C-WB-2	15.0	point49	49	3000.0	35.0	1834.00				Average	
		point70	70	3500.0	35.0	1835.00				Average	
		point50	50	4000.0	35.0	1850.00				Average	
		point51	51	4600.0	35.0	1836.00				Average	
		point52	52	5400.0	35.0	1861.00					
C-EB-1	15.0	point53	53	3000.0	-65.0	1834.00				Average	
		point72	72	3500.0	-65.0	1835.00				Average	
		point54	54	4000.0	-65.0	1850.00				Average	
		point55	55	4600.0	-65.0	1836.00				Average	
		point56	56	5400.0	-65.0	1861.00					
C-EB-2	15.0	point57	57	3000.0	-35.0	1834.00				Average	
		point71	71	3500.0	-35.0	1835.00				Average	
		point58	58	4000.0	-35.0	1850.00				Average	
		point59	59	4600.0	-35.0	1836.00				Average	
		point60	60	5400.0	-35.0	1861.00					
N-S Ramp	15.0	point73	73	3700.0	100.0	1850.00				Average	
		point74	74	3500.0	600.0	1840.00				Average	
		point75	75	3500.0	1500.0	1811.00					

JONES AND STOKES 25 May 2001
JMW TNM 1.1

INPUT: TRAFFIC FOR LAeq1h Percentages
PROJECT/CONTRACT: NSC/SR 2 OVERPASS
RUN: Shady Slope Neighborhood, 12' Walls

Roadway	Points		Segment										
Name	Name	No.	Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
B-WB-1	point27	27	948	87	60	8	60	5	60	0	0	0	0
	point28	28	948	87	60	8	60	5	60	0	0	0	0
	point65	65	948	87	60	8	60	5	60	0	0	0	0
	point29	29											
B-WB-2	point31	31	948	87	60	8	60	5	60	0	0	0	0
	point66	66	948	87	60	8	60	5	60	0	0	0	0
	point32	32	948	87	60	8	60	5	60	0	0	0	0
	point33	33											
B-EB-1	point34	34	331	87	60	8	60	5	60	0	0	0	0
	point68	68	331	87	60	8	60	5	60	0	0	0	0
	point35	35	331	87	60	8	60	5	60	0	0	0	0
	point36	36											
B-EB-2	point39	39	331	87	60	8	60	5	60	0	0	0	0
	point67	67	331	87	60	8	60	5	60	0	0	0	0
	point40	40	331	87	60	8	60	5	60	0	0	0	0
	point41	41											
C-WB-1	point45	45	834	87	60	8	60	5	60	0	0	0	0
	point69	69	834	87	60	8	60	5	60	0	0	0	0
	point46	46	834	87	60	8	60	5	60	0	0	0	0
	point47	47	834	87	60	8	60	5	60	0	0	0	0
	point48	48											
C-WB-2	point49	49	834	87	60	8	60	5	60	0	0	0	0

	point70	70	834	87	60	8	60	5	60	0	0	0	0
	point50	50	834	87	60	8	60	5	60	0	0	0	0
	point51	51	834	87	60	8	60	5	60	0	0	0	0
	point52	52											
C-EB-1	point53	53	331	87	60	8	60	5	60	0	0	0	0
	point72	72	331	87	60	8	60	5	60	0	0	0	0
	point54	54	331	87	60	8	60	5	60	0	0	0	0
	point55	55	331	87	60	8	60	5	60	0	0	0	0
	point56	56											
C-EB-2	point57	57	331	87	60	8	60	5	60	0	0	0	0
	point71	71	331	87	60	8	60	5	60	0	0	0	0
	point58	58	331	87	60	8	60	5	60	0	0	0	0
	point59	59	331	87	60	8	60	5	60	0	0	0	0
	point60	60											
N-S Ramp	point73	73	1136	87	60	8	60	5	60	0	0	0	0
	point74	74	0	0	0	0	0	0	0	0	0	0	0
	point75	75											

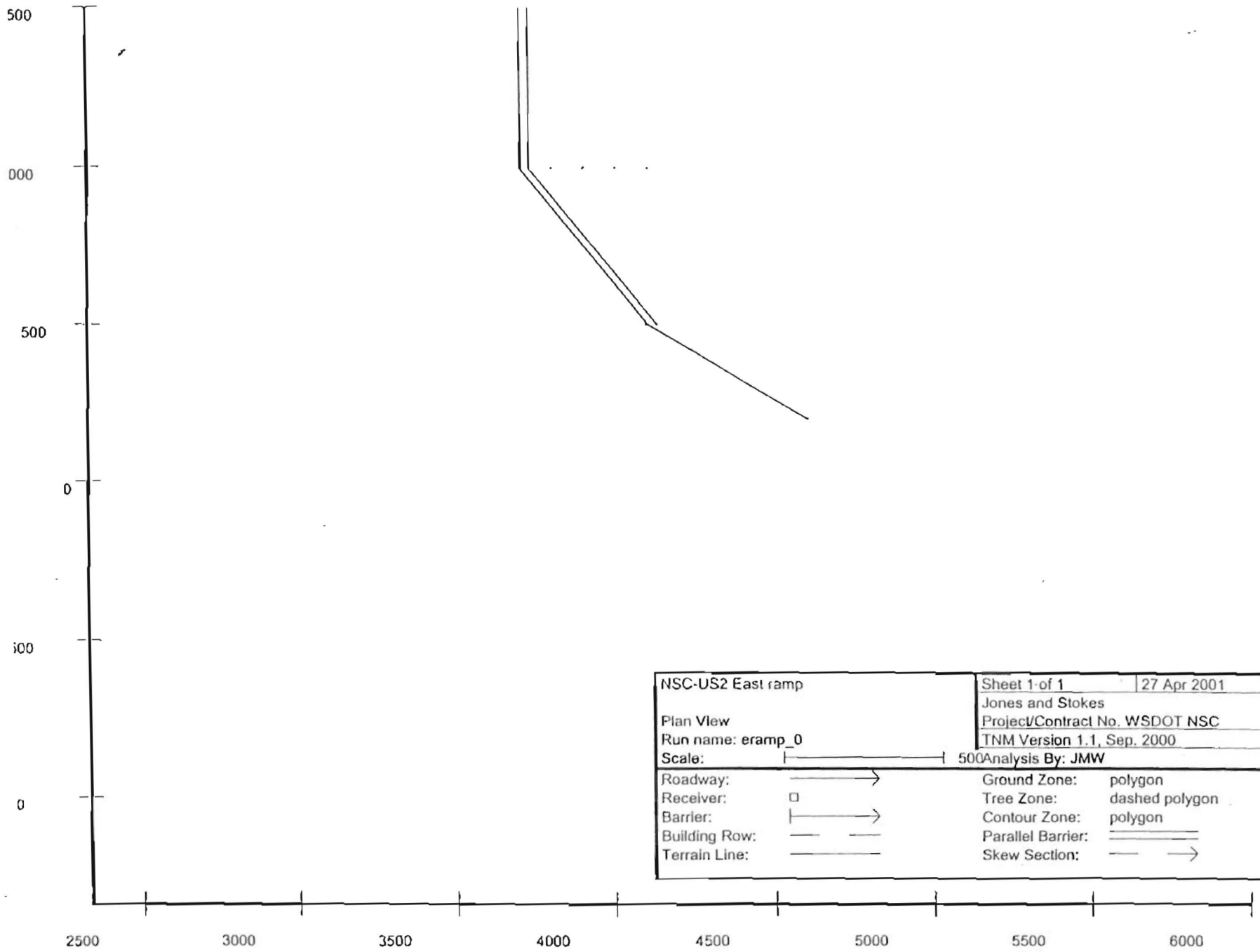
JONES AND STOKES 25 May 2001
JMW TNM 1.1

INPUT: RECEIVERS
PROJECT/CONTRACT: NSC/SR 2 OVERPASS
RUN: Shady Slope Neighborhood, 12' Walls

Receiver Name	No.	# DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Inc	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
C-N-300	51	1	3160.0	300.0	1841.00	4.92	0.00	66	10.0	8.0	Y
C-N-400	52	1	3160.0	400.0	1841.00	4.92	0.00	66	10.0	8.0	Y
C-N-600	53	1	3160.0	600.0	1850.00	4.92	0.00	66	10.0	8.0	Y
C-N-800	54	1	3160.0	800.0	1856.00	4.92	0.00	66	10.0	8.0	Y
RAMP-I-100	69	1	3400.0	600.0	1837.00	4.92	0.00	0	0.0	0.0	Y
RAMP-I-200	67	1	3300.0	600.0	1840.00	4.92	0.00	0	0.0	0.0	Y
RAMP-I-300	70	1	3200.0	600.0	1850.00	4.92	0.00	0	0.0	0.0	Y
RAMP-I-400	71	1	3100.0	600.0	1850.00	4.92	0.00	0	0.0	0.0	Y
RAMP-I-500	73	1	3000.0	600.0	1850.00	4.92	0.00	0	0.0	0.0	Y
RAMP-H-100	75	1	3400.0	1000.0	1842.00	4.92	0.00	0	0.0	0.0	Y
RAMP-H-200	76	1	3300.0	1000.0	1850.00	4.92	0.00	0	0.0	0.0	Y
RAMP-H-300	77	1	3200.0	1000.0	1850.00	4.92	0.00	0	0.0	0.0	Y
RAMP-H-400	78	1	3100.0	1000.0	1850.00	4.92	0.00	0	0.0	0.0	Y
RAMP-H-500	79	1	3000.0	1000.0	1850.00	4.92	0.00	0	0.0	0.0	Y

INPUT: BARRIERS
PROJECT/CONTRACT: NSC/SR 2 OVERPASS
RUN: Shady Slope Neighborhood, 12' Walls

Barrier Name	Type	Height Min	Height Max	If Wall $ per unit area	If Berm $ per unit volume	Top Width	Run:Rise	Add'tnl $ per unit length	Points Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Increment	Perturbs #Up	#Dn	On Struct?	Important Reflections?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
BA+BB North Embankment	W	0.00	99.00	0.00				0.00	point16	16	-1000.0	150.0	1879.00	6.00	0.00	0	0		
									point17	17	1400.0	150.0	1872.00	56.00	0.00	0	0		
									point18	18	2700.0	150.0	1852.00	6.00					
Shady Slope Overpass Berm	W	0.00	30.00	0.00				0.00	point19	19	2900.0	150.0	1834.00	25.00	0.00	0	0		
									point20	20	2800.0	500.0	1844.00	5.00					
Shady Slope Wall	W	0.00	99.99	0.00				0.00	point24	24	3000.0	200.0	1841.00	12.00	0.00	0	0		
									point25	25	3400.0	200.0	1841.00	12.00					
Ramp Cut	W	0.00	99.99	0.00				0.00	point36	36	3450.0	1500.0	1811.00	31.00	0.00	0	0		
									point37	37	3450.0	600.0	1835.00	2.00					
Noise Wall	W	0.00	17.00	0.00				0.00	point42	42	3430.0	1000.0	1824.00	12.00	0.00	0	0		
									point43	43	3430.0	550.0	1840.00	12.00	0.00	0	0		
									point44	44	3550.0	300.0	1845.00	12.00					



NSC-US2 East ramp		Sheet 1 of 1	27 Apr 2001
		Jones and Stokes	
Plan View		Project/Contract No. WSDOT NSC	
Run name: eramp_0		TNM Version 1.1, Sep. 2000	
Scale:	500	Analysis By: JMW	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

Jones and Stokes
JMW

25 May 2001
TNM 1.1
Calculated with TNM 1.1

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: WSDOT NSC
RUN: NSC-US2 East ramp
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

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

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ramp-j-100	1	1	0.0	60.1	66	60.1	10	----	60.1	0.0	8	-8.0
ramp-j-200	2	1	0.0	56.8	66	56.8	10	----	56.8	0.0	8	-8.0
ramp-j-300	3	1	0.0	55.7	66	55.7	10	----	55.7	0.0	8	-8.0
ramp-j-400	4	1	0.0	54.8	66	54.8	10	----	54.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	4	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Jones and Stokes 25 May 2001
JMW TNM 1.1

INPUT: ROADWAYS
PROJECT/CONTRACT: WSDOT NSC
RUN: NSC-US2 East ramp

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

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
East connector ramp	12.0	point1	1	3700.0	1500.0	1811.00				Average	
		point2	2	3700.0	1000.0	1811.00				Average	
		point3	3	4100.0	500.0	1834.00				Average	
		point4	4	4600.0	200.0	1834.00					

Jones and Stokes 25 May 2001
JMW TNM 1.1

INPUT: TRAFFIC FOR LAeq1h Percentages
PROJECT/CONTRACT: WSDOT NSC
RUN: NSC-US2 East ramp

Roadway	Points		Segment										
Name	Name	No.	Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
East connector ramp	point1	1	1271	87	60	8	60	5	60	0	0	0	0
	point2	2	1271	87	60	8	60	5	60	0	0	0	0
	point3	3	1271	87	60	8	60	5	60	0	0	0	0
	point4	4											

Jones and Stokes 25 May 2001
JMW TNM 1.1

INPUT: RECEIVERS
PROJECT/CONTRACT: WSDOT NSC
RUN: NSC-US2 East ramp

Receiver Name	No.	# DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l Inc	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ramp-j-100	1	1	3800.0	1000.0	1834.00	4.92	0.00	66	10.0	8.0	Y
ramp-j-200	2	1	3900.0	1000.0	1834.00	4.92	0.00	66	10.0	8.0	Y
ramp-j-300	3	1	4000.0	1000.0	1834.00	4.92	0.00	66	10.0	8.0	Y
ramp-j-400	4	1	4100.0	1000.0	1834.00	4.92	0.00	66	10.0	8.0	Y