APPENDIX B

STAMINA 2.0 CODING FORMS

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
DEMONSTRATION PROJECTS PROGRAM

STAMINA 2.0
FHWA TRAFFIC NOISE PREDICTION PROGRAM

NAME _____
PAGE ____ OF ____
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PROJECT _____

FORM 1 - PROJECT DESCRIPTION

****PLACE A SPACE OR COMMA BETWEEN ITEMS ON SAME LINE WHEN KEYPUNCHING OR ENTERING ITEMS ON TERMINAL****

'OPTIONS' LINE (OPTIONAL)

	METRIC IN?	METRIC OUT?	COMPUTE REFLECTIONS
*			

STAMINA 2.0 ASSUMES INPUT DATA WILL BE IN ENGLISH UNITS. PRINTS OUTPUT DATA IN ENGLISH UNITS, AND DOES NOT COMPUTE REFLECTIONS FROM 'REFLECTIVE' BARRIERS. TO CHANGE ANY OF THOSE ITEMS, CODE AN ASTERISK. THEN A Y FOR YES OR AN N FOR NO FOR ALL ITEMS USING THE FIRST 4 COLUMNS ONLY.

PROBLEM TITLE (MAXIMUM 80 CHARACTERS, ENTER AS ONE LINE)

NOTES/SKETCH:

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FORM 3 - ROADWAY DATA

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PROJECT _____

BLOCK CONTROL LINE

2 NUMBER OF ROADS

NOTES 1. MAXIMUM OF 30 ROADWAYS PERMITTED
2. MAXIMUM OF 15 ENDPOINTS PER ROADWAY
3. USE A SEPARATE SHEET FOR EACH ROADWAY
4. ONLY ENTER BLOCK CONTROL LINE ONCE PER EACH BLOCK OF ROADWAY DATA

ROADWAY TITLE (MAXIMUM OF 60 CHARACTERS. ENTER AS ONE LINE)	NO. ____

VEHICLE TYPE	VEHICLES PER HOUR	SPEED
'CARS'		
'MT'		
'HT'		
'VEH4'		
'VEH5'		
'VEH6'		
'VEH7'		
'VEH8'		

CROSS OUT IF NOT REQUIRED

'L'/

ENDPOINT ID (MAX 8 CHARAC)	EAST COORDINATE (X)	NORTH COORDINATE (Y)	ELEVATION(Z)	GA*	DO NOT CODE
' '					1
' '					2
' '					3
' '					4
' '					5
' '					6
' '					7
' '					8
' '					9
' '					10
' '					11
' '					12
' '					13
' '					14
' '					15

'L'/

*GA=GRADE ADJUSTMENT FOR HEAVY TRUCKS - 1=YES, 0=NO

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FORM 4 - BARRIER DATA

NAME _____
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PROJECT _____

BLOCK CONTROL LINE

3	

NUMBER OF BARRIERS

NOTES 1. MAXIMUM OF 20 BARRIERS PERMITTED
2. MAXIMUM OF 10 ENDPOINTS PER BARRIER
3. USE A SEPARATE SHEET FOR EACH BARRIER
4. ONLY ENTER BLOCK CONTROL LINE ONCE FOR BARRIER DATA

BARRIER TITLE (MAXIMUM OF 50 CHARAC.). ENTER AS ONE LINE.

NO. _____

ENDPOINT ID (MAX 8 CHARAC)	EAST COORDINATE (X)	NORTH COORDINATE (Y)	BARRIER TOP ELEVATION(Z)	BARRIER GROUND ELEVATION(ZG)	DELZ*	P**
' '						
' '						
' '						
' '						
' '						
' '						
' '						
' '						
' '						
' '						

*DELZ=BARRIER HEIGHT INCREMENT IN FEET
**P=NUMBER OF HEIGHT CHANGES. MAX=3

' ' /

BARRIER TYPE A=ABSORPTIVE
R=REFLECTIVE
S=STRUCTURE

FOR STRUCTURE BARRIERS ONLY. ENTER THE FOLLOWING LINE:

NO. OF ROADS AFFECTED	AFFECTED ROADWAY NUMBERS (ASSIGNED SEQUENTIALLY BY PROGRAM)											

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FORM 5 - RECEIVER DATA

BLOCK CONTROL LINE

	NUMBER OF RECEIVERS
5	

NOTE: 1. MAXIMUM OF 40 RECEIVERS;
2. ENTER BLOCK CONTROL LINE ONLY ONCE FOR RECEIVER DATA
3. ENTER RECEIVER DATA TITLE ONLY ONCE.

RECEIVER DATA TITLE (MAXIMUM OF 80 CHARAC.). ENTER ONCE. ENTER AS 1 LINE

RECEIVER ID (MAX 8 CHARAC)	EAST COORDINATE (X)	NORTH COORDINATE (Y)	ELEVATION(Z)	DO NOT CODE
' '				1
' '				2
' '				3
' '				4
' '				5
' '				6
' '				7
' '				8
' '				9
' '				0
' '				1
' '				2
' '				3
' '				4
' '				5
' '				6
' '				7
' '				8
' '				9
' '				0

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FORM 6 – SOUND PROPAGATION DATA

BLOCK CONTROL LINE

	CODE
6	

NOTES: 1. ENTER CODE ON BLOCK CONTROL LINE: 1=ALPHA VALUES. 2=SHIELDING FACTORS.
2. ENTER BLOCK CONTROL LINE ONCE BEFORE EACH BLOCK OF SOUND PROPAGATION DATA

DATA BLOCK TITLE (ENTER ONCE PER DATA BLOCK. MAX. OF 80 CHARAC.

ENTER ALPHA VALUES OR SHIELDING FACTORS (IN DBA) FOR ALL RECEIVER–ROADWAY PAIR

ROADWAY NUMBERS

RECEIVER NUMBER										
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

7/ 'END OF DATA' LINE. ENTER ONLY ONCE AS LAST LINE IN DATA FILE

REFERENCES

1. Rudder, F. F., D. F. Lam, and P. Chueng, "User's Manual: FHWA Level Highway Traffic Noise Prediction Model, STAMINA 1.0, " U.S. Department of Transportation, Federal Highway Administration, Report No. FHWA-RD-78-138, May 1979.

2. Kurze, U. J., W. H. Levison, and S. Serben, "User's Manual for the Prediction of Road Traffic Noise Computer Program, "Transportation Systems Center, U.S. Department of Transportation, Office of the Secretary, Report No. DOT-TSC-315-1, May 1972.

3. Wesler, J. E., "Manual for Highway Noise Prediction," U.S. Department of Transportation, Federal Highway Administration, Report No. DOT-TSC-FHWA-72-1 (Appendix B Separately Bound), March 1972.

4. Rudder, F. F. and P. Lam, "Update of TSC Highway Traffic Noise Prediction Code (9174), "U.S. Department of Transportation, Federal Highway Administration, Office of Research, Report FHWA-RD-77-19, January 1977.

5. Rudder, F. F., Jr., and P. Lam, "User's Manual: TSC Highway Noise Prediction Code: MOD-04, "U.S. Department of Transportation, Federal Highway Administration, Report No. FHWA-RD-77-18, January 1977.

6. Miller, N. P., and C. W. Menge, "Report on Barrier Cost Reduction Procedure," prepared for Interstate Division for Baltimore City, August 1979.

7. Simpson, M.A., "Noise Barrier Design Handbook," U.S. Department of Transportation, Federal Highway Administration, Report No. FHWA-RD-76-58, February 1976.

8. Kugler, B.A., et al, "Highway Noise – A Design Guide for Prediction and Control," Chapter Six, Transportation Research Board, NCHRP 174, 1976.

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1. Rudder, F. F., Jr., and Lam, P., "User's Manual: TSC Highway Noise Prediction Code: MOD-04, "US. Department of Transportation, Federal Highway Administration, Report No. FHWA-RD-77-18, January 1977.

2. Rudder, F.F., D.F. Lam, and P. Chueng, "User's Manual: FHWA Level 2 Highway Traffic Noise Prediction Model, STAMINA 1.0," U.S. Department of Transportation, Federal Highway Administration, Report No. FHWA-RD-78-138, May 1979.

3. Kurze, U.J., "Noise from Complex Road Traffic," Journal of Sound and Vibration, Vol., 19, No. 2, 1971, pp. 167-177.

4. Miller, N.P., and C.W. Menge, "Report on Barrier Cost Reduction Procedure," prepared for Interstate Division for Baltimore City, August 1979.