

**FINAL DESIGN
NOISE IMPACT ANALYSIS
TECHNICAL REPORT**



**RESTON AVENUE TO JARRET VALLEY DRIVE
A DESIGN-BUILD PROJECT**

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1.0 EXECUTIVE SUMMARY

1.0 EXECUTIVE SUMMARY

This report describes the details of a final design noise impact assessment completed for the Route 7 Corridor Improvements project (Reston Avenue to Jarret Valley Drive) in Fairfax County, Virginia (**Figure 1**). The noise analysis was conducted in accordance with Federal Highway Administration (FHWA) and Virginia Department of Transportation (VDOT) noise assessment regulations and guidelines. The FHWA regulations are set forth in 23 CFR Part 772. VDOT's revised policy was updated most recently on February 20, 2018.

The scope of the Route 7 Corridor Improvements project involves constructing an additional general purpose through lane for each direction of travel extending 6.9 miles from Reston Avenue to Jarret Valley Drive in Fairfax County. Route 7 will be widened from two lanes to three lanes in each direction, including major intersection improvements. Service drives will be constructed as needed for access to driveways and to complete connections. The project also includes a shared-use path on both sides along the corridor. The project is expected to improve traffic flow and provide immediate congestion relief to the roadway corridor.

The study involved monitoring of existing noise conditions and modeling of 2018 existing conditions and future design year (2040) build condition in the study area with the FHWA-approved computerized Traffic Noise Model. The worst-case noise hour was established for both eastbound and westbound noise receptors using VDOT's ENTRADA traffic modeling software. A total of 1,237 receptors representing 1,237 noise-sensitive sites were modeled within 14 Common Noise Environments (CNEs) in the project study area. These 1,237 modeled sites include 1,092 residential dwelling units, a recreational trail (47 trail units), two cemeteries (25 cemetery grid units), 10 churches, four outdoor nurseries, four picnic areas, 13 playgrounds, four schools, an outdoor sports complex (30 grid units), basketball and volleyball courts, and a community pool (some locations are represented by more than one receptor).

Table 1 provides a summary of existing and future noise levels and impacts for each CNE in the study area. Impacts are predicted to occur for existing conditions in CNEs A, B, C, D, E, F, G, H, I, J, K, L, and N. Existing noise impacts were predicted at 161 receptors including single-family residential dwelling units, two cemeteries, a recreational trail, a schoolyard, and an athletic field in the study area. The worst-case noise hour existing noise levels ranged from 40 to 73 dBA. The future design year (2040) build condition resulted in noise impacts at the same CNEs impacted under the existing conditions (CNEs A, B, C, D, E, F, G, H, I, J, K, L, and N).

**TABLE 1
SUMMARY OF PREDICTED EXTERIOR NOISE LEVELS FOR THE WORST HOUR**

CNE	Land Use - Description	Activity Category	Range of Predicted Exterior Noise Levels and Impacts for the Worst Hour					
			Existing			2040 Build		
			Sound Level (dBA)		Number of Impacts	Sound Level (dBA)		Number of Impacts
			Min	Max		Min	Max	
A	Single-family homes in Cedar Chase development (Cedar Chase Road, Cedar Chase Court), Estates of North Hills (Water Pointe Lane, Water Pointe Circle, and Round Pebble Lane), and Reston Parkway	B	41	66	1	43	67	2
	Boyd School Playground; North Pointe Fire Station Picnic table; Great Falls Assisted Living Patio	C	55	59	0	56	61	0
	Good Shepherd Lutheran Church; The Boyd School – Reston Campus	D	30	32	0	30	33	0
B	Single-family homes in Autumn Wood development (Aidan Run Court, Autumn Mist Lane), Shain Court, Northfalls Court, Bowen Avenue, Loran Court, Loran Road, and Utterback Store Road	B	49	71	14	52	73	17
	Dog Park	C	51		0	52		0
	Seneca Hill Animal Hospital, Dranesville Church of the Brethren, MTO Shahmaghsoudi School of Islamic Sufism	D	26	44	0	32	46	0
	Meadows Farms Nurseries and Landscaping	E	62		0	65		0
C	Single-family homes in Wyndham Hills Development (Stones Throw Drive, Fieldview Drive), Bright Pond Lane, Piney Run Meadows Development (Tommye Lane, Meadowlook Court), Bishopsgate Way, Falls Park Estates (Markell Court), Great Falls Crossing (Hunter Gate Way), and Baron Cameron Avenue	B	40	72	16	48	73	21
	Great Falls Crossing Community Center (Pool, tennis, basketball, picnic area, pavilion, playground)	C	54	64	0	57	65	0
D	Single-family homes on Utterback Store Road, Great Passage Court, and Great Passage Boulevard	B	48	71	2	50	72	2
	Nike Park soccer/softball fields	C	50	64	0	54	68	2
E	Single-family homes along Great Passage Boulevard, Kettle Pond Lane, Amanda Drive, Riva Ridge Drive, Piney Pond Drive, Mountain Hope Court, Crippen Court, and Springvale Road	B	46	70	10	48	71	16
F	Single-family homes on Springvale Road, Springvale Court, Van Patten Lane, Colvin Run Road, Colvin Meadows Court, Colvin Meadows Lane, Lees Meadows Court, Robindale Drive, Hessick Court, Locust Hill Drive, and Trotting Horse Lane; Colvin Run Mill; cemetery	B	43	72	24	45	74	28
	Unnamed Cemetery, Colvin Run Mill	C	59	72	3	61	74	4
	Meadows Farms Nurseries and Landscaping; Hills Nursery	E	65	68	0	68	70	0



**TABLE 1
(CONTINUED)**

CNE	Land Use - Description	Activity Category	Range of Predicted Exterior Noise Levels and Impacts for the Worst Hour					
			Existing			2040 Build		
			Sound Level (dBA)		Number of Impacts	Sound Level (dBA)		Number of Impacts
			Min	Max		Min	Max	
G	Single-family homes on Water Falls Lane, Dunn Meadows Court, Cobble Pond Way, Dunn Meadows Road, Delta Glenn Court, Newkirk Court, Mill Wheel Lane, Colvin Forest Lane, Scenic View Terrace, Grapes Farm Way, Carpers Farm Court, Middleton Ridge Road, Middleton Court, Difficult Run Court, Tweed Court, and Beulah Road	B	42	72	38	45	74	46
	Capital Church Picnic Area, Beulah Dental, Chesterbrook Academy Preschool playground	C	61	65	0	65	69	1
	Capital Church; Chesterbrook Academy Preschool	D	32	45	0	36	48	0
H	Single-family homes on Trotting Horse Lane, Fairpine Lane, Forestville Drive, Farmingdale Court, Vernon Drive, Lyons Street, Kenmore Drive, and Towlston Road	B	47	73	14	48	75	15
	The Eastern Ridge School outdoor activity area	C	61	73	3	65	77	5
	The Eastern Ridge School	D	34		0	38		0
I	Single-family homes on Beulah Road, Deramus Farm Court, Atwood Road, Robnel Place, Stokley Way, Vanetta Lane, Kilby Glen Drive, and Towlston Road	B	44	71	10	49	74	13
	Picnic area at the Fairfax County Fire Station 42	C	50		0	53		0
	Wolf Trap Nursery	E	68		0	70		0
J	Single-family homes on Towlston Road, Schuman Court, and Windsor Meadows Lane	B	48	69	2	51	70	2
	Andrew Chapel Cemetery	C	56	73	6	58	73	8
	St. Athanasius Roman Catholic Church	D	42		0	44		0
K	Trap Road, Lucky Estates Drive, Timberwolf Court, Trailridge Court, Wolftrap Run Road, and Route 7	B	45	68	3	48	70	5
	Andrew Chapel playground, Jills House playground, McLean Bible Church playground	C	50	62	0	51	63	0
	Andrew Chapel United Methodist Church, Bethel Baptist Church, Jills House, McClean Bible Church	D	35	37	0	35	40	0
L	Single-family residences on Route 7, Dreamweaver Court, Royal Estates Drive, Old Tolson Mill Road, Brook Road, Gallant Green Drive, Gunnell Court, Woodside Drive, and Lewinsville Road	B	41	71	5	43	73	6
	Providence Baptist Church playground and volley ball	C	57	62	0	61	65	0
	Providence Baptist Church, St Thomas Episcopal Church/McLean Preschool	D	36	37	0	37	38	0



**TABLE 1
(CONTINUED)**

CNE	Land Use - Description	Activity Category	Range of Predicted Exterior Noise Levels and Impacts for the Worst Hour					
			Existing			2040 Build		
			Sound Level (dBA)		Number of Impacts	Sound Level (dBA)		Number of Impacts
			Min	Max		Min	Max	
M	Single-family residences on Route 7, Mirador Place, Prestwood Place, Woodhurst Boulevard, and Mayhurst Boulevard	B	47	62	0	51	65	0
N	Single-family residences on Laurel Hill Road, Glenridge Court, Old Ash Grove, Stanbridge Place, Carrington Ridge Lane, Broadstone Place, and Jarret Valley Drive	B	43	70	1	48	73	11
	Berea Church of Christ	D	32		0	33		0
F/G	Cross County Trail	C	56	72	7	58	73	18
Total Impacted Dwellings					159			222

The widening results in an average 3 dBA increase in the acoustical environment over existing conditions. The future design year (2040) build noise levels are predicted to range from 43 to 77 dBA. Future noise impacts were predicted at 222 receptor locations including 184 single-family residential dwelling units, two cemeteries, a recreational trail (18 receptors), two schoolyards, and an athletic field in the study area. Changes in the number of impacted areas from the noise analysis completed during preliminary design were a result of refined noise modeling detail, updated traffic data, refined proposed topography and cut/fill detail, and increased receptor density.

Noise abatement must be considered where noise impact is predicted to occur with the 2040 Build alternative. Noise abatement is evaluated to determine if it is warranted, feasible, and reasonable. **Table 2** summarizes the total length, estimated cost, and benefits that would be provided by the noise barriers that were evaluated in this study. Noise abatement was determined to be feasible and reasonable for the majority of the CNEs (CNE A, B, C, D, E, F, G, H, I, J, K, L, and N).

Construction activity may cause intermittent fluctuations in noise levels. During the construction phase of the project, all reasonable measures will be taken to minimize noise impact from these activities.

**TABLE 2
SUMMARY OF NOISE BARRIERS EVALUATED IN THIS STUDY**

CNE	Barrier ID	Number of Impacted Receptors	Impacted and Benefitted Receptors	Non-Impacted and Benefitted Receptors	Noise Barrier Details				Surface Area/Benefitted Receptor (SF/BR) ¹	Feasible?	Reasonable?
					Length (ft)	Average Height Range (ft)	Surface Area (SF)	Cost at \$42/SF			
A	A1	1	1	4	600	16	9,597	\$403,074	1,919	Y	N
	A2	1	1	12	1,286	16	20,117	\$844,914	1,547	Y	Y
B/D	B1-B5, D1	19	19	49	5,593	15	83,891	\$3,523,422	1,234	Y	Y
D/E	D2, E1-E4	18	18	25	4,385	15	65,775	\$2,762,550	1,530	Y	Y
C	C1-C2	21	21	47	5,140	15	77,096	\$3,238,032	1,134	Y	Y
F	F1, F1B, F1C, F2	8	7	3	1,127	13	14,658	\$615,636	1,466	Y	Y
	F3	12	12	14	2,546	16	40,735	\$1,710,870	1,567	Y	Y
	F4-F4B	6	6	16	2,210	16	35,352	\$1,484,784	1,607	N	--
	F5-F9	8	8	17	2,489	22	54,789	\$2,301,138	2,192	Y	N
G	G1-G6	24	24	56	5,377	18	96,783	\$4,064,886	1,210	Y	Y
	G8-G9	16	15	13	1,906	14	26,678	\$1,120,476	953	N	--
	G10-G13	20	20	10	2,626	17	45,123	\$1,895,166	1,504	Y	Y
	G14-G16	3	3	1	801	16	12,831	\$538,902	3,208	Y	N
H	H2-H11	20	19	28	3,941	16	62,408	\$2,621,136	1,328	Y	Y
I	I2	5	5	2	835	13	10,852	\$455,784	1,550	Y	Y
	I4-6	8	8	4	1,041	16	16,654	\$699,468	1,388	Y	Y
J/K	J2-J3, K1-K4	15	14	27	3,094	16	49,494	\$2,078,748	1,207	Y	Y
L	L1-L5	4	3	1	974	12	11,693	\$491,106	2,923	Y	N
	L6-L8	2	2	2	852	12	9,703	\$407,526	2,426	Y	N
N	Existing Barrier N	10	0	1	307	15	4,607	\$193,494	4,607	N	--
	N1-N3 and Existing	10	9	6	1,577	14	23,132	\$971,544	1,542	Y	Y
	N4	1	1	0	301	18	5,427	\$227,934	5,427	Y	N

¹ Where Square Feet/Benefitted Receptor (SF/BR) exceeds VDOT's maximum of 1,600, a noise barrier would not be considered cost-reasonable.



2.0 INTRODUCTION

2.0 INTRODUCTION

2.1 BACKGROUND AND PURPOSE

A final design traffic noise analysis was performed for the Route 7 Corridor Improvements slated from Reston Avenue to Jarret Valley Drive located in Fairfax County, Virginia. All highway noise impact assessment procedures, noise abatement criteria, and documentation are in accordance with the Federal Highway Administration (FHWA) and Virginia Department of Transportation (VDOT) noise assessment regulations and guidelines. FHWA regulations for highway traffic noise for federal-aid highway projects are contained in Title 23 of the United States Code of Federal Regulations Part 772 (23 CFR 772), updated July 13, 2011. The current VDOT State Noise Abatement Policy became effective on July 13, 2011, and was updated on February 20, 2018. The FHWA regulations for mitigation of highway traffic noise in the planning and design of federally aided highway projects contained in 23 CFR 772 state that a “Type I” traffic noise impact analysis is required when there is the addition of through-traffic lanes or ramps in an interchange.

This report documents a summary of the roadway improvements under study, a description of noise terminology, the applicable standards and criteria, the computations of existing and future noise levels, a projection of future noise levels, identification of potential noise impacts, evaluation of measures to mitigate noise impacts, noise abatement, a discussion of construction noise, and information to assist local officials.

2.2 PROJECT DESCRIPTION

The scope of the Route 7 Corridor Improvements project involves constructing an additional general purpose through lane for each direction of travel extending 6.9 miles from Reston Avenue to Jarret Valley Drive in Fairfax County. A “Preliminary Noise Analysis” was completed as part of the EA documentation, and multiple noise barriers were identified as potentially warranted, feasible, and reasonable at that time. This Final Design Noise Impact Analysis Technical Report is being completed consistent with the requirements of the final design details that have been developed.

Route 7 will be widened from two lanes to three lanes in each direction, including major intersection improvements. Service drives will be constructed as needed for access to driveways and to complete connections. The project also includes a shared-use path on both

sides along the corridor. The project is expected to improve traffic flow and provide immediate congestion relief to the roadway corridor.



3.0 METHODOLOGY

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The Noise Control Act of 1972 gives the United States Environmental Protection Agency (U.S. EPA) the authority to establish noise regulations to control major noise sources, including motor vehicles and construction equipment. Furthermore, the U.S. EPA is required to set noise emission standards for motor vehicles used for interstate commerce and the FHWA is required to enforce the U.S. EPA noise emission standards through the Office of Motor Carrier Safety. The National Environmental Policy Act (NEPA) of 1969 gives broad authority and responsibility to federal agencies to evaluate and mitigate adverse environmental impacts caused by federal actions. FHWA is required to comply with NEPA, including mitigating adverse highway traffic noise effects. The Federal-Aid Highway Act of 1970 mandates FHWA to develop standards for mitigating highway traffic noise. It also requires FHWA to establish traffic noise level criteria for various types of land uses. The Act prohibits FHWA approval of federal aid highway projects unless adequate consideration has been made for noise abatement measures to comply with the standards. FHWA regulations for highway traffic noise for federal-aid highway projects are contained in 23 CFR 772. The regulations contain noise abatement criteria, which represent the maximum acceptable level of highway traffic noise for specific types of land uses. The regulations do not mandate that the abatement criteria be met in all situations but rather require that reasonable and feasible efforts be made to provide noise mitigation when the abatement criteria are approached or exceeded.

The State Noise Abatement Policy was developed to implement the requirements of 23 Code of Federal Regulations (CFR) Part 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise (July 13, 2011), FHWA's Highway Traffic Noise Analysis and Abatement Policy and Guidance (December 2011), and the noise related requirements of The National Environmental Policy Act of 1969. The current VDOT State Noise Abatement Policy became effective on July 13, 2011 and was updated on February 20, 2018.

Noise is generally defined as unwanted or annoying sound. Airborne sound occurs by a rapid fluctuation of air pressure above and below atmospheric pressure. Sound pressure levels are usually measured and expressed in decibels (dB). The decibel scale is logarithmic and expresses the ratio of the sound pressure unit being measured to a standard reference level.

Most sounds occurring in the environment do not consist of a single frequency but rather a broad band of differing frequencies. The intensities of each frequency add to generate sound. Because the human ear does not respond to all frequencies equally, the method commonly

used to quantify environmental noise consists of evaluating all of the frequencies of a sound according to a weighting system. It has been found that the A-weighted filter on a sound level meter, which includes circuits to differentially measure selected audible frequencies, best approximates the frequency response of the human ear.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources, creating a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of traffic noise, a statistical noise descriptor called the equivalent hourly sound level, or $L_{eq(h)}$, is commonly used. $L_{eq(h)}$ describes a noise-sensitive receptor's cumulative exposure from all noise-producing events over a one-hour period.

Because decibels are logarithmic units, sound levels cannot be added by ordinary arithmetic means. The following general relationships provide a basic understanding of sound generation and propagation.

- An increase, or decrease, of 10 dB will be perceived by a receptor to be a doubling, or halving, of the sound level.
- Doubling the distance between a highway and receptor will produce a 3 dB sound level decrease.
- A 3 dB sound level increase is barely detectable by the human ear.

3.1 NOISE ABATEMENT CRITERIA

The State Noise Abatement Policy has adopted the Noise Abatement Criteria (NAC) that have been established by FHWA (23 CFR 772) for determining traffic noise impacts for a variety of land uses. The NAC, listed in **Table 3** for various activities, represents the upper limit of acceptable traffic noise conditions and also a balancing of that which may be desirable with that which may be achievable. The NAC applies to areas having regular human use and where lowered noise levels are desired. They do not apply to the entire tract of land on which the activity is based, but only to that portion where the activity takes place. The NAC is given in terms of the hourly, A-weighted, equivalent sound level in decibels (dBA). The noise impact assessment is made using the guidelines listed in **Table 3**. The study area consists of exterior residential (Category B) land use, athletic/recreational fields (Category C), exterior commercial

(Category E), the interior of public/institutional buildings (Category D), as well as other non-noise-sensitive land uses included in Category F and Category G (undeveloped).

TABLE 3
FHWA NOISE ABATEMENT CRITERIA
HOURLY A-WEIGHTED SOUND LEVEL DECIBELS (L_{eq(h)}) IN dBA)

Activity Category	Activity Criteria L _{eq(h)}	Evaluation Location	Activity Description
A	57	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	Exterior	Residential
C*	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare 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	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	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F
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: 23 CFR Part 772
 * Includes undeveloped lands permitted for this activity category

3.2 DEFINITION OF NOISE IMPACT

Traffic noise impacts occur if either of the following two conditions is met.

- The predicted traffic noise levels (future design year) approach or exceed the NAC, as shown in **Table 3**.

The VDOT State Noise Abatement Policy defines an approach level to be used when determining a traffic noise impact. The “Approach” level has been defined by VDOT as one dBA less than the Noise Abatement

Criteria for Activity Categories A to E. For example, for a Category B receptor, 66 dBA would be approaching 67 dBA and would be considered an impact. If design year noise levels “approach or exceed” the NAC, then the activity is impacted and a series of abatement measures must be considered.

- The predicted traffic noise levels are substantially higher than the existing noise levels.

A substantial noise increase has been defined by VDOT when the predicted (future design year) highway traffic noise levels exceed existing noise levels by 10 dBA or more for all noise-sensitive exterior activity categories. For example, if a receptor’s existing noise level is 50 dBA and if the future noise level is 60 dBA, then it would be considered an impact. The noise levels of the substantial increase impact do not have to exceed the appropriate NAC. Receptors that satisfy this condition warrant consideration of highway traffic noise abatement.

If a traffic noise impact is identified within the project corridor, then consideration of noise abatement measures is necessary. The final decision on whether or not to provide noise abatement along a project corridor will take into account the feasibility of the design and overall cost weighted against the environmental benefit.

3.3 NOISE PREDICTION MODEL

Since roadway noise levels can be determined accurately through computer modeling techniques for areas that are dominated by road traffic, design year traffic noise calculations have been predicted using the FHWA’s Traffic Noise Model (FHWA TNM) Version 2.5, which is the latest approved version. The FHWA TNM® was developed and sponsored by the U.S. Department of Transportation and John A. Volpe National Transportation Systems Center, Acoustics facility. The TNM estimates vehicle noise emissions and resulting noise levels based on reference energy mean emission levels. The existing and proposed alignment (horizontal and vertical) are input into the model, along with the receptor locations, traffic volumes of cars, medium trucks (vehicles with two axles and six tires), heavy trucks, average vehicle speeds, pavement type, and any traffic-control devices. The TNM uses its acoustic algorithms to predict noise levels at the selected receptor locations by taking into account sound propagation variables such as, atmospheric absorption, divergence, intervening ground, barriers, building rows, and sometimes heavy vegetation.

Future build TNM runs were developed by modifying the validated existing condition models to account for the proposed highway widening. Roadway design engineering files and future terrain contour files were supplied by Dewberry. The modeling accounted for the variability in the local terrain and included the following parameters that affect the propagation of traffic noise: terrain lines, ground zones, and fixed height barriers to represent buildings. The default ground type used in the modeling was “lawn.” The noise model also included a number of “empty” lanes (e.g., roadways without traffic) to represent paved shoulders and side streets.

To fully characterize future noise levels at all noise-sensitive land uses in the study area, noise prediction receivers (also called “receptors” and/or “sites”) were added to the measurement sites in the TNM runs. A link to the TNM models is located in Appendix F.

3.4 TRAFFIC DATA

The Environmental Traffic Data, ENTRADA (v.9-2018), Program developed by VDOT standardizes the production of environmental traffic data needed as input for noise analyses. ENTRADA utilizes look-up tables based upon the Highway Capacity Manual (HCM), Special Report 209; NCHRP Reports 365 (187), 387 and 504 (references provided in Section 10.0 of this report); and other nationally and internationally recognized sources to adjust free-flow speeds for different facility types (Freeways, Multi-Lane and Two-Lane Highways, and Urban Streets). It incorporates factors recommended by these documents in order to adjust free-flow speeds based upon number of lanes, access points, lateral clearances, median types, and lane widths.

Traffic volumes in hourly segments for a 24-hour period were provided for Route 7 by Dewberry in ENTRADA format for the 2018 existing conditions and future design year (2040) build conditions. Three roadway zones were established for the Route 7 corridor from west to east to account for variations in traffic volumes/composition:

- Zone one extends from Reston Avenue to Baron Cameron Avenue
- Zone two extends from Baron Cameron Avenue to Lewinsville Road
- Zone three extends from Lewinsville Road to Jarrett Valley Drive

Peak hour traffic (A.M. or P.M.) that corresponded closest to the worst-case noise hour was used for the side roads.

3.4.1 Worst-Case Noise Hour

The traffic data used in the noise analysis must produce sound levels representative of the loudest (“worst noise”) hour of the day in the future design year, per FHWA and VDOT policy. In many cases, experience has shown that the peak traffic hour may coincide with the worst noise hour of the day. However, on occasion, conditions such as capacity, effects of traffic on vehicle speed, higher than normal off-peak truck percentages, or unusual hourly traffic distribution may cause the worst noise hour of the day to be different from the peak traffic hour of the day. Due to peak-hour congestion on major commuter routes, the worst noise hour may occur during the off-peak period on such roadways.

Noise levels have been predicted for that hour of the day when the vehicle volume, operating speed, and number of trucks (vehicles with three or more axles) combine to produce the worst noise conditions. According to FHWA guidance, the “worst hourly traffic noise impact” occurs at a time when truck volumes and vehicle speeds are the greatest, typically when traffic is free-flowing and at or near level of service (LOS) C conditions.

The ENTRADA data for the Route 7 corridor was imported into the loudest hour determination spreadsheet developed by VDOT to evaluate the calculated noise levels at test receptors 200 feet from the source. Due to the differing peak traffic periods for Route 7 eastbound and westbound, the loudest hour was identified for the eastbound travel lanes and used for worst-case noise modeling for the sensitive land uses along the eastbound travel lanes. Consequently, to predict an absolute worst-case sound level for the sensitive land uses along the westbound travel lanes, the loudest hour was identified by calculating the westbound peak traffic and using that hour for sound level predictions for the sensitive land uses that are adjacent to the westbound travel lanes. The loudest hours were determined to be 6:00 A.M. for Route 7 eastbound and 3:00 P.M. for Route 7 westbound. Appendix B provides the ENTRADA loudest-hour traffic data summary.

4.0 EXISTING NOISE ENVIRONMENT

4.0 EXISTING NOISE ENVIRONMENT

4.1 STUDY AREA/Common Noise Environment (CNE) DESCRIPTION

The majority of noise-sensitive land uses in the project study area include single-family residences within an approximate 500-foot corridor adjacent to both the eastbound and westbound lanes of Route 7. Following VDOT and FHWA policies and procedures, the receptors used in the model to represent exterior activity areas at noise-sensitive land uses were grouped into Common Noise Environments (CNEs).

A CNE is defined as a group of receptors within the same Activity Category that are exposed to similar noise sources and levels; traffic volumes, traffic mix, and speed; and topographic features. There are 14 distinct geographic areas within the project area containing noise-sensitive land uses within 500 feet of the construction limits that can be considered similar in acoustical environment. The CNEs within the project area (**Figure 2**) consist of exterior residential (Category B) land use, athletic/recreational fields (Category C), exterior commercial (Category E), interior of public/institutional buildings (Category D), as well as other non-noise-sensitive land uses included in Category F and Category G (undeveloped). The modeled receptors for the analysis were grouped into the following CNEs:

- CNE A is located south of Route 7 between Georgetown Pike and Reston Parkway at the western termini of the project. CNE A extends past the 500ft study buffer towards Georgetown Pike to maintain community continuity. CNE A encompasses noise-sensitive land uses in the Cedar Chase development (Cedar Chase Road, Cedar Chase Court), Reston Parkway, and Estates of North Hills (Water Pointe Lane, Water Pointe Circle, and Round Pebble Lane). CNE A contains 83 modeling-*only* sites (A1-A83) which represent 77 single-family residential homes, The Boyd School – Reston Campus, North Pointe Fire Station, Great Falls Assisted Living, and Good Shepherd Lutheran Church. CNE A also contains two monitoring sites (A1 and A2) which were used for model validation.
- CNE B is located north of Route 7 between Georgetown Pike and Utterback Store Road at the western termini of the project. CNE B encompasses noise-sensitive land uses in the Autumn Wood development (Aidan Run Court, Autumn Mist Lane), Shain Court, Northfalls Court, Bowen Avenue, Loran Court, Loran Road, and Utterback Store Road. CNE B contains 72 modeling-*only* sites (B1-B72) which represent 67 single-family residences, Seneca Hill Animal Hospital, MTO Shahmaghsoudi School of Islamic Sufism, Dranesville Church of the Brethren, and Meadows Farms Nurseries and Landscaping. CNE B also

contains two monitoring sites (B1 and B2) which were used for model validation.

- CNE C is located south of Route 7 between Reston Parkway and Baron Cameron Avenue and encompasses noise-sensitive land uses in the Wyndham Hills development (Stones Throw Drive, Fieldview Drive), Bright Pond Lane, Piney Run Meadows development (Tommye Lane, Meadowlook Court), Bishopsgate Way, Falls Park Estates (Markell Court), Great Falls Crossing (Hunter Gate Way), and Baron Cameron Avenue. CNE C contains 111 modeling-*only* sites (C1-C111) which represents 105 single-family residences and Great Falls Crossing Community Center which includes a playground (C-111), pavilion (C-110), basketball court (C-109), picnic area (C-108), swimming pool (C-106), and tennis courts (C-107). CNE C also contains two monitoring sites (C1 and C2) which were used for model validation.
- CNE D is located north of Route 7 between Utterback Store Road and Great Passage Boulevard and encompasses noise-sensitive land uses on Utterback Store Road, Great Passage Court, and Great Passage Boulevard. CNE D contains 41 modeling-*only* sites (D1-D41) which represent 11 residences and Nike Park soccer and baseball/softball fields.
- CNE E is located north of Route 7 between Great Passage Boulevard and Springvale Road and encompasses noise-sensitive land uses on Great Passage Boulevard, Kettle Pond Lane, Amanda Drive, Riva Ridge Drive, Piney Pond Drive, Mountain Hope Court, Crippen Court, and Springvale Road. CNE E contains 66 modeling-*only* sites (E1-E66) which represent 66 residences. CNE E also contains one monitoring site (E1) which was used for model validation.
- CNE F is located north of Route 7 between Springvale Road and Trotting Horse Lane in the center part of the project and encompasses noise-sensitive land uses on Springvale Road, Springvale Court, Van Patten Lane, Colvin Run Road, Colvin Meadows Court, Colvin Meadows Lane, Lees Meadows Court, Robindale Drive, Hessick Court, Locust Hill Drive, and Trotting Horse Lane. CNE F contains 164 modeling-*only* sites (F1-F164) which represent 155 single-family residences, Meadows Farms Nurseries and Landscaping, Colvin Run Mill, and a cemetery. CNE F contains modeling sites for portions of the relocated Cross County Connector Trail. CNE F also contains four monitoring sites (F1, F2 F3, F4) which were used for model validation.
- CNE G is located south of Route 7 between Baron Cameron Avenue and Beulah Road and encompasses noise-sensitive land uses on Water Falls Lane, Dunn Meadows Court, Cobble Pond Way, Dunn Meadows Road, Delta Glenn Court, Newkirk Court, Mill Wheel Lane, Colvin Forest Lane, Scenic View Terrace, Grapes Farm Way, Carpers Farm Court, Middleton Ridge Road, Middleton Court, Difficult Run Court, Tweed Court, and

Beulah Road. CNE G contains 208 modeling-*only* sites (G1-G208) which represent 203 single-family residences, Capital Church, Chesterbrook Academy Preschool, and Beulah Dental. CNE G contains modeling sites for portions of the relocated Cross County Connector Trail. CNE G also contains three monitoring sites (G1, G2, and G3) which were used for model validation.

- CNE H is located north of Route 7 between Trotting Horse Lane and Towlston Road and encompasses noise-sensitive land uses on Trotting Horse Lane, Fairpine Lane, Forestville Drive, Farmingdale Court, Vernon Drive, Lyons Street, Kenmore Drive, and Towlston Road. CNE H contains 79 modeling-*only* sites (H1-H79) which represents 72 single-family residences and The Eastern Ridge School. CNE H also contains two monitoring sites (H1 and H2) which were used for model validation.
- CNE I is located south of Route 7 between Beulah Road and Towlston Road and encompasses noise-sensitive land uses on Beulah Road, Deramus Farm Court, Atwood Road, Robnel Place, Stokley Way, Vanetta Lane, Kilby Glen Drive, and Towlston Road. CNE I contains 112 modeling-*only* sites (I1-I112) which represents 110 single-family residences, Wolf Trap Nursery, and a picnic area at Fairfax County Fire Station 42. CNE I also contains one monitoring site (I-1) which was used for model validation.
- CNE J is located south of Route 7 between Towlson Road and Trap Road and encompasses noise-sensitive land uses on Towlston Road, Schuman Court, and Windsor Meadows Lane. CNE J contains 35 modeling-*only* sites (J1-J35) which represents 15 single-family residences, St. Athanasius Roman Catholic Church, and Andrew Chapel Cemetery. CNE J also contains one monitoring site (J1) which was used for model validation.
- CNE K is located south of Route 7 between Trap Road and the McLean Bible Church and encompasses noise-sensitive land uses on Trap Road, Lucky Estates Drive, Timberwolf Court, Trailridge Court, Wolftrap Run Road, and Route 7. CNE K contains 39 modeling-*only* sites (K1-K39) which represents 32 single-family residences, Andrew Chapel Preschool, Bethel Baptist Church, McLean Bible Church, and Jill's House. CNE K also contains one monitoring site (K1) which was used for model validation.
- CNE L is located north of Route 7 between Towlston Road and Lewinsville Road and encompasses noise-sensitive land uses on Route 7, Dreamweaver Court, Royal Estates Drive, Old Tolson Mill Road, Brook Road, Gallant Green Drive, Gunnell Court, Woodside Drive, and Lewinsville Road. CNE L contains 49 modeling-*only* sites (L1-L49) which represents 45 single-family residences, Providence Baptist Church, and St Thomas Episcopal Church/McLean Preschool. CNE L also contains one monitoring site (L1) which was used for model validation.

- CNE M is located north of Route 7 between Lewinsville Road and the Dulles Toll Road off-ramp at the eastern termini of the project. CNE M encompasses noise-sensitive land uses on Route 7, Mirador Place, Prestwould Place, Woodhurst Boulevard, and Mayhurst Boulevard. CNE M contains 52 modeling-*only* sites (M1-M52) which represents 52 single-family residences. The locations of the receptor sites are shown on **Figure 2-7**. Receptor M-01 is a proposed property acquisition; therefore, no sound level predictions were made for M1 under the Design Year (2040) Build condition. CNE M also contains one monitoring site (M1) which was used for model validation.
- CNE N is located south of Route 7 between Laurel Hill Road and Jarrett Valley Drive at the eastern termini of the project. CNE N encompasses noise-sensitive land uses on Laurel Hill Road, Glenridge Court, Old Ash Grove, Stanbridge Place, Carrington Ridge Lane, Broadstone Place, and Jarret Valley Drive. CNE N contains 78 modeling-*only* sites (N1-N80) which represents 81 residences and Berea Church of Christ. CNE N contains one monitoring site (N1) which was used for model validation. CNE N also contains an existing noise barrier that was erected as part of the Route 7 over Dulles Access Toll Road (DATR) Major Bridge Rehabilitation project (UPC 82135).

4.2 UNDEVELOPED LANDS AND PERMITTED DEVELOPMENTS

Highway traffic noise analyses are (and will be) performed for developed lands as well as undeveloped lands if they are considered “permitted.” Undeveloped lands are deemed to be permitted when there is a definite commitment to develop land with an approved specific design of land use activities as evidenced by the issuance of at least one building permit.

In accordance with the *VDOT Traffic Noise Policy*, an undeveloped lot is considered to be planned, designed, and programmed if a building permit has been issued by the local authorities prior to the Date of Public Knowledge for the relevant project. VDOT considers the “Date of Public Knowledge” as the date that the final NEPA approval is made. The NEPA approval date for the project is November 15, 2017. VDOT has no obligation to provide noise mitigation for any undeveloped land that is permitted or constructed after this date.

According to a review of Fairfax County Planning Commission site plan and submission records, there are no new planned or permitted lands or developments (building permits) with noise-sensitive land use within a 500-foot buffer zone as of the NEPA approval date (November 15, 2017). The permitted development that has occurred before the FONSI has been incorporated into this analysis. Please see Appendix H for permitted lands research.

4.3 MONITORING OF EXISTING NOISE LEVELS

A noise monitoring program was conducted within the Route 7 Corridor Improvements study area consistent with FHWA and VDOT recommended procedures. The objectives of the monitoring program were to document existing ambient noise levels in noise-sensitive locations and to provide a means for validation of the traffic noise prediction model.

Short-term noise measurements of 15-minute duration were obtained at 12 locations within the project corridor on November 17, 2015, for the Preliminary Engineering. These measurements were supplemented with 11 locations on March 20, 2019. All monitoring was performed using Metrosonics dB-3080 sound analyzers. One location was omitted from the analysis (G4) since the measurement results were influenced by mowing and mulching activities occurring at neighboring residences. Field calibration of the meters was performed immediately prior to noise monitoring using a Metrosonics cl-304 sound level calibrator. The sound analyzers were post-calibrated subsequent to the measurements using a Metrosonics cl-304 sound level calibrator. All equipment was lab-calibrated on April 26, 2018. This equipment meets all requirements of the American National Standard Specification for Sound Level Meters, ANSI S1.4-1983 (R1990), Type 2. Noise measurements were in the A-weighted scale and reported in decibels (dBA). The data collection procedure involved the L_{eq} measurements in consecutive 30-second intervals. This method allows individual time intervals that include noise events unrelated to traffic noise (such as aircraft over flights) to be excluded from consideration. Hourly average noise levels [$L_{eq(h)}$] were derived at each location from the 15- to 20-minute L_{eq} values. Existing noise measurements were collected under meteorologically acceptable conditions when the pavement was dry and winds were calm or light. Additional data collected at each monitoring location included atmospheric conditions such as wind speed, humidity, and ambient temperature. Monitoring was conducted in accordance with the U.S. Department of Transportation, FHWA "Measurement of Highway-Related Noise," FHWA Report No. FHWA-PD-96-046, May 1996.

Short-term noise monitoring is not a process to determine design year noise impacts or barrier locations. Short-term noise monitoring provides a level of consistency between what is present in real-world situations and how that is represented in the computer noise model. Short-term monitoring does not need to occur within every CNE to validate the computer noise model.

The measured noise levels appear in **Table 4** as equivalent sound levels (L_{eq}). The L_{eq} is a sound-energy average of the fluctuating sound level (in A-weighted decibels, dBA) measured over a specified period of time. **Table 4** provides the site address as well as the date, start time, and duration of each measurement. The traffic data (vehicle composition and speed) were also recorded during the measurement period. According to VDOT procedure, traffic was grouped into one of three categories: automobiles, medium trucks, and heavy trucks. The traffic data were converted to one-hour traffic data based on the measurement duration for validation of the noise model.

**TABLE 4
SHORT-TERM NOISE MONITORING SUMMARY**

Site ID	Address	Date	Time Start	Duration (minutes)	Monitored L_{eq} (dBA)
A1	11304 Water Pointe Circle	11/17/2015	9:35	15	57
A2	11582 Cedar Chase Road	3/21/2019	10:10	20	56
B1	11119 Loran Road	11/17/2015	9:35	15	63
B2	1063 Autumn Mist Lane	3/21/2019	10:10	20	60
C1	1155 Markell Court	11/17/2015	9:35	15	58
C2	11270 Stones Throw Drive	3/21/2019	10:10	20	56
E1	10805 Piney Pond Drive	11/17/2015	9:35	15	61
F1	10411 Van Pattern Lane	11/17/2015	10:40	15	60
F2	9629 Locust Hill Drive	11/17/2015	10:40	15	60
F3	1220 Colvin Meadows Lane	3/21/2019	11:37	20	56
F4	9911 Hessick Court	3/21/2019	11:37	20	56
G1	1253 Dunn Meadow Court	11/17/2015	10:40	15	64
G2	1293 Colvin Forest Drive	11/17/2015	10:40	15	63
G3	10237 Leesburg Pike	3/21/2019	11:37	20	57
H1	9393 Farmingdale Court	11/17/2015	11:40	15	58
H2	9320 Leesburg Pike	3/21/2019	12:54	20	66
I1	9356 Mildred Court	11/17/2015	11:40	15	63
J1	1308 Trap Road	3/21/2019	12:54	20	57
K1	9105 Lucky Estates Drive	3/21/2019	12:54	20	57
L1	9026 Leesburg Pike	11/17/2015	11:40	15	63
M1	1424 Woodhurst Boulevard	3/21/2019	13:42	20	53
N1	8850 Glenridge Court	11/17/2015	11:40	15	65

The location of each noise monitoring site is indicated with a star symbol on **Figure 2**. Additional noise monitoring data (site sketches, meter printouts, and calibration certificates) are located in Appendix A. The monitored L_{eq} in the study corridor ranged from 53 dBA to 66 dBA. Traffic noise from Route 7 was the dominant source of noise at each of the monitoring locations.

4.4 NOISE MODEL VALIDATION

The noise monitoring data are primarily used to validate the computer model used to predict existing and future levels. Upon measurement of the existing noise levels, a three-dimensional noise model of the existing roadway network was constructed which incorporates all significant terrain features that define the propagation path between the roadway and noise-sensitive receptors. Traffic volumes, composition, and speeds that were observed during the short-term monitoring periods were used as inputs to generate the validation models sound levels. FHWA and VDOT consider a difference of ± 3 dBA or less between the measured noise levels and the computer modeled noise levels is considered acceptable. This computer model validation verifies that the sound propagation paths within the model are accurate and that the modeling techniques are correct and ensures that reported changes between the 2018 existing conditions and future design year (2040) conditions are due to changes in traffic or propagation path and not discrepancies between monitoring and modeling techniques.

The model validation was performed for the existing traffic conditions observed and recorded during the measurement period. As these noise measurements were not necessarily obtained during the existing loudest hour, the existing noise levels obtained during the 20-minute short-term monitoring session were not predicted as the project's existing noise levels. Instead, the validated existing conditions TNM noise model was used to generate existing loudest-hour noise levels by using Design Hour Volumes and truck percentages supplied by the traffic engineers as model inputs (refer to Section 5.2).

A summary of the model validation is presented in **Table 5**. Each of the monitored locations was able to be accurately modeled within the acceptable ± 3 dBA range. Due to the relatively close proximity of the monitoring locations to Route 7 and absence of other major noise sources, traffic noise was the most dominant component of the acoustic environment at each monitoring location. The project-wide average difference between calculated noise levels and monitored noise levels was 1.7 decibels, which generally shows excellent agreement

between monitored and modeled sound levels and suggests confidence in the modeling assumptions.

**TABLE 5
COMPUTED VS. MEASURED SOUND LEVELS AT MEASUREMENT SITES**

Site ID	CNE	Address	Monitored L_{eq} (dBA)	TNM - Computed L_{eq} (dBA)	Difference (dBA)
A1	A	11304 Water Pointe Circle	57.2	58.3	1.1
A2		11582 Cedar Chase Road	56.0	56.8	0.8
B1	B	11119 Loran Road	63.2	64.4	1.2
B2		1063 Autumn Mist Lane	60.2	60.9	0.7
C1	C	1155 Markell Court	58.1	57.2	-0.9
C2		11270 Stones Throw Drive	56.4	59.3	2.9
E1	E	10805 Piney Pond Drive	60.7	63.0	2.3
F1	F	10411 Van Pattern Lane	59.5	60.5	1.0
F2		9629 Locust Hill Drive	60.1	62.4	2.3
F3		1220 Colvin Meadows Lane	56.0	58.8	2.8
F4		9911 Hessick Court	56.3	59.3	3.0
G1	G	1253 Dunn Meadow Court	64.4	64.8	0.4
G2		1293 Colvin Forest Drive	63.3	65.6	2.3
G3		10237 Leesburg Pike	56.7	58.6	1.9
H1	H	9393 Farmingdale Court	58.1	61.1	3.0
H2		9320 Leesburg Pike	65.7	67.4	1.7
I1	I	9356 Mildred Court	63.0	63.2	0.2
J1	J	1308 Trap Road	56.5	59.1	2.6
K1	K	9105 Lucky Estates Drive	57.2	60.2	3.0
L1	L	9026 Leesburg Pike	63.4	66.1	2.7
M1	M	1424 Woodhurst Boulevard	52.5	53.8	1.3
N1	N	8850 Glenridge Court	65.3	65.4	0.1
Average Difference					1.7
Standard Deviation of Difference					1.1

4.5 PREDICTED EXISTING NOISE LEVELS

For calculation of loudest-hour noise levels throughout the study area, 1,237 receiver locations were added to the validated TNM model(s) to provide a comprehensive basis of

comparison for the analysis of noise impacts from the existing and future project conditions. Using the appropriate loudest-hour traffic data, existing and future traffic noise levels were predicted for the measurement sites and the additional receiver locations. The computation methods and predicted noise levels are presented in the next section of this report.

The noise measurements provided valuable information on current noise conditions and the effects of terrain and shielding on sound propagation from the roadway to the nearby residential land uses. However, because existing noise levels are not always measured during the loudest hour of the day, the loudest-hour existing noise levels were computed using the appropriate traffic data as input. The predicted existing noise levels for the loudest hour of the day are then used as the baseline against which probable future noise levels are compared and potential noise impacts assessed.

Of the 1,237 total noise receptor sites (grouped into 14 CNEs), 159 receptor sites (within 13 of the 14 CNEs) are predicted to approach or exceed the NAC for the existing condition worst-case noise hour. For all studied sites, the predicted existing year noise levels range from 40 dBA to 73 dBA. A discussion of the predicted existing noise levels for each of the CNEs is provided below. **Figure 2** presents the locations of all the CNEs and all of their respective modeled receptor sites. Calculated noise levels for all noise-sensitive sites are presented in **Table 7** and discussed below. Due to the amount of data, this table is located in the Data Tables section.

- Existing loudest hour noise levels within CNE A were predicted to range from 41 to 66 dBA. One noise-sensitive sites are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.
- Existing loudest hour noise levels within CNE B were predicted to range from 49 to 71 dBA. There are 14 noise-sensitive sites that are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.
- Existing loudest hour noise levels within CNE C were predicted to range from 40 to 72 dBA. There are 16 noise-sensitive sites that are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.
- Existing loudest hour noise levels within CNE D were predicted to range from 48 to 71 dBA. There are two noise-sensitive sites that are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.

- Existing loudest hour noise levels within CNE E were predicted to range from 46 to 70 dBA. There are 10 noise-sensitive sites that are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.
- Existing loudest hour noise levels within CNE F were predicted to range from 43 to 72 dBA. There are 27 noise-sensitive sites that are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.
- Existing loudest hour noise levels were predicted to range from 42 to 72 dBA within CNE G. There are 38 noise-sensitive sites that are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.
- Existing loudest hour noise levels were predicted to range from 47 to 73 dBA within CNE H. There are 17 noise-sensitive sites that are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.
- Existing loudest hour noise levels were predicted to range from 44 to 71 dBA within CNE I. There are 10 noise-sensitive sites that are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.
- Existing loudest hour noise levels were predicted to range from 48 to 69 dBA within CNE J. There are eight noise-sensitive sites that are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.
- Existing loudest hour noise levels were predicted to range from 45 to 68 dBA within CNE K. Three noise-sensitive sites are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.
- Existing loudest hour noise levels were predicted to range from 41 to 71 dBA within CNE L. There are five noise-sensitive sites that are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.
- Existing loudest hour noise levels were predicted to range from 47 to 62 dBA within CNE M. No noise-sensitive sites are predicted to approach or exceed the NAC for the existing condition worst-case noise hour.
- Existing loudest hour noise levels were predicted to range from 43 to 70 dBA within CNE N. There is one noise-sensitive site predicted to approach or exceed the NAC for the existing condition worst-case noise hour.

5.0 FUTURE NOISE ENVIRONMENT

5.0 FUTURE NOISE ENVIRONMENT

This section discusses the noise prediction model and traffic data used as input to the noise prediction model and then presents a summary of the predicted noise levels.

5.1 PRESENTATION OF RESULTS

Table 6 summarizes the range of predicted noise levels by CNE. The table includes a description of each CNE and its land use, the FHWA Activity Category, and the loudest-hour traffic noise levels which are presented in terms of the A-weighted equivalent sound level, or L_{eq} , in dBA. Loudest-hour noise levels were computed for 2018 existing conditions as well as the future design year (2040) proposed highway widening.

**TABLE 6
RANGES OF PREDICTED EXTERIOR NOISE LEVELS FOR THE WORST HOUR**

CNE	Land Use- Description	Activity Category	Range of Predicted Exterior Noise Levels and Impacts for the Worst Hour			
			Existing Sound Level (dBA)		2040 Build Sound Level (dBA)	
			Min	Max	Min	Max
A	Single-family homes in Cedar Chase development (Cedar Chase Road, Cedar Chase Court), Estates of North Hills (Water Pointe Lane, Water Pointe Circle, and Round Pebble Lane), and Reston Parkway	B	41	66	43	67
	Boyd School Playground; North Pointe Fire Station Picnic table; Great Falls Assisted Living Patio	C	55	59	56	61
	Good Shepherd Lutheran Church; The Boyd School – Reston Campus	D	30	32	30	33
B	Single-family homes in Autumn Wood development (Aidan Run Court, Autumn Mist Lane), Shain Court, Northfalls Court, Bowen Avenue, Loran Court, Loran Road, and Utterback Store Road	B	49	71	52	73
	Dog Park	C	51		52	
	Seneca Hill Animal Hospital, Dranesville Church of the Brethren, MTO Shahmaghsoudi School of Islamic Sufism	D	26	44	32	46
	Meadows Farms Nurseries and Landscaping	E	62		65	

**TABLE 6
(CONTINUED)**

CNE	Land Use- Description	Activity Category	Range of Predicted Exterior Noise Levels and Impacts for the Worst Hour			
			Existing Sound Level (dBA)		2040 Build Sound Level (dBA)	
			Min	Max	Min	Max
C	Single-family homes in Wyndham Hills Development (Stones Throw Drive, Fieldview Drive), Bright Pond Lane, Piney Run Meadows Development (Tommye Lane, Meadowlook Court), Bishopsgate Way, Falls Park Estates (Markell Court), Great Falls Crossing (Hunter Gate Way), and Baron Cameron Avenue	B	40	72	48	73
	Great Falls Crossing Community Center (Pool, tennis, basketball, picnic area, pavilion, playground)	C	54	64	57	65
D	Single-family homes on Utterback Store Road, Great Passage Court, and Great Passage Boulevard	B	48	71	50	72
	Nike Park soccer/softball fields	C	50	64	54	68
E	Single-family homes along Great Passage Boulevard, Kettle Pond Lane, Amanda Drive, Riva Ridge Drive, Piney Pond Drive, Mountain Hope Court, Crippen Court, and Springvale Road	B	46	70	48	71
F	Single-family homes on Springvale Road, Springvale Court, Van Patten Lane, Colvin Run Road, Colvin Meadows Court, Colvin Meadows Lane, Lees Meadows Court, Robindale Drive, Hessick Court, Locust Hill Drive, and Trotting Horse Lane; Colvin Run Mill; cemetery	B	43	72	45	74
	Unnamed Cemetery, Colvin Run Mill	C	59	72	61	74
	Meadows Farms Nurseries and Landscaping; Hills Nursery	E	65	68	68	70
G	Single-family homes on Water Falls Lane, Dunn Meadows Court, Cobble Pond Way, Dunn Meadows Road, Delta Glenn Court, Newkirk Court, Mill Wheel Lane, Colvin Forest Lane, Scenic View Terrace, Grapes Farm Way, Carpers Farm Court, Middleton Ridge Road, Middleton Court, Difficult Run Court, Tweed Court, and Beulah Road	B	42	72	45	74
	Capital Church Picnic Area, Beulah Dental, Chesterbrook Academy Preschool playground	C	61	65	65	69
	Capital Church; Chesterbrook Academy Preschool	D	32	45	36	48
H	Single-family homes on Trotting Horse Lane, Fairpine Lane, Forestville Drive, Farmingdale Court, Vernon Drive, Lyons Street, Kenmore Drive, and Towlston Road	B	47	73	48	75
	The Eastern Ridge School outdoor activity area	C	61	73	65	77
	The Eastern Ridge School	D	34		38	

**TABLE 6
(CONTINUED)**

CNE	Land Use- Description	Activity Category	Range of Predicted Exterior Noise Levels and Impacts for the Worst Hour			
			Existing Sound Level (dBA)		2040 Build Sound Level (dBA)	
			Min	Max	Min	Max
I	Single-family homes on Beulah Road, Deramus Farm Court, Atwood Road, Robnel Place, Stokley Way, Vanetta Lane, Kilby Glen Drive, and Towlston Road	B	44	71	49	74
	Picnic area at the Fairfax County Fire Station 42	C	50		53	
	Wolf Trap Nursery	E	68		70	
J	Single-family homes on Towlston Road, Schuman Court, and Windsor Meadows Lane	B	48	69	51	70
	Andrew Chapel Cemetery	C	56	73	58	73
	St. Athanasius Roman Catholic Church	D	45		47	
K	Trap Road, Lucky Estates Drive, Timberwolf Court, Trailridge Court, Wolftrap Run Road, and Route 7	B	45	68	48	70
	Andrew Chapel playground, Jills House playground, McLean Bible Church playground	C	50	62	51	63
	Andrew Chapel United Methodist Church, Bethel Baptist Church, Jills House, McClean Bible Church	D	35	37	35	40
L	Single-family residences on Route 7, Dreamweaver Court, Royal Estates Drive, Old Tolson Mill Road, Brook Road, Gallant Green Drive, Gunnell Court, Woodside Drive, and Lewinsville Road	B	41	71	43	73
	Providence Baptist Church playground and volley ball	C	57	62	61	65
	Providence Baptist Church, St Thomas Episcopal Church/McLean Preschool	D	36	37	37	38
M	Single-family residences on Route 7, Mirador Place, Prestwoud Place, Woodhurst Boulevard, and Mayhurst Boulevard	B	47	62	51	65
N	Single-family residences on Laurel Hill Road, Glenridge Court, Old Ash Grove, Stanbridge Place, Carrington Ridge Lane, Broadstone Place, and Jarret Valley Drive	B	43	70	48	73
	Berea Church of Christ	D	32		33	
F/G	Cross County Trail	C	56	72	58	73

Figure 2 provides a location map for the CNEs, noise-sensitive receptors, 66 dBA L_{eq} “contour” for the 2040 Build alternative, and potential noise barrier locations. Each receptor is shown in **Figure 2** with a color-coded dot that indicates the status of each receptor according to its 2040 Build noise level.

Future design year (2040) noise levels are predicted to exceed the NAC within 13 of the 14 CNEs at a total of 222 noise-sensitive receptor sites. For all studied sites, the future design year (2040) exterior noise levels range from 43 dBA to 77 dBA. The increase in noise is attributable to an increase in overall traffic volumes along Route 7 as well as minor alterations in the source/receiver noise propagation path resulting from the construction of the additional travel lane.

- Future design year (2040) noise levels within CNE A are predicted to range from 43 dBA to 67 dBA, with noise levels predicted to approach or exceed the NAC at two noise-sensitive receptor locations. There is a maximum of 4 dBA increase over existing sound levels within CNE A.
- Future design year (2040) noise levels within CNE B are predicted to range from 52 dBA to 73 dBA, with noise levels predicted to approach or exceed the NAC at 17 noise-sensitive receptor locations. There is a maximum of 6 dBA increase over existing sound levels within CNE B.
- Future design year (2040) noise levels within CNE C are predicted to range from 48 dBA to 73 dBA, with noise levels predicted to approach or exceed the NAC at 21 noise-sensitive receptor locations. There is a maximum of 14 dBA increase over existing sound levels within CNE C.
- Future design year (2040) noise levels within CNE D are predicted to range from 50 dBA to 72 dBA, with noise levels predicted to approach or exceed the NAC at four noise-sensitive receptor locations. There is a maximum of 5 dBA increase over existing sound levels within CNE D.
- Future design year (2040) noise levels within CNE E are predicted to range from 48 dBA to 71 dBA, with noise levels predicted to approach or exceed the NAC at 16 noise-sensitive receptor locations. There is a maximum of 4 dBA increase over existing sound levels within CNE E.
- Future design year (2040) noise levels within CNE F are predicted to range from 45 dBA to 74 dBA, with noise levels predicted to approach or exceed the NAC at 32 noise-sensitive receptor locations. There is a maximum of 5 dBA increase over existing sound levels within CNE F.
- Future design year (2040) noise levels within CNE G are predicted to range from 45 dBA to 74 dBA, with noise levels predicted to approach or exceed the NAC at 47 noise-sensitive receptor locations. There is a maximum of 6 dBA increase over existing sound levels within CNE G.
- Future design year (2040) noise levels within CNE H are predicted to range from 48 dBA to 75 dBA, with noise levels predicted to approach or

exceed the NAC at 20 noise-sensitive receptor locations. There is a maximum of 7 dBA increase over existing sound levels within CNE H.

- Future design year (2040) noise level within CNE I are predicted to range from 49 dBA to 74 dBA, with noise levels predicted to approach or exceed the NAC at 13 noise-sensitive receptor locations. There is a maximum of 5 dBA increase over existing sound levels within CNE I.
- Future design year (2040) noise levels within CNE J are predicted to range from 51 dBA to 73 dBA, with noise levels predicted to approach or exceed the NAC at 10 noise-sensitive receptor locations. There is a maximum of 6 dBA increase over existing sound levels within CNE J.
- Future design year (2040) noise levels at the athletic fields within CNE K are predicted to range from 48 dBA to 70 dBA, with noise levels predicted to approach or exceed the NAC at five noise-sensitive receptor location. There is a maximum of 7 dBA increase over existing sound levels within CNE K.
- Future design year (2040) noise levels within CNE L are predicted to range from 43 dBA to 73 dBA, with noise levels predicted to approach or exceed the NAC at six noise-sensitive receptor locations. There is a maximum of 4 dBA increase over existing sound levels within CNE L.
- Future design year (2040) noise levels within CNE M are predicted to range from 51 dBA to 65 dBA and are not predicted to approach or exceed the NAC at any noise-sensitive receptor location. There is an earth berm constructed between Route 7 and the community, significantly shielding these homes from traffic noise. There is a maximum of 5 dBA increase over existing sound levels within CNE M.
- Future design year (2040) noise levels within CNE N are predicted to range from 48 dBA to 73 dBA, with the noise levels predicted to approach or exceed the NAC at 11 noise-sensitive receptor locations. There is a maximum of 7 dBA increase over existing sound levels within CNE N.

Table 7 (refer to Data Tables for receptor sound data tables) outlines all of the computed sound levels at all 1,237 of the modeled receptors included in the noise assessment. The noise-impacted sites have been highlighted in red. All impacts result from an approach or exceedance of the NAC. There are no impacts associated with the “substantial increase” impact threshold.

Table 8 presents a summary of the predicted noise impact for the 2018 existing condition and the future design year (2040) build alternative. The impacts are summarized for the entire study area, separately by FHWA Activity Category.

**TABLE 8
NOISE IMPACT SUMMARY**

Scenario	Impact Type ¹	Number of Impacted Units by Land Use and FHWA Activity Category ²				
		Residential Exterior (B)	Recreational Exterior (C)	Institutional Interior (D)	Commercial Exterior (E)	Total
Existing	NAC	140	19	0	0	159
Build	NAC	184	38	0	0	222

1 "NAC" = Noise levels approach or exceed the FHWA Noise Abatement Criteria (NAC) for applicable Activity Category.
2 The FHWA Activity Category is shown in parenthesis.

Table 9 presents a summary of the predicted noise impact for the 2018 existing condition and the future design year (2040) build alternative by CNE.

**TABLE 9
PREDICTED TRAFFIC NOISE IMPACT BY COMMON NOISE ENVIRONMENT (CNE)**

CNE	Land Use - Description	Activity Category	Range of Predicted Exterior Noise Levels and Impacts for the Worst Hour	
			Existing	2040 Build
			Number of Impacts	Number of Impacts
A	Single-family homes in Cedar Chase development (Cedar Chase Road, Cedar Chase Court), Estates of North Hills (Water Pointe Lane, Water Pointe Circle, and Round Pebble Lane), and Reston Parkway	B	1	2
	Boyd School Playground; North Pointe Fire Station Picnic table; Great Falls Assisted Living Patio	C	0	0
	Good Shepherd Lutheran Church; The Boyd School – Reston Campus	D	0	0
B	Single-family homes in Autumn Wood development (Aidan Run Court, Autumn Mist Lane), Shain Court, Northfalls Court, Bowen Avenue, Loran Court, Loran Road, and Utterback Store Road	B	14	17
	Dog Park	C	0	0
	Seneca Hill Animal Hospital, Dranesville Church of the Brethren, MTO Shahmaghsoudi School of Islamic Sufism	D	0	0
	Meadows Farms Nurseries and Landscaping	E	0	0
C	Single-family homes in Wyndham Hills Development (Stones Throw Drive, Fieldview Drive), Bright Pond Lane, Piney Run Meadows Development (Tommye Lane, Meadowlook Court), Bishopsgate Way, Falls Park Estates (Markell Court), Great Falls Crossing (Hunter Gate Way), and Baron Cameron Avenue	B	16	21

**TABLE 9
(CONTINUED)**

CNE	Land Use - Description	Activity Category	Range of Predicted Exterior Noise Levels and Impacts for the Worst Hour	
			Existing	2040 Build
			Number of Impacts	Number of Impacts
	Great Falls Crossing Community Center (Pool, tennis, basketball, picnic area, pavilion, playground)	C	0	0
D	Single-family homes on Utterback Store Road, Great Passage Court, and Great Passage Boulevard	B	2	2
	Nike Park soccer/softball fields	C	0	2
E	Single-family homes along Great Passage Boulevard, Kettle Pond Lane, Amanda Drive, Riva Ridge Drive, Piney Pond Drive, Mountain Hope Court, Crippen Court, and Springvale Road	B	10	16
F	Single-family homes on Springvale Road, Springvale Court, Van Patten Lane, Colvin Run Road, Colvin Meadows Court, Colvin Meadows Lane, Lees Meadows Court, Robindale Drive, Hessick Court, Locust Hill Drive, and Trotting Horse Lane; Colvin Run Mill; cemetery	B	24	28
	Unnamed Cemetery, Colvin Run Mill	C	3	4
	Meadows Farms Nurseries and Landscaping; Hills Nursery	E	0	0
G	Single-family homes on Water Falls Lane, Dunn Meadows Court, Cobble Pond Way, Dunn Meadows Road, Delta Glenn Court, Newkirk Court, Mill Wheel Lane, Colvin Forest Lane, Scenic View Terrace, Grapes Farm Way, Carpers Farm Court, Middleton Ridge Road, Middleton Court, Difficult Run Court, Tweed Court, and Beulah Road	B	38	46
	Capital Church Picnic Area, Beulah Dental, Chesterbrook Academy Preschool playground	C	0	1
	Capital Church; Chesterbrook Academy Preschool	D	0	0
H	Single-family homes on Trotting Horse Lane, Fairpine Lane, Forestville Drive, Farmingdale Court, Vernon Drive, Lyons Street, Kenmore Drive, and Towlston Road	B	14	15
	The Eastern Ridge School outdoor activity area	C	3	5
	The Eastern Ridge School	D	0	0
I	Single-family homes on Beulah Road, Deramus Farm Court, Atwood Road, Robnel Place, Stokley Way, Vanetta Lane, Kilby Glen Drive, and Towlston Road	B	10	13
	Picnic area at the Fairfax County Fire Station 42	C	0	0
	Wolf Trap Nursery	E	0	0
J	Single-family homes on Towlston Road, Schuman Court, and Windsor Meadows Lane	B	2	2
	Andrew Chapel Cemetery	C	6	8
	St. Athanasius Roman Catholic Church	D	0	0

**TABLE 9
(CONTINUED)**

CNE	Land Use - Description	Activity Category	Range of Predicted Exterior Noise Levels and Impacts for the Worst Hour	
			Existing	2040 Build
			Number of Impacts	Number of Impacts
K	Trap Road, Lucky Estates Drive, Timberwolf Court, Trailridge Court, Wolftrap Run Road, and Route 7	B	3	5
	Andrew Chapel playground, Jills House playground, McLean Bible Church playground	C	0	0
	Andrew Chapel United Methodist Church, Bethel Baptist Church, Jills House, McClean Bible Church	D	0	0
L	Single-family residences on Route 7, Dreamweaver Court, Royal Estates Drive, Old Tolson Mill Road, Brook Road, Gallant Green Drive, Gunnell Court, Woodside Drive, and Lewinsville Road	B	5	6
	Providence Baptist Church playground and volley ball	C	0	0
	Providence Baptist Church, St Thomas Episcopal Church/McLean Preschool	D	0	0
M	Single-family residences on Route 7, Mirador Place, Prestwould Place, Woodhurst Boulevard, and Mayhurst Boulevard	B	0	0
N	Single-family residences on Laurel Hill Road, Glenridge Court, Old Ash Grove, Stanbridge Place, Carrington Ridge Lane, Broadstone Place, and Jarret Valley Drive	B	1	11
	Berea Church of Christ	D	0	0
F/G	Cross County Trail	C	7	18
Total Impacted Dwellings			159	222

6.0 NOISE ABATEMENT DETERMINATION

6.0 NOISE ABATEMENT DETERMINATION

Noise Abatement Determination is a three-phased approach. The first phase of the process is to determine if highway traffic noise abatement consideration is warranted for the affected communities and/or affected receptors. The warranted criterion specifically pertains to traffic noise impacted receptors, defined in Section 5. Since predicted noise levels for the future design year (2040) build condition approach or exceed the NAC and/or meet the substantial increase criterion, in accordance with VDOT's State Noise Abatement Policy, noise abatement considerations are warranted for these impacted noise-sensitive areas. Satisfying the warranted criterion is considered to be the first phase (Phase 1) of the three-phased noise abatement determination. Phases 2 and 3 (determining feasibility and reasonableness) are discussed below. Following completion of all three phases, a determination can be made related to the feasibility and reasonableness of the noise abatement options.

Noise-sensitive sites behind existing noise barriers that are predicted to be impacted by traffic noise under the future design year (2040) build condition are subject to the following evaluation. This is due to the fact that noise barriers posts and foundations are uniquely designed for each noise barrier; as such, retrofitting a noise barrier to address new noise impacts is not possible. This methodology determines if the existing noise barrier is still feasible and reasonable under VDOT's State Noise Abatement Policy, and is as follows:

- Determine the future design year (2040) noise levels with and without the existing noise barrier.
 - If the noise barrier is determined to be feasible and reasonable, then the process shall stop.
 - If the existing barrier is not feasible and/or reasonable, a new feasible barrier shall be evaluated.
 - If the new noise barrier being evaluated is determined to not be feasible and/or not reasonable, the existing noise barrier will be left in place without modification.
 - If the new noise barrier being evaluated is determined to be both feasible and reasonable, the new barrier will be recommended for further consideration.

6.1 ABATEMENT MEASURES EVALUATION

VDOT guidelines recommend a variety of mitigation measures that should be considered in response to transportation-related noise impacts. While noise barriers and/or earth berms are generally the most effective forms of noise mitigation, additional mitigation measures exist which have the potential to provide considerable noise reductions under certain circumstances. Mitigation measures considered for this project include:

- Traffic-Control Measures,
- Alteration of Horizontal and Vertical Alignments,
- Acoustical Insulation of Public-Use and Non-Profit Facilities,
- Acquisition of Buffer Land,
- Construction of Earth Berms, and
- Construction of Noise Barriers.

6.1.1 Traffic-Control Measures (TCM)

Traffic-control measures (such as speed limit restrictions, truck traffic restrictions, and other traffic-control measures that may be considered for the reduction of noise emission levels) are not practical for this project. Reducing speeds will not be an effective noise mitigation measure since a substantial decrease in speed is necessary to provide adequate noise reduction. Typically, a 10-mile-per-hour (mph) reduction in speed will result in only a 2 dBA decrease in noise level, which would not eliminate all impacts and is not perceptible to the typical human ear. Additionally, a reduction in speed is not practical for a limited access highway and would be counterproductive to the project objective of alleviating traffic and reducing congestion.

6.1.2 Alteration of Horizontal and Vertical Alignments

Consistent with the Environmental Assessment documentation, complete realignment of Route 7 either horizontally or vertically is not included in the scope of the project as it would result in significant amounts of right-of-way and easement impacts to the adjacent private properties. Accordingly, the scope of this project is to widen Route 7 through construction of an additional travel lane in each direction in the median of the existing interstate. Minimal vertical

profile adjustments are being made to address substandard vertical profile elements, but more drastic vertical changes are not feasible or proposed due to the impacts on the travelling public during construction and impacts on private property which would be required. The noise barriers being studied as part of this project have been placed to maximize their benefit to the surrounding properties and developments while also minimizing right-of-way, easement acquisition, and environmental impacts as well as maintaining access to proposed stormwater management facilities.

6.1.3 Acoustical Insulation of Public-Use and Non-Profit Facilities

This noise abatement measure option applies only to public and institutional use buildings. Since no public use or institutional structures are anticipated to have interior noise levels exceeding FHWA's interior NAC, this noise abatement option will not be applied.

6.1.4 Acquisition of Buffering Land

The purchase of property for noise barrier construction or the creation of a "buffer zone" to reduce noise impacts is only considered for predominantly unimproved properties because the amount of property required for this option to be effective would create significant additional impacts (e.g., in terms of residential displacements), which were determined to outweigh the benefits of land acquisition.

6.1.5 Construction of Berms/Noise Barriers

Construction of noise barriers can be an effective way to reduce noise levels at areas of outdoor activity. Noise barriers can be wall structures, earthen berms, or a combination of the two. The effectiveness of a noise barrier depends on the distance and elevation difference between roadway and receptor and the available placement location for a barrier. Gaps between overlapping noise barriers also decrease the effectiveness of the barrier, as opposed to a single connected barrier. The barrier's ability to attenuate noise decreases as the gap width increases.

Noise barriers and earth berms are often implemented into the highway design in response to the identified noise impacts. The effectiveness of a free-standing (post and panel)

noise barrier and an earth berm of equivalent height are relatively consistent; however, an earth berm is perceived as a more aesthetically pleasing option. In contrast, the use of earth berms is not always an option due to the excessive space they require adjacent to the roadway corridor. At a standard slope of 2:1, every one foot in height would require four feet of horizontal width. This requirement becomes more difficult to meet in urban settings where residential properties often abut the proposed roadway corridor. In these situations, implementation of earth berms can require significant property acquisitions to accommodate noise mitigation, and the cost associated with the acquisition of property to construct a berm can significantly increase the total costs to implement this form of noise mitigation and make it unreasonable.

Availability of fill material to construct the berm also needs to be considered. On projects where proposed grading yields excess waste material, earth berms are often cost-effective mitigation options. On balance or borrow projects, the implementation of earth berms is often an expensive solution due to the need to identify, acquire, and transport the material to the project site. Berms were not considered for this project due to right-of-way constraints.

As a general practice, noise barriers are most effective when placed at a relatively high point between the roadway and the impacted noise-sensitive land use. To achieve the greatest benefit from a potential noise barrier, the goal of the barrier should focus on breaking the line of sight (to the greatest degree possible) from the roadway to the receptor. In roadway fill conditions, where the highway is above the natural grade, noise barriers are typically most effective when placed on the edge of the roadway shoulder or on top of the fill slope. In roadway cut conditions, where the roadway is located below the natural grade, barriers are typically most effective when placed at the top of the cut slope. Engineering and safety issues have the potential to alter these typical barrier locations.

The effectiveness of a noise barrier is measured by examining the barrier's capability to reduce future noise levels. Noise reduction is measured by comparing design year pre- and post-barrier noise levels. This difference between unabated and abated noise levels is known as insertion loss (IL).

Additionally, the Noise Policy Code of Virginia (HB 2577, as amended by HB 2025) states:

“Whenever the Commonwealth Transportation Board or the Department plan for or undertake any highway construction or improvement project and such project includes or may include the requirement for the mitigation of traffic noise impacts, first consideration should be given to the use of noise reducing design and low

noise pavement materials and techniques in lieu of construction of noise barriers or sound barriers. Vegetative screening, such as the planting of appropriate conifers, in such a design would be utilized to act as a visual screen if visual screening is required.”

This documentation is located in **Appendix D**.

6.2 FEASIBILITY, REASONABLENESS, AND DESIGN GOALS

According to FHWA and VDOT guidelines, potential mitigation measures for warranted receptors must also be assessed for feasibility and reasonableness. Noise mitigation is required to be both “feasible” and “reasonable” to be recommended for construction.

6.2.1 Feasibility Criterion for Noise Barriers

All receptors that meet the warranted criterion must progress to the “feasible” phase. Phase 2 of the noise abatement criteria requires that both of the following acoustical and engineering conditions be considered. The noise abatement measure is said to be feasible if it meets both of the following criteria.

- **At least a 5 dBA highway traffic noise reduction at impacted receptors:** According to 23 CFR 772, FHWA requires the highway agency to determine the number of impacted receptors required to achieve at least 5 dBA of reduction. VDOT requires that 50% or more of the impacted receptors experience 5 dBA or more of insertion loss to be feasible.
- **The determination that it is possible to design and construct the noise abatement measure:** The factors related to the design and construction include safety, barrier height, topography, drainage, utilities, environmental impacts and maintenance of the abatement measure, maintenance access to adjacent properties, and general access to adjacent properties (i.e., arterial widening projects). Topography and environmental impacts, notably the avoidance of jurisdictional wetlands and streams, are required to be considered to ensure the recommended noise barrier improvements can be permitted by the appropriate state and federal agencies (Virginia Department of Environmental Quality and U.S. Army Corps of Engineers, for example). A feasibility determination (e.g., engineering conflicts, sight distance, safety concerns, etc.) has been conducted for all the proposed barriers. There were no feasibility issues

noted except for the floodplain impacts noted for Barrier System F4-F4B and Barrier System G8-G9.

6.2.2 Reasonableness Criterion for Noise Barriers

All receptors that meet the feasibility criterion must progress to the “reasonableness” phase. Phase 3 of the noise abatement criteria requires that all of the following conditions be considered.

- **The Viewpoints of the Benefited Receptors:** VDOT shall solicit the viewpoints of all benefited receptors (refer to Section 7.1) through certified mailings and obtain enough responses to document a decision as to whether or not there is a desire for the proposed noise abatement measure. Fifty percent (50%) or more of the respondents shall be required to favor the noise abatement measure in determining reasonableness. Community views in and of themselves are not sufficient for a barrier to be found reasonable if one or both of the other two reasonableness criteria are not satisfied.
- **Cost-effectiveness:** Typically, the limiting factor related to barrier reasonableness is the cost-effectiveness value, where the total surface area of the barrier is divided by the number of benefited receptors receiving at least a 5 dBA reduction in noise level. VDOT’s approved cost is based on a maximum square footage of abatement per benefited receptor, a value of 1,600 square feet per benefited receptor (SF/BR).

Where multi-family housing includes balconies at elevations that exceed a 30-foot high barrier or the topography causes receptors to be above the elevation of a 30-foot barrier, these receptors are not assessed for barrier benefits and are not included in the computation of the barrier’s reasonableness.

6.2.3 Noise Reduction Design Goals

The design goal is a reasonableness factor indicating a specific reduction in noise levels that VDOT uses to identify that a noise abatement measure effectively reduces noise. The design goal establishes a criterion, selected by VDOT, which noise abatement must achieve. VDOT’s noise reduction design goal is defined as a 7 dBA of insertion loss for at least one impacted receptor, meaning that at least one impacted receptor is predicted to achieve a 7 dBA or greater noise reduction with the proposed barrier in place. The design goal is not the same

as acoustic feasibility, which defines the minimum level of effectiveness for a noise abatement measure. Acoustic feasibility indicates that the noise abatement measure can, at a minimum, achieve a discernible reduction in noise levels.

Noise reduction is measured by comparing the future design year (2040) build condition pre-and post-barrier noise levels. This difference between unabated and abated noise levels is known as “insertion loss” (IL). It is important to optimize the noise barrier design to achieve the most effective noise barrier in terms of both noise reduction (insertion losses) and cost. Although at least a 5 dBA reduction is required to meet the feasibility criteria, the following tiered noise barrier abatement goals are used to govern barrier design and optimization.

- Reduction of future highway traffic noise by 7 dBA at one or more of the impacted receptor sites (required criterion)
- Reduction of future highway traffic noise levels to the low-60-decibel range when practical (desirable)
- Reduction of future highway traffic noise levels to existing noise levels when practical (desirable)

6.3 NOISE ABATEMENT RESULTS

Noise barriers were evaluated for the residences within CNE A, B, C, D, E, F, G, H, I, J, K, L, and N that are predicted to experience noise impacts in the build condition. The barrier locations are shown on the graphics located on **Figures 2A** through **2K**. An overview of the evaluated barrier parameters is shown in **Table 10**. A summary of the evaluated barriers acoustical performance and statistics is described in the following subsections. The detailed sound level results for each receptor are located in **Tables 11** through **30** (refer to Data Tables for sound levels data tables). The acoustical profiles of the recommended noise barriers are located within Appendix C. The Warranted, Feasible, and Reasonable Worksheets were completed for all impacted CNEs are included in Appendix E.

**TABLE 10
SUMMARY OF POTENTIAL NOISE BARRIERS EVALUATED IN THIS STUDY**

CNE	Barrier ID	Number of Impacted Receptors	Impacted and Benefitted Receptors	Non-Impacted and Benefitted Receptors	Noise Barrier Details				Surface Area/Benefitted Receptor (SF/BR) ¹	Feasible?	Reasonable?
					Length (ft)	Average Height Range (ft)	Surface Area (SF)	Cost at \$42/SF			
A	A1	1	1	4	600	16	9,597	\$403,074	1,919	Y	N
	A2	1	1	12	1,286	16	20,117	\$844,914	1,547	Y	Y
B/D	B1-B5, D1	19	19	49	5,593	15	83,891	\$3,523,422	1,234	Y	Y
D/E	D2, E1-E4	18	18	25	4,385	15	65,775	\$2,762,550	1,530	Y	Y
C	C1-C2	21	21	47	5,140	15	77,096	\$3,238,032	1,134	Y	Y
F	F1, F1B, F1C, F2	8	7	3	1,127	13	14,658	\$615,636	1,466	Y	Y
	F3	12	12	14	2,546	16	40,735	\$1,710,870	1,567	Y	Y
	F4-F4B	6	6	16	2,210	16	35,352	\$1,484,784	1,607	N	--
	F5-F9	8	8	17	2,489	22	54,789	\$2,301,138	2,192	Y	N
G	G1-G6	24	24	56	5,377	18	96,783	\$4,064,886	1,210	Y	Y
	G8-G9	16	15	13	1,906	14	26,678	\$1,120,476	953	N	--
	G10-G13	20	20	10	2,626	17	45,123	\$1,895,166	1,504	Y	Y
	G14-G16	3	3	1	801	16	12,831	\$538,902	3,208	Y	N
H	H2-H11	20	19	28	3,941	16	62,408	\$2,621,136	1,328	Y	Y
I	I2	5	5	2	835	13	10,852	\$455,784	1,550	Y	Y
	I4-6	8	8	4	1,041	16	16,654	\$699,468	1,388	Y	Y
J/K	J2-J3, K1-K4	15	14	27	3,094	16	49,494	\$2,078,748	1,207	Y	Y
L	L1-L5	4	3	1	974	12	11,693	\$491,106	2,923	Y	N
	L6-L8	2	2	2	852	12	9,703	\$407,526	2,426	Y	N
N	Existing Barrier N	10	0	1	307	15	4,607	\$193,494	4,607	N	--
	N1-N3 and Existing	10	9	6	1,577	14	23,132	\$971,544	1,542	Y	Y
	N4	1	1	0	301	18	5,427	\$227,934	5,427	Y	N

¹ Where Square Feet/Benefitted Receptor (SF/BR) exceeds VDOT's maximum of 1,600, a noise barrier would not be considered cost-reasonable.



6.3.1 CNE A

Barrier A1

A single noise barrier configuration (Barrier A1) was evaluated for all the CNE A impacted receptors on Cedar Chase Court/Road, extending west of Reston Avenue behind the 7 Eleven Store. **Table 11** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barrier averages 16 feet in height, totals 600 feet in length, and has a total surface area of 9,597 SF benefitting five receptors, equating to 1,919 SF/BR. The barrier provides a noise reduction of 6 to 8 dBA and benefits one impacted receptor as well as four non-impacted receptors. The barrier provides an average noise reduction of 6 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier is considered **feasible but not reasonable** due to a SF/BR calculation above the specified 1,600 SF/BR.

Barrier A2

A single noise barrier configuration (Barrier A2) was evaluated for all the CNE A impacted receptor on Water Pointe Lane, extending from approximately eastbound Station 1178+00 to Station 1190+00 where it terminates at Reston Parkway. **Table 12** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barrier averages 16 feet in height (13 to 18 feet), totals 1,286 in length, and has a total surface area of 20,117 SF benefitting 13 receptors, equating to 1,547 SF/BR. The barrier provides a noise reduction of 5 to 8 dBA and benefits the one impacted receptor as well as 12 non-impacted receptors. The barrier provides an average noise reduction of 7 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier is considered **feasible and reasonable** pending public involvement.

6.3.2 CNE B

Barrier System B1-B5 and D1

A six noise barrier configuration (Barrier B1-B5 and D1) was evaluated for all the impacted receptors in CNE B and a portion of CNE D (Nike Park athletic fields; Receptors D-01 through D-30), extending from approximately westbound Station 167+00 to Station 224+75 (Reston Avenue to Nike Park). Breaks in the barriers system are required for two private driveways, the walking path and Utterback Store Road. The barriers were evaluated as system since they were shown to work interdependently. **Table 13** (see Data Tables) outlines the performance of the optimized barrier for both scenarios.

Barriers B2-B5 and D1 average 15 feet in height, total 5,593 feet in length, and have a total surface area of 83,891 SF benefitting 68 receptors, equating to 1,234 SF/BR. The barriers provide a noise reduction of 5 to 14 dBA and benefits 19 of the 19 impacted receptors as well as 49 non-impacted receptors. The barrier system provides an average noise reduction of 7 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier system is considered **feasible and reasonable** pending public involvement.

6.3.3 CNE D/E

Barrier System D2 and E1-E4

A five noise barrier configuration (Barrier D2 and Barriers E1-E4) was evaluated for all the impacted receptors in CNE E and a portion of CNE D (Great Passage Court; Receptors D-31 through D-41), extending from approximately westbound Station 228+50 to Station 277+00 (Columbia Gas plant to Springvale Road). Breaks in the barrier system are required for Great Passage Boulevard, Amanda Drive, Riva Ridge Drive and a pipeline right-of-way. The barriers were evaluated as a system since they were shown to work interdependently. **Table 14** (see Data Tables) outlines the performance of the optimized barrier scenario.

Barrier D2 and Barriers E1-E4 average 15 feet in height, total 4,385 feet in length, and have a total surface area of 65,775 SF benefitting 43 receptors, equating to 1,530 SF/BR. The

barriers provide a noise reduction of 5 to 10 dBA and benefits all 18 of the 18 impacted receptors as well as 25 non-impacted receptors. The barrier system provides an average noise reduction of 6 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier system is considered **feasible and reasonable** pending public involvement.

6.3.4 CNE C

Barrier System C1-C2

A two noise barrier configuration (Barriers C1–C2) was evaluated for all the impacted receptors in CNE C, extending from approximately eastbound Station 1193+00 to Station 1245+75 (Reston Parkway to Markell Court). A break in the barrier is required at Bishopgate Way. The barriers were evaluated as a system since they were shown to work interdependently. **Table 15** (see Data Tables) outlines the performance of the optimized barrier scenario.

Barriers C1-C2 average 15 feet in height, total 5,140 feet in length, and have a total surface area of 77,096 SF benefitting 68 receptors, equating to 1,134 SF/BR. The barriers provide a noise reduction of 5 to 15 dBA and benefits all 21 impacted receptors as well as 47 non-impacted receptors. The barrier system provides an average noise reduction of 8 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier system is considered **feasible and reasonable** pending public involvement.

6.3.5 CNE F

CNE F was divided into four subareas (F1, F1B, F1C, and F2; F-3; F4 and F4B; and F5-F9) to evaluate the noise barriers configurations independently based on their individual acoustical influence zones.

Barrier System F1-F1B, F1C, and F2

A four noise barrier configuration (Barriers F1-F1B, F1C, and F2) was evaluated for all the CNE F impacted receptors west of Colvin Run Road W, extending from approximately westbound Station 301+00 to Station 312+75. The noise barrier protects residences along Van Patten Lane, a cemetery along Route 7, and a single-family residence along Route 7. The barrier was required to be split for two driveways into the cemetery as well as a residential driveway. The barriers were evaluated as a system since they were shown to work interdependently. **Table 16** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barriers average 13 feet in height, total 1,127 feet in length, and have a total surface area of 14,658 SF benefitting 10 receptors, equating to 1,466 SF/BR. The barriers provide a noise reduction of 5 to 10 dBA and benefits seven of the eight impacted receptors as well as three non-impacted receptors. The barrier system provides an average noise reduction of 6 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 88% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier system is considered **feasible and reasonable** pending public involvement.

Barrier F3

A single noise barrier configuration (Barrier F3) was evaluated for all the CNE F impacted receptors on Colvin Meadows Lane, extending from approximately westbound Station 313+50 to Station 338+80. **Table 17** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barrier averages 16 feet in height, totals 2,546 feet in length, and has a total surface area of 40,735 SF benefitting 26 receptors, equating to 1,567 SF/BR. The barrier provides a noise reduction of 5 to 11 dBA and benefits all 12 impacted receptors as well as 14 non-impacted receptors. The barrier provides an average noise reduction of 8 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it

provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier is considered **feasible and reasonable** pending public involvement.

Barrier System F4-F4B

A dual noise barrier configuration (Barrier F4-F4B) was evaluated for all the CNE F impacted receptors near the Clovin Run Mill including trail receptors, extending from approximately westbound Station 346+00 to Station 369+50. A break in the barrier is required at Colvin Run Road. The barriers were evaluated as a system since they were shown to work interdependently. **Table 18** (see Data Tables) outlines the performance of the optimized barrier scenario.

Additional investigations have indicated that this barrier is **not feasible** as a result of floodplain impacts associated with Difficult Run watershed. Barrier System F4-F4B was determined to be not-feasible due to the potential impacts to the 100-year floodplain as a result of construction of these noise barriers. While the bridge over Difficult Run is being raised to accommodate the 25-year storm, the 100-year storm is still projected to overtop Route 7. As the low point on Route 7 is west of the bridge over Difficult Run, construction of noise barrier system F4-F4B would restrict flow during 100-year and larger flow events, potentially resulting in damaging flood impacts upstream of Route 7. Accordingly, the barrier system is deemed “not-feasible” and therefore is not recommended for construction. There are no alternative barrier locations outside the floodplain where a barrier can be constructed to effectively mitigate noise levels.

Barrier System F5-F9

A five noise barrier configuration (Barrier F5-F9) was evaluated for all the CNE F impacted receptors along Locust Hills Drive, extending from approximately westbound Station 370+00 to Station 397+00. There are three private driveways east of Faulkner Drive that require breaks in the barrier. The barriers were evaluated as a system since they were shown to work interdependently. **Table 19** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barriers average 22 feet in height, total 2,489 feet in length, and have a total surface area of 54,789 SF benefitting 25 receptors, equating to 2,192 SF/BR. The barriers provide a

noise reduction of 5 to 12 dBA and benefits all eight impacted receptors as well as 17 non-impacted receptors. The barrier system provides an average noise reduction of 6 dBA to the benefitted receptors. The barrier is considered **feasible but not reasonable** due to a SF/BR calculation above the specified 1,600 SF/BR.

Multiple noise barrier height iterations from 10 to 30 feet were analyzed for this portion of CNE F in attempt to design a reasonable barrier. In addition, partial mitigation (i.e., F5-F8, F6-F8, F6-F9) was also analyzed from 10 to 30 feet. A barrier design that met the specified reasonable calculation threshold was not found for any of the alternatives analyzed. The acoustical effectiveness is reduced as a result of the breaks in the barrier coupled with the terrain and distance to the receptors along Locust Hill Drive. The number of non-impacted benefitting receptors as a result of barrier systems analyzed is diminished by flanking noise propagating through the required breaks in the barrier needed for the three private driveways and Faulkner Drive. A matrix of results is located with the CNE F5-F9 Warranted Feasible and Reasonable Worksheets located in Appendix E.

6.3.6 CNE G

CNE G was divided into four subareas (G1-G6, G8-G9, G11-G13, and G14-G16) to evaluate the noise barriers configurations independently based on their individual acoustical influence zones.

Barrier System G1-G6

A six noise barrier configuration (Barriers G1-G6) was evaluated for all the CNE G impacted receptors between Baron Cameron Road of Colvin Forest Drive, extending from approximately eastbound Station 1280+50 to Station 1338+35. The noise barrier protects residences along Dunn Meadow Road, Dunn Meadow Court, Colvin Forest Drive and three single-family residences that have a private driveway from Route 7. Breaks in the barriers system are required at Delta Gate Court, Colvin Forest Drive and three private driveways. The barriers were evaluated as a system since they were shown to work interdependently. **Table 20** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barriers average 18 feet in height, total 5,377 feet in length, and have a total surface area of 96,783 SF benefitting 80 receptors, equating to 1,210 SF/BR. The barriers provide a

noise reduction of 5 to 14 dBA and benefits all 24 impacted receptors as well as 56 non-impacted receptors. The barrier system provides an average noise reduction of 8 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier is considered **feasible and reasonable** pending public involvement.

Barrier System G8-G9

A dual noise barrier configuration (Barrier G8-G9) was evaluated for the CNE G impacted receptors representing the Cross County recreational trail that crosses Carpers Farm Way, extending from approximately eastbound Station 1350+00 to Station 1369+250. A break in the barrier is required at Colvin Run Road. The barriers were evaluated as a system since they were shown to work interdependently. **Table 21** (see Data Tables) outlines the performance of the optimized barrier scenario.

Additional investigations have indicated that this barrier is **not feasible** as a result of floodplain impacts associated with Difficult Run watershed. Noise barriers G8 and G9 near Colvin Run and Difficult Run were determined to be not-feasible due to the potential impacts to the 100-year floodplain as a result of construction of these noise barriers. While the bridge over Difficult Run is being raised to accommodate the 25-year storm, the 100-year storm is still projected to overtop Route 7. As the low point on Route 7 is west of the bridge over Difficult Run, construction of barrier system G8-G9 would restrict flow during 100-year and larger flow events, potentially resulting in damaging flood impacts upstream of Route 7. Accordingly, Barrier System G8-G9 is deemed “not-feasible” and therefore is not recommended for construction. All of the impacts are located with the floodplain and alternative offline barrier locations are not feasible.

Barrier System G10-G13

A four noise barrier configuration (Barriers G10-G13) was evaluated for all the CNE G impacted receptors between Serenity Woods Lane and Middleton Ridge Road, extending from approximately eastbound Station 1373+00 to Station 1400+00. The noise barrier was designed to protect residences along Serenity Woods Lane, Middleton Ridge Road, Middleton Court,

Difficult Run Court, and Tweed Court. Breaks in the barriers system were required at Serenity Woods Lane, two private driveways and Middleton Ridge Road. The barriers were evaluated as a system since they were shown to work interdependently. **Table 22** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barriers average 17 feet in height (13 to 18 feet), total 2,626 feet in length, and have a total surface area of 45,123 SF benefitting 30 receptors, equating to 1,504 SF/BR. The barriers provide a noise reduction of 5 to 13 dBA and benefits at all 20 impacted receptors as well as 10 non-impacted receptors. The barrier system provides an average noise reduction of 8 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier configuration is considered **feasible and reasonable** pending public involvement.

Barrier System G14-G16

A three noise barrier configuration (Barriers G14-G16) was evaluated for all the CNE G impacted receptors between Serenity Woods Lane and Middleton Ridge Road, extending from approximately eastbound Station 1407+50 to Station 1414+00. The noise barrier protects a single-family residence (Receptor G-202), the playground at Chesterbrook Academy Preschool (Receptor G-203) – both of which have direct access from Route 7, and a single-family residence with access off of Beulah Road. Breaks in the barrier system are required for two private driveways. The barriers were evaluated as a system since they were shown to work interdependently. **Table 23** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barriers average 16 feet in height, total 801 feet in length, and have a total surface area of 12,831 SF benefitting four receptors, equating to 3,208 SF/BR. The barriers provide a noise reduction of 5 to 7 dBA and benefits at all three impacted receptors as well as one non-impacted receptor. The barrier system provides an average noise reduction of 6 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The

barrier configuration is considered **feasible but not reasonable** due to a SF/BR calculation above the specified 1600 SF/BR.

6.3.7 CNE H

Barrier System H2-H11

A 10 noise barrier configuration (Barriers H2-H11) was evaluated for all the CNE H impacted receptors between Forestville Drive and Towlston Road, extending from approximately eastbound Station 408+00 to Station 452+30. The noise barrier protects residences along Farmingdale Court, Wolf Trap Creek Court, five residences with direct driveway access onto Route 7, and the outdoor recreational area associated with The Eastern Ridge School. Breaks in the barrier system are required at Forestville Drive as well as the residential driveways. The barriers were evaluated as a system since they were shown to work interdependently. **Table 24** (see Data Tables) outlines the performance of the optimized barrier scenario. This barrier impacts overhead utility lines and will require relocating the powerlines to the front yards of the homes that abut Route 7. An additional barrier was evaluated as part of this system west of barrier H2 in an attempt to provide additional attenuation at site H-01, however the barrier provided no additional acoustical benefit and therefore was excluded from the barrier system.

The barriers average 16 feet in height (15 to 16 feet), total 3,941 feet in length, and have a total surface area of 62,408 SF benefitting 47 receptors, equating to 1,328 SF/BR. The barriers provide a noise reduction of 5 to 17 dBA and benefits at 19 of 20 impacted receptors as well as 28 non-impacted receptors. The barrier system provides an average noise reduction of 8 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 95% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier configuration is considered **feasible and reasonable** pending public involvement.

6.3.8 CNE I

Barrier I2

A single noise barrier configuration (Barrier I2) was evaluated for part of the CNE I impacted receptors on Deramus Farm Court, extending west of Atwood Road. **Table 25** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barrier averages 13 feet in height, totals 835 feet in length, and has a total surface area of 10,852 SF benefitting seven receptors, equating to 1,550 SF/BR. The barrier provides a noise reduction of 5 to 12 dBA and benefits five impacted receptors as well as two non-impacted receptors. The barrier provides an average noise reduction of 7 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier configuration is considered **feasible and reasonable** pending public involvement.

Barrier System I4-I6

A three noise barrier configuration (Barriers I4-I6) was evaluated for part of the CNE I impacted receptors extending east of Atwood Road to Towlston Road. Breaks in the barrier system are required at Stokley Way and a residential driveway. The barriers were evaluated as a system since they were shown to work interdependently. **Table 26** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barrier averages 16 feet in height, totals 1,041 feet in length, and has a total surface area of 16,654 SF benefitting 12 receptors, equating to 1,388 SF/BR. The barrier provides a noise reduction of 5 to 11 dBA and benefits eight impacted receptors as well as four non-impacted receptors. The barrier provides an average noise reduction of 6 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier is considered **feasible and reasonable** due to a SF/BR calculation above the specified 1,600 SF/BR.

6.3.9 CNE J K

Barrier System J K

A six noise barrier configuration (Barriers J2-J3 and K1-K4) was evaluated for all the impacted receptors in CNE J, and K extending from approximately eastbound Station 1453+50 to Station 1488+25. Breaks in the barrier systems were required at Trap Road, Lucky Estates Drive and 2 private access driveways. The barriers were evaluated as a system since they were shown to work interdependently. **Table 27** (see Data Tables) outlines the performance of the optimized barrier scenario. A barrier was evaluated west of Towlston Road, but provided no acoustical benefit to the impacted site J-01 and was removed from the analysis.

Barrier configuration JK is 16 feet in height, totals 3,094 feet in length, and has a total surface area of 49,494 SF benefitting 41 receptors, equating to 1,207 SF/BR. The barriers provide a noise reduction of 5 to 10 dBA and benefits 14 out of 15 impacted receptors as well as 27 non-impacted receptors. A barrier was evaluated west of Towson Road in an effort to benefit the impacted site J-01. However, the barrier did not provide any acoustical benefits to the site, therefore was eliminated from the barrier system. The barrier system provides an average noise reduction of 6 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 93% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier configuration is considered **feasible and reasonable** pending public involvement.

6.3.9 CNE L

CNE L was divided into two subareas (L1-L5 and L6-L8) to evaluate the noise barriers configurations independently based on their individual acoustical influence zones.

Barrier System L1-L5

A five noise barrier configuration (Barriers L1-L5) was evaluated for impacted Receptors L-01, L-03, L-04, and L-05 in CNE L, extending from approximately westbound Station 463+00 to Station 474+00. The breaks in the barrier system are required for four private driveways. The

barriers were evaluated as a system since they were shown to work interdependently. **Table 28** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barriers average 12 in height (11 to 13 feet), are 974 feet in length, and have a total surface area of 11,693 SF benefitting four receptors, equating to 2,923 SF/BR. The barriers provide a noise reduction of 5 to 7 dBA and benefits the three of the four impacted receptors and one non-impacted benefitted receptor. The barrier system provides an average noise reduction of 6 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 75% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier is considered **feasible but not reasonable** due to a SF/BR calculation above the specified 1,600 SF/BR.

Barrier System L6-L8

A three noise barrier configuration (Barriers L6-L8) was evaluated for impacted Receptors L-11 and L-12 in CNE L, extending from approximately westbound Station 479+00 to Station 488+00. The breaks in the barrier system were required at two private driveways. The barriers were evaluated as a system since they were shown to work interdependently. **Table 29** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barriers average 12 in height (10 to 12 feet), are 852 feet in length, and have a total surface area of 9,703 SF benefitting four receptors, equating to 2,426 SF/BR. The barriers provide a noise reduction of 5 to 10 dBA and benefit the two impacted receptors and two non-impacted benefitted receptors. The barrier system provides an average noise reduction of 7 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier is considered feasible **but not reasonable** due to a SF/BR calculation above the specified 1,600 SF/BR. The barrier is not feasible since it does not provide 5 dBA reduction to 50% of the impacted locations.

6.3.10 CNE N

Existing Barrier N

CNE N contains an existing noise barrier that was constructed as part of the Route 7 over Dulles Access Toll Road (DATR) Major Bridge Rehabilitation project (UPC 82135). This barrier extends from eastbound Station 1523+25 to Station 1526+75 and was designed for noise sensitive sites behind the Stanbridge Place duplexes represented by Receptors N-75 and N-76 in this analysis. Following VDOT's guidance for evaluating existing noise barriers that are not physically impacted, future design year noise levels were evaluated with the existing noise barrier in place. Noise impacts were identified behind the noise barrier, therefore the barrier was evaluated for its effectiveness. Design year build noise levels with and without the existing noise barrier were analyzed. **Table 30** (see Data Tables) outlines the performance of the optimized barrier scenario.

The existing sound barrier configuration averages 15 feet in height, totals 307 feet in length, and has a total surface area of 4,607 SF benefitting one non-impacted receptor (church interior), equating to 4,607 SF/BR. The existing barrier does not benefit any impacted sites; therefore, it is considered not feasible. As such, a new barrier system (described below) was evaluated.

Barrier System N1-N3 and Existing Barrier

As previously mentioned, since the existing barrier was not shown to be feasible, a new barrier system was evaluated at this location. The three noise barrier configuration (Barriers N1-N3 and existing Barrier) was evaluated for all the impacted receptors in CNE N, extending from approximately eastbound Station 1508+00 to Station 1526+75 (Laurel Jill Road to Jarrett Valley Drive). The barrier system is split by Laurel Hill Road and Old Ash Grove. The required access openings limit the overall effectiveness of this sound barrier configuration. The barriers were evaluated as a system since they were shown to work interdependently. **Table 31** (see Data Tables) outlines the performance of the optimized barrier scenario.

The barrier system varies from 12 to 15 feet in height (N1 is 12 feet high and N2-N3 are 15 feet high), totals 1,577 feet in length, and has a total surface area of 23,132 SF (including existing barrier) benefitting 15 receptors, equating to 1,542 SF/BR. The barriers provide a noise

reduction of 5 to 10 dBA and benefits nine of 10 impacted receptors including the two impacted sites (N-75 and N-79) behind the existing noise barrier. Furthermore, the noise barrier benefits six non-impacted receptors. The barrier system provides an average noise reduction of 7 dBA to the benefitted receptors. The barrier is feasible since it provides at least a 5 dBA reduction to 90% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier configuration is considered **feasible and reasonable** pending public involvement.

Barrier N4

A noise barrier configuration N4 was evaluated for the isolated impacted Receptor N-78 in CNE N, extending from Jarret Valley Drive to the on ramp for the DTR. The barrier was evaluated independently from N1-N3 due to its isolation from the remainder of CNE N. **Table 32** (see Data Tables) outlines the performance of the optimized barrier scenario.

Barrier N4 averages 18 feet in height, totals 301 feet in length, and has a total surface area of 5,427 SF benefitting one receptor, equating to 5,427 SF/BR. The barrier provides a noise reduction of 7 dBA and benefits one impacted receptor. The barrier is feasible since it provides at least a 5 dBA reduction to 100% of the impacted locations (greater than 50%). The barrier also meets the 7 dBA design goal since it provides a noise reduction of at least 7 dBA to more than one impacted receptor. The barrier is considered **feasible but not reasonable** due to a SF/BR calculation above the specified 1,600 SF/BR.

A summary of the noise barriers analyzed and determined to be feasible and reasonable is located in **Table 33**.

**TABLE 33
SUMMARY OF FEASIBLE AND REASONABLE NOISE BARRIERS**

CNE	Barrier ID	Insertion Loss (dBA)*		Height (ft)		Length (ft)	Area (SF)	Total # Impacted Units	Benefitted Units			Square Foot per Benefitted Receptor	Cost (\$42.00/ft ²)
		Range	Average	Range	Average				Impacts	Non-Impacts	Total		
A	A2	5-8	7	13-18	16	1,286	20,117	1	1	12	13	1,547	\$844,914
B, D	B1-B6 and D1	5-14	7	15	15	5,593	83,891	19	19	49	68	1,234	\$3,523,422
C	C1-C2	5-15	8	15	15	5,140	77,096	21	21	47	68	1,134	\$3,238,032

D, E	D2 and E1-E4	5-10	6	15	15	4,385	65,775	18	18	25	43	1,530	\$2,762,550
F	F1, F1B, F1C, F2	5-10	6	13	13	1,127	14,658	8	7	3	10	1,466	\$615,636
	F3	5-11	7	16	16	2,546	40,735	12	12	14	26	1,567	\$1,710,870
G	G1-G6	5-14	8	18	18	5,377	96,783	24	24	56	80	1,210	\$4,064,886
	G10-G13	5-13	8	13-18	17	2,626	45,123	20	20	10	30	1,504	\$1,895,166
H	H2-H11	5-17	8	15-16	16	3,941	62,408	20	19	28	47	1,328	\$2,621,136
I	I2	5-12	7	13	13	835	10,852	5	5	2	7	1,550	\$455,784
	I4-i6	5-11	6	16	16	1,041	16,654	8	8	4	12	1,388	\$699,468
JK	J2-J3, K1-K04	5-10	6	16	16	3,094	49,494	15	14	27	41	1,207	\$2,078,748
N	N1-N3 and Existing Barrier	5-10	7	12-15	14	1,577	23,132	10	9	6	15	1,542	\$971,544

* Insertion Loss statistics are calculated for all benefitted receptors

7.0 PUBLIC INVOLVEMENT/ LOCAL OFFICIALS COORDINATION

7.0 PUBLIC INVOLVEMENT/LOCAL OFFICIALS COORDINATION

FHWA and VDOT policies require that VDOT provide certain information to local officials within whose jurisdiction the highway project is located in order to minimize future traffic noise impacts of Type I projects on currently undeveloped lands. (Type I projects involve highway improvements with noise analysis.) This information must include details on noise-compatible land-use planning and noise impact zones for undeveloped lands within the project corridor. The aforementioned details are provided below. Additional information about VDOT's noise abatement program has also been included in this section.

7.1 PUBLIC INVOLVEMENT EFFORTS

For noise barriers determined to be feasible and reasonable, the affected public will be given an opportunity to decide whether they are in favor of construction of the noise barrier. A final determination as to the construction of barriers will be made after the public involvement process. For barriers that are determined to be feasible and reasonable, input from the impacted property owners and renters must be obtained through citizen surveys. Of the votes tallied, 50% or more must be in favor of a proposed noise barrier in order for that barrier to be considered further. Upon completion of the citizen survey, the VDOT Noise Abatement staff will make recommendations to the Chief Engineer for approval. Approved barriers will be incorporated into the road project plans and a Final NADR will be prepared detailing the results of the survey.

7.2 INFORMATION FOR LOCAL GOVERNMENT OFFICIALS NOISE-COMPATIBLE LAND-USE PLANNING

Sections 12.1 and 12.2 of VDOT's current noise policy outline VDOT's approach to communication with local officials and provides information and resources on highway noise and noise-compatible land-use planning. VDOT's intention is to assist local officials in planning the uses of undeveloped land adjacent to highways to minimize the potential impacts of highway traffic noise.

"Entering the Quiet Zone" is a brochure that provides general information and examples to elected officials, planners, developers, and the general public about the problem of traffic noise and effective responses to it. A link to this brochure on FHWA's website is provided below:

https://www.fhwa.dot.gov/environment/noise/noise_compatible_planning/federal_approach/land_use/index.cfm.

A wide variety of administrative strategies may be used to minimize or eliminate potential highway noise impacts, thereby preventing the need or desire for costly noise abatement structures such as noise barriers in future years. There are five broad categories of such strategies:

- Zoning,
- Other legal restrictions (subdivision control, building codes, health codes),
- Municipal ownership or control of the land,
- Financial incentives for compatible development, and
- Educational and advisory services.

“The Audible Landscape: A Manual for Highway and Land Use” is a well-written and comprehensive guide addressing these noise-compatible land-use planning strategies, with significant detailed information. This document is available through FHWA’s Website at https://www.fhwa.dot.gov/environment/noise/noise_compatible_planning/federal_approach/audible_landscape/index.cfm.

7.3 NOISE IMPACT ZONES IN UNDEVELOPED LAND ALONG THE STUDY CORRIDOR

Also required under the revised 2011 FHWA and VDOT noise policies is information on the noise impact zones adjacent to project roadways in undeveloped lands. To determine these zones, noise levels are computed at various distances from the edge of the project roadways in each of the undeveloped areas of the project study area. Then, the distances from the edge of the roadway to the noise abatement criteria sound levels are determined through interpolation. Distances vary in the project corridor due to changes in traffic volumes, or terrain features. Any noise-sensitive sites within these zones should be considered noise impacted if no barrier is present to reduce sound levels.

Noise level contours are lines of equal noise exposure that typically parallel roadway alignments and are often times useful to local officials in undeveloped corridors. Highway traffic noise is considered a linear noise source and sound levels can drop considerably over distance. The degree that sound levels decrease can vary based on a number of different factors including objects that shield the roadway noise, terrain features and ground cover type (e.g.,

pavement, grass or snow). The use of noise level contours has become increasingly popular over the last several years, as they have been implemented in planning programs for undeveloped areas with roadway noise influence. Through conscious planning efforts and noise contour generation, municipal officials can restrict future development inside the noise impact zone (i.e., the area within the 66-dBA noise contour). **Figure 2** shows the approximate 66-dBA noise level contours for the study area when considering the proposed improvements and the Design Year (2040) traffic volumes, speeds and composition. This 66-dBA noise contour can be used to approximate the distance away from Route 7 in which the NAC will be exceeded for an Activity Category B receptor (e.g., the most common receptor).

7.4 VDOT'S NOISE ABATEMENT PROGRAM

Information on VDOT's noise abatement program is available on VDOT's Website at <http://www.virginiadot.org/projects/pr-noise-walls-about.asp>. The site provides information on VDOT's noise program and policies, noise barriers, and a downloadable noise barrier brochure.

8.0 CONSTRUCTION NOISE

8.0 CONSTRUCTION NOISE

Throughout the construction of Route 7 project, noise-sensitive land uses that are analyzed for traffic noise impacts are also susceptible to construction noise impacts. Typical highway construction/reconstruction equipment such as loaders, dump trucks, graders, bulldozers, etc. is likely to temporarily elevate noise within the project area. Sensitive receptors within 100 to 200 feet of construction activities may experience varying periods and degrees of noise impacts, with potential noise levels between 75 dBA and 85 dBA, depending on the nature of the construction activity, the type of equipment in use, and the relative nearness to the activity.

VDOT is concerned with noise generated during the construction phase of the proposed project. While the degree of construction noise impact will vary, it is directly related to the types and number of equipment used and the proximity to the noise-sensitive land uses within the project area. Land uses that are sensitive to traffic noise, are also potentially considered to be sensitive to construction noise. Any construction noise impacts that do occur as a result of roadway construction measures are anticipated to be temporary in nature and will cease upon completion of the project construction phase. A method of controlling construction noise is to establish the maximum level of noise that construction operations can generate. In view of this, VDOT has developed and FHWA has approved a specification that establishes construction noise limits. This specification can be found in VDOT's 2016 Road and Bridge Specifications, Section 107.16(b.3), "Noise." The contractor will be required to conform to this specification to reduce the impact of construction noise on the surrounding community.

Construction noise can be minimized by implementing specific measures to help mitigate the noise at the source. The contractor shall exercise proper maintenance procedures for all construction equipment regularly and thoroughly. Replacement of failing or ineffective muffling and exhaust systems, periodic lubrication of moving parts, and properly tuned engines are necessary in order to keep construction equipment noise emissions to a minimum.

The following construction noise related items are included in VDOT's 2016 Road and Bridge Specifications:

- The Contractor's operations shall be performed so that exterior noise levels measured during a noise-sensitive activity shall not exceed 80 decibels. Such noise level measurements shall be taken at a point on the perimeter of the construction limit that is closest to the adjoining property

on which a noise-sensitive activity is occurring. A noise-sensitive activity is any activity for which lowered noise levels are essential if the activity is to serve its intended purpose and not present an unreasonable public nuisance. Such activities include, but are not limited to, those associated with residences, hospitals, nursing homes, churches, schools, libraries, parks, and recreational areas.

- The Department may monitor construction-related noise. If construction noise levels exceed 80 decibels during noise-sensitive activities, the Contractor shall take corrective action before proceeding with operations. The Contractor shall be responsible for costs associated with the abatement of construction noise and the delay of operations attributable to noncompliance with these requirements.
- The Department may prohibit or restrict to certain portions of the project any work that produces objectionable noise between 10 P.M. and 6 A.M. If other hours are established by local ordinance, the local ordinance shall govern.
- Equipment shall in no way be altered so as to result in noise levels that are greater than those produced by the original equipment.
- When feasible, the Contractor shall establish haul routes that direct his vehicles away from developed areas and ensure that noise from hauling operations is kept to a minimum.
- These requirements shall not be applicable if the noise produced by sources other than the Contractor's operation at the point of reception is greater than the noise from the Contractor's operation at the same point.

9.0 LIST OF PREPARERS AND REVIEWERS

9.0 LIST OF PREPARERS AND REVIEWERS

Noise Monitoring, Noise Modeling, Report Preparation

Alan Dunay
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BS/1997/Biology
21 Years' Experience

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Director of Acoustical and Air Quality Services
BA/1991/Geography, Urban and Regional Planning
26 Years' Experience

Ethan Anderson
Environmental Noise Analyst (TNM Certified)
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3 Years' Experience

John Frank
Senior GIS Analyst and Noise Analyst (TNM Certified)
BS/2013/Geography and Environmental Planning
MA/2017/Geography and Environmental Planning
5 Years' Experience

Technical Analysis Reviewers

10.0 REFERENCES

10.0 REFERENCES

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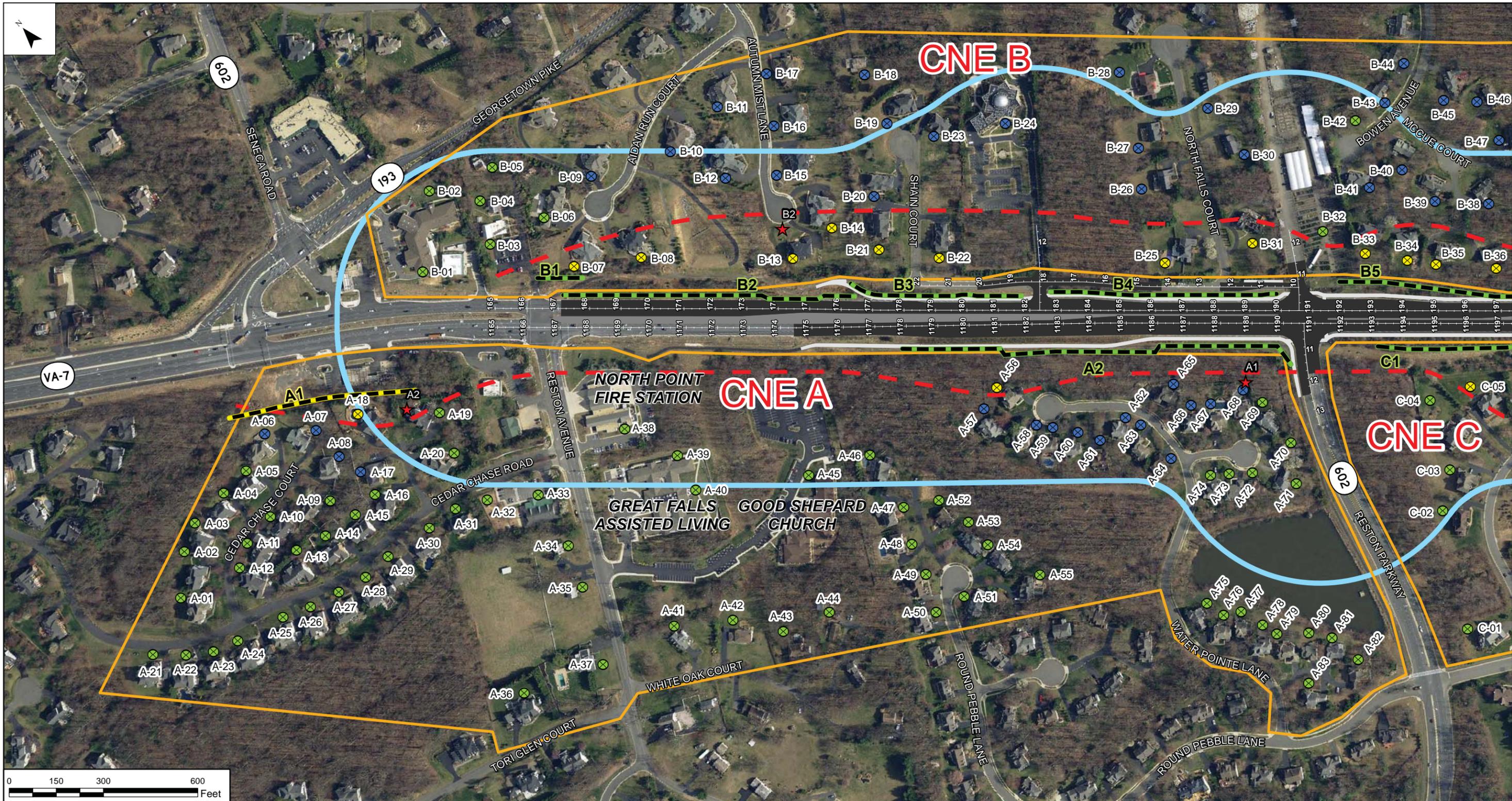
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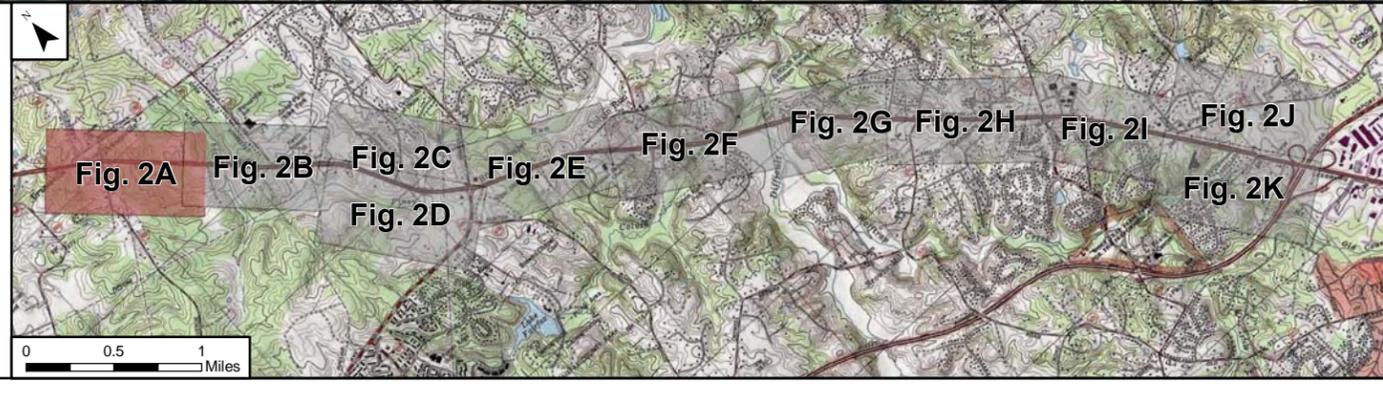
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MAPPING



	100 YEAR FLOODPLAIN		66 DBA CONTOUR
	COMMON NOISE ENVIRONMENTS		PROPOSED MEDIAN
	500' BUFFER		DISPLACED BUILDINGS
	PROPOSED PAVEMENT		BRIDGE DECKING
	PROPOSED SIDEWALK		NOISE MEASUREMENT LOCATION
MODELED NOISE RECEPTORS		POTENTIAL BARRIERS	
	IMPACTED, BENEFITTED		BARRIER FEASIBLE NOT REASONABLE
	IMPACTED, NOT BENEFITTED		BARRIER NOT FEASIBLE
	NOT IMPACTED, NOT BENEFITTED		BARRIER FEASIBLE AND REASONABLE
	NOT IMPACTED, BENEFITTED		EXISTING NOISE WALL



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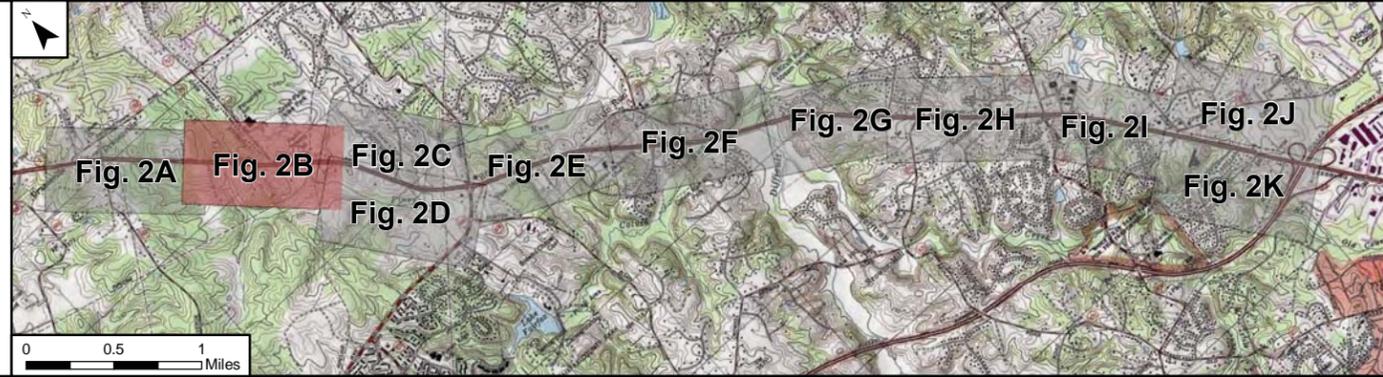
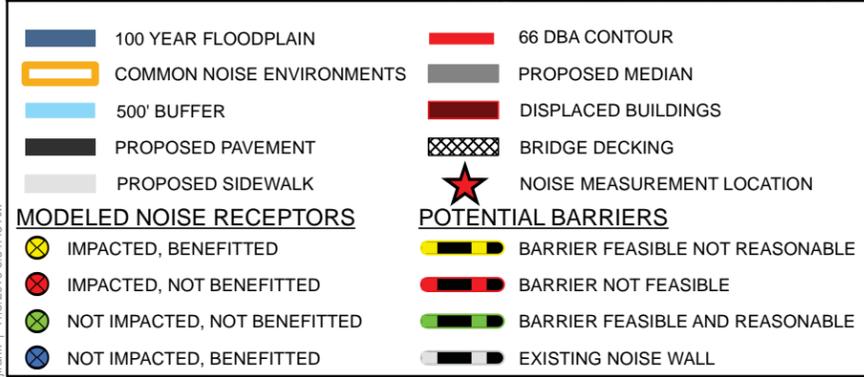
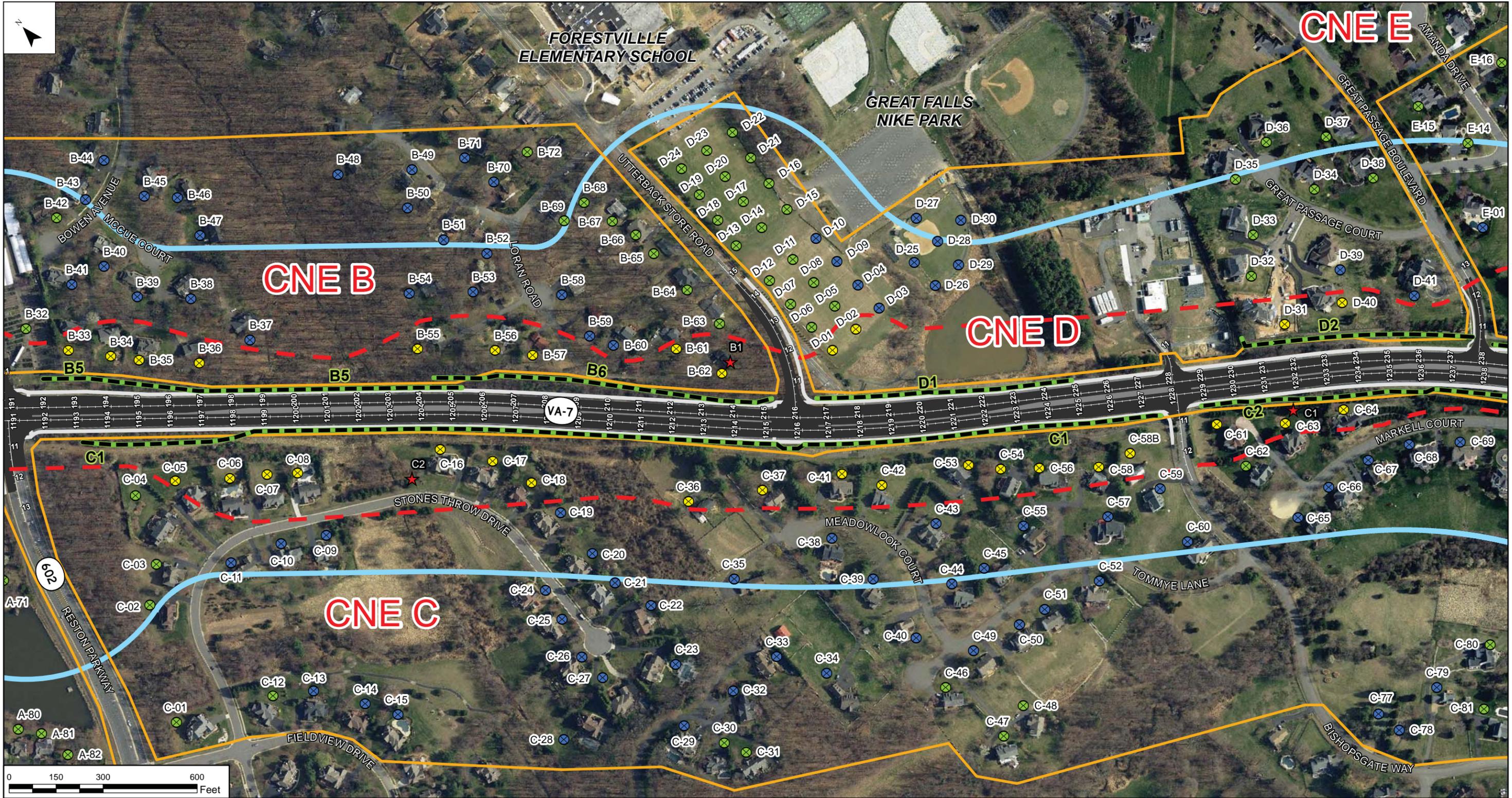
ROUTE 7 WIDENING PROJECT - RT. 193 TO RT. 267
UPC: 99478/106917

**COMMON NOISE ENVIRONMENTS,
NOISE RECEPTOR AND MITIGATION
LOCATIONS**

FAIRFAX COUNTY
VIRGINIA

Job No.: R17-0524.000 | 11" X 17" : 1" = 300'

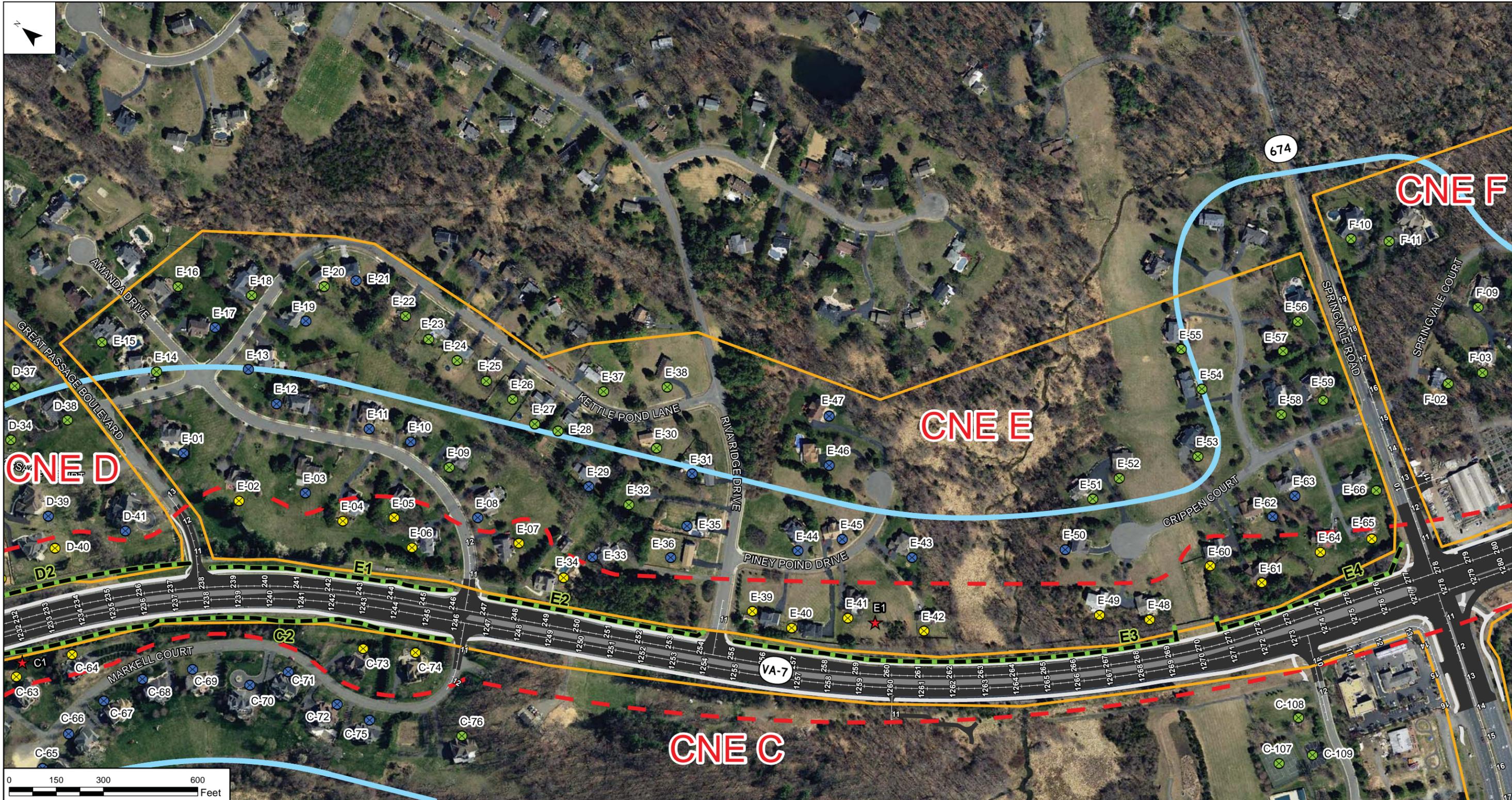
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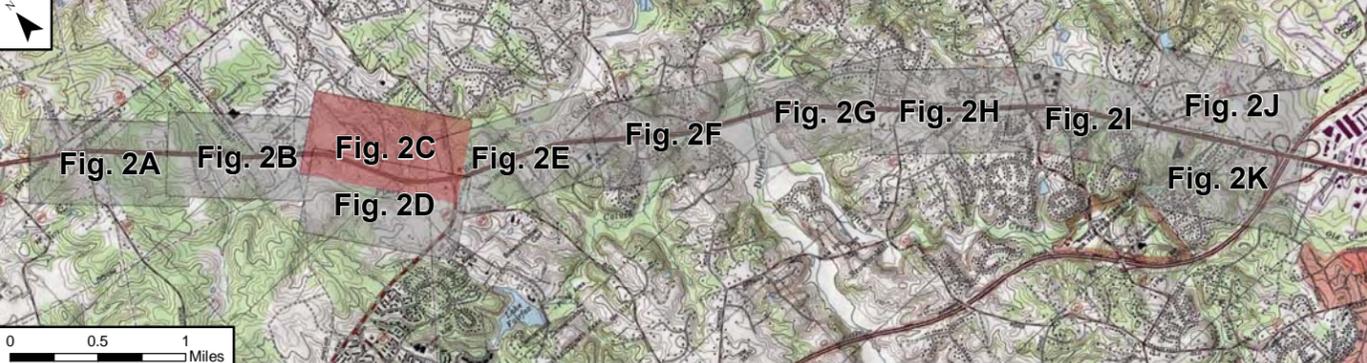
SKELLY and LOY, Inc.	November 2019	Figure 2B
ROUTE 7 WIDENING PROJECT - RT. 193 TO RT. 267 UPC: 99478/106917		
COMMON NOISE ENVIRONMENTS, NOISE RECEPTOR AND MITIGATION LOCATIONS		
FAIRFAX COUNTY VIRGINIA		
Job No.: R17-0524.000	11" X 17" : 1" = 300'	

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	100 YEAR FLOODPLAIN		66 DBA CONTOUR
	COMMON NOISE ENVIRONMENTS		PROPOSED MEDIAN
	500' BUFFER		DISPLACED BUILDINGS
	PROPOSED PAVEMENT		BRIDGE DECKING
	PROPOSED SIDEWALK		NOISE MEASUREMENT LOCATION
MODELED NOISE RECEPTORS		POTENTIAL BARRIERS	
	IMPACTED, BENEFITTED		BARRIER FEASIBLE NOT REASONABLE
	IMPACTED, NOT BENEFITTED		BARRIER NOT FEASIBLE
	NOT IMPACTED, NOT BENEFITTED		BARRIER FEASIBLE AND REASONABLE
	NOT IMPACTED, BENEFITTED		EXISTING NOISE WALL



SKELLY and LOY, Inc. | November 2019 | Figure 2C

ROUTE 7 WIDENING PROJECT - RT. 193 TO RT. 267
UPC: 99478/106917

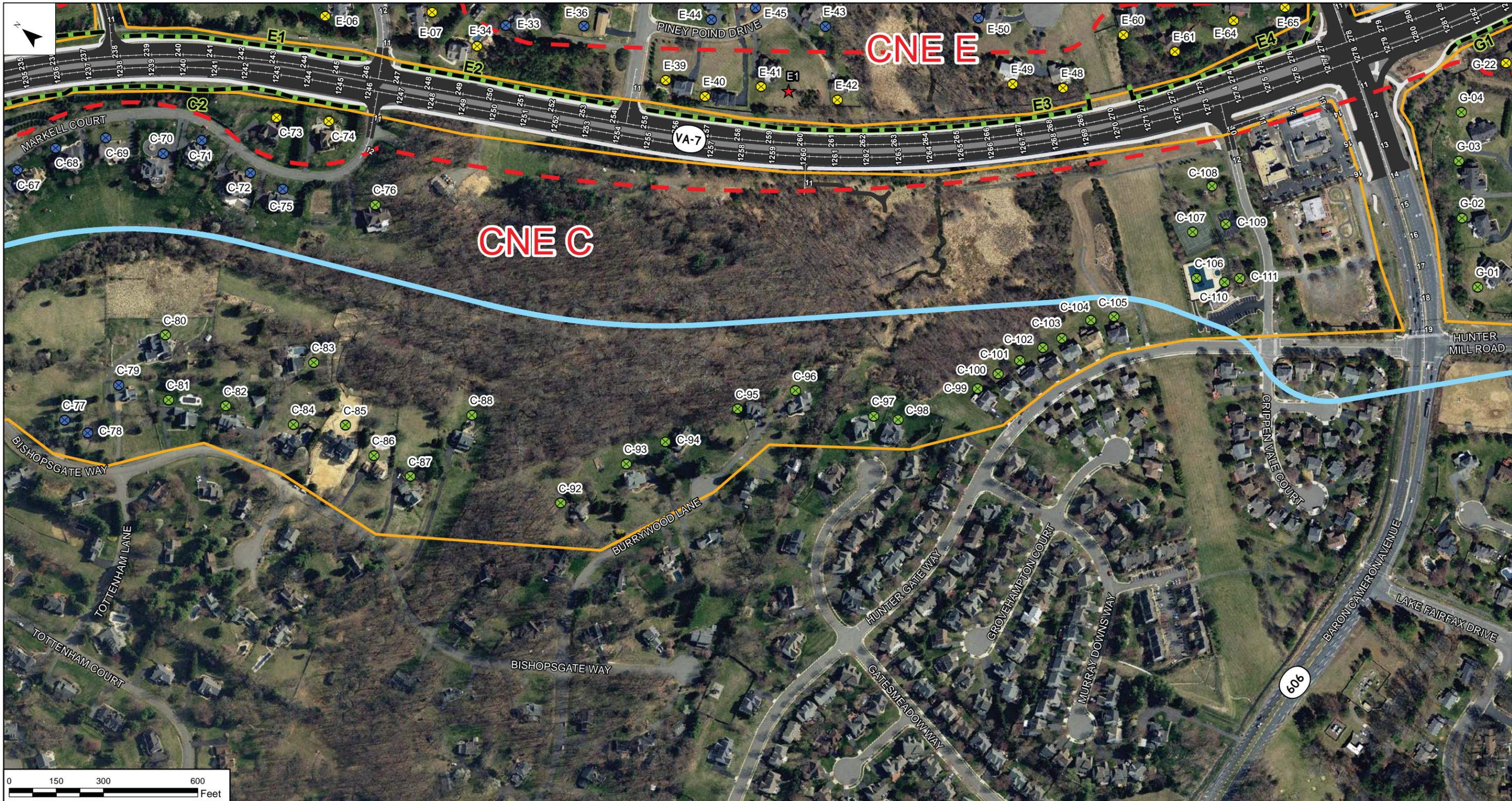
**COMMON NOISE ENVIRONMENTS,
NOISE RECEPTOR AND MITIGATION
LOCATIONS**

FAIRFAX COUNTY
VIRGINIA

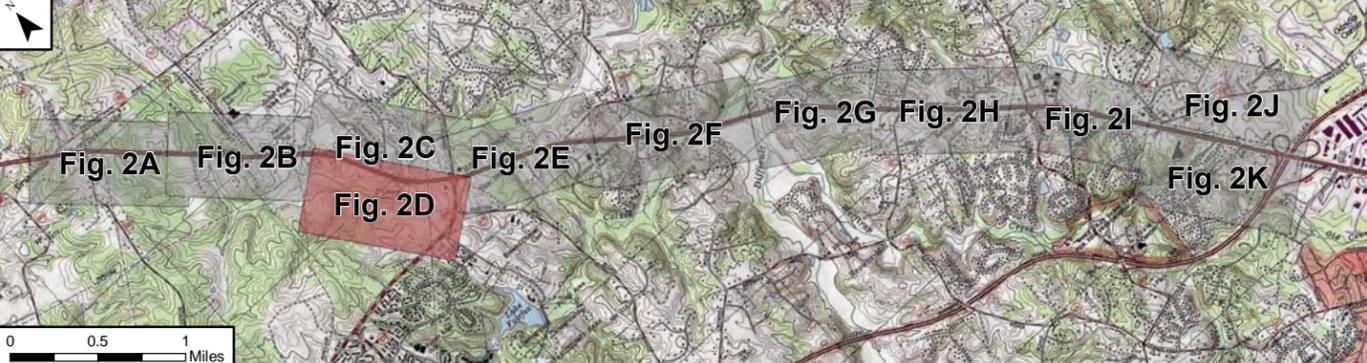
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	100 YEAR FLOODPLAIN		66 DBA CONTOUR
	COMMON NOISE ENVIRONMENTS		PROPOSED MEDIAN
	500' BUFFER		DISPLACED BUILDINGS
	PROPOSED PAVEMENT		BRIDGE DECKING
	PROPOSED SIDEWALK		NOISE MEASUREMENT LOCATION
MODELED NOISE RECEPTORS		POTENTIAL BARRIERS	
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	NOT IMPACTED, NOT BENEFITTED		BARRIER FEASIBLE AND REASONABLE
	NOT IMPACTED, BENEFITTED		EXISTING NOISE WALL



SKELLY and LOY, Inc. | November 2019 | Figure 2D

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UPC: 99478/106917

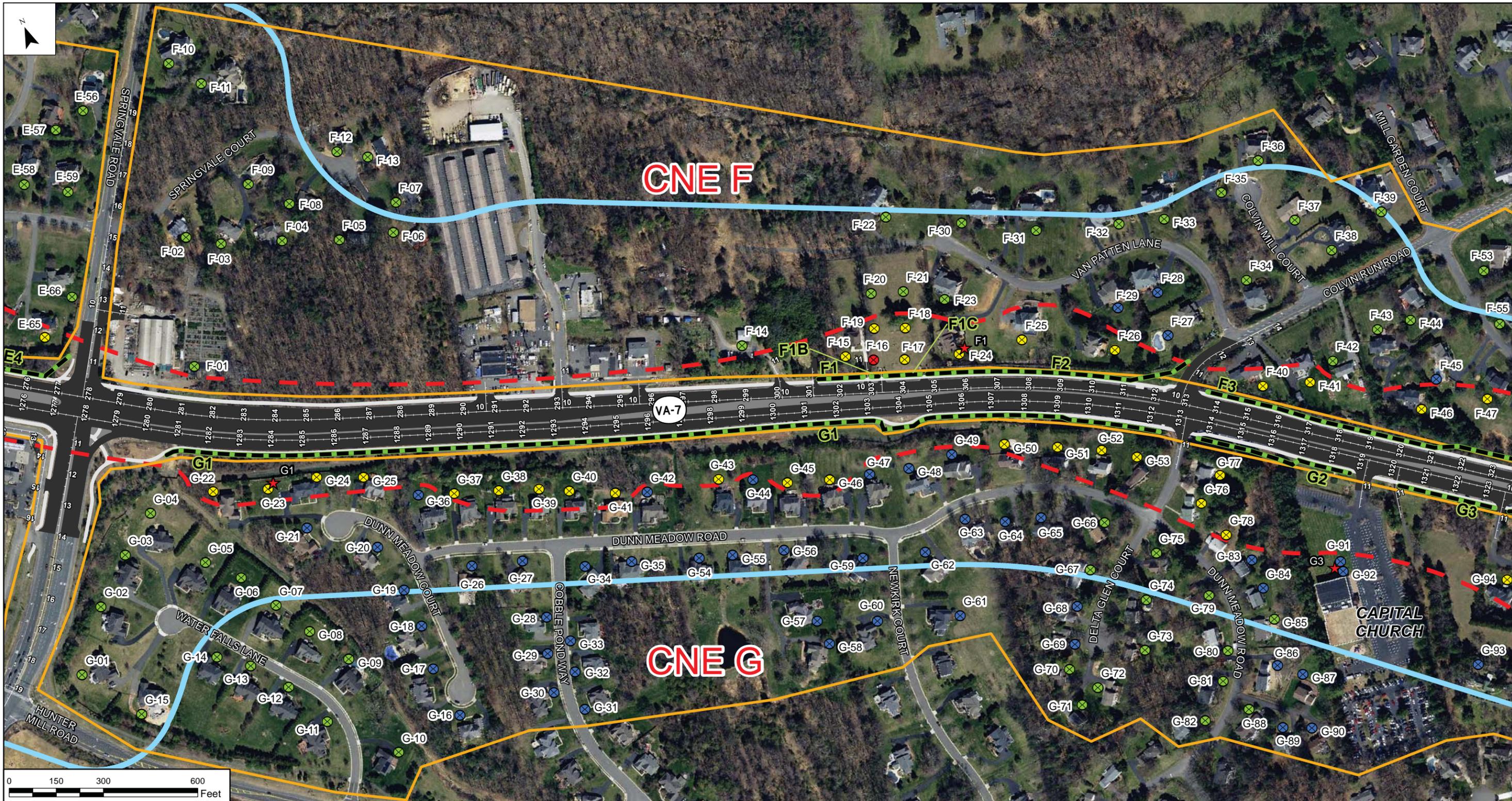
**COMMON NOISE ENVIRONMENTS,
NOISE RECEPTOR AND MITIGATION
LOCATIONS**

FAIRFAX COUNTY
VIRGINIA

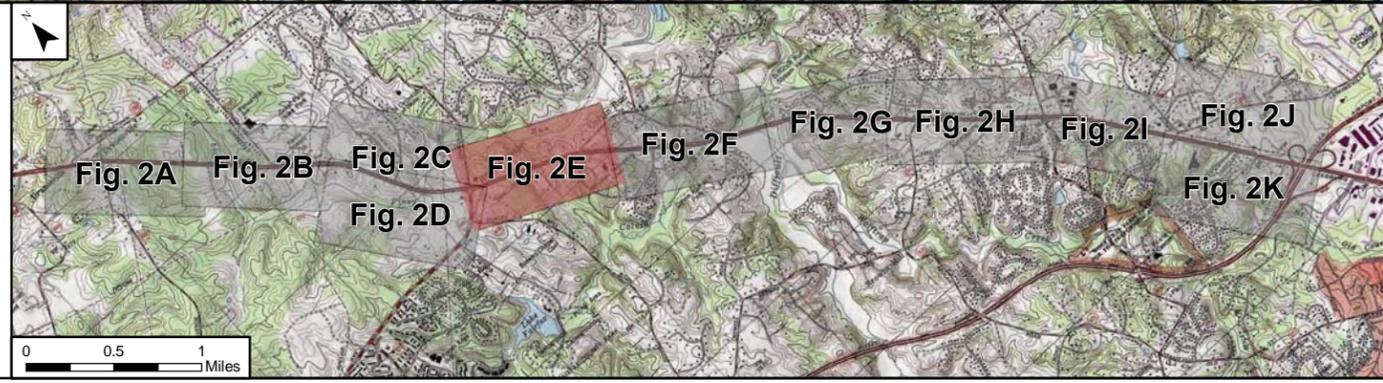
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	100 YEAR FLOODPLAIN		66 DBA CONTOUR
	COMMON NOISE ENVIRONMENTS		PROPOSED MEDIAN
	500' BUFFER		DISPLACED BUILDINGS
	PROPOSED PAVEMENT		BRIDGE DECKING
	PROPOSED SIDEWALK		NOISE MEASUREMENT LOCATION
MODELED NOISE RECEPTORS		POTENTIAL BARRIERS	
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SKELLY and LOY, Inc. | November 2019 | Figure 2E

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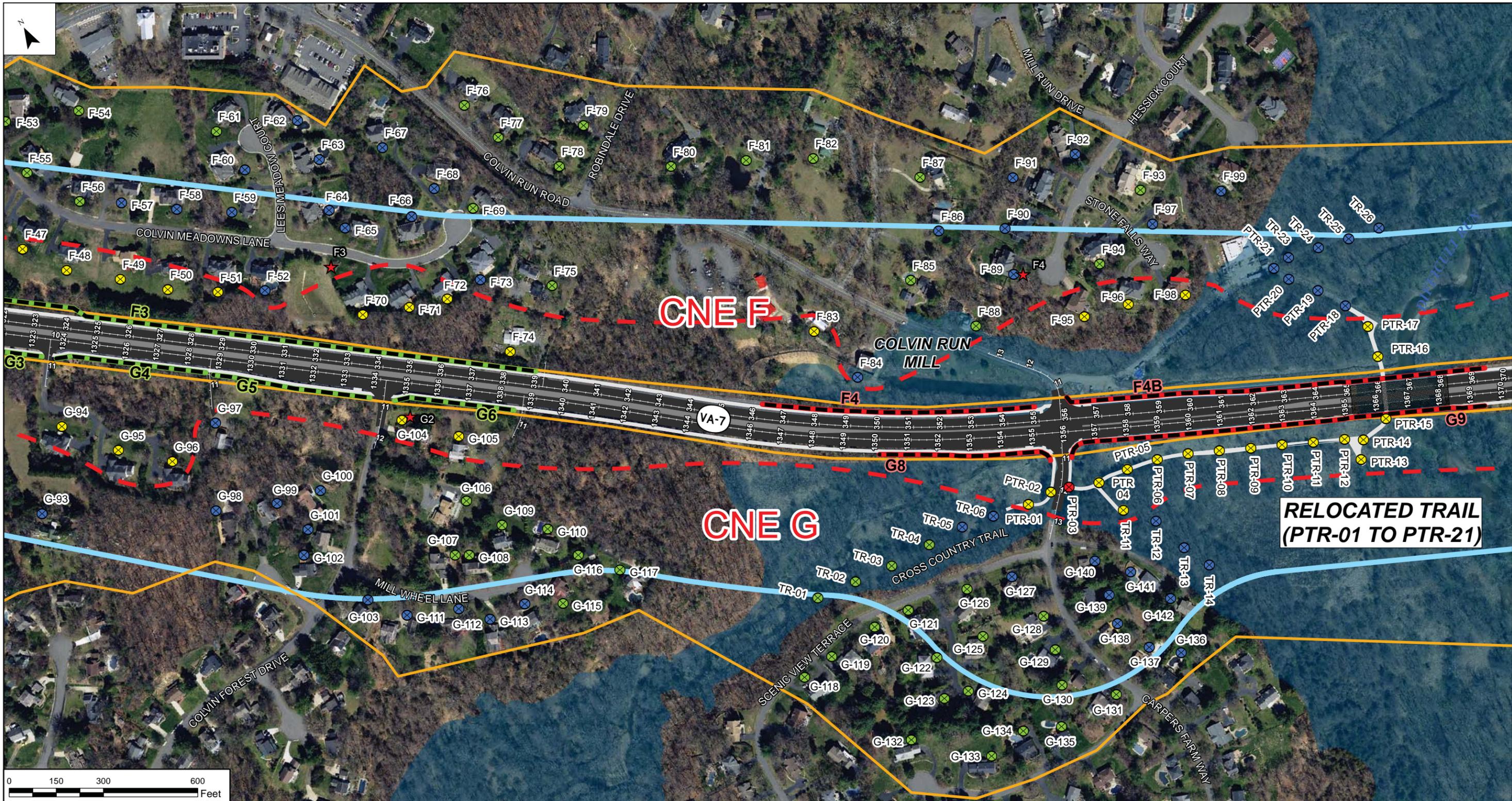
**COMMON NOISE ENVIRONMENTS,
NOISE RECEPTOR AND MITIGATION
LOCATIONS**

FAIRFAX COUNTY
VIRGINIA

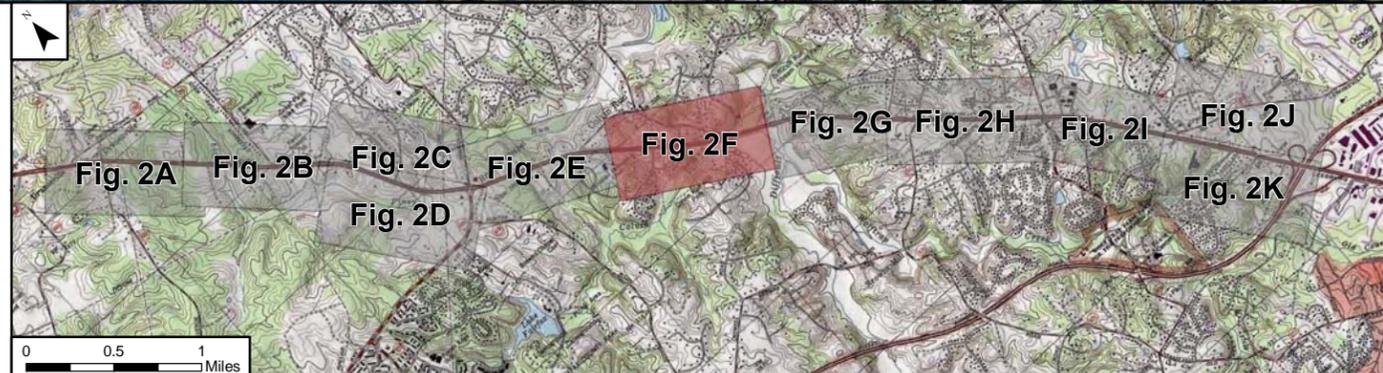
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	COMMON NOISE ENVIRONMENTS		PROPOSED MEDIAN
	500' BUFFER		DISPLACED BUILDINGS
	PROPOSED PAVEMENT		BRIDGE DECKING
	PROPOSED SIDEWALK		NOISE MEASUREMENT LOCATION
MODELED NOISE RECEPTORS		POTENTIAL BARRIERS	
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	NOT IMPACTED, BENEFITTED		EXISTING NOISE WALL



SKELLY and LOY, Inc. | November 2019 | Figure 2F

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UPC: 99478/106917

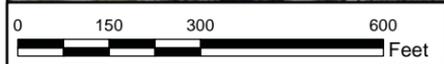
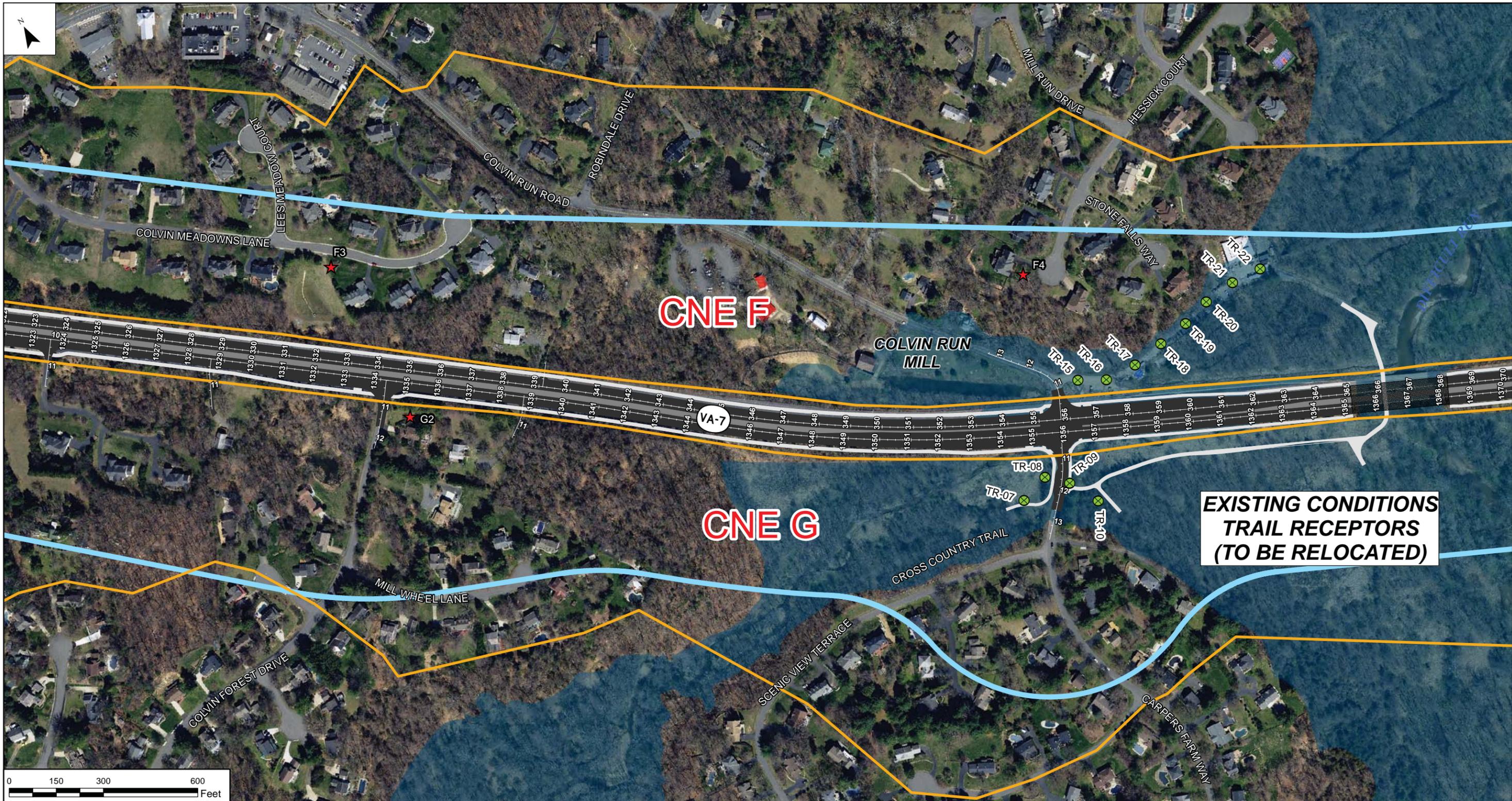
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LOCATIONS**

FAIRFAX COUNTY
VIRGINIA

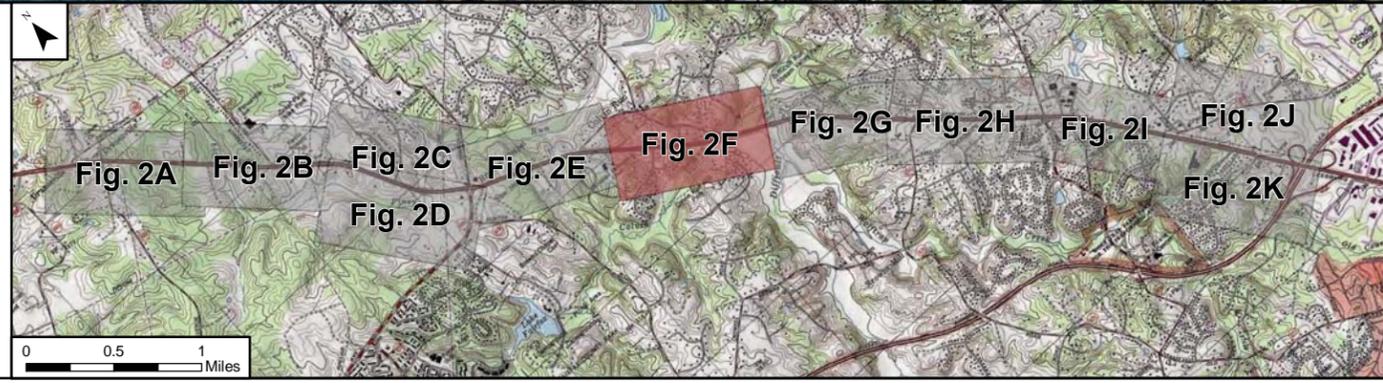
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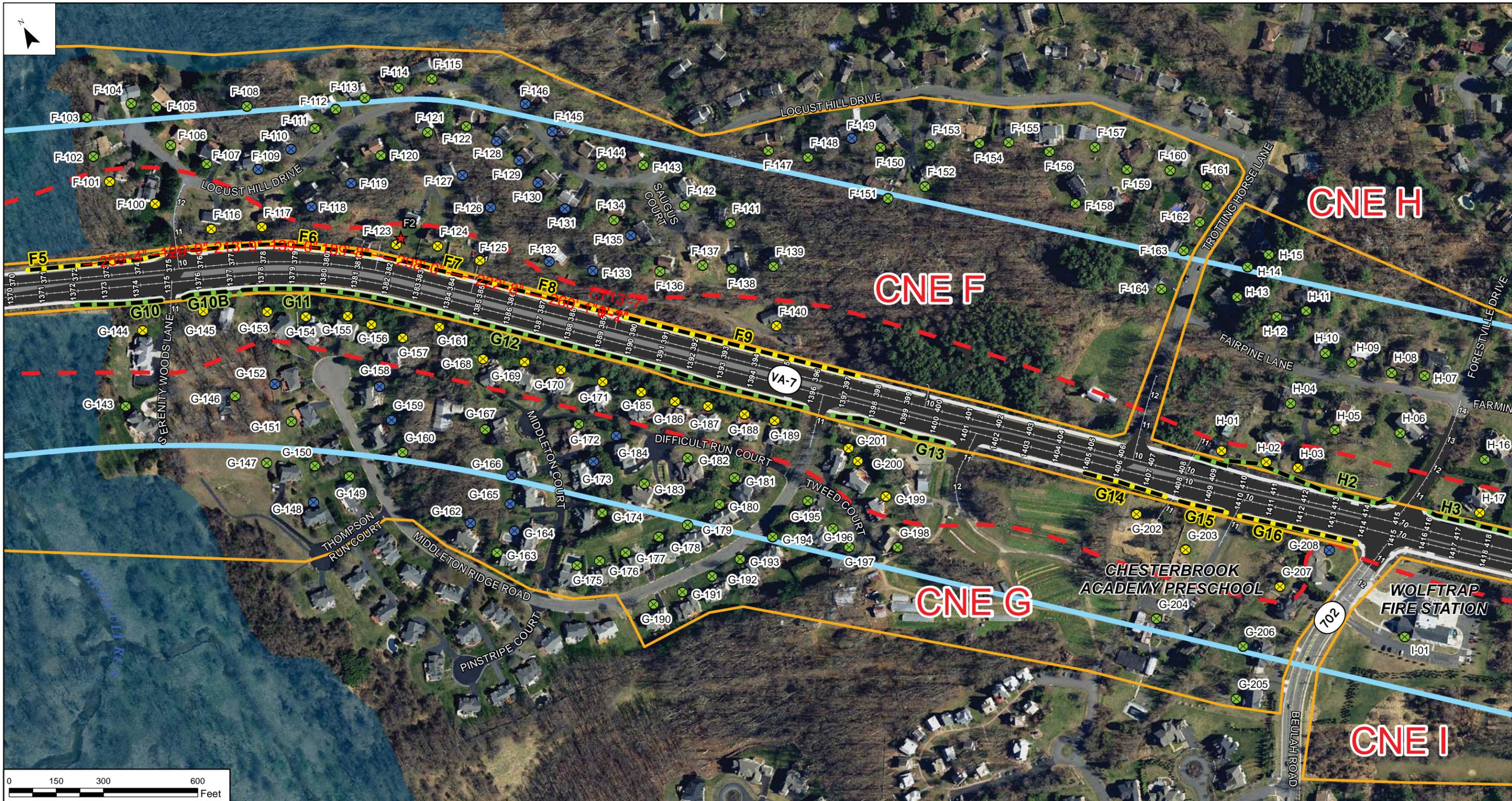
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	PROPOSED SIDEWALK		
MODELED NOISE RECEPTORS			
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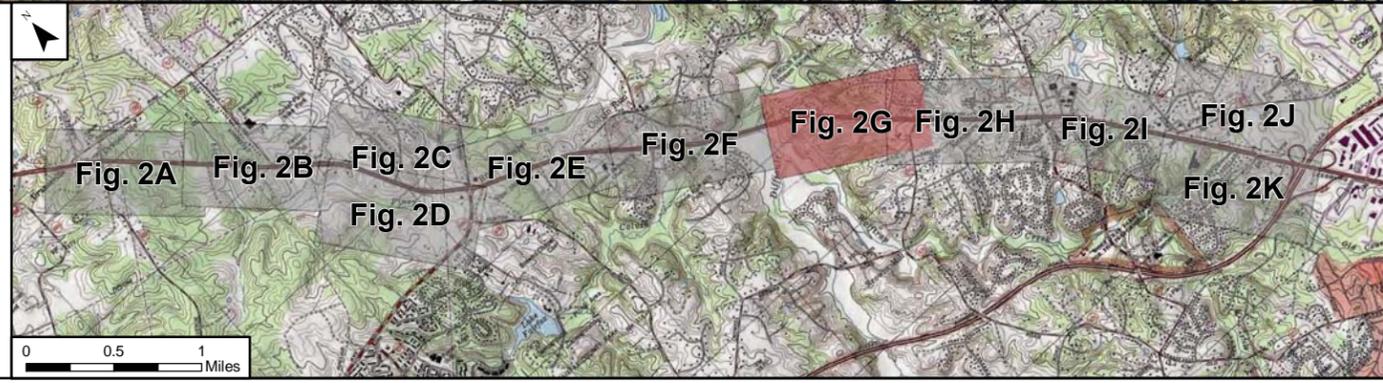
SKELLY and LOY, Inc.	November 2019	Figure 2F Trail Design
ROUTE 7 WIDENING PROJECT - RT. 193 TO RT. 267 UPC: 99478/106917		
COMMON NOISE ENVIRONMENTS, NOISE RECEPTOR AND MITIGATION LOCATIONS		
FAIRFAX COUNTY VIRGINIA		
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	100 YEAR FLOODPLAIN		66 DBA CONTOUR
	COMMON NOISE ENVIRONMENTS		PROPOSED MEDIAN
	500' BUFFER		DISPLACED BUILDINGS
	PROPOSED PAVEMENT		BRIDGE DECKING
	PROPOSED SIDEWALK		NOISE MEASUREMENT LOCATION
MODELED NOISE RECEPTORS		POTENTIAL BARRIERS	
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SKELLY and LOY, Inc. | November 2019 | Figure 2G

ROUTE 7 WIDENING PROJECT - RT. 193 TO RT. 267
UPC: 99478/106917

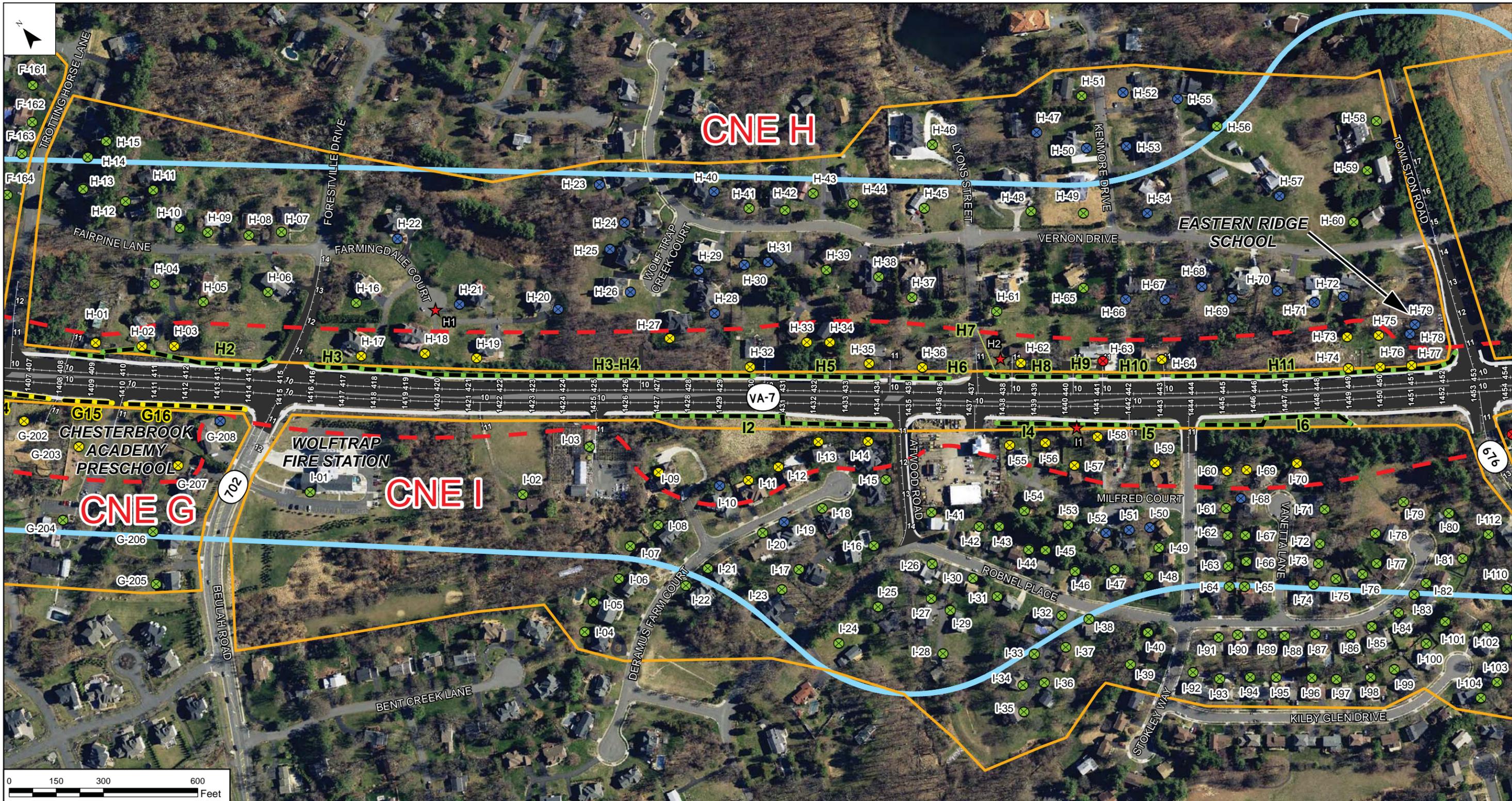
**COMMON NOISE ENVIRONMENTS,
NOISE RECEPTOR AND MITIGATION
LOCATIONS**

FAIRFAX COUNTY
VIRGINIA

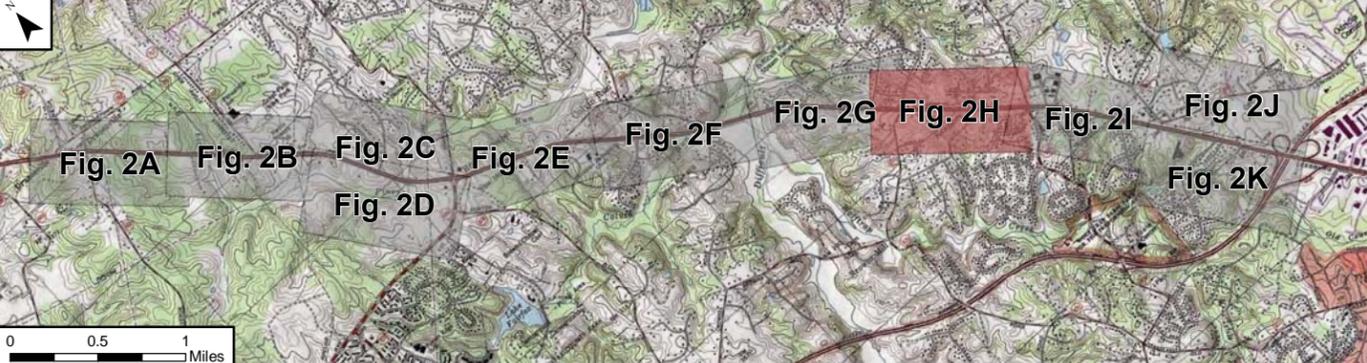
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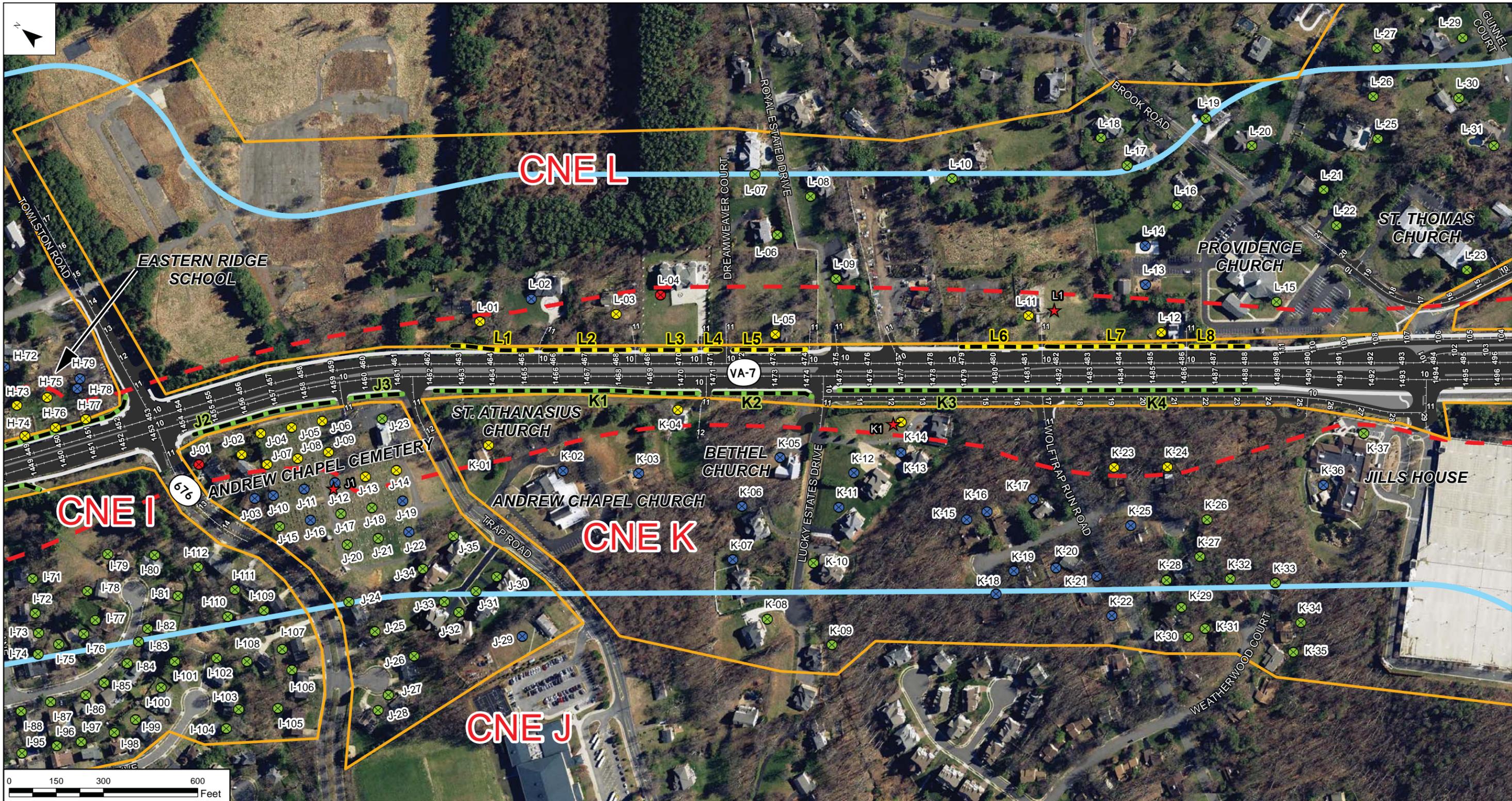
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	PROPOSED PAVEMENT		BRIDGE DECKING
	PROPOSED SIDEWALK		NOISE MEASUREMENT LOCATION
MODELED NOISE RECEPTORS		POTENTIAL BARRIERS	
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	IMPACTED, NOT BENEFITTED		BARRIER NOT FEASIBLE
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	NOT IMPACTED, BENEFITTED		EXISTING NOISE WALL



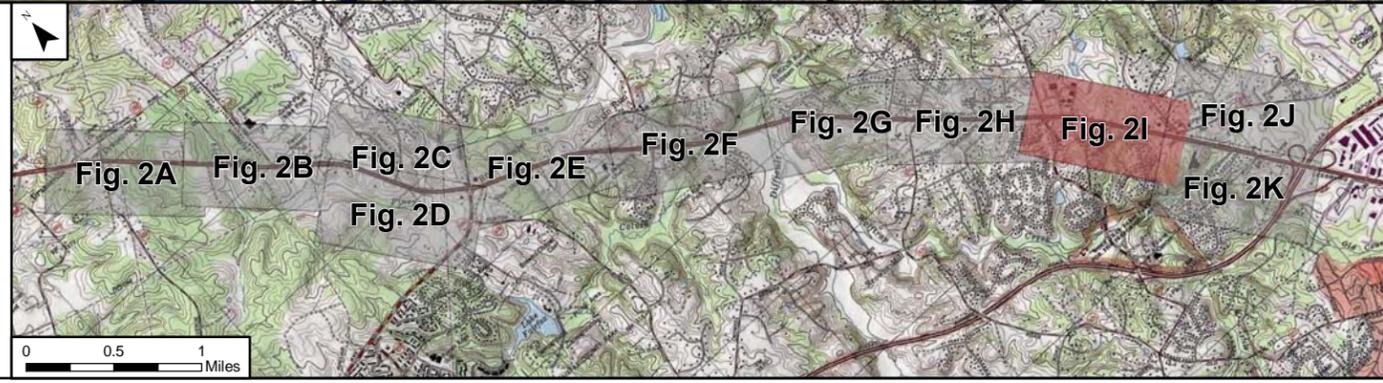
SKELLY and LOY, Inc.	November 2019	Figure 2H
ROUTE 7 WIDENING PROJECT - RT. 193 TO RT. 267 UPC: 99478/106917		
COMMON NOISE ENVIRONMENTS, NOISE RECEPTOR AND MITIGATION LOCATIONS		
FAIRFAX COUNTY VIRGINIA		
Job No.: R17-0524.000	11" X 17" : 1" = 300'	

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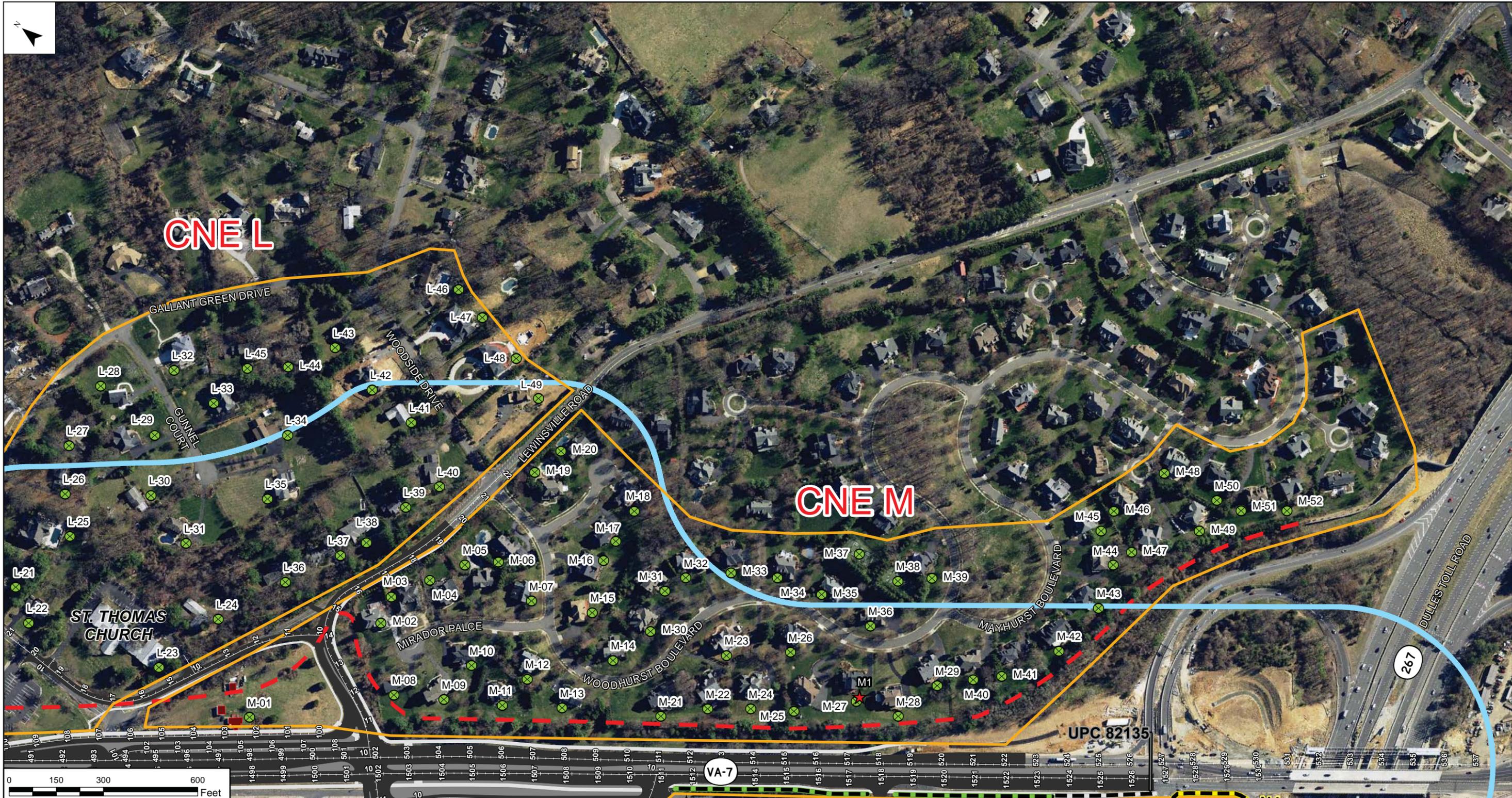


	100 YEAR FLOODPLAIN		66 DBA CONTOUR
	COMMON NOISE ENVIRONMENTS		PROPOSED MEDIAN
	500' BUFFER		DISPLACED BUILDINGS
	PROPOSED PAVEMENT		BRIDGE DECKING
	PROPOSED SIDEWALK		NOISE MEASUREMENT LOCATION
MODELED NOISE RECEPTORS		POTENTIAL BARRIERS	
	IMPACTED, BENEFITTED		BARRIER FEASIBLE NOT REASONABLE
	IMPACTED, NOT BENEFITTED		BARRIER NOT FEASIBLE
	NOT IMPACTED, NOT BENEFITTED		BARRIER FEASIBLE AND REASONABLE
	NOT IMPACTED, BENEFITTED		EXISTING NOISE WALL

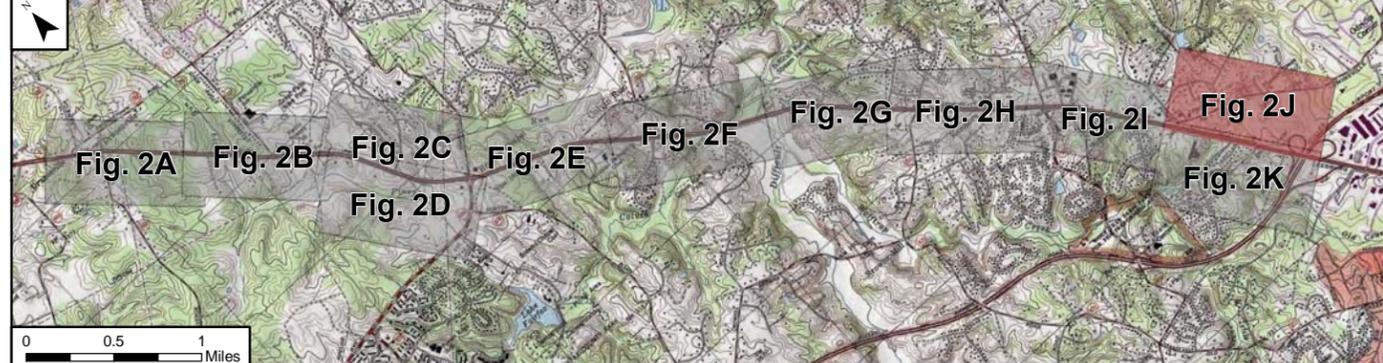


SKELLY and LOY, Inc.	November 2019	Figure 2I
ROUTE 7 WIDENING PROJECT - RT. 193 TO RT. 267 UPC: 99478/106917		
COMMON NOISE ENVIRONMENTS, NOISE RECEPTOR AND MITIGATION LOCATIONS		
FAIRFAX COUNTY VIRGINIA		
Job No.: R17-0524.000	11" X 17" : 1" = 300'	

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	100 YEAR FLOODPLAIN		66 DBA CONTOUR
	COMMON NOISE ENVIRONMENTS		PROPOSED MEDIAN
	500' BUFFER		DISPLACED BUILDINGS
	PROPOSED PAVEMENT		BRIDGE DECKING
	PROPOSED SIDEWALK		NOISE MEASUREMENT LOCATION
MODELED NOISE RECEPTORS		POTENTIAL BARRIERS	
	IMPACTED, BENEFITTED		BARRIER FEASIBLE NOT REASONABLE
	IMPACTED, NOT BENEFITTED		BARRIER NOT FEASIBLE
	NOT IMPACTED, NOT BENEFITTED		BARRIER FEASIBLE AND REASONABLE
	NOT IMPACTED, BENEFITTED		EXISTING NOISE WALL



SKELLY and LOY, Inc. | November 2019 | Figure 2J

ROUTE 7 WIDENING PROJECT - RT. 193 TO RT. 267
UPC: 99478/106917

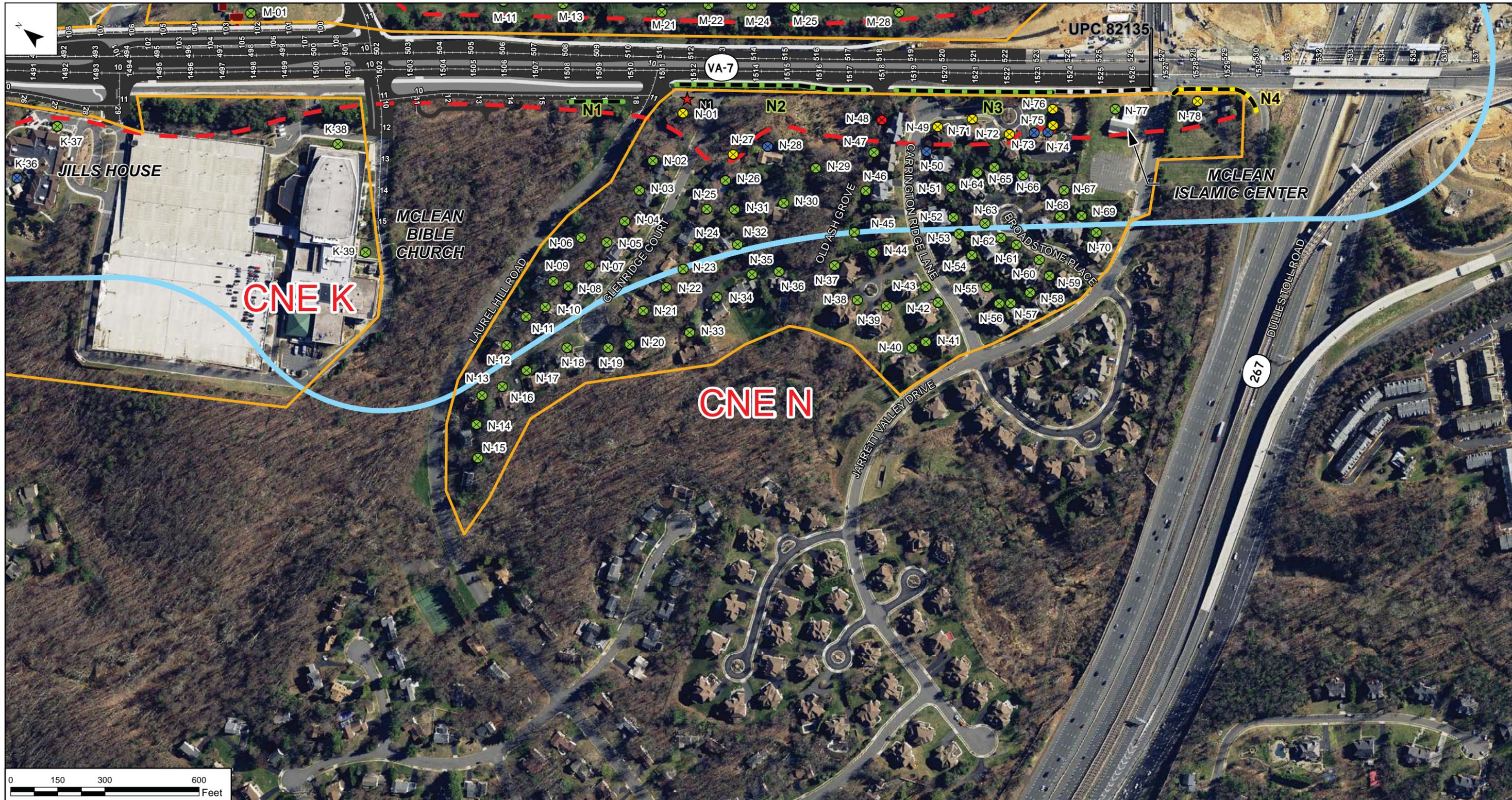
**COMMON NOISE ENVIRONMENTS,
NOISE RECEPTOR AND MITIGATION
LOCATIONS**

FAIRFAX COUNTY
VIRGINIA

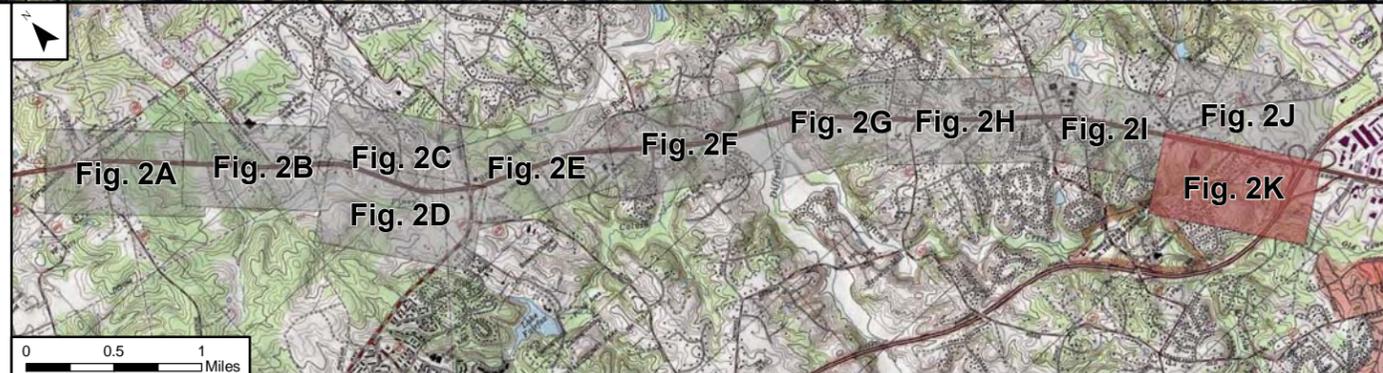
Job No.: R17-0524.000 | 11" X 17" : 1" = 300'

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	100 YEAR FLOODPLAIN		66 DBA CONTOUR
	COMMON NOISE ENVIRONMENTS		PROPOSED MEDIAN
	500' BUFFER		DISPLACED BUILDINGS
	PROPOSED PAVEMENT		BRIDGE DECKING
	PROPOSED SIDEWALK		NOISE MEASUREMENT LOCATION
MODELED NOISE RECEPTORS		POTENTIAL BARRIERS	
	IMPACTED, BENEFITTED		BARRIER FEASIBLE NOT REASONABLE
	IMPACTED, NOT BENEFITTED		BARRIER NOT FEASIBLE
	NOT IMPACTED, NOT BENEFITTED		BARRIER FEASIBLE AND REASONABLE
	NOT IMPACTED, BENEFITTED		EXISTING NOISE WALL



SKELLY and LOY, Inc.	November 2019	Figure 2K
ROUTE 7 WIDENING PROJECT - RT. 193 TO RT. 267 UPC: 99478/106917		
COMMON NOISE ENVIRONMENTS, NOISE RECEPTOR AND MITIGATION LOCATIONS		
FAIRFAX COUNTY VIRGINIA		
Job No.: R17-0524.000	11" X 17" : 1" = 300'	

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DATA TABLES

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
CNE A	A-01	1080 CEDAR CHASE CT	1	B	Residence	66	50	52
	A-02	1076 CEDAR CHASE CT	1	B	Residence	66	53	55
	A-03	1076 CEDAR CHASE CT	1	B	Residence	66	55	57
	A-04	1074 CEDAR CHASE CT	1	B	Residence	66	61	61
	A-05	1072 CEDAR CHASE CT	1	B	Residence	66	58	60
	A-06	1070 CEDAR CHASE CT	1	B	Residence	66	62	65
	A-07	1068 CEDAR CHASE CT	1	B	Residence	66	62	63
	A-08	1069 CEDAR CHASE CT	1	B	Residence	66	58	59
	A-09	1071 CEDAR CHASE CT	1	B	Residence	66	53	54
	A-10	1073 CEDAR CHASE CT	1	B	Residence	66	52	56
	A-11	1075 CEDAR CHASE CT	1	B	Residence	66	51	54
	A-12	11596 CEDAR CHASE RD	1	B	Residence	66	50	53
	A-13	11594 CEDAR CHASE RD	1	B	Residence	66	52	53
	A-14	11592 CEDAR CHASE RD	1	B	Residence	66	53	54
	A-15	11590 CEDAR CHASE RD	1	B	Residence	66	54	55
	A-16	11588 CEDAR CHASE RD	1	B	Residence	66	55	56
	A-17	11586 CEDAR CHASE RD	1	B	Residence	66	58	59
	A-18	11584 CEDAR CHASE RD	1	B	Residence	66	66	67
	A-19	11582 CEDAR CHASE RD	1	B	Residence	66	64	65
	A-20	11580 CEDAR CHASE RD	1	B	Residence	66	59	59
	A-21	11605 CEDAR CHASE RD	1	B	Residence	66	49	50
	A-22	11603 CEDAR CHASE RD	1	B	Residence	66	48	50
	A-23	11601 CEDAR CHASE RD	1	B	Residence	66	47	49
	A-24	11599 CEDAR CHASE RD	1	B	Residence	66	47	49
	A-25	11597 CEDAR CHASE RD	1	B	Residence	66	46	48
	A-26	11595 CEDAR CHASE RD	1	B	Residence	66	46	48
	A-27	11593 CEDAR CHASE RD	1	B	Residence	66	47	48
	A-28	11591 CEDAR CHASE RD	1	B	Residence	66	48	50
	A-29	11589 CEDAR CHASE RD	1	B	Residence	66	50	51
	A-30	11585 CEDAR CHASE RD	1	B	Residence	66	52	53
	A-31	11585 CEDAR CHASE RD	1	B	Residence	66	54	56
	A-32	11579 CEDAR CHASE RD	1	C	Playground	66	55	56
	A-33	11579 CEDAR CHASE RD	1	D	School	51	56 (31)	57 (32)
	A-34	1126 RESTON AVE	1	B	Residence	66	52	54
	A-35	1132 RESTON AVE	1	B	Residence	66	51	53
	A-36	11602 TORI GLEN CT	1	B	Residence	66	41	43
	A-37	1138 RESTON AVE	1	B	Residence	66	48	49
	A-38	1117 RESTON AVE	1	C	Picnic Area	66	55	56
	A-39	1121 RESTON AVE	1	C	Outdoor Area	66	59	61
	A-40	1121 RESTON AVE	1	C	Patio	66	56	58
	A-41	11500 WHITE OAK CT	1	B	Residence	66	50	51
	A-42	11498 WHITE OAK CT	1	B	Residence	66	49	51
	A-43	11496 WHITE OAK CT	1	B	Residence	66	48	50
	A-44	11494 WHITE OAK CT	1	B	Residence	66	47	50
	A-45	1133 RESTON AVE	1	D	Church	51	57 (32)	58 (33)
	A-46	1104 ROUND PEBBLE LN	1	B	Residence	66	56	58
	A-47	1106 ROUND PEBBLE LN	1	B	Residence	66	52	54
	A-48	1108 ROUND PEBBLE LN	1	B	Residence	66	50	52
	A-49	1110 ROUND PEBBLE LN	1	B	Residence	66	49	51
	A-50	1112 ROUND PEBBLE LN	1	B	Residence	66	48	50
	A-51	1111 ROUND PEBBLE LN	1	B	Residence	66	47	49
	A-52	1102 ROUND PEBBLE LN	1	B	Residence	66	50	52
	A-53	1100 ROUND PEBBLE LN	1	B	Residence	66	48	50
	A-54	1100 ROUND PEBBLE LN	1	B	Residence	66	48	50
	A-55	1109 ROUND PEBBLE LN	1	B	Residence	66	46	48
	A-56	1101 WATER POINTE LN	1	B	Residence	66	63	66
	A-57	1100 WATER POINTE LN	1	B	Residence	66	59	61
	A-58	1104 WATER POINTE LN	1	B	Residence	66	57	60
	A-59	1104 WATER POINTE LN	1	B	Residence	66	57	61
	A-60	1106 WATER POINTE LN	1	B	Residence	66	58	61
	A-61	1108 WATER POINTE LN	1	B	Residence	66	55	59
	A-62	1110 WATER POINTE LN	1	B	Residence	66	59	63
	A-63	1110 WATER POINTE LN	1	B	Residence	66	57	60
	A-64	1114 WATER POINTE LN	1	B	Residence	66	55	57
	A-65	1109 WATER POINTE LN	1	B	Residence	66	63	65
	A-66	1113 WATER POINTE LN	1	B	Residence	66	61	63

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
	A-67	11306 WATER POINTE CIR	1	B	Residence	66	61	63
	A-68	11304 WATER POINTE CIR	1	B	Residence	66	61	63
	A-69	11300 WATER POINTE CIR	1	B	Residence	66	60	62
	A-70	11301 WATER POINTE CIR	1	B	Residence	66	61	65
	A-71	11303 WATER POINTE CIR	1	B	Residence	66	59	63
	A-72	11305 WATER POINTE CIR	1	B	Residence	66	54	56
	A-73	11307 WATER POINTE CIR	1	B	Residence	66	53	56
	A-74	11309 WATER POINTE CIR	1	B	Residence	66	53	56
	A-75	1141 WATER POINTE LN	1	B	Residence	66	50	53
	A-76	1143 WATER POINTE LN	1	B	Residence	66	50	53
	A-77	1145 WATER POINTE LN	1	B	Residence	66	51	54
	A-78	1147 WATER POINTE LN	1	B	Residence	66	51	54
	A-79	1149 WATER POINTE LN	1	B	Residence	66	52	55
	A-80	1151 WATER POINTE LN	1	B	Residence	66	52	55
	A-81	1153 WATER POINTE LN	1	B	Residence	66	53	55
A-82	1155 WATER POINTE LN	1	B	Residence	66	53	56	
A-83	1157 WATER POINTE LN	1	B	Residence	66	51	54	
CNE B	B-01	11415 GEORGETOWN PIKE	1	D	Animal Hospital	51	69 (44)	71 (46)
	B-02	11415 GEORGETOWN PIKE	1	C	Dog Park	66	51	52
	B-03	11500 LEESBURG PIKE	1	D	Church	51	63 (38)	67 (42)
	B-04	11502 LEESBURG PIKE	1	B	Residence	66	58	61
	B-05	11411 GEORGETOWN PIKE	1	B	Residence	66	55	57
	B-06	11448 AIDAN RUN CT	1	B	Residence	66	61	63
	B-07	11447 AIDAN RUN CT	1	B	Residence	66	71	73
	B-08	11445 AIDAN RUN CT	1	B	Residence	66	70	72
	B-09	11444 AIDAN RUN CT	1	B	Residence	66	54	56
	B-10	11441 AIDAN RUN CT	1	B	Residence	66	55	57
	B-11	1056 AUTUMN MIST LN	1	B	Residence	66	52	55
	B-12	1058 AUTUMN MIST LN	1	B	Residence	66	58	61
	B-13	1063 AUTUMN MIST LN	1	B	Residence	66	70	72
	B-14	1061 Autumn Mist Ln	1	B	Residence	66	63	66
	B-15	1059 AUTUMN MIST LN	1	B	Residence	66	57	60
	B-16	1057 AUTUMN MIST LN	1	B	Residence	66	53	56
	B-17	1055 AUTUMN MIST LN	1	B	Residence	66	51	54
	B-18	11309 GEORGETOWN PIKE	1	B	Residence	66	49	52
	B-19	1070 SHAIN CT	1	B	Residence	66	54	57
	B-20	1076 SHAIN CT	1	B	Residence	66	59	62
	B-21	1076 SHAIN CT	1	B	Residence	66	66	69
	B-22	1075 SHAIN CT	1	B	Residence	66	68	70
	B-23	1071 SHAIN CT	1	B	Residence	66	54	57
	B-24	11326 LEESBURG PIKE	1	D	School	51	51 (26)	57 (32)
	B-25	1066 NORTHFALLS CT	1	B	Residence	66	67	67
	B-26	1062 NORTHFALLS CT	1	B	Residence	66	57	62
	B-27	1058 NORTHFALLS CT	1	B	Residence	66	55	60
	B-28	1054 NORTHFALLS CT	1	B	Residence	66	50	55
	B-29	1061 NORTHFALLS CT	1	B	Residence	66	53	57
	B-30	1061 NORTHFALLS CT	1	B	Residence	66	55	58
	B-31	1065 NORTHFALLS CT	1	B	Residence	66	64	67
	B-32	11254 LEESBURG PIKE	1	E	Nursery	71	62	65
	B-33	11133 BOWEN AVE	1	B	Residence	66	68	70
	B-34	11131 BOWEN AVE	1	B	Residence	66	67	70
B-35	1094 MCCUE CT	1	B	Residence	66	68	71	
B-36	1096 MCCUE CT	1	B	Residence	66	70	72	
B-37	1095 MCCUE CT	1	B	Residence	66	63	64	
B-38	1098 MCCUE CT	1	B	Residence	66	61	63	
B-39	1092 MCCUE CT	1	B	Residence	66	60	62	
B-40	11129 BOWEN AVE	1	B	Residence	66	57	60	
B-41	11135 BOWEN AVE	1	B	Residence	66	59	62	
B-42	11134 BOWEN AVE	1	B	Residence	66	52	54	
B-43	11128 BOWEN AVE	1	B	Residence	66	51	54	
B-44	11126 BOWEN AVE	1	B	Residence	66	51	52	
B-45	11127 BOWEN AVE	1	B	Residence	66	51	54	
B-46	1091 MCCUE CT	1	B	Residence	66	51	53	
B-47	1093 MCCUE CT	1	B	Residence	66	52	55	
B-48	1090 LORAN CT	1	B	Residence	66	53	56	
B-49	1092 LORAN CT	1	B	Residence	66	51	54	

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
	B-50	1094 LORAN CT	1	B	Residence	66	57	59
	B-51	1096 LORAN CT	1	B	Residence	66	57	59
	B-52	1098 LORAN CT	1	B	Residence	66	56	58
	B-53	11104 LORAN RD	1	B	Residence	66	59	61
	B-54	11106 LORAN RD	1	B	Residence	66	62	63
	B-55	11108 LORAN RD	1	B	Residence	66	69	71
	B-56	11110 LORAN RD	1	B	Residence	66	66	68
	B-57	11112 LORAN RD	1	B	Residence	66	67	71
	B-58	11111 LORAN RD	1	B	Residence	66	54	57
	B-59	11113 LORAN RD	1	B	Residence	66	59	62
	B-60	11115 LORAN RD	1	B	Residence	66	62	65
	B-61	11117 LORAN RD	1	B	Residence	66	64	67
	B-62	11119 LORAN RD	1	B	Residence	66	68	71
	B-63	1124 UTTERBACK STORE RD	1	B	Residence	66	61	65
	B-64	1116 UTTERBACK STORE RD	1	B	Residence	66	56	61
	B-65	1112 UTTERBACK STORE RD	1	B	Residence	66	53	57
	B-66	1108 UTTERBACK STORE RD	1	B	Residence	66	53	57
	B-67	1104 UTTERBACK STORE RD	1	B	Residence	66	53	57
	B-68	1100 UTTERBACK STORE RD	1	B	Residence	66	54	57
	B-69	11101 LORAN RD	1	B	Residence	66	54	57
	B-70	1097 LORAN CT	1	B	Residence	66	50	54
	B-71	1093 LORAN CT	1	B	Residence	66	51	54
	B-72	1088 UTTERBACK STORE RD	1	B	Residence	66	51	54
	C-01	11300 STONES THROW DR	1	B	Residence	66	54	57
	C-02	11296 STONES THROW DR	1	B	Residence	66	55	58
	C-03	11294 STONES THROW DR	1	B	Residence	66	56	60
	C-04	11292 STONES THROW DR	1	B	Residence	66	62	64
	C-05	11290 STONES THROW DR	1	B	Residence	66	63	66
	C-06	11288 STONES THROW DR	1	B	Residence	66	64	67
	C-07	11286 STONES THROW DR	1	B	Residence	66	67	69
	C-08	11284 STONES THROW DR	1	B	Residence	66	68	70
	C-09	11285 STONES THROW DR	1	B	Residence	66	60	62
	C-10	11287 STONES THROW DR	1	B	Residence	66	58	61
	C-11	11289 STONES THROW DR	1	B	Residence	66	53	57
	C-12	1149 FIELDVIEW DR	1	B	Residence	66	49	52
	C-13	1151 FIELDVIEW DR	1	B	Residence	66	48	52
	C-14	1153 FIELDVIEW DR	1	B	Residence	66	50	54
	C-15	1155 FIELDVIEW DR	1	B	Residence	66	51	55
	C-16	11270 STONES THROW DR	1	B	Residence	66	72	73
	C-17	11268 STONES THROW DR	1	B	Residence	66	69	72
	C-18	11266 STONES THROW DR	1	B	Residence	66	63	68
	C-19	11264 STONES THROW DR	1	B	Residence	66	60	65
	C-20	11262 STONES THROW DR	1	B	Residence	66	57	62
	C-21	11260 STONES THROW DR	1	B	Residence	66	56	60
	C-22	11258 STONES THROW DR	1	B	Residence	66	52	56
	C-23	11256 STONES THROW DR	1	B	Residence	66	48	52
	C-24	11263 STONES THROW DR	1	B	Residence	66	54	57
	C-25	11261 STONES THROW DR	1	B	Residence	66	53	56
	C-26	11259 STONES THROW DR	1	B	Residence	66	51	54
	C-27	11255 STONES THROW DR	1	B	Residence	66	49	52
	C-28	11257 Stones Throw Dr	1	B	Residence	66	45	48
	C-29	11225 BRIGHT POND LN	1	B	Residence	66	46	49
	C-30	11217 BRIGHT POND LN	1	B	Residence	66	45	49
	C-31	11211 BRIGHT POND LN	1	B	Residence	66	45	49
	C-32	11205 BRIGHT POND LN	1	B	Residence	66	46	50
	C-33	11201 BRIGHT POND LN	1	B	Residence	66	49	52
	C-34	1144 MEADOWLOOK CT	1	B	Residence	66	49	52
	C-35	1140 MEADOWLOOK CT	1	B	Residence	66	55	58
	C-36	1141 MEADOWLOOK CT	1	B	Residence	66	61	66
	C-37	1143 MEADOWLOOK CT	1	B	Residence	66	68	70
	C-38	1152 MEADOWLOOK CT	1	B	Residence	66	59	61
	C-39	1158 MEADOWLOOK CT	1	B	Residence	66	55	57
	C-40	1162 MEADOWLOOK CT	1	B	Residence	66	50	52
	C-41	1147 MEADOWLOOK CT	1	B	Residence	66	71	72
	C-42	1151 MEADOWLOOK CT	1	B	Residence	66	68	69
	C-43	1159 MEADOWLOOK CT	1	B	Residence	66	63	65

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)		
							2018 Existing	2040 Build	
CNE C	C-44	1163 MEADOWLOOK CT	1	B	Residence	66	59	61	
	C-45	11116 TOMMYE LN	1	B	Residence	66	60	61	
	C-46	11133 TOMMYE LN	1	B	Residence	66	48	50	
	C-47	11129 TOMMYE LN	1	B	Residence	66	45	48	
	C-48	11125 TOMMYE LN	1	B	Residence	66	45	48	
	C-49	11121 TOMMYE LN	1	B	Residence	66	50	52	
	C-50	11117 TOMMYE LN	1	B	Residence	66	52	53	
	C-51	11113 TOMMYE LN	1	B	Residence	66	53	55	
	C-52	11109 TOMMYE LN	1	B	Residence	66	52	53	
	C-53	1155 MEADOWLOOK CT	1	B	Residence	66	70	71	
	C-54	11108 TOMMYE LN	1	B	Residence	66	69	70	
	C-55	11110 TOMMYE LN	1	B	Residence	66	61	61	
	C-56	11106 TOMMYE LN	1	B	Residence	66	68	69	
	C-57	11102 TOMMYE LN	1	B	Residence	66	61	62	
	C-58	11104 TOMMYE LN	1	B	Residence	66	68	69	
	C-58B	0	0	1	B	Residence	66	66	67
	C-59	1192 BISHOPSGATE WAY	1	B	Residence	66	63	64	
	C-60	11100 TOMMYE LN	1	B	Residence	66	57	58	
	C-61	1153 MARKELL CT	1	B	Residence	66	71	72	
	C-62	1151 MARKELL CT	1	B	Residence	66	56	57	
	C-63	1155 MARKELL CT	1	B	Residence	66	65	66	
	C-64	1157 MARKELL CT	1	B	Residence	66	68	70	
	C-65	1150 MARKELL CT	1	B	Residence	66	55	56	
	C-66	1152 MARKELL CT	1	B	Residence	66	55	57	
	C-67	1154 MARKELL CT	1	B	Residence	66	58	60	
	C-68	1156 MARKELL CT	1	B	Residence	66	62	63	
	C-69	1158 MARKELL CT	1	B	Residence	66	64	65	
	C-70	1160 MARKELL CT	1	B	Residence	66	61	63	
	C-71	1162 MARKELL CT	1	B	Residence	66	62	64	
	C-72	1164 MARKELL CT	1	B	Residence	66	61	63	
	C-73	1163 MARKELL CT	1	B	Residence	66	70	71	
	C-74	1167 MARKELL CT	1	B	Residence	66	70	68	
	C-75	1166 MARKELL CT	1	B	Residence	66	61	63	
	C-76	1170 MARKELL CT	1	B	Residence	66	60	62	
	C-77	1201 Bishopsgate Way	1	B	Residence	66	52	54	
	C-78	1201 Bishopsgate Way	1	B	Residence	66	52	54	
	C-79	1201 BISHOPSGATE WAY	1	B	Residence	66	53	55	
	C-80	1203 BISHOPSGATE WAY	1	B	Residence	66	52	55	
	C-81	1205 BISHOPSGATE WAY	1	B	Residence	66	52	55	
	C-82	1205 BISHOPSGATE WAY	1	B	Residence	66	53	56	
	C-83	1209 BISHOPSGATE WAY	1	B	Residence	66	52	56	
	C-84	1211 BISHOPSGATE WAY	1	B	Residence	66	50	55	
	C-85	1213 BISHOPSGATE WAY	1	B	Residence	66	49	55	
	C-86	1215 BISHOPSGATE WAY	1	B	Residence	66	46	54	
	C-87	1217 BISHOPSGATE WAY	1	B	Residence	66	43	53	
	C-88	1219 BISHOPSGATE WAY	1	B	Residence	66	41	53	
	C-89	10819 LEESBURG PIKE	1	B	Residence	66	62	66	
	C-90	10819 LEESBURG PIKE	1	B	Residence	66	56	60	
	C-91	10819 LEESBURG PIKE	1	B	Residence	66	53	60	
	C-92	11006 BURYWOOD LN	1	B	Residence	66	40	53	
	C-93	11004 BURYWOOD LN	1	B	Residence	66	40	52	
	C-94	11002 BURYWOOD LN	1	B	Residence	66	41	54	
	C-95	11000 BURYWOOD LN	1	B	Residence	66	42	56	
	C-96	11001 BURYWOOD LN	1	B	Residence	66	43	57	
	C-97	1286 GATESMEADOW WAY	1	B	Residence	66	43	56	
	C-98	1284 GATESMEADOW WAY	1	B	Residence	66	42	55	
	C-99	10864 HUNTER GATE WAY	1	B	Residence	66	46	59	
	C-100	10860 HUNTER GATE WAY	1	B	Residence	66	48	60	
	C-101	10858 HUNTER GATE WAY	1	B	Residence	66	49	60	
	C-102	10856 Hunter Gate Way	1	B	Residence	66	50	60	
	C-103	10854 HUNTER GATE WAY	1	B	Residence	66	52	60	
	C-104	10852 HUNTER GATE WAY	1	B	Residence	66	56	60	
	C-105	10850 HUNTER GATE WAY	1	B	Residence	66	57	60	
	C-106	10846 HUNTER GATE WAY	1	C	Pool	66	55	57	
	C-107	10846 HUNTER GATE WAY	1	C	Tennis Court	66	58	60	
	C-108	10846 HUNTER GATE WAY	1	C	Picnic Area	66	64	65	

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
	C-109	10846 HUNTER GATE WAY	1	C	Basketball	66	58	60
	C-110	10846 HUNTER GATE WAY	1	C	Pavillion	66	54	57
	C-111	10846 HUNTER GATE WAY	1	C	Playground	66	54	57
CNE D	D-01	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	64	68
	D-02	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	62	66
	D-03	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	61	64
	D-04	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	58	62
	D-05	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	60	63
	D-06	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	60	64
	D-07	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	58	62
	D-08	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	57	61
	D-09	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	56	60
	D-10	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	55	59
	D-11	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	56	60
	D-12	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	56	60
	D-13	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	57	61
	D-14	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	54	58
	D-15	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	53	57
	D-16	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	52	56
	D-17	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	53	57
	D-18	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	55	60
	D-19	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	54	59
	D-20	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	52	56
	D-21	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	51	55
	D-22	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	50	54
	D-23	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	51	55
	D-24	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	53	58
	D-25	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	58	62
	D-26	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	60	63
	D-27	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	55	59
	D-28	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	57	61
	D-29	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	59	62
	D-30	1149 UTTERBACK STORE RD	1	C	Sports Complex	66	56	60
	D-31	1054 Hanchel Ter	1	B	Residence	66	71	72
	D-32	1052 Hanchel Ter	1	B	Residence	66	62	63
	D-33	1050 Hanchel Ter	1	B	Residence	66	55	57
	D-34	10924 GREAT PASSAGE CT	1	B	Residence	66	53	55
	D-35	10932 GREAT PASSAGE CT	1	B	Residence	66	52	55
	D-36	10928 GREAT PASSAGE CT	1	B	Residence	66	51	53
	D-37	1100 GREAT PASSAGE BLVD	1	B	Residence	66	48	50
	D-38	1104 GREAT PASSAGE BLVD	1	B	Residence	66	53	55
	D-39	1051 Hanchel Ter	1	B	Residence	66	64	65
	D-40	1051 HANCHEL TER	1	B	Residence	66	68	70
	D-41	1108 GREAT PASSAGE BLVD	1	B	Residence	66	65	63
E	E-01	1142 KETTLE POND LN	1	B	Residence	66	61	62
	E-02	1112 AMANDA DR	1	B	Residence	66	65	66
	E-03	1114 AMANDA DR	1	B	Residence	66	62	63
	E-04	1116 AMANDA DR	1	B	Residence	66	67	69
	E-05	1118 AMANDA DR	1	B	Residence	66	66	67
	E-06	1124 AMANDA DR	1	B	Residence	66	70	71
	E-07	1125 AMANDA DR	1	B	Residence	66	64	66
	E-08	1123 AMANDA DR	1	B	Residence	66	62	64
	E-09	1121 AMANDA DR	1	B	Residence	66	59	61
	E-10	1119 AMANDA DR	1	B	Residence	66	58	59
	E-11	1117 AMANDA DR	1	B	Residence	66	56	58
	E-12	1115 AMANDA DR	1	B	Residence	66	53	55
	E-13	1146 KETTLE POND LN	1	B	Residence	66	50	53
	E-14	1143 KETTLE POND LN	1	B	Residence	66	52	54
	E-15	1104 AMANDA DR	1	B	Residence	66	49	51
	E-16	1105 AMANDA DR	1	B	Residence	66	46	48
	E-17	1107 AMANDA DR	1	B	Residence	66	50	52
	E-18	1149 KETTLE POND LN	1	B	Residence	66	47	49
	E-19	1148 KETTLE POND LN	1	B	Residence	66	47	49
	E-20	1150 KETTLE POND LN	1	B	Residence	66	46	48
	E-21	1152 KETTLE POND LN	1	B	Residence	66	46	48
	E-22	1154 KETTLE POND LN	1	B	Residence	66	49	51

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
CNE E	E-23	1156 KETTLE POND LN	1	B	Residence	66	51	53
	E-24	1158 KETTLE POND LN	1	B	Residence	66	52	54
	E-25	1160 KETTLE POND LN	1	B	Residence	66	52	55
	E-26	1162 KETTLE POND LN	1	B	Residence	66	52	54
	E-27	1164 KETTLE POND LN	1	B	Residence	66	51	54
	E-28	1166 KETTLE POND LN	1	B	Residence	66	49	52
	E-29	1168 KETTLE POND LN	1	B	Residence	66	53	55
	E-30	1170 KETTLE POND LN	1	B	Residence	66	50	50
	E-31	1150 RIVA RIDGE DR	1	B	Residence	66	51	53
	E-32	1152 RIVA RIDGE DR	1	B	Residence	66	55	57
	E-33	1158 RIVA RIDGE DR	1	B	Residence	66	63	65
	E-34	1127 AMANDA DR	1	B	Residence	66	67	68
	E-35	1154 RIVA RIDGE DR	1	B	Residence	66	56	58
	E-36	1156 RIVA RIDGE DR	1	B	Residence	66	62	64
	E-37	1165 KETTLE POND LN	1	B	Residence	66	48	51
	E-38	1169 KETTLE POND LN	1	B	Residence	66	49	50
	E-39	10809 PINEY POND DR	1	B	Residence	66	67	68
	E-40	10807 PINEY POND DR	1	B	Residence	66	69	70
	E-41	10805 PINEY POND DR	1	B	Residence	66	66	68
	E-42	10803 PINEY POND DR	1	B	Residence	66	65	67
	E-43	10801 PINEY POND DR	1	B	Residence	66	57	58
	E-44	10806 PINEY POND DR	1	B	Residence	66	58	60
	E-45	10804 PINEY POND DR	1	B	Residence	66	57	59
	E-46	10802 PINEY POND DR	1	B	Residence	66	50	53
	E-47	10800 PINEY POND DR	1	B	Residence	66	49	52
	E-48	11715 CRIPPEN CT	1	B	Residence	66	70	71
	E-49	11717 CRIPPEN CT	1	B	Residence	66	70	71
	E-50	11718 CRIPPEN CT	1	B	Residence	66	64	65
	E-51	11716 CRIPPEN CT	1	B	Residence	66	48	51
	E-52	11714 CRIPPEN CT	1	B	Residence	66	48	51
	E-53	11710 CRIPPEN CT	1	B	Residence	66	50	52
	E-54	1106 MOUNTAIN HOPE CT	1	B	Residence	66	46	49
	E-55	1104 MOUNTAIN HOPE CT	1	B	Residence	66	47	49
	E-56	1105 MOUNTAIN HOPE CT	1	B	Residence	66	54	55
	E-57	1103 MOUNTAIN HOPE CT	1	B	Residence	66	52	54
	E-58	1107 MOUNTAIN HOPE CT	1	B	Residence	66	52	54
E-59	11700 CRIPPEN CT	1	B	Residence	66	56	58	
E-60	11713 CRIPPEN CT	1	B	Residence	66	63	66	
E-61	11711 CRIPPEN CT	1	B	Residence	66	66	69	
E-62	11709 CRIPPEN CT	1	B	Residence	66	55	58	
E-63	11707 CRIPPEN CT	1	B	Residence	66	54	57	
E-64	11705 CRIPPEN CT	1	B	Residence	66	65	68	
E-65	11703 CRIPPEN CT	1	B	Residence	66	64	67	
E-66	11701 CRIPPEN CT	1	B	Residence	66	60	64	
CNE F	F-01	10618 LEESBURG PIKE	1	E	Nursery	71	65	68
	F-02	10613 SPRINGVALE CT	1	B	Residence	66	53	57
	F-03	10611 SPRINGVALE CT	1	B	Residence	66	55	58
	F-04	10609 SPRINGVALE CT	1	B	Residence	66	53	56
	F-05	10603 SPRINGVALE CT	1	B	Residence	66	53	55
	F-06	10601 SPRINGVALE CT	1	B	Residence	66	51	55
	F-07	10600 SPRINGVALE CT	1	B	Residence	66	51	55
	F-08	10605 SPRINGVALE CT	1	B	Residence	66	51	53
	F-09	10607 SPRINGVALE CT	1	B	Residence	66	49	51
	F-10	1137 SPRINGVALE RD	1	B	Residence	66	53	55
	F-11	1141 SPRINGVALE RD	1	B	Residence	66	49	51
	F-12	10604 Springvale Ct	1	B	Residence	66	46	49
	F-13	10602 SPRINGVALE CT	1	B	Residence	66	47	50
	F-14	10500 LEESBURG PIKE	1	E	Nursery	71	68	70
	F-15	10420 LEESBURG PIKE	1	B	Residence	66	70	68
	F-16	10416 LEESBURG PIKE	1	C	Cemetery	66	72	73
F-17	10416 LEESBURG PIKE	1	C	Cemetery	66	72	74	
F-18	10416 LEESBURG PIKE	1	C	Cemetery	66	65	68	
F-19	10416 LEESBURG PIKE	1	C	Cemetery	66	65	68	
F-20	10416 LEESBURG PIKE	1	C	Cemetery	66	60	62	
F-21	10416 LEESBURG PIKE	1	C	Cemetery	66	59	61	
F-22	10416 VAN PATTEN LN	1	B	Residence	66	52	55	

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
CNE F	F-23	10413 VAN PATTEN LN	1	B	Residence	66	55	57
	F-24	10411 VAN PATTEN LN	1	B	Residence	66	71	70
	F-25	10409 VAN PATTEN LN	1	B	Residence	66	68	71
	F-26	10407 VAN PATTEN LN	1	B	Residence	66	71	69
	F-27	10401 VAN PATTEN LN	1	B	Residence	66	62	62
	F-28	10403 VAN PATTEN LN	1	B	Residence	66	60	61
	F-29	10405 VAN PATTEN LN	1	B	Residence	66	61	62
	F-30	10414 VAN PATTEN LN	1	B	Residence	66	48	50
	F-31	10410 VAN PATTEN LN	1	B	Residence	66	49	51
	F-32	10406 VAN PATTEN LN	1	B	Residence	66	52	52
	F-33	10402 VAN PATTEN LN	1	B	Residence	66	51	51
	F-34	10400 VAN PATTEN LN	1	B	Residence	66	54	57
	F-35	1101 COLVIN MILL CT	1	B	Residence	66	49	50
	F-36	1103 COLVIN MILL CT	1	B	Residence	66	48	49
	F-37	1105 COLVIN MILL CT	1	B	Residence	66	48	50
	F-38	1107 COLVIN MILL CT	1	B	Residence	66	53	55
	F-39	1162 MILL GARDEN CT	1	B	Residence	66	51	54
	F-40	10313 COLVIN RUN RD	1	B	Residence	66	69	72
	F-41	10309 COLVIN RUN RD	1	B	Residence	66	66	69
	F-42	10301 COLVIN RUN RD	1	B	Residence	66	59	63
	F-43	1202 COLVIN MEADOWS LN	1	B	Residence	66	56	60
	F-44	1200 COLVIN MEADOWS LN	1	B	Residence	66	55	58
	F-45	1206 COLVIN MEADOWS LN	1	B	Residence	66	60	64
	F-46	1204 COLVIN MEADOWS LN	1	B	Residence	66	65	69
	F-47	1208 COLVIN MEADOWS LN	1	B	Residence	66	62	67
	F-48	1210 COLVIN MEADOWS LN	1	B	Residence	66	68	70
	F-49	1212 COLVIN MEADOWS LN	1	B	Residence	66	69	71
	F-50	1214 COLVIN MEADOWS LN	1	B	Residence	66	70	71
	F-51	1216 COLVIN MEADOWS LN	1	B	Residence	66	69	70
	F-52	1218 COLVIN MEADOWS LN	1	B	Residence	66	65	65
	F-53	1201 COLVIN MEADOWS LN	1	B	Residence	66	49	51
	F-54	1203 COLVIN MEADOWS LN	1	B	Residence	66	48	50
	F-55	1205 COLVIN MEADOWS LN	1	B	Residence	66	52	55
	F-56	1207 COLVIN MEADOWS LN	1	B	Residence	66	51	54
	F-57	1209 COLVIN MEADOWS LN	1	B	Residence	66	53	55
	F-58	1211 COLVIN MEADOWS LN	1	B	Residence	66	54	56
	F-59	1194 LEES MEADOW CT	1	B	Residence	66	54	55
	F-60	1192 LEES MEADOW CT	1	B	Residence	66	52	54
	F-61	1192 LEES MEADOW CT	1	B	Residence	66	48	51
	F-62	1191 LEES MEADOW CT	1	B	Residence	66	50	53
	F-63	1193 LEES MEADOW CT	1	B	Residence	66	52	54
	F-64	1195 LEES MEADOW CT	1	B	Residence	66	54	56
	F-65	1195 LEES MEADOW CT	1	B	Residence	66	55	57
	F-66	1225 COLVIN MEADOWS LN	1	B	Residence	66	55	58
	F-67	1227 COLVIN MEADOWS LN	1	B	Residence	66	55	57
	F-68	1227 COLVIN MEADOWS LN	1	B	Residence	66	54	56
	F-69	1230 Colvin Meadows Ln	1	B	Residence	66	54	57
	F-70	1222 COLVIN MEADOWS LN	1	B	Residence	66	70	70
	F-71	1224 COLVIN MEADOWS LN	1	B	Residence	66	68	70
	F-72	1226 COLVIN MEADOWS LN	1	B	Residence	66	66	68
	F-73	1228 COLVIN MEADOWS LN	1	B	Residence	66	61	64
	F-74	10124 LEESBURG PIKE	1	B	Residence	66	71	74
	F-75	10101 Colvin Run Rd	1	B	Residence	66	60	64
	F-76	10108 COLVIN RUN RD	1	B	Residence	66	57	56
	F-77	10104 COLVIN RUN RD	1	B	Residence	66	58	55
	F-78	10100 COLVIN RUN RD	1	B	Residence	66	56	55
	F-79	1172 ROBINDALE DR	1	B	Residence	66	53	56
	F-80	10030 COLVIN RUN RD	1	B	Residence	66	53	53
	F-81	10026 COLVIN RUN RD	1	B	Residence	66	52	52
	F-82	10020 COLVIN RUN RD	1	B	Residence	66	54	56
	F-83	10017 COLVIN RUN RD	1	B	Residence	66	66	67
	F-84	10017 COLVIN RUN RD	1	C	Historic Site	66	66	65
	F-85	10014 COLVIN RUN RD	1	B	Residence	66	59	59
	F-86	10018 COLVIN RUN RD	1	B	Residence	66	60	62
	F-87	10024 COLVIN RUN RD	1	B	Residence	66	57	59
	F-88	10010 COLVIN RUN RD	1	B	Residence	66	64	65

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
	F-89	9912 HESSICK CT	1	B	Residence	66	63	65
	F-90	9910 HESSICK CT	1	B	Residence	66	59	61
	F-91	9908 HESSICK CT	1	B	Residence	66	56	58
	F-92	9906 HESSICK CT	1	B	Residence	66	53	56
	F-93	9907 HESSICK CT	1	B	Residence	66	55	58
	F-94	1200 STONE FALLS WAY	1	B	Residence	66	62	65
	F-95	9911 HESSICK CT	1	B	Residence	66	67	69
	F-96	1204 STONE FALLS WAY	1	B	Residence	66	66	68
	F-97	1205 STONE FALLS WAY	1	B	Residence	66	57	60
	F-98	1208 STONE FALLS WAY	1	B	Residence	66	66	67
	F-99	1104 MILL FIELD CT	1	B	Residence	66	61	63
	F-100	9713 LOCUST HILL DR	1	B	Residence	66	68	69
	F-101	9715 LOCUST HILL DR	1	B	Residence	66	65	67
	F-102	9719 LOCUST HILL DR	1	B	Residence	66	63	65
	F-103	9721 LOCUST HILL DR	1	B	Residence	66	61	63
	F-104	9720 LOCUST HILL DR	1	B	Residence	66	54	56
	F-105	9718 LOCUST HILL DR	1	B	Residence	66	54	56
	F-106	9714 LOCUST HILL DR	1	B	Residence	66	59	61
	F-107	9710 LOCUST HILL DR	1	B	Residence	66	60	62
	F-108	9716 LOCUST HILL DR	1	B	Residence	66	43	45
	F-109	9708 LOCUST HILL DR	1	B	Residence	66	58	60
	F-110	9706 LOCUST HILL DR	1	B	Residence	66	54	56
	F-111	9704 LOCUST HILL DR	1	B	Residence	66	53	54
	F-112	9702 LOCUST HILL DR	1	B	Residence	66	52	53
	F-113	9700 LOCUST HILL DR	1	B	Residence	66	51	52
	F-114	9622 LOCUST HILL DR	1	B	Residence	66	50	51
	F-115	9620 LOCUST HILL DR	1	B	Residence	66	48	50
	F-116	9711 LOCUST HILL DR	1	B	Residence	66	71	72
	F-117	9709 LOCUST HILL DR	1	B	Residence	66	70	71
	F-118	9707 LOCUST HILL DR	1	B	Residence	66	61	61
	F-119	9705 LOCUST HILL DR	1	B	Residence	66	58	59
	F-120	9703 LOCUST HILL DR	1	B	Residence	66	55	55
	F-121	9621 LOCUST HILL DR	1	B	Residence	66	51	52
	F-122	9619 LOCUST HILL DR	1	B	Residence	66	50	52
	F-123	9629 LOCUST HILL DR	1	B	Residence	66	72	74
	F-124	9627 LOCUST HILL DR	1	B	Residence	66	71	73
	F-125	9720 LEESBURG PIKE	1	B	Residence	66	70	73
	F-126	9625 LOCUST HILL DR	1	B	Residence	66	59	60
	F-127	9623 LOCUST HILL DR	1	B	Residence	66	54	56
	F-128	9617 LOCUST HILL DR	1	B	Residence	66	51	53
	F-129	9615 LOCUST HILL DR	1	B	Residence	66	53	54
	F-130	9613 LOCUST HILL DR	1	B	Residence	66	54	55
	F-131	9611 LOCUST HILL DR	1	B	Residence	66	55	56
	F-132	9609 LOCUST HILL DR	1	B	Residence	66	65	65
	F-133	9607 LOCUST HILL DR	1	B	Residence	66	65	65
	F-134	9605 LOCUST HILL DR	1	B	Residence	66	56	56
	F-135	1202 SAUGUS CT	1	B	Residence	66	57	58
	F-136	1204 SAUGUS CT	1	B	Residence	66	60	61
	F-137	1206 SAUGUS CT	1	B	Residence	66	57	58
	F-138	1207 SAUGUS CT	1	B	Residence	66	56	57
	F-139	1205 SAUGUS CT	1	B	Residence	66	56	57
	F-140	9700 LEESBURG PIKE	1	B	Residence	66	65	66
	F-141	1203 SAUGUS CT	1	B	Residence	66	52	54
	F-142	1201 SAUGUS CT	1	B	Residence	66	53	55
	F-143	9602 LOCUST HILL DR	1	B	Residence	66	52	53
	F-144	9612 LOCUST HILL DR	1	B	Residence	66	51	54
	F-145	9614 Locust Hill Dr	1	B	Residence	66	50	52
	F-146	9616 Locust Hill Dr	1	B	Residence	66	49	51
	F-147	9541 LOCUST HILL DR	1	B	Residence	66	51	53
	F-148	9539 LOCUST HILL DR	1	B	Residence	66	52	55
	F-149	9537 LOCUST HILL DR	1	B	Residence	66	54	56
	F-150	9531 LOCUST HILL DR	1	B	Residence	66	52	55
	F-151	9529 LOCUST HILL DR	1	B	Residence	66	55	59
	F-152	9527 LOCUST HILL DR	1	B	Residence	66	54	58
	F-153	9525 LOCUST HILL DR	1	B	Residence	66	51	54
	F-154	9523 LOCUST HILL DR	1	B	Residence	66	51	56

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
	F-155	9515 LOCUST HILL DR	1	B	Residence	66	50	54
	F-156	9513 LOCUST HILL DR	1	B	Residence	66	50	53
	F-157	9511 LOCUST HILL DR	1	B	Residence	66	49	53
	F-158	9509 LOCUST HILL DR	1	B	Residence	66	51	55
	F-159	9505 LOCUST HILL DR	1	B	Residence	66	49	52
	F-160	9503 LOCUST HILL DR	1	B	Residence	66	49	52
	F-161	9501 LOCUST HILL DR	1	B	Residence	66	48	51
	F-162	1212 TROTting HORSE LN	1	B	Residence	66	50	53
	F-163	1214 TROTting HORSE LN	1	B	Residence	66	52	55
	F-164	1216 TROTting HORSE LN	1	B	Residence	66	53	57
	G-01	10691 WATER FALLS LN	1	B	Residence	66	58	62
	G-02	10693 WATER FALLS LN	1	B	Residence	66	60	64
	G-03	10694 WATER FALLS LN	1	B	Residence	66	61	65
	G-04	10692 WATER FALLS LN	1	B	Residence	66	61	65
	G-05	10690 WATER FALLS LN	1	B	Residence	66	56	60
	G-06	10688 WATER FALLS LN	1	B	Residence	66	51	56
	G-07	10686 WATER FALLS LN	1	B	Residence	66	49	53
	G-08	10684 WATER FALLS LN	1	B	Residence	66	48	51
	G-09	10682 WATER FALLS LN	1	B	Residence	66	47	51
	G-10	10680 WATER FALLS LN	1	B	Residence	66	45	48
	G-11	10681 WATER FALLS LN	1	B	Residence	66	46	49
	G-12	10683 WATER FALLS LN	1	B	Residence	66	47	49
	G-13	10685 WATER FALLS LN	1	B	Residence	66	48	51
	G-14	10687 WATER FALLS LN	1	B	Residence	66	49	52
	G-15	10689 WATER FALLS LN	1	B	Residence	66	49	51
	G-16	1264 DUNN MEADOW CT	1	B	Residence	66	50	53
	G-17	1262 DUNN MEADOW CT	1	B	Residence	66	50	53
	G-18	1260 DUNN MEADOW CT	1	B	Residence	66	51	54
	G-19	1258 DUNN MEADOW CT	1	B	Residence	66	54	56
	G-20	1256 DUNN MEADOW CT	1	B	Residence	66	57	60
	G-21	1254 DUNN MEADOW CT	1	B	Residence	66	58	60
	G-22	1251 DUNN MEADOW CT	1	B	Residence	66	66	68
	G-23	1253 DUNN MEADOW CT	1	B	Residence	66	65	68
	G-24	1253 DUNN MEADOW CT	1	B	Residence	66	68	72
	G-25	1255 DUNN MEADOW CT	1	B	Residence	66	71	73
	G-26	10523 DUNN MEADOW RD	1	B	Residence	66	56	58
	G-27	10519 DUNN MEADOW RD	1	B	Residence	66	56	59
	G-28	1252 COBBLE POND WAY	1	B	Residence	66	54	57
	G-29	1254 COBBLE POND WAY	1	B	Residence	66	52	55
	G-30	1256 COBBLE POND WAY	1	B	Residence	66	50	52
	G-31	1257 COBBLE POND WAY	1	B	Residence	66	49	51
	G-32	1255 COBBLE POND WAY	1	B	Residence	66	50	53
	G-33	1253 Cobble Pond Way	1	B	Residence	66	52	54
	G-34	10515 DUNN MEADOW RD	1	B	Residence	66	57	58
	G-35	10513 DUNN MEADOW RD	1	B	Residence	66	59	60
	G-36	10524 DUNN MEADOW RD	1	B	Residence	66	60	63
	G-37	10522 DUNN MEADOW RD	1	B	Residence	66	68	70
	G-38	10520 DUNN MEADOW RD	1	B	Residence	66	66	68
	G-39	10518 DUNN MEADOW RD	1	B	Residence	66	66	68
	G-40	10516 DUNN MEADOW RD	1	B	Residence	66	67	69
	G-41	10514 DUNN MEADOW RD	1	B	Residence	66	67	69
	G-42	10512 DUNN MEADOW RD	1	B	Residence	66	65	65
	G-43	10508 DUNN MEADOW RD	1	B	Residence	66	65	66
	G-44	10506 DUNN MEADOW RD	1	B	Residence	66	64	65
	G-45	10500 DUNN MEADOW RD	1	B	Residence	66	66	66
	G-46	10498 DUNN MEADOW RD	1	B	Residence	66	67	69
	G-47	10496 DUNN MEADOW RD	1	B	Residence	66	62	65
	G-48	10410 DUNN MEADOW RD	1	B	Residence	66	60	63
	G-49	10408 DUNN MEADOW RD	1	B	Residence	66	59	65
	G-50	10406 DUNN MEADOW RD	1	B	Residence	66	66	69
	G-51	10404 DUNN MEADOW RD	1	B	Residence	66	71	73
	G-52	10402 DUNN MEADOW RD	1	B	Residence	66	71	73
	G-53	10400 DUNN MEADOW RD	1	B	Residence	66	69	71
	G-54	10509 DUNN MEADOW RD	1	B	Residence	66	57	58
	G-55	10507 DUNN MEADOW RD	1	B	Residence	66	57	59
	G-56	10501 DUNN MEADOW RD	1	B	Residence	66	57	58

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
CNE G	G-57	10503 DUNN MEADOW RD	1	B	Residence	66	51	53
	G-58	10505 DUNN MEADOW RD	1	B	Residence	66	50	52
	G-59	10497 DUNN MEADOW RD	1	B	Residence	66	57	59
	G-60	1290 NEWKIRK CT	1	B	Residence	66	51	53
	G-61	1291 NEWKIRK CT	1	B	Residence	66	47	50
	G-62	10411 DUNN MEADOW RD	1	B	Residence	66	52	55
	G-63	10409 DUNN MEADOW RD	1	B	Residence	66	56	59
	G-64	10405 DUNN MEADOW RD	1	B	Residence	66	56	59
	G-65	10403 DUNN MEADOW RD	1	B	Residence	66	58	60
	G-66	10401 DUNN MEADOW RD	1	B	Residence	66	56	60
	G-67	1212 DELTA GLEN CT	1	B	Residence	66	52	56
	G-68	1214 DELTA GLEN CT	1	B	Residence	66	50	53
	G-69	1216 DELTA GLEN CT	1	B	Residence	66	48	51
	G-70	1218 DELTA GLEN CT	1	B	Residence	66	46	49
	G-71	1220 DELTA GLEN CT	1	B	Residence	66	45	48
	G-72	1217 DELTA GLEN CT	1	B	Residence	66	46	48
	G-73	1215 DELTA GLEN CT	1	B	Residence	66	46	48
	G-74	1213 DELTA GLEN CT	1	B	Residence	66	50	53
	G-75	1211 DELTA GLEN CT	1	B	Residence	66	55	59
	G-76	1203 DELTA GLEN CT	1	B	Residence	66	65	68
	G-77	1201 DELTA GLEN CT	1	B	Residence	66	70	72
	G-78	10334 DUNN MEADOW RD	1	B	Residence	66	63	66
	G-79	10331 DUNN MEADOW RD	1	B	Residence	66	53	56
	G-80	10329 DUNN MEADOW RD	1	B	Residence	66	50	52
	G-81	10327 DUNN MEADOW RD	1	B	Residence	66	48	50
	G-82	10317 DUNN MEADOW RD	1	B	Residence	66	42	45
	G-83	10332 DUNN MEADOW RD	1	B	Residence	66	62	65
	G-84	10330 DUNN MEADOW RD	1	B	Residence	66	56	61
	G-85	10328 DUNN MEADOW RD	1	B	Residence	66	54	58
	G-86	10326 DUNN MEADOW RD	1	B	Residence	66	51	55
	G-87	10324 DUNN MEADOW RD	1	B	Residence	66	51	55
	G-88	10318 DUNN MEADOW RD	1	B	Residence	66	46	49
	G-89	10320 DUNN MEADOW RD	1	B	Residence	66	46	48
	G-90	10322 DUNN MEADOW RD	1	B	Residence	66	47	50
	G-91	10237 LEESBURG PIKE	1	D	Church	51	61 (36)	66 (41)
	G-92	10237 LEESBURG PIKE	1	C	Picnic Area	66	61	65
	G-93	10231 LEESBURG PIKE	1	B	Residence	66	57	61
	G-94	10249 LEESBURG PIKE	1	B	Residence	66	66	68
	G-95	10247 LEESBURG PIKE	1	B	Residence	66	65	67
	G-96	10245 LEESBURG PIKE	1	B	Residence	66	64	67
	G-97	10219 LEESBURG PIKE	1	B	Residence	66	61	63
	G-98	10214 CHESTNUT OAK CT	1	B	Residence	66	61	64
	G-99	10202 CHESTNUT OAK CT	1	B	Residence	66	58	60
	G-100	1296 COLVIN FOREST DR	1	B	Residence	66	58	61
	G-101	1298 COLVIN FOREST DR	1	B	Residence	66	58	59
	G-102	10200 CHESTNUT OAK CT	1	B	Residence	66	56	59
	G-103	1301 COLVIN FOREST DR	1	B	Residence	66	54	57
	G-104	1293 COLVIN FOREST DR	1	B	Residence	66	69	70
	G-105	1295 COLVIN FOREST DR	1	B	Residence	66	67	70
	G-106	1297 COLVIN FOREST DR	1	B	Residence	66	56	59
	G-107	10112 MILL WHEEL LN	1	B	Residence	66	54	56
	G-108	10110 MILL WHEEL LN	1	B	Residence	66	55	57
	G-109	10106 MILL WHEEL LN	1	B	Residence	66	57	60
	G-110	10100 MILL WHEEL LN	1	B	Residence	66	56	61
	G-111	10115 MILL WHEEL LN	1	B	Residence	66	52	55
	G-112	10111 MILL WHEEL LN	1	B	Residence	66	51	53
	G-113	10109 MILL WHEEL LN	1	B	Residence	66	51	54
	G-114	10107 MILL WHEEL LN	1	B	Residence	66	53	55
	G-115	10105 MILL WHEEL LN	1	B	Residence	66	47	52
	G-116	10103 MILL WHEEL LN	1	B	Residence	66	55	59
	G-117	10101 MILL WHEEL LN	1	B	Residence	66	52	56
	G-118	10019 SCENIC VIEW TER	1	B	Residence	66	55	59
	G-119	10017 SCENIC VIEW TER	1	B	Residence	66	56	60
	G-120	10015 SCENIC VIEW TER	1	B	Residence	66	57	61
	G-121	10013 SCENIC VIEW TER	1	B	Residence	66	56	60
	G-122	10011 SCENIC VIEW TER	1	B	Residence	66	56	60

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
	G-123	10009 SCENIC VIEW TER	1	B	Residence	66	54	58
	G-124	10007 SCENIC VIEW TER	1	B	Residence	66	54	57
	G-125	10005 SCENIC VIEW TER	1	B	Residence	66	55	59
	G-126	10003 SCENIC VIEW TER	1	B	Residence	66	58	62
	G-127	1220 CARPERS FARM WAY	1	B	Residence	66	61	65
	G-128	1222 CARPERS FARM WAY	1	B	Residence	66	58	62
	G-129	1224 CARPERS FARM WAY	1	B	Residence	66	56	60
	G-130	1226 CARPERS FARM WAY	1	B	Residence	66	55	58
	G-131	1228 CARPERS FARM WAY	1	B	Residence	66	54	59
	G-132	10012 CARPERS FARM CT	1	B	Residence	66	57	59
	G-133	10010 CARPERS FARM CT	1	B	Residence	66	55	58
	G-134	10008 CARPERS FARM CT	1	B	Residence	66	55	58
	G-135	10004 CARPERS FARM CT	1	B	Residence	66	54	57
	G-136	1229 CARPERS FARM WAY	1	B	Residence	66	56	60
	G-137	1227 CARPERS FARM WAY	1	B	Residence	66	58	62
	G-138	1225 CARPERS FARM WAY	1	B	Residence	66	59	63
	G-139	1223 CARPERS FARM WAY	1	B	Residence	66	59	63
	G-140	1221 CARPERS FARM WAY	1	B	Residence	66	61	65
	G-141	1219 CARPERS FARM WAY	1	B	Residence	66	58	63
	G-142	1217 CARPERS FARM WAY	1	B	Residence	66	56	61
	G-143	1284 SERENITY WOODS LN	1	B	Residence	66	59	63
	G-144	1280 SERENITY WOODS LN	1	B	Residence	66	70	73
	G-145	9801 LEESBURG PIKE	1	B	Residence	66	70	73
	G-146	1283 SERENITY WOODS LN	1	B	Residence	66	52	56
	G-147	1294 THOMPSON RUN CT	1	B	Residence	66	49	52
	G-148	1292 THOMPSON RUN CT	1	B	Residence	66	48	50
	G-149	1290 THOMPSON RUN CT	1	B	Residence	66	44	47
	G-150	9731 MIDDLETON RIDGE RD	1	B	Residence	66	51	55
	G-151	9733 MIDDLETON RIDGE RD	1	B	Residence	66	53	57
	G-152	9735 MIDDLETON RIDGE RD	1	B	Residence	66	60	62
	G-153	9737 MIDDLETON RIDGE RD	1	B	Residence	66	72	73
	G-154	9739 MIDDLETON RIDGE RD	1	B	Residence	66	71	72
	G-155	9740 MIDDLETON RIDGE RD	1	B	Residence	66	71	73
	G-156	9736 MIDDLETON RIDGE RD	1	B	Residence	66	70	72
	G-157	9734 MIDDLETON RIDGE RD	1	B	Residence	66	67	70
	G-158	9732 MIDDLETON RIDGE RD	1	B	Residence	66	56	59
	G-159	9730 MIDDLETON RIDGE RD	1	B	Residence	66	48	52
	G-160	9728 MIDDLETON RIDGE RD	1	B	Residence	66	45	48
	G-161	9719 LEESBURG PIKE	1	B	Residence	66	71	74
	G-162	9724 MIDDLETON RIDGE RD	1	B	Residence	66	46	49
	G-163	1294 MIDDLETON CT	1	B	Residence	66	42	45
	G-164	1292 MIDDLETON CT	1	B	Residence	66	48	50
	G-165	1288 MIDDLETON CT	1	B	Residence	66	49	52
	G-166	1286 MIDDLETON CT	1	B	Residence	66	48	50
	G-167	9723 LEESBURG PIKE	1	B	Residence	66	47	52
	G-168	1280 MIDDLETON CT	1	B	Residence	66	63	68
	G-169	1281 MIDDLETON CT	1	B	Residence	66	66	71
	G-170	1283 MIDDLETON CT	1	B	Residence	66	68	71
	G-171	1285 MIDDLETON CT	1	B	Residence	66	67	70
	G-172	1287 MIDDLETON CT	1	B	Residence	66	55	58
	G-173	1289 MIDDLETON CT	1	B	Residence	66	52	55
	G-174	1291 MIDDLETON CT	1	B	Residence	66	50	52
	G-175	1293 MIDDLETON CT	1	B	Residence	66	46	49
	G-176	9716 MIDDLETON RIDGE RD	1	B	Residence	66	45	49
	G-177	9714 MIDDLETON RIDGE RD	1	B	Residence	66	46	48
	G-178	9712 MIDDLETON RIDGE RD	1	B	Residence	66	46	49
	G-179	9710 MIDDLETON RIDGE RD	1	B	Residence	66	49	52
	G-180	9706 MIDDLETON RIDGE RD	1	B	Residence	66	52	56
	G-181	1298 DIFFICULT RUN CT	1	B	Residence	66	58	61
	G-182	1294 DIFFICULT RUN CT	1	B	Residence	66	60	63
	G-183	1290 DIFFICULT RUN CT	1	B	Residence	66	54	57
	G-184	1288 DIFFICULT RUN CT	1	B	Residence	66	59	62
	G-185	1291 DIFFICULT RUN CT	1	B	Residence	66	71	74
	G-186	1293 DIFFICULT RUN CT	1	B	Residence	66	71	74
	G-187	1295 DIFFICULT RUN CT	1	B	Residence	66	72	74
	G-188	1297 DIFFICULT RUN CT	1	B	Residence	66	72	74

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
G	G-189	1299 DIFFICULT RUN CT	1	B	Residence	66	72	74
	G-190	9713 MIDDLETON RIDGE RD	1	B	Residence	66	44	48
	G-191	9711 MIDDLETON RIDGE RD	1	B	Residence	66	45	48
	G-192	9709 MIDDLETON RIDGE RD	1	B	Residence	66	48	50
	G-193	9707 MIDDLETON RIDGE RD	1	B	Residence	66	51	54
	G-194	9705 MIDDLETON RIDGE RD	1	B	Residence	66	54	57
	G-195	1290 TWEED CT	1	B	Residence	66	59	62
	G-196	1294 TWEED CT	1	B	Residence	66	58	61
	G-197	1296 TWEED CT	1	B	Residence	66	56	60
	G-198	1297 TWEED CT	1	B	Residence	66	59	63
	G-199	1295 TWEED CT	1	B	Residence	66	66	69
	G-200	1293 TWEED CT	1	B	Residence	66	70	72
	G-201	1291 TWEED CT	1	B	Residence	66	70	73
	G-202	9601 LEESBURG PIKE	1	B	Residence	66	69	72
	G-203	9525 LEESBURG PIKE	1	C	Playground	66	65	69
	G-204	9525 LEESBURG PIKE	1	D	Preschool	51	57 (32)	61 (36)
	G-205	1318 BEULAH RD	1	B	Residence	66	52	56
	G-206	1314 BEULAH RD	1	B	Residence	66	57	62
	G-207	1310 BEULAH RD	1	B	Residence	66	63	68
	G-208	1300 BEULAH RD	1	D	Medical Center	51	71 (46)	74 (49)
H	H-01	9522 LEESBURG PIKE	1	B	Residence	66	71	75
	H-02	9407 FAIRPINE LN	1	B	Residence	66	67	74
	H-03	9405 FAIRPINE LN	1	B	Residence	66	64	68
	H-04	9409 FAIRPINE LN	1	B	Residence	66	51	53
	H-05	9403 FAIRPINE LN	1	B	Residence	66	55	56
	H-06	9401 FAIRPINE LN	1	B	Residence	66	61	62
	H-07	9400 FAIRPINE LN	1	B	Residence	66	55	57
	H-08	9402 FAIRPINE LN	1	B	Residence	66	53	55
	H-09	9404 FAIRPINE LN	1	B	Residence	66	53	56
	H-10	9406 FAIRPINE LN	1	B	Residence	66	53	56
	H-11	9410 FAIRPINE LN	1	B	Residence	66	56	59
	H-12	9410 FAIRPINE LN	1	B	Residence	66	54	58
	H-13	1217 TROTting HORSE LN	1	B	Residence	66	53	55
	H-14	1215 TROTting HORSE LN	1	B	Residence	66	51	54
	H-15	1213 TROTting HORSE LN	1	B	Residence	66	51	55
	H-16	9397 FARMINGDALE CT	1	B	Residence	66	64	64
	H-17	9395 FARMINGDALE CT	1	B	Residence	66	72	74
	H-18	9393 Farmingdale Ct	1	B	Residence	66	72	73
	H-19	9390 FARMINGDALE CT	1	B	Residence	66	67	67
	H-20	9392 FARMINGDALE CT	1	B	Residence	66	60	60
	H-21	9394 FARMINGDALE CT	1	B	Residence	66	58	59
	H-22	9396 FARMINGDALE CT	1	B	Residence	66	53	55
	H-23	9428 VERNON DR	1	B	Residence	66	54	56
	H-24	9390 WOLF TRAP CREEK CT	1	B	Residence	66	55	56
	H-25	9392 WOLF TRAP CREEK CT	1	B	Residence	66	60	61
	H-26	9394 WOLF TRAP CREEK CT	1	B	Residence	66	62	62
	H-27	9395 WOLF TRAP CREEK CT	1	B	Residence	66	70	71
	H-28	9393 WOLF TRAP CREEK CT	1	B	Residence	66	63	63
	H-29	9424 VERNON DR	1	B	Residence	66	58	60
	H-30	9422 VERNON DR	1	B	Residence	66	59	61
	H-31	9420 VERNON DR	1	B	Residence	66	59	61
	H-32	9412 LEESBURG PIKE	1	B	Residence	66	73	75
	H-33	9418 VERNON DR	1	B	Residence	66	67	70
	H-34	9416 VERNON DR	1	B	Residence	66	67	70
	H-35	9400 LEESBURG PIKE	1	B	Residence	66	72	74
	H-36	1306 LYONS ST	1	B	Residence	66	73	74
	H-37	9400 VERNON DR	1	B	Residence	66	58	60
	H-38	9406 VERNON DR	1	B	Residence	66	58	60
	H-39	9414 VERNON DR	1	B	Residence	66	58	60
	H-40	9425 VERNON DR	1	B	Residence	66	54	56
	H-41	9423 VERNON DR	1	B	Residence	66	53	55
	H-42	9421 VERNON DR	1	B	Residence	66	52	54
	H-43	9415 VERNON DR	1	B	Residence	66	52	54
	H-44	9407 VERNON DR	1	B	Residence	66	52	54
	H-45	1272 LYONS ST	1	B	Residence	66	53	54
	H-46	1266 LYONS ST	1	B	Residence	66	50	51

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
	H-47	1266 KENMORE DR	1	B	Residence	66	50	51
	H-48	1273 LYONS ST	1	B	Residence	66	54	55
	H-49	1272 KENMORE DR	1	B	Residence	66	56	58
	H-50	1266 KENMORE DR	1	B	Residence	66	52	54
	H-51	1260 KENMORE DR	1	B	Residence	66	47	48
	H-52	1261 KENMORE DR	1	B	Residence	66	49	51
	H-53	1267 KENMORE DR	1	B	Residence	66	54	56
	H-54	9240 VERNON DR	1	B	Residence	66	56	58
	H-55	9226 VERNON DR	1	B	Residence	66	53	55
	H-56	9222 VERNON DR	1	B	Residence	66	54	56
	H-57	9218 VERNON DR	1	B	Residence	66	57	59
	H-58	1290 TOWLSTON RD	1	B	Residence	66	59	62
	H-59	1292 TOWLSTON RD	1	B	Residence	66	51	53
	H-60	9200 VERNON DR	1	B	Residence	66	53	55
	H-61	9320 LEESBURG PIKE	1	B	Residence	66	62	65
	H-62	9320 LEESBURG PIKE	1	B	Residence	66	72	73
	H-63	9312 LEESBURG PIKE	1	B	Residence	66	72	72
	H-64	9304 LEESBURG PIKE	1	B	Residence	66	71	72
	H-65	9247 VERNON DR	1	B	Residence	66	59	59
	H-66	9243 VERNON DR	1	B	Residence	66	61	62
	H-67	9239 VERNON DR	1	B	Residence	66	61	63
	H-68	9227 VERNON DR	1	B	Residence	66	59	61
	H-69	9225 VERNON DR	1	B	Residence	66	63	65
	H-70	9219 VERNON DR	1	B	Residence	66	58	61
	H-71	9217 VERNON DR	1	B	Residence	66	58	62
	H-72	9215 VERNON DR	1	B	Residence	66	58	62
	H-73	1296 TOWLSTON RD	1	C	Playground	66	64	68
	H-74	9201 Vernon Dr	1	C	Playground	66	73	76
	H-75	9201 VERNON DR	1	C	Playground	66	63	67
	H-76	9201 Vernon Dr	1	C	Playground	66	73	76
	H-77	9201 Vernon Dr	1	C	Playground	66	72	77
	H-78	9201 VERNON DR	1	C	Playground	66	61	65
	H-79	9201 VERNON DR	1	D	School	51	59 (34)	63 (38)
	I-01	1315 BEULAH RD	1	C	Picnic Area	66	50	53
	I-02	9439 LEESBURG PIKE	1	B	Residence	66	61	64
	I-03	9439 LEESBURG PIKE	1	E	Nursery	71	68	70
	I-04	9472 DERAMUS FARM CT	1	B	Residence	66	51	53
	I-05	9470 DERAMUS FARM CT	1	B	Residence	66	52	54
	I-06	9468 DERAMUS FARM CT	1	B	Residence	66	53	55
	I-07	9466 DERAMUS FARM CT	1	B	Residence	66	55	57
	I-08	9464 DERAMUS FARM CT	1	B	Residence	66	56	58
	I-09	9462 DERAMUS FARM CT	1	B	Residence	66	68	70
	I-10	9460 DERAMUS FARM CT	1	B	Residence	66	62	64
	I-11	9458 DERAMUS FARM CT	1	B	Residence	66	66	69
	I-12	9454 DERAMUS FARM CT	1	B	Residence	66	68	71
	I-13	9452 DERAMUS FARM CT	1	B	Residence	66	71	74
	I-14	9450 DERAMUS FARM CT	1	B	Residence	66	69	69
	I-15	9451 DERAMUS FARM CT	1	B	Residence	66	62	64
	I-16	9455 DERAMUS FARM CT	1	B	Residence	66	52	55
	I-17	9457 DERAMUS FARM CT	1	B	Residence	66	50	53
	I-18	9453 DERAMUS FARM CT	1	B	Residence	66	57	60
	I-19	9459 DERAMUS FARM CT	1	B	Residence	66	57	60
	I-20	9461 DERAMUS FARM CT	1	B	Residence	66	55	59
	I-21	9463 DERAMUS FARM CT	1	B	Residence	66	54	56
	I-22	9465 DERAMUS FARM CT	1	B	Residence	66	52	55
	I-23	9416 ATWOOD RD	1	B	Residence	66	52	55
	I-24	9413 ATWOOD RD	1	B	Residence	66	48	51
	I-25	9411 ATWOOD RD	1	B	Residence	66	50	53
	I-26	9375 ROBNEI PL	1	B	Residence	66	54	58
	I-27	9373 ROBNEI PL	1	B	Residence	66	53	57
	I-28	9371 ROBNEI PL	1	B	Residence	66	49	52
	I-29	9369 ROBNEI PL	1	B	Residence	66	52	55
	I-30	9367 ROBNEI PL	1	B	Residence	66	52	55
	I-31	9365 Robnel Pl	1	B	Residence	66	47	50
	I-32	9363 ROBNEI PL	1	B	Residence	66	50	52
	I-33	9361 ROBNEI PL	1	B	Residence	66	48	51

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
CNE I	I-34	9359 ROBANEL PL	1	B	Residence	66	47	50
	I-35	9357 ROBANEL PL	1	B	Residence	66	46	49
	I-36	9355 ROBANEL PL	1	B	Residence	66	47	50
	I-37	9353 ROBANEL PL	1	B	Residence	66	48	51
	I-38	9351 ROBANEL PL	1	B	Residence	66	49	52
	I-39	1342 STOKLEY WAY	1	B	Residence	66	46	49
	I-40	1340 STOKLEY WAY	1	B	Residence	66	50	53
	I-41	9374 ROBANEL PL	1	B	Residence	66	53	57
	I-42	9370 ROBANEL PL	1	B	Residence	66	50	54
	I-43	9368 ROBANEL PL	1	B	Residence	66	52	54
	I-44	9366 ROBANEL PL	1	B	Residence	66	50	53
	I-45	9364 ROBANEL PL	1	B	Residence	66	53	55
	I-46	9352 ROBANEL PL	1	B	Residence	66	50	53
	I-47	9350 ROBANEL PL	1	B	Residence	66	50	53
	I-48	1338 STOKLEY WAY	1	B	Residence	66	49	51
	I-49	1336 STOKLEY WAY	1	B	Residence	66	52	54
	I-50	1334 STOKLEY WAY	1	B	Residence	66	56	60
	I-51	9353 MILDRED CT	1	B	Residence	66	57	60
	I-52	9355 MILDRED CT	1	B	Residence	66	57	61
	I-53	9357 MILDRED CT	1	B	Residence	66	55	59
	I-54	9359 MILDRED CT	1	B	Residence	66	52	56
	I-55	9360 MILDRED CT	1	B	Residence	66	70	73
	I-56	9358 MILDRED CT	1	B	Residence	66	70	74
	I-57	9356 MILDRED CT	1	B	Residence	66	66	69
	I-58	9352 MILDRED CT	1	B	Residence	66	70	73
	I-59	9350 Mildred Ct	1	B	Residence	66	67	70
	I-60	1331 STOKLEY WAY	1	B	Residence	66	64	67
	I-61	1333 STOKLEY WAY	1	B	Residence	66	57	60
	I-62	1335 STOKLEY WAY	1	B	Residence	66	54	57
	I-63	1337 STOKLEY WAY	1	B	Residence	66	52	55
	I-64	1339 STOKLEY WAY	1	B	Residence	66	52	54
	I-65	9320 ROBANEL PL	1	B	Residence	66	52	55
	I-66	1336 VANETTA LN	1	B	Residence	66	54	57
	I-67	1334 VANETTA LN	1	B	Residence	66	55	58
	I-68	1332 VANETTA LN	1	B	Residence	66	57	61
	I-69	1330 VANETTA LN	1	B	Residence	66	63	67
	I-70	1331 VANETTA LN	1	B	Residence	66	64	68
	I-71	1333 VANETTA LN	1	B	Residence	66	59	62
	I-72	1335 VANETTA LN	1	B	Residence	66	55	59
	I-73	1337 VANETTA LN	1	B	Residence	66	54	57
	I-74	9316 ROBANEL PL	1	B	Residence	66	53	56
	I-75	9314 ROBANEL PL	1	B	Residence	66	54	58
	I-76	9310 ROBANEL PL	1	B	Residence	66	55	58
	I-77	9306 ROBANEL PL	1	B	Residence	66	54	57
	I-78	9304 ROBANEL PL	1	B	Residence	66	56	59
	I-79	9300 ROBANEL PL	1	B	Residence	66	58	61
	I-80	9301 ROBANEL PL	1	B	Residence	66	57	60
	I-81	9303 ROBANEL PL	1	B	Residence	66	52	55
	I-82	9305 ROBANEL PL	1	B	Residence	66	53	56
I-83	9307 ROBANEL PL	1	B	Residence	66	53	56	
I-84	9309 ROBANEL PL	1	B	Residence	66	52	55	
I-85	9311 ROBANEL PL	1	B	Residence	66	52	54	
I-86	9313 ROBANEL PL	1	B	Residence	66	51	54	
I-87	9315 ROBANEL PL	1	B	Residence	66	51	54	
I-88	9317 ROBANEL PL	1	B	Residence	66	52	55	
I-89	9319 ROBANEL PL	1	B	Residence	66	52	56	
I-90	9321 ROBANEL PL	1	B	Residence	66	52	55	
I-91	9323 ROBANEL PL	1	B	Residence	66	51	55	
I-92	9318 KILBY GLEN DR	1	B	Residence	66	50	53	
I-93	9316 KILBY GLEN DR	1	B	Residence	66	49	52	
I-94	9314 KILBY GLEN DR	1	B	Residence	66	49	52	
I-95	9312 KILBY GLEN DR	1	B	Residence	66	49	52	
I-96	9310 KILBY GLEN DR	1	B	Residence	66	48	51	
I-97	9308 KILBY GLEN DR	1	B	Residence	66	48	51	
I-98	9306 KILBY GLEN DR	1	B	Residence	66	49	51	
I-99	9302 KILBY GLEN DR	1	B	Residence	66	50	53	

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
	I-100	9300 KILBY GLEN DR	1	B	Residence	66	50	53
	I-101	9298 KILBY GLEN DR	1	B	Residence	66	50	52
	I-102	9296 KILBY GLEN DR	1	B	Residence	66	50	52
	I-103	9297 KILBY GLEN DR	1	B	Residence	66	48	52
	I-104	9299 KILBY GLEN DR	1	B	Residence	66	48	51
	I-105	1324 TOWLSTON RD	1	B	Residence	66	44	49
	I-106	1322 TOWLSTON RD	1	B	Residence	66	47	51
	I-107	1320 TOWLSTON RD	1	B	Residence	66	48	52
	I-108	1318 TOWLSTON RD	1	B	Residence	66	47	50
	I-109	1314 TOWLSTON RD	1	B	Residence	66	52	55
	I-110	1316 TOWLSTON RD	1	B	Residence	66	50	53
	I-111	1316 TOWLSTON RD	1	B	Residence	66	54	57
I-112	1310 TOWLSTON RD	1	B	Residence	66	53	56	
CNE J	J-01	1301 TOWLSTON RD	1	B	Residence	66	69	70
	J-02	1303 TOWLSTON RD	1	B	Residence	66	68	67
	J-03	1305 TOWLSTON RD	1	B	Residence	66	58	59
	J-04	1308 TRAP RD	1	C	Cemetery	66	71	71
	J-05	1308 TRAP RD	1	C	Cemetery	66	73	73
	J-06	1308 TRAP RD	1	C	Cemetery	66	73	73
	J-07	1308 TRAP RD	1	C	Cemetery	66	67	68
	J-08	1308 TRAP RD	1	C	Cemetery	66	67	69
	J-09	1308 TRAP RD	1	C	Cemetery	66	67	68
	J-10	1308 TRAP RD	1	C	Cemetery	66	61	64
	J-11	1308 TRAP RD	1	C	Cemetery	66	63	65
	J-12	1308 TRAP RD	1	C	Cemetery	66	63	65
	J-13	1308 TRAP RD	1	C	Cemetery	66	64	66
	J-14	1308 TRAP RD	1	C	Cemetery	66	64	66
	J-15	1305 TOWLSTON RD	1	C	Cemetery	66	58	62
	J-16	1308 TRAP RD	1	C	Cemetery	66	60	62
	J-17	1308 TRAP RD	1	C	Cemetery	66	60	63
	J-18	1308 TRAP RD	1	C	Cemetery	66	60	62
	J-19	1308 TRAP RD	1	C	Cemetery	66	60	61
	J-20	1308 TRAP RD	1	C	Cemetery	66	57	59
	J-21	1308 TRAP RD	1	C	Cemetery	66	56	58
	J-22	1308 TRAP RD	1	C	Cemetery	66	56	58
	J-23	9201 LEESBURG PIKE	1	D	Church	51	70 (45)	72 (47)
	J-24	1319 TOWLSTON RD	1	B	Residence	66	53	59
	J-25	1321 TOWLSTON RD	1	B	Residence	66	49	53
	J-26	1323 SCHUMAN CT	1	B	Residence	66	48	51
	J-27	1322 SCHUMAN CT	1	B	Residence	66	48	53
	J-28	1320 SCHUMAN CT	1	B	Residence	66	49	54
	J-29	1316 TRAP RD	1	B	Residence	66	53	56
	J-30	9201 WINDSOR MEADOWS LN	1	B	Residence	66	55	57
	J-31	9203 WINDSOR MEADOWS LN	1	B	Residence	66	52	54
	J-32	9207 WINDSOR MEADOWS LN	1	B	Residence	66	51	53
	J-33	9207 WINDSOR MEADOWS LN	1	B	Residence	66	50	53
	J-34	9202 WINDSOR MEADOWS LN	1	B	Residence	66	51	53
	J-35	9200 WINDSOR MEADOWS LN	1	B	Residence	66	54	57
	K-01	1301 TRAP RD	1	B	Residence	66	68	70
	K-02	1301 TRAP RD	1	D	Church	51	60 (35)	61 (36)
	K-03	1301 TRAP RD	1	C	Playground	66	62	63
	K-04	9105 LEESBURG PIKE	1	B	Residence	66	67	68
	K-05	9101 LEESBURG PIKE	1	D	Church	51	60 (35)	64 (39)
	K-06	9118 LUCKY ESTATES DR	1	B	Residence	66	57	59
	K-07	9122 LUCKY ESTATES DR	1	B	Residence	66	53	55
	K-08	9126 Lucky Estates Dr	1	B	Residence	66	50	52
	K-09	9123 LUCKY ESTATES DR	1	B	Residence	66	45	48
	K-10	9119 LUCKY ESTATES DR	1	B	Residence	66	50	53
	K-11	9115 LUCKY ESTATES DR	1	B	Residence	66	57	60
	K-12	9109 LUCKY ESTATES DR	1	B	Residence	66	61	64
	K-13	9105 LUCKY ESTATES DR	1	B	Residence	66	59	62
	K-14	9101 LUCKY ESTATES DR	1	B	Residence	66	66	69
	K-15	9030 TIMBERWOLF CT	1	B	Residence	66	57	59
	K-16	9028 TIMBERWOLF CT	1	B	Residence	66	58	60
	K-17	9026 TIMBERWOLF CT	1	B	Residence	66	61	63
	K-18	9031 TIMBERWOLF CT	1	B	Residence	66	56	59

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
CNE K	K-19	9029 TIMBERWOLF CT	1	B	Residence	66	58	61
	K-20	1402 WOLFTRAP RUN RD	1	B	Residence	66	56	59
	K-21	1404 WOLFTRAP RUN RD	1	B	Residence	66	55	58
	K-22	1406 WOLFTRAP RUN RD	1	B	Residence	66	53	56
	K-23	9024 TRAILRIDGE CT	1	B	Residence	66	64	67
	K-24	9022 TRAILRIDGE CT	1	B	Residence	66	64	67
	K-25	9023 TRAILRIDGE CT	1	B	Residence	66	58	61
	K-26	9020 TRAILRIDGE CT	1	B	Residence	66	59	62
	K-27	9021 TRAILRIDGE CT	1	B	Residence	66	55	58
	K-28	1405 WOLFTRAP RUN RD	1	B	Residence	66	51	54
	K-29	1407 WOLFTRAP RUN RD	1	B	Residence	66	51	55
	K-30	1409 WOLFTRAP RUN RD	1	B	Residence	66	48	52
	K-31	9024 WEATHERWOOD CT	1	B	Residence	66	47	51
	K-32	1440 LAUREL HILL RD	1	B	Residence	66	52	56
	K-33	9021 WEATHERWOOD CT	1	B	Residence	66	50	54
	K-34	9023 WEATHERWOOD CT	1	B	Residence	66	47	49
	K-35	9025 WEATHERWOOD CT	1	B	Residence	66	46	48
	K-36	9011 LEESBURG PIKE	1	C	Playground	66	53	57
	K-37	9011 LEESBURG PIKE	1	D	School	51	60 (35)	69 (44)
K-38	8909 LEESBURG PIKE	1	D	Church	51	62 (37)	65(40)	
K-39	8909 LEESBURG PIKE	1	C	Playground	66	50	51	
CNE L	L-01	9120 LEESBURG PIKE	1	B	Residence	66	67	69
	L-02	9116 LEESBURG PIKE	1	B	Residence	66	63	65
	L-03	9112 LEESBURG PIKE	1	B	Residence	66	66	69
	L-04	9106 LEESBURG PIKE	1	B	Residence	66	63	66
	L-05	9100 LEESBURG PIKE	1	B	Residence	66	69	72
	L-06	1377 DREAMWEAVER CT	1	B	Residence	66	61	64
	L-07	1355 DREAMWEAVER CT	1	B	Residence	66	54	58
	L-08	1325 ROYAL ESTATES DR	1	B	Residence	66	55	58
	L-09	1327 ROYAL ESTATES DR	1	B	Residence	66	61	65
	L-10	8964 OLD TOLSON MILL RD	1	B	Residence	66	56	60
	L-11	9026 LEESBURG PIKE	1	B	Residence	66	69	71
	L-12	9022 LEESBURG PIKE	1	B	Residence	66	71	73
	L-13	8973 OLD TOLSON MILL RD	1	C	Playground	66	62	65
	L-14	8980 Brook Rd	1	C	Volleyball	66	57	61
	L-15	8980 BROOK RD	1	D	Church	51	61 (36)	63 (38)
	L-16	8970 BROOK RD	1	B	Residence	66	54	58
	L-17	8962 BROOK RD	1	B	Residence	66	53	57
	L-18	8954 BROOK RD	1	B	Residence	66	52	56
	L-19	8965 BROOK RD	1	B	Residence	66	50	53
	L-20	8916 GALLANT GREEN DR	1	B	Residence	66	51	54
	L-21	8977 BROOK RD	1	B	Residence	66	52	55
	L-22	8983 BROOK RD	1	B	Residence	66	57	60
	L-23	8991 BROOK RD	1	D	Church	51	62 (37)	62 (37)
	L-24	8991 BROOK RD	1	B	Residence	66	58	59
	L-25	8913 GALLANT GREEN DR	1	B	Residence	66	51	54
	L-26	8909 GALLANT GREEN DR	1	B	Residence	66	48	52
	L-27	8905 GALLANT GREEN DR	1	B	Residence	66	46	48
	L-28	8901 GALLANT GREEN DR	1	B	Residence	66	44	46
	L-29	1334 GUNNELL CT	1	B	Residence	66	43	44
	L-30	1336 GUNNELL CT	1	B	Residence	66	45	47
	L-31	1342 GUNNELL CT	1	B	Residence	66	47	49
	L-32	8815 GALLANT GREEN DR	1	B	Residence	66	41	43
	L-33	1335 GUNNELL CT	1	B	Residence	66	43	44
	L-34	1339 GUNNELL CT	1	B	Residence	66	43	45
	L-35	1343 GUNNELL CT	1	B	Residence	66	45	46
	L-36	8832 LEWINSVILLE RD	1	B	Residence	66	57	58
	L-37	8826 LEWINSVILLE RD	1	B	Residence	66	57	59
	L-38	8820 LEWINSVILLE RD	1	B	Residence	66	58	61
	L-39	8814 LEWINSVILLE RD	1	B	Residence	66	56	59
	L-40	1388 WOODSIDE DR	1	B	Residence	66	57	60
	L-41	1382 WOODSIDE DR	1	B	Residence	66	45	48
	L-42	1378 WOODSIDE DR	1	B	Residence	66	43	46
	L-43	1374 WOODSIDE DR	1	B	Residence	66	41	43
	L-44	8805 GALLANT GREEN DR	1	B	Residence	66	41	44
	L-45	8809 GALLANT GREEN DR	1	B	Residence	66	42	44

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
	L-46	1379 WOODSIDE DR	1	B	Residence	66	42	44
	L-47	1379 WOODSIDE DR	1	B	Residence	66	43	45
	L-48	1383 WOODSIDE DR	1	B	Residence	66	50	52
	L-49	1387 WOODSIDE DR	1	B	Residence	66	58	60
CNE M	M-01	8934 LEESBURG PIKE	1	B	Residence	66	61	Aquired
	M-02	8808 MIRADOR PL	1	B	Residence	66	57	60
	M-03	8806 MIRADOR PL	1	B	Residence	66	60	62
	M-04	8804 MIRADOR PL	1	B	Residence	66	58	61
	M-05	8802 MIRADOR PL	1	B	Residence	66	56	58
	M-06	1400 WOODHURST BLVD	1	B	Residence	66	53	55
	M-07	8800 MIRADOR PL	1	B	Residence	66	54	57
	M-08	8809 MIRADOR PL	1	B	Residence	66	60	65
	M-09	8807 MIRADOR PL	1	B	Residence	66	58	62
	M-10	8805 MIRADOR PL	1	B	Residence	66	59	62
	M-11	8803 MIRADOR PL	1	B	Residence	66	60	63
	M-12	8801 MIRADOR PL	1	B	Residence	66	62	64
	M-13	1406 WOODHURST BLVD	1	B	Residence	66	58	61
	M-14	1407 WOODHURST BLVD	1	B	Residence	66	57	60
	M-15	1405 WOODHURST BLVD	1	B	Residence	66	53	56
	M-16	1403 WOODHURST BLVD	1	B	Residence	66	51	54
	M-17	8805 PRESTWOULD PL	1	B	Residence	66	49	52
	M-18	8801 PRESTWOULD PL	1	B	Residence	66	48	51
	M-19	1401 WOODHURST BLVD	1	B	Residence	66	60	62
	M-20	8800 PRESTWOULD PL	1	B	Residence	66	58	61
	M-21	1408 WOODHURST BLVD	1	B	Residence	66	61	63
	M-22	1410 WOODHURST BLVD	1	B	Residence	66	59	61
	M-23	1412 WOODHURST BLVD	1	B	Residence	66	54	57
	M-24	1418 WOODHURST BLVD	1	B	Residence	66	59	61
	M-25	1424 WOODHURST BLVD	1	B	Residence	66	62	64
	M-26	1420 WOODHURST BLVD	1	B	Residence	66	52	55
	M-27	1426 WOODHURST BLVD	1	B	Residence	66	59	61
	M-28	1428 WOODHURST BLVD	1	B	Residence	66	59	62
	M-29	1430 WOODHURST BLVD	1	B	Residence	66	59	61
	M-30	1411 WOODHURST BLVD	1	B	Residence	66	54	57
	M-31	1413 WOODHURST BLVD	1	B	Residence	66	51	54
	M-32	1415 WOODHURST BLVD	1	B	Residence	66	52	55
	M-33	1417 WOODHURST BLVD	1	B	Residence	66	52	55
	M-34	1421 WOODHURST BLVD	1	B	Residence	66	51	54
	M-35	1423 WOODHURST BLVD	1	B	Residence	66	51	54
	M-36	1427 WOODHURST BLVD	1	B	Residence	66	52	55
	M-37	1431 WOODHURST BLVD	1	B	Residence	66	48	51
	M-38	1429 WOODHURST BLVD	1	B	Residence	66	48	51
	M-39	1429 WOODHURST BLVD	1	B	Residence	66	50	54
	M-40	1477 MAYHURST BLVD	1	B	Residence	66	61	64
M-41	1475 MAYHURST BLVD	1	B	Residence	66	62	65	
M-42	1473 MAYHURST BLVD	1	B	Residence	66	60	63	
M-43	1471 MAYHURST BLVD	1	B	Residence	66	59	63	
M-44	1469 MAYHURST BLVD	1	B	Residence	66	58	62	
M-45	1467 MAYHURST BLVD	1	B	Residence	66	52	57	
M-46	1441 MAYHURST BLVD	1	B	Residence	66	52	55	
M-47	1439 MAYHURST BLVD	1	B	Residence	66	56	60	
M-48	1435 MAYHURST BLVD	1	B	Residence	66	47	52	
M-49	1437 MAYHURST BLVD	1	B	Residence	66	61	65	
M-50	1433 MAYHURST BLVD	1	B	Residence	66	57	61	
M-51	1431 MAYHURST BLVD	1	B	Residence	66	61	65	
M-52	1429 MAYHURST BLVD	1	B	Residence	66	62	65	
	N-01	8850 GLENRIDGE CT	1	B	Residence	66	65	67
	N-02	8852 GLENRIDGE CT	1	B	Residence	66	60	63
	N-03	8854 GLENRIDGE CT	1	B	Residence	66	58	61
	N-04	8856 GLENRIDGE CT	1	B	Residence	66	56	59
	N-05	8858 GLENRIDGE CT	1	B	Residence	66	55	58
	N-06	1427 LAUREL HILL RD	1	B	Residence	66	54	56
	N-07	8860 GLENRIDGE CT	1	B	Residence	66	54	57
	N-08	8862 GLENRIDGE CT	1	B	Residence	66	53	56
	N-09	1429 LAUREL HILL RD	1	B	Residence	66	50	52
	N-10	8864 GLENRIDGE CT	1	B	Residence	66	52	54

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)	
							2018 Existing	2040 Build
CNE N	N-11	1431 LAUREL HILL RD	1	B	Residence	66	49	51
	N-12	1433 LAUREL HILL RD	1	B	Residence	66	48	50
	N-13	1435 LAUREL HILL RD	1	B	Residence	66	46	50
	N-14	1437 LAUREL HILL RD	1	B	Residence	66	46	49
	N-15	1439 LAUREL HILL RD	1	B	Residence	66	44	48
	N-16	8866 GLENRIDGE CT	1	B	Residence	66	50	53
	N-17	8868 GLENRIDGE CT	1	B	Residence	66	51	54
	N-18	8869 GLENRIDGE CT	1	B	Residence	66	50	53
	N-19	8867 GLENRIDGE CT	1	B	Residence	66	52	55
	N-20	8865 GLENRIDGE CT	1	B	Residence	66	51	54
	N-21	8863 GLENRIDGE CT	1	B	Residence	66	49	54
	N-22	8861 GLENRIDGE CT	1	B	Residence	66	50	54
	N-23	8859 GLENRIDGE CT	1	B	Residence	66	46	52
	N-24	8857 GLENRIDGE CT	1	B	Residence	66	48	53
	N-25	8855 GLENRIDGE CT	1	B	Residence	66	54	57
	N-26	8853 GLENRIDGE CT	1	B	Residence	66	56	59
	N-27	8851 GLENRIDGE CT	1	B	Residence	66	64	66
	N-28	1484 OLD ASH GRV	1	B	Residence	66	61	64
	N-29	1482 OLD ASH GRV	1	B	Residence	66	56	60
	N-30	1488 OLD ASH GRV	1	B	Residence	66	47	51
	N-31	1486 OLD ASH GRV	1	B	Residence	66	53	57
	N-32	1492 OLD ASH GRV	1	B	Residence	66	47	53
	N-33	1498 OLD ASH GRV	1	B	Residence	66	43	49
	N-34	1496 OLD ASH GRV	1	B	Residence	66	44	49
	N-35	1494 OLD ASH GRV	1	B	Residence	66	45	50
	N-36	1490 OLD ASH GRV	1	B	Residence	66	45	50
	N-37	1440 CARRINGTON RIDGE LN	1	B	Residence	66	47	51
	N-38	1442 CARRINGTON RIDGE LN	1	B	Residence	66	45	50
	N-39	1444 CARRINGTON RIDGE LN	1	B	Residence	66	47	52
	N-40	8826 JARRETT VALLEY DR	1	B	Residence	66	45	50
	N-41	8826 JARRETT VALLEY DR	1	B	Residence	66	46	53
	N-42	1448 CARRINGTON RIDGE LN	1	B	Residence	66	46	52
	N-43	1446 CARRINGTON RIDGE LN	1	B	Residence	66	47	52
	N-44	1438 CARRINGTON RIDGE LN	1	B	Residence	66	49	54
	N-45	1436 CARRINGTON RIDGE LN	1	B	Residence	66	49	54
	N-46	1434 CARRINGTON RIDGE LN	1	B	Residence	66	57	60
	N-47	1432 CARRINGTON RIDGE LN	1	B	Residence	66	60	64
	N-48	1430 CARRINGTON RIDGE LN	1	B	Residence	66	64	69
	N-49	1433 CARRINGTON RIDGE LN	1	B	Residence	66	61	67
	N-50	1433 CARRINGTON RIDGE LN	1	B	Residence	66	56	61
	N-51	1435 CARRINGTON RIDGE LN	1	B	Residence	66	48	53
	N-52	1437 CARRINGTON RIDGE LN	1	B	Residence	66	47	52
	N-53	1439 CARRINGTON RIDGE LN	1	B	Residence	66	46	51
	N-54	1447 CARRINGTON RIDGE LN	1	B	Residence	66	45	51
	N-55	1449 CARRINGTON RIDGE LN	1	B	Residence	66	45	50
	N-56	8820 JARRETT VALLEY DR	1	B	Residence	66	45	49
	N-57	8818 JARRETT VALLEY DR	1	B	Residence	66	46	50
	N-58	8816 JARRETT VALLEY DR	1	B	Residence	66	45	50
	N-59	8814 JARRETT VALLEY DR	1	B	Residence	66	47	52
	N-60	1492 BROADSTONE PL	1	B	Residence	66	52	57
	N-61	1490 BROADSTONE PL	1	B	Residence	66	52	56
	N-62	1488 BROADSTONE PL	1	B	Residence	66	52	56
	N-63	1486 BROADSTONE PL	1	B	Residence	66	51	56
	N-64	1484 BROADSTONE PL	1	B	Residence	66	50	54
	N-65	1485 BROADSTONE PL	1	B	Residence	66	52	57
	N-66	1487 BROADSTONE PL	1	B	Residence	66	52	56
	N-67	1489 BROADSTONE PL	1	B	Residence	66	54	59
	N-68	1491 BROADSTONE PL	1	B	Residence	66	53	58
	N-69	1493 BROADSTONE PL	1	B	Residence	66	57	61
	N-70	8810 JARRETT VALLEY DR	1	B	Residence	66	57	61
	N-71	1404 STANBRIDGE PL	1	B	Residence	66	63	68
	N-72	1487 BROADSTONE PL	1	B	Residence	66	61	66
	N-73	1409 Stanbridge Pl	2	B	Residence	66	59	65
	N-74	1415 Stanbridge Pl	2	B	Residence	66	59	65
	N-75	0	2	B	Residence	66	61	68
	N-76	0	2	B	Residence	66	65	72

**TABLE 7
ROUTE 7 EXISTING AND FUTURE PREDICTED NOISE LEVELS**

CNE	Receptor ID	Address	# of Dwelling Units	Activity Category	Land Use	NAC	Loudest-hour Noise Levels (Leq(h) in dBA)		
							2018 Existing	2040 Build	
	N-77	8800 JARRETT VALLEY DR	1	D	Church	51	57 (32)	66 (41)	
	N-78	8801 JARRETT VALLEY DR	1	B	Residence	66	70	73	
Proposed Trail	PTR-01	9900 Leesburg Pike	1	C	Trail	66	P r o p o s e d t r a i l	66	
	PTR-02	9900 Leesburg Pike	1	C	Trail	66		70	
	PTR-03	9900 Leesburg Pike	1	C	Trail	66		70	
	PTR-04	9900 Leesburg Pike	1	C	Trail	66		70	
	PTR-05	9900 Leesburg Pike	1	C	Trail	66		71	
	PTR-06	9900 Leesburg Pike	1	C	Trail	66		71	
	PTR-07	9900 Leesburg Pike	1	C	Trail	66		71	
	PTR-08	9900 Leesburg Pike	1	C	Trail	66		70	
	PTR-09	9900 Leesburg Pike	1	C	Trail	66		69	
	PTR-10	9900 Leesburg Pike	1	C	Trail	66		69	
	PTR-11	9900 Leesburg Pike	1	C	Trail	66		69	
	PTR-12	9900 Leesburg Pike	1	C	Trail	66		68	
	PTR-13	9900 Leesburg Pike	1	C	Trail	66		70	
	PTR-14	9900 Leesburg Pike	1	C	Trail	66		73	
	PTR-15	9900 Leesburg Pike	1	C	Trail	66		70	
	PTR-16	9900 LEESBURG PIKE	1	C	Trail	66		67	
	PTR-17	9900 LEESBURG PIKE	1	C	Trail	66		65	
	PTR-18	9900 LEESBURG PIKE	1	C	Trail	66		64	
	PTR-19	9900 LEESBURG PIKE	1	C	Trail	66		63	
	PTR-20	9900 LEESBURG PIKE	1	C	Trail	66		65	
	PTR-21	9900 LEESBURG PIKE	1	C	Trail	66		65	
Existing Trail	TR-01	9900 Leesburg Pike	1	C	Trail	66	56	58	
	TR-02	9900 Leesburg Pike	1	C	Trail	66	57	60	
	TR-03	9900 Leesburg Pike	1	C	Trail	66	58	60	
	TR-04	9900 Leesburg Pike	1	C	Trail	66	60	62	
	TR-05	9900 Leesburg Pike	1	C	Trail	66	62	63	
	TR-06	9900 Leesburg Pike	1	C	Trail	66	63	64	
	TR-07	9900 Leesburg Pike	1	C	Trail	66	64	relocated trail	
	TR-08	9900 Leesburg Pike	1	C	Trail	66	67		
	TR-09	9900 Leesburg Pike	1	C	Trail	66	66	relocated trail	
	TR-10	9900 Leesburg Pike	1	C	Trail	66	63		
	TR-11	9900 Leesburg Pike	1	C	Trail	66	62	67	
	TR-12	9900 Leesburg Pike	1	C	Trail	66	61	65	
	TR-13	9900 Leesburg Pike	1	C	Trail	66	59	63	
	TR-14	9900 Leesburg Pike	1	C	Trail	66	58	62	
	TR-15	9900 Leesburg Pike	1	C	Trail	66	72	relocated trail	
	TR-16	9900 LEESBURG PIKE	1	C	Trail	66	72		
	TR-17	9900 LEESBURG PIKE	1	C	Trail	66	70		
	TR-18	9900 LEESBURG PIKE	1	C	Trail	66	68		
	TR-19	9900 LEESBURG PIKE	1	C	Trail	66	66		
	TR-20	9900 Leesburg Pike	1	C	Trail	66	64		
	TR-21	9900 LEESBURG PIKE	1	C	Trail	66	63		
	TR-22	9900 LEESBURG PIKE	1	C	Trail	66	62		
	TR-23	9900 LEESBURG PIKE	1	C	Trail	66	60		63
	TR-24	9900 LEESBURG PIKE	1	C	Trail	66	61		63
	TR-25	9900 LEESBURG PIKE	1	C	Trail	66	60	63	
	TR-26	9900 LEESBURG PIKE	1	C	Trail	66	60	62	

TABLE 11

CNE A- BARRIER A1 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels dBA			Leq(h) in
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)	
Barrier A1					
A-01	1	52	52	0	
A-02	1	55	55	0	
A-03	1	57	57	2	
A-04	1	61	60	1	
A-05	1	60	59	1	
A-06	1	65	58	6	
A-07	1	63	55	8	
A-08	1	59	53	6	
A-09	1	54	51	3	
A-10	1	56	55	1	
A-11	1	54	54	0	
A-12	1	53	53	0	
A-13	1	53	52	2	
A-14	1	54	52	2	
A-15	1	55	53	3	
A-16	1	56	53	3	
A-17	1	59	55	5	
A-18	1	67	60	7	
A-19	1	65	64	1	
A-20	1	59	59	1	
A-21	1	50	50	0	
A-22	1	50	50	0	
A-23	1	49	48	1	
A-24	1	49	49	0	
A-25	1	48	47	1	
A-26	1	48	47	1	
A-27	1	48	47	1	
A-28	1	50	49	1	
A-29	1	51	50	1	
A-30	1	53	53	1	
A-31	1	56	55	1	
A-32	1	56	56	0	
A-33	1	57 (32)	56.6 (31.6)	0	
*	Insertion Loss (IL) sound levels may be different due to rounding				
66	Indicates noise impact (NAC only)				
5	Indicates at least a 5 dBA benefit				

TABLE 12

CNE A- BARRIER A2 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels dBA			Leq(h) in
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)	
Barrier A2					
A-56	1	66	59	6	
A-57	1	61	56	5	
A-58	1	60	53	7	
A-59	1	61	53	8	
A-60	1	61	53	8	
A-61	1	59	51	8	
A-62	1	63	55	8	
A-63	1	60	53	7	
A-64	1	57	52	5	
A-65	1	65	57	7	
A-66	1	63	58	6	
A-67	1	63	58	6	
A-68	1	63	58	6	
A-69	1	62	59	3	
A-70	1	65	64	1	
A-71	1	63	62	1	
A-72	1	56	54	2	
A-73	1	56	53	3	
A-74	1	56	52	3	
*	Insertion Loss (IL) sound levels may be different due to rounding				
66	Indicates noise impact (NAC only)				
5	Indicates at least a 5 dBA benefit				

TABLE 13

CNE B- BARRIER B1-B6 and D1 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels dBA			Leq(h) in
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)	
Barrier B1-B5 and D1					
B-01	1	71 (46)	72 (46)	0	
B-02	1	52.3	52	0	
B-03	1	67 (42)	65 (40)	2	
B-04	1	61	60	1	
B-05	1	57	56	1	
B-06	1	63	61	2	
B-07	1	73	65	8	
B-08	1	72	64	8	
B-09	1	56	51	6	
B-10	1	57	51	6	
B-11	1	55	49	6	
B-12	1	61	52	8	
B-13	1	72	62	10	
B-14	1	66	58	9	
B-15	1	60	52	8	
B-16	1	56	49	7	
B-17	1	54	48	6	
B-18	1	52	47	5	
B-19	1	57	52	5	
B-20	1	62	55	7	
B-21	1	69	61	8	
B-22	1	70	63	7	
B-23	1	57	53	5	
B-24	1	57 (32)	52 (27)	5	
B-25	1	67	58	8	
B-26	1	62	55	8	
B-27	1	60	53	7	
B-28	1	55	50	6	
B-29	1	57	51	6	
B-30	1	58	53	5	
B-31	1	67	61	6	
B-32	1	65	62	3	
B-33	1	70	64	6	
B-34	1	70	61	10	
B-35	1	71	60	11	
B-36	1	72	59	12	
B-37	1	64	55	8	
B-38	1	63	54	9	
B-39	1	62	55	7	
B-40	1	60	54	6	
B-41	1	62	56	5	
B-42	1	54	51	4	
B-43	1	54	49	5	
B-44	1	52	47	5	
B-45	1	54	47	7	
B-46	1	53	46	7	
B-47	1	55	47	7	
B-48	1	56	48	8	
B-49	1	54	48	6	
B-50	1	59	50	9	
B-51	1	59	52	7	
B-52	1	58	52	6	

TABLE 13

CNE B- BARRIER B1-B6 and D1 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels dBA			Leq(h) in
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)	
Barrier B1-B5 and D1					
B-53	1	61	53	8	
B-54	1	63	53	10	
B-55	1	71	57	14	
B-56	1	68	60	7	
B-57	1	71	62	9	
B-58	1	57	52	5	
B-59	1	62	56	6	
B-60	1	65	58	7	
B-61	1	67	60	7	
B-62	1	71	62	8	
B-63	1	65	61	4	
B-64	1	61	57	4	
B-65	1	57	55	2	
B-66	1	57	55	2	
B-67	1	57	55	2	
B-68	1	57	55	2	
B-69	1	57	53	4	
B-70	1	54	49	5	
B-71	1	54	49	5	
B-72	1	54	52	2	
D-01	1	68	63	5	
D-02	1	66	60	6	
D-03	1	64	59	6	
D-04	1	62	57	5	
D-05	1	63	59	4	
D-06	1	64	60	4	
D-07	1	62	58	4	
D-08	1	61	57	4	
D-09	1	60	56	5	
D-10	1	59	54	5	
D-11	1	60	56	4	
D-12	1	60	57	3	
D-13	1	61	60	1	
D-14	1	58	55	3	
D-15	1	57	53	4	
D-16	1	56	52	4	
D-17	1	57	55	3	
D-18	1	60	59	1	
D-19	1	59	57	1	
D-20	1	56	54	3	
D-21	1	55	52	4	
D-22	1	54	51	3	
D-23	1	55	53	2	
D-24	1	58	57	1	
D-25	1	62	56	6	
D-26	1	63	57	6	
D-27	1	59	54	5	
D-28	1	61	55	5	
D-29	1	62	57	6	
D-30	1	60	54	5	
*	Insertion Loss (IL) sound levels may be different due to rounding				

TABLE 13**CNE B- BARRIER B1-B6 and D1 OPTIMIZED BARRIER RESULTS**

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels dBA			Leq(h) in
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)	
Barrier B1-B5 and D1					
66		Indicates noise impact (NAC only)			
5		Indicates at least a 5 dBA benefit			

TABLE 14

CNE D/E- BARRIER D2 and E1-E4 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels Leq(h) in dBA		
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier D2 and E1-E4				
E-01	1	62	57	5
E-02	1	66	60	6
E-03	1	63	57	6
E-04	1	69	60	8
E-05	1	67	59	8
E-06	1	71	62	9
E-07	1	66	60	5
E-08	1	64	59	5
E-09	1	61	56	4
E-10	1	59	55	5
E-11	1	58	53	5
E-12	1	55	50	5
E-13	1	53	49	5
E-14	1	54	50	4
E-15	1	51	48	3
E-16	1	48	44	4
E-17	1	52	47	5
E-18	1	49	45	3
E-19	1	49	45	5
E-20	1	48	44	4
E-21	1	48	43	5
E-22	1	51	47	3
E-23	1	53	49	4
E-24	1	54	50	4
E-25	1	55	51	4
E-26	1	54	51	4
E-27	1	54	50	4
E-28	1	52	48	4
E-29	1	55	51	5
E-30	1	50	47	4
E-31	1	53	48	5
E-32	1	57	53	4
E-33	1	65	57	7
E-34	1	68	59	9
E-35	1	58	52	7
E-36	1	64	58	6
E-37	1	51	47	4
E-38	1	50	46	4
E-39	1	68	63	5
E-40	1	70	60	10
E-41	1	68	59	9
E-42	1	67	58	9

TABLE 14

CNE D/E- BARRIER D2 and E1-E4 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels Leq(h) in dBA		
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
E-43	1	58	52	6
E-44	1	60	56	5
E-45	1	59	54	5
E-46	1	53	48	5
E-47	1	52	47	5
E-48	1	71	61	10
E-49	1	71	61	10
E-50	1	65	58	7
E-51	1	51	47	4
E-52	1	51	47	3
E-53	1	52	49	2
E-54	1	49	47	2
E-55	1	49	46	3
E-56	1	55	55	0
E-57	1	54	53	1
E-58	1	54	53	1
E-59	1	58	58	1
E-60	1	66	62	5
E-61	1	69	61	9
E-62	1	58	52	6
E-63	1	57	52	5
E-64	1	68	60	8
E-65	1	67	62	5
E-66	1	64	63	0
D-31	1	72	64	9
D-32	1	63	62	2
D-33	1	57	55	2
D-34	1	55	52	3
D-35	1	55	54	1
D-36	1	53	51	2
D-37	1	50	47	4
D-38	1	55	51	4
D-39	1	65	60	5
D-40	1	70	64	5
D-41	1	63	57	6
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 15

CNE C- BARRIER C1-C2 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier C1-C2				
C-01	1	57	57	1
C-02	1	58	57	1
C-03	1	60	59	1
C-04	1	64	62	2
C-05	1	66	61	5
C-06	1	67	59	9
C-07	1	69	59	10
C-08	1	70	56	14
C-09	1	62	52	10
C-10	1	61	52	9
C-11	1	57	51	6
C-12	1	52	49	3
C-13	1	52	47	5
C-14	1	54	48	6
C-15	1	55	49	6
C-16	1	73	58	15
C-17	1	72	59	13
C-18	1	68	58	10
C-19	1	65	55	10
C-20	1	62	54	8
C-21	1	60	53	7
C-22	1	56	50	7
C-23	1	52	46	6
C-24	1	57	49	8
C-25	1	56	49	7
C-26	1	54	47	7
C-27	1	52	45	7
C-28	1	48	43	6
C-29	1	49	44	5
C-30	1	49	45	4
C-31	1	49	45	4
C-32	1	50	45	5
C-33	1	52	47	5
C-34	1	52	47	5
C-35	1	58	51	7
C-36	1	66	57	9
C-37	1	70	61	8
C-38	1	61	53	8
C-39	1	57	49	7
C-40	1	52	47	5
C-41	1	72	60	11
C-42	1	69	58	12
C-43	1	65	54	10
C-44	1	61	51	9
C-45	1	61	52	9
C-46	1	50	46	4
C-47	1	48	44	4
C-48	1	48	44	4
C-49	1	52	48	5
C-50	1	53	48	5
C-51	1	55	48	7
C-52	1	53	48	5

TABLE 15

CNE C- BARRIER C1-C2 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier C1-C2				
C-53	1	71	58	14
C-54	1	70	57	12
C-55	1	61	53	8
C-56	1	69	58	12
C-57	1	62	54	8
C-58	1	69	60	9
C-58B	1	67	60	7
C-59	1	64	59	5
C-60	1	58	54	5
C-61	1	72	67	6
C-62	1	57	53	4
C-63	1	66	59	7
C-64	1	70	60	9
C-65	1	56	50	6
C-66	1	57	51	6
C-67	1	60	52	8
C-68	1	63	54	9
C-69	1	65	55	10
C-70	1	63	56	7
C-71	1	64	57	8
C-72	1	63	57	7
C-73	1	71	60	11
C-74	1	68	60	8
C-75	1	63	57	6
C-76	1	62	60	2
C-77	1	54	49	5
C-78	1	54	49	5
C-79	1	55	50	5
C-80	1	55	51	4
C-81	1	55	51	4
C-82	1	56	52	4
C-83	1	56	53	3
C-84	1	55	53	2
C-85	1	55	53	2
C-86	1	54	53	2
C-87	1	53	51	2
C-88	1	53	52	1
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 16

CNE F-BARRIER F1-F1B-F1C-F2 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels			Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)	
Barrier F1-F1B-F1C-F2					
F-15	1	68	64	5	
F-16	1	73	69	4	
F-17	1	74	68	6	
F-18	1	68	63	5	
F-19	1	68	63	5	
F-20	1	62	61	1	
F-21	1	61	57	4	
F-22	1	55	53	1	
F-23	1	57	53	3	
F-24	1	70	62	8	
F-25	1	71	61	10	
F-26	1	69	59	10	
F-27	1	62	57	5	
F-28	1	61	55	5	
F-29	1	62	55	6	
F-30	1	50	49	2	
F-31	1	51	49	3	
F-32	1	52	49	3	
F-33	1	51	49	2	
F-34	1	57	56	1	
F-35	1	50	49	2	
F-36	1	49	47	2	
F-37	1	50	48	1	
F-38	1	55	55	0	
F-39	1	54	54	0	
*	Insertion Loss (IL) sound levels may be different due to rounding				
66	Indicates noise impact (NAC only)				
5	Indicates at least a 5 dBA benefit				

TABLE 17

CNE F- BARRIER F3 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier F3				
F-40	1	72	64	8
F-41	1	69	63	7
F-42	1	63	59	4
F-43	1	60	58	2
F-44	1	58	56	2
F-45	1	64	58	6
F-46	1	69	58	11
F-47	1	67	61	6
F-48	1	70	64	6
F-49	1	71	62	9
F-50	1	71	61	10
F-51	1	70	60	10
F-52	1	65	58	7
F-53	1	51	50	1
F-54	1	50	47	3
F-55	1	55	52	3
F-56	1	54	50	4
F-57	1	55	51	5
F-58	1	56	51	5
F-59	1	55	49	6
F-60	1	54	48	6
F-61	1	51	46	4
F-62	1	53	48	5
F-63	1	54	49	5
F-64	1	56	50	6
F-65	1	57	50	7
F-66	1	58	52	6
F-67	1	57	51	6
F-68	1	56	51	5
F-69	1	57	53	4
F-70	1	70	61	9
F-71	1	70	63	7
F-72	1	68	62	7
F-73	1	64	59	5
F-74	1	74	67	8
F-75	1	64	62	2
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 18

CNE F- BARRIER F4-F4B OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier F4-F4B				
F-83	1	67	62	5
F-84	1	65	58	8
F-85	1	59	55	4
F-86	1	62	57	5
F-87	1	59	54	4
F-88	1	65	61	4
F-89	1	65	61	5
F-90	1	61	55	6
F-91	1	58	53	5
F-92	1	56	51	5
F-93	1	58	54	4
F-94	1	65	60	4
F-95	1	69	64	5
F-96	1	68	62	6
F-97	1	60	55	5
F-98	1	67	60	7
F-99	1	63	57	6
PTR-16	1	70	58	12
PTR-17	1	67	58	9
PTR-18	1	65	58	7
PTR-19	1	64	56	8
PTR-20	1	63	56	8
PTR-21	1	65	56	8
TR-23	1	63	56	7
TR-24	1	63	57	6
TR-25	1	63	57	6
TR-26	1	62	57	5
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 19

CNE F- BARRIER F5-F9 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier F5-F9				
F-100	1	69	64	5
F-101	1	67	62	5
F-102	1	65	61	4
F-103	1	63	60	3
F-104	1	56	53	3
F-105	1	56	52	4
F-106	1	61	57	4
F-107	1	62	58	4
F-108	1	45	43	2
F-109	1	60	55	5
F-110	1	56	51	5
F-111	1	54	50	4
F-112	1	53	49	4
F-113	1	52	48	4
F-114	1	51	48	3
F-115	1	50	46	3
F-116	1	72	65	8
F-117	1	71	60	12
F-118	1	61	56	5
F-119	1	59	54	5
F-120	1	55	51	4
F-121	1	52	49	3
F-122	1	52	47	4
F-123	1	74	66	8
F-124	1	73	63	10
F-125	1	73	68	5
F-126	1	60	53	7
F-127	1	56	51	5
F-128	1	53	47	5
F-129	1	54	48	7
F-130	1	55	49	7
F-131	1	56	50	6
F-132	1	65	56	9
F-133	1	65	58	7
F-134	1	56	52	4
F-135	1	58	53	5
F-136	1	61	57	4
F-137	1	58	55	4
F-138	1	57	54	3
F-139	1	57	54	4
F-140	1	66	60	6
F-141	1	54	51	4
F-142	1	55	52	3
F-143	1	53	49	4
F-144	1	54	50	4
F-145	1	52	47	5
F-146	1	51	46	5
F-147	1	53	49	4
F-148	1	55	51	4
F-149	1	56	52	5
F-150	1	55	51	4
F-151	1	59	56	3

TABLE 19

CNE F- BARRIER F5-F9 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier F5-F9				
F-152	1	58	55	3
F-153	1	54	50	4
F-154	1	56	54	2
F-155	1	54	52	2
F-156	1	53	51	2
F-157	1	53	51	2
F-158	1	55	53	2
F-159	1	52	52	1
F-160	1	52	51	1
F-161	1	51	50	1
F-162	1	53	53	1
F-163	1	55	54	1
F-164	1	57	57	0
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 20

CNE G- BARRIER G1-G6 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier G1-G6				
G-01	1	62	62	0
G-02	1	64	64	0
G-03	1	65	64	1
G-04	1	65	63	2
G-05	1	60	57	3
G-06	1	56	54	3
G-07	1	53	51	2
G-08	1	51	49	2
G-09	1	51	48	2
G-10	1	48	45	3
G-11	1	49	47	2
G-12	1	49	48	2
G-13	1	51	49	2
G-14	1	52	51	2
G-15	1	51	50	1
G-16	1	53	47	6
G-17	1	53	48	5
G-18	1	54	49	5
G-19	1	56	51	6
G-20	1	60	53	7
G-21	1	60	54	6
G-22	1	68	60	7
G-23	1	68	57	10
G-24	1	72	59	13
G-25	1	73	61	12
G-26	1	58	52	6
G-27	1	59	51	8
G-28	1	57	47	9
G-29	1	55	46	9
G-30	1	52	45	8
G-31	1	51	44	7
G-32	1	53	45	8
G-33	1	54	46	8
G-34	1	58	50	8
G-35	1	60	50	9
G-36	1	63	56	7
G-37	1	70	58	12
G-38	1	68	58	10
G-39	1	68	58	11
G-40	1	69	57	13
G-41	1	69	55	14
G-42	1	65	54	11
G-43	1	66	55	11
G-44	1	65	55	11
G-45	1	66	55	10
G-46	1	69	56	13
G-47	1	65	56	9
G-48	1	63	55	8
G-49	1	65	57	8
G-50	1	69	59	11
G-51	1	73	65	8
G-52	1	73	65	8

TABLE 20

CNE G- BARRIER G1-G6 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier G1-G6				
G-53	1	71	66	6
G-54	1	58	50	9
G-55	1	59	50	9
G-56	1	58	50	8
G-57	1	53	45	7
G-58	1	52	45	7
G-59	1	59	50	8
G-60	1	53	46	7
G-61	1	50	44	6
G-62	1	55	49	6
G-63	1	59	51	8
G-64	1	59	51	8
G-65	1	60	54	7
G-66	1	60	56	4
G-67	1	56	52	4
G-68	1	53	49	5
G-69	1	51	46	5
G-70	1	49	45	4
G-71	1	48	44	4
G-72	1	48	44	4
G-73	1	48	45	3
G-74	1	53	50	3
G-75	1	59	56	3
G-76	1	68	62	6
G-77	1	72	65	7
G-78	1	66	60	6
G-79	1	56	51	4
G-80	1	52	49	4
G-81	1	50	47	4
G-82	1	45	42	3
G-83	1	65	59	6
G-84	1	61	56	5
G-85	1	58	54	4
G-86	1	55	50	5
G-87	1	55	50	6
G-88	1	49	45	4
G-89	1	48	44	5
G-90	1	50	45	5
G-91	1	66 (41)	61 (36)	5
G-92	1	65	61	5
G-93	1	61	55	6
G-94	1	68	61	8
G-95	1	67	60	8
G-96	1	67	59	8
G-97	1	63	56	7
G-98	1	64	56	8
G-99	1	60	52	7
G-100	1	61	54	7
G-101	1	59	52	8
G-102	1	59	52	7
G-103	1	57	51	6
G-104	1	70	66	5

TABLE 20

CNE G- BARRIER G1-G6 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier G1-G6				
G-105	1	70	62	8
G-106	1	59	55	3
G-107	1	56	52	4
G-108	1	57	54	3
G-109	1	60	57	3
G-110	1	61	58	3
G-111	1	55	50	5
G-112	1	53	48	5
G-113	1	54	48	6
G-114	1	55	50	5
G-115	1	52	50	2
G-116	1	59	56	3
G-117	1	56	53	3
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 21

CNE G- BARRIER G8-G9 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier G8-G9				
G-118	1	59	57	2
G-119	1	60	58	2
G-120	1	61	58	2
G-121	1	60	57	3
G-122	1	60	55	4
G-123	1	58	54	4
G-124	1	57	55	3
G-125	1	59	55	4
G-126	1	62	58	4
G-127	1	65	60	5
G-128	1	62	58	4
G-129	1	60	57	3
G-130	1	58	56	3
G-131	1	59	57	2
G-132	1	59	57	3
G-133	1	58	55	3
G-134	1	58	55	3
G-135	1	57	55	3
G-136	1	60	55	5
G-137	1	62	56	5
G-138	1	63	58	5
G-139	1	63	58	6
G-140	1	65	60	6
G-141	1	63	58	6
G-142	1	61	55	6
PTR-01	1	66	61	5
PTR-02	1	70	65	5
PTR-03	1	70	66	4
PTR-04	1	70	61	9
PTR-05	1	71	61	10
PTR-06	1	71	60	11
PTR-07	1	71	61	10
PTR-08	1	71	61	10
PTR-09	1	70	61	8
PTR-10	1	69	59	10
PTR-11	1	69	59	10
PTR-12	1	69	59	10
PTR-13	1	68	58	10
PTR-14	1	70	59	11
PTR-15	1	73	57	16
TR-01	1	58	57	1
TR-02	1	60	58	2
TR-03	1	60	58	2
TR-04	1	62	59	3
TR-05	1	63	59	5
TR-06	1	64	59	5
TR-11	1	67	59	8
TR-12	1	65	57	8
TR-13	1	63	56	8
TR-14	1	62	55	7
*	Insertion Loss (IL) sound levels may be different due to rounding			

TABLE 21

CNE G- BARRIER G8-G9 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier G8-G9				
66		Indicates noise impact (NAC only)		
5		Indicates at least a 5 dBA benefit		

TABLE 22

CNE G- BARRIER G11-G13 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier G11-G13				
G-143	1	63	60	3
G-144	1	73	67	6
G-145	1	73	67	6
G-146	1	56	52	4
G-147	1	52	48	4
G-148	1	50	45	5
G-149	1	47	44	3
G-150	1	55	52	3
G-151	1	57	53	4
G-152	1	62	58	5
G-153	1	73	64	10
G-154	1	72	60	12
G-155	1	73	60	13
G-156	1	72	59	13
G-157	1	70	60	10
G-158	1	59	53	6
G-159	1	52	47	5
G-160	1	48	45	4
G-161	1	74	63	11
G-162	1	49	44	6
G-163	1	45	42	3
G-164	1	50	46	5
G-165	1	52	46	6
G-166	1	50	45	5
G-167	1	52	48	4
G-168	1	68	59	9
G-169	1	71	60	11
G-170	1	71	60	11
G-171	1	70	59	11
G-172	1	58	55	4
G-173	1	55	48	7
G-174	1	52	50	3
G-175	1	49	47	3
G-176	1	49	46	3
G-177	1	48	46	3
G-178	1	49	47	2
G-179	1	52	50	2
G-180	1	56	53	3
G-181	1	61	58	3
G-182	1	63	59	4
G-183	1	57	54	3
G-184	1	62	57	5
G-185	1	74	64	10
G-186	1	74	65	9
G-187	1	74	65	9
G-188	1	74	66	8
G-189	1	74	68	6
G-190	1	48	47	1
G-191	1	48	47	1
G-192	1	50	49	2
G-193	1	54	52	2
G-194	1	57	55	3

TABLE 22

CNE G- BARRIER G11-G13 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier G11-G13				
G-195	1	62	59	4
G-196	1	61	57	4
G-197	1	60	56	4
G-198	1	63	60	3
G-199	1	69	64	5
G-200	1	72	66	6
G-201	1	73	66	6
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 23

CNE G- BARRIER G14-G16 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels			Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)	
Barrier G14-G16					
G-202	1	72	67	5	
G-203	1	69	63	6	
G-204	1	61 (36)	58 (33)	3	
G-205	1	56	53	3	
G-206	1	62	58	4	
G-207	1	68	62	6	
G-208	1	74 (49)	66 (41)	7	
*	Insertion Loss (IL) sound levels may be different due to rounding				
66	Indicates noise impact (NAC only)				
5	Indicates at least a 5 dBA benefit				

TABLE 24

CNE H - BARRIER H3-H11 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier H2-H11				
H-01	1	75	61	14
H-02	1	74	60	14
H-03	1	68	59	9
H-04	1	53	50	3
H-05	1	56	53	3
H-06	1	62	59	3
H-07	1	57	53	4
H-08	1	55	52	4
H-09	1	56	54	2
H-10	1	56	54	1
H-11	1	59	58	1
H-12	1	58	57	1
H-13	1	55	55	1
H-14	1	54	54	1
H-15	1	55	54	1
H-16	1	64	61	4
H-17	1	74	63	12
H-18	1	73	61	12
H-19	1	67	57	10
H-20	1	60	53	7
H-21	1	59	53	6
H-22	1	55	50	5
H-23	1	56	49	7
H-24	1	56	49	7
H-25	1	61	52	10
H-26	1	62	54	8
H-27	1	71	60	11
H-28	1	63	56	7
H-29	1	60	53	7
H-30	1	61	56	6
H-31	1	61	56	5
H-32	1	75	69	5
H-33	1	70	63	8
H-34	1	70	63	8
H-35	1	74	68	6
H-36	1	74	66	8
H-37	1	60	57	3
H-38	1	60	57	4
H-39	1	60	56	4
H-40	1	56	50	6
H-41	1	55	51	4
H-42	1	54	51	4
H-43	1	54	51	3
H-44	1	54	50	4
H-45	1	54	51	3
H-46	1	51	48	3
H-47	1	51	46	5
H-48	1	55	51	4
H-49	1	58	53	4
H-50	1	54	49	6
H-51	1	48	44	4
H-52	1	51	46	5

TABLE 24

CNE H - BARRIER H3-H11 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier H2-H11				
H-53	1	56	51	5
H-54	1	58	53	5
H-55	1	55	50	5
H-56	1	56	52	4
H-57	1	59	54	5
H-58	1	62	61	0
H-59	1	53	52	2
H-60	1	55	53	2
H-61	1	65	61	4
H-62	1	73	67	6
H-63	1	72	68	4
H-64	1	72	67	5
H-65	1	59	55	4
H-66	1	62	58	5
H-67	1	63	58	6
H-68	1	61	56	5
H-69	1	65	58	7
H-70	1	61	56	6
H-71	1	62	56	6
H-72	1	62	55	6
H-73	1	68	59	9
H-74	1	76	59	17
H-75	1	67	58	9
H-76	1	76	60	17
H-77	1	77	59	17
H-78	1	65	58	7
H-79	1	63 (38)	58 (33)	5
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 25

CNE I- BARRIER I2 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier I2				
I-01	1	53	53	0
I-02	1	64	64	0
I-03	1	70	70	1
I-04	1	53	52	1
I-05	1	54	52	2
I-06	1	55	53	2
I-07	1	57	54	2
I-08	1	58	55	3
I-09	1	70	65	5
I-10	1	64	57	7
I-11	1	69	60	9
I-12	1	71	62	9
I-13	1	74	62	12
I-14	1	69	64	5
I-15	1	64	62	2
I-16	1	55	53	2
I-17	1	53	50	3
I-18	1	60	56	4
I-19	1	60	55	5
I-20	1	59	55	3
I-21	1	56	53	4
I-22	1	55	51	4
I-23	1	55	51	4
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 26

CNE I- BARRIER I4-I6 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier I4-I6				
I-24	1	51	51	0
I-25	1	53	52	0
I-26	1	58	58	0
I-27	1	57	56	0
I-28	1	52	51	1
I-29	1	55	55	1
I-30	1	55	54	1
I-31	1	50	49	1
I-32	1	52	51	2
I-33	1	51	50	2
I-34	1	50	49	2
I-35	1	49	48	1
I-36	1	50	49	2
I-37	1	51	50	2
I-38	1	52	50	2
I-39	1	49	47	2
I-40	1	53	50	3
I-41	1	57	57	0
I-42	1	54	50	3
I-43	1	54	51	4
I-44	1	53	52	2
I-45	1	55	53	2
I-46	1	53	51	2
I-47	1	53	50	3
I-48	1	51	49	2
I-49	1	54	50	4
I-50	1	60	55	5
I-51	1	60	55	5
I-52	1	61	55	5
I-53	1	59	55	4
I-54	1	56	54	2
I-55	1	73	68	6
I-56	1	74	64	10
I-57	1	69	60	9
I-58	1	73	62	11
I-59	1	70	64	5
I-60	1	67	63	5
I-61	1	60	56	4
I-62	1	57	53	4
I-63	1	55	51	4
I-64	1	54	51	4
I-65	1	55	51	4
I-66	1	57	53	4
I-67	1	58	54	4
I-68	1	61	57	5
I-69	1	67	61	5
I-70	1	68	63	5
I-71	1	62	60	2
I-72	1	59	57	2
I-73	1	57	55	2
I-74	1	56	55	2
I-75	1	58	56	1

TABLE 26

CNE I- BARRIER I4-I6 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier I4-I6				
I-76	1	58	57	1
I-77	1	57	56	1
I-78	1	59	58	1
I-79	1	61	61	1
I-80	1	60	60	0
I-81	1	55	55	0
I-82	1	56	55	1
I-83	1	56	55	0
I-84	1	55	55	1
I-85	1	54	54	1
I-86	1	54	53	1
I-87	1	54	52	2
I-88	1	55	52	3
I-89	1	56	53	3
I-90	1	55	52	3
I-91	1	55	52	3
I-92	1	53	50	3
I-93	1	52	50	2
I-94	1	52	50	2
I-95	1	52	50	2
I-96	1	51	50	1
I-97	1	51	50	1
I-98	1	51	51	1
I-99	1	53	52	1
I-100	1	53	53	1
I-101	1	52	52	0
I-102	1	52	52	0
I-103	1	52	51	0
I-104	1	51	50	0
I-105	1	49	49	0
I-106	1	51	51	0
I-107	1	52	52	0
I-108	1	50	50	0
I-109	1	55	55	0
I-110	1	53	53	0
I-111	1	57	57	0
I-112	1	56	56	0
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 27

CNE I- BARRIER J2-J3 and K1-K4 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier J2-J3 and K1-K4				
J-01	1	70	67	2
J-02	1	67	60	7
J-03	1	59	52	7
J-04	1	71	61	9
J-05	1	73	63	10
J-06	1	73	66	7
J-07	1	68	60	8
J-08	1	69	62	7
J-09	1	68	63	5
J-10	1	64	57	7
J-11	1	65	59	6
J-12	1	65	61	5
J-13	1	66	61	5
J-14	1	66	61	5
J-15	1	62	60	2
J-16	1	62	58	5
J-17	1	63	59	4
J-18	1	62	58	4
J-19	1	61	56	5
J-20	1	59	56	3
J-21	1	58	54	4
J-22	1	58	53	5
J-23	1	72 (47)	66(41)	6
J-24	1	59	58	0
J-25	1	53	52	1
J-26	1	51	49	2
J-27	1	53	53	1
J-28	1	54	54	1
J-29	1	56	51	5
J-30	1	57	53	4
J-31	1	54	50	4
J-32	1	53	50	4
J-33	1	53	49	3
J-34	1	53	49	4
J-35	1	57	53	4
K-01	1	70	62	8
K-02	1	61 (36)	54 (29)	7
K-03	1	63	56	7
K-04	1	68	62	6
K-05	1	64 (39)	56(31)	8
K-06	1	59	54	5
K-07	1	55	50	5
K-08	1	52	48	4
K-09	1	48	43	4
K-10	1	53	49	4
K-11	1	60	55	6
K-12	1	64	58	6
K-13	1	62	56	6
K-14	1	69	61	8
K-15	1	59	52	7
K-16	1	60	53	7
K-17	1	63	55	8

TABLE 27

CNE I- BARRIER J2-J3 and K1-K4 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier J2-J3 and K1-K4				
K-18	1	59	52	8
K-19	1	61	53	7
K-20	1	59	52	8
K-21	1	58	52	7
K-22	1	56	52	5
K-23	1	67	58	8
K-24	1	67	61	6
K-25	1	61	55	6
K-26	1	62	59	3
K-27	1	58	56	2
K-28	1	54	51	3
K-29	1	55	54	2
K-30	1	52	51	1
K-31	1	51	51	1
K-32	1	56	55	2
K-33	1	54	53	1
K-34	1	49	48	1
K-35	1	48	47	1
K-36	1	57	50	7
K-37	1	69 (44)	68(43)	1
K-38	1	65(40)	65(40)	0
K-39	1	51	51	0
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 28

CNE L- BARRIER L1-L5 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier L1-L5				
L-01	1	69	63	7
L-02	1	65	60	5
L-03	1	69	63	6
L-04	1	66	62	4
L-05	1	72	66	6
L-06	1	64	62	2
L-07	1	58	56	2
L-08	1	58	57	1
L-09	1	65	65	1
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 29

CNE L- BARRIER L6-L8 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier L6-L8				
L-10	1	60	58	1
L-11	1	71	66	5
L-12	1	73	62	10
L-13	1	65	57	8
L-14	1	61	56	5
L-15	1	63 (38)	63 (38)	0
L-16	1	58	54	4
L-17	1	57	54	3
L-18	1	56	53	3
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 30

CNE N- Existing BARRIER OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Existing Barrier				
N-01	1	67	67	0
N-02	1	63	63	0
N-03	1	61	61	0
N-04	1	59	59	0
N-05	1	58	58	0
N-06	1	56	56	0
N-07	1	57	57	0
N-08	1	56	56	0
N-09	1	52	52	0
N-10	1	54	54	0
N-11	1	51	51	0
N-12	1	50	50	0
N-13	1	50	50	0
N-14	1	49	49	0
N-15	1	48	48	0
N-16	1	53	53	0
N-17	1	54	54	0
N-18	1	53	53	0
N-19	1	55	55	0
N-20	1	54	54	0
N-21	1	54	54	0
N-22	1	54	54	0
N-23	1	52	52	0
N-24	1	53	53	0
N-25	1	57	57	0
N-26	1	59	59	0
N-27	1	66	66	0
N-28	1	64	64	0
N-29	1	60	60	0
N-30	1	51	51	0
N-31	1	57	57	0
N-32	1	53	53	0
N-33	1	49	49	0
N-34	1	49	49	0
N-35	1	50	50	0
N-36	1	50	50	0
N-37	1	51	51	0
N-38	1	50	50	0
N-39	1	52	52	0
N-40	1	50	50	0
N-41	1	53	52	0
N-42	1	52	52	0
N-43	1	52	52	0
N-44	1	54	54	0
N-45	1	54	54	0
N-46	1	60	60	0
N-47	1	64	64	0
N-48	1	69	69	0
N-49	1	67	67	0
N-50	1	61	61	0
N-51	1	53	53	0
N-52	1	52	52	0

TABLE 30

CNE N- Existing BARRIER OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Existing Barrier				
N-53	1	51	51	0
N-54	1	51	50	0
N-55	1	50	49	0
N-56	1	49	49	0
N-57	1	50	50	1
N-58	1	50	50	0
N-59	1	52	52	1
N-60	1	57	56	1
N-61	1	56	56	0
N-62	1	56	56	0
N-63	1	56	56	0
N-64	1	54	54	0
N-65	1	57	57	0
N-66	1	56	56	0
N-67	1	59	58	2
N-68	1	58	57	1
N-69	1	61	60	1
N-70	1	61	61	1
N-71	1	68	68	0
N-72	1	66	66	0
N-73	2	65	64	1
N-74	2	65	63	2
N-75	2	68	65	3
N-76	2	72	68	4
N-77	1	66 (41)	58 (33)	8
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 31

CNE N- BARRIER N1-N3 & EXISTING OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier N1-N3 & Existing				
N-01	1	67	63	5
N-02	1	63	61	2
N-03	1	61	59	1
N-04	1	59	58	1
N-05	1	58	57	1
N-06	1	56	55	1
N-07	1	57	56	1
N-08	1	56	55	1
N-09	1	52	51	1
N-10	1	54	53	1
N-11	1	51	50	1
N-12	1	50	49	1
N-13	1	50	49	1
N-14	1	49	49	1
N-15	1	48	48	0
N-16	1	53	52	1
N-17	1	54	53	1
N-18	1	53	52	1
N-19	1	55	54	1
N-20	1	54	53	1
N-21	1	54	52	1
N-22	1	54	53	1
N-23	1	52	50	1
N-24	1	53	51	2
N-25	1	57	54	3
N-26	1	59	55	4
N-27	1	66	60	6
N-28	1	64	58	6
N-29	1	60	55	4
N-30	1	51	49	2
N-31	1	57	53	4
N-32	1	53	51	2
N-33	1	49	47	1
N-34	1	49	48	1
N-35	1	50	48	2
N-36	1	50	50	1
N-37	1	51	48	3
N-38	1	50	49	2
N-39	1	52	51	1
N-40	1	50	49	1
N-41	1	53	52	1
N-42	1	52	51	1
N-43	1	52	51	2
N-44	1	54	52	2
N-45	1	54	52	2
N-46	1	60	57	3
N-47	1	64	60	4
N-48	1	69	65	3
N-49	1	67	60	8
N-50	1	61	56	5
N-51	1	53	52	2
N-52	1	52	51	1

TABLE 31

CNE N- BARRIER N1-N3 & EXISTING OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels		Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)
Barrier N1-N3 & Existing				
N-53	1	51	50	2
N-54	1	51	49	2
N-55	1	50	48	2
N-56	1	49	48	2
N-57	1	50	49	2
N-58	1	50	49	2
N-59	1	52	51	1
N-60	1	57	55	1
N-61	1	56	55	1
N-62	1	56	55	1
N-63	1	56	55	1
N-64	1	54	53	1
N-65	1	57	56	1
N-66	1	56	56	1
N-67	1	59	57	2
N-68	1	58	56	2
N-69	1	61	60	1
N-70	1	61	61	1
N-71	1	68	59	9
N-72	1	66	58	8
N-73	2	65	59	6
N-74	2	65	58	6
N-75	2	68	60	7
N-76	2	72	62	10
N-77	1	66 (41)	58 (33)	8
*	Insertion Loss (IL) sound levels may be different due to rounding			
66	Indicates noise impact (NAC only)			
5	Indicates at least a 5 dBA benefit			

TABLE 32

CNE N- BARRIER N4 OPTIMIZED BARRIER RESULTS

Receptor ID	# of Dwelling /Recreational Units	2040 Loudest Hour Predicted Future Noise Levels			Leq(h) in dBA
		No Barrier	With Barrier (dBA)	Insertion Loss (IL)* (dBA)	
Barrier N4					
N-78	1	73	66	7	
*	Insertion Loss (IL) sound levels may be different due to rounding				
66	Indicates noise impact (NAC only)				
5	Indicates at least a 5 dBA benefit				

APPENDICES

**APPENDIX A -
NOISE MEASUREMENT DATA**

Route 7 Field Data Sheets

Site # **B2** Description : 1063 Autumn Mist Lane

Done By: **EJA, ERZ**

Meter: **2**

Monitoring Data:

Date: 3/20/19
 Start Time: 10:10AM
 End Time: 10:30AM
 Duration: 20min.

Leq (dBA) **60.2**

Traffic Data: 20 Minute Roadway

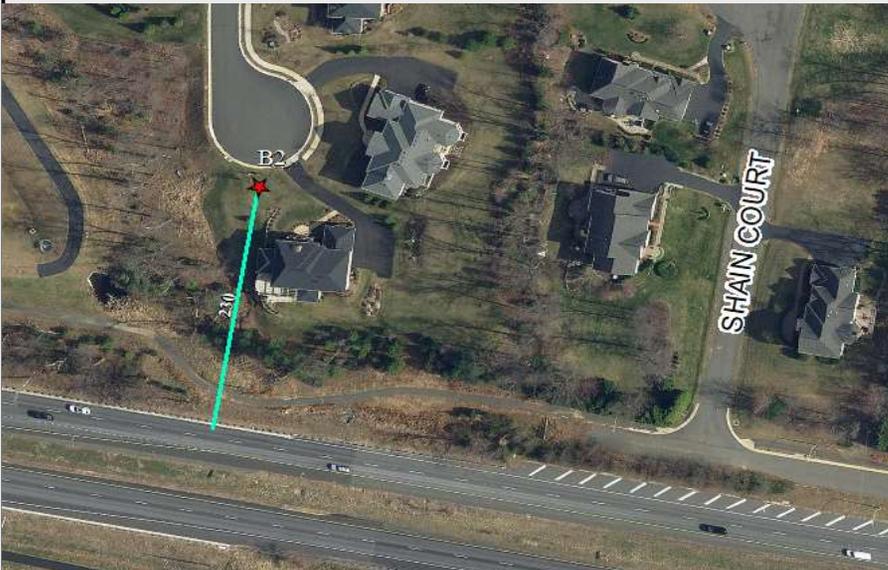
Direction	Leesburg Pike		Reston PKWY	
	WB	EB	NB	SB
Traffic Total:	346	493	73	114
Cars	322	474	71	107
MT	14	13	2	6
HT	10	6	1	1

Atmospheric Data
Wind Speed (mph) 6mph
Temp. (°F) 51
Humidity (%) 28



Site Data: Site Surface: Grass Grade: _____ Pavement Type: Average

Notes: Periodic construction noises: did not dominate the noise environment.
 Occasional Air plane fly overs that also did not dominate the noise environment



Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)
1	10:10:00 AM	62.5	21	10:20:00 AM	62.2	41			61		
2	10:10:30 AM	59.6	22	10:20:30 AM	58.7	42			62		
3	10:11:00 AM	61.7	23	10:21:00 AM	60.4	43			63		
4	10:11:30 AM	62	24	10:21:30 AM	62.8	44			64		
5	10:12:00 AM	62.2	25	10:22:00 AM	58.4	45			65		
6	10:12:30 AM	59.8	26	10:22:30 AM	53.1	46			66		
7	10:13:00 AM	58.8	27	10:23:00 AM	56.1	47			67		
8	10:13:30 AM	62.6	28	10:23:30 AM	60.4	48			68		
9	10:14:00 AM	61.8	29	10:24:00 AM	57.3	49			69		
10	10:14:30 AM	60.5	30	10:24:30 AM	54.3	50			70		
11	10:15:00 AM	59.7	31	10:25:00 AM	54.7	51			71		
12	10:15:30 AM	62.2	32	10:25:30 AM	59.6	52			72		
13	10:16:00 AM	62.3	33	10:26:00 AM	59.7	53			73		
14	10:16:30 AM	60.2	34	10:26:30 AM	52	54			74		
15	10:17:00 AM	60.8	35	10:27:00 AM	54.5	55			75		
16	10:17:30 AM	63.6	36	10:27:30 AM	56.5	56			76		
17	10:18:00 AM	60.7	37	10:28:00 AM	57.2	57			77		
18	10:18:30 AM	60.3	38	10:28:30 AM	54.2	58			78		
19	10:19:00 AM	62.1	39	10:29:00 AM	57.2	59			79		
20	10:19:30 AM	63.1	40	10:29:30 AM	60.1	60			80		

Route 7 Field Data Sheets

Site # **A2** Description : 11582 Cedar Chase Rd

Done By: **EJA, ERZ**

Meter: **1**

Monitoring Data:

Date: 3/20/19
 Start Time: 10:10AM
 End Time: 10:30AM
 Duration: 20min.

Leq (dBA): 56.0

Traffic Data: 20 Minute Roadway

	Leesburg Pike		Reston PKWY	
Direction	WB	EB	NB	SB
Traffic Total:	346	493	73	114
Cars	322	474	71	107
MT	14	13	2	6
HT	10	6	1	1

Atmospheric Data
Wind Speed (mph) 6mph
Temp. (°F) 51
Humidity (%) 28

Site Data: Site Surface: Grass Grade: _____ Pavement Type: Average



Notes: Periodic construction noises: did not dominate the noise environment.
 Occasional Air plane fly overs that also did not dominate the noise environment



Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)
1	10:10:00 AM	58.1	21	10:20:00 AM	57.2	41			61		
2	10:10:30 AM	56.3	22	10:20:30 AM	52.4	42			62		
3	10:11:00 AM	59.1	23	10:21:00 AM	54.2	43			63		
4	10:11:30 AM	56.3	24	10:21:30 AM	55.5	44			64		
5	10:12:00 AM	55.9	25	10:22:00 AM	59.4	45			65		
6	10:12:30 AM	52.2	26	10:22:30 AM	54.6	46			66		
7	10:13:00 AM	57.3	27	10:23:00 AM	53.8	47			67		
8	10:13:30 AM	57.8	28	10:23:30 AM	59.6	48			68		
9	10:14:00 AM	57.1	29	10:24:00 AM	54.7	49			69		
10	10:14:30 AM	54.1	30	10:24:30 AM	48.9	50			70		
11	10:15:00 AM	53.8	31	10:25:00 AM	52.4	51			71		
12	10:15:30 AM	56.6	32	10:25:30 AM	58.9	52			72		
13	10:16:00 AM	56.2	33	10:26:00 AM	56.4	53			73		
14	10:16:30 AM	52.6	34	10:26:30 AM	50.9	54			74		
15	10:17:00 AM	56.5	35	10:27:00 AM	52.8	55			75		
16	10:17:30 AM	57.7	36	10:27:30 AM	55	56			76		
17	10:18:00 AM	55.4	37	10:28:00 AM	57.2	57			77		
18	10:18:30 AM	55.3	38	10:28:30 AM	53	58			78		
19	10:19:00 AM	54.3	39	10:29:00 AM	55.1	59			79		
20	10:19:30 AM	55.5	40	10:29:30 AM	56.2	60			80		

Route 7 Field Data Sheets

Site # **C2** Description : 11270 Stones Throw Dr

Done By: **EJA, ERZ**

Meter: **3**

Monitoring Data:

Date: 3/20/19
 Start Time: 10:10AM
 End Time: 10:30AM
 Duration: 20min.

Leq (dBA) **56.4**

Traffic Data: 20 Minute Roadway

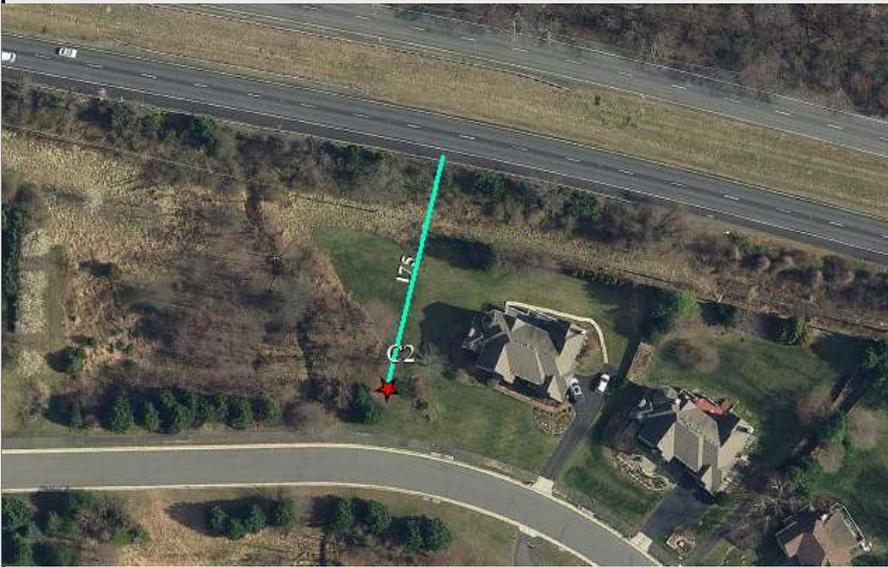
Direction	Leesburg Pike		Reston PKWY	
	WB	EB	NB	SB
Traffic Total:	346	493	73	114
Cars	322	474	71	107
MT	14	13	2	6
HT	10	6	1	1

Site Data: Site Surface: Grass Grade: _____ Pavement Type: Average

Atmospheric Data
Wind Speed (mph) 6mph
Temp. (°F) 51
Humidity (%) 28



Notes:
 Periodic construction noises: did not dominate the noise environment.
 Occasional Air plane fly overs that also did not dominate the noise environment
 Rather quiet could hear birds chirping over road noise.
 Neighbor had an electric predator noise maker to keep birds off porch that would go off periodically.



Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)
1	10:10:00 AM	54.7	21	10:20:00 AM	53.8	41			61		
2	10:10:30 AM	54.9	22	10:20:30 AM	55.3	42			62		
3	10:11:00 AM	54.9	23	10:21:00 AM	54	43			63		
4	10:11:30 AM	59.4	24	10:21:30 AM	56.1	44			64		
5	10:12:00 AM	55.5	25	10:22:00 AM	56.6	45			65		
6	10:12:30 AM	53.7	26	10:22:30 AM	55.3	46			66		
7	10:13:00 AM	54.9	27	10:23:00 AM	50.9	47			67		
8	10:13:30 AM	56.1	28	10:23:30 AM	53.7	48			68		
9	10:14:00 AM	59	29	10:24:00 AM	59.9	49			69		
10	10:14:30 AM	55.6	30	10:24:30 AM	60.2	50			70		
11	10:15:00 AM	53.1	31	10:25:00 AM	54.6	51			71		
12	10:15:30 AM	55.1	32	10:25:30 AM	60.1	52			72		
13	10:16:00 AM	57.8	33	10:26:00 AM	60	53			73		
14	10:16:30 AM	55.4	34	10:26:30 AM	55.2	54			74		
15	10:17:00 AM	50.4	35	10:27:00 AM	51.1	55			75		
16	10:17:30 AM	56	36	10:27:30 AM	59.2	56			76		
17	10:18:00 AM	57	37	10:28:00 AM	56.8	57			77		
18	10:18:30 AM	53.2	38	10:28:30 AM	54.5	58			78		
19	10:19:00 AM	57.8	39	10:29:00 AM	53.3	59			79		
20	10:19:30 AM	56.9	40	10:29:30 AM	56.7	60			80		

Route 7 Field Data Sheets

Site # **F3** Description : 1222 Colvin Meadows Ln

Done By: **EJA, ERZ**

Meter: **2**

Monitoring Data:

Date: 3/20/19
 Start Time: 11:37 AM
 End Time: 11:57 AM
 Duration: 20min

Leq (dBA) **56.0**

Traffic Data: 20 Minute Roadway

Direction	Route 7		Colvin Run		Carpers Farm	
	EB	WB	NB	SB	NB	SB
Traffic Total:	562	403	36	24	9	10
Cars	541	376	34	20	9	10
MT	16	17	2	4		
HT	5	10				

Atmospheric Data
Wind Speed (mph) 5
Temp. (°F) 53
Humidity (%) 27

Site Data: Site Surface: Grass Grade: _____ Pavement Type: Average



Notes:



Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)
1	11:37:00 AM	49.3	21	11:47:00 AM	52.7	41			61		
2	11:37:30 AM	57.9	22	11:47:30 AM	56.9	42			62		
3	11:38:00 AM	58	23	11:48:00 AM	60.2	43			63		
4	11:38:30 AM	60.3	24	11:48:30 AM	58.7	44			64		
5	11:39:00 AM	49.2	25	11:49:00 AM	56.3	45			65		
6	11:39:30 AM	51.7	26	11:49:30 AM	55.5	46			66		
7	11:40:00 AM	57.3	27	11:50:00 AM	55.6	47			67		
8	11:40:30 AM	58.3	28	11:50:30 AM	53.7	48			68		
9	11:41:00 AM	54.2	29	11:51:00 AM	50.5	49			69		
10	11:41:30 AM	56.1	30	11:51:30 AM	55.1	50			70		
11	11:42:00 AM	57.8	31	11:52:00 AM	56.8	51			71		
12	11:42:30 AM	56.6	32	11:52:30 AM	52.9	52			72		
13	11:43:00 AM	49.9	33	11:53:00 AM	50.7	53			73		
14	11:43:30 AM	59.1	34	11:53:30 AM	54	54			74		
15	11:44:00 AM	58	35	11:54:00 AM	54.4	55			75		
16	11:44:30 AM	50.4	36	11:54:30 AM	55.1	56			76		
17	11:45:00 AM	53.4	37	11:55:00 AM	52.3	57			77		
18	11:45:30 AM	55.8	38	11:55:30 AM	56.6	58			78		
19	11:46:00 AM	53.7	39	11:56:00 AM	56.8	59			79		
20	11:46:30 AM	55	40	11:56:30 AM	57.3	60			80		

Route 7 Field Data Sheets

Site # **F4** Description : 9912 Hessick Court

Done By: **EJA, ERZ**

Meter: **3**

Monitoring Data:

Date: 3/20/19
 Start Time: 11:37 AM
 End Time: 11:57 AM
 Duration: 20min

Leq (dBA): 56.3

Traffic Data: 20 Minute Roadway

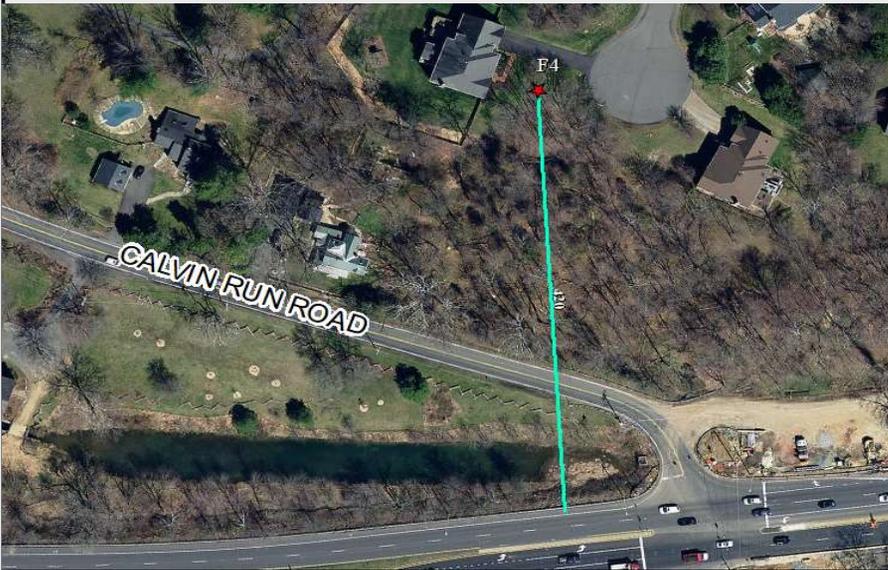
Direction	Route 7		Colvin Run		Carpers Farm	
	EB	WB	NB	SB	NB	SB
Traffic Total:	562	403	36	24	9	10
Cars	541	376	34	20	9	10
MT	16	17	2	4		
HT	5	10				

Atmospheric Data
Wind Speed (mph)
5
Temp. (°F)
53
Humidity (%)
27

Site Data: Site Surface: Grass Grade: _____ Pavement Type: Average



Notes: Site is located above roadway on a bluff like terrain feature. Semi steep grade below site to local road.



Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)
1	11:37:00 AM	55.7	21	11:47:00 AM	58.9	41			61		
2	11:37:30 AM	57.8	22	11:47:30 AM	55.9	42			62		
3	11:38:00 AM	56.5	23	11:48:00 AM	57.6	43			63		
4	11:38:30 AM	52	24	11:48:30 AM	53	44			64		
5	11:39:00 AM	55.2	25	11:49:00 AM	58.6	45			65		
6	11:39:30 AM	58.1	26	11:49:30 AM	58.9	46			66		
7	11:40:00 AM	56.3	27	11:50:00 AM	54.3	47			67		
8	11:40:30 AM	57.7	28	11:50:30 AM	53.9	48			68		
9	11:41:00 AM	56.5	29	11:51:00 AM	56.4	49			69		
10	11:41:30 AM	58.1	30	11:51:30 AM	55.1	50			70		
11	11:42:00 AM	53	31	11:52:00 AM	51.3	51			71		
12	11:42:30 AM	53.9	32	11:52:30 AM	50.1	52			72		
13	11:43:00 AM	60.4	33	11:53:00 AM	55.8	53			73		
14	11:43:30 AM	57.3	34	11:53:30 AM	57.1	54			74		
15	11:44:00 AM	55.1	35	11:54:00 AM	54.6	55			75		
16	11:44:30 AM	54.5	36	11:54:30 AM	53.2	56			76		
17	11:45:00 AM	53.6	37	11:55:00 AM	57.5	57			77		
18	11:45:30 AM	53.9	38	11:55:30 AM	57.1	58			78		
19	11:46:00 AM	56.9	39	11:56:00 AM	59.4	59			79		
20	11:46:30 AM	56	40	11:56:30 AM	51.8	60			80		

Route 7 Field Data Sheets

Site # **G4** Description : 1282 Middleton Court

Done By: **EJA, ERZ**

Meter: **6**

Monitoring Data:

Date: 3/20/19
 Start Time: 11:37 AM
 End Time: 11:57 AM
 Duration: 20min

Leq (dBA) **59.9**

Traffic Data: 20 Minute Roadway

Direction	Route 7		Colvin Run		Carpers Farm	
	EB	WB	NB	SB	NB	SB
Traffic Total:	562	403	36	24	9	10
Cars	541	376	34	20	9	10
MT	16	17	2	4		
HT	5	10				

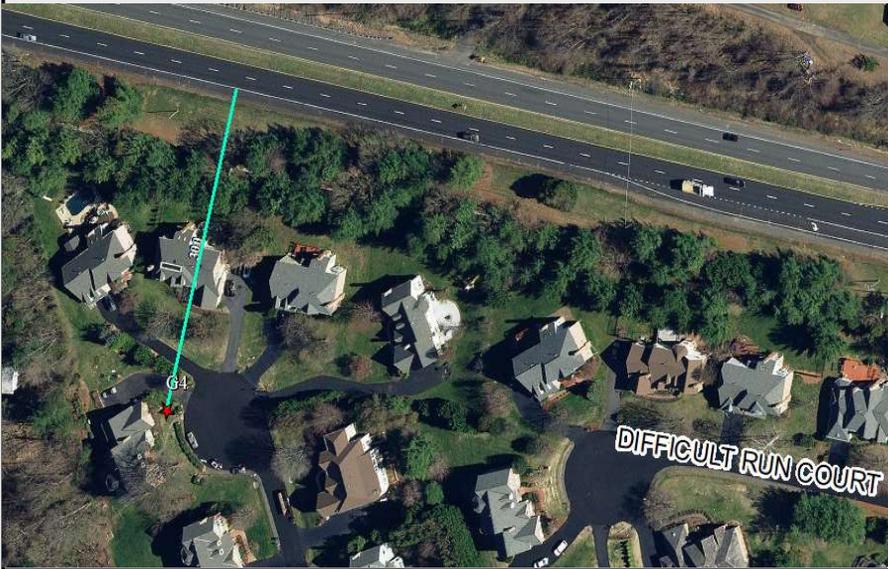
Atmospheric Data	
Wind Speed (mph)	5
Temp. (°F)	53
Humidity (%)	27

Site Data: Site Surface: Grass Grade: _____ Pavement Type: Average



NOTES: **Stump grinder and mulching activities at 1283 Middleton Court**
 Highway slightly audible (not a very loud area).

THIS SITE WAS OMITTED FROM VALIDATION DUE TO NON HIGHWAY NOISE CONTRIBUTIONS



Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)
1	11:37:00 AM	53.8	21	11:47:00 AM	61.9	41			61		
2	11:37:30 AM	49.7	22	11:47:30 AM	61.8	42			62		
3	11:38:00 AM	51.6	23	11:48:00 AM	61.9	43			63		
4	11:38:30 AM	49.3	24	11:48:30 AM	61.6	44			64		
5	11:39:00 AM	52.9	25	11:49:00 AM	62.2	45			65		
6	11:39:30 AM	52.6	26	11:49:30 AM	61.7	46			66		
7	11:40:00 AM	53.8	27	11:50:00 AM	62.1	47			67		
8	11:40:30 AM	57.1	28	11:50:30 AM	61.7	48			68		
9	11:41:00 AM	50.2	29	11:51:00 AM	61.6	49			69		
10	11:41:30 AM	54.5	30	11:51:30 AM	61.8	50			70		
11	11:42:00 AM	53.9	31	11:52:00 AM	61.7	51			71		
12	11:42:30 AM	55.1	32	11:52:30 AM	61.2	52			72		
13	11:43:00 AM	58.1	33	11:53:00 AM	61.3	53			73		
14	11:43:30 AM	59.2	34	11:53:30 AM	61.2	54			74		
15	11:44:00 AM	55.9	35	11:54:00 AM	61.6	55			75		
16	11:44:30 AM	56.8	36	11:54:30 AM	61.5	56			76		
17	11:45:00 AM	59.3	37	11:55:00 AM	61.9	57			77		
18	11:45:30 AM	61.7	38	11:55:30 AM	60.9	58			78		
19	11:46:00 AM	61.4	39	11:56:00 AM	61.4	59			79		
20	11:46:30 AM	61.8	40	11:56:30 AM	61.6	60			80		

Route 7 Field Data Sheets

Site # **G3** Description : 10237 Leesburg Pike

Done By: **EJA, ERZ**

Meter: **1**

Monitoring Data:

Date: 3/20/19
 Start Time: 11:37 AM
 End Time: 11:57 AM
 Duration: 20min

Leq (dBA) **56.7**

Traffic Data: 20 Minute

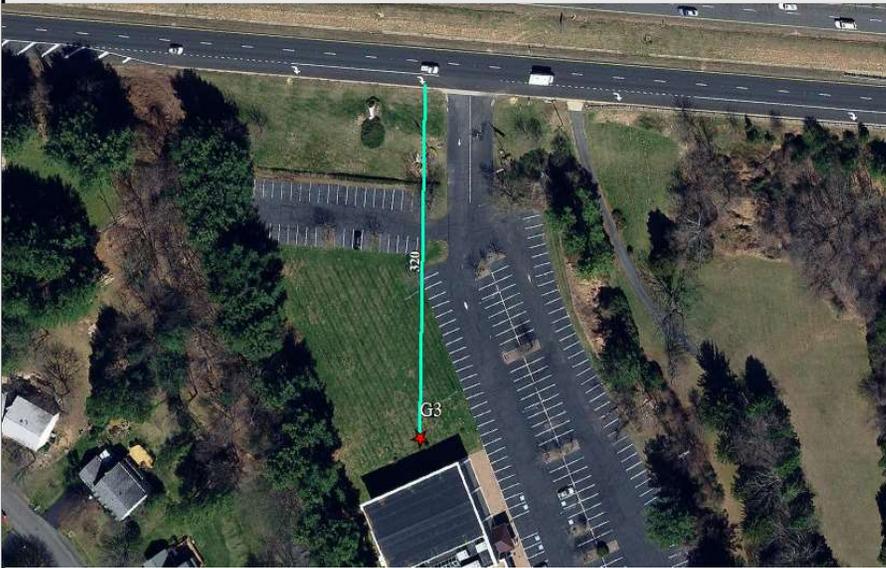
Roadway	Route 7		Colvin Run		Carpers Farm	
Direction	EB	WB	NB	SB	NB	SB
Traffic Total:	562	403	36	24	9	10
Cars	541	376	34	20	9	10
MT	16	17	2	4		
HT	5	10				

Atmospheric Data
Wind Speed (mph) 5
Temp. (°F) 53
Humidity (%) 27



Notes: Church has no outdoor use area in front of church on road side. Playground located on backside of facility.

Site Data: Site Surface: Grass Grade: _____ Pavement Type: Average



Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)
1	11:37:00 AM	49.5	21	11:47:00 AM	53.2	41			61		
2	11:37:30 AM	57.4	22	11:47:30 AM	54.8	42			62		
3	11:38:00 AM	57.5	23	11:48:00 AM	58.6	43			63		
4	11:38:30 AM	60	24	11:48:30 AM	60.1	44			64		
5	11:39:00 AM	55.1	25	11:49:00 AM	59.9	45			65		
6	11:39:30 AM	53.5	26	11:49:30 AM	53.3	46			66		
7	11:40:00 AM	57.8	27	11:50:00 AM	55.5	47			67		
8	11:40:30 AM	57.1	28	11:50:30 AM	56	48			68		
9	11:41:00 AM	56.4	29	11:51:00 AM	49.2	49			69		
10	11:41:30 AM	49.8	30	11:51:30 AM	54.9	50			70		
11	11:42:00 AM	60.2	31	11:52:00 AM	58.4	51			71		
12	11:42:30 AM	58.5	32	11:52:30 AM	58.2	52			72		
13	11:43:00 AM	53.4	33	11:53:00 AM	52.7	53			73		
14	11:43:30 AM	56	34	11:53:30 AM	50.2	54			74		
15	11:44:00 AM	58.6	35	11:54:00 AM	56.3	55			75		
16	11:44:30 AM	52	36	11:54:30 AM	56.9	56			76		
17	11:45:00 AM	54.8	37	11:55:00 AM	55.5	57			77		
18	11:45:30 AM	56.3	38	11:55:30 AM	58.2	58			78		
19	11:46:00 AM	56.3	39	11:56:00 AM	58.7	59			79		
20	11:46:30 AM	55.6	40	11:56:30 AM	58.6	60			80		

Route 7 Field Data Sheets

Site # H2 Description : 9320 Leesburg Pike

Done By: EJA, ERZ

Meter: 1

Monitoring Data:

Date 3/20/19
 Start Time 12:54 PM
 End Time 1:14 PM
 Duration 20min

Leq (dBA) **65.7**

Traffic Data: 20 Minute

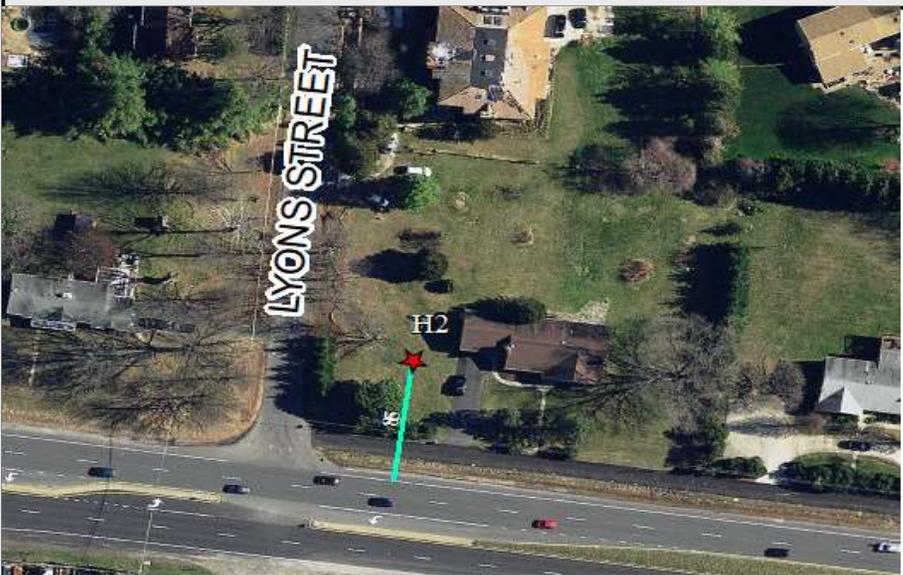
Direction	Route 7		S.					
	EB	WB	NB	SB	NB	SB		
Traffic Total:	495	523	68	32	17	41		
Cars	472	505	68	28	17	41		
MT	19	17		4				
HT	4	1						

Site Data: Site Surface: Grass Grade: _____ Pavement Type: Average

Atmospheric Data
Wind Speed (mph) 8
Temp. (°F) 53
Humidity (%) 27



Notes:



Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)
1	12:54:00 PM	73.8	21	1:04:00 PM	63.6	41			61		
2	12:54:30 PM	72	22	1:04:30 PM	64.7	42			62		
3	12:55:00 PM	60.2	23	1:05:00 PM	62.2	43			63		
4	12:55:30 PM	63.5	24	1:05:30 PM	65.6	44			64		
5	12:56:00 PM	64.8	25	1:06:00 PM	63	45			65		
6	12:56:30 PM	63.8	26	1:06:30 PM	60.9	46			66		
7	12:57:00 PM	65.6	27	1:07:00 PM	62.7	47			67		
8	12:57:30 PM	68.5	28	1:07:30 PM	63.7	48			68		
9	12:58:00 PM	64.8	29	1:08:00 PM	64.6	49			69		
10	12:58:30 PM	62.7	30	1:08:30 PM	66.5	50			70		
11	12:59:00 PM	66.1	31	1:09:00 PM	63.1	51			71		
12	12:59:30 PM	63.1	32	1:09:30 PM	67	52			72		
13	1:00:00 PM	64.8	33	1:10:00 PM	65.6	53			73		
14	1:00:30 PM	65.8	34	1:10:30 PM	64.1	54			74		
15	1:01:00 PM	64.7	35	1:11:00 PM	63.9	55			75		
16	1:01:30 PM	59.3	36	1:11:30 PM	64.8	56			76		
17	1:02:00 PM	66.3	37	1:12:00 PM	62.9	57			77		
18	1:02:30 PM	65	38	1:12:30 PM	64.2	58			78		
19	1:03:00 PM	64	39	1:13:00 PM	63.9	59			79		
20	1:03:30 PM	65.9	40	1:13:30 PM	64.2	60			80		

Route 7 Field Data Sheets

Site # M1 Description : 1426 Woodhurst Blvd

Done By: EJA, ERZ

Meter: → 1

Monitoring Data:

Date 3/20/19
 Start Time 1:42 PM
 End Time 2:02 PM
 Duration 20 min

Leq (dBA) 52.5

Traffic Data: 20 Minute

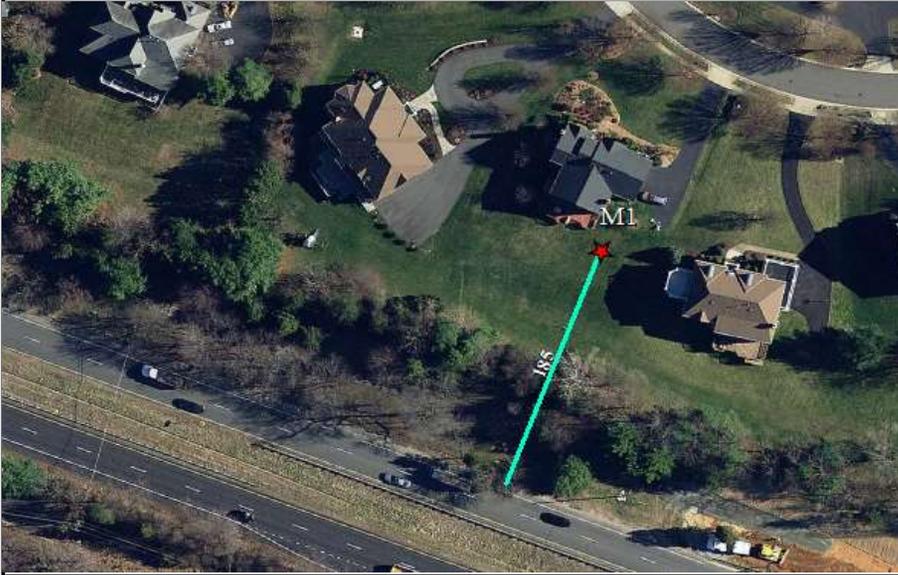
Roadway	Route 7		Lewinsville			
	EB	WB	NB	SB		
Direction	430	507	91	111		
Traffic Total:						
Cars	401	478	86	105		
MT	27	25	5	6		
HT	2	4				

Site Data: Site Surface: Grass Grade: _____ Pavement Type: Average

Atmospheric Data	
Wind Speed (mph)	8
Temp. (°F)	53
Humidity (%)	27



Notes: Site is quiet, terrain feature (berm) and a privacy fence around 8ft tall on berm reduce road noise.



Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)
1	1:42:00 PM	53.3	21	1:52:00 PM	49.8	41			61		
2	1:42:30 PM	50.2	22	1:52:30 PM	51.4	42			62		
3	1:43:00 PM	50.2	23	1:53:00 PM	53.7	43			63		
4	1:43:30 PM	48.3	24	1:53:30 PM	50.3	44			64		
5	1:44:00 PM	52.6	25	1:54:00 PM	48.4	45			65		
6	1:44:30 PM	51.6	26	1:54:30 PM	48.1	46			66		
7	1:45:00 PM	50.8	27	1:55:00 PM	48	47			67		
8	1:45:30 PM	48	28	1:55:30 PM	47.4	48			68		
9	1:46:00 PM	48.2	29	1:56:00 PM	53.1	49			69		
10	1:46:30 PM	49.7	30	1:56:30 PM	52.2	50			70		
11	1:47:00 PM	53.5	31	1:57:00 PM	50.3	51			71		
12	1:47:30 PM	55.5	32	1:57:30 PM	50	52			72		
13	1:48:00 PM	56.4	33	1:58:00 PM	48.6	53			73		
14	1:48:30 PM	52.1	34	1:58:30 PM	50	54			74		
15	1:49:00 PM	55.7	35	1:59:00 PM	55.1	55			75		
16	1:49:30 PM	50.5	36	1:59:30 PM	52.9	56			76		
17	1:50:00 PM	55.5	37	2:00:00 PM	50	57			77		
18	1:50:30 PM	56.7	38	2:00:30 PM	49.6	58			78		
19	1:51:00 PM	56.6	39	2:01:00 PM	49.3	59			79		
20	1:51:30 PM	49.4	40	2:01:30 PM	56.8	60			80		

Route 7 Field Data Sheets

Site # K1 Description : 9101 Lucky Estates Drive

Done By: EJA, ERZ

Meter: → 3

Monitoring Data:

Date 3/20/19
 Start Time 12:54 PM
 End Time 1:14 PM
 Duration 20min

Leq (dBA) 57.2

Traffic Data: 20 Minute Roadway

Direction	Route 7		S. Towlston		N. Towlston	
	EB	WB	NB	SB	NB	SB
Traffic Total:	495	523	68	32	17	41
Cars	472	505	68	28	17	41
MT	19	17		4		
HT	4	1				

Atmospheric Data
Wind Speed (mph)
8
Temp. (°F)
53
Humidity (%)
27



Notes:

Site Data: Site Surface: Grass Grade: Pavement Type: Average



Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)
1	12:54:00 PM	59.4	21	1:04:00 PM	57.5	41			61		
2	12:54:30 PM	53.6	22	1:04:30 PM	58.1	42			62		
3	12:55:00 PM	58.3	23	1:05:00 PM	55.7	43			63		
4	12:55:30 PM	58	24	1:05:30 PM	56.3	44			64		
5	12:56:00 PM	57.7	25	1:06:00 PM	57.2	45			65		
6	12:56:30 PM	55.5	26	1:06:30 PM	54.5	46			66		
7	12:57:00 PM	56.7	27	1:07:00 PM	55.6	47			67		
8	12:57:30 PM	58.2	28	1:07:30 PM	57.3	48			68		
9	12:58:00 PM	58.5	29	1:08:00 PM	53.9	49			69		
10	12:58:30 PM	49.4	30	1:08:30 PM	50.6	50			70		
11	12:59:00 PM	56.1	31	1:09:00 PM	60.7	51			71		
12	12:59:30 PM	56.7	32	1:09:30 PM	59.3	52			72		
13	1:00:00 PM	57.4	33	1:10:00 PM	58	53			73		
14	1:00:30 PM	51.1	34	1:10:30 PM	57.2	54			74		
15	1:01:00 PM	57.2	35	1:11:00 PM	54.7	55			75		
16	1:01:30 PM	60.5	36	1:11:30 PM	57.6	56			76		
17	1:02:00 PM	57.4	37	1:12:00 PM	58.4	57			77		
18	1:02:30 PM	51.7	38	1:12:30 PM	53.7	58			78		
19	1:03:00 PM	59.2	39	1:13:00 PM	57.9	59			79		
20	1:03:30 PM	59.4	40	1:13:30 PM	58.2	60			80		

Route 7 Field Data Sheets

Site # J1 Description : 1308 Trap Road

Done By: EJA, ERZ

Meter: 2

Monitoring Data:

Date 3/20/19
 Start Time 12:54 PM
 End Time 1:14 PM
 Duration 20min

Leq (dBA) 56.5

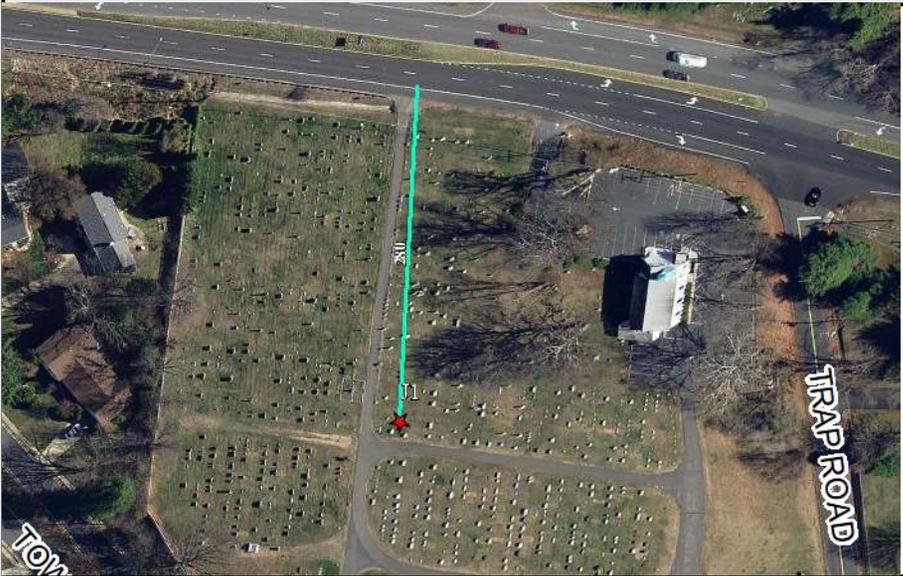
Traffic Data: 20 Minute Roadway

	Route 7		S. Towlston		N. Towlston	
Direction	EB	WB	NB	SB	NB	SB
Traffic Total:	495	523	68	32	17	41
Cars	472	505	68	28	17	41
MT	19	17		4		
HT	4	1				

Atmospheric Data
Wind Speed (mph) 8
Temp. (°F) 53
Humidity (%) 27



Notes:



Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)	Num	Time	Lav (dBA)
1	12:54:00 PM	61.7	21	1:04:00 PM	55.7	41			61		
2	12:54:30 PM	58.4	22	1:04:30 PM	49.6	42			62		
3	12:55:00 PM	57.6	23	1:05:00 PM	54	43			63		
4	12:55:30 PM	56.7	24	1:05:30 PM	55.5	44			64		
5	12:56:00 PM	54.4	25	1:06:00 PM	54.3	45			65		
6	12:56:30 PM	60.2	26	1:06:30 PM	50.9	46			66		
7	12:57:00 PM	61.6	27	1:07:00 PM	51.3	47			67		
8	12:57:30 PM	59.3	28	1:07:30 PM	52.7	48			68		
9	12:58:00 PM	61.4	29	1:08:00 PM	54.3	49			69		
10	12:58:30 PM	61.7	30	1:08:30 PM	56.4	50			70		
11	12:59:00 PM	52.2	31	1:09:00 PM	57.3	51			71		
12	12:59:30 PM	55.1	32	1:09:30 PM	56.1	52			72		
13	1:00:00 PM	52.9	33	1:10:00 PM	55.1	53			73		
14	1:00:30 PM	50	34	1:10:30 PM	52.3	54			74		
15	1:01:00 PM	54.4	35	1:11:00 PM	53.2	55			75		
16	1:01:30 PM	55.1	36	1:11:30 PM	55.6	56			76		
17	1:02:00 PM	53.8	37	1:12:00 PM	54.6	57			77		
18	1:02:30 PM	51.4	38	1:12:30 PM	52.3	58			78		
19	1:03:00 PM	56.7	39	1:13:00 PM	54.9	59			79		
20	1:03:30 PM	54.6	40	1:13:30 PM	56	60			80		

Filename.. ..MON1
Test Locat ion..... ..VA 7
Employee N ame..... ..ERZ, EJA
Employee N umber..... ..
DepartmentENV
1003 Autumn Mist Lane

Calibrator Type..... ..
Calibrator Cal. Date ..

METROSONIC S db-3080 V1.20 SERIAL # 5093
REPORT PRINTED ON 03 /21/19 at 15:36 :07

User ID: _

LOGGING STARTED..... .03/20/19 at 09 :41:00
TOTAL LOGGING TIME.. .0 DAYS 01:01:2 4
LOGGING STOPPED..... .03/20/19 at 10 :42:24
TOTAL INTERVAL RVALS..... 0.123
INTERVAL LENGTH..... .00:00:30

AUTO STOP.NO
CLOCK SYNC H..... .YES
RESPONSE RATE..... .SLOW
FILTER....A WT.

PRE-TEST CALIBRATION TIME...03/20/ 19 AT 09:3 9:10
PRE-TEST CALIBRATION RANGE...41.0 TO 141.0 dB
POST-TEST CALIBRATION NOT DONE
CUTOFF USED FOR TIME HISTORY Lav... NONE

<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE RATE..... ..3dB
CUTOFFS... .. 80dB 90dB
CEILING... ..115dB

DOSE CRITE RION LEVEL ... 90dB
 DOSE CRITE RION LENGT H.. 8 HOURS

Lav..... 60. 4dB
 Lav (80). 41. 0dB
 Lav (90). 41. 0dB
 SEL..... 96. 0dB

TWA..... 51. 6dB
 TWA (80). 41. 0dB
 TWA (90). 41. 0dB

Lmax..... 70. 6dB 03/20/19 a t 09:48:15
 Lpk.....UNDER RANGE
 TIME OVER 115dB...00 :00:00.00

DOSE (80) 0.00%
 PROJ. DOSE (80).. 0.00%
 DOSE (90) 0.00%
 PROJ. DOSE (90).. 0.00%

<<< TIME H ISTORY REP ORT FOR TEST NU MBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
3/20/2019					
9:41:00	57.4		62 UNDER	60	52 549540.9
9:41:30	55.8		60.1 UNDER	57	51 380189.4
9:42:00	60.1		61.8 UNDER	61	57 1023293
9:42:30	60.1		62 UNDER	61	58 1023293
9:43:00	58.9		60.3 UNDER	60	57 776247.1
9:43:30	60.9		62.7 UNDER	62	59 1230269
9:44:00	61.7		63.6 UNDER	63	59 1479108
9:44:30	63.4		66.9 UNDER	66	59 2187762
9:45:00	58.4		59.7 UNDER	59	57 691831
9:45:30	59.2		62.8 UNDER	61	57 831763.8
9:46:00	61.1		62 UNDER	61	59 1288250
9:46:30	63.6		65.6 UNDER	65	60 2290868
9:47:00	61.8		68 UNDER	64	59 1513561
9:47:30	63.3		65.6 UNDER	64	62 2137962
9:48:00	65.1		70.6 UNDER	67	62 3235937
9:48:30	61.6		62.9 UNDER	62	60 1445440
9:49:00	60		61.8 UNDER	60	58 1000000
9:49:30	61		62.1 UNDER	62	59 1258925
9:50:00	61.7		63.7 UNDER	62	60 1479108
9:50:30	60.8		62 UNDER	61	59 1202264

9:51:00	62.1	63.3 UNDER	63	60	1621810
9:51:30	62.7	64.5 UNDER	63	61	1862087
9:52:00	62.9	66.8 UNDER	65	59	1949845
9:52:30	59.4	60.2 UNDER	60	58	870963.6
9:53:00	59.9	61.4 UNDER	61	58	977237.2
9:53:30	61.5	62.4 UNDER	61	60	1412538
9:54:00	63.4	66.8 UNDER	65	61	2187762
9:54:30	60.5	62.9 UNDER	60	59	1122018
9:55:00	61.9	65.2 UNDER	64	59	1548817
9:55:30	61	62.4 UNDER	62	59	1258925
9:56:00	61.2	63.5 UNDER	62	59	1318257
9:56:30	63.1	66 UNDER	65	60	2041738
9:57:00	62.4	67.2 UNDER	64	59	1737801
9:57:30	60.9	61.9 UNDER	61	60	1230269
9:58:00	60.7	62.8 UNDER	61	59	1174898
9:58:30	61.5	62.9 UNDER	62	58	1412538
9:59:00	61.8	65.6 UNDER	63	59	1513561
9:59:30	61.4	63.8 UNDER	62	60	1380384
10:00:00	60.6	61.6 UNDER	61	59	1148154
10:00:30	61	63.2 UNDER	62	59	1258925
10:01:00	61.4	65.6 UNDER	64	59	1380384
10:01:30	60.1	65.3 UNDER	62	58	1023293
10:02:00	62.2	63.6 UNDER	63	61	1659587
10:02:30	60.2	61.2 UNDER	60	59	1047129
10:03:00	60.8	62.1 UNDER	61	59	1202264
10:03:30	60.7	62 UNDER	61	59	1174898
10:04:00	60.4	62.5 UNDER	61	58	1096478
10:04:30	59.9	61.3 UNDER	60	58	977237.2
10:05:00	61.6	64.9 UNDER	64	59	1445440
10:05:30	63.3	66.6 UNDER	65	59	2137962
10:06:00	61.3	62.5 UNDER	62	59	1348963
10:06:30	61.8	62.8 UNDER	62	60	1513561
10:07:00	61.9	63.7 UNDER	62	59	1548817
10:07:30	62.3	63.4 UNDER	63	60	1698244
10:08:00	59.9	61.8 UNDER	61	57	977237.2
10:08:30	58.5	59.4 UNDER	58	57	707945.8
10:09:00	60.6	62.5 UNDER	62	58	1148154
10:09:30	61.7	62.7 UNDER	62	60	1479108
10:10:00	62.5	64.1 UNDER	63	60	1778279
10:10:30	59.6	60.9 UNDER	60	58	912010.8
10:11:00	61.7	63.7 UNDER	63	58	1479108
10:11:30	62	65.4 UNDER	64	60	1584893
10:12:00	62.2	63 UNDER	62	60	1659587
10:12:30	59.8	61.2 UNDER	60	58	954992.6
10:13:00	58.8	60.7 UNDER	59	57	758577.6
10:13:30	62.6	65.3 UNDER	64	60	1819701

10:14:00	61.8	64.1 UNDER	63	59	1513561
10:14:30	60.5	61.4 UNDER	61	58	1122018
10:15:00	59.7	61.2 UNDER	60	57	933254.3
10:15:30	62.2	64 UNDER	63	60	1659587
10:16:00	62.3	64.1 UNDER	63	60	1698244
10:16:30	60.2	61.2 UNDER	61	58	1047129
10:17:00	60.8	62.1 UNDER	61	59	1202264
10:17:30	63.6	68.5 UNDER	66	60	2290868
10:18:00	60.7	61.6 UNDER	61	59	1174898
10:18:30	60.3	62 UNDER	61	57	1071519
10:19:00	62.1	64.3 UNDER	63	60	1621810
10:19:30	63.1	66.5 UNDER	65	60	2041738
10:20:00	62.2	63.6 UNDER	63	60	1659587
10:20:30	58.7	60.4 UNDER	60	57	741310.2
10:21:00	60.4	62.4 UNDER	61	57	1096478
10:21:30	62.8	63.9 UNDER	63	59	1905461
10:22:00	58.4	61.4 UNDER	59	54	691831
10:22:30	53.1	57.2 UNDER	56	47	204173.8
10:23:00	56.1	60 UNDER	58	51	407380.3
10:23:30	60.4	66 UNDER	65	52	1096478
10:24:00	57.3	59.2 UNDER	58	54	537031.8
10:24:30	54.3	60.4 UNDER	59	46	269153.5
10:25:00	54.7	57.9 UNDER	56	47	295120.9
10:25:30	59.6	62.4 UNDER	61	54	912010.8
10:26:00	59.7	62 UNDER	61	55	933254.3
10:26:30	52	56.6 UNDER	55	45	158489.3
10:27:00	54.5	56.5 UNDER	56	49	281838.3
10:27:30	56.5	59.4 UNDER	58	53	446683.6

10:28:00	57.2	59.7 UNDER	57	55	524807.5
10:28:30	54.2	59.7 UNDER	57	47	263026.8
10:29:00	57.2	59.8 UNDER	59	54	524807.5
10:29:30	60.1	62.1 UNDER	61	56	1023293
10:30:00	59.7	63.3 UNDER	61	54	933254.3
10:30:30	57.8	64.8 UNDER	61	49	602559.6
10:31:00	53.4	57.6 UNDER	56	50	218776.2
10:31:30	60	62.5 UNDER	61	56	1000000
10:32:00	58.4	61.8 UNDER	61	49	691831
10:32:30	49	53.2 UNDER	51	45	79432.82
10:33:00	55.8	59.4 UNDER	59	46	380189.4
10:33:30	59	62.1 UNDER	61	54	794328.2
10:34:00	54.3	59.1 UNDER	56	52	269153.5
10:34:30	49.1	53.7 UNDER	53	43	81283.05
10:35:00	54.4	58.7 UNDER	58	43	275422.9
10:35:30	62.1	66.4 UNDER	65	54	1621810
10:36:00	61.5	66.4 UNDER	63	57	1412538
10:36:30	56.7	61.2 UNDER	60	53	467735.1
10:37:00	53.7	56.9 UNDER	56	48	234422.9
10:37:30	58.8	63 UNDER	62	55	758577.6
10:38:00	55.7	59.6 UNDER	58	51	371535.2
10:38:30	51.6	56.4 UNDER	56	45	144544
10:39:00	55.9	60.4 UNDER	59	46	389045.1
10:39:30	59	60.8 UNDER	60	56	794328.2
10:40:00	57.3	59.9 UNDER	59	50	537031.8
10:40:30	49	52.6 UNDER	51	46	79432.82
10:41:00	52.3	55.4 UNDER	54	46	169824.4
10:41:30	58.4	61.9 UNDER	61	52	691831
10:42:00	61.4	63.2 UNDER	62	57	1380384

Filename.. ..MON2~1
Test Locat ion..... ..VA 7
Employee N ame..... ..ERZ, EJA
Employee N umber..... ..
DepartmentENV
11582 Cdar Chase Rd

Calibrator Type..... ..
Calibrator Cal. Date ..

METROSONIC S db-3080 V1.12 SERIAL # 3895
REPORT PRI NTED ON 03 /21/19 at 15:37 :30

User ID: _

LOGGING ST ARTED..... .03/20/19 at 09 :27:00
TOTAL LOGG ING TIME.. .0 DAYS 01:09:3 5
LOGGING ST OPPED..... .03/20/19 at 10 :36:35
TOTAL INTE RVALS..... 0.14
INTERVAL L ENGTH..... .00:00:30

AUTO STOP.NO
CLOCK SYNC H..... .YES
RESPONSE R ATE..... .SLOW
FILTER....A WT.

PRE-TEST C ALIBRATION TIME...03/20/ 19 AT 09:2 4:41
PRE-TEST C ALIBRATION RANGE...40.1 T O 140.1 dB
POST-TEST CALIBRATIO N NOT DONE
CUTOFF USE D FOR TIME HISTORY Lav... NONE

<<< SUMMAR Y REPORT F OR TEST NUMBER 1 OF 1 >>>

EXCHANGE R ATE..... ..3dB
CUTOFFS... .. 80dB 90dB
CEILING... ..115dB

DOSE CRITE RION LEVEL ... 90dB
 DOSE CRITE RION LENGT H.. 8 HOURS

Lav..... 56. 0dB
 Lav (80). 40. 1dB
 Lav (90). 40. 1dB
 SEL..... 92. 1dB

TWA..... 47. 7dB
 TWA (80). 40. 1dB
 TWA (90). 40. 1dB

Lmax..... 74. 4dB 03/20/19 a t 10:36:33
 Lpk.....UNDER RANGE
 TIME OVER 115dB...00 :00:00.00

DOSE (80) 0.00%
 PROJ. DOSE (80).. 0.00%
 DOSE (90) 0.00%
 PROJ. DOSE (90).. 0.00%

<<< TIME H IISTORY REP ORT FOR TEST NU MBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA	
3/20/2019						
9:27:00		54.2	60.6 UNDER	55.1	51.1	263026.8
9:27:30		57.4	59 UNDER	58.1	55.1	549540.9
9:28:00		55.9	59.2 UNDER	58.1	52.1	389045.1
9:28:30		54.4	56.6 UNDER	55.1	52.1	275422.9
9:29:00		55.6	57.4 UNDER	57.1	54.1	363078.1
9:29:30		57.8	59.6 UNDER	59.1	55.1	602559.6
9:30:00		56.7	60.6 UNDER	59.1	50.1	467735.1
9:30:30		51.5	54.6 UNDER	52.1	49.1	141253.8
9:31:00		56.6	57.8 UNDER	57.1	54.1	457088.2
9:31:30		55.5	56.5 UNDER	56.1	54.1	354813.4
9:32:00		55	56.7 UNDER	56.1	53.1	316227.8
9:32:30		54.4	57 UNDER	56.1	52.1	275422.9
9:33:00		55.8	58.3 UNDER	57.1	53.1	380189.4
9:33:30		56.5	58.2 UNDER	57.1	53.1	446683.6
9:34:00		53.2	55.1 UNDER	54.1	51.1	208929.6
9:34:30		53.4	55 UNDER	54.1	51.1	218776.2
9:35:00		54.7	56.2 UNDER	56.1	52.1	295120.9
9:35:30		55.6	56.6 UNDER	56.1	52.1	363078.1
9:36:00		57.5	59 UNDER	58.1	56.1	562341.3
9:36:30		59.5	64.1 UNDER	63.1	53.1	891250.9

9:37:00	54.7	56.2 UNDER	55.1	52.1	295120.9
9:37:30	52	55.8 UNDER	55.1	49.1	158489.3
9:38:00	52.8	56.6 UNDER	55.1	50.1	190546.1
9:38:30	55.7	58.2 UNDER	57.1	51.1	371535.2
9:39:00	53.9	57.7 UNDER	56.1	51.1	245470.9
9:39:30	57.5	59.8 UNDER	59.1	55.1	562341.3
9:40:00	56.8	58.6 UNDER	57.1	54.1	478630.1
9:40:30	56.4	57.4 UNDER	57.1	54.1	436515.8
9:41:00	52.9	54.6 UNDER	54.1	49.1	194984.5
9:41:30	50.7	54.2 UNDER	53.1	49.1	117489.8
9:42:00	53.4	54.6 UNDER	54.1	51.1	218776.2
9:42:30	54.3	56.2 UNDER	55.1	52.1	269153.5
9:43:00	55.8	58.6 UNDER	58.1	52.1	380189.4
9:43:30	56.6	58.7 UNDER	58.1	55.1	457088.2
9:44:00	56.3	57.4 UNDER	57.1	55.1	426579.5
9:44:30	56.3	58.9 UNDER	58.1	50.1	426579.5
9:45:00	51.3	56.6 UNDER	53.1	48.1	134896.3
9:45:30	52.1	53.8 UNDER	53.1	50.1	162181
9:46:00	56.7	60.2 UNDER	57.1	53.1	467735.1
9:46:30	57.2	60.2 UNDER	59.1	52.1	524807.5
9:47:00	56.5	60 UNDER	59.1	52.1	446683.6
9:47:30	57.2	58.6 UNDER	58.1	55.1	524807.5
9:48:00	59	62.5 UNDER	61.1	55.1	794328.2
9:48:30	55.9	61 UNDER	59.1	51.1	389045.1
9:49:00	54.4	56.3 UNDER	55.1	51.1	275422.9
9:49:30	55.6	57.7 UNDER	57.1	53.1	363078.1
9:50:00	55.2	56.6 UNDER	56.1	53.1	331131.1
9:50:30	55.1	56.6 UNDER	56.1	53.1	323593.7
9:51:00	56.5	57.7 UNDER	57.1	55.1	446683.6
9:51:30	56.8	60.2 UNDER	58.1	54.1	478630.1
9:52:00	54.6	58.6 UNDER	56.1	51.1	288403.2
9:52:30	52.4	53.8 UNDER	53.1	50.1	173780.1
9:53:00	54.4	57.8 UNDER	56.1	50.1	275422.9
9:53:30	57.2	61.4 UNDER	60.1	54.1	524807.5
9:54:00	58.8	60.2 UNDER	59.1	55.1	758577.6
9:54:30	53.8	55.6 UNDER	55.1	52.1	239883.3
9:55:00	54.3	55.9 UNDER	55.1	52.1	269153.5
9:55:30	54.9	57.8 UNDER	57.1	51.1	309029.5
9:56:00	55.9	63 UNDER	58.1	51.1	389045.1
9:56:30	56.1	59 UNDER	58.1	52.1	407380.3
9:57:00	55.5	56.8 UNDER	56.1	53.1	354813.4
9:57:30	56.2	59.4 UNDER	56.1	55.1	416869.4
9:58:00	55.6	57.4 UNDER	56.1	54.1	363078.1
9:58:30	55.9	57.8 UNDER	57.1	53.1	389045.1
9:59:00	57.1	60.2 UNDER	59.1	53.1	512861.4
9:59:30	53.7	56.7 UNDER	55.1	51.1	234422.9
10:00:00	55.9	57 UNDER	56.1	53.1	389045.1

10:00:30	53.1	54.6 UNDER	54.1	51.1	204173.8
10:01:00	54.8	56.2 UNDER	55.1	53.1	301995.2
10:01:30	58.6	67.8 UNDER	63.1	51.1	724436
10:02:00	56	57.8 UNDER	57.1	53.1	398107.2
10:02:30	54.3	57 UNDER	55.1	50.1	269153.5
10:03:00	53.7	56.2 UNDER	55.1	51.1	234422.9
10:03:30	53.1	54.6 UNDER	54.1	51.1	204173.8
10:04:00	54.2	55 UNDER	54.1	53.1	263026.8
10:04:30	52.4	53.8 UNDER	53.1	50.1	173780.1
10:05:00	54.4	58.2 UNDER	56.1	51.1	275422.9
10:05:30	56.4	58.3 UNDER	58.1	53.1	436515.8
10:06:00	54.2	56.2 UNDER	55.1	52.1	263026.8
10:06:30	57.6	62.2 UNDER	60.1	52.1	575439.9
10:07:00	55.2	57 UNDER	57.1	52.1	331131.1
10:07:30	56.5	57.4 UNDER	57.1	55.1	446683.6
10:08:00	54.5	56.7 UNDER	56.1	52.1	281838.3
10:08:30	55.9	61.8 UNDER	60.1	50.1	389045.1
10:09:00	56.1	57.6 UNDER	57.1	54.1	407380.3
10:09:30	56.2	58.2 UNDER	57.1	54.1	416869.4
10:10:00	58.1	59.6 UNDER	59.1	55.1	645654.2
10:10:30	56.3	63.8 UNDER	57.1	53.1	426579.5
10:11:00	59.1	64.2 UNDER	61.1	56.1	812830.5
10:11:30	56.3	58.6 UNDER	57.1	54.1	426579.5
10:12:00	55.9	57 UNDER	56.1	53.1	389045.1
10:12:30	52.2	54.2 UNDER	53.1	51.1	165958.7
10:13:00	57.3	63.8 UNDER	61.1	51.1	537031.8
10:13:30	57.8	60.5 UNDER	59.1	56.1	602559.6

10:14:00	57.1	59 UNDER	58.1	56.1	512861.4
10:14:30	54.1	56.6 UNDER	56.1	50.1	257039.6
10:15:00	53.8	56.6 UNDER	56.1	50.1	239883.3
10:15:30	56.6	58.6 UNDER	57.1	55.1	457088.2
10:16:00	56.2	57.4 UNDER	56.1	54.1	416869.4
10:16:30	52.6	54.8 UNDER	54.1	49.1	181970.1
10:17:00	56.5	57.8 UNDER	57.1	54.1	446683.6
10:17:30	57.7	59.3 UNDER	58.1	55.1	588843.7
10:18:00	55.4	57 UNDER	56.1	53.1	346736.9
10:18:30	55.3	58.2 UNDER	57.1	51.1	338844.2
10:19:00	54.3	55.4 UNDER	55.1	53.1	269153.5
10:19:30	55.5	58.2 UNDER	57.1	53.1	354813.4
10:20:00	57.2	59.8 UNDER	59.1	52.1	524807.5
10:20:30	52.4	53.8 UNDER	53.1	50.1	173780.1
10:21:00	54.2	56 UNDER	55.1	51.1	263026.8
10:21:30	55.5	57.7 UNDER	57.1	51.1	354813.4
10:22:00	59.4	66.2 UNDER	65.1	50.1	870963.6
10:22:30	54.6	60.6 UNDER	59.1	49.1	288403.2
10:23:00	53.8	56.6 UNDER	55.1	50.1	239883.3
10:23:30	59.6	62.6 UNDER	62.1	56.1	912010.8
10:24:00	54.7	57.4 UNDER	56.1	50.1	295120.9
10:24:30	48.9	50.7 UNDER	49.1	47.1	77624.71
10:25:00	52.4	54.2 UNDER	53.1	49.1	173780.1
10:25:30	58.9	61.8 UNDER	61.1	53.1	776247.1
10:26:00	56.4	57.4 UNDER	57.1	53.1	436515.8
10:26:30	50.9	53.8 UNDER	52.1	49.1	123026.9
10:27:00	52.8	54.6 UNDER	54.1	51.1	190546.1
10:27:30	55	56.6 UNDER	56.1	53.1	316227.8
10:28:00	57.2	58.4 UNDER	58.1	53.1	524807.5
10:28:30	53	59.4 UNDER	56.1	49.1	199526.2
10:29:00	55.1	57.6 UNDER	57.1	50.1	323593.7
10:29:30	56.2	61.4 UNDER	59.1	53.1	416869.4
10:30:00	54	55 UNDER	54.1	53.1	251188.6
10:30:30	57.3	63 UNDER	60.1	51.1	537031.8
10:31:00	54.8	57.8 UNDER	57.1	51.1	301995.2
10:31:30	56.5	58.1 UNDER	57.1	54.1	446683.6
10:32:00	53.5	54.6 UNDER	54.1	52.1	223872.1
10:32:30	49.8	51.9 UNDER	51.1	48.1	95499.26
10:33:00	55.6	58.6 UNDER	58.1	50.1	363078.1
10:33:30	55.2	58.2 UNDER	57.1	52.1	331131.1
10:34:00	53.6	55.4 UNDER	54.1	50.1	229086.8
10:34:30	48.9	50.6 UNDER	49.1	47.1	77624.71
10:35:00	51.2	54 UNDER	53.1	48.1	131825.7
10:35:30	63	69.8 UNDER	68.1	53.1	1995262
10:36:00	62.3	69 UNDER	66.1	55.1	1698244
10:36:30	70	74.4 UNDER	73.1	56.1	10000000

Filename.. ..MON3
Test Locat ion..... ..VA 7
Employee N ame..... ..ERZ, EJA
Employee N umber..... ..
DepartmentENV
11270 Ston es Throw

Calibrator Type..... ..
Calibrator Cal. Date ..

METROSONIC S db-3080 V1.12 SERIAL # 3897
REPORT PRI NTED ON 03 /21/19 at 15:37 :45

User ID: _

LOGGING ST ARTED..... .03/20/19 at 09 :56:30
TOTAL LOGG ING TIME.. .0 DAYS 00:52:2 0
LOGGING ST OPPED..... .03/20/19 at 10 :48:50
TOTAL INTE RVALS..... 0.105
INTERVAL L ENGTH..... .00:00:30

AUTO STOP.NO
CLOCK SYNC H..... .YES
RESPONSE R ATE..... .SLOW
FILTER....A WT.

PRE-TEST C ALIBRATION TIME...03/20/ 19 AT 09:2 1:29
PRE-TEST C ALIBRATION RANGE...39.9 T O 139.9 dB
POST-TEST CALIBRATIO N NOT DONE
CUTOFF USE D FOR TIME HISTORY Lav... NONE

<<< SUMMAR Y REPORT F OR TEST NUMBER 1 OF 1 >>>

EXCHANGE R ATE..... ..3dB
CUTOFFS... .. 80dB 90dB
CEILING... ..115dB

DOSE CRITE RION LEVEL ... 90dB
 DOSE CRITE RION LENGT H.. 8 HOURS

Lav..... 56. 4dB
 Lav (80). 39. 9dB
 Lav (90). 39. 9dB
 SEL..... 91. 3dB

TWA..... 46. 8dB
 TWA (80). 39. 9dB
 TWA (90). 39. 9dB

Lmax..... 68. 8dB 03/20/19 a t 09:56:37
 Lpk.....UNDER RANGE
 TIME OVER 115dB...00 :00:00.00

DOSE (80) 0.00%
 PROJ. DOSE (80).. 0.00%
 DOSE (90) 0.00%
 PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REP ORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
3/20/2019					
9:56:30	58.4	68.8	UNDER	62.9	48.9 691831
9:57:00	52.8	56.7	UNDER	55.9	49.9 190546.1
9:57:30	56.3	68.4	UNDER	57.9	47.9 426579.5
9:58:00	57.2	59.6	UNDER	59.9	55.9 524807.5
9:58:30	58.3	61.7	UNDER	60.9	55.9 676083
9:59:00	57.5	60.8	UNDER	59.9	45.9 562341.3
9:59:30	56.9	66	UNDER	61.9	43.9 489778.8
10:00:00	54.6	61.2	UNDER	58.9	48.9 288403.2
10:00:30	54.2	60.8	UNDER	58.9	43.9 263026.8
10:01:00	57.1	63.2	UNDER	60.9	52.9 512861.4
10:01:30	55.5	59.3	UNDER	58.9	50.9 354813.4
10:02:00	51.1	54.9	UNDER	54.9	44.9 128825
10:02:30	46.6	51.9	UNDER	49.9	43.9 45708.82
10:03:00	58.1	62	UNDER	60.9	52.9 645654.2
10:03:30	55.7	56.8	UNDER	56.9	54.9 371535.2
10:04:00	56.7	67.6	UNDER	59.9	51.9 467735.1
10:04:30	54.2	61.8	UNDER	60.9	47.9 263026.8
10:05:00	47.7	51.7	UNDER	49.9	44.9 58884.37
10:05:30	51.7	56.4	UNDER	54.9	48.9 147910.8
10:06:00	58.2	61.6	UNDER	60.9	54.9 660693.4

10:06:30	57.7	60.8 UNDER	60.9	54.9	588843.7
10:07:00	53	57.6 UNDER	56.9	46.9	199526.2
10:07:30	52.8	58.2 UNDER	55.9	45.9	190546.1
10:08:00	57.9	60.9 UNDER	60.9	50.9	616595
10:08:30	55.9	57.6 UNDER	57.9	52.9	389045.1
10:09:00	53.5	56.7 UNDER	55.9	50.9	223872.1
10:09:30	55.9	61 UNDER	59.9	50.9	389045.1
10:10:00	54.7	59.6 UNDER	56.9	50.9	295120.9
10:10:30	54.9	60.4 UNDER	59.9	47.9	309029.5
10:11:00	54.9	58.1 UNDER	56.9	50.9	309029.5
10:11:30	59.4	62 UNDER	61.9	55.9	870963.6
10:12:00	55.5	58.8 UNDER	57.9	50.9	354813.4
10:12:30	53.7	56.6 UNDER	56.9	48.9	234422.9
10:13:00	54.9	61.2 UNDER	59.9	48.9	309029.5
10:13:30	56.1	58.4 UNDER	57.9	50.9	407380.3
10:14:00	59	65.8 UNDER	64.9	52.9	794328.2
10:14:30	55.6	65.6 UNDER	59.9	44.9	363078.1
10:15:00	53.1	56.4 UNDER	56.9	44.9	204173.8
10:15:30	55.1	57.9 UNDER	57.9	51.9	323593.7
10:16:00	57.8	62.6 UNDER	61.9	54.9	602559.6
10:16:30	55.4	59.6 UNDER	58.9	50.9	346736.9
10:17:00	50.4	53.6 UNDER	52.9	47.9	109647.8
10:17:30	56	60.8 UNDER	58.9	51.9	398107.2
10:18:00	57	61.6 UNDER	60.9	51.9	501187.2
10:18:30	53.2	55.7 UNDER	55.9	50.9	208929.6
10:19:00	57.8	60.4 UNDER	59.9	54.9	602559.6
10:19:30	56.9	59.5 UNDER	58.9	55.9	489778.8
10:20:00	53.8	56 UNDER	55.9	50.9	239883.3
10:20:30	55.3	59.2 UNDER	58.9	51.9	338844.2
10:21:00	54	57.4 UNDER	57.9	46.9	251188.6
10:21:30	56.1	59.2 UNDER	58.9	51.9	407380.3
10:22:00	56.6	58.2 UNDER	57.9	54.9	457088.2
10:22:30	55.3	61.2 UNDER	59.9	49.9	338844.2
10:23:00	50.9	55.9 UNDER	53.9	45.9	123026.9
10:23:30	53.7	59.6 UNDER	56.9	46.9	234422.9
10:24:00	59.9	66 UNDER	63.9	54.9	977237.2
10:24:30	60.2	67.8 UNDER	66.9	53.9	1047129
10:25:00	54.6	58.2 UNDER	57.9	50.9	288403.2
10:25:30	60.1	66 UNDER	63.9	54.9	1023293
10:26:00	60	65.8 UNDER	64.9	52.9	1000000
10:26:30	55.2	65 UNDER	56.9	47.9	331131.1
10:27:00	51.1	53.6 UNDER	53.9	44.9	128825
10:27:30	59.2	63.2 UNDER	62.9	53.9	831763.8
10:28:00	56.8	60.4 UNDER	59.9	52.9	478630.1
10:28:30	54.5	56 UNDER	55.9	52.9	281838.3
10:29:00	53.3	55.6 UNDER	55.9	51.9	213796.2

10:29:30	56.7	59 UNDER	58.9	54.9	467735.1
10:30:00	57	61.7 UNDER	60.9	51.9	501187.2
10:30:30	54.1	56.8 UNDER	55.9	48.9	257039.6
10:31:00	50.2	57.2 UNDER	54.9	45.9	104712.9
10:31:30	57.6	61.2 UNDER	59.9	49.9	575439.9
10:32:00	59.2	63.6 UNDER	62.9	50.9	831763.8
10:32:30	56.8	61.6 UNDER	60.9	52.9	478630.1
10:33:00	50.2	54.3 UNDER	53.9	44.9	104712.9
10:33:30	50.5	55.8 UNDER	54.9	42.9	112201.8
10:34:00	58.7	65 UNDER	62.9	54.9	741310.2
10:34:30	52.7	55.8 UNDER	54.9	44.9	186208.7
10:35:00	52.3	58 UNDER	56.9	44.9	169824.4
10:35:30	61.2	66.7 UNDER	64.9	54.9	1318257
10:36:00	57.1	60.8 UNDER	60.9	53.9	512861.4
10:36:30	52.4	56.8 UNDER	55.9	44.9	173780.1
10:37:00	55.9	59.9 UNDER	58.9	46.9	389045.1
10:37:30	55.2	58 UNDER	57.9	50.9	331131.1
10:38:00	54.6	58.4 UNDER	57.9	48.9	288403.2
10:38:30	58.6	61.5 UNDER	60.9	53.9	724436
10:39:00	55.9	62.3 UNDER	58.9	50.9	389045.1
10:39:30	56.9	63.2 UNDER	60.9	52.9	489778.8
10:40:00	57	60 UNDER	58.9	52.9	501187.2
10:40:30	52.4	56 UNDER	55.9	45.9	173780.1
10:41:00	52.6	58 UNDER	56.9	48.9	181970.1
10:41:30	59	62.9 UNDER	62.9	49.9	794328.2
10:42:00	60.1	65.7 UNDER	64.9	55.9	1023293
10:42:30	56.6	60.4 UNDER	59.9	53.9	457088.2
10:43:00	53.2	60 UNDER	57.9	49.9	208929.6

10:43:30	59.2	67.2 UNDER	65.9	48.9	831763.8
10:44:00	58.9	66.8 UNDER	62.9	52.9	776247.1
10:44:30	54.8	60 UNDER	59.9	46.9	301995.2
10:45:00	50.3	55.6 UNDER	52.9	46.9	107151.9
10:45:30	59.6	67.6 UNDER	63.9	49.9	912010.8
10:46:00	52.6	55.3 UNDER	54.9	48.9	181970.1
10:46:30	57.7	63.6 UNDER	60.9	53.9	588843.7
10:47:00	55.8	62 UNDER	60.9	47.9	380189.4
10:47:30	57.8	66.1 UNDER	63.9	43.9	602559.6
10:48:00	56.3	58.6 UNDER	57.9	54.9	426579.5
10:48:30	60	66.9 UNDER	61.9	56.9	1000000

Filename.. ..MON5
Test Locat ion..... ..VA 7
Employee N ame..... ..ERZ, EJA
Employee N umber..... ..
DepartmentENV
1220 Colvi n Meadows Ln

Calibrator Type..... ..
Calibrator Cal. Date ..

METROSONIC S db-3080 V1.20 SERIAL # 5093
REPORT PRI NTED ON 03 /21/19 at 15:38 :00

User ID: _

LOGGING ST ARTED..... .03/20/19 at 11 :08:00
TOTAL LOGG ING TIME.. .0 DAYS 01:00:0 5
LOGGING ST OPPED..... .03/20/19 at 12 :08:05
TOTAL INTE RVALS..... 0.121
INTERVAL L ENGTH..... .00:00:30

AUTO STOP.NO
CLOCK SYNC H..... .YES
RESPONSE R ATE..... .SLOW
FILTER....A WT.

PRE-TEST C ALIBRATION TIME...03/20/ 19 AT 09:3 9:10
PRE-TEST C ALIBRATION RANGE...41.0 T O 141.0 dB
POST-TEST CALIBRATIO N NOT DONE
CUTOFF USE D FOR TIME HISTORY Lav... NONE

<<< SUMMAR Y REPORT F OR TEST NUMBER 1 OF 1 >>>

EXCHANGE R ATE..... ..3dB
CUTOFFS... .. 80dB 90dB
CEILING... ..115dB

DOSE CRITE RION LEVEL ... 90dB
 DOSE CRITE RION LENGT H.. 8 HOURS

Lav..... 56. 8dB
 Lav (80). 41. 0dB
 Lav (90). 41. 0dB
 SEL..... 92. 3dB

TWA..... 47. 8dB
 TWA (80). 41. 0dB
 TWA (90). 41. 0dB

Lmax..... 76. 0dB 03/20/19 a t 12:05:55
 Lpk.....UNDER RANGE
 TIME OVER 115dB...00 :00:00.00

DOSE (80) 0.00%
 PROJ. DOSE (80).. 0.00%
 DOSE (90) 0.00%
 PROJ. DOSE (90).. 0.00%

<<< TIME H IISTORY REP ORT FOR TEST NU MBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA
3/20/2019					
11:08:00	52.3	56.9	UNDER	54	50 169824.4
11:08:30	51.4	54.9	UNDER	53	46 138038.4
11:09:00	51.9	54.6	UNDER	54	47 154881.7
11:09:30	54.2	58.4	UNDER	57	48 263026.8
11:10:00	54.5	57.3	UNDER	56	48 281838.3
11:10:30	56	58.4	UNDER	57	53 398107.2
11:11:00	54.1	58.5	UNDER	56	50 257039.6
11:11:30	59.6	64.9	UNDER	64	53 912010.8
11:12:00	58.4	62.4	UNDER	61	51 691831
11:12:30	54.4	56.4	UNDER	56	51 275422.9
11:13:00	49.7	53.9	UNDER	52	47 93325.43
11:13:30	58.9	62.4	UNDER	61	49 776247.1
11:14:00	57.9	63.3	UNDER	62	51 616595
11:14:30	58.4	64.9	UNDER	63	49 691831
11:15:00	52.8	61.7	UNDER	56	48 190546.1
11:15:30	53.5	56.5	UNDER	55	46 223872.1
11:16:00	58.7	60.9	UNDER	60	54 741310.2
11:16:30	57.1	62	UNDER	60	46 512861.4
11:17:00	52.2	56	UNDER	55	44 165958.7
11:17:30	56.8	61.3	UNDER	60	48 478630.1

11:18:00	55.3	57.6 UNDER	57	46	338844.2
11:18:30	53.8	56.5 UNDER	55	51	239883.3
11:19:00	51.2	56.6 UNDER	55	45	131825.7
11:19:30	55.2	58.4 UNDER	57	49	331131.1
11:20:00	58.1	62.1 UNDER	61	55	645654.2
11:20:30	53.6	57.2 UNDER	55	47	229086.8
11:21:00	53.2	58 UNDER	56	50	208929.6
11:21:30	54.5	59.2 UNDER	57	45	281838.3
11:22:00	57.5	63.3 UNDER	60	48	562341.3
11:22:30	57.8	62.9 UNDER	60	48	602559.6
11:23:00	49.8	52.8 UNDER	51	47	95499.26
11:23:30	56.4	58.9 UNDER	58	50	436515.8
11:24:00	56.2	58.6 UNDER	58	51	416869.4
11:24:30	60.4	66.4 UNDER	65	53	1096478
11:25:00	52.9	58.9 UNDER	57	47	194984.5
11:25:30	55.7	58.4 UNDER	57	49	371535.2
11:26:00	58.2	63.6 UNDER	62	50	660693.4
11:26:30	57.2	63.2 UNDER	60	50	524807.5
11:27:00	49.3	51.6 UNDER	51	43	85113.8
11:27:30	55	61.6 UNDER	59	43	316227.8
11:28:00	55.5	58 UNDER	57	46	354813.4
11:28:30	59.5	64.5 UNDER	62	53	891250.9
11:29:00	52.1	56.2 UNDER	54	48	162181
11:29:30	55.7	60 UNDER	59	50	371535.2
11:30:00	58	60 UNDER	58	56	630957.3
11:30:30	55.1	58.5 UNDER	58	47	323593.7
11:31:00	50.2	55.2 UNDER	54	44	104712.9
11:31:30	58.2	65.2 UNDER	61	47	660693.4
11:32:00	59.1	64 UNDER	62	47	812830.5
11:32:30	53.2	57.7 UNDER	55	50	208929.6
11:33:00	53.3	56.6 UNDER	56	50	213796.2
11:33:30	53.4	55.6 UNDER	55	46	218776.2
11:34:00	55.9	59.2 UNDER	58	51	389045.1
11:34:30	55.8	58.8 UNDER	58	49	380189.4
11:35:00	52.6	59.1 UNDER	58	45	181970.1
11:35:30	57.3	58.8 UNDER	58	54	537031.8
11:36:00	58.4	63.3 UNDER	62	54	691831
11:36:30	54.9	61.4 UNDER	57	50	309029.5
11:37:00	49.3	54.1 UNDER	52	44	85113.8
11:37:30	57.9	63.9 UNDER	62	46	616595
11:38:00	58	62 UNDER	59	55	630957.3
11:38:30	60.3	66.4 UNDER	63	51	1071519
11:39:00	49.2	51.2 UNDER	50	45	83176.38
11:39:30	51.7	57.8 UNDER	56	44	147910.8
11:40:00	57.3	60.1 UNDER	59	54	537031.8
11:40:30	58.3	61.2 UNDER	60	53	676083

11:41:00	54.2	59.9 UNDER	57	46	263026.8
11:41:30	56.1	62.1 UNDER	60	47	407380.3
11:42:00	57.8	62.4 UNDER	60	54	602559.6
11:42:30	56.6	62.3 UNDER	60	49	457088.2
11:43:00	49.9	53.2 UNDER	52	47	97723.72
11:43:30	59.1	64.1 UNDER	62	49	812830.5
11:44:00	58	63.3 UNDER	61	47	630957.3
11:44:30	50.4	57.7 UNDER	55	44	109647.8
11:45:00	53.4	57.9 UNDER	57	46	218776.2
11:45:30	55.8	58.8 UNDER	58	49	380189.4
11:46:00	53.7	57.2 UNDER	56	50	234422.9
11:46:30	55	57.3 UNDER	56	49	316227.8
11:47:00	52.7	56.9 UNDER	55	46	186208.7
11:47:30	56.9	66.8 UNDER	58	51	489778.8
11:48:00	60.2	66.9 UNDER	66	52	1047129
11:48:30	58.7	64.4 UNDER	63	53	741310.2
11:49:00	56.3	63.7 UNDER	58	51	426579.5
11:49:30	55.5	58.1 UNDER	57	46	354813.4
11:50:00	55.6	58.5 UNDER	58	49	363078.1
11:50:30	53.7	57.2 UNDER	56	48	234422.9
11:51:00	50.5	55 UNDER	54	44	112201.8
11:51:30	55.1	59.3 UNDER	58	50	323593.7
11:52:00	56.8	62.5 UNDER	62	49	478630.1
11:52:30	52.9	56.3 UNDER	55	48	194984.5
11:53:00	50.7	55 UNDER	53	47	117489.8
11:53:30	54	58 UNDER	57	48	251188.6
11:54:00	54.4	56.9 UNDER	56	48	275422.9
11:54:30	55.1	58.5 UNDER	57	45	323593.7

11:55:00	52.3	56.8 UNDER	54	46	169824.4
11:55:30	56.6	61 UNDER	59	49	457088.2
11:56:00	56.8	60.9 UNDER	60	52	478630.1
11:56:30	57.3	62.4 UNDER	61	50	537031.8
11:57:00	49.6	54.4 UNDER	53	46	91201.08
11:57:30	55.9	58.2 UNDER	57	49	389045.1
11:58:00	58.8	66.1 UNDER	62	49	758577.6
11:58:30	57.9	62.9 UNDER	62	48	616595
11:59:00	52.8	56.2 UNDER	54	48	190546.1
11:59:30	48.2	54 UNDER	52	43	66069.34
12:00:00	56.3	58.8 UNDER	58	54	426579.5
12:00:30	54.8	57.6 UNDER	57	48	301995.2
12:01:00	50.8	54.6 UNDER	54	47	120226.4
12:01:30	55.8	60.1 UNDER	59	51	380189.4
12:02:00	56	58.5 UNDER	58	49	398107.2
12:02:30	57	60.9 UNDER	60	53	501187.2
12:03:00	55.7	61.8 UNDER	60	46	371535.2
12:03:30	54.5	58 UNDER	56	48	281838.3
12:04:00	59.6	63.3 UNDER	62	55	912010.8
12:04:30	57.5	59.6 UNDER	59	52	562341.3
12:05:00	52.9	54 UNDER	53	51	194984.5
12:05:30	67.9	76 UNDER	72	52	6165950
12:06:00	59.5	68.9 UNDER	63	52	891250.9
12:06:30	66.1	74.5 UNDER	72	49	4073803
12:07:00	50.2	57.2 UNDER	50	47	104712.9
12:07:30	58.7	62.9 UNDER	62	54	741310.2
12:08:00	56.6	61 UNDER	57	55	457088.2

Filename.. ..MON6
Test Locat ion..... ..VA 7
Employee N ame..... ..ERZ, EJA
Employee N umber..... ..
DepartmentENV
9911 Hessi ck Ct

Calibrator Type..... ..
Calibrator Cal. Date ..

METROSONIC S db-3080 V1.12 SERIAL # 3897
REPORT PRI NTED ON 03 /21/19 at 15:38 :13

User ID: _

LOGGING ST ARTED..... .03/20/19 at 11 :15:00
TOTAL LOGG ING TIME.. .0 DAYS 00:48:1 1
LOGGING ST OPPED..... .03/20/19 at 12 :03:11
TOTAL INTE RVALS..... 0.97
INTERVAL L ENGTH..... .00:00:30

AUTO STOP.NO
CLOCK SYNC H..... .YES
RESPONSE R ATE..... .SLOW
FILTER....A WT.

PRE-TEST C ALIBRATION TIME...03/20/ 19 AT 09:2 1:29
PRE-TEST C ALIBRATION RANGE...39.9 T O 139.9 dB
POST-TEST CALIBRATIO N NOT DONE
CUTOFF USE D FOR TIME HISTORY Lav... NONE

<<< SUMMAR Y REPORT F OR TEST NUMBER 1 OF 1 >>>

EXCHANGE R ATE..... ..3dB
CUTOFFS... .. 80dB 90dB
CEILING... ..115dB

DOSE CRITE RION LEVEL ... 90dB
 DOSE CRITE RION LENGT H.. 8 HOURS

Lav..... 56. 5dB
 Lav (80). 39. 9dB
 Lav (90). 39. 9dB
 SEL..... 91. 0dB

TWA..... 46. 5dB
 TWA (80). 39. 9dB
 TWA (90). 39. 9dB

Lmax..... 65. 9dB 03/20/19 a t 11:26:04
 Lpk.....UNDER RANGE
 TIME OVER 115dB...00 :00:00.00

DOSE (80) 0.00%
 PROJ. DOSE (80).. 0.00%
 DOSE (90) 0.00%
 PROJ. DOSE (90).. 0.00%

<<< TIME H IISTORY REP ORT FOR TEST NU MBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA	
3/20/2019						
11:15:00	56.5	57.8	UNDER	57.9	55.9	446683.6
11:15:30	58	60.7	UNDER	60.9	56.9	630957.3
11:16:00	57.1	60	UNDER	59.9	52.9	512861.4
11:16:30	59	64.8	UNDER	63.9	51.9	794328.2
11:17:00	56.2	60.4	UNDER	59.9	53.9	416869.4
11:17:30	56.8	58.2	UNDER	57.9	54.9	478630.1
11:18:00	53.4	57.2	UNDER	55.9	50.9	218776.2
11:18:30	54.5	57.8	UNDER	57.9	49.9	281838.3
11:19:00	59	60.8	UNDER	60.9	57.9	794328.2
11:19:30	58.1	60.3	UNDER	59.9	55.9	645654.2
11:20:00	52.6	55.7	UNDER	54.9	50.9	181970.1
11:20:30	52	55.6	UNDER	54.9	48.9	158489.3
11:21:00	55.6	57.2	UNDER	56.9	52.9	363078.1
11:21:30	58.8	61.2	UNDER	60.9	56.9	758577.6
11:22:00	55.5	60.4	UNDER	58.9	51.9	354813.4
11:22:30	53.3	56.8	UNDER	56.9	48.9	213796.2
11:23:00	58.6	60.8	UNDER	60.9	55.9	724436
11:23:30	56.5	59.2	UNDER	58.9	51.9	446683.6
11:24:00	57.5	60.8	UNDER	60.9	51.9	562341.3
11:24:30	54	57.6	UNDER	56.9	49.9	251188.6

11:25:00	58.3	60 UNDER	59.9	56.9	676083
11:25:30	59.9	62.2 UNDER	61.9	57.9	977237.2
11:26:00	59.1	65.9 UNDER	64.9	49.9	812830.5
11:26:30	49.9	53.2 UNDER	52.9	48.9	97723.72
11:27:00	57	59.6 UNDER	59.9	53.9	501187.2
11:27:30	56.4	57.6 UNDER	57.9	55.9	436515.8
11:28:00	57.8	61.6 UNDER	60.9	51.9	602559.6
11:28:30	54	57.5 UNDER	57.9	49.9	251188.6
11:29:00	58.7	59.9 UNDER	59.9	56.9	741310.2
11:29:30	58.6	61.1 UNDER	59.9	57.9	724436
11:30:00	57.3	59.4 UNDER	59.9	50.9	537031.8
11:30:30	55.5	60 UNDER	59.9	50.9	354813.4
11:31:00	56.5	59.4 UNDER	58.9	54.9	446683.6
11:31:30	56.4	58.8 UNDER	58.9	53.9	436515.8
11:32:00	53.3	55.6 UNDER	54.9	50.9	213796.2
11:32:30	54.6	59.5 UNDER	56.9	51.9	288403.2
11:33:00	56.3	57.8 UNDER	57.9	55.9	426579.5
11:33:30	57.8	59.5 UNDER	59.9	55.9	602559.6
11:34:00	56.6	58.2 UNDER	58.9	51.9	457088.2
11:34:30	52.3	56.2 UNDER	55.9	48.9	169824.4
11:35:00	55.2	56.8 UNDER	56.9	53.9	331131.1
11:35:30	57.4	60.3 UNDER	59.9	55.9	549540.9
11:36:00	57	59.6 UNDER	58.9	51.9	501187.2
11:36:30	51.9	56.4 UNDER	56.9	47.9	154881.7
11:37:00	55.7	59.6 UNDER	58.9	52.9	371535.2
11:37:30	57.8	60.8 UNDER	59.9	55.9	602559.6
11:38:00	56.5	60 UNDER	57.9	51.9	446683.6
11:38:30	52	56.6 UNDER	54.9	48.9	158489.3
11:39:00	55.2	58 UNDER	57.9	52.9	331131.1
11:39:30	58.1	58.8 UNDER	58.9	56.9	645654.2
11:40:00	56.3	57.8 UNDER	57.9	53.9	426579.5
11:40:30	57.7	60.8 UNDER	60.9	52.9	588843.7
11:41:00	56.5	59.2 UNDER	58.9	53.9	446683.6
11:41:30	58.1	60.4 UNDER	59.9	55.9	645654.2
11:42:00	53	58.8 UNDER	56.9	47.9	199526.2
11:42:30	53.9	59.2 UNDER	57.9	47.9	245470.9
11:43:00	60.4	61.6 UNDER	61.9	59.9	1096478
11:43:30	57.3	61.2 UNDER	59.9	51.9	537031.8
11:44:00	55.1	58 UNDER	57.9	51.9	323593.7
11:44:30	54.5	58.4 UNDER	57.9	50.9	281838.3
11:45:00	53.6	56.9 UNDER	56.9	47.9	229086.8
11:45:30	53.9	57.5 UNDER	56.9	47.9	245470.9
11:46:00	56.9	60.7 UNDER	58.9	51.9	489778.8
11:46:30	56	62.5 UNDER	61.9	48.9	398107.2
11:47:00	58.9	60.4 UNDER	59.9	56.9	776247.1
11:47:30	55.9	57.5 UNDER	56.9	54.9	389045.1

11:48:00	57.6	61.1 UNDER	60.9	53.9	575439.9
11:48:30	53	56.6 UNDER	55.9	50.9	199526.2
11:49:00	58.6	60.4 UNDER	59.9	56.9	724436
11:49:30	58.9	60.2 UNDER	60.9	57.9	776247.1
11:50:00	54.3	59.9 UNDER	57.9	47.9	269153.5
11:50:30	53.9	57.6 UNDER	57.9	48.9	245470.9
11:51:00	56.4	57.7 UNDER	57.9	54.9	436515.8
11:51:30	55.1	58.4 UNDER	58.9	48.9	323593.7
11:52:00	51.3	54.6 UNDER	53.9	48.9	134896.3
11:52:30	50.1	54.4 UNDER	53.9	47.9	102329.3
11:53:00	55.8	57.3 UNDER	56.9	53.9	380189.4
11:53:30	57.1	59 UNDER	58.9	54.9	512861.4
11:54:00	54.6	58 UNDER	57.9	46.9	288403.2
11:54:30	53.2	57.1 UNDER	56.9	46.9	208929.6
11:55:00	57.5	59.2 UNDER	58.9	54.9	562341.3
11:55:30	57.1	59.6 UNDER	58.9	53.9	512861.4
11:56:00	59.4	63.1 UNDER	61.9	50.9	870963.6
11:56:30	51.8	58 UNDER	54.9	48.9	151356.1
11:57:00	59	61.6 UNDER	60.9	56.9	794328.2
11:57:30	56.7	60 UNDER	59.9	53.9	467735.1
11:58:00	55	59.2 UNDER	58.9	50.9	316227.8
11:58:30	54.2	56.4 UNDER	56.9	49.9	263026.8
11:59:00	56.2	59.8 UNDER	59.9	51.9	416869.4
11:59:30	57.1	60.4 UNDER	59.9	53.9	512861.4
12:00:00	53.2	56.4 UNDER	55.9	48.9	208929.6
12:00:30	54.1	58.2 UNDER	56.9	48.9	257039.6
12:01:00	55.1	60.5 UNDER	56.9	52.9	323593.7
12:01:30	57.5	60.8 UNDER	59.9	52.9	562341.3

12:02:00	55.9	58.7 UNDER	57.9	52.9	389045.1
12:02:30	55.1	58.8 UNDER	56.9	51.9	323593.7
12:03:00	59.4	65.1 UNDER	59.9	56.9	870963.6

Filename.. ..MON7
Test Locat ion..... ..VA 7
Employee N ame..... ..ERZ, EJA
Employee N umber..... ..
DepartmentENV
1282 Middl eton Ct

Calibrator Type..... ..
Calibrator Cal. Date ..

METROSONIC S db-3080 V1.20 SERIAL # 4618
REPORT PRI NTED ON 03 /21/19 at 15:38 :28

User ID: _

LOGGING ST ARTED..... .03/20/19 at 11 :30:00
TOTAL LOGG ING TIME.. .0 DAYS 00:46:0 9
LOGGING ST OPPED..... .03/20/19 at 12 :16:09
TOTAL INTE RVALS..... 0.93
INTERVAL L ENGTH..... .00:00:30

AUTO STOP.NO
CLOCK SYNC H..... .YES
RESPONSE R ATE..... .SLOW
FILTER....A WT.

PRE-TEST C ALIBRATION TIME...03/20/ 19 AT 11:2 7:24
PRE-TEST C ALIBRATION RANGE...40.0 T O 140.0 dB
POST-TEST CALIBRATIO N TIME...03/20/ 19 AT 13:4 3:22
POST-TEST CALIBRATIO N RANGE...40.1 TO 140.1
CUTOFF USE D FOR TIME HISTORY Lav... NONE

<<< SUMMAR Y REPORT F OR TEST NUMBER 1 OF 1 >>>

EXCHANGE R ATE..... ..3dB
CUTOFFS... .. 80dB 90dB

CEILING... ..115dB
 DOSE CRITE RION LEVEL ... 90dB
 DOSE CRITE RION LENGT H.. 8 HOURS

Lav..... 59. 3dB
 Lav (80). 40. 0dB
 Lav (90). 40. 0dB
 SEL..... 93. 6dB

TWA..... 49. 1dB
 TWA (80). 40. 0dB
 TWA (90). 40. 0dB

Lmax..... 69. 0dB 03/20/19 a t 12:16:08
 Lpk.....UNDER RANGE
 TIME OVER 115dB...00 :00:00.00

DOSE (80) 0.00%
 PROJ. DOSE (80).. 0.00%
 DOSE (90) 0.00%
 PROJ. DOSE (90).. 0.00%

<<< TIME H ISTORY REP ORT FOR TEST NU MBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA		
3/20/2019							
11:30:00	55.9	60.3	UNDER	58	53	389045.1	
11:30:30	55.2	59.1	UNDER	57	52	331131.1	
11:31:00	51.9	53.5	UNDER	53	49	154881.7	
11:31:30	51.2	57.8	UNDER	52	47	131825.7	
11:32:00	55.4	61.9	UNDER	59	47	346736.9	
11:32:30	55.6	61.5	UNDER	58	50	363078.1	
11:33:00	51.8	52.9	UNDER	52	50	151356.1	
11:33:30	51.4	53.3	UNDER	52	50	138038.4	
11:34:00	50.8	51.6	UNDER	51	49	120226.4	
11:34:30	51.4	53.1	UNDER	52	49	138038.4	
11:35:00	58.2	60.8	UNDER	60	53	660693.4	
11:35:30	53.2	56.8	UNDER	54	49	208929.6	
11:36:00	49.7	54.3	UNDER	50	47	93325.43	
11:36:30	51.5	54.3	UNDER	53	48	141253.8	
11:37:00	53.8	61.4	UNDER	56	48	239883.3	
11:37:30	49.7	55.9	UNDER	52	46	93325.43	
11:38:00	51.6	56.2	UNDER	54	47	144544	
11:38:30	49.3	50.3	UNDER	49	48	85113.8	

11:39:00	52.9	55 UNDER	54	48	194984.5
11:39:30	52.6	54.7 UNDER	54	50	181970.1
11:40:00	53.8	60.3 UNDER	56	50	239883.3
11:40:30	57.1	61.3 UNDER	59	51	512861.4
11:41:00	50.2	53.5 UNDER	51	48	104712.9
11:41:30	54.5	56.3 UNDER	55	49	281838.3
11:42:00	53.9	56.2 UNDER	55	52	245470.9
11:42:30	55.1	58.1 UNDER	57	51	323593.7
11:43:00	58.1	59.5 UNDER	58	57	645654.2
11:43:30	59.2	65.1 UNDER	62	54	831763.8
11:44:00	55.9	57.9 UNDER	56	54	389045.1
11:44:30	56.8	58.5 UNDER	58	54	478630.1
11:45:00	59.3	62.6 UNDER	60	57	851138
11:45:30	61.7	63.1 UNDER	62	60	1479108
11:46:00	61.4	63 UNDER	62	60	1380384
11:46:30	61.8	63.1 UNDER	62	60	1513561
11:47:00	61.9	63.1 UNDER	62	60	1548817
11:47:30	61.8	63.9 UNDER	62	59	1513561
11:48:00	61.9	63.4 UNDER	62	60	1548817
11:48:30	61.6	62.9 UNDER	62	60	1445440
11:49:00	62.2	64.5 UNDER	63	60	1659587
11:49:30	61.7	63.1 UNDER	62	60	1479108
11:50:00	62.1	64.3 UNDER	63	60	1621810
11:50:30	61.7	63.7 UNDER	62	59	1479108
11:51:00	61.6	63.1 UNDER	62	60	1445440
11:51:30	61.8	63.9 UNDER	62	60	1513561
11:52:00	61.7	63.4 UNDER	62	59	1479108
11:52:30	61.2	62.9 UNDER	62	59	1318257
11:53:00	61.3	63 UNDER	62	60	1348963
11:53:30	61.2	63.1 UNDER	62	59	1318257
11:54:00	61.6	62.9 UNDER	62	60	1445440
11:54:30	61.5	63.5 UNDER	62	59	1412538
11:55:00	61.9	64 UNDER	62	60	1548817
11:55:30	60.9	62.5 UNDER	61	59	1230269
11:56:00	61.4	63.1 UNDER	62	60	1380384
11:56:30	61.6	63.3 UNDER	62	60	1445440
11:57:00	61	62.5 UNDER	62	59	1258925
11:57:30	61.3	62.3 UNDER	62	59	1348963
11:58:00	61	62.3 UNDER	61	60	1258925
11:58:30	60.7	62.9 UNDER	61	58	1174898
11:59:00	60.9	62.1 UNDER	61	59	1230269
11:59:30	61.3	63.7 UNDER	62	60	1348963
12:00:00	61.2	63.5 UNDER	62	59	1318257
12:00:30	61.4	62.9 UNDER	62	60	1380384
12:01:00	61.5	63.9 UNDER	63	59	1412538
12:01:30	60.9	62.2 UNDER	61	59	1230269

12:02:00	61.1	62.3 UNDER	61	60	1288250
12:02:30	60.4	61.9 UNDER	61	58	1096478
12:03:00	61	63.1 UNDER	62	58	1258925
12:03:30	60.7	62.3 UNDER	61	58	1174898
12:04:00	60.6	63.3 UNDER	62	58	1148154
12:04:30	59.3	61.3 UNDER	60	58	851138
12:05:00	59.3	61.3 UNDER	60	58	851138
12:05:30	59	59.7 UNDER	59	58	794328.2
12:06:00	59.3	59.9 UNDER	59	58	851138
12:06:30	59.1	59.9 UNDER	59	57	812830.5
12:07:00	60.6	62.3 UNDER	61	58	1148154
12:07:30	59.7	62.3 UNDER	61	58	933254.3
12:08:00	58.7	59.7 UNDER	59	57	741310.2
12:08:30	60.1	61.3 UNDER	61	58	1023293
12:09:00	59.6	61.3 UNDER	60	57	912010.8
12:09:30	59.9	61.7 UNDER	60	58	977237.2
12:10:00	58.4	60.1 UNDER	59	56	691831
12:10:30	58.2	60.7 UNDER	59	56	660693.4
12:11:00	57.8	60.5 UNDER	59	56	602559.6
12:11:30	59.3	61.3 UNDER	60	58	851138
12:12:00	60.6	62.9 UNDER	61	59	1148154
12:12:30	56.1	59.9 UNDER	59	50	407380.3
12:13:00	51	54.9 UNDER	51	48	125892.5
12:13:30	51.9	57.2 UNDER	54	48	154881.7
12:14:00	54.8	58.3 UNDER	56	50	301995.2
12:14:30	56.1	58.3 UNDER	57	53	407380.3
12:15:00	56.2	59.5 UNDER	58	53	416869.4
12:15:30	56.4	59.7 UNDER	59	53	436515.8
12:16:00	58.8	69 UNDER	57	55	758577.6

Filename.. ..MON9
Test Locat ion..... ..VA 7
Employee N ame..... ..ERZ, EJA
Employee N umber..... ..
DepartmentENV
10237 Lees burg Pike

Calibrator Type..... ..
Calibrator Cal. Date ..

METROSONIC S db-3080 V1.12 SERIAL # 3895
REPORT PRI NTED ON 03 /21/19 at 15:38 :50

User ID: _

LOGGING ST ARTED..... .03/20/19 at 11 :00:00
TOTAL LOGG ING TIME.. .0 DAYS 01:12:1 3
LOGGING ST OPPED..... .03/20/19 at 12 :12:13
TOTAL INTE RVALS..... 0.145
INTERVAL L ENGTH..... .00:00:30

AUTO STOP.NO
CLOCK SYNC H..... .YES
RESPONSE R ATE..... .SLOW
FILTER....A WT.

PRE-TEST C ALIBRATION TIME...03/20/ 19 AT 09:2 4:41
PRE-TEST C ALIBRATION RANGE...40.1 T O 140.1 dB
POST-TEST CALIBRATIO N NOT DONE
CUTOFF USE D FOR TIME HISTORY Lav... NONE

<<< SUMMARY REPORT FOR TEST NUMBER 1 OF 1 >>>

EXCHANGE R ATE..... ..3dB
CUTOFFS... .. 80dB 90dB
CEILING... ..115dB

DOSE CRITE RION LEVEL ... 90dB
 DOSE CRITE RION LENGT H.. 8 HOURS

Lav..... 56. 8dB
 Lav (80). 40. 1dB
 Lav (90). 40. 1dB
 SEL..... 93. 1dB

TWA..... 48. 7dB
 TWA (80). 40. 1dB
 TWA (90). 40. 1dB

Lmax..... 67. 8dB 03/20/19 a t 12:04:02
 Lpk.....UNDER RANGE
 TIME OVER 115dB...00 :00:00.00

DOSE (80) 0.00%
 PROJ. DOSE (80).. 0.00%
 DOSE (90) 0.00%
 PROJ. DOSE (90).. 0.00%

<<< TIME H IISTORY REP ORT FOR TEST NU MBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA		
3/20/2019							
11:00:00		57.9	60.6 UNDER	59.1	55.1	616595	
11:00:30		58.7	61 UNDER	59.1	57.1	741310.2	
11:01:00		57.1	60.7 UNDER	59.1	49.1	512861.4	
11:01:30		51.2	54.6 UNDER	53.1	48.1	131825.7	
11:02:00		56	58.6 UNDER	58.1	50.1	398107.2	
11:02:30		53.5	56.3 UNDER	55.1	48.1	223872.1	
11:03:00		53.9	59.9 UNDER	57.1	47.1	245470.9	
11:03:30		57.4	60.6 UNDER	59.1	54.1	549540.9	
11:04:00		57.7	61 UNDER	60.1	52.1	588843.7	
11:04:30		56.8	61.8 UNDER	60.1	53.1	478630.1	
11:05:00		54.9	58.6 UNDER	57.1	50.1	309029.5	
11:05:30		51.9	53.8 UNDER	53.1	49.1	154881.7	
11:06:00		56.7	59.7 UNDER	59.1	51.1	467735.1	
11:06:30		59.1	63.8 UNDER	61.1	56.1	812830.5	
11:07:00		58.9	62 UNDER	60.1	56.1	776247.1	
11:07:30		59.2	60.7 UNDER	60.1	57.1	831763.8	
11:08:00		56.6	59.6 UNDER	59.1	50.1	457088.2	
11:08:30		55.6	60.3 UNDER	59.1	49.1	363078.1	
11:09:00		53.9	56.2 UNDER	55.1	50.1	245470.9	
11:09:30		53	57.3 UNDER	55.1	48.1	199526.2	

11:10:00	55.3	57.8 UNDER	57.1	52.1	338844.2
11:10:30	58.8	60.6 UNDER	59.1	56.1	758577.6
11:11:00	59.7	62.2 UNDER	61.1	55.1	933254.3
11:11:30	56	59.8 UNDER	58.1	52.1	398107.2
11:12:00	58.6	61.4 UNDER	61.1	55.1	724436
11:12:30	55.9	57.4 UNDER	57.1	54.1	389045.1
11:13:00	56.8	59.1 UNDER	58.1	54.1	478630.1
11:13:30	57.5	61.4 UNDER	60.1	51.1	562341.3
11:14:00	60.9	64.6 UNDER	63.1	57.1	1230269
11:14:30	57	63 UNDER	58.1	55.1	501187.2
11:15:00	58.4	61 UNDER	60.1	50.1	691831
11:15:30	53	58.5 UNDER	56.1	47.1	199526.2
11:16:00	58.2	60.2 UNDER	59.1	56.1	660693.4
11:16:30	57.2	60.3 UNDER	58.1	55.1	524807.5
11:17:00	56.4	60.2 UNDER	59.1	52.1	436515.8
11:17:30	54.5	59.4 UNDER	57.1	48.1	281838.3
11:18:00	57.9	59.8 UNDER	58.1	56.1	616595
11:18:30	54.9	58.5 UNDER	57.1	47.1	309029.5
11:19:00	50.2	54.8 UNDER	52.1	46.1	104712.9
11:19:30	54	56.6 UNDER	56.1	49.1	251188.6
11:20:00	56.3	61.1 UNDER	58.1	53.1	426579.5
11:20:30	56.3	58.6 UNDER	57.1	55.1	426579.5
11:21:00	55.6	58.3 UNDER	57.1	49.1	363078.1
11:21:30	54.3	59.2 UNDER	58.1	49.1	269153.5
11:22:00	57.3	59.9 UNDER	58.1	55.1	537031.8
11:22:30	57.7	59 UNDER	58.1	55.1	588843.7
11:23:00	51.9	57.3 UNDER	56.1	47.1	154881.7
11:23:30	52.4	54.6 UNDER	53.1	47.1	173780.1
11:24:00	60.8	67.3 UNDER	64.1	54.1	1202264
11:24:30	58.5	59.4 UNDER	59.1	57.1	707945.8
11:25:00	59.8	63.8 UNDER	62.1	52.1	954992.6
11:25:30	55.5	58.6 UNDER	58.1	50.1	354813.4
11:26:00	59.7	61.1 UNDER	60.1	57.1	933254.3
11:26:30	58.2	62.2 UNDER	61.1	54.1	660693.4
11:27:00	52.5	57 UNDER	55.1	46.1	177827.9
11:27:30	50.4	57 UNDER	55.1	45.1	109647.8
11:28:00	58.9	60.7 UNDER	60.1	55.1	776247.1
11:28:30	59.5	60.6 UNDER	60.1	58.1	891250.9
11:29:00	56.9	62.2 UNDER	60.1	50.1	489778.8
11:29:30	55.4	57.6 UNDER	57.1	53.1	346736.9
11:30:00	57.8	60.2 UNDER	59.1	55.1	602559.6
11:30:30	54.7	57 UNDER	56.1	50.1	295120.9
11:31:00	53.2	57 UNDER	56.1	47.1	208929.6
11:31:30	57	61.8 UNDER	61.1	49.1	501187.2
11:32:00	59.3	63 UNDER	61.1	57.1	851138
11:32:30	57.9	60.8 UNDER	59.1	55.1	616595
11:33:00	57.3	60.4 UNDER	59.1	51.1	537031.8

11:33:30	55.3	57.4 UNDER	57.1	51.1	338844.2
11:34:00	53.6	58.2 UNDER	55.1	51.1	229086.8
11:34:30	55.3	58.1 UNDER	57.1	53.1	338844.2
11:35:00	57.1	58.9 UNDER	58.1	55.1	512861.4
11:35:30	56.5	59.6 UNDER	57.1	54.1	446683.6
11:36:00	57	58.9 UNDER	58.1	54.1	501187.2
11:36:30	54.6	59.7 UNDER	57.1	49.1	288403.2
11:37:00	49.5	52.8 UNDER	52.1	43.1	89125.09
11:37:30	57.4	60.7 UNDER	60.1	45.1	549540.9
11:38:00	57.5	60.2 UNDER	58.1	56.1	562341.3
11:38:30	60	65.4 UNDER	61.1	56.1	1000000
11:39:00	55.1	62.7 UNDER	58.1	47.1	323593.7
11:39:30	53.5	56.6 UNDER	56.1	46.1	223872.1
11:40:00	57.8	62.2 UNDER	61.1	54.1	602559.6
11:40:30	57.1	58.6 UNDER	57.1	55.1	512861.4
11:41:00	56.4	60.2 UNDER	58.1	49.1	436515.8
11:41:30	49.8	51.4 UNDER	50.1	48.1	95499.26
11:42:00	60.2	62.5 UNDER	61.1	50.1	1047129
11:42:30	58.5	61 UNDER	60.1	53.1	707945.8
11:43:00	53.4	56.2 UNDER	54.1	51.1	218776.2
11:43:30	56	58.8 UNDER	58.1	53.1	398107.2
11:44:00	58.6	60.6 UNDER	59.1	55.1	724436
11:44:30	52	56.2 UNDER	53.1	47.1	158489.3
11:45:00	54.8	58.5 UNDER	57.1	47.1	301995.2
11:45:30	56.3	57.4 UNDER	57.1	54.1	426579.5
11:46:00	56.3	59 UNDER	58.1	52.1	426579.5
11:46:30	55.6	57.4 UNDER	57.1	53.1	363078.1

11:47:00	53.2	56.9 UNDER	55.1	49.1	208929.6
11:47:30	54.8	57.4 UNDER	56.1	52.1	301995.2
11:48:00	58.6	59.9 UNDER	59.1	56.1	724436
11:48:30	60.1	61.9 UNDER	61.1	57.1	1023293
11:49:00	59.9	64.1 UNDER	63.1	53.1	977237.2
11:49:30	53.3	55.4 UNDER	54.1	51.1	213796.2
11:50:00	55.5	57.5 UNDER	57.1	53.1	354813.4
11:50:30	56	57.8 UNDER	57.1	51.1	398107.2
11:51:00	49.2	51.7 UNDER	51.1	45.1	83176.38
11:51:30	54.9	57.8 UNDER	57.1	49.1	309029.5
11:52:00	58.4	59.8 UNDER	59.1	56.1	691831
11:52:30	58.2	60.6 UNDER	59.1	56.1	660693.4
11:53:00	52.7	56.2 UNDER	55.1	49.1	186208.7
11:53:30	50.2	53.1 UNDER	51.1	47.1	104712.9
11:54:00	56.3	57.8 UNDER	57.1	53.1	426579.5
11:54:30	56.9	59.4 UNDER	58.1	54.1	489778.8
11:55:00	55.5	56.6 UNDER	55.1	54.1	354813.4
11:55:30	58.2	61 UNDER	60.1	55.1	660693.4
11:56:00	58.7	61.3 UNDER	60.1	55.1	741310.2
11:56:30	58.6	60.8 UNDER	60.1	54.1	724436
11:57:00	51.4	55 UNDER	53.1	47.1	138038.4
11:57:30	54	57.3 UNDER	56.1	48.1	251188.6
11:58:00	58.3	59.4 UNDER	59.1	55.1	676083
11:58:30	60.1	62.2 UNDER	61.1	57.1	1023293
11:59:00	51.8	57.4 UNDER	55.1	46.1	151356.1
11:59:30	48	50.6 UNDER	49.1	45.1	63095.73
12:00:00	55.4	57.5 UNDER	57.1	47.1	346736.9
12:00:30	55.1	57 UNDER	56.1	52.1	323593.7
12:01:00	55.5	57.4 UNDER	57.1	52.1	354813.4
12:01:30	56.5	62.4 UNDER	61.1	47.1	446683.6
12:02:00	56.9	59.8 UNDER	58.1	53.1	489778.8
12:02:30	56.3	58.2 UNDER	57.1	53.1	426579.5
12:03:00	48.6	54.2 UNDER	53.1	44.1	72443.6
12:03:30	55.1	63.4 UNDER	58.1	45.1	323593.7
12:04:00	62.3	67.8 UNDER	65.1	58.1	1698244
12:04:30	58.3	59.4 UNDER	59.1	57.1	676083
12:05:00	55	59 UNDER	58.1	49.1	316227.8
12:05:30	54	58 UNDER	56.1	50.1	251188.6
12:06:00	55.8	59.1 UNDER	58.1	51.1	380189.4
12:06:30	56.7	60.6 UNDER	58.1	54.1	467735.1
12:07:00	53.6	58.2 UNDER	56.1	50.1	229086.8
12:07:30	57	61 UNDER	60.1	48.1	501187.2
12:08:00	59.2	62.2 UNDER	61.1	57.1	831763.8
12:08:30	58.8	62.2 UNDER	61.1	55.1	758577.6
12:09:00	53.1	57.4 UNDER	55.1	48.1	204173.8
12:09:30	53.5	57.8 UNDER	55.1	50.1	223872.1

12:10:00	57.8	59.4 UNDER	59.1	53.1	602559.6
12:10:30	59.6	65 UNDER	62.1	57.1	912010.8
12:11:00	58.7	60.2 UNDER	59.1	56.1	741310.2
12:11:30	57.2	60.2 UNDER	59.1	54.1	524807.5
12:12:00	58	65 UNDER	59.1	55.1	630957.3

Filename.. ..MON10
Test Locat ion..... ..VA 7
Employee N ame..... ..ERZ, EJA
Employee N umber..... ..
DepartmentENV
9320 Leesb urg Pike

Calibrator Type..... ..
Calibrator Cal. Date ..

METROSONIC S db-3080 V1.12 SERIAL # 3895
REPORT PRI NTED ON 03 /21/19 at 15:36 :27

User ID: _

LOGGING ST ARTED..... .03/20/19 at 12 :28:30
TOTAL LOGG ING TIME.. .0 DAYS 00:49:4 8
LOGGING ST OPPED..... .03/20/19 at 13 :18:18
TOTAL INTE RVALS..... 0.1
INTERVAL L ENGTH..... .00:00:30

AUTO STOP.NO
CLOCK SYNC H..... .YES
RESPONSE R ATE..... .SLOW
FILTER....A WT.

PRE-TEST C ALIBRATION TIME...03/20/ 19 AT 09:2 4:41
PRE-TEST C ALIBRATION RANGE...40.1 T O 140.1 dB
POST-TEST CALIBRATIO N NOT DONE
CUTOFF USE D FOR TIME HISTORY Lav... NONE

<<< SUMMAR Y REPORT F OR TEST NUMBER 1 OF 1 >>>

EXCHANGE R ATE..... ..3dB
CUTOFFS... .. 80dB 90dB
CEILING... ..115dB

DOSE CRITE RION LEVEL ... 90dB
 DOSE CRITE RION LENGT H.. 8 HOURS

Lav..... 65. 3dB
 Lav (80). 54. 4dB
 Lav (90). 40. 1dB
 SEL..... 99. 9dB

TWA..... 55. 5dB
 TWA (80). 44. 6dB
 TWA (90). 40. 1dB

Lmax..... 85. 0dB 03/20/19 a t 12:54:28
 Lpk.....UNDER RANGE
 TIME OVER 115dB...00 :00:00.00

DOSE (80) 0.00%
 PROJ. DOSE (80).. 0.00%
 DOSE (90) 0.00%
 PROJ. DOSE (90).. 0.00%

<<< TIME HISTORY REP ORT FOR TEST NUMBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA	
3/20/2019						
12:28:30	64.1		67.4 UNDER	67.1	56.1	2570396
12:29:00	65.9		71.8 UNDER	70.1	58.1	3890451
12:29:30	57.7		64.7 UNDER	61.1	50.1	588843.7
12:30:00	65.3		68.6 UNDER	67.1	55.1	3388442
12:30:30	63.1		69 UNDER	67.1	57.1	2041738
12:31:00	64.6		67.4 UNDER	66.1	61.1	2884032
12:31:30	65.8		68.2 UNDER	67.1	62.1	3801894
12:32:00	66.8		71.7 UNDER	69.1	63.1	4786301
12:32:30	67.2		73.1 UNDER	70.1	60.1	5248075
12:33:00	61.5		65.7 UNDER	63.1	57.1	1412538
12:33:30	63.7		66.6 UNDER	66.1	57.1	2344229
12:34:00	64.1		66.6 UNDER	65.1	57.1	2570396
12:34:30	62.1		64.6 UNDER	63.1	57.1	1621810
12:35:00	64.5		67.9 UNDER	66.1	59.1	2818383
12:35:30	65.6		67.8 UNDER	67.1	61.1	3630781
12:36:00	63.4		69.8 UNDER	68.1	53.1	2187762
12:36:30	63.1		67.8 UNDER	66.1	56.1	2041738
12:37:00	62.9		67.8 UNDER	65.1	60.1	1949845
12:37:30	65.5		69.5 UNDER	68.1	61.1	3548134
12:38:00	66		70.6 UNDER	67.1	61.1	3981072

12:38:30	66.2	71 UNDER	70.1	54.1	4168694
12:39:00	67.1	71.4 UNDER	68.1	58.1	5128614
12:39:30	61.9	66.2 UNDER	63.1	58.1	1548817
12:40:00	65.9	67.8 UNDER	67.1	61.1	3890451
12:40:30	67.1	74.6 UNDER	72.1	51.1	5128614
12:41:00	64.6	67.2 UNDER	66.1	60.1	2884032
12:41:30	67.7	71.8 UNDER	71.1	60.1	5888437
12:42:00	64.3	68.2 UNDER	67.1	56.1	2691535
12:42:30	62.5	66.2 UNDER	65.1	54.1	1778279
12:43:00	62.6	64.7 UNDER	64.1	56.1	1819701
12:43:30	63.9	67.1 UNDER	66.1	57.1	2454709
12:44:00	65.3	68.4 UNDER	67.1	60.1	3388442
12:44:30	65.7	69 UNDER	67.1	60.1	3715352
12:45:00	64.2	67.4 UNDER	66.1	61.1	2630268
12:45:30	64.6	67.9 UNDER	67.1	59.1	2884032
12:46:00	66.4	69 UNDER	68.1	63.1	4365158
12:46:30	65.2	69.4 UNDER	69.1	61.1	3311311
12:47:00	66.6	68.6 UNDER	68.1	62.1	4570882
12:47:30	64	68.2 UNDER	66.1	56.1	2511886
12:48:00	64.6	66.7 UNDER	66.1	59.1	2884032
12:48:30	61.9	66.2 UNDER	64.1	56.1	1548817
12:49:00	63.7	68.2 UNDER	67.1	56.1	2344229
12:49:30	64.1	68.2 UNDER	67.1	57.1	2570396
12:50:00	63.8	67.8 UNDER	66.1	52.1	2398833
12:50:30	66.2	70.3 UNDER	68.1	61.1	4168694
12:51:00	68.7	76.2 UNDER	73.1	63.1	7413102
12:51:30	66.1	68.4 UNDER	67.1	60.1	4073803
12:52:00	65.4	68.6 UNDER	67.1	60.1	3467369
12:52:30	66.4	69.8 UNDER	69.1	61.1	4365158
12:53:00	65.7	68.6 UNDER	67.1	62.1	3715352
12:53:30	67	75 UNDER	71.1	60.1	5011872
12:54:00	73.8	85 UNDER	75.1	64.1	23988329
12:54:30	72	84.2 UNDER	75.1	57.1	15848932
12:55:00	60.2	65.6 UNDER	62.1	55.1	1047129
12:55:30	63.5	67 UNDER	66.1	54.1	2238721
12:56:00	64.8	67.4 UNDER	66.1	56.1	3019952
12:56:30	63.8	66.6 UNDER	66.1	59.1	2398833
12:57:00	65.6	68.7 UNDER	67.1	62.1	3630781
12:57:30	68.5	73.1 UNDER	71.1	63.1	7079458
12:58:00	64.8	66.6 UNDER	66.1	59.1	3019952
12:58:30	62.7	67 UNDER	65.1	54.1	1862087
12:59:00	66.1	70.3 UNDER	68.1	52.1	4073803
12:59:30	63.1	67.4 UNDER	66.1	55.1	2041738
13:00:00	64.8	67.4 UNDER	66.1	59.1	3019952
13:00:30	65.8	69.4 UNDER	68.1	58.1	3801894
13:01:00	64.7	68.8 UNDER	67.1	57.1	2951209

13:01:30	59.3	65.8 UNDER	63.1	51.1	851138
13:02:00	66.3	69.4 UNDER	68.1	58.1	4265795
13:02:30	65	69.8 UNDER	68.1	59.1	3162278
13:03:00	64	67 UNDER	66.1	58.1	2511886
13:03:30	65.9	71.4 UNDER	70.1	58.1	3890451
13:04:00	63.6	67.4 UNDER	66.1	59.1	2290868
13:04:30	64.7	69.4 UNDER	67.1	57.1	2951209
13:05:00	62.2	65 UNDER	64.1	59.1	1659587
13:05:30	65.6	67.8 UNDER	67.1	60.1	3630781
13:06:00	63	65.8 UNDER	64.1	58.1	1995262
13:06:30	60.9	65.4 UNDER	64.1	51.1	1230269
13:07:00	62.7	68.7 UNDER	67.1	46.1	1862087
13:07:30	63.7	67.4 UNDER	66.1	53.1	2344229
13:08:00	64.6	70.1 UNDER	65.1	61.1	2884032
13:08:30	66.5	71 UNDER	69.1	59.1	4466836
13:09:00	63.1	66.7 UNDER	65.1	60.1	2041738
13:09:30	67	70.2 UNDER	69.1	63.1	5011872
13:10:00	65.6	67 UNDER	66.1	61.1	3630781
13:10:30	64.1	66.6 UNDER	66.1	60.1	2570396
13:11:00	63.9	68.6 UNDER	67.1	57.1	2454709
13:11:30	64.8	66.7 UNDER	66.1	63.1	3019952
13:12:00	62.9	66.2 UNDER	65.1	52.1	1949845
13:12:30	64.2	68.2 UNDER	67.1	59.1	2630268
13:13:00	63.9	69.4 UNDER	66.1	59.1	2454709
13:13:30	64.2	67.8 UNDER	66.1	58.1	2630268
13:14:00	65.3	69.6 UNDER	67.1	61.1	3388442
13:14:30	62.9	66.6 UNDER	66.1	52.1	1949845
13:15:00	63.4	65.5 UNDER	65.1	61.1	2187762

13:15:30	65.7	68.2 UNDER	67.1	61.1	3715352
13:16:00	64.6	66.8 UNDER	65.1	62.1	2884032
13:16:30	62.5	65.4 UNDER	64.1	57.1	1778279
13:17:00	65	68 UNDER	67.1	61.1	3162278
13:17:30	64.7	67.8 UNDER	66.1	57.1	2951209
13:18:00	61.8	63.8 UNDER	63.1	58.1	1513561

Filename.. ..MON11
Test Locat ion..... ..VA 7
Employee N ame..... ..ERZ, EJA
Employee N umber..... ..
DepartmentENV
1424 Woodh urst BLVD

Calibrator Type..... ..
Calibrator Cal. Date ..

METROSONIC S db-3080 V1.12 SERIAL # 3895
REPORT PRI NTED ON 03 /21/19 at 15:36 :42

User ID: _

LOGGING ST ARTED..... .03/20/19 at 13 :36:30
TOTAL LOGG ING TIME.. .0 DAYS 00:33:2 5
LOGGING ST OPPED..... .03/20/19 at 14 :09:55
TOTAL INTE RVALS..... 0.67
INTERVAL L ENGTH..... .00:00:30

AUTO STOP.NO
CLOCK SYNC H..... .YES
RESPONSE R ATE..... .SLOW
FILTER....A WT.

PRE-TEST C ALIBRATION TIME...03/20/ 19 AT 09:2 4:41
PRE-TEST C ALIBRATION RANGE...40.1 T O 140.1 dB
POST-TEST CALIBRATIO N NOT DONE
CUTOFF USE D FOR TIME HISTORY Lav... NONE

<<< SUMMAR Y REPORT F OR TEST NUMBER 1 OF 1 >>>

EXCHANGE R ATE..... ..3dB
CUTOFFS... .. 80dB 90dB
CEILING... ..115dB

DOSE CRITE RION LEVEL ... 90dB
 DOSE CRITE RION LENGT H.. 8 HOURS

Lav..... 52. 6dB
 Lav (80). 40. 1dB
 Lav (90). 40. 1dB
 SEL..... 85. 5dB

TWA..... 41. 0dB
 TWA (80). 40. 1dB
 TWA (90). 40. 1dB

Lmax..... 63. 8dB 03/20/19 a t 14:09:54
 Lpk.....UNDER RANGE
 TIME OVER 115dB...00 :00:00.00

DOSE (80) 0.00%
 PROJ. DOSE (80).. 0.00%
 DOSE (90) 0.00%
 PROJ. DOSE (90).. 0.00%

<<< TIME H IISTORY REP ORT FOR TEST NU MBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA	
3/20/2019						
13:36:30		53.2	61.8 UNDER	54.1	50.1	208929.6
13:37:00		50	51.1 UNDER	50.1	48.1	100000
13:37:30		50.8	55.4 UNDER	52.1	47.1	120226.4
13:38:00		53.2	56.6 UNDER	55.1	50.1	208929.6
13:38:30		50.6	52.5 UNDER	51.1	47.1	114815.4
13:39:00		48.5	50.6 UNDER	49.1	46.1	70794.58
13:39:30		46.4	48.6 UNDER	47.1	45.1	43651.58
13:40:00		47.3	49.4 UNDER	49.1	45.1	53703.18
13:40:30		53.2	56.2 UNDER	55.1	49.1	208929.6
13:41:00		55.6	57.2 UNDER	56.1	53.1	363078.1
13:41:30		52.8	56.2 UNDER	55.1	49.1	190546.1
13:42:00		53.3	55.5 UNDER	55.1	50.1	213796.2
13:42:30		50.2	52.1 UNDER	51.1	49.1	104712.9
13:43:00		50.2	51.3 UNDER	51.1	49.1	104712.9
13:43:30		48.3	50.6 UNDER	50.1	45.1	67608.3
13:44:00		52.6	57.8 UNDER	56.1	46.1	181970.1
13:44:30		51.6	52.5 UNDER	52.1	51.1	144544
13:45:00		50.8	53.5 UNDER	53.1	46.1	120226.4
13:45:30		48	51.4 UNDER	50.1	45.1	63095.73

13:46:00	48.2	51 UNDER	49.1	46.1	66069.34
13:46:30	49.7	53.6 UNDER	52.1	47.1	93325.43
13:47:00	53.5	54.8 UNDER	54.1	52.1	223872.1
13:47:30	55.5	60.6 UNDER	57.1	52.1	354813.4
13:48:00	56.4	62.4 UNDER	59.1	49.1	436515.8
13:48:30	52.1	59.4 UNDER	53.1	49.1	162181
13:49:00	55.7	62.2 UNDER	60.1	50.1	371535.2
13:49:30	50.5	57.2 UNDER	53.1	45.1	112201.8
13:50:00	55.5	59 UNDER	57.1	51.1	354813.4
13:50:30	56.7	63.4 UNDER	59.1	53.1	467735.1
13:51:00	56.6	61.8 UNDER	59.1	51.1	457088.2
13:51:30	49.4	53.8 UNDER	51.1	46.1	87096.36
13:52:00	49.8	52.5 UNDER	51.1	47.1	95499.26
13:52:30	51.4	56.6 UNDER	55.1	47.1	138038.4
13:53:00	53.7	56.6 UNDER	55.1	51.1	234422.9
13:53:30	50.3	51.1 UNDER	50.1	49.1	107151.9
13:54:00	48.4	50.6 UNDER	50.1	45.1	69183.1
13:54:30	48.1	49.8 UNDER	49.1	45.1	64565.42
13:55:00	48	50.1 UNDER	49.1	46.1	63095.73
13:55:30	47.4	50.4 UNDER	48.1	45.1	54954.09
13:56:00	53.1	54.9 UNDER	54.1	49.1	204173.8
13:56:30	52.2	53.9 UNDER	53.1	51.1	165958.7
13:57:00	50.3	53.4 UNDER	51.1	48.1	107151.9
13:57:30	50	53 UNDER	51.1	47.1	100000
13:58:00	48.6	50.6 UNDER	49.1	46.1	72443.6
13:58:30	50	54.8 UNDER	51.1	47.1	100000
13:59:00	55.1	60.5 UNDER	58.1	51.1	323593.7
13:59:30	52.9	57 UNDER	55.1	50.1	194984.5
14:00:00	50	52.4 UNDER	50.1	48.1	100000
14:00:30	49.6	51 UNDER	50.1	47.1	91201.08
14:01:00	49.3	50.6 UNDER	50.1	47.1	85113.8
14:01:30	56.8	63 UNDER	60.1	47.1	478630.1
14:02:00	54.3	59.8 UNDER	57.1	50.1	269153.5
14:02:30	51.2	53.5 UNDER	52.1	49.1	131825.7
14:03:00	50.6	52.1 UNDER	51.1	48.1	114815.4
14:03:30	50.8	54.6 UNDER	53.1	47.1	120226.4
14:04:00	56.5	61.4 UNDER	59.1	49.1	446683.6
14:04:30	52	53.4 UNDER	53.1	50.1	158489.3
14:05:00	51.8	53.5 UNDER	53.1	50.1	151356.1
14:05:30	54	57.4 UNDER	56.1	50.1	251188.6
14:06:00	49.8	50.8 UNDER	50.1	49.1	95499.26
14:06:30	51.8	56.1 UNDER	54.1	48.1	151356.1
14:07:00	49.7	51.8 UNDER	51.1	47.1	93325.43
14:07:30	49.8	54 UNDER	52.1	45.1	95499.26
14:08:00	57	62.2 UNDER	61.1	51.1	501187.2
14:08:30	52.8	57.8 UNDER	54.1	51.1	190546.1

14:09:00	51.7	55 UNDER	53.1	48.1 147910.8
14:09:30	57.4	63.8 UNDER	60.1	48.1 549540.9

Filename.. ..MON12
Test Locat ion..... ..VA 7
Employee N ame..... ..ERZ, EJA
Employee N umber..... ..
DepartmentENV
9105 Lucky Estates Dr

Calibrator Type..... ..
Calibrator Cal. Date ..

METROSONIC S db-3080 V1.12 SERIAL # 3897
REPORT PRI NTED ON 03 /21/19 at 15:36 :56

User ID: _

LOGGING ST ARTED..... .03/20/19 at 12 :46:30
TOTAL LOGG ING TIME.. .0 DAYS 00:37:2 7
LOGGING ST OPPED..... .03/20/19 at 13 :23:57
TOTAL INTE RVALS..... 0.75
INTERVAL L ENGTH..... .00:00:30

AUTO STOP.NO
CLOCK SYNC H..... .YES
RESPONSE R ATE..... .SLOW
FILTER....A WT.

PRE-TEST C ALIBRATION TIME...03/20/ 19 AT 09:2 1:29
PRE-TEST C ALIBRATION RANGE...39.9 T O 139.9 dB
POST-TEST CALIBRATIO N TIME...03/20/ 19 AT 13:4 4:08
POST-TEST CALIBRATIO N RANGE...39.9 TO 139.9
CUTOFF USE D FOR TIME HISTORY Lav... NONE

<<< SUMMAR Y REPORT F OR TEST NUMBER 1 OF 1 >>>

EXCHANGE R ATE..... ..3dB
CUTOFFS... .. 80dB 90dB

CEILING... ..115dB
 DOSE CRITE RION LEVEL ... 90dB
 DOSE CRITE RION LENGT H.. 8 HOURS

Lav..... 57. 2dB
 Lav (80). 39. 9dB
 Lav (90). 39. 9dB
 SEL..... 90. 7dB

TWA..... 46. 2dB
 TWA (80). 39. 9dB
 TWA (90). 39. 9dB

Lmax..... 72. 8dB 03/20/19 a t 13:23:56
 Lpk.....UNDER RANGE
 TIME OVER 115dB...00 :00:00.00

DOSE (80) 0.00%
 PROJ. DOSE (80).. 0.00%
 DOSE (90) 0.00%
 PROJ. DOSE (90).. 0.00%

<<< TIME H ISTORY REP ORT FOR TEST NU MBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA	
3/20/2019						
12:46:30	57.3		65.2 UNDER	59.9	53.9	537031.8
12:47:00	57.6		60.8 UNDER	59.9	54.9	575439.9
12:47:30	58.4		61 UNDER	59.9	56.9	691831
12:48:00	57.6		61.2 UNDER	60.9	55.9	575439.9
12:48:30	55.2		59.3 UNDER	58.9	49.9	331131.1
12:49:00	56.9		61.6 UNDER	59.9	51.9	489778.8
12:49:30	59.1		60.8 UNDER	60.9	55.9	812830.5
12:50:00	54.9		56.8 UNDER	56.9	52.9	309029.5
12:50:30	56		60 UNDER	58.9	52.9	398107.2
12:51:00	56.7		58.4 UNDER	57.9	54.9	467735.1
12:51:30	58.5		61.2 UNDER	59.9	56.9	707945.8
12:52:00	58		60.8 UNDER	59.9	54.9	630957.3
12:52:30	57.5		60.4 UNDER	59.9	52.9	562341.3
12:53:00	55.8		58.9 UNDER	57.9	51.9	380189.4
12:53:30	63.1		66.6 UNDER	65.9	58.9	2041738
12:54:00	59.4		65.6 UNDER	61.9	56.9	870963.6
12:54:30	53.6		56.8 UNDER	55.9	49.9	229086.8
12:55:00	58.3		61.5 UNDER	60.9	54.9	676083

12:55:30	58	61.9 UNDER	59.9	53.9	630957.3
12:56:00	57.7	60.4 UNDER	59.9	54.9	588843.7
12:56:30	55.5	57.2 UNDER	56.9	54.9	354813.4
12:57:00	56.7	59.5 UNDER	58.9	51.9	467735.1
12:57:30	58.2	60.4 UNDER	59.9	55.9	660693.4
12:58:00	58.5	61.3 UNDER	60.9	53.9	707945.8
12:58:30	49.4	53.6 UNDER	52.9	45.9	87096.36
12:59:00	56.1	59.4 UNDER	58.9	50.9	407380.3
12:59:30	56.7	59.5 UNDER	58.9	54.9	467735.1
13:00:00	57.4	60 UNDER	59.9	53.9	549540.9
13:00:30	51.1	55.6 UNDER	54.9	45.9	128825
13:01:00	57.2	61 UNDER	60.9	52.9	524807.5
13:01:30	60.5	63.2 UNDER	62.9	58.9	1122018
13:02:00	57.4	60.8 UNDER	59.9	52.9	549540.9
13:02:30	51.7	54.8 UNDER	54.9	46.9	147910.8
13:03:00	59.2	64 UNDER	63.9	51.9	831763.8
13:03:30	59.4	63.6 UNDER	62.9	56.9	870963.6
13:04:00	57.5	59.6 UNDER	59.9	55.9	562341.3
13:04:30	58.1	63.4 UNDER	61.9	52.9	645654.2
13:05:00	55.7	58.3 UNDER	56.9	53.9	371535.2
13:05:30	56.3	58 UNDER	57.9	53.9	426579.5
13:06:00	57.2	59.2 UNDER	58.9	54.9	524807.5
13:06:30	54.5	58.7 UNDER	58.9	47.9	281838.3
13:07:00	55.6	59.2 UNDER	57.9	47.9	363078.1
13:07:30	57.3	59.2 UNDER	58.9	55.9	537031.8
13:08:00	53.9	58.3 UNDER	57.9	48.9	245470.9
13:08:30	50.6	57.1 UNDER	54.9	44.9	114815.4
13:09:00	60.7	66.7 UNDER	65.9	56.9	1174898
13:09:30	59.3	64.4 UNDER	61.9	55.9	851138
13:10:00	58	60.6 UNDER	60.9	54.9	630957.3
13:10:30	57.2	63.1 UNDER	60.9	52.9	524807.5
13:11:00	54.7	58 UNDER	57.9	51.9	295120.9
13:11:30	57.6	59.6 UNDER	58.9	55.9	575439.9
13:12:00	58.4	62.4 UNDER	61.9	54.9	691831
13:12:30	53.7	55.6 UNDER	54.9	50.9	234422.9
13:13:00	57.9	60.4 UNDER	60.9	52.9	616595
13:13:30	58.2	60.5 UNDER	60.9	56.9	660693.4
13:14:00	57.9	60.8 UNDER	59.9	55.9	616595
13:14:30	54	57.6 UNDER	56.9	52.9	251188.6
13:15:00	55.6	57.2 UNDER	56.9	53.9	363078.1
13:15:30	56.6	60 UNDER	58.9	54.9	457088.2
13:16:00	55.9	58.4 UNDER	57.9	53.9	389045.1
13:16:30	53.4	57.2 UNDER	55.9	51.9	218776.2
13:17:00	57.1	60.4 UNDER	58.9	52.9	512861.4
13:17:30	58	60.4 UNDER	59.9	54.9	630957.3
13:18:00	56.5	58.4 UNDER	57.9	53.9	446683.6

13:18:30	55.6	58.6 UNDER	57.9	51.9	363078.1
13:19:00	58.8	61.4 UNDER	60.9	57.9	758577.6
13:19:30	55.9	58.4 UNDER	57.9	53.9	389045.1
13:20:00	55.7	57.2 UNDER	56.9	52.9	371535.2
13:20:30	53.7	56.8 UNDER	56.9	47.9	234422.9
13:21:00	51.5	56.8 UNDER	55.9	44.9	141253.8
13:21:30	59.4	61.6 UNDER	61.9	55.9	870963.6
13:22:00	56.4	59.1 UNDER	57.9	53.9	436515.8
13:22:30	56.3	61.2 UNDER	59.9	50.9	426579.5
13:23:00	56.8	60.7 UNDER	58.9	55.9	478630.1
13:23:30	58.7	72.8 UNDER	60.9	55.9	741310.2

Filename.. .. MON13~1
Test Locat ion..... ..VA 7
Employee N ame..... ..ERZ, EJA
Employee N umber..... ..
DepartmentENV
1308 Trap Rd

Calibrator Type..... ..
Calibrator Cal. Date ..

METROSONIC S db-3080 V1.20 SERIAL # 5093
REPORT PRI NTED ON 03 /21/19 at 15:37 :12

User ID: _

LOGGING ST ARTED..... .03/20/19 at 12 :35:30
TOTAL LOGG ING TIME.. .0 DAYS 00:39:0 0
LOGGING ST OPPED..... .03/20/19 at 13 :14:30
TOTAL INTE RVALS..... 0.78
INTERVAL L ENGTH..... .00:00:30

AUTO STOP.NO
CLOCK SYNC H..... .YES
RESPONSE R ATE..... .SLOW
FILTER....A WT.

PRE-TEST C ALIBRATION TIME...03/20/ 19 AT 09:3 9:10
PRE-TEST C ALIBRATION RANGE...41.0 T O 141.0 dB
POST-TEST CALIBRATIO N TIME...03/20/ 19 AT 13:4 4:34
POST-TEST CALIBRATIO N RANGE...41.0 TO 141.0
CUTOFF USE D FOR TIME HISTORY Lav... NONE

<<< SUMMAR Y REPORT F OR TEST NUMBER 1 OF 1 >>>

EXCHANGE R ATE..... ..3dB
CUTOFFS... .. 80dB 90dB

CEILING... ..115dB
 DOSE CRITE RION LEVEL ... 90dB
 DOSE CRITE RION LENGT H.. 8 HOURS

Lav..... 57. 0dB
 Lav (80). 41. 0dB
 Lav (90). 41. 0dB
 SEL..... 90. 6dB

TWA..... 46. 2dB
 TWA (80). 41. 0dB
 TWA (90). 41. 0dB

Lmax..... 73. 4dB 03/20/19 a t 12:42:28
 Lpk.....UNDER RANGE
 TIME OVER 115dB...00 :00:00.00

DOSE (80) 0.00%
 PROJ. DOSE (80).. 0.00%
 DOSE (90) 0.00%
 PROJ. DOSE (90).. 0.00%

<<< TIME H ISTORY REP ORT FOR TEST NU MBER 1 OF 1 >>>

TIME	Lav dBA	Lmax dBA	Lpk dBC	L(10.0) dBA	L(99.9) dBA		
3/20/2019							
12:35:30	58.4	63.3	UNDER	60	54	691831	
12:36:00	57.4	62.4	UNDER	59	52	549540.9	
12:36:30	49.2	52.5	UNDER	51	47	83176.38	
12:37:00	51	54	UNDER	52	49	125892.5	
12:37:30	55.3	58	UNDER	56	53	338844.2	
12:38:00	57.1	60.9	UNDER	59	51	512861.4	
12:38:30	51.4	55.8	UNDER	53	49	138038.4	
12:39:00	55.4	62.2	UNDER	58	49	346736.9	
12:39:30	58	59.9	UNDER	59	54	630957.3	
12:40:00	59.4	64.8	UNDER	62	53	870963.6	
12:40:30	52.8	55.5	UNDER	54	50	190546.1	
12:41:00	54.4	58.9	UNDER	56	50	275422.9	
12:41:30	54.9	58.5	UNDER	56	52	309029.5	
12:42:00	63.9	73.4	UNDER	69	52	2454709	
12:42:30	62.1	71.9	UNDER	63	52	1621810	
12:43:00	62.3	67.7	UNDER	64	56	1698244	
12:43:30	56	60.4	UNDER	57	53	398107.2	
12:44:00	56.7	60	UNDER	58	53	467735.1	
12:44:30	51.5	55.8	UNDER	54	47	141253.8	

12:45:00	55.6	60.9 UNDER	59	48	363078.1
12:45:30	57.2	62.3 UNDER	59	53	524807.5
12:46:00	55.4	57.2 UNDER	56	51	346736.9
12:46:30	52.7	56.8 UNDER	55	50	186208.7
12:47:00	56	57.2 UNDER	56	54	398107.2
12:47:30	56.3	57.5 UNDER	57	54	426579.5
12:48:00	56.2	60.6 UNDER	58	52	416869.4
12:48:30	53.6	60.8 UNDER	57	49	229086.8
12:49:00	56.6	62.9 UNDER	60	51	457088.2
12:49:30	55.2	57 UNDER	56	53	331131.1
12:50:00	55.5	56.6 UNDER	56	54	354813.4
12:50:30	53.1	58 UNDER	55	48	204173.8
12:51:00	56.4	60.9 UNDER	58	52	436515.8
12:51:30	57.8	58.9 UNDER	58	56	602559.6
12:52:00	56.8	60.4 UNDER	58	53	478630.1
12:52:30	61.3	69.6 UNDER	65	52	1348963
12:53:00	58.3	64.9 UNDER	62	53	676083
12:53:30	61.6	65.7 UNDER	64	56	1445440
12:54:00	61.7	66.4 UNDER	64	54	1479108
12:54:30	58.4	62.9 UNDER	61	52	691831
12:55:00	57.6	61.9 UNDER	60	51	575439.9
12:55:30	56.7	60.9 UNDER	59	54	467735.1
12:56:00	54.4	56.8 UNDER	55	53	275422.9
12:56:30	60.2	64.6 UNDER	62	54	1047129
12:57:00	61.6	71.2 UNDER	65	54	1445440
12:57:30	59.3	64.4 UNDER	62	54	851138
12:58:00	61.4	68.8 UNDER	66	53	1380384
12:58:30	61.7	68.3 UNDER	66	51	1479108
12:59:00	52.2	56.8 UNDER	53	49	165958.7
12:59:30	55.1	58.4 UNDER	56	51	323593.7
13:00:00	52.9	55.5 UNDER	54	47	194984.5
13:00:30	50	53.4 UNDER	51	47	100000
13:01:00	54.4	57.7 UNDER	56	50	275422.9
13:01:30	55.1	56.9 UNDER	56	52	323593.7
13:02:00	53.8	54.9 UNDER	54	51	239883.3
13:02:30	51.4	55.3 UNDER	53	49	138038.4
13:03:00	56.7	63.3 UNDER	60	50	467735.1
13:03:30	54.6	56.4 UNDER	55	52	288403.2
13:04:00	55.7	59.1 UNDER	57	50	371535.2
13:04:30	49.6	51.8 UNDER	50	48	91201.08
13:05:00	54	57.7 UNDER	56	50	251188.6
13:05:30	55.5	57.2 UNDER	56	54	354813.4
13:06:00	54.3	56.4 UNDER	55	50	269153.5
13:06:30	50.9	54.8 UNDER	52	48	123026.9
13:07:00	51.3	52.7 UNDER	52	49	134896.3
13:07:30	52.7	54.1 UNDER	54	48	186208.7

13:08:00	54.3	55.6 UNDER	55	51	269153.5
13:08:30	56.4	65.9 UNDER	61	48	436515.8
13:09:00	57.3	60.4 UNDER	59	53	537031.8
13:09:30	56.1	58.5 UNDER	57	54	407380.3
13:10:00	55.1	58.3 UNDER	57	50	323593.7
13:10:30	52.3	57.2 UNDER	54	50	169824.4
13:11:00	53.2	54.8 UNDER	54	51	208929.6
13:11:30	55.6	59.6 UNDER	58	53	363078.1
13:12:00	54.6	58.1 UNDER	55	51	288403.2
13:12:30	52.3	55.2 UNDER	53	50	169824.4
13:13:00	54.9	57.6 UNDER	55	53	309029.5
13:13:30	56	57.6 UNDER	57	53	398107.2
13:14:00	56.1	57.3 UNDER	57	54	407380.3

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

ACOUSTICAL CALIBRATOR

Manufactured by: METROSONICS
Model No: CL304
Serial No: 3616
Calibration Recall No: 28756

Submitted By:

Customer: EVAN R. ZEIDERS
Company: SKELLY & LOY, INC.
Address: 449 EISENHOWER BLVD., STE. 300
HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. CL304 METR

Upon receipt for Calibration, the instrument was found to be:

Within (X)

tolerance of the indicated specification. See attached Report of Calibration.
The information supplied relates to the calibrated item listed above.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by:

Felix Christopher (QA Mgr.)

Calibration Date: 26-Apr-18

Certificate No: 28756 - 5

QA Doc. #1051 Rev. 2.0 10/1/01

Certificate Page 1 of 1

ISO/IEC 17025:2005

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.



Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories, Inc.
 uncompromised calibration
 1575 State Route 96, Victor NY 14564



Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Acoustical Calibrator
 Company: Skelly & Loy, Inc.

Model No.: CL304

Serial No.: 3616
 I. D. No.: XXXX

Calibration results:

Before data: ...X... After data:
 Before & after data same:
 Sound Pressure Level at 999.99 Hz and pressure of 1013 hPa (mbar)
 was 102.29 dB re 20 μ Pa
 Sound Pressure Level: Pass
 Frequency: Pass
 Distortion: Pass
 Stability: Pass
 All tested parameters: Pass

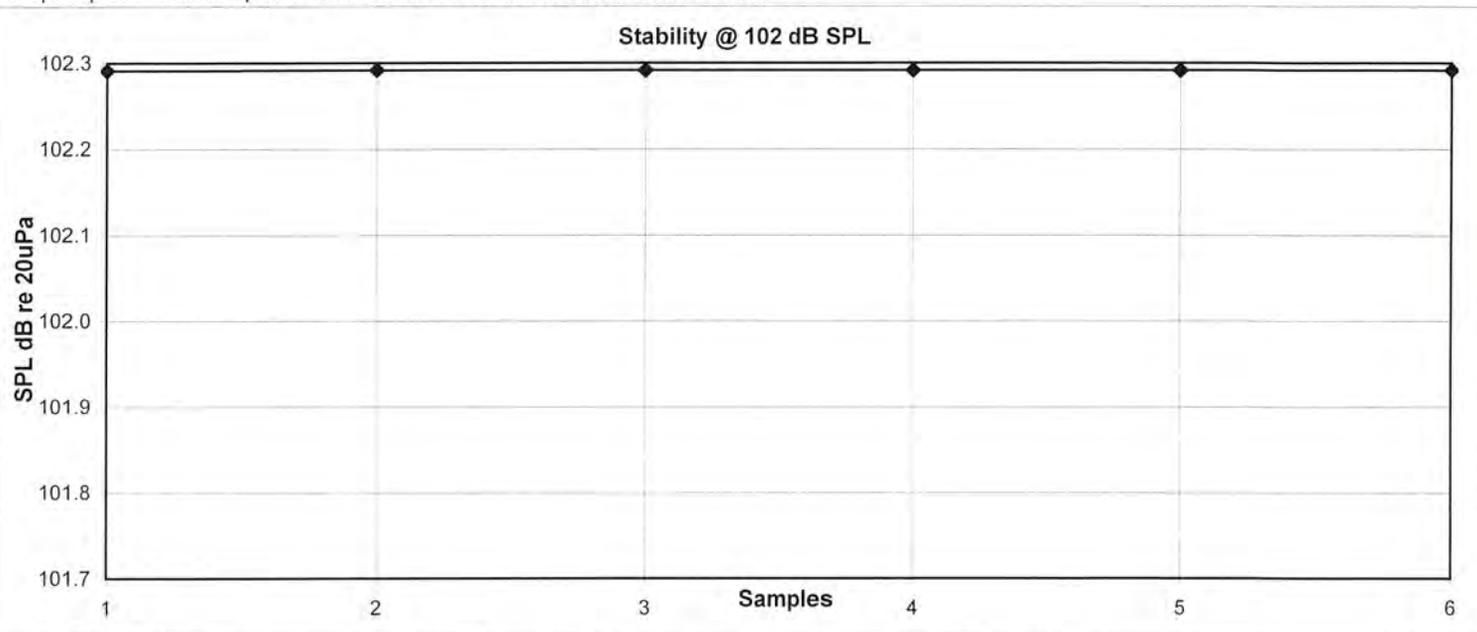
Laboratory Environment:
 Ambient Temperature: 20.2 °C
 Ambient Humidity: 32.6 % RH
 Ambient Pressure: 98.624 kPa
 Calibration Date: 26-Apr-2018
 Calibration Due: 26-Apr-2019
 Report Number: 28756 -5
 Control Number: 28756

The above listed instrument meets or exceeds the tested manufacturer's specifications.

This Calibration is traceable through NIST test numbers: 822/275722-14

The expanded uncertainty of calibration: 0.11 dB at 95% confidence level with a coverage factor of k=2.

Graph represents six samples of Sound Pressure Level measured at 5sec. interval.



The above listed instrument was checked using calibration procedure documented in West Caldwell

Calibration Laboratories Inc. procedure :

Rev. 7.0 Jan. 24, 2014 Doc. # 1038 CL304METR

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures

intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSS Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

Cal. Date: 26-Apr-2018

Measurements performed by:

Calibrated on WCCL system type 9700

James Zhu

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Rev. 7.0 Jan. 24, 2014 Doc. # 1038CL304METR

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327**Calibration Data Record**

for

Metrosonics Acoustical Calibrator
Company: Skelly & Loy, Inc.

Model No.: CL304

Serial No.: 3616

All tested parameters: Pass

Measured Sound Pressure Level (Six samples measured at 5 sec. interval)

Sample	1	102.29 dB re 20 μ Pa	
	2	102.29	
	3	102.29	
	4	102.29	
	5	102.29	
	6	102.29	
	Average	102.29	Spec. 102 dB \pm 0.3 dB

Frequency measured (Three samples at 30 sec. Interval)

Sample	1	999.96 Hz	
	2	1000.00	
	3	1000.00	
	Average	999.99	Spec. 1000 Hz \pm 2.0%

Distortion measured	-40.1 dB	Spec. \leq 34 dB
----------------------------	----------	--------------------

Instruments used for calibration:	Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær 4231 S/N 2308998	1-Aug-2017	822/275722-14	1-Aug-2018
Brüel & Kjær 4134 S/N 854464	1-Aug-2017	822/275722-14	1-Aug-2018
Brüel & Kjær 2669 S/N 2148476	1-Aug-2017	683/281764-14	1-Aug-2018
HP 34401A S/N US360980	1-Aug-2017	,205342	1-Aug-2018
Brüel & Kjær 2636 S/N 1323964	1-Aug-2017	822/275722-14	1-Aug-2018

Cal. Date: 26-Apr-2018

Tested by: James Zhu

Calibrated on WCCL system type 9700

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Rev. 7.0 Jan. 24, 2014 Doc. # 1038CL304METR

REPORT OF CALIBRATION

for

Metrosonics Acoustical Calibrator
 Company: Skelly & Loy, Inc.

Model No.: CL304

Serial No.: 3616
 I. D. No.: XXXX

Calibration results:

Before data: After data: ...X...

Before & after data same:

Sound Pressure Level at 999.99 Hz and pressure of 1013 hPa (mbar)
 was 102.05 dB re 20 μ Pa

Sound Pressure Level: **Pass**

Frequency: **Pass**

Distortion: **Pass**

Stability: **Pass**

All tested parameters: **Pass**

Laboratory Environment:

Ambient Temperature: **20.2** °C

Ambient Humidity: **32.6** % RH

Ambient Pressure: **98.624** kPa

Calibration Date: **26-Apr-2018**

Calibration Due: **26-Apr-2019**

Report Number: **28756 -5**

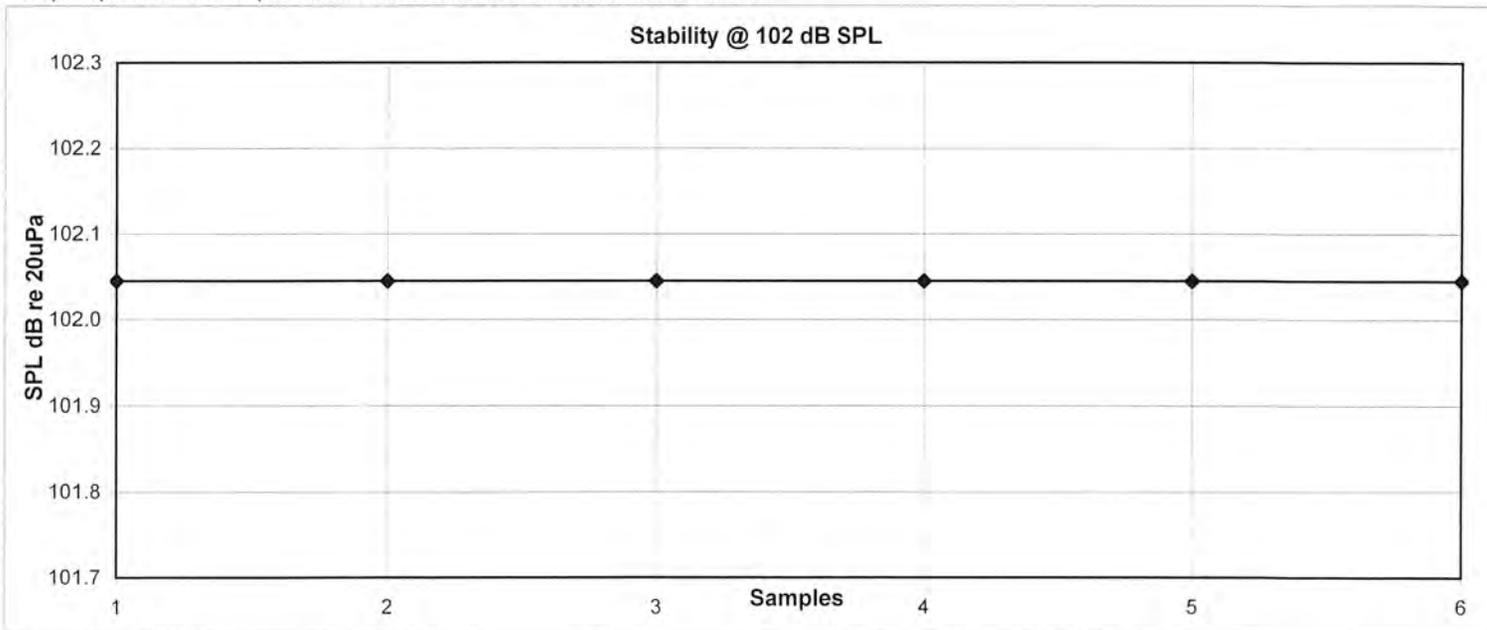
Control Number: **28756**

The above listed instrument meets or exceeds the tested manufacturer's specifications.

This Calibration is traceable through NIST test numbers: 822/275722-14

The expanded uncertainty of calibration: 0.11 dB at 95% confidence level with a coverage factor of k=2.

Graph represents six samples of Sound Pressure Level measured at 5sec. interval.



The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 7.0 Jan. 24, 2014 Doc. # 1038 CL304METR**
 Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

Cal. Date: 26-Apr-2018

Measurements performed by:

Calibrated on WCCL system type 9700

James Zhu

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Rev. 7.0 Jan. 24, 2014 Doc. # 1038CL304METR

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564

Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Metrosonics Acoustical Calibrator
Company: Skelly & Loy, Inc.

Model No.: CL304

Serial No.: 3616

All tested parameters: Pass

Measured Sound Pressure Level (Six samples measured at 5 sec. interval)

Sample	1	102.05 dB re 20 μ Pa	
	2	102.05	
	3	102.05	
	4	102.05	
	5	102.05	
	6	102.05	
	Average	102.05	Spec. 102 dB \pm 0.3 dB

Frequency measured (Three samples at 30 sec. Interval)

Sample	1	999.96 Hz	
	2	1000.00	
	3	1000.00	
	Average	999.99	Spec. 1000 Hz \pm 2.0%

Distortion measured	-42.7 dB	Spec. \leq -34 dB
----------------------------	-----------------	---------------------

Instruments used for calibration:	Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær 4231 S/N 2308998	1-Aug-2017	822/275722-14	1-Aug-2018
Brüel & Kjær 4134 S/N 854464	1-Aug-2017	822/275722-14	1-Aug-2018
Brüel & Kjær 2669 S/N 2148476	1-Aug-2017	683/281764-14	1-Aug-2018
HP 34401A S/N US360980	1-Aug-2017	,205342	1-Aug-2018
Brüel & Kjær 2636 S/N 1323964	1-Aug-2017	822/275722-14	1-Aug-2018

Cal. Date: 26-Apr-2018

Tested by: James Zhu

Calibrated on WCCL system type 9700

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Rev. 7.0 Jan. 24, 2014 Doc. # 1038CL304METR

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

PERMISSIBLE SOUND LEVEL METER

Manufactured by: METROSONICS
Model No: db3080
Serial No: 5093
Calibration Recall No: 28756

Submitted By:

Customer: EVAN R. ZEIDERS
Company: SKELLY & LOY, INC.
Address: 449 EISENHOWER BLVD., STE. 300
HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. db3080 METR

Upon receipt for Calibration, the instrument was found to be:

Within (X)

tolerance of the indicated specification. See attached Report of Calibration.
The information supplied relates to the calibrated item listed above.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by: 

Calibration Date: 26-Apr-18

Felix Christopher (QA Mgr.)

Certificate No: 28756 - 4

QA Doc. #1051 Rev. 2.0 10/1/01

Certificate Page 1 of 1

ISO/IEC 17025:2005


uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.



Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564

Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Manufacturer: Metrosonics

Model No.: db-3080

S/N: 5093

Permissible Sound Level Meter

Submitted by,

Company: Skelly & Loy, Inc.

Test	Function	Tolerance			Measured values			
		Min	Max		Before	Out	After	Out
0.	SPL Reading with 102.0dB SPL	101.4	102.6		102.0		102.0	
1.	Level Accuracy	93.4	94.6	94dB	94.0		94.0	
		103.4	104.6	104dB	104.0		104.0	
		113.4	114.6	114dB	113.9		113.9	
2.	Frequency Response A Weighting	88.0	97.8	8kHz	93.2		93.2	
		92.1	97.9	4kHz	97.5		97.5	
		93.3	97.1	2kHz	94.8		94.8	
		92.6	95.4	1kHz	93.9		93.9	
		89.4	92.2	500Hz	90.9		90.9	
		84.0	86.8	250Hz	85.5		85.5	
		76.5	79.3	125Hz	78.3		78.3	
		65.9	69.7	63Hz	69.2		69.2	
		51.8	57.5	31.5Hz	57.2		57.2	
	C Weighting	86.1	95.9	8kHz	88.8		88.8	
		90.3	96.1	4kHz	95.8		95.8	
		91.9	95.7	2kHz	93.7		93.7	
		92.6	95.4	1kHz	94.0		94.0	
		92.6	95.4	500Hz	94.3		94.3	
		92.6	95.4	250Hz	94.4		94.4	
		92.4	95.2	125Hz	94.4		94.4	
		91.3	95.1	63Hz	93.9		93.9	
		88.2	93.9	31.5Hz	91.3		91.3	
		3.	SLM	113.4	114.6		114.0	
L avg. / Leq	113.4		114.6		114.0		114.0	
L max.	113.4		114.6		114.0		114.0	
L pk	116.1		117.9		117.7		117.7	
Dose %								
0.18% @ 94 dB 1kHz	0.14%		0.22%		0.19%		0.19%	
0.73% @ 104 dB 1kHz	0.58%		0.88%		0.76%		0.76%	
2.90% @ 114 dB 1kHz	2.32%	3.48%		3.02%		3.02%		
4	Inherent noise level				60.4		60.4	

The expanded uncertainty of calibration at 95% confidence level with a coverage factor of $k=2$.

Parameter	Test Instrumentation Uncertainty	DUT Uncertainty	Total DUT Uncertainty
Reading with mic. @ 1 kHz:	0.11	0.1	0.15
Meter linearity:	0.17	0.1	0.20
Attenuator accuracy:	0.17	0.1	0.20
Freq. Response: 63 Hz to 8 kHz	0.10	0.1	0.14
Inherent noise level:	0.024	0.1	0.10
Functions:	0.11	0.1	0.15
Sensitivity:	0.11	0.1	0.15
Dose:	0.30	0.1	0.32

Measurements performed by:

Calibration Date: 26-Apr-2018

James Zhu

**West Caldwell
Calibration
Laboratories, Inc.**
uncompromised calibration
1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005

ACCREDITED
Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Permissible Sound Level Meter

**Model No.: db3080
Company: Skelly & Loy, Inc.**

**Serial No.: 51
I. D. No.: XXXX**

Calibration results:		Laboratory Environment:	
Before data:	After data:	Ambient Temperature:	20.2 °C
Before & after data same: ...X...		Ambient Humidity:	32.6 % RH
All tested parameters: Pass		Ambient Pressure:	98.624 kPa
For details see "Calibration Data Record"		Calibration Date:	26-Apr-2018
		Calibration Due:	26-Apr-2019
		Report Number:	28756 -4
		Control Number:	28756
<p>The above listed instrument meets or exceeds the tested manufacturer's specifications. This Calibration is traceable through NIST test numbers listed below. The absolute uncertainty of calibration: See last page. Unless otherwise noted, the reported values are both "as found" and "as left" data.</p>			

The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 7.0 Jan. 24, 2014 Doc. # 1038 DB3080METR**
 Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NC SL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

NIST Traceable Instruments:	Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær 4226 S/N 2272364	1-Aug-2017	822/275722-15	1-Aug-2018

Cal. Date: 26-Apr-2018

Measurements performed by:

Calibrated on WCCL system type 9700

James Zhu

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Rev. 7.0 Jan. 24, 2014 Doc. # 1038 DB3080METR

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

PERMISSIBLE SOUND LEVEL METER

Manufactured by: METROSONICS
Model No: db3080
Serial No: 4618
Calibration Recall No: 28756

Submitted By:

Customer: EVAN R. ZEIDERS
Company: SKELLY & LOY, INC.
Address: 449 EISENHOWER BLVD., STE. 300
HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. db3080 METR

Upon receipt for Calibration, the instrument was found to be:

Within (X)

tolerance of the indicated specification. See attached Report of Calibration.
The information supplied relates to the calibrated item listed above.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by:

Felix Christopher (QA Mgr.)

Calibration Date: 26-Apr-18

Certificate No: 28756 - 3

QA Doc. #1051 Rev. 2.0 10/1/01

Certificate Page 1 of 1

ISO/IEC 17025:2005

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.



Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564

Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Manufacturer: Metrosonics

Model No.: db-3080

S/N: 4618

Permissible Sound Level Meter
Submitted by,

Company: Skelly & Loy, Inc.

Test	Function	Tolerance			Measured values			
		Min	Max		Before	Out	After	Out
0.	SPL Reading with 102.0dB SPL	101.4	102.6		102.1		102.1	
1.	Level Accuracy	93.4	94.6	94dB	94.1		94.1	
		103.4	104.6	104dB	104.3		104.3	
		113.4	114.6	114dB	114.1		114.1	
2.	Frequency Response A Weighting	88.0	97.8	8kHz	92.5		92.5	
		92.1	97.9	4kHz	96.8		96.8	
		93.3	97.1	2kHz	94.5		94.5	
		92.6	95.4	1kHz	94.1		94.1	
		89.4	92.2	500Hz	91.4		91.4	
		84.0	86.8	250Hz	86.2		86.2	
		76.5	79.3	125Hz	78.9		78.9	
		65.9	69.7	63Hz	69.1		69.1	
		51.8	57.5	31.5Hz	56.1		56.1	
	C Weighting	86.1	95.9	8kHz	90.6		90.6	
		90.3	96.1	4kHz	95.0		95.0	
		91.9	95.7	2kHz	93.1		93.1	
		92.6	95.4	1kHz	94.1		94.1	
		92.6	95.4	500Hz	94.7		94.7	
		92.6	95.4	250Hz	94.7		94.7	
		92.4	95.2	125Hz	94.7		94.7	
		91.3	95.1	63Hz	93.9		93.9	
		88.2	93.9	31.5Hz	91.5		91.5	
		3.	SLM	113.4	114.6		113.9	
L avg. / Leq	113.4		114.6		113.9		113.9	
L max.	113.4		114.6		114.1		114.1	
L pk	116.1		117.9		117.8		117.8	
Dose %								
0.18% @ 94 dB 1kHz	0.14%		0.22%		0.18%		0.18%	
0.73% @ 104 dB 1kHz	0.58%		0.88%		0.78%		0.78%	
2.90% @ 114 dB 1kHz	2.32%	3.48%		2.95%		2.95%		
4	Inherent noise level				60.1		60.1	

The expanded uncertainty of calibration at 95% confidence level with a coverage factor of k=2.

Parameter	Test Instrumentation Uncertainty	DUT Uncertainty	Total DUT Uncertainty
Reading with mic. @ 1 kHz:	0.11	0.1	0.15
Meter linearity:	0.17	0.1	0.20
Attenuator accuracy:	0.17	0.1	0.20
Freq. Response: 63 Hz to 8 kHz	0.10	0.1	0.14
Inherent noise level:	0.024	0.1	0.10
Functions:	0.11	0.1	0.15
Sensitivity:	0.11	0.1	0.15
Dose:	0.30	0.1	0.32

Measurements performed by:

Calibration Date: 26-Apr-2018

James Zhu

West Caldwell Calibration Laboratories, Inc.
 uncompromised calibration
 1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005



Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Permissible Sound Level Meter

Model No.: db3080
Company: Skelly & Loy, Inc.

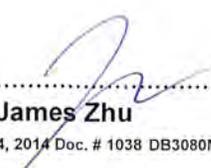
Serial No.: 4618
I. D. No.: XXXX

Calibration results:		Laboratory Environment:	
Before data:	After data:	Ambient Temperature:	20.2 °C
Before & after data same: ...X...		Ambient Humidity:	32.6 % RH
All tested parameters: Pass		Ambient Pressure:	98.624 kPa
For details see "Calibration Data Record"		Calibration Date:	26-Apr-2018
		Calibration Due:	26-Apr-2019
		Report Number:	28756 -3
		Control Number:	28756
<p>The above listed instrument meets or exceeds the tested manufacturer's specifications. This Calibration is traceable through NIST test numbers listed below. The absolute uncertainty of calibration: See last page. Unless otherwise noted, the reported values are both "as found" and "as left" data.</p>			

The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 7.0 Jan. 24, 2014 Doc. # 1038 DB3080METR**
 Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NC SL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

NIST Traceable Instruments:	Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær 4226 S/N 2272364	1-Aug-2017	822/275722-15	1-Aug-2018

Cal. Date: 26-Apr-2018
 Calibrated on WCCL system type 9700

Measurements performed by: 
James Zhu

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Rev. 7.0 Jan. 24, 2014 Doc. # 1038 DB3080METR

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

PERMISSIBLE SOUND LEVEL METER

Manufactured by: METROSONICS
Model No: db3080
Serial No: 3897
Calibration Recall No: 28756

Submitted By:

Customer: EVAN R. ZEIDERS
Company: SKELLY & LOY, INC.
Address: 449 EISENHOWER BLVD., STE. 300
HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. db3080 METR

Upon receipt for Calibration, the instrument was found to be:

Within (X)

tolerance of the indicated specification. See attached Report of Calibration.
The information supplied relates to the calibrated item listed above.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by:

Felix Christopher (QA Mgr.)

Calibration Date: 26-Apr-18

Certificate No: 28756 - 2

QA Doc. #1051 Rev. 2.0 10/1/01

Certificate Page 1 of 1

ISO/IEC 17025:2005

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.



Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Manufacturer: Metrosonics

Model No.: db-3080

S/N: 3897

Permissible Sound Level Meter
Submitted by,

Company: Skelly & Loy, Inc.

Test	Function	Tolerance			Measured values			
		Min	Max		Before	Out	After	Out
,0.	SPL Reading with 102.0dB SPL	101.4	102.6		102.0		102.0	
,1.	Level Accuracy	93.4	94.6	94dB	94.1		94.1	
		103.4	104.6	104dB	104.0		104.0	
		113.4	114.6	114dB	114.1		114.1	
,2.	Frequency Response A Weighting	88.0	97.8	8kHz	94.0		94.0	
		92.1	97.9	4kHz	97.8		97.8	
		93.3	97.1	2kHz	95.6		95.6	
		92.6	95.4	1kHz	94.2		94.2	
		89.4	92.2	500Hz	91.2		91.2	
		84.0	86.8	250Hz	85.6		85.6	
		76.5	79.3	125Hz	77.7		77.7	
		65.9	69.7	63Hz	68.0		68.0	
		51.8	57.5	31.5Hz	55.5		55.5	
	C Weighting	86.1	95.9	8kHz	92.0		92.0	
		90.3	96.1	4kHz	92.8		92.8	
		91.9	95.7	2kHz	94.0		94.0	
		92.6	95.4	1kHz	94.0		94.0	
		92.6	95.4	500Hz	94.1		94.1	
		92.6	95.4	250Hz	94.3		94.3	
		92.4	95.2	125Hz	94.0		94.0	
		91.3	95.1	63Hz	93.2		93.2	
		88.2	93.9	31.5Hz	90.4		90.4	
		,3	SLM	113.4	114.6		114.0	
L avg. / Leq	113.4		114.6		114.0		114.0	
L max.	113.4		114.6		114.0		114.0	
L pk	116.1		117.9		116.6		116.6	
Dose %								
0.18% @ 94 dB 1kHz	0.14%		0.22%		0.19%		0.19%	
0.73% @ 104 dB 1kHz	0.58%		0.88%		0.81%		0.81%	
2.90% @ 114 dB 1kHz	2.32%	3.48%		3.14%		3.14%		
4	Inherent noise level				59.4		59.4	

The expanded uncertainty of calibration at 95% confidence level with a coverage factor of $k=2$.

Parameter	Test Instrumentation Uncertainty	DUT Uncertainty	Total DUT Uncertainty
Reading with mic. @ 1 kHz:	0.11	0.1	0.15
Meter linearity:	0.17	0.1	0.20
Attenuator accuracy:	0.17	0.1	0.20
Freq. Response: 63 Hz to 8 kHz	0.10	0.1	0.14
Inherent noise level:	0.024	0.1	0.10
Functions:	0.11	0.1	0.15
Sensitivity:	0.11	0.1	0.15
Dose:	0.30	0.1	0.32

Measurements performed by:

Calibration Date: 26-Apr-2018

James Zhu

West Caldwell Calibration Laboratories, Inc.
 uncompromised calibration
 1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005

 Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Permissible Sound Level Meter

Model No.: db3080
Company: Skelly & Loy, Inc.

Serial No.: 3897
I. D. No.: XXXX

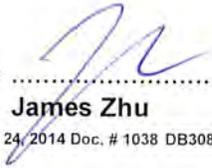
Calibration results:		Laboratory Environment:	
Before data:	After data:	Ambient Temperature:	20.2 °C
Before & after data same: ...X...		Ambient Humidity:	32.6 % RH
All tested parameters: Pass		Ambient Pressure:	98.624 kPa
For details see "Calibration Data Record"		Calibration Date:	26-Apr-2018
		Calibration Due:	26-Apr-2019
		Report Number:	28756 -2
		Control Number:	28756

The above listed instrument meets or exceeds the tested manufacturer's specifications.
 This Calibration is traceable through NIST test numbers listed below.
 The absolute uncertainty of calibration: See last page. Unless otherwise noted, the reported values are both "as found" and "as left" data.

The above listed instrument was checked using calibration procedure documented in West Caldwell Calibration Laboratories Inc. procedure : **Rev. 7.0 Jan. 24, 2014 Doc. # 1038 DB3080METR**
 Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NC SL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

NIST Traceable Instruments:	Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær 4226 S/N 2272364	1-Aug-2017	822/275722-15	1-Aug-2018

Cal. Date: 26-Apr-2018

Measurements performed by: 

James Zhu

Calibrated on WCCL system type 9700

Rev. 7.0 Jan. 24, 2014 Doc. # 1038 DB3080METR

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West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

PERMISSIBLE SOUND LEVEL METER

Manufactured by: METROSONICS
Model No: db3080
Serial No: 3895
Calibration Recall No: 28756

Submitted By:

Customer: EVAN R. ZEIDERS
Company: SKELLY & LOY, INC.
Address: 449 EISENHOWER BLVD., STE. 300
HARRISBURG PA 17111

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. db3080 METR

Upon receipt for Calibration, the instrument was found to be:

Within (X)

tolerance of the indicated specification. See attached Report of Calibration.
The information supplied relates to the calibrated item listed above.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by:

Felix Christopher (QA Mgr.)

Calibration Date: 26-Apr-18

Certificate No: 28756 - 1

QA Doc. #1051 Rev. 2.0 10/1/01

Certificate Page 1 of 1

ISO/IEC 17025:2005

uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.
West Caldwell Calibration Laboratories, Inc.



Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories Inc.

1575 State Route 96, Victor NY 14564
Tel. (585) 586-3900 FAX (585) 586-4327

Calibration Data Record

for

Manufacturer: Metrosonics

Model No.: db-3080

S/N: 3895

Permissible Sound Level Meter
Submitted by,

Company: Skelly & Loy, Inc.

Test	Function	Tolerance			Measured values			
		Min	Max		Before	Out	After	Out
.0.	SPL Reading with 102.0dB SPL	101.4	102.6		102.0		102.0	
.1.	Level Accuracy	93.4	94.6	94dB	94.0		94.0	
		103.4	104.6	104dB	104.0		104.0	
		113.4	114.6	114dB	114.0		114.0	
.2.	Frequency Response A Weighting	88.0	97.8	8kHz	93.6		93.6	
		92.1	97.9	4kHz	94.9		94.9	
		93.3	97.1	2kHz	95.6		95.6	
		92.6	95.4	1kHz	94.0		94.0	
		89.4	92.2	500Hz	91.4		91.4	
		84.0	86.8	250Hz	85.3		85.3	
		76.5	79.3	125Hz	77.6		77.6	
		65.9	69.7	63Hz	67.6		67.6	
		51.8	57.5	31.5Hz	54.0		54.0	
	C Weighting	86.1	95.9	8kHz	92.0		92.0	
		90.3	96.1	4kHz	93.2		93.2	
		91.9	95.7	2kHz	94.4		94.4	
		92.6	95.4	1kHz	94.0		94.0	
		92.6	95.4	500Hz	94.0		94.0	
		92.6	95.4	250Hz	94.0		94.0	
		92.4	95.2	125Hz	94.0		94.0	
		91.3	95.1	63Hz	93.1		93.1	
		88.2	93.9	31.5Hz	89.6		89.6	
		.3	SLM	113.4	114.6		114.0	
L avg. / Leq	113.4		114.6		114.0		114.0	
L max.	113.4		114.6		114.2		114.2	
L pk	116.1		117.9		116.8		116.8	
Dose %								
0.18% @ 94 dB 1kHz	0.14%		0.22%		0.17%		0.17%	
0.73% @ 104 dB 1kHz	0.58%		0.88%		0.78%		0.78%	
2.90% @ 114 dB 1kHz	2.32%	3.48%		2.93%		2.93%		
4	Inherent noise level				62.4		62.4	

The expanded uncertainty of calibration at 95% confidence level with a coverage factor of $k=2$.

Parameter	Test Instrumentation Uncertainty	DUT Uncertainty	Total DUT Uncertainty
Reading with mic. @ 1 kHz:	0.11	0.1	0.15
Meter linearity:	0.17	0.1	0.20
Attenuator accuracy:	0.17	0.1	0.20
Freq. Response: 63 Hz to 8 kHz	0.10	0.1	0.14
Inherent noise level:	0.024	0.1	0.10
Functions:	0.11	0.1	0.15
Sensitivity:	0.11	0.1	0.15
Dose:	0.30	0.1	0.32

Measurements performed by:

Calibration Date: 26-Apr-2018

James Zhu

**West Caldwell
Calibration
Laboratories, Inc.**
uncompromised calibration
1575 State Route 96, Victor NY 14564

ISO/IEC 17025: 2005

ACCREDITED
Calibration Lab. Cert. # 1533.01

REPORT OF CALIBRATION

for

Metrosonics Permissible Sound Level Meter

**Model No.: db3080
Company: Skelly & Loy, Inc.**

**Serial No.: 3895
I. D. No.: XXXX**

Calibration results:

Before data: After data:
Before & after data same: ...X...

All tested parameters: Pass

For details see "Calibration Data Record"

Laboratory Environment:

Ambient Temperature: 20.2 °C
Ambient Humidity: 32.6 % RH
Ambient Pressure: 98.624 kPa

Calibration Date: 26-Apr-2018
Calibration Due: 26-Apr-2019
Report Number: 28756 -1
Control Number: 28756

The above listed instrument meets or exceeds the tested manufacturer's specifications.

This Calibration is traceable through NIST test numbers listed below.

The absolute uncertainty of calibration: See last page. Unless otherwise noted, the reported values are both "as found" and "as left" data.

The above listed instrument was checked using calibration procedure documented in West Caldwell

Calibration Laboratories Inc. procedure :

Rev. 7.0 Jan. 24, 2014 Doc. # 1038 DB3080METR

Calibration was performed by West Caldwell Calibration Laboratories Inc. under Operating Procedures

intended to implement the requirements of ISO10012-1, IEC Guide 25, ANSI/NCSL Z540-1, (MIL-STD-45662A) and ISO 9001:2008, ISO 17025

NIST Traceable Instruments:	Date of Cal.	Traceability No.	Re-cal. Due Date
Brüel & Kjær 4226 S/N 2272364	1-Aug-2017	822/275722-15	1-Aug-2018

Cal. Date: 26-Apr-2018

Measurements performed by:

Calibrated on WCCL system type 9700

James Zhu

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Rev. 7.0 Jan. 24, 2014 Doc. # 1038 DB3080METR

Model	NC-74	Product Name	Sound Calibrator
--------------	-------	---------------------	------------------

Ensure all the items below are in the package.
If there is a missing part, please contact your supplier.

Type	Description	Quantity	Note
NC-74	Main unit	1	#35236431
	Soft case	1	
	Batteries IEC LR6 (size AA)	2	
NC-74-002	1/2-inch microphone adapter	1	mounted on main unit
	Instruction manual	1	
	Inspection certificate	1	This sheet
	Document for China RoHS	1	only to China

Inspection Certificate

INSPECTOR



We hereby certify that this product has been tested and calibrated at our factory according to RION specifications and that the product satisfies all relevant requirements.

RION CO., LTD.
3-20-41 Higashimotomachi, Kokubunji,
Tokyo 185-8533,
Japan

Sound and Vibration Measuring Instrument Section Product Information and software downloads can be found on our web-site:

<http://svmeas.rion.co.jp/>.

Please check it out.

Calibration Certificate No. 34210

Instrument:	Sound Level Meter	Date Calibrated:	7/7/2015	Cal Due:	
Model:	NL42	Status:	Received	Sent	
Manufacturer:	Rion	In tolerance:	X	X	
Serial number:	01122580	Out of tolerance:			
Tested with:	Microphone UC52 s/n 144597	See comments:			
	Preamplifier NH24 s/n 22621	Contains non-accredited tests:	___ Yes <u>X</u> No		
Type (class):	2	Calibration service:	___ Basic <u>X</u> Standard		
Customer:	McCormick Taylor, Inc.	Address:	5511 Capital Center Drive, Suite		
Tel/Fax:	215-592-4200 ext.1313 /		560 Raleigh, NC 27606		

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/22/2012
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence	Cal. Due
				Cal. Lab / Accreditation	
483B-Norsonic	SME Cal Unit	31052	Oct 7, 2014	Scantek, Inc./ NVLAP	Oct 7, 2015
DS-360-SRS	Function Generator	33584	Sep 30, 2013	ACR Env./ A2LA	Sep 30, 2015
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 1, 2014	ACR Env./ A2LA	Oct 1, 2015
HM30-Thommen	Meteo Station	1040170/39633	Oct 3, 2014	ACR Env./ A2LA	Oct 3, 2015
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1251-Norsonic	Calibrator	30878	Nov 10, 2014	Scantek, Inc./ NVLAP	Nov 10, 2015
4225-Brüel&Kjaer	Multifunction calibrator	2305103	Jul 28, 2014	Scantek, Inc./ NVLAP	Jul 28, 2015

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
24.2	100.25	49.1

Calibrated by:	Lydon Dawkins	Authorized signatory:	Valentin Buzduga
Signature	<i>Lydon Dawkins</i>	Signature	<i>Valentin Buzduga</i>
Date	7/7/2015	Date	7/07/2015

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.
This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Meter #2



ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)

NVLAP Lab Code: 200625-0

Calibration Certificate No.34205

Instrument: **Sound Level Meter**
Model: **NL42**
Manufacturer: **Rion**
Serial number: **01222875_017997**
Tested with: **Microphone UC52 s/n 144499**
Preamplifier NH24 s/n 22922
Type (class): **2**
Customer: **Mccormick Taylor**
Tel/Fax: **717-540-6040 /**

Date Calibrated: **7/2/2015** Cal Due:
Status:

Received	Sent
X	X

In tolerance:

X	X
---	---

Out of tolerance:

--	--

See comments:
Contains non-accredited tests: Yes No
Calibration service: Basic Standard
Address: **5 Capital Drive, Suite 400**
Harrisburg, PA 17110

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/22/2012
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence	Cal. Due
				Cal. Lab / Accreditation	
483B-Norsonic	SME Cal Unit	31052	Oct 7, 2014	Scantek, Inc./ NVLAP	Oct 7, 2015
DS-360-SRS	Function Generator	33584	Sep 30, 2013	ACR Env./ A2LA	Sep 30, 2015
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 1, 2014	ACR Env. / A2LA	Oct 1, 2015
HM30-Thommen	Meteo Station	1040170/39633	Oct 3, 2014	ACR Env./ A2LA	Oct 3, 2015
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	-
1251-Norsonic	Calibrator	30878	Nov 10, 2014	Scantek, Inc./ NVLAP	Nov 10, 2015
4226-Brüel&Kjær	Multifunction calibrator	2305103	Jul 28, 2014	Scantek, Inc./ NVLAP	Jul 28, 2015

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
23.1	99.78	69.1

Calibrated by:	Lydon Dawkins	Authorized signatory:	Valentin Buzduga
Signature	<i>Lydon Dawkins</i>	Signature	<i>Valentin Buzduga</i>
Date	7/2/2015	Date	7/02/2015

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory. This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Scantek, Inc.

CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCCL Z540:1994 Part 1
ACCREDITED by NVLAP (an ILAC MRA signatory)



NVLAP Lab Code: 200625-0

Calibration Certificate No.34211

Instrument: Sound Level Meter
Model: NL42
Manufacturer: Rion
Serial number: 01222874_017995
Tested with: Microphone UC52 s/n 144498
Preamplifier NH24 s/n 22921
Type (class): 2
Customer: McCormick Taylor, Inc.
Tel/Fax: 215-592-4200 ext.1313 /

Date Calibrated: 7/7/2015 **Cal Due:**
Status:

Received	Sent
X	X

In tolerance:

X	X
---	---

Out of tolerance:

--	--

See comments:
Contains non-accredited tests: Yes No
Calibration service: Basic Standard
Address: 5511 Capital Center Drive, Suite
560 Raleigh, NC 27606

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., Rev. 6/22/2012
SLM & Dosimeters – Acoustical Tests, Scantek Inc., Rev. 7/6/2011

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence	Cal. Due
				Cal. Lab / Accreditation	
483B-Norsonic	SME Cal Unit	31052	Oct 7, 2014	Scantek, Inc./ NVLAP	Oct 7, 2015
DS-360-SRS	Function Generator	33584	Sep 30, 2013	ACR Env./ A2LA	Sep 30, 2015
34401A-Agilent Technologies	Digital Voltmeter	US36120731	Oct 1, 2014	ACR Env./ A2LA	Oct 1, 2015
HM30-Thommen	Meteo Station	1040170/39633	Oct 3, 2014	ACR Env./ A2LA	Oct 3, 2015
PC Program 1019 Norsonic	Calibration software	v.6.1T	Validated Nov 2014	Scantek, Inc.	
1251-Norsonic	Calibrator	30878	Nov 10, 2014	Scantek, Inc./ NVLAP	Nov 10, 2015
4226-Brüel&Kjær	Multifunction calibrator	2305103	Jul 28, 2014	Scantek, Inc./ NVLAP	Jul 28, 2015

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
25.0	100.26	44.5

Calibrated by:	Lydon Dawkins	Authorized signatory:	Valentin Byrduga
Signature	<i>Lydon Dawkins</i>	Signature	<i>Valentin Byrduga</i>
Date	7/7/2015	Date	7/07/2015

Calibration Certificates or Test Reports shall not be reproduced, except in full, without written approval of the laboratory.
This Calibration Certificate or Test Reports shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Document stored Z:\Calibration Lab\SLM 2015\RIONL42_01222874_017995_M1.doc

Page 1 of 2

Model	NL-42	Product Name	Sound Level Meter, Class 2
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Ensure all the items below are in the package.
If there is a missing part, please contact your supplier.

Type	Description	Quantity	Note
NL-42	Main unit	1	00345978
NL-42-025	Storage case	1	42-52-150627 NH-09-36126
WS-10	Windscreen	1	
NL-42-033	Windscreen fall prevention rubber	1	attached to the main unit
VM-63-017	Hand strap	1	
LR6	Size AA alkaline batteries	4	
	CD-ROM (Instruction manual, Serial interface manual, Technical notes, Program option manual)	1	
	Description for IEC 61672-1	1	
	SD memory card (512 MByte)	1	only when NX-42EX is pre-installed
	Inspection certificate	1	This sheet
	Document for China RoHS	1	only to China

Inspection Certificate

INSPECTOR

M. Hidaka

We hereby certify that this product has been tested and calibrated at our factory according to RION specifications and that the product satisfies all relevant requirements.

RION CO., LTD.
3-20-41 Higashimotomachi, Kokubunji,
Tokyo 185-8533,
Japan

Sound and Vibration Measuring Instrument Section Product information and software downloads can be found on our web-site:
<http://svmeas.rion.co.jp/>
Please check it out.

№C11030302

Route 7 Widening Project

Site # R1 Description : 11304 Water Pointe Circle, Reston, Virginia 20194

Done By: JJW/KTT

Meter: →

Monitoring Data:

Date	11/17/15		
Start Time	9:35 AM		
End Time	9:50 AM		
Duration	15 MIN		

Leq.

57.2		
-------------	--	--

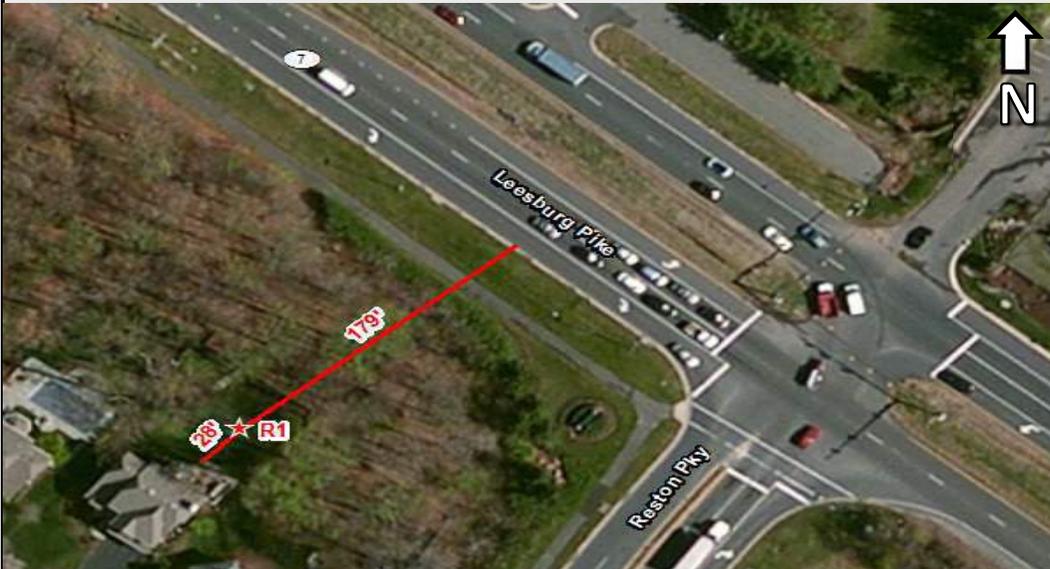
Atmospheric Data
Wind Speed (mph)
8
Temp. (°F)
52
Humidity (%)
63

Traffic Data

Roadway	Route 7					
Direction	EB	WB				
Traffic Total:	260	228	0	0	0	0
Cars	252	202				
MT	7	18				
HT	1	8				
Buses						
Motorcycles						

Weather Conditions

Site Data: Site Surface (alpha): _____ Shielding Factor : _____ Pavement Type : _____



*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closest travel lane measured in feet.

Monitoring Notes

Notes: _____

Route 7 Widening Project

Site # R2 **Description :** 11119 Loran Road, Great Falls, Virginia 22066

Done By: JJW/KTT

Meter: →

Monitoring Data:

	<u> 1 </u>			
Date	11/17/15			
Start Time	9:35 AM			
End Time	9:50 AM			
Duration	15 MIN			

Atmospheric Data
Wind Speed (mph)
8
Temp. (°F)
52
Humidity (%)
63

Leq.

63.2				
-------------	--	--	--	--

Traffic Data

	Route 7						
Direction	EB	WB	0	0	0	0	0
Traffic Total:	260	228	0	0	0	0	0
Cars	252	202					
MT	7	18					
HT	1	8					
Buses							
Motorcycles							

Weather Conditions

Site Data: Site Surface (alpha): Shielding Factor : Pavement Type :



*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closest travel lane measured in feet.

Monitoring Notes

Notes: Time:? Car enters and leaves driveway.

Route 7 Widening Project

Site # R3 **Description :** 1155 Markell Court, Reston, Virginia 20194

Done By: JJW/KTT

Meter: →

Monitoring Data:

Date	11/17/15		
Start Time	9:35 AM		
End Time	9:50 AM		
Duration	15 MIN		

Atmospheric Data	
Wind Speed (mph)	8
Temp. (°F)	52
Humidity (%)	63

Leq.

Traffic Data

Roadway	Route 7							
Direction	EB	WB						
Traffic Total:	260	228	0	0	0	0		
Cars	252	202						
MT	7	18						
HT	1	8						
Buses								
Motorcycles								

Weather Conditions

Site Data: Site Surface (alpha): Shielding Factor : Pavement Type :



*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closest travel lane measured in feet.

Monitoring Notes

Notes: _____

Route 7 Widening Project

Site # R4 Description : 10805 Piney Pond Drive, Great Falls, Virginia 22066

Done By: JJW/KTT

Meter: →

Monitoring Data:

Date	<u> 11/17/15 </u>	<u> </u>	<u> </u>
Start Time	<u> 9:35 AM </u>	<u> </u>	<u> </u>
End Time	<u> 9:50 AM </u>	<u> </u>	<u> </u>
Duration	<u> 15 MIN </u>	<u> </u>	<u> </u>

Atmospheric Data

Wind Speed (mph)	<u> 8 </u>
Temp. (°F)	<u> 52 </u>
Humidity (%)	<u> 63 </u>

Leq.

<u> 60.7 </u>	<u> </u>	<u> </u>
-------------------------	-----------------------------	-----------------------------

Traffic Data

Roadway	<u> Route 7 </u>			
Direction	<u> EB </u>	<u> WB </u>	<u> </u>	<u> </u>
Traffic Total:	<u> 260 </u>	<u> 228 </u>	<u> 0 </u>	<u> 0 </u>
Cars	<u> 252 </u>	<u> 202 </u>	<u> </u>	<u> </u>
MT	<u> 7 </u>	<u> 18 </u>	<u> </u>	<u> </u>
HT	<u> 1 </u>	<u> 8 </u>	<u> </u>	<u> </u>
Buses	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Motorcycles	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Weather Conditions

Site Data: Site Surface (alpha): Shielding Factor : Pavement Type :



*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closest travel lane measured in feet.

Monitoring Notes

Notes: 9:42 AM- Lawn mower engine made a loud popping noise.
 9:46 AM- Landscaping company across the street mowing and weed wacking.

Route 7 Widening Project

Site # R5 **Description :** 10411 Van Pattern Lane, Great Falls, Virginia 22066

Done By: JJW/KTT

Meter: →

Monitoring Data:

Date	<u>11/17/15</u>	_____	_____
Start Time	<u>10:40 AM</u>	_____	_____
End Time	<u>10:55 AM</u>	_____	_____
Duration	<u>15 MIN</u>	_____	_____

Leq. **59.5** _____ _____

Traffic Data

Roadway	Route 7				
Direction	EB	WB	_____	_____	_____
Traffic Total:	357	257	_____	_____	_____
Cars	329	239	_____	0	0
MT	14	14	_____	_____	_____
HT	14	4	_____	_____	_____
Buses			_____	_____	_____
Motorcycles			_____	_____	_____

Atmospheric Data

Wind Speed (mph)	10
Temp. (°F)	56
Humidity (%)	59



Site Data: Site Surface (alpha): _____ Shielding Factor : _____ Pavement Type : _____



*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closeset travel lane measured in feet.

Monitoring Notes

Notes: Privacy Fence (8ft)

Route 7 Widening Project

Site # R6 **Description :** 9629 Locust Hill Drive, Great Falls, Virginia 22066

Done By: JJW/KTT

Meter: →

Monitoring Data:

	<u> 3 </u>		
Date	<u>11/17/15</u>		
Start Time	<u>10:40 AM</u>		
End Time	<u>10:55 AM</u>		
Duration	<u>15 MIN</u>		

Leq.

60.1		
-------------	--	--

Atmospheric Data
Wind Speed (mph)
10
Temp. (°F)
56
Humidity (%)
59

Traffic Data

Roadway	Route 7					
Direction	EB	WB				
Traffic Total:	357	257	0	0	0	0
Cars	329	239				
MT	14	14				
HT	14	4				
Buses						
Motorcycles						

Weather Conditions

Site Data: Site Surface (alpha): Shielding Factor : Pavement Type :



*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closest travel lane measured in feet.

Monitoring Notes

Notes: Privacy Fence (8ft)

Route 7 Widening Project

Site # R7 **Description :** 1253 Dunn Meadow Court, Vienna, Virginia 22182

Done By: JJW/KTT

Meter: →

Monitoring Data:

Date	<u> 11/17/15 </u>	<u> </u>	<u> </u>
Start Time	<u> 10:40 AM </u>	<u> </u>	<u> </u>
End Time	<u> 10:55 AM </u>	<u> </u>	<u> </u>
Duration	<u> 15 MIN </u>	<u> </u>	<u> </u>

Atmospheric Data	
Wind Speed (mph)	<u> 10 </u>
Temp. (°F)	<u> 56 </u>
Humidity (%)	<u> 59 </u>

Leq.

<u> 2 </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
64.4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Traffic Data

Roadway	<u> Route 7 </u>				<u> </u>	<u> </u>
Direction	<u> EB </u>	<u> WB </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Traffic Total:	<u> 357 </u>	<u> 257 </u>	<u> 0 </u>	<u> 0 </u>	<u> 0 </u>	<u> 0 </u>
Cars	<u> 329 </u>	<u> 239 </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
MT	<u> 14 </u>	<u> 14 </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
HT	<u> 14 </u>	<u> 4 </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Buses	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Motorcycles	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Weather Conditions

Site Data: Site Surface (alpha): Shielding Factor : Pavement Type :



*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closest travel lane measured in feet.

Monitoring Notes

Notes: _____

Route 7 Widening Project

Site # R8 **Description :** 1293 Colvin Forest Drive, Vienna, Virginia 22182

Done By: JJW/KTT

Meter: →

Monitoring Data:

	<u>9</u>		
Date	11/17/15		
Start Time	10:40 AM		
End Time	10:55 AM		
Duration	15 MIN		

Leq.

63.3		
------	--	--

Atmospheric Data

Wind Speed (mph)	10
Temp. (°F)	56
Humidity (%)	59

Traffic Data

Roadway Route 7

Direction

Route 7					
EB	WB				
357	257	0	0	0	0
329	239				
14	14				
14	4				

Traffic Total:

Cars

MT

HT

Buses

Motorcycles

Weather Conditions

Site Data: Site Surface (alpha): Shielding Factor : Pavement Type :



Monitoring Notes

Notes:



*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closest travel lane measured in feet.

Route 7 Widening Project

Site # R9 Description : 9393 Farmingdale Court, Great Falls, Virginia 22066

Done By: JJW/KTT

Meter: →

Monitoring Data:

Date

 11/17/15

Start Time

 11:40 AM

End Time

 11:55 AM

Duration

 15 MIN

Leq.

 58.1

Atmospheric Data

Wind Speed
(mph)

 10

Temp. (F)

 58

Humidity (%)

 60

Traffic Data

Roadway

 Route 7

Direction

 EB WB

Traffic Total:

 392 308

Cars

 375 292

MT

 15 13

HT

 2 3

Buses

Motorcycles

Weather Conditions

Site Data: Site Surface (alpha): Shielding Factor : Pavement Type :



*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closest travel lane measured in feet.

Monitoring Notes

Notes: _____

Route 7 Widening Project

Site # R10 **Description :** 9356 Mildred Court, Vienna, Virginia 22182

Done By: JJW/KTT

Meter: \longrightarrow

Monitoring Data:

Date: 11/17/15
 Start Time: 11:40 AM
 End Time: 11:55 AM
 Duration: 15 MIN

Leq. 62.9

Atmospheric Data

Wind Speed (mph): 10
 Temp. (F): 58
 Humidity (%): 60

Traffic Data

Roadway: Route 7

Direction	EB	WB				
Traffic Total:	392	308	0	0	0	0
Cars	375	292				
MT	15	13				
HT	2	3				
Buses						
Motorcycles						

Weather Conditions

Site Data: Site Surface (alpha): _____ Shielding Factor : _____ Pavement Type : _____



*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closest travel lane measured in feet.

Monitoring Notes

Notes:

Route 7 Widening Project

Site # R11
Description : 9026 Leesburg Pike, Vienna, Virginia 22182
Done By: JJW/KTT
Meter: →

Monitoring Data:			
Date	<u> 3 </u>		
Start Time	<u> 11/17/15 </u>		
End Time	<u> 11:40 AM </u>		
Duration	<u> 11:55 AM </u>		
	<u> 15 MIN </u>		
Leq.	<u> 63.4 </u>		

Traffic Data			
Roadway	Route 7		
Direction	EB WB		
Traffic Total:	392 308	0 0	0 0
Cars	375 292		
MT	15 13		
HT	2 3		
Buses			
Motorcycles			

Weather Conditions

Site Data: Site Surface (alpha): Shielding Factor : Pavement Type :

Atmospheric Data
Wind Speed (mph) 10
Temp. (°F) 58
Humidity (%) 60



*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closest travel lane measured in feet.

Monitoring Notes

Notes:

Route 7 Widening Project

Site # R12 **Description :** 8850 Glenridge Court, Vienna, Virginia 22182

Done By: JJW/KTT

Meter: →

Monitoring Data:

	<u> 2 </u>		
Date	11/17/15		
Start Time	11:40 AM		
End Time	11:55 AM		
Duration	15 MIN		

Atmospheric Data
Wind Speed (mph)
10
Temp. (°F)
58
Humidity (%)
60

Leq. 65.2

Traffic Data

Roadway	Route 7					
Direction	EB	WB				
Traffic Total:	392	308	0	0	0	0
Cars	375	292				
MT	15	13				
HT	2	3				
Buses						
Motorcycles						

Weather Conditions

Site Data: Site Surface (alpha): Shielding Factor : Pavement Type :



*Distances in the photo above are from noise meter to nearest structure and from noise meter to edge of pavement of the closest travel lane measured in feet.

Monitoring Notes

Notes: Minimal traffic on Leesburg Pike.

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R1																57.2
263	11/17/2015	9:47:26	00d 00:10.0	52.9	62.9	53.4	52.4	--	53.4	53.4	52.8	52.5	52.4	----	----	194984.5
264	11/17/2015	9:47:36	00d 00:10.0	54.4	64.4	55.9	53.1	--	55.8	55.4	54.2	53.2	53.2	----	----	275422.9
265	11/17/2015	9:47:46	00d 00:10.0	56.3	66.3	57	55.3	--	56.9	56.9	56.4	55.5	55.4	----	----	426579.5
266	11/17/2015	9:47:56	00d 00:10.0	59.1	69.1	60.5	55.5	--	60.5	60.3	59	55.6	55.6	----	----	812830.5
267	11/17/2015	9:48:06	00d 00:10.0	58.2	68.2	60.2	57.1	--	60.2	60.1	58.2	57.3	57.2	----	----	660693.4
268	11/17/2015	9:48:16	00d 00:10.0	58.6	68.6	60	57.5	--	59.9	59.6	58.1	57.7	57.6	----	----	724436.0
269	11/17/2015	9:48:26	00d 00:10.0	60.4	70.4	61.4	58.7	--	61.2	61.2	60.8	58.9	58.8	----	----	1096478.2
270	11/17/2015	9:48:36	00d 00:10.0	62.2	72.2	64	58.4	--	63.9	63.8	61.8	59.3	58.6	----	----	1659586.9
271	11/17/2015	9:48:46	00d 00:10.0	54.7	64.7	60.4	52.3	--	59.8	59	54.3	52.6	52.5	----	----	295120.9
272	11/17/2015	9:48:56	00d 00:10.0	54.5	64.5	55.6	52	--	55.6	55.5	54	52.3	52.2	----	----	281838.3
273	11/17/2015	9:49:06	00d 00:10.0	54.9	64.9	55.4	54.5	--	55.3	55.2	54.9	54.6	54.6	----	----	309029.5
274	11/17/2015	9:49:16	00d 00:10.0	57	67	58.4	54.8	--	58.4	58.3	56.5	54.8	54.8	----	----	501187.2
275	11/17/2015	9:49:26	00d 00:10.0	55.8	65.8	57.6	54.6	--	57.4	57.3	55.9	54.8	54.7	----	----	380189.4
276	11/17/2015	9:49:36	00d 00:10.0	53.2	63.2	55.1	51.4	--	55	54.9	53.5	51.6	51.5	----	----	208929.6
277	11/17/2015	9:49:46	00d 00:10.0	55.7	65.7	58.4	51.5	--	58.2	57.7	54.9	51.8	51.5	----	----	371535.2
278	11/17/2015	9:49:56	00d 00:10.0	57.6	67.6	59	56.1	--	58.8	58.6	57.6	56.4	56.3	----	----	575439.9

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R2																63.2
265	11/17/2015	9:47:29 00d 00:10.0	61.2	71.2	62.6	59.7	--	62.4	62.3	60.8	59.9	59.8	----	----	1318256.7	
266	11/17/2015	9:47:39 00d 00:10.0	64.5	74.5	65.9	61.7	--	65.8	65.8	64.4	62.7	62.2	----	----	2818382.9	
267	11/17/2015	9:47:49 00d 00:10.0	64.6	74.6	68.2	61.5	--	67.8	67.4	62.5	61.6	61.6	----	----	2884031.5	
268	11/17/2015	9:47:59 00d 00:10.0	68.3	78.3	71.2	66.1	--	70.9	70.7	68	66.3	66.3	----	----	6760829.8	
269	11/17/2015	9:48:09 00d 00:10.0	63.6	73.6	66.2	61.8	--	66	65.8	63.9	62	61.9	----	----	2290867.7	
270	11/17/2015	9:48:19 00d 00:10.0	64.2	74.2	65.4	62.5	--	65.1	65.1	63.9	63	62.7	----	----	2630268.0	
271	11/17/2015	9:48:29 00d 00:10.0	60.7	70.7	63.7	59.7	--	63.3	62.7	60.6	59.8	59.8	----	----	1174897.6	
272	11/17/2015	9:48:39 00d 00:10.0	60.8	70.8	61.3	60.4	--	61.2	61.1	60.8	60.6	60.5	----	----	1202264.4	
273	11/17/2015	9:48:49 00d 00:10.0	59.7	69.7	60.4	59.2	--	60.4	60.3	59.7	59.5	59.3	----	----	933254.3	
274	11/17/2015	9:48:59 00d 00:10.0	59.7	69.7	61	58.6	--	60.9	60.8	59.1	58.7	58.6	----	----	933254.3	
275	11/17/2015	9:49:09 00d 00:10.0	57.7	67.7	60.3	55.2	--	59.9	59.4	58.6	55.6	55.3	----	----	588843.7	
276	11/17/2015	9:49:19 00d 00:10.0	58.7	68.7	60.7	54.5	--	60.6	60.4	58.2	54.8	54.7	----	----	741310.2	
277	11/17/2015	9:49:29 00d 00:10.0	63.3	73.3	67.5	59.3	--	67.3	66.9	60.1	59.5	59.4	----	----	2137962.1	
278	11/17/2015	9:49:39 00d 00:10.0	63.4	73.4	67	62.5	--	66	64.8	63.8	62.6	62.6	----	----	2187761.6	
279	11/17/2015	9:49:49 00d 00:10.0	59.6	69.6	62.6	58.7	--	62.2	61.4	59.7	58.8	58.8	----	----	912010.8	
280	11/17/2015	9:49:59 00d 00:10.0	60.1	70.1	60.4	59.7	--	60.3	60.3	60.2	59.9	59.8	----	----	1023293.0	

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leg
R3																58.1
263	11/17/2015	9:47:29	00d 00:10.0	56.8	66.8	58.1	55.6	-	57.9	57.7	56.7	55.8	---	---	478630.1	
264	11/17/2015	9:47:39	00d 00:10.0	58.3	68.3	60.1	55.2	-	60	59.8	58.4	56.4	---	---	676083.0	
265	11/17/2015	9:47:49	00d 00:10.0	53.5	63.5	55.2	52.9	-	54.8	54.7	53.4	53	---	---	223872.1	
266	11/17/2015	9:47:59	00d 00:10.0	57	67	58.3	54	-	58.2	58	56.7	55.2	---	---	501187.2	
267	11/17/2015	9:48:09	00d 00:10.0	58.1	68.1	60	56	-	59.9	59.8	57.9	56.2	---	---	645654.2	
268	11/17/2015	9:48:19	00d 00:10.0	58.3	68.3	59.7	56.7	-	59.6	59.5	57.9	57	---	---	676083.0	
269	11/17/2015	9:48:29	00d 00:10.0	58.5	68.5	59.5	57.4	-	59.4	59.2	58.6	57.7	---	---	707945.8	
270	11/17/2015	9:48:39	00d 00:10.0	59.4	69.4	61.7	57.4	-	61.6	61.3	59.2	57.7	---	---	870963.6	
271	11/17/2015	9:48:49	00d 00:10.0	59.9	69.9	61.1	57.7	-	61	60.9	60.1	57.8	---	---	977237.2	
272	11/17/2015	9:48:59	00d 00:10.0	58.8	68.8	61.3	55.8	-	61.2	60.9	58.1	56.1	---	---	758577.6	
273	11/17/2015	9:49:09	00d 00:10.0	58.6	68.6	60.7	57.3	-	60.6	60.6	58.4	57.6	---	---	724436.0	
274	11/17/2015	9:49:19	00d 00:10.0	60	70	62.1	58.2	-	61.9	61.4	59.8	58.5	---	---	1000000.0	
275	11/17/2015	9:49:29	00d 00:10.0	55.2	65.2	58.3	53.1	-	58.1	57.7	54.5	53.2	---	---	331131.1	
276	11/17/2015	9:49:39	00d 00:10.0	58.5	68.5	60.2	54	-	60.1	59.8	58.6	54.2	---	---	707945.8	
277	11/17/2015	9:49:49	00d 00:10.0	57.3	67.3	59.6	56.3	-	59.3	58.9	57.2	56.4	---	---	537031.8	
278	11/17/2015	9:49:59	00d 00:10.0	56.7	66.7	58.4	54.5	-	58.3	58.1	57.1	54.7	---	---	467735.1	

Address	Start Time	Measurement Time			Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq	
R4																			60.7
265	11/17/2015	9:47:40	00d	00:10.0	55.4	65.4	56.5	53.3	--	56.7	56.7	55.6	54.4	54.2	----	----	346736.9		
266	11/17/2015	9:47:50	00d	00:10.0	57.5	67.5	59.6	54.4	--	60.3	60.3	57.5	55.7	54.3	----	----	562341.3		
267	11/17/2015	9:48:00	00d	00:10.0	55.6	65.6	57.3	54.5	--	57.4	57.4	55.1	54.5	54.5	----	----	363078.1		
268	11/17/2015	9:48:10	00d	00:10.0	53.8	63.8	55.1	52.9	--	55.1	55.1	53.8	53.1	52.6	----	----	239883.3		
269	11/17/2015	9:48:20	00d	00:10.0	53.2	63.2	54.3	52.3	--	54.8	54.8	53.2	52.5	52.3	----	----	208929.6		
270	11/17/2015	9:48:30	00d	00:10.0	58.6	68.6	59.2	54.3	--	59.2	59.2	58.7	58.3	57	----	----	724436.0		
271	11/17/2015	9:48:40	00d	00:10.0	61.6	71.6	64.9	58.4	--	65.2	65.2	60.6	58.5	58.5	----	----	1445439.8		
272	11/17/2015	9:48:50	00d	00:10.0	63.7	73.7	64.8	62.6	--	64.3	64.3	63.8	62.6	62.4	----	----	2344228.8		
273	11/17/2015	9:49:00	00d	00:10.0	63.8	73.8	67.3	59.9	--	67.9	67.9	63.2	59.8	59.8	----	----	2398832.9		
274	11/17/2015	9:49:10	00d	00:10.0	59.5	69.5	61.7	57.4	--	62	62	59.1	57.5	57.4	----	----	891250.9		
275	11/17/2015	9:49:20	00d	00:10.0	63.3	73.3	64.7	61.7	--	64.8	64.8	63.1	61.9	61.5	----	----	2137962.1		
276	11/17/2015	9:49:30	00d	00:10.0	62.2	72.2	63.7	60.2	--	63.8	63.8	62.7	60.3	59.5	----	----	1659586.9		
277	11/17/2015	9:49:40	00d	00:10.0	61.3	71.3	62.8	59	--	63	63	61.3	59.4	58.5	----	----	1348962.9		
278	11/17/2015	9:49:50	00d	00:10.0	57.5	67.5	59.1	56.3	--	59	59	57.5	56.1	55.9	----	----	562341.3		

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R5																59.5
205	11/17/2015	10:52:26	00d 00:10.0	57.3	67.3	59.9	54.4	--	59.6	59.3	56.8	54.6	54.5	----	----	537031.8
206	11/17/2015	10:52:36	00d 00:10.0	56.5	66.5	58.8	53.6	--	58.4	58.2	56.4	54.3	54.1	----	----	446683.6
207	11/17/2015	10:52:46	00d 00:10.0	56.4	66.4	58.9	53.9	--	58.7	58.3	55.8	54.4	54.3	----	----	436515.8
208	11/17/2015	10:52:56	00d 00:10.0	59	69	61.4	56.1	--	61.3	60.9	58.3	57.2	56.3	----	----	794328.2
209	11/17/2015	10:53:06	00d 00:10.0	64.9	74.9	70	57.3	--	69.6	69.2	58.1	57.4	57.4	----	----	3090295.4
210	11/17/2015	10:53:16	00d 00:10.0	58.1	68.1	67.8	55.8	--	66.6	65.1	57.8	56	55.9	----	----	645654.2
211	11/17/2015	10:53:26	00d 00:10.0	56.2	66.2	56.9	55.6	--	56.9	56.9	56.4	55.6	55.6	----	----	416869.4
212	11/17/2015	10:53:36	00d 00:10.0	57.3	67.3	59.1	55.6	--	58.4	57.8	56.9	55.7	55.6	----	----	537031.8
213	11/17/2015	10:53:46	00d 00:10.0	60.2	70.2	61.2	58.3	--	61.1	61.1	60.3	58.9	58.5	----	----	1047128.5
214	11/17/2015	10:53:56	00d 00:10.0	57.1	67.1	58.3	56.1	--	58.1	58.1	57.2	56.2	56.2	----	----	512861.4
215	11/17/2015	10:54:06	00d 00:10.0	59.9	69.9	60.8	56.6	--	60.7	60.7	59.9	57.6	57.1	----	----	977237.2
216	11/17/2015	10:54:16	00d 00:10.0	60.1	70.1	60.7	59.1	--	60.6	60.5	60	59.3	59.2	----	----	1023293.0
217	11/17/2015	10:54:26	00d 00:10.0	57.1	67.1	60.3	56	--	59.9	59.4	57	56.2	56.2	----	----	512861.4
218	11/17/2015	10:54:36	00d 00:10.0	56.3	66.3	57.8	54.2	--	57.8	57.7	56.1	55.1	54.5	----	----	426579.5
219	11/17/2015	10:54:46	00d 00:10.0	53	63	54.5	51.4	--	54.3	54.2	53	51.5	51.5	----	----	199526.2
220	11/17/2015	10:54:56	00d 00:10.0	54	64	56.5	50.6	--	56.4	56.4	51.9	50.7	50.7	----	----	251188.6

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leg
R6																60.1
122	11/17/2015	10:52:11	00d	00:10.0	55.3	65.3	58.3	50.9	--	58.5	58.5	55.1	52.2	52	----	338844.2
123	11/17/2015	10:52:21	00d	00:10.0	59.5	69.5	61.8	52.8	--	62.1	62.1	59.7	55.7	53.9	----	891250.9
124	11/17/2015	10:52:31	00d	00:10.0	59	69	61.6	55.5	--	61.8	61.8	58.4	55.4	54.9	----	794328.2
125	11/17/2015	10:52:41	00d	00:10.0	61.1	71.1	61.8	60.4	--	62	62	61.2	60.6	60.4	----	1288249.6
126	11/17/2015	10:52:51	00d	00:10.0	62	72	63.7	58.8	--	64.1	64.1	62.2	59.1	57.6	----	1584893.2
127	11/17/2015	10:53:01	00d	00:10.0	56.6	66.6	58.8	56.1	--	57.5	57.5	56.5	56.1	55.8	----	457088.2
128	11/17/2015	10:53:11	00d	00:10.0	58	68	59.3	56.1	--	59.9	59.9	57.9	56.7	55.1	----	630957.3
129	11/17/2015	10:53:21	00d	00:10.0	64.2	74.2	69.6	55.4	--	70.1	70.1	61	56.2	55	----	2630268.0
130	11/17/2015	10:53:31	00d	00:10.0	60.5	70.5	65	59.5	--	62.1	62.1	60.2	59.8	59.2	----	1122018.5
131	11/17/2015	10:53:41	00d	00:10.0	58.1	68.1	59.6	57.8	--	58.6	58.6	58.1	57.7	57.6	----	645654.2
132	11/17/2015	10:53:51	00d	00:10.0	58.9	68.9	61.8	55.7	--	62.4	62.4	58.9	55.6	55.5	----	776247.1
133	11/17/2015	10:54:01	00d	00:10.0	61.1	71.1	63.5	59	--	64	64	60.7	59.4	58.3	----	1288249.6
134	11/17/2015	10:54:11	00d	00:10.0	62	72	64.9	57.8	--	65.2	65.2	62.2	57.9	57.4	----	1584893.2
135	11/17/2015	10:54:21	00d	00:10.0	62.5	72.5	65	60.6	--	65.4	65.4	62	60.5	60.5	----	1778279.4
136	11/17/2015	10:54:31	00d	00:10.0	60.9	70.9	64.5	60	--	61.7	61.7	61.1	59.9	59.4	----	1230268.8
137	11/17/2015	10:54:41	00d	00:10.0	60.8	70.8	61.7	59.6	--	61.8	61.8	61.2	59.9	59.3	----	1202264.4
138	11/17/2015	10:54:51	00d	00:10.0	57.4	67.4	59.6	56.3	--	59.2	59.2	57.5	56.5	55.9	----	549540.9

Address	Start Time	Measurement Time		Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R7																	64.4
206	11/17/2015	10:52:11	00d	00:10.0	63.1	73.1	65.1	60.5	--	65	64.9	63.2	61.1	60.7	----	----	2041737.9
207	11/17/2015	10:52:21	00d	00:10.0	66.4	76.4	67.2	62.7	--	67.1	67	66.6	64.8	63.6	----	----	4365158.3
208	11/17/2015	10:52:31	00d	00:10.0	66.2	76.2	67	65.3	--	66.9	66.7	66.1	65.7	65.5	----	----	4168693.8
209	11/17/2015	10:52:41	00d	00:10.0	63.1	73.1	65.9	59.4	--	65.4	65	63.4	59.5	59.5	----	----	2041737.9
210	11/17/2015	10:52:51	00d	00:10.0	61.2	71.2	65	58.2	--	64.5	64	61.8	58.9	58.4	----	----	1318256.7
211	11/17/2015	10:53:01	00d	00:10.0	60.4	70.4	63.6	55.6	--	63.2	62.9	59	55.9	55.8	----	----	1096478.2
212	11/17/2015	10:53:11	00d	00:10.0	57.2	67.2	63.6	51.9	--	63.2	62.7	55.6	52.1	52	----	----	524807.5
213	11/17/2015	10:53:21	00d	00:10.0	62.6	72.6	65.5	57.8	--	65.3	65.1	61.2	59.4	59.2	----	----	1819700.9
214	11/17/2015	10:53:31	00d	00:10.0	62.2	72.2	63.9	60.4	--	63.8	63.8	61.6	60.6	60.5	----	----	1659586.9
215	11/17/2015	10:53:41	00d	00:10.0	62.6	72.6	64.4	61	--	64.2	64.1	62.2	61.2	61	----	----	1819700.9
216	11/17/2015	10:53:51	00d	00:10.0	63.1	73.1	64.5	61.7	--	64.4	64.2	62.9	61.9	61.8	----	----	2041737.9
217	11/17/2015	10:54:01	00d	00:10.0	66.4	76.4	67.5	64.5	--	67.5	67.4	66.2	65	64.9	----	----	4365158.3
218	11/17/2015	10:54:11	00d	00:10.0	69.6	79.6	72.2	64.9	--	72.1	72.1	68	65.2	65.1	----	----	9120108.4
219	11/17/2015	10:54:21	00d	00:10.0	69.7	79.7	73.3	66.3	--	73.1	72.7	68.6	66.6	66.4	----	----	9332543.0
220	11/17/2015	10:54:31	00d	00:10.0	67.1	77.1	72.8	60.7	--	72.1	70.8	68.9	62.3	61.5	----	----	5128613.8
221	11/17/2015	10:54:41	00d	00:10.0	59.5	69.5	63.8	54.6	--	63.4	63	57.3	54.9	54.7	----	----	891250.9
222	11/17/2015	10:54:51	00d	00:10.0	64.4	74.4	66.4	62.8	--	66.3	66.1	63.9	63.1	62.9	----	----	2754228.7

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leg
R8																63.3
144	11/17/2015	10:52:26	00d 00:10.0	54	64	55.6	53.2	--	55.4	55	53.8	53.4	53.4	----	----	251188.6
145	11/17/2015	10:52:36	00d 00:10.0	52.8	62.8	54	51.8	--	53.9	53.6	52.9	52.2	51.9	----	----	190546.1
146	11/17/2015	10:52:46	00d 00:10.0	55	65	56.5	51.7	--	56.5	56.4	54.3	52	51.8	----	----	316227.8
147	11/17/2015	10:52:56	00d 00:10.0	56	66	56.6	55.3	--	56.6	56.5	56	55.4	55.4	----	----	398107.2
148	11/17/2015	10:53:06	00d 00:10.0	60.3	70.3	62.9	55.4	--	62.8	62.4	58.3	56	55.7	----	----	1071519.3
149	11/17/2015	10:53:16	00d 00:10.0	61.5	71.5	63.5	58.8	--	63.5	63.4	61.8	59.4	59.1	----	----	1412537.5
150	11/17/2015	10:53:26	00d 00:10.0	57.6	67.6	58.9	57.3	--	58.7	58.3	57.6	57.4	57.3	----	----	575439.9
151	11/17/2015	10:53:36	00d 00:10.0	57.5	67.5	58	56.9	--	57.9	57.8	57.4	57.1	57	----	----	562341.3
152	11/17/2015	10:53:46	00d 00:10.0	60.2	70.2	62.6	57.2	--	62.5	61.9	59.1	57.8	57.5	----	----	1047128.5
153	11/17/2015	10:53:56	00d 00:10.0	58.6	68.6	61.9	56.2	--	61.7	61.4	58	56.8	56.6	----	----	724436.0
154	11/17/2015	10:54:06	00d 00:10.0	55.5	65.5	56.5	54.2	--	56.3	56.2	56	54.4	54.3	----	----	354813.4
155	11/17/2015	10:54:16	00d 00:10.0	53.6	63.6	55.3	52.3	--	54.5	54.3	53.6	52.6	52.4	----	----	229086.8
156	11/17/2015	10:54:26	00d 00:10.0	54.4	64.4	55.3	53.7	--	55.2	55.1	54.3	53.8	53.7	----	----	275422.9
157	11/17/2015	10:54:36	00d 00:10.0	55	65	56	54	--	56	55.9	54.8	54.2	54	----	----	316227.8
158	11/17/2015	10:54:46	00d 00:10.0	56.8	66.8	57.5	54.7	--	57.3	57.2	57	55	55	----	----	478630.1
159	11/17/2015	10:54:56	00d 00:10.0	59	69	61.2	57.4	--	60.9	60.1	58.1	57.8	57.7	----	----	794328.2

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R9																58.1
159	11/17/2015	11:52:24	00d 00:10.0	54.3	64.3	57.6	51.5	--	57.2	57.1	53.8	51.7	51.6	----	----	269153.5
160	11/17/2015	11:52:34	00d 00:10.0	52.8	62.8	53.8	51.6	--	53.6	53.5	52.9	51.9	51.7	----	----	190546.1
161	11/17/2015	11:52:44	00d 00:10.0	54.3	64.3	54.8	53.3	--	54.7	54.7	54.4	53.8	53.7	----	----	269153.5
162	11/17/2015	11:52:54	00d 00:10.0	56.4	66.4	60	53	--	59.4	59	54.6	53.2	53.1	----	----	436515.8
163	11/17/2015	11:53:04	00d 00:10.0	60.5	70.5	63.8	54.5	--	63.7	63.5	60.4	55.4	54.8	----	----	1122018.5
164	11/17/2015	11:53:14	00d 00:10.0	56.6	66.6	57.5	54.5	--	57.5	57.4	56.8	54.9	54.8	----	----	457088.2
165	11/17/2015	11:53:24	00d 00:10.0	63	73	66.2	55.9	--	66	65.7	60.9	56.4	56.1	----	----	1995262.3
166	11/17/2015	11:53:34	00d 00:10.0	60.8	70.8	65	59.4	--	64.7	64.6	59.9	59.5	59.4	----	----	1202264.4
167	11/17/2015	11:53:44	00d 00:10.0	59	69	60	57.9	--	59.8	59.7	59	58.1	58	----	----	794328.2
168	11/17/2015	11:53:54	00d 00:10.0	60.6	70.6	61	59.2	--	60.9	60.9	60.6	60	59.7	----	----	1148153.6
169	11/17/2015	11:54:04	00d 00:10.0	56	66	59.4	55.3	--	58.9	58.3	56	55.4	55.4	----	----	398107.2
170	11/17/2015	11:54:14	00d 00:10.0	55.7	65.7	57.2	53.9	--	57.1	57	55.9	54.2	54.1	----	----	371535.2
171	11/17/2015	11:54:24	00d 00:10.0	54.4	64.4	55.4	53.6	--	55.3	55.2	54	53.6	53.6	----	----	275422.9
172	11/17/2015	11:54:34	00d 00:10.0	52.4	62.4	55.3	50.9	--	55.1	54.8	52	51.2	51.1	----	----	173780.1
173	11/17/2015	11:54:44	00d 00:10.0	52.4	62.4	55.2	49.5	--	55.1	55	50.8	49.8	49.7	----	----	173780.1
174	11/17/2015	11:54:54	00d 00:10.0	52.2	62.2	54.7	51.5	--	53.7	53	52.4	51.6	51.5	----	----	165958.7

Address	Start Time	Measurement Time		Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leg
R10																	
180	11/17/2015	11:52:19	00d	00:10.0	61.5	71.5	64.5	59.4	--	64.4	64.3	60.8	59.7	59.6	----	----	1412537.5
181	11/17/2015	11:52:29	00d	00:10.0	64.5	74.5	67.1	60.4	--	66.6	65.9	62.9	60.7	60.5	----	----	2818382.9
182	11/17/2015	11:52:39	00d	00:10.0	65.7	75.7	68.5	59.4	--	68.4	68.3	66.6	60.8	60.2	----	----	3715352.3
183	11/17/2015	11:52:49	00d	00:10.0	58.3	68.3	60.1	57.1	--	60	59.8	58.2	57.4	57.3	----	----	676083.0
184	11/17/2015	11:52:59	00d	00:10.0	59	69	59.9	57.6	--	59.8	59.7	59	58	57.9	----	----	794328.2
185	11/17/2015	11:53:09	00d	00:10.0	57	67	58	55.4	--	57.7	57.5	57.2	55.8	55.6	----	----	501187.2
186	11/17/2015	11:53:19	00d	00:10.0	59	69	59.3	57.4	--	59.3	59.2	58.9	58.1	57.9	----	----	794328.2
187	11/17/2015	11:53:29	00d	00:10.0	61.2	71.2	62.7	59.2	--	62.6	62.4	60.9	60	59.4	----	----	1318256.7
188	11/17/2015	11:53:39	00d	00:10.0	59.4	69.4	62.2	54.9	--	62.2	61.8	58.9	55.2	55	----	----	870963.6
189	11/17/2015	11:53:49	00d	00:10.0	64.4	74.4	66.3	61.1	--	66.2	66.2	64.4	61.4	61.3	----	----	2754228.7
190	11/17/2015	11:53:59	00d	00:10.0	63.5	73.5	64.8	58.9	--	64.7	64.7	64.3	59.3	59.1	----	----	2238721.1
191	11/17/2015	11:54:09	00d	00:10.0	64.1	74.1	65.9	62.1	--	65.8	65.7	64.2	62.3	62.2	----	----	2570395.8
192	11/17/2015	11:54:19	00d	00:10.0	62.5	72.5	64.6	60.4	--	63.9	63.7	63	61	60.6	----	----	1778279.4
193	11/17/2015	11:54:29	00d	00:10.0	63.2	73.2	64	62.3	--	64	63.8	63.2	62.4	62.3	----	----	2089296.1
194	11/17/2015	11:54:39	00d	00:10.0	61.7	71.7	63.5	60.8	--	63.3	63.1	61.6	61.1	60.9	----	----	1479108.4
195	11/17/2015	11:54:49	00d	00:10.0	62	72	63.2	61	--	63.1	63	61.9	61.1	61.1	----	----	1584893.2
196	11/17/2015	11:54:59	00d	00:10.0	60.5	70.5	61.6	59.7	--	61.4	61.3	60.4	59.8	59.8	----	----	1122018.5

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R11																63.4
83	11/17/2015	11:51:55	00d 00:10.0	60.5	70.5	63.5	58	-	64.1	64.1	59.8	57.8	57.5	----	----	1122018.5
84	11/17/2015	11:52:05	00d 00:10.0	64.8	74.8	65.7	63.5	-	66.1	66.1	64.4	64	64	----	----	3019951.7
85	11/17/2015	11:52:15	00d 00:10.0	60.1	70.1	64.6	59.3	-	61.5	61.5	60.1	59.1	59.1	----	----	1023293.0
86	11/17/2015	11:52:25	00d 00:10.0	63.2	73.2	65.3	60.6	-	65.4	65.4	62.3	61.5	60.4	----	----	2089296.1
87	11/17/2015	11:52:35	00d 00:10.0	65.7	75.7	67.4	63	-	67.5	67.5	65.2	63.1	62.8	----	----	3715352.3
88	11/17/2015	11:52:45	00d 00:10.0	63.5	73.5	67.5	56.3	-	67.2	67.2	62.4	56.3	55.6	----	----	2238721.1
89	11/17/2015	11:52:55	00d 00:10.0	62.6	72.6	66.7	55.6	-	66.8	66.8	59.5	56.5	55.2	----	----	1819700.9
90	11/17/2015	11:53:05	00d 00:10.0	63.5	73.5	67.8	58.8	-	68.2	68.2	62.4	59.1	58.8	----	----	2238721.1
91	11/17/2015	11:53:15	00d 00:10.0	56.3	66.3	60.3	52.3	-	60.5	60.5	54.6	52.2	52.1	----	----	426579.5
92	11/17/2015	11:53:25	00d 00:10.0	55.4	65.4	58.1	53.2	-	57.8	57.8	54.8	53.3	53.3	----	----	346736.9
93	11/17/2015	11:53:35	00d 00:10.0	62.8	72.8	64.4	57.3	-	64.6	64.6	62.7	62	58.3	----	----	1905460.7
94	11/17/2015	11:53:45	00d 00:10.0	60.9	70.9	63	59.2	-	63.1	63.1	60.8	59.5	59.1	----	----	1230268.8
95	11/17/2015	11:53:55	00d 00:10.0	65.2	75.2	66.5	60.6	-	67	67	65.1	64	63.1	----	----	3311311.2
96	11/17/2015	11:54:05	00d 00:10.0	69.1	79.1	71.7	65.6	-	72.2	72.2	69.3	65.7	65.4	----	----	8128305.2
97	11/17/2015	11:54:15	00d 00:10.0	63.5	73.5	71.1	61.6	-	66.2	66.2	63.4	62	61.4	----	----	2238721.1
98	11/17/2015	11:54:25	00d 00:10.0	62.9	72.9	64.6	61.3	-	64.6	64.6	62.9	61.2	60.6	----	----	1949844.6
99	11/17/2015	11:54:35	00d 00:10.0	61.3	71.3	63.1	59.8	-	63.9	63.9	61.1	59.9	59.1	----	----	1348962.9
100	11/17/2015	11:54:45	00d 00:10.0	60.9	70.9	62.2	59.2	-	62.3	62.3	61.3	59.6	58.2	----	----	1230268.8
101	11/17/2015	11:54:55	00d 00:10.0	59.8	69.8	61.7	56.7	-	61.9	61.9	60.1	57	56	----	----	954992.6

Address	Start Time	Measurement Time	Leq	LE	LMAX	LMIN	Ly	LN1	LN2	LN3	LN4	LN5	Over	Under	Inverse Log	Overall Leq
R12																65.2
129	11/17/2015	11:52:13	00d	00:10.0	67.5	77.5	68.5	65.6	-	68.3	68.3	67.7	66.1	65.8	----	5623413.3
130	11/17/2015	11:52:23	00d	00:10.0	66	76	68.4	64.4	-	68	67.8	65.5	64.6	64.5	----	3981071.7
131	11/17/2015	11:52:33	00d	00:10.0	67.4	77.4	69.4	61.9	-	69.3	69.2	68	63.7	62.9	----	5495408.7
132	11/17/2015	11:52:43	00d	00:10.0	63.2	73.2	66.3	55.6	-	66.2	65.8	63.3	57.5	56.4	----	2089296.1
133	11/17/2015	11:52:53	00d	00:10.0	58.4	68.4	59.3	55.2	-	59.2	59	58.7	55.8	55.3	----	691831.0
134	11/17/2015	11:53:03	00d	00:10.0	59	69	61.2	56.3	-	61.2	61	58.9	57	56.7	----	794328.2
135	11/17/2015	11:53:13	00d	00:10.0	55.3	65.3	56.3	54.1	-	56.1	56	55.5	54.2	54.2	----	338844.2
136	11/17/2015	11:53:23	00d	00:10.0	58.8	68.8	60.2	55.4	-	60	59.5	58.8	55.6	55.5	----	758577.6
137	11/17/2015	11:53:33	00d	00:10.0	61.7	71.7	63.8	58.1	-	63.7	63.5	62	58.3	58.2	----	1479108.4
138	11/17/2015	11:53:43	00d	00:10.0	64.3	74.3	66.3	61.4	-	65.7	65.3	63.6	61.7	61.5	----	2691534.8
139	11/17/2015	11:53:53	00d	00:10.0	67.4	77.4	69.9	64.5	-	69.8	69.7	67.2	64.8	64.6	----	5495408.7
140	11/17/2015	11:54:03	00d	00:10.0	67.3	77.3	68.5	65	-	68.4	68.3	67.1	65.3	65.1	----	5370318.0
141	11/17/2015	11:54:13	00d	00:10.0	67.7	77.7	69.8	66.2	-	69.7	69.4	67.5	66.4	66.3	----	5888436.6
142	11/17/2015	11:54:23	00d	00:10.0	67.3	77.3	68.1	65.7	-	68	67.9	67.5	66.3	65.8	----	5370318.0
143	11/17/2015	11:54:33	00d	00:10.0	64.2	74.2	65.9	62.6	-	65.8	65.3	64.4	62.9	62.7	----	2630268.0
144	11/17/2015	11:54:43	00d	00:10.0	62.8	72.8	64.4	62.1	-	64.2	63.9	62.8	62.2	62.2	----	1905460.7
145	11/17/2015	11:54:53	00d	00:10.0	65.5	75.5	66.9	62.6	-	66.8	66.7	65.2	63.4	63.4	----	3548133.9

**APPENDIX B -
TRAFFIC DATA**



ENTRADA® - Environmental Traffic Data Input Sheet (V 2018-09)

1. Purpose of Analysis: 2-Scenario: Existing & Design (Noise) 1a. Period: 24-hour 1b. Segment Length (mi.): 2.10

2. Is the Analysis Segment Signalized: Yes 2a. Does it Remain Signalized After Project Completion: Yes

3. Analysis Facility Name & Number: Leesburg Pike (Route 7) 3a. Area Type: Urban [Defination](#)

4. Project Title/Proj. Number/UPC Number: Route 7 Corridor Improvements Design-Build / 0007-029-225, 0007-029-942 / 106917, 99478

4a. Analysis Segment Beginning: Route 7917 (Reston Ave) 4b. Facility Direction: East-West

4c. Analysis Segment Ending: Route 606 (Baron Cameron Ave) 4d. Reverse Direction: No

5. VDOT District: 9. Northern Virginia 5a. Jurisdiction: Fairfax Co 5b. Terrain: Rolling PCE= 2.50

6. Name/Year 1: Existing 2018 Name/Year 2: Design 2040

7. Volume-Delay Function (Travel-Time Model): BPR

8. Selected BPR Parameters & Formulation: α 0.15 β 4.00 BPR Model: $t = t_0 * (1.0 + 0.15 * (v/c)^{4.00})$

[Link to additional Parameters for most Volume-Delay Models](#)

NEW - Facility type selections are now available for Design year

9. Analysis Facility Type (FT): Existing Year 2018 Major Arterial with PS>50 mph Design Year 2040 Major Arterial with PS>50 mph

Capacity: 960 pephpl 960 pephpl

10. Facility Cross Section: Divided Divided

11. Posted Speed (PS, mph): 55 55

12. Free-Flow Speed (F-FS) Calculation Method: Smb= 0.79 * PS + 12 Smb= 0.79 * PS + 12

12a. Free-Flow Speed, mph: 55 55

Smb= Mid-block F-F Speed (Signalized Facility)

13. Number of Lane: Eastbound 2 Westbound 2 Eastbound 3 Westbound 3

14. Lane Width (ft.): 11 11

15. Shoulder Width (ft.): Inside Outside Inside Outside

16. Access Density (# of access/mi.): 4 4

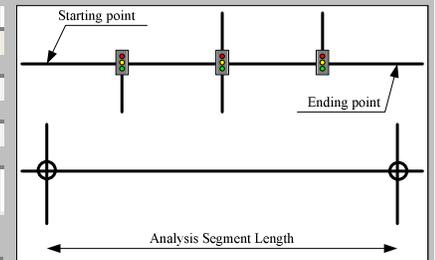
17. Analysis Segment No. of Signals: 4 4

18. Average Cycle Length (sec.): 225 212

19. Average Green Time per Cycle (sec.): 150 135

20. Signal Coordination: Excellent Coord. Excellent Coord.

Delay caused by signal, mph: 9 10



Note:
your note here...

Analysis Segment Truck Input Type and Daily Traffic Volume

Existing Year 2018 Design Year 2040

21. Truck Input Type: Hourly

22. Two-way ADT or AADT: 51,600 74,000

ADT: Average Daily Traffic, AADT: Annual ADT

22a. Is No-build Condition ADT or AADT Available: No

Existing & Future Traffic Inputs (The default time periods for the Noise Study are 6:00 AM to 9:00 PM)

23. Design - Build & No-Build Traffic Assignment: Constrained - Noise Study 23a. Is Current Hourly Speed Available: Yes 23b. Initial: GM

24. Apply Existing K-factor & D-factor to the Design Year: Yes 24b. Apply Existing Hourly % Truck: Yes



ENTRADA© - Environmental Traffic Data Input Sheet (V 2018-09)

Use "Paste-as-value" option.

Starting Time	Existing Hourly: % K-factor, % D-factor, % Truck and Collected Speed								
	Tow-way K-factor	Eastbound D-factor	Eastbound % Truck		Westbound % Truck		Eastbound Existing Avg. Speed, mph	Westbound Existing Avg. Speed, mph	
			2X-6T	3X & up	2X-6T	3X & up			
0:00	0.8%	35%	0.9%	5.7%	1.3%	1.0%	52	53	
1:00	0.5%	45%	3.0%	1.0%	1.8%	3.1%	54	52	
2:00	0.3%	44%	2.6%	2.7%	4.3%	2.9%	53	51	
3:00	0.4%	65%	2.3%	4.6%	4.7%	3.9%	54	52	
4:00	1.6%	75%	1.6%	1.7%	3.2%	3.0%	57	52	
5:00	3.9%	75%	2.1%	1.6%	4.5%	2.8%	56	53	
6:00	6.1%	78%	2.3%	3.3%	4.8%	2.2%	46	51	
7:00	5.1%	62%	4.6%	4.4%	4.0%	2.6%	24	50	
8:00	5.6%	62%	3.0%	2.3%	5.0%	2.8%	39	49	
9:00	5.3%	65%	2.9%	3.0%	4.2%	2.9%	45	48	
10:00	4.7%	59%	3.7%	2.9%	4.6%	3.3%	52	47	
11:00	4.6%	57%	4.0%	2.2%	4.9%	4.4%	52	46	
12:00	4.6%	53%	5.1%	3.1%	3.0%	3.7%	52	47	
13:00	5.0%	49%	3.9%	3.2%	2.0%	3.2%	51	44	
14:00	5.4%	47%	2.5%	1.9%	3.8%	3.2%	53	45	
15:00	6.7%	39%	2.8%	2.1%	2.8%	3.0%	52	48	
16:00	7.4%	38%	2.7%	1.8%	2.2%	2.2%	51	47	
17:00	7.3%	39%	3.0%	1.3%	1.4%	1.8%	51	48	
18:00	7.0%	37%	1.7%	1.0%	0.9%	2.1%	53	46	
19:00	5.6%	35%	2.0%	1.3%	0.8%	1.4%	53	48	
20:00	4.4%	40%	0.9%	1.3%	1.4%	1.2%	51	49	
21:00	3.6%	38%	1.3%	0.5%	1.0%	0.9%	52	50	
22:00	2.5%	34%	0.9%	0.6%	0.4%	0.3%	54	52	
23:00	1.6%	31%	0.8%	0.8%	1.1%	1.1%	54	52	
100%							Avg. Speed:	50	49

ENTRADA program is developed by Ed Azimi @VDOT-NOVA/TP

For Question, Problem & Comment:

[Ed Azimi](#)

V 2018-09



ENTRADA® - Environmental Traffic Data Input Sheet (V 2018-09)

1. Purpose of Analysis: 2-Scenario: Existing & Design (Noise) 1a. Period: 24-hour 1b. Segment Length (mi.): 4.25

2. Is the Analysis Segment Signalized: Yes 2a. Does it Remain Signalized After Project Completion: Yes

3. Analysis Facility Name & Number: Leesburg Pike (Route 7) 3a. Area Type: Urban [Defination](#)

4. Project Title/Proj. Number/UPC Number: Route 7 Corridor Improvements Design-Build / 0007-029-225, 0007-029-942 / 106917, 99478

4a. Analysis Segment Beginning: Route 606 (Baron Cameron Ave) 4b. Facility Direction: East-West

4c. Analysis Segment Ending: Route 694 (Levinville Rd) 4d. Reverse Direction: No

5. VDOT District: 9. Northern Virginia 5a. Jurisdiction: Fairfax Co 5b. Terrain: Rolling PCE= 2.50

6. Name/Year 1: Existing 2018 Name/Year 2: Design 2040

7. Volume-Delay Function (Travel-Time Model): BPR

8. Selected BPR Parameters & Formulation: α 0.15 β 4.00 BPR Model: $t = t_0 * (1.0 + 0.15 * (v/c)^{4.00})$

[Link to additional Parameters for most Volume-Delay Models](#)

NEW - Facility type selections are now available for Design year

9. Analysis Facility Type (FT): Existing Year 2018 Major Arterial with PS>50 mph Design Year 2040 Major Arterial with PS>50 mph

Capacity: 960 pephpl 960 pephpl

10. Facility Cross Section: Divided Divided

11. Posted Speed (PS, mph): 55 55

12. Free-Flow Speed (F-FS) Calculation Method: Smb= 0.79 * PS + 12 Smb= 0.79 * PS + 12

12a. Free-Flow Speed, mph: 55 55

Smb= Mid-block F-F Speed (Signalized Facility)

13. Number of Lane: Eastbound 2 Westbound 2 Eastbound 3 Westbound 3

14. Lane Width (ft.): 11 11

15. Shoulder Width (ft.): Inside Outside Inside Outside

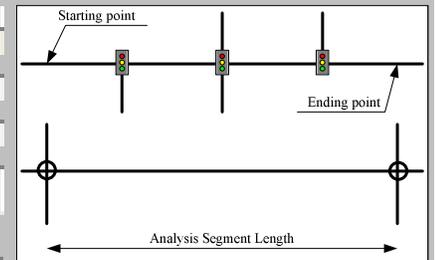
16. Access Density (# of access/mi.): 4 4

17. Analysis Segment No. of Signals: 5 5

18. Average Cycle Length (sec.): 231 230

19. Average Green Time per Cycle (sec.): 164 168

20. Signal Coordination: Excellent Coord. Excellent Coord.
Delay caused by signal, mph: 5 4



Note:
your note here...

Analysis Segment Truck Input Type and Daily Traffic Volume

Existing Year 2018 Design Year 2040

21. Truck Input Type: Hourly

22. Two-way ADT or AADT: 61,600 103,000

ADT: Average Daily Traffic, AADT: Annual ADT

22a. Is No-build Condition ADT or AADT Available: No

Existing & Future Traffic Inputs (The default time periods for the Noise Study are 6:00 AM to 9:00 PM)

23. Design - Build & No-Build Traffic Assignment: Constrained - Noise Study 23a. Is Current Hourly Speed Available: Yes 23b. Initial: GM

24. Apply Existing K-factor & D-factor to the Design Year: Yes 24b. Apply Existing Hourly % Truck: Yes



ENTRADA© - Environmental Traffic Data Input Sheet (V 2018-09)

Use "Paste-as-value" option.

Starting Time	Existing Hourly: % K-factor, % D-factor, % Truck and Collected Speed								
	Tow-way	Eastbound	Eastbound % Truck		Westbound % Truck		Eastbound	Westbound	
	K-factor	D-factor	2X-6T	3X & up	2X-6T	3X & up	Existing Avg. Speed, mph		
0:00	0.8%	34%	1.3%	2.1%	1.1%	1.1%	51	51	
1:00	0.5%	40%	3.7%	2.8%	2.6%	1.0%	51	50	
2:00	0.4%	43%	1.4%	2.6%	2.5%	2.8%	52	51	
3:00	0.5%	59%	2.7%	2.9%	4.3%	2.8%	53	50	
4:00	1.6%	70%	2.3%	2.2%	3.9%	3.7%	56	50	
5:00	3.9%	69%	2.6%	2.1%	4.0%	2.9%	52	49	
6:00	5.8%	71%	2.7%	2.9%	3.9%	3.3%	41	45	
7:00	5.8%	60%	3.3%	3.4%	3.2%	3.5%	31	43	
8:00	5.8%	59%	3.5%	3.5%	4.4%	2.9%	29	42	
9:00	5.4%	61%	3.0%	3.6%	3.3%	2.9%	33	44	
10:00	4.8%	57%	3.2%	2.9%	4.3%	3.0%	42	44	
11:00	4.6%	55%	3.9%	2.6%	4.3%	3.6%	41	43	
12:00	4.9%	51%	4.2%	3.3%	3.2%	3.1%	41	42	
13:00	5.0%	48%	4.3%	2.9%	3.2%	2.9%	42	41	
14:00	5.7%	45%	3.1%	2.5%	2.8%	3.1%	42	43	
15:00	6.7%	42%	2.5%	2.2%	3.0%	2.8%	45	40	
16:00	6.6%	44%	2.4%	2.1%	2.5%	3.1%	44	31	
17:00	6.1%	50%	2.2%	1.9%	3.0%	3.6%	44	23	
18:00	6.2%	45%	1.9%	1.8%	2.5%	2.3%	43	27	
19:00	5.7%	37%	1.8%	1.3%	1.0%	1.3%	45	41	
20:00	4.8%	36%	0.9%	1.2%	1.0%	1.0%	48	44	
21:00	3.9%	37%	1.3%	0.6%	0.8%	0.8%	49	48	
22:00	2.8%	36%	0.9%	0.8%	1.1%	1.0%	50	48	
23:00	1.7%	33%	1.2%	0.5%	1.5%	0.8%	41	50	
100%							Avg. Speed:	44	43

ENTRADA program is developed by Ed Azimi @VDOT-NOVA/TP

For Question, Problem & Comment:

[Ed Azimi](#)

V 2018-09



ENTRADA® - Environmental Traffic Data Input Sheet (V 2018-09)

1. Purpose of Analysis: 2-Scenario: Existing & Design (Noise) 1a. Period: 24-hour 1b. Segment Length (mi.): 0.48

2. Is the Analysis Segment Signalized: Yes 2a. Does it Remain Signalized After Project Completion: Yes

3. Analysis Facility Name & Number: Leesburg Pike (Route 7) 3a. Area Type: Urban [Defination](#)

4. Project Title/Proj. Number/UPC Number: Route 7 Corridor Improvements Design-Build / 0007-029-225, 0007-029-942 / 106917, 99478

4a. Analysis Segment Beginning: Route 694 (Lewinsville Rd) 4b. Facility Direction: East-West

4c. Analysis Segment Ending: Route 8912 (Jarrett Valley Dr) 4d. Reverse Direction: No

5. VDOT District: 9. Northern Virginia 5a. Jurisdiction: Fairfax Co 5b. Terrain: Rolling PCE= 2.50

6. Name/Year 1: Existing 2018 Name/Year 2: Design 2040

7. Volume-Delay Function (Travel-Time Model): BPR

8. Selected BPR Parameters & Formulation: α 0.15 β 4.00 BPR Model: $t = t_0 * (1.0 + 0.15 * (v/c)^{4.00})$

[Link to additional Parameters for most Volume-Delay Models](#)

NEW - Facility type selections are now available for Design year

9. Analysis Facility Type (FT): Existing Year 2018: Minor Arterial with PS<50 mph Design Year 2040: Minor Arterial with PS<50 mph

Capacity: 700 pephpl 700 pephpl

10. Facility Cross Section: Divided Divided

11. Posted Speed (PS, mph): 45 45

12. Free-Flow Speed (F-FS) Calculation Method: Smb= 0.79 * PS + 12 Smb= 0.79 * PS + 12

12a. Free-Flow Speed, mph: 48 48

Smb= Mid-block F-F Speed (Signalized Facility)

13. Number of Lane: Eastbound 2 Westbound 2 Eastbound 3 Westbound 3

14. Lane Width (ft.): 11 11

15. Shoulder Width (ft.): Inside Outside Inside Outside

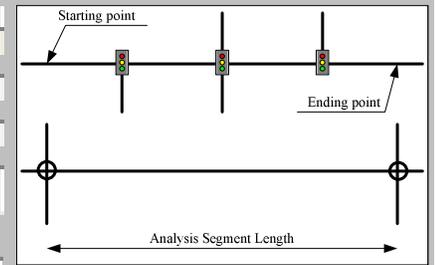
16. Access Density (# of access/mi.): 4 4

17. Analysis Segment No. of Signals: 1 1

18. Average Cycle Length (sec.): 210 230

19. Average Green Time per Cycle (sec.): 139 173

20. Signal Coordination: Excellent Coord. Excellent Coord.
Delay caused by signal, mph: 7 4



Note:
your note here...

Analysis Segment Truck Input Type and Daily Traffic Volume

Existing Year 2018 Design Year 2040

21. Truck Input Type: Hourly

22. Two-way ADT or AADT: 51,800 82,000

ADT: Average Daily Traffic, AADT: Annual ADT

22a. Is No-build Condition ADT or AADT Available: No

Existing & Future Traffic Inputs (The default time periods for the Noise Study are 6:00 AM to 9:00 PM)

23. Design - Build & No-Build Traffic Assignment: Constrained - Noise Study 23a. Is Current Hourly Speed Available: Yes 23b. Initial: GM

24. Apply Existing K-factor & D-factor to the Design Year: Yes 24b. Apply Existing Hourly % Truck: Yes



ENTRADA© - Environmental Traffic Data Input Sheet (V 2018-09)

Use "Paste-as-value" option.

Starting Time	Existing Hourly: % K-factor, % D-factor, % Truck and Collected Speed								
	Tow-way	Eastbound	Eastbound % Truck		Westbound % Truck		Eastbound	Westbound	
	K-factor	D-factor	2X-6T	3X & up	2X-6T	3X & up	Existing Avg. Speed, mph		
0:00	1.0%	34%	2.6%	1.9%	0.6%	1.6%	49	53	
1:00	0.5%	37%	6.5%	3.9%	3.4%	1.4%	49	51	
2:00	0.4%	44%	2.9%	5.7%	3.2%	4.3%	49	53	
3:00	0.5%	58%	1.5%	3.8%	4.0%	2.0%	50	52	
4:00	1.8%	68%	2.5%	1.6%	3.8%	3.4%	52	55	
5:00	4.2%	64%	3.4%	1.9%	4.7%	3.4%	48	54	
6:00	6.1%	69%	2.9%	2.6%	4.6%	3.5%	46	49	
7:00	7.1%	65%	2.5%	1.9%	5.4%	3.9%	44	45	
8:00	6.6%	64%	1.4%	2.3%	5.5%	2.8%	39	46	
9:00	6.2%	66%	2.0%	2.5%	5.3%	2.9%	41	46	
10:00	4.8%	58%	3.0%	2.6%	5.2%	3.8%	41	46	
11:00	4.4%	62%	4.8%	3.1%	4.5%	3.8%	41	47	
12:00	4.3%	61%	4.1%	3.1%	4.0%	3.5%	40	47	
13:00	4.2%	60%	4.6%	4.1%	3.6%	3.4%	40	46	
14:00	4.8%	57%	5.1%	3.3%	2.9%	3.3%	37	39	
15:00	6.1%	51%	3.8%	2.1%	3.2%	2.8%	40	35	
16:00	6.0%	54%	2.6%	2.0%	3.4%	3.2%	42	23	
17:00	5.5%	57%	2.7%	0.6%	4.6%	3.9%	43	20	
18:00	5.3%	56%	2.3%	1.1%	3.1%	3.1%	43	25	
19:00	5.9%	38%	2.5%	0.6%	1.5%	1.0%	44	37	
20:00	4.9%	39%	1.7%	0.1%	3.9%	2.1%	45	27	
21:00	4.4%	43%	0.5%	0.5%	0.6%	1.0%	44	48	
22:00	3.1%	39%	1.0%	1.5%	1.3%	1.5%	48	48	
23:00	1.9%	37%	1.1%	0.0%	1.1%	0.2%	48	51	
100%							Avg. Speed:	44	43

ENTRADA program is developed by Ed Azimi @VDOT-NOVA/TP

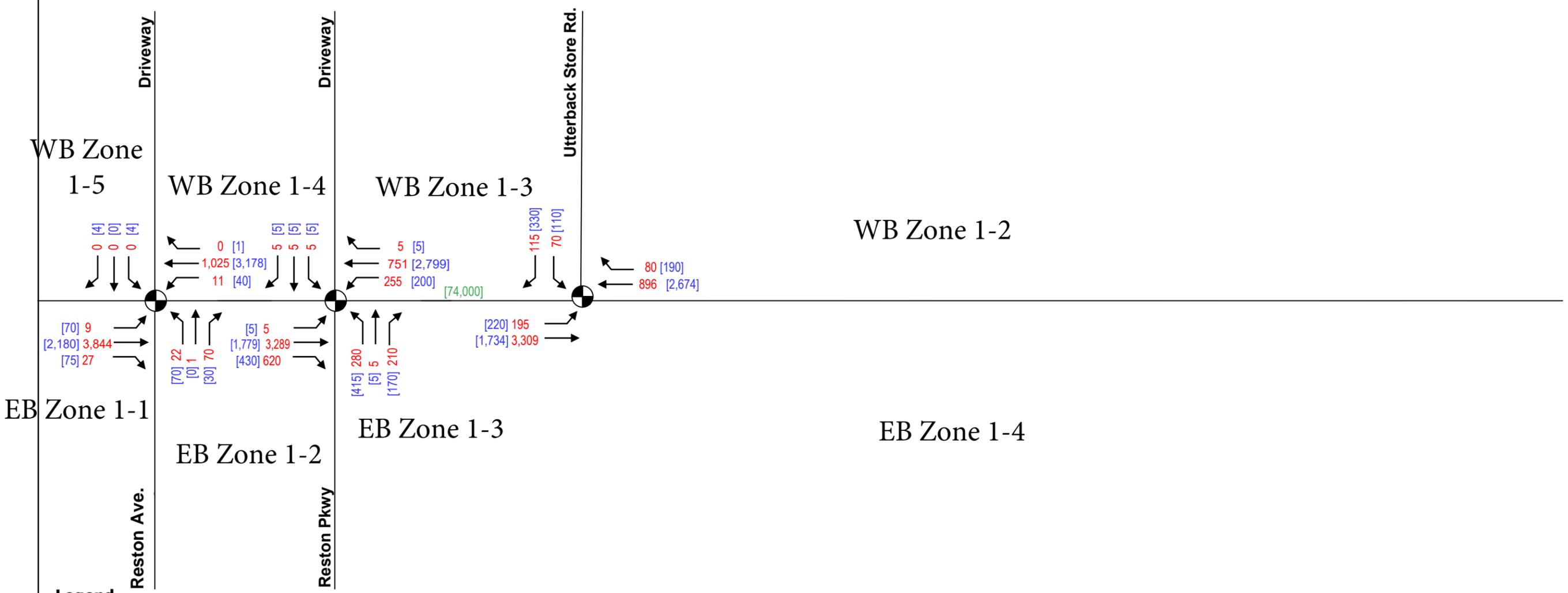
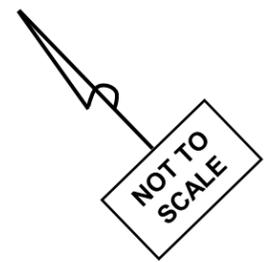
For Question, Problem & Comment:

[Ed Azimi](#)

V 2018-09

VERSION 2.2		Build - 50 ft Test Receiver									Loudest Hour (50 ft.)		
Compatible with ENTRADA v. 2018-09		EB or NB			WB or SB			EB or NB	WB or SB	200 ft	NB	SB	Combined
Roadway	HOURS	Auto	Med Trk	Heavy Trk	Auto	Med Trk	Heavy Trk	Leq	Leq	Combine d			
Zone 1	0:00	56.2	43.7	57.2	59.0	47.9	52.2	59.8	60.1	63.0	6:00	16:00	16:00
	1:00	55.3	48.0	48.6	56.1	46.6	54.4	56.8	58.6	60.8			
	2:00	53.0	45.0	50.6	53.9	48.2	51.9	55.4	56.7	59.1			
Leesburg Pike (Route 7) From Route 7917 (Reston Ave) To Route 606 (Baron Cameron Ave)	3:00	55.8	47.4	55.8	53.1	47.9	52.5	59.1	56.5	61.0			
	4:00	62.6	52.5	58.1	57.8	50.8	56.0	64.2	60.5	65.8			
	5:00	66.5	57.6	61.8	61.5	56.0	59.4	68.2	64.3	69.6			
	6:00	68.5	60.0	67.0	63.0	57.8	59.9	71.2	65.5	72.2			
	7:00	58.5	57.5	63.9	64.6	58.6	62.1	65.7	67.2	69.5			
	8:00	65.3	58.7	63.1	64.9	59.9	62.8	67.9	67.8	70.8			
	9:00	67.1	59.6	65.2	64.4	58.6	62.4	69.7	67.1	71.6			
	10:00	66.1	59.8	64.2	64.4	59.1	63.1	68.8	67.5	71.2			
	11:00	65.9	59.9	62.7	64.5	59.5	64.5	68.3	68.2	71.2			
	12:00	65.5	60.6	63.8	65.1	57.8	64.1	68.5	68.1	71.3			
	13:00	65.6	59.5	64.0	65.4	56.4	63.9	68.5	68.0	71.3			
	14:00	65.8	57.7	61.9	66.1	59.9	64.6	67.8	69.0	71.4			
	15:00	66.0	58.3	62.5	67.8	60.2	65.9	68.1	70.4	72.4			
	16:00	66.3	58.5	62.1	68.4	59.7	65.1	68.2	70.5	72.5			
	17:00	66.4	59.0	60.8	68.3	57.6	64.1	68.0	70.0	72.1			
	18:00	66.0	56.1	59.2	68.3	55.6	64.7	67.2	70.0	71.8			
	19:00	64.8	55.6	59.2	67.5	54.3	62.1	66.2	68.8	70.7			
20:00	64.4	51.7	58.7	66.1	55.3	60.1	65.6	67.3	69.5				
21:00	63.2	52.1	53.4	65.4	53.2	58.1	64.0	66.4	68.3				
22:00	61.2	48.5	52.2	64.1	47.8	52.0	61.9	64.5	66.4				
23:00	58.8	45.6	51.0	62.3	50.5	55.9	59.6	63.5	65.0				
							MAX	71.2	70.5	72.5			
Zone 2	0:00	59.3	47.7	55.1	62.2	49.9	55.3	60.9	63.2	65.2	6:00	15:00	15:00
	1:00	57.8	50.9	55.1	59.7	51.2	52.4	60.2	60.9	63.6			
	2:00	57.3	46.1	54.2	58.4	49.8	55.6	59.2	60.6	63.0			
Leesburg Pike (Route 7) From Route 606 (Baron Cameron Ave) To Route 694 (Lewinsville Rd)	3:00	59.5	51.2	56.9	57.9	51.7	55.2	61.8	60.4	64.2			
	4:00	65.4	56.3	61.5	61.5	54.9	60.1	67.3	64.4	69.1			
	5:00	69.2	60.6	65.1	65.2	58.8	62.8	71.0	67.8	72.7			
	6:00	71.0	62.7	68.4	65.0	59.0	63.7	73.3	68.0	74.4			
	7:00	66.2	60.3	66.0	65.4	58.9	64.8	69.6	68.6	72.2			
	8:00	65.2	59.9	65.6	65.4	60.4	64.1	69.0	68.5	71.8			
	9:00	66.1	59.7	66.1	65.1	58.7	63.6	69.6	68.0	71.9			
	10:00	66.6	59.9	64.9	65.1	59.8	63.8	69.4	68.2	71.8			
	11:00	65.5	60.0	63.7	64.7	59.6	64.4	68.4	68.2	71.3			
	12:00	65.4	60.3	64.7	65.3	58.9	64.3	68.8	68.4	71.6			
	13:00	65.3	60.2	64.1	65.7	59.3	64.4	68.5	68.7	71.6			
	14:00	66.0	59.3	63.9	68.4	60.7	66.5	68.6	71.0	73.0			
	15:00	67.7	59.5	64.4	70.8	62.9	68.0	69.8	73.1	74.7			
	16:00	67.8	59.5	64.4	67.0	59.6	66.1	69.9	70.0	72.9			
	17:00	68.2	59.4	64.2	60.5	57.1	64.4	70.1	66.4	71.6			
	18:00	67.0	57.8	63.1	64.1	57.9	63.4	68.8	67.3	71.1			
	19:00	65.4	56.2	60.2	69.5	57.1	63.6	66.9	70.7	72.2			
20:00	66.1	53.3	60.0	68.3	56.0	61.4	67.3	69.3	71.4				
21:00	65.9	54.5	56.5	67.4	54.1	59.5	66.7	68.2	70.5				
22:00	64.9	51.7	56.6	66.4	54.4	59.4	65.7	67.5	69.7				
23:00	59.9	48.8	50.5	65.4	54.5	57.1	60.6	66.3	67.4				
							MAX	73.3	73.1	74.7			
Zone 3	0:00	56.7	49.0	53.1	59.8	45.6	55.3	58.8	61.2	63.2	6:00	7:00	7:00
	1:00	53.8	50.4	53.6	56.4	49.9	51.5	57.6	58.3	61.0			
	2:00	53.7	46.7	55.1	54.8	48.1	54.9	57.8	58.3	61.1			

Compatible with ENTRADA v. 2018-09		Build - 50 ft Test Receiver						Loudest Hour (50 ft.)		
		EB or NB		WB or SB		EB or NB	WB or SB			
Leesburg Pike (Route 7) From Route 694 (Lewinsville Rd) To Route 8912 (Jarrett Valley Dr)	3:00	56.0	46.0	55.5	54.6	48.9	51.3	59.0	57.0	61.1
	4:00	62.4	54.5	58.0	58.9	53.0	58.0	64.2	62.1	66.3
	5:00	65.7	59.2	62.2	63.1	58.1	62.2	67.9	66.3	70.2
	6:00	67.6	60.4	65.4	64.1	59.1	63.3	70.2	67.4	72.0
	7:00	68.1	60.2	64.5	65.2	60.9	64.9	70.1	68.8	72.5
	8:00	67.7	57.3	64.9	65.1	60.8	63.3	69.8	68.2	72.1
	9:00	67.6	58.8	65.2	64.5	60.1	62.9	69.9	67.6	71.9
	10:00	65.9	58.8	63.7	64.3	59.8	63.9	68.4	67.8	71.2
	11:00	65.7	60.8	64.4	63.5	58.3	63.1	68.8	66.9	71.0
	12:00	65.5	59.9	64.2	63.5	57.8	62.7	68.6	66.8	70.8
	13:00	65.2	60.2	65.2	63.6	57.5	62.7	68.9	66.7	70.9
	14:00	65.5	61.0	64.6	63.7	56.9	63.0	68.9	66.8	71.0
	15:00	66.3	60.3	63.2	66.0	59.3	64.2	68.7	68.8	71.7
	16:00	66.5	58.8	63.2	60.2	56.5	62.5	68.7	65.2	70.3
	17:00	66.5	58.9	57.8	56.6	56.5	62.7	67.6	64.4	69.3
	18:00	66.2	57.9	60.2	58.9	55.2	61.6	67.7	64.1	69.2
19:00	65.1	57.1	56.4	67.2	57.0	60.7	66.2	68.4	70.4	
20:00	64.4	54.7	47.9	62.9	58.4	61.6	64.9	66.1	68.5	
21:00	64.4	49.3	54.8	65.6	51.4	59.1	64.9	66.6	68.9	
22:00	62.4	50.4	57.7	64.3	53.5	59.6	63.9	65.8	68.0	
23:00	60.1	48.5	43.5	62.4	50.8	48.9	60.4	62.9	64.8	



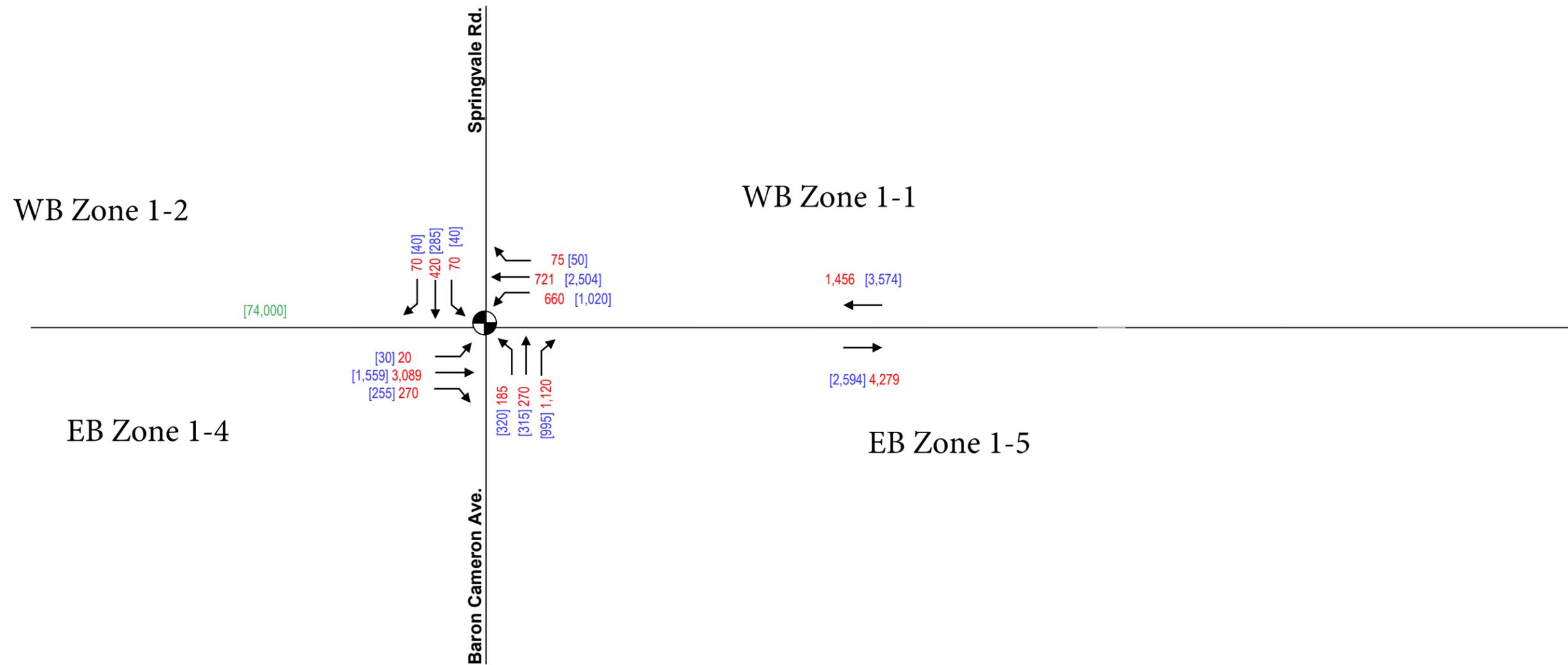
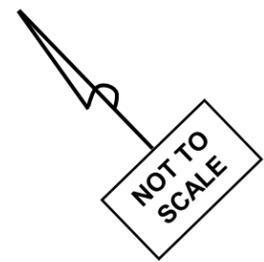
- Legend**
- - Turning Movement
 - - Signalized Intersection
 - - Unsignalized Intersection
 - XX [XX] - AM [PM] Peak Hour Turning Movement Volumes
 - [XXXX] - Average Daily Traffic

* Modified volumes as a result of forecasting or intersection balancing.

Route 7 (Leesburg Pike) – UPC#52328
Fairfax, Virginia

Year 2040 Balanced Traffic Volumes for Noise Analysis
ZONE 1

FIGURE
18



- Legend**
- - Turning Movement
 - - Signalized Intersection
 - - Unsignalized Intersection
 - XX [XX] - AM [PM] Peak Hour Turning Movement Volumes
 - [XXXX] - Average Daily Traffic

* Modified volumes as a result of forecasting or intersection balancing.

Route 7 (Leesburg Pike) – UPC#52328
Fairfax, Virginia

Year 2040 Balanced Traffic Volumes for Noise Analysis
ZONE 1

FIGURE
19

EASTBOUND TRAFFIC Zone 1 (Reston > Baron Cameron) WCNH 15:00 PM									
Route 7 EB Zone 1-1 Begin > Reston Ave									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	MT	HT			
2325	0.951	0.028	0.021	2211	65	49	737	22	16
				2325					
Route 7 EB Zone 1-2 (Reston Ave > Reston Pkwy)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	MT	HT			
2214	0.951	0.028	0.021	2106	62	46	702	21	15
				2214					
Route 7 EB Zone 1-3 (Reston Pkwy > Utterback)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	MT	HT			
1954	0.951	0.028	0.021	1858	55	41	619	18	14
				1954					
Route 7 EB Zone 1-4 (Utterback > Baron Cameron)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	MT	HT			
1844	0.951	0.028	0.021	1754	52	39	585	17	13
				1844					
Route 7 EB Zone 1-5 (Baron Cameron > Zone 2)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	MT	HT			
2594	0.951	0.028	0.021	2467	73	54	822	24	18
				2594					

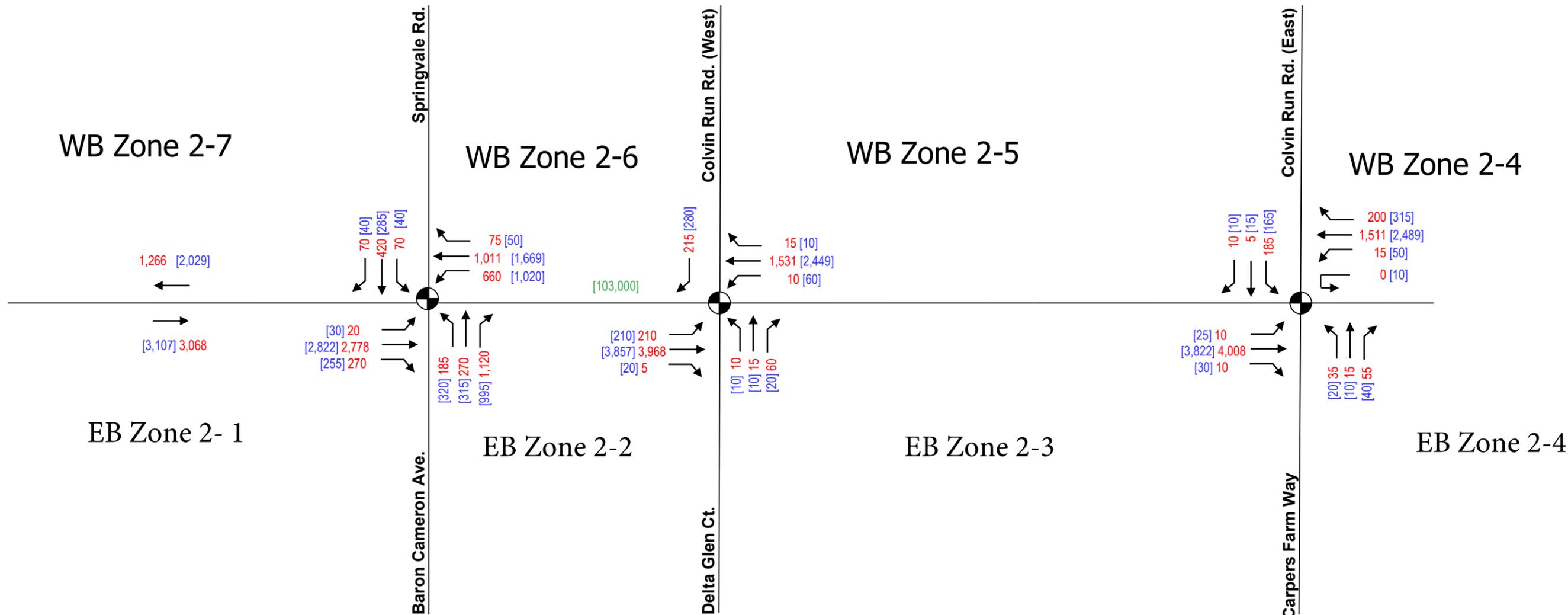
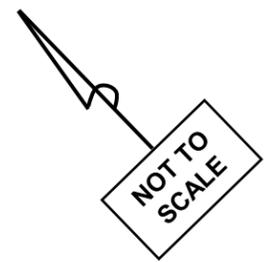
WESTBOUND TRAFFIC Zone 1 (Reston > Baron Cameron) WCNH 15:00 PM									
Route 7 WB Zone 1-1 (Zone 2 > Baron Cameron)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	MT	HT			
3574	0.942	0.028	0.03	3367	100	107	1122	33	36
				3574					
Route 7 WB Zone 1-2 (Baron Cameron > Utterback)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	MT	HT			
2864	0.942	0.028	0.03	2698	80	86	899	27	29
				2864					
Route 7 WB Zone 1-3 (Utterback > Reston Pkwy)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	MT	HT			
3004	0.942	0.028	0.03	2830	84	90	943	28	30
				3004					
Route 7 WB Zone 1-4 (Reston Pkwy > Reston Ave)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	MT	HT			
3219	0.942	0.028	0.03	3032	90	97	1011	30	32
				3219					
Route 7 WB Zone 1-5 (Reston Ave > End)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	MT	HT			
3247	0.942	0.028	0.03	3059	91	97	1020	30	32
				3247					

EASTBOUND TRAFFIC Zone 1 (Reston > Baron Cameron) WCNH 6:00 AM									
Route 7 EB Zone 1-1 Begin > Reston Ave									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	3663	1221			
3880	0.944	0.023	0.033	MT	89	30			
				HT	128	43			
					3880				
Route 7 EB Zone 1-2 (Reston Ave > Reston Pkwy)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	3695	1232			
3914	0.944	0.023	0.033	MT	90	30			
				HT	129	43			
					3914				
Route 7 EB Zone 1-3 (Resont Pkwy > Utterback)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	3308	1103			
3504	0.944	0.023	0.033	MT	81	27			
				HT	116	39			
					3504				
Route 7 EB Zone 1-4 (Utterback > Baron Cameron)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	3190	1063			
3379	0.944	0.023	0.033	MT	78	26			
				HT	112	37			
					3379				
Route 7 EB Zone 1-5 (Baron Cameron > Zone 2)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	4039	1346			
4279	0.944	0.023	0.033	MT	98	33			
				HT	141	47			
					4279				

WESTBOUND TRAFFIC Zone 1 (Reston > Baron Cameron) WCNH 6:00 AM									
Route 7 WB Zone 1-1 (Zone 2 > Baron Cameron)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	1354	451			
1456	0.93	0.048	0.022	MT	70	23			
				HT	32	11			
					1456				
Route 7 WB Zone 1-2 (Baron Cameron > Utterback)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	908	303			
976	0.93	0.048	0.022	MT	47	16			
				HT	21	7			
					976				
Route 7 WB Zone 1-3 (Utterback > Reston Pkwy)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	940	313			
1011	0.93	0.048	0.022	MT	49	16			
				HT	22	7			
					1011				
Route 7 WB Zone 1-4 (Reston Pkwy > Reston Ave)									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	963	321			
1036	0.93	0.048	0.022	MT	50	17			
				HT	23	8			
					1036				
Route 7 WB Zone 1-5									
				Total (3 Lanes)		1 Lane			
Total Vehicles	Cars%	MT%	HT%	Cars	974	325			
1047	0.93	0.048	0.022	MT	50	17			
				HT	23	8			
					1047				

Route 7 Widening 2040 Peak Hour Traffic for Side Roads Zone 1 Reston > Baron Cameron

Roadway	Movement	2018 Peak Total		AM			PM		
		AM	PM	Cars	MT	HT	Cars	MT	HT
Reston Ave Rt 7 Turning Lanes	NB Thru	2	0	2	0	0	0	0	0
	NB Right	70	30	68	2	0	29	1	0
	NB Left	22	70	21	1	0	68	2	0
	EB Right	27	75	26	1	0	73	2	0
	EB Left	9	70	9	0	0	68	2	0
	WB Left	11	40	11	0	0	39	1	0
	WB Right	0	1	0	0	0	1	0	0
Reston Pky Rt 7 Turning Lanes	NB Thru	5	5	5	0	0	5	0	0
	NB Left	280	415	277	3	0	411	4	0
	NB Right	210	170	208	2	0	168	2	0
	EB Right	620	430	614	6	0	426	4	0
	EB Left	5	5	5	0	0	5	0	0
	WB Left	255	200	252	3	0	198	2	0
	WB Right	5	5	5	0	0	5	0	0
Utterback Store Road Rt 7 Turning Lanes	SB Right	115	330	112	3	0	320	10	0
	SB Left	70	110	68	2	0	107	3	0
	WB Right	80	190	78	2	0	184	6	0
	EB Left	195	220	189	6	0	213	7	0
Baron Cameron Ave Rt 7 Turning Lanes	NB Right	1120	995	1098	11	11	975	10	10
	NB Left	185	320	181	2	2	314	3	3
	NB Thru	270	315	265	3	3	309	3	3
	WB Left	660	1020	647	7	7	1000	10	10
	EB Right	270	255	265	3	3	250	3	3
Springvale Rt 7 Turning Lanes	SB Left	70	40	68	2	0	39	1	0
	SB Thru	420	285	407	13	0	276	9	0
	SB Right	70	40	68	2	0	39	1	0
	EB Left	20	30	19	1	0	29	1	0
	WB Right	75	50	73	2	0	49	2	0



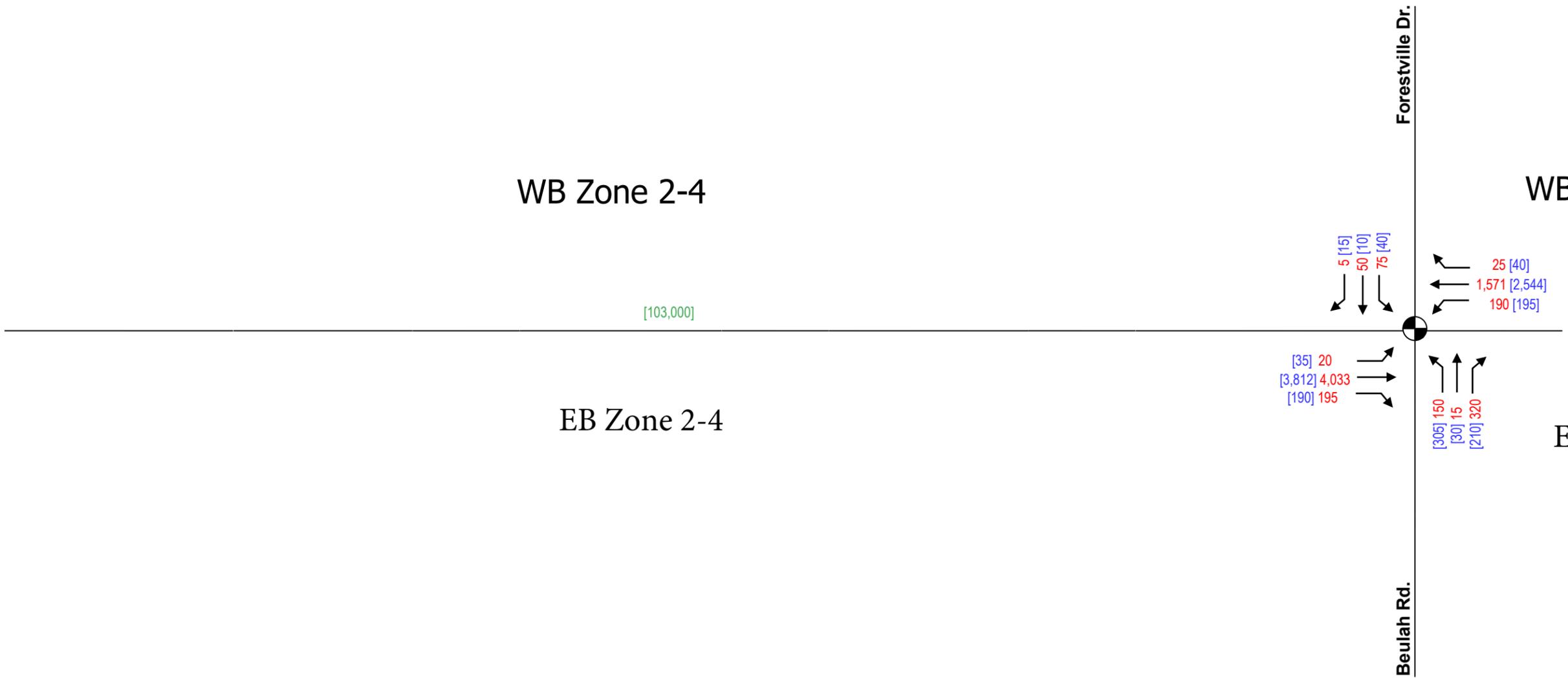
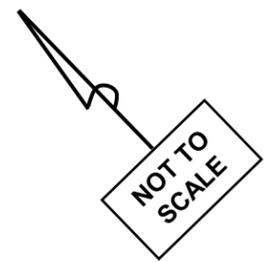
- Legend**
- - Turning Movement
 - - Signalized Intersection
 - - Unsignalized Intersection
 - XX [XX] - AM [PM] Peak Hour Turning Movement Volumes
 - [XXXX] - Average Daily Traffic

* Modified volumes as a result of forecasting or intersection balancing.

Route 7 (Leesburg Pike) – UPC#52328
Fairfax, Virginia

Year 2040 Balanced Traffic Volumes for Noise Analysis
ZONE 2

FIGURE
20



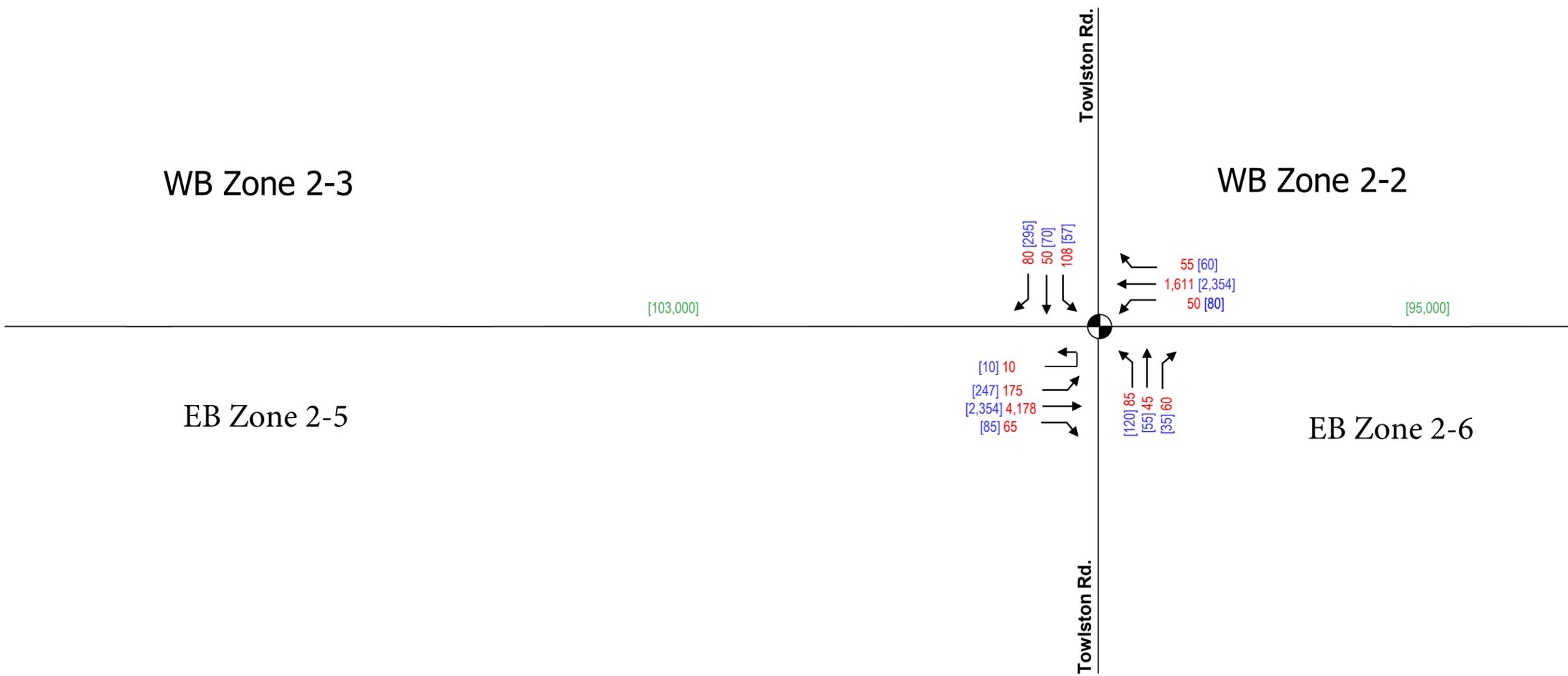
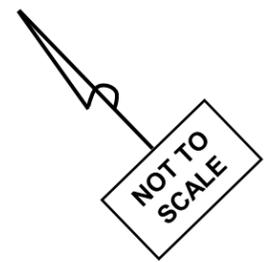
- Legend**
- - Turning Movement
 - ⊕ - Signalized Intersection
 - - Unsignalized Intersection
 - XX [XX] - AM [PM] Peak Hour Turning Movement Volumes
 - [XXXX] - Average Daily Traffic

* Modified volumes as a result of forecasting or intersection balancing.

Route 7 (Leesburg Pike) – UPC#52328
Fairfax, Virginia

Year 2040 Balanced Traffic Volumes for Noise Analysis
ZONE 2

FIGURE
21



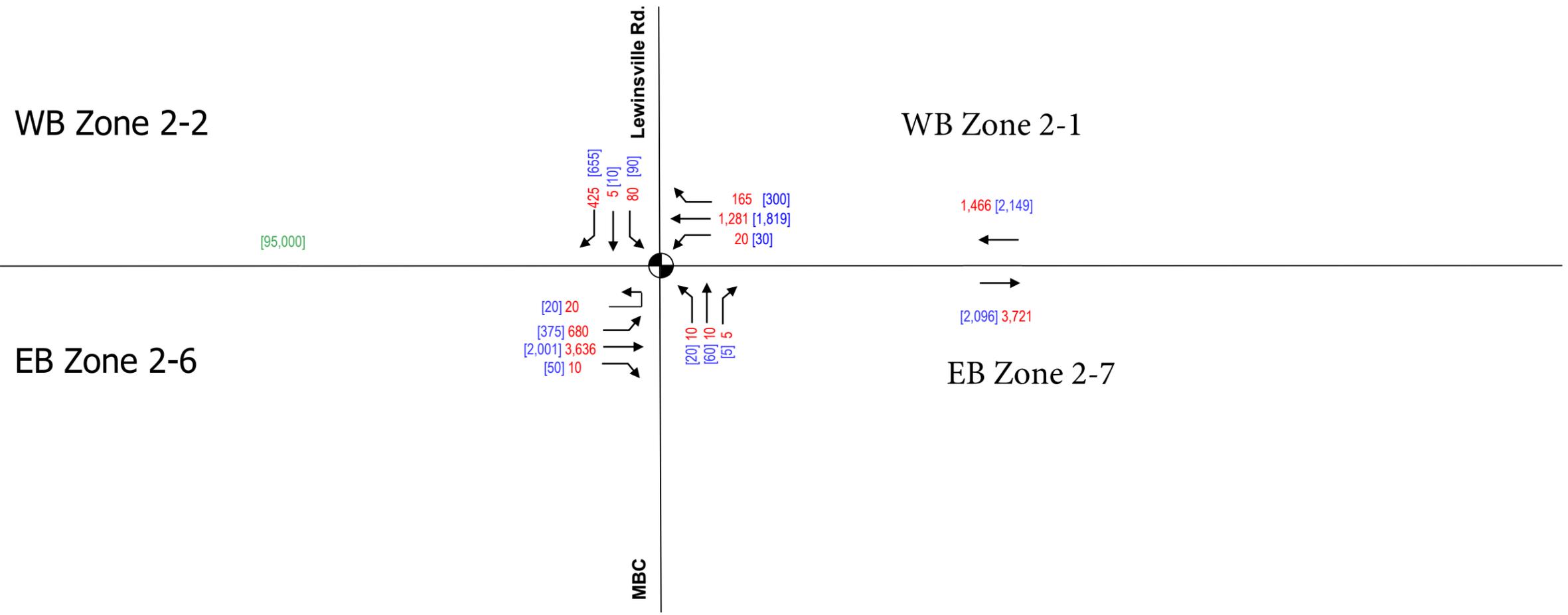
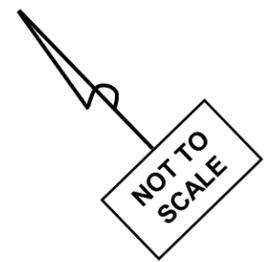
- Legend**
- - Turning Movement
 - ⊕ - Signalized Intersection
 - - Unsignalized Intersection
 - XX [XX] - AM [PM] Peak Hour Turning Movement Volumes
 - [XXXX] - Average Daily Traffic

* Modified volumes as a result of forecasting or intersection balancing.

Route 7 (Leesburg Pike) – UPC#52328
Fairfax, Virginia

Year 2040 Balanced Traffic Volumes for Noise Analysis
ZONE 2

FIGURE
22



- Legend**
- - Turning Movement
 - ⊕ - Signalized Intersection
 - - Unsignalized Intersection
 - XX [XX] - AM [PM] Peak Hour Turning Movement Volumes
 - [XXXX] - Average Daily Traffic

* Modified volumes as a result of forecasting or intersection balancing.

Route 7 (Leesburg Pike) – UPC#52328
Fairfax, Virginia

Year 2040 Balanced Traffic Volumes for Noise Analysis
ZONE 2

FIGURE
23

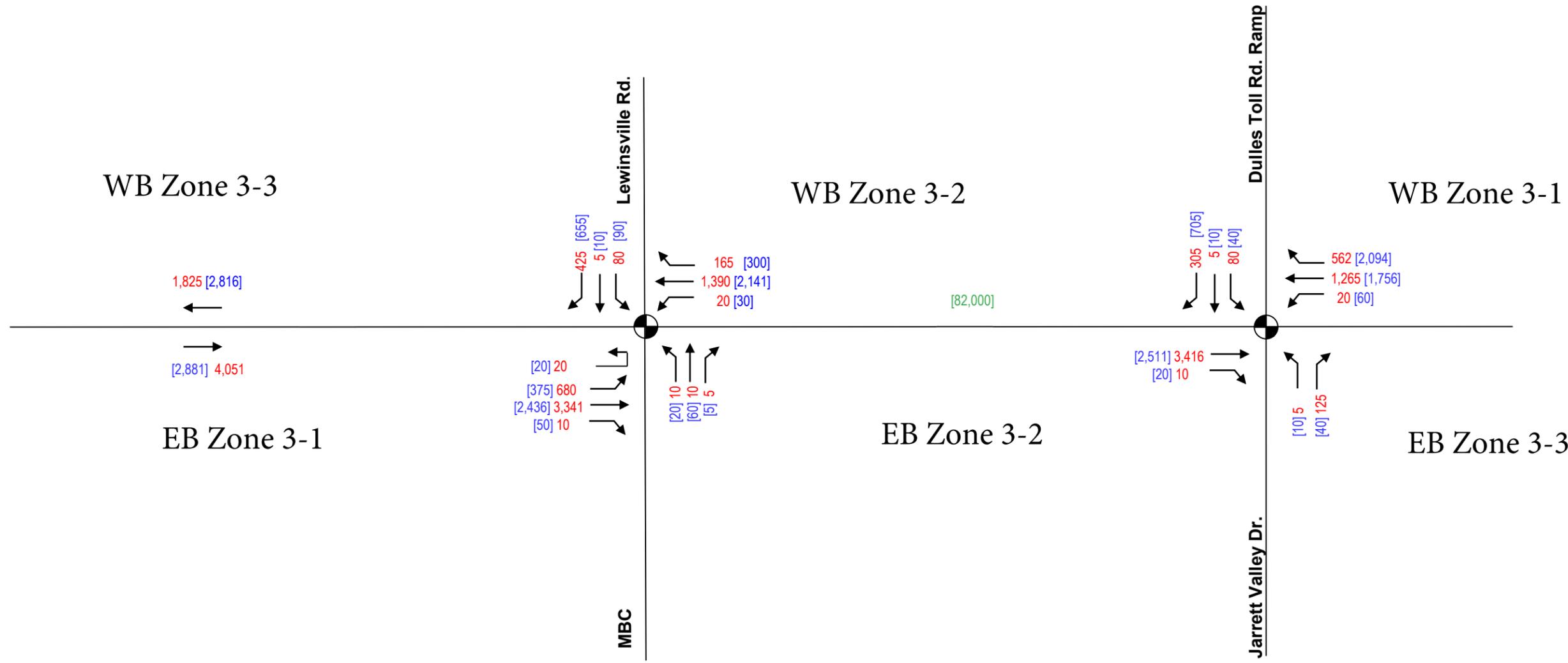
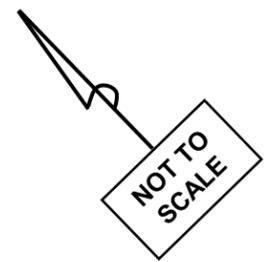
EASTBOUND TRAFFIC Zone 2 (Baron Cameron > Lewinsville) WCNH 15:00 PM									
Route 7 EB Zone 2-1 (Zone 1 > Baron Cameron)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
3107	0.953	0.025	0.022	2961	78	68	3107	987	26
				MT		HT		23	
Route 7 EB Zone 2-2 (Baron Cameron > Delta Gate)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
4087	0.953	0.025	0.022	3895	102	90	4087	1298	34
				MT		HT		30	
Route 7 EB Zone 2-3 (Delta Gate > Carpers)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
3877	0.953	0.025	0.022	3695	97	85	3877	1232	32
				MT		HT		28	
Route 7 EB Zone 2-4 (Carpers > Beulah)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
4037	0.953	0.025	0.022	3847	101	89	4037	1282	34
				MT		HT		30	
Route 7 EB Zone 2-5 (Beulah > Towlston)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
2696	0.953	0.025	0.022	2569	67	59	2696	856	22
				MT		HT		20	
Route 7 EB Zone 2-6 (Towlston > Lewinsville)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
2446	0.953	0.025	0.022	2331	61	54	2446	777	20
				MT		HT		18	
Route 7 EB Zone 2-7 (Lewinsville > Zone 3)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
2096	0.953	0.025	0.022	1997	52	46	2096	666	17
				MT		HT		15	

WESTBOUND TRAFFIC Zone 2 (Baron Cameron > Lewinsville) WCNH 15:00 PM									
Route 7 WB Zone 2-1 (Zone 3 > Lewinsville)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
2149	0.942	0.03	0.028	2024	64	60	2149	675	21
				MT		HT		20	
Route 7 WB Zone 2-2 (Lewinsville > Towlston)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
2494	0.942	0.03	0.028	2349	75	70	2494	783	25
				MT		HT		23	
Route 7 WB Zone 2-3 (Towlston > Beulah)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
2779	0.942	0.03	0.028	2618	83	78	2779	873	28
				MT		HT		26	
Route 7 WB Zone 2-4 (Beulah > Carpers)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
2864	0.942	0.03	0.028	2698	86	80	2864	899	29
				MT		HT		27	
Route 7 WB Zone 2-5 (Carpers > Delta Gate)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
2519	0.942	0.03	0.028	2373	76	71	2519	791	25
				MT		HT		24	
Route 7 WB Zone 2-6 (Delta Gate > Baron Cameron)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
2739	0.942	0.03	0.028	2580	82	77	2739	860	27
				MT		HT		26	
Route 7 WB Zone 2-7 (Baron Cameron > Zone 1)									
				Total (3 Lanes)			1 Lane		
Total Vehicles	Cars%	MT%	HT%	Cars					
2029	0.942	0.03	0.028	1911	61	57	2029	637	20
				MT		HT		19	

EASTBOUND TRAFFIC Zone 2 (Baron Cameron > Lewinsville) WCNH 6:00 AM					WESTBOUND TRAFFIC Zone 2 (Baron Cameron > Lewinsville) WCNH6:00 AM									
Route 7 EB Zone 2-1 (Zone 1 > Baron Cameron)					Route 7 WB Zone 2-1 (Zone 3 > Lewinsville)									
				Total (3 Lanes)		1 Lane								
Total Vehicles	Cars%	MT%	HT%	Cars	975	2924		Total Vehicles	Cars%	MT%	HT%	Cars	453	1360
3068	0.953	0.025	0.022	MT	26	77		1466	0.928	0.039	0.033	MT	19	57
				HT	22	67		HT			16	48		
						3068					1466			
Route 7 EB Zone 2-2 (Baron Cameron > Delta Gate)					Route 7 WB Zone 2-2 (Lewinsville > Towlson)									
				Total (3 Lanes)		1 Lane								
Total Vehicles	Cars%	MT%	HT%	Cars	1316	3949		Total Vehicles	Cars%	MT%	HT%	Cars	531	1592
4183	0.944	0.027	0.029	MT	38	113		1716	0.928	0.039	0.033	MT	22	67
				HT	40	121		HT			19	57		
						4183					1716			
Route 7 EB Zone 2-3 (Delta Gate > Carpers)					Route 7 WB Zone 2-3 (Towlston > Beulah)									
				Total (3 Lanes)		1 Lane								
Total Vehicles	Cars%	MT%	HT%	Cars	1267	3802		Total Vehicles	Cars%	MT%	HT%	Cars	552	1657
4028	0.944	0.027	0.029	MT	36	109		1786	0.928	0.039	0.033	MT	23	70
				HT	39	117		HT			20	59		
						4028					1786			
Route 7 EB Zone 2-4 (Carpers > Beulah)					Route 7 WB Zone 2-4 (Beulah > Carpers)									
				Total (3 Lanes)		1 Lane								
Total Vehicles	Cars%	MT%	HT%	Cars	1337	4010		Total Vehicles	Cars%	MT%	HT%	Cars	534	1602
4248	0.944	0.027	0.029	MT	38	115		1726	0.928	0.039	0.033	MT	22	67
				HT	41	123		HT			19	57		
						4248					1726			
Route 7 EB Zone 2-5 (Beulah > Towlston)					Route 7 WB Zone 2-5 (Carpers > Delta Gate)									
				Total (3 Lanes)		1 Lane								
Total Vehicles	Cars%	MT%	HT%	Cars	1393	4180		Total Vehicles	Cars%	MT%	HT%	Cars	481	1444
4428	0.944	0.027	0.029	MT	40	120		1556	0.928	0.039	0.033	MT	20	61
				HT	43	128		HT			17	51		
						4428					1556			
Route 7 EB Zone 2-6 (Towlston > Lewinsville)					Route 7 WB Zone 2-6 (Delta Gate > Baron Cameron)									
				Total (3 Lanes)		1 Lane								
Total Vehicles	Cars%	MT%	HT%	Cars	1368	4103		Total Vehicles	Cars%	MT%	HT%	Cars	540	1620
4346	0.944	0.027	0.029	MT	39	117		1746	0.928	0.039	0.033	MT	23	68
				HT	42	126		HT			19	58		
						4346					1746			
Route 7 EB Zone 2-7 (Lewinsville > Zone 3)					Route 7 WB Zone 2-7 (Baron Cameron > Zone 1)									
				Total (3 Lanes)		1 Lane								
Total Vehicles	Cars%	MT%	HT%	Cars	1171	3513		Total Vehicles	Cars%	MT%	HT%	Cars	392	1175
3721	0.944	0.027	0.029	MT	33	100		1266	0.928	0.039	0.033	MT	16	49
				HT	36	108		HT			14	42		
						3721					1266			

Route 7 Widening 2040 Peak Hour Traffic for Side Roads Zone 2 Baron Cameron > Lewinsville

Roadway	Movement	2018 Peak Total		AM			PM		
		AM	PM	Cars	MT	HT	Cars	MT	HT
Baron Cameron Ave Rt 7 Turning Lanes	NB Right	1120	995	1098	11	11	975	10	10
	NB Left	185	320	181	2	2	314	3	3
	NB Thru	270	315	265	3	3	309	3	3
	WB Left	660	1020	647	7	7	1000	10	10
	EB Right	270	255	265	3	3	250	3	3
Springvale Rt 7 Turning Lanes	SB Left	70	40	68	2	0	39	1	0
	SB Thru	420	285	407	13	0	276	9	0
	SB Right	70	40	68	2	0	39	1	0
	EB Left	20	30	19	1	0	29	1	0
	WB Right	75	50	73	2	0	49	2	0
Colvin Run Road -West Rt 7 Turning Lanes	SB Right	215	280	211	2	2	274	3	3
	WB Right	15	10	15	0	0	10	0	0
	EB Left	210	210	206	2	2	206	2	2
	NB Right	60	20	59	1	0	20	0	0
Delta Glen Ct Rt 7 Turning Lanes	NB Thru	15	10	15	0	0	10	0	0
	NB Left	10	10	10	0	0	10	0	0
	EB Right	5	20	5	0	0	20	0	0
	WB Left	10	60	10	0	0	59	1	0
Colvin Run Road -East Rt 7 Turning Lanes Carpers Farm Way Rt 7 Turning Lanes	SB Right	10	10	10	0	0	10	0	0
	SB Thru	5	15	5	0	0	15	0	0
	SB Left	185	165	181	2	2	162	2	2
	WB Right	200	315	196	2	2	309	3	3
	EB Left	10	25	10	0	0	25	0	0
	NB Left	35	20	35	0	0	20	0	0
	NB Thru	15	10	15	0	0	10	0	0
	NB Right	55	40	54	1	0	40	0	0
	EB Right	10	30	10	0	0	30	0	0
WB Left	15	50	15	0	0	50	1	0	
Beulah Rt 7 Turning Lanes	NB Left	150	305	147	2	2	299	3	3
	NB Thru	15	30	15	0	0	29	0	0
	NB Right	320	210	314	3	3	206	2	2
	EB Right	195	190	191	2	2	186	2	2
	WB Left	190	195	186	2	2	191	2	2
	SB Right	5	15	5	0	0	15	0	0
Forestville Rt 7 Turning Lanes	SB Thru	50	10	49	1	1	10	0	0
	SB Left	75	40	74	1	1	39	0	0
	EB Left	20	35	20	0	0	34	0	0
	WB Right	25	40	25	0	0	39	0	0
Towlston Rd North Rt 7 Turning Lanes	SB Right	80	295	78	1	1	289	3	3
	SB Thru	50	70	49	1	1	69	1	1
	SB Left	108	57	106	1	1	56	1	1
	EB Left	175	247	172	2	2	242	2	2
	WB Right	55	60	54	1	1	59	1	1
	NB Left	85	120	83	1	1	118	1	1
Towlston RD South Rt 7 Turning Lanes	NB Thru	45	55	44	0	0	54	1	1
	NB Right	60	35	59	1	1	34	0	0
	EB Right	65	85	64	1	1	83	1	1
	WB Left	50	80	49	1	1	78	1	1
Lewinsville RD Rt 7 Turning Lanes MBC	SB Right	425	655	421	4	0	648	7	0
	SB Thru	5	10	5	0	0	10	0	0
	SB Left	80	90	79	1	0	89	1	0
	WB Right	165	300	163	2	0	297	3	0
	EB Left	680	375	673	7	0	371	4	0
	EB Right	10	50	10	0	0	50	1	0
	WB Left	20	30	20	0	0	30	0	0
	NB Left	10	20	10	0	0	20	0	0
NB Thru	10	60	10	0	0	59	1	0	
NB Right	5	5	5	0	0	5	0	0	



- Legend**
- - Turning Movement
 - - Signalized Intersection
 - - Unsignalized Intersection
 - XX [XX] - AM [PM] Peak Hour Turning Movement Volumes
 - [XXXX] - Average Daily Traffic

* Modified volumes as a result of forecasting or intersection balancing.

2040 Design Year No-Build Traffic Volumes and Speeds

EASTBOUND TRAFFIC Zone 3 (Lewinsville > Jarrett Valley) WCNH 15:00 PM							
Route 7 EB Zone 3-1 (Zone 2 > Lewinsville)							
				Total (3 Lanes)		1 Lane	
Total Vehicles	Cars%	MT%	HT%	Cars			
2881	0.941	0.038	0.021	2711	109	61	904
				HT			20
					2881		
Route 7 EB Zone 3-2 (Lewinsville > Jarrett Valley)							
				Total (3 Lanes)		1 Lane	
Total Vehicles	Cars%	MT%	HT%	Cars			
2531	0.941	0.038	0.021	2382	96	53	794
				HT			18
					2531		
Route 7 EB Zone 3-3 (Jarrett Valley > End)							
				Total (3 Lanes)		1 Lane	
Total Vehicles	Cars%	MT%	HT%	Cars			
2591	0.941	0.038	0.021	2438	98	54	813
				HT			18
					2591		

WESTBOUND TRAFFIC Zone 3 (Lewinsville > Jarrett Valley) WCNH 15:00 PM							
Route 7 WB Zone 3-1 (End > DTR Ramp)							
				Total (3 Lane)		1 Lane	
Total Vehicles	Cars%	MT%	HT%	Cars			
3910	0.94	0.032	0.028	3675	125	109	1225
				HT			36
					3910		
Route 7 WB Zone 3-2 (DTR Ramp > Lewinsville)							
				Total (3 Lane)		1 Lane	
Total Vehicles	Cars%	MT%	HT%	Cars			
2471	0.94	0.032	0.028	2323	79	69	774
				HT			23
					2471		
Route 7 WB Zone 3-3 (Lewinsville > Zone 2)							
				Total (3 Lane)		1 Lane	
Total Vehicles	Cars%	MT%	HT%	Cars			
2816	0.94	0.032	0.028	2647	90	79	882
				HT			26
					2816		

EASTBOUND TRAFFIC Zone 3 (Lewinsville > Jarrett Valley) WCNH 6:00 AM					WESTBOUND TRAFFIC Zone 3 (Lewinsville > Jarrett Valley) WCNH 6:00 AM								
Route 7 EB Zone 3-1 (Zone 2 > Lewinsville)					Route 7 WB Zone 3-1 (End > DTR Ramp)								
				Total (3 Lanes)		1 Lane							
Total Vehicles	Cars%	MT%	HT%	Cars	3828	1276	Total Vehicles	Cars%	MT%	HT%	Cars	1697	566
4051	0.945	0.029	0.026	MT	117	39	1847	0.919	0.046	0.035	MT	85	28
				HT	105	35					HT	65	22
					4051							1847	
Route 7 EB Zone 3-2 (Lewinsville > Jarrett Valley)					Route 7 WB Zone 3-2 (DTR Ramp > Lewinsville)								
				Total (3 Lanes)		1 Lane							
Total Vehicles	Cars%	MT%	HT%	Cars	3238	1079	Total Vehicles	Cars%	MT%	HT%	Cars	1447	482
3426	0.945	0.029	0.026	MT	99	33	1575	0.919	0.046	0.035	MT	72	24
				HT	89	30					HT	55	18
					3426							1575	
Route 7 EB Zone 3-3 (Jarrett Valley > End)					Route 7 WB Zone 3-3 (Lewinsville > Zone 2)								
				Total (3 Lanes)		1 Lane							
Total Vehicles	Cars%	MT%	HT%	Cars	3422	1141	Total Vehicles	Cars%	MT%	HT%	Cars	1677	559
3621	0.945	0.029	0.026	MT	105	35	1825	0.919	0.046	0.035	MT	84	28
				HT	94	31					HT	64	21
					3621							1825	

Route 7 Widening 2040 Peak Hour Traffic for Side Roads Zone 3

Roadway	Movement	2018 Peak Total		AM			PM		
		AM	PM	Cars	MT	HT	Cars	MT	HT
Lewinsville RD Rt 7 Turning Lanes MBC	SB Right	425	655	421	4	0	648	7	0
	SB Thru	5	10	5	0	0	10	0	0
	SB Left	80	90	79	1	0	89	1	0
	WB Right	165	300	163	2	0	297	3	0
	EB Left	680	375	673	7	0	371	4	0
	EB Right	10	50	10	0	0	50	1	0
	WB Left	20	30	20	0	0	30	0	0
	NB Left	10	20	10	0	0	20	0	0
	NB Thru	10	60	10	0	0	59	1	0
	NB Right	5	5	5	0	0	5	0	0
Jarrett Valley Road Rt 7 Turning Lanes	NB Left	5	10	5	0	0	10	0	0
	NB Right	125	40	124	1	0	40	0	0
	EB Right	10	20	10	0	0	20	0	0
	WB Left	20	60	20	0	0	59	1	0
DTR Off Ramp for 7 WB		305	705	281	12	122	649	28	28
DTR Off Ramp for 7 EB		80	40	78	1	1	39	0	0
DTR Off Ramp to Jarrett Valley		5	10	5	0	0	10	0	0
DTR On Ramp from 7 WB		562	2094	551	6	6	2052	21	21
DTR On Ramp from 7 EB		100	150	97	2	1	146	2	3

**APPENDIX C -
ACOUSTICAL PROFILES**

CNE A - Wall A2 Acoustical Profile (Projection NAD_1983_StatePlane_Virginia_North US Feet)

Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall A2 (Design Stationing 1175+00 to 1190+50)						
10+00.00	11,812,639	7,048,137	404.2	18.0	422.2	28
10+28.00	11,812,660	7,048,118	406.0	18.0	424.0	28
10+56.00	11,812,681	7,048,099	408.1	18.0	426.1	29
10+85.00	11,812,703	7,048,080	410.3	18.0	428.3	29
11+14.00	11,812,724	7,048,060	412.0	18.0	430.0	50
11+64.00	11,812,762	7,048,028	414.2	18.0	432.2	49
12+13.00	11,812,799	7,047,996	414.9	18.0	432.9	49
12+62.00	11,812,836	7,047,964	414.2	18.0	432.2	49
13+11.00	11,812,873	7,047,932	413.6	18.0	431.6	24
13+35.00	11,812,870	7,047,908	412.7	18.0	430.7	41
13+76.00	11,812,903	7,047,883	411.2	18.0	429.2	41
14+17.00	11,812,935	7,047,858	408.7	18.0	426.7	40
14+57.00	11,812,967	7,047,834	406.8	18.0	424.8	40
14+97.00	11,812,999	7,047,809	405.5	18.0	423.5	45
15+42.00	11,813,033	7,047,779	404.8	18.0	422.8	46
15+88.00	11,813,067	7,047,749	404.5	17.0	421.5	45
16+33.00	11,813,101	7,047,719	404.7	16.0	420.7	45
16+78.00	11,813,135	7,047,689	404.8	15.0	419.8	45
17+23.00	11,813,169	7,047,659	403.9	14.0	417.9	45
17+68.00	11,813,203	7,047,629	403.1	13.0	416.1	45
18+13.00	11,813,236	7,047,598	402.2	13.0	415.2	25
Wall N3 (D	11,813,260	7,047,604	401.7	13.0	414.7	47
18+85.00	11,813,295	7,047,573	400.4	13.0	413.4	47
19+32.00	11,813,330	7,047,542	398.4	13.0	411.4	47
19+79.00	11,813,365	7,047,511	397.3	13.0	410.3	48
20+27.00	11,813,401	7,047,480	397.1	13.0	410.1	47
20+74.00	11,813,436	7,047,449	396.3	13.0	409.3	47
21+21.00	11,813,471	7,047,418	395.6	13.0	408.6	47
21+68.00	11,813,506	7,047,387	395.3	13.0	408.3	47
22+15.00	11,813,541	7,047,356	394.7	13.0	407.7	36
22+51.00	11,813,538	7,047,321	395.0	13.0	408.0	36
22+87.00	11,813,536	7,047,285	393.4	13.0	406.4	0

CNEs B & D - B1-B6 and D1 Acoustical Profiles (Projection NAD_1983_StatePlane_Virginia_North US Feet)

Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall B1 (Design Stationing 166+50 to 168+00)						
10+00.00	11,811,915	7,049,071	429.4	15.0	444.4	48
10+48.00	11,811,951	7,049,039	432.9	15.0	447.9	48
10+96.00	11,811,987	7,049,008	432.4	15.0	447.4	48
11+44.00	11,812,023	7,048,976	429.5	15.0	444.5	0
Wall B2 (Design Stationing 167+25 to 176+75)						
10+00.00	11,812,634	7,048,362	413.7	15.0	428.7	48
10+48.00	11,812,598	7,048,394	414.1	15.0	429.1	48
10+96.00	11,812,563	7,048,427	414.6	15.0	429.6	24
11+20.00	11,812,540	7,048,433	414.6	15.0	429.6	39
11+59.00	11,812,511	7,048,459	414.9	15.0	429.9	39
11+98.00	11,812,482	7,048,485	415.1	15.0	430.1	40
12+38.00	11,812,452	7,048,511	415.8	15.0	430.8	39
12+77.00	11,812,423	7,048,537	416.2	15.0	431.2	24
13+01.00	11,812,414	7,048,559	416.7	15.0	431.7	48
13+49.00	11,812,378	7,048,591	417.0	15.0	432.0	49
13+98.00	11,812,341	7,048,624	417.6	15.0	432.6	49
14+47.00	11,812,304	7,048,656	418.1	15.0	433.1	49
14+96.00	11,812,267	7,048,688	418.7	15.0	433.7	49
15+45.00	11,812,230	7,048,721	419.2	15.0	434.2	48
15+93.00	11,812,194	7,048,753	419.7	15.0	434.7	49
16+42.00	11,812,157	7,048,785	420.2	15.0	435.2	49
Wall N3 (Des	11,812,120	7,048,818	420.7	15.0	435.7	49
17+40.00	11,812,083	7,048,850	421.2	15.0	436.2	49
17+89.00	11,812,046	7,048,883	421.7	15.0	436.7	48
18+37.00	11,812,010	7,048,915	422.1	15.0	437.1	49
18+86.00	11,811,973	7,048,947	422.6	15.0	437.6	49
19+35.00	11,811,936	7,048,980	423.9	15.0	438.9	0
Wall B3 (Design Stationing 176+50 to 182+00)						
10+00.00	11,812,652	7,048,400	415.2	15.0	430.2	36
10+36.00	11,812,663	7,048,366	414.1	15.0	429.1	24
10+60.00	11,812,673	7,048,344	413.6	15.0	428.6	24
10+84.00	11,812,686	7,048,324	413.3	15.0	428.3	24
11+08.00	11,812,703	7,048,307	414.1	15.0	429.1	35
11+43.00	11,812,729	7,048,283	413.6	15.0	428.6	36
11+79.00	11,812,756	7,048,259	413.1	15.0	428.1	36
12+15.00	11,812,782	7,048,234	412.5	15.0	427.5	41
12+56.00	11,812,813	7,048,207	411.6	15.0	426.6	41
12+97.00	11,812,844	7,048,180	411.2	15.0	426.2	41
13+38.00	11,812,875	7,048,153	410.9	15.0	425.9	24
13+62.00	11,812,895	7,048,141	409.9	15.0	424.9	24
13+86.00	11,812,913	7,048,125	409.4	15.0	424.4	24
14+10.00	11,812,928	7,048,106	410.2	15.0	425.2	48
14+58.00	11,812,964	7,048,075	409.7	15.0	424.7	47
14+58.00	11,812,999	7,048,044	409.1	15.0	424.1	48
15+05.00	11,813,035	7,048,012	407.5	15.0	422.5	0

Wall B4 (Design Stationing 182+50 to 190+25)						
10+00.00	11,813,648	7,047,483	397.3	15.0	412.3	24
10+24.00	11,813,630	7,047,498	398.6	15.0	413.6	24
10+48.00	11,813,610	7,047,511	398.8	15.0	413.8	45
10+93.00	11,813,576	7,047,541	399.3	15.0	414.3	45
11+38.00	11,813,542	7,047,570	399.8	15.0	414.8	45
11+83.00	11,813,509	7,047,600	400.4	15.0	415.4	45
12+28.00	11,813,475	7,047,630	401.0	15.0	416.0	45
12+73.00	11,813,441	7,047,660	401.6	15.0	416.6	45
13+18.00	11,813,407	7,047,689	402.2	15.0	417.2	45
13+63.00	11,813,374	7,047,719	402.7	15.0	417.7	45
14+08.00	11,813,340	7,047,749	403.3	15.0	418.3	48
14+56.00	11,813,303	7,047,780	403.8	15.0	418.8	42
14+98.00	11,813,273	7,047,809	404.3	15.0	419.3	42
15+40.00	11,813,243	7,047,839	404.8	15.0	419.8	42
15+82.00	11,813,213	7,047,868	405.3	15.0	420.3	41
16+23.00	11,813,184	7,047,898	405.9	15.0	420.9	48
16+71.00	11,813,148	7,047,930	406.5	15.0	421.5	48
17+19.00	11,813,112	7,047,961	406.4	15.0	421.4	0
Wall B5 (Design Stationing 192+00 to 205+50)						
10+00.00	11,813,824	7,047,379	406.8	15.0	421.8	46
10+46.00	11,813,858	7,047,349	408.6	15.0	423.6	46
10+92.00	11,813,893	7,047,318	408.7	15.0	423.7	45
11+37.00	11,813,927	7,047,288	408.2	15.0	423.2	45
11+82.00	11,813,957	7,047,254	406.2	15.0	421.2	45
12+27.00	11,813,987	7,047,221	404.2	15.0	419.2	45
12+72.00	11,814,017	7,047,187	402.3	15.0	417.3	45
13+17.00	11,814,046	7,047,153	400.3	15.0	415.3	45
13+62.00	11,814,076	7,047,119	397.4	15.0	412.4	45
14+07.00	11,814,106	7,047,085	393.8	15.0	408.8	45
14+52.00	11,814,136	7,047,052	390.9	15.0	405.9	45
14+97.00	11,814,165	7,047,018	390.6	15.0	405.6	49
15+46.00	11,814,202	7,046,985	390.0	15.0	405.0	49
15+95.00	11,814,239	7,046,953	389.4	15.0	404.4	49
16+44.00	11,814,276	7,046,920	388.8	15.0	403.8	49
16+93.00	11,814,313	7,046,888	388.1	15.0	403.1	49
17+42.00	11,814,350	7,046,855	387.4	15.0	402.4	50
17+92.00	11,814,387	7,046,822	386.7	15.0	401.7	50
18+42.00	11,814,425	7,046,790	386.0	15.0	401.0	49
18+91.00	11,814,462	7,046,757	385.3	15.0	400.3	49
19+40.00	11,814,499	7,046,725	384.6	15.0	399.6	49
19+89.00	11,814,536	7,046,692	383.9	15.0	398.9	49
20+38.00	11,814,573	7,046,660	383.2	15.0	398.2	50
20+88.00	11,814,610	7,046,627	382.8	15.0	397.8	49
21+37.00	11,814,647	7,046,594	382.4	15.0	397.4	49
21+86.00	11,814,684	7,046,562	382.1	15.0	397.1	38
22+24.00	11,814,712	7,046,537	381.8	15.0	396.8	36
22+60.00	11,814,739	7,046,512	381.4	15.0	396.4	38
22+98.00	11,814,767	7,046,487	381.0	15.0	396.0	38
23+36.00	11,814,795	7,046,461	380.7	15.0	395.7	0

Wall B6 (Design Stationing 204+50 to 215+50)						
10+00.00	11,814,749	7,046,545	370.3	15.0	385.3	39
10+39.00	11,814,778	7,046,519	374.7	15.0	389.7	39
10+78.00	11,814,807	7,046,492	379.9	15.0	394.9	39
11+17.00	11,814,835	7,046,466	385.4	15.0	400.4	40
11+57.00	11,814,864	7,046,439	390.7	15.0	405.7	48
12+05.00	11,814,905	7,046,414	397.3	15.0	412.3	47
12+52.00	11,814,938	7,046,380	398.4	15.0	413.4	48
13+00.00	11,814,972	7,046,346	398.5	15.0	413.5	48
13+48.00	11,815,006	7,046,311	396.3	15.0	411.3	48
13+96.00	11,815,040	7,046,277	394.1	15.0	409.1	47
14+43.00	11,815,073	7,046,243	392.9	15.0	407.9	48
14+91.00	11,815,104	7,046,206	389.4	15.0	404.4	48
15+39.00	11,815,135	7,046,169	386.6	15.0	401.6	48
15+87.00	11,815,165	7,046,132	384.6	15.0	399.6	48
16+35.00	11,815,196	7,046,096	381.8	15.0	396.8	48
16+83.00	11,815,227	7,046,059	378.7	15.0	393.7	48
17+31.00	11,815,258	7,046,022	377.6	15.0	392.6	48
17+79.00	11,815,288	7,045,985	374.7	15.0	389.7	48
18+27.00	11,815,319	7,045,948	371.8	15.0	386.8	48
18+75.00	11,815,350	7,045,911	369.0	15.0	384.0	48
19+23.00	11,815,381	7,045,874	369.1	15.0	384.1	38
19+61.00	11,815,408	7,045,848	368.3	15.0	383.3	37
19+98.00	11,815,434	7,045,821	367.3	15.0	382.3	38
20+36.00	11,815,461	7,045,794	366.4	15.0	381.4	48
20+84.00	11,815,504	7,045,772	364.3	15.0	379.3	0
Wall D1 (Design Stationing 216+50 to 225+00)						
10+00.00	11,816,252	7,045,173	350.9	15.0	55.0	48
10+48.00	11,816,213	7,045,200	351.1	15.0	366.1	48
10+96.00	11,816,174	7,045,228	351.3	15.0	366.3	48
11+44.00	11,816,135	7,045,256	351.4	15.0	366.4	49
11+93.00	11,816,095	7,045,284	351.6	15.0	366.6	48
12+41.00	11,816,056	7,045,312	351.9	15.0	366.9	48
12+89.00	11,816,019	7,045,342	352.3	15.0	367.3	48
13+37.00	11,815,982	7,045,372	352.8	15.0	367.8	49
13+86.00	11,815,944	7,045,402	353.3	15.0	368.3	48
14+34.00	11,815,907	7,045,432	353.7	15.0	368.7	24
14+58.00	11,815,890	7,045,450	353.1	15.0	368.1	48
15+06.00	11,815,852	7,045,479	354.2	15.0	369.2	48
15+54.00	11,815,814	7,045,508	355.2	15.0	370.2	48
16+02.00	11,815,776	7,045,537	356.3	15.0	371.3	48
16+50.00	11,815,739	7,045,567	357.5	15.0	56.0	36
16+86.00	11,815,711	7,045,590	358.3	15.0	373.3	36
17+22.00	11,815,683	7,045,613	358.9	15.0	373.9	48
17+70.00	11,815,647	7,045,644	359.9	15.0	374.9	48
18+18.00	11,815,611	7,045,676	360.0	15.0	375.0	0

CNE C - Wall C1 and C2 Acoustical Profile (Projection NAD_1983_StatePlane_Virginia_North US Feet)

Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall C1 (Design Stationing 1193+00 to 1227+50)						
10+00.00	11,816,388	7,044,898	345.9	15.0	360.9	24
10+24.00	11,816,370	7,044,914	350.0	15.0	365.0	40
10+64.00	11,816,337	7,044,937	350.2	15.0	365.2	41
11+05.00	11,816,304	7,044,961	350.4	15.0	365.4	41
11+46.00	11,816,271	7,044,984	350.5	15.0	365.5	39
11+85.00	11,816,239	7,045,007	350.6	15.0	365.6	41
12+26.00	11,816,206	7,045,031	350.7	15.0	365.7	46
12+72.00	11,816,170	7,045,059	350.9	15.0	365.9	45
13+17.00	11,816,135	7,045,088	351.2	15.0	366.2	46
13+63.00	11,816,099	7,045,116	351.4	15.0	366.4	45
14+08.00	11,816,064	7,045,145	351.6	15.0	366.6	24
14+32.00	11,816,045	7,045,160	351.8	15.0	366.8	43
14+75.00	11,816,010	7,045,185	352.1	15.0	367.1	44
15+19.00	11,815,974	7,045,210	352.8	15.0	367.8	43
15+62.00	11,815,939	7,045,235	353.7	15.0	368.7	43
16+05.00	11,815,904	7,045,260	354.7	15.0	369.7	43
16+48.00	11,815,869	7,045,285	355.8	15.0	370.8	24
16+72.00	11,815,849	7,045,299	356.5	15.0	371.5	24
16+96.00	11,815,830	7,045,313	357.2	15.0	372.2	24
17+20.00	11,815,810	7,045,327	357.8	15.0	372.8	24
17+44.00	11,815,791	7,045,341	358.3	15.0	373.3	24
Wall N3 (D	11,815,772	7,045,356	358.9	15.0	373.9	24
17+92.00	11,815,753	7,045,370	359.4	15.0	374.4	25
18+17.00	11,815,733	7,045,385	359.9	15.0	374.9	24
18+41.00	11,815,714	7,045,399	360.5	15.0	375.5	23
18+64.00	11,815,696	7,045,414	361.0	15.0	376.0	24
18+88.00	11,815,677	7,045,429	361.5	15.0	376.5	25
19+13.00	11,815,658	7,045,444	362.1	15.0	377.1	24
19+37.00	11,815,639	7,045,459	362.6	15.0	377.6	23
19+60.00	11,815,621	7,045,474	363.2	15.0	378.2	25
19+85.00	11,815,602	7,045,490	363.7	15.0	378.7	24
20+09.00	11,815,584	7,045,505	364.2	15.0	379.2	24
20+33.00	11,815,566	7,045,521	364.7	15.0	379.7	25
20+58.00	11,815,547	7,045,537	365.3	15.0	380.3	40
20+98.00	11,815,517	7,045,563	366.4	15.0	381.4	46
21+44.00	11,815,483	7,045,594	367.2	15.0	382.2	24
21+68.00	11,815,459	7,045,598	367.7	15.0	382.7	48
22+16.00	11,815,424	7,045,631	368.3	15.0	383.3	24
22+40.00	11,815,418	7,045,654	368.4	15.0	383.4	13
22+53.00	11,815,409	7,045,663	368.5	15.0	383.5	24
22+77.00	11,815,392	7,045,679	368.9	15.0	383.9	24
23+01.00	11,815,375	7,045,696	369.2	15.0	384.2	25
23+26.00	11,815,357	7,045,713	369.5	15.0	384.5	24
23+50.00	11,815,340	7,045,730	369.7	15.0	384.7	24
23+74.00	11,815,323	7,045,747	369.9	15.0	384.9	0

24+21.00	11,815,290	7,045,781	370.3	15.0	385.3	48
24+69.00	11,815,256	7,045,815	370.7	15.0	385.7	48
25+17.00	11,815,222	7,045,849	371.1	15.0	386.1	47
25+64.00	11,815,189	7,045,883	371.6	15.0	386.6	48
26+12.00	11,815,155	7,045,917	372.2	15.0	387.2	48
26+60.00	11,815,121	7,045,951	372.9	15.0	387.9	48
27+08.00	11,815,087	7,045,986	373.5	15.0	388.5	47
27+55.00	11,815,054	7,046,020	374.2	15.0	389.2	48
28+03.00	11,815,020	7,046,054	374.8	15.0	389.8	48
28+51.00	11,814,986	7,046,088	375.3	15.0	390.3	48
28+99.00	11,814,952	7,046,122	375.8	15.0	390.8	47
29+46.00	11,814,919	7,046,156	376.1	15.0	391.1	48
29+94.00	11,814,885	7,046,191	376.4	15.0	391.4	48
30+42.00	11,814,851	7,046,225	376.6	15.0	391.6	24
30+66.00	11,814,834	7,046,242	376.6	15.0	391.6	24
30+90.00	11,814,817	7,046,259	376.7	15.0	391.7	24
31+14.00	11,814,800	7,046,275	376.8	15.0	391.8	24
31+38.00	11,814,783	7,046,292	376.9	15.0	391.9	24
31+62.00	11,814,766	7,046,309	377.1	15.0	392.1	25
31+87.00	11,814,748	7,046,326	377.2	15.0	392.2	24
32+11.00	11,814,731	7,046,342	377.4	15.0	392.4	24
32+35.00	11,814,714	7,046,359	377.6	15.0	392.6	24
32+59.00	11,814,696	7,046,375	377.9	15.0	392.9	24
32+83.00	11,814,678	7,046,391	378.2	15.0	393.2	23
33+06.00	11,814,661	7,046,407	378.5	15.0	393.5	24
33+30.00	11,814,643	7,046,423	378.8	15.0	393.8	24
33+54.00	11,814,625	7,046,440	379.2	15.0	394.2	24
33+78.00	11,814,607	7,046,455	379.7	15.0	394.7	48
34+26.00	11,814,571	7,046,487	380.5	15.0	395.5	48
34+74.00	11,814,535	7,046,519	381.2	15.0	396.2	48
35+22.00	11,814,499	7,046,551	381.9	15.0	396.9	48
35+70.00	11,814,463	7,046,582	382.6	15.0	397.6	48
36+18.00	11,814,427	7,046,614	383.3	15.0	398.3	48
36+66.00	11,814,391	7,046,646	384.0	15.0	399.0	48
37+14.00	11,814,355	7,046,677	384.8	15.0	399.8	48
37+62.00	11,814,319	7,046,709	385.5	15.0	400.5	48
38+10.00	11,814,283	7,046,741	386.2	15.0	401.2	48
38+58.00	11,814,247	7,046,772	386.9	15.0	401.9	48
39+06.00	11,814,211	7,046,804	387.8	15.0	402.8	36
39+42.00	11,814,178	7,046,819	389.5	15.0	404.5	36
39+78.00	11,814,145	7,046,834	395.4	15.0	410.4	36
40+14.00	11,814,115	7,046,854	397.9	15.0	412.9	36
40+50.00	11,814,085	7,046,873	399.8	15.0	414.8	43
40+93.00	11,814,052	7,046,901	401.0	15.0	416.0	43
41+36.00	11,814,019	7,046,929	402.3	15.0	417.3	43
41+79.00	11,813,986	7,046,957	403.4	15.0	418.4	44
42+23.00	11,813,952	7,046,984	404.6	15.0	419.6	43
42+66.00	11,813,919	7,047,012	405.5	15.0	420.5	48
43+14.00	11,813,883	7,047,044	406.2	15.0	421.2	48
43+62.00	11,813,847	7,047,076	406.2	15.0	421.2	48
44+10.00	11,813,814	7,047,111	405.0	15.0	420.0	48
44+58.00	11,813,781	7,047,145	402.6	15.0	417.6	0

Wall C2 (Design Stationing 1228+50 to 1246+00)

10+00.00	11,817,631	7,043,622	338.1	15.0	353.1	36
10+36.00	11,817,611	7,043,652	343.3	15.0	358.3	36
10+72.00	11,817,591	7,043,682	343.2	15.0	358.2	36
11+08.00	11,817,574	7,043,714	342.9	15.0	357.9	35
11+43.00	11,817,558	7,043,746	342.5	15.0	357.5	36
11+79.00	11,817,539	7,043,777	342.2	15.0	357.2	36
12+15.00	11,817,520	7,043,807	341.9	15.0	356.9	36
12+51.00	11,817,506	7,043,841	341.5	15.0	356.5	36
12+87.00	11,817,492	7,043,874	341.4	15.0	356.4	36
13+23.00	11,817,475	7,043,905	341.5	15.0	356.5	36
13+59.00	11,817,457	7,043,936	341.9	15.0	356.9	48
14+07.00	11,817,425	7,043,972	342.5	15.0	357.5	48
14+55.00	11,817,392	7,044,008	347.7	15.0	362.7	48
15+03.00	11,817,360	7,044,043	350.9	15.0	365.9	48
15+51.00	11,817,331	7,044,081	352.3	15.0	367.3	36
15+87.00	11,817,312	7,044,112	350.4	15.0	365.4	36
16+23.00	11,817,292	7,044,142	347.5	15.0	362.5	48
16+71.00	11,817,263	7,044,180	347.1	15.0	362.1	48
17+19.00	11,817,234	7,044,218	344.4	15.0	359.4	43
17+62.00	11,817,205	7,044,250	343.6	15.0	358.6	44
18+06.00	11,817,175	7,044,282	343.8	15.0	358.8	43
18+49.00	11,817,146	7,044,314	343.9	15.0	358.9	43
18+92.00	11,817,117	7,044,346	344.0	15.0	359.0	43
19+35.00	11,817,088	7,044,378	344.1	15.0	359.1	24
19+59.00	11,817,065	7,044,385	344.2	15.0	359.2	40
19+99.00	11,817,036	7,044,413	344.5	15.0	359.5	40
20+39.00	11,817,007	7,044,440	345.3	15.0	360.3	40
20+79.00	11,816,978	7,044,467	347.6	15.0	362.6	48
21+27.00	11,816,939	7,044,495	351.1	15.0	366.1	48
21+75.00	11,816,900	7,044,523	353.1	15.0	368.1	48
22+23.00	11,816,861	7,044,551	354.2	15.0	369.2	48
22+71.00	11,816,823	7,044,581	354.3	15.0	369.3	48
23+19.00	11,816,785	7,044,610	354.5	15.0	369.5	40
23+59.00	11,816,755	7,044,637	352.5	15.0	367.5	40
23+99.00	11,816,725	7,044,663	350.7	15.0	365.7	40
24+39.00	11,816,695	7,044,690	349.2	15.0	364.2	36
24+75.00	11,816,666	7,044,711	349.1	15.0	364.1	36
25+11.00	11,816,637	7,044,732	348.0	15.0	363.0	48
25+59.00	11,816,602	7,044,764	348.2	15.0	363.2	41
26+00.00	11,816,569	7,044,788	348.5	15.0	363.5	40
26+40.00	11,816,536	7,044,811	348.8	15.0	363.8	39
26+79.00	11,816,504	7,044,834	347.2	15.0	362.2	0

CNE D/E - Walls E1-E4 and D2 Acoustical Profile (Projection NAD_1983_StatePlane_Virginia_North US Feet)

Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall E1 (Design Stationing 238+25 to 246+00)						
10+00.00	11,817,325	7,044,354	344.6	15.0	359.6	48
10+48.00	11,817,357	7,044,318	347.3	15.0	362.3	48
10+96.00	11,817,388	7,044,282	347.1	15.0	362.1	25
11+21.00	11,817,401	7,044,261	348.0	15.0	363.0	48
11+69.00	11,817,431	7,044,224	347.8	15.0	362.8	37
12+06.00	11,817,454	7,044,195	347.7	15.0	362.7	36
12+42.00	11,817,476	7,044,167	347.6	15.0	362.6	48
12+90.00	11,817,501	7,044,126	347.3	15.0	362.3	48
13+38.00	11,817,526	7,044,085	346.9	15.0	361.9	48
13+86.00	11,817,552	7,044,045	346.7	15.0	361.7	48
14+34.00	11,817,577	7,044,004	346.4	15.0	361.4	36
14+70.00	11,817,596	7,043,973	346.3	15.0	361.3	36
15+06.00	11,817,615	7,043,943	346.2	15.0	361.2	48
15+54.00	11,817,640	7,043,902	346.1	15.0	361.1	24
15+78.00	11,817,656	7,043,883	345.0	15.0	360.0	24
16+02.00	11,817,668	7,043,862	344.8	15.0	359.8	24
16+26.00	11,817,676	7,043,839	345.4	15.0	360.4	36
16+62.00	11,817,694	7,043,808	345.1	15.0	360.1	35
16+97.00	11,817,711	7,043,777	344.8	15.0	359.8	36
17+33.00	11,817,733	7,043,748	344.6	15.0	359.6	36
17+69.00	11,817,754	7,043,719	341.8	15.0	356.8	0
Wall N3 (Design Stationing 1518+25 to 1526+75)						
10+00.00	11,817,815.00	7,043,610.00	341	15.0	356.0	44
10+44.00	11,817,837.00	7,043,571.50	342.95	15.0	358.0	44
10+88.00	11,817,858.00	7,043,533.00	345.7	15.0	360.7	44
11+32.00	11,817,880.00	7,043,495.00	347.19	15.0	362.2	44
11+76.00	11,817,901.00	7,043,456.50	346.8	15.0	361.8	44
12+20.00	11,817,923.00	7,043,418.00	343.95	15.0	359.0	44
12+64.00	11,817,944.00	7,043,379.50	342.45	15.0	357.5	48
13+12.00	11,817,966.00	7,043,337.00	342.37	15.0	357.4	48
13+60.00	11,817,989.00	7,043,294.50	342.31	15.0	357.3	48
14+08.00	11,818,011.00	7,043,252.00	342.25	15.0	357.3	44
14+52.00	11,818,032.00	7,043,213.50	342.12	15.0	357.1	44
14+96.00	11,818,054.00	7,043,175.00	341.99	15.0	357.0	43
15+39.00	11,818,075.00	7,043,137.00	341.86	15.0	356.9	44
15+83.00	11,818,097.00	7,043,098.50	341.66	15.0	356.7	44
16+27.00	11,818,118.00	7,043,060.00	341.32	15.0	356.3	44
16+71.00	11,818,140.00	7,043,022.00	340.89	15.0	355.9	24
16+95.00	11,818,162.00	7,043,013.50	338.26	15.0	353.3	0

Wall E3 (Design Stationing 254+25 to 269+25)

10+00.00	11,819,124	7,041,865	316.8	15.0	331.8	40
10+40.00	11,819,099	7,041,834	317.9	15.0	332.9	25
10+65.00	11,819,080	7,041,850	317.3	15.0	332.3	24
10+89.00	11,819,062	7,041,865	316.8	15.0	331.8	24
11+13.00	11,819,044	7,041,881	316.2	15.0	331.2	0

11+37.00	11,819,026	7,041,897	315.6	15.0	330.6	24
11+61.00	11,819,008	7,041,912	315.0	15.0	330.0	24
11+85.00	11,818,990	7,041,928	314.5	15.0	329.5	24
12+09.00	11,818,972	7,041,944	314.0	15.0	329.0	24
12+33.00	11,818,954	7,041,961	313.6	15.0	328.6	23
12+56.00	11,818,937	7,041,977	313.2	15.0	328.2	24
12+80.00	11,818,919	7,041,993	312.8	15.0	327.8	24
13+04.00	11,818,902	7,042,010	312.5	15.0	327.5	24
13+28.00	11,818,884	7,042,026	312.3	15.0	327.3	24
13+52.00	11,818,867	7,042,043	312.0	15.0	327.0	24
13+76.00	11,818,850	7,042,060	311.9	15.0	326.9	24
14+00.00	11,818,833	7,042,077	311.7	15.0	326.7	24
14+24.00	11,818,816	7,042,094	311.6	15.0	326.6	24
14+48.00	11,818,799	7,042,111	311.6	15.0	326.6	24
14+72.00	11,818,782	7,042,128	311.6	15.0	326.6	24
14+96.00	11,818,766	7,042,145	311.6	15.0	326.6	24
15+20.00	11,818,749	7,042,163	311.7	15.0	326.7	24
15+44.00	11,818,733	7,042,180	311.9	15.0	326.9	24
15+68.00	11,818,716	7,042,198	312.0	15.0	327.0	24
15+92.00	11,818,700	7,042,216	312.2	15.0	327.2	24
16+16.00	11,818,684	7,042,233	312.5	15.0	327.5	24
16+40.00	11,818,668	7,042,251	312.8	15.0	327.8	24
16+64.00	11,818,652	7,042,269	313.1	15.0	328.1	24
16+88.00	11,818,636	7,042,287	313.5	15.0	328.5	24
17+12.00	11,818,621	7,042,306	314.0	15.0	329.0	24
17+36.00	11,818,605	7,042,324	314.4	15.0	329.4	24
17+60.00	11,818,590	7,042,342	315.0	15.0	330.0	24
17+84.00	11,818,575	7,042,361	315.5	15.0	330.5	24
18+08.00	11,818,559	7,042,379	316.1	15.0	331.1	24
18+32.00	11,818,544	7,042,398	316.8	15.0	331.8	24
18+56.00	11,818,529	7,042,417	317.5	15.0	332.5	24
18+80.00	11,818,514	7,042,436	318.2	15.0	333.2	24
19+04.00	11,818,500	7,042,455	319.0	15.0	334.0	24
19+28.00	11,818,485	7,042,474	319.8	15.0	334.8	24
19+52.00	11,818,471	7,042,493	320.7	15.0	335.7	24
19+76.00	11,818,456	7,042,512	321.6	15.0	336.6	24
20+00.00	11,818,442	7,042,531	322.5	15.0	337.5	24
20+24.00	11,818,428	7,042,551	323.5	15.0	338.5	24
20+48.00	11,818,415	7,042,571	324.5	15.0	339.5	24
20+72.00	11,818,402	7,042,591	325.5	15.0	340.5	24
20+96.00	11,818,389	7,042,612	326.6	15.0	341.6	24
21+20.00	11,818,377	7,042,632	327.6	15.0	342.6	24
21+44.00	11,818,365	7,042,653	328.5	15.0	343.5	24
21+68.00	11,818,353	7,042,673	329.4	15.0	344.4	24
21+92.00	11,818,340	7,042,693	330.3	15.0	345.3	24
22+16.00	11,818,326	7,042,713	331.1	15.0	346.1	24
22+40.00	11,818,313	7,042,734	331.9	15.0	346.9	24
22+64.00	11,818,300	7,042,754	332.7	15.0	347.7	24
22+88.00	11,818,288	7,042,774	333.5	15.0	348.5	24
23+12.00	11,818,275	7,042,794	334.3	15.0	349.3	24
23+36.00	11,818,262	7,042,815	335.0	15.0	350.0	24
23+60.00	11,818,250	7,042,835	335.6	15.0	350.6	24
23+84.00	11,818,238	7,042,856	336.2	15.0	351.2	24
24+08.00	11,818,225	7,042,877	336.8	15.0	351.8	24
24+32.00	11,818,213	7,042,897	337.5	15.0	352.5	24
24+56.00	11,818,201	7,042,918	340.0	15.0	355.0	0

Wall E4 (Design Stationing 270+75 to 277+50)						
10+00.00	11,819,231	7,041,781	324.7	15.0	339.7	38
10+38.00	11,819,209	7,041,750	322.8	15.0	337.8	29
10+67.00	11,819,233	7,041,734	324.1	15.0	339.1	30
10+97.00	11,819,258	7,041,717	325.5	15.0	340.5	30
11+27.00	11,819,283	7,041,701	327.0	15.0	342.0	29
11+56.00	11,819,307	7,041,685	328.4	15.0	343.4	45
12+01.00	11,819,345	7,041,661	330.4	15.0	345.4	44
12+45.00	11,819,382	7,041,638	332.3	15.0	347.3	45
12+90.00	11,819,420	7,041,614	334.0	15.0	349.0	44
13+34.00	11,819,457	7,041,591	335.2	15.0	350.2	45
13+79.00	11,819,495	7,041,567	336.4	15.0	351.4	24
14+03.00	11,819,517	7,041,558	338.5	15.0	353.5	24
14+27.00	11,819,537	7,041,546	339.1	15.0	354.1	24
14+51.00	11,819,555	7,041,530	338.1	15.0	353.1	41
14+92.00	11,819,590	7,041,508	338.9	15.0	353.9	40
15+32.00	11,819,624	7,041,487	339.6	15.0	354.6	40
15+72.00	11,819,658	7,041,465	340.2	15.0	355.2	40
16+12.00	11,819,692	7,041,444	340.7	15.0	355.7	50
16+62.00	11,819,740	7,041,458	349.2	15.0	364.2	49
17+11.00	11,819,787	7,041,473	346.4	15.0	361.4	0
Wall D2 (Design Stationing 230+50 to 237+50)						
10+00.00	11,817,293	7,044,415	343.5	15.0	358.5	35
10+35.00	11,817,268	7,044,440	342.8	15.0	357.8	35
10+70.00	11,817,244	7,044,465	342.8	15.0	357.8	35
11+05.00	11,817,219	7,044,490	342.9	15.0	357.9	34
11+39.00	11,817,195	7,044,514	342.9	15.0	357.9	35
11+74.00	11,817,169	7,044,538	342.7	15.0	357.7	34
12+08.00	11,817,144	7,044,562	342.7	15.0	357.7	35
12+43.00	11,817,118	7,044,585	344.3	15.0	359.3	35
12+78.00	11,817,092	7,044,609	347.3	15.0	362.3	35
13+13.00	11,817,065	7,044,631	350.7	15.0	365.7	34
13+47.00	11,817,039	7,044,654	353.0	15.0	368.0	35
13+82.00	11,817,012	7,044,676	355.6	15.0	370.6	35
14+17.00	11,816,985	7,044,698	357.7	15.0	372.7	35
14+52.00	11,816,957	7,044,719	358.7	15.0	373.7	35
14+87.00	11,816,930	7,044,741	359.6	15.0	374.6	35
15+22.00	11,816,902	7,044,761	360.2	15.0	375.2	35
15+57.00	11,816,874	7,044,782	361.1	15.0	376.1	43
16+00.00	11,816,839	7,044,807	361.7	15.0	376.7	42
16+42.00	11,816,805	7,044,832	360.7	15.0	375.7	43
16+42.00	11,816,770	7,044,857	360.0	15.0	375.0	42
16+84.00	11,816,736	7,044,881	358.2	15.0	373.2	27
17+11.00	11,816,744	7,044,907	358.1	15.0	373.1	0

CNE F - Walls F1, F1B, F1C, and F2 Acoustical Profile (Projection NAD_1983_StatePlane_Virginia_North US Feet)

Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall F1 (Design Stationing 301+25 to 302+75)						
10+00.00	11,822,101	7,040,455	320.3	13.0	333.3	49
10+49.00	11,822,055	7,040,471	320.7	13.0	333.7	48
10+97.00	11,822,010	7,040,487	321.1	13.0	334.1	48
11+45.00	11,821,965	7,040,503	321.5	13.0	334.5	0
Wall F1B (Design Stationing 303+00 to 303+25)						
10+00.00	11,822,123.00	7,040,447.00	320.08	13.0	333.1	24
10+24.00	11,822,146.00	7,040,439.00	319.92	13.0	332.9	0
Wall F1C (Design Stationing 303+50 to 304+75)						
10+00.00	11,822,273	7,040,394	319.8	13.0	332.8	38
10+38.00	11,822,237	7,040,407	319.7	13.0	332.7	38
10+76.00	11,822,201	7,040,419	319.6	13.0	332.6	37
11+13.00	11,822,166	7,040,432	319.8	13.0	332.8	0
Wall F2 (Design Stationing 304+75 to 313+00)						
10+00.00	11,823,076	7,040,109	309.5	12.0	321.5	30
10+30.00	11,823,047	7,040,103	307.3	12.0	319.3	30
10+60.00	11,823,018	7,040,097	306.5	12.0	318.5	46
11+06.00	11,822,973	7,040,106	306.8	12.0	318.8	46
11+52.00	11,822,928	7,040,115	307.8	12.0	319.8	46
11+98.00	11,822,883	7,040,124	313.0	12.0	325.0	49
12+47.00	11,822,840	7,040,149	313.9	12.0	325.9	49
12+96.00	11,822,797	7,040,173	314.8	12.0	326.8	50
ationing 15	11,822,753	7,040,196	315.7	12.0	327.7	49
13+95.00	11,822,709	7,040,218	316.6	12.0	328.6	49
14+44.00	11,822,665	7,040,239	317.5	12.0	329.5	50
14+94.00	11,822,620	7,040,260	318.3	12.0	330.3	49
15+43.00	11,822,575	7,040,280	318.9	12.0	330.9	49
15+92.00	11,822,530	7,040,299	319.5	12.0	331.5	50
16+42.00	11,822,484	7,040,318	319.9	12.0	331.9	49
16+91.00	11,822,438	7,040,335	320.2	12.0	332.2	49
17+40.00	11,822,392	7,040,352	320.1	12.0	332.1	35
17+75.00	11,822,359	7,040,364	320.0	12.0	332.0	36
10+00.00	11,822,325	7,040,376	319.9	12.0	331.9	35
10+35.00	11,822,292	7,040,388	319.8	12.0	331.8	0

CNE F - Wall F3 Acoustical Profile (Projection NAD_1983_StatePlane_Virginia_North US Feet)

Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall F3 (Design Stationing 313+50 to 339+00)						
10+00.00	11,825,161	7,038,522	260.1	16.0	276.1	49
10+49.00	11,825,121	7,038,551	265.9	16.0	281.9	50
10+99.00	11,825,080	7,038,580	268.0	16.0	284.0	49
11+48.00	11,825,040	7,038,609	268.7	16.0	284.7	50
11+98.00	11,824,999	7,038,637	269.7	16.0	285.7	49
12+47.00	11,824,959	7,038,666	267.7	16.0	283.7	50
12+97.00	11,824,918	7,038,695	268.6	16.0	284.6	49
13+46.00	11,824,878	7,038,724	268.1	16.0	284.1	50
13+96.00	11,824,837	7,038,752	268.9	16.0	284.9	49
14+45.00	11,824,797	7,038,781	269.8	16.0	285.8	50
14+95.00	11,824,756	7,038,810	270.6	16.0	286.6	49
15+44.00	11,824,716	7,038,838	269.0	16.0	285.0	50
15+94.00	11,824,675	7,038,867	265.3	16.0	281.3	49
16+43.00	11,824,635	7,038,896	264.0	16.0	280.0	50
16+93.00	11,824,594	7,038,925	263.2	16.0	279.2	49
17+42.00	11,824,554	7,038,953	265.5	16.0	281.5	50
17+92.00	11,824,513	7,038,982	271.8	16.0	287.8	49
18+41.00	11,824,473	7,039,011	275.0	16.0	291.0	50
18+91.00	11,824,432	7,039,040	277.5	16.0	293.5	49
19+40.00	11,824,392	7,039,068	278.3	16.0	294.3	50
19+90.00	11,824,351	7,039,097	279.2	16.0	295.2	50
Wall N3 (D	11,824,310	7,039,126	280.0	16.0	296.0	49
20+89.00	11,824,270	7,039,154	280.9	16.0	296.9	50
21+39.00	11,824,229	7,039,183	281.7	16.0	297.7	49
21+88.00	11,824,189	7,039,212	282.6	16.0	298.6	50
22+38.00	11,824,148	7,039,241	283.5	16.0	299.5	49
22+87.00	11,824,108	7,039,269	284.3	16.0	300.3	50
23+37.00	11,824,067	7,039,298	285.2	16.0	301.2	49
23+86.00	11,824,027	7,039,327	286.0	16.0	302.0	50
24+36.00	11,823,986	7,039,356	286.9	16.0	302.9	47
24+83.00	11,823,964	7,039,398	296.5	16.0	312.5	49
25+32.00	11,823,924	7,039,426	304.8	16.0	320.8	48
25+80.00	11,823,885	7,039,454	309.1	16.0	325.1	49
26+29.00	11,823,845	7,039,482	310.1	16.0	326.1	48
26+77.00	11,823,806	7,039,509	307.9	16.0	323.9	49
27+26.00	11,823,766	7,039,537	299.8	16.0	315.8	36
27+62.00	11,823,732	7,039,549	294.0	16.0	310.0	36
27+98.00	11,823,698	7,039,560	293.0	16.0	309.0	45
28+43.00	11,823,661	7,039,586	293.7	16.0	309.7	44
28+87.00	11,823,625	7,039,612	294.5	16.0	310.5	45
29+32.00	11,823,588	7,039,638	295.3	16.0	311.3	45
29+77.00	11,823,551	7,039,664	296.2	16.0	312.2	44
30+21.00	11,823,515	7,039,690	298.3	16.0	314.3	45
30+66.00	11,823,478	7,039,716	298.7	16.0	314.7	45
31+11.00	11,823,441	7,039,742	301.3	16.0	317.3	0

31+56.00	11,823,404	7,039,768	302.8	16.0	318.8	24
31+80.00	11,823,385	7,039,782	302.5	16.0	318.5	48
32+28.00	11,823,348	7,039,813	304.7	16.0	320.7	48
32+76.00	11,823,310	7,039,843	307.1	16.0	323.1	48
33+24.00	11,823,273	7,039,873	309.7	16.0	325.7	43
33+67.00	11,823,238	7,039,898	309.7	16.0	325.7	44
34+11.00	11,823,202	7,039,923	307.8	16.0	323.8	43
34+54.00	11,823,167	7,039,948	309.0	16.0	325.0	43
34+97.00	11,823,132	7,039,973	308.3	16.0	324.3	43
35+40.00	11,823,097	7,039,998	306.2	16.0	322.2	43

CNE G - Walls G1_G6 Acoustical Profile (Projection NAD_1983_StatePlane_Virginia_North US Feet)						
Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall G1 (Design Stationing 1280+75 to 1312+50)						
10+00.00	11,822,906.00	7,039,938.50	306.57	18.0	324.6	24
10+24.00	11,822,886.00	7,039,951.50	306.78	18.0	324.8	24
10+48.00	11,822,865.00	7,039,964.00	307.21	18.0	325.2	24
10+72.00	11,822,845.00	7,039,976.50	307.64	18.0	325.6	24
10+96.00	11,822,824.00	7,039,989.00	308.07	18.0	326.1	24
11+20.00	11,822,803.00	7,040,001.00	308.5	18.0	326.5	23
11+43.00	11,822,783.00	7,040,013.00	308.93	18.0	326.9	24
11+67.00	11,822,762.00	7,040,025.00	309.36	18.0	327.4	24
11+91.00	11,822,741.00	7,040,036.50	309.78	18.0	327.8	24
12+15.00	11,822,720.00	7,040,048.00	310.21	18.0	328.2	25
12+40.00	11,822,698.00	7,040,059.00	310.64	18.0	328.6	24
12+64.00	11,822,677.00	7,040,070.00	311.07	18.0	329.1	24
12+88.00	11,822,656.00	7,040,081.00	311.5	18.0	329.5	24
13+12.00	11,822,638.00	7,040,097.00	311.81	18.0	329.8	24
13+36.00	11,822,616.00	7,040,107.50	312.23	18.0	330.2	24
13+60.00	11,822,594.00	7,040,117.50	312.65	18.0	330.7	23
13+83.00	11,822,573.00	7,040,127.50	313.08	18.0	331.1	24
14+07.00	11,822,551.00	7,040,137.50	313.51	18.0	331.5	24
14+31.00	11,822,529.00	7,040,147.50	313.91	18.0	331.9	24
14+55.00	11,822,507.00	7,040,157.00	314.29	18.0	332.3	24
14+79.00	11,822,485.00	7,040,166.00	314.64	18.0	332.6	24
Wall N3 (D	11,822,463.00	7,040,175.50	314.97	18.0	333.0	25
15+28.00	11,822,440.00	7,040,184.00	315.28	18.0	333.3	24
15+52.00	11,822,418.00	7,040,193.00	315.63	18.0	333.6	24
15+76.00	11,822,396.00	7,040,201.50	316.05	18.0	334.1	25
16+01.00	11,822,373.00	7,040,210.00	316.44	18.0	334.4	24
16+25.00	11,822,350.00	7,040,218.00	316.83	18.0	334.8	48
16+73.00	11,822,305.00	7,040,234.00	317.59	18.0	335.6	48
17+21.00	11,822,260.00	7,040,250.00	318.86	18.0	336.9	24
17+45.00	11,822,237.00	7,040,256.50	318.64	18.0	336.6	24
17+69.00	11,822,213.00	7,040,257.00	318.48	18.0	336.5	24
17+93.00	11,822,190.00	7,040,250.50	319.44	18.0	337.4	49
18+42.00	11,822,143.00	7,040,263.50	316.39	18.0	334.4	49
18+91.00	11,822,096.00	7,040,276.00	315.83	18.0	333.8	25
19+16.00	11,822,097.00	7,040,300.50	317.3	18.0	335.3	23
19+39.00	11,822,078.00	7,040,313.50	319.86	18.0	337.9	25
19+64.00	11,822,055.00	7,040,322.00	320.29	18.0	338.3	23
19+87.00	11,822,033.00	7,040,330.00	320.51	18.0	338.5	24
20+11.00	11,822,010.00	7,040,337.50	320.73	18.0	338.7	24
20+35.00	11,821,987.00	7,040,345.00	320.96	18.0	339.0	23
20+58.00	11,821,965.00	7,040,353.00	321.18	18.0	339.2	24
20+82.00	11,821,942.00	7,040,360.50	321.4	18.0	339.4	24
21+06.00	11,821,919.00	7,040,368.00	321.62	18.0	339.6	24
21+30.00	11,821,896.00	7,040,375.50	321.85	18.0	339.9	23
21+53.00	11,821,874.00	7,040,383.00	322.07	18.0	340.1	0

21+77.00	11,821,851.00	7,040,390.50	322.29	18.0	340.3	24
22+01.00	11,821,828.00	7,040,398.00	322.52	18.0	340.5	24
22+25.00	11,821,805.00	7,040,405.50	322.74	18.0	340.7	24
22+49.00	11,821,782.00	7,040,412.50	322.96	18.0	341.0	24
22+73.00	11,821,759.00	7,040,420.00	323.18	18.0	341.2	24
22+97.00	11,821,736.00	7,040,427.00	323.41	18.0	341.4	24
23+21.00	11,821,713.00	7,040,434.00	323.63	18.0	341.6	23
23+44.00	11,821,691.00	7,040,441.50	323.85	18.0	341.9	24
23+68.00	11,821,668.00	7,040,448.50	324.08	18.0	342.1	24
23+92.00	11,821,645.00	7,040,455.50	324.3	18.0	342.3	24
24+16.00	11,821,622.00	7,040,462.50	324.52	18.0	342.5	24
24+40.00	11,821,599.00	7,040,469.50	324.74	18.0	342.7	24
24+64.00	11,821,576.00	7,040,476.50	324.96	18.0	343.0	24
24+88.00	11,821,553.00	7,040,483.50	325.18	18.0	343.2	24
25+12.00	11,821,530.00	7,040,491.00	325.4	18.0	343.4	24
25+36.00	11,821,507.00	7,040,498.00	325.63	18.0	343.6	24
25+60.00	11,821,484.00	7,040,505.50	325.85	18.0	343.9	24
25+84.00	11,821,461.00	7,040,512.50	326.07	18.0	344.1	23
26+07.00	11,821,439.00	7,040,520.00	326.29	18.0	344.3	24
26+31.00	11,821,416.00	7,040,527.50	326.51	18.0	344.5	24
26+55.00	11,821,393.00	7,040,535.00	326.73	18.0	344.7	24
26+79.00	11,821,370.00	7,040,542.50	326.95	18.0	345.0	24
27+03.00	11,821,347.00	7,040,550.00	327.17	18.0	345.2	23
27+26.00	11,821,325.00	7,040,557.50	327.39	18.0	345.4	24
27+50.00	11,821,302.00	7,040,565.00	327.61	18.0	345.6	24
27+74.00	11,821,279.00	7,040,573.00	327.83	18.0	345.8	24
27+98.00	11,821,256.00	7,040,580.50	328.06	18.0	346.1	23
28+21.00	11,821,234.00	7,040,588.50	328.28	18.0	346.3	24
28+45.00	11,821,211.00	7,040,596.00	328.5	18.0	346.5	24
28+69.00	11,821,188.00	7,040,604.00	328.72	18.0	346.7	23
28+92.00	11,821,166.00	7,040,612.00	328.94	18.0	346.9	24
29+16.00	11,821,143.00	7,040,620.00	329.16	18.0	347.2	24
29+40.00	11,821,120.00	7,040,628.00	329.38	18.0	347.4	48
29+88.00	11,821,075.00	7,040,644.00	329.83	18.0	347.8	48
30+36.00	11,821,030.00	7,040,660.00	330.27	18.0	348.3	48
30+84.00	11,820,985.00	7,040,676.00	330.71	18.0	348.7	49
31+33.00	11,820,939.00	7,040,692.00	331.16	18.0	349.2	48
31+81.00	11,820,894.00	7,040,708.00	331.6	18.0	349.6	48
32+29.00	11,820,849.00	7,040,724.00	332.04	18.0	350.0	48
32+77.00	11,820,804.00	7,040,740.00	332.49	18.0	350.5	49
33+26.00	11,820,758.00	7,040,756.00	332.95	18.0	351.0	48
33+74.00	11,820,713.00	7,040,772.00	333.46	18.0	351.5	48
34+22.00	11,820,668.00	7,040,788.00	334.04	18.0	352.0	48
34+70.00	11,820,623.00	7,040,804.00	334.96	18.0	353.0	49
35+19.00	11,820,577.00	7,040,820.00	335.92	18.0	353.9	48
35+67.00	11,820,532.00	7,040,836.00	336.88	18.0	354.9	48
36+15.00	11,820,487.00	7,040,852.00	337.83	18.0	355.8	48
36+63.00	11,820,442.00	7,040,868.00	338.79	18.0	356.8	49
37+12.00	11,820,396.00	7,040,884.00	339.74	18.0	357.7	24
37+36.00	11,820,374.00	7,040,892.50	340.21	18.0	358.2	24
37+60.00	11,820,351.00	7,040,900.50	340.68	18.0	358.7	24
37+84.00	11,820,329.00	7,040,909.50	341.15	18.0	359.2	25
38+09.00	11,820,306.00	7,040,918.00	341.58	18.0	359.6	24
38+33.00	11,820,284.00	7,040,927.00	341.89	18.0	359.9	24
38+57.00	11,820,262.00	7,040,936.00	342.2	18.0	360.2	24
38+81.00	11,820,240.00	7,040,945.50	342.51	18.0	360.5	24
39+05.00	11,820,218.00	7,040,955.00	342.82	18.0	360.8	24

39+29.00	11,820,196.00	7,040,965.00	343.13	18.0	361.1	24
39+53.00	11,820,174.00	7,040,974.50	343.43	18.0	361.4	24
39+77.00	11,820,152.00	7,040,985.00	343.7	18.0	361.7	23
40+00.00	11,820,131.00	7,040,995.00	343.95	18.0	362.0	24
40+24.00	11,820,109.00	7,041,005.50	344.17	18.0	362.2	24
40+48.00	11,820,088.00	7,041,016.50	344.37	18.0	362.4	25
40+73.00	11,820,066.00	7,041,027.50	344.55	18.0	362.6	24
40+97.00	11,820,045.00	7,041,038.50	344.7	18.0	362.7	24
41+21.00	11,820,024.00	7,041,049.50	344.83	18.0	362.8	25
41+46.00	11,820,002.00	7,041,060.50	344.96	18.0	363.0	24
41+70.00	11,819,979.00	7,041,065.50	345.15	18.0	363.2	24
41+94.00	11,819,955.00	7,041,064.50	345.39	18.0	363.4	0
Wall G2 (Design Stationing 1313+75 to 1318+75)						
10+00.00	11,823,418.00	7,039,587.50	294.44	18.0	312.4	41
10+41.00	11,823,385.00	7,039,611.00	297.82	18.0	315.8	40
10+81.00	11,823,352.00	7,039,634.00	298.46	18.0	316.5	39
11+20.00	11,823,320.00	7,039,657.00	299.1	18.0	317.1	48
11+68.00	11,823,282.00	7,039,687.00	299.92	18.0	317.9	23
11+91.00	11,823,259.00	7,039,682.50	300.2	18.0	318.2	24
12+15.00	11,823,241.00	7,039,699.00	300.94	18.0	318.9	23
12+38.00	11,823,224.00	7,039,715.00	301.31	18.0	319.3	49
12+87.00	11,823,186.00	7,039,745.50	302.13	18.0	320.1	48
13+35.00	11,823,149.00	7,039,775.50	302.93	18.0	320.9	42
13+77.00	11,823,115.00	7,039,800.00	303.6	18.0	321.6	42
14+19.00	11,823,081.00	7,039,824.00	304.27	18.0	322.3	43
14+62.00	11,823,046.00	7,039,848.50	304.82	18.0	322.8	42
15+04.00	11,823,012.00	7,039,873.00	301.8	18.0	319.8	0
Wall G3 (Design Stationing 1320+25 to 1323+25)						
10+00.00	11,823,548.00	7,039,491.00	293.06	18.0	311.1	45
10+45.00	11,823,585.00	7,039,465.50	291.71	18.0	309.7	44
10+89.00	11,823,621.00	7,039,439.50	290.35	18.0	308.4	45
11+34.00	11,823,658.00	7,039,414.00	289.06	18.0	307.1	44
11+78.00	11,823,694.00	7,039,388.00	287.9	18.0	305.9	44
12+22.00	11,823,730.00	7,039,362.50	286.87	18.0	304.9	45
12+67.00	11,823,767.00	7,039,336.50	285.97	18.0	304.0	44
13+11.00	11,823,803.00	7,039,310.50	283.68	18.0	301.7	0
Wall G4 (Design Stationing 1323+75 to 1328+75)						
10+00.00	11,824,237.00	7,039,017.50	270.37	18.0	288.4	48
10+48.00	11,824,198.00	7,039,045.00	277.24	18.0	295.2	48
10+96.00	11,824,159.00	7,039,073.00	278.07	18.0	296.1	48
11+44.00	11,824,120.00	7,039,101.00	278.89	18.0	296.9	48
11+92.00	11,824,081.00	7,039,128.50	279.72	18.0	297.7	49
12+41.00	11,824,041.00	7,039,156.50	280.54	18.0	298.5	48
12+89.00	11,824,002.00	7,039,184.00	281.37	18.0	299.4	48
13+37.00	11,823,963.00	7,039,212.00	282.2	18.0	300.2	48
13+85.00	11,823,924.00	7,039,239.50	283.02	18.0	301.0	48
14+33.00	11,823,885.00	7,039,267.50	283.85	18.0	301.9	48
14+81.00	11,823,840.00	7,039,283.50	282.7	18.0	300.7	0
Wall G5 (Design Stationing 1329+00 to 1334+00)						
10+00.00	11,824,254.00	7,039,000.00	268.77	18.0	286.8	48
10+48.00	11,824,293.00	7,038,972.50	274.64	18.0	292.6	24
10+72.00	11,824,312.00	7,038,958.00	274.21	18.0	292.2	48
11+20.00	11,824,350.00	7,038,928.00	273.3	18.0	291.3	48
11+68.00	11,824,387.00	7,038,898.00	272.42	18.0	290.4	48
12+16.00	11,824,424.00	7,038,868.00	271.54	18.0	289.5	48
12+64.00	11,824,462.00	7,038,838.00	270.61	18.0	288.6	48
13+12.00	11,824,501.00	7,038,810.00	269.85	18.0	287.9	48

13+60.00	11,824,540.00	7,038,782.50	269.02	18.0	287.0	48
14+08.00	11,824,579.00	7,038,754.50	268.2	18.0	286.2	49
14+57.00	11,824,619.00	7,038,727.00	267.37	18.0	285.4	48
15+05.00	11,824,658.00	7,038,699.00	260.03	18.0	278.0	0

Wall G6 (Design Stationing 1334+50 to 1338+75)

10+00.00	11,825,043.00	7,038,446.50	254.79	18.0	272.8	48
10+48.00	11,825,004.00	7,038,474.00	259.27	18.0	277.3	49
10+97.00	11,824,964.00	7,038,502.00	260.52	18.0	278.5	48
11+45.00	11,824,925.00	7,038,529.50	261.65	18.0	279.7	48
11+93.00	11,824,886.00	7,038,557.50	262.67	18.0	280.7	48
12+41.00	11,824,847.00	7,038,585.00	263.56	18.0	281.6	48
12+89.00	11,824,808.00	7,038,613.00	264.39	18.0	282.4	48
13+37.00	11,824,769.00	7,038,640.50	264.46	18.0	282.5	48
13+85.00	11,824,723.00	7,038,654.00	261.77	18.0	279.8	0

CNE G - Walls G10 - G13 Acoustical Profile (Projection NAD_1983_StatePlane_Virginia_North US Feet)						
Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall G10 (Design Stationing 1372+00 to 1374+75)						
10+00.00	11,828,251	7,036,767	223.8	17.0	261.9	40
10+40.00	11,828,214	7,036,783	224.6	17.0	262.7	40
10+80.00	11,828,177	7,036,798	223.0	17.0	265.4	40
11+20.00	11,828,140	7,036,814	221.2	17.0	266.0	37
11+57.00	11,828,107	7,036,831	219.8	17.0	266.4	38
11+95.00	11,828,073	7,036,848	218.4	17.0	267.0	37
12+32.00	11,828,040	7,036,865	216.9	17.0	267.3	38
12+70.00	11,828,006	7,036,882	215.4	17.0	268.4	0
Wall G10B (Design Stationing 1375+50 to 1376+75)						
10+00.00	11,828,315	7,036,742	229.9	17.0	261.9	23
10+23.00	11,828,338	7,036,739	230.3	17.0	262.7	25
10+48.00	11,828,361	7,036,731	231.2	17.0	265.4	45
10+93.00	11,828,402	7,036,713	242.0	17.0	266.0	45
11+38.00	11,828,443	7,036,696	244.4	17.0	266.4	18
11+56.00	11,828,450	7,036,679	244.0	17.0	267.0	0
Wall G11 (Design Stationing 1377+75 to 1384+75)						
10+00.00	11,828,479	7,036,668	244.9	17.0	261.9	15
10+15.00	11,828,493	7,036,674	245.7	17.0	262.7	25
10+40.00	11,828,516	7,036,664	248.4	17.0	265.4	23
10+63.00	11,828,537	7,036,654	249.0	17.0	266.0	24
10+87.00	11,828,559	7,036,643	249.4	17.0	266.4	24
Wall N3 (D	11,828,580	7,036,632	250.0	17.0	267.0	25
11+36.00	11,828,602	7,036,621	250.3	17.0	267.3	24
11+60.00	11,828,623	7,036,610	251.4	17.0	268.4	24
11+84.00	11,828,644	7,036,598	251.5	17.0	268.5	23
12+07.00	11,828,664	7,036,586	252.5	17.0	269.5	24
12+31.00	11,828,685	7,036,573	253.6	17.0	270.6	24
12+55.00	11,828,705	7,036,561	255.7	17.0	272.7	24
12+79.00	11,828,725	7,036,548	256.6	17.0	273.6	24
13+03.00	11,828,745	7,036,534	257.3	17.0	274.3	24
13+27.00	11,828,765	7,036,521	258.9	17.0	275.9	24
13+51.00	11,828,785	7,036,507	260.3	17.0	277.3	24
13+75.00	11,828,804	7,036,493	261.5	17.0	278.5	24
13+99.00	11,828,823	7,036,478	262.1	17.0	279.1	24
14+23.00	11,828,842	7,036,464	263.0	17.0	280.0	25
14+48.00	11,828,861	7,036,448	263.6	17.0	280.6	23
14+71.00	11,828,879	7,036,433	264.1	18.0	282.1	25
14+96.00	11,828,898	7,036,418	264.2	18.0	282.2	24
15+20.00	11,828,916	7,036,402	265.2	18.0	283.2	23
15+43.00	11,828,933	7,036,386	266.1	18.0	284.1	42
15+85.00	11,828,964	7,036,357	268.7	18.0	286.7	42
16+27.00	11,828,995	7,036,329	270.3	18.0	288.3	42
16+69.00	11,829,026	7,036,301	272.1	18.0	290.1	41
17+10.00	11,829,057	7,036,273	269.8	18.0	287.8	0
Wall G12 (Design Stationing 1384+75 to 1396+00)						

10+00.00	11,829,897	7,035,497	256.9	17.0	273.9	48
10+48.00	11,829,861	7,035,529	259.2	17.0	276.2	48
10+96.00	11,829,826	7,035,562	260.3	17.0	277.3	48
11+44.00	11,829,790	7,035,594	265.7	17.0	282.7	47
11+91.00	11,829,755	7,035,626	268.2	17.0	285.2	48
12+39.00	11,829,719	7,035,659	269.8	17.0	286.8	47
12+86.00	11,829,684	7,035,691	271.4	17.0	288.4	48
13+34.00	11,829,650	7,035,725	271.9	17.0	288.9	48
13+82.00	11,829,617	7,035,760	271.6	17.0	288.6	48
14+30.00	11,829,583	7,035,794	271.9	17.0	288.9	23
14+53.00	11,829,566	7,035,810	273.6	17.0	290.6	50
15+03.00	11,829,529	7,035,844	274.9	18.0	292.9	50
15+53.00	11,829,492	7,035,878	275.2	18.0	293.2	50
16+03.00	11,829,455	7,035,911	275.0	18.0	293.0	50
16+53.00	11,829,418	7,035,945	274.6	18.0	292.6	50
17+03.00	11,829,381	7,035,978	276.4	18.0	294.4	50
17+53.00	11,829,344	7,036,012	277.4	18.0	295.4	50
18+03.00	11,829,307	7,036,045	278.2	18.0	296.2	49
18+52.00	11,829,271	7,036,079	278.1	18.0	296.1	50
19+02.00	11,829,234	7,036,112	277.4	18.0	295.4	50
19+52.00	11,829,197	7,036,146	276.9	18.0	294.9	50
20+02.00	11,829,160	7,036,179	275.9	18.0	293.9	50
20+52.00	11,829,123	7,036,213	275.2	18.0	293.2	50
21+02.00	11,829,086	7,036,247	265.4	18.0	283.4	0

Wall G13 (Design Stationing 1396+75 to 1400+75)

10+00.00	11,829,959	7,035,439	255.3	17.0	272.3	23
10+23.00	11,829,976	7,035,423	254.3	17.0	271.3	33
10+56.00	11,830,004	7,035,405	257.0	17.0	274.0	33
10+89.00	11,830,032	7,035,387	256.6	17.0	273.6	50
11+39.00	11,830,067	7,035,351	256.4	17.0	273.4	50
11+89.00	11,830,102	7,035,315	256.4	17.0	273.4	50
12+39.00	11,830,137	7,035,280	256.6	16.0	272.6	24
12+63.00	11,830,151	7,035,261	256.1	16.0	272.1	24
12+87.00	11,830,169	7,035,245	256.4	15.0	271.4	24
13+11.00	11,830,189	7,035,232	257.2	14.0	271.2	36
13+47.00	11,830,216	7,035,207	257.7	13.0	270.7	36
13+83.00	11,830,243	7,035,183	251.7	13.0	264.7	0

CNE H - Walls H2-H11 Acoustical Profile (Projection NAD_1983_StatePlane_Virginia_North US Feet)

Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall H2 (Design Stationing 408+00 to 414+75)						
10+00.00	11,831,403.00	7,034,366.00	313.72	15.0	328.7	47
10+47.00	11,831,356.00	7,034,372.50	315.01	15.0	330.0	47
10+94.00	11,831,321.00	7,034,403.50	313.04	15.0	328.0	46
11+40.00	11,831,287.00	7,034,434.00	312.34	15.0	327.3	46
11+86.00	11,831,253.00	7,034,464.50	311.99	15.0	327.0	46
12+32.00	11,831,218.00	7,034,495.00	311.85	15.0	326.9	43
12+75.00	11,831,191.00	7,034,528.50	312.37	15.0	327.4	43
13+18.00	11,831,164.00	7,034,562.00	313.26	15.0	328.3	43
13+61.00	11,831,137.00	7,034,595.00	311.92	15.0	326.9	43
14+04.00	11,831,110.00	7,034,628.50	310.71	15.0	325.7	44
14+48.00	11,831,082.00	7,034,662.00	310.18	15.0	325.2	34
14+82.00	11,831,054.00	7,034,681.00	308.31	15.0	323.3	34
15+16.00	11,831,026.00	7,034,699.50	305.89	15.0	320.9	35
15+51.00	11,830,997.00	7,034,718.50	303.68	15.0	318.7	16
15+67.00	11,830,986.00	7,034,707.00	297.02	15.0	312.0	40
16+07.00	11,830,958.00	7,034,735.50	295.46	15.0	310.5	40
16+47.00	11,830,930.00	7,034,763.50	295.28	15.0	310.3	16
16+63.00	11,830,918.00	7,034,774.00	287.71	15.0	302.7	0

Wall H3-4 (Design Stationing 415+75 to 430+00)

10+00.00	11,831,489.00	7,034,271.50	315.32	16.0	331.3	23
10+23.00	11,831,502.00	7,034,252.00	319.19	16.0	335.2	36
Wall N3 (D	11,831,529.00	7,034,228.00	320.38	16.0	336.4	36
10+95.00	11,831,555.00	7,034,203.50	321.54	16.0	337.5	24
11+19.00	11,831,576.00	7,034,191.00	321.63	16.0	337.6	24
11+43.00	11,831,594.00	7,034,175.00	322.14	16.0	338.1	24
11+67.00	11,831,609.00	7,034,156.00	323.74	16.0	339.7	36
12+03.00	11,831,636.00	7,034,132.00	324.77	16.0	340.8	36
12+39.00	11,831,663.00	7,034,108.50	325.76	16.0	341.8	45
12+84.00	11,831,695.00	7,034,077.50	326.96	16.0	343.0	24
13+08.00	11,831,715.00	7,034,064.00	326.93	16.0	342.9	24
13+32.00	11,831,732.00	7,034,047.50	327.54	16.0	343.5	24
13+56.00	11,831,746.00	7,034,028.00	328.76	16.0	344.8	29
13+85.00	11,831,767.00	7,034,008.00	329.44	16.0	345.4	24
14+09.00	11,831,785.00	7,033,992.00	330.01	16.0	346.0	47
14+56.00	11,831,821.00	7,033,961.50	331.07	16.0	347.1	48
15+04.00	11,831,858.00	7,033,930.50	331.98	16.0	348.0	48
15+52.00	11,831,895.00	7,033,899.50	332.8	16.0	348.8	40
15+92.00	11,831,926.00	7,033,874.50	333.44	16.0	349.4	40
16+32.00	11,831,957.00	7,033,849.00	334.01	16.0	350.0	40
16+72.00	11,831,988.00	7,033,823.50	333.21	16.0	349.2	47
17+19.00	11,832,025.00	7,033,794.00	333.59	16.0	349.6	47
17+66.00	11,832,062.00	7,033,764.50	335.56	16.0	351.6	47
18+13.00	11,832,099.00	7,033,735.00	335.96	16.0	352.0	48
18+61.00	11,832,136.00	7,033,705.00	336.29	16.0	352.3	47
19+08.00	11,832,173.00	7,033,675.50	336.54	16.0	352.5	0

19+55.00	11,832,210.00	7,033,646.00	336.72	16.0	352.7	47
20+02.00	11,832,247.00	7,033,616.50	336.84	16.0	352.8	48
20+50.00	11,832,284.00	7,033,586.50	328.73	16.0	344.7	47
20+97.00	11,832,321.00	7,033,557.00	336.81	16.0	352.8	47
21+44.00	11,832,358.00	7,033,527.50	336.71	16.0	352.7	48
21+92.00	11,832,395.00	7,033,497.50	336.6	16.0	352.6	43
22+35.00	11,832,428.00	7,033,470.50	336.5	16.0	352.5	43
22+78.00	11,832,462.00	7,033,443.50	336.4	16.0	352.4	43
23+21.00	11,832,495.00	7,033,416.00	336.31	16.0	352.3	43
23+64.00	11,832,529.00	7,033,389.00	336.22	16.0	352.2	44
24+08.00	11,832,563.00	7,033,361.50	336.19	16.0	352.2	0
Wall H5 (Design Stationing 430+50 to 434+00)						
10+00.00	11,832,867.00	7,033,109.00	337.99	16.0	354.0	43
10+43.00	11,832,834.00	7,033,136.50	337.76	16.0	353.8	43
10+86.00	11,832,801.00	7,033,164.50	337.52	16.0	353.5	44
11+30.00	11,832,767.00	7,033,192.00	337.29	16.0	353.3	43
11+73.00	11,832,734.00	7,033,219.50	337.05	16.0	353.1	43
12+16.00	11,832,701.00	7,033,247.00	336.82	16.0	352.8	25
12+41.00	11,832,682.00	7,033,262.50	336.69	16.0	352.7	23
12+64.00	11,832,664.00	7,033,277.50	336.56	16.0	352.6	25
12+89.00	11,832,645.00	7,033,293.00	336.44	16.0	352.4	23
13+12.00	11,832,627.00	7,033,308.00	336.35	16.0	352.4	25
13+37.00	11,832,608.00	7,033,323.50	336.28	16.0	352.3	0
Wall H6 (Design Stationing 434+50 to 436+25)						
10+00.00	11,832,914.00	7,033,070.50	338.32	16.0	354.3	42
10+47.00	11,832,946.00	7,033,043.50	338.55	16.0	354.6	42
10+95.00	11,832,979.00	7,033,017.00	338.77	16.0	354.8	42
11+42.00	11,833,011.00	7,032,990.00	339	16.0	355.0	42
11+90.00	11,833,043.00	7,032,963.00	339.23	16.0	355.2	0

Wall H7 (Design Stationing 437+25 to 438+00)						
10+00.00	11,833,191.00	7,032,852.50	338.87	16.0	354.9	48
10+48.00	11,833,154.00	7,032,883.00	339.26	16.0	355.3	24
10+72.00	11,833,142.00	7,032,904.00	339.19	16.0	355.2	0
Wall H8 (Design Stationing 438+50 to 440+00)						
10+00.00	11,833,335.00	7,032,736.00	339.05	16.0	355.1	36
10+36.00	11,833,307.00	7,032,758.50	340.74	16.0	356.7	36
10+72.00	11,833,279.00	7,032,781.00	340.54	16.0	356.5	36
11+08.00	11,833,251.00	7,032,803.50	340.35	16.0	356.4	24
11+32.00	11,833,232.00	7,032,818.50	340.22	16.0	356.2	25
11+57.00	11,833,213.00	7,032,834.00	338.28	16.0	354.3	0
Wall H9 (Design Stationing 440+25 to 441+00)						
10+00.00	11,833,365.00	7,032,712.00	339.35	16.0	355.4	30
10+30.00	11,833,388.00	7,032,693.50	341.44	16.0	357.4	30
10+60.00	11,833,411.00	7,032,674.50	340.06	16.0	356.1	0
Wall H10 (Design Stationing 441+25 to 443+00)						
10+00.00	11,833,564.00	7,032,553.00	343.74	16.0	359.7	12
10+12.00	11,833,555.00	7,032,560.50	345.23	16.0	361.2	24
10+36.00	11,833,536.00	7,032,575.00	344.64	16.0	360.6	24
10+60.00	11,833,517.00	7,032,590.00	344.08	16.0	360.1	24
10+84.00	11,833,498.00	7,032,605.00	343.58	16.0	359.6	36
11+20.00	11,833,470.00	7,032,627.50	342.89	16.0	358.9	36
11+56.00	11,833,442.00	7,032,650.00	340.22	16.0	356.2	0

Wall H11 (Design Stationing 443+50 to 452+75)

10+00.00	11,834,349.00	7,032,021.00	377.24	16.0	393.2	35
10+35.00	11,834,317.00	7,032,008.00	377.26	16.0	393.3	23
10+58.00	11,834,295.00	7,032,014.50	376.12	16.0	392.1	24
10+82.00	11,834,272.00	7,032,021.50	375.15	16.0	391.2	44
11+26.00	11,834,236.00	7,032,047.00	374.13	16.0	390.1	44
11+70.00	11,834,200.00	7,032,072.50	372.2	16.0	388.2	44
12+14.00	11,834,164.00	7,032,098.00	370.49	16.0	386.5	44
12+58.00	11,834,128.00	7,032,123.50	368.02	16.0	384.0	44
13+02.00	11,834,092.00	7,032,149.00	363.13	16.0	379.1	43
13+45.00	11,834,057.00	7,032,174.50	362.59	16.0	378.6	24
13+69.00	11,834,037.00	7,032,188.00	362.32	16.0	378.3	24
13+93.00	11,834,017.00	7,032,202.00	362.01	16.0	378.0	24
14+17.00	11,833,998.00	7,032,216.00	361.66	16.0	377.7	24
14+41.00	11,833,978.00	7,032,230.00	361.28	16.0	377.3	24
14+65.00	11,833,959.00	7,032,244.00	360.86	16.0	376.9	24
14+89.00	11,833,940.00	7,032,258.00	360.39	16.0	376.4	25
15+14.00	11,833,920.00	7,032,272.50	359.89	16.0	375.9	24
15+38.00	11,833,901.00	7,032,286.50	359.36	16.0	375.4	25
15+63.00	11,833,881.00	7,032,301.00	358.78	16.0	374.8	24
15+87.00	11,833,862.00	7,032,315.00	358.16	16.0	374.2	24
16+11.00	11,833,843.00	7,032,329.50	357.51	16.0	373.5	24
16+35.00	11,833,824.00	7,032,343.50	356.81	16.0	372.8	49
16+84.00	11,833,787.00	7,032,375.00	355.26	16.0	371.3	48
17+32.00	11,833,751.00	7,032,406.00	353.56	16.0	369.6	49
17+81.00	11,833,714.00	7,032,437.50	351.82	16.0	367.8	24
18+05.00	11,833,695.00	7,032,452.00	350.93	16.0	366.9	24
18+29.00	11,833,676.00	7,032,466.50	350.04	16.0	366.0	24
18+53.00	11,833,657.00	7,032,481.50	349.19	16.0	365.2	24
18+77.00	11,833,638.00	7,032,496.00	348.36	16.0	364.4	24
19+01.00	11,833,619.00	7,032,510.50	347.58	16.0	363.6	24
19+25.00	11,833,600.00	7,032,525.50	345.08	16.0	361.1	0

CNEs I - Wall I2 Acoustical Profile (Projection NAD_1983_StatePlane_Virginia_North US Feet)

Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall I2 (Design Stationing 1426+00 to 1434+25)						
10+00.00	11,832,776.00	7,032,989.50	337.41	13.0	350.4	2
10+02.00	11,832,774.00	7,032,990.50	337.4	13.0	350.4	10
10+12.00	11,832,767.00	7,032,997.00	337.34	13.0	350.3	10
10+22.00	11,832,759.00	7,033,003.50	337.29	13.0	350.3	10
10+32.00	11,832,751.00	7,033,010.00	337.23	13.0	350.2	10
10+42.00	11,832,744.00	7,033,016.50	337.18	13.0	350.2	10
10+52.00	11,832,736.00	7,033,022.50	337.12	13.0	350.1	10
10+62.00	11,832,728.00	7,033,029.00	337.06	13.0	350.1	10
10+72.00	11,832,721.00	7,033,035.50	337.01	13.0	350.0	10
10+82.00	11,832,713.00	7,033,042.00	336.95	13.0	350.0	10
10+92.00	11,832,705.00	7,033,048.50	336.89	13.0	349.9	10
11+02.00	11,832,698.00	7,033,055.00	336.84	13.0	349.8	10
11+12.00	11,832,690.00	7,033,061.50	336.79	13.0	349.8	10
11+22.00	11,832,682.00	7,033,067.50	336.76	13.0	349.8	10
11+32.00	11,832,675.00	7,033,074.00	336.73	13.0	349.7	10
11+42.00	11,832,667.00	7,033,080.50	336.7	13.0	349.7	10
11+52.00	11,832,659.00	7,033,087.00	336.66	13.0	349.7	10
11+62.00	11,832,652.00	7,033,093.50	336.63	13.0	349.6	10
11+72.00	11,832,644.00	7,033,100.00	336.6	13.0	349.6	10
11+82.00	11,832,636.00	7,033,106.00	336.57	13.0	349.6	10
11+92.00	11,832,629.00	7,033,112.50	336.53	13.0	349.5	10
Wall N3 (Design Stationing 1434+25 to 1434+25)	11,832,621.00	7,033,119.00	336.5	13.0	349.5	10
12+12.00	11,832,613.00	7,033,125.50	336.47	13.0	349.5	10
12+22.00	11,832,606.00	7,033,132.00	336.44	13.0	349.4	10
12+32.00	11,832,598.00	7,033,138.50	336.41	13.0	349.4	10
12+42.00	11,832,590.00	7,033,145.00	336.39	13.0	349.4	9
12+51.00	11,832,583.00	7,033,151.00	336.37	13.0	349.4	10
12+61.00	11,832,575.00	7,033,157.50	336.35	13.0	349.4	10
12+71.00	11,832,567.00	7,033,164.00	336.34	13.0	349.3	10
12+81.00	11,832,560.00	7,033,170.50	336.32	13.0	349.3	10
12+91.00	11,832,552.00	7,033,177.00	336.31	13.0	349.3	9
13+00.00	11,832,545.00	7,033,183.00	336.31	13.0	349.3	24
13+24.00	11,832,550.00	7,033,206.00	335.87	13.0	348.9	10
13+34.00	11,832,543.00	7,033,212.50	335.85	13.0	348.9	10
13+44.00	11,832,535.00	7,033,218.50	335.82	13.0	348.8	10
13+54.00	11,832,527.00	7,033,225.00	335.81	13.0	348.8	10
13+64.00	11,832,520.00	7,033,231.50	335.79	13.0	348.8	10
13+74.00	11,832,512.00	7,033,237.50	335.78	13.0	348.8	10
13+84.00	11,832,504.00	7,033,244.00	335.77	13.0	348.8	10
13+94.00	11,832,496.00	7,033,250.50	335.76	13.0	348.8	9
14+03.00	11,832,489.00	7,033,256.50	335.76	13.0	348.8	10
14+13.00	11,832,481.00	7,033,263.00	335.76	13.0	348.8	10
14+23.00	11,832,473.00	7,033,269.50	335.76	13.0	348.8	99
15+22.00	11,832,396.00	7,033,332.50	335.93	13.0	348.9	10
15+32.00	11,832,388.00	7,033,338.50	335.96	13.0	349.0	0

15+42.00	11,832,380.00	7,033,345.00	335.99	13.0	349.0	10
15+52.00	11,832,373.00	7,033,351.50	336.02	13.0	349.0	10
15+62.00	11,832,365.00	7,033,357.50	336.05	13.0	349.1	10
15+72.00	11,832,357.00	7,033,364.00	336.08	13.0	349.1	5
15+77.00	11,832,353.00	7,033,367.00	336.09	13.0	349.1	5
15+82.00	11,832,349.00	7,033,370.00	336.11	13.0	349.1	10
15+92.00	11,832,341.00	7,033,376.50	336.14	13.0	349.1	9
16+01.00	11,832,334.00	7,033,382.50	336.17	13.0	349.2	10
16+11.00	11,832,326.00	7,033,389.00	336.2	13.0	349.2	10
16+21.00	11,832,318.00	7,033,395.00	336.23	13.0	349.2	10
16+31.00	11,832,310.00	7,033,401.50	336.26	13.0	349.3	9
16+40.00	11,832,303.00	7,033,407.50	336.29	13.0	349.3	10
16+50.00	11,832,295.00	7,033,414.00	336.32	13.0	349.3	10
16+60.00	11,832,287.00	7,033,420.00	336.35	13.0	349.4	10
16+70.00	11,832,279.00	7,033,426.50	336.38	13.0	349.4	10
16+80.00	11,832,271.00	7,033,432.50	336.41	13.0	349.4	10
16+90.00	11,832,264.00	7,033,439.00	336.43	13.0	349.4	10
17+00.00	11,832,256.00	7,033,445.00	336.46	13.0	349.5	10
17+10.00	11,832,248.00	7,033,451.50	336.48	13.0	349.5	10
17+20.00	11,832,240.00	7,033,457.50	336.49	13.0	349.5	10
17+30.00	11,832,232.00	7,033,464.00	336.51	13.0	349.5	9
17+39.00	11,832,225.00	7,033,470.00	336.52	13.0	349.5	10
17+49.00	11,832,217.00	7,033,476.50	336.52	13.0	349.5	10
17+59.00	11,832,209.00	7,033,482.50	336.53	13.0	349.5	10
17+69.00	11,832,201.00	7,033,489.00	336.53	13.0	349.5	10
17+79.00	11,832,193.00	7,033,495.00	336.52	13.0	349.5	10
17+89.00	11,832,186.00	7,033,501.50	336.52	13.0	349.5	10
17+99.00	11,832,178.00	7,033,507.50	336.51	13.0	349.5	10
18+09.00	11,832,170.00	7,033,514.00	336.5	13.0	349.5	10
18+19.00	11,832,162.00	7,033,520.00	336.48	13.0	349.5	10
18+29.00	11,832,154.00	7,033,526.50	336.46	18.0	354.5	0

CNE I - Walls I4-I6 Acoustical Profile (Projection NAD_1983_StatePlane_Virginia_North US Feet)

Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall I4 (Design Stationing 1437+75 to 1441+75)						
10+00.00	11,833,072.00	7,032,760.00	340.89	16.0	356.9	45
10+45.00	11,833,107.00	7,032,731.00	340.46	16.0	356.5	45
10+90.00	11,833,142.00	7,032,702.00	340.7	16.0	356.7	45
11+35.00	11,833,177.00	7,032,673.00	340.96	16.0	357.0	44
11+79.00	11,833,211.00	7,032,644.50	341.11	16.0	357.1	45
12+24.00	11,833,246.00	7,032,615.50	341.27	16.0	357.3	45
12+69.00	11,833,281.00	7,032,586.50	341.44	16.0	357.4	45
13+14.00	11,833,316.00	7,032,557.50	341.74	16.0	357.7	45
13+59.00	11,833,351.00	7,032,528.50	342.27	16.0	358.3	45
14+04.00	11,833,386.00	7,032,499.50	342.99	16.0	359.0	0
Wall I5 (Design Stationing 1442+00 to 1443+75)						
10+00.00	11,833,406.00	7,032,480.00	343.56	16.0	359.6	38
10+38.00	11,833,436.00	7,032,456.50	344.34	16.0	360.3	37
10+75.00	11,833,465.00	7,032,433.00	345.23	16.0	361.2	38
11+13.00	11,833,495.00	7,032,409.00	345.62	16.0	361.6	23
11+36.00	11,833,513.00	7,032,394.00	346.49	16.0	362.5	0
Wall I6 (Design Stationing 1444+25 to 1449+25)						
10+00.00	11,833,576.00	7,032,347.00	347.99	16.0	364.0	48
10+48.00	11,833,614.00	7,032,317.00	350.13	16.0	366.1	48
10+96.00	11,833,651.00	7,032,287.00	353.38	16.0	369.4	48
11+44.00	11,833,688.00	7,032,257.00	356.99	16.0	373.0	48
Wall N3 (D	11,833,726.00	7,032,227.00	360.26	16.0	376.3	24
12+16.00	11,833,748.00	7,032,236.50	356.26	16.0	372.3	50
12+66.00	11,833,788.00	7,032,207.00	357.71	16.0	373.7	50
13+16.00	11,833,828.00	7,032,177.50	359.01	16.0	375.0	51
13+67.00	11,833,869.00	7,032,148.00	360.14	16.0	376.1	41
14+08.00	11,833,901.00	7,032,122.00	360.9	16.0	376.9	40
14+48.00	11,833,932.00	7,032,096.50	361.55	16.0	377.6	48
14+96.00	11,833,948.00	7,032,051.00	362.51	16.0	378.5	0

CNEs JK - Walls JK Acoustical Profile (Projection NAD_1983_StatePlane_Virginia_North US Feet)

Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall J2 (Design Stationing 1454+00 to 1458+75)						
10+00.00	11,834,747.00	7,031,493.00	365.88	16.0	381.9	24
10+24.00	11,834,730.00	7,031,510.00	362	16.0	378.0	24
10+48.00	11,834,713.00	7,031,526.50	361.61	16.0	377.6	24
10+72.00	11,834,696.00	7,031,543.50	361.28	16.0	377.3	24
10+96.00	11,834,678.00	7,031,559.50	360.98	16.0	377.0	23
11+19.00	11,834,661.00	7,031,575.50	360.77	16.0	376.8	24
11+43.00	11,834,643.00	7,031,591.50	360.73	16.0	376.7	25
11+68.00	11,834,624.00	7,031,607.00	360.72	16.0	376.7	24
11+92.00	11,834,606.00	7,031,622.50	360.74	16.0	376.7	24
12+16.00	11,834,587.00	7,031,637.00	360.74	16.0	376.7	48
12+64.00	11,834,548.00	7,031,665.00	360.81	16.0	376.8	49
13+13.00	11,834,508.00	7,031,692.50	361.02	16.0	377.0	48
13+61.00	11,834,469.00	7,031,720.50	361.14	16.0	377.1	48
14+09.00	11,834,430.00	7,031,748.00	361.42	16.0	377.4	48
14+57.00	11,834,391.00	7,031,776.00	361.73	16.0	377.7	0
Wall J3 (Design Stationing 1459+50 to 1461+00)						
10+00.00	11,834,904.00	7,031,337.00	369.84	16.0	385.8	23
10+23.00	11,834,889.00	7,031,355.00	369.79	16.0	385.8	24
10+47.00	11,834,873.00	7,031,373.00	367.09	16.0	383.1	24
10+71.00	11,834,856.00	7,031,390.50	366.41	16.0	382.4	24
10+95.00	11,834,840.00	7,031,408.00	365.79	16.0	381.8	24
Wall N3 (D	11,834,823.00	7,031,425.00	365.13	16.0	381.1	24
11+43.00	11,834,806.00	7,031,442.00	364.45	16.0	380.5	24
11+67.00	11,834,789.00	7,031,459.00	367.25	16.0	383.3	0
Wall K1 (Design Stationing 1462+00 to 1470+75)						
10+00.00	11,834,975	7,031,263	370.7	16.0	386.7	49
10+49.00	11,835,006	7,031,225	373.1	16.0	389.1	48
10+97.00	11,835,036	7,031,187	373.7	16.0	389.7	48
11+45.00	11,835,066	7,031,149	374.3	16.0	390.3	48
11+93.00	11,835,096	7,031,111	374.7	16.0	390.7	49
12+42.00	11,835,127	7,031,073	375.0	16.0	391.0	48
12+90.00	11,835,157	7,031,035	375.2	16.0	391.2	48
13+38.00	11,835,187	7,030,997	375.3	16.0	391.3	48
13+86.00	11,835,217	7,030,960	375.3	16.0	391.3	48
14+34.00	11,835,247	7,030,922	375.1	16.0	391.1	49
14+83.00	11,835,278	7,030,884	374.9	16.0	390.9	48
15+31.00	11,835,308	7,030,846	374.5	16.0	390.5	48
15+79.00	11,835,338	7,030,808	373.9	16.0	389.9	38
16+17.00	11,835,360	7,030,777	373.5	16.0	389.5	37
16+54.00	11,835,381	7,030,746	373.1	16.0	389.1	38
16+92.00	11,835,403	7,030,716	372.6	16.0	388.6	38
17+30.00	11,835,425	7,030,685	371.3	16.0	387.3	35
17+65.00	11,835,447	7,030,657	371.8	16.0	387.8	35
18+00.00	11,835,469	7,030,630	371.4	16.0	387.4	35
18+35.00	11,835,490	7,030,602	366.2	16.0	382.2	0

Wall K2 (Design Stationing 1471+00 to 1474+25)						
10+00.00	11,835,522	7,030,563	366.4	16.0	382.4	48
10+48.00	11,835,552	7,030,525	368.9	16.0	384.9	48
10+96.00	11,835,582	7,030,487	369.4	16.0	385.4	48
11+44.00	11,835,612	7,030,449	368.9	16.0	384.9	48
11+92.00	11,835,642	7,030,412	368.4	16.0	384.4	49
12+41.00	11,835,673	7,030,374	367.7	16.0	383.7	48
12+89.00	11,835,703	7,030,336	363.0	16.0	379.0	24
13+13.00	11,835,707	7,030,312	361.3	16.0	377.3	0
Wall K3 (Design Stationing 1475+00 to 1482+00)						
10+00.00	11,836,215	7,029,708	360.9	16.0	376.9	48
10+48.00	11,836,185	7,029,746	360.9	16.0	376.9	48
10+96.00	11,836,155	7,029,783	361.0	16.0	377.0	48
11+44.00	11,836,125	7,029,821	361.1	16.0	377.1	47
11+91.00	11,836,096	7,029,858	361.3	16.0	377.3	48
12+39.00	11,836,066	7,029,896	361.6	16.0	377.6	48
12+87.00	11,836,036	7,029,933	362.0	16.0	378.0	48
13+35.00	11,836,006	7,029,970	362.4	16.0	378.4	48
13+83.00	11,835,976	7,030,008	362.9	16.0	378.9	48
14+31.00	11,835,946	7,030,045	363.4	16.0	379.4	47
14+78.00	11,835,917	7,030,083	363.9	16.0	379.9	48
15+26.00	11,835,887	7,030,120	364.4	16.0	380.4	48
15+74.00	11,835,857	7,030,157	364.9	16.0	380.9	48
16+22.00	11,835,827	7,030,195	365.4	16.0	381.4	48
16+70.00	11,835,797	7,030,232	366.0	16.0	382.0	47
17+17.00	11,835,768	7,030,270	366.1	16.0	382.1	0
Wall K4 (Design Stationing 1482+25 to 1488+50)						
10+00.00	11,836,228	7,029,691	360.9	16.0	376.9	46
10+46.00	11,836,257	7,029,655	361.0	16.0	377.0	46
10+92.00	11,836,286	7,029,619	361.2	16.0	377.2	46
11+38.00	11,836,314	7,029,582	361.4	16.0	377.4	46
11+84.00	11,836,343	7,029,546	361.7	16.0	377.7	46
12+30.00	11,836,372	7,029,510	362.0	16.0	378.0	46
12+76.00	11,836,401	7,029,474	362.3	16.0	378.3	47
13+23.00	11,836,430	7,029,438	362.6	16.0	378.6	46
13+69.00	11,836,458	7,029,402	362.9	16.0	378.9	46
14+15.00	11,836,487	7,029,366	363.2	16.0	379.2	46
14+61.00	11,836,516	7,029,330	363.5	16.0	379.5	47
15+08.00	11,836,545	7,029,293	363.8	16.0	379.8	46
15+54.00	11,836,573	7,029,257	364.1	16.0	380.1	46
16+00.00	11,836,602	7,029,221	364.4	16.0	380.4	0

CNE N - Walls N1-N3 Acoustical Profile (Projection NAD_1983_StatePlane_Virginia_North US Feet)						
Station	X Coordinate	Y Coordinate	Base Elevation	Wall Height	Top Elevation	Segment Length
Wall N1 (Design Stationing 1508+00 to 1509+75)						
10+00.00	11,837,784.00	7,027,642.00	350.93	12.0	362.9	43
10+43.00	11,837,811.00	7,027,608.00	352.31	12.0	364.3	43
10+86.00	11,837,838.00	7,027,574.00	353.78	12.0	365.8	44
11+30.00	11,837,865.00	7,027,539.50	355.27	12.0	367.3	44
11+74.00	11,837,893.00	7,027,505.50	356.94	12.0	368.9	0
Wall N2 (Design Stationing 1511+50 to 1517+50)						
10+00.00	11,838,408.00	7,026,918.00	390.05	15.0	405.1	40
10+40.00	11,838,383.00	7,026,949.50	385.54	15.0	400.5	40
10+80.00	11,838,359.00	7,026,981.50	383.91	15.0	398.9	40
11+20.00	11,838,334.00	7,027,013.00	382.28	15.0	397.3	48
11+68.00	11,838,309.00	7,027,054.00	380.45	15.0	395.5	48
12+16.00	11,838,284.00	7,027,095.00	378.61	15.0	393.6	24
12+40.00	11,838,270.00	7,027,114.00	377.65	15.0	392.7	47
12+87.00	11,838,241.00	7,027,151.00	375.75	15.0	390.8	46
13+33.00	11,838,213.00	7,027,187.50	373.85	15.0	388.9	47
13+80.00	11,838,184.00	7,027,224.00	371.95	15.0	387.0	47
14+27.00	11,838,155.00	7,027,261.00	370.05	15.0	385.1	46
14+73.00	11,838,127.00	7,027,297.50	368.15	15.0	383.2	47
15+20.00	11,838,098.00	7,027,334.00	366.26	15.0	381.3	46
15+66.00	11,838,070.00	7,027,370.50	364.37	15.0	379.4	47
16+13.00	11,838,041.00	7,027,407.50	361.71	15.0	376.7	0
Wall N3 (Design Stationing 1518+25 to 1526+75)						
10+00.00	11,838,462.00	7,026,849.00	388.13	15.0	403.1	42
10+42.00	11,838,487.00	7,026,815.50	391.84	15.0	406.8	42
10+84.00	11,838,513.00	7,026,782.00	392.79	15.0	407.8	42
11+26.00	11,838,538.00	7,026,748.50	393.42	15.0	408.4	42
11+68.00	11,838,563.00	7,026,715.00	393.87	15.0	408.9	45
12+13.00	11,838,591.00	7,026,680.00	394.35	15.0	409.4	45
12+58.00	11,838,618.00	7,026,644.50	394.65	15.0	409.7	45
13+03.00	11,838,646.00	7,026,609.50	394.77	15.0	409.8	44
13+47.00	11,838,673.00	7,026,574.50	394.71	15.0	409.7	45
13+92.00	11,838,701.00	7,026,539.50	394.47	15.0	409.5	45
14+37.00	11,838,728.00	7,026,504.00	394.07	15.0	409.1	47
14+84.00	11,838,758.00	7,026,467.50	393.04	15.0	408.0	0
14+84.00	11,838,758.00	7,026,467.50	393.04	15.0	408.0	67
15+51.00	11,838,801.00	7,026,416.50	391.15	15.0	406.2	109
16+60.00	11,838,868.00	7,026,330.50	390.66	15.0	405.7	109
17+69.00	11,838,935.00	7,026,244.50	390.11	15.0	405.1	22
17+91.00	11,838,949.00	7,026,227.00	390.08	15.0	405.1	0
Existing Barrier Portion of Proposed Barrier System						

**APPENDIX D -
HB 2577 DOCUMENTATION**



October 14, 2019

MEMORANDUM

TO: LJ Muchenje PE, Noise Abatement

FROM: Bill Kaufell Skelly and Loy, Noise Consultant

SUBJECT: Route 7 Corridor Improvements Project, UPC 52328

The 2009 General Assembly passed Chapter 120 (HB 2577, as amended by HB2025), which amends the Code of Virginia by adding in Article 15 of Chapter 1 of Title 33.1 a section numbered 33.1-223.2:21, relating to highway noise abatement.

House Bill 2025 States: Requires that whenever the Commonwealth Transportation Board or the Department plan for or undertake any highway construction or improvement project and such project includes or may include the requirement for the mitigation of traffic noise impacts, first consideration should be given to the use of noise reducing design and low noise pavement materials and techniques in lieu of construction of noise walls or sound barriers. Vegetative screening, such as the planting of appropriate conifers, in such a design would be utilized to act as a visual screen if visual screening is required.

In an effort to honor the intent of HB 2025 we are asking for your input (per [Chapter VI of Materials Division's Manual of Instruction](#) and [Section 2B-3 Determination of Roadway Design](#) of the VDOT Road Design manual (pages 2B-5 and 2B-6)). As part of the Noise Technical Report and technical files, we are seeking your professional opinion by providing comments for the project noted above. Please distribute this memorandum to the appropriate District staff and combine all responses into one response.

Should you have any questions, please contact me at (804) 371-6768. Thank you for your time and consideration regarding this request.

Comment: Is noise reducing design feasible in lieu of construction of noise walls or sound barriers? For example, the roadway alignment can be shifted away from noise sensitive receptors or the roadway can be placed in deep cut (Location & Design to address)

Response: The horizontal alignment for this project was developed with the intent of limiting the right of way impacts to the properties fronting Route 7 while preserving the existing median for safety. The current design, developed through alternative studies and public input, provides the best solution to meet these goals. Shifting the horizontal alignment to the outside or inside will create undesirable impacts such as additional right-of-way/easement acquisitions, and potential median width reductions or eliminations and, in turn, leading to decreased safety.

The vertical alignment for this project was developed with the intent of holding the existing grade as much as possible. The current design holds closely to the existing grade and provides room for milling/overlaying operations and cross slope correction. Placing the roadway in deep cut is not feasible given that it would require total pavement reconstruction through the corridor as well as triggering substantial utility relocation impacts.

Comment: Can the project support the use of low noise pavement in lieu of construction of noise walls or sound barriers? (Materials Division to address)

Response: The Virginia Department of Transportation is not authorized by the Federal Highway Administration to use “quiet pavement” at this time as a form of noise mitigation. Upon completion of the Quiet Pavement Pilot Program and approval from FHWA, the use of “quiet pavement” will be given additional consideration.

Comment: Can landscaping be utilized to act as a visual screen if visual screening is required? (Location & Design to address)

Response: Landscaping can be used as a visual screen if required. The landscaping must be placed outside of the clear zone, must not decrease driver sight distance, and must not require additional right-of-way.

Note: Please provide the name of each responder.

**APPENDIX E -
WARRANTED, FEASIBLE, AND
REASONABLE WORKSHEETS**

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System A1
Community Name and/or CNE#	CNE A
Noise Abatement Category(s)	B, C, and D
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	1
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	1
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness

1 Surface Area (Square foot)-Benefit Factors

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	9,597 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	1
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	4
d. Total number of benefited receptors.	5
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,919 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	600 ft
b. Height range of the proposed noise barrier. (ft)	16-16 ft
c. Average height of the proposed noise barrier. (ft)	16.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$403,074
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System A2
Community Name and/or CNE#	CNE A
Noise Abatement Category(s)	B
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	1
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	1
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness

1 Surface Area (Square foot)-Benefit Factors

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	20,117 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	1
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	12
d. Total number of benefited receptors.	13
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,547 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	1,286 ft
b. Height range of the proposed noise barrier. (ft)	13-18 ft
c. Average height of the proposed noise barrier. (ft)	16.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$844,914
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System B1-B6 and D1
Community Name and/or CNE#	CNEs B and D
Noise Abatement Category(s)	B, C, D, and E
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	19
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	19
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	83,891 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	19
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	49
d. Total number of benefited receptors.	68
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,234 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	5,593 ft
b. Height range of the proposed noise barrier. (ft)	15-15
c. Average height of the proposed noise barrier. (ft)	15.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$3,523,422
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System C1 and C2
Community Name and/or CNE#	CNE C
Noise Abatement Category(s)	B
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	21
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	21
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	77,096 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	21
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	47
d. Total number of benefited receptors.	68
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,134 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	5,140 ft
b. Height range of the proposed noise barrier. (ft)	15-15
c. Average height of the proposed noise barrier. (ft)	15.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$3,238,032
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System D2 and E1-E4
Community Name and/or CNE#	CNEs D and E
Noise Abatement Category(s)	B
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	18
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	18
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	65,775 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	18
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	25
d. Total number of benefited receptors.	43
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,530 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	4,385 ft
b. Height range of the proposed noise barrier. (ft)	15-15
c. Average height of the proposed noise barrier. (ft)	15.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$2,762,550
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System F1, F1B, F1C and F2
Community Name and/or CNE#	CNE F
Noise Abatement Category(s)	B and C
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	8
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	7
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	88%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	14,658 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	7
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	3
d. Total number of benefited receptors.	10
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,466 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	1,127 ft
b. Height range of the proposed noise barrier. (ft)	13-13
c. Average height of the proposed noise barrier. (ft)	13.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$615,636
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier F3
Community Name and/or CNE#	CNE F
Noise Abatement Category(s)	B
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	12
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	12
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	40,735 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	12
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	14
d. Total number of benefited receptors.	26
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,567 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	2,546 ft
b. Height range of the proposed noise barrier. (ft)	16-16
c. Average height of the proposed noise barrier. (ft)	16.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$1,710,870
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System F4-F4B
Community Name and/or CNE#	CNE F
Noise Abatement Category(s)	B, C
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	6
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	6
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	Yes
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness

1 Surface Area (Square foot)-Benefit Factors

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	35,352 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	6
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	16
d. Total number of benefited receptors.	22
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,607 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	2,210 ft
b. Height range of the proposed noise barrier. (ft)	16-16 ft
c. Average height of the proposed noise barrier. (ft)	16.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$1,484,784
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	No
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

Barriers impact the 100 year floodplain in this area resulting in safety issues by restricting flow during high water events. Therefore it is not recommended that the barriers be built.

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System F5-F9
Community Name and/or CNE#	CNE F
Noise Abatement Category(s)	B
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	8
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	8
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	54,789 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	8
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	17
d. Total number of benefited receptors.	25
e. Surface Area per benefited receptor unit. (ft ² /BR)	2,192 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	2,489 ft
b. Height range of the proposed noise barrier. (ft)	22-22 ft
c. Average height of the proposed noise barrier. (ft)	22.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$2,301,138
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System G1-G6
Community Name and/or CNE#	CNE G
Noise Abatement Category(s)	B, C and D
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	24
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	24
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	96,783 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	24
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	56
d. Total number of benefited receptors.	80
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,210 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	5,377 ft
b. Height range of the proposed noise barrier. (ft)	18-18 ft
c. Average height of the proposed noise barrier. (ft)	18.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$4,064,886
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System G8-G9
Community Name and/or CNE#	CNE G
Noise Abatement Category(s)	B, C
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	16
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	15
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	94%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	Yes
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	26,678 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	15
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	13
d. Total number of benefited receptors.	28
e. Surface Area per benefited receptor unit. (ft ² /BR)	953 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	1,906 ft
b. Height range of the proposed noise barrier. (ft)	14-14 ft
c. Average height of the proposed noise barrier. (ft)	14.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$1,120,476
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	No
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

Barriers impact the 100 year floodplain in this area resulting in safety issues by restricting flow during high water events. Therefore it is not recommended that the barriers be built.

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System G10-G13
Community Name and/or CNE#	CNE G
Noise Abatement Category(s)	B
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	20
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	20
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	45,123 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	20
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	10
d. Total number of benefited receptors.	30
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,504 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	2,626 ft
b. Height range of the proposed noise barrier. (ft)	13-18
c. Average height of the proposed noise barrier. (ft)	17.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$1,895,166
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System G14-G16
Community Name and/or CNE#	CNE G
Noise Abatement Category(s)	B, C, and D
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	3
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	3
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	12,831 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	3
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	1
d. Total number of benefited receptors.	4
e. Surface Area per benefited receptor unit. (ft ² /BR)	3,208 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	No

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	801 ft
b. Height range of the proposed noise barrier. (ft)	16-16 ft
c. Average height of the proposed noise barrier. (ft)	16.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$538,902
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System H2-H11
Community Name and/or CNE#	CNE H
Noise Abatement Category(s)	B, C and D
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	20
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	19
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	95%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	62,408 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	19
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	28
d. Total number of benefited receptors.	47
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,328 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	3,941 ft
b. Height range of the proposed noise barrier. (ft)	15-16 ft
c. Average height of the proposed noise barrier. (ft)	16.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$2,621,136
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier I2
Community Name and/or CNE#	CNE I
Noise Abatement Category(s)	B
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	5
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	5
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness

1 Surface Area (Square foot)-Benefit Factors

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	10,852 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	5
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	2
d. Total number of benefited receptors.	7
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,550 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	835 ft
b. Height range of the proposed noise barrier. (ft)	13-13
c. Average height of the proposed noise barrier. (ft)	13.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$455,784
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System I4-I6
Community Name and/or CNE#	CNE I
Noise Abatement Category(s)	B
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	8
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	8
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	16,654 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	8
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	4
d. Total number of benefited receptors.	12
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,388 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	1,041 ft
b. Height range of the proposed noise barrier. (ft)	16-16
c. Average height of the proposed noise barrier. (ft)	16.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$699,468
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System J2-J3,K1-K4
Community Name and/or CNE#	CNE J, and K
Noise Abatement Category(s)	B, C, E, D
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	15
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	14
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	93%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	49,494 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	14
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	27
d. Total number of benefited receptors.	41
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,207 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	3,094 ft
b. Height range of the proposed noise barrier. (ft)	16-16
c. Average height of the proposed noise barrier. (ft)	16.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$2,078,748
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System L1-L5
Community Name and/or CNE#	CNE L
Noise Abatement Category(s)	B
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	4
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	3
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	75%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	11,693 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	3
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	1
d. Total number of benefited receptors.	4
e. Surface Area per benefited receptor unit. (ft ² /BR)	2,923 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	974 ft
b. Height range of the proposed noise barrier. (ft)	11-13
c. Average height of the proposed noise barrier. (ft)	12.2 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$491,106
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System L6-L8
Community Name and/or CNE#	CNE L
Noise Abatement Category(s)	B, C and D
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	2
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	2
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness

1 Surface Area (Square foot)-Benefit Factors

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	9,703 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	2
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	2
d. Total number of benefited receptors.	4
e. Surface Area per benefited receptor unit. (ft ² /BR)	2,426 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	852 ft
b. Height range of the proposed noise barrier. (ft)	10-12
c. Average height of the proposed noise barrier. (ft)	11.5 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$407,526
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System N1-N3
Community Name and/or CNE#	CNE N
Noise Abatement Category(s)	B and D
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	10
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	9
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	90%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	23,132 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	9
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	6
d. Total number of benefited receptors.	15
e. Surface Area per benefited receptor unit. (ft ² /BR)	1,542 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	Yes
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	1,577 ft
b. Height range of the proposed noise barrier. (ft)	12-15
c. Average height of the proposed noise barrier. (ft)	14.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$971,544
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	Yes

Additional Reasons for Decision:

Existing Barrier (UPC 82135) is Included in the Square Footage and length

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System N4
Community Name and/or CNE#	CNE N
Noise Abatement Category(s)	B
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	1
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	1
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	100%
d.	Is the percentage 50 or greater?	Yes
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	5,427 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	1
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	0
d. Total number of benefited receptors.	1
e. Surface Area per benefited receptor unit. (ft ² /BR)	5,427 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	Yes

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	301 ft
b. Height range of the proposed noise barrier. (ft)	18
c. Average height of the proposed noise barrier. (ft)	18.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$227,934
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	Yes
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

**VDOT Highway Traffic Noise Abatement
Warranted, Feasible, and Reasonable Worksheet**

Note: Not all questions apply depending on the design phase which may cause differing answers between preliminary and final design phase. Answers to the questions may change depending on the design phase of the project.

Date:	11/1/19
Project No. and UPC:	State Project No. 007-029-128, B610, C502, P102, R202 Federal Project No. STP-5A01(745) and STP-5A01(790) UPC 52328
County:	Fairfax
District:	Route 7
Barrier System ID:	Barrier System Existing Wall
Community Name and/or CNE#	CNE N
Noise Abatement Category(s)	B
Design phase:	Final design

Warranted

1	Community Documentation (if applicable)	
a.	Date community was permitted. (Per 23CFR 772 this is the date the building permit was issued).	NA
b.	Date of approval for the Categorical Exclusion (CE), Record of Decision (ROD), or Finding of No Significant Impact (FONSI):	NA
c.	Does the date in 1.a precede the date in 1.b? If yes, proceed to Warranted Item 2. If no, consideration of noise abatement is not warranted. Proceed to "Decision" block and answer "no" to warranted question. As the reason for this decision, state that "Community was permitted after the date of approval of CE, ROD, or FONSI, as appropriate."	No
2	Criteria requiring consideration of noise abatement	
a.	Project causes design year noise levels to approach or exceed the Noise Abatement Criteria?	Yes
b.	Project causes a substantial noise increase of 10 dB(A) or more?	No

Feasibility

1	Impacted receptor units	
a.	Number of impacted receptor units:	10
b.	Number of impacted receptor units receiving 5 dB(A) or more insertion loss (IL):	0
c.	Percentage of impacted receptor units receiving 5 dB(A) or more IL	0%
d.	Is the percentage 50 or greater?	No
2	Will placement of the noise barrier cause engineering or safety conflicts, e.g drainage issues or site distance issues?	No
3	Will placement of the noise barrier restrict access to vehicular or pedestrian travel?	No
4	Will placement of the noise barrier conflict with existing utility locations?	No

Reasonableness**1 Surface Area (Square foot)-Benefit Factors**

a. Surface Area (Total square foot) of the proposed noise barrier. (ft ²)	4,607 SF
b. Impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	0
c. Non-impacted noise sensitive receptor(s) receiving 5 dB(A) IL or more.	1
d. Total number of benefited receptors.	1
e. Surface Area per benefited receptor unit. (ft ² /BR)	4,607 SF/BR
f. Is (1e) less than or equal to the maximum square feet per benefited receptor (MaxSF/BR) value of 1600?	No
g. Does the barrier provide an IL of at least 7 dB(A) for at least one impacted receptor in the design year?	No

2 Additional Noise Barrier Details

a. Length of the proposed noise barrier. (ft)	307 ft
b. Height range of the proposed noise barrier. (ft)	15
c. Average height of the proposed noise barrier. (ft)	15.0 ft
d. Cost per square foot. (\$/ft ²)	\$42/SF
e. Total Barrier Cost (\$)	\$193,494
f. Barrier Material	NA

3 Community Desires Related to the Barrier

Do at least 50 percent of the benefited receptor unit owner(s) and renters desire the noise barrier? If yes, continue to "decision" block. If no, the barrier can be considered not to be reasonable. Proceed to "decision" block and answer "no" to reasonableness question. As the reason for this decision, state that "The majority of the impacted receptor unit owners do not desire the barrier."

Decision

Is the Noise Barrier(s) WARRANTED?	Yes
Is the Noise Barrier(s) FEASIBLE?	No
Is the Noise Barrier(s) REASONABLE?	No

Additional Reasons for Decision:

Existing Barrier is not considered Feasible for the impacts within CNE N due to the Route 7 project. Therefore modification to the existing barrier is warranted and will be studied as a result

**APPENDIX F -
TNM FILES**

TNM Files for this project can be downloaded at the following address:

http://emp.skellyloy.com/downloads/VA7TNM11_05_2019.zip

**APPENDIX G -
NOISE REPORT GUIDANCE
AND ACCOUNTABILITY CHECKLIST**

VIRGINIA DEPARTMENT OF TRANSPORTATION

NOISE REPORT GUIDANCE AND ACCOUNTABILITY CHECKLIST

VERSION 3.0

This checklist is not an inclusive document that accounts for all projects. However this guidance checklist outlines the most common items that will be reviewed during VDOT's review process. This checklist follows guidance set forth in VDOT's Highway Traffic Noise Manual.

Checked Items are Required		Preliminary	Final Design	UPC: Completed By: Date:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">106689/109790</td></tr> <tr><td style="text-align: center;">Skelly and Loy/W Kaufell</td></tr> <tr><td style="text-align: center;">11/05/2019</td></tr> </table>	106689/109790	Skelly and Loy/W Kaufell	11/05/2019	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">X</td></tr> <tr><td style="text-align: center;">N/A</td></tr> <tr><td style="text-align: center;">D</td></tr> </table>	X	N/A	D	This Item has been verified by the document writer This item is "Not/Applicable" to this project This Item is Project Dependent
106689/109790													
Skelly and Loy/W Kaufell													
11/05/2019													
X													
N/A													
D													

1.0 TITLE PAGE

- 1.1 ✓ ✓ - Report is Appropriately Named, with Correct Project Limits, Project Number(s), UPC(s) (Universal Project Code), and Submission Date
- 1.2 ✓ ✓ - Person Performing the Noise Analysis is Prequalified in the State of Virginia

2.0 TABLE OF CONTENTS (TOC)

- 2.1 ✓ ✓ - Items listed in TOC are Accurately Numbered, Including the Report Sections, Tables, Figures, Graphics, and Appendices

3.0 EXECUTIVE SUMMARY

- 3.1 ✓ ✓ - Brief Project Description provided with Project Location Information
- 3.2 ✓ ✓ - Summary of the Number (and sound level ranges) of Impacts for Existing, No-Build (if applicable), and the Future Design Year
- 3.3 ✓ ✓ - Noise Abatement Summary and Barrier Analyses Summary - (If Future Design Year Impacts are Predicted)
- 3.4 ✓ - "Conversely . . ." Statement Added
- 3.5 ✓ ✓ - Construction Noise Summary
- 3.6 ✓ - Discussion of Further Noise Abatement Considerations during Final Design - eg. Rail noise, Aviation noise, Reflected Noise from Existing or Proposed Barriers / Retaining Walls, Commitments for further evaluation based on new design information, Alternatives to proposed noise barrier placement. . .

4.0 INTRODUCTION

- 4.1 ✓ ✓ - Discussion of the Project Description of the Proposed Project. Should include the Project Limits, Number of Proposed Lanes and/or Proposed Modification, Lane Width, etc.

Checked Items are Required		Preliminary	UPC:	106689/109790	✘ N/A D	This Item has been verified by the document writer This item is "Not/Applicable" to this project This Item is Project Dependent
		Final Design	Completed By:	Skelly and Loy/W Kaufell		
			Date:	10/10/2018		

Modification, Lane widths etc . . .

- 4.2 ✓ ✓ - Discussion of the History of the Project, Background, Future Design Year, Specific Pertinent Project Details, Including the Preferred Alternative and other Road Improvements.

Checked Items are Required		Preliminary	Final Design	UPC:	106689/109790	✘ N/A D	This Item has been verified by the document writer This item is "Not/Applicable" to this project This Item is Project Dependent
				Completed By:	Skelly and Loy/W Kaufell		
				Date:	10/10/2018		

4.3 ✓ ✓ - Project Location Figure (See VDOT's Noise Report Development and Guidance Document)

4.4 D D - Additional NEPA documentation (If Necessary - Documents to support an older ROD or Date of Public Knowledge)

5.0 METHODOLOGY

5.1 ✓ ✓ - FHWA and State Policy Discussion and Compliance Regulations

5.2 ✓ ✓ - Sound Level Metrics Defined

5.3 ✓ ✓ - NAC Defined

5.4 ✓ ✓ - Definiton of Noise Impact

5.5 ✓ ✓ - Analysis Proceedure Defined

5.6 ✓ ✓ - TNM Model Version Defined and Program Overview Description given

Source of Model Inputs Documented

5.7 ✓ ✓ - Discussion of the Source of Design Files / Typical Sections/ Profiles / Cross Sections, or Study Corridor Limits if Engineering is not Available

5.8 ✓ ✓ - Discussion of Traffic Volumes / Speeds / Truck %'s

5.9 ✓ ✓ - Document the Source of Survey Information

5.10 D D - Additional Data (Existng or Proposed Retaining Walls, Existing Noise Barriers or Berms, GIS Layers and/or Supplemental Elevation Data)

6.0 EXISTING NOISE ENVIRONMENT

6.1 NOISE MONITORING

6.1.1 ✓ ✓ - Noise Monitoring Methodology is Clearly Defined

6.1.2 ✓ ✓ - The Date(s) of Monitoring are Documented

6.1.3 ✓ ✓ - Type of Meter is Noted and Pertinent Calibration Information is Included

Checked Items are Required		Preliminary	Final Design	UPC:	106689/109790	✘ N/A D	This Item has been verified by the document writer This item is "Not/Applicable" to this project This Item is Project Dependent
				Completed By:	Skelly and Loy/W Kaufell		
				Date:	10/10/2018		

6.1.4 **X** ✓ ✓ - Number of Sites (Short-term or Long-term) are Identified and Located on Figure

Checked Items are Required		Preliminary	Final Design	UPC:	106689/109790	✘ N/A D	This Item has been verified by the document writer This item is "Not/Applicable" to this project This Item is Project Dependent
				Completed By:	Skelly and Loy/W Kaufell		
				Date:	10/10/2018		

6.1.5 ✓ ✓ - Documentation of Noise Monitoring Data Sheets and other monitoring factors such sampling interval, weather . . .

6.1.6 ✓ ✓ - Table and Discussion of Ambient Noise Monitoring Results and Required Sample Text Regarding Monitoring

6.1.7 ✓ ✓ - Table and Discussion of Noise Validation Results

6.2 UNDEVELOPED LANDS AND PERMITTED DEVELOPMENTS

6.2.1 ✓ ✓ - "Undeveloped Lands and Permitted Developments" Sample Text Added

6.2.2 ✓ ✓ - Documentation of the Coordination Dates and Contact Information for the Undeveloped Lands and Permitted Developments Search

6.3 COMMON NOISE ENVIRONMENT (CNE) DETERMINATION

6.3.1 ✓ ✓ - Are all Noise Sensitive Receptors within at least 500 feet of the Proposed Edge of Pavement Considered for Evaluation?

6.3.2 ✓ ✓ - Discussion of Existing Land Uses for each CNE

6.3.3 ✓ ✓ - Are all non noise sensitive land uses addressed in the report (reasons why they are not noise sensitive)?

6.3.4 ✓ ✓ - CNE's Boundaries Located on Figure

6.4 WORST NOISE HOUR

6.4.1 ✓ ✓ - The Worst Noise Hour selected needs to be the same for ALL roadways. Review to ensure this is accurate.

6.4.2 ✓ ✓ - Discussion of the Selection of the Worst Noise Hour

6.4.3 ✓ ✓ - Was 24-Hour (Long Term Monitoring) Utilized to Determine the Worst Noise Hour

6.4.4 D D - State if Multiple Sets of TNM runs were Created / Modeled to Determine the Worst Noise Hour (or were there dual worst noise hours)

Checked Items are Required	<input type="checkbox"/>	Preliminary	Final Design	UPC:	106689/109790	<input checked="" type="checkbox"/>	This Item has been verified by the document writer		
				Completed By:	Skelly and Loy/W Kaufell			<input type="checkbox"/>	This item is "Not/Applicable" to this project
				Date:	10/10/2018			<input type="checkbox"/>	This Item is Project Dependent

6.4.5 D D - Were other Factors Considered for the Selection of the Worst Noise Hour

6.5 RECEPTOR IDENTIFICATION AND NAC CATEGORIZATION

If NAC A's are present, is the Criteria met and the Items Listed Below are Discussed:

6.5.1 D D - Serenity and Quiet - The site under consideration meets the serenity and quiet criterion if the current Leq noise level does not approach or exceed the Activity Category A Noise Abatement Criterion (NAC) during any period when serving its intended purpose.

Checked Items are Required	<input type="checkbox"/>	Preliminary	Final Design	UPC:	106689/109790	<input checked="" type="checkbox"/>	This Item has been verified by the document writer		
				Completed By:	Skelly and Loy/W Kaufell			<input type="checkbox"/>	This item is "Not/Applicable" to this project
				Date:	10/10/2018			<input type="checkbox"/>	This Item is Project Dependent

6.5.2 D D - Public Need - The site under consideration provides an important benefit of the public visiting or using the site due to its historical, religious, cultural, or natural significance

6.5.3 D D - Intended Purpose - Is the Preservation of Serenity and Quiet Essential to Continue to Serve its Intended Purpose

6.5.4 D D - Frequent Human Use - Can the public can access the site during all times when it is available and able to serve its intended purpose?

6.5.5 D D - Is the FHWA Supporting Documentation Included

If NAC B's are present, is the Criteria met and the Items Listed Below are Discussed:

6.5.5 D D - Are the Number of Receptors Equal to or Representative to a Number of Dwelling Units

6.5.6 D D - Are there Multi-floor Residential Units and do they have Outdoor Use Areas

6.5.7 D D - Are Outdoor Use Areas (Balconies) Identified and Discussed

If NAC C's are present, is the Criteria met and the Items Listed Below are Discussed:

6.5.8 D D - Are the Outdoor Use Areas Documented for Each of the Identified Receptors

6.5.9 D D - Was the "Grid system" Used and Shown on Figures for Recreational Areas, Trails, Campgrounds, Cemeteries, etc. . .

If NAC D's are present, is the Criteria met and the Item Listed Below is Discussed:

6.5.10 D D - Discuss the Building Materials and Interior Reduction Factor for each Identified Receptor

If NAC E's are present, is the Criteria met and the Item Listed Below is Discussed:

6.5.11 D D - Are Outdoor Use Areas Identified and Discussed

6.5.12 D D - If "No", Text Should be Provided that the Land Use was Identified but not Evaluated due to the Lack of Outdoor Use

Historic Properties

6.5.13 D D - Discuss if any Section 106 (Historic) Properties were Identified

6.5.14 D D - Discuss if any Section 4(f) Properties were Identified

Checked Items are Required	<input type="checkbox"/>	Preliminary	Final Design	UPC:	106689/109790	<input checked="" type="checkbox"/>	This Item has been verified by the document writer		
				Completed By:	Skelly and Loy/W Kaufell			<input type="checkbox"/>	This item is "Not/Applicable" to this project
				Date:	10/10/2018			<input type="checkbox"/>	This Item is Project Dependent

6.5.15 D D - If Section 4(f) Properties are Identified, Does it Constitute a "Constructive Use" Determination

6.6 MODELED EXISTING ENVIRONMENT

- 6.6.1 ✓ D - Are Existing and Future Design Years Stated
- 6.6.2 D D - Are Existing Noise Barriers Present within the Proposed Project Area
- 6.6.3 D D - If Existing Noise Barriers are Present, Does the Project Involve In-Kind Barrier Replacement
- 6.6.4 ✓ ✓ - Discussion of the Overall Numbers of Existing Condition Impacts and Sound Level Ranges (all CNEs)
- 6.6.5 ✓ ✓ - Discussion of the Determination and Identification of Noise Impacts (by CNE under Existing Condition)
- 6.6.6 ✓ D - Existing Noise Environment discussion

7.0 FUTURE NOISE ENVIRONMENT

7.1 MODELED FUTURE ENVIRONMENT

- 7.1.1 ✓ ✓ - Is there Documentation why a No-Build Condition evaluation was/wasn't warranted?
- 7.1.2 D D - Discussion of the Overall Numbers of No-Build Condition Impacts and Sound Level Ranges (all CNEs)
- 7.1.3 D D - Discussion of the Determination and Identification of Noise Impacts (by CNE under No-Build Condition)
- 7.1.4 ✓ ✓ - Discussion of the Overall Numbers of Build Condition Impacts and Sound Level Ranges (all CNEs)
- 7.1.5 ✓ ✓ - Discussion of the Determination and Identification of Noise Impacts (by CNE under Build Condition)
- 7.1.6 ✓ D - Comparison of existing and future total noise levels for all identified receptors
- 7.1.7 ✓ ✓ - Future Noise Environment Discussion
- 7.1.8 ✓ ✓ - Table of Predicted Noise Levels (By CNE)

7.2 NOISE ABATEMENT DETERMINATION

- 7.2.1 ✓ ✓ - Alternative Abatement Measures Discussion

Checked Items are Required		Preliminary	UPC: Completed By: Date:	106689/109790	✘ N/A D	This Item has been verified by the document writer This item is "Not/Applicable" to this project This Item is Project Dependent
		Final Design		Skelly and Loy/W Kaufell		
		10/10/2018				

Checked Items are Required	<input checked="" type="checkbox"/>	Preliminary	Final Design	UPC:	106689/109790	<input checked="" type="checkbox"/>	This Item has been verified by the document writer This item is "Not/Applicable" to this project This Item is Project Dependent
				Completed By:	Skelly and Loy/W Kaufell	N/A	
				Date:	10/10/2018	D	

7.2.2 ✓ ✓ - Was VDOT's Single Receptor Methodology Utilized?

WARRANTED CRITERIA

7.2.3 ✓ ✓ - Is Warranted Criteria Defined?

7.2.3.1 ✓ ✓ - NAC Impact Definition ("Approach or Exceed") Provided

7.2.3.2 ✓ ✓ - Substantial Increase Impact Definition Provided

7.2.3.3 ✓ ✓ - Has the NAC for Each Evaluated Land Use Category been Defined

FEASIBILITY CRITERIA

7.2.4 ✓ ✓ - Is Feasibility Defined?

7.2.4.1 ✓ ✓ - Included definition regarding "Are at least 50% of the impacted receptors predicted to experience at least a 5dB(A) benefit?"

7.2.4.2 ✓ ✓ - Included definition regarding "Is the barrier able to be constructed?"

REASONABLENESS CRITERIA

7.2.5 ✓ ✓ - Is Reasonableness Defined?

7.2.5.1 ✓ ✓ - Included definition regarding "Noise Reduction Design Goals"

7.2.5.2 ✓ ✓ - Included definition regarding "Cost-effectiveness"

7.2.5.3 ✓ ✓ - Included definition regarding "The Viewpoints of the Benefited Receptors"

NOISE BARRIER EVALUATION

7.2.6 ✓ ✓ - Barrier Documentation should Include: Discussion of Total Number of Impacts, Benefitted Impacts, Additional Benefits, Total Benefits, Feasibility, Reasonability, Barrier Length, Range of Panel Heights, Barrier Location, Ground or Structure Mounted, Barrier Systems, etc. . .

7.2.7 ✓ ✓ - Reason for Barrier Placement, Barrier Termini, Barrier Location etc. . .

Checked Items are Required		Preliminary	Final Design	UPC:	106689/109790	✘ N/A D	This Item has been verified by the document writer This item is "Not/Applicable" to this project This Item is Project Dependent
				Completed By:	Skelly and Loy/W Kaufell		
				Date:	10/10/2018		

7.2.8 - All Evaluated Barriers shown on Figures

7.2.9 - Barriers were Optimized to Maximize Benefits while Minimizing Cost (Diminishing Returns)

Checked Items are Required	<input type="checkbox"/>	Preliminary	Final Design	UPC:	106689/109790	<input checked="" type="checkbox"/>	This Item has been verified by the document writer		
				Completed By:	Skelly and Loy/W Kaufell			<input type="checkbox"/>	This item is "Not/Applicable" to this project
				Date:	10/10/2018			<input type="checkbox"/>	This Item is Project Dependent

- 7.2.10 ✓ ✓ - Table was included that shows the Barrier name, Insertion Loss, Panel Height Range, Total Length, Total Surface Area, Total Benefits, Total sq.ft. / no. of benefits, Cost (for Planning Purposes Only)
- 7.2.11 ✓ ✓ - Table that shows the Sound Levels, Barrier Insertion Loss for each Receptor included in the Barrier Analysis
- 7.2.12 D ✓ - Table that shows the Approximate Stationing, Northing, Easting, Bottom and Top of barrier, Panel Heights by Segment
- 7.2.13 D D - Does the Barrier (System) Work Independently or is it Dependent on Another Barrier (Existing or Proposed)

8.0 CONSTRUCTION NOISE

- 8.1 ✓ ✓ - Construction Noise Discussion

9.0 PUBLIC INVOLVEMENT PROCESS

9.1 NOISE COMPATIBLE CONTOURS

- 9.1.1 ✓ ✓ - 66 dBA Contour Discussion and Shown on Figure(s)
- 9.1.2 D D - Discussion of Public Involvement Efforts (including Community Information Meetings, Individual Meetings, and Special Coordination)

9.2 VOTING PROCEEDURES

- 9.2.1 ✓ ✓ - Voting Process Defined?
- 9.2.2 ✓ - How many / when were Certified Letters Sent?
- 9.2.3 ✓ - What were the Voting Results Related to Desire for a Barrier?
- 9.2.4 ✓ - Summary of Barrier Survey Results and Comments?
- 9.2.5 ✓ - How many Surveys were Unresponsive or Undeliverable?
- 9.2.6 ✓ - Voting Graphic showing the Results of the Barrier Survey?
- 9.2.7 ✓ - Were there any Special Abatement Commitments / Acoustic Profiles/ Aesthetics Considerations

Checked Items are Required		Preliminary	Final Design	UPC:	106689/109790	✘ N/A D	This Item has been verified by the document writer This item is "Not/Applicable" to this project This Item is Project Dependent
				Completed By:	Skelly and Loy/W Kaufell		
				Date:	10/10/2018		

9.2.8

✓ - Is this an Addendum Report with Revised Impact / Barrier Results

Checked Items are Required		Preliminary	Final Design	UPC:	106689/109790	✘ N/A D	This Item has been verified by the document writer This item is "Not/Applicable" to this project This Item is Project Dependent
				Completed By:	Skelly and Loy/W Kaufell		
				Date:	10/10/2018		

10.0 OTHER CONSIDERATIONS

- 10.1 D D - Absorptive or Reflective Noise Barriers Proposed?
- 10.2 D D - Was Reflection Noise Considered?
- 10.3 D D - Was Structure Noise Considered?
- 10.4 D D - Was Rail or Aviation Noise Considered?

11.0 APPENDICES

- 11.1 ✓ ✓ - List of References
- 11.2 ✓ ✓ - List of Preparers / Reviewers
- 11.3 ✓ ✓ - Traffic Data
- 11.4 ✓ ✓ - Noise Monitoring Field Logs
- 11.5 ✓ ✓ - Warranted, Feasible, Reasonable, Worksheets
- 11.6 ✓ ✓ - Alternative Mitigation Measures Response Form from Project Manager
- 11.7 ✓ ✓ - Other Site Sketches of Monitored Locations, Noise Meter Printouts, Noise Meter Calibration Reports, Pertinent Correspondance
- 11.8 ✓ ✓ - TNM Certification Certificates
- 11.9 ✓ ✓ - Noise Report Guidance and Accountability Form

12.0 TNM RUNS

- 12.1 ✓ ✓ - Actual TNM Runs (Electronic Files) must be Submitted for Review with Report, TNM Output Tables are Not Required for Inclusion into the Report, However a Copy of the Printed Modeling Information shall be Supplied Upon Request

Checked Items are Required		Preliminary	UPC: Completed By: Date:	106689/109790	<input checked="" type="checkbox"/> <input type="checkbox"/> N/A D	This Item has been verified by the document writer This item is "Not/Applicable" to this project This Item is Project Dependent
		Final Design		Skelly and Loy/W Kaufell		
		10/10/2018				

13.0 GENERAL

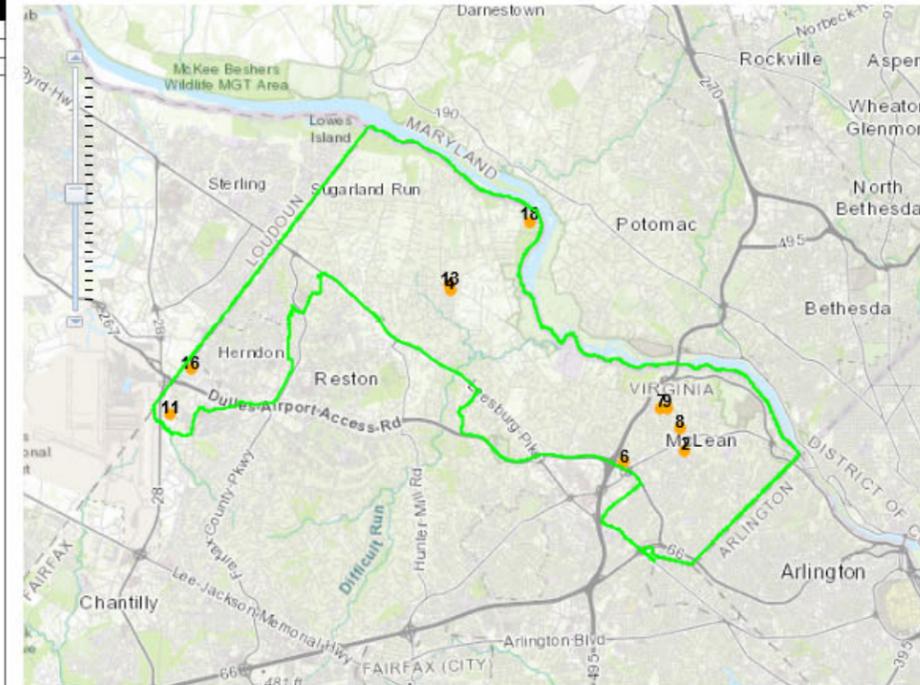
13.1 ✓ ✓ - Figures were Developed in Accordance with VDOT's Noise Report Development and Guidance Document

**APPENDIX H -
FAIRFAX COUNTY PERMITTED LANDS AS OF ROD**



Search By Magisterial District

Plan Index	Plan Number	Plan Description	Plan Map
1	000481-MSP -002-1	MOUNT DANIEL ELEMENTARY SCHOOL - TRAILERS (DR)	ZOOM
2	001844-MSP -001-1	BANK OF AMERICA ADA ACCESSIBILITY IMPROVEMENT	ZOOM
3	001855-MSP -001-2	GENERATOR REPLACEMENT - 933 ROLLING HOLLY DRIVE (DR)	ZOOM
4	002273-MSP -001-1	BANK OF AMERICA GREAT FALLS ADA REPAIRS (DR)	ZOOM
5	002787-MSP -001-1	CLEARVIEW ELEMENTARY SCHOOL	ZOOM
6	003231-MSP -005-1	T505 TYSONS MCLEAN - WATER TANK (DR)	ZOOM
7	004078-MSP -004-1	MCLEAN ST LUKES SCHOOL AND CONVENT (DR)	ZOOM
8	005020-MSP -001-1	KINGS MANOR (DR)	ZOOM
9	005042-MSP -001-1	DEAD RUN STATION CONFINED SPACE IMPROVEMENTS (DR)	ZOOM
10	005863-MSP -001-1	LANGLEY LOT 11B - CLEMJONTRI PARK (DR)	ZOOM
11	006867-MSP -002-1	JEFFERSON AT PRESIDENTS PARK (DR)	ZOOM
12	007518-MSP -006-1	CORBALLS WATER TREATMENT PLANT ELECTRICAL SYSTEM (DR)	ZOOM
13	008484-MSP -001-1	DRAINFIELD EXPANSION (DR)	ZOOM

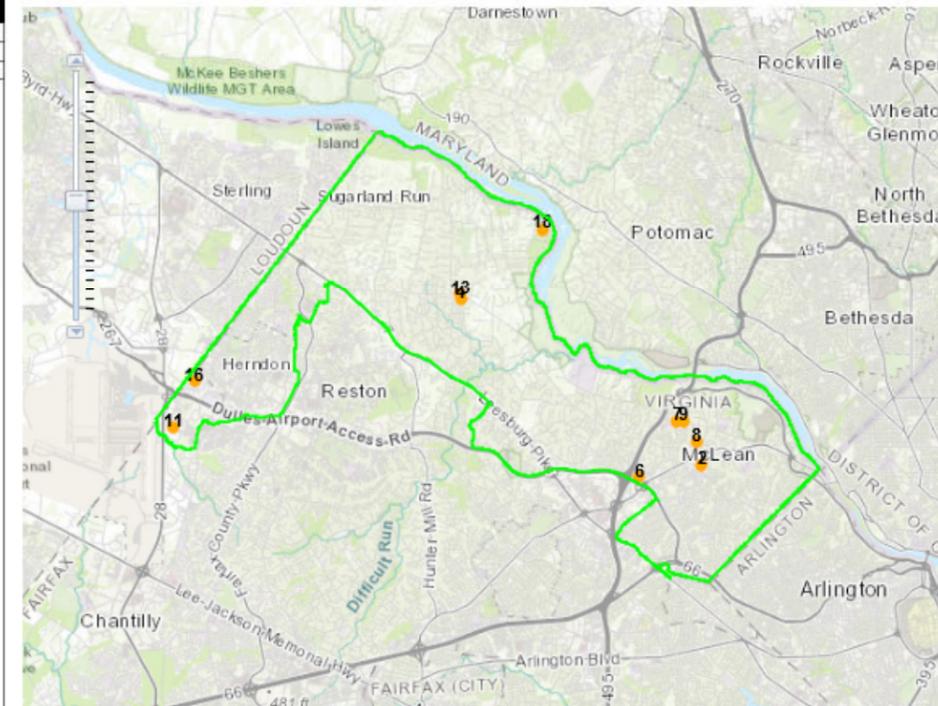


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Search By Magisterial District

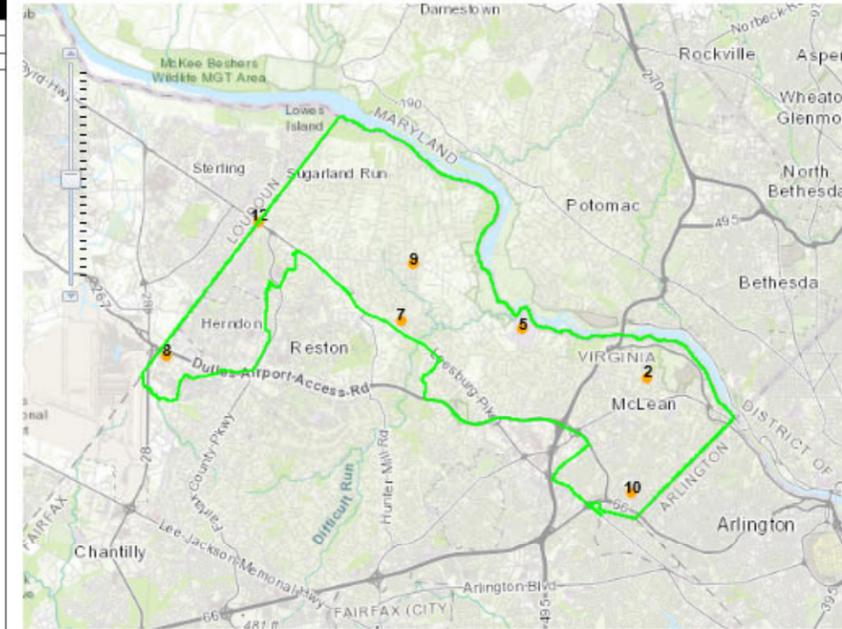
Help	Legend	Selection	Results
DRANESVILLE Approved Plans from 1/1/2017 to 12/31/2017: MSP			
6	003231-MSP -005-1	1505 TYSONS MCLEAN - WATER TANK (DR)	ZOOM
7	004078-MSP -004-1	MCLEAN ST LUKES SCHOOL AND CONVENT (DR)	ZOOM
8	005020-MSP -001-1	KINGS MANOR (DR)	ZOOM
9	005042-MSP -001-1	DEAD RUN STATION CONFINED SPACE IMPROVEMENTS (DR)	ZOOM
10	005863-MSP -001-1	LANGLEY LOT 11B - CLEMJONTRI PARK (DR)	ZOOM
11	006867-MSP -002-1	JEFFERSON AT PRESIDENTS PARK (DR)	ZOOM
12	007518-MSP -006-1	CORBALLS WATER TREATMENT PLANT ELECTRICAL SYSTEM (DR)	ZOOM
13	008484-MSP -001-1	DRAINFIELD EXPANSION (DR)	ZOOM
14	008487-MSP -007-1	GREAT FALLS NIKE PARK - TURF INSTALLATION (DR)	ZOOM
15	008498-MSP -006-1	RIVER BEND GOLF AND COUNTRY CLUB (DR)	ZOOM
16	009479-MSP -003-1	DULLES GREENE MINOR SITE PLAN (DR)	ZOOM
17	009800-MSP -001-1	MCLEAN ISLAMIC CENTER (DR)	ZOOM
18	024875-MSP -003-1	FAIRFAX COUNTY PARK AUTHORITY- RIVER BEND PARK (DR)	ZOOM



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Plan Index	Plan Number	Plan Description	Plan Map
1	000481-SP -002-2	MOUNT DANIEL ELEMENTARY SCHOOL (DR)	ZOOM
2	000525-SP -001-2	LANGLEY HIGH SCHOOL - RENOVATION + ADDITION (DR)	ZOOM
3	001504-SP -006-2	ARROWBROOK CENTRE LANDBAYS B1 & C1 (DR)	ZOOM
4	003728-SP -003-2	FLEETWOOD RESIDENTIAL (DR)	ZOOM
5	005158-SP -008-2	MADEIRA SCHOOL OVAL RENOVATION (DR)	ZOOM
6	005518-SP -041-2	WOODLAND PARK WEST TOWNS AND CONDOMINIUMS (DR)	ZOOM
7	005860-SP -002-3	FOLEY/ WALKER ROAD (DR)	ZOOM
8	006848-SP -013-2	DULLES STATION PARCEL 5A	ZOOM
9	021868-SP -001-2	TD BANK - 9901 GEORGETOWN PIKE (DR)	ZOOM
10	025205-SP -001-2	HAYCOCK ELEMENTARY SCHOOL (DR)	ZOOM
11	025351-SP -001-2	HERNDON HIGH SCHOOL (DR)	ZOOM
12	025379-SP -001-2	POPEYES AT LEESBURG (DR)	ZOOM

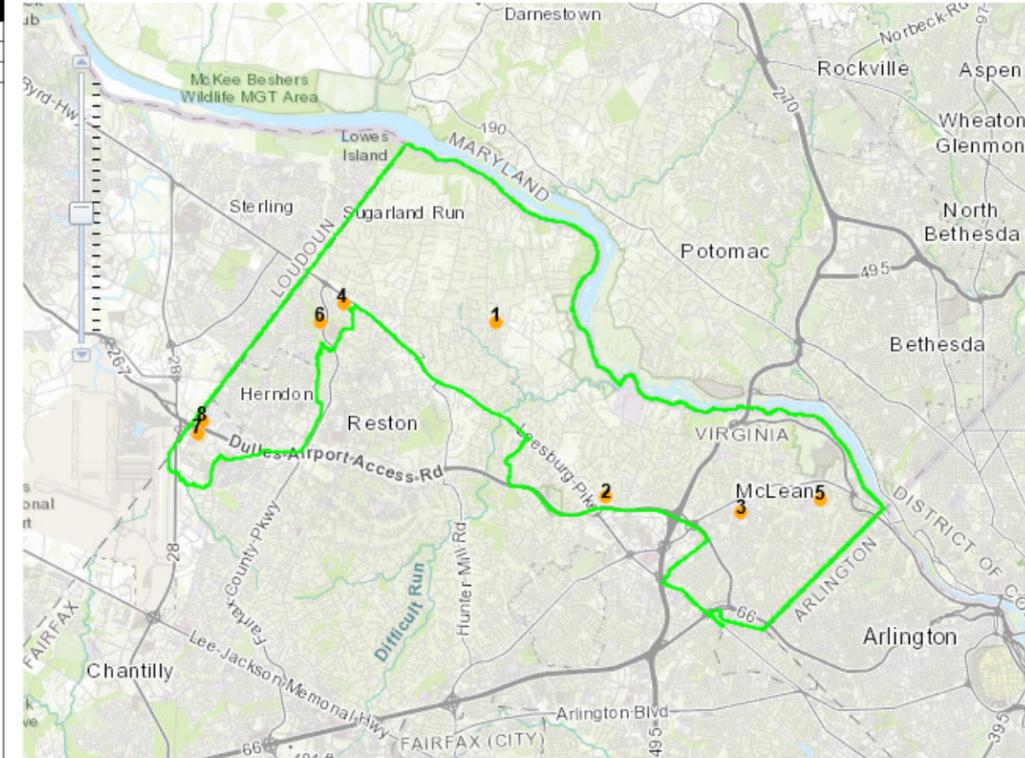


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[Fairfax Home Page](#)[LDSnet Home Page](#)

[Help](#) [Legend](#) [Selection](#) [Results](#)**DRANESVILLE Approved Plans from 1/1/2017 to 12/31/2017: SE**

Plan Index	Plan Number	Plan Description	Plan Map
1	SE 2013-DR-001	DRIVE-IN FINANCIAL INSTITUTION IN THE C-8 DISTRICT WITH	ZOOM
2	SE 2014-DR-033	USES IN FLOODPLAIN	ZOOM
3	SE 2014-DR-043	TO PERMIT OFFICE	ZOOM
4	SE 2014-DR-052	RESIDENTIAL CLUSTER SUBDIVISION	ZOOM
5	SE 2014-DR-057	CLUSTER SUBDIVISION	ZOOM
6	SE 2015-DR-005	HOME CHILD CARE FACILITY	ZOOM
7	SE 2015-DR-016	ELECTRICALLY-POWERED REGIONAL RAIL TRANSIT FACILITIES	ZOOM
8	SE 2015-DR-028	ELECTRICALLY POWERED REGIONAL RAIL TRANSIT FACILITIES	ZOOM
9	SE 2017-DR-002	WAIVER OF CERTAIN SIGN REGULATIONS TO PERMIT AN INCREAS	ZOOM
10	SE 2017-DR-003	DRIVE-IN FINANCIAL INSTITUTION AND WAIVER OF MINIMUM L	ZOOM



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Search By Magisterial District

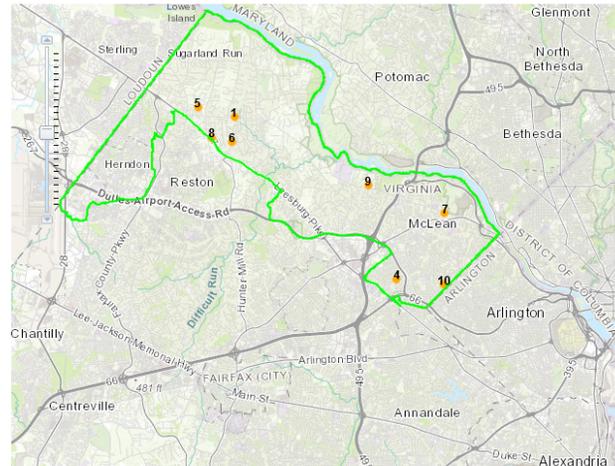


[Help](#) [Legend](#) [Selection](#) [Results](#)

DRANESVILLE Approved Plans from 1/1/2017 to 12/31/2017: SD

Plan Index	Plan Number	Plan Description	Plan Map
1	001089-SD -001-2	AULAKH SUBDIVISION (DR)	ZOOM
2	001237-SD -001-2	MEHR FARMS (DR)	ZOOM
3	001809-SD -002-2	JAMES A THOMPSON PROPERTY (DR)	ZOOM
4	004344-SD -002-1	MID PIKE - 7150 PENGUIN PLACE LOT 16 (DR)	ZOOM
5	004605-SD -001-2	OSBORNE PROPERTY (DR)	ZOOM
6	005024-SD -001-2	1039 SPRINGVALE ROAD (DR)	ZOOM
7	005863-SD -001-1	1101 CHAIN BRIDGE ROAD (DR)	ZOOM
8	007339-SD -003-3	MARKELL PROPERTY (DR)	ZOOM
9	008868-SD -001-2	BULL NECK (DR)	ZOOM
10	009176-SD -002-2	FRANKLIN PARK BLOCK 5 LOTS 57A & 58E (DR)	ZOOM
11	025427-SD -001-2	SUMMER HILL PROPERTY	ZOOM
12	025856-SD -001-2	RIVERMONT (DR)	ZOOM

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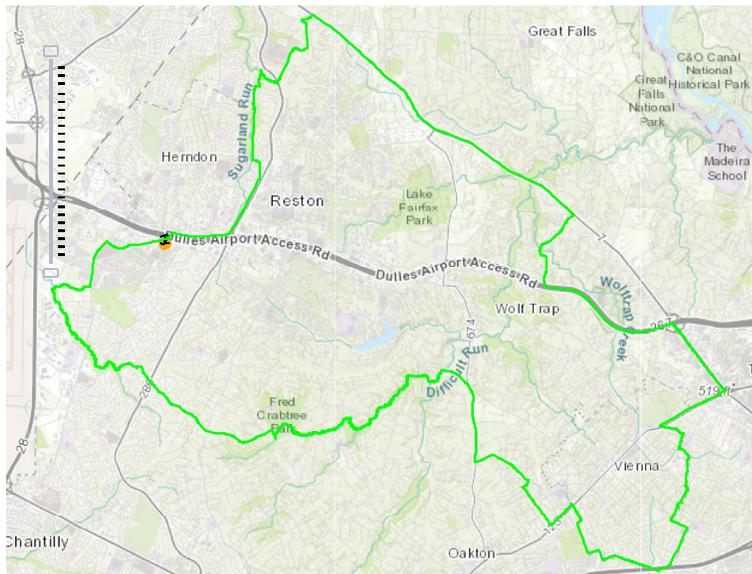


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Help	Legend	Selection	Results
HUNTER MILL Approved Plans from 1/1/2017 to 12/31/2017: FDPA			
Plan Index	Plan Number	Plan Description	Plan Map
1	FDPA 87-C -060-19 (ZAPSMain.aspx?cde=FDPA&seq=4227826)	AMEND FDP 87-D-060 TO PERMIT ADDITION 12.7 FEET FROM RE	ZOOM (GISMap.aspx?typ=2&apptyp=ZAPS&cde=FDPA&seq=4227826)
2	FDPA 2000-HM-044-02 (ZAPSMain.aspx?cde=FDPA&seq=4208977)	MIXED USE	ZOOM (GISMap.aspx?typ=2&apptyp=ZAPS&cde=FDPA&seq=4208977)
3	FDPA 2003-HM-046 (ZAPSMain.aspx?cde=FDPA&seq=4208980)	MIXED USE	ZOOM (GISMap.aspx?typ=2&apptyp=ZAPS&cde=FDPA&seq=4208980)



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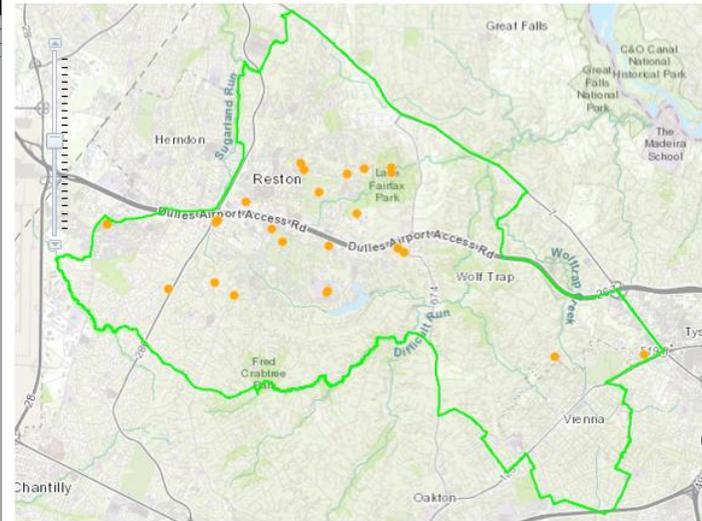


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HUNTER MILL In Process Plans from 1/1/2017 to 12/31/2017: MSP

Plan Index	Plan Number	Plan Description	Plan Map
1	000491-MSP -001-2	ISLAND WALK RENOVATION/MODERNIZATION	ZOOM
2	001463-MSP -004-1	VERIZON WIRELESS SOUTH LAKES HS (HM)	ZOOM
3	001463-MSP -005-2	SOUTH LAKES HIGH SCHOOL (HM)	ZOOM
4	001463-MSP -007-1	LANGSTON HUGHES MIDDLE SCHOOL (HM)	ZOOM
5	002075-MSP -001-1	UNITARIAN UNIVERSALIST CHURCH IN RESTON (HM)	ZOOM
6	002615-MSP -005-1	RESTON BLK 6 SEC 913 - 11493 SUNSET HILLS RENOV (HM)	ZOOM
7	003129-MSP -001-1	SYSTEM RELIABILITY IMPROVMENTS FOX MILL PUMP STATION	ZOOM
8	003292-MSP -004-1	LAKE FAIRFAX BUSINESS CENTER BUILDING 6 (HM)	ZOOM
9	003741-MSP -005-1	GODDARD AT TYSONS (HM)	ZOOM
10	003899-MSP -001-1	PARKRIDGE CENTER	ZOOM
11	003899-MSP -003-1	PARKRIDGE II SITE IMPROVEMENTS RESTON SEC 910 (HM)	ZOOM
12	003900-MSP -004-3	CAMPUS COMMONS (HM)	ZOOM
13	004053-MSP -004-2	FCPA LAKE FAIRFAX GROUPED ADA SHELTER B (HM)	ZOOM

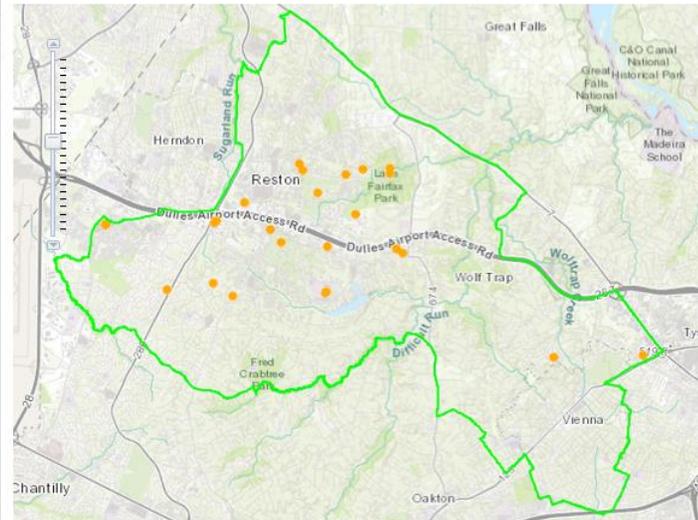


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HUNTER MILL In Process Plans from 1/1/2017 to 12/31/2017: MSP			
14	004278-MSP -003-1	TYCON COURTHOUSE DEVELOPMENT (HM)	ZOOM
15	004486-MSP -001-1	LAKE FAIRFAX PARK PICNIC SHELTERS	ZOOM
16	004599-MSP -004-1	LOCKHEED MARTIN (HM)	ZOOM
17	004599-MSP -006-1	RESTON, SEC. 904 (HM)	ZOOM
18	004847-MSP -001-1	KIDDIE ACADEMY (HM)	ZOOM
19	004890-MSP -006-2	RESTON SEC 912 BLK 1 (HM)	ZOOM
20	005226-MSP -001-2	LAKE ANNE ELEMENTARY SCHOOL RENOVATION (HM)	ZOOM
21	005482-MSP -003-1	RESTON METRO CENTER (HM)	ZOOM
22	005482-MSP -004-1	RESTON CROSSING (HM)	ZOOM
23	005482-MSP -005-1	2003 EDMUND HALLEY DR (HM)	ZOOM
24	005731-MSP -006-1	MEADOWLARK GARDENS PARKING (HM)	ZOOM
25	005734-MSP -001-2	RESTON FIRE STATION 25 TEMP STATION (HM)	ZOOM
26	006246-MSP -001-2	WOLFTRAP ELEMENTARY SCHOOL	ZOOM
27	006734-MSP -001-1	RESTON SEC 40, BLOCK 1C (HM)	ZOOM



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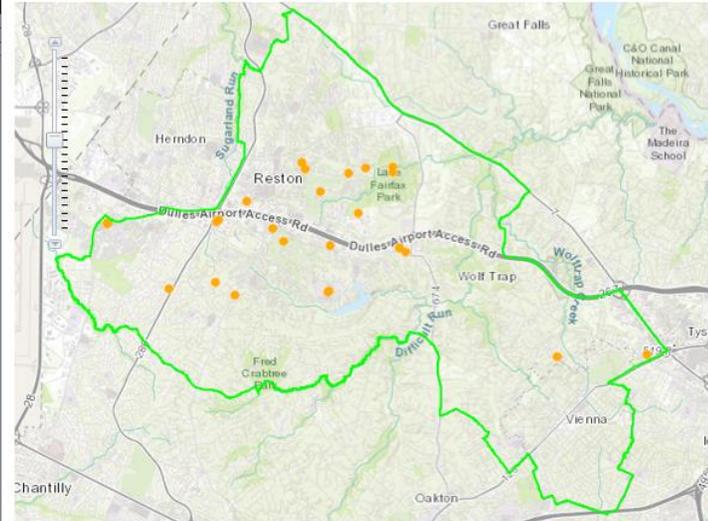
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Help	Legend	Selection	Results
HUNTER MILL In Process Plans from 1/1/2017 to 12/31/2017: MSP			
24	005731-MSP -006-1	MEADOWLARK GARDENS PARKING (HM)	ZOOM
25	005734-MSP -001-2	RESTON FIRE STATION 25 TEMP STATION (HM)	ZOOM
26	006246-MSP -001-2	WOLFTRAP ELEMENTARY SCHOOL	ZOOM
27	006734-MSP -001-1	RESTON SEC 40, BLOCK 1C (HM)	ZOOM
28	007693-MSP -004-2	VILLAGE CENTER AT DULLES (HM)	ZOOM
29	007693-MSP -006-1	VILLAGE CENTER AT DULLES (HM)	ZOOM
30	007805-MSP -001-1	SHEEHY AUTOMOTIVE (HM)	ZOOM
31	008501-MSP -002-2	RENOVATION OF TYSONS TOWERS (HM)	ZOOM
32	009058-MSP -002-2	CARTER LAKE APARTMENTS (HM)	ZOOM
33	009348-MSP -001-1	RESTON, SEC, 93, BLK 2 (HM)	ZOOM
34	015795-MSP -001-2	RESTON SECTION 15 BLOCK 1 FAIRWAY POOL AND CLUBHSE (HM)	ZOOM
35	018335-MSP -002-2	RESTON ANIMAL HOSPITAL (HM)	ZOOM
36	018955-MSP -002-1	RN DRIVING RANGE (HM)	ZOOM



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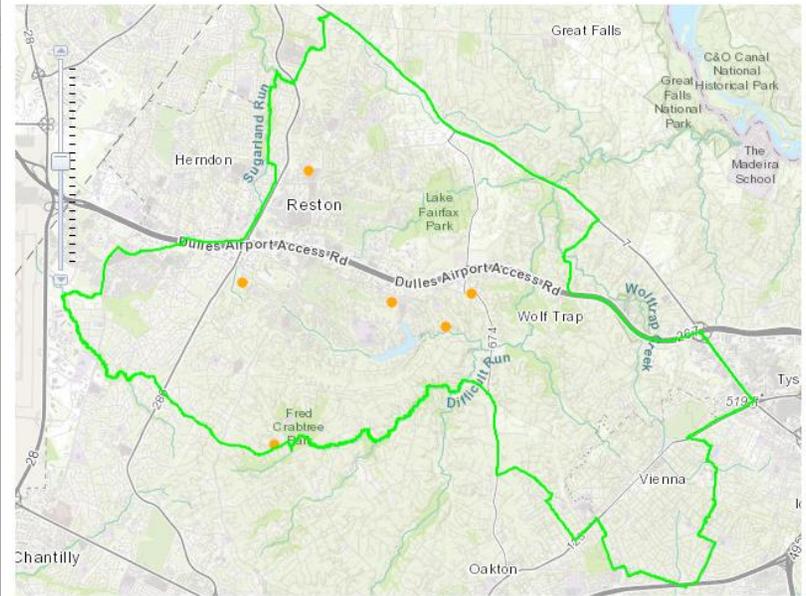


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Help Legend Selection Results

HUNTER MILL In Process Plans from 1/1/2017 to 12/31/2017: SP

Plan Index	Plan Number	Plan Description	Plan Map
1	SP 2003-HM-026	HOME CHILD CARE FACILITY	ZOOM
2	SP 2004-HM-039	HOME PROFESSIONAL OFFICE	ZOOM
3	SP 2006-HM-069	TO PERMIT MODIFICATIONS TO THE LIMITATIONS ON THE KEEPING	ZOOM
4	SP 2009-HM-056	MODIFICATION TO THE LIMITATIONS ON THE KEEPING OF ANIMALS	ZOOM
5	SP 2014-HM-152	HOME CHILD CARE FACILITY	ZOOM
6	SP 2015-HM-078	HOME CHILD CARE FACILITY	ZOOM
7	SP 2016-HM-108	REDUCTION IN CERTAIN YARD REQUIREMENTS TO PERMIT CONSTRUCTION	ZOOM
8	SP 2017-HM-002	REDUCTION OF CERTAIN YARD REQUIREMENTS TO PERMIT CONSTRUCTION	ZOOM
9	SP 2017-HM-006	HOME CHILD CARE FACILITY	ZOOM
10	SP 2017-HM-017	REDUCTION IN MINIMUM YARD REQUIREMENTS BASED ON AN ERROR	ZOOM
11	SP 2017-HM-022	HOME CHILD CARE FACILITY	ZOOM
12	SP 2017-HM-032	ACCESSORY DWELLING UNIT	ZOOM
13	SP 2017-HM-081	REDUCTION OF CERTAIN YARD REQUIREMENTS TO PERMIT CONSTRUCTION	ZOOM

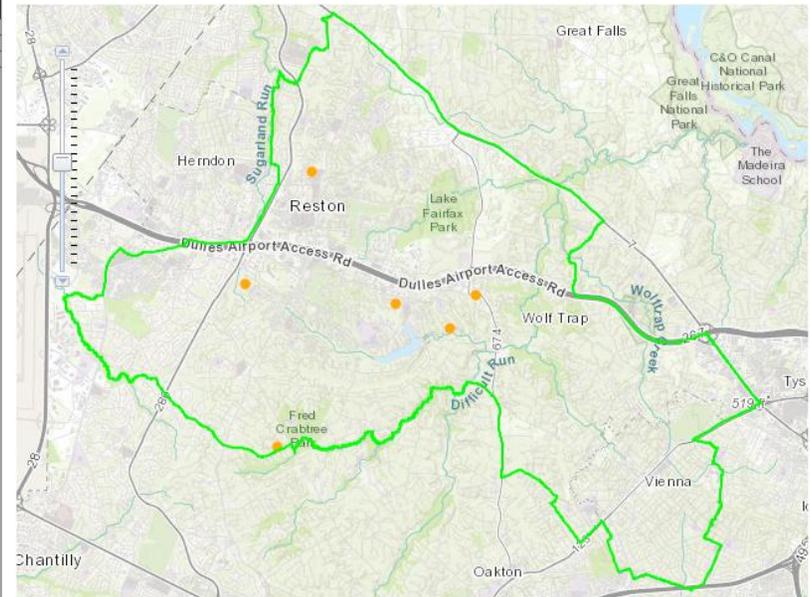


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Help	Legend	Selection	Results
HUNTER MILL In Process Plans from 1/1/2017 to 12/31/2017: SP			
3	SP 2006-HM-069	TO PERMIT MODIFICATIONS TO THE LIMITATIONS ON THE KEEPING OF ANIMALS	ZOOM
4	SP 2009-HM-056	MODIFICATION TO THE LIMITATIONS ON THE KEEPING OF ANIMALS	ZOOM
5	SP 2014-HM-152	HOME CHILD CARE FACILITY	ZOOM
6	SP 2015-HM-078	HOME CHILD CARE FACILITY	ZOOM
7	SP 2016-HM-108	REDUCTION IN CERTAIN YARD REQUIREMENTS TO PERMIT CONSTRUCTION	ZOOM
8	SP 2017-HM-002	REDUCTION OF CERTAIN YARD REQUIREMENTS TO PERMIT CONSTRUCTION	ZOOM
9	SP 2017-HM-006	HOME CHILD CARE FACILITY	ZOOM
10	SP 2017-HM-017	REDUCTION IN MINIMUM YARD REQUIREMENTS BASED ON AN ERROR	ZOOM
11	SP 2017-HM-022	HOME CHILD CARE FACILITY	ZOOM
12	SP 2017-HM-032	ACCESSORY DWELLING UNIT	ZOOM
13	SP 2017-HM-081	REDUCTION OF CERTAIN YARD REQUIREMENTS TO PERMIT CONSTRUCTION	ZOOM
14	SP 2017-HM-112	REDUCTION IN MINIMUM YARD REQUIREMENTS BASED ON ERROR I	ZOOM
15	SP 2017-HM-113	HOME CHILD CARE FACILITY	ZOOM



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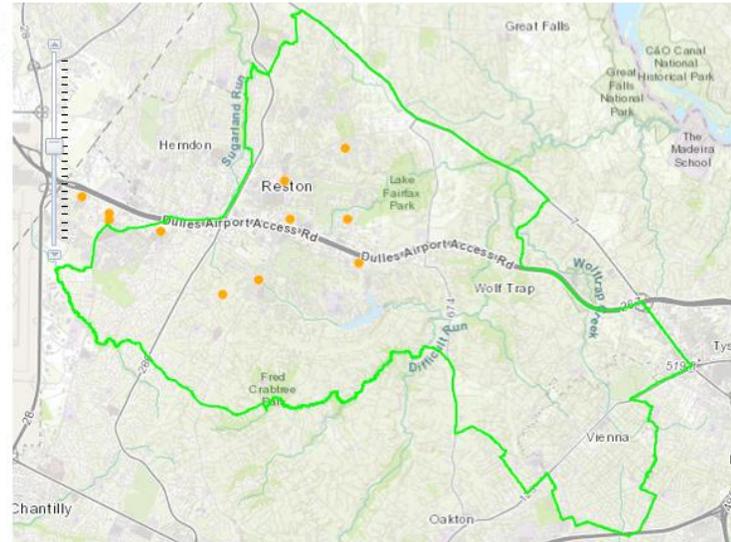


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HUNTER MILL In Process Plans from 1/1/2017 to 12/31/2017: SP P

Plan Index	Plan Number	Plan Description	Plan Map
1	000365-SP -002-3	COLTS NECK BLOCK 1, SECTION 30, RESTON (HM)	ZOOM
2	000786-SP -013-2	SUNRISE SQUARE FORMALLY 11690 SUNRISE VALLEY DRIVE (HM)	ZOOM
3	000786-SP -014-1	SUNRISE VALLEY (HM)	ZOOM
4	000826-SP -011-2	RESTON EASTGATE (HM)	ZOOM
5	001504-SP -003-2	ARROWBROOK CENTRE PHASE 1 (HM)	ZOOM
6	001504-SP -004-2	ARROWBROOK CENTRE TRAIL SITE PLAN (HM)	ZOOM
7	002608-SP -003-2	RESTON SEC 87-1 REDEVELOPMENT (HM)	ZOOM
8	003488-SP -007-2	LINCOLN AT WIEHLE STATION	ZOOM
9	003729-SP -005-2	LOFTS AT RESTON STATION (HM)	ZOOM
10	003900-SP -023-2	SUNRISE OAK PROFESSIONAL CENTER (HM)	ZOOM
11	004599-SP -015-3	SUNRISE TECHNOLOGY PARK - CORESITE VA3 (HM)	ZOOM
12	004847-SP -005-3	PINECREST RESEARCH CENTER (HM)	ZOOM
13	005518-SP -030-1	TECH-POINTE WOODLAND PARK	ZOOM

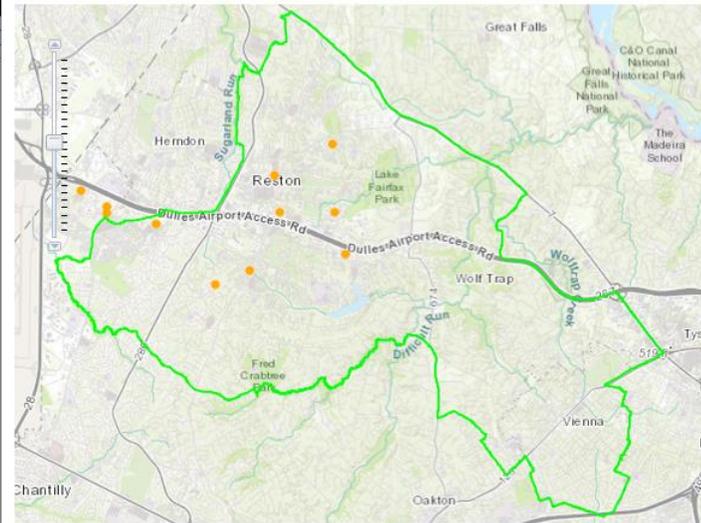


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Help	Legend	Selection	Results
HUNTER MILL In Process Plans from 1/1/2017 to 12/31/2017: SP P			
14	005518-SP -043-2	WOODLAND PARK EAST INFRASTRUCTURE PLAN (HM)	ZOOM
15	005518-SP -044-2	WOODLAND PARK EAST BLK A (HM)	ZOOM
16	005518-SP -045-2	WOODLAND PARK EAST BLOCK B (HM)	ZOOM
17	005518-SP -046-1	WOODLAND PARK EAST BLOCKS C AND D INFRASTRUCTURE (HM)	ZOOM
18	005518-SP -047-1	WOODLAND PARK EAST BLOCK C (HM)	ZOOM
19	005518-SP -048-1	FAIRFIELD AT WOODLAND PARK EAST BLOCK D (HM)	ZOOM
20	005518-SP -049-1	WOODLAND PARK EAST-URBAN RECREATION PARK (HM)	ZOOM
21	006039-SP -009-2	RESTON HOSPITAL CAMPUS (HM)	ZOOM
22	006092-SP -002-2	MARTIN LUTHER KING JR CHRISTIAN CHURCH (HM)	ZOOM
23	006279-SP -005-1	TYSONS WEST RETAIL (HM)	ZOOM
24	006848-SP -012-2	DULLES STATION - DULLES CORNER, BLDG D (HM)	ZOOM
25	007281-SP -003-2	RESTON SECTION 905 BLOCK 7 PRCL E2 & N2	ZOOM
26	007693-SP -045-1	FLORIS - CONSERVATORY FOR FINE ARTS (HM)	ZOOM
27	007693-SP -046-1	NORTHWEST COUNTY ELEMENTARY SCHOOL (HM)	ZOOM



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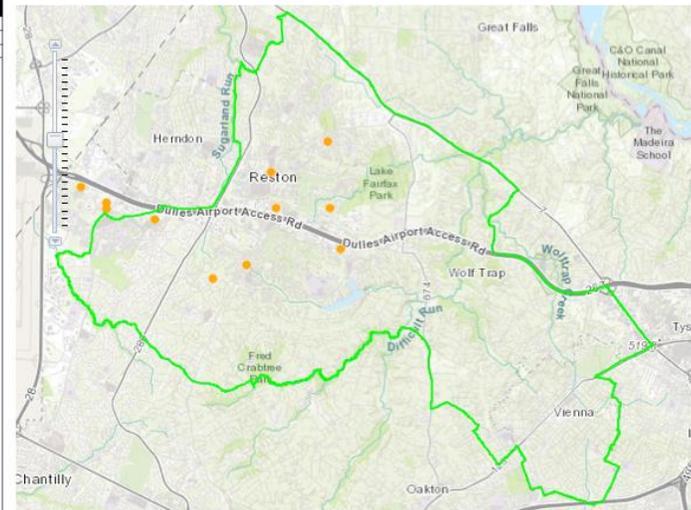
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HUNTER MILL In Process Plans from 1/1/2017 to 12/31/2017: SP P			
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25	007281-SP -003-2	RESTON SECTION 905 BLOCK 7 PRCL E2 & N2	ZOOM
26	007693-SP -045-1	FLORIS - CONSERVATORY FOR FINE ARTS (HM)	ZOOM
27	007693-SP -046-1	NORTH-WEST COUNTY ELEMENTARY SCHOOL (HM)	ZOOM
28	008165-SP -003-2	CHICK FILA NORTH POINT VILLAGE CENTER (HM)	ZOOM
29	008166-SP -002-1	CONVERGENCE 1865 OLD RESTON AVE (HM)	ZOOM
30	008646-SP -004-1	CROWELL RD MEETING HOUSE (HM)	ZOOM
31	009523-SP -003-2	RESTON, SEC. 095, BLK 2 - ORACLE HDQRT, PH. III (HM)	ZOOM
32	009523-SP -004-2	RESTON SEC 95 BLK 2 (HM)	ZOOM
33	009559-SP -002-2	TALL OAKS RETAIL (HM)	ZOOM
34	009559-SP -003-1	TALL OAKS TOWNHOMES (HM)	ZOOM
35	012650-SP -001-1	RESTON BLK 6 SEC 911 (HM)	ZOOM
36	018059-SP -001-3	8399 LEESBURG PIKE (HM)	ZOOM



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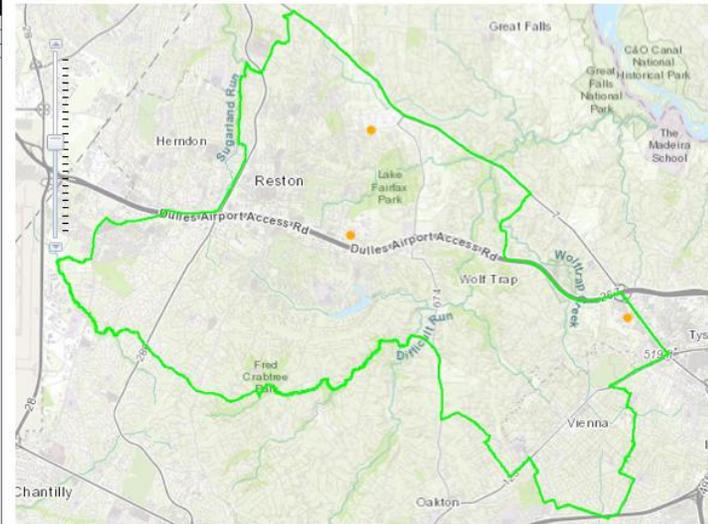
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Plan Index	Plan Number	Plan Description	Plan Map
1	SE 2002-HM-009	TO PERMIT A PRIVATE SCHOOL OF GENERAL EDUCATION AND CHI	ZOOM
2	SE 2011-HM-010	HOME CHILD CARE FACILITY	ZOOM
3	SE 2014-HM-034	INCREASE IN FAR IN THE PTC DISTRICT TO PERMIT OFFICE AN	ZOOM
4	SE 2016-HM-020	ELECTRICALLY POWERED REGIONAL RAIL TRANSIT FACILITIES	ZOOM
5	SE 2016-HM-024	ASSISTED LIVING FACILITY	ZOOM
6	SE 2017-HM-010	RETAIL SALES ESTABLISHMENT IN AN INDUSTRIAL DISTRICT	ZOOM
7	SE 2017-HM-016	HOTEL AND INCREASE IN FAR	ZOOM
8	SE 2017-HM-030	INCREASE IN FAR	ZOOM
9	SE 2017-HM-031	WAIVER OF CERTAIN SIGN REGULATIONS	ZOOM



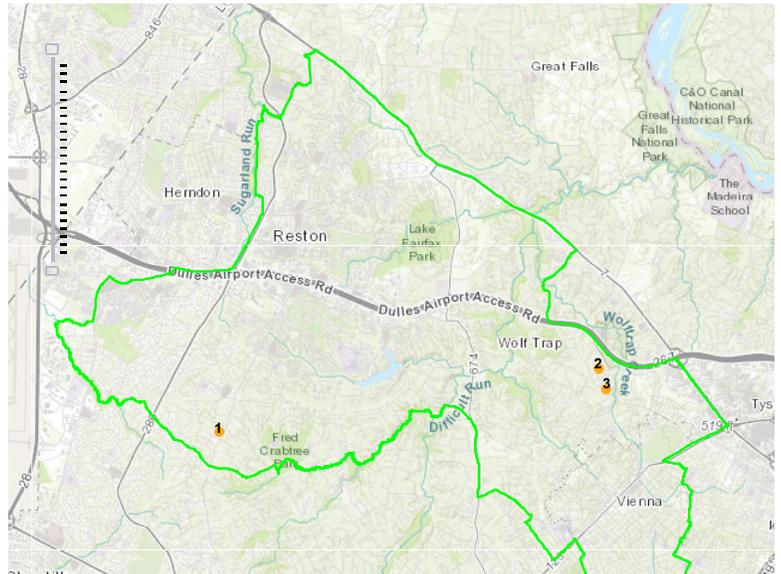
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Plan Index	Plan Number	Plan Description	Plan Map
1	004332-SD -001-2 (PAWSMain.aspx?cde=SD&seq=4198464)	IRIS HILLS (HM)	ZOOM (GISMap.aspx?typ=2&apptyp=PAWS&cde=SD&seq=4198464)
2	021295-SD -001-2 (PAWSMain.aspx?cde=SD&seq=4205152)	TRAP ROAD (HM)	ZOOM (GISMap.aspx?typ=2&apptyp=PAWS&cde=SD&seq=4205152)
3	024861-SD -001-2 (PAWSMain.aspx?cde=SD&seq=4122806)	9318 OLD COURTHOUSE ROAD (HM)	ZOOM (GISMap.aspx?typ=2&apptyp=PAWS&cde=SD&seq=4122806)



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012	1	21		0002		YES
012	1	21		0005		YES
012	1	21			A	YES
012	1	21		0003		YES
012	1	21		0001		YES

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* Please be advised that an approved plan does not indicate construction is ready to commence. Typically, a Land Disturbance Permit must be issued prior to a Pre-Construction Meeting. Please check the Outstanding Items to see if Approval Conditions must be met.

- Select a Query:**
- [Distribution Status](#)
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 - [Processing Status](#)
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 - [Site Specific Options](#)
 - [Releated Submission](#)
 - [Submission Sub-Type](#)
 - [View GIS Map](#)
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 - [Review Comment](#)
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Status	Outstanding Item	Participant
Site Location	Related Submission	Submission ID

Distribution Status:

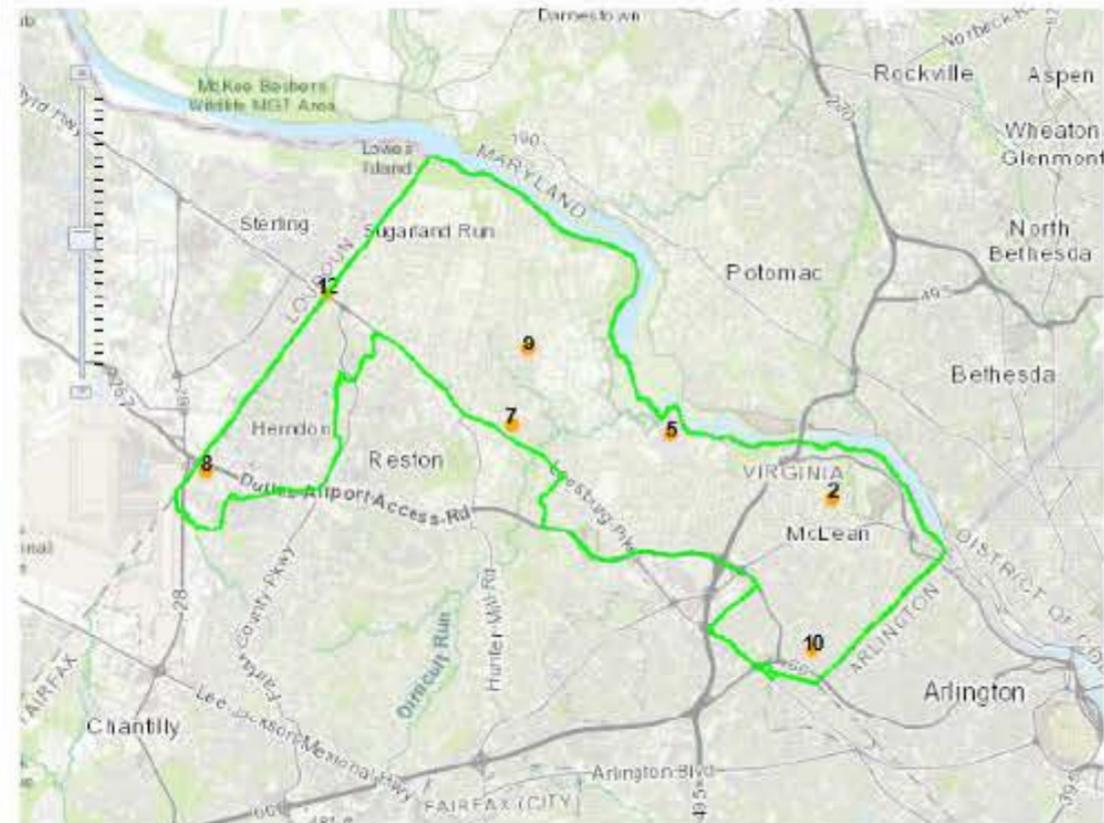
Dist Point	Dist Purpose	Assignee	Status	Date Sent	Action
PLAN CONTROL PROCESSING DP	ACCEPTANCE		DP FINAL	04/28/2014	PASS
PLAN CONTROL PROCESSING DP	INFORMATION ONLY		DP FINAL	11/06/2014	N/A
ADDRESS REVIEW DP	REVIEW		DP FINAL	04/29/2014	APPROVE
BOND ESTIMATE REVIEW DP	REVIEW	EWHT03	DP FINAL	04/29/2014	APPROVE
BOND/PERMIT PACKAGE REVIEW DP	REVIEW	HFABA1	PENDING		
BOS DP	REVIEW		PENDING		
CONSERVATION DEPOSIT ESTIMATE REVIEW DP	REVIEW	EWHT03	DP FINAL	04/30/2014	APPROVE
FIRE MARSHAL DP	REVIEW		DP FINAL	04/29/2008	APPROVE
FUTURE CONSTRUCTION ESTIMATE REVIEW DP	REVIEW	HFABA1	PENDING		
GEO TECH REVIEW DP	REVIEW		PENDING		
HEALTH DEPARTMENT DP	REVIEW		DP FINAL	09/02/2008	APPROVE
INSPECTION FEE DP	REVIEW	AFBANK	DP FINAL	08/22/2014	APPROVE
INSPECTION FEE DP	REVIEW	EWHT03	DP FINAL	04/30/2014	APPROVE
OSDS DECISION DP	REVIEW	MBAIC1	DP FINAL	10/30/2014	APPROVE
PRO DATA SHARE DP	REVIEW	EWHT03	DP FINAL	04/30/2014	APPROVE
PROFFER REVIEW DP	REVIEW		DP FINAL	07/29/2014	APPROVE
PROJECT APPROVAL DP	REVIEW	LCUNN1	DP FINAL	07/21/2014	REVIEW COMPLETE
SITE PERMITS PROCESSING DP	REVIEW		DISTRIBUTED	11/06/2014	
SITE REVIEW BR CHIEF DP	REVIEW	CMCLAU	DP FINAL	06/12/2014	APPROVE
SITE REVIEW DP	REVIEW	CMAVR2	DP FINAL	04/28/2014	APPROVE
SITE REVIEW DP	REVIEW	CMAVR2	DP FINAL	06/30/2014	APPROVE
STORM WATER MANAGEMENT BR CH DP	REVIEW		PENDING		
STORM WATER MANAGEMENT DP	REVIEW	ASANT2	PENDING		
STREET LIGHTS DP	REVIEW	LDATCH	DP FINAL	01/02/2008	APPROVE
URBAN FORESTRY DP	REVIEW	CHERWI	DP FINAL	01/02/2008	APPROVE
VEDOT DISTRICT REVIEW DP	REVIEW		DP FINAL	03/03/2008	APPROVE
WA FAIRFAX WATER DP	REVIEW		DP FINAL	01/02/2008	APPROVE
WASTEWATER PLANNING AND MONITORING DIVISION	REVIEW	RCHLT	DP FINAL	04/29/2014	REVIEW NOT REQD

Life Cycle Status:

LCS	Date Achieved
PROJECT COMPLETED	06/30/2018
REVISED	01/27/2016
REVISED	06/06/2015
REVISED	02/27/2015
APPROVED	11/07/2014
DISTRIBUTED TO BONDING	07/03/2014
DISTRIBUTED	04/28/2014
ACCEPTED	04/28/2014
SUBMITTED	04/28/2014
RECEIVED	04/28/2014

DRANESVILLE Approved Plans from 1/1/2017 to 12/31/2017: SP P

Plan Index	Plan Number	Plan Description	Plan Map
1	000481-SP-002-2	MOUNT DANIEL ELEMENTARY SCHOOL (DR)	ZOOM
2	000525-SP-001-2	LANGLEY HIGH SCHOOL - RENOVATION & ADDITION (DR)	ZOOM
3	001504-SP-006-2	ARROWBROOK CENTRE LANDBAYS B1 & C1 (DR)	ZOOM
4	003778-SP-003-2	FLEETWOOD RESIDENTIAL (DR)	ZOOM
5	005158-SP-008-2	MADEIRA SCHOOL OVAL RENOVATION (DR)	ZOOM
6	005518-SP-041-2	WOODLAND PARK WEST TOWNS AND CONDOMINIUMS (DR)	ZOOM
7	005860-SP-002-3	FCLEY/WALKER ROAD (DR)	ZOOM
8	006848-SP-013-2	DULLES STATION PARCEL 5A	ZOOM
9	021868-SP-001-2	TD BANK - 9901 GEORGETOWN PIKE (DR)	ZOOM
10	025205-SP-001-2	HAYCOCK ELEMENTARY SCHOOL (DR)	ZOOM
11	025351-SP-001-2	HERNDON HIGH SCHOOL (DR)	ZOOM
12	025370-SP-001-2	DOPEYES AT LEESBURG (DR)	ZOOM



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DRANESVILLE Approved Plans from 1/1/2017 to 12/31/2017: SD

Plan Index	Plan Number	Plan Description	Plan Map
1	001089-SD -001-2	AULAKH SUBDIVISION (DR)	ZOOM
2	001237-SD -001-2	MEHR FARMS (DR)	ZOOM
3	001809-SD -002-2	JAMES A THOMPSON PROPERTY (DR)	ZOOM
4	004344-SD -002-1	MID PIKE - 7150 PENGUIN PLACE LOT 15 (DR)	ZOOM
5	004605-SD -001-2	OSBORNE PROPERTY (DR)	ZOOM
6	005024-SD -001-2	1039 SPRINGVALE ROAD (DR)	ZOOM
7	005863-SD -001-1	1101 CHAIN BRIDGE ROAD (DR)	ZOOM
8	007339-SD -003-3	MARKELL PROPERTY (DR)	ZOOM
9	008868-SD -001-2	BULL NECK (DR)	ZOOM
10	00976-SD -002-2	FRANKLIN PARK BLOCK 5 LOTS 57A & 58E (DR)	ZOOM
11	025427-SD -001-2	SUMMER HILL PROPERTY	ZOOM
12	025856-SD -001-2	RIVERMONT (DR)	ZOOM

