

1745 North Avenue, Commercial Twp, NJ

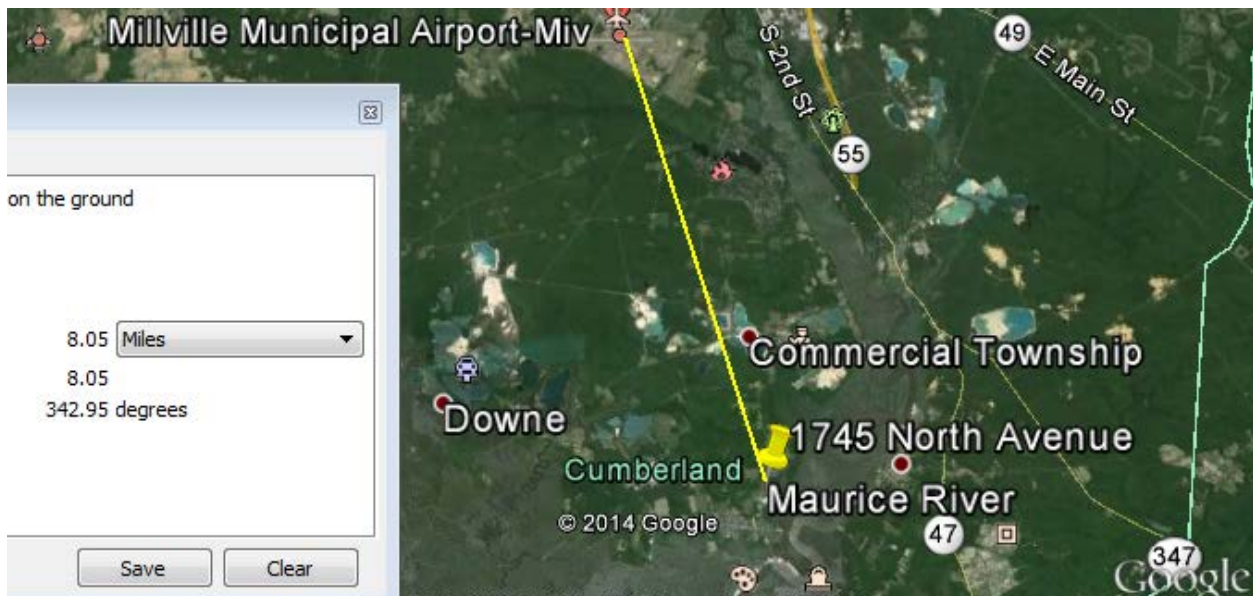
HUD Noise Screening Analysis

The project does not involve new stationary noise sources and the effect of a single-family residence on mobile source noise generation is negligible. The project would generate noise temporarily during construction, but no significant construction noise impacts are anticipated because of the scale and type of construction involved.

The following sections assess the existing noise exposure of the project site for comparison to the HUD criterion for outdoor noise at residential buildings. The analysis is consistent with 24 CFR Part 51 and the HUD Noise Guidebook.

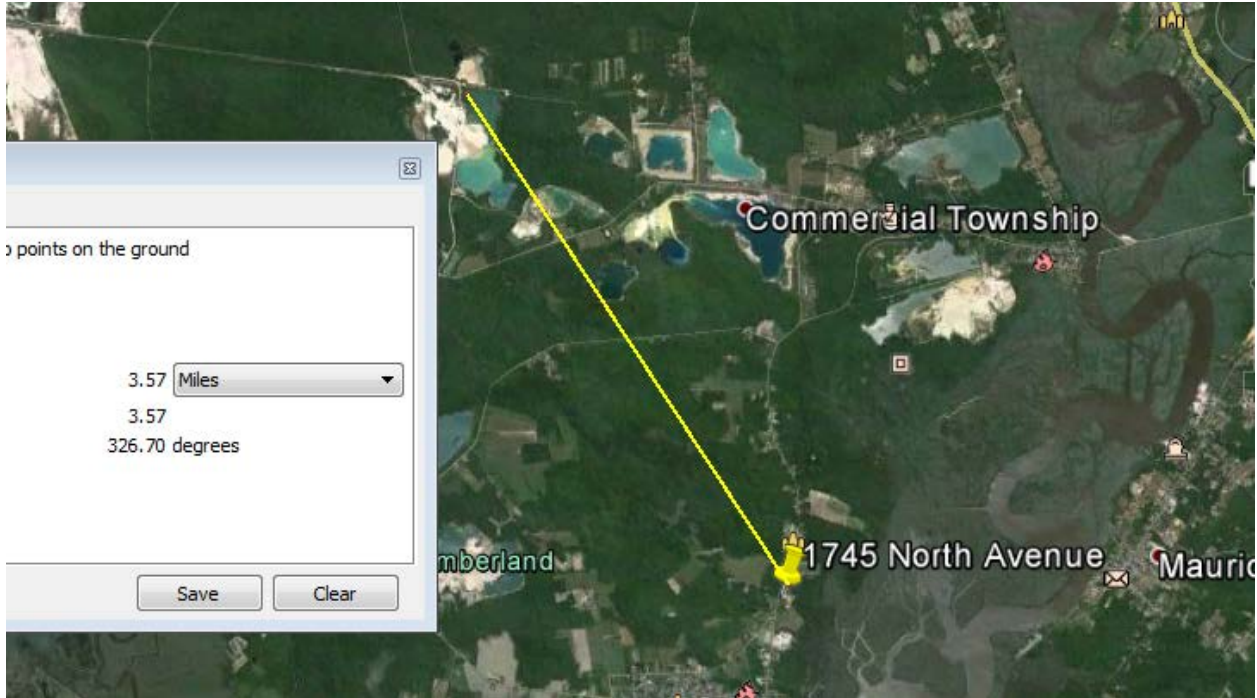
Airports

There are no major commercial airports in the vicinity of the project site. The nearest airport is the Millville Municipal Airport, which is approximately 8 miles from the site. Based on the distance and limited operations typical of municipal airports, further airport noise analysis is not warranted.



Railroads

There is an inactive railroad to the west of the project site. The nearest potentially active freight rail line (Conrail) is located over three miles to the northwest. Therefore, rail operations would not contribute to total sound levels at the site and no railroad noise analysis is necessary.



Roadway Traffic

NJDOT traffic counts for a location on North Avenue south of the project site were available. The traffic data and assumptions are summarized in Table 1.

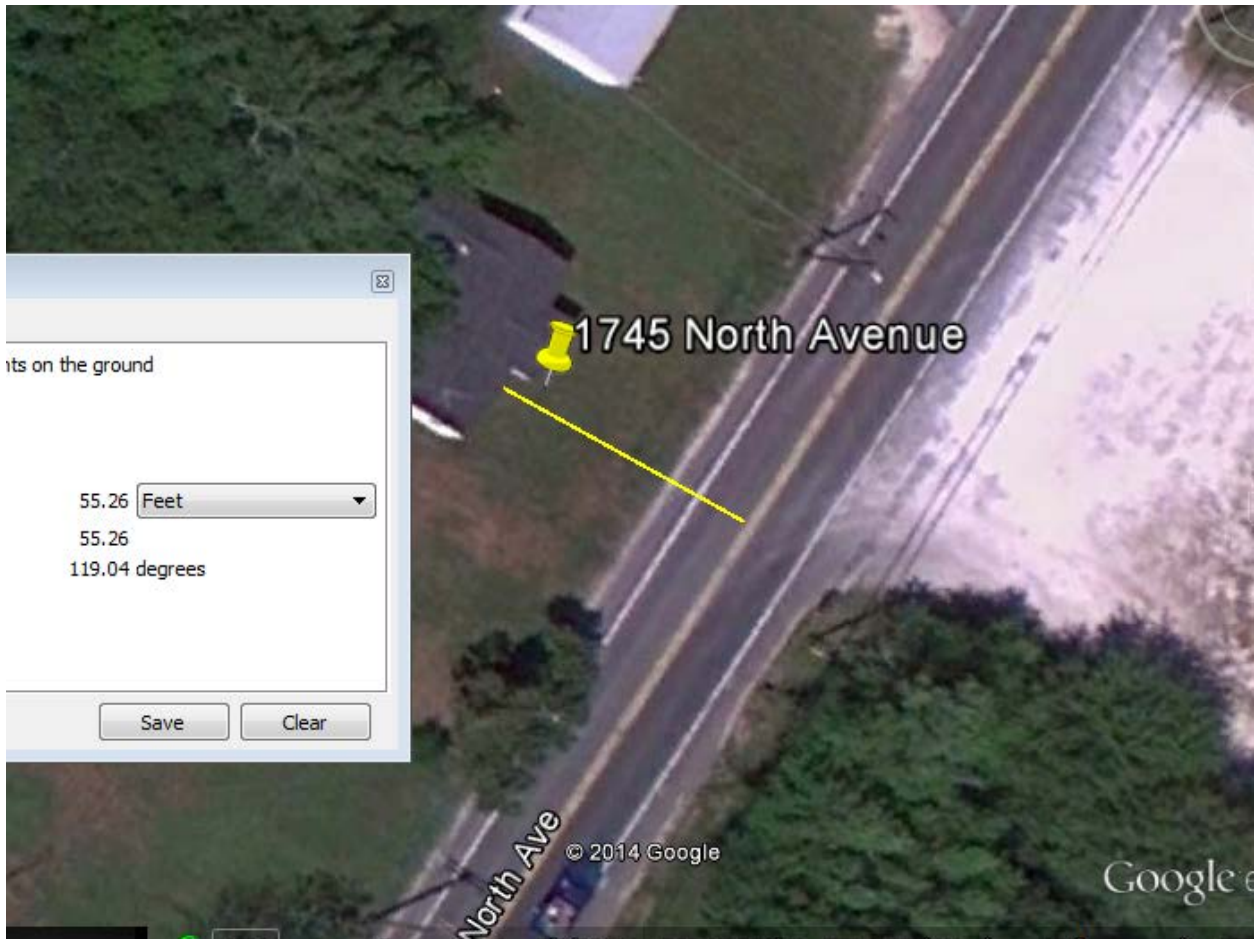
Table 1: Traffic Data

Roadway	Effective Distance (feet)	AADT	Functional Class	Percent Auto	Percent Med Truck	Percent Heavy Truck
North Avenue	55	1,649	Rural Minor Arterial	96.3	2.87	0.83

Sources:

AADT from http://www.state.nj.us/transportation/refdata/roadway/traffic_counts/TMS2Go/reports/8-6-121%20on%2006-29-2010_09_20_2010.pdf

Vehicle classification based on average by functional class for count region 4, see <http://www.state.nj.us/transportation/refdata/roadway/pdf/TravelActivityVehTypeByRegion.pdf>



The figure below shows the input and output from HUD’s “Site DNL Calculator” for the traffic noise analysis for the proposed residence. The traffic noise was predicted to result in a DNL of 59.6 dBA, which within the “acceptable” range per the HUD noise criteria.

Road #1			
Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	55	55	55
Distance to Stop Sign			
Average Speed	45	45	45
Average Daily Trips (ADT)	1588	47	14
Night Fraction of ADT	15	15	15
Road Gradient (%)			0
Vehicle DNL	57.878	42.5905	54.166
Calculate Road #1 DNL	59.5593	Reset	

Mitigation

As discussed above, the noise screening analysis shows the 65 DNL criterion for acceptable noise would not be exceeded at the project site. Therefore, no significant impacts would occur and no mitigation is required.

New Jersey Department of Transportation

Daily Volume from 06/29/2010 through 07/01/2010

Site Names: 8-6-121, , North Avenue-0.53, 06000649__, COMMERCIAL TWP.
 County: CUMBERLAND
 Funct. Rural Minor Arterial
 Location: Bet Yock Wock Road and Taylor Avenue

Seasonal Factor Type: 3 Rural Other Roadways
 Daily Factor Type: 3 Rural Other Roadways
 Axle Factor Type: 6
 Growth Factor Type: 3 Rural Other Roadways

	06/27/2010			06/28/2010			06/29/2010			06/30/2010			07/01/2010			07/02/2010			07/03/2010		
	ROAD	S	N	ROAD	S	N	ROAD	S	N	ROAD	S	N	ROAD	S	N	ROAD	S	N	ROAD	S	N
00:00										12	10	2	7	5	2						
01:00										7	1	6	7	3	4						
02:00										12	7	5	10	4	6						
03:00										7	2	5	10	6	4						
04:00										17	7	10	26	10	16						
05:00										46	18	28	42	20	22						
06:00										73	28	45	66	21	45						
07:00										114	54	60	105	47	58						
08:00										94	39	55	120	57	63						
09:00										102	46	56	110	46	64						
10:00										137	65	72	119	61	58						
11:00										116	53	63	85	33	52						
12:00							106	47	59	122	59	63									
13:00							121	55	66	133	56	77									
14:00							118	50	68	119	59	60									
15:00							129	64	65	144	60	84									
16:00							122	53	69	133	56	77									
17:00							134	60	74	123	61	62									
18:00							108	70	38	116	54	62									
19:00							93	44	49	60	33	27									
20:00							69	30	39	69	32	37									
21:00							90	35	55	67	34	33									
22:00							25	13	12	44	21	23									
23:00							22	16	6	33	18	15									
Volume							1,137	537	600	1,900	873	1,027	707	313	394						
AM Peak Vol										137	65	72	126	63	70						
AM Peak Fct										0.84	0.81	0.82	0.90	0.72	0.83						
AM Peak Hr										10:00	10:00	10:00	7:30	7:45	9:15						
PM Peak Vol							140	73	78	157	73	93									
PM Peak Fct							0.80	0.83	0.78	0.84	0.83	0.73									
PM Peak Hr							15:30	18:15	16:15	15:15	12:30	15:15									
Seasonal Fct							0.925	0.925	0.925	0.925	0.925	0.925	0.916	0.916	0.916						
Daily Fct							1.001	1.001	1.001	0.990	0.990	0.990	0.962	0.962	0.962						
Axle Fct							0.483	0.483	0.483	0.483	0.483	0.483	0.482	0.482	0.482						
Pulse Fct							2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000						