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HAMBURG CROSSINGS
HAMBURG, NEW YORK

WAREHOUSE FACILITY
NOISE ASSESSMENT

Prepared For:

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1.0 Introduction

Benderson Development Company, LLC proposes to construct a warehouse facility on property at 5220 Camp Road in the Town of Hamburg, NY, located west of Camp Road, south of Southwestern Boulevard, north of the New York State Thruway, and east of Creekview Drive. The property is currently vacant and formerly contained a recreational bowling facility and a hotel.

The current noise assessment evaluates the potential noise generated by the projected sound sources operating at the planned warehouse facilities, and evaluates acceptability in comparison to the current community background noise environment.

The planned warehouse property is commercially zoned (C2) in the Town of Hamburg. The property adjoins several businesses contained within commercially zoned property on the west side of Camp Road, including car rental, sales, and repair facilities, exercise facilities, and restaurants. Other adjoining businesses located on the south side of Southwestern Boulevard contained within the commercially zoned property include automotive and small engine repair shops, and a county water facility.

The project site adjoins business properties on the south side of Southwestern Boulevard contained in manufacturing zoning (M2), including a commercial bus garage, storage facilities, a warehouse, an industrial facility, and small retail businesses.

The project site adjoins hotels, a restaurant, and other businesses located in commercially zoned property along Commerce Place to the south. Additional commercial properties are located east of the project site on the east side of Camp Road, including auto sales and repair facilities, restaurants, and a hotel. Additional commercial operations are located on town property on the south side of the New York State Thruway, including several hotels.

The warehouse property adjoins wooded and residentially developed properties contained in residential zoning (R2) along the west boundary of the property. Since the 2007 study, the number of residences on western properties has been increasing. Other residentially zoned (R1B, R2, R3, PUD) properties are located opposite the south side of the facility to the south of the Thruway in the Village of Hamburg.

Zoning maps for the Town of Hamburg and the Village of Hamburg are shown in the following figures.

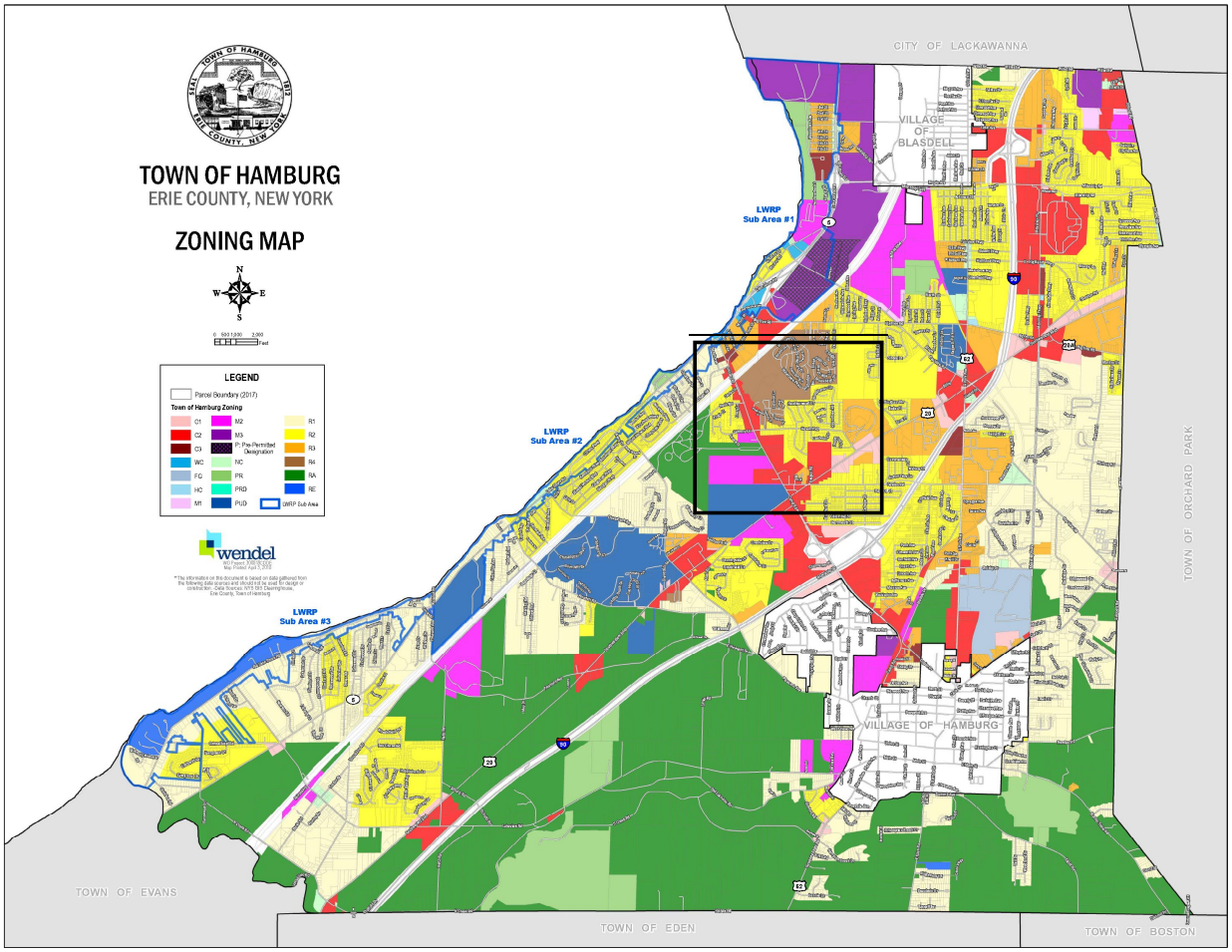

Figure 1 Town of Hamburg Zoning Map
with Project Site Outlined

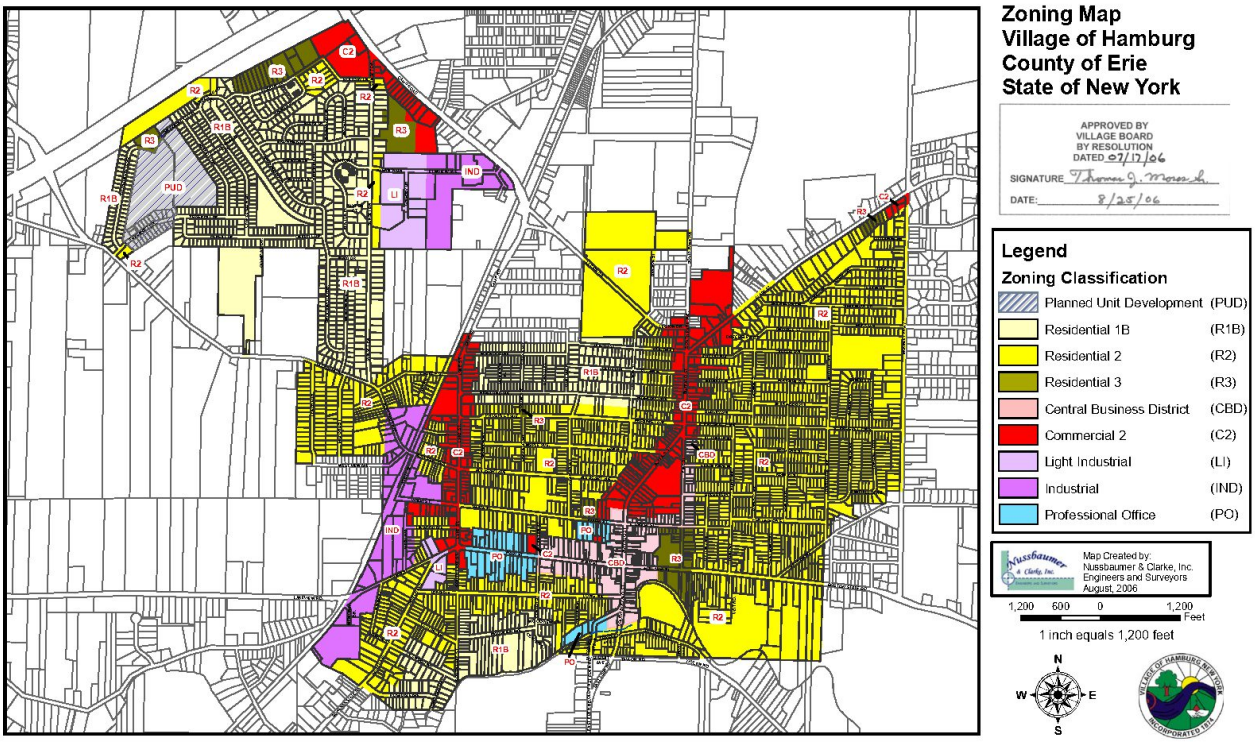

Figure 2 Village of Hamburg Zoning Map

The planned warehouse facility includes four warehouse buildings located at the north end of the property and one warehouse building at the south end of the property. The proposed facility layout is shown in Figure 3. The planned north buildings range in size from 108,000 to 140,000 square feet. The planned south building has an approximate size of 351,500 square feet. The docks for the north buildings are proposed to be located in the concourse between the buildings. The building layout will provide screening of dock operations, truck startups, and truck movements between the docks and the site access roads from the nearest residences to the east and west of the facility. The docks for the south building are proposed to be located on the south side of the building along the Thruway. The building layout will similarly provide screening of truck traffic and dock operations from the nearest residences.

Vehicle access to the facility is proposed to be from a planned site road to be constructed at the north edge of the property that will intersect with Camp Road, and from a constructed site road that would connect to the current west end of Commerce Place at the south edge of the property.

Employee traffic is planned to access the facility from the two site access roads. Employee parking lots are located along the west side of the northern warehouse grouping and on the north side of the southern building.

Each warehouse building is expected to include a number of rooftop ventilation equipment to serve office areas. The equipment was represented to be located at one corner of each building above expected main office areas. Other mechanical equipment components such as dock unit heaters were assumed to be located inside the buildings.

The warehouse facility is planned to be separated from adjoining residential properties to the west by existing wooded areas. The vegetation is expected to provide a degree of visual and noise screening of facility activities.

The warehouse noise assessments represented noise emissions from the potential sources of sound at the facility, consisting of truck traffic and dock operations, employee vehicle traffic, and building rooftop ventilation equipment. The warehouse noise emissions were assessed in characteristic daytime and nighttime periods representing estimated truck volumes and employee vehicle traffic volumes, with simultaneous operations of typical rooftop ventilation equipment on each building. The selections and layouts of potential facility sound sources were developed in the noise model using the proposed facility plans and referencing designs and operations of other warehouse facilities.

The warehouse noise assessments evaluated the sound levels received at the boundaries of the facility and at locations in the community from background traffic, from component facility sound sources, and from the combination of facility sound sources with future background roadway traffic that includes added truck and employee traffic on Camp Road. The acceptability of the received sound levels from the warehouse facility sources was determined referencing measurements and predictions of existing background noise levels generated by traffic and other ambient sources, which were identified in several characteristic time periods.

Previous proposals were prepared to develop the property with a mixture of commercial retail, hotel, and restaurant facilities. Assessments of noise from the retail-hotel project were evaluated in a noise study performed in the year 2007. The study assessed the sound levels received at project boundaries and at community locations from retail-hotel traffic and from building ventilation equipment. The study characterized the community background noise levels based on sound level measurements and traffic noise modeling, and developed noise acceptability criteria based on the relative sound level increases.

The 2007 noise assessment determined that background noise from Thruway traffic and traffic on local roadways dominated the noise environment, and that in comparison the retail-hotel project would not generate significant noise level increases. Since the 2007 retail facility noise study, the entrance ramp to the Thruway from Camp Road was changed from an elevated circular ramp and bridge to an at-grade signalized interchange. The volumes of traffic on the Thruway due to growth and the volumes and patterns of traffic on local roads around the project site have as result changed since the 2007 retail study.

Accordingly, the community background traffic noise levels were characterized in a recent series of background sound surveys and modeling estimates representing contemporary traffic volumes, as means to develop current noise acceptability criteria for the planned warehouse project.

The current environmental background noise levels received on the project site boundaries and in the community around the site were similarly found to be dominated by traffic on the New York State Thruway and on local roadways adjoining the property.

The background noise levels were continuously recorded over a period of several days in December 2021 at a location on the western boundary of the facility adjacent to the closest residential community. The findings of noise level logging on the western boundary are summarized in Appendix A.

The background noise levels were further sampled in several time periods at the closest location on the western boundary of the project site and at representative locations in the community around the facility. The findings of sampling surveys are summarized in Appendix B in the form of time history graphs and levels tables by location and by time period.

The current environmental background noise levels on the project site boundaries and in the community around the site were similarly found to be dominated by traffic on the New York State Thruway and on local roadways adjoining the property.

The current and future background noise levels at each receptor location were further characterized by acoustical modeling using the CADNA/A environmental noise assessment program. Inputs to the model included published roadway traffic volume counts and projections for the adjoining Thruway segment, entrance ramp, and local roadways. The modeling program was used to generate graphical noise contours representing the component and combined sources at the facility. The contours were used to identify the average sound levels received at the characteristic sound survey locations and at othr representative community receptor locations. The modeled noise contours and summary levels tables are included in Appendix C.

2.0 Background and Warehouse Facility Noise Assessment Summary

The current community background noise levels around the proposed project site were determined to be highly influenced by sounds of traffic on the New York State Thruway, Camp Road, Southwestern Boulevard, and the entrance ramp to the Thruway. Further background sound sources include passbys of vehicles on local side streets, operations at surrounding industrial and commercial facilities, and occasional airplane over flights and train horns.

Background sound surveys

Background traffic sound levels were continuously logged at the western boundary of the project site over the period from Tuesday morning on December 7 to Friday morning on December 10, 2021.

The background sound levels were logged at the western boundary using a Metrosonics model db3080 sound level analyzer, which conforms to ANSI S1.4-1983 standard requirements for a Type 2 sound level analyzer. The instrument was programmed to measure the minimum, average, and maximum sound levels with slow time response in five-minute time history periods. The logger was calibrated at the start and end of the logging period with a Metrosonics model cl304 acoustical calibrator. The analyzer was installed in a weatherproof enclosure, with the logger microphone fitted with a weatherproofed windscreen.

The results of sampling surveys are summarized in Appendix A. The time-history graph describes the measured A-weighted equivalent-average sound levels by 5-minute intervals ($L_{eq\text{-}5min}$) and computed A-weighted one-hour average sound levels ($L_{eq\text{-}1hour}$), compared to the daytime and nighttime average sound levels in each time period. The tabular data include the measured A-weighted statistical minimum sound level (L_{99}), the equivalent-average sound levels ($L_{eq\text{-}5min}$), the statistical ten-percent exceedance levels (L_{10}), and the maximum sound levels (Lmax) for each five-minute period, and the computed hourly-average sound levels ($L_{eq\text{-}1hour}$), measured with slow time response.

In the daytime period from 7:00 a.m. to 5:00 p.m. the overall average background sound levels determined by logging ranged from 46 dBA to 59 dBA on each day at the boundary. During the afternoon period from 4:00 p.m. to 7:00 p.m. the average background sound levels for each day ranged from 60 dBA to 63 dBA.

The overall average noise level associated with logging in the business daytime period from 7:00 a.m. to 5:00 p.m. was 52.1 dBA, and for the extended daytime period from 7:00 a.m. to 11:00 p.m. was 52.4 dBA, averaged from the three day logging period.

The hourly-average sound level associated with the morning period from 7:00 a.m. to 8:00 a.m. was 50.8 dBA. The hourly-average sound level associated with the afternoon period from 4:00 p.m. to 5:00 p.m. was 54.8 dBA. The hourly-average sound level associated with the nighttime period from 2:00 a.m. to 3:00 a.m. was 51.1 dBA.

During the nighttime, the hourly-average background noise levels at the western boundary ranged from 45 dBA to 58 dBA. A limited number of nighttime hourly-average records extended to 59 dBA to 66 dBA that are attributed to passbys of noisy vehicles or other environmental sources. The average background sound levels averaged for the hours from 11:00 p.m. to 7:00 a.m. were 47.6 dBA in the period from Tuesday to Wednesday, 52.8 dBA in the period from Wednesday to Thursday, and 56.7 dBA in the period from Thursday to Friday. The overall average nighttime background sound level from logging over the three nights was 52.4 dBA.

Background sound levels were further sampled in three morning periods, two afternoon periods, and two nighttime periods. Sampling surveys were obtained on the project site western boundary, at two locations on Creekview Drive, and at a location on Sycamore Lane to represent the nearest town residential communities to the west. Sampling surveys were also obtained opposite the nearest residence on Dartmouth Street east of Camp Road to represent the town residential community and businesses east and north of the project site, and at a location on Commerce Place to represent lodging hotels and businesses south of the project site. Sampling surveys were additionally obtained at two locations south of the Thruway representing village residential properties along Holiday Lane and Brookwood Drive.

The results of sampling surveys are summarized in Table B1 of Appendix B. The data include the measured A-weighted minimum (L_{min}), equivalent-average (L_{eq}), and maximum (Lmax) sound levels measured with slow time response.

The sampled sound levels were obtained with a Larson Davis model 831 sound level analyzer, which conforms to requirements specified in standard ANSI S1.4-2014/IEC 61672-1:2013 (R2019) for a Class 1 sound level analyzer. The sound level analyzer was operated at locations along the right of way of the public roadways opposite the residential and commercial properties and at the location on the western boundary. The background sound levels were sampled for a portion of an hour at each location using one-second time intervals. The analyzer was operated on a tripod, with the microphone fitted with a windscreen. The analyzer was calibrated before and after each measurement with a CEL model 284/2 acoustical calibrator.

During the survey period from December 7 to December 10, 2021 the average temperatures ranged from 27°F to 43°F. The average wind speeds ranged from 6.4 mph to 10.2 mph on each day. Winds did not

significantly affect the measurements compared to the dominant levels of background traffic noise. Artifacts caused in the logging records by the surveyor during instrument installation at the start and end of logging are noted in the records and are excluded from evaluations of hourly-average sound levels. Weather data for the survey period are summarized in Appendix D.

Modeled existing background traffic noise levels

The existing background noise levels received at the western boundary from current roadway traffic were modeled to average 55.5 dBA in the morning peak period, 56.6 dBA in the afternoon peak period, and 45.8 dBA in the nighttime minimum period. The background noise levels were modeled using NYSDOT traffic counts from February 2017 for the Thruway and from July 2019 and May 2020 for Southwestern Boulevard and Camp Road, respectively. The roadway traffic was represented using counts for the daytime hours from 7:00 a.m. to 8:00 a.m. and from 4:00 p.m. to 5:00 pm., and for the nighttime hour from 2:00 a.m. to 3:00 a.m. The modeled daytime background sound levels were relatively consistent with the measured background sound levels. The predicted daytime background sound levels were typically 0 to 3 dBA higher than the measured background sound levels. In a few measurements the modeled levels were slightly higher, which were attributed to currently lower daytime traffic volumes and higher nighttime volumes than the published counts, associated with seasonal factors or other traffic pattern factors. In a few measurements the average background sound levels were higher than the predicted average background sound levels, which were attributed to passbys of local vehicles during a measurement. The modeled traffic values were therefore concluded to be consistent and representative of the average background traffic noise environment at each evaluated representative receptor location.

Assessed component sound levels of warehouse truck traffic

The assessments of warehouse truck traffic moving on the two facility access roads and operating on the concourse between the buildings were based on sound level measurements of truck traffic at a comparable warehouse facility. The source sound level associated with truck traffic was determined from a maximum measured sound level of 74.3 dBA from passbys of tractor trailers moving slowly on the concourse and on roadways at reference distances of 50 feet. The warehouse truck traffic was represented in the model as point sources moving on road segments at speeds of 20 mph, at an hourly rate associated with each main access road and divided among the building to each bay door.

For the estimated daytime hourly rate of 52 trucks divided among the two entrances and among the warehouse bay doors, the noise assessment predicts the daytime hourly-average sound levels received at the western boundary of the facility to be 33.8 dBA. For the estimated nighttime hourly rate of 5 trucks, the predicted nighttime hourly-average sound level at the western boundary is 23.6 dBA. The daytime truck sound levels are therefore 21 to 22 dBA lower than the modeled existing daytime background

sound levels. The nighttime truck sound levels are similarly 21 dBA lower than the modeled existing nighttime background sound levels.

Assessed component sound levels of employee vehicle traffic

The assessments of employee vehicle traffic moving on the two facility access roads and operating on perimeter parking lots around the buildings were based on measurements of passenger vehicle passbys at a comparable warehouse facility, measured at a reference distance of 50 feet. The vehicles were represented as point sources moving on road segments at speeds of 20 mph, at hourly rates representing shift change, with the measured maximum sound level of 69.8 dBA. Two hourly vehicle volumes were evaluated to characterize potential ranges of employment.

The noise assessment predicts the hourly-average sound levels received at the western boundary from employee vehicle traffic to be 49.4 dBA from 200 vehicles during a shift change (Scenarios A), and 46.4 dBA from 100 vehicles (Scenario B). For an estimated volume of 50 total vehicles divided between the two entrances, which might represent off-shift nighttime employee traffic, the noise assessment predicts an hourly average sound level of 43.4 dBA. The modeled daytime hourly-average sound levels from employee vehicle traffic are accordingly 5 to 9 dBA lower than the modeled existing daytime background roadway traffic sound levels. The modeled nighttime hourly-average sound levels from employee vehicle traffic are 1.3 dBA lower than the lowest modeled nighttime existing background sound levels.

Assessed component sound levels of warehouse rooftop ventilation equipment

The assessments of noise from warehouse building rooftop ventilation equipment represent installations of five office air handling units, operating simultaneously. Each source was characterized with a sound power level of 81.6 dBA, referenced from manufacturer data for the Trane model SAHF 20-ton packaged unit operating at 7000 CFM used to represent a typical warehouse office installation.

The noise assessment predicts the average sound levels received at the western boundary from the combined rooftop ventilation equipment operating alone to be 27.6 dBA, which is 27 to 28 dBA lower than the modeled existing daytime background sound levels, and 17 dBA lower than the modeled existing nighttime background sound levels.

Assessed sound levels of combined facility sources

The noise assessment predicts combined daytime warehouse truck traffic, daytime employee vehicles, and rooftop ventilation equipment will produce an hourly-average sound level of 49.6 dBA at the nearest receiver location on the western boundary, excluding background roadway traffic, based on an hourly estimate of 52 trucks and 200 employee vehicles during a shift change (Scenarios A).

The noise assessment predicts combined daytime warehouse operations will produce an hourly-average sound level of 47.6 dBA at the western boundary, excluding background roadway traffic, based on an hourly estimate of 52 trucks and 100 employee vehicles during a shift change (Scenario B).

The noise assessment predicts nighttime warehouse operations will produce an hourly-average sound level of 43.6 dBA at the western boundary, excluding background roadway traffic, based on an hourly estimate of 5 trucks and 50 employee vehicles in the nighttime.

The predicted sound levels from combined daytime facility truck and employee vehicle sound sources during shift change are 5 to 9 dBA lower than the modeled daytime background traffic sound levels of 54.7 dBA (morning peak) and 55.7 dBA (afternoon peak). The predicted sound level from combined nighttime facility truck and vehicle sound sources is 1.1 dBA lower than the modeled minimum nighttime background traffic sound level of 44.7 dBA.

The warehouse facility noise assessment predicts the sound levels from combined facility sources with future background traffic noise to average 55.9 dBA at the western boundary location in the evaluated morning period and 56.7 dBA in the evaluated afternoon period with the higher estimated volume of employee traffic (Scenario A), and 47.2 dBA in the represented nighttime period. The predicted noise level increase above background noise levels is therefore predicted to be limited to a maximum of 1.2 dBA in the daytime operating hours and 2.6 dBA in the nighttime during the lowest traffic period. The estimated increases in background sound levels in each period are relatively insignificant to minor and will not be perceptible based on reference noise assessment criteria.

Modeling parameters and summary assessment findings

The ISO 9613-2 standard calculation procedures used in the modeling assessments apply environmental sound propagation factors to account for sound attenuation due to spreading loss over increasing distance, atmospheric sound absorption, meteorological factors, and screening from terrain, vegetation, and building objects, and sound increases due to reflections from solid ground and vertical surfaces.

The modeling parameters represented all warehouse building faces to be entirely sound reflective with reflection loss of 0 dB, all parking area and roadway surfaces to be fully sound reflective (G=0), and other surrounding porous ground surfaces to be sound absorptive (G=1). The parameters included foliage sound attenuation from buffer areas of trees and vegetation at the attenuation rate of 0.06 dB per meter depth. Standard meteorological conditions were set to a temperature of 10°C, relative humidity of 70%, and downwind propagation to each receiver at the speed of 3 m/s. The modeling program was configured to calculate the received sound level contours received at a standard 1.5m receiver height.

The facility truck traffic sources and employee vehicle traffic sources were represented using maximum measured sound levels in component octave-band frequencies obtained from field measurements at a warehouse facility. The building rooftop mechanical equipment were represented using sound levels in component octave-band frequencies obtained from equipment manufacturer published data.

The property parcel containing the former Thruway access ramp along the east side of the warehouse property is currently undeveloped. The parcel includes the former access ramp berm.

The facility and background noise contour figures are detailed in Appendix C. The following Table 1 summarizes the background traffic noise levels extracted from the contours, which are predicted to be received at the western boundary of the project site adjacent to the nearest residential community (Location 1). The summary table includes the modeled sound levels from the component warehouse facility sources, the modeled sound levels from the combined warehouse facility sources, and the modeled sound levels from the combined facility sound sources along with the modeled background traffic noise levels at the represented receptor location. The table data summarizes the maximum expected sound level differences between the modeled background sound levels and the modeled combined facility sources, as 1.2 dBA in the morning peak period, 1.0 dBA in the afternoon peak period, and 2.5 dBA in the nighttime minium background traffic period.

Table 1 Summary of Modeled Average Sound Levels Received at Western Boundary, dBA			
Component or Combined Sound Sources	**Morning 7:00-8:00 a.m.**	**Afternoon 4:00-5:00 p.m.**	**Nighttime 2:00-3:00 a.m.**
Modeled background noise levels from roadway traffic based on NYSDOT traffic counts	54.6	55.7	44.7
Warehouse truck traffic (52 passbys a.m., 52 passbys p.m., 5 passbys night)	33.8	33.8	23.6
Employee vehicle daytime site traffic (daytime Scenario A: 200 passbys)	49.4	49.4	-
Employee vehicle daytime site traffic (daytime Scenario B: 100 passbys)	46.4	46.4	-
Employee vehicle nighttime site traffic (50 passbys)	-	-	43.4
Rooftop ventilation equipment components (full operations)	27.6	27.6	27.6
Combined daytime facility sources: 52 warehouse truck passbys, 200 employee vehicle passbys (Scenario A), rooftop equipment	49.6	49.6	-
Combined daytime facility sources: 52 warehouse truck passbys, 100 employee vehicle passbys (Scenario B), rooftop equipment	46.7	46.7	-
Combined nighttime facility sources: 5 warehouse truck passbys, 50 employee vehicle passbys, rooftop equipment	-	-	43.6
Combined daytime facility sources (Scenario A) added to modeled existing background traffic noise levels	55.8	56.7	47.2
Relative increase above modeled existing background traffic noise levels	1.2	1.0	2.5

3.0 Community Noise Criteria

Restrictions to generation of unreasonable community noise levels are described the noise codes of the Town of Hamburg and the Village of Hamburg.

Town of Hamburg

Relevant sections of the Code of the Town of Hamburg, NY Chapter 175 are excerpted below:

§ 175-1

Legislative intent.

By adoption of this chapter, the Town Board of the Town of Hamburg declares its intent to prohibit and/or regulate in a manner consistent with the health, welfare and safety of the citizens of this town breaches of the peace, improper assembly, unreasonably loud and disturbing noises, profane, vulgar and/or obscene language or conduct. Therefore, the Town Board, in the exercise of its police power vested in it under §130 of the Town Law of the State of New York, does hereby enact the following ordinance:

§ 175-2

Prohibitions.

A. The creation of any unnecessary and unreasonably loud or disturbing noise is prohibited as a public nuisance.
B. Noise of such character, intensity and duration as to be detrimental to the life, health or welfare of the inhabitants of the Town of Hamburg is prohibited as a public nuisance.
C. In particular, without excluding other types of prohibited sounds by failure to enumerate them, all sleep-disturbing noises are prohibited. Sleep-disturbing noises shall mean any unnecessary and unreasonably loud or disturbing sounds occurring during the hours between 11:00 p.m. and 7:00 a.m. and unreasonably interfering with the sleep, comfort, health and repose of any individual within hearing thereof or in the vicinity.

Village of Hamburg

Relevant sections of the Code of the Village of the Town of Hamburg, NY Chapter 164, which may aply to the project, are excerpted below:

Article I

§ 164-2

Purpose.

The purpose of this chapter is to preserve the public health, peace, welfare and good order by suppressing the making, creation or maintenance of excessive, unnecessary, unnatural or unusually loud noises which are prolonged, unusual and unnatural in their time, place and use and which are detrimental to the environment. It is also the purpose of this chapter to allow all residents of the village to coexist harmoniously in a manner which is mutually respectful of the interests, rights and obligations of all persons.

§ 164-3

Definitions.

Unless the context otherwise clearly indicates, the words and phrases used in this chapter are defined as follows:

DAYTIME HOURS

The hours between 7:00 a.m. and 11:00 p.m., local time, on any day.

EMERGENCY WORK.

Work made necessary to restore property to a safe condition following a public calamity or work necessary to protect persons or property from an imminent exposure to danger.

IMPULSIVE SOUND

A sound of short duration, usually less than one second, and of high intensity, with an abrupt onset and rapid decay.

MOTOR VEHICLES

Includes but is not limited to automobiles, trucks, buses, mopeds, minibikes and any other vehicles as defined by the Vehicle and Traffic Law of the State of New York, as it may be amended from time to time.

NIGHTTIME HOURS

The hours between 10:00 p.m., local time, on any day and 7:30 a.m. on the following day.

NOISE

A level of sound that is injurious or annoying or disturbing to be heard.

PERSON

Includes the singular and plural and also any individual; any property owner and/or lessee; any firm; a corporation; a political subdivision; a government agency, including any agency of the Village of Hamburg; an association or an organization, including but not limited to officers, directors, employees, agents and/or independent contractors thereof; or any legal entity whatsoever.

SOUND-AMPLIFYING EQUIPMENT

Any machine or device for the amplification of the human voice, instrumental music or any other sound. "Sound-amplifying equipment" shall not include standard automobile radios or tape recorders when used and heard only by the occupants of the vehicle in which such automobile radio or tape recorder is installed. As used in this chapter, "sound-amplifying equipment" shall not include warning devices on authorized emergency vehicles or horns or other warning devices on any vehicle used only for traffic safety purposes or authorized fire horns or other authorized emergency alarms

§ 164-4

Unreasonable noise prohibited.

A. No person shall intentionally cause public inconvenience, annoyance or alarm or recklessly create a risk thereof by making unreasonable noise or by causing unreasonable noise to be made.
B. For the purpose of implementing and enforcing the standard set forth in Subsection A of this section, "unreasonable noise" shall mean any sound created or caused to be created by any person which either annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of the public or which causes injury to animal life or damage to property or business. Factors to be considered in

determining whether unreasonable noise exists in a given situation include but are not limited to any or all of the following:

(1) The intensity of the noise.
(2) Whether the nature of the noise is usual or unusual.
(3) Whether the origin of the noise is associated with nature or human-made activity.
(4) The intensity of the background noise, if any.
(5) The proximity of the noise to sleeping facilities.
(6) The nature and the zoning district of the area within which the noise emanates and of the area within 500 feet of the source of the sound.
(7) The time of the day or night the noise occurs.
(8) The time duration of the noise.
(9) Whether the sound source is temporary.
(10) Whether the noise is continuous or impulsive.
(11) The volume of the noise.
(12) The existence of complaints concerning the noise from persons living or working in different places or premises who are affected by the noise.

C. This section shall not be interpreted to prevent the issuance of permits pursuant to §164-14 that will authorize particular sound sources.

Article II Special Noise Sources

§ 164-5

Purpose of article.

The provisions of this Article II complement and supplement the other provisions of this chapter and shall be interpreted and applied in accordance with and in addition to and not in lieu of those other provisions. The provisions of this article shall not be interpreted to prevent the issuance of permits pursuant to § 164-14 that will authorize particular sound sources.

§ 164-6

Radios, television sets and similar sound-amplifying devices.

It shall be unlawful for any person anywhere in the village to use or to operate any radio or receiving set, musical instrument, phonograph, television set, any other machine or device for the producing or reproducing of sound or any other sound-amplifying equipment in a loud, annoying or offensive manner such that noise from the device interferes with the comfort, repose, health or safety of members of the public within any building or, outside of a building, at a distance of 25 feet or more from the source of such sound or interferes with the conversation of members of the public who are 25 feet or more from the source of such sound.

§ 164-9

Machinery.

It shall be unlawful for any person to operate or repair any machinery, motor vehicle, construction equipment or other equipment, pump, fan, air-conditioning apparatus or similar mechanical device or to engage in any commercial or industrial activity in any manner so as to create unreasonable noise as

defined in § 164-4 of this chapter. In making such determination with respect to the matters governed by this subsection, additional factors to be considered shall include:

A. The necessity of the work being done.

B. The ability of the creator of the noise to minimize or reduce the amount of noise created or to otherwise minimize its adverse effects.

§ 164-10

Construction during nighttime hours.

A. Except for the purposes specified in Subsection B, during nighttime hours it shall be unlawful for any person within a residential zone or within 500 feet of a residential zone to operate construction equipment (including but not limited to any pile driver, steam shovel, pneumatic hammer, derrick or steam or electric hoist) or perform any outside construction or repair work so as to create noise. Any designated official of the Village of Hamburg shall give a verbal warning that the violation exists and of the penalties that may result if the violation continues.

B. This section shall not be deemed to prohibit:

   (1) Work of an emergency nature.

   (2) Work of a domestic nature on buildings, structures or projects being undertaken by a person(s) residing in such premises; provided that, if any domestic power tool, including but not limited to mechanically powered saws, sanders, grinders and lawn and garden tools used outdoors, is operated during the nighttime hours, no person shall operate such machinery so as to cause noise within a residential building or across a residential real property boundary where such noise interferes with the comfort, repose, health or safety of members of the public within any building or, outside of a building, at 25 feet or more from the source of the sound.

§ 164-11

Applicability of article.

This article shall be applied in addition to § 164-4.

§ 164-12

Continuing noise.

It shall be unlawful for any person to make or continue or cause to be made or continued any loud, unnecessary or unusual noise or sound that shall continue for more than three cumulative minutes in any sixty-minute period and which shall exceed the permitted noise levels specified in this chapter. Any designated official of the Village of Hamburg may issue a verbal warning that the violation exists and of the penalties that may ensue

The Town of Hamburg noise code and the Village of Hamburg noise code do not specify permissible sound level limits or other objective means to identify levels of unreasonable noise. The acceptability of the sound levels predicted to be generated by the planned warehouse facility were accordingly evaluated based on potential perceptibility in relation to the existing background noise levels. The background noise levels are defined as sound levels generated by environmental and other surrounding sources that exclude the particular sound source under evaluation. The acceptability of a sound source can further be evaluated in terms of the character of the source, including frequency spectrum and temporal properties. Sounds from sources with characters similar to the background environment, such as traffic noise, will commonly be less perceptible.

The acceptability of the proposed warehouse operations was assessed referencing the noise assessment guidelines of the New York State Department of Environmental Conservation (NYSDEC). The NYSDEC defines practical noise assessment guidelines in Program Policy DEP-00-1 *Assessing and Mitigating Noise Impacts*, October 2001. The policy defines means to determine the reasonableness and acceptability of received noise levels in relation to the background noise levels and to recommended permissible sound level limits.

Relevant sections of the NYSDEC noise assessment guidelines which describe noise levels and noise character, permissible sound level limits, acceptable thresholds of level increase, and relative noise acceptability at points of reception, are excerpted below:

V. Procedure

B. Impact Assessment

1. Factors to Consider

Factors to consider in determining the impact of noise on humans, are as follows:

a. Evaluation of Sound Characteristics

(1) Ambient noise level - A noise can only intrude if it differs in character or SPL from the normal ambient sound. Most objective attempts to assess nuisance noise adopt the technique of comparing the noise with actual ambient sound levels or with some derived criterion.

(2) Future noise level - The ambient noise level plus the noise level from the new or proposed source.

(3) Increase In Sound Pressure Level - A significant factor in determining the annoyance of a noise is Sound Pressure Level (SPL). SPLs are measured in decibels.

(4) Sharp and Startling Noise - These high frequency and high intensity noises can be extremely annoying. When initially evaluating the effects of noise from an operation, pay particular attention to noises that can be particularly annoying. One such noise is the back-up beepers required to be used on machinery. They definitely catch one's attention as they were meant to do. Continual beeping by machinery can be mitigated(see Section V.C. Mitigation - Best Management Practices). Another impulse

noise source that can be very annoying is the exhaust from compressed air machinery. This exhaust is usually released in loud bursts. Compressed air exhaust can also be mitigated if it causes a noise problem by using readily available mufflers or specifically designed enclosures.

(5) Frequency and Tone - Frequency is the rate at which a sound source vibrates or makes the air vibrate. Frequency is measured in Hertz (Hz). Frequency can also be classified as high ("sharp"), low ("dull"), and moderate. Pure tones are rare in nature. Tonal sounds usually consist of pure tones at several frequencies. Pure tones and tonal sounds are discerned more readily by the human ear. Pure tones and tonal sounds are compensated for in sound studies by adding a calculated number of dB(A) to the measured sound pressure.

(6) Percentile of Sound Levels - Fluctuations of SPLs can be expressed as a percentile level designated as L(n) where a given decibel level is exceeded n % of the time. A designation of L(10) = 70 dBA means the measured SPLs exceeded 70 dBA 10% of the time. A designation of L(90) = 70 dBA means the measured SPLs were exceeded 90% of the time. L(90) is often used to designate the background noise level.

(7) Expression of Overall Sound - Part of the overall assessment of sound is the Equivalent Sound Level (Leq)which assigns a single value of sound level for a period of time in which varying levels of sound are experienced over that time period. The L eq value provides an indication of the effects of sound on people. It is also useful in establishing the ambient sound levels at a potential noise source.

In order to evaluate the above factors in the appropriate context, one must identify the following: 1) appropriate receptor locations for sound level calculation or measurement; 2) ambient sound levels and characteristics at these receptor locations; and 3) the sound pressure increase and characteristics of the sound that represents a significant noise effect at a receptor location.

b. Receptor Locations

Appropriate receptor locations may be either at the property line of the parcel on which the facility is located or at the location of use or inhabitance on adjacent property. The solid waste regulations require the measurements of sound levels beat the property line. The most conservative approach utilizes the property line. The property line should be the point of reference when adjacent land use is proximal to the property line. Reference points at other locations on adjacent properties can be chosen after determining that existing property usage between the property line and the reference point would not be impaired by noise, i.e., property uses are relatively remote from the property line. The location of the facility should be shown on a map in relation to each potential receptor. Any future expansion should be described in a narrative as well as depicted on a map. The map and narrative should also include the distance of the operation to each point of reception including the distance at the point in time when an expanding operation will be closest to the receptors.

c. Thresholds for Significant Sound Pressure Level (SPL) Increase.

The goal for any permitted operation should be to minimize increases in sound pressure

level above ambient levels at the chosen point of sound reception. Increases ranging from 0-3 dB should have no appreciable effect on receptors. Increases from 3-6 dB may have potential for adverse noise impact only in cases where the most sensitive of receptors are present. Sound pressure increases of more than 6 dB may require a closer analysis of impact potential depending on existing SPLs and the character of surrounding land use and receptors. SPL increases approaching 10 dB result in a perceived doubling of SPL. The perceived doubling of the SPL results from the fact that SPLs are measured on a logarithmic scale. An increase of 10 dB(A) deserves consideration of avoidance and mitigation measures in most cases. The above thresholds as indicators of impact potential should be viewed as guidelines subject to adjustment as appropriate for the specific circumstances one encounters. Establishing a maximum SPL at the point of reception can be an appropriate approach to addressing potential adverse noise impacts. Noise thresholds are established for solid waste management facilities in the Department's Solid Waste regulations, 6 NYCRR Part 360. Most humans find a sound level of 60 - 70 dB(A) as beginning to create a condition of significant noise effect (EPA 550/9-79-100,November 1978). In general, the EPA's "Protective Noise Levels" guidance found that ambient noise levels #55 dBA L(dn) was sufficient to protect public health and welfare and, in most cases, did not create an annoyance (EPA 550/9-79-100,November 1978). In non-industrial settings the SPL should probably not exceed ambient noise by more than 6 dB(A) at the receptor. An increase of 6 dB(A) may cause complaints. There may be occasions where an increase in SPLs of greater than 6 dB(A) might be acceptable. The addition of any noise source, in a non-industrial setting, should not raise the ambient noise level above a maximum of 65dB(A). This would be considered the "upper end" limit since 65 dB(A) allows for undisturbed speech at a distance of approximately three feet. Some outdoor activities can be conducted at a SPL of 65 dB(A). Still lower ambient noise levels may be necessary if there are sensitive receptors nearby. These goals can be attained by using the mitigative techniques outlined in this guidance. Ambient noise SPLs in industrial or commercial areas may exceed 65 dB(A) with a high end of approximately 79 dB(A) (EPA 550/9-79-100, November 1979). In these instances mitigative measures utilizing best management practices should be used in an effort to ensure that a facility's generated sound levels are at a minimum. The goal in an industrial/commercial area, where ambient SPLs are already at a high level, should be not to exceed the ambient SPL.

The assessments of acceptability of the sound levels predicted to be received from operations of the proposed warehouse facility accordingly are based on the definitions that sound level increases of 0 to 3 dBA above the background sound levels will be unnoticeable and have no appreciable effect on receptors. Sound level increases of 3 to 6 dBA may only be noticed by sensitive individuals. The maximum referenced limit for sound level increases in non-industrial settings is 6 dBA at the receptor.

The noise assessments additionally reference the stated permissible sound level limit for added facility noise in combination with existing background noise received in non-industrial areas that is 65 dBA. The assessments further reference the permissible sound level limit for commercial and industrial receiving areas where the guidelines state for instances the background levels exceed 65 dBA the goal for future noise is to not exceed the background level.

4.0 Community Noise Acceptability Conclusions

The noise assessments predict the hourly average sound levels produced by warehouse truck traffic on the facility roads and concourse will be 21 to 22 dBA lower at the nearest residential boundary than the modeled daytime background noise levels. The truck traffic sound levels will accordingly be imperceptible, and will not increase the existing background noise levels.

The assessments predict the hourly average sound levels produced by employee vehicle traffic on the facility roads and parking areas during a shift change will be 5 to 9 dBA lower at the nearest residential boundary than the morning and afternoon ambient noise levels, and 1.3 dBA lower than nighttime ambient sound levels. The vehicle sound levels will accordingly not be perceptible or may only be faintly noticeable, and will not significantly increase the existing background noise levels during a shift change.

The noise assessments predict the sound levels from warehouse rooftop ventilation equipment operating simultaneously in peak mode will be 27 to 28 dBA lower than the daytime ambient levels, and 17 dBA lower than the lowest nighttime ambient levels at the western boundary. The rooftop equipment will accordingly not be perceptible and will not increase the existing background noise levels. Any characteristic frequencies generated by the fan rotations are similarly not expected to be perceptible above the ambient noise levels.

The assessments predict the sound levels received from combined warehouse truck traffic, employee vehicle traffic, and rooftop mechanical sources will be 5 to 9 dBA lower than the background noise levels in morning and afternoon periods, and 1.3 dBA lower than the background traffic noise levels in the minimum nighttime traffic period.

The combination of facility sound sources with the existing background noise environment will not produce measurable noise level increases at the assessed receivers. As summarized in Table C1 of Appendix C, the added facility sources are predicted will produce sound level increases ranging from zero to 2.9 dBA at each of the surveyed and represented residential receptor locations. The predicted sound level increases at each location are below the 0-3 dBA range that should have no appreciable effect on a receiver, as supported by the NYSDEC noise assessment guidelines, and are therefore concluded will be imperceptible and acceptable. The facility sources are predicted to produce sound level increases of 4.2 to 5.7 dBA at the boundary with the commercial lodging facilities due to warehouse traffic on Commerce Place. The predicted sound level increases are below the 6 dBA sound level increase limit, as recommended by the NYSDEC noise assessment guidelines, and accordingly are expected to be acceptable.

The character of the noise produced by warehouse truck traffic and employee vehicle traffic will not significantly differ from the current background noise environment produced by Thruway traffic and local roadway traffic. The sound levels from building ventilation equipment are predicted will be significantly lower than the background noise levels, and accordingly the equipment noise character will not be perceptible.

At the western residential boundary, the highest modeled daytime hourly-average sound level received from combined warehouse facility sources during afternoon peak operations is 56.7 dBA, for estimated daytime warehouse truck traffic and the highest estimated employee traffic volume during a shift change. For the previous retail and hotel plan, the highest assessed daytime sound level was 56.4 dBA at the boundary. The warehouse project is therefore expected to produce sound levels that would be nearly identical to the previously proposed retail and hotel project.

At the western residential boundary, the modeled nighttime sound level received from warehouse operations in the quietest nighttime background noise period is 47.3 dBA, which represents estimated nighttime volumes of warehouse truck operations, nighttime volumes of employee traffic, and peak rooftop equipment operations. For the previous retail and hotel plan, the assessed nighttime sound level was 49.6 dBA. The warehouse project is therefore assessed to produce comparatively lower sound levels in the nighttime. Both the warehouse and retail projects were assessed to produce sound levels lower than the current background traffic sound levels, and both were assessed to not perceptibly increase the background noise levels.

It is further concluded from the facility noise assessments that both the component facility sources and the combined activities of the warehouse facility will not exceed the NYSDEC recommended received sound level limit of 65 dBA at each of the evaluated residential points of reception.

The noise modeling assessments evaluated the received sound levels from waste removal services at container locations represented in the concourse between the warehouse buildings. The assessments are based on a maximum sound level of 81.4 dBA measured opposite a waste container truck operation at a distance of 30 feet. The assessments determined the waste container services will not generate sound levels that exceed the background traffic noise levels at the surrounding receiver locations.

The noise assessments evaluated the received sound levels from snow removal equipment operating in paths on the site roads, employee parking lots, and truck concourse. The assessments are based on a maximum sound level of 81.4 dBA measured at 30 feet during passbys of a Clark Michigan 150C front end wheel loader, with engine rated approximately 250 HP. The assessments determined snow removal services performed during daytime hours will produce sound levels that do not exceed the daytime background noise levels at the residential receptor locations. Snow removal services performed during nighttime hours may produce sound levels that exceed the lowest predicted background traffic noise levels by up to 3 dBA at the western boundary and by up to 5 dBA at the southern boundary along the lodging facilities. The sounds of snow removal equipment and activities are not expected to be noticeable at the residential boundaries, and are expected to be imperceptible or not objectionable at the lodging facilities.

It is concluded from noise assessments of the planned warehouse facility at 5220 Camp Road that facility operations will conform to the requirements of the noise code of the Town of Hamburg, New York and the noise code of the Village of Hamburg, New York, and not produce unreasonable, annoying, or significantly perceptible noise, nor will sounds from warehouse operations exceed the referenced sound level limits, at boundaries of the warehouse project site and at points of reception in the community around the project site. The conclusions are based on noise assessment criteria contained in the noise policy of New York State Department of Environmental Conservation, including recommended permissible sound level limits, identified sound level increase thresholds for human perceptibility, and recommended limits to sound level increases.

Prepared by:

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APPENDIX A

Noise Level Logging

December 7 to December 10, 2021

AURORA ACOUSTICAL CONSULTANTS Inc.

SOUND TEST DATE December 7-10, 2021

SOUND LEVEL METER:

☐	Larson Davis 831	s/n 0001466	☐	Larson Davis 831	s/n 0001057
	½" mic 377B02	s/n 143898		½" mic 377B20	s/n 105288
	preamp PRM831	s/n 0141		preamp PRM831	s/n 10126
	preamp CEL 495	s/n 108368		preamp CEL 495	s/n 058195
☐	Rion SA-77	s/n 10151076	☐	Rion SA-78	s/n 00730055
	½" mic B&K 4176R	s/n 1583199		½" mic B&K 4176R	s/n 1583199
	Preamp Rion NH-174	s/n 61582		Preamp Rion NH-174	s/n 61582
☐	Metrosonics db3100	s/n 1163 ¼" mic mk3100R	☐	Metrosonics db3080	s/n 4441 ¼" mic mk3100R
☐	Metrosonics db3100	s/n 1414 ¼" mic mk3100R	☐	Metrosonics db3080	s/n 4676 ¼" mic mk3100R
☐	Metrosonics db3100	s/n 1505 ¼" mic mk3100R	☐	Metrosonics db3100	s/n 4677 ¼" mic mk3100R
☐	Metrosonics db3100	s/n 1511 ¼" mic mk3100R	☐	Metrosonics db3100	s/n 4763 ¼" mic mk3100R
☐	Metrosonics db3100	s/n 1658 ¼" mic mk3100R	☐	Metrosonics db3100	s/n 4680 ¼" mic mk3100R
☐	Metrosonics db3100	s/n 2196 ¼" mic mk3100R	☐	Metrosonics db3100	s/n 4684 ¼" mic mk3100R
☐	Metrosonics db3100	s/n 2859 ¼" mic mk3100R	☐	Metrosonics db3100	s/n 4689 ¼" mic mk3100R
☐	Metrosonics db3100	s/n 3067 ¼" mic mk3100R	☐	Metrosonics db3100	s/n 5224 ¼" mic mk3100R
☐	Metrosonics db3100	s/n 3275 ¼" mic mk3100R	☐	Metrosonics db3100	s/n 5727 ¼" mic mk3100R
☒	Metrosonics db3100	s/n 3780 ¼" mic mk3100R	☐	Metrosonics db3080	s/n 5914 ¼" mic mk3100R
☐	Metrosonics db3100	s/n 3819 ¼" mic mk3100R	☐	Metrosonics db3080	s/n 5916 ¼" mic mk3100R
☐	Metrosonics db3080	s/n 3980 ¼" mic mk3100R	☐	Metrosonics db3080	s/n 6603 ¼" mic mk3100R
☐	Metrosonics db3080	s/n 3996 ¼" mic mk3100R	☐	Metrosonics db3080	s/n 6611 ¼" mic mk3100R
☐	Metrosonics db3080	s/n 4036 ¼" mic mk3100R	☐	Metrosonics db3080	s/n 6614 ¼" mic mk3100R
☐	Metrosonics db3080	s/n 4049 ¼" mic mk3100R	☐	Metrosonics db3080	s/n 6621 ¼" mic mk3100R
☐	Metrosonics db3080	s/n 4401 ¼" mic mk3100R	☐	Metrosonics db3080	s/n 6622 ¼" mic mk3100R
☐	Metrosonics db3080	s/n 4415 ¼" mic mk3100R	☐	Metrosonics db3080	s/n 6623 ¼" mic mk3100R
☐	Metrosonics db3080	s/n 4418 ¼" mic mk3100R	☐	Metrosonics db3080	s/n 6624 ¼" mic mk3100R

CALIBRATOR:

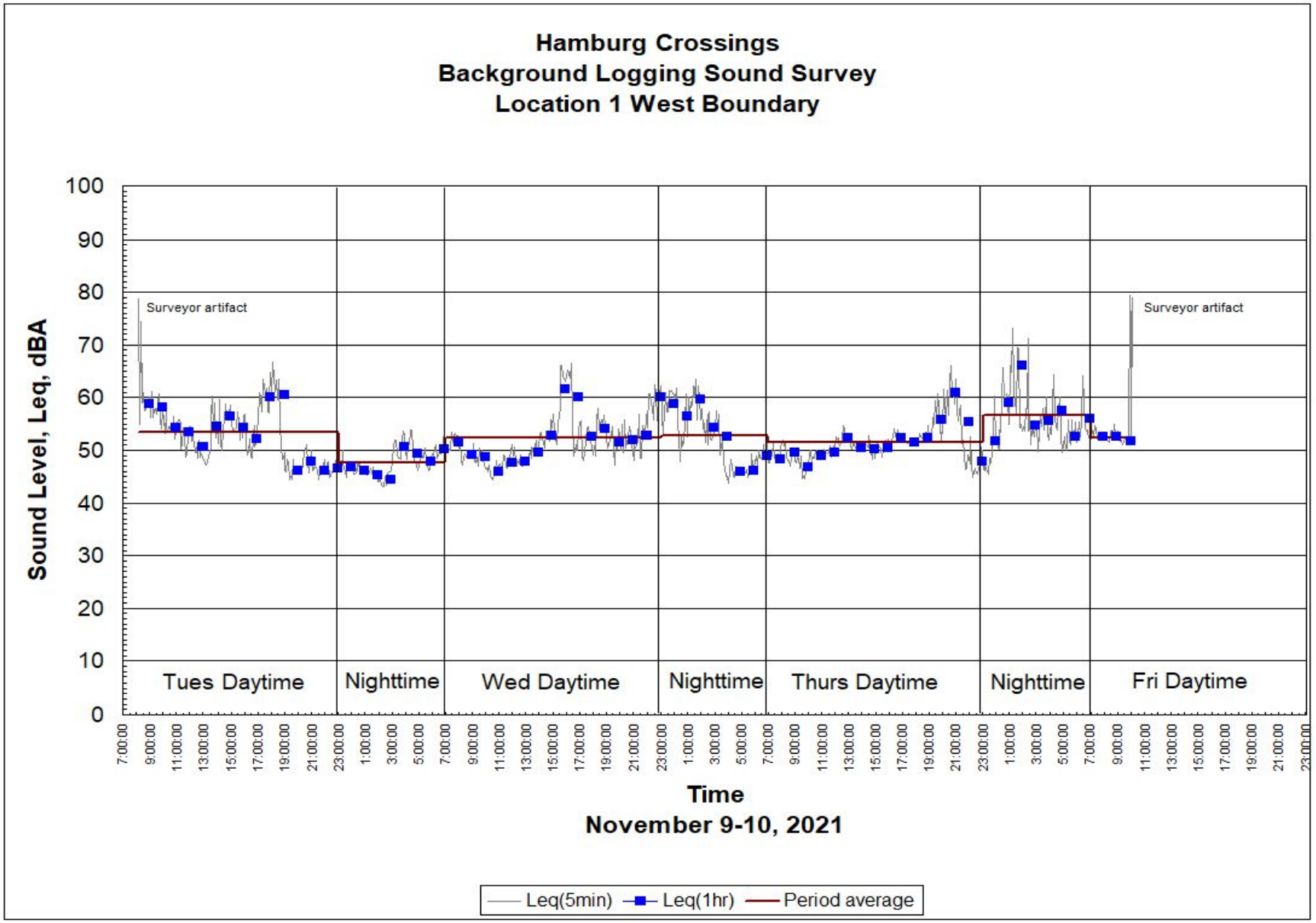
☐	CEL 284/2	s/n 02512942	☐	CEL 284/2	s/n 3/09819815
☐	CEL 284/2	s/n 3/07819583	☐	CEL 284/2	s/n 4/09921209
☐	Metrosonics cl304	s/n 01379	☐	Metrosonics cl304	s/n 4541
☒	Metrosonics cl304	s/n 2054	☐	Metrosonics cl304	s/n 5523
☐	Metrosonics cl304	s/n 3067	☐	Metrosonics cl304	s/n 7513

WEATHER:

☐ Clear ☐ Cloudy ☐ Brief rain ☐ Fog ☐ Snowing ☐ Snow on Ground ☐ Wet Streets

Temperature = _____ °F Winds = _____ @ _____ mph Relative Humidity = _____ %

NOTES: Detailed weather data for the survey week are summarized in Appendix D


Hamburg Crossings
Background Logging Sound Survey
Location 1 West Boundary
Sound Level, Leq, dBA
100
90
80
70
60
50
40
30
20
10
0
Surveyor artifact
Surveyor artifact
Tues Daytime
Nighttime
Wed Daytime
Nighttime
Thurs Daytime
Nighttime
Fri Daytime
7:00:00
9:00:00
11:00:00
13:00:00
15:00:00
17:00:00
19:00:00
21:00:00
23:00:00
1:00:00
3:00:00
5:00:00
Time
November 9-10, 2021
Leq(5min)
Leq(1hr)
Period average

Background Noise Level Logging Location (Loc. 1)

****
Filename.....30801
Test Location.....Location 1
Employee Name.....
Employee Number.....
Department.....
Calibrator Type.....cl304 #2054
Calibrator Cal. Date...6/18/2021

****
METROSONICS db-3080 V1.12 SERIAL # 3780

Hamburg Crossings
Background Sound Survey
West Boundary
Aurora Acoustical
Consultants Inc.
East Aurora, New York

LOGGING STARTED.....12/07/21 at 08:10:00
TOTAL LOGGING TIME...3 DAYS 01:56:14
LOGGING STOPPED.....12/10/21 at 10:06:14
TOTAL INTERVALS.....888
INTERVAL LENGTH.....00:05:00
AUTO STOP.....NO
CLOCK SYNCH.....YES
RESPONSE RATE.....SLOW
FILTER.....A WT.
PRE-TEST CALIBRATION TIME....12/07/21 AT 07:54:46
PRE-TEST CALIBRATION RANGE...40.9 TO 140.9 dB
POST-TEST CALIBRATION TIME...12/10/21 AT 12:39:36
POST-TEST CALIBRATION RANGE...41.5 TO 141.5
CUTOFF USED FOR TIME HISTORY Lav...NONE

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

EXCHANGE RATE.....3dB
CUTOFFS..... 60dB 60dB
CEILING.....115dB
DOSE CRITERION LEVEL... 90dB
DOSE CRITERION LENGTH.. 8 HOURS
Lav..... 58.1dB
Lav (60)..... 57.1dB
Lav (60)..... 57.1dB
SEL..... 112.1dB
TWA..... 67.7dB
TWA (60)..... 66.7dB
TWA (60)..... 66.7dB
Lmax..... 103.4dB 12/10/21 at 09:54:20
Lpk..... 134.0dB 12/10/21 at 09:54:20
TIME OVER 115dB...00:00:00.00
DOSE (60)..... 0.46%
DOSE (60)..... 0.46%

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 1 >>>

	START	Leq(5min)	Lmax	L(10.0)	L(99.0)	Leq(1hr)
	TIME	dBA	dBA	dBA	dBA	dBA
12/7/2021	8:10:00	78.7	97.3	81.9	48.9	
	8:15:00	55.0	67.8	57.9	48.9	
	8:20:00	74.5	98.7	61.9	47.9	
	8:25:00	59.1	68.9	63.9	48.9	
	8:30:00	60.9	70.2	65.9	49.9	
	8:35:00	57.6	65.6	60.9	48.9	
	8:40:00	57.8	67.4	60.9	49.9	
	8:45:00	58.4	70.2	60.9	48.9	
	8:50:00	58.7	72.5	62.9	48.9	
	8:55:00	60.0	70.5	64.9	47.9	58.7
	9:00:00	56.2	66.2	60.9	49.9	
	9:05:00	61.0	68.5	65.9	49.9	
	9:10:00	61.1	71.1	65.9	49.9	
	9:15:00	56.3	63.5	60.9	47.9	
	9:20:00	57.6	67.3	61.9	48.9	
	9:25:00	58.0	68.5	61.9	47.9	
	9:30:00	56.8	64.9	60.9	48.9	
	9:35:00	59.2	69.9	62.9	48.9	
	9:40:00	60.7	73.8	64.9	48.9	
	9:45:00	55.7	64.9	60.9	47.9	
	9:50:00	54.0	62.8	57.9	48.9	
	9:55:00	57.6	66.1	62.9	47.9	58.1
	10:00:00	56.0	66.1	59.9	46.9	
	10:05:00	53.3	62.4	57.9	47.9	
	10:10:00	57.2	67.7	60.9	46.9	
	10:15:00	54.5	66.2	56.9	46.9	
	10:20:00	53.5	60.9	56.9	49.9	
	10:25:00	54.4	63.3	58.9	47.9	
	10:30:00	54.6	67.3	57.9	46.9	
	10:35:00	53.5	61.2	56.9	47.9	
	10:40:00	53.8	62.1	57.9	47.9	
	10:45:00	56.5	64.3	60.9	48.9	
	10:50:00	52.1	62.9	55.9	46.9	
	10:55:00	53.5	62.4	57.9	46.9	54.4
	11:00:00	55.2	66.7	58.9	47.9	
	11:05:00	55.7	69.6	59.9	47.9	
	11:10:00	55.8	67.2	59.9	47.9	
	11:15:00	55.2	63.1	58.9	47.9	
	11:20:00	50.2	58.4	53.9	46.9	
	11:25:00	51.1	59.7	54.9	46.9	
	11:30:00	54.2	64.1	58.9	46.9	
	11:35:00	53.0	60.3	54.9	48.9	
	11:40:00	48.8	55.5	50.9	45.9	
	11:45:00	49.3	56.8	51.9	46.9	
	11:50:00	52.8	62.2	55.9	47.9	
	11:55:00	54.6	62.1	59.9	47.9	53.4
	12:00:00	54.4	60.9	58.9	47.9	
	12:05:00	51.7	60.5	54.9	46.9	

12:10:00	52.5	61.3	55.9	45.9	
12:15:00	51.0	58.5	54.9	46.9	
12:20:00	50.3	58.4	53.9	46.9	
12:25:00	49.6	58.1	51.9	45.9	
12:30:00	50.7	59.3	54.9	45.9	
12:35:00	48.5	54.6	50.9	45.9	
12:40:00	51.9	59.7	55.9	45.9	
12:45:00	48.8	56.0	51.9	45.9	
12:50:00	49.4	56.1	51.9	45.9	
12:55:00	48.8	55.2	51.9	45.9	50.7
13:00:00	47.6	54.2	49.9	45.9	
13:05:00	47.2	52.5	48.9	45.9	
13:10:00	47.6	49.8	48.9	46.9	
13:15:00	48.9	55.8	50.9	46.9	
13:20:00	49.3	54.0	51.9	46.9	
13:25:00	50.6	60.6	52.9	46.9	
13:30:00	56.8	67.0	59.9	48.9	
13:35:00	60.3	69.8	64.9	50.9	
13:40:00	53.8	61.4	57.9	47.9	
13:45:00	59.0	75.3	63.9	48.9	
13:50:00	52.4	59.3	56.9	47.9	
13:55:00	54.9	64.1	57.9	48.9	54.6
14:00:00	51.3	59.7	54.9	46.9	
14:05:00	59.6	69.2	63.9	49.9	
14:10:00	51.0	57.1	53.9	47.9	
14:15:00	49.9	58.4	51.9	46.9	
14:20:00	53.8	63.7	57.9	46.9	
14:25:00	56.1	65.7	60.9	47.9	
14:30:00	58.8	72.5	61.9	46.9	
14:35:00	58.2	66.5	61.9	48.9	
14:40:00	57.0	66.5	60.9	47.9	
14:45:00	57.3	67.7	61.9	48.9	
14:50:00	56.8	67.8	59.9	48.9	
14:55:00	58.6	66.9	62.9	48.9	56.5
15:00:00	55.2	62.6	58.9	48.9	
15:05:00	53.7	64.8	57.9	47.9	
15:10:00	53.6	68.9	56.9	47.9	
15:15:00	54.0	64.8	57.9	48.9	
15:20:00	54.2	67.4	56.9	48.9	
15:25:00	57.4	68.6	61.9	49.9	
15:30:00	55.4	65.9	58.9	47.9	
15:35:00	51.9	62.7	53.9	48.9	
15:40:00	52.7	60.0	55.9	48.9	
15:45:00	54.3	70.0	56.9	48.9	
15:50:00	52.3	67.1	54.9	48.9	
15:55:00	56.6	67.3	60.9	47.9	54.2
16:00:00	56.8	66.2	61.9	48.9	
16:05:00	51.3	64.9	54.9	45.9	
16:10:00	49.2	58.1	52.9	45.9	
16:15:00	49.8	58.4	52.9	46.9	
16:20:00	52.1	64.0	55.9	47.9	
16:25:00	48.7	54.1	50.9	47.9	

16:30:00	48.5	52.9	49.9	46.9	
16:35:00	52.9	61.3	58.9	46.9	
16:40:00	54.7	66.1	57.9	46.9	
16:45:00	50.6	59.8	52.9	46.9	
16:50:00	51.0	58.9	53.9	46.9	
16:55:00	54.1	61.3	57.9	47.9	52.1
17:00:00	55.3	65.0	58.9	47.9	
17:05:00	60.9	70.1	64.9	50.9	
17:10:00	60.2	67.2	63.9	50.9	
17:15:00	57.3	71.9	60.9	48.9	
17:20:00	63.5	78.5	68.9	47.9	
17:25:00	62.2	72.7	67.9	49.9	
17:30:00	60.7	69.4	64.9	49.9	
17:35:00	61.9	71.0	65.9	50.9	
17:40:00	57.2	67.0	61.9	45.9	
17:45:00	57.1	69.2	61.9	47.9	
17:50:00	59.4	71.3	63.9	47.9	
17:55:00	64.7	73.9	68.9	48.9	60.1
18:00:00	61.0	71.8	66.9	47.9	
18:05:00	66.8	73.9	70.9	51.9	
18:10:00	64.1	73.2	67.9	54.9	
18:15:00	61.2	68.6	63.9	54.9	
18:20:00	63.2	72.6	66.9	50.9	
18:25:00	59.7	67.7	62.9	51.9	
18:30:00	63.5	71.6	66.9	56.9	
18:35:00	55.1	66.3	57.9	48.9	
18:40:00	50.9	58.6	53.9	43.9	
18:45:00	48.2	57.3	51.9	42.9	
18:50:00	48.6	57.6	51.9	43.9	
18:55:00	49.5	62.7	52.9	44.9	60.6
19:00:00	46.3	55.4	48.9	43.9	
19:05:00	46.0	51.2	47.9	43.9	
19:10:00	48.3	57.2	50.9	43.9	
19:15:00	47.9	57.3	50.9	43.9	
19:20:00	44.5	52.9	46.9	42.9	
19:25:00	45.0	58.1	46.9	42.9	
19:30:00	44.4	47.7	45.9	42.9	
19:35:00	48.2	51.4	50.9	44.9	
19:40:00	46.2	52.0	47.9	44.9	
19:45:00	46.1	53.1	47.9	43.9	
19:50:00	45.6	51.7	46.9	43.9	
19:55:00	45.6	48.9	47.9	43.9	46.1
20:00:00	45.4	50.1	46.9	43.9	
20:05:00	45.4	53.1	46.9	43.9	
20:10:00	45.8	54.4	47.9	42.9	
20:15:00	46.2	57.3	48.9	42.9	
20:20:00	47.3	58.7	49.9	43.9	
20:25:00	49.7	59.8	51.9	44.9	
20:30:00	50.0	58.1	53.9	44.9	
20:35:00	51.1	57.8	54.9	44.9	
20:40:00	47.6	56.7	50.9	42.9	
20:45:00	45.8	57.6	47.9	42.9	

	20:50:00	47.9	53.7	50.9	43.9	
	20:55:00	50.1	56.6	52.9	45.9	47.8
	21:00:00	46.1	52.2	47.9	43.9	
	21:05:00	46.8	58.5	48.9	43.9	
	21:10:00	46.3	53.7	48.9	43.9	
	21:15:00	46.7	56.4	48.9	43.9	
	21:20:00	46.7	55.8	48.9	43.9	
	21:25:00	46.4	55.3	48.9	43.9	
	21:30:00	44.5	50.5	45.9	42.9	
	21:35:00	45.7	53.0	47.9	43.9	
	21:40:00	46.7	56.6	48.9	43.9	
	21:45:00	46.3	54.5	48.9	43.9	
	21:50:00	47.0	54.7	49.9	43.9	
	21:55:00	48.2	56.1	51.9	44.9	46.1
	22:00:00	46.0	52.8	47.9	43.9	
	22:05:00	47.6	53.3	50.9	43.9	
	22:10:00	46.6	56.3	48.9	44.9	
	22:15:00	47.8	55.1	49.9	45.9	
	22:20:00	44.8	51.1	46.9	42.9	
	22:25:00	45.1	53.8	46.9	43.9	
	22:30:00	46.0	49.7	47.9	42.9	
	22:35:00	46.0	50.1	47.9	43.9	
	22:40:00	45.9	52.5	47.9	43.9	
	22:45:00	48.0	53.7	51.9	43.9	
	22:50:00	47.2	52.3	49.9	43.9	
	22:55:00	48.2	54.2	50.9	44.9	46.5
	23:00:00	47.1	53.8	49.9	43.9	
	23:05:00	47.8	53.5	50.9	43.9	
	23:10:00	46.1	49.4	48.9	42.9	
	23:15:00	49.9	60.5	53.9	44.9	
	23:20:00	47.8	53.3	50.9	44.9	
	23:25:00	46.4	51.0	48.9	43.9	
	23:30:00	46.2	51.2	48.9	42.9	
	23:35:00	44.8	48.1	46.9	42.9	
	23:40:00	47.8	54.4	50.9	42.9	
	23:45:00	47.3	53.6	49.9	44.9	
	23:50:00	47.3	51.5	48.9	44.9	
	23:55:00	46.6	53.8	48.9	43.9	46.8
12/8/2021	0:00:00	46.7	50.2	48.9	43.9	
	0:05:00	45.6	48.9	46.9	43.9	
	0:10:00	45.6	49.8	47.9	43.9	
	0:15:00	45.8	51.0	47.9	42.9	
	0:20:00	47.5	51.2	48.9	45.9	
	0:25:00	46.2	50.5	48.9	41.9	
	0:30:00	47.7	56.7	50.9	42.9	
	0:35:00	47.9	57.0	50.9	42.9	
	0:40:00	46.3	50.6	48.9	42.9	
	0:45:00	46.7	51.2	48.9	42.9	
	0:50:00	46.1	51.2	48.9	43.9	
	0:55:00	45.5	49.7	46.9	42.9	46.1
	1:00:00	46.3	53.5	48.9	42.9	
	1:05:00	45.2	50.8	47.9	41.9	

1:10:00	46.8	53.6	50.9	42.9	
1:15:00	45.8	52.6	47.9	42.9	
1:20:00	46.6	55.1	48.9	43.9	
1:25:00	46.2	57.7	47.9	43.9	
1:30:00	45.5	50.6	47.9	42.9	
1:35:00	46.8	54.5	50.9	42.9	
1:40:00	45.1	51.7	46.9	42.9	
1:45:00	44.8	49.4	46.9	41.9	
1:50:00	45.3	49.2	47.9	41.9	
1:55:00	43.9	48.4	45.9	41.9	45.3
2:00:00	44.3	48.4	46.9	41.9	
2:05:00	44.6	48.5	45.9	42.9	
2:10:00	43.3	47.4	44.9	41.9	
2:15:00	43.2	47.4	44.9	41.9	
2:20:00	43.2	46.0	44.9	41.9	
2:25:00	45.0	53.3	46.9	41.9	
2:30:00	43.4	50.0	44.9	41.9	
2:35:00	44.8	50.3	47.9	42.9	
2:40:00	45.6	54.0	48.9	41.9	
2:45:00	46.0	50.6	48.9	42.9	
2:50:00	46.0	50.9	47.9	43.9	
2:55:00	46.1	51.8	47.9	43.9	44.5
3:00:00	47.8	55.6	49.9	43.9	
3:05:00	50.8	58.7	53.9	43.9	
3:10:00	51.9	59.7	54.9	45.9	
3:15:00	52.0	57.9	55.9	46.9	
3:20:00	49.4	57.0	51.9	45.9	
3:25:00	48.6	54.5	50.9	44.9	
3:30:00	48.4	55.0	50.9	44.9	
3:35:00	48.3	55.7	50.9	44.9	
3:40:00	48.3	55.3	50.9	43.9	
3:45:00	52.2	59.7	54.9	45.9	
3:50:00	53.7	59.7	56.9	46.9	
3:55:00	53.3	60.9	56.9	44.9	50.6
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4:10:00	51.0	59.7	53.9	45.9	
4:15:00	51.1	56.8	53.9	46.9	
4:20:00	53.8	60.8	56.9	47.9	
4:25:00	53.9	60.2	56.9	46.9	
4:30:00	50.2	59.0	52.9	44.9	
4:35:00	48.3	56.1	50.9	43.9	
4:40:00	47.9	54.7	49.9	44.9	
4:45:00	47.8	52.4	49.9	45.9	
4:50:00	47.3	51.7	48.9	44.9	
4:55:00	46.2	50.1	47.9	43.9	49.4
5:00:00	46.9	52.3	48.9	44.9	
5:05:00	48.8	56.9	50.9	45.9	
5:10:00	49.8	55.7	51.9	46.9	
5:15:00	48.5	54.9	50.9	46.9	
5:20:00	48.8	52.5	50.9	45.9	
5:25:00	50.5	54.6	52.9	47.9	

5:30:00	48.2	50.9	49.9	46.9	
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5:40:00	46.2	51.9	47.9	44.9	
5:45:00	46.4	48.6	47.9	45.9	
5:50:00	47.8	57.0	49.9	45.9	
5:55:00	48.6	54.1	50.9	45.9	47.9
6:00:00	49.4	55.2	51.9	46.9	
6:05:00	48.9	54.1	50.9	46.9	
6:10:00	50.4	54.1	52.9	46.9	
6:15:00	51.0	55.3	53.9	46.9	
6:20:00	48.6	54.4	49.9	46.9	
6:25:00	49.0	54.1	50.9	46.9	
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6:35:00	49.3	54.7	50.9	47.9	
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6:45:00	52.4	60.1	56.9	48.9	
6:50:00	52.7	60.1	55.9	48.9	
6:55:00	51.1	53.5	52.9	49.9	50.1
7:00:00	51.0	53.9	52.9	49.9	
7:05:00	49.9	54.3	50.9	48.9	
7:10:00	49.6	56.3	50.9	48.9	
7:15:00	50.2	53.2	51.9	48.9	
7:20:00	50.0	52.7	51.9	48.9	
7:25:00	53.5	61.3	55.9	49.9	
7:30:00	51.5	54.1	52.9	49.9	
7:35:00	52.7	57.7	54.9	49.9	
7:40:00	53.3	59.3	55.9	50.9	
7:45:00	52.5	55.3	53.9	50.9	
7:50:00	52.7	56.0	54.9	50.9	
7:55:00	51.8	55.6	53.9	49.9	51.5
8:00:00	50.4	63.1	51.9	47.9	
8:05:00	51.9	59.4	55.9	46.9	
8:10:00	47.9	50.5	48.9	45.9	
8:15:00	47.3	48.9	48.9	46.9	
8:20:00	48.5	53.6	49.9	46.9	
8:25:00	49.3	56.3	50.9	46.9	
8:30:00	48.9	52.5	50.9	46.9	
8:35:00	48.6	52.2	49.9	46.9	
8:40:00	49.2	51.8	50.9	47.9	
8:45:00	49.7	52.2	50.9	47.9	
8:50:00	49.8	52.1	50.9	48.9	
8:55:00	49.9	53.0	50.9	48.9	49.1
9:00:00	50.3	56.1	52.9	47.9	
9:05:00	51.3	67.0	53.9	46.9	
9:10:00	48.1	50.5	49.9	46.9	
9:15:00	47.7	53.4	49.9	45.9	
9:20:00	48.7	56.2	50.9	46.9	
9:25:00	47.1	50.1	48.9	45.9	
9:30:00	50.4	57.5	52.9	47.9	
9:35:00	49.6	57.5	51.9	46.9	
9:40:00	50.0	59.6	51.9	47.9	
9:45:00	48.5	54.4	50.9	46.9	

9:50:00	47.3	51.2	49.9	45.9	
9:55:00	46.8	51.0	47.9	45.9	48.7
10:00:00	46.3	49.7	47.9	44.9	
10:05:00	46.7	50.9	47.9	45.9	
10:10:00	46.0	49.0	47.9	44.9	
10:15:00	47.2	54.9	49.9	43.9	
10:20:00	45.5	49.7	47.9	43.9	
10:25:00	44.6	48.0	45.9	43.9	
10:30:00	44.4	47.8	45.9	43.9	
10:35:00	45.5	50.7	47.9	43.9	
10:40:00	46.2	52.1	47.9	43.9	
10:45:00	48.0	54.1	50.9	44.9	
10:50:00	46.1	49.4	47.9	44.9	
10:55:00	47.0	50.9	49.9	44.9	45.9
11:00:00	47.5	53.0	49.9	43.9	
11:05:00	46.7	49.6	48.9	43.9	
11:10:00	45.9	53.2	47.9	44.9	
11:15:00	46.7	51.9	48.9	43.9	
11:20:00	49.2	60.1	52.9	44.9	
11:25:00	48.9	54.4	51.9	45.9	
11:30:00	47.0	51.7	48.9	44.9	
11:35:00	46.6	51.5	47.9	44.9	
11:40:00	47.0	52.4	49.9	44.9	
11:45:00	48.7	64.4	50.9	44.9	
11:50:00	49.7	56.9	52.9	44.9	
11:55:00	51.1	56.2	53.9	46.9	47.7
12:00:00	49.0	54.2	50.9	45.9	
12:05:00	50.6	59.6	54.9	44.9	
12:10:00	47.6	53.6	49.9	44.9	
12:15:00	47.0	54.2	49.9	44.9	
12:20:00	48.3	55.0	50.9	44.9	
12:25:00	47.7	58.5	49.9	44.9	
12:30:00	47.5	54.1	49.9	45.9	
12:35:00	49.2	55.1	51.9	45.9	
12:40:00	47.1	51.8	48.9	44.9	
12:45:00	47.1	52.1	48.9	45.9	
12:50:00	48.2	54.4	50.9	45.9	
12:55:00	47.5	54.1	49.9	44.9	47.8
13:00:00	48.0	58.4	49.9	44.9	
13:05:00	48.4	54.0	50.9	45.9	
13:10:00	49.2	61.0	51.9	45.9	
13:15:00	49.8	58.5	51.9	46.9	
13:20:00	48.5	58.2	50.9	45.9	
13:25:00	50.7	56.5	53.9	45.9	
13:30:00	50.5	60.2	53.9	45.9	
13:35:00	49.2	55.7	51.9	46.9	
13:40:00	50.9	63.1	53.9	46.9	
13:45:00	51.9	59.0	55.9	46.9	
13:50:00	48.9	52.8	50.9	46.9	
13:55:00	50.7	58.8	53.9	46.9	49.6
14:00:00	53.0	66.1	56.9	46.9	
14:05:00	53.5	64.2	56.9	47.9	

14:10:00	52.2	62.0	55.9	47.9	
14:15:00	51.5	58.2	54.9	46.9	
14:20:00	50.4	56.6	53.9	46.9	
14:25:00	53.6	63.7	57.9	46.9	
14:30:00	52.3	61.8	54.9	48.9	
14:35:00	52.9	61.9	55.9	47.9	
14:40:00	53.3	63.4	55.9	48.9	
14:45:00	51.8	57.7	54.9	46.9	
14:50:00	55.7	63.6	59.9	48.9	
14:55:00	54.2	69.7	57.9	48.9	52.9
15:00:00	56.9	70.4	59.9	48.9	
15:05:00	53.9	64.2	57.9	47.9	
15:10:00	52.4	59.5	54.9	48.9	
15:15:00	51.0	60.1	52.9	48.9	
15:20:00	55.4	62.4	58.9	48.9	
15:25:00	56.3	64.1	59.9	50.9	
15:30:00	58.4	66.6	61.9	50.9	
15:35:00	66.0	73.4	68.9	58.9	
15:40:00	66.2	73.5	68.9	56.9	
15:45:00	64.2	71.9	66.9	53.9	
15:50:00	63.8	71.9	66.9	55.9	
15:55:00	63.1	69.2	65.9	55.9	61.6
16:00:00	63.9	73.3	67.9	54.9	
16:05:00	65.3	74.2	68.9	55.9	
16:10:00	64.6	73.3	67.9	51.9	
16:15:00	63.8	69.9	66.9	49.9	
16:20:00	66.6	75.7	70.9	57.9	
16:25:00	56.2	65.0	60.9	46.9	
16:30:00	48.9	58.8	51.9	44.9	
16:35:00	49.7	59.7	52.9	43.9	
16:40:00	51.1	61.7	54.9	45.9	
16:45:00	50.0	56.7	52.9	44.9	
16:50:00	50.0	58.3	52.9	44.9	
16:55:00	53.9	66.3	56.9	46.9	60.1
17:00:00	55.1	67.0	60.9	46.9	
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17:20:00	49.6	56.0	52.9	45.9	
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17:40:00	52.9	64.4	56.9	46.9	
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17:50:00	51.6	60.1	54.9	46.9	
17:55:00	51.0	59.8	53.9	46.9	52.6
18:00:00	49.2	54.2	51.9	45.9	
18:05:00	50.9	60.4	52.9	47.9	
18:10:00	48.9	56.6	51.9	45.9	
18:15:00	55.7	65.8	59.9	47.9	
18:20:00	58.0	68.7	62.9	46.9	
18:25:00	53.8	64.9	57.9	48.9	

18:30:00	55.1	63.1	60.9	46.9	
18:35:00	55.9	62.2	59.9	46.9	
18:40:00	54.9	62.3	58.9	47.9	
18:45:00	56.6	65.9	60.9	47.9	
18:50:00	54.7	63.9	58.9	46.9	
18:55:00	55.3	63.7	58.9	46.9	54.0
19:00:00	52.6	62.6	56.9	45.9	
19:05:00	50.4	58.4	54.9	45.9	
19:10:00	50.9	57.0	53.9	46.9	
19:15:00	52.2	66.1	55.9	45.9	
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19:30:00	50.0	58.5	53.9	44.9	
19:35:00	47.3	52.9	48.9	44.9	
19:40:00	52.1	63.7	55.9	45.9	
19:45:00	50.2	58.9	53.9	45.9	
19:50:00	54.0	68.3	56.9	43.9	
19:55:00	53.0	65.6	56.9	45.9	51.6
20:00:00	52.0	60.8	54.9	47.9	
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20:35:00	52.5	63.0	55.9	45.9	
20:40:00	54.6	64.5	59.9	46.9	
20:45:00	53.7	64.5	57.9	45.9	
20:50:00	51.2	59.7	53.9	45.9	
20:55:00	49.6	62.4	52.9	44.9	51.8
21:00:00	48.1	56.3	50.9	44.9	
21:05:00	51.1	63.3	53.9	44.9	
21:10:00	50.5	62.4	53.9	45.9	
21:15:00	51.0	58.8	53.9	46.9	
21:20:00	51.6	62.9	54.9	43.9	
21:25:00	56.8	68.0	60.9	46.9	
21:30:00	48.4	54.8	50.9	44.9	
21:35:00	48.5	56.9	50.9	44.9	
21:40:00	54.8	67.8	58.9	43.9	
21:45:00	52.7	65.3	55.9	45.9	
21:50:00	56.8	68.0	59.9	45.9	
21:55:00	54.2	63.2	57.9	46.9	52.8
22:00:00	60.8	72.4	64.9	46.9	
22:05:00	60.6	69.6	64.9	46.9	
22:10:00	60.8	71.8	64.9	46.9	
22:15:00	58.9	68.2	62.9	46.9	
22:20:00	58.1	71.1	61.9	45.9	
22:25:00	55.7	67.7	58.9	45.9	
22:30:00	62.5	70.9	66.9	49.9	
22:35:00	61.2	71.9	65.9	47.9	
22:40:00	55.6	66.2	59.9	45.9	
22:45:00	60.1	69.5	64.9	48.9	

	22:50:00	60.6	73.0	62.9	47.9	
	22:55:00	62.2	71.0	66.9	46.9	60.0
	23:00:00	56.5	67.1	60.9	45.9	
	23:05:00	53.0	61.4	57.9	43.9	
	23:10:00	57.7	66.2	61.9	47.9	
	23:15:00	56.5	66.9	60.9	47.9	
	23:20:00	61.0	72.0	65.9	48.9	
	23:25:00	57.3	72.3	61.9	46.9	
	23:30:00	57.3	68.6	61.9	46.9	
	23:35:00	61.4	70.6	66.9	48.9	
	23:40:00	61.1	70.1	65.9	47.9	
	23:45:00	61.4	71.1	66.9	46.9	
	23:50:00	60.9	73.9	65.9	48.9	
	23:55:00	60.3	68.3	64.9	48.9	58.8
12/9/2021	0:00:00	59.7	70.5	64.9	46.9	
	0:05:00	61.9	70.7	66.9	47.9	
	0:10:00	54.8	67.1	59.9	44.9	
	0:15:00	52.9	61.3	56.9	46.9	
	0:20:00	53.0	64.5	55.9	45.9	
	0:25:00	47.9	55.6	50.9	43.9	
	0:30:00	52.8	63.2	57.9	42.9	
	0:35:00	50.8	60.4	55.9	42.9	
	0:40:00	51.4	63.2	55.9	41.9	
	0:45:00	55.5	67.5	60.9	42.9	
	0:50:00	60.7	72.5	64.9	48.9	
	0:55:00	52.6	66.2	57.9	41.9	56.4
	1:00:00	60.1	71.5	64.9	45.9	
	1:05:00	56.9	69.9	59.9	44.9	
	1:10:00	59.3	70.3	64.9	42.9	
	1:15:00	58.6	68.9	64.9	42.9	
	1:20:00	62.3	79.4	63.9	43.9	
	1:25:00	60.1	71.3	64.9	44.9	
	1:30:00	60.5	69.9	64.9	44.9	
	1:35:00	63.5	80.0	68.9	44.9	
	1:40:00	55.9	66.5	60.9	43.9	
	1:45:00	62.3	76.8	66.9	42.9	
	1:50:00	59.9	71.7	63.9	44.9	
	1:55:00	55.9	68.1	59.9	42.9	59.6
	2:00:00	57.9	70.6	62.9	43.9	
	2:05:00	54.1	66.6	58.9	41.9	
	2:10:00	55.2	68.2	59.9	42.9	
	2:15:00	51.5	62.4	56.9	42.9	
	2:20:00	55.9	71.8	59.9	43.9	
	2:25:00	51.0	60.1	54.9	42.9	
	2:30:00	56.7	69.3	61.9	41.9	
	2:35:00	57.2	68.7	61.9	41.9	
	2:40:00	52.3	64.8	55.9	41.9	
	2:45:00	51.9	65.6	56.9	41.9	
	2:50:00	52.4	63.8	56.9	42.9	
	2:55:00	52.8	65.3	56.9	43.9	54.2
	3:00:00	54.3	65.9	59.9	43.9	
	3:05:00	57.5	67.6	61.9	44.9	

3:10:00	54.3	64.8	58.9	42.9	
3:15:00	56.8	69.2	60.9	43.9	
3:20:00	49.1	62.2	50.9	42.9	
3:25:00	51.2	60.9	55.9	42.9	
3:30:00	50.8	61.0	54.9	42.9	
3:35:00	51.9	66.7	54.9	41.9	
3:40:00	47.9	56.3	51.9	42.9	
3:45:00	46.5	53.3	49.9	41.9	
3:50:00	45.0	50.2	47.9	42.9	
3:55:00	45.0	52.0	48.9	41.9	52.5
4:00:00	43.8	48.7	45.9	41.9	
4:05:00	46.1	56.1	48.9	42.9	
4:10:00	48.3	54.3	50.9	43.9	
4:15:00	46.7	54.5	48.9	43.9	
4:20:00	45.3	50.9	47.9	42.9	
4:25:00	44.9	49.9	46.9	42.9	
4:30:00	46.9	55.5	50.9	42.9	
4:35:00	45.2	57.3	46.9	42.9	
4:40:00	45.6	55.7	47.9	42.9	
4:45:00	46.7	53.2	48.9	42.9	
4:50:00	46.5	53.0	48.9	42.9	
4:55:00	46.2	52.8	48.9	42.9	45.9
5:00:00	45.4	52.4	46.9	42.9	
5:05:00	45.2	51.3	47.9	42.9	
5:10:00	46.0	51.0	47.9	43.9	
5:15:00	45.7	52.1	47.9	43.9	
5:20:00	46.4	51.9	48.9	42.9	
5:25:00	44.9	47.6	45.9	43.9	
5:30:00	45.3	49.7	46.9	42.9	
5:35:00	46.1	50.3	47.9	43.9	
5:40:00	46.8	53.3	48.9	44.9	
5:45:00	49.3	66.9	48.9	44.9	
5:50:00	47.2	56.0	48.9	44.9	
5:55:00	47.0	54.5	48.9	43.9	46.1
6:00:00	47.6	53.4	48.9	44.9	
6:05:00	49.0	55.5	51.9	45.9	
6:10:00	47.3	51.6	48.9	44.9	
6:15:00	49.9	60.9	52.9	45.9	
6:20:00	48.5	56.2	50.9	46.9	
6:25:00	48.6	52.3	49.9	46.9	
6:30:00	48.8	54.5	50.9	46.9	
6:35:00	51.0	60.2	53.9	46.9	
6:40:00	48.7	54.4	50.9	46.9	
6:45:00	50.2	59.7	52.9	45.9	
6:50:00	48.3	51.3	49.9	45.9	
6:55:00	51.8	54.2	53.9	49.9	49.0
7:00:00	47.7	50.3	48.9	46.9	
7:05:00	47.7	50.4	48.9	46.9	
7:10:00	48.4	52.0	49.9	46.9	
7:15:00	48.9	52.5	49.9	47.9	
7:20:00	51.4	60.6	55.9	46.9	
7:25:00	48.7	54.1	50.9	46.9	

7:30:00	48.1	50.4	49.9	46.9	
7:35:00	48.0	51.6	49.9	45.9	
7:40:00	49.3	56.7	50.9	46.9	
7:45:00	49.0	53.3	50.9	47.9	
7:50:00	49.4	53.8	50.9	48.9	
7:55:00	50.4	53.4	51.9	48.9	48.4
8:00:00	51.6	57.9	54.9	48.9	
8:05:00	52.0	60.8	54.9	47.9	
8:10:00	50.9	53.5	52.9	48.9	
8:15:00	51.2	60.5	52.9	47.9	
8:20:00	49.0	52.6	50.9	47.9	
8:25:00	48.0	51.6	49.9	45.9	
8:30:00	48.1	52.2	49.9	46.9	
8:35:00	46.9	48.5	47.9	45.9	
8:40:00	48.4	52.1	49.9	46.9	
8:45:00	49.5	53.4	51.9	46.9	
8:50:00	50.3	54.4	52.9	47.9	
8:55:00	49.9	53.5	51.9	46.9	49.6
9:00:00	48.1	50.6	49.9	46.9	
9:05:00	47.7	50.8	49.9	45.9	
9:10:00	48.8	52.8	50.9	46.9	
9:15:00	48.6	58.8	49.9	45.9	
9:20:00	46.6	50.6	48.9	44.9	
9:25:00	49.0	59.4	52.9	43.9	
9:30:00	44.7	47.5	45.9	43.9	
9:35:00	45.0	51.0	46.9	43.9	
9:40:00	44.6	48.7	46.9	42.9	
9:45:00	46.0	49.1	47.9	43.9	
9:50:00	47.4	50.9	48.9	45.9	
9:55:00	47.0	51.1	48.9	44.9	46.9
10:00:00	49.4	55.7	51.9	45.9	
10:05:00	49.3	52.6	50.9	45.9	
10:10:00	50.1	54.0	52.9	46.9	
10:15:00	47.8	52.1	49.9	45.9	
10:20:00	48.8	53.3	50.9	45.9	
10:25:00	48.5	52.9	49.9	46.9	
10:30:00	49.7	54.3	51.9	46.9	
10:35:00	50.1	54.8	52.9	47.9	
10:40:00	49.0	52.7	50.9	47.9	
10:45:00	48.8	56.5	51.9	45.9	
10:50:00	49.2	53.1	50.9	47.9	
10:55:00	49.2	53.3	50.9	47.9	48.9
11:00:00	49.6	54.4	51.9	47.9	
11:05:00	50.1	54.8	51.9	47.9	
11:10:00	50.3	65.7	51.9	46.9	
11:15:00	50.0	55.7	51.9	47.9	
11:20:00	49.5	53.6	51.9	46.9	
11:25:00	49.4	53.0	50.9	47.9	
11:30:00	49.5	52.6	50.9	47.9	
11:35:00	50.9	58.1	53.9	47.9	
11:40:00	48.7	56.7	49.9	46.9	
11:45:00	48.9	53.0	50.9	46.9	

11:50:00	50.9	63.3	53.9	46.9	
11:55:00	50.6	54.4	52.9	48.9	49.6
12:00:00	52.5	59.6	55.9	48.9	
12:05:00	52.1	59.3	55.9	47.9	
12:10:00	52.4	65.1	55.9	47.9	
12:15:00	51.6	56.9	53.9	48.9	
12:20:00	50.8	54.8	52.9	48.9	
12:25:00	51.5	58.4	53.9	48.9	
12:30:00	52.2	58.3	54.9	48.9	
12:35:00	54.7	66.4	57.9	49.9	
12:40:00	54.0	64.9	56.9	48.9	
12:45:00	52.2	58.5	54.9	48.9	
12:50:00	52.9	63.1	54.9	47.9	
12:55:00	52.3	59.6	54.9	48.9	52.3
13:00:00	52.8	61.3	54.9	49.9	
13:05:00	51.0	55.7	52.9	47.9	
13:10:00	50.3	53.4	51.9	47.9	
13:15:00	51.0	57.7	52.9	48.9	
13:20:00	51.6	63.0	53.9	47.9	
13:25:00	51.2	56.5	52.9	48.9	
13:30:00	50.5	54.8	52.9	47.9	
13:35:00	50.6	59.2	52.9	47.9	
13:40:00	50.5	59.1	52.9	47.9	
13:45:00	50.1	57.8	51.9	46.9	
13:50:00	50.0	55.9	51.9	47.9	
13:55:00	50.3	54.0	51.9	47.9	50.4
14:00:00	50.1	53.9	51.9	47.9	
14:05:00	50.4	56.1	52.9	47.9	
14:10:00	51.4	58.2	52.9	48.9	
14:15:00	51.0	56.1	52.9	48.9	
14:20:00	50.9	54.6	52.9	48.9	
14:25:00	50.5	58.1	51.9	48.9	
14:30:00	52.7	61.2	54.9	47.9	
14:35:00	51.4	57.3	52.9	48.9	
14:40:00	49.9	52.8	51.9	47.9	
14:45:00	48.3	53.8	49.9	46.9	
14:50:00	50.6	56.9	53.9	47.9	
14:55:00	48.6	51.6	49.9	46.9	50.2
15:00:00	50.1	54.1	51.9	47.9	
15:05:00	51.2	55.7	52.9	48.9	
15:10:00	51.0	54.8	52.9	48.9	
15:15:00	50.6	55.7	52.9	48.9	
15:20:00	50.5	54.9	51.9	48.9	
15:25:00	48.8	54.1	50.9	46.9	
15:30:00	50.0	53.7	51.9	47.9	
15:35:00	50.4	53.2	51.9	48.9	
15:40:00	51.1	53.2	52.9	48.9	
15:45:00	52.0	60.7	54.9	47.9	
15:50:00	51.4	55.0	52.9	48.9	
15:55:00	52.1	56.5	54.9	49.9	50.5
16:00:00	51.8	55.9	53.9	49.9	
16:05:00	51.5	55.7	52.9	48.9	

16:10:00	51.9	56.4	53.9	49.9	
16:15:00	52.3	59.0	53.9	48.9	
16:20:00	54.0	63.7	55.9	50.9	
16:25:00	53.3	56.5	54.9	50.9	
16:30:00	52.0	56.4	53.9	50.9	
16:35:00	53.8	62.4	55.9	50.9	
16:40:00	52.7	56.0	54.9	50.9	
16:45:00	53.2	56.1	54.9	50.9	
16:50:00	52.6	55.4	53.9	50.9	
16:55:00	53.3	58.9	54.9	50.9	52.3
17:00:00	53.1	55.4	54.9	51.9	
17:05:00	53.1	58.1	54.9	50.9	
17:10:00	51.9	55.4	53.9	49.9	
17:15:00	51.7	54.2	52.9	49.9	
17:20:00	51.2	54.1	52.9	49.9	
17:25:00	51.4	55.4	52.9	49.9	
17:30:00	51.3	56.0	53.9	48.9	
17:35:00	51.9	56.0	53.9	49.9	
17:40:00	51.8	54.9	53.9	49.9	
17:45:00	51.7	57.3	52.9	49.9	
17:50:00	51.0	54.4	52.9	47.9	
17:55:00	51.1	55.6	52.9	49.9	51.5
18:00:00	52.1	55.5	53.9	49.9	
18:05:00	51.8	55.5	53.9	48.9	
18:10:00	51.6	55.7	52.9	48.9	
18:15:00	53.2	58.2	54.9	50.9	
18:20:00	52.7	56.5	54.9	49.9	
18:25:00	52.3	57.7	53.9	49.9	
18:30:00	52.6	58.0	54.9	50.9	
18:35:00	52.7	57.7	54.9	49.9	
18:40:00	53.4	61.0	55.9	49.9	
18:45:00	52.8	60.4	54.9	49.9	
18:50:00	52.1	57.6	54.9	49.9	
18:55:00	54.8	62.3	58.9	50.9	52.4
19:00:00	52.6	59.0	54.9	50.9	
19:05:00	51.9	57.3	54.9	47.9	
19:10:00	52.0	59.4	54.9	49.9	
19:15:00	56.2	71.7	57.9	51.9	
19:20:00	54.9	70.9	56.9	49.9	
19:25:00	59.5	73.8	63.9	51.9	
19:30:00	55.6	67.7	58.9	50.9	
19:35:00	60.7	76.6	64.9	50.9	
19:40:00	58.3	69.3	62.9	50.9	
19:45:00	53.2	67.7	55.9	49.9	
19:50:00	53.5	63.9	56.9	49.9	
19:55:00	51.9	61.6	54.9	48.9	55.8
20:00:00	54.0	63.2	57.9	49.9	
20:05:00	61.5	80.9	61.9	48.9	
20:10:00	58.7	72.5	62.9	50.9	
20:15:00	55.2	70.1	57.9	48.9	
20:20:00	61.3	76.8	63.9	50.9	
20:25:00	56.6	70.8	59.9	48.9	

	20:30:00	63.3	77.7	67.9	49.9	
	20:35:00	66.2	83.8	68.9	49.9	
	20:40:00	60.4	75.3	63.9	48.9	
	20:45:00	61.3	81.2	62.9	49.9	
	20:50:00	58.9	73.1	62.9	49.9	
	20:55:00	63.5	78.6	65.9	49.9	61.0
	21:00:00	63.2	77.9	66.9	48.9	
	21:05:00	57.6	69.6	61.9	48.9	
	21:10:00	55.6	72.1	57.9	49.9	
	21:15:00	57.4	72.6	60.9	49.9	
	21:20:00	58.5	73.5	61.9	48.9	
	21:25:00	51.3	62.3	53.9	46.9	
	21:30:00	51.9	60.3	54.9	47.9	
	21:35:00	49.2	59.4	53.9	44.9	
	21:40:00	46.4	49.9	47.9	44.9	
	21:45:00	46.6	50.3	48.9	44.9	
	21:50:00	49.1	57.3	51.9	45.9	
	21:55:00	48.5	61.7	50.9	45.9	55.4
	22:00:00	47.5	53.5	48.9	44.9	
	22:05:00	52.6	65.0	57.9	45.9	
	22:10:00	47.2	50.4	48.9	44.9	
	22:15:00	44.8	47.2	45.9	43.9	
	22:20:00	46.0	49.8	47.9	43.9	
	22:25:00	46.6	50.9	48.9	43.9	
	22:30:00	45.7	50.5	46.9	44.9	
	22:35:00	45.6	56.1	46.9	42.9	
	22:40:00	46.6	52.0	48.9	43.9	
	22:45:00	47.0	50.8	48.9	44.9	
	22:50:00	50.7	62.1	53.9	45.9	
	22:55:00	49.6	61.4	50.9	43.9	47.9
	23:00:00	46.6	49.6	48.9	44.9	
	23:05:00	46.2	50.8	47.9	44.9	
	23:10:00	47.3	51.1	48.9	45.9	
	23:15:00	46.6	50.2	48.9	44.9	
	23:20:00	46.1	49.3	47.9	43.9	
	23:25:00	45.5	49.3	46.9	43.9	
	23:30:00	48.4	64.6	50.9	44.9	
	23:35:00	47.7	52.2	49.9	43.9	
	23:40:00	49.5	54.1	51.9	46.9	
	23:45:00	52.4	67.4	54.9	46.9	
	23:50:00	60.3	82.1	55.9	47.9	
	23:55:00	51.3	61.6	53.9	47.9	51.8
12/10/2021	0:00:00	51.5	65.3	54.9	45.9	
	0:05:00	50.5	57.8	52.9	46.9	
	0:10:00	50.3	61.0	52.9	45.9	
	0:15:00	53.8	66.0	57.9	45.9	
	0:20:00	53.5	67.0	57.9	44.9	
	0:25:00	59.9	81.1	57.9	45.9	
	0:30:00	65.6	83.0	64.9	44.9	
	0:35:00	60.1	75.6	63.9	43.9	
	0:40:00	59.4	73.2	63.9	46.9	
	0:45:00	60.8	79.6	61.9	42.9	

0:50:00	59.5	78.1	60.9	45.9	
0:55:00	54.9	69.3	58.9	46.9	59.0
1:00:00	66.1	86.9	62.9	43.9	
1:05:00	64.7	82.8	66.9	45.9	
1:10:00	73.1	91.5	68.9	45.9	
1:15:00	63.2	84.1	61.9	45.9	
1:20:00	60.7	81.1	62.9	44.9	
1:25:00	59.9	76.3	63.9	45.9	
1:30:00	56.7	70.0	61.9	44.9	
1:35:00	69.5	86.6	68.9	45.9	
1:40:00	69.3	89.4	66.9	45.9	
1:45:00	54.2	68.4	57.9	44.9	
1:50:00	55.0	70.1	57.9	46.9	
1:55:00	53.6	66.1	56.9	46.9	66.1
2:00:00	54.5	70.3	57.9	44.9	
2:05:00	53.6	68.7	56.9	43.9	
2:10:00	58.0	70.1	62.9	44.9	
2:15:00	57.9	72.5	61.9	45.9	
2:20:00	71.3	90.9	66.9	46.9	
2:25:00	53.7	68.5	57.9	43.9	
2:30:00	56.6	78.2	53.9	43.9	
2:35:00	51.1	65.0	54.9	43.9	
2:40:00	54.3	67.5	56.9	42.9	
2:45:00	53.7	71.0	56.9	43.9	
2:50:00	52.5	70.9	52.9	45.9	
2:55:00	54.7	69.8	57.9	44.9	54.7
3:00:00	55.1	74.3	56.9	45.9	
3:05:00	49.7	61.4	52.9	44.9	
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3:15:00	56.5	71.3	59.9	45.9	
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3:30:00	57.9	73.6	60.9	42.9	
3:35:00	53.8	68.0	57.9	45.9	
3:40:00	56.2	68.4	60.9	44.9	
3:45:00	60.0	76.4	62.9	45.9	
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4:05:00	53.0	68.6	55.9	44.9	
4:10:00	58.8	72.9	62.9	45.9	
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4:20:00	55.7	71.8	58.9	46.9	
4:25:00	54.7	69.0	57.9	44.9	
4:30:00	53.9	70.3	58.9	45.9	
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4:40:00	57.5	71.9	60.9	46.9	
4:45:00	60.1	80.3	58.9	46.9	
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4:55:00	49.6	66.6	50.9	44.9	57.5
5:00:00	50.8	62.0	52.9	46.9	
5:05:00	52.6	74.2	52.9	45.9	

5:10:00	50.1	61.3	52.9	44.9	
5:15:00	50.7	64.8	52.9	44.9	
5:20:00	55.8	71.7	59.9	47.9	
5:25:00	51.8	64.3	54.9	47.9	
5:30:00	51.0	59.2	54.9	44.9	
5:35:00	55.9	74.5	57.9	46.9	
5:40:00	54.8	66.2	58.9	45.9	
5:45:00	52.8	64.9	55.9	47.9	
5:50:00	52.3	66.0	53.9	48.9	
5:55:00	55.3	72.2	57.9	49.9	52.6
6:00:00	51.4	62.1	53.9	48.9	
6:05:00	53.0	62.9	55.9	46.9	
6:10:00	55.4	71.9	58.9	48.9	
6:15:00	52.6	60.9	54.9	47.9	
6:20:00	55.9	64.1	59.9	48.9	
6:25:00	64.2	85.0	56.9	50.9	
6:30:00	54.2	65.9	55.9	49.9	
6:35:00	53.6	73.1	53.9	48.9	
6:40:00	53.8	64.1	56.9	49.9	
6:45:00	53.5	64.3	55.9	49.9	
6:50:00	52.4	55.5	53.9	49.9	
6:55:00	52.2	63.5	53.9	48.9	56.0
7:00:00	52.2	63.1	54.9	49.9	
7:05:00	53.9	74.0	53.9	48.9	
7:10:00	52.7	60.9	54.9	50.9	
7:15:00	54.8	64.1	58.9	50.9	
7:20:00	54.1	62.7	57.9	49.9	
7:25:00	52.2	58.7	53.9	49.9	
7:30:00	52.1	54.8	53.9	49.9	
7:35:00	52.5	55.3	53.9	50.9	
7:40:00	52.8	69.7	53.9	49.9	
7:45:00	52.5	55.5	53.9	51.9	
7:50:00	52.2	58.0	53.9	49.9	
7:55:00	52.9	57.6	54.9	49.9	52.5
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8:25:00	53.4	56.6	54.9	50.9	
8:30:00	53.8	72.9	53.9	50.9	
8:35:00	52.5	59.3	54.9	48.9	
8:40:00	54.9	75.4	54.9	50.9	
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9:15:00	52.0	63.4	53.9	49.9	
9:20:00	51.0	54.9	52.9	48.9	
9:25:00	51.4	54.6	52.9	48.9	

9:30:00	52.5	57.0	54.9	49.9	
9:35:00	51.5	54.9	52.9	49.9	
9:40:00	51.6	53.7	52.9	49.9	
9:45:00	51.4	54.7	52.9	49.9	
9:50:00	79.4	103.4	67.9	49.9	
9:55:00	73.5	91.7	76.9	49.9	51.6
10:00:00	52.3	57.3	53.9	50.9	
10:05:00	79.2	94.1	81.9	52.9	

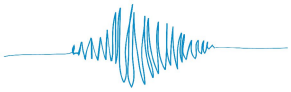
AURORA ACOUSTICAL CONSULTANTS Inc.

745 Warren Drive
East Aurora, New York 14052
716-655-2200
info@auroraacoustical.com

APPENDIX B

Sampling Sound Surveys

December 7 to December 10, 2021



AURORA ACOUSTICAL CONSULTANTS Inc.

SOUND TEST DATE December 7-10, 2021

SOUND LEVEL METER:

☐	Larson Davis 831	s/n 0001466	☒	Larson Davis 831	s/n 0001057
	½" mic 377B02	s/n 143898		½" mic 377B20	s/n 105288
	preamp PRM831	s/n 0141		preamp PRM831	s/n 10126
	preamp CEL 495	s/n 108368		preamp CEL 495	s/n 058195
☐	Rion SA-77	s/n 10151076	☐	Rion SA-78	s/n 00730055
	½" mic B&K 4176R	s/n 1583199		½" mic B&K 4176R	s/n 1583199
	Preamp Rion NH-174	s/n 61582		Preamp Rion NH-174	s/n 61582

☐	Metrosonics db3100	s/n 1163	¼" mic mk3100R	☐	Metrosonics db3080	s/n 4441	¼" mic mk3100R
☐	Metrosonics db3100	s/n 1414	¼" mic mk3100R	☐	Metrosonics db3080	s/n 4676	¼" mic mk3100R
☐	Metrosonics db3100	s/n 1505	¼" mic mk3100R	☐	Metrosonics db3100	s/n 4677	¼" mic mk3100R
☐	Metrosonics db3100	s/n 1511	¼" mic mk3100R	☐	Metrosonics db3100	s/n 4763	¼" mic mk3100R
☐	Metrosonics db3100	s/n 1658	¼" mic mk3100R	☐	Metrosonics db3100	s/n 4680	¼" mic mk3100R
☐	Metrosonics db3100	s/n 2196	¼" mic mk3100R	☐	Metrosonics db3100	s/n 4684	¼" mic mk3100R
☐	Metrosonics db3100	s/n 2859	¼" mic mk3100R	☐	Metrosonics db3100	s/n 4689	¼" mic mk3100R
☐	Metrosonics db3100	s/n 3067	¼" mic mk3100R	☐	Metrosonics db3100	s/n 5224	¼" mic mk3100R
☐	Metrosonics db3100	s/n 3275	¼" mic mk3100R	☐	Metrosonics db3100	s/n 5727	¼" mic mk3100R
☐	Metrosonics db3100	s/n 3780	¼" mic mk3100R	☐	Metrosonics db3080	s/n 5914	¼" mic mk3100R
☐	Metrosonics db3100	s/n 3819	¼" mic mk3100R	☐	Metrosonics db3080	s/n 5916	¼" mic mk3100R
☐	Metrosonics db3080	s/n 3980	¼" mic mk3100R	☐	Metrosonics db3080	s/n 6603	¼" mic mk3100R
☐	Metrosonics db3080	s/n 3996	¼" mic mk3100R	☐	Metrosonics db3080	s/n 6611	¼" mic mk3100R
☐	Metrosonics db3080	s/n 4036	¼" mic mk3100R	☐	Metrosonics db3080	s/n 6614	¼" mic mk3100R
☐	Metrosonics db3080	s/n 4049	¼" mic mk3100R	☐	Metrosonics db3080	s/n 6621	¼" mic mk3100R
☐	Metrosonics db3080	s/n 4401	¼" mic mk3100R	☐	Metrosonics db3080	s/n 6622	¼" mic mk3100R
☐	Metrosonics db3080	s/n 4415	¼" mic mk3100R	☐	Metrosonics db3080	s/n 6623	¼" mic mk3100R
☐	Metrosonics db3080	s/n 4418	¼" mic mk3100R	☐	Metrosonics db3080	s/n 6624	¼" mic mk3100R

CALIBRATOR:

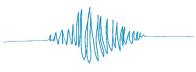
☐	CEL 284/2	s/n 02512942	☒	CEL 284/2	s/n 3/09819815
☐	CEL 284/2	s/n 3/07819583	☐	CEL 284/2	s/n 4/09921209
☐	Metrosonics cl304	s/n 01379	☐	Metrosonics cl304	s/n 4541
☐	Metrosonics cl304	s/n 2054	☐	Metrosonics cl304	s/n 5523
☐	Metrosonics cl304	s/n 3067	☐	Metrosonics cl304	s/n 7513

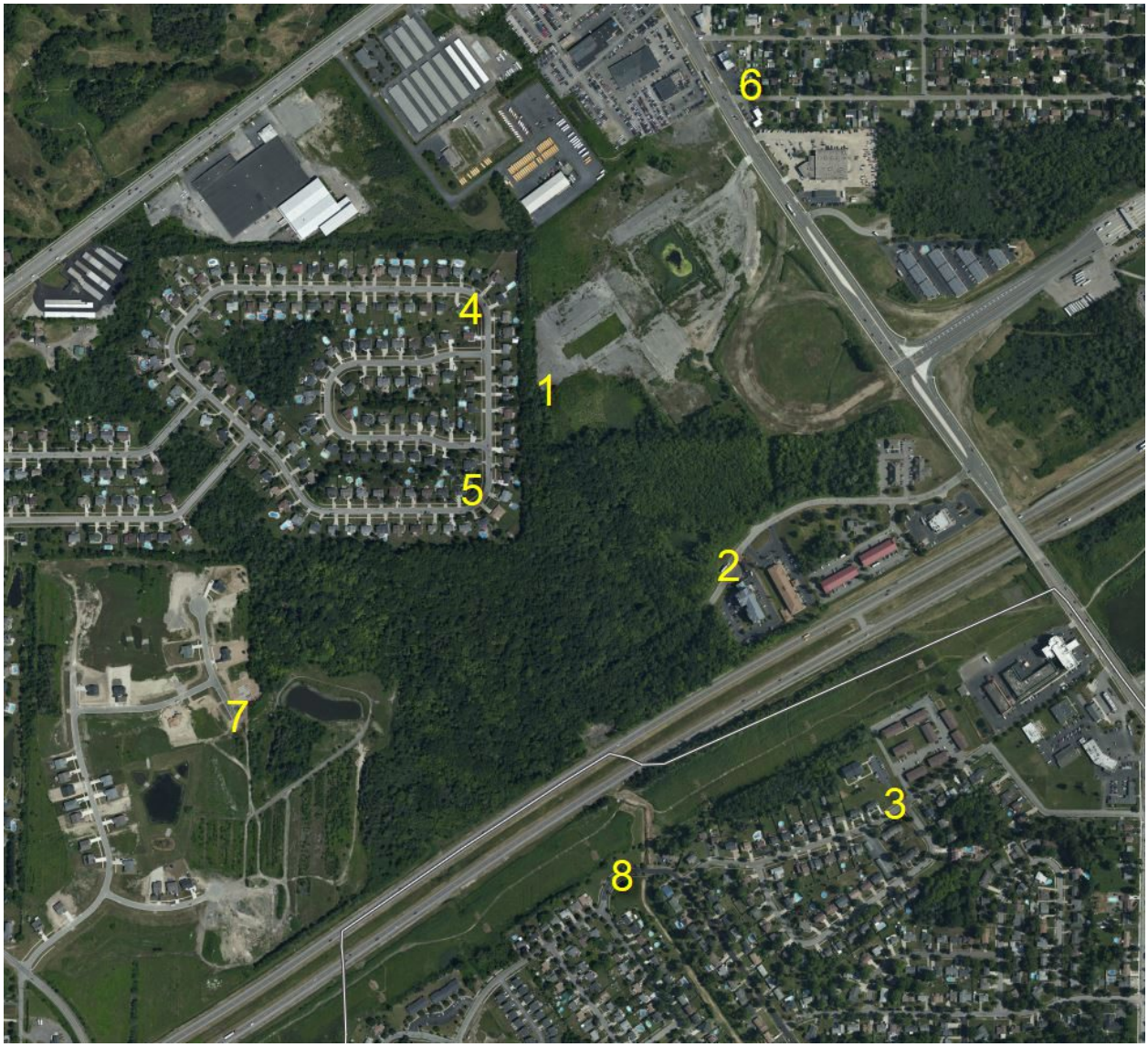
WEATHER:

☐ Clear ☐ Cloudy ☐ Brief rain ☐ Fog ☐ Snowing ☐ Snow on Ground ☐ Wet Streets

Temperature = _____ °F Winds = _____ @ _____ mph Relative Humidity = _____ %

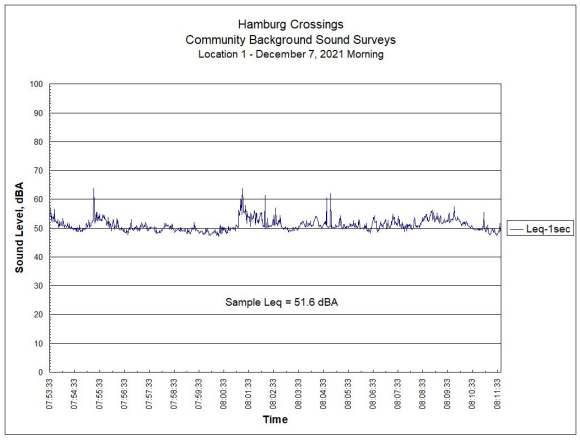
NOTES: Detailed weather data for the survey week are summarized in Appendix D

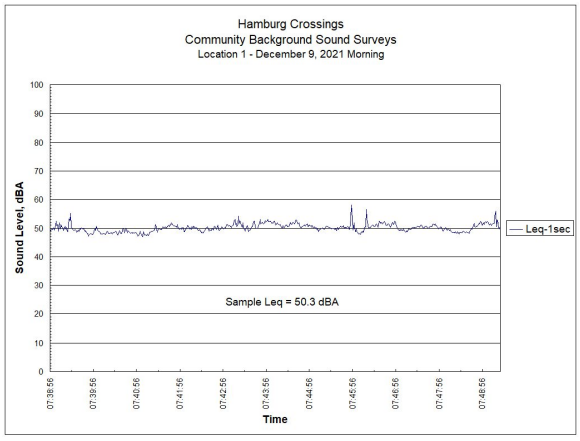


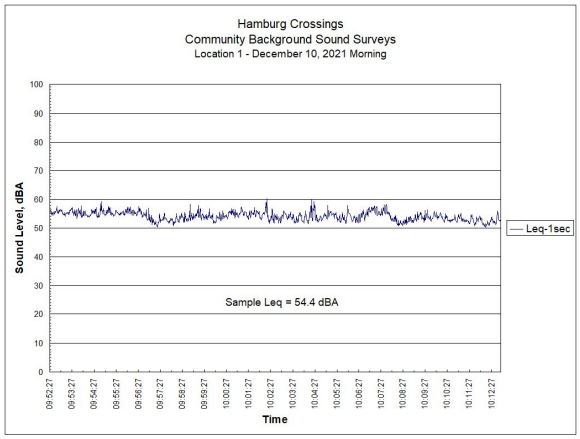


Background Noise Level Sampling Locations

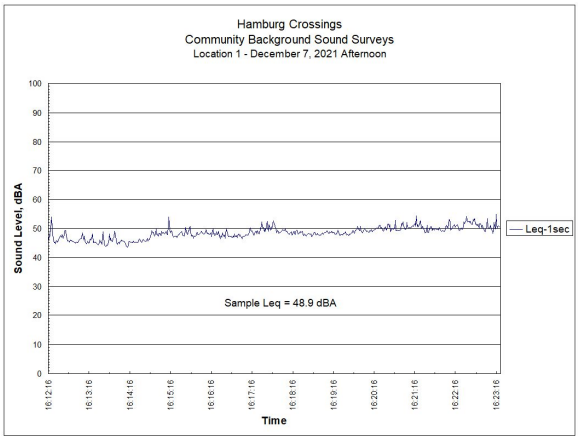
Location 1 morning background surveys

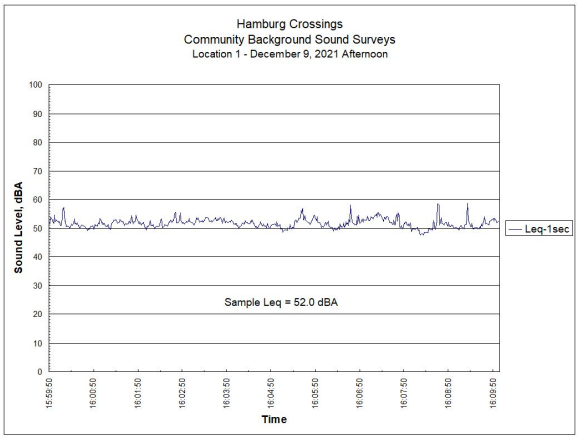




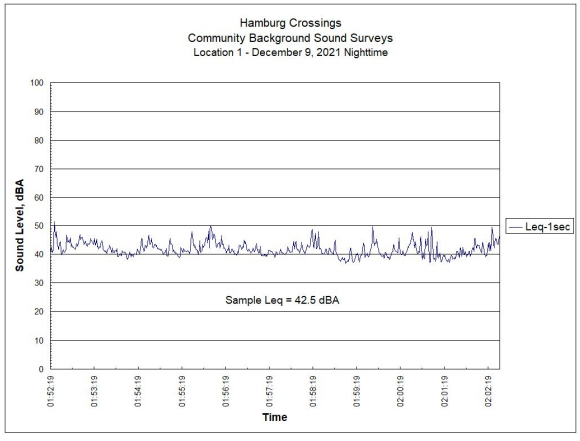


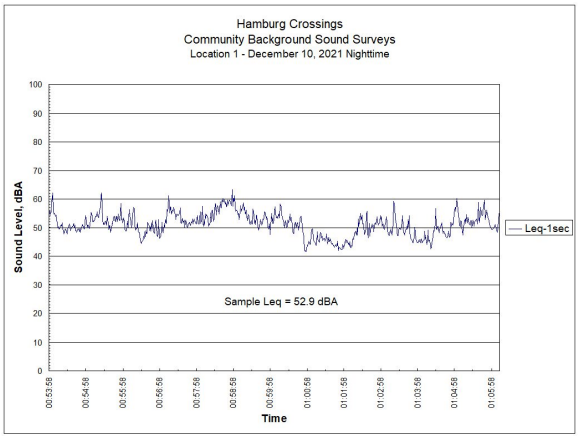
Location 1 afternoon background surveys



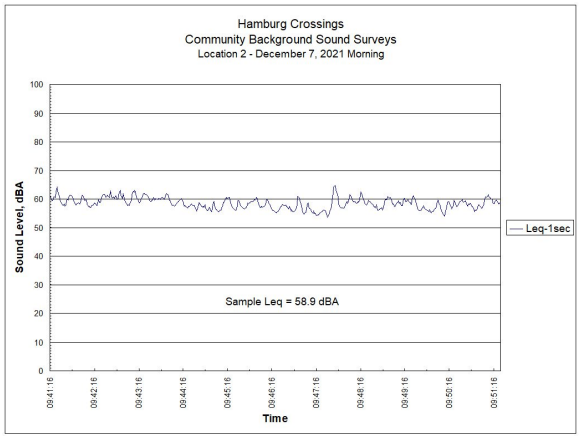


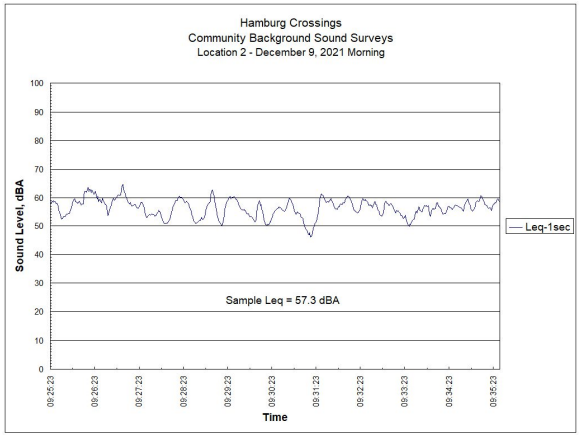
Location 1 nighttime background surveys

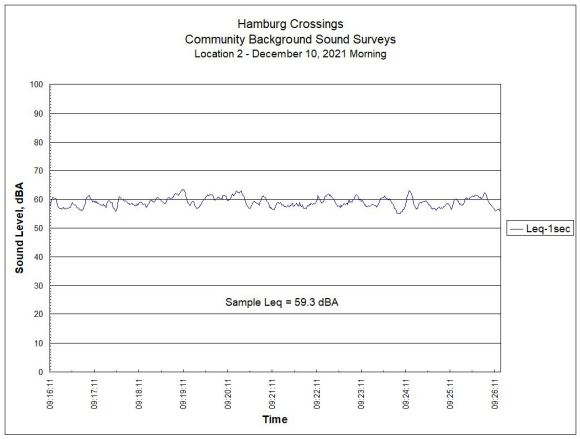




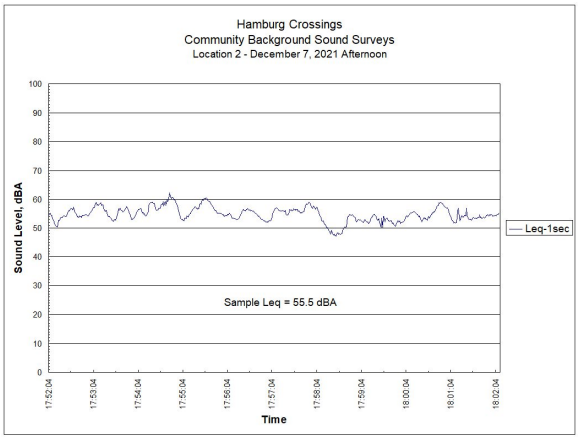
Location 2 morning background surveys

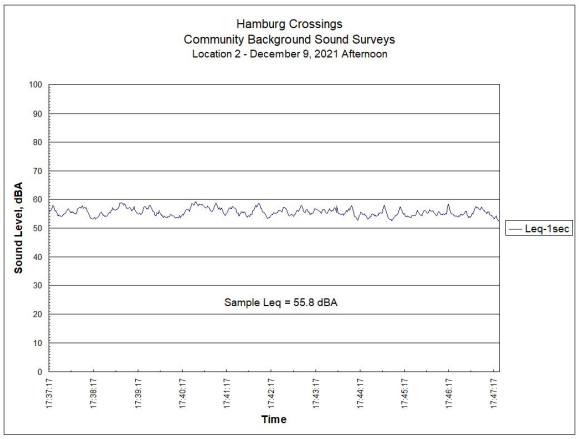




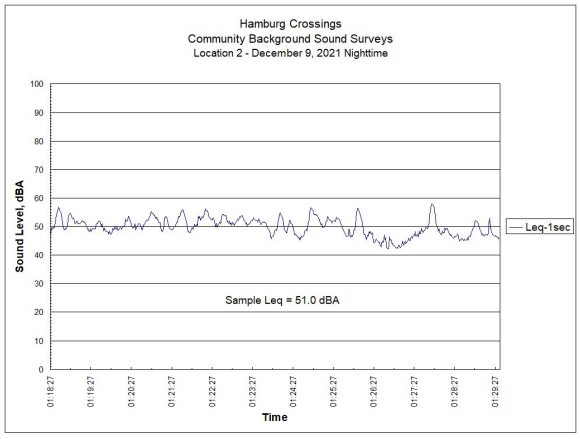


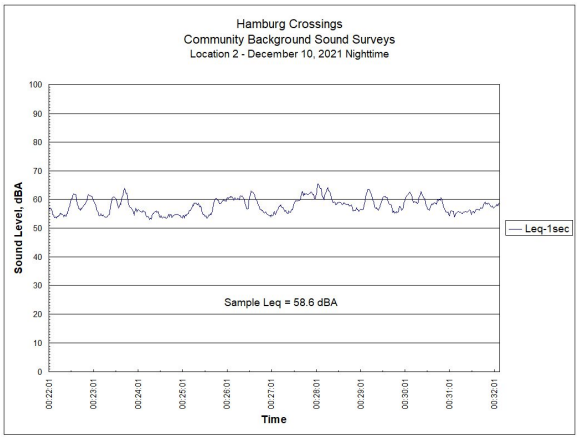
Location 2 afternoon background surveys



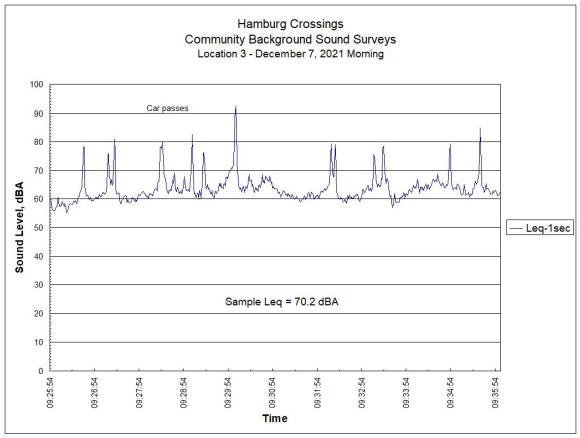


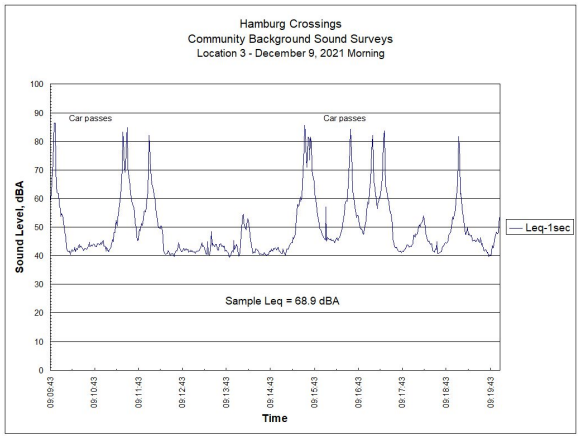
Location 2 nighttime background surveys

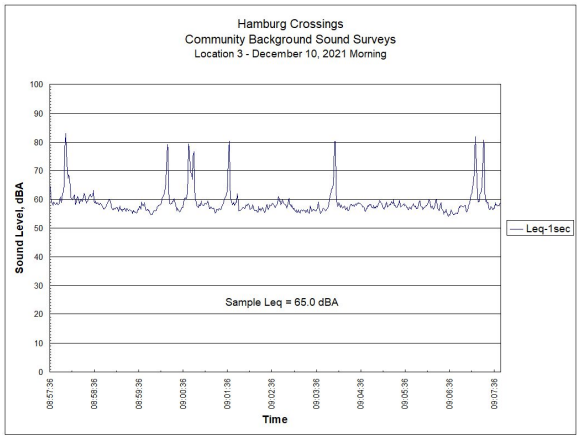




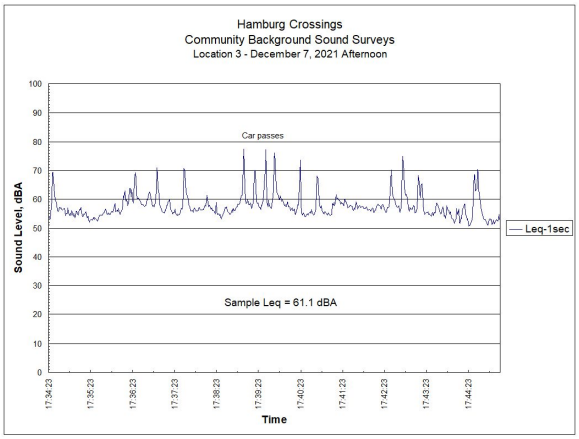
Location 3 morning background surveys

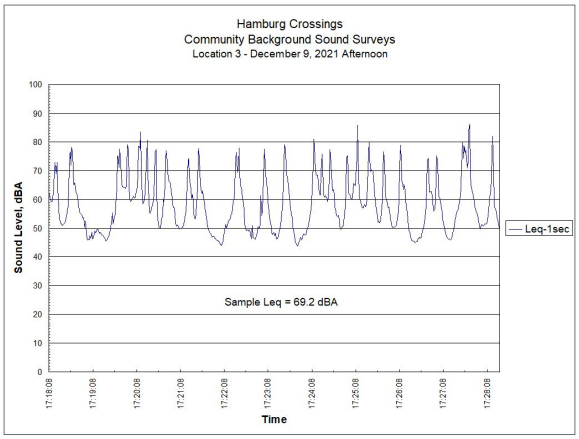




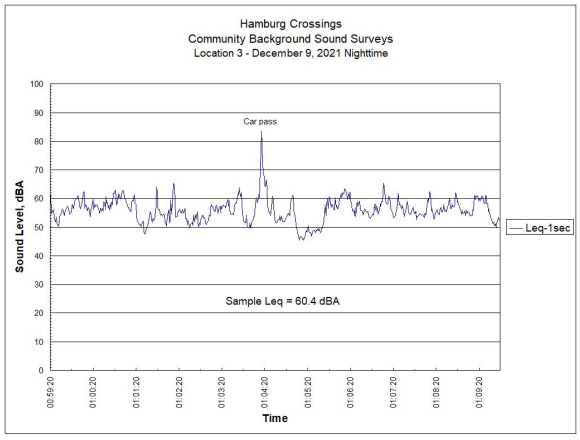


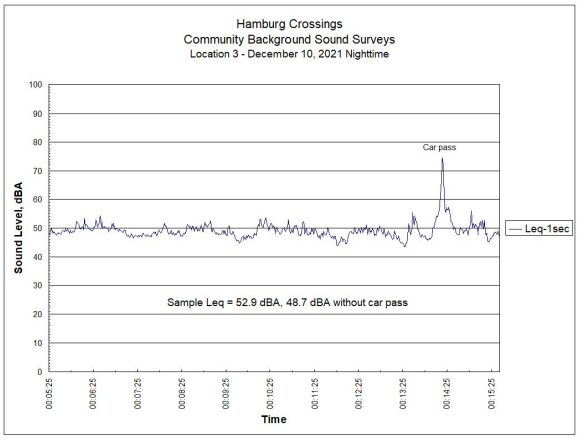
Location 3 afternoon background surveys



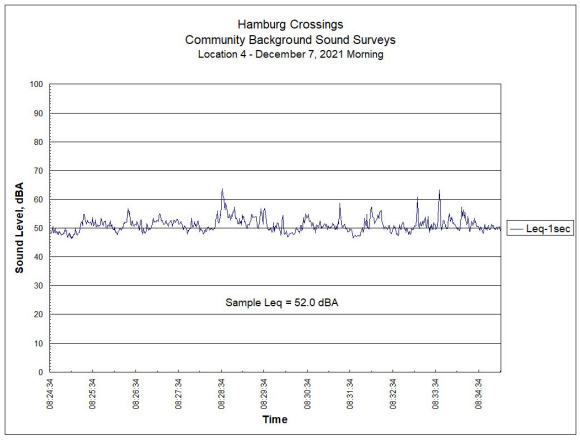


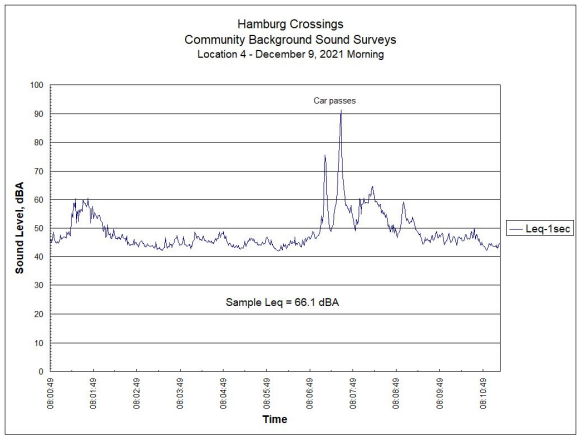
Location 3 nighttime background surveys

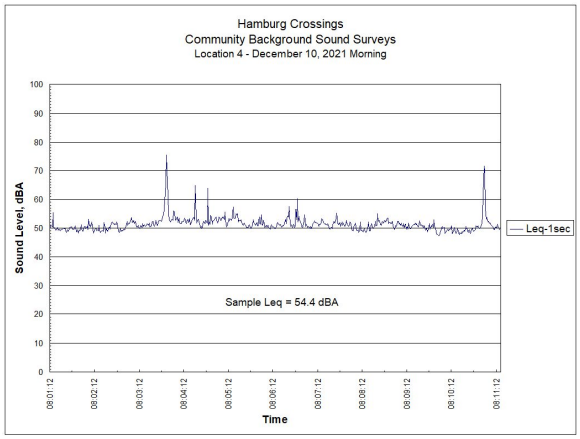




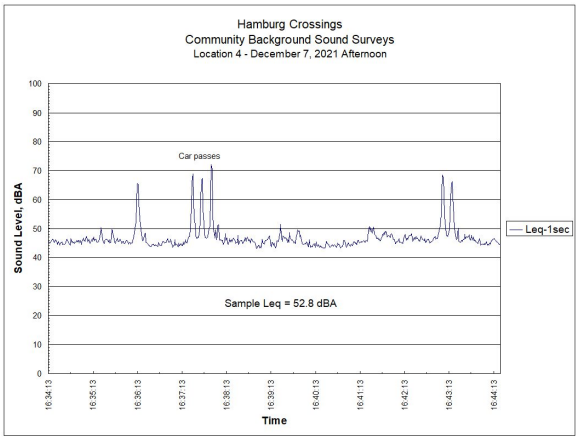
Location 4 morning background surveys

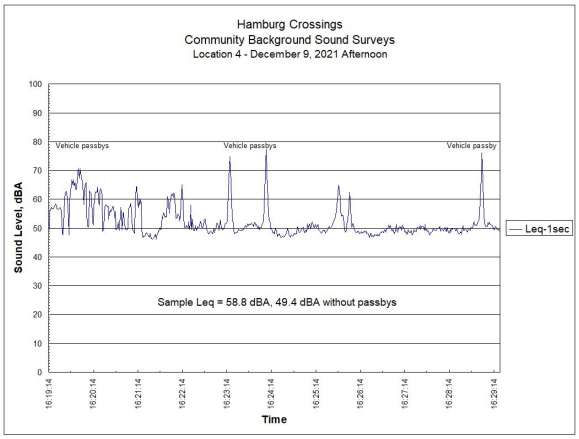




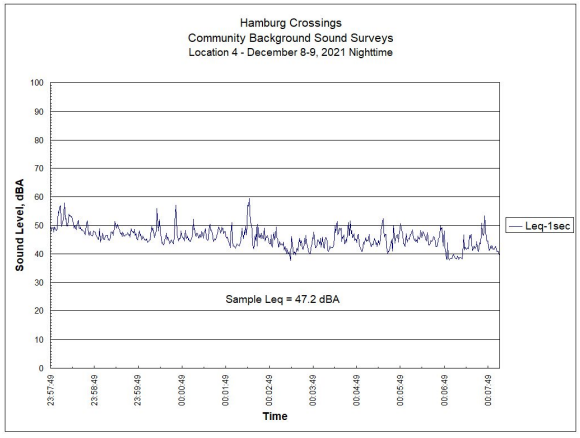


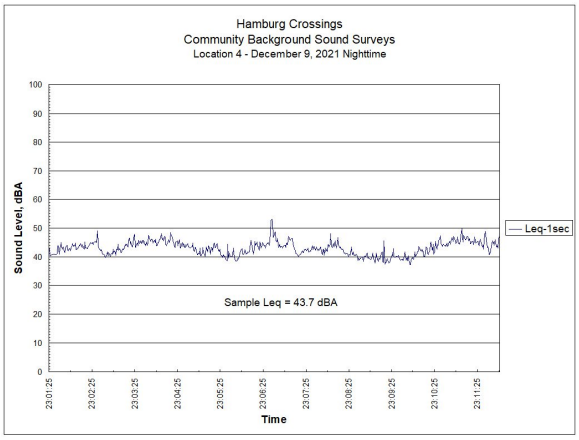
Location 4 afternoon background surveys



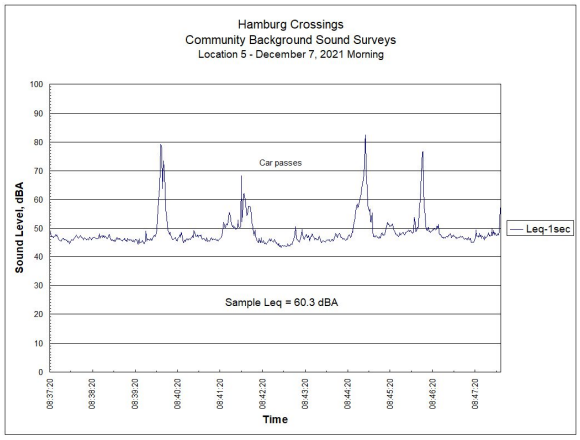


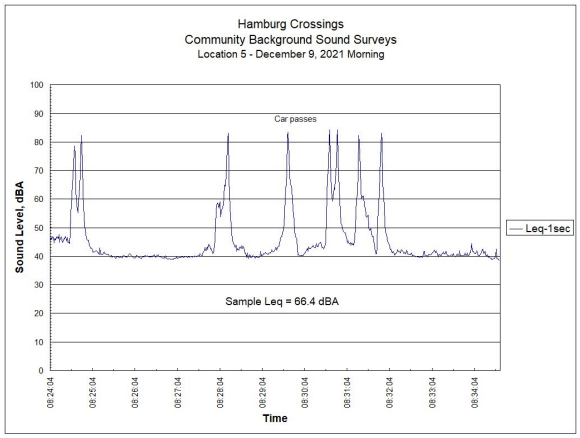
Location 4 nighttime background surveys

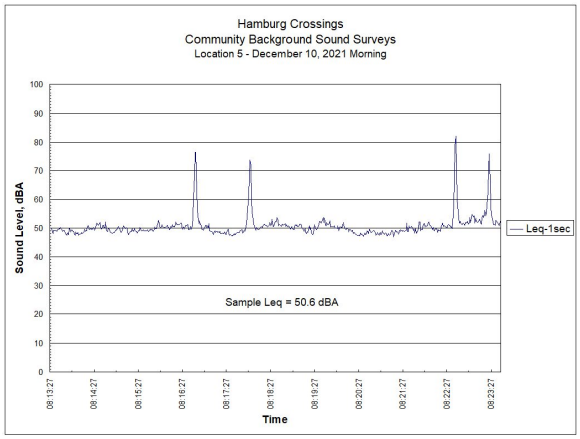




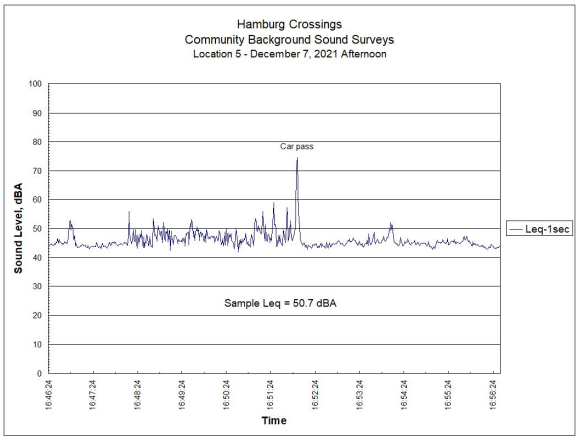
Location 5 morning background surveys

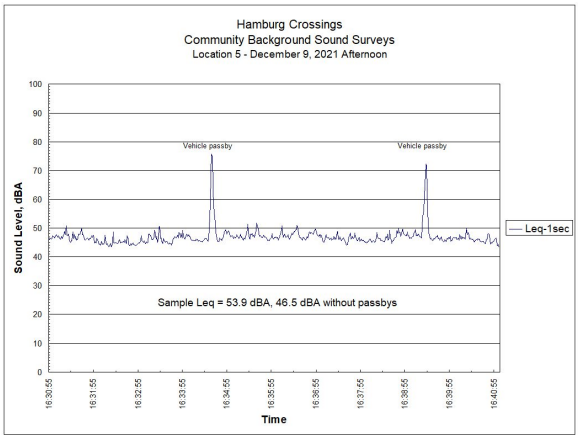




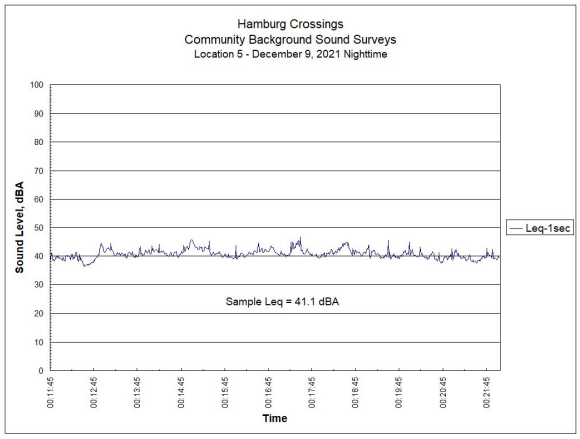


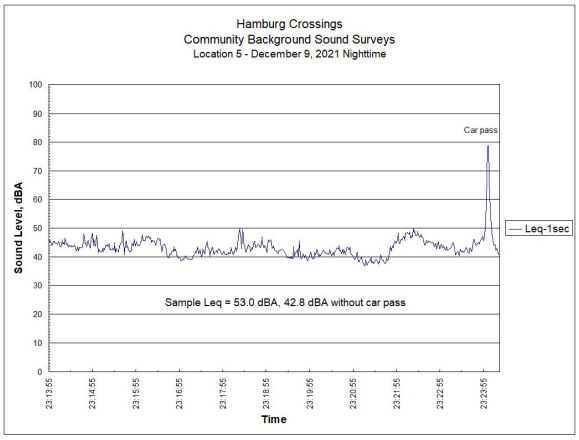
Location 5 afternoon background surveys



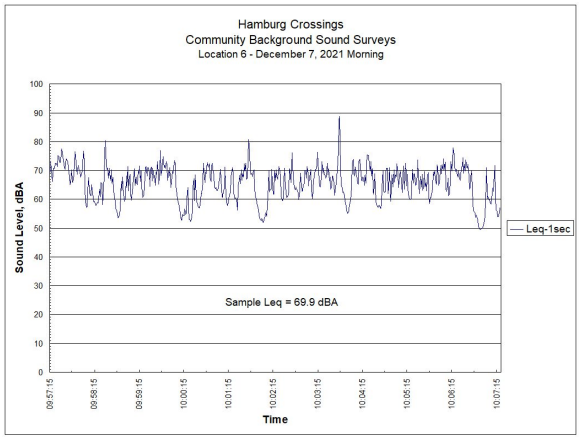


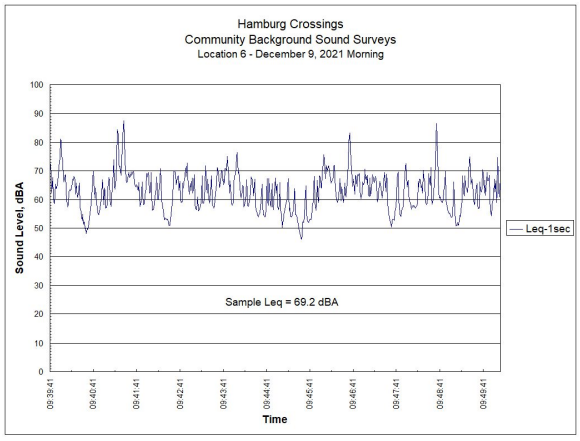
Location 5 nighttime background surveys

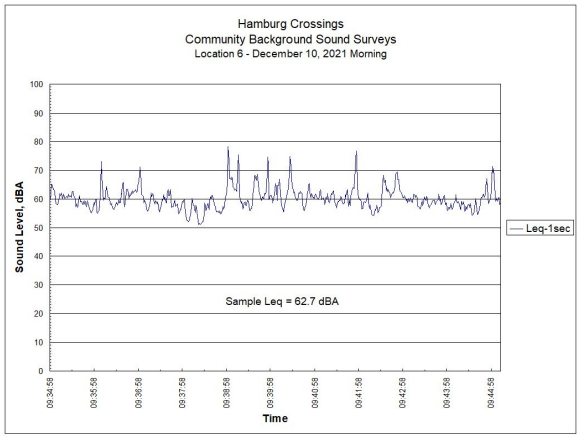




Location 6 morning background surveys







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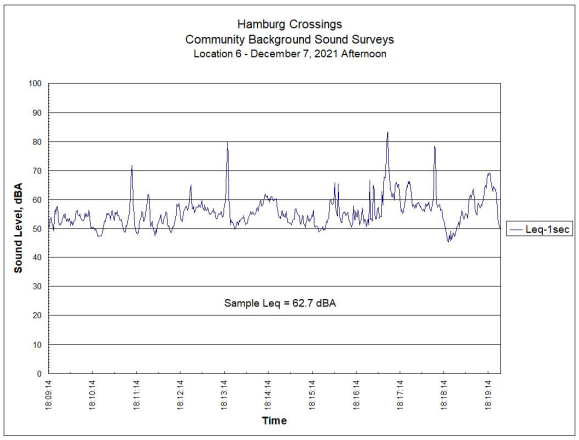
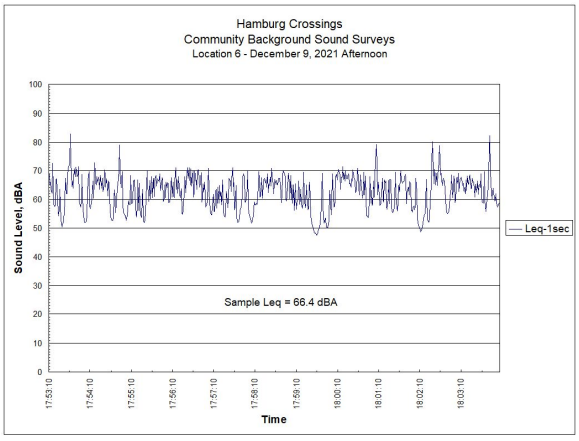
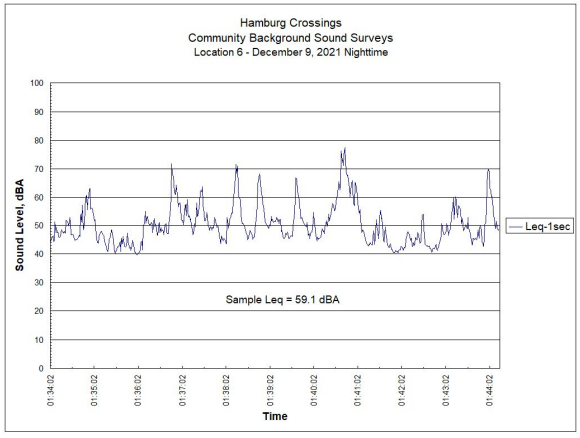
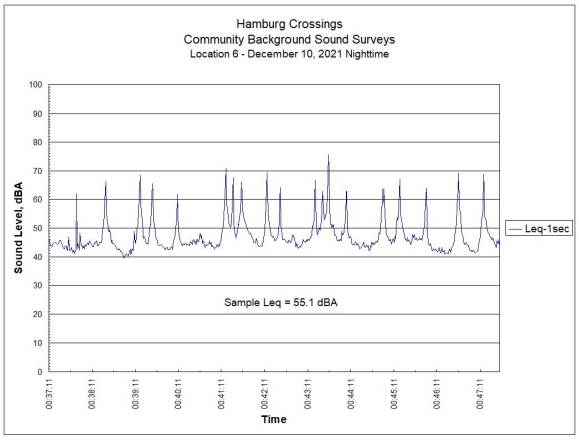


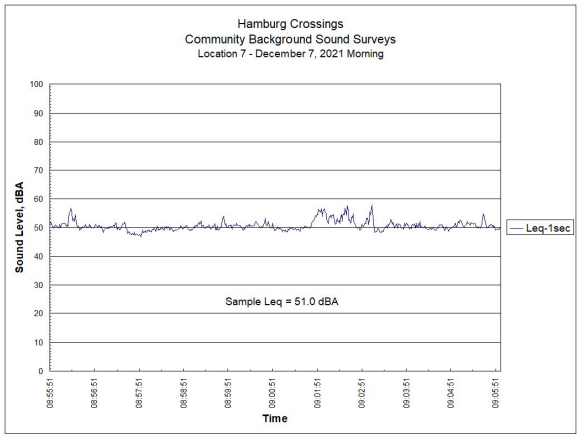


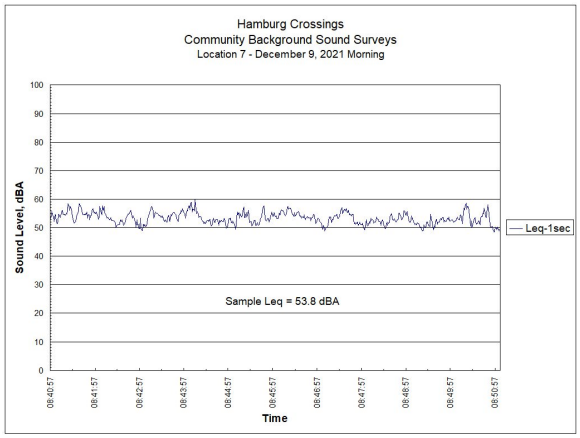
Location 6 nighttime background surveys

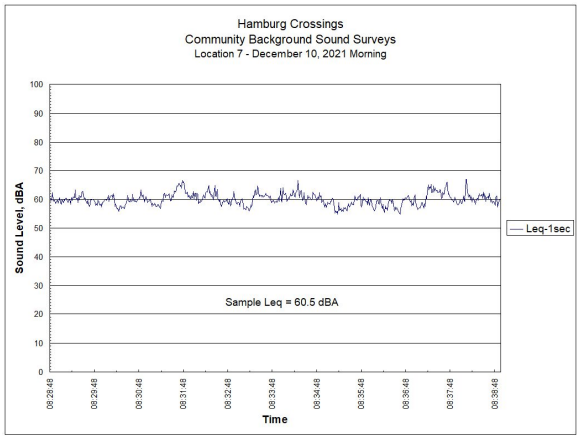




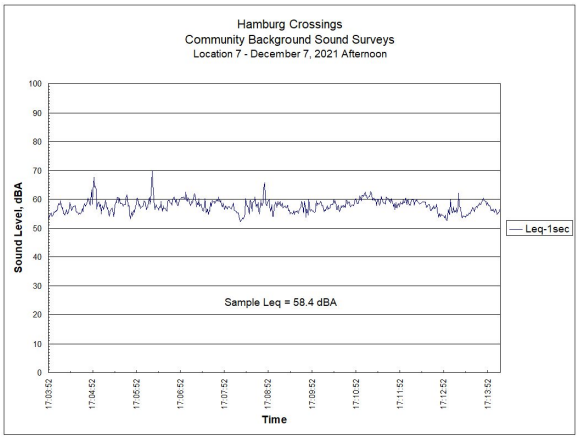
Location 7 morning background surveys

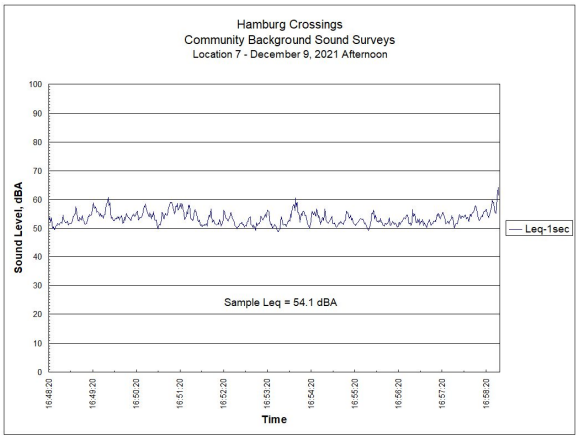




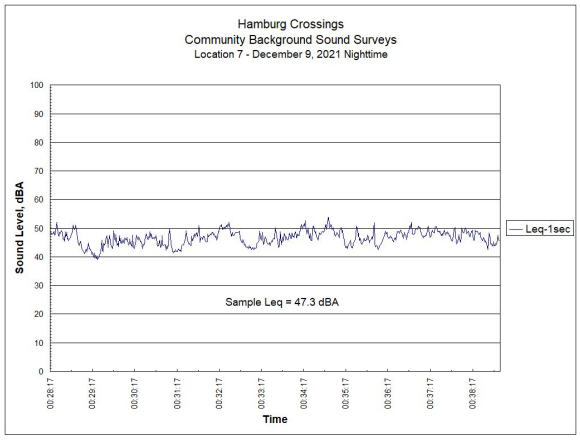


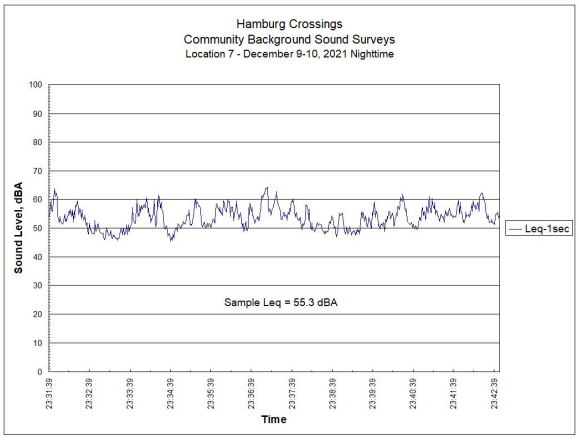
Location 7 afternoon background surveys



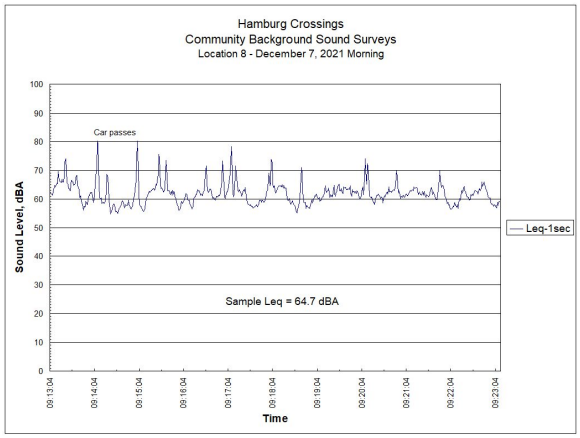


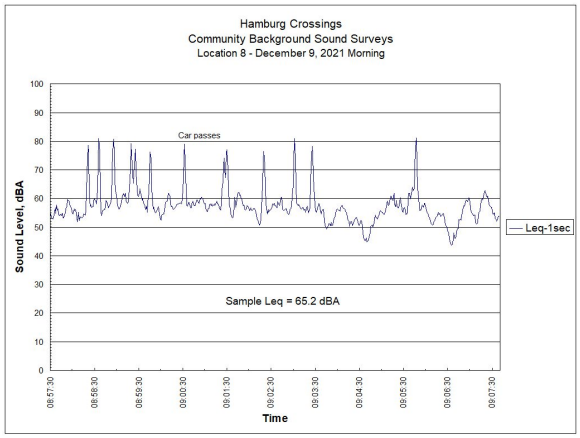
Location 7 nighttime background surveys

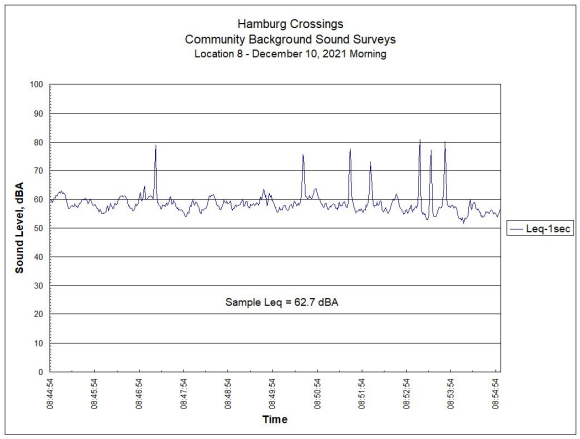




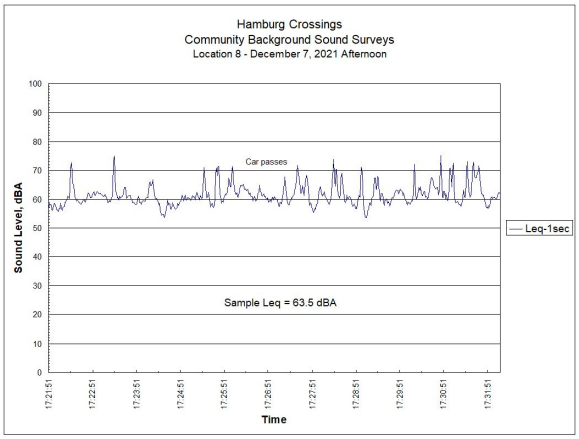
Location 8 morning background surveys

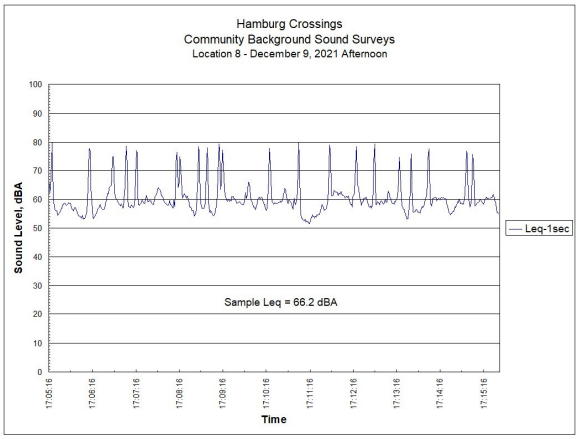




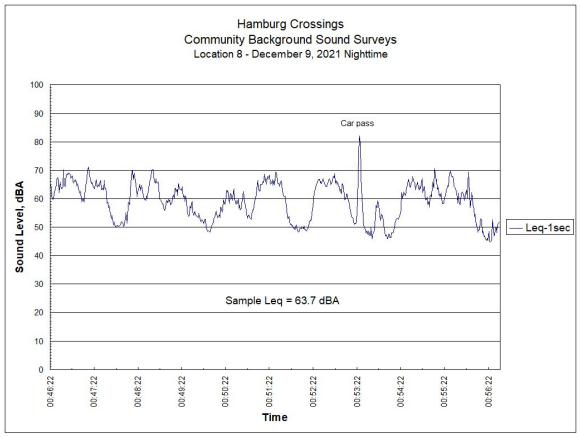


Location 8 afternoon background surveys





Location 8 nighttime background surveys



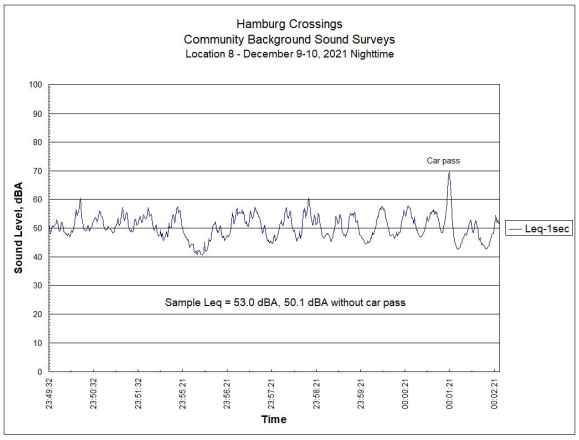


Table B1 Hamburg Crossings Warehouse Facility - Community Background Noise Level Sampling Surveys						
Location	**Date**	**Morning start time**	**Stop time**	**Lmin, dBA**	**Leq, dBA**	**Lmax, dBA**
1	December 7, 2021	7:53 AM	8:11 AM	47.3	51.6	63.2
2	December 7, 2021	9:41 AM	9:51 AM	54.0	58.9	66.9
3	December 7, 2021	9:25 AM	9:36 AM	55.7	70.2	91.4
4	December 7, 2021	8:24 AM	8:35 AM	46.6	52.0	62.7
5	December 7, 2021	8:37 AM	8:47 AM	43.4	60.3	81.6
6	December 7, 2021	9:57 AM	10:07 AM	49.6	69.9	88.9
7	December 7, 2021	8:55 AM	9:05 AM	47.0	51.0	57.5
8	December 7, 2021	9:13 AM	9:23 AM	55.1	64.7	80.7
Location	**Date**	**Afternoon start time**	**Stop time**	**Lmin, dBA**	**Leq, dBA**	**Lmax, dBA**
1	December 7, 2021	4:12 PM	4:23 PM	43.6	48.9	54.7
2	December 7, 2021	5:52 PM	6:02 PM	47.2	55.5	61.9
3	December 7, 2021	5:34 PM	5:45 PM	50.9	61.1	76.2
4	December 7, 2021	4:34 PM	4:44 PM	43.1	52.8	71.9
5	December 7, 2021	4:46 PM	4:56 PM	42.8	50.7	73.4
6	December 7, 2021	6:09 PM	6:19 PM	45.7	62.7	83.6
7	December 7, 2021	5:03 PM	5:14 PM	52.4	58.4	68.3
8	December 7, 2021	5:21 PM	5:32 PM	53.8	63.5	74.1
Location	**Date**	**Night start time**	**Stop time**	**Lmin, dBA**	**Leq, dBA**	**Lmax, dBA**
1	December 9, 2021	1:52 AM	2:02 AM	37.1	42.5	50.1
2	December 9, 2021	1:18 AM	1:29 AM	42.3	51.0	57.9
3	December 9, 2021	12:59 AM	1:09 AM	45.5	60.4	82.2
4	December 8, 2021	11:57 PM	12:08 AM	38.1	47.2	67.4
5	December 9, 2021	12:11 AM	12:22 AM	36.7	41.1	50.7
6	December 9, 2021	1:34 AM	1:44 AM	39.9	59.1	76.6
7	December 9, 2021	12:28 AM	12:38 AM	39.2	47.3	56.0
8	December 7, 2021	12:46 AM	12:56 AM	45.1	63.7	81.4
Location	**Date**	**Morning start time**	**Stop time**	**Lmin, dBA**	**Leq, dBA**	**Lmax, dBA**
1	December 9, 2021	7:38 AM	7:49 AM	47.1	50.3	57.4
2	December 9, 2021	9:25 AM	9:35 AM	46.4	57.3	64.2
3	December 9, 2021	9:09 AM	9:19 AM	39.8	68.9	86.9
4	December 9, 2021	8:00 AM	8:11 AM	42.0	66.1	90.5
5	December 9, 2021	8:24 AM	8:34 AM	38.7	66.4	83.3
6	December 9, 2021	9:39 AM	9:50 AM	46.6	69.2	86.6
7	December 9, 2021	8:40 AM	8:51 AM	48.6	53.8	58.8
8	December 7, 2021	8:57 AM	9:07 AM	35.3	65.2	80.2
Location	**Date**	**Afternoon start time**	**Stop time**	**Lmin, dBA**	**Leq, dBA**	**Lmax, dBA**
1	December 9, 2021	3:59 PM	4:09 PM	47.7	52.0	58.7
2	December 9, 2021	5:37 PM	5:47 PM	52.7	55.8	59.1
3	December 9, 2021	5:18 PM	5:28 PM	43.9	69.2	86.0
4	December 9, 2021	4:19 PM	4:29 PM	46.2	58.8	76.0
5	December 9, 2021	4:30 PM	4:41 PM	43.5	53.9	75.4
6	December 9, 2021	5:53 PM	6:04 PM	47.7	66.4	81.3
7	December 9, 2021	4:48 PM	4:58 PM	48.9	54.1	63.1
8	December 7, 2021	5:05 PM	5:15 PM	51.5	66.2	78.4
Location	**Date**	**Night start time**	**Stop time**	**Lmin, dBA**	**Leq, dBA**	**Lmax, dBA**
1	December 10, 2021	12:53 AM	1:06 AM	41.9	52.9	63.1
2	December 10, 2021	12:22 AM	12:32 AM	53.2	58.6	65.3
3	December 10, 2021	12:05 AM	12:15 AM	43.6	52.9	74.0
4	December 9, 2021	11:01 PM	11:11 PM	37.5	43.7	53.3
5	December 9, 2021	11:13 PM	11:24 PM	36.9	54.4	79.5
6	December 10, 2021	12:37 AM	12:47 AM	39.7	55.1	75.0
7	December 9, 2021	11:31 PM	11:42 PM	45.3	55.3	64.2
8	December 7, 2021	11:49 PM	12:02 AM	40.6	53.0	68.7
Location	**Date**	**Morning start time**	**Stop time**	**Lmin, dBA**	**Leq, dBA**	**Lmax, dBA**
1	December 10, 2021	9:52 AM	10:12 AM	50.5	54.4	65.5
2	December 10, 2021	9:16 AM	9:26 AM	54.9	59.3	63.4
3	December 10, 2021	8:57 AM	9:07 AM	54.4	65.0	81.4
4	December 10, 2021	8:01 AM	8:11 AM	47.4	54.4	73.9
5	December 10, 2021	8:13 AM	8:23 AM	47.2	59.2	80.9
6	December 10, 2021	9:34 AM	9:45 AM	51.0	62.7	77.1
7	December 10, 2021	8:28 AM	8:38 AM	55.0	60.5	67.0
8	December 10, 2021	8:44 AM	8:55 AM	52.3	62.7	79.5

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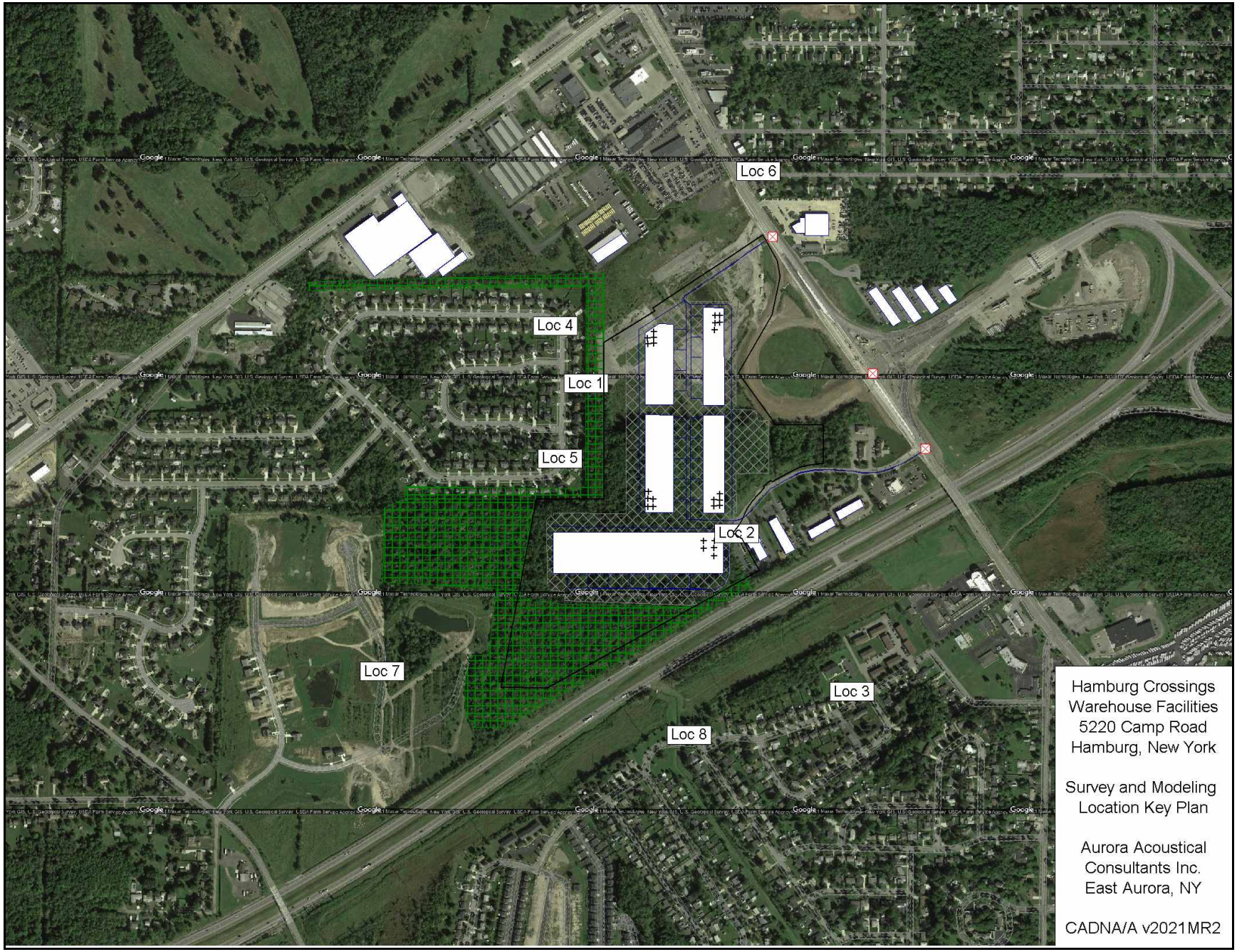
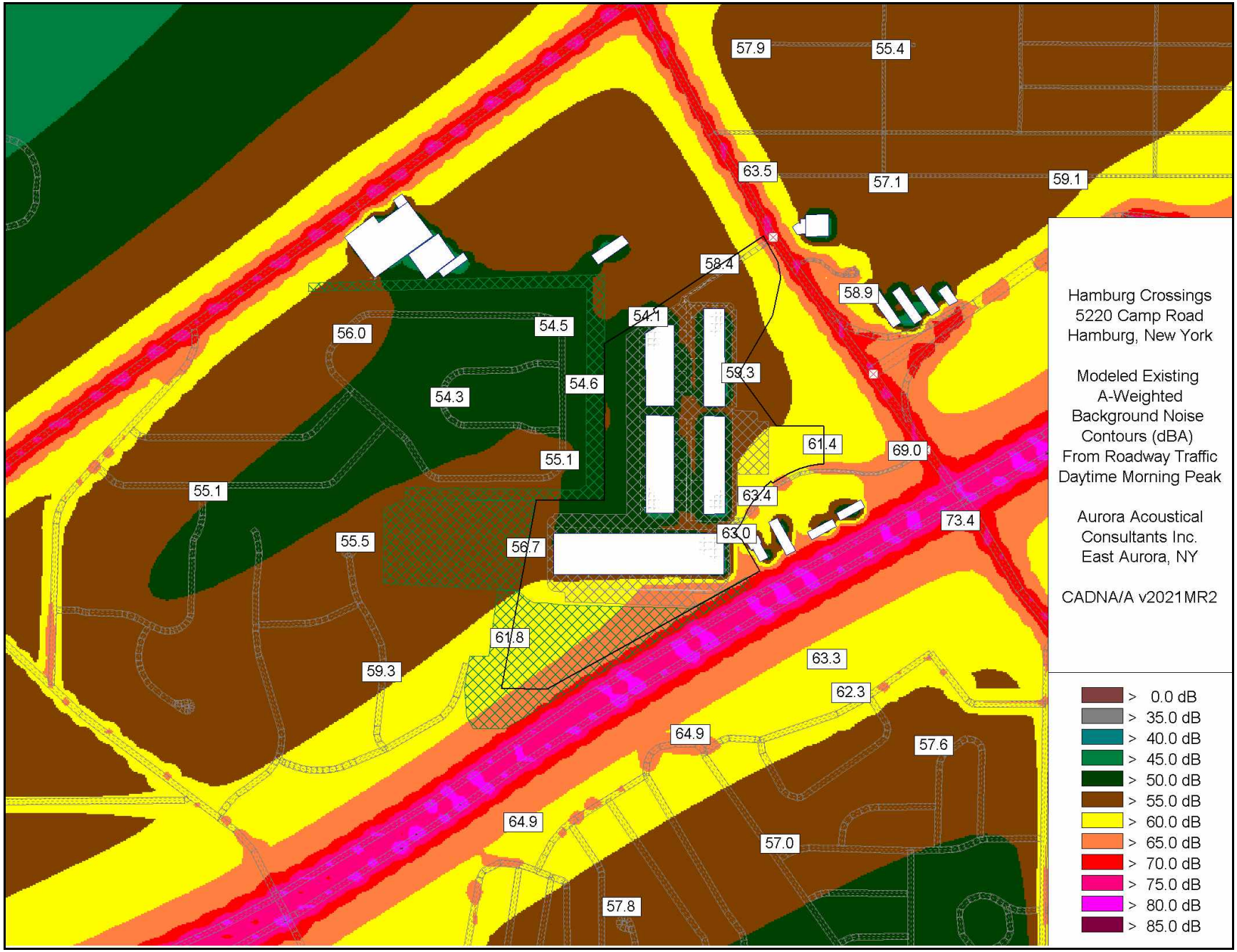
745 Warren Drive
East Aurora, New York 14052
716-655-2200
info@auroraacoustical.com

APPENDIX C

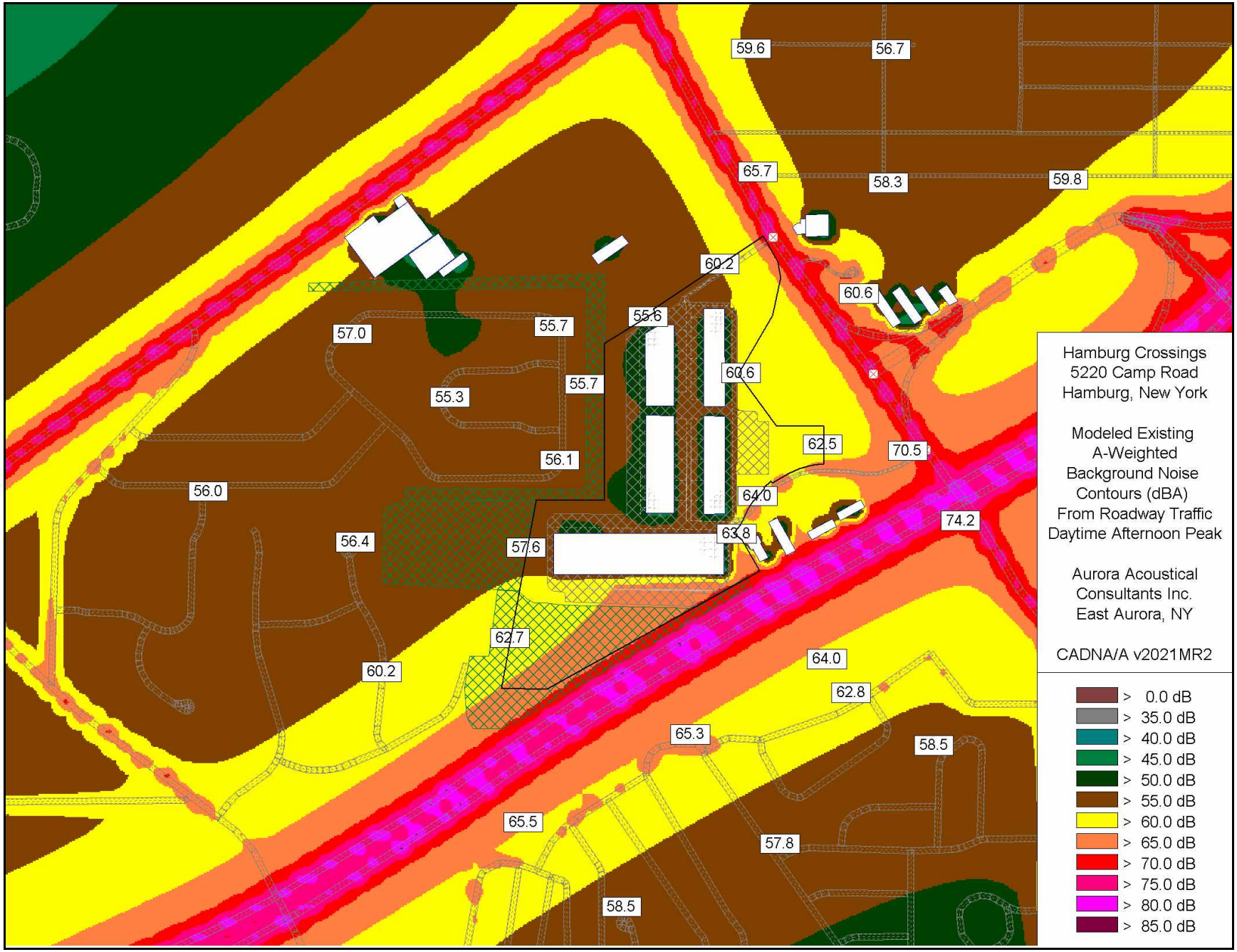
Modeled Background Traffic Noise Level Contours and Facility Sound Level Contours



Survey and Modeling Locations Key Plan

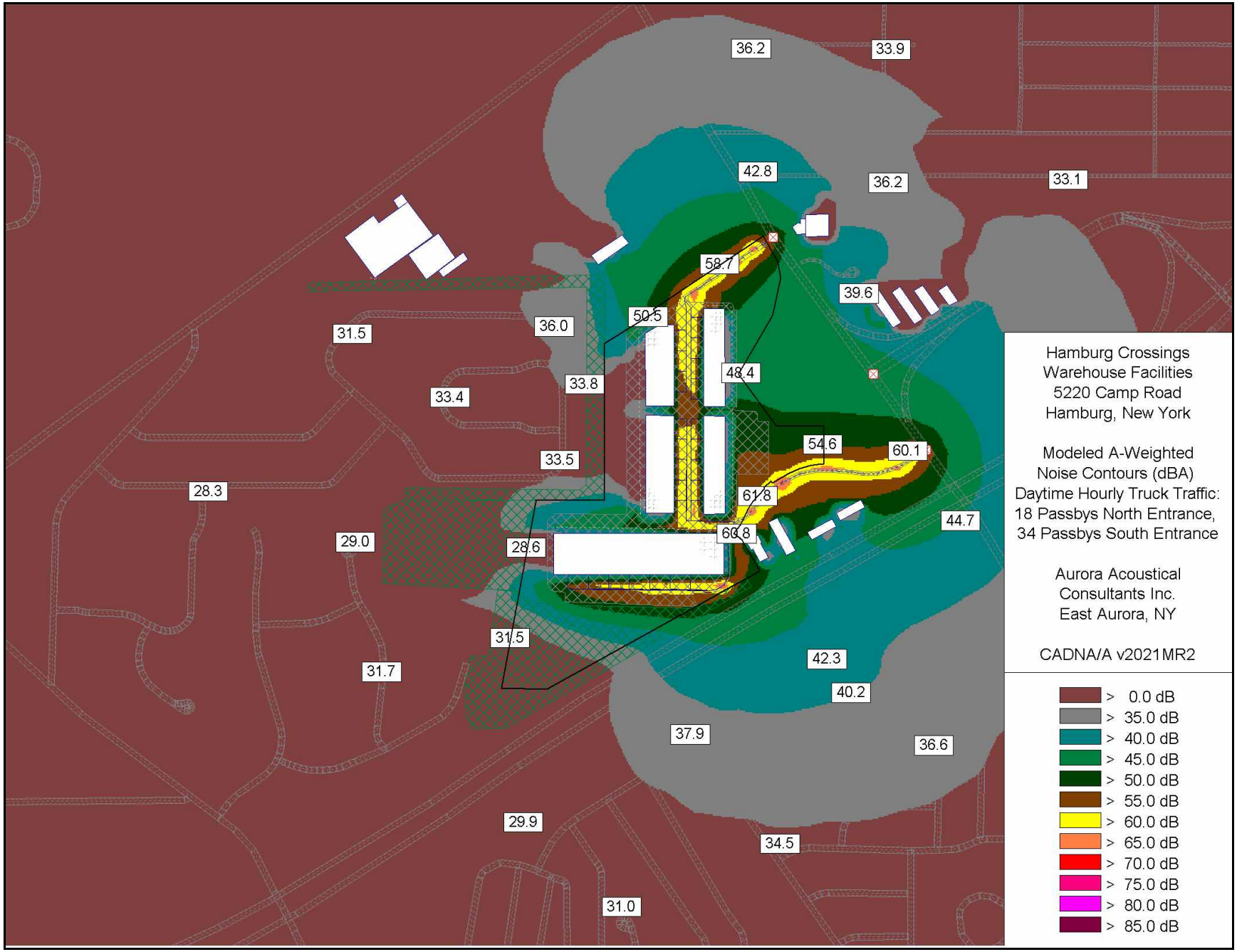


Modeled background traffic noise levels, morning peak period

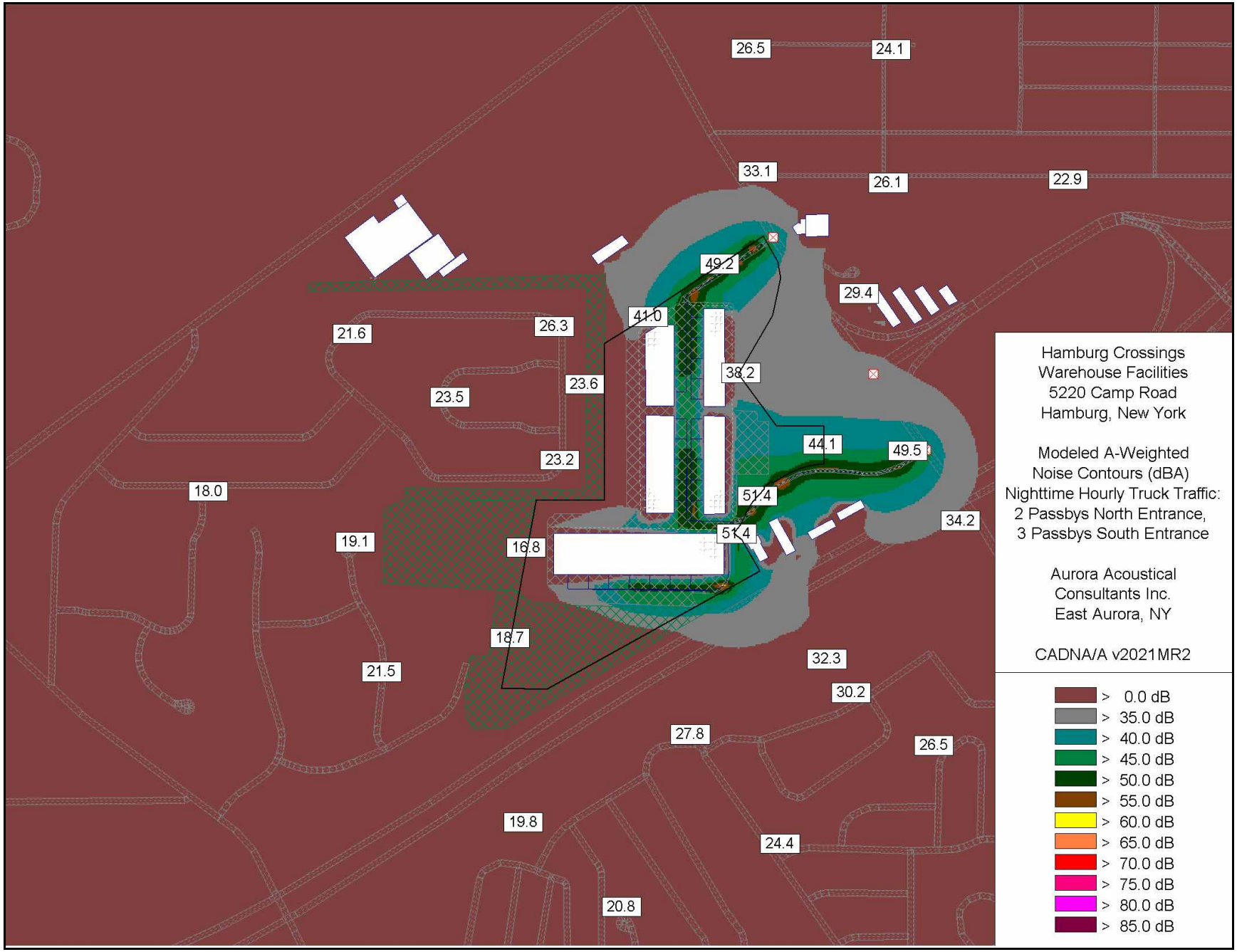


Modeled background traffic noise levels, afternoon peak period

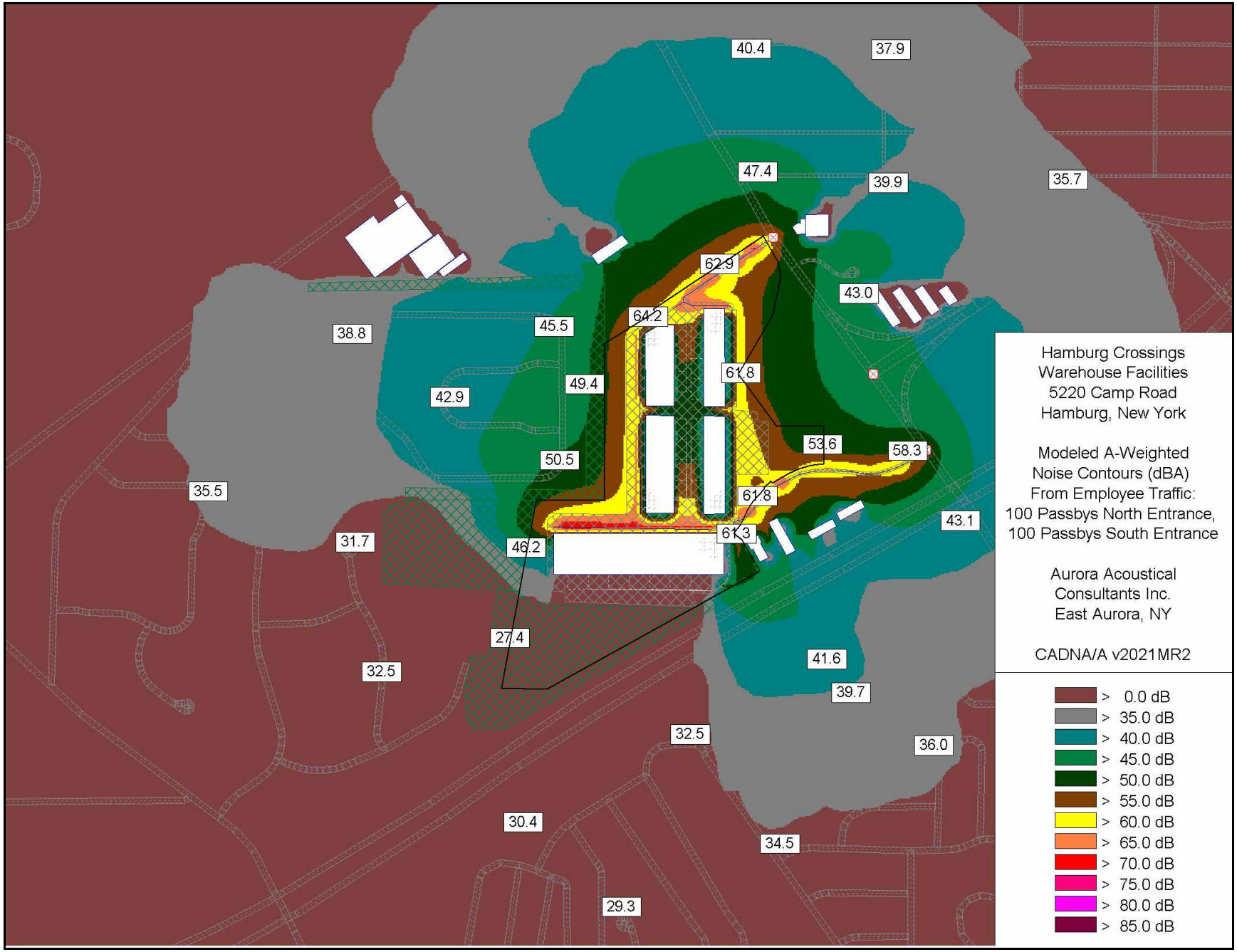
Modeled background traffic noise levels, nighttime minimum period



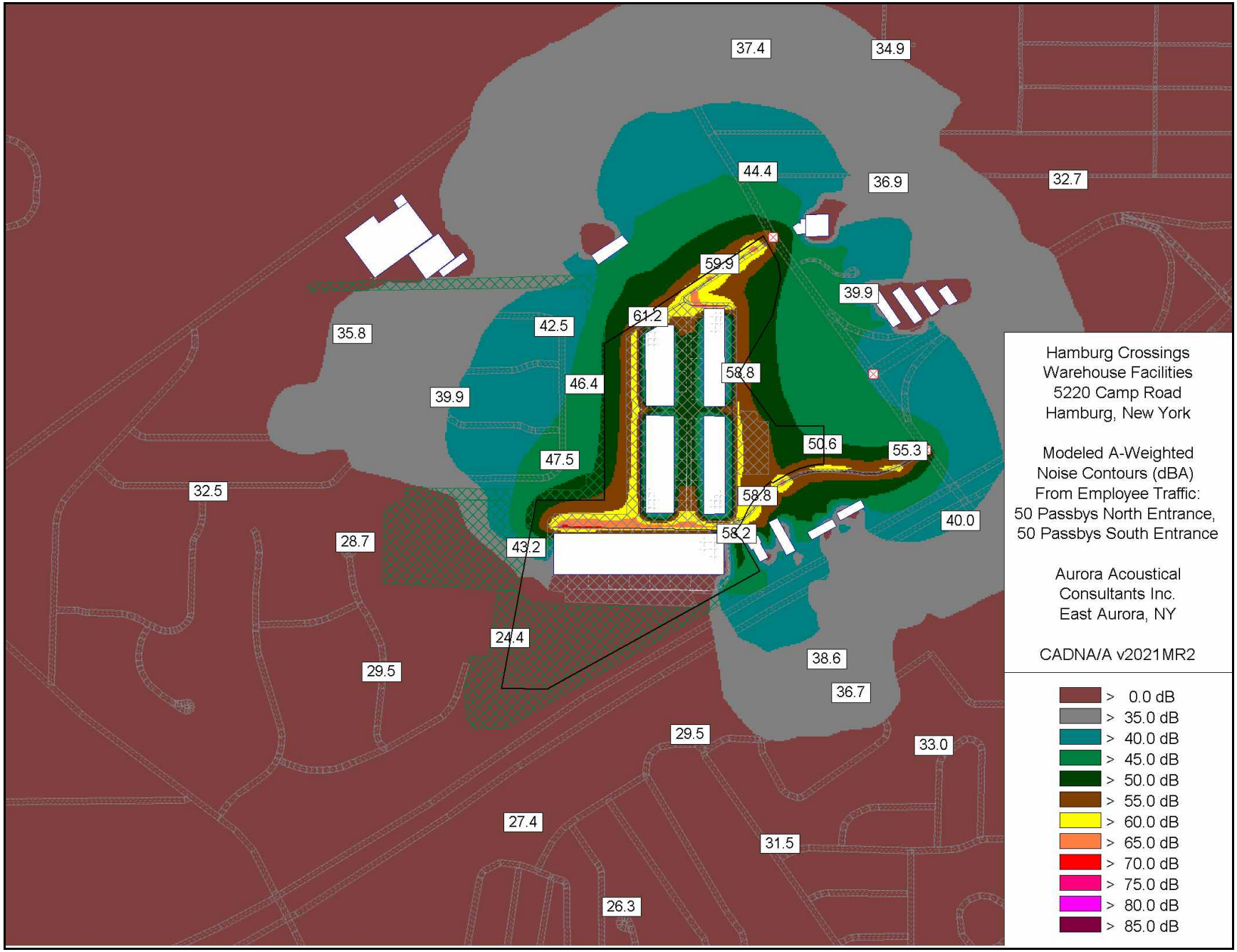
Modeled warehouse site truck traffic noise levels, 52 hourly total, daytime period



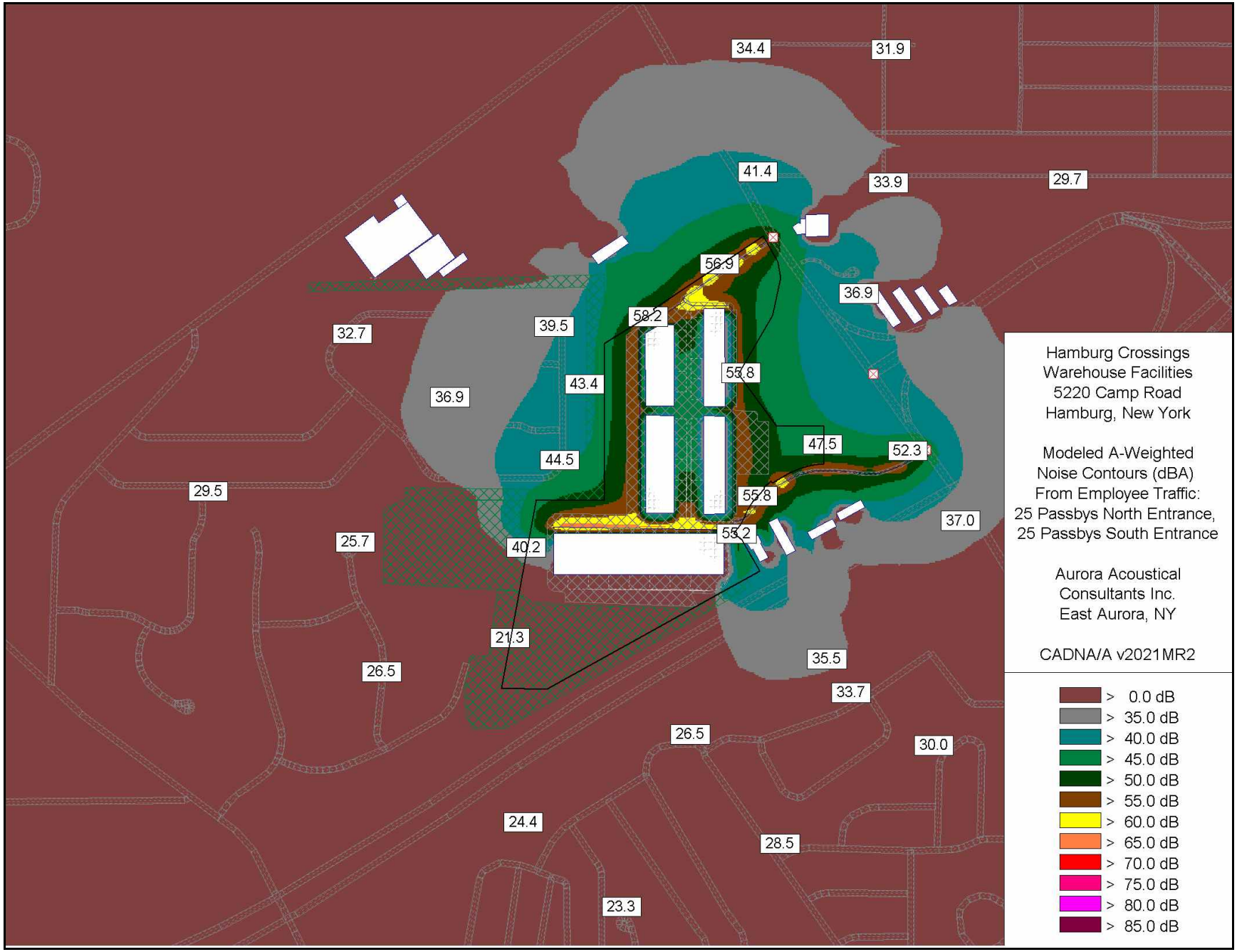
Modeled warehouse site truck traffic noise levels, 5 hourly total, nighttime period



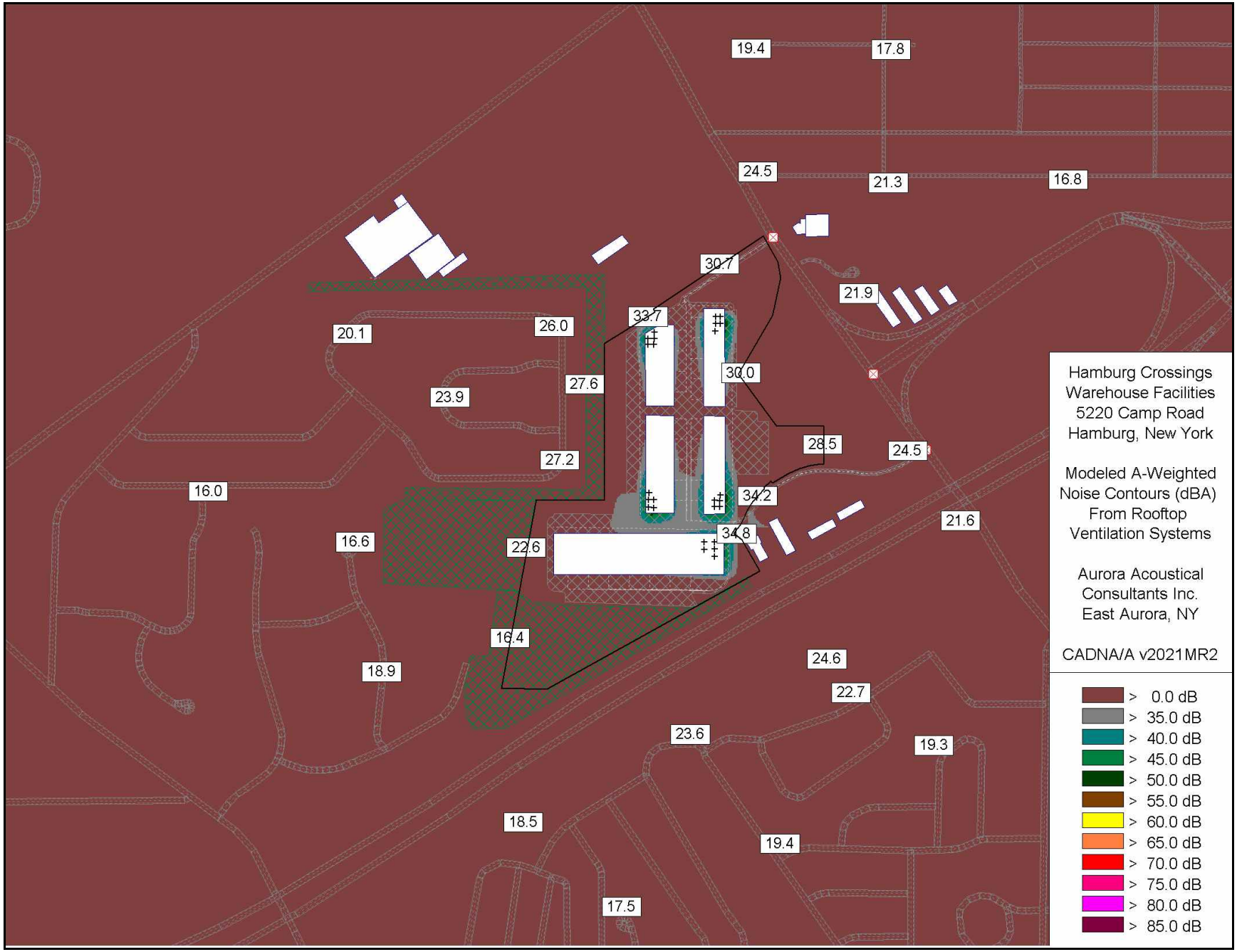
Modeled employee site traffic noise levels, 200 hourly total



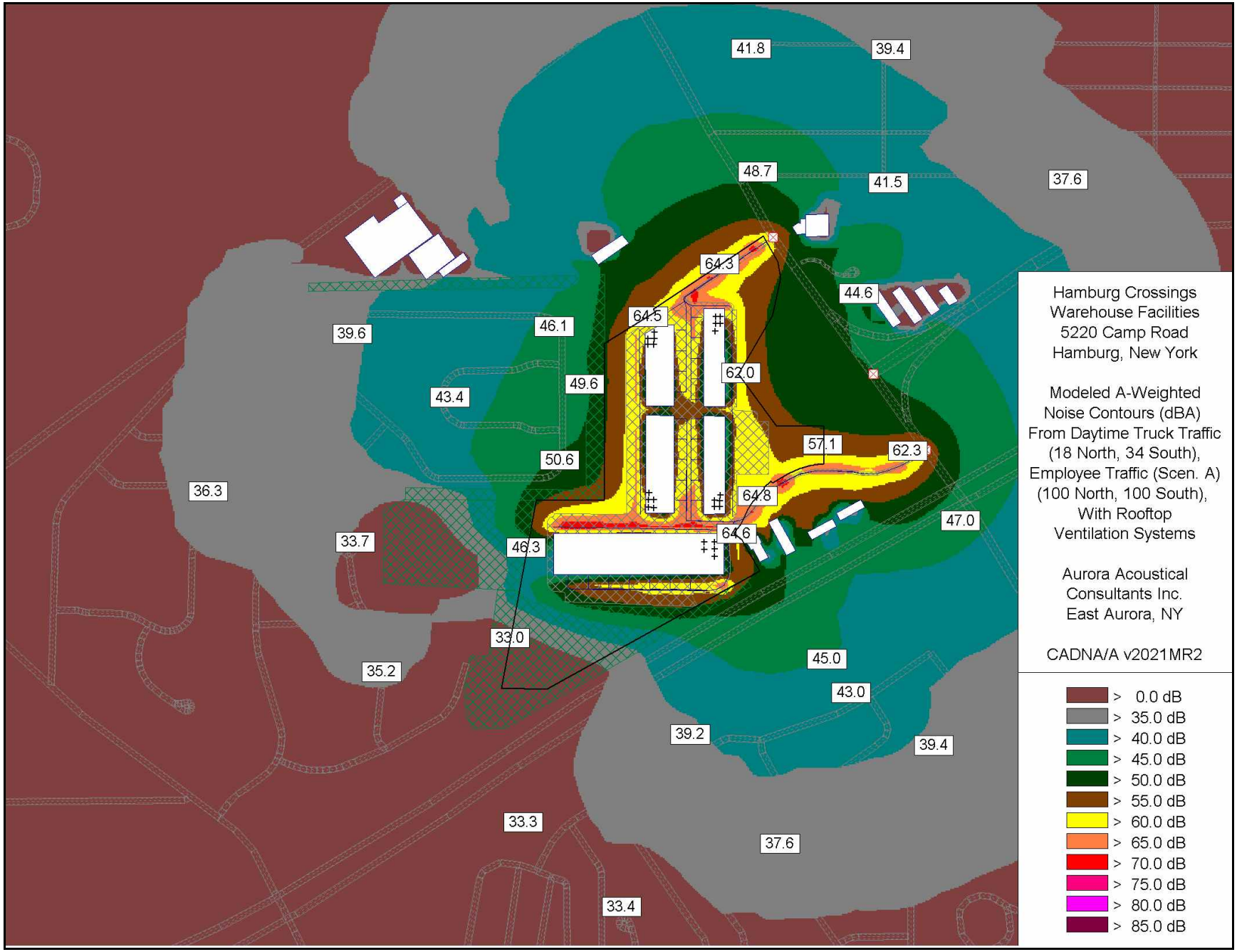
Modeled employee site traffic noise levels, 100 hourly total



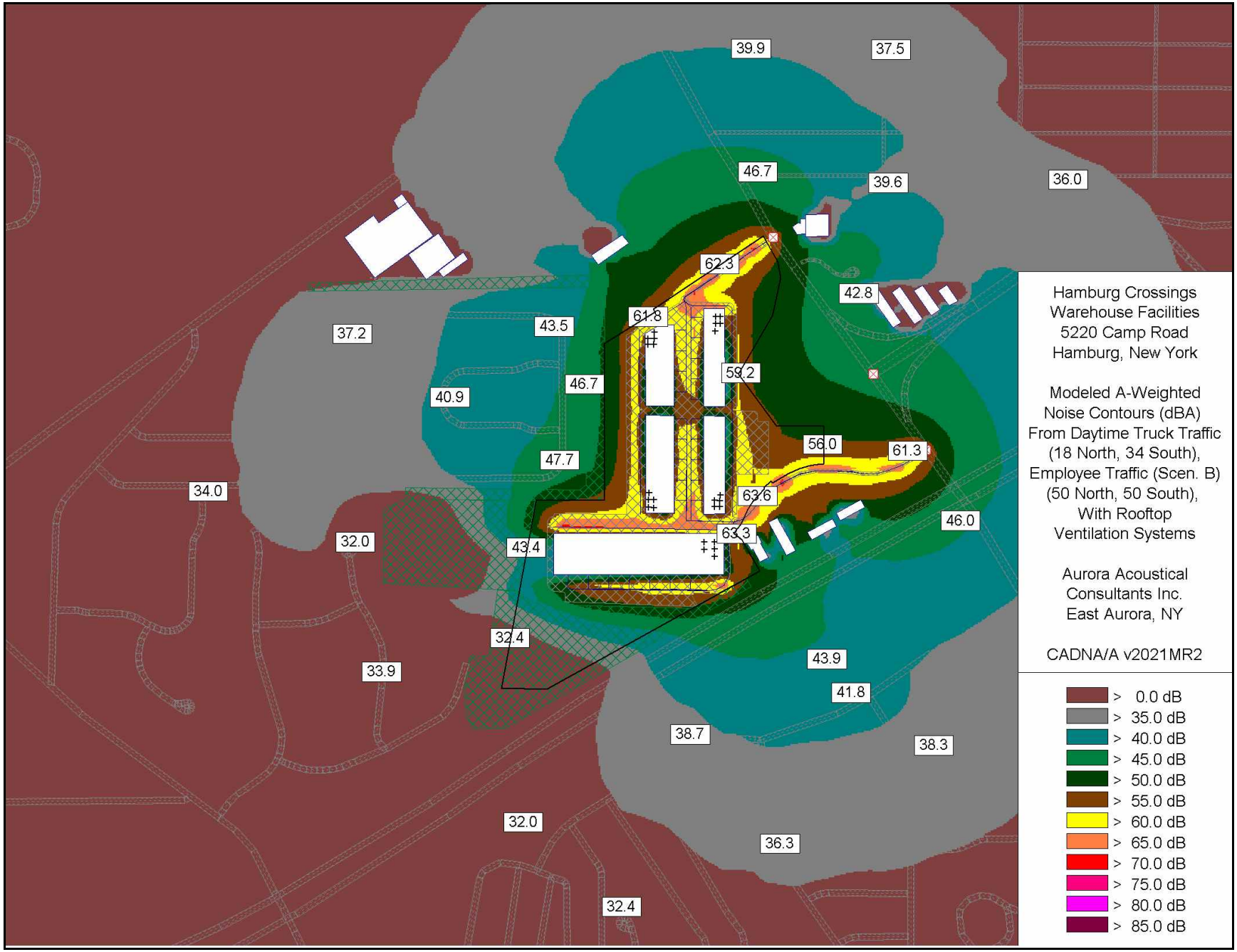
Modeled employee site traffic noise levels, 50 hourly total



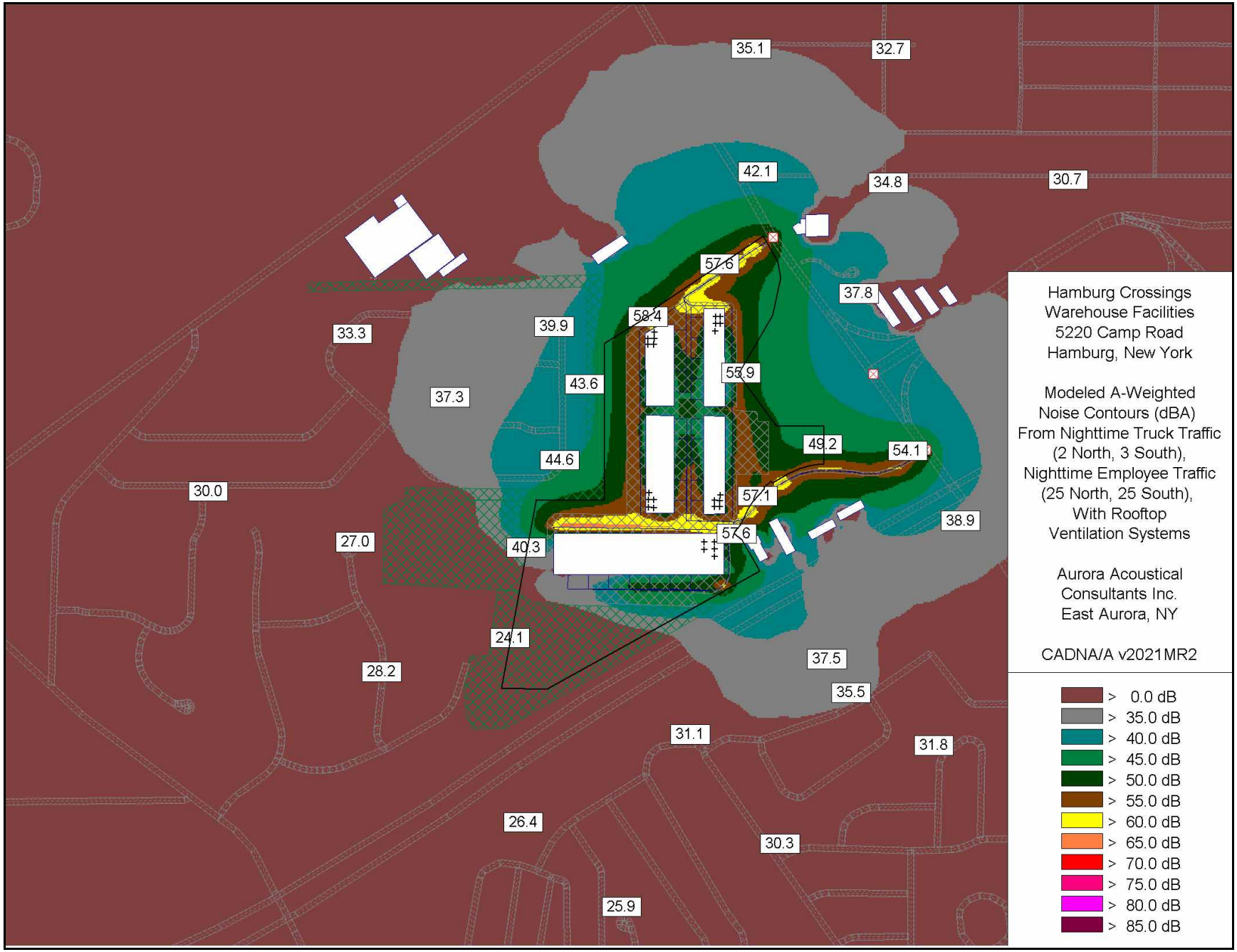
Modeled warehouse rooftop ventilation equipment noise levels



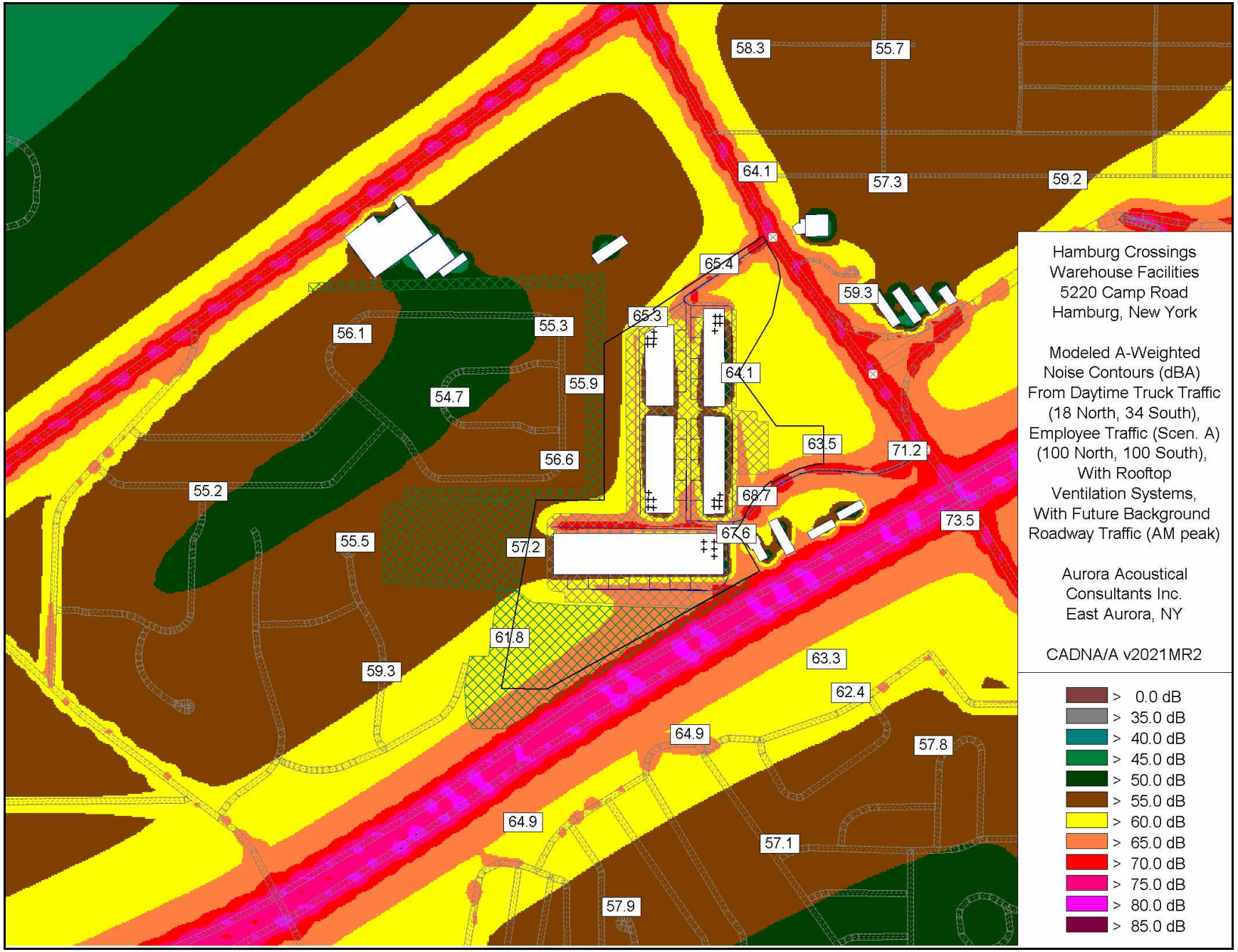
Modeled truck and employee site traffic and rooftop ventilation equipment noise levels



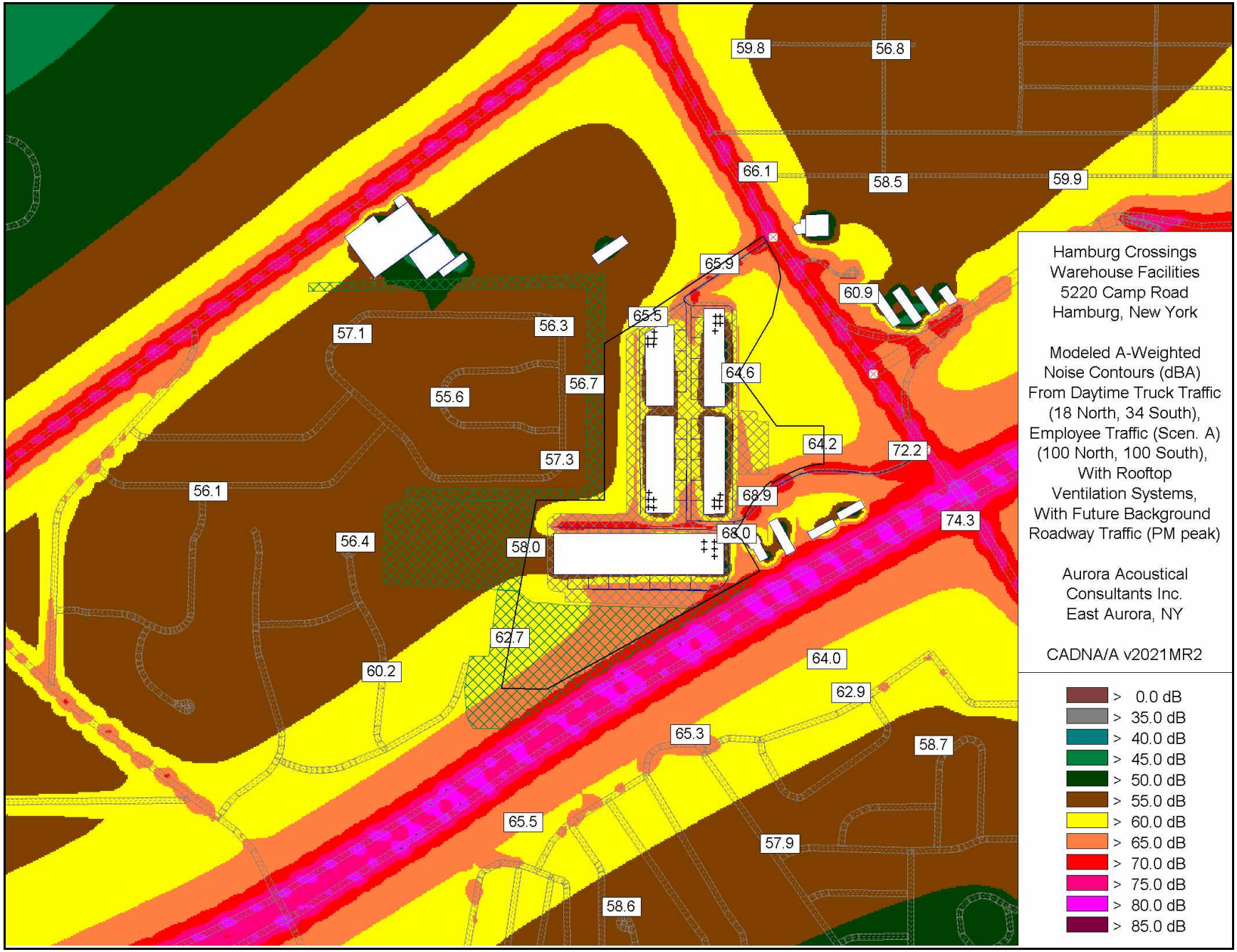
Modeled truck and employee site traffic and rooftop ventilation equipment noise levels



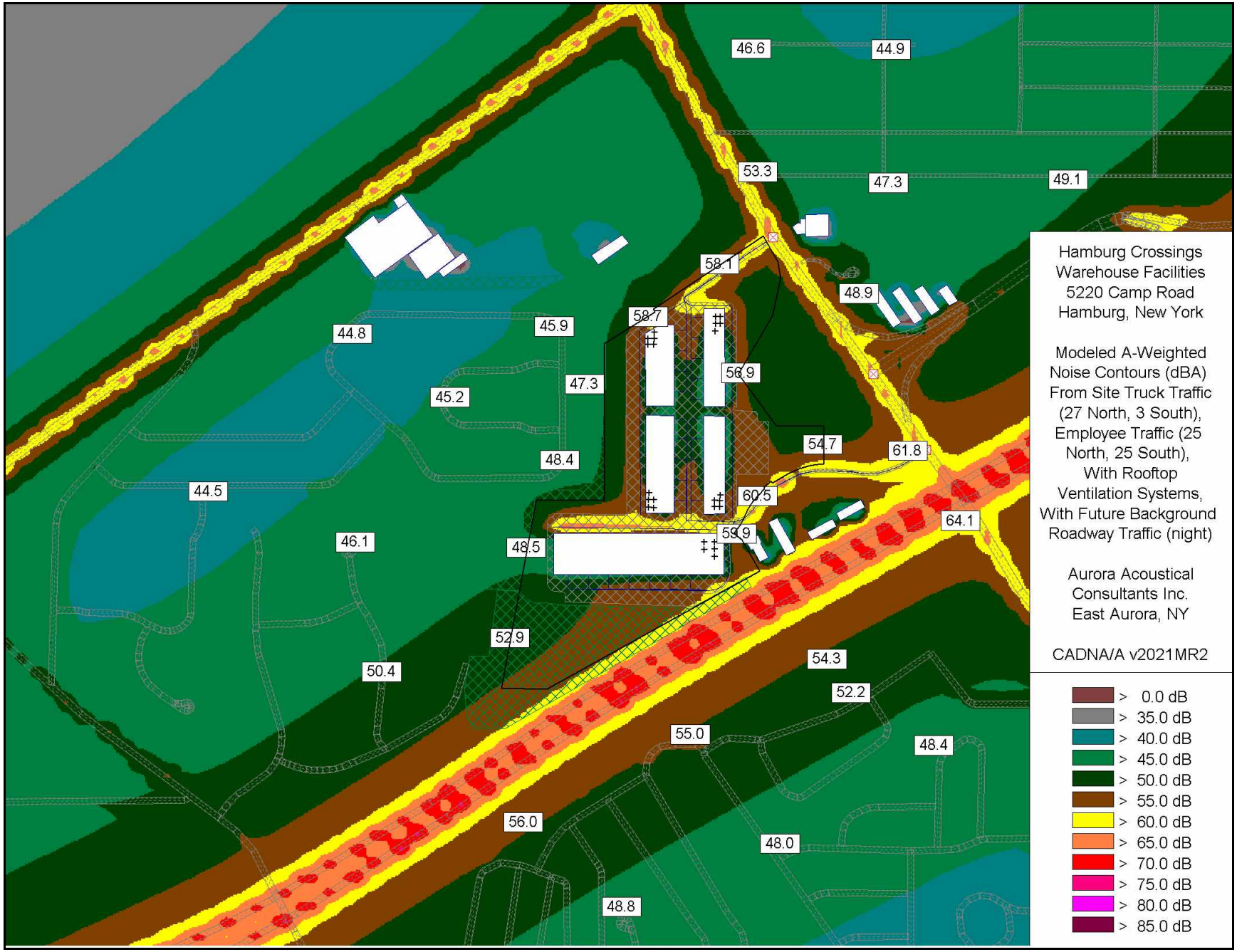
Modeled truck and employee site traffic and rooftop ventilation equipment noise levels



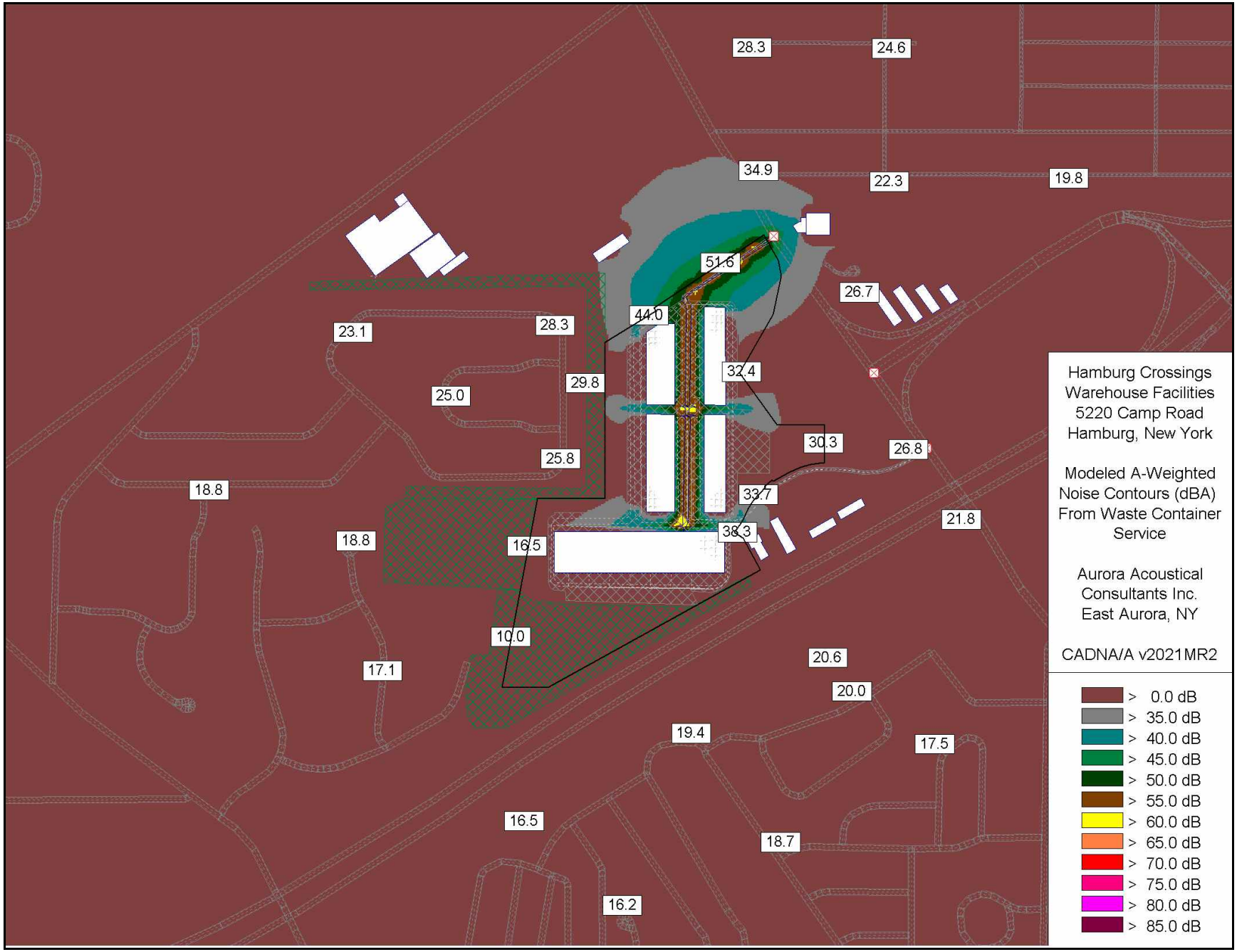
Modeled truck and employee site traffic and rooftop ventilation equipment noise levels, with morning peak background traffic



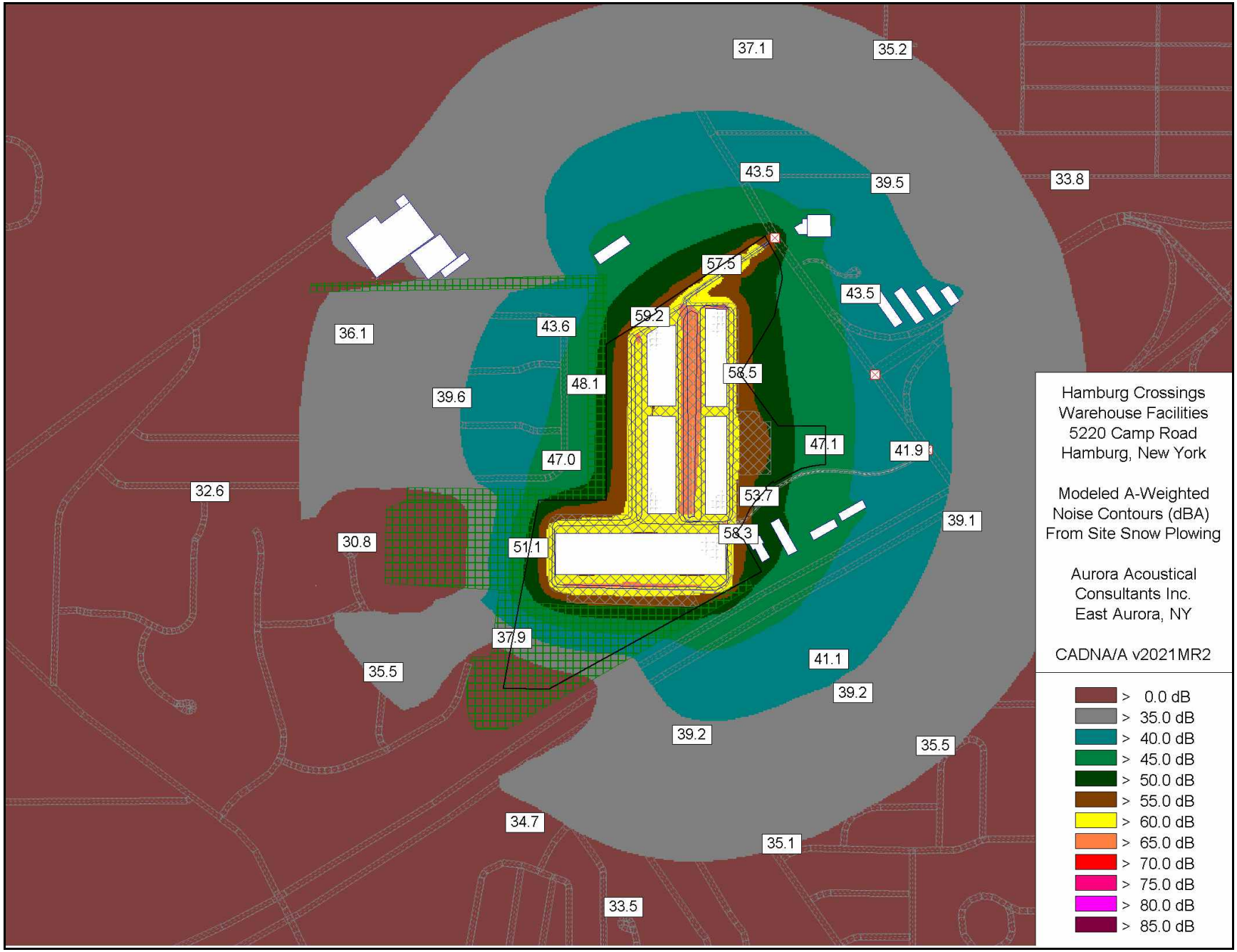
Modeled truck and employee site traffic and rooftop ventilation equipment noise levels, with afternoon peak background traffic



Modeled truck and employee site traffic and rooftop ventilation equipment noise levels, with nighttime minimum background traffic



Modeled waste container services at five concourse locations



Modeled snow removal services

Table C1a Hamburg Crossings Warehouse Facility
Modeled Hourly Background Noise Levels and Facility Component Sound Levels, dBA

Location	Background traffic, a.m. peak	Background traffic, p.m. peak	Background traffic, night min.	Warehouse trucks, only, daytime (52)	Warehouse trucks, only, nighttime (5)	Employee vehicles, only, Scenario A. (200)	Employee vehicles, only, Scenario B. (100)	Employee vehicles, only, Night (50)	Rooftop ventilation systems, only
1	54.6	55.7	44.7	33.8	23.6	49.4	46.4	43.4	27.6
2	63.0	63.8	53.2	60.8	51.4	61.3	58.2	55.7	34.8
3	62.3	62.8	52.0	40.2	30.21	39.7	36.7	33.7	22.7
4	54.5	55.7	44.1	36.0	26.3	45.5	42.5	39.5	26.0
5	55.1	56.1	45.5	33.5	23.2	50.5	47.5	44.5	27.2
6	63.5	65.7	51.4	42.8	33.1	474	44.4	41.4	24.5
7	59.3	60.2	50.3	31.5	18.7	32.5	29.5	26.5	18.9
8	64.9	65.3	55.0	37.9	27.8	39.7	29.5	26.5	23.6

Table C1b Hamburg Crossings Warehouse Facility
Modeled Hourly Combined Facility Sound Levels, and Combined Facility and Background Traffic Sound Levels, dBA

Location	Combined daytime warehouse trucks (52), 200 employee vehicles, rooftop HVAC	Combined daytime warehouse trucks (52), 100 employee vehicles, rooftop HVAC	Combined nighttime warehouse trucks (5), 50 employee vehicles, rooftop HVAC	Combined future morning background + warehouse trucks (52), 200 employee vehicles, rooftop HVAC	Increase above existing background, a.m.	Combined future afternoon background + warehouse trucks (52), 200 employee vehicles, rooftop HVAC	Increase above existing background, p.m.	Combined future background + nighttime trucks (5), 50 employee vehicles, rooftop HVAC	Increase above existing background, Night
1	49.6	46.7	43.6	55.9	1.2	56.7	1.0	47.3	2.6
2	64.6	63.3	57.6	67.6	4.6	68.0	4.2	59.9	5.7
3	43.0	41.8	25.5	62.4	0.1	62.9	0.1	52.2	0.2
4	46.1	43.5	39.9	55.3	0.8	56.3	0.6	45.9	1.8
5	50.6	47.7	44.6	56.6	2.0	57.3	1.2	48.4	2.9
6	42.7	46.7	42.1	64.1	0.6	66.1	0.4	53.3	1.9
7	35.2	33.9	28.2	59.3	2.5	60.2	0	50.4	0.1
8	39.2	41.8	31.1	64.9	0	65.3	0	55.0	0

Table C1c Hamburg Crossings Warehouse Facility		
Location	**Waste Container Service**	**Snow Removal Service**
1	29.8	48.1
2	38.3	58.3
3	20.0	39.2
4	28.3	43.6
5	25.8	47.0
6	34.9	43.5
7	17.1	35.5
8	19.4	39.2

AURORA ACOUSTICAL CONSULTANTS Inc.
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APPENDIX D

Weather Data December 7 to December 10, 2021

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service
Current Location: Elev: 709 ft. Lat: 42.9400° N Lon: -78.7361° W
Station: BUFFALO NIAGARA INTERNATIONAL, NY US WBAN: 72528014733 (KBUF)

Local Climatological Data
Daily Summary
December 2021

Generated on 01/25/2022

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH / Direction = Degrees			
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Peak Speed	Peak Dir	Sust. Speed	Sust. Dir
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	44	36	40	4.6				25	0	0726	1642		0.00	0.0	0	29.26		10.4	29	250	22	270
02	53	38	46	11.0				19	0	0727	1641	RA SN BR	0.11	T	0	28.87		18.5	50	230	37	250
03	38	35	37	2.4				28	0	0728	1641		0.00	0.0	0	29.24		7.5	22	310	16	290
04	43	34	39	4.8				26	0	0729	1641		T	0.0	0	29.29		11.9	35	270	26	260
05	45	30	38	4.2				27	0	0730	1641	RA SN BR	0.17	0.0	0	29.39		8.3	23	170	18	160
06	54	33	44	10.5				21	0	0731	1641	RA SN BR	0.26	T	0	28.87		21.4	52	240	40	250
07	33	26	30	-3.1				35	0	0732	1640	SN	T	T	0	29.33		10.2	28	270	22	270
08	29	24	27	-5.7				38	0	0733	1640	SN FZFG BR FG	0.19	2.0	T	29.23		6.4	16	290	13	270
09	37	25	31	-1.4				34	0	0734	1640		0.00	0.0	2	29.32		7.5	19	280	15	150
10	50	36	43	11.0				22	0	0735	1640	RA	T	0.0	T	29.18		8.9	22	230	17	220
11	67*	36	52	20.3s				13s	0s	0736	1640	RA BR	0.28	0.0	0	28.69		25.7	66	230	46	230
12	45	32	39	7.6				26	0	0737	1641		0.00	0.0	0	29.07		22.3	39	250	30	250
13	48	40	44	13.0				21	0	0737	1641		0.00	0.0	0	29.38		20.6	48	240	35	230
14	47	33	40	9.3				25	0	0738	1641		0.00	0.0	0	29.71		6.8	17	070	14	080
15	58	34	46	15.6				19	0	0739	1641	RA	0.09	0.0	0	29.51		13.3	31	200	25	200
16	64	45	55	24.9				10	0	0740	1641	RA	0.02	0.0	0	29.03		23.4	58	250	39	250
17	45	34	40	10.2				25	0	0740	1642		0.00	0.0	0	29.33		16.0	45	240	33	240
18	35	29	32	2.5				33	0	0741	1642	RA DZ FZDZ SN PL BR	0.38	0.7	0	29.25		10.6	23	030	17	020
19	30	21	26	-3.2				39	0	0742	1642	SN	T	T	T	29.47		7.2	18	320	15	330
20	41	21*	31	2.1				34	0	0742	1643		0.00	0.0	T	29.41		13.5	40	250	28	250
21	42	32	37	8.3				28	0	0743	1643		0.00	0.0	0	29.18		7.6	28	280	20	200
22	42	27	35	6.6				30	0	0743	1644	RA SN	T	T	0	28.95		19.5	37	230	29	240
23	33	23	28	-0.2				37	0	0744	1644	SN BR	0.08	1.1	0	29.31		6.9	23	260	17	270
24	48	31	40	12.1				25	0	0744	1645	SN BR	0.04	0.5	1	29.10		5.4	18	210	13	210
25	50	38	44	16.3				21	0	0744	1646	RA DZ BR	0.64	0.0	0	28.77		8.0	24	310	17	300
26	40	30	35	7.5				30	0	0745	1646		0.00	0.0	0	29.22		9.6	22	300	17	270
27	41	28	35	7.7				30	0	0745	1647	DZ FZRA FZDZ SN BR RA	0.05	0.4	0	29.15		9.8	25	110	21	110
28	42	34	38	10.9				27	0	0745	1648	RA DZ SN FG BR	0.10	0.9	0	29.03		12.0	36	240	28	250
29	41	34	38	11.1				27	0	0746	1648	DZ SN BR	0.04	0.1	T	29.07		6.9	20	040	15	060
30	42	37	40	13.3				25	0	0746	1649	DZ BR	T			29.14		3.2	12	270	10	270
										Monthly Averages | Totals												
				Departure from Normal (1981-2010)																		

Degree Days					Number of days with...									
	Monthly		Season-to-date		Temperature				Precipitation		Snow	Weather	
	Total	Departure	Total	Departure	Max		Min						
					>=90°	<=32°	<=32°	<=0°	>=0.01"	>=0.1"	>=1"	T-Storms	Heavy Fog
Heating													
Cooling													

Date of 5-sec to 3-sec wind equipment change	Sea Level Pressure			Greatest...		
		Date	Time	24-Hr...		Snow Depth
N/A	Maximum			Precip	Snowfall	
	Minimum					
				Date		

Station Augmentation
Name:N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service
Current Location: Elev: 709 ft. Lat: 42.9400° N Lon: -78.7361° W
Station: BUFFALO NIAGARA INTERNATIONAL, NY US WBAN: 72528014733 (KBUF)

Local Climatological Data
Hourly Precipitation
December 2021

Generated on 01/25/2022

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Date	For Hour (LST) Ending at																							Date
	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	NOON	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	MID	
01																									01
02						T	T	T	0.03	T	T					0.08	T						T		02
03																									03
04																T									04
05														T						T	0.01	0.02	0.07	0.07	05
06	0.02	0.01	T	T			0.05	0.07	T	T	0.06	0.03	0.02			M	T	T	T						06
07												T	T	T	T	T	T	T	T	T		T	T	T	07
08	T	T	0.01	0.01	0.04	0.01	T					T	T	0.03	0.02	0.06	0.01	T							08
09																									09
10																								T	10
11	0.01	T	0.02	0.03	0.01	0.05	T	T	0.01	0.01	T	T	M	M	0.14	M	M	M	M	M	M	M	M	M	11
12	M	M	M	M	M	M	M	M	M	M	T														12
13																									13
14																									14
15									T	0.01	0.02	T	0.03	0.01		0.02	T	T						T	15
16																		T	0.02						16
17																									17
18			T	T	T			0.01	0.03	0.05	0.02	0.03	0.06	0.04	0.04	T	0.04	0.04	0.02	T	T	T	T		18
19		T	T	T			T	T				T	T												19
20																									20
21																									21
22				T	T	T	T	T	T	T	T	T													22
23																		T	0.03	0.03	0.02			T	23
24	T	0.04	T	T																					24
25		0.02	0.02	0.02	0.06	0.06	0.05	0.10	0.09	0.04	0.01	0.01	T	0.02	0.04	0.02	0.06	0.02		T					25
26																									26
27										T	0.01	T	T	T		T	0.01	T	T	T	T	T	T	T	27
28	T	T																	0.02	0.04	T	T	0.01	0.03	28
29	0.03	T	T	T	T											T	T	T	T	0.01	T				29
30																		T	T						30
31	M	M	M	M	M	T	0.01	T	T	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	31

Maximum Short Duration Precipitation

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (inches)												
Ending Date Time (yyyy-mm-dd hh:mi)												

Hourly, daily, and monthly totals on the Daily Summary page and the Hourly Precipitation Table are shown as reported by the instrumentation at the site. However, NWS does not edit hourly values for its ASOS sites, but may edit the daily and monthly totals for selected sites which will be reflected on the Daily Summary page.

T = Trace
s = Suspect
* = Erroneous
Blank = No precipitation observed
M = Missing

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data
Hourly Observations
December 2021

Generated on 01/25/2022

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 709 ft. Lat: 42.9400° N Lon: -78.7361° W
Station: BUFFALO NIAGARA INTERNATIONAL, NY US WBAN: 72528014733 (KBUF)

Date	Time (LST)	Station Type	Sky Conditions	Visibility	Weather Type (see documentation)	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Hum %	Wind Speed (MPH)	Wind Dir (Deg)	Wind Gusts (MPH)	Station Press (inHg)	Press. Tend	Net 3-Hr Change (inHg)	Sea Level Press. (inHg)	Report Type	Precip Total (in)	Altimeter Setting (inHg)
					AU | AW | MW	(F)	(C)	(F)	(C)	(F)	(C)											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
07	0054	7	FEW:02 25 SCT:04 40	10.00		32	0.0	28	-2.2	20	-6.7	61	16	270	28	29.21	1	-0.10	29.98	FM-15	0.00	29.96
07	0100	4	26	9.94		32	0.0	28	-2.2	20	-6.7	61	16	270		29.17	1	-0.10	29.98	FM-12		
07	0154	7	FEW:02 25 SCT:04 40	10.00		32	0.0	28	-2.2	20	-6.7	61	18	270	28	29.24			30.01	FM-15	0.00	30.00
07	0254	7	FEW:02 25 SCT:04 40	10.00		31	-0.6	27	-2.8	20	-6.7	64	15	280	23	29.27			30.05	FM-15	0.00	30.03
07	0354	7	FEW:02 25 SCT:04 70	10.00		30	-1.1	26	-3.3	19	-7.2	64	16	280	25	29.29	1	-0.09		FM-15	0.00	30.05
07	0400	4	26	9.94		30	-1.1	26	-3.3	19	-7.2	64	16	280		29.26	1	-0.09		FM-12		
07	0454	7	CLR:00	10.00		30	-1.1	26	-3.3	19	-7.2	64	14	280	22	29.29			30.08	FM-15	0.00	30.05
07	0554	7	CLR:00	10.00		29	-1.7	26	-3.3	19	-7.2	66	13	280		29.31			30.09	FM-15	0.00	30.07
07	0654	7	FEW:02 30	10.00		28	-2.2	25	-3.9	18	-7.8	66	13	280		29.33	3	-0.04	30.11	FM-15	0.00	30.09
07	0700	4	26	9.94		28	-2.2	25	-3.9	18	-7.8	66	13	280		29.30	3	-0.04	30.11	FM-12		
07	0754	7	FEW:02 30	10.00		27	-2.8	24	-4.4	17	-8.3	66	10	270		29.35			30.14	FM-15	0.00	30.11
07	0800	4																		SHEF		
07	0854	7	FEW:02 25 FEW:02 39 BKN:07 270	10.00		29	-1.7	25	-3.9	16	-8.9	58	8	280		29.37			30.15	FM-15	0.00	30.13
07	0856	7	FEW:02 25 FEW:02 39 BKN:07 270	10.00		29	-1.7	25	-3.9	17	-8.3	61	11	270		29.37				FM-16		30.13
07	0954	7	FEW:02 25 FEW:02 41 BKN:07 260	10.00		29	-1.7	25	-3.9	16	-8.9	58	14	280		29.41	3	-0.07	30.19	FM-15	0.00	30.17
07	1000	4	26	9.94		29	-1.7	25	-3.9	16	-8.9	58	14	280		29.37	3	-0.07	30.19	FM-12		
07	1054	7	FEW:02 25 FEW:02 41 OVC:08 240	10.00		30	-1.1	26	-3.3	16	-8.9	56	11	290		29.42			30.20	FM-15	0.00	30.18
07	1154	7	FEW:02 29 BKN:07 45 OVC:08 240	10.00	-SN:03 |SN |	30	-1.1	26	-3.3	16	-8.9	56	11	280		29.38			30.17	FM-15	T	30.14
07	1254	7	SCT:04 32 BKN:07 45 BKN:07 240	10.00	-SN:03 |SN |	30	-1.1	26	-3.3	17	-8.3	58	6	270		29.39	8	+0.02	30.17	FM-15	T	30.15
07	1300	4	26	9.94		30	-1.1	26	-3.3	17	-8.3	58	6	270		29.35	8	+0.02	30.17	FM-12		
07	1354	7	BKN:07 32 BKN:07 45 BKN:07 240	10.00	-SN:03 |SN |	30	-1.1	25	-3.9	15	-9.4	54	10	260		29.38			30.17	FM-15	T	30.14
07	1454	7	SCT:04 34 BKN:07 47 BKN:07 240	10.00	-SN:03 |SN |	30	-1.1	26	-3.3	17	-8.3	58	11	280		29.38			30.17	FM-15	T	30.14
07	1554	7	BKN:07 32 OVC:08 45	10.00	-SN:03 |SN |	30	-1.1	26	-3.3	18	-7.8	61	8	260		29.39	3	0.00	30.18	FM-15	T	30.15
07	1600	4	26	9.94		30	-1.1	26	-3.3	18	-7.8	61	8	260		29.35	3	0.00	30.18	FM-12		
07	1644	7	BKN:07 27 BKN:07 33	10.00	-SN:03 |SN |	30	-1.1	26	-3.3	18	-7.8	61	9	250		29.38				FM-16	T	30.14
07	1654	7	BKN:07 27 BKN:07 33	10.00	-SN:03 |SN |	30	-1.1	26	-3.3	18	-7.8	61	7	250		29.39			30.17	FM-15	T	30.15
07	1754	7	OVC:08 27	9.00	-SN:03 |SN |	29	-1.7	25	-3.9	17	-8.3	61	8	300		29.38			30.17	FM-15	T	30.14
07	1837	7	OVC:08 30	10.00	-SN:03 |SN |	29	-1.7	25	-3.9	17	-8.3	61	7	290		29.39				FM-16	T	30.15
07	1854	7	OVC:08 30	10.00	-SN:03 |SN |	28	-2.2	24	-4.4	16	-8.9	60	8	300		29.39	3	0.00	30.18	FM-15	T	30.15

07	1900	4	26	9.94		28	-2.2	24	-4.4	16	-8.9	60	8	300		29.35	3	0.00	30.18	FM-12		
07	1908	7	BKN:07 31	10.00		28	-2.2	24	-4.4	15	-9.4	58	6	280		29.40				FM-16	T	30.16
07	1954	7	BKN:07 31	10.00		28	-2.2	24	-4.4	15	-9.4	58	6	280		29.40			30.19	FM-15	T	30.16
07	2054	7	OVC:08 30	10.00		28	-2.2	24	-4.4	15	-9.4	58	6	250		29.40			30.19	FM-15	0.00	30.16
07	2151	7	OVC:08 33	10.00	-SN:03 |SN |	28	-2.2	24	-4.4	16	-8.9	59	3	290		29.38				FM-16	T	30.14
07	2154	7	OVC:08 32	10.00	-SN:03 |SN |	28	-2.2	24	-4.4	15	-9.4	58	5	340		29.38	8	+0.01	30.17	FM-15	T	30.14
07	2200	4	26	9.94		28	-2.2	24	-4.4	15	-9.4	58	5	340		29.34	8	+0.01	30.17	FM-12		
07	2217	7	OVC:08 28	10.00	-SN:03 |SN |	27	-2.8	23	-5.0	15	-9.4	61	6	320		29.38				FM-16	T	30.14
07	2254	7	BKN:07 25 BKN:07 32	10.00	-SN:03 |SN |	27	-2.8	24	-4.4	16	-8.9	63	6	350		29.37			30.16	FM-15	T	30.13
07	2354	7	OVC:08 26	9.00	-SN:03 |SN |	27	-2.8	24	-4.4	16	-8.9	63	5	350		29.35			30.14	FM-15	T	30.11

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data
Hourly Observations
December 2021

Generated on 01/25/2022

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 709 ft. Lat: 42.9400° N Lon: -78.7361° W
Station: BUFFALO NIAGARA INTERNATIONAL, NY US WBAN: 72528014733 (KBUF)

Date	Time (LST)	Station Type	Sky Conditions	Visibility	Weather Type (see documentation)	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Hum	Wind Speed (MPH)	Wind Dir (Deg)	Wind Gusts (MPH)	Station Press (inHg)	Press. Tend	Net 3-Hr Change (inHg)	Sea Level Press. (inHg)	Report Type	Precip Total (in)	Altimeter Setting (inHg)
					AU | AW | MW	(F)	(C)	(F)	(C)	(F)	(C)	%										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
08	0054	7	OVC:08 25	9.00	-SN:03 |SN |	26	-3.3	23	-5.0	15	-9.4	63	5	340		29.33	8	+0.05	30.12	FM-15	T	30.09
08	0100	4	26	8.70		26	-3.3	23	-5.0	15	-9.4	63	5	340		29.30	8	+0.05	30.12	FM-12		
08	0154	7	OVC:08 25	9.00	-SN:03 |SN |	27	-2.8	24	-4.4	16	-8.9	63	0	000		29.32			30.11	FM-15	T	30.08
08	0200	4																		SHEF		
08	0250	7	OVC:08 29	2.50	-SN:03 |SN |	27	-2.8	24	-4.4	18	-7.8	69	0	000		29.33				FM-16	0.01	30.09
08	0252	6	OVC:08 29	3.00	-SN:03 |SN |	27	-2.8	24	-4.4	18	-7.8	69	0	000		29.33				FM-16		30.09
08	0254	7	OVC:08 29	3.00	-SN:03 |SN |	25	-3.9	23	-5.0	18	-7.8	75	3	010		29.33			30.12	FM-15	0.01	30.09
08	0308	7	OVC:08 25	2.50	-SN:03 |SN |	25	-3.9	23	-5.0	19	-7.2	78	3	350		29.33				FM-16	T	30.09
08	0320	7	OVC:08 21	1.75	-SN:03 |SN |	25	-3.9	23	-5.0	20	-6.7	81	3	350		29.33				FM-16	T	30.09
08	0351	7	VV:09 12	1.00	-SN:03 BR:1 |SN |	25	-3.9	24	-4.4	21	-6.1	86	0	000		29.31				FM-16	0.01	30.07
08	0354	7	VV:09 12	1.00	-SN:03 BR:1 |SN |	25	-3.9	24	-4.4	21	-6.1	85	3	070		29.31	8	+0.02	30.10	FM-15	0.01	30.07
08	0400	4		0.99		25	-3.9	24	-4.4	21	-6.1	85	3	070		29.28	8	+0.02	30.10	FM-12		
08	0454	7	OVC:08 15	1.25	-SN:03 BR:1 |SN |	24	-4.4	23	-5.0	21	-6.1	88	0	000		29.30			30.09	FM-15	0.04	30.06
08	0511	7	FEW:02 19 OVC:08 25	2.00	-SN:03 BR:1 |SN |	24	-4.4	23	-5.0	21	-6.1	88	3	110		29.29				FM-16	T	30.05
08	0518	7	FEW:02 19 OVC:08 34	3.00	-SN:03 BR:1 |SN |	24	-4.4	23	-5.0	21	-6.1	88	5	110		29.29				FM-16	T	30.05
08	0554	7	OVC:08 48	4.00	-SN:03 BR:1 |SN |	25	-3.9	24	-4.4	21	-6.1	85	5	080		29.28			30.07	FM-15	0.01	30.04
08	0654	7	SCT:04 48 OVC:08 90	9.00		25	-3.9	24	-4.4	21	-6.1	85	6	110		29.26	8	+0.05	30.05	FM-15	T	30.02
08	0700	4	41	8.70		25	-3.9	24	-4.4	21	-6.1	85	6	110		29.23	8	+0.05	30.05	FM-12		
08	0754	7	FEW:02 48 OVC:08 110	10.00		25	-3.9	24	-4.4	21	-6.1	85	7	110		29.23			30.02	FM-15	0.00	29.99
08	0854	7	FEW:02 14 FEW:02 55 BKN:07 110	10.00		26	-3.3	24	-4.4	21	-6.1	81	7	130		29.22			30.01	FM-15	0.00	29.98
08	0954	7	FEW:02 14 FEW:02 65 BKN:07 85	10.00		27	-2.8	25	-3.9	21	-6.1	78	5	150		29.21	6	+0.05	29.99	FM-15	0.00	29.97
08	1000	4	15	9.94		27	-2.8	25	-3.9	21	-6.1	78	5	150		29.18	6	+0.05	29.99	FM-12		
08	1054	7	FEW:02 35 BKN:07 65 OVC:08 85	10.00		28	-2.2	26	-3.3	21	-6.1	75	8	210		29.21			29.98	FM-15	0.00	29.96
08	1146	7	OVC:08 50	8.00	-SN:03 |SN |	29	-1.7	26	-3.3	21	-6.1	72	9	200		29.18				FM-16	T	29.93
08	1154	7	OVC:08 45	5.00	-SN:03 |SN |	29	-1.7	26	-3.3	21	-6.1	72	9	200		29.18			29.96	FM-15	T	29.93
08	1215	7	BKN:07 29 BKN:07 37 OVC:08 45	1.75	-SN:03 |SN |	29	-1.7	27	-2.8	22	-5.6	75	8	190		29.15				FM-16	T	29.91
08	1252	7	VV:09 16	0.75	-SN:03 BR:1 |SN |	28	-2.2	27	-2.8	25	-3.9	86	8	180		29.15				FM-16	T	29.90
08	1254	7	VV:09 16	0.75	-SN:03 BR:1 |SN |	28	-2.2	27	-2.8	24	-4.4	85	8	190		29.15	8	+0.06	29.93	FM-15	T	29.90
08	1300	4		0.75		28	-2.2	27	-2.8	24	-4.4	85	8	190		29.11	8	+0.06	29.93	FM-12		
08	1317	7	FEW:02 6 BKN:07 16 OVC:08 24	0.75	-SN:03 BR:1 |SN |	28	-2.2	27	-2.8	24	-4.4	85	8	190		29.15				FM-16	0.01	29.90
08	1322	7	FEW:02 6 BKN:07 16 OVC:08 24	1.25	-SN:03 BR:1 |SN |	28	-2.2	27	-2.8	24	-4.4	85	9	190		29.15				FM-16	0.01	29.90
08	1333	7	BKN:07 6 BKN:07 16 OVC:08 24	0.50	SN:03 FZ:8 FG:2 |FG SN |	28	-2.2	27	-2.8	24	-4.4	85	8	190		29.13				FM-16	0.01	29.89

08	1354	7	BKN:07 8 OVC:08 16	0.50	SN:03 FZ:8 FG:2 |FG SN |	28	-2.2	27	-2.8	24	-4.4	85	7	200		29.13			29.92	FM-15	0.03	29.89
08	1400	4																			SHEF		
08	1421	7	SCT:04 8 OVC:08 14	0.75	-SN:03 BR:1 |SN |	28	-2.2	27	-2.8	24	-4.4	85	8	190		29.13				FM-16	0.01	29.88
08	1432	7	FEW:02 8 OVC:08 14	1.50	-SN:03 BR:1 |SN |	28	-2.2	27	-2.8	24	-4.4	85	7	200		29.13				FM-16	0.01	29.88
08	1448	7	SCT:04 8 BKN:07 14 OVC:08 24	0.50	SN:03 FZ:8 FG:2 |FG SN |	28	-2.2	27	-2.8	25	-3.9	86	9	200		29.13				FM-16	0.02	29.88
08	1454	7	BKN:07 8 BKN:07 14 OVC:08 24	0.50	SN:03 s |SN s |s	29	-1.7	27	-2.8	24	-4.4	82	9	200		29.13			29.91	FM-15	0.02	29.88
08	1500	7	VV:09 6	0.25	+SN:03 FZ:8 FG:2 |FG SN |	28	-2.2	27	-2.8	25	-3.9	88	9	210		29.13				FM-16	0.01	29.88
08	1516	7	VV:09 4	0.25	+SN:03 FZ:8 FG:2 |FG SN |	28	-2.2	27	-2.8	25	-3.9	88	7	210		29.13				FM-16	0.04	29.89
08	1526	7	SCT:04 4 OVC:08 13	0.50	SN:03 FZ:8 FG:2 |FG SN |	28	-2.2	27	-2.8	26	-3.3	92	7	210		29.13				FM-16	0.06	29.89
08	1531	7	FEW:02 4 OVC:08 12	1.25	-SN:03 BR:1 |SN |	28	-2.2	27	-2.8	25	-3.9	88	8	210		29.13				FM-16	0.06	29.89
08	1542	7	FEW:02 4 BKN:07 11 OVC:08 30	3.00	-SN:03 BR:1 |SN |	29	-1.7	28	-2.2	26	-3.3	89	5	250		29.13				FM-16	0.06	29.89
08	1554	7	FEW:02 6 BKN:07 16 OVC:08 30	2.00	-SN:03 BR:1 |SN |	29	-1.7	28	-2.2	26	-3.3	89	3	270		29.15	3	-0.01	29.93	FM-15	0.06	29.90
08	1600	4	5	1.99		29	-1.7	28	-2.2	26	-3.3	89	3	270		29.11	3	-0.01	29.93	FM-12		
08	1604	7	FEW:02 8 BKN:07 18 OVC:08 30	1.25	-SN:03 BR:1 |SN |	29	-1.7	28	-2.2	25	-3.9	85	5	290		29.15				FM-16	T	29.90
08	1652	6	FEW:02 10 OVC:08 32	1.50	-SN:03 |SN |	28	-2.2	27	-2.8	25	-3.9	86	8	290		29.16				FM-16		29.92
08	1654	7	FEW:02 10 OVC:08 34	3.00	-SN:03 |SN |	29	-1.7	27	-2.8	24	-4.4	82	8	290		29.16			29.95	FM-15	0.01	29.92
08	1709	7	OVC:08 48	9.00		29	-1.7	27	-2.8	24	-4.4	82	3	300		29.18				FM-16	T	29.93
08	1754	7	FEW:02 25 FEW:02 45 OVC:08 55	10.00		28	-2.2	26	-3.3	23	-5.0	81	9	290		29.18			29.97	FM-15	T	29.94
08	1854	7	FEW:02 65 SCT:04 100	10.00		27	-2.8	25	-3.9	20	-6.7	75	8	280		29.21	1	-0.06	29.99	FM-15	0.00	29.96
08	1900	4	57	9.94		27	-2.8	25	-3.9	20	-6.7	75	8	280		29.17	1	-0.06	29.99	FM-12		
08	1954	7	FEW:02 100	10.00		26	-3.3	23	-5.0	18	-7.8	71	8	270		29.22			30.01	FM-15	0.00	29.98
08	2000	4																		SHEF		
08	2054	7	FEW:02 100	10.00		26	-3.3	23	-5.0	18	-7.8	71	9	270		29.24			30.04	FM-15	0.00	30.00
08	2154	7	FEW:02 180	10.00		25	-3.9	22	-5.6	16	-8.9	69	8	250		29.26	1	-0.06	30.05	FM-15	0.00	30.02
08	2200	4		9.94		25	-3.9	22	-5.6	16	-8.9	69	8	250		29.23	1	-0.06	30.05	FM-12		
08	2254	7	BKN:07 60 OVC:08 100	10.00		26	-3.3	23	-5.0	17	-8.3	69	9	260		29.27			30.06	FM-15	0.00	30.03
08	2354	7	BKN:07 49 BKN:07 60 OVC:08 70	10.00		27	-2.8	24	-4.4	19	-7.2	72	9	260		29.27			30.06	FM-15	0.00	30.03

08	1954	MET09512/08/21 19:54:01 METAR KBUF 090054Z 27007KT 10SM FEW100 M03/M08 A2998 RMK AO2 SLP163 T10331078
08	2054	MET09512/08/21 20:54:01 METAR KBUF 090154Z 27008KT 10SM FEW100 M03/M08 A3000 RMK AO2 SLP172 T10331078
08	2154	MET10112/08/21 21:54:01 METAR KBUF 090254Z 25007KT 10SM FEW180 M04/M09 A3002 RMK AO2 SLP177 T10391089 51020
08	2200	SYN06472528 32966 22507 11039 21089 39897 40177 51020 90254 555 90903=
08	2254	MET10212/08/21 22:54:02 METAR KBUF 090354Z 26008KT 10SM BKN060 OVC100 M03/M08 A3003 RMK AO2 SLP179 T10331083
08	2354	MET11912/08/21 23:54:02 METAR KBUF 090454Z 26008KT 10SM BKN049 BKN060 OVC070 M03/M07 A3003 RMK AO2 SLP180 T10281072 4 10171044

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
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Local Climatological Data
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December 2021

Generated on 01/25/2022

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 709 ft. Lat: 42.9400° N Lon: -78.7361° W
Station: BUFFALO NIAGARA INTERNATIONAL, NY US WBAN: 72528014733 (KBUF)

Date	Time (LST)	Station Type	Sky Conditions	Visibility	Weather Type (see documentation)	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Hum	Wind Speed	Wind Dir	Wind Gusts	Station Press	Press. Tend	Net 3-Hr Change	Sea Level Press.	Report Type	Precip Total	Altimeter Setting
					AU | AW | MW	(F)	(C)	(F)	(C)	(F)	(C)	%	(MPH)	(Deg)	(MPH)	(inHg)		(inHg)	(inHg)		(in)	(inHg)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
09	0054	7	OVC:08 46	10.00		28	-2.2	25	-3.9	20	-6.7	72	9	280		29.28	1	-0.02	30.07	FM-15	0.00	30.04
09	0100	4	41	9.94		28	-2.2	25	-3.9	20	-6.7	72	9	280		29.25	1	-0.02	30.07	FM-12		
09	0154	7	BKN:07 46	10.00		28	-2.2	25	-3.9	20	-6.7	72	9	280		29.30			30.09	FM-15	0.00	30.06
09	0200	4																		SHEF		
09	0254	7	BKN:07 46	10.00		27	-2.8	25	-3.9	20	-6.7	75	8	280		29.33			30.12	FM-15	0.00	30.09
09	0354	7	BKN:07 48	10.00		27	-2.8	24	-4.4	19	-7.2	72	13	320		29.33	1	-0.05	30.12	FM-15	0.00	30.09
09	0400	4	41	9.94		27	-2.8	24	-4.4	19	-7.2	72	13	320		29.30	1	-0.05	30.12	FM-12		
09	0454	7	BKN:07 45	10.00		26	-3.3	23	-5.0	18	-7.8	71	8	320		29.34			30.13	FM-15	0.00	30.10
09	0554	7	OVC:08 44	10.00		26	-3.3	24	-4.4	19	-7.2	75	5	290		29.35			30.14	FM-15	0.00	30.11
09	0654	7	BKN:07 45	10.00		26	-3.3	24	-4.4	20	-6.7	78	0	000		29.38	3	-0.04	30.17	FM-15	0.00	30.14
09	0700	4	41	9.94		26	-3.3	24	-4.4	20	-6.7	78	0	000		29.34	3	-0.04	30.17	FM-12		
09	0754	7	BKN:07 46	10.00		27	-2.8	25	-3.9	21	-6.1	78	0	000		29.41			30.20	FM-15	0.00	30.17
09	0800	4																		SHEF		
09	0850	7	BKN:07 16 OVC:08 46	10.00		28	-2.2	26	-3.3	21	-6.1	74	3	060		29.42				FM-16		30.18
09	0854	7	BKN:07 16 OVC:08 46	10.00		28	-2.2	26	-3.3	21	-6.1	75	5	050		29.42			30.21	FM-15	0.00	30.18
09	0954	7	BKN:07 20 OVC:08 45	10.00		28	-2.2	26	-3.3	21	-6.1	75	6	080		29.44	3	-0.03	30.23	FM-15	0.00	30.20
09	1000	4	26	9.94		28	-2.2	26	-3.3	21	-6.1	75	6	080		29.40	3	-0.03	30.23	FM-12		
09	1043	7	FEW:02 22 BKN:07 42 BKN:07 110	10.00		28	-2.2	26	-3.3	21	-6.1	75	8	080		29.43				FM-16		30.19
09	1054	7	BKN:07 42 OVC:08 110	10.00		28	-2.2	26	-3.3	21	-6.1	75	6	090		29.43			30.22	FM-15	0.00	30.19
09	1154	7	FEW:02 37 BKN:07 120 OVC:08 200	10.00		29	-1.7	26	-3.3	21	-6.1	72	8	100		29.41			30.20	FM-15	0.00	30.17
09	1254	7	FEW:02 38 BKN:07 100 OVC:08 200	10.00		30	-1.1	27	-2.8	22	-5.6	72	7	110		29.36	8	+0.07	30.15	FM-15	0.00	30.12
09	1300	4	41	9.94		30	-1.1	27	-2.8	22	-5.6	72	7	110		29.33	8	+0.07	30.15	FM-12		
09	1354	7	FEW:02 40 OVC:08 110	10.00		31	-0.6	28	-2.2	21	-6.1	67	7	110		29.36			30.15	FM-15	0.00	30.12
09	1454	7	FEW:02 40 OVC:08 100	10.00		32	0.0	28	-2.2	21	-6.1	64	6	090		29.34			30.13	FM-15	0.00	30.10
09	1554	7	FEW:02 110 SCT:04 140 BKN:07 200	10.00		32	0.0	28	-2.2	22	-5.6	66	8	070		29.34	8	+0.03	30.12	FM-15	0.00	30.10
09	1600	4		9.94		32	0.0	28	-2.2	22	-5.6	66	8	070		29.31	8	+0.03	30.12	FM-12		
09	1654	7	OVC:08 110	10.00		31	-0.6	28	-2.2	23	-5.0	72	8	100		29.30			30.09	FM-15	0.00	30.06
09	1754	7	OVC:08 110	10.00		31	-0.6	28	-2.2	23	-5.0	72	10	100		29.29			30.08	FM-15	0.00	30.05
09	1854	7	BKN:07 55 OVC:08 70	10.00		31	-0.6	28	-2.2	22	-5.6	69	10	100		29.26	6	+0.07	30.04	FM-15	0.00	30.02
09	1900	4	57	9.94		31	-0.6	28	-2.2	22	-5.6	69	10	100		29.23	6	+0.07	30.04	FM-12		
09	1954	7	OVC:08 46	10.00		32	0.0	29	-1.7	23	-5.0	69	11	100		29.21			29.99	FM-15	0.00	29.97
09	2000	4																		SHEF		
09	2054	7	BKN:07 60 OVC:08 80	10.00		35	1.7	31	-0.6	25	-3.9	67	9	130		29.18			29.96	FM-15	0.00	29.93
09	2154	7	OVC:08 80	10.00		36	2.2	32	0.0	24	-4.4	62	9	130		29.15	6	+0.11	29.93	FM-15	0.00	29.91

09	2200	4	74	9.94		36	2.2	32	0.0	24	-4.4	62	9	130		29.12	6	+0.11	29.93	FM-12		
09	2254	7	OVC:08 85	10.00		36	2.2	32	0.0	24	-4.4	62	9	130		29.13			29.91	FM-15	0.00	29.89
09	2354	7	BKN:07 65 OVC:08 80	10.00		36	2.2	32	0.0	24	-4.4	62	8	150		29.12			29.89	FM-15	0.00	29.87

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data
Hourly Observations
December 2021

Generated on 01/25/2022

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 709 ft. Lat: 42.9400° N Lon: -78.7361° W
Station: BUFFALO NIAGARA INTERNATIONAL, NY US WBAN: 72528014733 (KBUF)

Date	Time (LST)	Station Type	Sky Conditions	Visibility	Weather Type (see documentation)	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Hum	Wind Speed	Wind Dir	Wind Gusts	Station Press	Press. Tend	Net 3-Hr Change	Sea Level Press.	Report Type	Precip Total	Altimeter Setting
					AU | AW | MW	(F)	(C)	(F)	(C)	(F)	(C)	%	(MPH)	(Deg)	(MPH)	(inHg)		(inHg)	(inHg)		(in)	(inHg)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
10	0054	7	FEW:02 45 OVC:08 75	10.00		36	2.2	32	0.0	25	-3.9	64	6	150		29.10	6	+0.05	29.88	FM-15	0.00	29.86
10	0100	4	41	9.94		36	2.2	32	0.0	25	-3.9	64	6	150		29.07	6	+0.05	29.88	FM-12		
10	0154	7	BKN:07 44 OVC:08 75	10.00		37	2.8	33	0.6	26	-3.3	65	5	220		29.10			29.88	FM-15	0.00	29.86
10	0200	4																		SHEF		
10	0254	7	OVC:08 43	10.00		40	4.4	35	1.7	27	-2.8	60	11	200		29.10			29.88	FM-15	0.00	29.86
10	0354	7	OVC:08 35	10.00		41	5.0	36	2.2	28	-2.2	60	11	200		29.12	3	-0.01	29.89	FM-15	0.00	29.87
10	0400	4	41	9.94		41	5.0	36	2.2	28	-2.2	60	11	200		29.08	3	-0.01	29.89	FM-12		
10	0454	7	FEW:02 32 OVC:08 40	10.00		41	5.0	36	2.2	29	-1.7	62	9	200		29.12			29.89	FM-15	0.00	29.87
10	0554	7	BKN:07 37	10.00		40	4.4	36	2.2	29	-1.7	65	9	210		29.15			29.92	FM-15	0.00	29.90
10	0654	7	BKN:07 49	10.00		41	5.0	36	2.2	30	-1.1	65	9	220		29.18	3	-0.06	29.96	FM-15	0.00	29.94
10	0700	4	41	9.94		41	5.0	36	2.2	30	-1.1	65	9	220		29.15	3	-0.06	29.96	FM-12		
10	0754	7	OVC:08 48	10.00		41	5.0	36	2.2	30	-1.1	65	9	210		29.19			29.97	FM-15	0.00	29.95
10	0854	7	BKN:07 48 BKN:07 120	10.00		41	5.0	37	2.8	32	0.0	70	9	190		29.21			29.98	FM-15	0.00	29.96
10	0954	7	FEW:02 48 OVC:08 200	10.00		43	6.1	38	3.3	32	0.0	65	10	200		29.22	3	-0.04	30.00	FM-15	0.00	29.98
10	1000	4	41	9.94		43	6.1	38	3.3	32	0.0	65	10	200		29.19	3	-0.04	30.00	FM-12		
10	1054	7	OVC:08 200	10.00		45	7.2	40	4.4	34	1.1	66	11	200		29.23			30.01	FM-15	0.00	29.99
10	1154	7	FEW:02 150 BKN:07 200	10.00		47	8.3	42	5.6	35	1.7	63	15	220		29.23			30.00	FM-15	0.00	29.99
10	1254	7	FEW:02 150 BKN:07 210	10.00		48	8.9	43	6.1	36	2.2	63	15	230	21	29.21	8	+0.01	29.98	FM-15	0.00	29.97
10	1300	4		9.94		48	8.9	43	6.1	36	2.2	63	15	230		29.18	8	+0.01	29.98	FM-12		
10	1354	7	FEW:02 30 SCT:04 150 BKN:07 210	10.00		49	9.4	43	6.1	37	2.8	64	10	240		29.21			29.98	FM-15	0.00	29.96
10	1454	7	SCT:04 150 BKN:07 210	10.00		48	8.9	43	6.1	37	2.8	66	7	250		29.22			30.00	FM-15	0.00	29.98
10	1554	7	BKN:07 46 BKN:07 150 BKN:07 210	10.00		49	9.4	44	6.7	39	3.9	69	5	250		29.23	3	-0.02	30.01	FM-15	0.00	29.99
10	1600	4	41	9.94		49	9.4	44	6.7	39	3.9	69	5	250		29.20	3	-0.02	30.01	FM-12		
10	1654	7	FEW:02 45 FEW:02 180 FEW:02 250	10.00		45	7.2	42	5.6	38	3.3	77	3	110		29.23			30.00	FM-15	0.00	29.99
10	1754	7	BKN:07 42 BKN:07 180 BKN:07 250	10.00		45	7.2	41	5.0	37	2.8	74	7	140		29.22			29.99	FM-15	0.00	29.98
10	1854	7	BKN:07 44 BKN:07 160 BKN:07 250	10.00		43	6.1	40	4.4	37	2.8	80	5	080		29.23	5	0.00	30.01	FM-15	0.00	29.99
10	1900	4	41	9.94		43	6.1	40	4.4	37	2.8	80	5	080		29.20	5	0.00	30.01	FM-12		
10	1954	7	OVC:08 46	10.00		44	6.7	41	5.0	37	2.8	76	6	070		29.21			29.99	FM-15	0.00	29.97
10	2054	7	SCT:04 48 OVC:08 180	10.00		44	6.7	40	4.4	36	2.2	73	8	100		29.18			29.94	FM-15	0.00	29.93
10	2154	7	FEW:02 45 OVC:08 150	10.00		44	6.7	40	4.4	36	2.2	73	10	120		29.13	8	+0.11	29.90	FM-15	0.00	29.88
10	2200	4	41	9.94		44	6.7	40	4.4	36	2.2	73	10	120		29.09	8	+0.11	29.90	FM-12		

10	2254	7	FEW:02 45 FEW:02 65 OVC:08 150	10.00		46	7.8	42	5.6	36	2.2	68	9	130		29.10			29.86	FM-15	0.00	29.85
10	2354	7	SCT:04 47 BKN:07 55 OVC:08 80	10.00	-RA:02 |RA |RA	47	8.3	42	5.6	37	2.8	69	11	130		29.04			29.80	FM-15	T	29.79