
Sound study review

Sugar House / 300 Kent Avenue

GZA SLA Acoustic Evaluation, project 41.0163635.00

Prepared from the 17 page photographs supplied on 10 September 2026. All study page references below refer to the printed page numbers. This is a document review; no site measurements or independent acoustic model were performed.

Assessment

There are material concerns to resolve before relying on the promise of imperceptible neighborhood noise. The study predicts compliance under its stated assumptions, and its reported residential levels are below the applicable numerical limits. But the late-night baseline is thin, the sound-control assumptions need field testing, and the bass results contain an apparent internal inconsistency.

The strongest findings

Limited late-night evidence. Two 20-minute outdoor samples on one evening end at 10:23 p.m. They do not establish conditions through the 2 a.m. close and later dispersal. (p. 7.)

Bass results need reconciliation. The ten reported 63-500 Hz bands imply about 46.7 dB(C) before other frequencies are added, exceeding the table's stated overall 44.0 dB(C). Its highest band is just 3.7 dB below the 45 dB limit. (p. 12, Table 3.)

The model relies on construction and operating controls. An airtight STC-35 interior door and sealed facade are assumed. A limiter, speaker isolation, and validation testing are recommended, but no completed commissioning results or enforceable settings are supplied. (pp. 11, 15.)

Coverage of homes and street activity is incomplete. One residential receiver represents 280 Kent; other homes are inferred to comply. Departing crowds and dispersed rideshare pickups are not separately quantified as acoustic sources. (pp. 3, 7, 10-14.)

The report needs corrections and supporting documents. An asserted ambient-plus-4 dB exemption is not supported by a cited authority; the Trinity study is absent; public-receiver labels and patio hours need reconciliation. (pp. 2-3, 6, 12-15.)

What deserves credit

The study includes the 80-seat patio and a 256-person entry queue, models 105 dBA venue music, addresses low-frequency bands, applies a 5 dB transmission-loss allowance, and assumes open residential windows. Those are useful provisions. The issue is whether the complete operating venue will meet the assumptions and protect all affected locations.

What the study actually models

The stated total is 1,045 guests: 800 in the Viewing Room, 115 in the main dining room, 50 in the private dining room, and 80 outside. Table 2 also models a separate 256-person entry queue. (pp. 3, 7, 10.)

Area	Occupancy	Speaking at once	Voice level	Music
Venue	800	400	Loud	105 dBA
Entry queue	256	128	Raised	None shown
Restaurant indoors	165	115	Raised	90 dBA
Patio	80	53	Raised	75 dBA

These are model inputs, not measured operating levels or approved sound-system settings. Table 2 does not specify the reference position, averaging time, or source music spectrum behind each overall dBA value.

Measured background, not measured venue performance

March 28, 2026 sample	Overall A	Overall C
River St / S. 2nd St 7:59:56-8:19:57 p.m.	64.6 dBA	82.1 dBC
S. 1st St between River and Kent 10:03:03-10:23:04 p.m.	62.4 dBA	79.6 dBC

The report identifies a Type 1 meter, calibration checks before and after sampling, and a windscreen. It provides octave-band summaries but not time histories, calibration records, meteorological observations, or the full recorded spectral dataset. (p. 7, Table 1.)

Reported receptor results

Receiver / metric	Reported result	Interpretation
280 Kent, indoors - overall A	36.7 dBA	5.3 dB below 42 dBA
280 Kent - highest listed band	41.3 dB at 160 Hz	3.7 dB below 45 dB
280 Kent - overall C	44.0 dBC	Needs reconciliation with band table
Domino Park / north / south right of way	51.9 / 56.9 / 59.2 dBA	Venue contribution; combined increases 0.4 / 1.1 / 1.7 dB

Source: p. 12, Tables 3-4. Reading Table 3 as venue contribution follows its Model Output label and surrounding method. The text also refers to ambient results, but the table prints only one output row; GZA should clarify the labeling. Code references: [1]-[2], review p. 8.

Does the quiet-night conclusion hold?

1. The background sample does not cover the operating night

Using the quieter measured sample is conservative relative to the other sample. It does not establish the quietest conditions across weekdays, seasons, or midnight to 2 a.m. The later sample is only 20 minutes beginning at 10:03 p.m. Location 1 was sampled before 10 p.m. No background measurement inside a dwelling is reported. (pp. 7, 15.)

Request: representative monitoring at affected homes and public locations during the full operating and dispersal period, including quieter nights, with time histories, one-third-octave spectra, and notes identifying unrelated sound sources. A qualified acoustician should justify the background statistic and period used for each assessment.

2. A sensitivity check shows why the baseline matters

Hold the south right-of-way venue contribution at the report's 59.2 dBA. Energy-add it to different background levels:

Background	Venue + background	Increase in total
62.4 dBA (study value)	64.1 dBA	1.7 dB
57.4 dBA (5 dB lower)	61.4 dBA	4.0 dB
52.4 dBA (10 dB lower)	60.0 dBA	7.6 dB

Illustrations only: no evidence supplied establishes the two lower backgrounds. Formula: $\text{total} = 10 \log_{10}(10^{(\text{venue}/10)} + 10^{(\text{background}/10)})$. This tests the report's claim about change in overall level; it is not a finding of a legal violation. Section 24-218 uses source-attributable sound and specified measurement locations. [2]

3. The residential conversion needs confirmation

GZA subtracts 10 dB from both outdoor background and predicted venue sound to estimate indoors with an open window. A 10 dB open-window reduction is an established transportation-noise screening assumption, so it should not be dismissed as invented. But the cited guidance concerns typical building reduction; it does not validate a constant reduction at every music frequency or every actual room. (p. 12; [3].)

Because the same reduction is applied to both sources, it leaves their relative contrast unchanged. Actual apartment background, window geometry, and frequency-dependent transmission remain unmeasured. Ask for indoor tests or a justified, site-specific spectral transfer calculation.

4. One modeled residence does not demonstrate every home

The study assumes compliance at the nearest building, 280 Kent, establishes compliance elsewhere. Figure 6 identifies one residential receiver, and the table does not give its height or floor. Distance alone does not establish the most exposed bedroom or balcony: sight lines, shielding, facade orientation, and source positions matter. Request receiver coordinates and results by relevant floor and facade, plus other occupied nearby homes. (pp. 3, 7, 12-14.)

Bass: verify the numbers and the inputs

5. Table 3 contains an apparent numerical inconsistency

The photographed table lists the following levels for the same residential result. Treating them as simultaneous, unweighted one-third-octave levels, the energy sum is **46.84 dB**. Applying standard C-weighting corrections gives approximately **46.66 dB(C)** for these bands alone. The reported overall C-weighted result is **44.0 dB(C)**. Adding frequencies outside this range cannot lower that sum. (p. 12, Table 3; weighting reference [4].)

Center frequency (Hz)	Band level (dB)	C correction (dB)
63 / 80	35.8 / 35.5	-0.8 / -0.5
100 / 125	34.8 / 39.1	-0.3 / -0.2
160 / 200	41.3 / 34.7	-0.1 / 0.0
250 / 315	35.2 / 34.2	0.0 / 0.0
400 / 500	36.1 / 35.2	0.0 / 0.0

Request: a corrected Table 3 and native model export showing weighting, bandwidth, source set, receiver, and averaging period. If the columns are different scenarios or a different spectral convention, the report must say so. This is a reconciliation issue; it does not by itself prove a noise-code exceedance.

6. The low-frequency allowance is not large

The highest listed band is 41.3 dB at 160 Hz, leaving 3.7 dB to the 45 dB threshold. The 36.7 dBA result leaves 5.3 dB to 42 dBA. Those differences are not uncertainty allowances or a license to turn up the system. They are conditional margins after the stated model assumptions, including its 5 dB transmission-loss reduction. (pp. 11-12.)

7. Overall dBA inputs do not fully specify bass output

Table 2 supplies 105, 90, and 75 dBA music inputs, while the one-third-octave results require spectral information. Request the complete music and speech spectra, exact vocal-effort standard, sound-system and subwoofer positions, directivity, and all INSUL transmission-loss curves. STC ratings alone do not show each required frequency's isolation; the report says spectral calculations were made but does not supply the underlying curves. (pp. 10-12.)

Also request a bass-heavy program test and an assessment of frequencies below 63 Hz and structure-borne vibration where relevant. The code's listed one-third-octave test starts at 63 Hz; absence of lower bands in this table is not by itself a breach of that test. GZA expressly warns that rigid speaker mounting can produce additional transfer outside these calculations. (p. 15.)

Controls and noise sources still to resolve

8. Door opening is a real operating condition

The model assumes an acoustically gasketed STC-35 metal door between the Viewing Room and the bar/vestibule. It also assumes airtight construction and a sealed facade. The supplied analysis does not show door-open duration, simultaneous inner/outer opening, or admission and mass-exit scenarios. A closed-door rating does not establish performance while patrons pass through. (pp. 7, 11, 15.)

Request: actual door and vestibule plans, inspection of seals, and measured tests while doors cycle at realistic admission and departure rates. Operational door controls must be compatible with required emergency egress.

9. Recommendations must become a tested operating plan

The report recommends a sound limiter, directional speakers, acoustic gasketing, isolation from the building structure, and validation testing. It assigns the client responsibility for construction and monitoring. It does not supply fixed limiter settings, a commissioning certificate, monitoring locations, retention rules, or a defined response to exceedances. (p. 15.)

Request: make essential controls conditions of operation: documented construction, locked and tamper-resistant limiters covering all inputs including guest equipment, defined bass settings, verification inside affected homes and outdoors, and retesting after material changes. Agree on response times, operating logs, and corrective action when limits or agreed targets are exceeded.

10. The entry queue does not capture the whole street operation

It would be inaccurate to claim that patrons outdoors were ignored: the model includes a 256-person queue and 80-seat patio. It does not separately quantify people dispersing after performances, rideshare pickup conversations, cars, loading, refuse collection, or overlapping nearby events. These can occur outside the modeled source locations and after the music stops. (pp. 7, 10-12.)

The July traffic study models about 728 patrons departing in the 11 p.m.-midnight hour and about 483 at the 2 a.m. close. Its timing extends late-event dispersal to about 2:30 a.m., with staff activity later, and it expects many rideshare pickups to spread one or two blocks away. These are traffic-study assumptions, not observed crowds. They are concrete scenarios for an integrated acoustic assessment. (Traffic pp. 3, 7, 12, 21.)

11. The Trinity study is a missing part of the evidence

GZA excludes impacts on other commercial units within 300 Kent and refers to an earlier Trinity Consultants study. It also relies on Trinity recommendations for speaker mounting, limiting, and internal compliance. The 17 photographs do not contain that report. Request the complete study, its drawings and revisions, and evidence that its recommendations are incorporated. (GZA pp. 2, 15-16.)

Code claims and document corrections

12. The ambient-plus-4 dB claim needs an authority

Page 6 asserts a practical exemption under which an already-high ambient level becomes a new benchmark plus 4 dB. It provides no citation. The current commercial-music provision specifies music-attributable limits inside dwellings: above 42 dBA, above 45 dB in any specified 63-500 Hz one-third-octave band, or a total increase of at least 6 dBC when ambient exceeds 62 dBC. I did not find a general ambient-plus-4 replacement rule in that provision. [1]

Request: identify the exact statute, rule, written DEP interpretation, or applicable variance supporting the assertion, and show whether the conclusion relies on it. The table's reported A-weighted and individual-band contributions already fall below the stated absolute limits, so this unsupported statement does not by itself overturn those comparisons.

13. Low total increase does not establish inaudibility

The study translates small changes in total level into an imperceptibility conclusion. A change in total broadband energy is not a direct test of whether distinctive music, bass rhythms, or voices can be heard. The study does not provide a listening evaluation in homes or a site-specific masking analysis. Ask it to distinguish predicted code compliance from the broader claim of no perceptible disturbance. (pp. 2, 6, 15.)

Section 24-218 also retains a general unreasonable-noise prohibition and source-specific applicability rules. A single percentage or total-level comparison is not a universal clearance for every sound generated by the operation. DEP should confirm the appropriate compliance protocol for the actual sources and locations. [2]

14. Correct the mismatches before relying on a final version

Issue	Evidence and necessary clarification
Patio closing time	GZA p. 3 says all three spaces operate until 2 a.m.; the July traffic study p. 7 says the patio closes at midnight. Confirm the proposed/licensed schedule and align both studies.
Public-receiver numbers	Figure 6 (p. 13) places receiver 3 north of receiver 2; Figure 7 (p. 14) and Table 4 (p. 12) use the opposite north/south association. Supply coordinates and consistent labels.
Summary versus results	p. 2 reports a worst public increase of 2.2 dBA; Table 4's maximum is 1.7 dB. Reconcile the scenario or revision.
Map address and completeness	Figures 3 and 6 label the site 400 Kent Avenue, while headers identify 300 Kent. Report p. 1 is absent, so the issue date and complete cover identification cannot be verified.

These are document-control issues, not evidence of intentional misrepresentation. The copies support focused requests for correction and clarification.

What to ask for before relying on the plan

The following requests target the evidence needed to validate the prediction. They are proposed review conditions, not a claim that every item is already mandated by law. An independent acoustician can define the final protocol and acceptance margins.

Priority	Concrete deliverable
1. Correct and disclose	Complete dated GZA report and prior revisions; missing cover; Trinity report; corrected Table 3 and receptor figures; native CadnaA/INSUL files and spectral inputs.
2. Establish the real baseline	Representative measurements at sensitive homes and streets through closing and dispersal, on multiple operating patterns; raw time histories, one-third-octave data, calibration and weather records.
3. Test the installed venue	Independent witnessed tests using the actual sound system and bass-heavy content at the maximum proposed settings; all spaces operating; door cycling; indoor and outdoor measurements at justified worst-exposed points.
4. Address all operating sources	A linked traffic-and-noise assessment of entry, show changeover, final departure, dispersed pickups, loading/refuse, mechanical equipment, and overlapping events, with responsibilities for each source.
5. Bind and monitor the controls	Documented speaker isolation, seals and limiting; locked settings and guest-system controls; specified monitoring and log retention; immediate corrective response and retesting triggers.

Questions that deserve clear written answers

- What are the final hours for patio occupancy and outdoor music, and what sound conditions apply after 10 p.m.?
- Which apartment floors, rooms, window conditions, and public measurement points determine the maximum permissible sound-system settings?
- How is the reported 44.0 dBC reconciled with the ten listed low-frequency band values?
- What happens acoustically while both vestibule doors are in use and a sold-out performance exits?
- Who independently verifies installation and operating limits, and what evidence will residents receive?
- What action is required when an exceedance or recurring disturbance is verified, and who can require retesting?

Recommended position

Seek a corrected study plus an independently verified, enforceable sound-management plan. The present document is a prediction that may be achievable with the right construction and controls. It does not yet demonstrate that nearby homes and public spaces will remain undisturbed during the full operation.

Sources, page index, and review limits

Source documents reviewed

GZA: SLA Acoustic Evaluation, 300 Kent Avenue, project 41.0163635.00; printed pp. 2-16 and Limitations pp. 1-2. Signatories shown: Sean Harkin, Ethan Wagner, Gene Bove, and Kevin Williams. The study reports measurements on March 28, 2026; its issue date is not established by the supplied pages. All 17 photographs were reviewed.

Traffic cross-check: Sugar House traffic study, July 2026, previously digitized from the supplied photographs; specifically printed pp. 3, 7, 12, and 21. Those planning assumptions identify acoustic scenarios to evaluate; this review does not independently validate the traffic model.

Searchable PDF page	Printed page / material
1-4	Report pp. 2-5: overview, operations, site and land-use maps
5-8	Report pp. 6-9: code, baseline data and measurement locations
9-11	Report pp. 10-12: source levels, isolation and model results
12-15	Report pp. 13-16: receptors, contours, recommendations and signatures
16-17	Limitations pp. 1-2

External references checked on 10 September 2026

- [1] NYC Administrative Code, section 24-231: Commercial music
- [2] NYC Administrative Code, section 24-218: General prohibitions
- [3] FHWA Noise Measurement Handbook, section 6 and Table 6-1: outdoor-to-indoor reduction
- [4] NIOSH HHE 81-066-882, Table II: A, B and C weighting networks
- [5] CCOHS Noise - Basic Information: decibel addition

Preservation and uncertainty

The source PDF retains every photographed page in capture order, with machine OCR and navigation bookmarks. Original HEIC files IMG_7435-IMG_7451, capture timestamps, SHA-256 checksums, OCR text and layout, a page index, verified table data, and this review are retained locally. Photographs show folded corners, page curvature and show-through. Text hidden by paper was not reconstructed.

Critical numerical tables were checked visually rather than accepted from OCR alone. OCR can still misread text and table order. Review calculations use the printed rounded values and stated assumptions; the C-weighted check assumes one coherent, unweighted one-third-octave spectrum. This review identifies evidence gaps and conditional risks, not a measured violation or an engineering certification. The code is checked as a current reference; a formal compliance determination belongs with the relevant authority.