

Board of Zoning Appeals

Public Notice



PUBLIC NOTICE

To: Property Owners, Owners of property located within 500 feet of the following Applications, and Neighborhood Association Representatives.
From: Planning and Development Staff
Subject: Upcoming Applications for the Board of Zoning Appeals
Date: 4/27/2020

The City of Greenville Board of Zoning Appeals will hold a Public Hearing on Thursday, May 14, 2020 at 4:00 PM via WebEx, for the purpose of considering the following Applications:
Public meetings will be hosted online and can be accessed at greenvillesc.gov/meeting using the password meetnow. Instructions to access the meeting are included at the end of this notice.

NEW BUSINESS

A. S 20-165

Application by Lisa Lanni on behalf of House 13 LLC for a SPECIAL EXCEPTION to establish an indoor entertainment use located at 401 RHETT ST (TM# 007200-02-00100)

Documents:

[S 20-165 401 RHETT ST.PDF](#)

Documents relating to these applications are available for review online at greenvillesc.gov. You may contact the Planning & Development Office at (864) 467-4476 for more information.

You will have the opportunity to voice your comments at the Public Hearing. Written comments may be mailed to Planning & Development Office, PO Box 2207, Greenville, SC 29602 or emailed to planning@greenvillesc.gov. Comments received by Monday before the hearing will be forwarded ahead to the Board. Comments received after Monday will be provided to the Board at the hearing. Please reference the application number and include your name and address on all correspondence. All written comments will be made part of the public record. In some cases the Applicant may be required as part of the application process to hold a neighborhood meeting before the application is heard by the Board. Property owners within 500' of the application site would then be notified by mail. A property owner that directly abuts the proposed project or owners of 20% of parcels within 500' may also request a meeting. Contact the Planning and Development Office for further information.

The criteria for the Board's Decision are established in the Land Management Ordinance (Chapter 19) of the City Code. A Staff Report will provide an analysis of the Applicant's request with regard to its context, any related City plans and ordinances, and the specific decision criteria. Staff will present its conclusion to the Board on whether the request satisfies the criteria and may recommend stipulations to the Board for its consideration in granting the request. The criteria for granting Special Exceptions and Variances may be found in Sections 19-2.3.5 and 19-2.3.7, respectively (Code of Ordinances, www.greenvillesc.gov). The Board will usually vote to grant or deny an application immediately after it considers the evidence and public testimony; however, it may decide to continue the hearing or postpone deliberation to a future date. After the Board votes to grant or deny an application, Staff will prepare a written Decision for mailing to the Applicant. Anyone having a substantial interest affected by the Decision may appeal to the Greenville County Circuit Court within thirty (30) days of the mailing of the Decision.

Webex Meeting Instructions

Steps for Online Access

1. Visit greenvillesc.gov/meeting. You can also go to greenvillesc.gov and click on ONLINE MEETING.
2. Join Event: Board of Zoning Appeals Regular Meeting 5/14/2020

Enter your: First Name

Enter your: Last Name

Enter your: Email Address

Enter the event password: meetnow

Click: Join Now

Steps for Phone Access

1. Dial: +1-415-655-0002
2. Enter Access Code: 715 777 242

Procedure for Public Comment during Meeting

1. The Board of Zoning Appeals Chair will read through each agenda item and call for a list of names who wish to speak during public comment. The public shall communicate directly with the Planning Staff Liaison if they wish to speak on the specific agenda item.
2. The Planning Staff Liaison will take a list of names, which will be called in order at the time of the specific agenda item, to provide public comment.
3. The Planning Staff Liaison will communicate directly with the public during the public portion of each item to provide comments on the specific agenda item.
4. Each member of the public shall provide their comments when their name is called by the Planning Staff Liaison.
5. Each member of the public will have 3 minutes to speak on the specific agenda item. When speaking:
 - Begin by clearly stating your name and address for the record. Please spell your name if it is prone to be misspelled. The 3-minute timer will start after you provide this information.
 - Please do not repeat information already presented by someone else and avoid off-topic statements. Those who wish to share similar concerns are encouraged to appoint a spokesperson to speak on behalf of the group.
 - Direct all comments and questions to the chairperson, who will respond or direct

the question to the appropriate party for response.

6. The Planning Staff Liaison will continue through the list of names until all members of the public who wished to speak on the specific agenda item have had an opportunity.

7. Once all names are called and public comment provided, the public portion for that specific agenda item will be closed.



Office Use Only:

Application# S-20-165

Fees Paid \$250

Date Receive 3-9-20

Accepte By MDL

APPLICATION FOR SPECIAL EXCEPTION CITY OF GREENVILLE, SOUTH CAROLINA

APPLICANT / PERMITTEE*: JAMES CARTER

HOUSE 13

Name

Title / Organization

permit may be limited to this entity.

APPLICANT'S REPRESENTATIVE: LISA LANNI

PRINCIPAL/ MPS

(Optional) Name

Title / Organization

MAILING ADDRESS: 400 AUGUSTA STREET, SUITE 200

PHONE: 864.242.2033

EMAIL: LLANNI@MCMILLANPAZDANSMITH.COM

PROPERTY OWNER: HELLBILLY RESERVES LLC

MAILING ADDRESS: 113 RIDGELAND DRIVE

PHONE: 864.304.3967

EMAIL: carter@house13.com

PROPERTY INFORMATION

STREET ADDRESS: 401 RHETT STREET

TAX PARCEL #: 0072000200100

ACREAGE: .574

ZONING DESIGNATION: C-4

REQUEST

Refer to Article 19-4, Use Regulations, of the Land Management Ordinance (www.municode.com/library/)

DESCRIPTION OF PROPOSED LAND USE:

"S" SPECIAL EXCEPTION FOR AN INDOOR ENTERTAINMENT FACILITY, GENERAL IN C-4 ZONING

INSTRUCTIONS

1. The application and fee, made payable to the City of Greenville, must be received by the planning and development office no later than 5:00 pm of the date reflected on the attached schedule.

2. The applicant/owner must respond to the "standards" questions on page 2 of this application (you must answer "why" you believe the application meets the tests for the granting of a special exception). See also **Section 19-2.3.5, Special Exception Permit**, for additional information. You may attach a separate sheet addressing these questions.

3. You must attach a scaled drawing of the property that reflects, at a minimum, the following: (a) property lines, existing buildings, and other relevant site improvements; (b) the nature (and dimensions) of the proposed development (activity); (c) existing buildings and other relevant site improvements on adjacent properties; and, (d) topographic, natural features, etc. relevant to the requested special exception.

4. You must attach the required application fee: \$250.00

5. The administrator will review the application for "sufficiency" pursuant to **Section 19-2.2.6, Determination of Sufficiency**, prior to placing the application on the BZA agenda. If the application is determined to be "insufficient", the administrator will contact the applicant to request that the applicant resolve the deficiencies. **You are encouraged to schedule an application conference with a planner, who will review your application for "sufficiency" at the time it is submitted. Call (864) 467-4476 to schedule an appointment.**

6. You must post the subject property at least 15 days (but not more than 18 days) prior to the scheduled hearing date.

 'Public Hearing' signs are acknowledged as received by the applicant

Applicant Signature

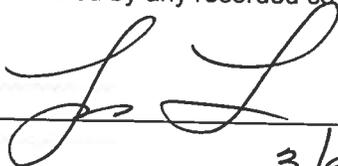


7. **Please read carefully:** The applicant and property owner affirm that all information submitted with this application; including any/all supplemental information is true and correct to the best of their knowledge and they have provided full disclosure of the relevant facts.

In addition the applicant affirms that the applicant or someone acting on the applicant's behalf has made a reasonable effort to determine whether a deed or other document places one or more restrictions on the property that preclude or impede the intended use and has found no record of such a restriction.

If the planning office by separate inquiry determines that such a restriction exists, it shall notify the applicant. If the applicant does not withdraw or modify the application in a timely manner, or act to have the restriction terminated or waived, then the planning office will indicate in its report to the Board of Zoning Appeals that granting the requested change would not likely result in the benefit the applicant seeks.

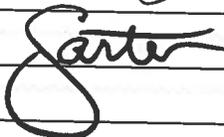
To that end, the applicant hereby affirms that the tract or parcel of land subject of the attached application is or is not restricted by any recorded covenant that is contrary to, conflicts with, or prohibits the requested activity.



APPLICANT / REPRESENTATIVE SIGNATURE

3/9/20

DATE



PROPERTY OWNER SIGNATURE

3/9/20

DATE

**APPLICANT RESPONSE TO
SECTION 19-2.3.5(D)(1), STANDARDS – SPECIAL EXCEPTION**

(YOU MAY ATTACH A SEPARATE SHEET)

1. DESCRIBE THE WAYS IN WHICH THE PROPOSED SPECIAL EXCEPTION IS CONSISTENT WITH THE COMPREHENSIVE PLAN.

THE PLANNED DEVELOPMENT ADDS VALUE TO THE WEST END SUBMARKET AND IS CONSISTENT WITH THE COMPREHENSIVE PLAN AS WELL AS USES ALREADY IN THE AREA. SEE NEXT PAGE FOR FURTHER RESPONSE.

2. DESCRIBE THE WAYS IN WHICH THE REQUEST WILL COMPLY WITH THE STANDARDS IN **SECTION 19-4.3, USE SPECIFIC STANDARDS.**

THE PROJECT WILL COMPLY WITH THE STANDARDS OF SECTION 19-4.3. SEE NEXT PAGE FOR FURTHER RESPONSE.

3. DESCRIBE THE WAYS IN WHICH THE REQUEST IS APPROPRIATE FOR ITS LOCATION AND IS COMPATIBLE WITH THE CHARACTER OF EXISTING AND PERMITTED USES OF SURROUNDING LANDS AND WILL NOT REDUCE THE PROPERTY VALUES THEREOF.

THE PROPOSAL IS CONSISTENT WITH THE CHARACTER OF THE WEST END AS AN EXTENSION OF MAIN STREET. SEE NEXT PAGE FOR FURTHER RESPONSE.

4. DESCRIBE THE WAYS IN WHICH THE REQUEST WILL MINIMIZE ADVERSE EFFECTS ON ADJACENT LANDS INCLUDING: VISUAL IMPACTS; SERVICE DELIVERY; PARKING AND LOADING; ODORS; NOISE; GLARE; AND, VIBRATION. DESCRIBE THE WAYS IN WHICH THE REQUEST WILL NOT CREATE A NUISANCE.

THE PROJECT WILL IMPROVE EXISTING CONDITIONS OF THE VACANT BUILDING. THE DEVELOPMENT WILL LIMIT LOADING AND NOISE BY COORDINATING DELIVERY TIMES AND FOLLOWING THE STANDARDS OF OPERATIONS OUTLINED IN SECTION 19-4.3.3. SEE NEXT PAGE FOR FURTHER RESPONSE.

**APPLICANT RESPONSE TO
SECTION 19-2.3.5(D)(1), STANDARDS – SPECIAL EXCEPTION**

1. DESCRIBE THE WAYS IN WHICH THE PROPOSED SPECIAL EXCEPTION IS CONSISTENT WITH THE COMPREHENSIVE PLAN.

This project adds value to the West End Submarket by creating a mid-size music venue unique to Greenville. The Plan-It Greenville Comprehensive Plan (2009) identifies the West End Submarket as an area for retail and artists. The Greenville West Side Comprehensive Plan (2014) expands on that by referencing the Downtown Master Plan (2008), which identifies the Rhett St. area as the "Warehouse District". Goals of the "Warehouse District" include combination of adaptive reuse of existing buildings and new construction, "cool" spaces for creative, hi-tech startup businesses, and shared parking structures.

The proposed project meets these goals by re-purposing an abandoned building, upfitting with new construction, and creating a "cool" space for interaction and the performing arts.

Parking will be shared within the area as part of the Central Business District. Neighborhood centers in the Comprehensive Plan are areas within .25 miles and a 5-minute walking radius. A parking plan has been provided as part of this application to show parking opportunities within this radius and distance. The project Site Plan indicates dedicated pick-up/drop-off locations on project property. Additionally, in the Comprehensive Plan, there are concepts of a new parking structure to be located adjacent to St. Andrews Episcopal Church that would serve both churches as well as "new development and visitors to Fluor Field and the West End Commercial District". When constructed, the parking structure will be located within a 5-minute walking radius of the proposed building.

2. DESCRIBE THE WAYS IN WHICH THE REQUEST WILL COMPLY WITH THE STANDARDS IN SECTION 19-4.3, USE SPECIFIC STANDARDS.

The project will comply with the following standards stated in Section 19-4.3:

On-site traffic shall be directed away from abutting residential uses or residential districts between the hours of 12:00 midnight and 5:00 a.m.

Delivery, waste collection, and similar commercial traffic is prohibited between the hours of 12:00 midnight and 5:00 a.m.

Loitering, solicitation, and disorderly conduct is prohibited at all times; rules consistent with the provisions of the Greenville Code of Ordinances shall be posted in conspicuous locations and shall be enforced by the proprietors.

There is no major on-site parking. On-site traffic only consists of performer and/or caterer vehicles for load in / load out. Planned location is shown on the Site Plan. Delivery and waste collection will comply with the hours required. Access will be achieved through an agreement with the adjacent property owner.

Ordinances will be posted and enforced to prohibit loitering and poor conduct. The project is designed to queue and absorb its full capacity on site, similar to Fluor Field and other venues in the surrounding area. Queuing on the designated property will avoid any disruption to the community or other venues in the area.

The project will comply with the following standards stated in Section 19-4.3 in ways described below:

Exterior sound amplification is prohibited except in areas specifically authorized on the approved site plan and/or floor plan; all amplified sound shall be directed inward toward the facility and away from any adjoining use or public property. No exterior amplified sound shall be permitted between the hours of 10:00 p.m. and 11:00 a.m. Interior sound amplification shall be located only as reflected on an approved floor plan and shall be directed away from the principal entrance or directed toward the interior of the building.

Exterior doors shall remain closed except to provide ingress and egress between the hours of 10:00 p.m. and 5:00 a.m.

The required permit, either special exception permit or conditional use permit, shall be limited to the applicant and shall not be transferrable. Copy of the special exception permit or the conditional use permit shall be maintained on the premises with other related inspection, licensing, and occupancy information.

Exterior sound amplification is indicated on the site plan. Hours will be adhered to.

Interior sound amplification will be contained to the Event Space as indicated on the floor plan. The Event Space is bordered by support spaces or vestibules along the full exterior walls where entry doors are located, buffering exterior openings from sound amplification.

Door requirements will be adhered to.

**APPLICANT RESPONSE TO
SECTION 19-2.3.5(D)(1), STANDARDS – SPECIAL EXCEPTION**

3. DESCRIBE THE WAYS IN WHICH THE REQUEST IS APPROPRIATE FOR ITS LOCATION AND IS COMPATIBLE WITH THE EXISTING AND PERMITTED USES OF SURROUNDING LANDS AND WILL NOT REDUCE THE VALUE OF THE PROPERTY VALUES THEROF.

The West End is home to "cool" indoor and outdoor activities. These include the newly established Gather GVL and Fluor Field, that host outdoor activities throughout the year. Similar venues including Zen and the Cigar Warehouse host live entertainment and events both inside and outside their venues. The proposed project will fill a void for a mid-sized venue in Greenville that will host corporate events, weddings, as well as live entertainment. It will bring a warehouse that has sat empty for years to life hosting famous artists and providing entertainment for all to enjoy.

4. DESCRIBE THE WAYS IN WHICH THE REQUEST WILL MINIMIZE ADVERSE EFFECTS ON ADJACENT LANDS INCLUDING: VISUAL IMPACTS; SERVICE DELIVERY; PARKING AND LOADING; ODORS; NOISE; GLARE; AND, VIBRATION. DESCRIBE THE WAYS IN WHICH THE REQUEST WILL NOT CREATE A NUISANCE.

See Question 2 for overall approach and adherence to requirements.

With regard to noise control, in addition to the planning strategy to buffer indoor sound amplification as described on Question 2, the full exterior envelope will be designed to mitigate sound transfer as recommended by an Acoustical Consultant. The entire roof including roof structure will be rebuilt and upper exterior walls are entirely new construction. Lower exterior walls will be modified. This work will meet Section 16-93 of the Ordinance. Please find recommendations in the attached acoustical report produced by Thorburn Associates.

In addition to the standards for granting a special exception, the request of an event venue will also comply with the following requirements:

The conditional use permit shall be limited to the applicant or a legal entity authorized to be represented by the applicant, and shall not be transferrable.

Operation of the facility shall be limited to an "event venue," as defined by this Code, and substantially conform to the statements of the applicant and the content of the application. modification of the facility's operation shall require the applicant to seek a modification of the conditional use permit.

At all times during occupancy of the event venue, the applicant shall assign a manager to the premises that shall ensure compliance with the terms of the conditional use permit, the city code, and the applicable S.C. Code of Laws and regulations. Operation of the business shall comply at all times with the provisions of the South Carolina Alcoholic Beverage Control Act and the regulations of the department of revenue.

As may be recommended by the technical advisory committee, the administrator may require the applicant to retain outdoor security persons for functions that include the serving of alcoholic beverages. The security persons must possess a security officer registration certificate pursuant to S.C. Code 1976, title 40, chapter 18, or, as an alternative, may be an off-duty sworn law enforcement officer. No other employee may serve in the capacity of the security person unless so certified.

All food, utensils, and accessory materials shall be "packed-in" and "packed-out"; no debris or garbage shall remain on-premises after the function is concluded except in proper storage containers (dumpsters) that are screened from public view. No kitchen waste shall be introduced into the disposal system without installation of a DHEC-approved grease trap.

Rooftop decks shall have perimeter guard railing above table surfaces.

Exterior sound amplification is prohibited except in areas specifically authorized on an approved site plan; all amplified sound shall be directed inward toward the facility and away from any adjoining use or public property. Specified hours of exterior sound amplification shall be limited by the permit.

Interior sound amplification shall be directed away from the principal entrance or directed toward the interior of the facility. Except to provide ingress and egress, exterior doors and windows shall remain closed after 10:00 p.m.

Acoustic music and entertainment may be permitted in an adjacent outdoor space until 10:00 pm; after that time, music and entertainment shall be limited to the indoor area only with the doors closed.

Maximum occupancy may vary and shall be approved by the chief building inspector based upon alternative floor and seating plans, sealed by a registered architect, prior to granting a certificate of occupancy.

If adequate parking is not provided on the parcel of the event venue, the applicant shall provide a parking agreement showing that sufficient parking will be provided for all events prior to issuing a certificate of occupancy. The applicant shall be responsible for maintaining the parking agreement as long as the business remains in operation.

APPLICANT RESPONSE TO
SECTION 19-2.3.5(D)(1), STANDARDS – SPECIAL EXCEPTION

A copy of the conditional use permit shall be maintained on the premises with other related inspection, licensing, and occupancy information.

The administrator may attach additional conditions to the conditional use permit which will protect nearby uses from any adverse impacts reasonably expected to occur as a result of the operation of the event venue.

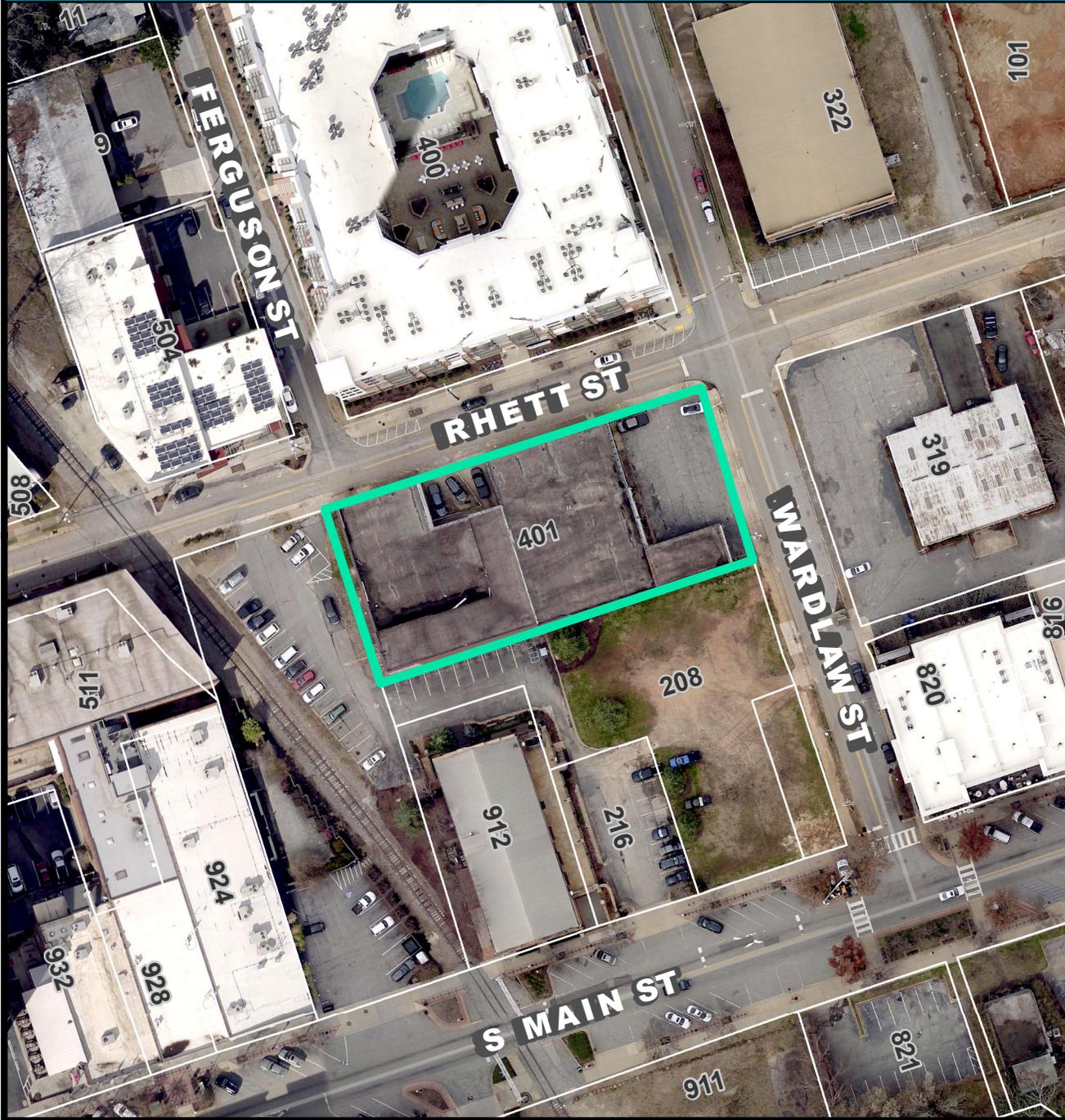
Exterior doors shall remain closed except to provide ingress and egress between the hours of 10:00 p.m. and 5:00 a.m.

The required permit, either special exception permit or conditional use permit, shall be limited to the applicant and shall not be transferrable. Copy of the special exception permit or the conditional use permit shall be maintained on the premises with other related inspection, licensing, and occupancy information.

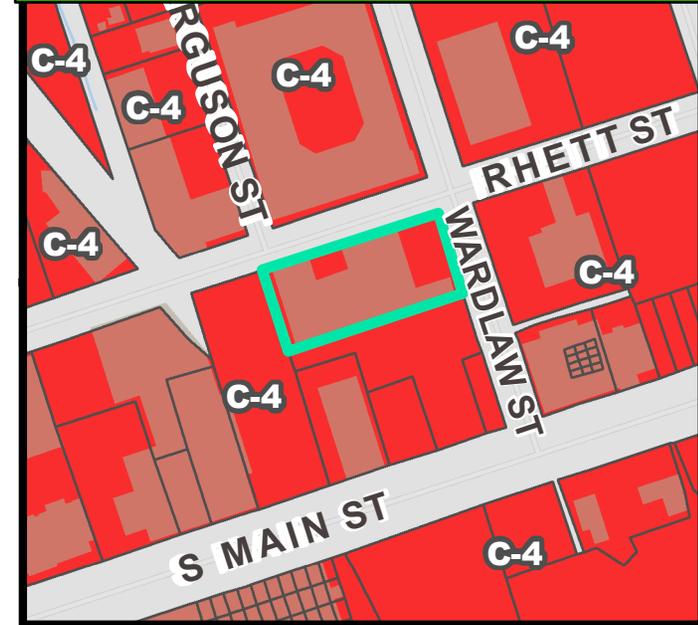
See plans and perspective images for illustration of roof terrace railings, occupant loads, sound amplification locations. See Parking Plan for parking requirements. See Questions 2, 3, and 4 for intent to comply for all items.

S 20-165 • 401 RHETT ST

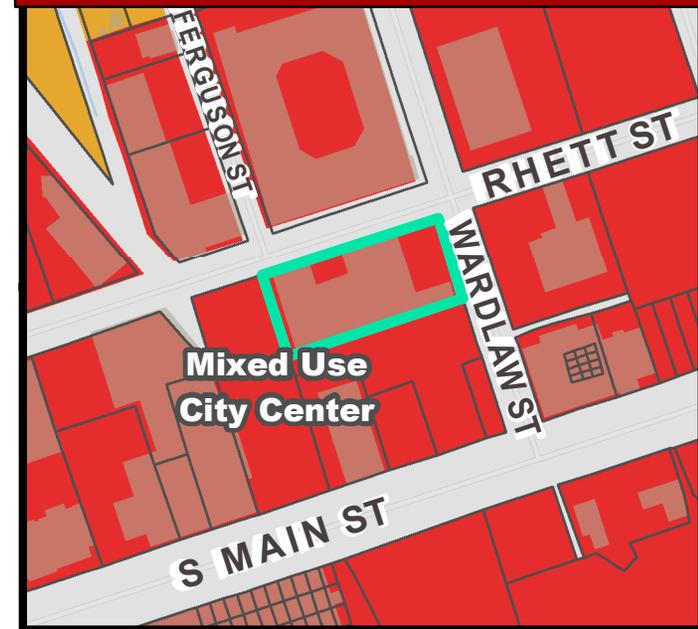
AERIAL VIEW



CURRENT ZONING

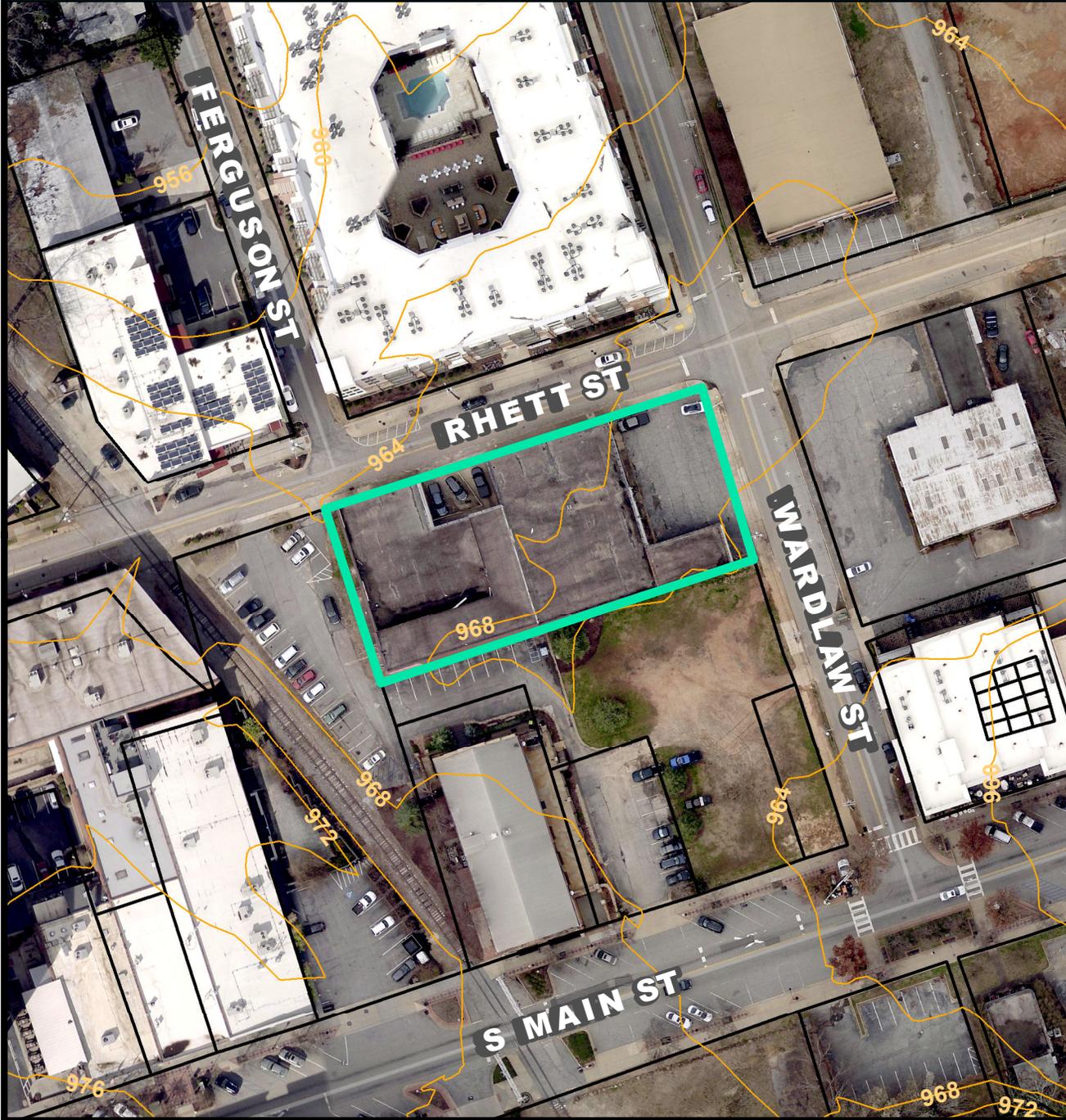


FUTURE LAND USE

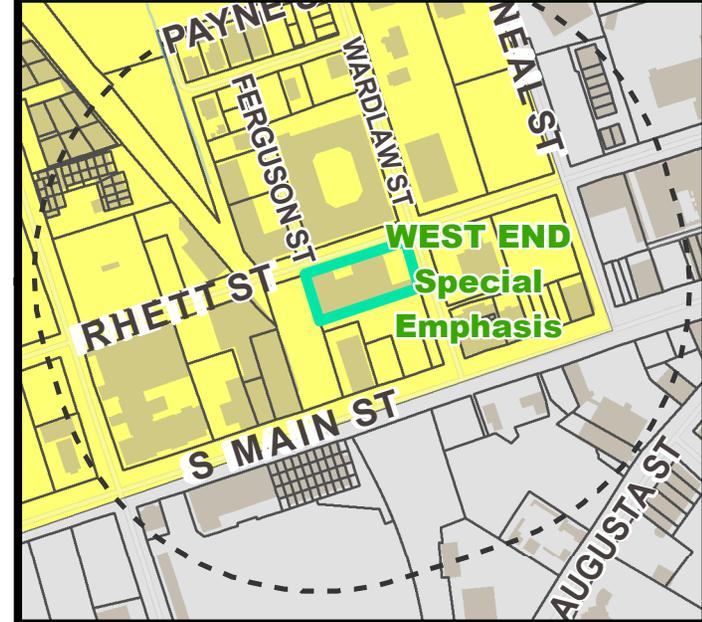


S 20-165 • 401 RHETT ST

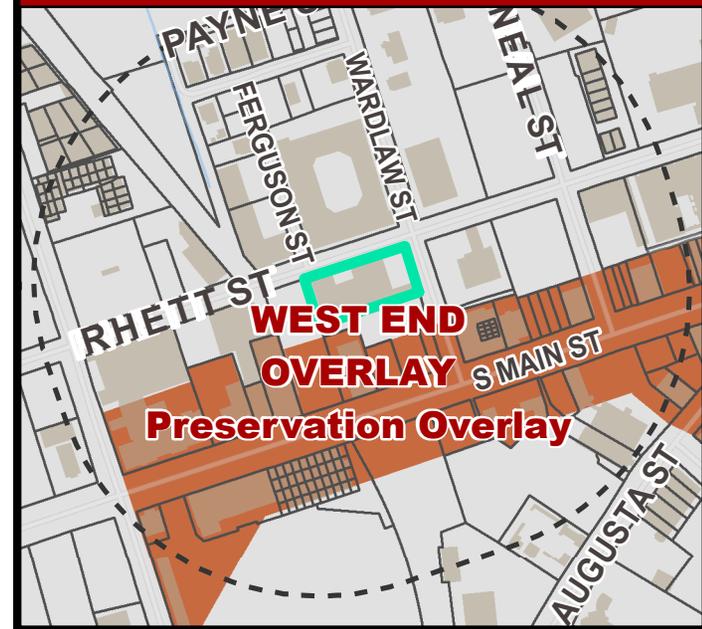
NATURAL / ENVIRONMENTAL FEATURES



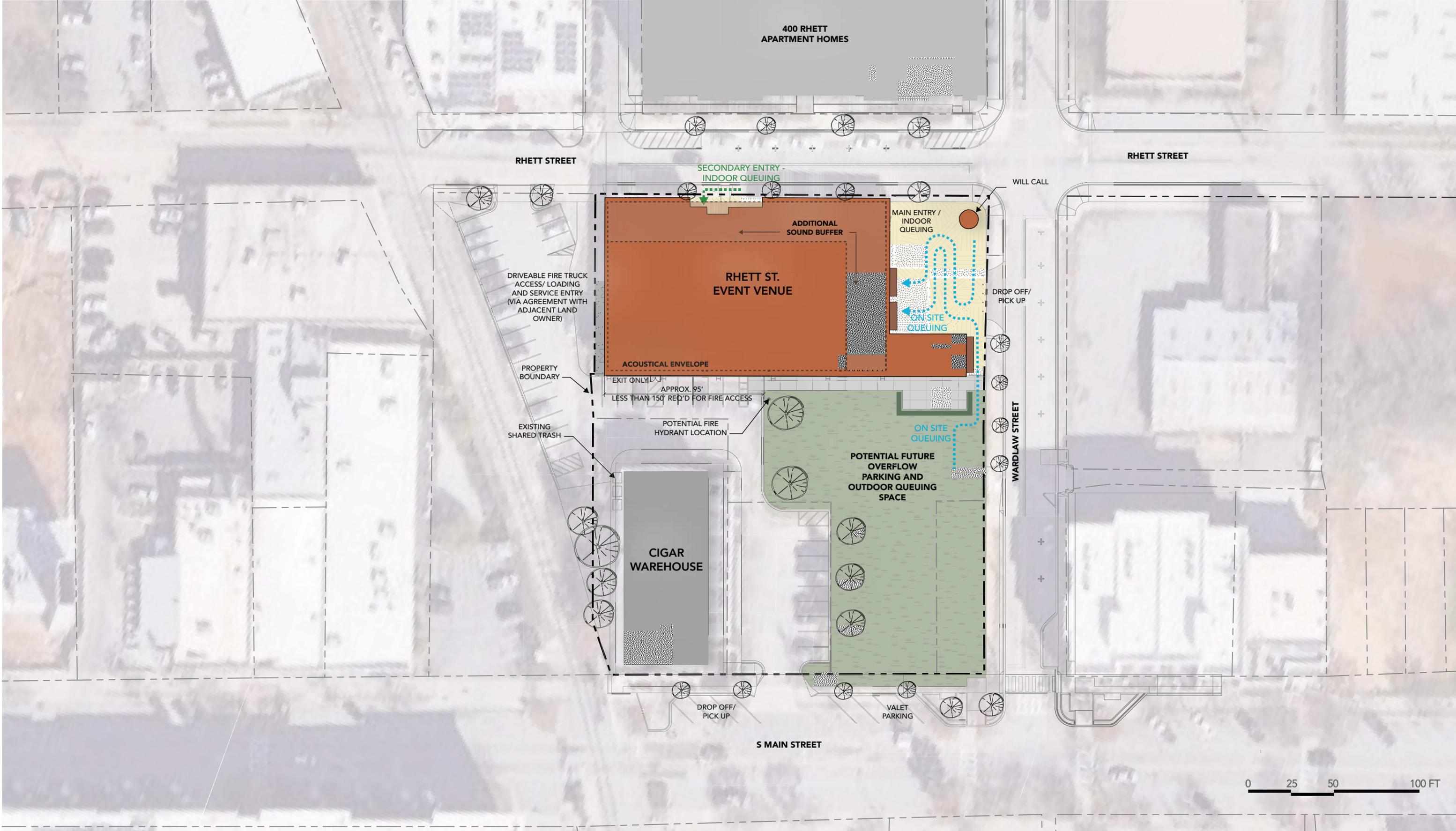
SPECIAL EMPHASIS NEIGHBORHOODS

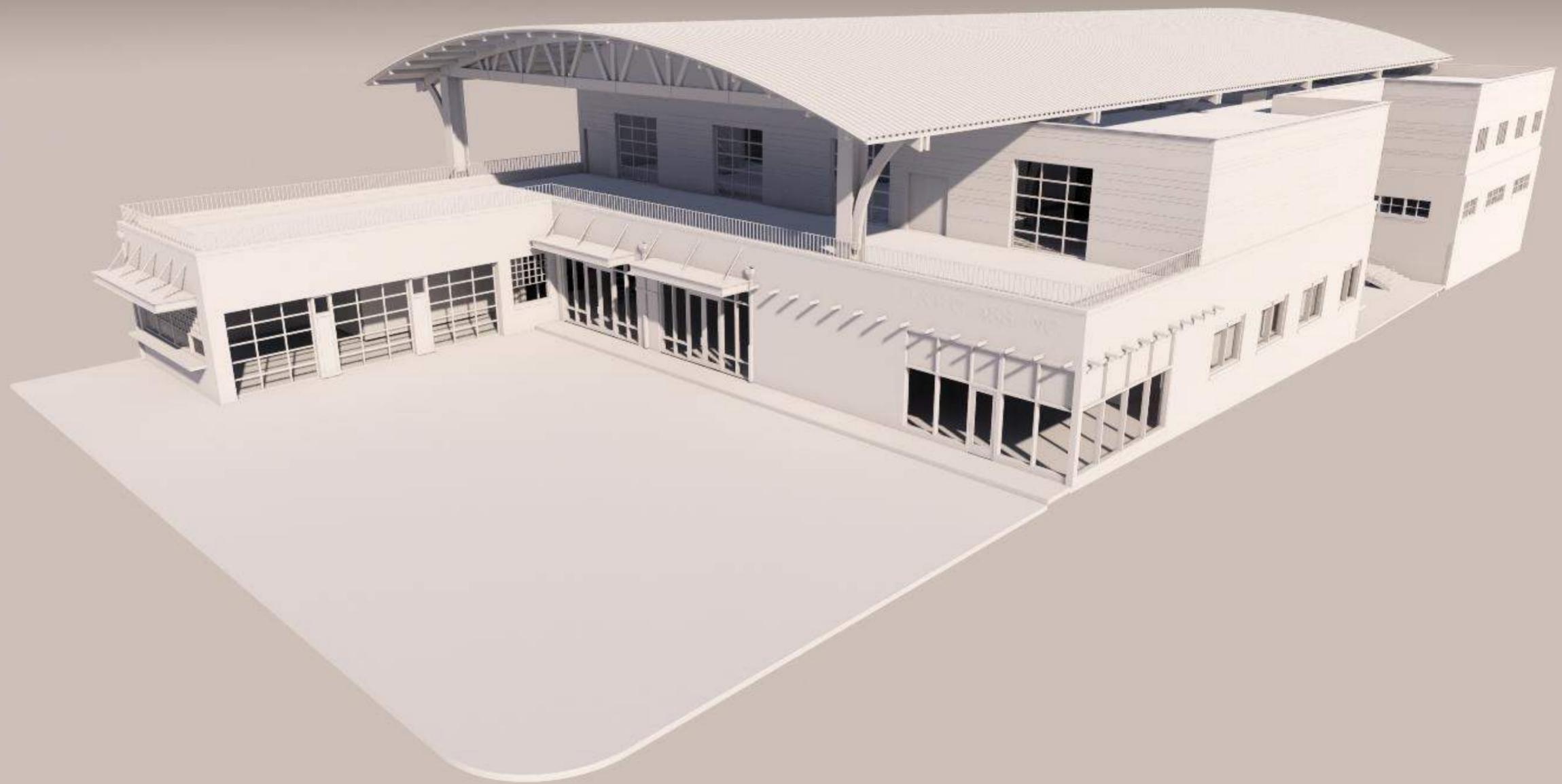


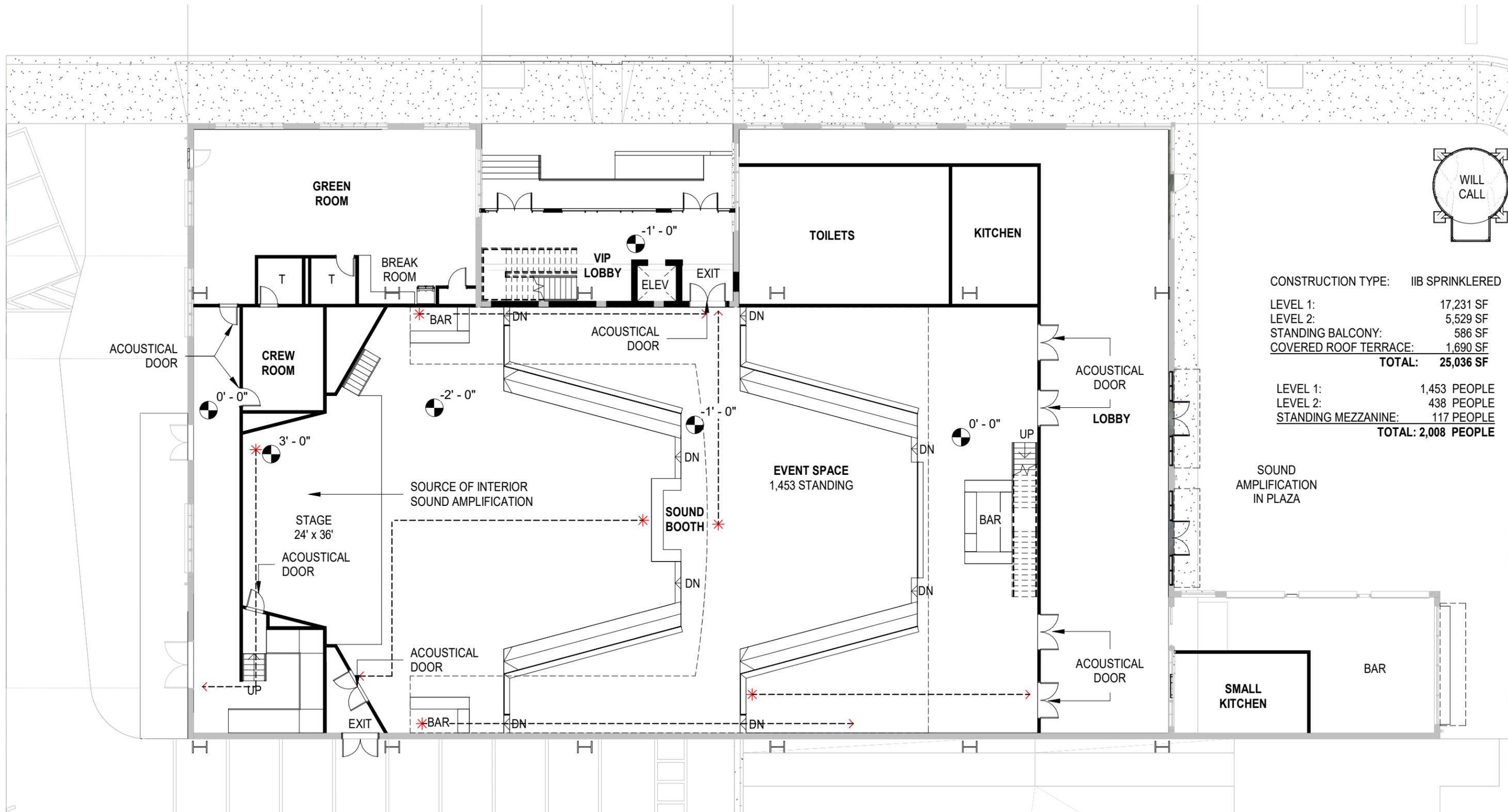
PRESERVATION OVERLAYS











CONSTRUCTION TYPE: IIB SPRINKLERED

LEVEL 1:	17,231 SF
LEVEL 2:	5,529 SF
STANDING BALCONY:	586 SF
COVERED ROOF TERRACE:	1,690 SF
TOTAL:	25,036 SF

LEVEL 1:	1,453 PEOPLE
LEVEL 2:	438 PEOPLE
STANDING MEZZANINE:	117 PEOPLE
TOTAL:	2,008 PEOPLE

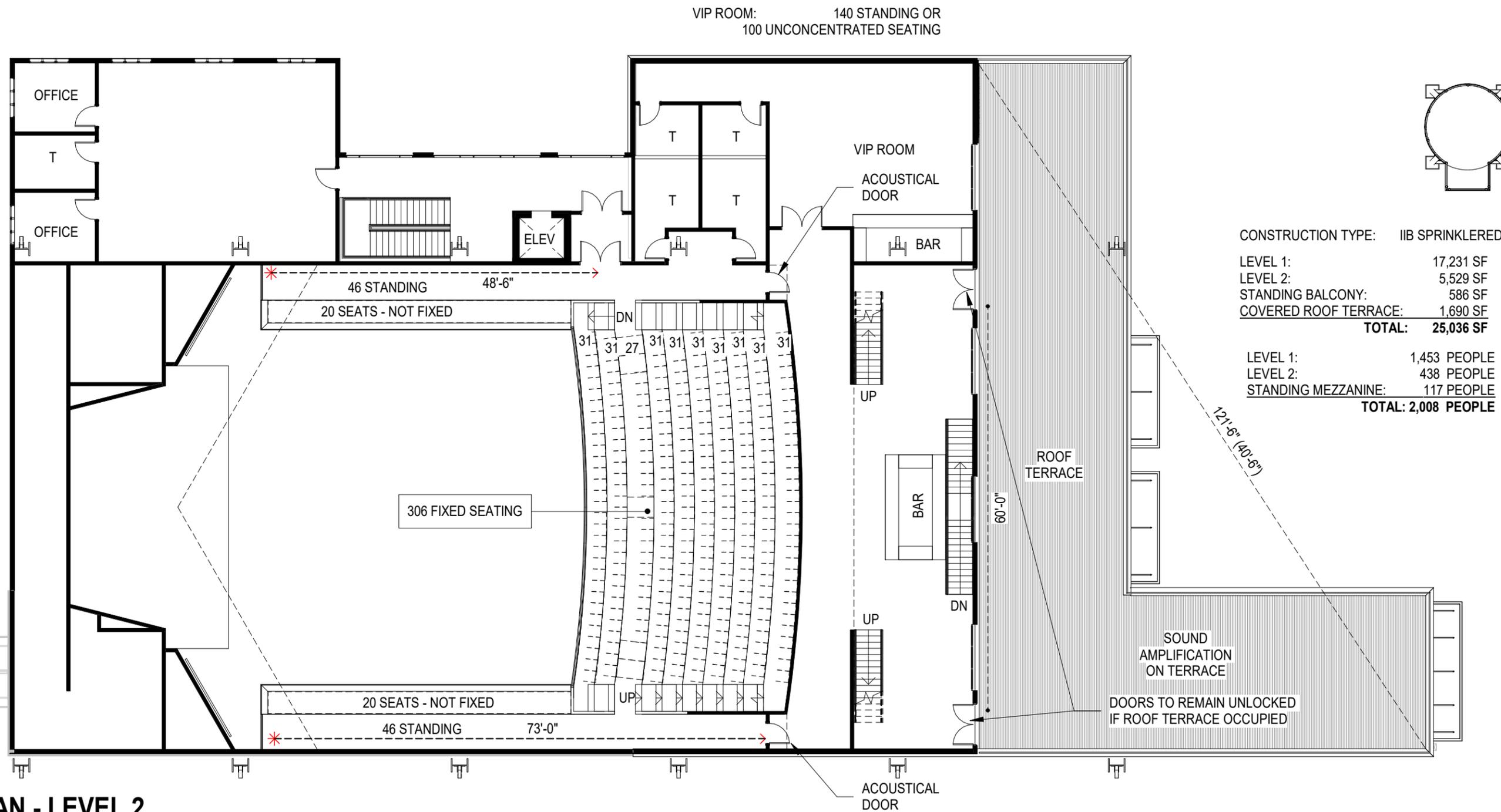
FLOOR PLAN - LEVEL 1

1/16" = 1'-0"



RHETT ST. EVENT VENUE
 GREENVILLE, SC
 03/09/2020

FLOOR PLAN - LEVEL 1

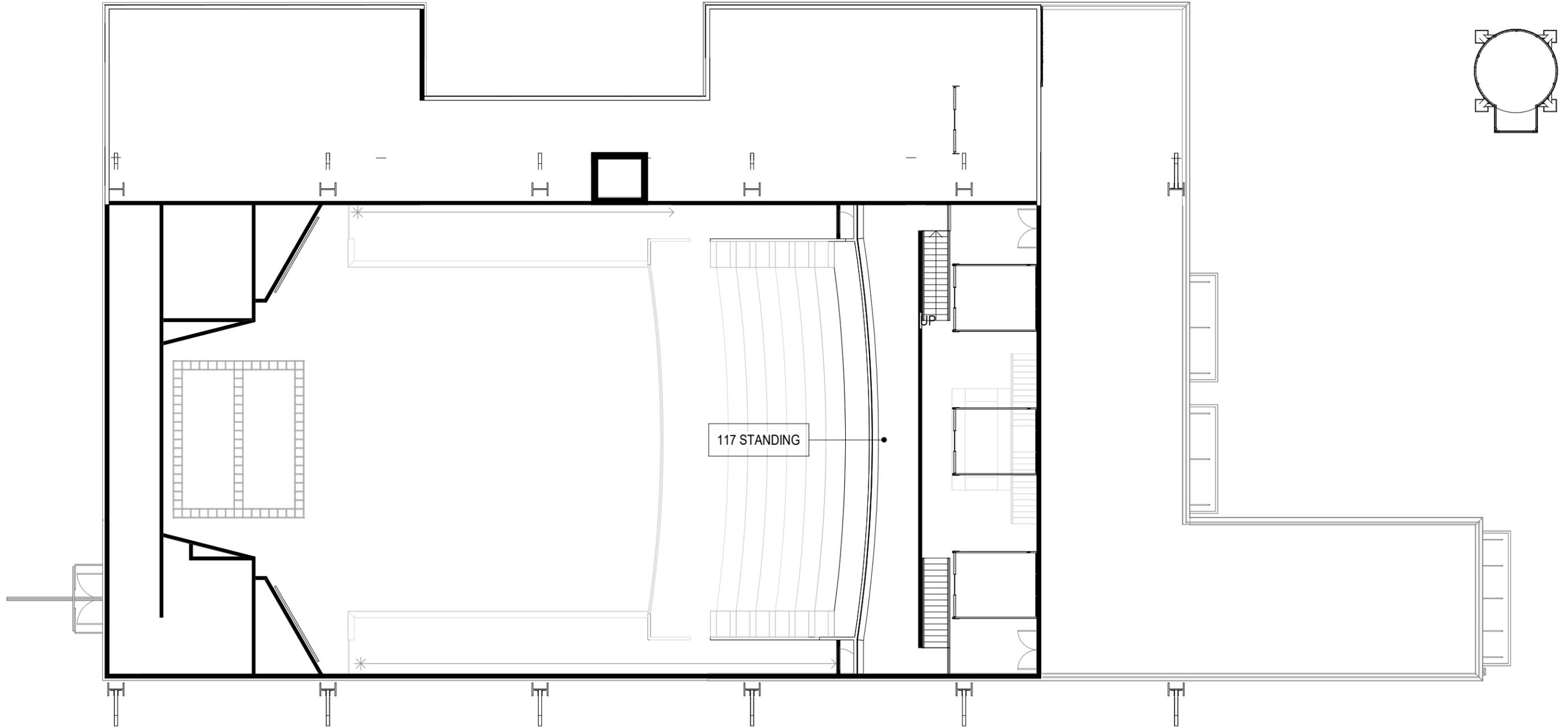


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FLOOR PLAN - LEVEL 2

1/16" = 1'-0"

LEVEL 1: 1,453 PEOPLE
LEVEL 2: 438 PEOPLE
STANDING BALCONY: 117 PEOPLE
TOTAL: 2,008 PEOPLE



STANDING BALCONY

1/16" = 1'-0"



Per City of Greenville Ordinance 19-6.1.3, the requirement for off street parking for an Indoor Entertainment Facility is 1 Parking Space per 3 Fixed Seats or 1 Parking Space per 300 sf, whichever is greatest.

Maximum Occupant Load = 2000
 $2000/3 = 667$ Parking Spaces

Per 19-6.1.2 B, The Off-Street Parking and Loading Standards shall not apply in the C-4 District, however a Parking Plan is shown to indicate where parking is provided.

There are 787 Parking Spaces provided within a .25 mile radius.



- 1 HOPPIN'
- 2 TODARO PIZZA
- 3 URBAN WREN WINERY/ VENUE
- 4 LIBERTY TAP ROOM
- 5 PURPLE INTERNATIONAL BISTRO & SUSHI
- 6 COMPADRES MEX GRILL
- 7 MAC'S SPEED SHOP
- 8 ORGANIC CAT CAFE & LISTENING LOUNGE
- 9 ZEN
- 10 OLD CIGAR WAREHOUSE
- 11 BEX CAFE & JUICE BAR
- 12 OTTO IZAKAYA
- 13 ON THE ROXX
- 14 HUSK GREENVILLE
- 15 OLD EUROPE COFFEE & DESSERTS
- 16 THE FLYING BISCUIT CAFE
- 17 RICK ERWIN'S WEST END GRILLE
- 18 LE PETIT CROISSANT
- 19 BLUEBERRY FROG
- 20 RICK ERWIN'S DELI
- 21 FOXCROFT WINE CO.
- 22 MARBLE SLAB/ GREAT AMERICAN COOKIE
- 23 VAULT & VATOR
- 24 SMOKE ON THE WATER
- 25 MELLOW MUSHROOM
- 26 THE VELO FELLOW
- 27 GREEN LETTUCE USA
- 28 EGGS UP GRILL
- 29 SMILEY'S ACOUSTIC CAFE
- 30 GATHER GVL
- 31 FUNNELICIOUS
- 32 FLUOR FIELD

■	Restaurant / Bar
■	Outdoor Entertainment
■	Indoor Entertainment
■	Buildings
	0.25 Mile= 5 minute walk
	0.50 Mile= 10 minute walk



9 March 2020

Cary Perkins
McMillan Pazdan Smith Architecture
400 Augusta St #200
Greenville, SC 29601

Email: cperkins@mcmillianpazdansmith.com

**Subject: Greenville Event Venue Acoustical Measurements
TA Project #20034**

Dear Cary,

As you know, Thorburn Associates visited 401 Rhett Street in Greenville SC to conduct long term sound level measurements from 27 February 2020 through 2 March 2020. The purpose of these measurements was to document the existing sound levels on site for the building's repurposing as an event venue.

MEASUREMENTS

Site Layout

There is an apartment building to the north of the site, and a future apartment building under construction to the northeast. A former warehouse turned event hall and a baseball park are located to the south. Railroad tracks run to the west/southwest of the site.

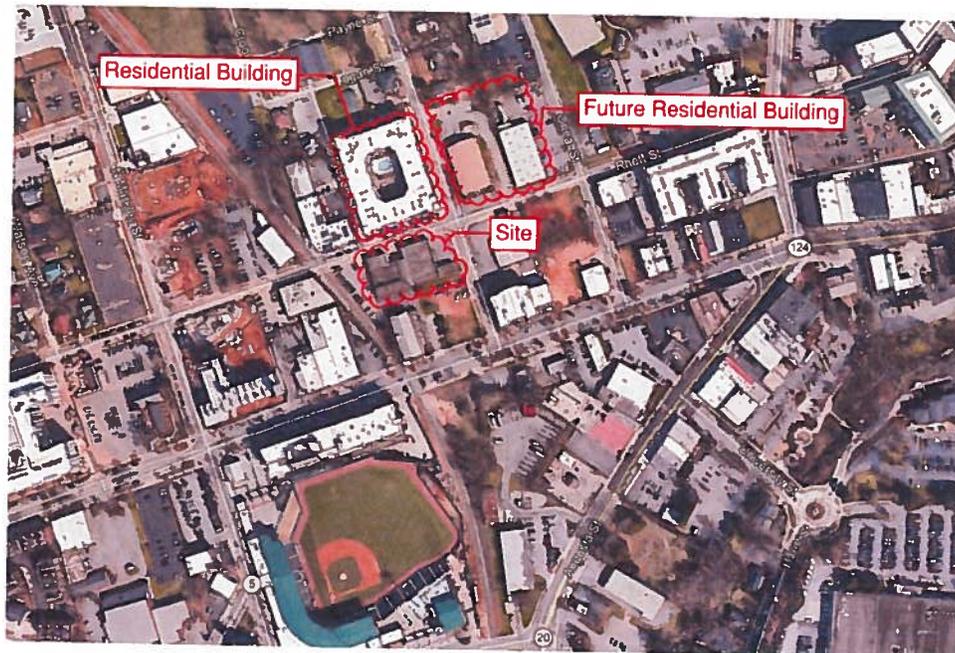


Figure 1: Site Layout

Zoning

The site and surrounding properties fall within the C-4 Central Business District zone.

Observations

No trains were observed while on site. Based on system maps it appears this trackage is used by Norfolk Southern freight trains.

Based on the stadium's schedule, there were several college baseball games on Friday, Saturday, and Sunday. There is direct line of sight from the stadium to the site.

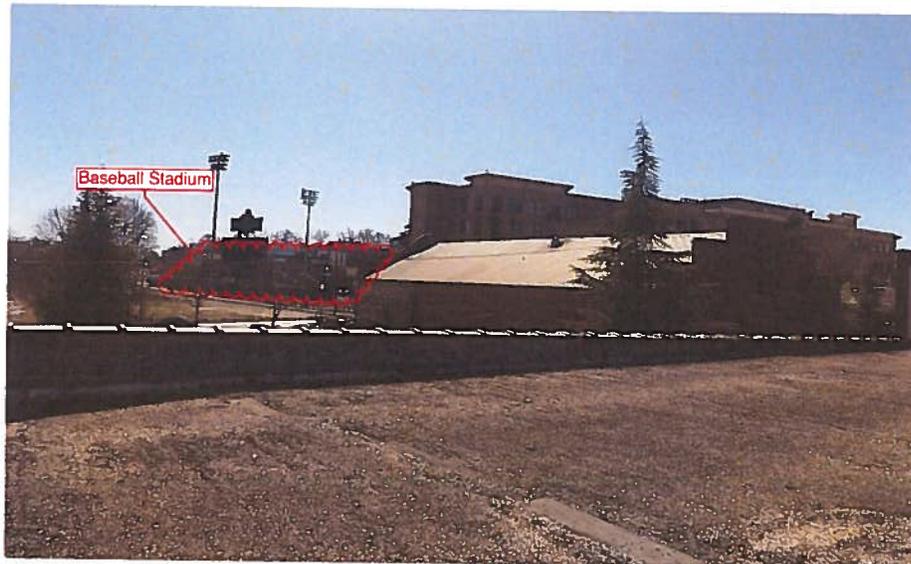


Figure 2: Line of Sight from Site to Baseball Stadium

Results

Long term sound levels were measured from the roof of 401 Rhett Street.



Figure 3: Roof Top Sound Level Meters

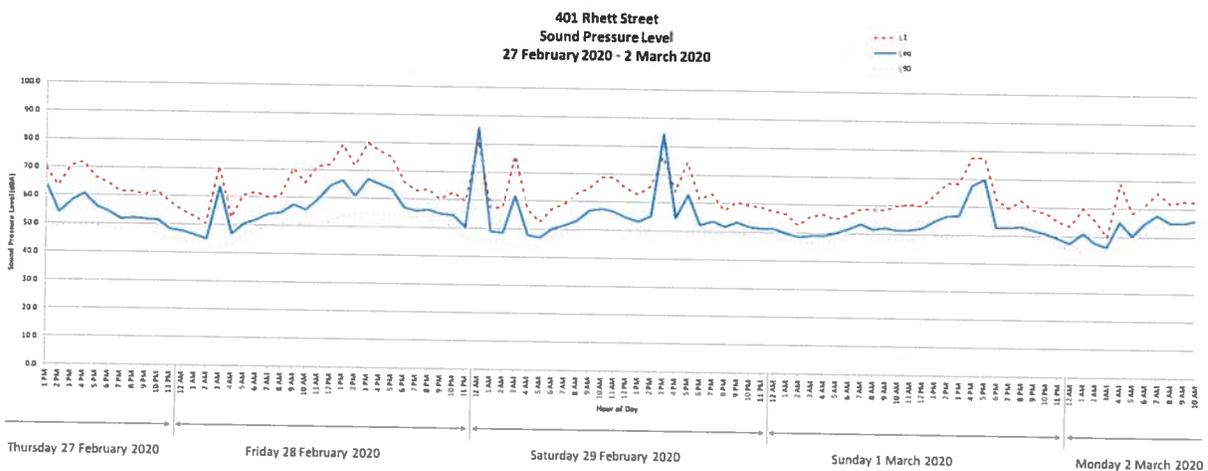
The full results of our measurements were graphed by hour in terms of Leq¹, L1², and L90³.

Leq is the equivalent steady-state dBA⁴ level that would contain the same acoustic energy as the time-varying sound level during a stated period of time.

L1 is the level exceeded during the loudest 1% of the measurement period (36 seconds of the hour). L1 generally describes exceptional or unusually loud sound levels, like a siren or a train passing by.

L90 is the level exceeded during the loudest 90% of the measurement. Put another way, the measurement location is only quieter than the L90 level 10% of the time. L90 is generally considered to be the effective base or ambient noise level, since it is only quieter during fairly atypical moments without any traffic, wind, or other local noises.

The Leq, L1 and L90 levels measured on the roof of 401 Rhett Street are graphed below. A larger format graph has been included as Appendix A.



Comments

Based on the duration and levels recorded, the spikes in the Leq and L1 levels during the 3:00am hour of 28 and 29 February 2020 and the 4:00am hour of 2 March 2020 are likely from a passing train.

The times when the Leq level exceeded the L1 level, the 12:00am and 3:00pm hours of 29 February 2020 are due to a very short but very loud event, such as an ambulance passing at speed or a truck sounding its horn directly adjacent to the site.

Ambient Level

As you can see, the L90 or ambient level at night ranged from 42-50dBA. This is relatively quiet for a central business district.

CODE

As noted above, the site and surrounding properties are zoned C-4 Central Business District.

Section 16-100 of the City of Greenville Code of Ordinances limits noise levels, as measured 25-feet from the property, to 80dBA from 7:00am to 10:00pm and 75dBA from 10:00pm to 7:00am.

However, it should be noted that Section 16-93 of the City of Greenville Code of Ordinances states:

“technological sound level measurements, while desirable, shall not be required to demonstrate a violation of this division or any other ordinance or statute which establishes the creation of disturbance or public nuisance. Decibel level measurements less than those specified in this division may still establish a violation of this division when due regard is made for the time, place and circumstances of the noise.”

OSHA

OSHA regulations (1910.95(b)(2)) limit noise exposure for employees and require hearing protection above 85dBA. Persons may only be exposed to noise levels as noted below:

Sound Level	Maximum Duration of Exposure per Day
90dBA	8 Hours
92dBA	6 Hours
95dBA	4 Hours
97dBA	3 Hours
100dBA	2 Hours
102dBA	1.5 Hours
105dBA	1 Hour
110dBA	0.5 Hour
115dBA	0.25 Hours

RECOMMENDATIONS

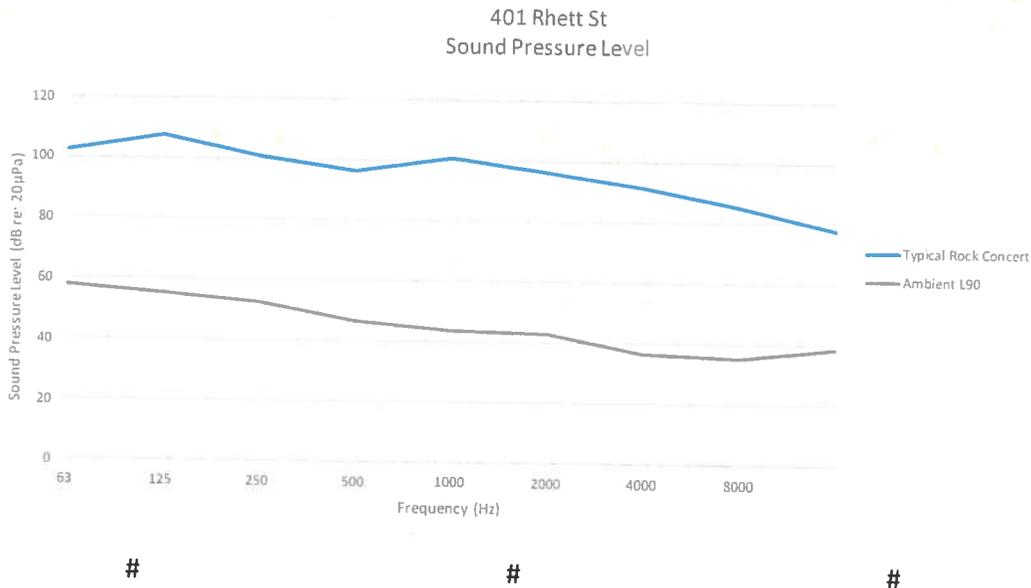
Based on OSHA limitations to staff noise exposure and our experience with other event venues, we expect the interior noise level to be between 95dBA and 105dBA.

To avoid the outdoor overall noise level (Leq) exceeding the noise ordinance, the exterior envelope should have a minimum rating of STC 35.

Because the City of Greenville Code of Ordinances does not require a noise to exceed prescribed levels to be considered in violation, we recommend the envelope be designed to avoid raising the ambient noise level in the area.

To avoid the outdoor overall noise level (Leq) exceeding the ambient level, the exterior envelope should have a minimum rating of STC 65.

It is important to note, STC is a single number rating and is just a snapshot of a partition's performance. The STC rating does not full encompass a partition's performance in lower frequencies, which makes up a significant portion of pop music. To avoid exceeding the ambient noise level in the lower frequencies, the exterior envelope should provide a transmission loss of at least 52dB in the 63Hz octave band. This can be accomplished using room within a room construction.



We trust this information is helpful. Please do not hesitate to contact us with any questions or to discuss further.

Sincerely,
Thorburn Associates Inc.

Paul Mangelsdorf, EIT, WELL AP
Associate

Steve Thorburn PE, LEED-AP, CTS-D, CTS-I
Principal

PSM/hcs

Enclosures: Appendix A
Environmental Noise Primer

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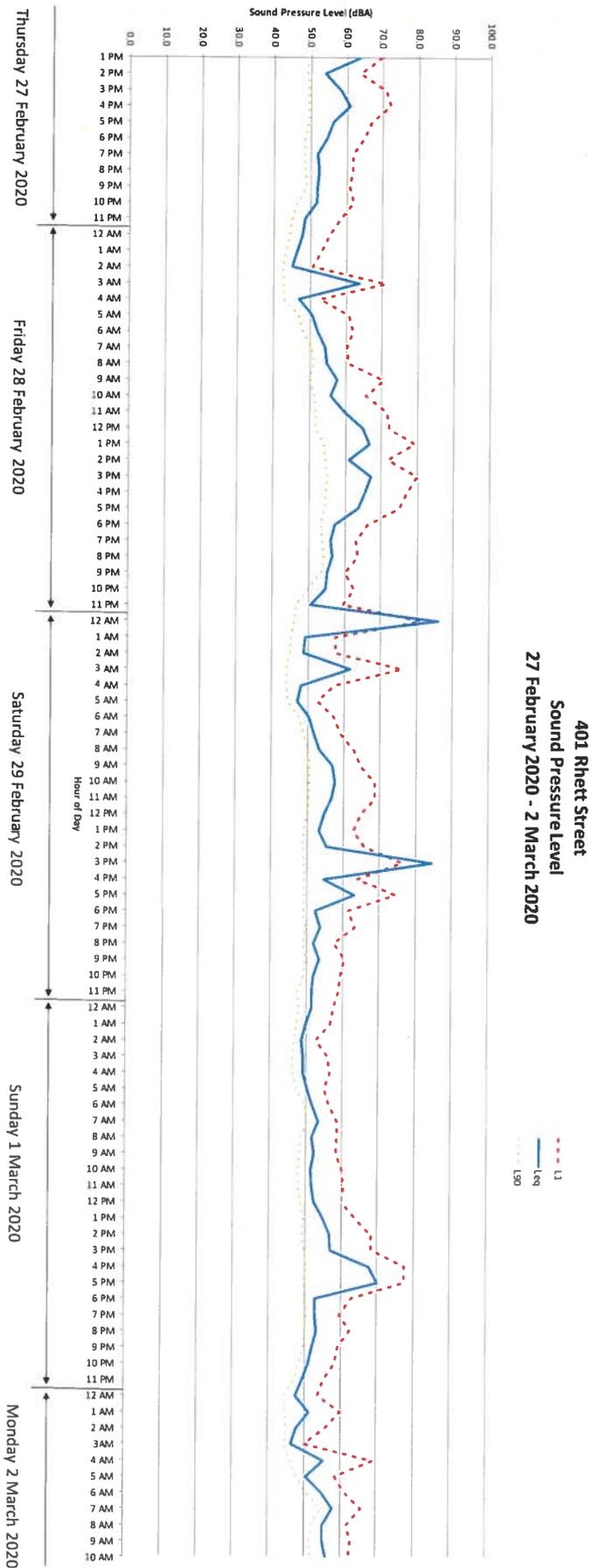
¹**Leq** -- The equivalent steady-state A-weighted sound level that, in a stated period of time, would contain the same acoustic energy as the time-varying sound level during the same time period.

²**L₁** -- A-weighted sound pressure level exceeded 1% of the measurement period.

³**L₉₀** -- A-weighted sound pressure level exceeded 90% of the measurement period.

⁴**A-Weighted Sound Level (Noise Level) -- dBA** -- A term for the A-weighted sound pressure level. A-weighting is a frequency weighting which is commonly used to measure the loudness or "noisiness" of sounds. A-weighting filters the microphone signal in a manner which better correlates with the sensation of the human ear. The sound level is obtained by use of a standard sound level meter and is expressed in decibels. Sometimes the unit of sound level is written as dBA. All noise data in this letter are A-weighted.

APPENDIX A



Fundamental Concepts of Environmental Acoustics

Three aspects of sound are important in determining a subjective response; sound level, frequency content, and time varying characteristics.

The level of a sound is a measure of its intensity or loudness, expressed as decibels (dB) with 0 dB corresponding roughly to the threshold of human hearing. The frequency (spectrum) of a sound refers to its pitch and is expressed in Hertz or cycles per second. For example, bass from a stereo usually has frequencies of 40 to 150 Hertz, while the sound of escaping compressed air is primarily high frequency, above 6,000 Hertz. Most of the noises we hear in the environment are a combination of many frequencies at different levels.

To evaluate an acoustical environment the existing and future sound levels must be determined. Because the human ear perceives extremely low and high frequency sounds as less annoying than mid frequency sounds, different weighting scales have been developed. Environmental measurements are commonly made using the "A-weighting" scale. Sound levels measured with an A-weighted scale are referenced as "dBA". Professional sound level meters include an electrical filter corresponding to the A-weighting curve. Common A-weighted sound levels for different environment and industry noises are described in the attached table.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a combination of noises from distant sources (traffic, wind in the trees, waves crashing on the beach, etc.) These distant sources create a relatively steady "background noise" in which no particular source is identifiable. The amount of noise above the "background noise" will vary over time, therefore it is helpful to know what the A-weighted noise level was statistically exceeded during 10%, 50%, and 90% of a stated time period. These levels are referenced as L_{10} , L_{50} , and L_{90} respectively. A single number descriptor called the L_{EQ} is also widely used. The L_{EQ} is the average A-weighted noise level during a stated period of time.

In determining the daily level of environmental noise, it is important to adjust for the difference in a person's perception of daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than daytime levels. However, most household noise also decreases at night and exterior noise becomes more noticeable. Further, most people sleep at night and are very sensitive to noise intrusion. To account for this human sensitivity to nighttime noise levels, a descriptor, Ldn (day/night average sound level), was developed. The Ldn divides the 24 hour day into the daytime hours (7:00 am to 10:00 pm) and nighttime hours (10:00 pm to 7:00 am). The nighttime noise levels are "penalized" or weighted 10 dB louder than the daytime noise levels. Another 24-hour average sound level, the Community Noise Equivalent Level (CNEL) is also used and includes both an evening (5 dB Penalty) and nighttime weighting (10 dB Penalty).

The effects of noise on people can be listed in three general categories:

- subjective effects of annoyance, nuisance, and dissatisfaction
- interference with activities such as speech, sleep, and learning
- physiological effects such as startling and hearing loss

The levels associated with environmental noise, in almost every case, produce effects only in the first two categories. Workers in industrial plants can experience noise in the last category. Unfortunately, there is as yet no completely satisfactory way to measure the subjective effects of noise, or of the

corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and a person's ability to adapt to existing noises based on their past experiences.

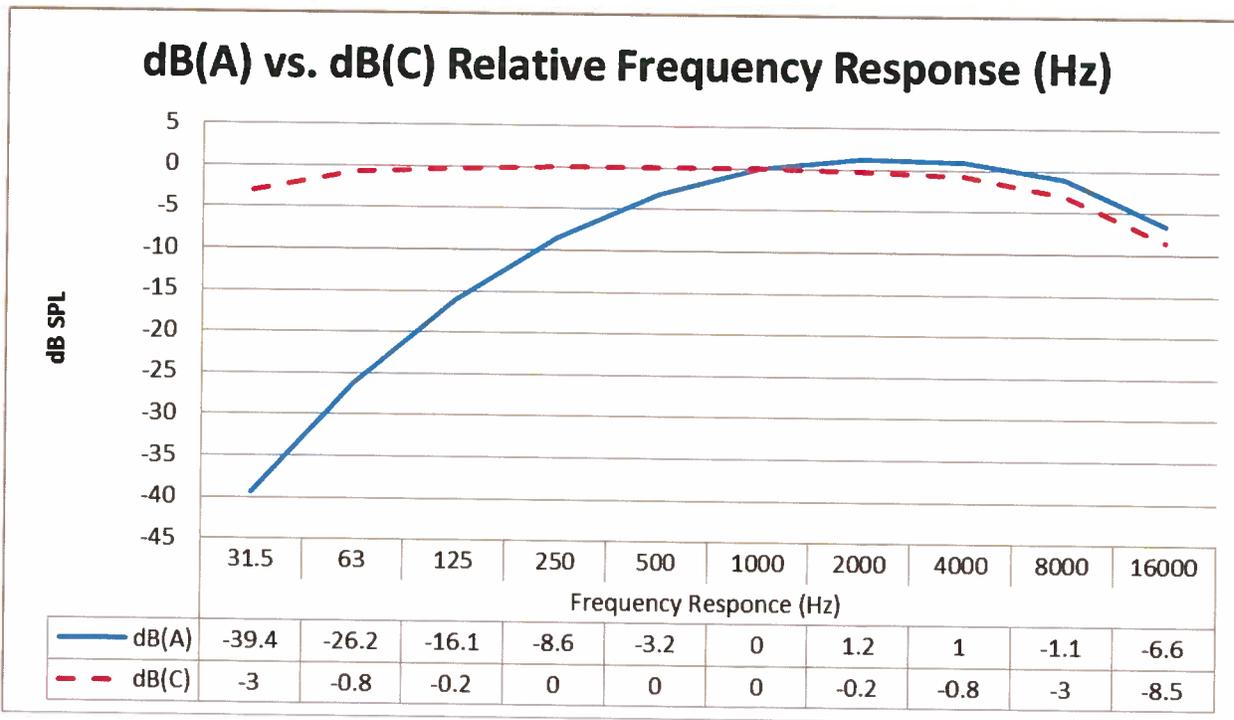
Therefore, an important way of determining a person's subjective reaction to a new noise is to compare it to the existing environment – the so-called "ambient" noise. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

Regarding increases in the A-weighted noise level, knowledge of the following relationships will be helpful in understanding this report:

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived.
- Outside of the laboratory, a 3 dB change is considered a just-perceivable difference.
- A change in level of at least 5 dB is required before any noticeable change in community response would be expected.
- A 10 dB change is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse change in community response.

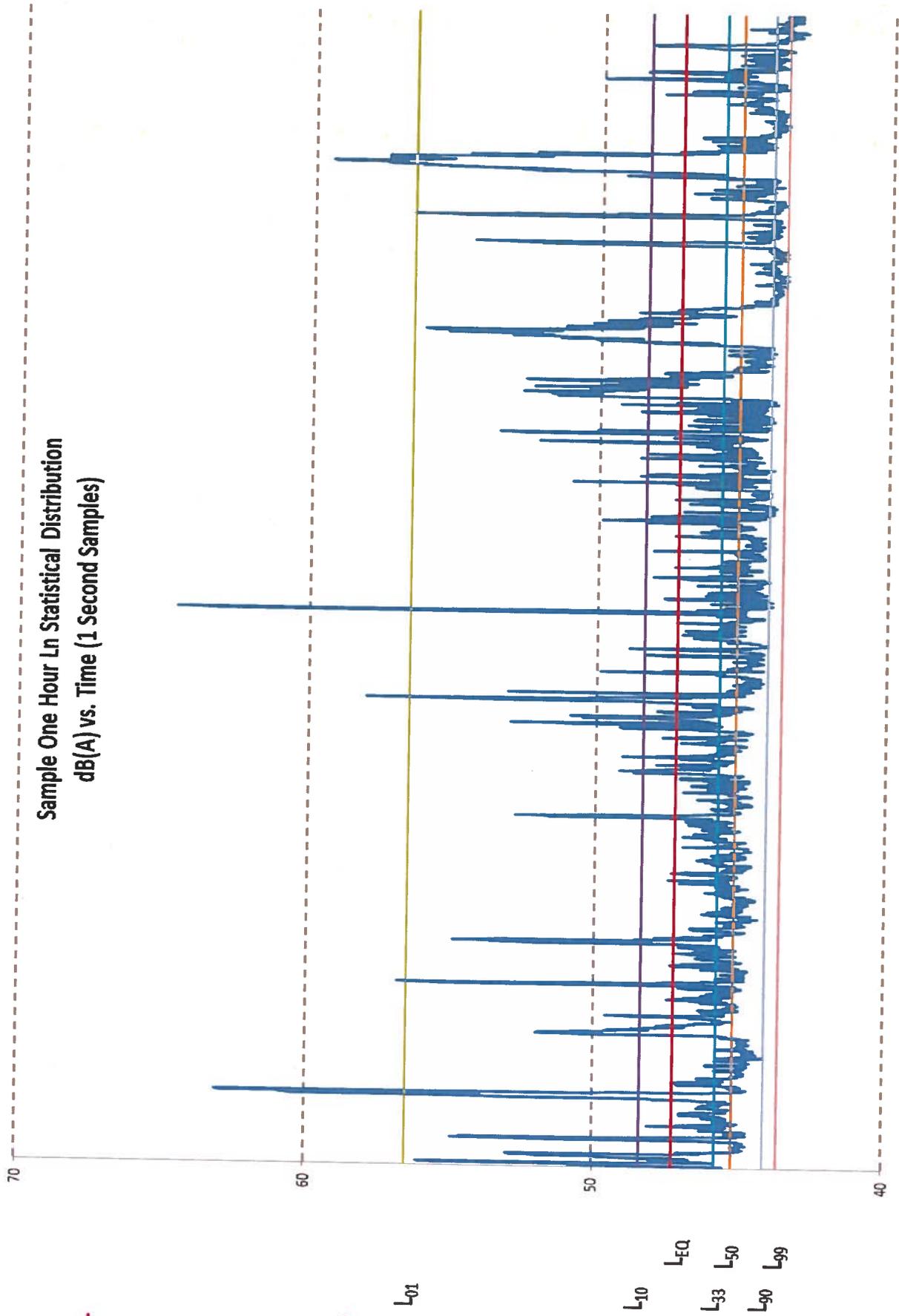
Common Sound Levels

EXAMPLES	A-Weighted Sound Level in Decibels	Subjective Evaluation
Jet Engine (75 Feet Away)	140	Painful and Dangerous
Jet Aircraft During Takeoff (300 Feet Away)	130	
Spinal Tap Concert, Thunder (Near By), Accelerating Motorcycle	120	Deafening
Riveting Machine	110	
Auto Horn, Crowd Noise at Football Game	100	Very Loud
Computer Equipment Room	90	
Cafeteria Crowd Noise	80	Loud
B-757 Aircraft During Flight	70	
Near Highway Traffic	60	Moderate
Office Activities	50	
Soft Stereo Music in Residences	40	Faint
Residence "Late at Night" without Stereo Playing	30	
Whisper	20	Very Faint
Rustle of Leaves in Breeze, Human Breathing	10	
	0	Audibility Threshold



A-Weighting (dBA) -- A quantity representing the subjective noisiness or loudness of a sound. It is obtained by weighting the amplitudes of various acoustical frequencies to correspond more closely with the sensation of human hearing. A 10 dB (decibel) increase in noise level is perceived to be twice as loud. A-weighting is specified by the U.S. EPA, OSHA, Caltrans, and others for use in noise measurements.

C-Weighting (dBC) -- Used as an overall measure of the loudness of sound with equal weighting given to all frequencies from 31.5 to 8000 Hertz, the average range of human hearing.



Acoustical Terms

A-Weighting (dBA) -- A quantity representing the subjective noisiness or loudness of a sound. It is obtained by weighting the amplitudes of various acoustical frequencies to correspond more closely with the sensation of human hearing. A 10 dB (decibel) increase in noise level is perceived to be twice as loud. A-weighting is specified by the U.S. EPA, OSHA, Caltrans, and others for use in noise measurements.

Ambient Noise Levels -- The composite of all near and far noise sources at a location. The ambient noise is the existing background noise level, free of unusual or distinct noise events. Ambient noise is usually determined by measuring the L_{EQ} for 10 to 15 minutes without inclusion of noise from isolated identifiable sources, at the location and time of day where a comparison is to be made.

Community Noise Equivalent Level (CNEL) -- A descriptor for the 24-hour A-weighted average noise level. The CNEL concept accounts for the increased acoustical sensitivity of people to noise during the evening and nighttime hours. Sound levels during the hours from 7:00 p.m. to 10:00 p.m. are penalized 5 dB; sound levels during the hours from 10:00 p.m. to 7:00 a.m. are penalized 10 dB.

C-Weighting (dBC) -- Used as an overall measure of the loudness of sound with equal weighting given to all frequencies from 31.5 to 8000 Hertz, the average range of human hearing.

Day/Night Sound Level (L_{DN}) -- A descriptor established by the Environmental Protection Agency (EPA) for the 24-hour average A-weighted noise level. Sound levels during the hours from 10:00 pm to 7:00 am, hours which people are more sensitive to noise, are penalized 10 decibels (dB).

Decibel (dB) -- A unit of measure describing the amplitude of sound pressure waves, relative to the standard reference level of 20 micropascals. This logarithmic ratio is used to obtain a convenient scale because the ear can detect such a wide range of absolute sound pressures.

Frequency (Hz) -- The rate of repetition of a periodic event. Sound in air consists of a series of compressions and rarefactions due to air particles set into motion by a vibrating source. The frequency of this sound wave is determined by the number of times per second a given air molecule vibrates around its neutral position. The greater the number of complete vibrations (cycles) the higher the frequency.

Intrusive -- The noise level of a particular source(s) that is over and above the existing ambient noise at a location. The relative disturbance depends upon the amplitude, duration, frequency, time of occurrence, and tonal or informational content as well as the prevailing ambient noise level.

L_{EQ} -- The equivalent steady-state A-weighted sound level that, in a stated period of time, would contain the same acoustic energy as the time-varying sound level during the same time period.

Line Source -- Sound energy from a line source (e.g., stream of automobiles or railroad cars) drops off by 3 dB for each doubling of the distance. This is because line sources consist of successive point sources which reinforce each other. Thus the spread of acoustical energy is cylindrical, not spherical.

Percentile Levels (L_n)--The percentage of observation time that a certain Sound Pressure Level has been exceeded. For example, L_{10} corresponds to the Sound Pressure Level exceeded 10% of the time.

Point Source -- Sound energy from point sources drop off by 6 dB for each doubling of the distance from the source.

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