

**STAFF REPORT FOR PLANNING COMMISSION MEETING OF NOVEMBER 16, 2021**

**FILE NO:** LU-2021-0304

**AGENDA ITEM:** 6.B

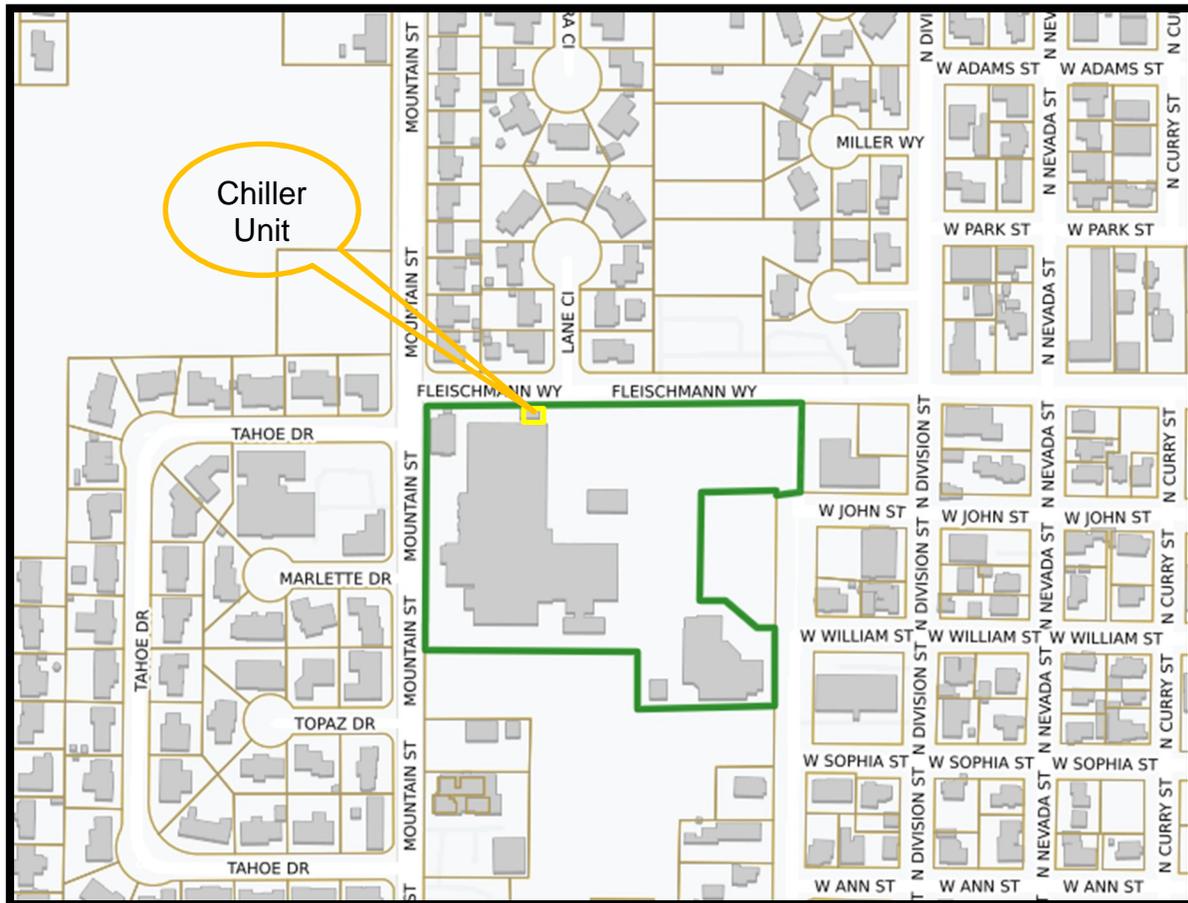
**STAFF CONTACT:** Heather Manzo, Associate Planner

**AGENDA TITLE:** LU-2021-0304 For Possible Action: Discussion and possible action regarding a request to amend special use permit U-95/96-14 to allow for the installation of a sound barrier around an existing chiller unit on property zoned Public Regional (“PR”) located at 775 Fleischmann Way, APN 001-201-30. (Heather Manzo, [hmanzo@carson.org](mailto:hmanzo@carson.org))

Summary: On March 27, 1996, the Planning Commission approved an amendment to a special use permit (“SUP”) to add a chiller and cooling tower on the north side of a hospital site. The approval included a condition of approval that limited the allowable noise level as measured at the exterior of the nearest residential unit to 55 decibels. As the condition of approval relative to noise is not being met, the applicant is proposing to replace an existing 8-foot-tall chain link fence with slats with a permanent 12 to 19-foot-tall sound-absorbing barrier around the chiller equipment. The Planning Commission is authorized to approve an amendment to the special use permit.

**RECOMMENDED MOTION:** “I move to approve LU-2021-0304, an amendment to U-95/96-14, based on the findings and subject to conditions of approval contained in the staff report.”

**VICINITY MAP:**



**RECOMMENDED CONDITIONS OF APPROVAL:**

*NOTE: The following conditions of approval shall supersede the conditions of approval associated with U-95/96-14. Language proposed to be added appear in bold with an underline. Language proposed to be deleted appear with a strikethrough.*

1. All development shall be substantially in accordance with the development plans approved with this application, except as otherwise modified by these conditions of approval.
2. All on and off-site improvements shall conform to City standards and requirements.
3. The use for which this permit is approved shall commence within 12 months of the date of final approval. A single, one year extension of time may be requested in writing to the Planning Division thirty days prior to the one-year expiration date. Should this permit not be initiated (obtain a Building Permit) within one year and no extension granted, the permit shall become null and void.
4. The applicant must sign and return the notice of decision acknowledging the conditions of approval within 10 days of receipt of notification. If the notice of decision is not signed and returned within 10 days, then the item may be rescheduled for the next Planning Commission meeting for further consideration.
- ~~5. All other departments' conditions of approval, which are attached, shall be incorporated as conditions of this report.~~
6. The Fleischmann Way frontage shall be screened with a combination of low wall and dense landscaping to screen the engineering services building and new chiller and cooling tower. **Prior to the issuance of a building permit, the applicant shall have landscape plans approved which include the installation of two non-columnar trees in the landscape area located between the north side of the chiller barrier and the sidewalk.**
7. ~~The noise level from the chiller and cooling tower shall be limited to 55 dBa at the nearest residential unit on the outside and 45 dBa at the nearest residential unit on the inside, or at those levels specified in Carson City Municipal Code if one is in place at the time a building permit is issued.~~ **Prior to a final inspection for the sound barrier, the applicant shall submit a letter from a licensed acoustical engineering consultant demonstrating that the noise level at the nearest property line on the north side of Fleischmann Way is 55 dBa (decibels, A-weighted) or less with the chiller operating at 100% capacity for the duration of the noise survey. The noise level from the chiller and cooling tower shall be limited to a maximum of 55 dBa at the nearest property line of a residence.**
8. **Prior to the issuance of a building permit, the applicant shall demonstrate that a four-sided permanent barrier, 19 feet in height will be installed around the chiller unit, consistent with Sheet P-4 dated 10/14/2021 (Attachment 1). The access door to the chiller area shall be constructed of the same, or similar sound proofing material as the sound barrier structure. Chain link shall be prohibited.**

**LEGAL REQUIREMENTS:** Carson City Municipal Code ("CCMC") 18.02.080 (Special Use Permits) and 18.04.185 (Public Regional "PR").

**MASTER PLAN DESIGNATION:** Mixed Use Residential

**ZONING:** Public Regional (“PR”)

**KEY ISSUES:** Will the proposed improvements adequately reduce the noise generated by the chiller unit to bring the site into compliance with Condition of Approval No. 7 for case No. U-95/96-14, limiting noise levels at the nearest residence to a maximum of 55 dBa?

**SITE DEVELOPMENT INFORMATION:**

LOT SIZE: portion of a 7.15 acre site

EXISTING LAND USE: Hospital

VARIANCES REQUESTED: None

**SURROUNDING ZONING AND LAND USE INFORMATION:**

NORTH: Single Family 6,000 (“SF6”) and Public Community (“PC”) / single family residences

EAST: Residential Office (“RO”) / residences, medical and office buildings, Treadway Park

SOUTH: Multi-Family Apartment (“MFA”) / memory care facility

WEST: RO and SF6 / single family residences, medical and office buildings

**DISCUSSION:**

In 1994, a SUP (U-93/94-24) was approved to allow for an expansion of existing hospital facilities at the subject site located at 775 Fleischmann Way. An amendment to the approved SUP was granted in 1996 to remodel the hospital which introduced a new condition associated with Case No. U-95/96-14 that stated:

*“7. The noise level from the chiller and cooling tower shall be limited to 55 dBa at the nearest residential unit on the outside and 45 dBa at the nearest residential unit on the inside, or at those levels specified in Carson City Municipal Code if one is in place at the time a building permit is issued.”*

At the time the condition was placed on the project, Carson-Tahoe Hospital owned the subject site as well as the adjacent residential property across Fleischmann Way. Obtaining sound readings would have been possible since both properties were under common ownership. In 2014, Carson-Tahoe sold the residential property which is now used as a private residence.

Staff has received complaints from residents adjacent to the hospital site stating that the noise levels were not in compliance with the condition of approval. These levels have been substantiated by sound readings taken by staff and by the applicant-hired acoustical consultant during a site visit on August 23, 2021.

In order to bring the site into conformance with the conditions of approval, the applicant has proposed the installation of a four-sided sound barrier around the chiller unit at a height between 12 and 19 feet tall. The acoustical analysis prepared on October 14, 2021 by Bollard Acoustical Consultants, Inc finds that the barrier must be 19 feet tall in order for the noise levels to be in compliance with the 55 dBa noise level at the nearest residential unit.

Per the provisions of CCMC 18.02.080, the Planning Commission has the authority to approve the SUP upon making each of the seven required findings in the affirmative.

**PUBLIC COMMENTS:** Public notices were mailed to 139 property owners within 600 feet of the subject property on November 2, 2021. As of the writing of this report, staff has not received any inquiries related to the request. Any comments that are received after this report is completed will

be submitted to the Planning Commission prior to or at the meeting on November 16, 2021, depending on the date of submittal of the comments to the Planning Division.

**OTHER CITY DEPARTMENTS OR OUTSIDE AGENCY COMMENTS:** The following comments were received by various city departments. Recommendations that are not code requirements have been incorporated into the recommended conditions of approval, where applicable.

**Carson City Fire Department:**

The project must comply with the International Fire Code and Northern Nevada Fire Code amendments as adopted by Carson City.

**Carson City Building Department:**

The building permit will need to include design according to manufacturer specifications for installation to maximize the effectiveness of the barrier. Since the barrier exceeds six feet in height, the barrier will need to be engineered.

**Carson City Development Engineering Division:**

The Engineering Division has no preference or objection to the special use request provided that the following requirement is met:

- If work is proposed within the Fleischmann Way public right of way, an encroachment permit will be required prior to commencement of work.

**FINDINGS:** The staff recommendation is based upon the findings as required by CCMC 18.02.080 (Special Use Permits) enumerated below and substantiated in the public record for the project.

***1. Will be consistent with the objectives of the Master Plan elements.***

The subject property has a Master Plan land use designation of Mixed-Use Residential which primarily consists of medium to high density residential housing with a variety of non-residential uses which include: health services, professional offices, and other commercial uses that generally support neighborhoods.

The hospital use is established. This request is to install a sound barrier of sufficient design and height on an existing hospital site to mitigate noise generated by an existing chiller unit located on the northern portion of the site.

***2. Will not be detrimental to the use, peaceful enjoyment, economic value, or development of surrounding properties or the general neighborhood; and is compatible with and preserves the character and integrity of adjacent development and neighborhoods or includes improvements or modifications either on-site or within the public right-of-way to mitigate development related to adverse impacts such as noise, vibrations, fumes, odors, dust, glare or physical activity.***

The area of concern for this project is related to adverse noise impacts on neighboring properties. It should be noted that at the time the SUP was approved in 1996, the property across the street from the approved chiller unit was owned by Carson-Tahoe Hospital and is zoned Public Community ("PC"). Based on available records, it appears that the property to the north of the chiller unit has had a single-family use established since the property was developed in the mid-

1960's. Condition No. 7 was intended to mitigate the noise impacts of the chiller unit on all nearby residents. The condition requires applicant representatives and City staff to enter onto private property to determine whether noise levels comply with the conditions of approval. This presents challenges from an administrative feasibility level, and if against property owner wishes, would result in the applicant's inability to demonstrate compliance with the required conditions of approval.

**Condition No. 5** has been deleted as there are no secondary conditions of approval associated with this SUP. **Condition No. 6** is recommended to be modified to require enhanced landscaping to include the installation of trees between the sound barrier wall and Fleischmann Way. Changes to **Condition No. 7** are recommended to replace the original condition of approval related to noise generation. As stated in the October 14, 2021 sound study, if noise levels meet the maximum level of 55dBa at the closest property line, the noise levels at the residence will be at or less than 55dBa. Figure 3 of the sound study includes a Center for Disease Control ("CDC") Noisemeter that depicts noise levels for a variety of everyday activities. Per the CDC, a conversation between two people is 65 dBa. **Condition No. 8** is recommended to require the applicant to construct the sound barrier at 19 feet tall since the acoustical analysis found that 55 dBa would not be reached with a barrier that was constructed at less than 19 feet in height.

With the recommended conditions of approval, staff can make SUP finding 2.

***3. Will have little or no detrimental effect on vehicular or pedestrian traffic.***

There are sidewalks along the project frontage and the proposed sound barrier will not result in a modification to vehicle and pedestrian traffic.

***4. Will not overburden existing public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage, and other public improvements.***

The proposed sound wall will not have an impact on public services and facilities.

***5. Meets the definition and specific standards set forth elsewhere in this Title for such particular use and meets the purpose statement of that district.***

The hospital use is one of the listed conditional uses within the PR zoning district. With the inclusion of the recommended conditions of approval, the project is found to be in compliance with CCMC.

***6. The use will not be detrimental to the public health, safety, convenience and welfare.***

The proposed sound barrier will not be detrimental to the health, safety, convenience and welfare of the public. The proposed sound barrier will bring the project into conformance with the allowable noise levels in the SUP.

***7. Will not result in material damage or prejudice to other property in the vicinity, as a result of proposed mitigation measures.***

The proposed 19-foot-tall sound barrier will replace the 8-foot-tall chain link fence with slats that currently exists around the chiller unit. The barrier materials are specifically designed to reduce noise impacts on nearby properties and while the purpose of the barrier is to reduce noise to levels

below 55 dB at the residential property lines to the north, the barrier is made of a more decorative material than chain link which has been proposed to be complimentary to the site. Additional landscaping is recommended to minimize the visual impacts of the sound barrier. With the inclusion of the recommended conditions of approval, the project will not result in material damage or prejudice to other property in the project vicinity.

Attachment: Application LU-2021-0304

Carson City Planning Division  
108 E. Proctor Street • Carson City NV 89701  
Phone: (775) 887-2180 • E-mail: [planning@carson.org](mailto:planning@carson.org)

FOR OFFICE USE ONLY:

CCMC 18.02.080

## SPECIAL USE PERMIT

FEE\*: \$2,450.00 MAJOR  
\$2,200.00 MINOR (Residential zoning districts)  
+ noticing fee

\*Due after application is deemed complete by staff

- SUBMITTAL PACKET – 4 Complete Packets (1 Unbound Original and 3 Copies) including:
- Application Form
  - Detailed Written Project Description
  - Site Plan
  - Building Elevation Drawings and Floor Plans
  - Special Use Permit Findings
  - Master Plan Policy Checklist
  - Applicant's Acknowledgment Statement
  - Documentation of Taxes Paid-to-Date
  - Project Impact Reports (Engineering)

- CD or USB DRIVE with complete application in PDF

Application Received and Reviewed By: \_\_\_\_\_

Submission Deadline: Planning Commission application submission schedule.

Note: Submittals must be of sufficient clarity and detail for all departments to adequately review the request. Additional information may be required.

### FILE #

APPLICANT PHONE #  
Peter Zemp 775-790-6604

MAILING ADDRESS, CITY, STATE, ZIP  
P.O. Box 1305 Carson City NV 89702

EMAIL ADDRESS  
[n\\_s\\_construction@yahoo.com](mailto:n_s_construction@yahoo.com)

PROPERTY OWNER PHONE #  
ARHC CTRNV001 LLC 858-794-1900

MAILING ADDRESS, CITY, STATE, ZIP  
%Altus Group Venfas #7725 PO Box 71970 Phoenix, AZ 85050

EMAIL ADDRESS

APPLICANT AGENT/REPRESENTATIVE PHONE #  
PMB Real Estate Services / Micki Marston 775-420-7440

MAILING ADDRESS, CITY STATE, ZIP  
401 Ryland St. Suite #136 Reno, NV 89502

EMAIL ADDRESS  
[mmarston@pmbres.com](mailto:mmarston@pmbres.com)

Project's Assessor Parcel Number(s):

1-201-25

Street Address

775 Fleischmann Way Carson City NV 89703

Project's Master Plan Designation

Project's Current Zoning

Public (P)

Nearest Major Cross Street(s)

Mountain st.

Please provide a brief description of your proposed project and/or proposed use below. Provide additional pages to describe your request in more detail. We would like to replace the current 8' tall chain link fencing surrounding chiller equipment on the north side of property with a new 12' sound absorbing sound wall.

### PROPERTY OWNER'S AFFIDAVIT

I, Micki Marston PMB Real Estate Services, being duly deposed, do hereby affirm that I am the record owner of the subject property, and that I have knowledge of, and I agree to, the filing of this application.

Micki Marston  
Signature

401 Ryland St. Suite #136 Reno, NV 89502

Address

09/15/21

Date

Use additional page(s) if necessary for additional owners.

STATE OF NEVADA

COUNTY WASHOE

On Sept. 15, 2021, Micki Marston, personally appeared before me, a notary public, personally known (or proved) to me to be the person whose name is subscribed to the foregoing document and who acknowledged to me that he/she executed the foregoing document.

Karen Soohoo  
Notary Public



KAREN SOOHO  
NOTARY PUBLIC  
STATE OF NEVADA  
APPT. NO. 06-107011-2  
MY APPT. EXPIRES JULY 30, 2022

NOTE: If your project is located within the Historic District or airport area, it may need to be scheduled before the Historic Resources Commission or the Airport Authority in addition to being scheduled for review by the Planning Commission. Planning staff can help you make this determination.

Payment History									
Fiscal Year		Total Due	Total Paid	Amount Unpaid	Date Paid				
- (2021 - 2022)		\$253,453.53	\$0.00	\$253,453.53					
Instalment	Paid By	Date Due	Date Paid	Tax Billed	Cost Billed	Penalty/Interest	Total Due	Amount Paid	Total Unpaid
1		8/16/2021		\$63,364.88	\$0.00	\$0.00	\$63,364.88	\$0.00	\$63,364.88
2		10/4/2021		\$63,362.89	\$0.00	\$0.00	\$63,362.89	\$0.00	\$63,362.89
3		1/3/2022		\$63,362.89	\$0.00	\$0.00	\$63,362.89	\$0.00	\$63,362.89
4		3/7/2022		\$63,362.89	\$0.00	\$0.00	\$63,362.89	\$0.00	\$63,362.89
+ (2020 - 2021)		\$244,408.80	\$244,408.80	\$0.00	3/4/2021				
+ (2019 - 2020)		\$235,915.85	\$235,915.85	\$0.00	2/12/2020				
Show 11 More									

Related Names	
<b>CURRENT MAIL TO FOR 2022 (2022 - 2023)</b> Name ARHC CTCRCNV001 LLC Mailing % ALTUS GROUP VENTAS Address #7725 PO BOX 71970 PHOENIX, AZ, 85050-0000 Status Current Account	<b>CURRENT OWNER FOR 2022 (2022 - 2023)</b> Name ARHC CTCRCNV001 LLC Mailing Address Status Current Account
	<b>MAIL TO FOR 2020 (2020 - 2021)</b> Name ARHC CTCRCNV001 LLC Mailing % ALTUS GROUP VENTAS Address #7725 PO BOX 71970 PHOENIX, AZ, 85050-0000 Status Current Account
<b>OWNER FOR 2020 (2020 - 2021)</b> Name ARHC CTCRCNV001 LLC Mailing Address Status Current Account	

+ Structure 1 of 8

+ Structure 2 of 8

+ Structure 3 of 8

+ Structure 4 of 8

+ Structure 5 of 8

## Detailed Project Description

Date: 10/16/2021

Re: 775 Fleischmann Way Carson City NV- APN 1-201-25 and 1-201-99

We are requesting for an amendment to a previously approved special use permit application U95/96-14

We wish to replace an 8' tall chain link fence with a permanent 12' to 19' tall sound-absorbing wall around some chiller equipment. The wall would cover 3 sides of the equipment, (East, North and South) where the current chain link fencing is located, and we would also install a new 8' tall chain link access gate covered with sound blankets on the West side. This gate would be located within the facilities yard and would not be visible from the street.

The equipment sits across the street from several residences that have complained about the noise. I have included a notice of violation and notice to abate letter dated 06/03/2020 for your review.

The current chain link fencing does not adequately mitigate the sound problems that they are experiencing. The property management company had previously added sound blankets to the fencing with less than desired results. They proposed building a CMU wall to take care of the issues, however, CMU has very poor sound deadening qualities. Therefore, we reached out to Sound Fighters Systems LLC. This is a company that provides solutions to sound issues. With their help, we decided to use the SonaGuard absorptive sound barrier panel and determined it would be advisable to have it be 12' to 19' tall to accomplish the sound absorbing goals. These panels are made with durable, long lasting building materials, and have an aesthetic shiplap design, are non-glare, non-conductive, non-corrosive and have a Class A flame rating.

The current building has a two-color paint scheme on the North end. The color of the panels would match the color that extends from the ground level to 12' high, making the new sound wall blend in with the current building.



Peter Zemp

North Star Construction

775-790-6604

n\_s\_construction@yahoo.com

CITY OF CARSON, STATE OF NEVADA  
REGIONAL PLANNING COMMISSION  
MARCH 27, 1996

NOTICE OF DECISION

A request for an amendment to a previously approved special use permit application, U-95/96-14, to allow the expansion/remodel of Carson-Tahoe Hospital, specifically condition no. 7, on property zoned Public (P), located at 775 Fleischmann Way, APN 1-201-25 and 1-201-99, was received from Roger Sedway (property owner: Carson-Tahoe Hospital), pursuant to the requirements of the Carson City Municipal Code.

The Regional Planning Commission conducted a public hearing on March 27, 1996, in conformance with City and State legal requirements, and the Regional Planning Commission approved U-95/96-14, and based its decision on the following findings and subject to the following conditions of approval:

FINDINGS

1. The project will not be detrimental to the use, peaceful enjoyment, economic value, or development of surrounding properties or the general neighborhood; and will cause no objectionable noise, vibrations, fumes, odors, dust, glare or physical activity.

Except during construction, the project will not add to objectionable impacts to the area as the project will be contained within the confines of the existing building footprint. Parking and other services are presently available to meet the needs of the proposed addition.

2. The project will have little or no detrimental effect on vehicular or pedestrian traffic.

All existing pedestrian and vehicular needs are met on site and no changes will be made to these facilities to accommodate the proposed project.

3. The project will not overburden existing public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage, and other public improvements.

The proposal will not overburden public services, for the project meets the definition and specific standards set forth in this title for such particular use and meets the purpose statement of that district. By special use permit, hospital uses are allowed in the Public (P) zoning district.

4. Will not be detrimental to the public health, safety, convenience and welfare and will not result in material damage or prejudice to other property in the vicinity

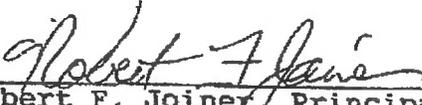
The proposed project will be of benefit to the public health, safety and convenience in that it will provide

additional health services. The proposal will not result in material damage or prejudice to other property in the vicinity as all districts zoned Public (P) require a special use permit and public hearing prior to expansion of services.

#### CONDITIONS OF APPROVAL

1. All development shall be substantially in accordance with the attached site development plan.
2. All on and off-site improvements shall conform to City standards and requirements.
3. The use for which this permit is approved shall commence within twelve months of the date of final approval. A single, one-year extension of time must be requested in writing to the Community Development Department thirty days prior to the one year expiration date. Should this permit not be initiated within one year and no extension granted the permit shall become null and void.
4. The applicant must sign and return the acknowledgement of conditions for approval within ten (10) days of receipt of notification. If the acknowledgement is not signed, and returned within ten days then the item will be rescheduled for the next Planning Commission meeting for further considerations.
5. All other departments' conditions of approval, which are attached, shall be incorporated as conditions of this report.
6. The Fleischmann Street frontage shall be screened with a combination low wall and dense landscaping to screen the engineering services building and the new chiller and cooling tower.
7. The noise level from the chiller and cooling tower shall be limited to 55 dba at the nearest residential unit on the outside and 45 dba at the nearest residential unit on the inside or at those levels specified in Carson City Municipal Code if one is in place at the time the building permit is issued.

The decision was made on a vote of 7 ayes, 0 nays and 0 absent.

  
\_\_\_\_\_  
Robert F. Joiner, Principal Planner  
Community Development Department

RFJ/ph

Mailed 4/8/96 By ph

DATE MAILED: 1/12/94

PLEASE SIGN AND RETURN THIS ACKNOWLEDGEMENT WITHIN TEN DAYS OF RECEIPT.

This is to acknowledge that I have read and understand the Conditions of Approval as approved by the Carson City Regional Planning Commission on January 5, 1994, for a special use permit application, U-93/94-24, from Carson-Tahoe Hospital to allow expansion of existing hospital facilities; specifically, to add 2,900 square feet for ambulatory surgery, 3,500 square feet for additional storage and warehousing, and 2,500 square feet for medical diagnosis and services on property zoned Public (P), located at 775 Fleischmann Way, APN 1-201-25.

**CONDITIONS OF APPROVAL**

1. All development shall be substantially in accordance with the attached site development plan.
2. All on and off-site improvements shall conform to City standards and requirements.
3. The use for which this permit is approved shall commence within twelve months of the date of final approval. An extension of time must be requested in writing to the Community Development Department thirty days prior to the one year expiration date. Should this permit not be initiated within one year and no extension granted the permit shall become null and void.
4. The applicant must sign and return the acknowledgement of conditions for approval within ten (10) days of receipt of notification. If the acknowledgement is not signed, and returned within ten days then the item will be rescheduled for the next Planning Commission meeting for further considerations.
5. All other departments' conditions of approval, which are attached, shall be incorporated as conditions of this report.
6. The Mountain Street frontage shall be screened with a combination low wall and dense landscaping plan approved by staff, at such time as the warehouse is located on the west side of the hospital.

Steve Smith  
APPLICANT

1/20/94  
DATE

**RETURN TO:**

Carson City Community Development Department  
2621 Northgate Lane, Suite 62  
Carson City, Nevada 89706  
ATTN: Laura Lau

Enclosures: Planning Commission Notice of Decision  
Self-addressed envelope

13. Show all existing and proposed parking, landscape islands and traffic aisles, with dimensions. If you are requesting approval for off-site parking within 300 feet, provide site plans showing (1) parking on your site, (2) parking on the off-site parking lot, and (3) how much of the off-site parking area is required for any business other than your own.
14. Show location of existing and proposed utilities and drainage facilities, and indicate whether overhead or underground. Show the location of any septic lines/fields.
15. If specific landscape areas are required or provided, show with dimensions.
16. Show location of all proposed amenities, such as gazebos, retaining walls, retention areas, etc.

### SPECIAL USE PERMIT APPLICATION FINDINGS

State law requires that the Planning Commission consider and support the statements below with facts in the record. These are called "FINDINGS". Since staff's recommendation is based on the adequacy of your findings, you need to complete and attach the required findings with as much detail as possible to ensure that there is adequate information supporting your proposal.

**THE FINDINGS BELOW ARE PROVIDED IN THE EXACT LANGUAGE FOUND IN THE CARSON CITY MUNICIPAL CODE (CCMC), FOLLOWED BY EXPLANATIONS TO GUIDE YOU IN YOUR RESPONSE. ON A SEPARATE SHEET TO BE INCLUDED WITH YOUR COMPLETE APPLICATION, LIST EACH FINDING AND PROVIDE A RESPONSE IN YOUR OWN WORDS. ANSWER THE QUESTIONS AS COMPLETELY AS POSSIBLE TO PROVIDE THE PLANNING COMMISSION WITH THE DETAILS NECESSARY TO CONSIDER YOUR PROJECT. IF A FINDING DOES NOT APPLY TO YOUR SITUATION, EXPLAIN WHY.**

**CCMC 18.02.080(5) FINDINGS.** Findings from a preponderance of evidence must indicate that the proposed use:

1. **Will be consistent with the objectives of the Master Plan elements.**

Yes. The proposed sound wall will look nicer and be more permanent and durable than the existing chain link fence, and will deaden the sound of the screened in equipment for a more peaceful neighborhood. Furthermore, it will not impact any existing landscaping.

2. **Will not be detrimental to the use, peaceful enjoyment, economic value, or development of surrounding properties or the general neighborhood; and is compatible with and preserves the character and integrity of adjacent development and neighborhoods or includes improvements or modifications either on-site or within the public right-of-way to mitigate development related to adverse impacts such as noise, vibrations, fumes, odors, dust, glare or physical activity.**

- A. Since this is a large property, there are multiple zonings in each direction. The zonings to the West are RO and SF6. To the North are PC, SF6 and PR. And to the East it is RO. Directly West and North of the proposed sound wall there are residences.
- B. The proposed sound wall will enhance current property values and allow for quiet enjoyment of neighboring residences.
- C. Replacing the chain link fence with a sound deadening wall, of the same color as the building, will both be pleasing to the eye as well as to the ear.
- D. N/A There will be no lighting added.
- E. The existing landscaping will remain in place.
- F. Short and long range, the neighbors will be a lot happier. The current fencing does a terrible job of sound deadening and is not that pleasing to look at.

**3. Will have little or no detrimental effect on vehicular or pedestrian traffic.**

The sound wall will generate no vehicle or pedestrian traffic.  
The location of the sound wall will be the same as the existing chain link fencing and will not impact line of sight at the subject property or adjacent public right of way.

**4. Will not overburden existing public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage and other public improvements.**

The proposed sound wall will have no impact on existing public services and facilities.

**5. Meets the definition and specific standards set forth elsewhere in Carson City Municipal Code, Title 18 for such particular use and meets the purpose statement of that district.**

Upon approval of the special use permit and building permits, the sound wall will be consistent with the purpose statement of the Public (P) zoning district.

**6. Will not be detrimental to the public health, safety, convenience and welfare.**

The proposed sound wall will not create any land use impacts.

**7. Will not result in material damage or prejudice to other property in the vicinity, as a result of proposed mitigation measures.**

The proposed sound wall will take the place of an existing chain link fence and will be built using durable long lasting materials. The wall will also color match the existing building. Furthermore the wall will be engineered for the 12' -19' height. Based on these factors, the sound wall is not expected to create land use impacts which would materially damage or prejudice other properties in the vicinity.

If there is any additional information that would provide a clearer picture of your proposal that you would like to add for presentation to the Planning Commission, please be sure to include it in your detailed description.

Please type and sign the statement on the following page at the end of your findings response.

**ACKNOWLEDGMENT OF APPLICANT**

I certify that the forgoing statements are true and correct to the best of my knowledge and belief. I agree to fully comply with all conditions as established by the Planning Commission. I am aware that this permit becomes null and void if the use is not initiated within one-year of the date of the Planning Commission's approval; and I understand that this permit may be revoked for violation of any of the conditions of approval. I further understand that approval of this application does not exempt me from all City code requirements.



Applicant's Signature

Peter Zemp  
Print Name

08/16/2021  
Date



## Carson City Code Enforcement

108 E. Proctor Street  
Carson City, Nevada 89701  
(775) 887-2180 – Hearing Impaired: 711  
codeenforcement@carson.org  
www.carson.org/planning

June 3, 2020

CERTIFIED MAIL 70153010000019207468

ARHC CTCRCNV001 LLC  
%ALTUS GROUP VENTAS #7725  
PO BOX 71970  
PHOENIX, AZ 85050-0000

RE: NOTICE OF VIOLATION and NOTICE TO ABATE 775 Fleischmann Wy. Carson City, NV (APN 001-201-30)

Property Owner,

Please be advised that a Nuisance exists at the property located at 775 Fleischmann Wy. Carson City, NV 89706, APN 001-201-30 in violation of Carson City Municipal Code 8.08.070 – Nuisance per se, Section 11. The operation of a recently installed HVAC unit is causing a blight to many of the neighboring residents. Property Owner, please be advised the City has attempted to remedy this matter on several occasions within the past year with no results.

Currently the operation of the HVAC unit located on the North side of the property is causing a very loud noise throughout the neighborhood that is disturbing the peace and impairing the livability to the neighboring properties. Per CCMC 8.08.030 – Definitions, this noise is a blight to the community. The current property owner is responsible for the cause and abatement of the violation as stated in CCMC 8.08.095 – Unlawful acts; penalties and enforcement actions.

The required action to abate the condition in order to prevent further action includes the following:

- 1) Eliminate the disturbing noise emitting from 775 Fleischmann Wy.

**YOU HAVE THIRTY (30) CALENDAR DAYS FROM RECEIPT OF THIS NOTICE TO ABATE THE CONDITION.**

**Failure** to complete the requirements stated above will result in the immediate action by the City to the property. Actions may include administrative fines, issuance of a misdemeanor citation or summons to appear in court to the current property owner.

You may request a hearing before the Hearing Officer on this notice to abate in accordance with Sections 8.09.340 to 8.09.460 of the Carson City Municipal Code. Your request must be submitted within ten (10) business days of receipt of this notice.

If you wish to request a hearing, you may obtain the form from our office located at 108 E Proctor St, Carson City, NV 89701, Monday through Friday 8:00 am to 12:00 pm and 1:00pm to 4:00pm excluding holidays. Be advised that the thirty (30) calendar days for which you must abate the condition is tolled for the period during which you request a hearing and receive a final decision. You are also afforded the opportunity to appeal the hearing decision as set forth in Chapter 8.09 of the Carson City Municipal Code.

Failure to respond to this notice within the prescribed time period above will result in the abatement of your property. The City will seek to recover all costs, including actual costs of abatement, in addition to any other enforcement costs. Collection efforts may include referral to the finance department for collection, enforcement of a lien, or through an action in court. Be advised that civil penalties will be assessed for each day that you do not abate the condition after the thirty (30) calendar days prescribed above. For the first citation, a fine in the amount \$100.00 will be assessed, a second citation, a fine in the amount of \$250.00 will be assessed and for a third or subsequent citation, a fine in the amount of \$500.00 will be assessed.

Be advised that an enforcement official may record the Notice of Violation in the official records of Carson City pursuant to Sections 8.09.110 to 8.09.130 of the Carson City Municipal Code. Any and all fees associated with the abatement by the City may be filed with the Carson City Recorder as a lien for repayment or by order of the Carson City Board of Supervisors: a Special Assessment attached to the real property taxes may be imposed.

If you fail to abate the condition, a City enforcement official (s) may direct the City to abate the condition on the property and may recover the amount expended by the City for labor and material used to abate the condition.

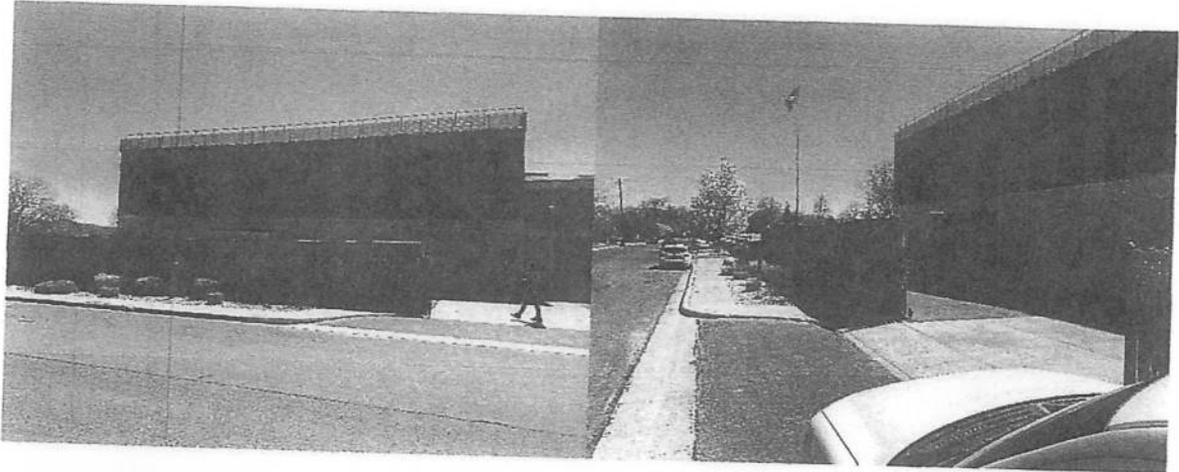
If you have any questions or need further clarification, I can be reached at 775-283-7229 or [jjohnston@carson.org](mailto:jjohnston@carson.org)

Sincerely,

Jason Johnston  
Code Enforcement Officer

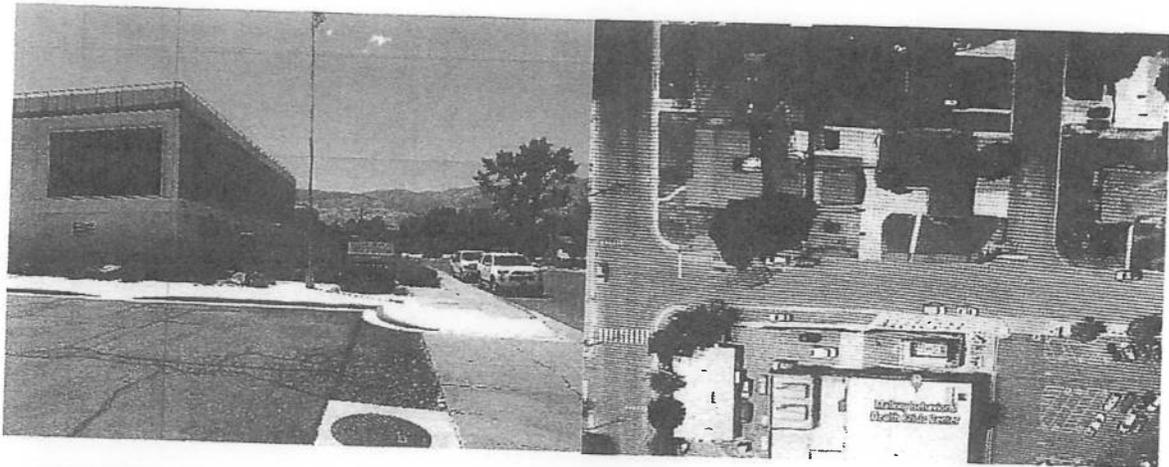
C; File-Case 103173

Current conditions at 775 Fleischmann Way Carson City NV



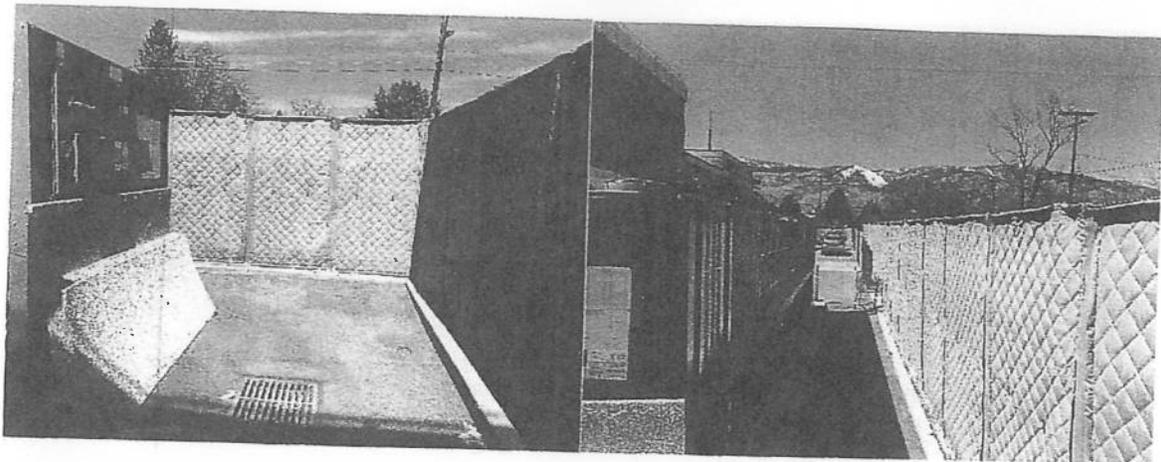
Looking South

Looking East



Looking West

Birds eye view



Looking North from inside the enclosure

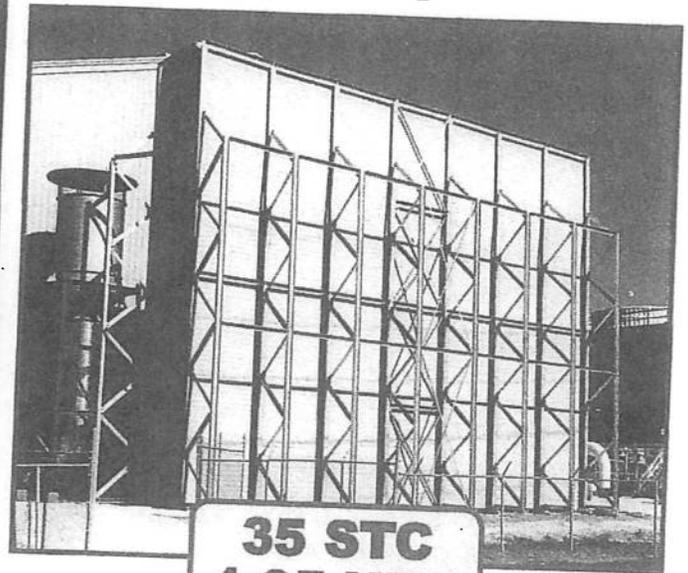
Looking West from inside enclosure

**SonaGuard®** (US Patent D865,224)

**Perforated Fiberglass Sound-Absorptive Noise Barrier System**  
Superior Acoustics — Wide Spans — High Strength



**Spans  
Up to 14 Ft.**



**35 STC  
1.05 NRC**

- ◆ **Exceptional Acoustical Performance: NRC 1.05 and STC 35**
- ◆ **Extreme Strength = Wider Spans = Fewer Foundations = Lower Turnkey Cost**
- ◆ **Lightweight: Less than 5 lbs per square foot**
- ◆ **Easy to Install and Easy Field Modification**
- ◆ **Aesthetic Shiplap Design Towards Receivers and Residents**
- ◆ **Non-Glare finish**
- ◆ **Non-Conductive**
- ◆ **Non-Corrosive**
- ◆ **Up to Class A Flame Rating**
- ◆ **DOT and FERC Approved**

The patented SonaGuard® Absorptive Noise Barrier is the highest quality reinforced fiberglass noise barrier on the market. Manufactured using the most advanced materials and processes, it has been designed with strength, noise reduction, and aesthetics in mind. SonaGuard® panels feature a tongue-and-groove design which provides superior deflection strength, and also eliminates any spaces or gaps that would allow unwanted noise to escape.



Sound Fighter® Systems L.L.C. and its Noise Barrier Systems are proudly 100% located, sourced and manufactured in the USA.



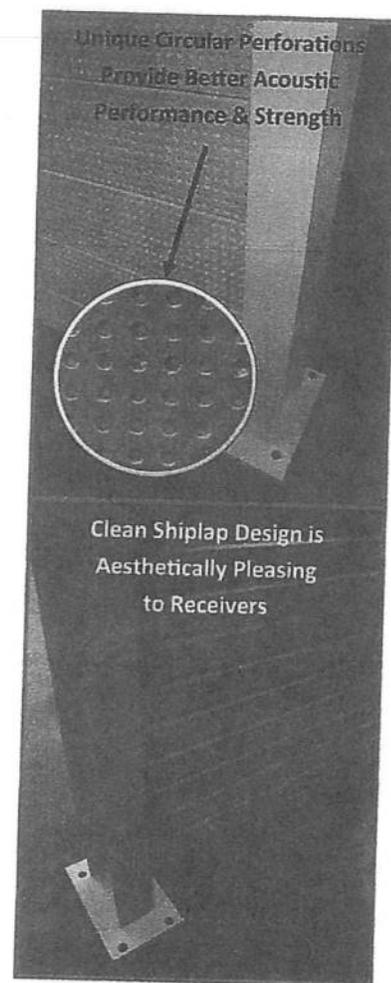
**Business  
Of the  
Year**



America's Oldest Manufacturer of High-Performance Outdoor Noise Barrier Systems

### SonaGuard® Noise Barrier Features:

- Noise Reduction Coefficient (NRC) of 1.05
- Sound Transmission Class (STC) of 35
- Wide Spans = fewer foundations = easier install = less \$\$
- Can meet any current North American wind load
- Lightweight and Modular – means quick installation in confined areas without the use of heavy equipment, minimizing traffic control issues and damage to surrounding landscaping
- Available in many colors
- UV resistant, continuous glass reinforced composite material that is resistant to corrosion, chemical abrasion and weathering
- Will not corrode, rust or rot
- Graffiti, moisture and freeze/thaw resistant
- Up to Class A Flame Rating



#### Effective Noise Reduction for:

- > DOT and Highway
- > Oil & Gas
- > Recycling
- > Military
- > Water and Wastewater
- > Industrial and Manufacturing
- > Rail
- > Electrical Substations
- > Commercial HVAC
- > Bridges and Rooftops
- > Big Box Development
- > LNG

#### SonaGuard® Specifications

- Length: up to 14 ft
- Width: 2.75 inches
- Height: 12 inches
- Weight: 4.4 lb/sq ft
- Tensile strength: 69,812 psi
- Tensile mod.: 3,923,000 psi ASTM D-638
- Compressive strength: 68,927 psi ASTM D-695
- Compressive mod.: 3,960,000 psi ASTM D-695
- Flex strength: 89,515 psi ASTM D-790
- Flex mod.: 2,384,000 psi ASTM D-790
- Specific Gravity: 1.88 ASTM D-792



For more information on Sound Fighter® Systems:

Call: 1-866-348-0833

E-mail: [info@soundfighter.com](mailto:info@soundfighter.com)

Visit: [www.soundfighter.com](http://www.soundfighter.com)

# Environmental Noise Assessment

## Carson Tahoe Hospital Chiller

Carson City, Nevada

BAC Job # 2021-143

Prepared For:

### **Northstar Construction**

Mr. Peter Zemp  
PO Box 1305  
Carson City, NV. 89702

Prepared By:

### **Bollard Acoustical Consultants, Inc.**



Paul Bollard, President

October 14, 2021



## Introduction

Bollard Acoustical Consultants, Inc. (BAC) has completed this analysis of the noise generation of the chiller located at the Carson Tahoe Hospital located at 775 Fleischmann Way in Carson City Nevada. This analysis was specifically prepared to address compliance of chiller noise generation with the Special Use Permit conditions, which are presented later in this report. The project location and photographs of the chiller in question are presented in Figures 1 and 2.

## Acoustical Background and Terminology

### General

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that human hearing can detect. If the pressure variations occur frequently enough (i.e., at least 20 times per second) they can be identified as sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz). Please see Appendix A for definitions of terminology used in this report.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale utilizes the hearing threshold (20 micropascals of pressure) as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers within a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness. Figure 3 illustrates common noise levels associated with various sources.

The perceived loudness of sound is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighting the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. All noise levels reported in this section are A-weighted.

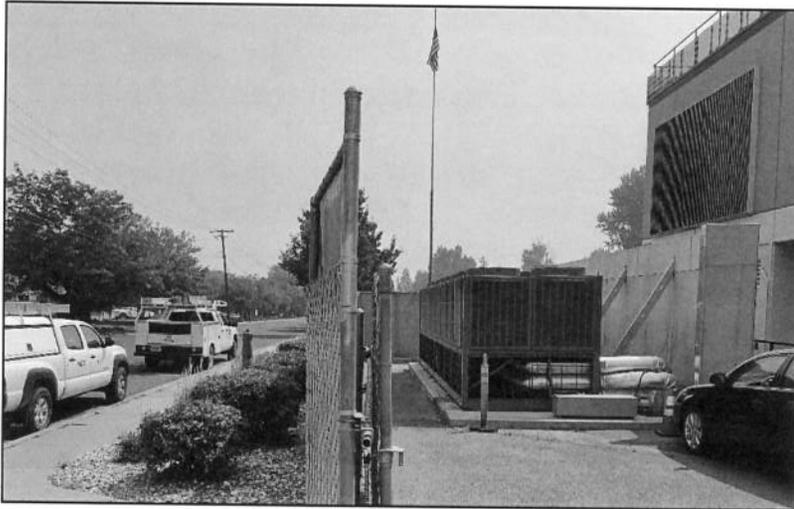
Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level ( $L_{eq}$ ) over a given time period (usually one hour).

Figure 1  
Chiller Location  
Carson Tahoe Hospital - 775 Fleischmann Way, Carson City, Nevada

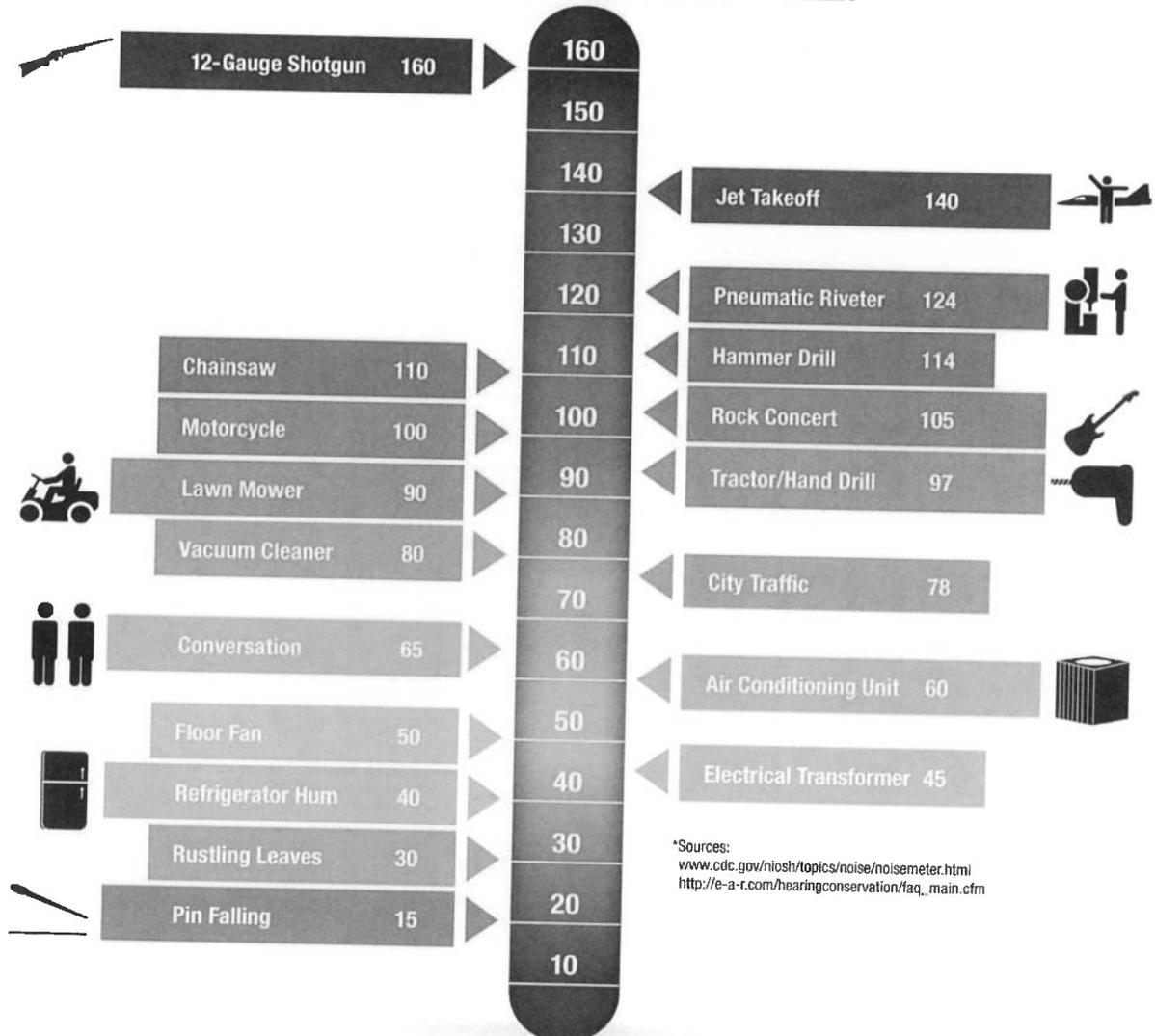


Figure 2  
Chiller Photographs

Carson Tahoe Hospital - 775 Fleischmann Way, Carson City, Nevada



**Figure 3**  
**Typical A-Weighted Sound Levels of Common Noise Sources**  
**Decibel Scale (dBA)\***



\*Sources:  
[www.cdc.gov/niosh/topics/noise/noisemeter.html](http://www.cdc.gov/niosh/topics/noise/noisemeter.html)  
[http://e-a-r.com/hearingconservation/faq\\_main.cfm](http://e-a-r.com/hearingconservation/faq_main.cfm)

**Noise Attenuation with Distance**

Stationary “point” sources of noise, such as the chiller, attenuate (decrease) at a rate of approximately 6 dBA per doubling of distance from the source, not accounting for other environmental conditions (i.e., atmospheric conditions, noise barriers, ground type, vegetation, topography, etc.). Mobile noise sources, such as traffic, are typically considered “moving point sources”, and sound from these sources typically attenuates at a lower rate, (approximately 4.5 dBA decrease per doubling distance from the source), also dependent upon environmental conditions. The chiller is an example of a stationary noise source.

## Effects of Shielding

A noise barrier is any impediment which intercepts the path of sound as it travels from source to receiver. The physical properties of sound are such that, at the point where the line-of-sight between the source and receiver is interrupted by a barrier, a 5 dB reduction in sound typically occurs.

The effectiveness of a barrier is a function of the difference in distance sound travels on a straight-line path from source to receiver versus the distance it must travel from source to top of noise barrier, then top of noise barrier to receiver. This difference is referred to as the “path length difference”, and is used to calculate the Fresnel Number. A barrier’s effectiveness is a function of the Fresnel number and frequency content of the source. In general, the more acute the angle of the sound path created by the introduction of a barrier, the greater the noise reduction provided by the barrier. The existing noise barrier shown in Figure 2 shields the majority of the chiller from view of the residences on the north side of Fleischmann Way, but does not fully shield the top of the chiller.

## Criteria for Acceptable Chiller Noise Generation

Carson City does not have an adopted noise ordinance. As a result, the noise standards contained within the special use permit conditions of approval for the original chiller (March 1996), are also applicable to the noise generation of the current chiller. Special Use Permit condition of approval #7 states the following with respect to acceptable noise generation of the chiller:

- 7. The noise level from the chiller and cooling tower shall be limited to 55 dBA at the nearest residential unit on the outside and 45 dBA at the nearest residential unit on the inside or at those levels specified in Carson City Municipal Code if one is in place at the time the building permit is issued.*

According to Carson City Code Enforcement Department Staff (Jason Johnson), the interior noise standard must be achieved with windows in both open and closed positions.

## Chiller Noise Generation

To quantify the noise generation of the chiller, Bollard Acoustical Consultants, Inc. (BAC) conducted a series of noise level measurements on the afternoon of August 23, 2021. A hospital technician present during the noise measurement surveys adjusted the chiller controls such that the chiller would operate at 100% capacity for the duration of the noise surveys. The noise surveys were conducted from positions directly adjacent to the sides and top of the chiller, as well as residential locations on the north side of Fleischmann Way. The noise measurement locations are indicated on Figure 4. Representative photographs of the noise survey locations are provided in Appendix B.

Figure 4  
Chiller Noise Level Measurement Locations  
Carson Tahoe Hospital – August 23, 2021



A Larson Davis Laboratories (LDL) Model 831 precision integrating sound level meter was used for the noise level measurement survey. The meter was calibrated before and after use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

Weather conditions present during the noise survey period consisted of light winds, clear skies, cool temperatures, and moderate relative humidity. There were no anomalous atmospheric conditions present which would have jeopardized the integrity of the noise measurements. The noise survey results are provided in Table 1. Figure 5 shows a graph of the frequency content of the chiller as measured from position 7 directly (2 feet above the chiller – see Appendix B).

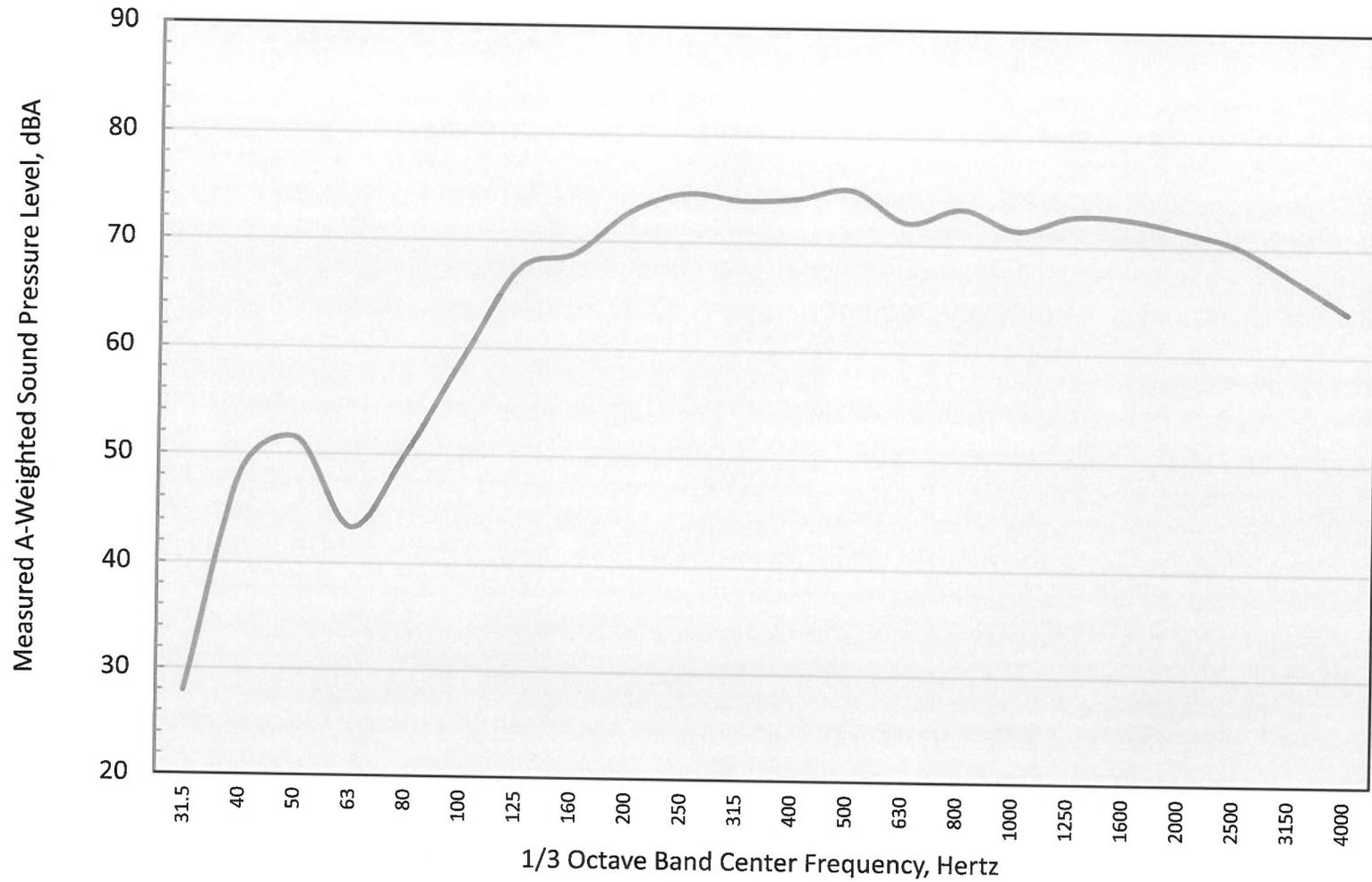
Location	Description	Distance from Chiller (ft)	Measured Sound Level, dBA
1	Sidewalk - 700 Fleischmann	60	65
2	Façade - 700 Fleischmann	100	63
3	Sidewalk - 1301 Mountain	100	63
4	West Side of Chiller	5	83
5	North Side of Chiller	3	87
6	East Side of Chiller	5	84
7	Top of Chiller	2	85

Source: Bollard Acoustical Consultants, Inc. (BAC), 2021

The noise survey results shown in Table 1 indicate that the chiller sound levels exceeded the Special Use Permit Condition of Approval #7 noise level standard of 55 dBA at the two nearest residences to the north of the chiller location. Specifically, levels of 65 and 63 dBA were measured at the sidewalks of the residences located at 700 Fleischman Way and 1301 Mountain Street, respectively. As a result, additional analysis of chiller noise attenuation was warranted. A discussion of the noise attenuation evaluation is provided in the following section.

The frequency content illustrated in Figure 5 shows that there is a low-frequency component of the chiller noise at approximately 50 Hertz but that the sound energy at that frequency is approximately 25 dBA below the majority of sound energy found between the 250 and 4,000 Hertz frequency bands.

Figure 5  
Carson Tahoe Hospital Chiller Noise Frequency Content  
Measurement Site 7 - August 23, 2021



## Analysis of Chiller Noise Attenuation Options

BAC staff (Bollard) field observations indicated that the existing barrier surrounding the chiller was insufficiently tall to provide the required degree of sound attenuation to satisfy the 55 dBA exterior noise level standard at the nearest residential properties to the north. As a result, BAC considered additional options for attenuating the chiller noise to acceptable levels at those nearest residences. Specific options considered included completely enclosing the chiller within a mechanical equipment room and constructing a taller sound barrier around the perimeter of the chiller. The options are discussed in greater detail below.

### Chiller Enclosure Option

The first option considered for attenuating the noise generation of the chiller was to completely enclose the chiller within a sound attenuating structure. This option is complicated because the operation of the chiller relies on fresh air transfer across the heat exchanging elements of the chiller so restriction of air flow within the building could jeopardize chiller cooling capacity and longevity. The chiller manufacturer's representative is investigating the airflow requirements and whether the manufacturer has measures specific to the equipment installed at the hospital which could be installed on the chiller itself to further control the noise emissions of the chiller.

### Chiller Noise Barrier Replacement

The second option considered for attenuating the noise generation of the chiller was to remove the existing noise barrier surrounding the north, east and south side of the chiller and replace that barrier with a taller, sound-absorbing, barrier. To complete the barrier analysis, the SoundPlan noise prediction model (Version 8.2) was used with the reference sound levels measured by BAC at the project site on August 23, 2021, project plans provided by North Star Construction, and Google Earth aerial imagery.

The SoundPlan model was calibrated until the predicted chiller noise levels at the nearest residences to the north matched the August 23, 2021 noise level measurement results from the same locations. Then the old barrier was removed and a new, taller, sound-absorbing noise barrier was modelled in its place. The results of the SoundPlan noise barrier analysis indicate that the absorptive barrier may need to be as tall as 19 feet relative to the pad elevation of the chiller to provide the additional 10 dB of noise attenuation required to satisfy the 55 dB exterior noise level standard at the nearest residences to the north.

Because a 19-foot tall barrier is considered very high, BAC recommends that, if there are no other remedy's identified by the chiller manufacturer, a 12-foot tall barrier be installed surrounding the chiller with supports capable of supporting an additional 7 feet of noise barrier height for a total height of 19 feet if needed. Through this approach the specific height of the barrier required to reduce exterior noise levels to 55 dBA at the nearest residences can be determined through actual noise measurements and excess barrier height could possibly be avoided.

Industry standard practices assume that the sound attenuations provided by a typical residence with windows in the closed and open positions are approximately 25 and 10 dBA, respectively. As a result, compliance with the 55 dBA exterior standard would ensure compliance with the 45 dBA interior noise standard when windows are closed, but would not guarantee compliance when windows are in the open position.

Achieving compliance with the 45 dB interior noise level standard within the residences to the north will depend on the degree of building façade noise attenuation provided by those residences when windows are in the open position. This determination is highly dependent upon where within the residence the standard is applied and where the noise measurements are conducted. A location with the microphone positioned directly against the screen of an open window would exhibit higher sound levels than a position in the center of a bedroom, for example.

In BAC's professional opinion, there would be little difference between levels measured directly against the screen of an open window and the level measured outside the same window. Therefore, a more reasonable evaluation location would be a position more central within the room. Although compliance with the 55 dBA noise level limit at the exterior of the nearest residences should result in compliance with the 45 dBA interior noise level standard with measurements conducted in the center of the room, BAC cannot definitively conclude that similar compliance would be achieved if the measurements are conducted with the microphone directly against an open window.

## Conclusions and Recommendations

This analysis concludes that noise levels generated by the operation of the chiller located at the Carson Tahoe Hospital on Fleischman Way in Carson City Nevada are currently approximately 10 dB above the special use permit condition of approval requiring levels not exceed 55 dBA at the exterior of nearby residential uses. As a result, the following specific measures are recommended to reduce chiller noise levels to a state of compliance with the 55 dBA standard at those nearest residences:

1. Remove the existing barrier surrounding the chiller and replace it with a taller sound-absorbing barrier. The initial height of the new barrier should be 12 feet with the supports capable of increasing the barrier in 1-foot increments up to an ultimate height of 19 feet if needed to achieve compliance with the 55 dBA exterior standard at the residences to the north. The barrier should be constructed on all four sides of the chiller with an access door installed pursuant to maintenance requirements. The barrier should also be acoustically absorptive on the four interior sides which face the chiller, with a Noise Reduction Coefficient (NRC) of 1.0.

OR

2. Additional investigation into the feasibility of partially or completely enclosing the chiller should be undertaken and implemented if determined to be a superior alternative to the construction of noise barriers around the perimeter of the chiller.

AND

3. The City should clearly define precisely where compliance with the interior noise level standard of 45 dBA would be determined. If compliance is required immediately against an open window, for example, additional exterior noise attenuation beyond that required to achieve exterior noise levels of 55 dBA at the residence may be required.

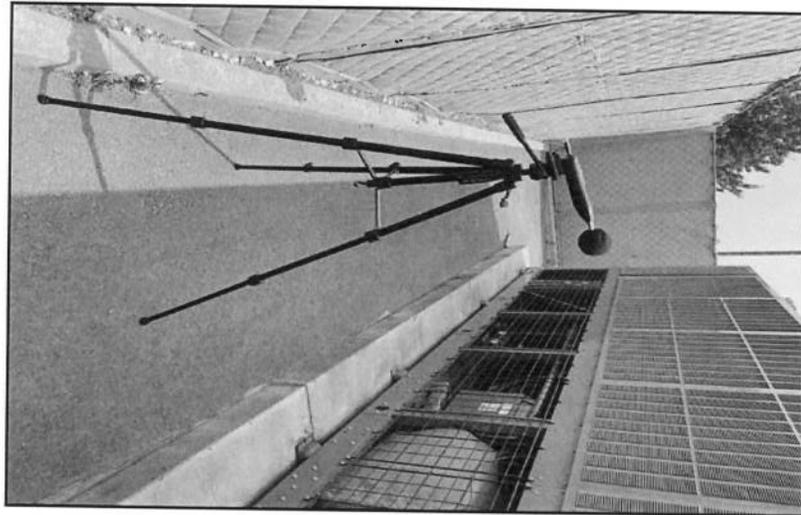
This concludes BAC's evaluation of the Carson Tahoe Hospital chiller noise generation, compliance with special use permit conditions of approval, and noise mitigation options. Please contact Paul Bollard at [BACnoise.com](http://BACnoise.com) with any questions or comments regarding this evaluation.

## Appendix A Acoustical Terminology

<b>Acoustics</b>	The science of sound.
<b>Ambient Noise</b>	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
<b>Attenuation</b>	The reduction of an acoustic signal.
<b>A-Weighting</b>	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
<b>Decibel or dB</b>	Fundamental unit of sound. A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
<b>CNEL</b>	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
<b>Frequency</b>	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
<b>IIC</b>	Impact Insulation Class (IIC): A single-number representation of a floor/ceiling partition's impact generated noise insulation performance. The field-measured version of this number is the FIIC.
<b>L<sub>dn</sub></b>	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
<b>Leq</b>	Equivalent or energy-averaged sound level.
<b>L<sub>max</sub></b>	The highest root-mean-square (RMS) sound level measured over a given period of time.
<b>Loudness</b>	A subjective term for the sensation of the magnitude of sound.
<b>Masking</b>	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
<b>Noise</b>	Unwanted sound.
<b>Peak Noise</b>	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.
<b>RT<sub>60</sub></b>	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
<b>STC</b>	Sound Transmission Class (STC): A single-number representation of a partition's noise insulation performance. This number is based on laboratory-measured, 16-band (1/3-octave) transmission loss (TL) data of the subject partition. The field-measured version of this number is the FSTC.

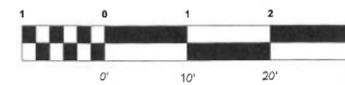
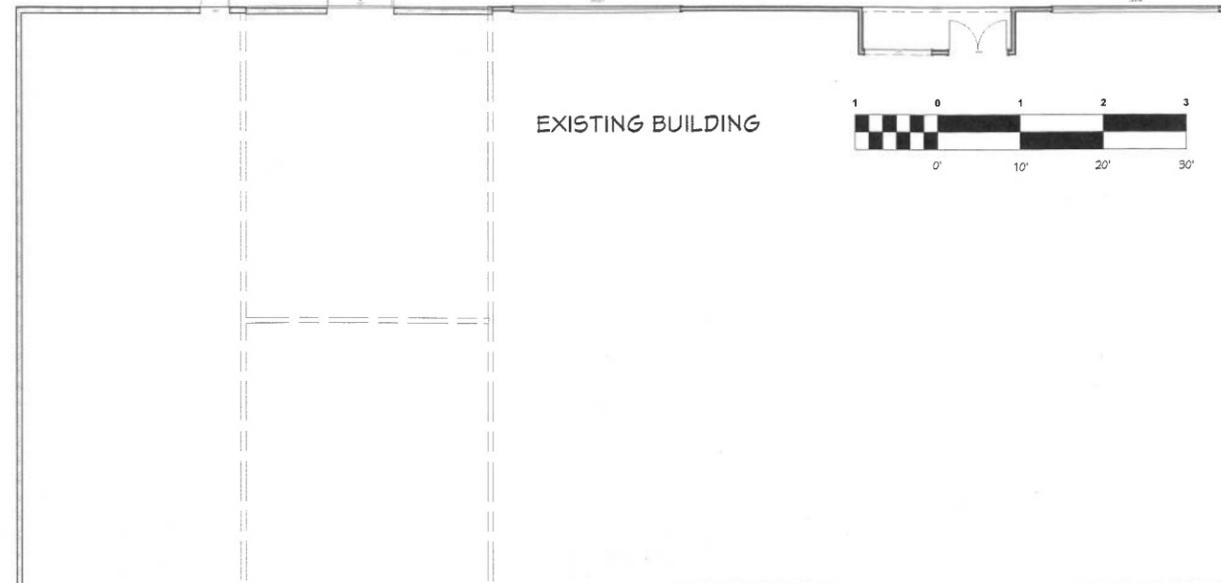


Appendix B  
Chiller Noise Measurement Photographs – August 23, 2021  
Carson Tahoe Hospital - 775 Fleischmann Way, Carson City, Nevada

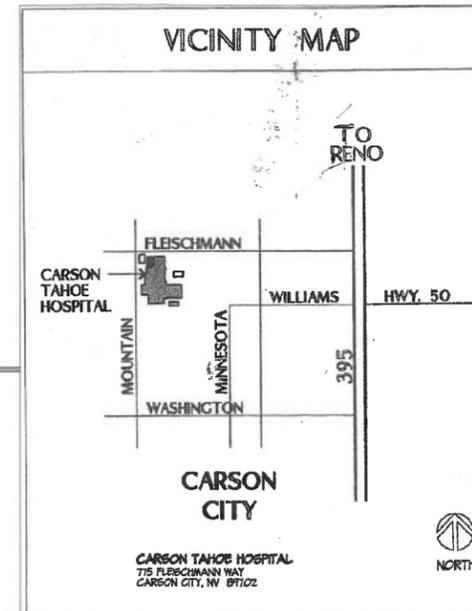


MOUNTAIN STREET

FLEISCHMANN WAY



SITE PLAN  
NORTH WEST CORNER OF PROPERTY



OWNER: ARHC CTGRNV001 LLC  
ALTUS GROUP VENTAS #1125  
P.O. BOX 71970  
PHOENIX, AZ 85050

APPLICANT: PETER ZEMP  
NORTH STAR CONSTRUCTION  
2150 MANHATTAN DRIVE  
CARSON CITY NV 775-790-6604

ADDRESS: 775 FLEISCHMANN WAY CARSON CITY NV  
APN 1-201-25

REQUEST: TO AMEND SPECIAL USE PERMIT TO REPLACE 8' TALL CHAIN LINK FENCING TO 12' TALL SOUND WALL

SITE PLAN PREPARED BY: PETER ZEMP

REVISION TABLE	NUMBER	DATE	REVISOR	DESCRIPTION

775 FLEISCHMANN WAY  
CARSON CITY NV 89103  
APN 1-201-25

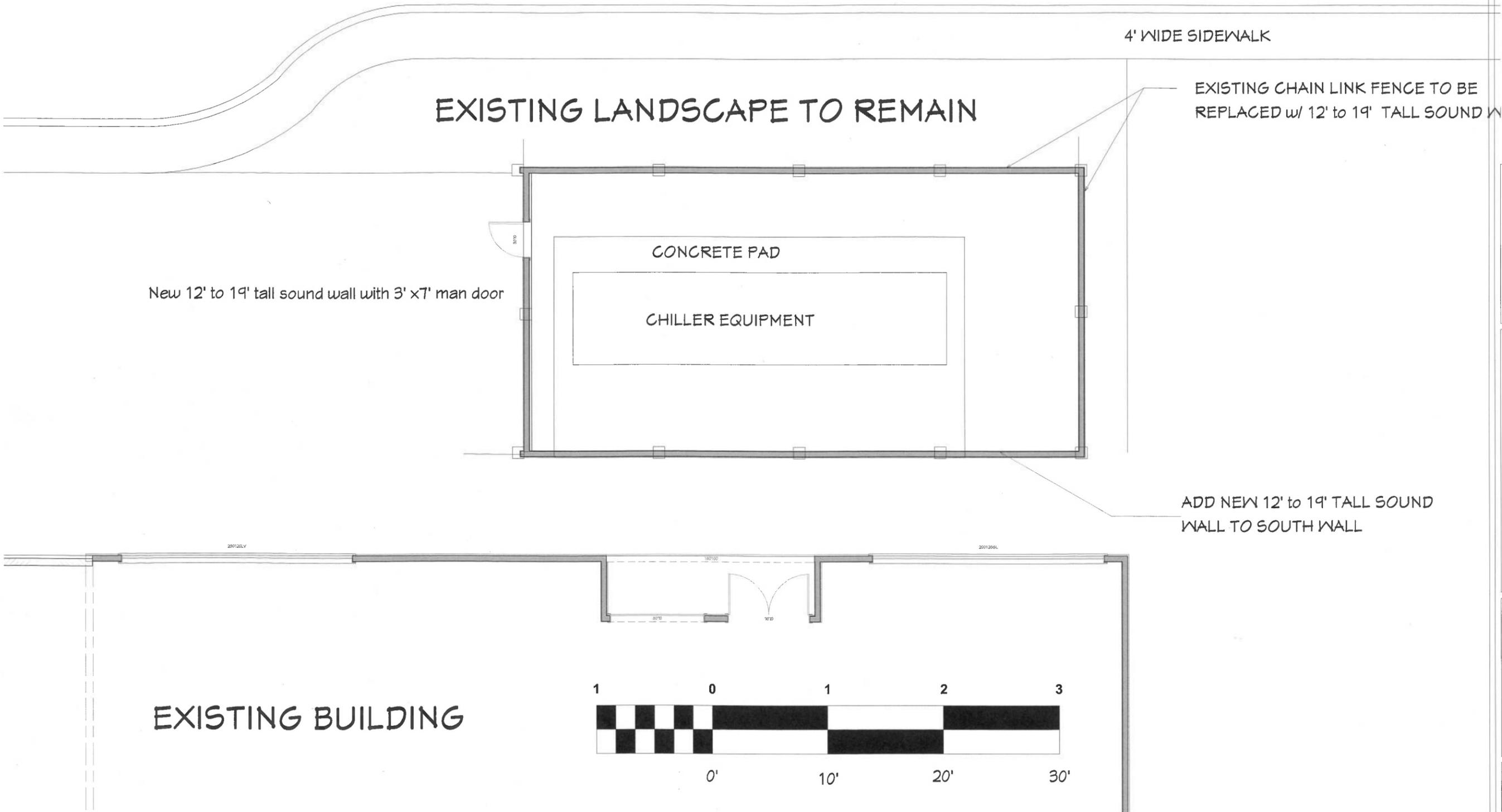
SPECIAL USE PERMIT

DRAWINGS PROVIDED BY:  
PETER ZEMP  
NORTH STAR CONSTRUCTION

DATE:  
10/14/2021

SCALE:

SHEET:  
P-1



REVISION TABLE	REVISION BY	DESCRIPTION
NUMBER	DATE	

TTS FLEISCHMANN WAY  
 CARSON CITY NV 89703  
 APN 1-201-25

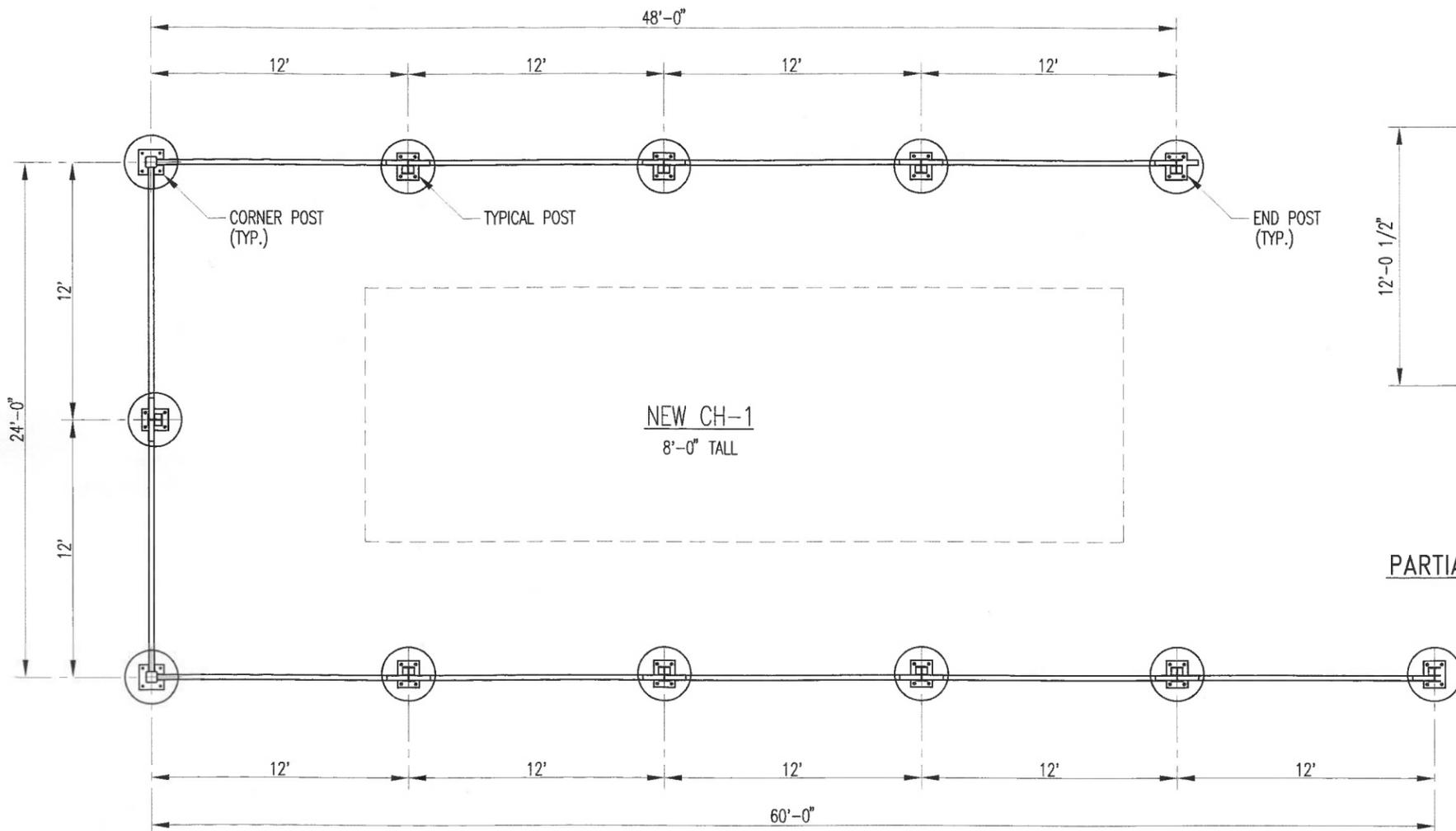
**SPECIAL USE PERMIT**

DRAWINGS PROVIDED BY:  
 PETER ZEMP  
 NORTH STAR CONSTRUCTION

DATE:  
 10/14/2021

SCALE:  
 1" = 10'

SHEET:  
 P-2



PLAN VIEW

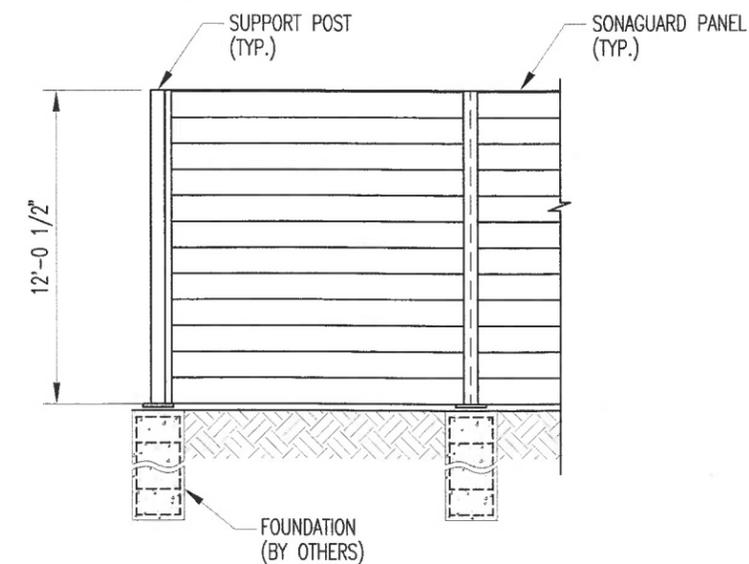
POST SPACING TOLERANCE  $\pm 1/4"$

NOTE:  
PERFORATED SIDE OF PANELS  
TO FACE NOISE SOURCE.

**DESIGN CRITERIA:**

1. STEEL FOR WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992. ALL HSS SHAPES SHALL CONFORM TO ASTM A500-B. ALL OTHER STRUCTURAL STEEL SHAPES AND BASE PLATES SHALL CONFORM TO ASTM A36.
2. ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY D1.1 AND ELECTRODES SHALL BE E70XX.
3. ALL FABRICATED STEEL MEMBERS AND ANCHOR BOLTS ARE TO BE HOT-DIP GALVANIZED.
4. ALL FASTENERS TO CONFORM TO A325 OR A307 AND BE HOT-DIP GALVANIZED.
5. FIELD TOUCH-UP OF PAINTED PANELS MAY BE REQUIRED.

SONAGUARD SECTIONS	11
SONAGUARD PANELS	132
TOTAL LINEAR FEET	132'-0"
TOTAL SQUARE FEET	1584
STACK HEIGHT	(12) PANELS 12'-0"



PARTIAL ELEVATION



PRELIMINARY  
NOT FOR CONSTRUCTION

REV	DESCRIPTION	BY	DATE
1	REVISED LENGTH	KG	4/16/21

SONAGUARD NOISE BARRIER SYSTEM

775 FLEISCHMANN WAY

LAYOUT

SOUND FIGHTER\* SYSTEMS, LLC  
  
 P.O. Box 7216  
 Shreveport, Louisiana  
 71137-7216  
 TEL: 318-861-6640  
 FAX 318-865-7373  
 Website: www.soundfighter.com

THIS DESIGN, DRAWING AND SPECIFICATION IS THE EXCLUSIVE PROPERTY OF SOUND FIGHTER SYSTEMS, LLC. IT AND/OR THE DESIGN THEREIN ARE NOT TO BE COPIED, SOLD, TRANSFERRED OR REPRODUCED IN ANY WAY AND IS SUBJECT TO RETURN ON DEMAND. THE ITEMS DESCRIBED ARE NOT TO BE BUILT OR ASSEMBLED OR IT'S DESIGN CRITERIA DISCLOSED TO OTHER PARTIES WITHOUT THE EXPRESSED WRITTEN PERMISSION OF SOUND FIGHTER SYSTEMS, LLC.

DRAWN	KG	DATE	4/12/21	SIZE	B	PROJECT	775 FLEISCHMANN WAY SHT-1.dwg	REV	1
SCALE	N.T.S.			SHEET	1				

REVISION TABLE	REVISION BY	DESCRIPTION
NUMBER	DATE	

T75 FLEISCHMANN WAY  
CARSON CITY NV 89703  
APN 1-201-25

SPECIAL USE PERMIT

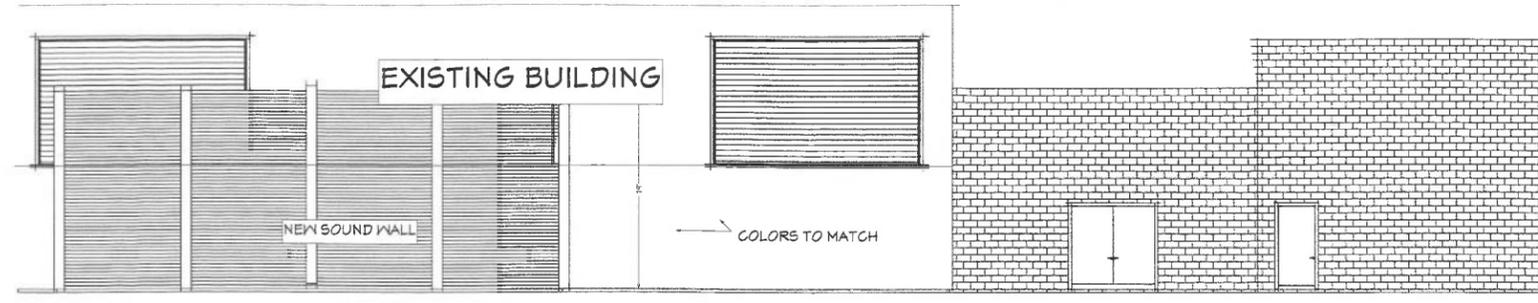
DRAWINGS PROVIDED BY:  
PETER ZEMP  
NORTH STAR CONSTRUCTION

DATE:  
10/14/2021

SCALE:

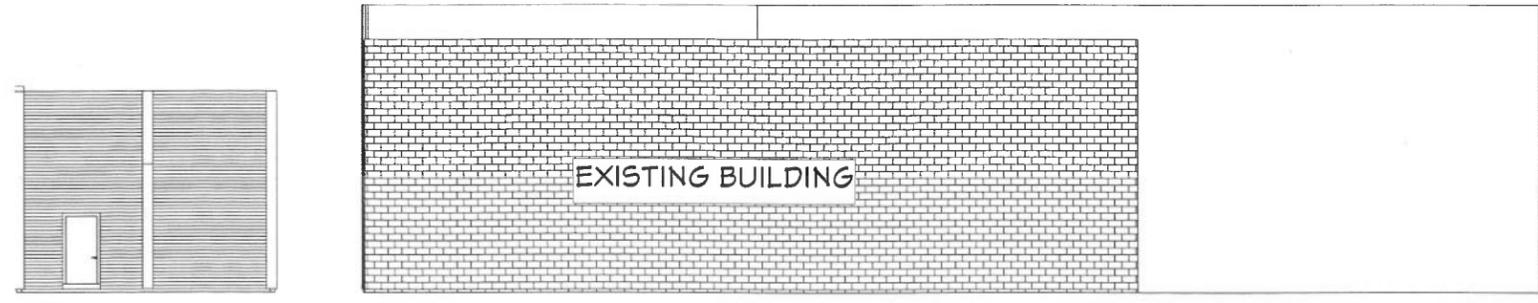
SHEET:

P-3



Elevation 2

**Sound wall drawn at 19' for worst case scenario**



Elevation 4

3'x7' man door



Elevation 3

REVISION TABLE	NUMBER	DATE	REVISED BY	DESCRIPTION

775 FLEISCHMANN WAY  
 CARSON CITY NV 89703  
 APR 1-201-25

**SPECIAL USE PERMIT**

DRAWINGS PROVIDED BY:  
 PETER ZEMP  
 NORTH STAR CONSTRUCTION

DATE:  
 10/14/2021

SCALE:

SHEET:  
**P-4**

**From:** [Heather Manzo](#)  
**To:** [Christie Overlay](#)  
**Subject:** FW: LU-2021-0304 SUP Amendment  
**Date:** Friday, November 5, 2021 9:16:58 AM  
**Attachments:** [image001.png](#)

---

Hey Christie,

Will you please delete the previous public comment from Lisa and replace it with the one below, at her request?

**Heather Manzo**

Associate Planner  
108 E. Proctor Street  
Carson City, NV 89701  
(775) 283-7075  
[hmanzo@carson.org](mailto:hmanzo@carson.org)



---

**From:** lisa harris <l\_turtle@yahoo.com>  
**Sent:** Friday, November 5, 2021 8:52 AM  
**To:** Heather Manzo <HManzo@carson.org>  
**Subject:** Re: LU-2021-0304 SUP Amendment

**This message originated outside of Carson City's email system. Use caution if this message contains attachments, links, or requests for information.**

---

Thank you for sharing that product with me Heather, I have never heard of it before. It looks pretty durable but I don't think it will solve the problem. My problem all along has been outdoor noise. I filed an official complaint that should be on file. Can you please revise my comment as follows?

The existing chiller on site has been a nuisance for many years. I understand the SUP was approved at 55 decibels. Is that really quiet enough? Should this permit be valid in a residential neighborhood? Can sound attenuation be studied during the installation further away? I live further than the studied areas and the constant humming noise is driving me crazy. I don't want to hear any buzzing noise. My yard is approximately 400'-500' away from the chiller and the noise is ridiculous. I want to enjoy our beautiful quiet city. The constant buzzing noise is far worse than intermittent noise like a loud car driving by. The sound study talks about reducing interior noise to 45dB. This is not my concern. My concern is being able to enjoy my yard. I want to hear 0dB from the non-compliant chiller. Can they put a roof over it to contain more sound, replace it or move it to a more suitable location? Due to many years of non-compliance and not caring about the residential neighborhood in general, I think their SUP should be rejected entirely. After 2 years of complaining, they have put up a hideous tarp with zero sound attenuation abilities. Their previous attempt was a chainlink fence with slats and weird green plastic plants. The chiller and their "solutions" detract from the beautiful quiet aesthetic of the neighborhood and have been absurd. Thank you for your time.

On Friday, November 5, 2021, 08:15:33 AM PDT, Heather Manzo <[hmanzo@carson.org](mailto:hmanzo@carson.org)> wrote:

Good Morning Lisa,

Thank you for providing your comments. I will forward them to the Planning Commission for their consideration if you would like.

I have attached the application which includes the sound study, the proposed site plan and sound barrier structure elevations.

Please let me know if you wish to discuss this further. My phone number and email are listed in my signature below.

***Heather Manzo***

Associate Planner

108 E. Proctor Street

Carson City, NV 89701

(775) 283-7075

[hmanzo@carson.org](mailto:hmanzo@carson.org)

