

Crittenden, Ian

From: J Carter Witt <jwitt@silverwingdevelopment.com>
Sent: Monday, December 03, 2018 9:54 AM
To: Anthony Marnell
Cc: Crittenden, Ian
Subject: Victorian Sq Amphitheater
Attachments: Nugget Amp Memo.doc; ACOUSTICAL ANALYSIS 11.28.2018_(4).docx

We have spent a considerable amount of time on the issues associated with your proposed venue and simply stated the concert sound levels that are intensely directed at exterior wood frame walls cannot be mitigated to an acceptable level under the current venue plan. I don't know a single outdoor venue that was dropped into a neighborhood after the fact, with over 500 residential units surrounding it (these are long term residents not hotel guests). Currently the interior sounds are 3x acceptable level for sound during a venue performance. Per your consultant (whose suggested sound levels we believe are understated) the baseline sound will be almost 3 x that allowed by city ordinance. Of course this does not speak to peak levels which are even more impactful.

As your consultant did not speak to acceptable noise levels and options to mitigate we have laid out the mitigation required in order to allow the venue a path to proceed and have provided the attached information, which was just received by us last night, to the PC today. We will be at the workshop and of course the PC hearing this next week to further discuss the issues. I am out today and tomorrow and flying home Wednesday.

We firmly disagree this venue considering all impacts, will be an attribute to our units and all you have to do is simply put yourself in one of these impacted units knowing you need to get sleep or conduct a life within the unit in quiet enjoyment uninterested in the bass and loud volume being produced next door and you should be able to understand the impact and risks.

That said, as I previously stated we directed our investigation with an objective on how to make this difficult situation work and you will see that is how we have concluded.

J

Crittenden, Ian

From: J Carter Witt <jwitt@silverwingdevelopment.com>
Sent: Sunday, December 02, 2018 5:33 PM
To: dian@dianvanderwell.com; shcarey@sbcglobal.net; brockm9146@sbcglobal.com; Fewins, James M; frankinsparks@gmail.com; sread@ncenet.com
Cc: Smith, Marilie; Crittenden, Ian
Subject: Nugget Amphitheater
Attachments: Nugget Amp Memo.doc; ACOUSTICAL ANALYSIS 11.28.2018_(4).docx

Dear Members of Sparks Planning Commission:

Please see the attached memo and supporting sound study regarding the upcoming public hearing on the Nugget Amphitheater. Of course if you have any questions prior to the workshop or hearing feel free to ask.

Thanks

J Witt
Silverwing Development



245 East Liberty Street Suite 215 Reno, NV 89501
Phone (775) 825-5300x215 Fax (775) 825-5305

jwitt@silverwingdevelopment.com

To: Sparks Planning Commission Members

From: J Carter Witt III

Re: Nugget Amphitheater

Date: December 3, 2018

As the largest landowner with existing and future projects impacted by all uses in the Victorian Square redevelopment area, I wanted to convey **our** concerns, thoughts and suggestions regarding the upcoming public hearing on the Nugget Amphitheater.

The addition of this development and respective conditions of its operation into the VS neighborhood will have significant impacts on the area that will determine the area's success for years to come.

For the record we are ambivalent about the general concept of a large outdoor event venue-seeing both negatives and positives to its use. Since being made aware of the specific layout of the project some 4 weeks ago, we have employed consultants and spent considerable time and cost with the intent of finding a way for an outdoor music venue to integrate into the existing and future residential uses of the immediate area. This has proven to be a difficult task as the accompanying sound study shows. Our objective has been to find a way for it to co-exist with the residential uses located immediately to the north, east and west of the proposed project.

1. **Traffic/Parking**-while this is and should be an issue of focus for the City, in general we are not overly concerned as to the impact these issues will have on our developments, as most events will be in the evening and most of our residents should be already home and our retail tenants should benefit from the additional nighttime activity. We are uncertain how parking will work and assume the Nugget has plans to provide the necessary parking for the expected events.
2. **Vagrancy** -while the venue is active there is no concern, however during most of the year it will be inactive which allows for the attraction of vagrants to the amphitheater area. We would suggest lighting at night both for the area above and below the intended seating. There should be proper posting of "No Trespassing signs and Nugget security should randomly check the venue daily and remove from the area unwelcomed individuals. Obviously without this understanding, the success of the surrounding properties which we have invested almost \$100M in, would be severely undermined as the venue will be dark much of the year and a magnet to homeless and unwanted activities.
3. **Trash and Post Event Loitering**-we assume this will be policed by The Nugget immediately after each event and an understanding of these needs will be documented as a condition of any approval.
4. **Light Pollution**-the venue's large screen lighting as well as exit lighting for attendees will impact all residential units on the north, east and west of the venue. We would request the Nugget ownership pay for attractive interior blackout drapes/window coverings on all unit windows that directly face toward the venue, to mitigate this impact.
 - a. We should note we will also try to find window coverings that are attractive and appropriate for apartment living that will reduce sound. However the expectation that windows covering only 20% of the exterior wall space can materially reduce interior sound by more than 3 dBA of sound reduction via window coverings is unwarranted. Compared to a hotel room we have much more exterior wall space that is transmitting sound into the residences.
5. **Sound**-when we developed The Bridges and The Deco, we relied upon city ordinances that were in place to design, finance and market those projects. The key ordinances (but not limited to) include:

- a. 9.42.070 (B)(C) &(E). Here we see even on Special Events no amplifying sound can continue past 10pm; no sound shall exceed 15 dBA above ambient at any property line; and the volume of sound shall be controlled that is will not be unreasonably loud, raucous, jarring, disturbing or a nuisance to reasonable persons...
- b. 5.28.350. Here it is unlawful to have an establishment to conduct music by mechanical musical instruments...which may unreasonably disturb any person of ordinary sensibilities in any adjoining premise.
- c. 20.04.005(B) Noise shall be muffled so as to not become objectionable due to intermittence, beat, frequency or shrillness.

I believe it goes without saying none of these ordinances which we predicated our investments upon can be met with the intended use of the venue.

Because of this we asked and the applicant to undertake a sound study. We do not entirely concur with the study's assumptions-by example its key assumption that rock venues mix and control volume to be 90-100 dBA at the control booth. Most studies seem to agree a steady volume of 102 dBA up to 120dBA (non-peak sound) and because of this understatement we are concerned that the resulting sound levels at our buildings will exceed the 95-dBA suggested in the Nugget sound study-Figure 5C. Also, as ambient sound rises it is typical for manufactured sound to rise as well-and we did find ambient sound to be higher in some locations due to the freeway noise-which in addition to crowd noise will in turn increase sound levels even more than anticipated by the venue and their consultant.

While our sound consultant's report is attached-we have assumed for the purpose of this analysis-the Nugget's assumption shown in the diagram C-5 of 95-dBA level at the property line (or face of our buildings).

In our findings in which we took several exterior and interior sound levels over a 4-hour period on November 28, 2018, we determined our wall and window system reduced the exterior sound level by an average of 23.5 dBA. Please be advised we built to meet building codes at that time. Using the Nugget's assumption of 95 dBA at the outside wall of our buildings (well more than allow by Sparks Ordinance 9.42.070) should result in an interior

sound level of 71.5 dBA. With adding interior window panes and shades we would expect another 7 dBA reduction resulting is 64.5 dBA.

Interior acceptable sound levels for residential use are 45 dBA or less. For a local credible source on acceptable residential sound levels (due to outside noises from air traffic) please reference the Reno Tahoe Airport noise standards which like most of the county use 45 dBA as the loudest nighttime sound level allowed before mitigation is required.

Each 10 dBA is a doubling in sound level. So, going from the highest acceptable level of 45dBA to 65.5 dBA resulting in more than 3 times the normal acceptable sound level inside the residential apartments. (this assumes the Nugget pays for the installation of a third pane window and acoustical shades on the end cap residential units).

While a hotel may receive more sound attenuation from the third pane and acoustical shades, that would not be the case on apartments which have approximately 80% of the external face still transferring sound without attenuation into the residences. A hotel would typically have 40-50% window exposure being improved and that is not the case with apartments. A hotel also has less outside wall exposure per square foot of habitable space, which also makes apartments vs. hotel rooms more difficult to mitigate.

Therefore, the only possible way to allow the outdoor venue co-exist with the residential units surrounding it to the north, east and west would be to follow all the mitigation recommendations in the accompanying sound study by Double Eagle Consulting. By following all of the mitigation measures in that report, we can support the venue in spite of the fact its use will be non-compliant with existing noise ordinances.

In summary, we ask for the following mitigation methods to be added to the proposed Conditional Use Permit if approved-as conditions of approval to be in place prior to the venue commencing operations:

***The west wall of The Deco will receive sound insulation on all 6 residential floors at the cost of the Nugget**

***The outdoor amphitheater shall be orientated so the stage is location on the north side of parcel and the sound is directed toward the south side of the parcel**

***The Nugget shall pay for a third window pane (1/2" Citiquiet laminated windows)to be added inside every window of every unit (excluding patio doors) within 80 feet from the east facing walls that are adjacent to the venue parcel**

***The Nugget shall pay for interior blackout drapes with some acoustical mitigation benefits on all windows within 80 feet of the Deco west facing walls and within 80 feet of the east facing walls on the Bridges**

***The Nugget will provide lighting both above and below seating to be on all nights that the venue is not in use or being under constant security**

***No Trespassing signs shall be properly posted so Nugget security can properly remove vagrants daily from venue site**

***Mature broadleaf evergreen vegetation as noted in the Sound Study will be planted and maintained around the venue perimeter by the Nugget**

***Temporary sound absorbing panels will be installed around the top of venue perimeter when concerts are being held**

ACOUSTICAL ANALYSIS

Bridges at Victorian Square Apartments

1500 Ave of the Oaks

Sparks, Nevada 89431

Prepared for

Silverwing Development

245 E. Liberty Suite 215

Reno, NV 89501

Prepared by

Double Eagle Consulting

Reno, Nevada 89507

INTRODUCTION

Silverwing Development requested an acoustical analysis to determine the effects of the proposed amphitheater would have on the interior apartment noise levels and how the noise levels would compare with normal and customary acoustical standards.

It should be noted that operating an outdoor music venue so close to a large number of residential units already in place, is a difficult task to mitigate, after the fact.

This acoustical analysis, prepared by Double Eagle Consulting, is based on the site plan provided by the applicant, noise level data obtained at the outdoor patio and inside the Bridges at Victorian Square Apartments and ambient noise level measurements taken in the project vicinity by Double Eagle Consulting.

Three elements in the project scope:

First, measure the background (ambient) noise levels inside the residential units and at the facade of the Bridges at Victorian Square Apartments. Second, project the noise impact the proposed amphitheater will have on the residence in the Bridges at Victorian Square Apartments. The last element in the project scope was to develop recommendations to reduce the noise level exposures the residents may have if they exceed the acceptable city codes in Sparks, NV Code of Ordinances Section 9.42.070.

Unless otherwise stated, all sound levels reported in this analysis are A-weighted sound pressure levels in decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighted sound levels, as they correlate well with public reaction to noise.

CRITERIA FOR ACCEPTABLE NOISE EXPOSURE

The Sparks, NV Code of Ordinances Section 9.42.070- Regulations. The commercial and noncommercial use of sound-amplifying equipment shall be subject to the following regulations:

- C. No sound emanating from sound amplifying equipment shall not exceed fifteen (15) dBA above the ambient (noise level) as measured at any property line.
- E. In any event, the volume of sound shall not be so controlled that it will not be unreasonably loud, raucous, jarring, disturbing or a nuisance to reasonable persons of normal sensitiveness with thee area of audibility.
- F. The speech or music amplified shall not be profane, lewd, obscene or slanderous.

Other local agencies have adopted standards found throughout the country that restrict interior sound levels to 45-49 dBA.

Reno code section 18.12.304; The Development Code establishes the maximum allowable hourly noise levels (Leq and Lmax) to be 65 dB between the hours of 6:00 a.m. to 10:00 p.m. and 49 dB between the hours of 10:00 p.m. to 6:00 a.m., at a residentially zoned property line.

The Reno-Tahoe International Airport has adopted the Federal Aviation Regulations (FAR) Part 150 Noise Compatibility program. This program provides residential sound insulation program for homes experiencing interior noise levels greater than 45 dB in the habitable rooms with the windows closed.

EXISTING NOISE ENVIRONMENT

There are two building that make up the Bridges at Victorian Square Apartments. In total there are 194 residential units and retail/commercial space. The Bridges at Victorian Square Apartments – South and North building exteriors are completed; exterior windows and doors are installed. Noise survey was completed in eleven (11) apartments in the South Building. Those locations had flooring, cabinets, countertops installed.

On November 28, 2018, background (ambient) noise levels were measured near the project site at eleven (11) apartments. The apartments were intended to be representative of existing noise levels in the project vicinity near the closest residential apartments to the proposed amphitheater site. Noise monitoring equipment utilized for the measurements consisted of Casella Cel-350 sound level meter. The sound level meter was calibrated in the field prior to use with a CEL-177 Precision Acoustic calibrator to ensure accuracy of the measurements. The sound level meter was also calibrated after testing to ensure sound level meter accuracy of the measurements.

The noise level testing was conducted in the interior and exterior of eleven (11) apartments. For the interior noise level monitoring – the sound level meter was placed on the kitchen counter with the speaker facing upward. For the exterior noise leveling monitoring – the sound level meter was hand held on the patio railing.

Weather conditions at the time of the measurements consisted of temperatures in the range of 35°F - 43°F, clear skies and winds out of the west in the range 0-5 mph. Measurements were conducted for a 4-hour period in order to document existing noise levels in the interior and exterior of the apartments during the evening (6:00PM - 10:00 PM) when the amphitheater would operation.

Measured noise levels were generally caused by vehicle traffic on I-80 and local street traffic. There was some pedestrian noise, but that was minimal during the course of the 4 hours. Measured noise levels are described in terms of the equivalent sound level (Leq) and maximum sound level (Lmax). Table 1 indicates that existing ambient noise levels at the facade of the residential areas close to the project site are currently at the normal and customary acoustical standards (which is 65dBA) without the amphitheater in operation.

| Location Description | A-Weighted Decibels, dBA | |
|---------------------------|--------------------------|-------------------|
| | Leq Mean (Range) | Lmax Mean (Range) |
| Residential Patio railing | 65.2 (59.8 – 70.1) | 83.7 (81.5 -89.5) |

Source: Double Eagle Consulting

A baseline noise level testing was complete inside eleven (11) apartment units. The same apartments where sampled for the outside ambient noise levels. During the time of the sampling, there were no units occupied an I was the only person in the building. No construction was being completed inside or outside the building. All the doors were shut and windows closed and locked. Table 2 indicates the noise levels with nothing on in the apartment except for a few lights. The air conditioner, heater, and fan were not on.

| TABLE 2 Summary of 4-hours inside Noise Level Measurements November 28, 2018 | |
|---|---|
| Location Description | A-Weighted Decibels, dBA |
| Kitchen area with no AC on and all the doors and windows close | Leq Mean (Range) 41.7 (38.3 – 46.3) |
| Source: Double Eagle Consulting | |

The noise inside the units came from the outside ambient noise. The windows, walls and patio door reduced the outside ambient noise by 23.5 dBA.

The Paoletti Consulting report, dated 16 November 2018, agrees there would be a noise level increase at the facade. Page 5 of their report states “it can be seen that the 85-90 dBA contours extend to the nearby residential building facades.” However, on page 17 of the same report, Figure 5C appears to show the noise level at the facade to be 90 – 100 dBA.

The report is also based upon the amplified music at 100 dBA plus a 50% crowd noise. Studies show that rock concerts can be over 120 dBA with peaks exceeding 135 dBA. If the amplified music and the crowd noise increases, this noise levels at the facades could reach 100 dBA or higher.

| Table 3 | | | | |
|---------------------------------|-------------|--------------------|-----------|------------|
| PL Noise Level | Attenuation | Inside noise level | Recommend | Difference |
| 75 dBA | 23.5 dBA | 51.5 dBA | 45 dBA | +65% |
| 80 dBA | 23.5 dBA | 56.5 dBA | 45 dBA | +115% |
| 85 dBA | 23.5 dBA | 61.5 dBA | 45 dBA | +165% |
| 90 dBA | 23.5 dBA | 66.5 dBA | 45 dBA | +215% |
| 95 dBA | 23.5 dBA | 71.5 dBA | 45 dBA | +265% |
| 100 dBA | 23.5 dBA | 76.5 dBA | 45 dBA | +315% |
| 105 dBA | 23.5 dBA | 81.5 dBA | 45 dBA | +365% |
| Source: Double Eagle Consulting | | | | |

Therefore, if we take what appears to be a low noise level at the facade of 85 dBA less the attenuation average of 23.5 dBA, we are at 61.5 dBA which is over 165% the recommended noise level of 45 dBA. See Table 3 above for the results at different noise levels at the property line.

The standard acceptable exterior noise level is 65 dBA and interior noise level at night is 45 dBA (see Reno code section 18.12.304 and the Reno Airport Authority standard - Federal Aviation Regulations (FAR) Part 150 Noise Compatibility Program)

Since we can not achieve the 65 dBA ambient noise level at the property line, we should consider how to reduce the interior noise to an acceptable level. By adding a third internal window pane and acoustical shades, we will attenuate the noise level by another 7 dBA. The internal noise level would be 54.5 dBA which is still almost twice the normal noise level with windows and doors closed and will not provide an internal environment that is conducive to typical residential use-which is particularly important in this location since 50% of the tenants work off hour shifts at the Tesla/Panasonic Gigafactory.

Therefore, we will need to have sound redirected by adjusting the stage and sound equipment to the north side of the parcel (facing south) with sound in same direction. Based on that we believe sound at outer face of facade to be 75-80 dBA less 23.6 dBA and the 7 dBA in mitigation measures. The results would be approximately 48 dBA which is close to acceptable levels. Again, this does not include peak sound periods which will create even higher sound levels.

MITIGATION

At this time, it does not appear, the project design has incorporated any noise mitigation features that would minimize potential noise impacts at the residential facades. The increase noise level will impact all 194 units of the Bridges, the 209 units Deco being constructed as well as the 100 units at Square One.

There are several options to reduce the noise levels at the residential facade or reduce the noise levels inside the residential units.

1. Reorient the amphitheater so the musicians are north and the audiences are south. The music would be directed towards 180 and not towards the residential buildings. By the Nuggets own sound level study, it shows the building to the left of, and behind, the stage receives 80 dBA which is 15 dBA less than the current orientation resulting sound impact at the property line of the Bridges.
2. Plant mature broadleaf evergreens around the entire perimeter. Choose trees and shrubs with dense branches that reach all the way to the ground. Plants, such hollies and junipers, that have thick branches at the ground level provide excellent noise reduction.
3. Install temporary sound absorbing walls when any event is held in the amphitheater to reduce the noise levels at the facades of the residential buildings.
4. Install additional sound proofing material for each window within all 194 residential unit. This sound proofing could be soundproof window system, drapes or a combination of both. Third pane windows to be required on all unit windows directly facing venue (east facing for Bridges and west facing for Deco).

CONCLUSIONS

The current design plans of the amphitheater are NOT acceptable for the 503 residential apartment units in place or under construction in the two buildings.

The amplified music and the crowd noise would significantly increase the noise at the residential building facades surpassing the normal and customary acoustical standards of 65 dBA.

The Paoletti Consulting report, dated 16 November 2018, agrees there would be a noise level increase at the facade. Page 5 of their report states "it can be seen that the 85-90 dBA contours extend to the nearby residential building facades."

Their report is based upon the amplified music at 100 dBA plus a 50% crowd noise. Studies show that rock concerts can be over 120dBA with peaks exceeding 135 dBA. If the amplified music and the crowd noise increases, this noise levels at the facades could reach 100 dBA or higher compared to the 85-90 dBA levels suggested making internal noise conditions considerably worse. It should be noted for every 10 dBA increase the sound level doubles.

The foregoing conclusions are based upon the information known to Double Eagle Consulting at the time the study was prepared. This includes the amphitheater time of operations, design plans, and the use of the facility. Any significant changes to the information used for the analysis will require a review of the findings in this report.

Respectfully submitted,

John A. Braun, CSP
Double Eagle Consulting
Managing Director