

COUNCIL COMMUNICATION

	Number:	19-527	Meeting:	December 16, 2019
	Agenda Item:	53	Roll Call:	19-2048
	Submitted by:	Chris Johansen, Community Development Director		

AGENDA HEADING:

Amendments to the noise control ordinance regarding amplified sound limits.

SYNOPSIS:

The amendment will set sound limits at individual music venues in the City at levels that are appropriate for the venue. The limits have been determined using a mathematical formula that is designed to allow a volume that will allow venues to book quality entertainment, while protecting the residents of the community.

FISCAL IMPACT: NONE

ADDITIONAL INFORMATION:

- Upon the opening of the Lauridsen Amphitheater and the Killinger Family Stage at Water Work Park a proposed ordinance change was discussed to control nuisance noise in the surrounding neighborhoods.
- In preparation for an ordinance change a study was conducted over the summer of 2019 to determine if the sound levels established in the current code were established at the correct levels to allow music venues to prosper and neighbors to not suffer from venues being a nuisance. The study included taking sound readings around Water Works Park, the Brenton Skating Plaza and Capitan Roy's.
- It was discovered that concerts at Lauridsen Amphitheater and the Killinger Family Stage and Brenton Skating Plaza were sometimes over the limits allowed in the current ordinance. Staff determined that they could improve the way sound limits are determined. Using the mathematical formula for sound degradation called the inverse square rule, for every doubling of distance, sound pressure drops 6 dB. Using this formula, staff can input measurements and known distances and infer the remaining unknown sound pressure. Formula where:
 - $Lp1$ = sound pressure level at location 1 (dB)
 - $Lp2$ = sound pressure level at location 2 (dB)
 - $R1$ = distance from source to location 1 (ft, m)
 - $R2$ = distance from source to location 2 (ft, m)

$$Lp1 = 20\log(R2/R1) + Lp2$$

Source: https://www.engineeringtoolbox.com/inverse-square-law-d_890.html

- Using this formula staff determined that the following levels would be appropriate:
 - *Brenton Skating Plaza* - A type “F” permit may be issued for sound equipment for not more than 112 dBCs, at the front of stage which is established to be 50-feet from the sound. This permit is effective between the hours of 9:00 a.m. to 10:00 p.m. Sunday through Thursday and 9:00 a.m. to 11:00 p.m. on Friday and Saturday, the Sunday of Memorial Day weekend, Labor Day weekend and the Fourth of July should it fall on a Sunday.
 - *Waterworks Park* - A type “I” permit may be issued for amplification equipment for live performances held in Waterworks Park, emitting music or human speech, at a level not greater than 114 dBCs measured at front of house which will be 125-feet from the stage and limited to 85 dBc’s when measured at the nearest residence. A type “I” permit is effective for one (1) or two (2) days and between the hours of 9:00 a.m. to 10:00 p.m. Sunday through Thursday, and 9:00 a.m. to 11:00 midnight on Friday and Saturday, the Sunday of Memorial Day weekend, Labor Day weekend and the Fourth of July should it fall on a Sunday.
 - *Simon Estes Riverfront Amphitheater* - A type “N” permit may be issued for sound equipment to be used in the Simon Estes Riverfront Amphitheater in conjunction with a lease agreement entered into with the Parks and Recreation Department, emitting music or human speech, registering not more than 100 dBCs, when measured at the middle cement crosswalk. This permit is effective between the hours of 9:00 a.m. to 11:00 p.m. Sunday through Thursday, and 9:00 a.m. to 11:00 p.m. on Friday and Saturday, the Sunday of Memorial Day weekend, Labor Day weekend and the Fourth of July should it fall on a Sunday.
- In addition, each venue will be required to have sound meters on site to monitor the level of the amplified sound and keep records of readings for staff review.

PREVIOUS COUNCIL ACTION(S):

Date: March 20, 2017

Roll Call Number: [17-0507](#) and [17-0508](#)

Action: [Amending](#) Chapter 42 of the Municipal Code regarding noise control, by adding dBC scale and allowing measurement from the public right-of-way. ([Council Communication No. 17-286](#)) Moved by Hensley that this ordinance be considered and given first vote for passage. Motion Carried 7-0.

- (A) Final consideration of ordinance above, requires six votes. Moved by Coleman that the rule requiring that an ordinance must be considered and voted on for passage at two Council meetings prior to the meeting at which it is to be finally passed be suspended, that the ordinance be placed upon its final passage and that the ordinance do now pass, [#15,566](#). Motion Carried 7-0.

ANTICIPATED ACTIONS AND FUTURE COMMITMENTS:

Staff will use the formula to determine appropriate levels of amplified sound at other venues in the City as needed.

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