



## ARLINGTON COUNTY, VIRGINIA

### County Board Agenda Item Meeting of February 11, 2012

**DATE:** January 31, 2012

**SUBJECT:** U-3297-11-1 USE PERMIT AMENDMENT to change Conditions #6, #8, #14 of the existing use permit for live entertainment for Westover Market, located at 5841, 5853, and 5877 N. Washington Blvd. (RPC# 10-027-012 and -013).

**Applicant:**  
Westover Market

**By:**  
William B. Lawson, Jr.  
Lawson, Tarter & Charvet, P.C.  
6045 Wilson Blvd., #100  
Arlington, Virginia 22205

#### **C.M. RECOMMENDATION:**

Approve the subject use permit amendment, subject to all previous conditions, but with amended Conditions #6, 8, and 14 as shown in this report, with an administrative review in June 2012 and a County Board review in nine (9) months (November 2012).

**ISSUES:** This is a scheduled review and a use permit amendment request to amend three (3) conditions of approval of the use permit for live entertainment outdoors. Some neighbors continue to oppose the live entertainment use.

**SUMMARY:** The applicant, Westover Market, proposes to amend three (3) conditions of the approved use permit for live entertainment outdoors. The applicant had not begun regular live entertainment in the 2011 season. The applicant proposes to amend Condition #6 to reduce the frequency of the required noise testing by the applicant's hired acoustical expert to the frequency recommended by the expert in the sound management plan; and amend Conditions #8 and 14 to permit amplified entertainment one (1) day per week, and after a favorable administrative

County Manager: *BMD/GA*

County Attorney: *[Signature]* *[Signature]*

Staff: Peter Schulz, DCPHD, Planning Division

PLA-6116

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review, to permit amplified entertainment two (2) days per week. Entertainment on Wednesdays will always be unamplified. All other conditions of approval would remain the same. Currently, Condition #6 requires weekly noise testing by the applicant's hired acoustical engineer, and Conditions #8 and #14 limited the applicant to unamplified music only for the first two (2) months of live entertainment. However, after a favorable administrative review of the use permit, the applicant could be approved by the County Manager for one (1) night per week of amplified music. Staff recommends that condition #6 be amended to require one (1) test per month by the applicant's acoustical engineer during the 2012 season, and that Condition #14 be amended to require the applicant to install and use a "compression limiter", an electronic device that controls volume output to a predetermined level. Furthermore, staff does not recommend further amending conditions #8 and #14 to increase the permitted days of amplified entertainment, because the applicant did not have regular live entertainment in the 2011 season. These conditions would be amended to update the reference to the current year. Therefore, staff recommends the County Board approve the use permit amendment, subject to all previous conditions, but with amended Conditions #6, 8, and 14 as shown in this report, with an administrative review in June 2012 and a County Board review in nine (9) months (November 2012).

**BACKGROUND:** Westover Market is a restaurant and market in the Westover Village neighborhood with an outdoor café area known as the "Beer Garden". The County Board approved outdoor live entertainment in the Beer Garden three (3) nights per week, subject to conditions of approval and a County Board review in February 2012. Among the conditions of approval, the applicant was limited to unamplified music only for the first two (2) months of live entertainment, then after a favorable administrative review by County staff, the applicant was permitted to have one (1) night per week of amplified live music through the end of the 2011 season. Any further amplified music would have to be approved by the County Board.

The conditions of approval also required the applicant to complete the renovations to the restaurant and to hire an acoustical expert to develop a sound management plan before live entertainment could commence and for this expert to conduct regular decibel testing to ensure compliance with the Noise Ordinance. The applicant was able to complete construction and obtain a certificate of occupancy for the restaurant and hired a professional acoustic expert to develop a sound management plan, which County staff approved. However, such steps, which were required before live entertainment at the site could commence, took longer than expected, and the applicant was not able to hold regular live entertainment in the Beer Garden in the 2011 season. The applicant was able to hold one (1) live "test" on September 30, 2011, with amplified instruments in order to test the efficacy of the sound management plan. The test generated two (2) complaints by neighbors that they were not notified in accordance with the requirements of Conditions #3 and #6 (requirements that the applicant must inform the closest neighbors more than 48 hours before the sound test, and that the applicant must share his contact information with them). The acoustical expert's report states that that the sound levels from the test were able to be held between 56-62 decibels (60 decibels is the legal limit before 9 p.m.).

Among other recommendations, the applicant's sound management plan recommends that the applicant purchase and install a "compression limiter", an electronic device that would prevent the sound output from exceeding a predetermined decibel level.

The Westover Market is located at 5841-5877 N. Washington Blvd. in the Westover Shopping Center, and is described as follows:

Site: The “Beer Garden” or outdoor café is located in a paved area between the Westover Post Office branch and the Westover Market in the Westover Shopping Center. To the north is the shopping center parking lot (zoned partly “C-1” and partly “R-6”) and the rear yards of single-family homes that are zoned “R-6”. To the west is the Westover Library and Reed School Complex, zoned “S-3A”. To the south, across Washington Boulevard, are one-story retail uses zoned “C-1” and garden apartments zoned “RA14-26”. To the east are garden apartments zoned “RA14-26”

Zoning: The site is split-zoned “C-1” Local Commercial Districts and “R-6” One-Family Dwelling Districts.

Land Use: The site is designated on the General Land Use Plan (GLUP) as “Service Commercial.” The back part of the shopping center’s parking lot is designated “Low Residential (1-10 du/acre).”

Neighborhood: The site is located within the Westover Village Civic Association. The Civic Association was informed by staff of the amendment request and no comments have been received at this time. Staff has been in contact with immediate neighbors who remain opposed to the live entertainment use.

**DISCUSSION:** The applicant proposes to amend parts of three (3) conditions of approval: Condition #6, which (among other requirements) required weekly noise testing by the acoustical expert for a period of six months; Condition #8, which limited the applicant to unamplified entertainment only; and Condition #14, which limited the applicant to unamplified entertainment only for the first two (2) months of live entertainment, and after a favorable administrative review, permitted amplified entertainment one (1) day a week for the remainder of the 2011 season.

Condition #6

The applicant proposes to amend Condition #6 to reduce the amount of the required on-site decibel testing by the acoustical expert to the testing frequency that is recommended in the sound management plan developed by the expert. The condition currently requires testing by the expert at least once per week for six (6) months, and submitting to the County monthly summaries of the tests. The sound management Pplan recommends three (3) tests after live entertainment has commenced: One test would be performed during the first week of performances, another test during the second month, and the third test during the third quarter of performances (since the performance season lasts from April 1 to October 31; this test would come about August/September).

Staff believes that, if the applicant installs a compression limiter as recommended in the sound management plan, and implements the other recommendations of the plan, the likelihood of the applicant exceeding the noise limit has been reduced, and the necessity for weekly decibel

testing by the acoustical expert for six (6) months has also been reduced. Furthermore, County Code Enforcement staff will continue to make random unannounced visits to the Market during the hours of live entertainment to conduct the County's own checks of the applicant's compliance with the Noise Ordinance. Staff therefore recommends amending Condition #6 to require installation of the compression limiter and compliance with the approved sound management plan. However, staff believes that the applicant's proposal to test noise levels only three (3) times in the coming seven-month-long live entertainment season (April 1 to October 31) is not adequate. County staff will need more information to evaluate the applicant's success in keeping within the Noise Ordinance. Staff, therefore, recommends testing by the applicant's hired acoustical engineer once per month in the coming 2012 season. Applicant's testing will be supplemented by County staff's own testing.

Condition #6 also permits (but does not require) the applicant to install a decibel monitor at the property line with a webcam trained on it in order to give the public "real-time" decibel information. The acoustical expert does not recommend this technique, as it will measure noise in only one location and will be liable to false readings from background sounds. By contrast, when investigating a noise complaint, County staff take multiple readings from several different locations, and account for background noise when taking measurements. Staff therefore recommends amending Condition #6 to eliminate reference to the permitted "webcam".

#### Conditions #8 & #14

The current Condition #8 limits the applicant to unamplified music only.. Condition #14 permitted the applicant, after two (2) months of regularly-scheduled entertainment, and after a favorable administrative review by County staff, to have amplified entertainment on Saturdays only through the end of the 2011 season (October 31), and that the applicant would not be permitted to have any amplified entertainment at all after the 2011 season until the County Board has reviewed the use permit.

The applicant requests to amend Conditions #8 and 14 in order to permit amplified music one (1) night per week for the first two (2) months of the outdoor café season (April 1-May 30), followed by an administrative review. If the applicant receives a favorable review, then he may be permitted to have amplified entertainment on Fridays and Saturdays. The applicant agrees not to have amplified entertainment on Wednesdays.

Conditions #8 and 14 in their original form were intended to provide a trial period for the live entertainment, and to permit a "phase-in" of amplified entertainment to allow County staff to monitor events, to permit the applicant to make any adjustments necessary in order to comply with the noise ordinance, and not overly burden the neighboring residents. Staff believes that the adopted conditions should remain as they are. There was no regular live entertainment in the 2011 season, with the required noise testing reports by the applicant's acoustical engineer, therefore there was no baseline of information established by which to evaluate the applicant's success (or failure) to stay within the limits of the Noise Ordinance, whether with amplified or unamplified instruments. Staff

**CONCLUSION:** Staff believes that the conditions as amended, the prohibition of amplified entertainment on Wednesdays, and the required installation of noise-limiting technology, will

continue to serve the goal of protecting neighboring properties from excessive noise and other negative impacts arising from the use. Therefore, staff recommends the County Board approve the use permit amendment, subject to all previous conditions, but with amended Conditions #6, 8, and 14 as shown below, with an administrative review in June 2012 and a County Board review in nine (9) months (November 2012).

Revised Conditions #6, #8, #14:

6. The applicant agrees to retain an acoustical engineer or similar expert acceptable to the County Manager to develop a sound management plan that conforms to this condition, submit to and obtain approval from the County Manager for the plan, and implement and thereafter maintain such plan throughout the life of the use permit. The sound management plan shall ensure that the sound emitted from the live entertainment shall not exceed the limits of the Noise Control Ordinance or the limits specified hereinafter, whichever is less. The approved sound management plan shall be implemented beginning at or before commencement of live entertainment at the site. The applicant agrees that if a test involving live entertainment is necessary for the acoustical engineer to properly assess the feasibility of the sound management plan, the applicant agrees to request approval of such test from the Zoning Administrator at least 72 hours before commencement of the test. The applicant when making such a request shall submit the name and phone number of the acoustical engineer that will be on site conducting the test, the proposed schedule of said test, and the nature of the music being performed during said test. The applicant further agrees to inform the Westover Village Civic Association and nearest neighbors identified in Condition #3 at least 24 hours before commencing such test, if said test is approved by the Zoning Administrator. The applicant agrees that only one (1) test shall be approved by the Zoning Administrator.

~~Such plan may include, in the Manager's discretion after consultation with the Zoning Administrator concerning the enforceability of the plan, provisions for automatic monitoring by a recordable webcam of a decibel meter placed at the nearest residential property line, or by some other recordable process acceptable to the County Manager and the Zoning Administrator. Regardless of the monitoring tool used, d During the live entertainment the decibels measured shall at no time exceed 60 dB before 9 p.m. and 55 dB after 9 p.m., or the limits of the County Noise Ordinance, whichever is stricter, with the sound management plan making an accounting for environmental noise, e.g. vehicular traffic, aircraft, etc. The applicant shall submit a written report of the recorded information no later than the 30<sup>th</sup> of every month to the Arlington County Zoning Administrator, the neighbors identified in Condition #3, and the President of the Westover Village Civic Association.~~

The applicant agrees that he will cause the acoustical engineer, or a similar expert acceptable to the County Manager, ~~shall, for a period of six (6) months after the commencement of live entertainment, or such longer period as the County Manager directs to ensure the checks have occurred and shown compliance with this condition for a six-month period;~~ to conduct random unannounced checks of the noise level and the management of the sound at least once per ~~week~~ month while the live entertainment is

occurring. The tests shall be conducted in accordance with the procedures in the County Noise Control Ordinance from, at a minimum, two (2) locations including from the nearest residential property line. The acoustical engineer or expert shall also submit a ~~monthly~~ written report of the results of such tests to the applicant, the Arlington County Zoning Administrator, the neighbors identified in Condition #3, and the President of the Westover Village Civic Association. Results that show any noise levels above those referenced in this condition shall, without limitation as to the bases for revocation, be grounds for revocation of the use permit for live entertainment.

8. The applicant agrees that live entertainment is permitted only from April 1 to October 31 three days a week: on Wednesdays from 6 p.m. to 8 p.m.; and Fridays from 6 p.m. to 10 p.m., Saturdays from 5 p.m. to 9 p.m., and at no other times. Live entertainment shall not be amplified and shall not consist of electric or electronic instruments, except as permitted in Condition #14. The applicant agrees that Westover Market shall provide the amplification equipment, including speakers, mixing board and any equipment that controls volume. Volume shall always be controlled by a Westover Market employee. Performers shall not be permitted to control the volume.
14. The use permit shall be subject to an administrative review ~~two (2) months after the live entertainment has begun, but not earlier than September 2011~~ in June 2012.

Upon completion of the administrative review, and provided the County Manager determines that the applicant has complied with all conditions of the use permit up to the time of the review, the applicant shall be permitted to have live entertainment using amplified musical instruments and related equipment including, but not limited to, speakers, a mixing board, and sound control equipment, on Saturday evenings only until the end of the 2012~~4~~ season on October 31, 201~~4~~2, and no further unless this use permit is further amended by the County Board, at the County Board's discretion, when the use permit is reviewed in November 2012. In accordance with the sound management plan, the applicant agrees to install a compression limiter or similar device that will automatically limit the decibels received at the nearest residential property line. Such device shall be installed before commencing amplified live entertainment performances. All other conditions of the use permits shall remain in effect. The County shall notify the Westover Village Civic Association and nearest neighbors identified in Condition #3 once a decision is made to allow the applicant to have live entertainment using amplified musical instruments.

PREVIOUS COUNTY BOARD ACTIONS:

- June 23, 1956                      Approved use permit (U-1222-56-1) for a parking lot as a transitional use, subject to conditions.
- September 14, 1957                Amended use permit (U-1222-56-1) for a parking lot as a transitional use to eliminate the requirement for fencing in a portion of the rear yard, at the discretion of the Zoning Administrator.
- June 7, 1958                        Adopted a master plan for the Westover Shopping Area.
- June 13, 1992                      Approved a use permit (U-2741-92-1) for construction and operation of a United States Post Office and associated parking, subject to conditions and a review one year after issuance of the certificate of occupancy.
- June 5, 1993                        Renewed a use permit (U-2741-92-1) for construction and operation of a United States Post Office and associated parking, subject to all previous conditions and a review one year after issuance of the certificate of occupancy.
- May 17, 2011                        Approved a use permit (U-3297-11-1) for live entertainment in an existing restaurant outdoors, subject to conditions and a County Board review in February 2012.

Approved Conditions:

1. This live entertainment use permit shall apply solely to the restaurant located at 5863 Washington Boulevard and shall not apply to any other restaurant in the Westover Shopping Center. The applicant agrees that live entertainment shall be permitted only within the confines of the area for which a Certificate of Occupancy has been issued for an Outdoor Café at the Westover Market.
2. The applicant agrees that no live entertainment shall be permitted until a permanent certificate of occupancy for an indoor restaurant in the building that now houses the Westover Market has been obtained by the applicant, and all construction work under building permit #B1002423 has passed final inspection.
3. The applicant agrees to designate a neighborhood liaison who will be present at the Westover Market during business hours to communicate with nearby residents and neighbors to address concerns which may be related to the live entertainment, and to have an on-site liaison who shall be available during the hours of live entertainment to receive and respond to community concerns regarding the live entertainment. The applicant agrees that the designated on-site liaison shall be present on site at all times during the hours of live entertainment.

The applicant further agrees that the name and telephone number of such liaison(s) shall be submitted to the Zoning Administrator, the Westover Village, Tara-Leeway Heights and Highland Park-Overlee Knolls Civic Association Presidents and the residents of all houses on the 1600 block of North Longfellow Street and the 5800 block of 18<sup>th</sup> Street North before issuance of the Certificate of Occupancy for the indoor restaurant within the market. The applicant shall submit to the Zoning Administrator proof that contact information has been shared with the above-mentioned residents and the civic associations before issuance of the certificate of occupancy for the indoor restaurant within the market. In the event the designated liaisons change, such information shall be immediately forwarded to the Zoning Administrator and the above-named residents and Civic Associations.

4. The applicant agrees that there shall be no dancing by patrons or performers unless and until the applicant has applied for and obtained a Dance Hall Permit.
5. The applicant agrees that the area designated for the live performers shall be generally as shown on the exhibit entitled "Café at Westover" and dated 3/14/2011. The applicant shall ensure that performers shall always be set up so they are performing facing Washington Boulevard.
6. The applicant agrees to retain an acoustical engineer or similar expert acceptable to the County Manager to develop a sound management plan that conforms to this condition, submit to and obtain approval from the County Manager for the plan, and implement and thereafter maintain such plan throughout the life of the use permit. The sound management plan shall ensure that the sound emitted from the live entertainment shall not exceed the limits of the Noise Control Ordinance or the limits specified hereinafter, whichever is less.

The approved sound management plan shall be implemented beginning at or before commencement of live entertainment at the site. The applicant agrees that if a test involving live entertainment is necessary for the acoustical engineer to properly assess the feasibility of the sound management plan, the applicant agrees to request approval of such test from the Zoning Administrator at least 72 hours before commencement of the test. The applicant when making such a request shall submit the name and phone number of the acoustical engineer that will be on site conducting the test, the proposed schedule of said test, and the nature of the music being performed during said test. The applicant further agrees to inform the Westover Village Civic Association and nearest neighbors identified in Condition #3 at least 24 hours before commencing such test, if said test is approved by the Zoning Administrator. The applicant agrees that only one (1) test shall be approved by the Zoning Administrator.

Such plan may include, in the Manager's discretion after consultation with the Zoning Administrator concerning the enforceability of the plan, provisions for automatic monitoring by a recordable webcam of a decibel meter placed at the nearest residential property line, or by some other recordable process acceptable to the County Manager and the Zoning Administrator. Regardless of the monitoring tool used, during the live entertainment the decibels measured shall at no time exceed 60 dB before 9 p.m. and 55 dB after 9 p.m., or the limits of the County Noise Ordinance, whichever is less, the sound management plan making an accounting for environmental noise, e.g. vehicular traffic, aircraft, etc.. The applicant shall submit a written report of the recorded information no later than the 30<sup>th</sup> of every month to the Arlington County Zoning Administrator, the neighbors identified in Condition #3, and the President of the Westover Village Civic Association.

The acoustical engineer, or a similar expert acceptable to the County Manager, shall, for a period of six (6) months after the commencement of live entertainment, or such longer period as the County Manager directs to ensure the checks have occurred and shown compliance with this condition for a six-month period, conduct random unannounced checks of the noise level and the management of the sound at least once per week while the live entertainment is occurring. The tests shall be conducted in accordance with the procedures in the County Noise Control Ordinance from, at a minimum, two (2) locations including from the nearest residential property line. The acoustical engineer or expert shall also submit a monthly written report of the results of such tests to the applicant, the Arlington County Zoning Administrator, the neighbors identified in Condition #3, and the President of the Westover Village Civic Association. Results that show any noise levels above those referenced in this condition shall, without limitation as to the bases for revocation, be grounds for revocation of the use permit for live entertainment.

7. The applicant shall comply with the Arlington County Noise Ordinance as well as all other County and State Ordinances and the regulatory requirements of the Environmental Health Bureau, the Fire Marshal, the Police Department and the Virginia Department of Alcohol Beverage Control. The applicant agrees that the live entertainment and/or amplification shall not cause vibrations on adjacent properties.

8. The applicant agrees that live entertainment is permitted only from April 1 to October 31 three days a week: on Wednesdays from 6 p.m. to 8 p.m.; and Fridays from 6 p.m. to 10 p.m., Saturdays from 5 p.m. to 9 p.m., and at no other times. Live entertainment shall not be amplified and shall not consist of electric or electronic instruments. The applicant agrees that Westover Market shall provide the amplification equipment, including speakers, mixing board and any equipment that controls volume. Volume shall always be controlled by a Westover Market employee. Performers shall not be permitted to control the volume.
9. During the season that the outdoor café /Beer Garden is closed, the tables, chairs and outdoor bar shall be completely removed. The outdoor café shall not be open when the restaurant is not open for business.
10. The applicant agrees that maximum capacity of the outdoor café/Beer Garden shall be 29 seats when live entertainment is not occurring. No more than 29 seats and 69 persons standing shall be permitted during live entertainment. The applicant agrees that the total capacity during live entertainment events shall not exceed 98, consistent with the certificate of occupancy.
11. The applicant agrees to cooperate with the Arlington County Police Department when responding to complaints related to the outdoor café and live entertainment, and to ensure that all restaurant staff serving alcohol shall complete the State Training Intervention Procedures (TIPS) program.
12. The applicant agrees to notify the County Manager at any time when a change of ownership is contemplated; upon a change of ownership of the Westover Market, the use permit shall be scheduled for a County Board review.
13. The applicant agrees that radio, recorded, or “piped-in” music shall not be played in the outdoor café/Beer Garden on evenings (6 p.m. to closing time) that live music is not played.
14. The use permit shall be subject to an administrative review two (2) months after the live entertainment has begun, but not earlier than September 2011.

Upon completion of the administrative review, and provided the County Manager determines that the applicant has complied with all conditions of the use permit up to the time of the review, the applicant shall be permitted to have live entertainment using amplified musical instruments and related equipment including, but not limited to, speakers, a mixing board, and sound control equipment, on Saturday evenings only until the end of the 2011 season on October 31, 2011, and no further unless this use permit is further amended by the County Board. All other conditions of the use permits shall remain in effect. The County shall notify the Westover Village Civic Association and nearest neighbors identified in Condition #3 once a decision is made to allow the applicant to have live entertainment using amplified musical instruments.

October 6, 2011

Mr. Devin Hicks  
Westover Market  
5863 Washington Blvd  
Arlington, VA 22205

Re: Westover Beer Garden  
Noise Test

Mr. Hicks:

On Friday September 30, 2011, Hush Acoustics LLC measured sound levels in the parking lot behind the Westover Beer Garden at 5863 Washington Blvd, Arlington, VA 22205. The sound level meter was mounted on a tripod approximately 6 feet above the pavement, and approximately 5 feet from the fence separating the parking lot from the nearest residential property. Figure 1 shows the approximate measurement location on an aerial photo.

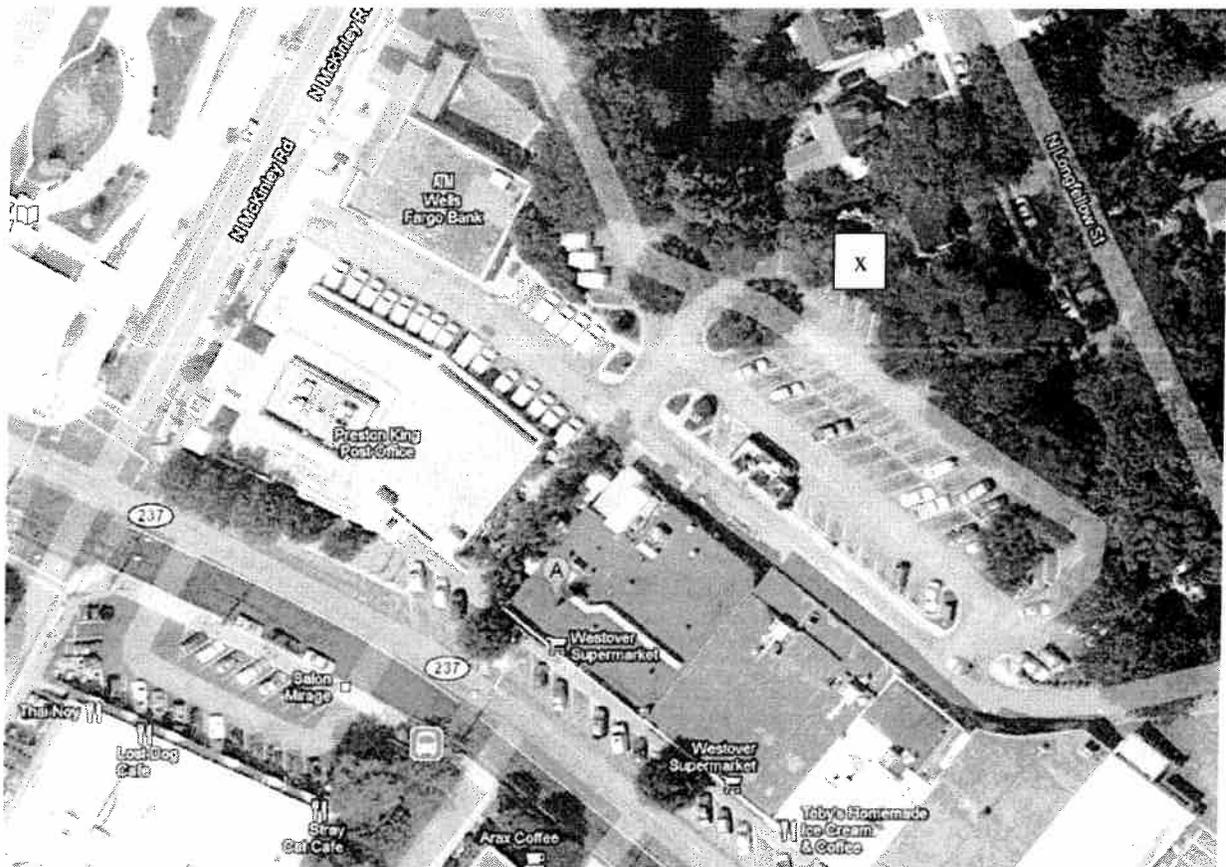


Figure 1. Sound Level Measurement Location

Sound levels were measured for just over 32 minutes using a Norsonic Precision Sound Analyser Nor140 serial number 1402854, with a single Norsonic Type 1233 microphone serial number 08609. The meter was programmed to automatically store the maximum and average A-weighted sound level each second. In addition, the meter stored sound levels in each frequency band; however, per our meeting with Arlington County staff on August 31, 2011, to simplify the analysis we focused only on A-weighted sound levels. During the sound level measurement period a log of predominant audible sound sources was maintained.

There was a band playing on the side patio of the Westover Beer Garden. There is currently a noise barrier consisting of mass-loaded vinyl with quilted facing on one side along the rear (north-northeast) side of the patio along the edge of the parking lot. The barrier is approximately 8 feet tall.

Figure 2 presents a graph of the maximum A-weighted sound each second during the 32-minute survey. This graph also includes annotations of predominant noise sources at various times. These A-weighted sound levels can be compared to the Arlington County noise ordinance limit of 60 dB; this limit applies during the daytime until 9 pm every day of the year. Although we did not measure sound levels at night, for reference the noise ordinance limit at night is 55 dB.

The noise sources were as follows:

- People on the patio talking; crickets; rooftop air handling and refrigeration units. With the exception of a few crickets, these are not listed in Figure 2 since they occurred during the entire sound monitoring period.
- Crickets. While cricket chirping was relatively constant, we tried to note a portion of the times when a cricket generally closer to the sound level meter was individually loud.
- Car door. This sound is from someone closing a car door as they leave or enter a car in the parking lot.
- Car. This is a car driving in the parking lot looking for a space or leaving.
- Car horn. This was the sound of a remote keyless entry system honking the car horn.
- Yelling. This was either from people in the beer garden patio or in some cases in the parking lot.
- Talking in parking lot near mic. On one occasion someone came up to me to ask what I was doing.
- Song. This is the total duration of music from the beer garden live band, starting from when instruments begin. In each case, the time when vocals began is also noted. For the first song we failed to note exactly when the song ended.
- Talking. In some cases, the band spoke using the microphone just prior to beginning a song.

It can be seen from Figure 2 that the maximum A-weighted sound level each second was in the range of 53 to 74 dB. Not counting sound levels influenced by the car horn and car doors, the sound level rarely exceeded 62 dB. Perhaps the most important feature of Figure 2 is a comparison of sound levels with and without music. Between songs the sound level was typically in the range of 54 to 57 dB, while during songs the sound level was typically in the range of 55 to 60 dB. During the second to last song of the monitoring period the sound level reached 61 dB as a car drove by, was 61 to 62 dB for 2 to 4 seconds when music was predominant, and reached 61 dB during yelling. During the last song the

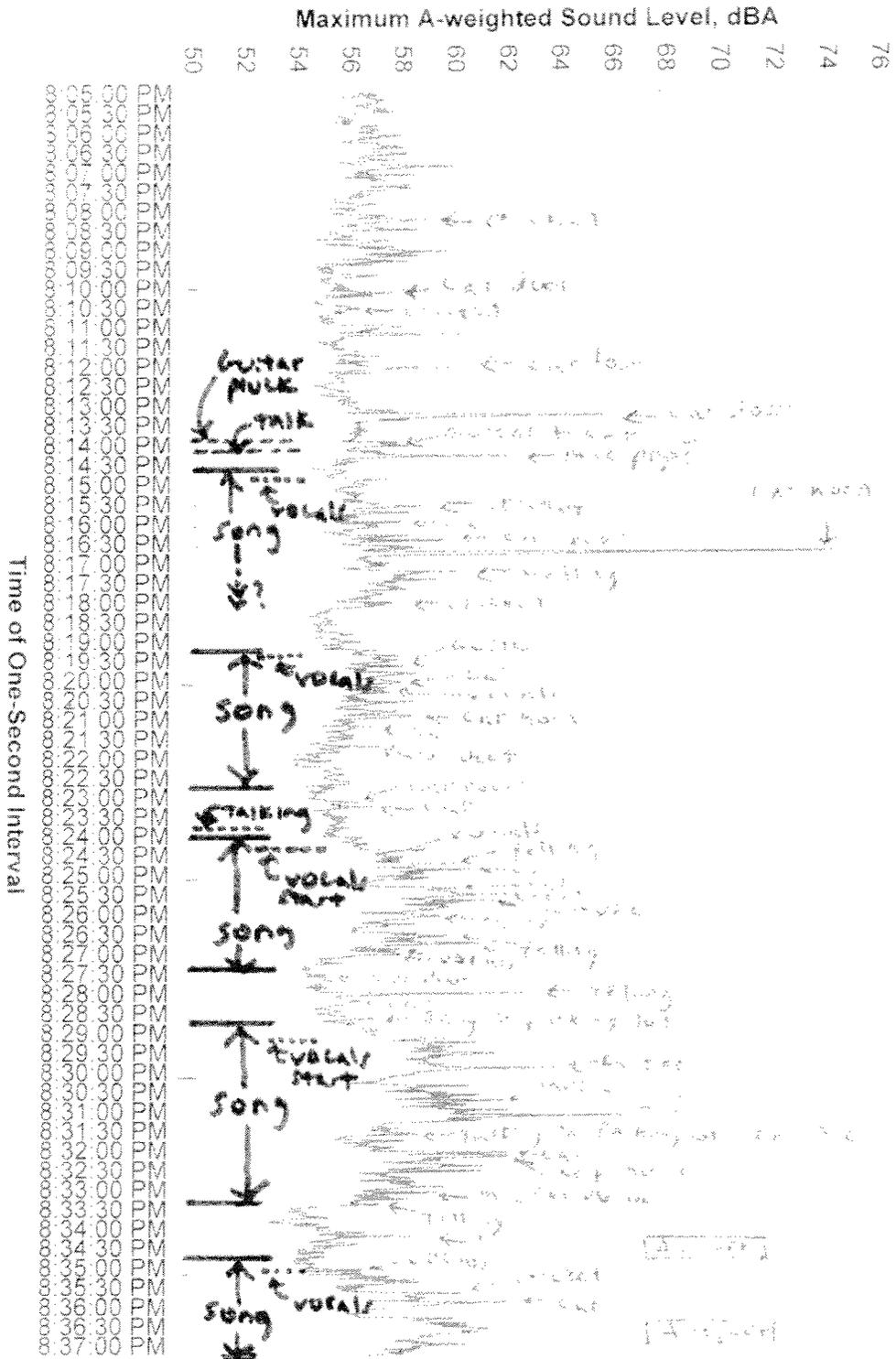


Figure 2. Graph of Measured Sound Levels

sound level reached 61 to 62 dB during 34 seconds when music was predominant, was 63 to 64 dB for 2 seconds when music was predominant, and was 65 to 67 dB during 3 seconds due to an un-noted noise.

It should also be noted that sound levels due to sound sources occurring simultaneously are logarithmically additive. For example, if the background sound level is equal to the sound level of the music, the total sound level is 3 dB greater than that due to either sound source alone. As another example, if the background sound level is 57 dB without music, and is 62 dB with music, by logarithmic subtraction it can be inferred that the music by itself would have produced a sound level of 60 dB. In other words, when the background sound level is within 5 dB of the total sound level, it can be inferred that the sound level of the non-background source is 2 dB less than the total sound level. For reference, the equation is  $L_{music} = 10 (\text{Log}_{10} (10^{(L_{total}/10)} - 10^{(L_{background})}))$ .

For the purposes of this report we are considering general crowd talking, crickets, and rooftop unit noise to be the “background” sound sources. Since the sound level between songs was in the range of 54 to 57 dB when there were no cars driving by or honking and the sound level during songs was generally 55 to 62 dB, it can be inferred that the music was producing a sound level of approximately 50 to 60 dB, with the possible exception of a couple of seconds when the sound level due to the music was closer to 63 dB.

In conclusion, other than a couple of seconds during the 32-minute survey, the sound level attributable to the music was 60 dB or lower and was in compliance with the Arlington County noise ordinance.

If you have any questions, please contact me at 703/534.2790 or [Gary@HushAcoustics.com](mailto:Gary@HushAcoustics.com).

Sincerely,



Gary Ehrlich, P.E.  
Principal

## SOUND MANAGEMENT PLAN FOR WESTOVER BEER GARDEN

Westover Market, with the assistance of Hush Acoustics LLC, has developed the following noise management plan for the Westover Beer Garden at 5863 Washington BLVD, Arlington, VA 22205.

From the prior tests summarized in a report dated October 6, 2011, it was inferred that the music was producing a sound level of approximately 50 to 60 dB, with the possible exception of a couple of seconds when the sound level due to the music was closer to 63 dB. **Aside from those very brief periods, the current music is in compliance with the Arlington County noise ordinance daytime A-weighted noise level limit of 60 dB.** Note that after 9pm the noise ordinance limit drops to 55 dB.

The Beer Garden is on a patio beside the Westover Market building. There are existing quilted mass-loaded vinyl curtains between the stage and parking lot. However, it was noted that the curtains currently approximately one foot from the building to accommodate a roughly two-foot tall brick sill.

In order to further reduce noise levels during the day, and limit the possibility of noise violations at night, some strategies to be implemented are as follows.

1. Upgrade the Westover Market-owned sound system to allow for 100% of amplified sound to go through Westover Market-owned speakers and a compression limiter. This would require purchasing stage monitor speakers, a mixing board with enough input channels, and adding a compression limiter. The compression limiter is an electronic device which can be set by the Westover Market once to produce a certain maximum sound level at the property line, and after that time it would automatically reduce the total input signals coming into the mixing board a fraction of a second after it predicts excessive sound levels. In this way, the sound system could not produce sound levels in excess of the set threshold, other than for fractions of seconds as the system draws down the sound level. An indicator light on the front panel of the device shows moments in time when the device is actively limiting excessive input signals.
2. Use noise barriers to more fully enclose the stage area as follows:
  - a. Add more mass-loaded vinyl curtains to tie into the Westover Market building such that there are no gaps at the building or between the proposed and existing curtains.

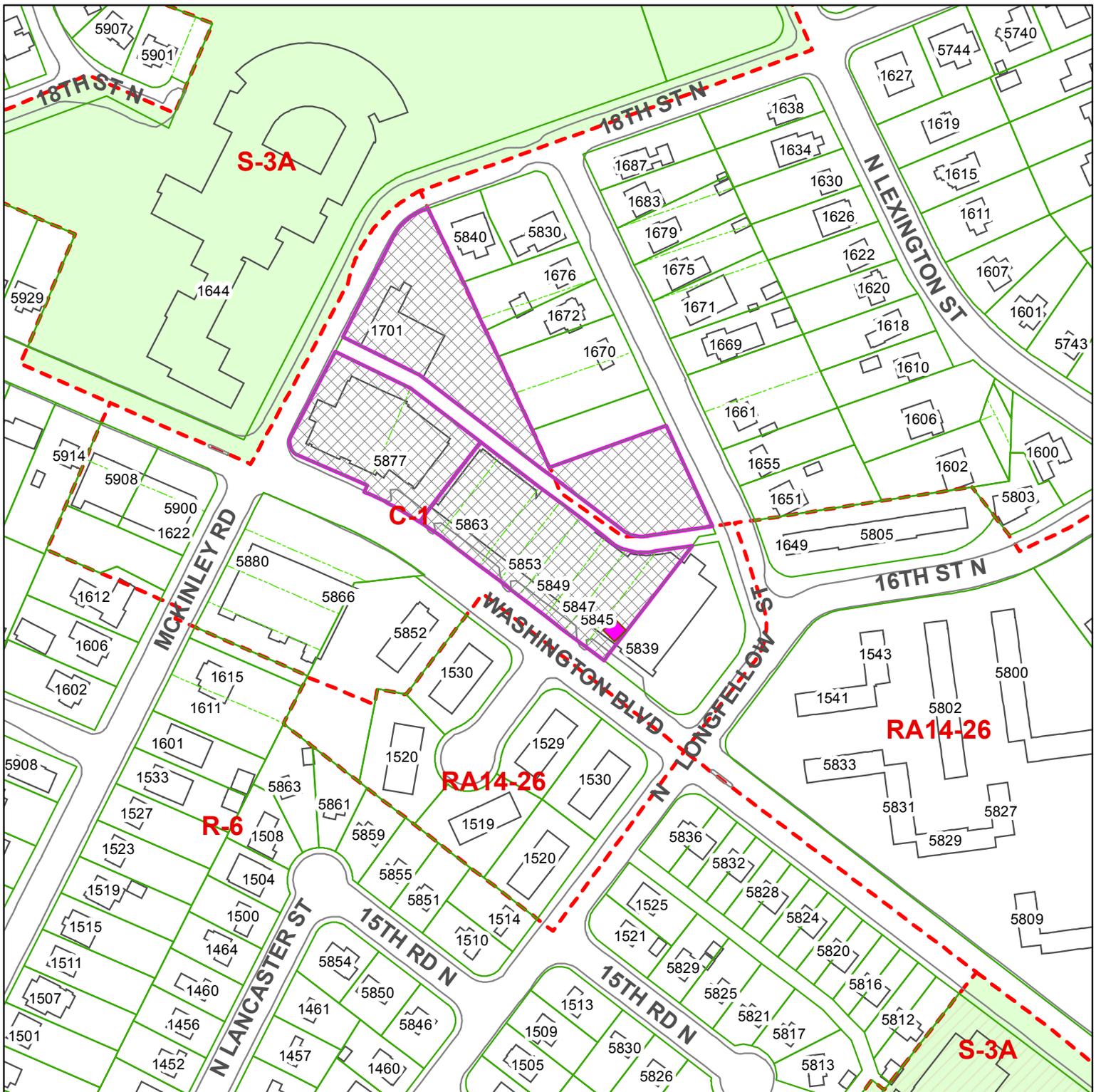
We do not recommend using a permanent noise monitor at the property line, with an Internet connection. The problem with this idea is that background sounds not associated with the music are often louder than the music. So, if one were to look at the sound level reported by the noise monitor, they would have a mistaken idea of how loud the music is. Instead, in order to manage noise emissions in the future, we recommend having an acoustical engineer and/or Arlington County inspectors measure noise levels in-person for approximately 30 minutes per occasion using the following schedule:

**Once during the first week of performances**

**Once during the second month of performances**

**Once during the third quarter of performances**

If you have any questions, comments, or concerns, please contact either Gary Ehrlich at [703-534-2790](tel:703-534-2790) / [Gary@HushAcoustics.com](mailto:Gary@HushAcoustics.com) or Devin Hicks at [703-881-2718](tel:703-881-2718) / [westovermarket@hotmail.com](mailto:westovermarket@hotmail.com) .



**U-3297-11-1**

**5841, 5853, and 5877 N. Washington Boulevard**

**RPC: 10-027-012 & -013**



 Case Location(s)  
 Scale: 1:2,000

Note: These maps are for property location assistance only. They may not represent the latest survey and other information.