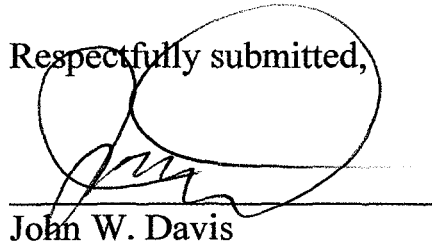


**IN THE DISTRICT OF COLUMBIA
DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS
OFFICE OF THE ZONING ADMINISTRATOR**

In the Matter of Jewish Primary Day :
School, :
Applicant. :
: **BZA Application No.: 18400**

**OPPOSITION OF DR. FRANCES CRESS WELSING TO THE
APPLICATION FOR A SPECIAL EXCEPTION AND ZONING
VARIATION**

Respectfully submitted,



John W. Davis
1629 K Street, NW, Suite 300
Washington, DC 20006
202-408-1952
202-403-3495 (facsimile)

Attorney for Dr. Frances Cress Welsing

**BOARD OF ZONING ADJUSTMENT
District of Columbia**

CASE NO. 18400

EXHIBIT NO. 44

RECEIVED
D.C. OFFICE OF ZONING
2013 JUL -7 PM 2:13

**IN THE DISTRICT OF COLUMBIA
DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS
OFFICE OF THE ZONING ADMINISTRATOR**

In the Matter of Jewish Primary Day School, Applicant.

**STATEMENT OF REASONS AND AUTHORITIES IN OPPOSITION
TO THE APPLICATION FOR A SPECIAL EXCEPTION AND
ZONING VARIANCE OF THE JEWISH PRIMARY DAY SCHOOL**

This statement of Reasons and Authorities in opposition to the application of the Jewish Primary Day School is submitted on behalf of Dr. Frances Cress Welsing by her counsel, John W. Davis

I. NATURE OF RELIEF SOUGHT

The Jewish Primary Day School has made application for a special exception and zoning variance to increase the existing caps on the maximum number of students, faculty and staff , and additional variance relief from the parking requirements for the premises of the Jewish Primary Day School's main campus located at 6045 16th Street, NW, Zoning District R-1-B/R-5-A (Lots 825 and 831, Square 2726).

II. OPPOSITION TO THE SPECIAL EXCEPTION/VARIANCE

A. HISTORICAL BACKGROUND

In April 2007, the Jewish Primary Day School applied for zoning relief to the Board of Zoning Adjustment in Application No. 17700. In that case, the application by the JPDS sought zoning relief in order to construct a playground, increase the number of students, and add spaces to the school's parking lot. The variance also sought to increase the number of faculty and staff at the school. The playground was to be constructed on the property which the JPDS had just purchased. That property is directly adjacent to the north property line of Dr. Frances Cress Welsing, the party opponent in this zoning application.

B. Factual Background/ 2007 Zoning Application of JPDS

The facts regarding what happened to Zoning Application 17700 are pretty much undisputed, and are set forth below in individual paragraphs. The JPDS application for zoning relief asked for permission to raze the house next door to Dr. Welsing, in order to create the space on which to build the playground.

1. As part of the application process, the JPDS had to give notice to all of the affected property owners in the area of the JPDS zoning application, and the particulars of the application.
2. Dr. Welsing was one of the affected property owners, as the playground would be built next door to her home.
3. Dr. Welsing attended several meetings convened by the JPDS, and at those meetings, Dr. Welsing expressed her only concern: that the proposed playground might create noise that would interfere with her peace and quiet.
4. At no time did Dr. Welsing ever oppose the playground; she only asked that it be constructed in a manner that would protect her from the noise emanating from the playground.
5. The D.C. Board of Zoning Adjustment (“BZA”) convened a hearing in order to determine whether to give the JPDS permission to build the playground and increase its student enrollment.
6. Dr. Welsing attended the hearings and expressed to the BZA her only concern: that the noise from the playground might interfere with her use and enjoyment of her home.
7. In her meetings with the JPDS, and in the hearings convened by the BZA, Dr. Welsing asked that the JPDS protect her from the noise by building a wall between the proposed playground and her property.
8. The JPDS insisted that building a wall was unnecessary, because there was already a natural barrier between Dr. Welsing’s property and the proposed playground.

9. The natural barrier proposed by the JPDS consisted of a row of mature, 40 feet tall evergreen trees, which grew along the property line between Dr. Welsing's property and the house next door.
10. Exhibits 1 and 2 are aerial photographs taken of the 6000 block of 16th Street Northwest in 2007. Dr. Welsing's home is almost totally obscured by the mature, 40 feet tall evergreens.
11. Exhibits 3 and 4 are photographs taken at the street level from the 16th Street side, showing the location of the mature 40 feet tall evergreens, and the manner in which they obscure Dr. Welsing's home from view.
12. The JPDS insisted that the huge evergreens along Dr. Welsing's north property line would form both a sight and sound barrier, but that the JPDS would build additional trees as an additional buffer to protect Dr. Welsing.
13. Dr. Welsing was still skeptical about the trees being sufficient as a sound barrier, but the BZA nevertheless granted permission to the JPDS to build the playground.
14. Throughout the hearing process, one of the biggest concerns among BZA board members was how the noise would affect the neighbors of JPDS. (Exhibit 12 is an excerpt of the Hearing Transcript of the January 15, 2008, BZA Hearing. Note: colloquy is between Chairperson Miller and Vice-Chair Loud).
15. The BZA granted the relief to the JPDS but the BZA also explicitly stated the importance of "continued dialogue of good faith" to address the noise issue. (Exhibit 13, pp. 61-62, January 15, 2008, BZA Hearing Transcripts).

16. Instead of adding more trees, the JPDS uprooted and removed all of the mature evergreen trees. These trees, over forty feet in height, provided a visual and aural buffer between the proposed lawn and Dr. Welsing's property. (See Exhibits 1-4)
17. Now, with the mature trees removed, Dr. Welsing is fully exposed to all of the sounds of the playground built by the JPDS.
18. Exhibits 5,6 and 7 are pictures of the new trees planted by the JPDS, and the pictures show clearly how exposed Dr. Welsing's home and yard are to the noise and projectiles emanating from the playground.
19. JPDS neither notified Dr. Welsing nor consulted with her regarding removing the mature trees. The new trees that were planted are so small that they do not fulfill the role as a buffer to the noise generated by the children on the open lawn.
20. When Dr. Welsing realized that the trees were being knocked down, she notified the JPDS. The only response Dr. Welsing received from the JPDS was that the trees were not supposed to be knocked down, but now that it had happened, there was nothing that could be done.
21. Dr. Welsing made several other attempts to persuade the JPDS to address the issue of the trees being removed, to no avail.
22. Eventually, Dr. Welsing retained counsel to help with the situation, but that tactic also proved fruitless.
23. The JPDS did plant several new trees along the property line between the playground and Dr. Welsing's fence. These trees, however, were too small and immature, and were planted at least ten feet apart. Because the mature, 40-foot high trees were

removed, there is neither a sound nor visual barrier between Dr. Welsing's home and the playground. (See Exhibits 5-7).

24. Once the playground was completed in 2010, Dr. Welsing found that the noise from the playground was worse than she had anticipated, because there is no barrier or sound buffer between her property and the playground.
25. The sound from the playground is amplified by the very construction of the playground itself. The JPDS proposal submitted to the BZA showed the playground as being a lawn. However, the playground is actually constructed as a concrete slab of at least six inches in diameter, with an artificial turf skin on top of the concrete slab.
26. Exhibits 8 and 9 are photographs taken from ground level showing the composition of the playground as a concrete slab over which is placed artificial turf.
27. In April 2011, Dr. Welsing retained Henning and Associates, an engineering firm which specializes in acoustics, to conduct a noise study in her home and yard.
28. The results of the engineering study revealed that the noise levels emanating from the JPDS playground were at more than twice the decibel level allowed under District of Columbia law.
29. The Henning Associates report is attached as Exhibit 14.
30. In May 2011, when it was clear that the noise from the playground was causing problems with her health, Dr. Welsing filed a complaint with the D.C. Office of Zoning, alleging that the JPDS had failed and refused to comply with the BZA orders.

31. In approximately August 2011, staff members from the D.C. Office of Zoning visited Dr. Welsing's home to investigate her complaint. On the day the Office of Zoning conducted their visit, however, the JPDS was not holding classes, and thus, there were no children on the playground.
32. On September 26, 2011, the D.C. Office of Zoning released its report of investigation in a letter form. In the letter, the Office of Zoning found that the JPDS was in violation of the BZA orders with respect to the playground noise and the children playing on the buffer zone, which did not extend fifteen feet from the property line. Instead, the investigation showed that at the area where the playground is nearest to Dr. Welsing's home, the playground extends right up to the property line, only a few feet away.
33. Exhibit 15 is the Compliance Review Report of Office of Zoning.
34. The D.C. Office of Zoning has no enforcement power, so in September 2011, the Office of Zoning referred the matter to the Department of Consumer and Regulatory Affairs because DCRA is responsible for enforcement of zoning violations.
35. Between September 2011 and August 2012, Dr. Welsing and her counsel heard nothing from the D.C. Office of Zoning nor from DCRA with respect to any efforts being made to resolve the issue of the noise from the JPDS playground, even though Dr. Welsing's counsel wrote several letters to the DCRA Zoning Administrator.
36. Meanwhile, in May 2011, JPDS applied to the Office of Zoning for additional relief, to increase the enrollment at the main campus in

the 6000 block of 16th Street, in upper northwest. That application is the instant application, which Dr. Welsing herein opposes.

37. The JPDS also announced that they had purchased the property and house immediately adjacent to Dr. Welsing's south property line, and released plans to use that building as an office facility for the JPDS.

38. As a result of this most recent acquisition by the JPDS, Dr. Welsing's home is the only remaining residential dwelling in the 6000 block of 16th Street, NW, and is the only property in the block not owned by the JPDS.

39. In July 2012, frustrated with the fact that the D.C. government would not respond to her letters, Dr. Welsing filed suit in Superior Court against the JPDS.

40. In August 2012, Dr. Welsing applied for party status before the Board of Zoning Adjustment, in order to insure that the BZA would understand clearly her objections to the noise coming from the JPDS playground, and the adverse effect the noise was having on her health.

41. On September 25, at the BZA initial hearing on the JPDS application for zoning relief, Dr. Welsing was granted party status.

42. During the hearing, Dr. Welsing raised the issue that she had filed a complaint with the D.C. Office of Zoning and that the Office of Zoning had found that the JPDS was not in compliance with respect to the noise coming from the playground, and the issue of the JPDS failure to keep a fifteen feet buffer zone between the playground and Dr. Welsing's property line.

43. Attorneys for the JPDS who were at the BZA meeting then informed the BZA that the DCRA had issued a decision on Dr. Welsing's complaint, and that the DCRA had found that the JPDS was in compliance with the zoning order issued by the BZA.
44. Although the attorneys from the JPDS represented that there had been a finding of compliance by the DCRA, they could furnish no written proof of such finding.
45. Several weeks after the BZA September meeting, Dr. Welsing and her counsel received copies of the letters issued by the DCRA.
46. The first DCRA letter was addressed to the same JPDS attorneys who were at the BZA meeting. The letter was dated September 14, 2012, two weeks before the BZA hearing at which the attorneys from the JPDS represented that there had been a decision issued by the DCRA, but they did not have evidence of the decision at the time. Exhibit 16 is the September 14 letter to the JPDS from the Office of the Zoning Administrator.
47. The letter from the DCRA to the JPDS attorneys had allegedly been sent by email to the JPDS attorneys on September 14, 2012.
48. The letter to Dr. Welsing and her counsel was dated October 12, 2012, more than a year after the matter had been referred to DCRA for enforcement, and almost 18 months after Dr. Welsing had initially filed her complaint. That letter is at Exhibit 17.
49. The letter from the DCRA to the JPDS attorneys referenced an investigation by the DCRA, but the investigation consisted entirely of a meeting between the DCRA and the JPDS attorneys. There is no evidence that the DCRA ever visited the site of the playground, nor took any notice of the noise from the playground.

III. ZONING RELIEF CANNOT BE GRANTED WITHOUT CAUSING IRREPARABLE HARM TO DR. WELSING

A. Dr. Welsing's Only Issue Has Been Noise

Dr. Frances Cress Welsing has lived in her home in the 6000 block of 16th Street NW for more than forty years. From the inception of the announcement that the JPDS was going to build a playground next door to her home, Dr. Welsing has stated her concern about the noise that would emanate from the playground. Dr. Welsing has made her concerns known to the JPDS, to the BZA, and to the Zoning Administrator.

The Jewish Primary Day School assured Dr. Welsing and the BZA that the mature trees then standing on the border between Dr. Welsing's home and the property next door would suffice as a natural sight and sound barrier. (See Exhibit 18, Transcript of Hearing, December 18, 2007, pp. 174-178). The JPDS not only promised to leave the mature evergreen trees in place, but to also plant additional trees and shrubs, to provide even more of a buffer between the playground and Dr. Welsing's property.

In 2008, the JPDS razed the house next door to Dr. Welsing, and began construction of the playground. Almost immediately, the JPDS knocked down the mature evergreens bordering Dr. Welsing's property line. Subsequently, the JPDS finished their playground.

B. The Noise Has Adversely Affected Dr. Welsing's Health

From its inception, the noise from the JPDS playground has caused problems for Dr. Welsing. Just as she had brought the issue of the destroyed mature evergreens to the attention of the JPDS, Dr. Welsing brought the matters of the playground noise to the attention of the JPDS. None of the efforts made by Dr. Welsing to communicate her problems to the JPDS has resulted in any relief for Dr. Welsing.

The noise created by the JPDS playground has made it impossible for Dr. Welsing to have any peace and quiet in her own home during the middle hours of each weekday. In 2011, Dr. Welsing commissioned a noise level study. The study, conducted by an engineering firm called Henning and Associates, concluded that the noise level coming into Dr. Welsing's home and property was twice the legal level of noise allowed in the District of Columbia.

The noise level from the JPDS playground, and the stress associated with dealing with the noise level, has adversely affected Dr. Welsing's health. Dr. Welsing's physicians have noted an increase in her blood pressure, atrial fibrillation, and a marked increase in her anxiety levels as clear indicators that her health is suffering as a result of the noise pollution invading her property. Dr. Welsing has also been diagnosed with Post

Traumatic Stress Disorder. Exhibit 19 is a letter from Dr. Welsing's personal physician, Dr. Vernon C. Smith. Dr. Smith states that he has been treating Dr. Welsing since October 2010 for PTSD, atrial fibrillation and hypertension. Dr. Smith also states that the conditions for which he is treating Dr. Welsing make her a prime candidate for a heart attack or stroke.

Exhibit 19 is an internet article, with bibliographical references, on the adverse effects of noise on health.

These medical conditions of Dr. Welsing qualify as disabilities under the Americans with Disabilities Act and the District of Columbia Human Rights Act. Dr. Welsing faces irreparable harm if something is not done to protect her from the noise to which she is subjected on a daily basis. Dr. Welsing's home is virtually unusable during the core hours of the day. In addition, Dr. Welsing's back yard has been bombarded by numerous soccer balls, dodge balls, footballs, even a baseball bat. All of which has further exacerbated the situation.

C. The Americans with Disabilities Acts Applies to Zoning

Title II of the Americans with Disabilities Act provides that no qualified individual "with a disability shall, by reason of such disability, be excluded from participation in or be denied the services, programs, or activities of a public entity, or be subjected to discrimination by any such

entity.” 42 U.S.C. § 12132. Public entities includes cities, counties and towns. 42 U.S.C. § 12132(A). It is a matter of settled law that zoning is a public program or service within the meaning of the Americans with Disabilities Act, and the enforcement of zoning ordinances constitutes activity of a public entity within the meaning of the ADA. A Helping Hand v. Baltimore County, 515 F.3d 356 (4th Cir. 2008); New Directions Treatment Service v. City of Reading, 490 F.3d 293 (3rd Cir. 2007); Tsombanidis v. West Haven Fire Dept., 352 F.3d 565, 574 (2d 2003); Larkin v. Michigan Dept. of Social Servs., 89 F.3d 285 (6th Cir. 1996).

D. The ADA Applies to This Zoning Situation

Dr. Welsing’s medical conditions qualify her as disabled, within the meaning of the Americans with Disabilities Act. Atrial fibrillation, especially coupled with hypertension, is a serious and potentially life threatening disease. See, Hodgens v. General Dynamics Corp., 144 F.3d 151, 157 (1st Cir. 1998). Accordingly, Dr. Welsing is entitled to a reasonable accommodation by the Board of Zoning Adjustment and the Jewish Primary Day School. See Dadian v. Village of Wilmette, 269 F.3d 831 (7th Cir. 2001).

The noise from the playground at the Jewish Primary Day School has not only interfered with Dr. Welsing's use and enjoyment of her property, but it has had a seriously negative impact on her health.

E. Dr. Welsing's Requested Accommodation Is a Wall

Dr. Welsing first met with representatives of the Jewish Primary Day School regarding their proposed playground in 2007. At no time did Dr. Welsing ever say that she was opposed to the playground. All she ever stated was that she had a concern that the noise from the playground would interfere with the use and enjoyment of her home. At those very first meetings, and in every meeting thereafter, including the meetings of the BZA, Dr. Welsing requested that a wall be built between her property and the playground.

As discussed earlier, the BZA expressed concerns over Dr. Welsing's problems with the potential noise emanating from the playground. Eventually, the JPDS sold the BZA on the idea of not building a wall, on the theory that the mature, 40 feet tall trees bordering Dr. Welsing's north property line would be a sufficient aural and visual barrier to protect Dr. Welsing from the playground noise. The JPDS also agreed to supplement the trees already in existence, and to provide some sound buffering materials

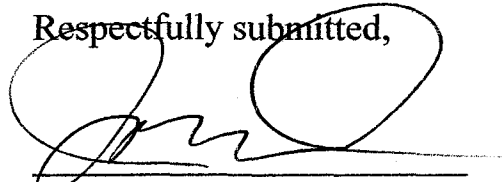
along the wood fence running between the properties. Again, these things were agreed to in addition to maintaining the mature trees.

Thus, the BZA did not order the JPDS to build a wall between the properties, but the BZA did make a final admonition to the parties: if the trees did not suffice as a noise and visual barrier, the parties were to attempt to work things out, and find some form of reasonable accommodation for Dr. Welsing. (See Exh. 13). As has been repeated *ad infinitum*, the trees never had a chance to work, because the trees were destroyed before construction began on the playground. No wall was built, and no soundproofing materials were added to the fence between the properties. The parties have been told by the BZA to attempt to mediate the matter, but at this point, given the state of Dr. Welsing's health, anything but a wall will be too little, too late.

CONCLUSION

The Jewish Primary Day School should not be granted any of the zoning relief requested in Application Number 18400 until such time as it builds a wall between its current playground and Dr. Welsing's property. The JPDS has at all times been aware that the playground was not built in a manner to protect Dr. Welsing from the playground noise. Application Number 18400 should be denied in its entirety.

Respectfully submitted,



John W. Davis

1629 K Street, NW, Suite 300

Washington, DC 20006

202-408-1952

202-403-3495 (facsimile)

Attorney for Dr. Frances Cress Welsing

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Opposition to BZA Application

18400 was sent by first class mail, postage prepaid , to the following:

Christine Roddy, Esq.

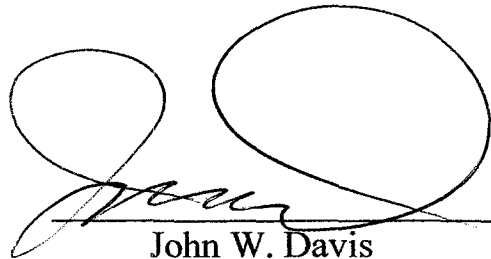
Goulston & Storrs

1999 K Street, NW

Suite 500

Washington, DC 20006-1101

Dated: January 4, 2012



John W. Davis

**IN THE DISTRICT OF COLUMBIA
DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS
OFFICE OF THE ZONING ADMINISTRATOR**

In the Matter of Jewish Primary Day School, Applicant.

: BZA Application No.: 18400

**TABLE OF EXHIBITS TO OPPOSITION OF DR. FRANCES CRESS
WELSGING TO THE APPLICATION FOR ZONING VARIANCE**

<u>EXHIBIT NUMBER</u>	<u>DESCRIPTION</u>
1.	Aerial view of 6000 block 16 th Street NW in 2007 showing mature trees
2.	Aerial view of 6000 block 16 th Street NW in 2007 (close up view)
3.	View of Welsing residence and trees and site of proposed playground
4.	View of Welsing residence and trees, another angle
5.	Current view (2012) of Welsing residence and JPDS playground
6.	Same view as Ex. 5, showing distance between new trees planted by JPDS
7.	View of JPDS playground showing Welsing residence and new trees
8.	View of JPDS playground foundation showing concrete under astroturf
9.	Another view of JPDS playground foundation showing concrete slab
10.	View of JPDS playgroud showing bleachers which were not on plan
11.	Another view of JPDS playground showing bleachers
12.	Transcript, BZA Hearing, Jan. 15, 2008 (pp. 11-15)
13.	Transcript, BZA Hearing, Jan. 15, 2008 (pp. 61-62)
14.	Henning Associates Noise Study Report, April 14, 2011
15.	Office of Zoning Compliance Review Report, Sept. 26, 2011
16.	Letter, Office of Zoning Administrator to JPDS, Sept. 14, 2012
17.	Letter, Ofc. Zoning Adm. To Dr. Welsing, Oct. 12, 2012
18.	Transcript, BZA Hearing, Dec. 18, 2007 (pp. 174-178)
19.	Medical Statement from Dr. Vernon C. Smith, M.D., Sept. 24, 2012
20.	Wikipedia Article on Health Effects from Noise, with Bibliography

1

Exhibit 1



Aerial View of:

A: JPDS

B: Welsing Residence

C: Mature Trees in Existence at the time of JDPS Application

D: Future Location of JPDS Playground before Construction

2

Exhibit 2



Aerial View of:

A: JPDS

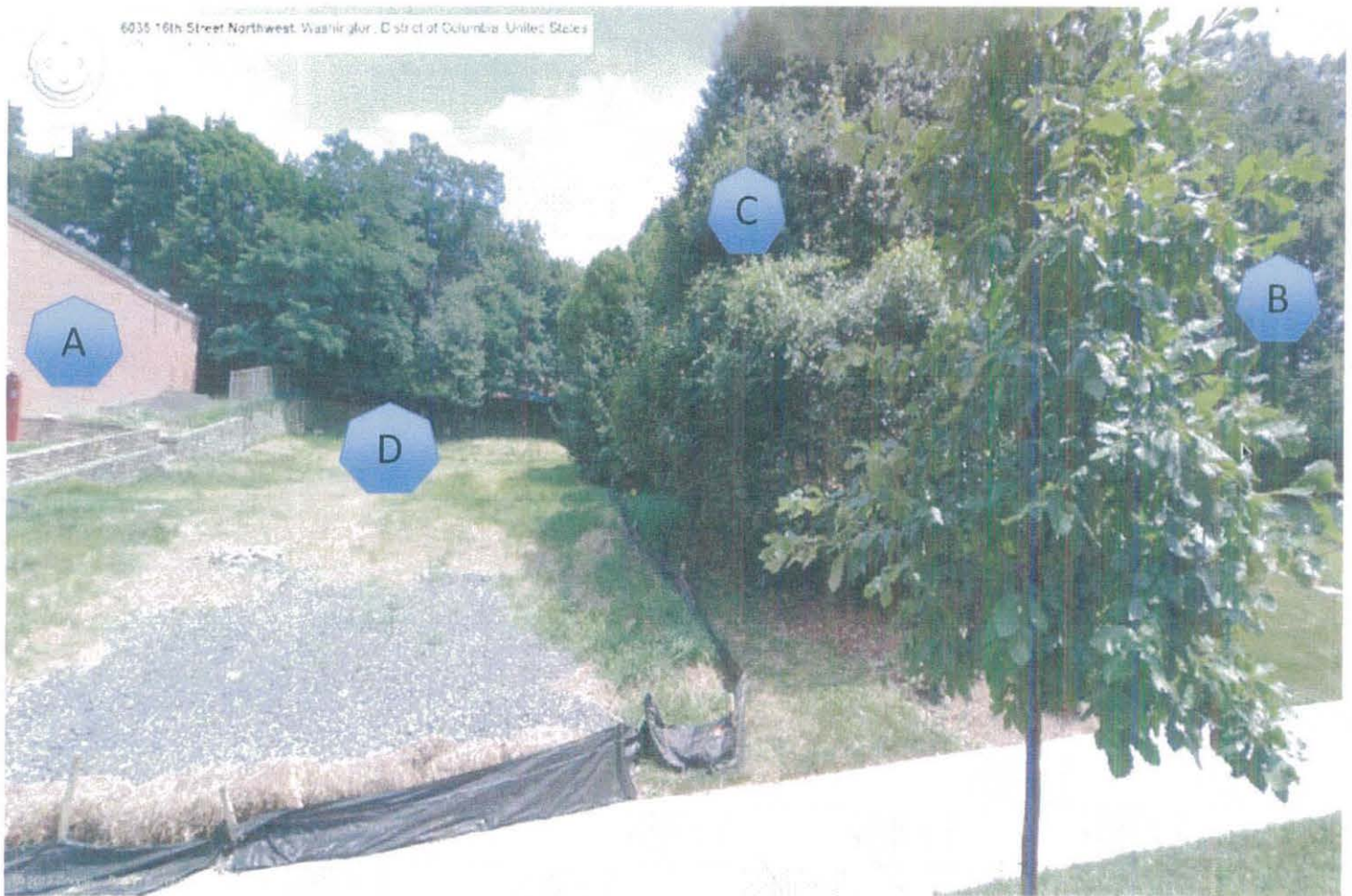
B: Welsing Residence

C: Mature Trees in Existence at the time of JDPS Application

D: Future Location of JPDS Playground before Construction

3

Exhibit 3



Ground View of:

A: JPDS

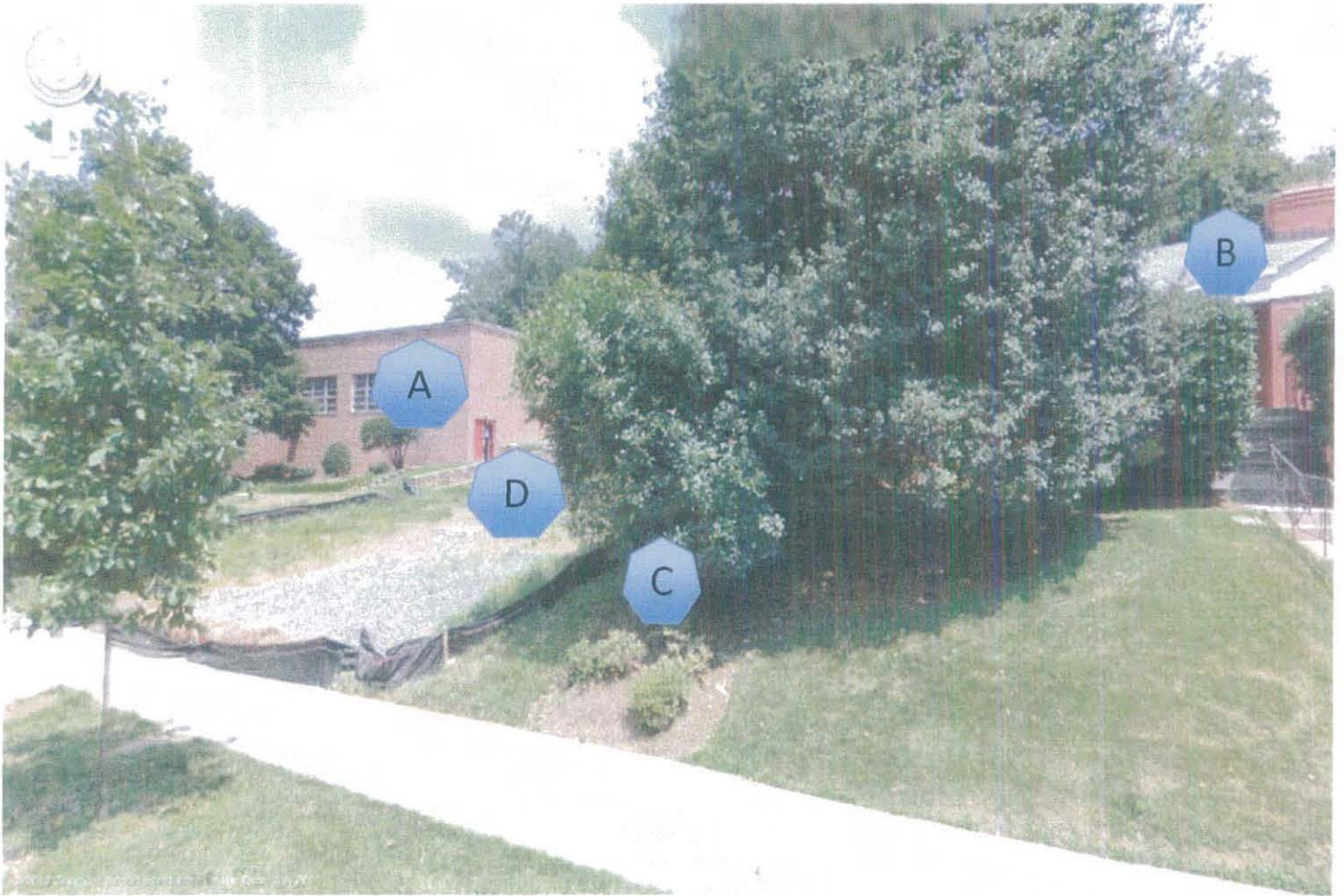
B: Welsing Residence

C: Mature Trees in Existence at the time of JDPS Application

D: Future Location of JPDS Playground During Construction

4

Exhibit 4



Ground View of:

A: JPDS

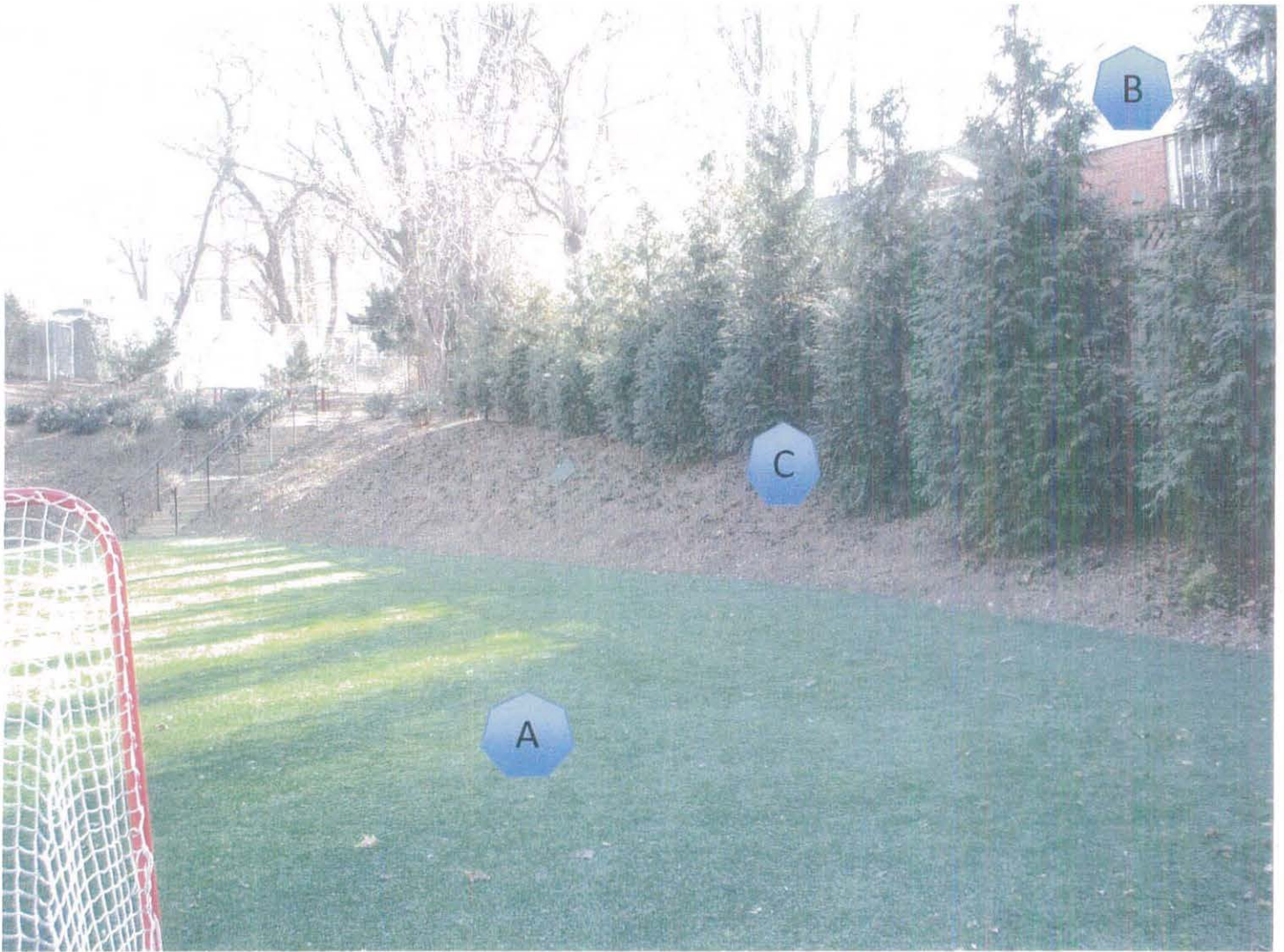
B: Welsing Residence

C: Mature Trees in Existence at the time of JDPS Application

D: Future Location of JPDS Playground During Construction

5

Exhibit 5



Current View of:

A: JPDS Playground

B: Welsing Residence

C: Young Trees Planted by JPDS

6

Exhibit 6



Current View of:

A: JPDS Playground

B: Welsing Residence

C: Young Trees Planted by JPDS

7

Exhibit 7



Current View of:

A: JDPS Playground

B: Welsing Residence

C: Young Trees Planted by JPDS

8

Exhibit 8



Current View of:

A: JPDS Playground's Artificial Turf

B: Slab of Concrete

9

Exhibit 9



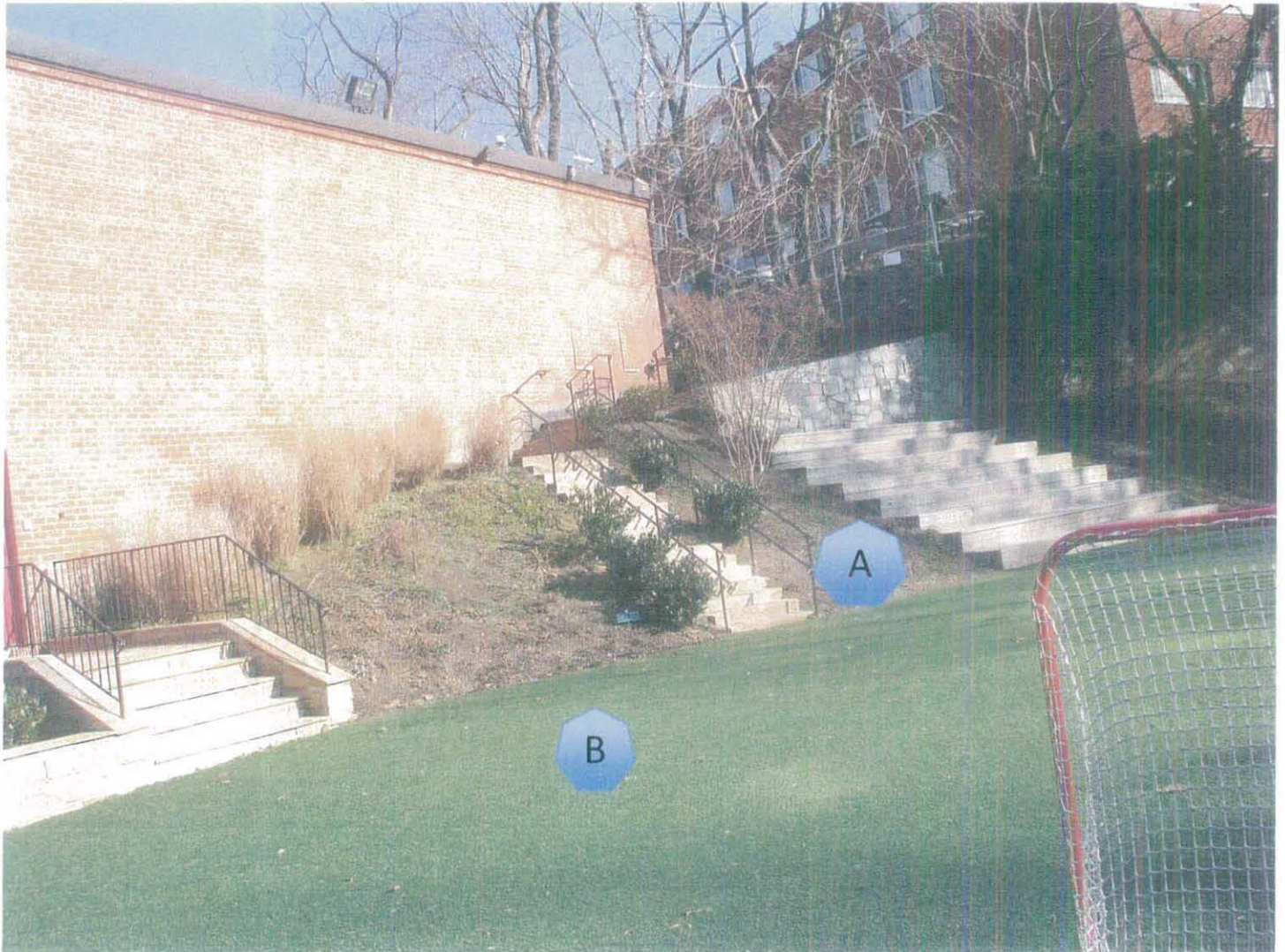
Current View of:

A: JPDS Playground's Artificial Turf

B: Slab of Concrete

10

Exhibit 10



Current View of:
A: Bleachers
B: JPDS Playground

11

Exhibit 11



Current View of:

A: Bleachers

B: JPDS Playground

12

GOVERNMENT
OF
THE DISTRICT OF COLUMBIA

+ + + + +

BOARD OF ZONING ADJUSTMENT

+ + + + +

SPECIAL PUBLIC MEETING

+ + + + +

TUESDAY

JANUARY 15, 2008

+ + + + +

The Special Public Meeting
convened in Room 220 South, 441 4th Street,
N.W., Washington, D.C. 20001, pursuant to
notice at 9:30 a.m., Ruthanne G. Miller,
Chairperson, presiding.

BOARD OF ZONING ADJUSTMENT MEMBERS PRESENT:

RUTHANNE G. MILLER, Chairperson
MARC D. LOUD, Vice Chairman
SHANE L. DETTMAN, Board Member (NCPC)

ZONING COMMISSION MEMBER PRESENT:

MICHAEL G. TURNBULL, FAIA, Commissioner
(OAC)

OFFICE OF ZONING STAFF PRESENT:

CLIFFORD MOY, Secretary
BEVERLEY BAILEY, Sr. Zoning Specialist
JOHN NYARKU, Zoning Specialist

D.C. OFFICE OF THE ATTORNEY GENERAL PRESENT:

LORI MONROE, ESQ.

The transcript constitutes the minutes
from the Public Meeting held on January 15,
2008.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

<u>AGENDA ITEM</u>	<u>PAGE</u>
<u>CALL TO ORDER:</u>	
Ruthanne Miller	4
<u>JEWISH PRIMARY DAY SCHOOL OF THE NATION'S</u>	
<u>CAPITAL, INC.</u>	
<u>APPLICATION NO. 17700</u>	5
<u>Vote to approve</u>	64
<u>FIFTH STREET, LLC</u>	
<u>APPLICATION NO. 17757</u>	65
<u>Rescheduled</u>	84
<u>ADJOURN</u> - Ruthanne Miller	85

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 conditions set forth in 206.2.

2 I don't recall any testimony that
3 there was concern per se with respect to the
4 increase in the number of students or faculty
5 in this case. The previous school did have
6 more students. I don't really think that was
7 an issue. Increase in faculty and staff did
8 trigger the parking variance which we will get
9 to later.

10 The big issue I recall really in
11 this case goes to the noise that might impact
12 Dr. Welsing who is an adjacent neighbor. We
13 spent a lot of time considering that because
14 the new play area that is being designated is
15 adjacent to her property. The applicant did
16 put forth some conditions to try to alleviate
17 noise impacts. We discussed those at the
18 hearing and then we also had post-hearing
19 submissions on that.

20 I think that particular aspect
21 really doesn't go to certainly granting a
22 special exception for the increase in the

4

1 students and faculty. They are fairly
2 unrelated.

3 The school has been operating
4 there for a while, I think since 2003, so
5 there is really no history showing that there
6 are adverse impacts from the number of
7 students there now or the increase.

8 I think we might leave this noise
9 issue to when we get to discuss conditions
10 perhaps because I think that is a concern and
11 that is something that we would want to
12 consider conditions to address. Not
13 necessarily would we deny this application
14 because of the noise.

15 VICE CHAIRMAN LOUD: Let me say
16 very broadly that I agree with you, Madam
17 Chair, in terms of addressing the noise issue
18 specifically and the conditions. At the same
19 time, in order to even get to conditions we
20 first have to have some sort of sense that the
21 applicant has met the requirements of Section
22 206.2, I believe.

5

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 I had tremendous concerns with the
2 noise issue. I didn't see any issues with
3 respect to the parking or the traffic
4 management, those kinds of issues, but just
5 looking at the record, looking at the location
6 of the play field, the number of students that
7 would be on the play field at any given time,
8 the hour spread that those young people would
9 be on the play field in the proximity to the
10 home of one of the witnesses that testified,
11 Dr. Welsing, was not a foregone conclusion for
12 me that relief should be granted.

13 I really had to struggle with the
14 issue of whether or not the noise level was
15 such that relief could not be granted under
16 206.2. Notwithstanding, I think I have
17 resolved that issue in a way that would
18 support granting of the application.

19 By the way, I think it was a great
20 application. I think good work is being done.
21 I really do commend the applicant on the
22 outreach to the ANCs and the civic

6

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1 associations. The traffic study was great as
2 well.

3 I just want to say that by way of
4 saying it wasn't a shoe-in for me that the
5 application was entitled to relief. Let's
6 figure out what the conditions are. I really
7 struggle with that idea of a noise level being
8 directly adjacent to the residence and there
9 being some almost lack of preparation by the
10 applicant to deal with that issue at the
11 initial hearing.

12 I think all of us probably spent
13 so much time on traffic management and the
14 study and the results of the study and the
15 different levels of service and all of that.
16 We certainly have had other cases where the
17 noise level, the noise abatement, warranted a
18 lot more testimony and studies and things like
19 that. Just with that caveat, I think I'm
20 ready to move on.

21 CHAIRPERSON MILLER: Okay. I was
22 really -- it's almost really a difference just

7

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1 in approach because 206.2 says the private
2 school shall be located so it is not likely to
3 become objectionable to adjoining and nearby
4 property because of noise, traffic, number of
5 students, or otherwise objectionable
6 conditions.

7 First, I think this school is
8 already located here so I guess I'm looking at
9 206.2 thinking, well, it's already located
10 here. I don't think there is really an issue
11 that it can continue. Then I'm looking at
12 number of students don't seem to be an issue.

13 Noise is an issue and that goes to
14 use of that area. Therefore, I think our
15 conditions will address use of that area, how
16 to address the noise and potential problems.
17 It really doesn't matter. It's just kind of
18 like how do we want to break this down for
19 analysis. I think we all agree that the
20 school can be here and have a number of
21 students and faculty but there have to be
22 certain conditions in order that it not be

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13

GOVERNMENT
OF
THE DISTRICT OF COLUMBIA

+ + + + +

BOARD OF ZONING ADJUSTMENT

+ + + + +

SPECIAL PUBLIC MEETING

+ + + + +

TUESDAY

JANUARY 15, 2008

+ + + + +

The Special Public Meeting
convened in Room 220 South, 441 4th Street,
N.W., Washington, D.C. 20001, pursuant to
notice at 9:30 a.m., Ruthanne G. Miller,
Chairperson, presiding.

BOARD OF ZONING ADJUSTMENT MEMBERS PRESENT:

RUTHANNE G. MILLER, Chairperson
MARC D. LOUD, Vice Chairman
SHANE L. DETTMAN, Board Member (NCPC)

ZONING COMMISSION MEMBER PRESENT:

MICHAEL G. TURNBULL, FAIA, Commissioner
(OAC)

OFFICE OF ZONING STAFF PRESENT:

CLIFFORD MOY, Secretary
BEVERLEY BAILEY, Sr. Zoning Specialist
JOHN NYARKU, Zoning Specialist

1 and the community upon request."

2 I did that so it could be
3 enforceable in some way and measurable. I
4 don't have any other conditions right now but
5 I believe there is the issue about should
6 there be more buffer between the properties
7 than the evergreens such as a wall as opposed
8 by Dr. Welsing.

9 VICE CHAIRMAN LOUD: I'll speak to
10 it very, very briefly. I hope very briefly.
11 I don't want to propose this as a condition
12 but give sort of the history of the case and
13 how the parties have worked in good faith
14 leading up to this point having negotiations
15 as recently as January 11 and serving the full
16 support of the ANC.

17 There is something that I think
18 Mr. Dettman noted earlier when we talked. Not
19 on record but in our meeting about the
20 applicant proposing to work in good faith to
21 provide some sound-absorbing materials on the
22 existing wood fence that on the south lot of

1 the property.

2 I would just encourage continued
3 dialogue on that in good faith at the
4 applicant's expense both the installation and
5 the maintenance of that site in a way that
6 site in a way that allows the gaps to be
7 filled that may or may not have been filled by
8 this hearing. I think that is an excellent
9 proposal and I would just hope the parties
10 move forward in continuing that dialogue.
11 Thank you, Madam Chair.

12 CHAIRPERSON MILLER: Thank you. I
13 would also like to pick up on that because the
14 applicant represented in its post-hearing
15 submission Exhibit No. 40 in our record at
16 page 3 that it would be "happy to work with
17 Dr. Welsing in looking into options for
18 providing sound-absorbing materials on the
19 existing fence.

20 Provided a reasonable agreement
21 can be negotiated, JPDS will pay for the
22 expenses associated with purchasing and

14

HENNING ASSOCIATES

*Henning Associates, Inc.
1688 East Gude Drive, Suite 302
Rockville, Maryland 20850*

CONSULTANTS
IN
ACOUSTICS
NOISE CONTROL
VIBRATION
AUDIOVISUAL DESIGN

WELSING RESIDENCE

WASHINGTON, DC

Measurement and Evaluation of Playground Noise Levels

**Gerald H. Henning
President**

April 14, 2011

Exhibit 74

Dr. Welsing resides at 6025 16th Street, NW, in Washington, District of Columbia. Adjacent to her residence is the playground of the Kay & Robert Schattner Center located at 6045 16th Street. The noise levels generated by children on the playground disturb her peaceful use and enjoyment of her screened back porch and backyard. Consequently, on March 8, 2011 an acoustical survey was conducted at Dr. Welsing's residence. Noise levels generated by activities on the playground were measured on her screened back porch and in her backyard. Summarized herein are the survey results and evaluations of the noise levels measured in terms of the District of Columbia noise code.

CRITERIA

Under the DC noise code described in Chapters 27, 28 and 29 of the District of Columbia Municipal Regulations, in general, no person shall cause or permit noise levels that exceed 60 dBA during the daytime and 55 dBA during the nighttime in a residential zone at the property line of the source. Daytime is defined as the hours from 7:00 a.m. to 9:00 p.m., and nighttime is defined as the hours from 9:00 p.m. to 7:00 a.m.

The A-weighted decibel (dBA) is a logarithmic unit of sound which simulates human hearing by rolling off the low and very high frequencies of sound. To help relate the A-weighted decibel system to subjective perceptions, a noise level decreased by 10 dBA is perceived to be roughly one-half as loud. Conversely, a noise level increased by 10 dBA is perceived to be roughly twice as loud. A difference of 3 dBA is generally the minimum perceivable difference between noise levels. For reference, the level of normal speech is approximately 60 dBA 3 ft from the person speaking.

Under the DC noise code, in a residential zone the maximum permissible noise levels associated with the unamplified voice are not quantitatively defined. However, the unamplified voice is not permitted to cause a noise disturbance. A noise disturbance is defined as any sound which is loud and raucous or loud and unseemly and unreasonably disturbs the peace and quiet of a reasonable person of ordinary sensibilities. In making a determination of a noise disturbance, the Mayor shall consider factors that are reasonably related to the impact of the noise on the health, safety, welfare, peace, and quiet of the community.

2

SURVEY RESULTS

Playground noise levels and background ambient noise levels were measured on Dr. Welsing's screened back porch and in her backyard on March 8, 2011 between 11:00 a.m. and 1:00 p.m. During this period three different activity sessions occurred on the playground. Each session appeared to comprise a different age group of children in the pre-kindergarten to 6th grade range. Session sizes ranged from 10-20 children to 30-50 children. For about one-half hour during the survey the playground was not in use.

The sound levels were measured approximately 5 ft above the ground which was approximately 1 ft below the top of the wood fence at the property line between Dr. Welsing's property and the playground. The sound levels were measured with a Rion NA-27 Real-Time Analyzer set to slow response. The calibration of the instrument was verified before and after the noise measurements. During the survey the wind velocity was low, and there was no precipitation.

During 30-second measurement periods of high activity, maximum vocal noise levels generated by the larger groups of children on the playground typically measured 60-65 dBA on the back porch and 63-68 dBA in the backyard. In one instance a whistle blown by an adult supervisor on the playground exceeded 70 dBA in the backyard. Without the children on the playground the background ambient noise levels averaged around 53 dBA on the back porch and around 55 dBA in the backyard. The background ambient noise levels were primarily due to traffic on 16th Street.

EVALUATIONS

Although the general decibel limits of the DC noise code do not strictly apply to the unamplified voice, these limits can be used as a reference to assist in the determination of a noise disturbance. Under the general decibel limits of the DC noise code, during the daytime in a residential zone the maximum permissible noise level is 60 dBA at the property line. The maximum vocal noise levels generated by children on the playground measured on Dr. Welsing's screened back porch and in her backyard noticeably exceeded this criterion. These maximum noise levels measured are about twice as loud as the average background ambient noise levels

3

measured on Dr. Welsing's back porch and in her backyard. Also, it is noted that noise generated by children on the playground is more annoying than broadband steady-state noise (such as generated by a fan) at the same level.

Although the sound levels from properly used safety signaling devices are exempt from the noise code, the whistle appeared to have been used to signal the children that the outdoor session had ended and that they needed to go back inside. At over 70 dBA the maximum whistle noise level measured in the backyard was at least twice as loud as the maximum permissible level of 60 dBA of the general decibel limits of the DC noise code. Also, the inherent character of this noise is substantially more annoying than broadband steady-state noise at the same level.



15

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Office of Zoning



COMPLIANCE REVIEW REPORT
DR. FRANCES C. WELSING / JEWISH PRIMARY DAY SCHOOL
BOARD OF ZONING ADJUSTMENT
ORDER 17700-A
CONDITIONS 3 AND 6

SEPTEMBER 26, 2011

Participants in Compliance Review Process

- Dr. Frances C. Welsing, M.D. (*pro se*)
- Jewish Primary Day School (through counsel)
- Counsel for JPDS – Phil Feola, Esq. & Christine Roddy, Esq.
Goulston & Storrs, PC
- Tracey W. Rose, Esq., Compliance Review Specialist, Office of Zoning
- Richard S. Nero, Acting Director, Office of Zoning

Complaint of Non-Compliance Filed by Dr. Welsing

Dr. Frances C. Welsing filed a completed Form 300 "Complaint of Non-Compliance with Condition(s) of a BZA/ZC Order" with the Office of Zoning ("OZ") on May 31, 2011 regarding BZA case No. 17700-A. Dr. Welsing noted that she lives immediately adjacent to the Jewish Primary Day School ("JPDS" or "the school") play area and requested the OZ investigate whether the school is in compliance with two conditions in the Board's Corrected Final Order No. 17700-A. She asserted that her home "is being bombarded on a daily basis, over many hours, by noise coming from the playground area of JPDS, which is totally destroying the peace and quiet of my home and property, making it impossible to live in my home and to maintain my health; thus effectively constituting the theft of my home and property."

The complaint and accompanying documents were provided to the JPDS along with a questionnaire to facilitate the Compliance Review investigation. Counsel for the school provided timely responses to the Office of Zoning. The comments of both participants will be discussed below.

The conditions to which Dr. Welsing refers are as follows:

Condition No. 3:

No more than 65 students shall be permitted at one time on the play area adjacent to the residential property on the southern property line (play area).

Exhibit 15

COMPLIANCE REVIEW REPORT
BZA ORDER NO. 17700-A
SEPTEMBER 26, 2011

Condition No. 6:

The play area shall be set back 15 feet from the south property line and landscaped in accordance with the attached landscaping plan (Exhibit 40(B)) that includes an open lawn, a 4-foot grade change between the play area and the adjacent property, and a buffer of evergreen trees between the play area and the adjacent property. (emphasis in original)

CONDITION NO. 3

In her statement to OZ, Dr. Welsing commented that, "The noise problem exists in the extreme when there are only 30 students at one time on the play area. The noise of 65 students would even be twice as loud. It is usually the smaller number of children in each play group presently creating the noise." (emphasis in original)

JPDS was not asked to address compliance with Condition 3; therefore, no comments were submitted related to this condition.

Compliance Review's Conclusion

Because Dr. Welsing did not allege that the school was out of compliance with regard to this condition, OZ concludes that there is nothing to investigate and therefore makes no findings related to Condition 3.

CONDITION NO. 6

There are several components to Condition 6, each of which will be addressed on its own for purposes of clarity.

The 15-Foot Set-Back

Dr. Welsing maintained that "There is not [a] 15 foot set back from the south property line. The play area comes up to 2 to 3 feet of the property line (my fence)." She noted that many play objects have continued to come on to her property.

The school maintains that the Board never intended for the play area "to be a uniform fifteen feet along the entire property line ... [but to] have the project conform to the Landscape Plan shown in [Exhibit] 40(B)." (Applicant's Response to Compliance Review Questionnaire, August 15, 2011.)

Counsel for the school also pointed out that the school received its permits to operate, ostensibly arguing that if the permits were issued, it can be assumed that the school has complied with the landscape plan for the site.

Compliance Review's Investigation & Findings

COMPLIANCE REVIEW REPORT
BZA ORDER NO. 17700-A
SEPTEMBER 26, 2011

The Office of Zoning staff met with Dr. Welsing and conducted a site visit on July 22, 2011. In response to her claim that the property between the play area and her property line did not amount to 15 feet, the staff measured the western edge of the play area and found it measured approximately six feet. After receiving the school's response to the claim, and after the staff conducted a careful examination of the Existing Landscape Plan and the Proposed Landscape Plan, the staff noticed that the Proposed Landscape Plan has a drawing of the play area that is wider to the east and narrower on the west side near 16th Street. The buffer area does taper off as it moves closer to 16th Street. But the plan has no measurements to indicate the width of the buffer area at any given point; consequently, staff is unable to determine whether the actual measurements comport with what is on the plan.

While OZ acknowledges that the permits were received by the school, OZ cannot assume that the Zoning Administrator's office inspected the actual buffer area for compliance with Condition 6.

Compliance Review's Conclusion

Because Condition 6 does not explicitly say that the entire buffer area is to be set back 15 feet from the adjacent property, and since the Proposed Landscape Plan shows a tapering off of the area, OZ concludes that there is a discrepancy between *the wording of Condition 6* and *the Proposed Landscape Plan*.

THE TREES

The Original Mature Trees between the Properties

Dr. Welsing stated that the mature, tall (evergreen) trees existing on the property that were helping to provide a buffer were removed. There is no buffer of evergreen trees (understood to mean a noise buffer), between the play area and the adjacent property. She maintains that these trees were healthy and were to remain as part of the noise barrier.

JPDS stated that, according to an arborist with whom the school consulted prior to construction, they were told that given "the age and ill health of the existing trees, none of the eight trees would survive implementation of the grading plan approved by the BZA."

Compliance Review's Conclusion

The Board's conditions do not address whether the original trees were to remain, but that the Proposed Landscape Plan would be implemented. The five "existing trees" on the "Existing Landscape Plan" are still on the *Proposed Landscape Plan*. OZ is not sure if these are the trees that were removed, but this plan does contain existing trees. These "existing" trees are located

**COMPLIANCE REVIEW REPORT
BZA ORDER NO. 17700-A
SEPTEMBER 26, 2011**

further west closer to 16th Street. Neither plan shows the symbol for existing trees (a solid black dot) along the fence line.

The New Trees

Dr. Welsing pointed out that there are only eight (8) young evergreen trees, widely spaced, immediately along her fence (the property line). She stated that these trees were put in place of the large trees along her fence line.

The school's position is that they comply with the Proposed Landscape Plan referenced in the Order. They maintain that the trees on the plan are in place and growing nicely.

Compliance Review's Investigation and Conclusion

When examining the *Proposed Landscape Plan*, you see "4 SCREENING TREES, SUCH AS GREEN GIANT ARBORVITAE, FOSTER HOLLY, NELLIE STEVENS HOLLY AND CRYPTOMERIA" all to be planted along the fence line. OZ is not sure what the plantings are to the north of this line of trees because there is nothing in the key to define the groupings of 3 and 4 circles together. Further, OZ is unable to discern what the plantings are immediately north of Dr. Welsing's structure because the symbol which is used in this area – a circle with lines through it – is also not defined on the key. Because the plan is unclear, and compliance cannot readily be determined, OZ leaves it up to the Zoning Administrator to determine whether the property contains the vegetation that is depicted on this plan.

THE BLEACHERS

Dr. Welsing's view is that the bleachers were not included in the proposal and should not have been placed on the property.

JPDS was not asked to address the bleachers in their response.

Compliance Review's Conclusion

The conditions do not mention the bleachers. The Proposed Landscape Plan, however, contains the following notation: "3 Risers". *Encarta Dictionary* defines "riser" as "2. height of step – the vertical part of a step or stair." Therefore, the risers were made part of the Proposed Landscape Plan approved by the Board.

THE OPEN LAWN

In Condition 6, the Board mentions that the play area is to consist of an "open lawn." However,

COMPLIANCE REVIEW REPORT
BZA ORDER NO. 17700-A
SEPTEMBER 26, 2011

Dr. Welsing pointed out that the play area consists of cement covered with artificial turf which makes this area noisy when the children play there. Her view is that the open lawn is to be natural grass.

The school pointed out that "The term 'open lawn' means 'an unobstructed green space' and that 'the word 'lawn' is commonly used to include both natural and artificial grass.'" In this case, "the open lawn area is covered with artificial grass." It is the school's position is that "open lawn" can include artificial turf and that they are not out of compliance because of the material used in this area.

Compliance Review's Conclusion

Since the condition was not explicit about the materials to be used, OZ does not find the Applicant to be out of compliance with this language.

USE OF THE BUFFER AREA

In conversations with OZ staff, Dr. Welsing stated that the children are playing on the buffer area up to her fence. Her understanding was that the Board intended for this area to be free from play.

Regarding this topic, the school stated, "There is no requirement in the BZA Order to 'keep students out of the buffer zone.' The buffer zone was intended by the BZA to be a physical landscape screen. Nonetheless, as you can see from the attached photograph (Exhibit B-3), the slope and planting of this area effectively keeps children out of it. Furthermore teachers are always present during play times and are instructed to keep children out of that area."

Compliance Review's Conclusion

In this case, the whole matter at issue is noise. The school's statement that the "buffer zone was intended by the BZA to be a physical landscape screen," begs the question, "screen from what?" The point of the landscape screen, as well as the distance between the play area and the Welsing property, was to minimize the impacts of noise on the adjacent neighbor. Since the buffer is for landscaping to minimize the noise from the play area, it is inconsistent to then suggest that the school is not obligated to keep the students on the play area, off of the buffer. For the Board to allow play, and its concomitant noise, on the buffer area up to the fence, is a *non sequitur* and the Order would have used a different word, other than "buffer," to direct the school's actions. A "buffer" is "something that serves to separate two items..." *Webster's Third New Int'l Dictionary*, 1971, p. 290. And according to *Encarta Dictionary* online, the term "buffer" means "1. protector against impact - somebody or something that reduces shock or impact or protects against other harm, usually by interception." In this case, OZ appreciates that the teachers are

**COMPLIANCE REVIEW REPORT
BZA ORDER NO. 17700-A
SEPTEMBER 26, 2011**

present during play, and are asked to keep the children out of the area. But the question becomes, is this actually happening? Are the children listening and abiding by this request?

OZ has reviewed the photograph referenced by the school, and notes that the angle from which the photograph was taken makes it appear as though the trees are all touching and serving as a buffer to keep the youth off of the area. But in fact the trees are not all touching at this point in their growth; they are planted apart from each other to allow for that growth in the future. If the photograph were taken from the north, looking south toward the trees, there would be a more accurate depiction of the space that is open and available for the youth to be.

If the students are not staying off of the area in question, then the requirement for a "buffer" area is being compromised and the Board's condition to provide a buffer is not being complied with. In light of the foregoing analysis, Compliance Review concludes that whenever play and noise actually occur in the buffer area, the school is out of compliance with the Board's directive to provide a buffer and the school is asked to devise additional measures/solutions to ensure that the boundaries of the buffer area are respected.

OVERALL CONCLUSIONS OF COMPLIANCE REVIEW

The Compliance Review staff has determined that the Applicant is not out of compliance on the issues of the open lawn, the risers or the number of children allowed to play in the play area. However, the school is out of compliance whenever the students are playing and creating noise on the buffer area. With regard to whether the buffer area is in compliance with the Proposed Landscape Plan, the staff is inconclusive. Therefore, the OZ Compliance Review staff will refer these matters back to Dr. Welsing with the option of contacting the Office of the Zoning Administrator, Enforcement Branch, about inspecting the property and making a determination on:

1. Whether the width of the buffer area complies with Condition 6 in the Board's Order?
2. Whether the trees and other plantings on the property are consistent with the Proposed Landscape Plan – Exhibit 40B?

Copies to:

- Dr. Frances C. Welsing, M.D.
- Phil Feola, Esq. & Christine Roddy, Esq.,
Goulston & Storrs, P.C.
- Matthew LeGrant, Zoning Administrator
- Justin Bellow, DCRA, Enforcement Branch
- Advisory Neighborhood Commission 4A
- Advisory Neighborhood Commission/SMD 4A07
- Councilmember Mary Cheh, Ward 3

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GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS
OFFICE OF THE ZONING ADMINISTRATOR



September 14, 2012

VIA FIRST CLASS MAIL AND EMAIL

Marshall R. Green
Director of Finance and Administration
Jewish Primary Day School of the Nation's Capital
6045 16th Street NW
Washington, DC 20011

Phil T. Feola
Goulston & Storrs
1999 K Street, NW
Suite 500
Washington, DC 20006

Re: Jewish Primary Day School, BZA Order No. 17700-A

Dear Mr. Green and Mr. Feola,

This letter is to inform you that the Office of the Zoning Administrator has concluded its investigation of a complaint that was forwarded to our office from the Office of Zoning against the Jewish Primary Day School. The complaint involved non-compliance with Condition 6 of BZA Order No. 17700-A.

Condition No. 6:

The play area shall be set back 15 feet from the south property line and landscaped in accordance with the attached landscaping plan (Exhibit 40(B)) that includes an open lawn, a 4-foot grade change between the play area and the adjacent property, and a buffer of evergreen trees between the play area and the adjacent property.

The Office of Zoning specifically asked that a determination be made regarding:

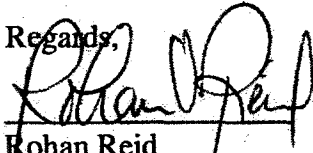
- 1. Whether the width of the buffer area complies with Condition 6 in the Board's Order?**
- 2. Whether the trees and other plantings on the property are consistent with the Proposed Landscape Plan – Exhibit 40B?**

Exhibit 16

The Zoning Administrator met with the Jewish Primary Day School to discuss compliance with the conditions of the BZA Order, and following the meeting the school was asked to submit a written statement demonstrating compliance with the BZA Order. In addition, the Jewish Primary Day School was also asked to demonstrate that the buffer area is an average of 15 feet wide between the play area and the adjacent property and provide supporting documentation by way of drawings and calculations to assist in demonstrating the average 15 feet separation.

After reviewing BZA Order No. 17700-A, the Jewish Primary Day School's written statement and supporting documentation, and additional information, the Zoning Administrator has concluded that the Jewish Primary Day School is compliant with condition 6 of BZA Order No. 17700-A, and that the trees and other plantings on the property are consistent with the Proposed Landscape Plan – Exhibit 40B. As such, the Office of the Zoning Administrator will take no action against the Jewish Primary Day School and close the investigation. If you have any additional questions or concerns, please feel free to contact our office.

Regards,



Rohan Reid
Zoning Enforcement Officer

cc: Matthew Le Grant (by email)
Jay Surabian (by email)
Sara Bardin, DCOZ Director (by email)

17

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS
OFFICE OF THE ZONING ADMINISTRATOR



October 12, 2012

VIA FIRST CLASS MAIL AND EMAIL

Frances C. Welsing, MD
6025 16th Street NW
Washington, DC 20011

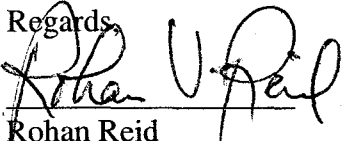
John W. Davis
1111 14th Street, NW
Suite 820
Washington, DC 20005

Re: Jewish Primary Day School, BZA Order No. 17700-A

Dear Dr. Welsing and Mr. Davis,

This letter is to inform you that the Office of the Zoning Administrator has concluded its investigation of Dr. Frances C. Welsing's complaint that was forwarded to our office from the Office of Zoning on September 26, 2011 against the Jewish Primary Day School. The result of the investigation revealed that the Jewish Primary Day School is in compliance with BZA Order No. 17700-A. Please see the attached letter that was sent to the Jewish Primary Day School that outlines the determination made by the Office of the Zoning Administrator as was requested by the Office of Zoning. If you have any additional questions or concerns, please feel free to contact our office.

Regards,


Rohan Reid
Zoning Enforcement Officer

Enclosure

cc: Matthew Le Grant (by email)
Jay Surabian (by email)
Sara Bardin, DCOZ Director (by email)

Exhibit 18 17

18

GOVERNMENT
OF
THE DISTRICT OF COLUMBIA
+ + + + +
BOARD OF ZONING ADJUSTMENT
+ + + + +
PUBLIC HEARING
+ + + + +
TUESDAY
DECEMBER 18, 2007
+ + + + +

The Public Hearing convened in
Room 220 South, 441 4th Street, N.W.,
Washington, D.C., 20001, pursuant to notice
at 12:10 p.m., Ruthanne G. Miller,
Chairperson, presiding.

BOARD OF ZONING ADJUSTMENT MEMBERS PRESENT:

RUTHANNE G. MILLER, Chairperson
MARC C. LOUD, Mayoral Appointee
SHANE L. DETTMAN, Board Member (NCPC)

ZONING COMMISSION MEMBER PRESENT:

CURTIS ETHERLY, JR., Commissioner

OFFICE OF ZONING STAFF PRESENT:

CLIFFORD MOY, Secretary
BEVERLEY BAILEY, Sr. Zoning Specialist

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WASHINGTON, D.C. 20005-3701

Exh. 18

D.C. OFFICE OF THE ATTORNEY GENERAL PRESENT:

SHERRY GLAZER, ESQ.
LORI MONROE, ESQ.

OFFICE OF PLANNING PRESENT:

MAXINE BROWN-ROBERTS
STEVEN COCHRAN
JOHN MOORE

The transcript constitutes the
minutes from the Public Hearing held on
December 18, 2007.

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1 MR. FEOLA: Madam Chair, I'd like
2 to enter into the record, just to tie back
3 around to the population of this building when
4 it was owned by the Hebrew Academy, and it's
5 a letter that we came across that was actually
6 directed to the Owl School. It's dated
7 October 31st, 2000, which was well before the
8 Jewish Primary Day School got involved in
9 this.

10 It's a letter from the Hebrew
11 Academy to, and you'll see it, to the Owl
12 School, indicating what the capacity of the
13 school was in the mid-70's, which is about the
14 time Dr. Welsing bought her house.

15 You know, I understand there's an
16 intervening property that is now part of this
17 application. But I just thought to close the
18 record off, and just not me saying there were
19 400 kids there, that this should be in the
20 record, if that's acceptable.

21 CHAIR MILLER: I'm sorry. This is
22 the end. Were you saying there were 450

1 students there then?

2 MR. FEOLA: According to what the
3 Hebrew Academy wrote to the Owl School. I
4 have no personal knowledge of that. If I can
5 then just wrap up very quickly, I think the
6 whole issue is revolving around, it seems to
7 be the noise on the open space that the school
8 can create as a matter of right.

9 I mean I don't think anybody
10 denies that we could tear down the building
11 and pretty it up and just keep it green. I
12 think the question is can we use it for school
13 purposes and how can we use it for school
14 purposes.

15 I think we've heard very loud and
16 clear from the Board and from Dr. Welsing, and
17 we're concerned as well, we need to come up
18 with a plan that convinces the Board that we
19 can use the area for a play area, and not
20 impact unnecessarily on her peace and quiet.

21 I think there is a way, with
22 additional fencing, soundproofing, additional

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1 screenery with shrubberies and evergreens that
2 that can be done. You know, we can take a
3 shot at trying to do something like that, in
4 a relatively short period of time.

5 I think it doesn't seem that the
6 enrollment increase issue is much of an issue
7 at all. You know, the ANC voted to support
8 the entire application. The Brightwood
9 Citizens Association is supportive of the
10 application.

11 So if there's a way to separate
12 the two, to approve the enrollment increase
13 for the existing property, and let us come
14 back with a plan for the lot to be, the vacant
15 lot to be, or give us a short time frame that
16 we can come back to you for a plan with that
17 lot, we would be appreciative.

18 I think one of the reasons that
19 the enrollment issue, is that we are entering,
20 as most schools do, application season, and
21 then the school has to make decisions on
22 admission.

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1 That has to be done well in
2 advance of September of 2008. So we're trying
3 to get a feel for can we increase and by how
4 much, and that's going to drive our admissions
5 process in February. So we don't have a lot
6 of time to try to figure out, or we will be
7 where we are.

8 Clearly, we made this application
9 so we wouldn't be where we are in the next
10 school year.

11 So with that, I think, you know,
12 we have everything in front of you that I
13 think would allow this project to be
14 approved. From the legal practical
15 difficulty, exceptional condition situation
16 that's in the record, and we know we have a
17 little homework to do on the open space and
18 the play area.

19 So with that, I think we'll thank
20 you for your extraordinary time today on this
21 project, and ask that you give us some
22 direction.

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1 CHAIR MILLER: Okay. Well,
2 without having conferred with my Board yet,
3 first of all, I would say we also recognize as
4 a Board that we live in a city and this is in
5 the city. So the standard is not absolute
6 silence.

7 How long would it take for you to
8 address that concern, because that is the
9 concern, and that is something that you would
10 need to submit to us for our consideration in
11 this application.

12 So somewhat the ball is in your
13 court. I think it's preferable usually for
14 the Board to deal with the whole picture at
15 once. I understand your, you know, situation
16 with applications, etcetera. But certainly,
17 you know, if it's a few weeks or something.

18 We're flexible. I don't think
19 there are a lot of issues to resolve in the
20 case. I only heard opposition and we only had
21 concern with respect to the use of that side
22 that's adjacent to a neighbor.

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VERNON C. SMITH, M.D.

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September 24, 2012

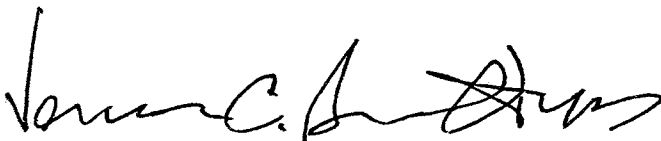
MEDICAL STATEMENT

**Re: Frances C. Welsing
DOB: 03/18/1935**

The above named person has been a patient in this medical practice since October 8, 2010. Her initial complaint was related to general fatigue, insomnia, stress, and elevated blood pressure.

The source of her medical problem appeared to arise from excessive noise generated by a school playground that had opened in early September of 2010. that is located immediately adjacent to her home.. The playground is utilized five (5)-days a week, multiple hours a day causing a high level of noise emanating from children yelling and screaming on the playground. The noise enters her house unmuffled due to the location of the playground to her property; the excessive noise affects her daily living functions and the use of her home. My patient is forced to leave her home to escape the noise and discomfort, thus causing her to suffer enormous stress.

Her initial complaint and clinical findings were consistent with a diagnosis of Acute Stress Disorder., however due to length of the constant exposure to offending source, the problem has now developed in to Post and Continuous Stress Disorder. My patient also suffer from Essential Hypertension, A Cardiology consultation/examination has determined my patient has Atrial Fibrillation , which places her at increased risk for heart attack and stroke, with places her in double jeopardy with the constant – continuous exposure to the offending source of her stress. My patient is receiving treatment for her symptoms, but unless the source of her problem is addressed the symptomatic treatment offers little. The noise assault must be removed in the interest of her health. My patient enjoyed a peaceful and tranquil stress free living environment for approximately forty (40) years, in her home. The present hostile (noise) environment has been forced upon her and unless the noise environment is abated, it will remain a source for my patient's ill health, mentally and physically.



Vernon C. Smith, M.D.

Exhibit 19

20

Health effects from noise

From Wikipedia, the free encyclopedia

Noise health effects are the health consequences of elevated sound levels. Elevated workplace or other noise can cause hearing impairment, hypertension, ischemic heart disease, annoyance and sleep disturbance. Changes in the immune system and birth defects have been attributed to noise exposure, but evidence is limited.^[1] Although some

presbycusis may occur naturally with age,^[2] in many developed nations the cumulative impact of noise is sufficient to impair the hearing of a large fraction of the population over the course of a lifetime.^{[3][4]} Noise exposure has also been known to induce tinnitus, hypertension, vasoconstriction and other cardiovascular impacts.^[5] Beyond these effects, elevated noise levels can create stress,

increase workplace accident rates, and stimulate aggression and other anti-social behaviors.^[6] The most significant causes are vehicle and aircraft noise, prolonged exposure to loud music, and industrial noise. Road traffic causes almost 80% of the noise annoyances in Norway.^[7]

The social costs of traffic noise in EU22 are over €40 billion per year, and passenger cars and lorries (trucks) are responsible for bulk of costs.^[8] Traffic noise alone is harming the health of almost every third person in the WHO European Region. One in five Europeans is regularly exposed to sound levels at night that could significantly damage health.^[9]

Noise is also a threat to marine^[10] and terrestrial ecosystems.



Roadway noise is a major source of exposure

Contents

- 1 Hearing loss
 - 1.1 Age-related (Presbycusis)
- 2 Cardiovascular effects
- 3 Stress
- 4 Annoyance
- 5 Regulations
- 6 See also
- 7 References
- 8 External links

Hearing loss

Main article: Noise-induced hearing loss

The mechanism of hearing loss arises from trauma to stereocilia of the cochlea, the principal fluid filled

Exhibit 20

structure of the inner ear.^[citation needed] The pinna combined with the middle ear amplifies sound pressure levels by a factor of twenty, so that extremely high sound pressure levels arrive in the cochlea, even from moderate atmospheric sound stimuli. Underlying pathology to the cochlea are reactive oxygen species, which play a significant role in noise-induced necrosis and apoptosis of the stereocilia.^[11] Exposure to high levels of noise have differing effects within a given population, and the involvement of reactive oxygen species suggests possible avenues to treat or prevent damage to hearing and related cellular structures.^[11]

The elevated sound levels cause trauma to the cochlear structure in the inner ear, which gives rise to irreversible hearing loss.^[12] A very loud sound in a particular frequency range can damage the cochlea's hair cells that respond to that range thereby reducing the ear's ability to hear those frequencies in the future.^[13] However, loud noise in *any* frequency range has deleterious effects across the entire range of human hearing.^[14] The outer ear (visible portion of the human ear) combined with the middle ear amplifies sound levels by a factor of 20 when sound reaches the inner ear.^[15]

Age-related (Presbycusis)

Hearing loss is somewhat inevitable with age. Though older males exposed to significant occupational noise demonstrate significantly reduced hearing sensitivity than their non-exposed peers, differences in hearing sensitivity decrease with time and the two groups are indistinguishable by age 79.^[2] Women exposed to occupational noise do not differ from their peers in hearing sensitivity, though they do hear better than their non-exposed male counterparts. Due to loud music and a generally noisy environment, young people in the United States have a rate of impaired hearing 2.5 times greater than their parents and grandparents, with an estimated 50 million individuals with impaired hearing estimated in 2050.^[3]

In Rosen's work on health effects and hearing loss, one of his findings derived from tracking Maaban tribesmen, who were insignificantly exposed to transportation or industrial noise. This population was systematically compared by cohort group to a typical U.S. population. The findings proved that aging is an almost insignificant cause of hearing loss, which instead is associated with chronic exposure to moderately high levels of environmental noise.^[12]

Cardiovascular effects

Noise has been associated with important cardiovascular health problems.^[16] In 1999, the World Health Organization concluded that the available evidence showed suggested a weak association between long-term noise exposure above 67-70 dB(A) and hypertension.^[17] More recent studies have suggested that noise levels of 50 dB(A) at night may also increase the risk of myocardial infarction by chronically elevating cortisol production.^{[18][19][20]}

Fairly typical roadway noise levels are sufficient to constrict arterial blood flow and lead to elevated blood pressure; in this case, it appears that a certain fraction of the population is more susceptible to vasoconstriction. This may result because annoyance from the sound causes elevated adrenaline levels trigger a narrowing of the blood vessels (vasoconstriction), or independently through medical stress reactions. Other effects of high noise levels are increased frequency of headaches, fatigue, stomach ← **2** ulcers and vertigo.^[21]

The U.S. Environmental Protection Agency authored a pamphlet in 1978 that suggested a correlation

between low-birthweight babies (using the World Health Organization definition of less than 2,500 g (~5.5 lb) and high sound levels, and also correlations in abnormally high rates of birth defects, where expectant mothers are exposed to elevated sound levels; such as typical airport environs. Specific birth abnormalities included harelip, cleft palate, and defects in the spine. According to Lester W. Sontag of The Fels Research Institute (as presented in the same EPA study): "There is ample evidence that environment has a role in shaping the physique, behavior and function of animals, including man, from conception and not merely from birth. The fetus is capable of perceiving sounds and responding to them by motor activity and cardiac rate change." Noise exposure is deemed to be particularly pernicious when it occurs between 15 and 60 days after conception, when major internal organs and the central nervous system are formed. Later developmental effects occur as vasoconstriction in the mother reduces blood flow and hence oxygen and nutrition to the fetus. Low birth weights and noise were also associated with lower levels of certain hormones in the mother, these hormones being thought to affect fetal growth and to be a good indicator of protein production. The difference between the hormone levels of pregnant mothers in noisy versus quiet areas increased as birth approached. In a more recent publication, Passchier-Vermeer and Passchier (2000)^[1] while reviewing recent studies on birthweight and noise exposure note that while some older studies suggest that when women are exposed to >65 dB aircraft noise a small decrease in birthweight occurs, in a more recent study of 200 Taiwanese women including noise dosimetry measurements of individual noise exposure the authors found no significant association between noise exposure and birth weight after adjusting for relevant confounders, e.g. social class, maternal weight gain during pregnancy, etc.

Stress

→ Research commissioned by Rockwool, a UK insulation manufacturer, reveals in the UK one third (33%) of victims of domestic disturbances claim loud parties have left them unable to sleep or made them
→ stressed in the last two years. Almost one in ten (9%)^[22] of those affected by domestic disturbances
→ claims it has left them continually disturbed and stressed. Over 1.8 million people claim noisy
→ neighbours have made their life a misery and they cannot enjoy their own homes. The impact of noise on health is potentially a significant problem across the UK given over 17.5 million Britons (38%) have been disturbed by the inhabitants of neighbouring properties in the last two years. For almost one in ten (7%) Britons this is a regular occurrence.

The extent of the problem of noise pollution for public health is reinforced by figures collated by Rockwool from local authority responses to a Freedom of Information Act (FOI) request. This research reveals in the period April 2008 - 2009 UK councils received 315,838 complaints about noise pollution from private residences. This resulted in environmental health officers across the UK serving 8,069 noise abatement notices, or citations under the terms of the Anti-Social Behaviour (Scotland) Act. In the last 12 months, 524 confiscations of equipment have been authorised involving the removal of powerful speakers, stereos and televisions. Westminster City Council^[23] has received more complaints per head of population than any other district in the UK with 9,814 grievances about noise, which equates to 42.32 complaints per thousand residents. Eight of the top 10 councils ranked by complaints per 1,000 residents are located in London.

Annoyance

Because some stressful effects depend on qualities of the sound other than its absolute decibel value, the annoyance associated with sound may need to be considered in regard to health effects. For example, noise from airports is typically perceived as more bothersome than noise from traffic of equal volume.

^[24] Annoyance effects of noise are minimally affected by demographics, but fear of the noise source

and sensitivity to noise both strongly affect the 'annoyance' of a noise.^[25] Even sound levels as low as 40 dB(A) (about as loud as a refrigerator or library^[26]) can generate noise complaints^[27] and the lower threshold for noise producing sleep disturbance is 45 dB(A) or lower.^[28]

Other factors that affect the 'annoyance level' of sound include beliefs about noise prevention and the importance of the noise source, and annoyance at the cause (i.e. non-noise related factors) of the noise.^[29] For instance, in an office setting, audible telephone conversations and discussions between co-workers were considered to be irritating, depending upon the contents of the conversations. Many of the interpretations of the level of annoyance and the relationship between noise levels and resulting health symptoms could be influenced by the quality of interpersonal relationships at the workplace, as well as the stress level generated by the work itself.^{[30][31]} Evidence regarding the impact of long-term noise versus recent changes in ongoing noise is equivocal on its impact on annoyance.^[29]

Estimates of sound annoyance typically rely on weighting filters, which consider some sound frequencies to be more important than others based on their presumed audibility to the human ear. The older dB(A) weighting filter described above is used widely in the U.S., but underestimates the impact of frequencies around 6000 Hz and at very low frequencies. The newer ITU-R 468 noise weighting filter is used more widely in Europe. The propagation of sound varies between environments; for example, low frequencies typically carry over longer distances. Therefore different filters, such as dB(B) and dB(C), may be recommended for specific situations.

When young children are exposed to speech interference levels of noise on a regular basis (the actual volume of which varies depending on distance and loudness of the speaker), they may develop speech or reading difficulties, because auditory processing functions are compromised. Children continue to develop their speech perception abilities until they reach their teenage years. Evidence has shown that when children learn in noisier classrooms, they have a more difficult time understanding speech than those who learn in quieter settings.^[32] In a study conducted by Cornell University in 1993, children exposed to noise in learning environments experienced trouble with word discrimination as well as various cognitive developmental delays.^[33] In particular the writing learning impairment known as dysgraphia is commonly associated with environmental stressors in the classroom.^[citation needed] The effect of high noise levels on small children has been known to cause physical health damages as well. Children from noisy residences often possess a heart rate that is significantly higher (by 2 beats/min on average) than in children from quieter residences.^[34]

Furthermore, studies have shown that neighborhood noise (consisting of noise from neighboring apartments, as well as noise within one's own apartment or home) can cause significant irritation and noise stress within people, due to the great deal of time people spend within their residences. This can result in an increased risk of depression and psychological disorders,^{[35][36]} migraines, and even emotional stress.^[36]

In the workplace, noise pollution is generally a problem once the noise level is greater than 55 dB(A). Selected studies show that approximately 35 to 40% of workers in office settings find noise levels from 55 to 60 dB(A) to be extremely irritating.^[30] In fact, the noise standard in Germany for mentally stressful tasks is set at 55 dB(A).^[37] However, if the noise is source is continuous, the threshold level for tolerable noise levels amongst office workers actually becomes lower than 55 dB(A).^[30]

One important effect of noise is to make a person's speech less easy to hear. The human brain automatically compensates the production of speech for background noise in a process called the

Lombard effect in which it becomes louder with more distinct syllables. But this cannot fully remove the problems of communication intelligibility made in noise.

Regulations

Main article: Noise regulation

Environmental noise regulations usually specify a maximum outdoor noise level of 60 to 65 dB(A), while occupational safety organizations recommend that the maximum exposure to noise is 40 hours per week at 85 to 90 dB(A). For every additional 3 dB(A), the maximum exposure time is reduced by a factor 2, e.g. 20 hours per week at 88 dB(A). Sometimes, a factor of two per additional 5 dB(A) is used. However, these occupational regulations are acknowledged by the health literature as inadequate to protect against hearing loss and other health effects.

With regard to indoor noise pollution in residences, the U.S. EPA has not set any restrictions on limits to the level of noise. Rather, it has provided a list of recommended levels in its Model Community Noise Control Ordinance, which was published in 1975. For instance, the recommended noise level for indoor residences is less than or equal to 45 dB.^{[38][39]} Noise pollution control in residences is not funded by the federal government in part because of the disagreements in establishing causal links between sounds and health risks, since the effect of noise is often psychological and also because it leaves no singular tangible trace of damage on the human body. For instance, hearing loss could be attributed to a variety of factors including age, rather than solely due to excessive exposure to noise.^{[40][41]} However, a state or local government is able to regulate indoor residential noise, such as when excessive noise from within a home causes disturbances to nearby residences.^{[40][42]}

See also

- Aircraft noise
- Noise mitigation
- Noise pollution
- Tinnitus

References

- ^a ^b Passchier-Vermeer W, Passchier WF (2000). "Noise exposure and public health". *Environ. Health Perspect.* **108 Suppl 1**: 123–31. doi:10.2307/3454637. PMC 1637786. PMID 10698728. <http://jstor.org/stable/3454637>.
- ^a ^b Rosenhall U, Pedersen K, Svanborg A (1990). "Presbycusis and noise-induced hearing loss". *Ear Hear* **11** (4): 257–63. doi:10.1097/00003446-199008000-00002. PMID 2210099.
- ^a ^b Schmid, RE (2007-02-18). "Aging nation faces growing hearing loss". CBS News. <http://www.cbsnews.com/stories/2007/02/18/ap/health/mainD8NC00AO0.shtml>. Retrieved 2007-02-18.
- ^a Senate Public Works Committee, *Noise Pollution and Abatement Act of 1972*, S. Rep. No. 1160, 92nd Cong. 2nd session
- ^a "Noise: Health Effects and Controls". University of California, Berkeley. Archived from the original on 2007-09-25. <http://web.archive.org/web/20070925221754/http://ist-socrates.berkeley.edu/~lohp/graphics/pdf/hw24en08.pdf>. Retrieved 2007-12-22.
- ^a Kryter, Karl D. (1994). *The handbook of hearing and the effects of noise: physiology, psychology, and public health*. Boston: Academic Press. ISBN 0-12-427455-2.
- ^a http://www.ssb.no/english/subjects/01/sa_nrm/arkiv/nrm2006/kap10-noise.pdf, pp. 188-189.
- ^a Traffic noise reduction in Europe, <http://webcache.googleusercontent.com/search?>

- q=cache:Vt3hjITbWvsJ:www.transportenvironment.org/Publications/prep_hand_out/lid:495+%22traffic+noise%22+europe+cardiovascular&hl=nn&gl=no
9. ^ health.<http://www.euro.who.int/en/what-we-do/health-topics/environmental-health/noise>
 10. ^ <http://www.whaleacoustics.com/purposeimpactofnoise.html>
 11. ^ ^{a b} Henderson D, Bielefeld EC, Harris KC, Hu BH (2006). "The role of oxidative stress in noise-induced hearing loss". *Ear Hear* **27** (1): 1–19. doi:10.1097/01.aud.0000191942.36672.f3. PMID 16446561.
 12. ^ ^{a b} S. Rosen and P. Olin, *Hearing Loss and Coronary Heart Disease*, Archives of Otolaryngology, 82:236 (1965)
 13. ^ HeadWize - Article: Preventing Hearing Damage When Listening With Headphones (A HeadWize Headphone Guide)
 14. ^ High-Frequency Hearing Loss Incurred by Exposure to Low-Frequency Noise
 15. ^ *Noise: A Health Problem* United States Environmental Protection Agency, Office of Noise Abatement and Control, Washington, DC 20460, August, 1978
 16. ^ Ising H, Babisch W, Kruppa B (1999). "Noise-Induced Endocrine Effects and Cardiovascular Risk". *Noise Health* **1** (4): 37–48. PMID 12689488. <http://www.noiseandhealth.org/article.asp?issn=1463-1741;year=1999;volume=1;issue=4;spage=37;epage=48;aualast=Ising>.
 17. ^ Berglund, B; Lindvall T, Schwela D, Goh KT (1999). "World Health Organization: Guidelines for Community Noise". World Health Organization. <http://www.who.int/docstore/peh/noise/guidelines2.html>.
 18. ^ Maschke C (2003). "Stress Hormone Changes in Persons exposed to Simulated Night Noise". *Noise Health* **5** (17): 35–45. PMID 12537833. <http://www.noiseandhealth.org/article.asp?issn=1463-1741;year=2002;volume=5;issue=17;spage=35;epage=45;aualast=Maschke>. Retrieved 2007-12-22.
 19. ^ Franssen EA, van Wiechen CM, Nagelkerke NJ, Lebet E (2004). "Aircraft noise around a large international airport and its impact on general health and medication use". *Occup Environ Med* **61** (5): 405–13. doi:10.1136/oem.2002.005488. PMC 1740783. PMID 15090660. <http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pmcentrez&artid=1740783>.
 20. ^ Lercher P, Hörtnagl J, Kofler WW (1993). "Work noise annoyance and blood pressure: combined effects with stressful working conditions". *Int Arch Occup Environ Health* **65** (1): 23–8. doi:10.1007/BF00586054. PMID 8354571.
 21. ^ *Noise: A Health Problem* United States Environmental Protection Agency, Office of Noise Abatement and Control, Washington, DC 20460, August, 1978
 22. ^ "How Noisy Neighbours Blight Millions of Lives, The Daily Express, <http://www.express.co.uk/posts/view/94084/How-noisy-neighbours-millions-of-lives>
 23. ^ "London is home to the noisiest neighbours", London Evening Standard, <http://www.thisislondon.co.uk/standard/article-23714071-details/London+is+home+to+the+noisiest+neighbours/article.do>.
 24. ^ Miedema and Oudshoorn 2001 cited in "Hypertension and exposure to noise near airports". Medscape. <http://www.medscape.com/viewarticle/516462>.
 25. ^ Miedema HME, Vos H (1999). "Demographic and attitudinal factors that modify annoyance from transportation noise". *Journal of the Acoustical Society of America* **105** (6): 3336–44. doi:10.1121/1.424662.
 26. ^ [1.pdf "Noise Facts and Figures!"] (PDF). Chiltern District Council. [http://www.chiltern.gov.uk/downloads/Decibel_chart_06\[1\].pdf](http://www.chiltern.gov.uk/downloads/Decibel_chart_06[1].pdf). Retrieved 2007-12-13.
 27. ^ Gelfand, Stanley A (2001). *Essentials of Audiology*. New York: Thieme Medical Publishers. ISBN 1-58890-017-7.
 28. ^ Walker, JR; Fahy, Frank (1998). *Fundamentals of noise and vibration*. London: E & FN Spon. ISBN 0419227008.
 29. ^ ^{a b} Field, JM (1993). "Effect of personal and situational variables upon noise annoyance in residential areas". *Journal of the Acoustical Society of America* **93** (5): 2753–63. doi:10.1121/1.405851.
 30. ^ ^{a b c} Passchier-Vermeer, W. and W.F. Passchier (March 2000). "Noise exposure and public health". *Environment Health Perspectives* **108** (1): 123–131. doi:10.2307/3454637. PMC 1637786. PMID 10698728. <http://jstor.org/stable/3454637>.
 31. ^ Halpern, David (1995). *Mental health and the built environment: more than bricks and mortar?*. Taylor & Francis. ISBN 0748402357.
 32. ^ Nelson, Peggy B. (1959). "Sound in the Classroom". *ASHRAE journal* **45** (2): 22–25.
 33. ^ Wakefield, Julie (June 2002). "Learning the Hard Way". *Environmental Health Perspectives* **110** (6).
 34. ^ Goran, Belojevic, et. al. (2008). "Urban Road Traffic Noise and Blood Pressure and Heart Rate in Preschool Children". *Environment International* **34** (2): 226–231. doi:10.1016/j.envint.2007.08.003.

6

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PMID 17869340.

35. ^ Pichot, P. (March 1992). "Noise, sleep and behavior". *Bulletin de l'Academie nationale de médecine* **176** (3): 393–9.
36. ^^{a b} Niemann, H., et. al. (2006). "Noise-induced annoyance and morbidity results from the pan-European LARES study". *Noise Health* **8** (31): 63–79. doi:10.4103/1463-1741.33537. PMID 17687182.
37. ^ Stellman, Jeanne Mager (1998). *Encyclopedia of occupational health and safety*. International Labour Organization. ISBN 9221092038.
38. ^ Williams, Luanne Kemp; Langley, Rick L. (2000). *Environmental Health Secrets*. Philadelphia: Elsevier Health Sciences. ISBN 1560534087.
39. ^ "EPA Identifies Noise Levels Affecting Health and Welfare". April 2, 1972. <http://www.epa.gov/history/topics/noise/01.htm>.
40. ^^{a b} Schmidt, Charles W. (January 2005). "Noise that Annoys: Regulating Unwanted Sound". *Environmental Health Perspectives* **113** (1): A42–A44. doi:10.1289/ehp.113-a42.
41. ^ Staples, Susan L. (Feb 1996). "Human response to environmental noise: Psychological research and public policy". *American Psychologist* **51** (2): 143–150. doi:10.1037/0003-066X.51.2.143. PMID 8746149.
42. ^ Leighton, Paul (April 14, 2009). "Beverly considers rules to quiet loud parties". *The Salem News*. http://salemnews.com/punews/local_story_103205126.html.

External links

- Acoustical Society of America
- Noise and Health International Journal devoted to research on all aspects of noise and its effects on human health
- World Health Organization: Guidelines for Community Noise

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