

**AFFIDAVIT REGARDING TONNESON MISREPRESENTATIONS**

STATE OF NEW YORK     )  
  ) SS:  
COUNTY OF ORANGE     )

I, Deborah Kopald. being duly sworn, deposes and states:

1. In Exhibit 1 of my affidavit of September 14th regarding the Tonnesons' *ex parte* communications before Judge Onofry, in violation of 9 NYCRR § 587.4, the Tonnesons ADMIT to the judge that they were engaging in leaf blowing (which is also corroborated by police reports I have shown this board). He states the following:

On October 6<sup>th</sup>, 2019, Deborah Kopald contacted the Town of Highlands Police Department TWICE to report noise. The first at approximately 10:00 AM.... The second time at approximately 1:00 p.m...(We were blowing leaves in the front-of the house.)

That is what Tonneson wrote to Judge Onofry. He perjured himself before this Board by stating at the building permits hearing that he had not engaged in leaf blowing. His description corroborates what I told this Board. It corroborates what I stated in my July 14, 2020 affidavit. The police reports in Exhibit 4 of my July 14, 2020 affidavit before the Appellate Division demonstrate same. (They are also at the end of Exhibit N of my 8/10/20 affidavit). David either cannot keep track of what he says to what Court and the police or brazenly tells this ZBA the opposite of what he told other authorities, perhaps knowing this ZBA will believe anything he says no matter how absurd and no matter how much evidence contradicts his claims, including government documents.

2. Exhibit 9 in the July 14, 2020 affidavit is a police report documenting a conversation with Orange County Assistant District Attorney Tanja Beemer that disproves Tonnesons claims I broke the law. Exhibit 10 in the July 14, 2020 affidavit is an 11/5/19 police report in which David Tonneson misrepresented to the police that he had a deed to 20-2-6 or had the right to an

easement therein. The Tonnesons also posted no trespassing signs or caused to be posted no trespassing signs on my property and on 20-2-6 then had Konstantinos Fatsis write a letter that implied I might have trespassed (on mine or my family's land) but never said that I had. The Tonnesons were trying to steal our property by adverse possession and claim I had trespassed...when I was walking on my own or my family's property.

3. Similar misrepresentations by the Tonnesons are documented in Exhibit 11 of the July 14, 2020 affidavit in an email to Bruce Terwilliger in which David Tonneson misrepresented that he had a deed to 20-2-6 and falsely accused me of improperly stopping an easement across that land. Exhibit 12 in the July 14 affidavit is an email from Orange and Rockland Utilities stating they will cease trespassing over 20-2-6 and will not string electric wires across 20-2-6 contrary to the misrepresentations the Tonnesons made to them.

4. **Exhibit 1** is the answer of Kevin McCarthy in Canterbury Forest Corporation versus Tonnesons et al.<sup>1</sup> The first cross-claim and Point 21 therein reads:

FIRST CROSS-CLAIM AGAINST ALL DEFENDANTS EXCEPT JACK McCARTHY

21. That if the plaintiff was caused to sustain damages as alleged in the Complaint through carelessness, negligence, recklessness and/or through any statutory violations, and which the answering defendant, KEVIN McCARTHY, specifically and expressly denies, and, **if the plaintiff was caused to sustain said damages through wrongful conduct other than through its own culpable conduct, then the answering defendant will be damaged thereby and will be entitled to full written contractual indemnification from Defendants, DAVID TONNESON, DEBORAH TONNESON, JAIDIN PAISLEY-TONNESON, JACK McCARTHY and JONATHAN MILLEN, from any judgment claimed or obtained as or against the answering defendant, pursuant to said contract,** and the answering defendant will further be entitled to recoupment of all costs and attorneys' fees associated with the defense of this lawsuit.

(Emphasis added)

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<sup>1</sup> In no filing in that case, EF 002857-2020, has the surveyor asserted that his survey is correct.

5. **Exhibit 2** is the response of the Tonnesons to Jack McCarthy's Cross-Claims:

Deny each and every cause and causes of action contained in paragraphs numbered "21" and "22" of the crossclaims.

In other words, Kevin McCarthy claims he had a contract with David Tonneson to destroy trees that were illegally cut down from 20-2-6. The Tonnesons claimed they did not have a contract. That's a pretty big discrepancy. They cannot both be right. This is yet another example in which David Tonneson says something that is either completely at odds with what somebody else says or in complete contradiction to a police report, his own statements said elsewhere and/or a legally valid document. In other words, I am not the only party asserting same.

6. Exhibit 13 in the July 14, 2020 affidavit is the May 21<sup>st</sup> 2020 email of Debbie Tonneson to this board stating:

FYI: If fees are waived for Deborah Kopald, it gives her more power to harass us and others in the future. We ask the zoning board of appeals to look objectively at her request. We assert that we have only follow the guidelines of the building inspector and the Governor's directives during this pandemic shut down. She falsely claims we sent her a letter about cell towers which we did not. It did not come from us. We have absolutely no contact with her.

I'll return to her claim about communications about the cell tower in my affidavit point 10 below; for now, it is worth noting that the Town genuflected to Debbie Tonneson's request and tried to extort illegal fees out of me to avoid deciding the appeal. See **Exhibit 3** (illegal demand by Town by payment on which the ZBA Chair is copied), **Exhibit 4** (email of Rick Golden to Alyse Terhune explaining why fee demand was illegal under the local code (and could not be demanded as a condition of deciding the appeal). **Exhibit 5** is my letter explaining why the code on its face is also illegal. **Exhibit 6** is the local code § 109-1 on fees. **Exhibit 7** are disbursements paid to date on the first appeal \$2300 as well as monies demanded and (\$1275

was paid on the second appeal). The escrow was only \$750 under the code and the Town was not allowed to charge me more money under its own code without looking at prevailing rates in other areas which it never did. Worse, case law does not permit an applicant to cover the legal costs of the Zoning Board of Appeals lawyer.

7. **Exhibit 8** is the second set of correspondence of Alyse Terhune to Rick Golden in which she demands again I not communicate with the ZBA directly (I had sent an affidavit to Jack Jannarone for filing after it was hand-delivered). In my August 10, 2020 affidavit, Exhibit U documented the first such instance (while the Tonnesons were permitted to communicate without their lawyer and *ex parte* because I was not being notified of their libelous emails):

On Jan 14, 2020, at 11:39 AM, Alyse Terhune wrote:

Hello, Rick, Happy New Year. It appears from the email below that your firm has been retained by Ms. Kopald. If so, please ask your client to communicate through you to me. Also, ask her to refrain from communicating directly with the Chairman of the ZBA or any other member of the ZBA. I would appreciate it. Thanks. Alyse Terhune, Esq. 82 East Allendale Road Saddle River, NJ 07458 (201) 934-9800

(Emphasis added)

**Exhibit 8** documents the second time a set of rules was applied to me that was not applied to the Tonnesons:

On Sep 5, 2020, at 11:24 AM, Alyse Terhune wrote:

Rick: This was submitted by Kopald directly to the Chairman. Again, I ask that anything she submits to the Board come through your office.

Alyse Terhune, Esq.  
82 East Allendale Road  
Saddle River, NJ 07458  
(201) 934-9800

(Emphasis added)

Apparently, the ZBA is just doubling down on misconduct after reading Exhibit V of August 10, 2020 affidavit) and my complaints that no board member put a stop to them. As I previously indicated, Ray Deveraux attacking me for “disparaging” everybody including the surveyor, when he acted improperly, especially when he and the other Board members were entertaining the Tonnesons libel ex parte without providing it to me. So it was okay for the Tonnesons to libel me privately without me knowing about it (week after week after week) while I was chastised for publicly calling out the credibility of their surveyor, whom I correctly told the Board was being sued along with the Tonnesons.

8. David Tonneson perjured himself in his affidavit of 7/27/20 (affidavit point 13) to the Appellate division; at no point at the last hearing did I say I had another action planned against him; I said another party was going to sue him, Canterbury Forest Corporation. He tried to misrepresent that I have any legal relationship to Canterbury Forest Corporation. I have none. He also misrepresented that construction stopped before the issuance of the CO; it did not. He was using the excavators and running them below my house such that I was forced out- what I have been complaining about for the balance of a year. The video shows he was operating this equipment a month after the CO was issued. It should also be reinforced that I had filed on Article 78 on the issuance of building permits. I was forced to file a second one on the amendment because one cannot amend a pleading as of right with post-commencement facts. The claim that the filings I have made were in any way vexatious are under appeal because no reasonable adjudicator would assert same when I had to file on the amended permit to meet a statute of limitations (especially when said adjudicator would not let me amend, contrary to NY CPLR 3025(b)). Besides the abuse of that ruling, it has been used as a defense such that any time I try to assert my rights as I am legally entitled, it is met with the Tonnesons’ cries of so-called

vexatiousness. Though I have not sought a stay to date of that portion of the ruling pending perfection of my appeal, the claim therein is not a valid defense to any issue I raise.

9. The Town's affirmation in opposition to a motion which is currently being re-argued before the Appellate Division completely MISREPRESENTS that I asked for the noise ordinance that was passed. This is another essential dishonesty of the parties. I was complaining repeatedly about construction noise that was forcing me out of my home. The Town decided to put in a noise ordinance because of my complaints about construction noise. As already stated, because of my electromagnetic sensitivities, I had nowhere to go and being constantly thrown out of my home affected each and every aspect of my life. The Building Department permit had an Attachment A, which recommended that construction end by 6 p.m. (**Exhibit 13**) The police were enforcing this as a Time limit. After David Tonneson's absurd demand to work until midnight 7 days a week that was roundly cheered by his posse of low-information voters and various members of his payroll (Squicciarini and Conley), and something that would have been laughed out in any other normal town as unserious, the Town *extended* his ability to work until 9 p.m., 7 days a week causing me more continual torture. Construction is not legal at night in residential areas in any other jurisdiction and every lawyer I have consulted said the law will be thrown out upon a declaratory judgment action. I assert the passage of this illegal ordinance was retaliation for my having sued the Town. I call it the "make noise" ordinance because it allowed more noise (of virtually any type) late into the night than when there was no ordinance. The Town's affirmation misstates virtually every aspect of the law, including that of mandamus, which is one of the reasons why the motion is under re-argument.

10. With regard to Debbie's claim about cell towers: **Exhibit 9** consists of the outer envelope sent to me, an inner envelope addressed to Restrs Ltd. aka Hudson Highlands

Restorations Realty, Ltd., aka (“RRL”), a solicitation from a cell tower company to place cell towers on a parcel owned by RRL, the tax roll demonstrating the Sec/Lot/Blk number corresponds to same and the Department of State Corporations database page confirming that David Tonneson is the corporate officer of RRL. If the Tonnesons didn’t send it to me or have it sent by a third party, then did someone steal the correspondence out of their P.O. Box or from Dave directly and mail it to me? Like most everything else that the Tonnesons state, the evidence belies their claims, this one being that they didn’t harass me by mail.

11. As is with virtually every document the Tonnesons put before this board, it offers NO LEGAL PROOF of their claims. They have once again falsely claimed they had right of way through 20-2-6, falsely claimed they did not cut trees on it (it is belied by the timber trespass exhibit (Exhibit E- January 8, 2020 affidavit), falsely claim they fixed the erosion control problems of the previous owners (they *caused* it by cutting the trees on the property). Again Exhibits 10 and 11 of the July 14, 2020 affidavit in an email to Bruce Terwilliger in which Tonneson misrepresented that he had a deed to 20-2-6 and accused me of improperly stopping an easement across that land. I have been on the right of way on 20-2-6 and there are obvious erosion control problems; also the stumps from the illegal tree cutting are still there, as documented in the timber trespass exhibit. I dispute the Tonnesons’ claims that they purchased the so-called triangle as an entry point or knowingly did so. At a Planning Board meeting in November 2019, Stephen Walker, my neighbor queried David Tonneson if he was building a road to meet Forest Hill Road. Tonneson explained that he had purchased the triangle to avoid *anyone else* building a road through his property into the future that could cause people from Forest Hill Road to traverse it. In any case the deed gives him no right of entry through 20-2-6. It’s yet another misrepresentation just like his most recent *ex parte* letter to Judge Onofry

claiming I was making him subdivide because he needed the money. (See Exhibit 5 of my September 14, 2020 affidavit). He had told me in August 2019 that he was going to subdivide and that also explains why he backed the current house so close to mine. He also told Judge Onofry in an undated *ex parte* communication that he had generated \$16 million in revenue from his building activities, so that belies claims of financial hardship. It also shows that he intends to do the same activity of which I complained, which is work upwards of 12 hours per day, 7 days a week, and forcing me out of my home/office again.

12. The Tonnesons are perjuring themselves again by claiming a picture of the wood road was taken in 2019. I have walked the road many times over the years and it barely looked like a road; it had more trees on it and it barely looked like a road; you could not see through it as this picture depicts. I have seen the stumps from after they illegally tore through a road- I witnessed destruction of same- I heard the trees being cut down, saw Kevin McCarthy's truck with trees in them and called the police. David Tonneson falsely told the police, O&R, the Building Inspector and the ZBA that he had the right to same. I have studied the title and the documents in the Canterbury Forest Corporation lawsuit and he has no right of way through 20-2-6. The right of way belongs to other parties. The drone pictures which I previously showed which Debbie Tonneson reproduced only underscores their absurd claim that there was some kind of gypsy moth problem just coincidentally in the area where they built. The Affidavit of Star Childs documents that the forest appeared healthy in the surrounding area. Debbie also falsely states that there was "illegal surveillance". Again, please see police report citing to Assistant District Attorney Tanja Beemer, Exhibit 9 in the July 14, 2020. No pictures were taken of the Tonnesons, just of the land and construction.

13. Another false claim by David Tonneson is that his drill permit (**Exhibit 10**) was

legal. He received it on July 12<sup>th</sup> before title had transferred to him (The deed is in the June 8, 2020 affidavit, Exhibit D, sub-exhibit D).

14. While David has misrepresented the percentage of his construction activities relevant to McCarthys, for extended periods of time when one wasn't working the other was. There was very little time where I wasn't flushed out by noise or recovering from extreme exposure to noise being made by him. There was construction noise going on after the CO, and having a CO does not obviate construction activities occurring. There has also been C-scale noise coming from the site. Contrary to David Tonneson's misrepresentations, C-scale noise come from machinery with a motor, including weed whackers and leaf blowers, not generalized human noise. There have been both, and both affect the value of my property because this noise has continued, both from the site and from other areas that I did not hear it from before due to the tree buffer. My house was quiet virtually 100% of the time before any construction on 11-1-1.52

15. Now that there have been greater stretches without construction noise, so that I can stay in my house for more than a few hours at a time and now that the home is occupied, I can hear more of the ambient noise more closely and can hear every time a vehicle pulls up or leaves the site and every time the garbage or recycling reaches Hemlock Road. This wouldn't have happened but for the improper removal of trees and siting of the house too close to me. July was also the first month I experienced with the trees not being there that had been there before. The light impact effects from the gap were worse. Furthermore, regarding my allegations of electromagnetic sensitivity, while documentation has been enough to exempt me from jury duty because of cell phones and Wi-Fi in use there in the Orange County court, the point is they are a reason I have to work from home, which is why I spend most of my time at home. The other obvious reason is the pandemic; so even if I had an office to work in, I would

not necessarily be able to access it given social distancing. **Exhibit 12** is a New York Times Article that speaks to the increase and likely permanent increase in people working from home, at least for the foreseeable future. It is open and notorious that Dr. Fauci has told the public that the pandemic should last through at least the end of 2021.

16. One of the other issues with the extreme displacement of the tree barrier is that as demonstrated through government documents from the EPA, the USDA and the USDOT, trees not only block out anthropomorphic noise, but alter the distribution in the balance between it and natural noises (birds chirping, etc), such that the anthropomorphic noises become more pronounced to the listener. (**Exhibit 14**)

17. The rules continue to not be transparent. Again, Alyse Terhune wrote to Rick Golden saying all document had to be in by September 4, 2020; however without informing me of same, they were accepting documents from the Tonnesons on September 9<sup>th</sup>, 2020 and posted them on the website (which I did not know about in the last appeal). This is further proof of my contentions that there is one set of rules for the Tonnesons and one set for me.

Exhibit 1 Kevin McCarthy answer with cross claims in EF 002857-2020

Exhibit 2 Tonnesons' denial of McCarthy's cross claims

Exhibit 3 Illegal demand by Town for payment on which the ZBA Chair is copied

Exhibit 4 Email of Rick Golden to Alyse Terhune explaining why fee demand was illegal

Exhibit 5 My letter to the Town explaining why other aspects of the local code were illegal

Exhibit 6 Code regarding Fees

Exhibit 7 History of Demands for Payment – First Appeal

Exhibit 8 Second Demand on behalf of ZBA to communicate through counsel

Exhibit 9 Correspondence sent to David Tonneson, the sent to me re: cell tower siting

Exhibit 10 The illegally issued Drill Permit (7/12/19)

Exhibit 11 Jack Jannarone rules for applicant

Exhibit 12 “Who Gets Left Behind in the Work From Home Revolution”, New York Times, (6/25/20)

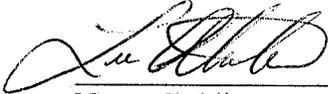
Exhibit 13 Building Department Attachment A.

Exhibit 14 Laverne RJ. *The Effects of Soundscapes on Humans* 4/28/20



Deborah Kopald

Sworn to before me this  
15<sup>th</sup> day of September 2020.



Notary Public

Notarization was made pursuant to NY Governor's Executive Order 202.7, as extended.

LISA ALVARADO  
Notary Public, State of New York  
No. 01AL6101150  
Qualified in Orange County  
Commission Expires November 3, 2023

# EXHIBIT 1

SUPREME COURT OF THE STATE OF NEW YORK  
COUNTY OF ORANGE

-----X  
CANTERBURY FOREST CORP.,

Index No.: EF002857-2020

Plaintiff,

**VERIFIED ANSWER**  
**WITH CROSS-CLAIMS**

-against-

DAVID TONNESON, DEBORAH TONNESON,  
JAIDIN PAISLEY-TONNESON, JACK McCARTHY,  
KEVIN McCARTHY and JONATHAN MILLEN,

Defendants.  
-----X

Defendant, KEVIN McCARTHY, by and through his attorneys, STEVEN F. GOLDSTEIN, LLP,  
as and for his Verified Answer to the Verified Complaint of the plaintiff herein, respectfully alleges and  
states upon information and belief, the following:

1. The answering defendant denies knowledge or information sufficient to form a belief as  
to the allegations contained in paragraphs "1," "2," "3," "4," "5," "5A," "5B," "5C," "5D," "5E," "6," "7," "8,"  
"9" and "10" of the within Verified Complaint.

**ANSWERING THE FIRST CAUSE OF ACTION:**  
**TRESPASS AS AGAINST ALL DEFENDANTS EXCEPT MILLEN**

2. The answering defendant repeats, reiterates and realleges each and every of the foregoing  
denials, denials of knowledge or information, and admissions, as contained in paragraphs "1" through "10"  
of the within Verified Complaint, inclusive with the same force and effect as if set forth herein at length.

3. The answering defendant denies knowledge or information sufficient to form a belief as  
to the allegations contained in paragraphs "12," "13," "15" and "16" of the within Verified Complaint.

4. The answering defendant denies each and every allegation contained in paragraphs "14,"  
"17," "18," "19," "20," "21" and "22" of the within Verified Complaint.

**ANSWERING THE SECOND CAUSE OF ACTION:**  
**RPAPL § 861 VIOLATIONS**  
**AGAINST ALL DEFENDANTS EXCEPT MILLEN**

5. The answering defendant repeats, reiterates and realleges each and every of the foregoing denials, denials of knowledge or information, and admissions, as contained in paragraphs "1" through "22" of the within Verified Complaint, inclusive with the same force and effect as if set forth herein at length.

6. The answering defendant denies each and every allegation contained in paragraphs "14," "17," "18," "19," "20," "21" and "22" of the within Verified Complaint.

**ANSWERING THE THIRD CAUSE OF ACTION:**  
**CONVERSION AGAINST ALL DEFENDANTS EXCEPT MILLEN**

7. The answering defendant repeats, reiterates and realleges each and every of the foregoing denials, denials of knowledge or information, and admissions, as contained in paragraphs "1" through "25" of the within Verified Complaint, inclusive with the same force and effect as if set forth herein at length.

8. The answering defendant denies each and every allegation contained in paragraph "27" of the within Verified Complaint.

**ANSWERING THE FOURTH CAUSE OF ACTION:**  
**NEGLIGENCE AGAINST ALL DEFENDANTS**

9. The answering defendant repeats, reiterates and realleges each and every of the foregoing denials, denials of knowledge or information, and admissions, as contained in paragraphs "1" through "27" of the within Verified Complaint, inclusive with the same force and effect as if set forth herein at length.

10. The answering defendant denies each and every allegation contained in paragraphs "29," "30," "31" and "32" of the within Verified Complaint.

**ANSWERING THE FIFTH CAUSE OF ACTION:**  
**SLANDER OF TITLE**  
**AS AGAINST MILLEN AND THE TONNESON DEFENDANTS**

11. The answering defendant repeats, reiterates and realleges each and every of the foregoing denials, denials of knowledge or information, and admissions, as contained in paragraphs "1" through "32" of the within Verified Complaint, inclusive with the same force and effect as if set forth herein at length.

12. The answering defendant denies knowledge or information sufficient to form a belief as to the allegations contained in paragraphs "34," "35," "36," "37," "38," "39," "40," "41," "42," "43" and "44" of the within Verified Complaint..

**AS AND FOR A FIRST AFFIRMATIVE DEFENSE**

13. That the plaintiff's Complaint, in whole or in part, fails to state a valid cause of action, or claim upon which relief may properly be granted against the answering defendant.

**AS AND FOR A SECOND AFFIRMATIVE DEFENSE**

14. Upon information and belief, that any damages sustained by the plaintiff, were caused solely and wholly by reason of the carelessness and negligence of the plaintiff in that plaintiff did not take the usual necessary and proper safety precautions and was otherwise negligent and careless.

**AS AND FOR A THIRD AFFIRMATIVE DEFENSE**

15. The answering defendant alleges, upon information and belief, that whatever damages were sustained by the plaintiff at the time and place alleged in the Complaint, were due in whole or in part as a result of the assumption of risk (primary and/or express and/or implied), comparative negligence, contributory negligence and culpable conduct of the plaintiff, and that such negligence, conduct and risk assumption reduces, mitigates and/or bars plaintiff's recovery.

**AS AND FOR A FOURTH AFFIRMATIVE DEFENSE**

16. The answering defendant denies any liability. However, should the answering defendant be held responsible, a demand is made that responsibility and damages be apportioned, reduced and determined in accordance with Articles 14 and 16 of the CPLR, in that if the finder of fact finds the answering defendant responsible, then plaintiff's damages were caused by its own culpable conduct and/or the culpable conduct and/or acts of others.

**AS AND FOR A FIFTH AFFIRMATIVE DEFENSE**

17. In the event plaintiff recovers a verdict or judgment against the answering defendant, said verdict or judgment should be reduced pursuant to CPLR 4545 by those amounts which have been or will

with reasonable certainty be replaced, or indemnify plaintiff, in whole or in part, for any past or future claimed economic loss from any collateral source.

**AS AND FOR A SIXTH AFFIRMATIVE DEFENSE**

18. The answering defendant pleads a set off of all settlements, discontinuances or agreements which would reduce any recovery pursuant to General Obligations Law 15-108.

**AS AND FOR A SEVENTH AFFIRMATIVE DEFENSE**

19. The plaintiff has failed to fully and properly mitigate damages.

**AS AND FOR AN EIGHTH AFFIRMATIVE DEFENSE**

20. The plaintiff lacks capacity and/or standing to bring this action.

**FIRST CROSS-CLAIM AGAINST ALL DEFENDANTS  
EXCEPT JACK McCARTHY**

21. That if the plaintiff was caused to sustain damages as alleged in the Complaint through carelessness, negligence, recklessness and/or through any statutory violations, and which the answering defendant, KEVIN McCARTHY, specifically and expressly denies, and, if the plaintiff was caused to sustain said damages through wrongful conduct other than through its own culpable conduct, then the answering defendant will be damaged thereby and will be entitled to full written contractual indemnification from Defendants, DAVID TONNESON, DEBORAH TONNESON, JAIDIN PAISLEY-TONNESON, JACK McCARTHY and JONATHAN MILLEN, from any judgment claimed or obtained as or against the answering defendant, pursuant to said contract, and the answering defendant will further be entitled to recoupment of all costs and attorneys' fees associated with the defense of this lawsuit.

**SECOND CROSS-CLAIM AGAINST ALL DEFENDANTS  
EXCEPT JACK McCARTHY**

22. That if the plaintiff was caused to sustain injuries and damages as alleged in the Complaint through carelessness, negligence, recklessness and/or through any statutory violations, and which the answering defendant, KEVIN McCARTHY, specifically and expressly denies, and, if the plaintiff was caused to sustain said damages through wrongful conduct other than through its own culpable conduct, then

the answering defendant will be damaged thereby and will be entitled to common-law indemnification from Defendants, DAVID TONNESON, DEBORAH TONNESON, JAIDIN PAISLEY-TONNESON, JACK McCARTHY and JONATHAN MILLEN, from any judgment claimed or obtained as or against the answering defendant, including recoupment of costs and attorneys' fees associated with the defense of this lawsuit.

**WHEREFORE**, Defendant, KEVIN McCARTHY, demands judgment dismissing the Verified Complaint of the plaintiff herein, as to it, together with the costs and disbursements of this action, and further demands that the ultimate rights of the defendants and of the plaintiff, be determined in this action, and that Defendant, KEVIN McCARTHY, have judgment over and against the plaintiff and its co-defendants for all or part of any verdict and/or judgment which shall or may be had against it in this action, together with all reasonable costs and expenses which may have been incurred in the defense of this action.

Dated: Carle Place, New York  
August 3, 2020

Yours, etc.

STEVEN F. GOLDSTEIN, LLP

  
BY: STEVEN F. GOLDSTEIN  
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*Defendant, Pro Se*

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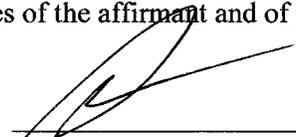
(914) 906-8830

VERIFICATION

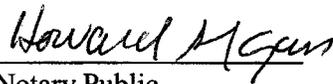
STATE OF NEW YORK        )  
                                  ) SS.:  
COUNTY OF NASSAU        )

**STEVEN F. GOLDSTEIN**, an attorney admitted to practice in the Courts of the State of New York, respectfully affirms the truth of the following under penalty of perjury and pursuant to Rule 2106 of the Civil Practice Law and Rules of the State of New York.

1.       The affirmant is a member of the law firm of STEVEN F. GOLDSTEIN, LLP attorney for Defendant, KEVIN McCARTHY
2.       The affirmant has read the foregoing **ANSWER WITH CROSS-CLAIMS** and knows the contents thereof; that the same is true to affirmant's own knowledge, except as to the matters therein stated to be alleged upon information and belief, and that as to those matters, affirmant believes it to be true.
3.       The affirmant further states that the reason this verification is being made by the affirmant and not by the defendants, is that the defendants are not currently within the County in which the affirmant maintains his office.
4.       The grounds of belief as to all matters not stated upon the knowledge of the affirmant are as follows: information contained in the records and files of the affirmant and of plaintiff.

  
\_\_\_\_\_  
STEVEN F. GOLDSTEIN

Sworn to before me this  
*3rd* day of August, 2020

  
\_\_\_\_\_  
Notary Public  
**HOWARD S. KASS**  
Notary Public, State of New York  
No. 30-01KA2040140  
Qualified in Nassau County  
My Commission Expires May 31, 2023

## **EXHIBIT 2**

SUPREME COURT OF THE STATE OF NEW YORK  
COUNTY OF ORANGE

-----X

CANTERBURY FOREST CORP.,

Index No.: EF002857-2020

Plaintiff,

-against-

**REPLY TO CROSSCLAIMS**

DAVID TONNESON, DEBORAH TONNESON,  
JAIDIN PAISLEY-TONNESON, JACK McCARTHY,  
KEVIN McCARTHY and JONATHAN MILLEN,

Defendants.

-----X

Defendants, DAVID TONNESON, DEBORAH TONNESON and JAIDIN PAISLEY-TONNESON, by their attorneys, LAW OFFICE OF THOMAS K. MOORE, in reply to the crossclaims contained in the answer of defendant, KEVIN McCARTHY, respectfully set forth as follows:

1. Deny each and every cause and causes of action contained in paragraphs numbered "21" and "22" of the crossclaims.

WHEREFORE, the defendant demands judgment:

- (1) Dismissing the complaint;
- (2) For costs and disbursements against adverse parties.

Dated: White Plains, New York  
August 21, 2020

  
 By: Jonathan W. Greisman  
 LAW OFFICE OF THOMAS K. MOORE  
 Attorneys for Defendants  
 DAVID TONNESON, DEBORAH TONNESON  
 & JAIDIN PAISLEY-TONNESON  
Mailing Address:  
 POB 2903  
 Hartford, CT 06104-2903  
 (914) 285-8500

TO: STEVEN F. GOLDSTEIN, LLP  
Attorneys for Defendant  
KEVIN McCARTHY  
One Old Country Road, Suite 318  
Carle Place, NY 11514  
(516) 873-0011

JACOBOWITZ & GUBITS, LLP  
Attorneys for Plaintiff  
158 Orange Avenue  
POB 367  
Walden, NY 12586  
(845) 778-2121

JAMES R. McCARL & ASSOCIATES  
Attorneys for Defendant  
JACK McCARTHY  
18 Bridge Street  
Montgomery, NY 12549  
(845) 457-9413

JONATHAN MILLEN  
Pro Se  
1229 Route 300  
Newburgh, NY 12550

# EXHIBIT 3

## Escrow

---

From: Kelly Pecoraro (kpecoraro@highlands-ny.gov)  
To: deborah\_kopald@ymail.com  
Cc: jjannarone@highlands-ny.gov; blivsey@highlands-ny.gov  
Date: Thursday, June 25, 2020, 04:31 PM EDT

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Dear Deborah,

I understand that the ZBA recently closed your public hearing. I have also been informed that no decision will be forthcoming and work will be discontinued if payment of all escrow fees are not up to date. This is the standing policy of the Town for all escrow matters. While I understand that you are protesting the payment of such fees, attached please find a notice of unpaid escrow fees. If I can be of further assistance, please do not hesitate to contact me.

Very truly yours,

Kelly Pecoraro

**Kelly Pecoraro**

**Comptroller**

Town of Highlands

254 Main Street

Highland Falls, NY 10928

Office Phone 845-446-4280 ext 325

Cell Phone 914-393-8896

Fax 845-446-6507



Escrow.pdf  
150.9kB

# EXHIBIT 4

## Re: Escrow

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From: Richard Golden (rgolden@bmglawyers.com)

To: aterhune@ldzhlaw.com

Date: Monday, July 6, 2020, 12:07 PM EDT

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Alyse,

Thanks for the heads up, but from what I know the Town failed to abide by its own requirements for assessing consultant fees under Town Code Section 109-1(3). That section required only a \$750 initial escrow deposit and then any future fees could only be requested if based upon a reasonable consultant fee estimate. I understand that Ms. Kopald has disputed the amount she is being assessed, and advises me she was never provided the required fee estimate, which, to be enforceable per the Code, must be premised on a documented reasonable relationship to fees prevailing in the surrounding geographical area for similar services on similar reviews.

In any event, this fee dispute is a matter between the Town and Ms. Kopald, and I will leave it to the Town and her as to how this gets resolved. My interest at the moment is focused on the concern I have that Ms. Pecoraro appears to be signaling that there will be no ZBA decision unless and until the fee dispute is resolved. That position is troubling because, as you well know, the timing of the ZBA decision is mandated by State law to be issued within 62 days after the close of the public hearing. I am unaware of any law that allows a delay to that State-mandated deadline owing to a fee dispute. The Town has clear legal remedies to try and enforce whatever fees it deems owed to it, without resorting to the holding up of a mandated timely decision. Regardless of Ms. Pecoraro's email, I believe that the ZBA must issue a timely decision on Ms. Kopald's appeal no later than August 18th.

Please let me know if you disagree.

Rick

Richard B. Golden, Esq.  
Burke, Miele, Golden & Naughton, LLP  
P.O. Box 216  
40 Matthews Street, Suite 209  
Goshen, New York 10924  
845-294-4080 (Office)  
845-551-0895 (Cell)

On Jul 2, 2020, at 10:27 AM, Alyse Terhune <[aterhune@ldzhlaw.com](mailto:aterhune@ldzhlaw.com)> wrote:

**Rick – as a courtesy. See attached and below.**

Alyse Terhune, Esq.  
82 East Allendale Road  
Saddle River, NJ 07458  
(201) 934-9800

This transmission contains information from the law firm of Alyse D. Terhune, Esq., which may be confidential and/or privileged. This information is intended to be for the exclusive use of the individual or entity named above. If you are not the intended recipient, be advised that any disclosure, copying, distribution or other use of this information is strictly prohibited. If you have received this transmission in error, please notify us by telephone at 201 934-9800 or 212 772-0943 or by e-mail immediately and delete the message.

#### IRS CIRCULAR 230 DISCLOSURE:

To ensure compliance with requirements imposed by the IRS, we inform you that any U.S. federal tax advice contained in this communication (including any attachments) is not intended or written to be used, and cannot be used, for the purpose of (i) avoiding penalties under the Internal Revenue Code or (ii) promoting, marketing or recommending to another party any transaction or matter addressed herein.

---

**From:** Kelly Pecoraro [<mailto:kpecoraro@highlands-ny.gov>]  
**Sent:** Thursday, June 25, 2020 4:32 PM  
**To:** Bob Livsey <[blivsey@highlands-ny.gov](mailto:blivsey@highlands-ny.gov)>; Richard Sullivan <[rsullivan@highlands-ny.gov](mailto:rsullivan@highlands-ny.gov)>; Richard Parry <[rparry@highlands-ny.gov](mailto:rparry@highlands-ny.gov)>; Ty King <[tking@highlands-ny.gov](mailto:tking@highlands-ny.gov)>  
**Cc:** Justin Rider <[JRider@riderweiner.com](mailto:JRider@riderweiner.com)>; Alyse Terhune <[aterhune@ldzhlaw.com](mailto:aterhune@ldzhlaw.com)>  
**Subject:** FW: Escrow

FYI

**Kelly Pecoraro**  
**Comptroller**  
Town of Highlands  
254 Main Street  
Highland Falls, NY 10928  
Office Phone 845-446-4280 ext 325  
Cell Phone 914-393-8896  
Fax 845-446-6507

---

**From:** Kelly Pecoraro  
**Sent:** Thursday, June 25, 2020 4:30 PM  
**To:** 'Deborah Kopald' <[deborah\\_kopald@ymail.com](mailto:deborah_kopald@ymail.com)>  
**Cc:** Jack Jannarone <[jjannarone@highlands-ny.gov](mailto:jjannarone@highlands-ny.gov)>; Bob Livsey <[blivsey@highlands-ny.gov](mailto:blivsey@highlands-ny.gov)>  
**Subject:** Escrow

Dear Deborah,

I understand that the ZBA recently closed your public hearing. I have also been informed that no decision will be forthcoming and work will be discontinued if payment of all escrow fees are not up to date. This is the standing policy of the Town for all escrow matters. While I understand that you are protesting the payment of such fees, attached please find a notice of unpaid escrow fees. If I can be of further assistance, please do not hesitate to contact me.

Very truly yours,

Kelly Pecoraro

**Kelly Pecoraro**  
**Comptroller**  
Town of Highlands  
254 Main Street  
Highland Falls, NY 10928  
Office Phone 845-446-4280 ext 325  
Cell Phone 914-393-8896  
Fax 845-446-6507

<Escrow.pdf>

# EXHIBIT 5

Deborah Kopald  
P.O. Box 998  
Fort Montgomery, NY 10922

Ms. Kelly Pecoraro, Comptroller, Town of Highlands  
254 Main Street  
Highland Falls, NY 10928

April 11, 2020

**PROTEST AGAINST ILLEGAL FEE LEVIES**

Dear Ms. Pecoraro,

I am in receipt of March 12<sup>th</sup> letter. When I started this process and paid a fee and an escrow I protested the escrow and protested the second escrow, telling you that I would seek return of monies with interest and that you only had the legal right to charge me one appellate fee.

At this juncture, these illegal charges are interfering with my due process. According to your recent letter, I owe the town \$2525.60 for a total charge of \$4825.60 and counting for an aggrieved neighbor appeal.

I am protesting these charges. If the Town refuses to continue to hear my appeal, I will seek not merely reinstatement but special damages for the Town's violating my due process rights and acting with malice.

First of all, the letters demanding money keep referring to the "above named project", but fails to identify the project- it leaves the Map, Block and Lot empty. In some sense, this is apt because **THIS IS NOT MY PROJECT.** This is an aggrieved neighbor appeal.

Even if I were a developer, you cannot pass through the ZBA's legal fees to me; please see: *New York Telephone Co. v. City of Amsterdam*, 200 A.D.2d 315 (3rd Dep't 1994):

"To the extent that [the] fees charged are exacted for revenue purposes or to offset the cost of general governmental functions they are invalid as an unauthorized tax \* \* \* "

The ZBA functions as a court and is supposed to hear appeals. NY Town Law § 267 states:

The town board may provide for compensation to be paid to experts, clerks and a secretary and provide for such other expenses as may be necessary and proper, not exceeding the appropriation made by the town board for such purpose.

Legal fees of the town attorney are not expert, clerk and secretary fees. Your attempting to charge me Ms. Terhune's costs to the town is an unauthorized TAX. An appeal is a government function and in fact the ZBA is a quasi-judicial body set up by the state legislature. An appeal is not supposed to be cost prohibitive; it is not supposed to pass on costs of administering justice to the appellant; it is not supposed to pass on costs to be borne by the taxpayer to the appellant; it is

supposed to have a fixed fee. And in fact there is no specific fee levied for this purpose in the Town code. It is not contemplated by the state code and indeed the Court of Appeals has forbidden it. Also, the \$75 fee isn't even enumerated in Local Code § 109-1.

§ 109-1 (3) generally refers to applications for *developers*, not for aggrieved neighbor appeals.

The last sentence reads,

No permit shall be issued for applications granted final approval unless the fees provided in this section have been paid in full.

This indicates that these expert fees (expert fees, not attorney fees) are generally contemplated for the project developer, who would get a permit. An aggrieved neighbor does not get a permit.

One portion reads:

A fee shall be considered reasonable in amount if it bears a reasonable relationship to fees prevailing in the surrounding geographical area for similar services on similar projects.

At no point has the town pointed to any other town that charges anything whatsoever for an aggrieved neighbor appeal.

Note-ably § 109-1 (3) does not contemplate expenses for the town attorney (which are not contemplated by NY Town Law § 267 either. It only refers to consultant review fees:

The applicant's account shall in no case be billed for more than has actually been expended for *consultant review fees*, and review fees attributable to environmental reviews under the State Environmental Quality Review Act (SEQR) shall in no event exceed the maximum amounts to be charged pursuant to the SEQR regulations.

(Emphasis added)

Again, there is no fee enumerated in the code for an application fee. The failure to even specify specific fees for an aggrieved neighbor appeal (to say nothing of the fact that the law does not allow attorneys' fees to be passed on to either an aggrieved neighbor appealing or a developer) is in itself legally significant. I will return to the point of the failure to specify specific fees. Meanwhile, with regard to the illegality of passing along attorneys' fees and violation of one's right to due process, please see: *Jewish Reconstructionist Synagogue of North Shore, Inc. v Incorporated Village of Roslyn Harbor*, 40 N.Y.S.2d 198 (Court of Appeals: 1976).

*The open-ended, indeed unlimited, nature of the fees which it authorizes therefore makes the ordinance vulnerable to attack on the ground that it overreaches the State statute's implied grant of power to the village. For when the State's jealously guarded police power is delegated to a local government or to its agencies, it must be accompanied by standards which guide and contain its use (Matter of Fink v. Cole, 302 N.Y. 216, 97*

N.E.2d 873; 8200 Realty Corp. v. Lindsay, 27 N.Y.2d 124, 313 N.Y.S.2d 733, 261 N.E.2d 647; Matter of Small v. Moss, 279 N.Y. 288, 295, 18 N.E.2d 281, 283; City of Amsterdam v. Helsby, 37 N.Y.2d 19, 27, 36, 371 N.Y.S.2d 404, 407, 415, 332 N.E.2d 290, 292, 298). *As a consequence, when the power to enact fees is to be implied, the limitation that the fees charged must be reasonably necessary to the accomplishment of the statutory command must also be implied (City of Buffalo v. Stevenson, supra, 207 N.Y. at pp. 261—262, 100 N.E. at pp. 799—800).*<sup>3</sup>

*4The fees also 'should be assessed or estimated on the basis of reliable factual studies or statistics' (9 McQuillan, Municipal Corporations, s 26.36, p. 89; see, also, Bon Air Estates v. Village of Suffern, 32 A.D.2d 921, 302 N.Y.S.2d 304; Matter of Hanson v. Griffiths, 204 Misc. 736, 124 N.Y.S.2d 473, Supra; People v. Malmud, 4 A.D.2d 86, 164 N.Y.S.2d 204, Supra). Put another way, the yardstick by which the reasonableness of charges made to an applicant in an individual case may be evaluated is the experience of the local government in cases of the same type. **Without the safeguard of a requirement that fees bear a relation to average costs, a board would be free to incur, in the individual case, not only necessary costs but also any which it, in its untrammelled discretion, might think desirable or convenient, no matter how oppressive or discouraging they might in fact be for applicants.***

(Emphasis added)

The Court of Appeals calls out the Incorporated Village of Roslyn Harbor for exactly what the Town of Highlands attempts to do to me- demand that the taxpayer bear no costs in this case and that I bear them all, charge me for something that isn't charged elsewhere (here it is worse- attempting to charge me for the zoning board attorney's fees) and impinging my rights to seek appeal- something that was mandated by Supreme Court for me to get relief (note- that ruling is under appeal).

But, obviously, a fee is not average when it is based on a sample of one. Here the village acknowledges that the plaintiff's application was the only one of its kind received by it in many years, if ever. *Yet, it legislated liability for whatever expenses the board unilaterally might decide to incur in a case involving such an applicant without making any attempt whatsoever, so far as the record shows, to determine whether the resulting charges would be so extensive that they would tend to discourage those seeking relief by appeal to the board. Nor is there even the slightest indication of any effort made to avoid idiosyncratic or atypical charges by ascertaining what prevailing practices had been developed over a range of experience by other villages of comparable size on the basis of their average experience.*

It is not just the amount of the fees alone which is here involved. *At stake are the terms upon which citizens may have access to a governmental function and their right to have those terms, whether or not they are in the form of fees, fixed by standards which lend assurance that they are not 'unreasonable, discriminatory nor oppressive' (Trio Distr.*

*Corp. v. City of Albany*, 2 A.D.2d 326, 329, 156 N.Y.S.2d 912, 915). Furthermore if fees for seeking relief from an unduly burdensome zoning ordinance can be tailored by a board to an individual case without reference to whatever is usual or average in other such cases, the appearance of a potential for abuse or discrimination may arise, whether one actually occurs or not. **Manifestly, ready accessibility of judicial and other mandated governmental functions is too important for that accessibility and its appearance of accessibility to be impaired by the insufficiently delineated fee system in this case, designed, as defendant admits it was, to guarantee that the community's taxpayers bear no share of the expense of maintaining the mandated function of government which the board was carrying out. That requirement puts too exclusive an obligation on the individual to bear the entire cost of a governmental function whose very existence is in furtherance of the general welfare.**

(Emphasis added)

Besides the issue of the insufficiently delineated fee system (local code has no specific provision for specific professional fees and indeed none specified for aggrieved neighbor appeals), **this case specifically concludes that signage and posting for the hearing were legal costs, but Attorney costs WERE NOT:**

In light of these legal and governmental values, Special Term's finding that the charges for the cost of publishing the notice required by statute and for the cost of the necessary technical, information-supplying engineering and inspection reports were not in excess of what was necessary in order to carry out the statutory mandate can be supported. While the ordinance does not set out guidelines as to the fees for those items, the wide range of other cases in which such services are commonly employed, as a result of which such charges have come to be fairly uniform and predictable, provides assurance that the board's power to assess them on a case-by-case basis is not unlimited or unanticipatable (see 2 Rathkopf, *Law of Zoning and Planning*, s 6, p. 55—15, and cases cited therein).

On the other hand, the *charges for legal fees*, those for transcribing the record of the proceedings and supplying copies of it to each board member,<sup>4</sup> and those for the rental of a capacious auditorium in which large numbers of spectators could be accommodated at each of the board's sessions, stand on a different footing. *They did not represent necessary expenditures but rather conveniences to the board for fulfillment of what in the end was its own decision-making responsibility* (see 12 Opns.St.Comp., 1956, p. 374; 21 Opns.St.Comp., 1965, p. 483).

(Emphasis added)

The town also conflates a right with a benefit (which is something a developer would seek, not an aggrieved neighbor. But even developers are not found by the courts to always be seeking benefits- they have some base rights and those should not be abused with fees

See also: *Philips v. Town of Clifton Park Water Authority*, 286 A.D. 2d 834 (3<sup>rd</sup> Dep't: 2001):

Indeed, “[t]o the extent that fees charged are exacted for revenue purposes or to offset the cost of general governmental functions they are invalid as an unauthorized

tax” *Matter of Torsoe Bros. Constr. Corp. v. Board of Trustees of Inc. Vil. of Monroe*, 49 A.D.2d 461, 465, 375 N.Y.S.2d 612;

See also: *Joy Apartments, LLC v. Town of Cornwall*, 160 A.D.3d 958 (2<sup>nd</sup> Dep’t: 2018); *Harriman Estates at Aquebogue, LLC v. Town of Riverhead*, A.D.3d 854 (2<sup>nd</sup> Dep’t 2017) and *New York Telephone Co. v City of Amsterdam*, 200 A.D.2d 315 (3<sup>rd</sup> Dep’t: 1994).

Returning to the issue of rights versus benefits (which are by definition only something a developer applicant would get in a ZBA review), *Jewish Reconstructionist Synagogue of North Shore, Inc. v Incorporated Village of Roslyn Harbor*, supra, states:

*That a right rather than a benefit is being pursued is of special significance in the context of this case. It is no doubt at the heart of the reason why, as the zoning expert and commentator whose work was instrumental in the formulation of the State enabling legislation (see Village Law, s 7—712; Town Law, s 267) has noted, the appellate jurisdiction of the board in hardship cases is fully and independently developed in our State statutes and not subject for its existence to the vagaries of the presence or absence of supplemental local enactment (Bassett, Zoning Practice in the New York Region: Comprising a Series of Aids to the Practice of Zoning, a Statement Regarding the Application of Zoning in New York City, and a Model State Enabling Act with Annotations (1926), at pp. 24—25). Correspondingly, an ordinance should be scrutinized more carefully for its inhibitions against the pursuit of such a right as distinguished from a benefit. For the justification which underlies fee structures has most often been expressed as a visitation of the costs of special services upon the one who derives a Benefit from them (see *Matter of Hanson v. Griffiths*, 204 Misc. 736, 124 N.Y.S.2d 473; *City of Buffalo v. Stevenson*, 207 N.Y. 258, 100 N.E. 798; *People v. Malmud*, 4 A.D.2d 86, 164 N.Y.S. 204; *People v. Brooklyn Garden Apts.*, 283 N.Y. 373, 28 N.E.2d 877; *Fox v. Kern*, Sup., 12 N.Y.S.2d 561).*

If the Town cancels my ZBA application (or if it has and does not promptly re-instate it), I will immediately hale it into federal court in White Plains and demand special damages for civil rights violations. I should not be forced to litigate in person during the pandemic. In as much as the Town is an ongoing party to the lawsuit, abuse of the ZBA process is especially damaging. The escrow provision is also for \$750 in the local code. My demand is for the Town to return the difference of what I have paid less \$750 with the N.Y statutory rate of interest forthwith as no experts have been consulted as well as the \$75 fee which was not specified in the local code. If the Town does not provide me with any examples of other nearby towns charging any escrow and fees for an aggrieved neighbor appeal for consultants, etc. by Friday April 24<sup>th</sup> at noon, my demand is for the Town to also return the remaining \$750 in escrow as well- so total monies paid.

Failure to resolve the issues of monies paid which I have disputed at every stage may result in imminent court action as well. Please contact me by Friday at noon with the town’s position on these matters so I can proceed to federal court forthwith to safeguard my rights if need be.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Deborah', with a long horizontal flourish extending to the right.

Deborah Kopald

# EXHIBIT 6

[Adopted as amended through L.L. No. 5-2008, adopted 11-10-2008]

## § 109-1 Fees enumerated.

### A. Section III. Planning Board fees.

Description/Item	Fee
a. Subdivisions	
For application of approval subdivisions of not more than 4 lots	\$250 plus \$100 per lot
For subdivision of more than 4 lots	\$500 plus \$100 per lot
b. Application for site plan review	
Residential	\$250 plus \$100 per lot/unit
All others	\$250 plus \$0.25 per square feet each square feet over 300 square feet
c. Special exception use permit application fee	\$300
d. Erosion control permits	\$100
e. Inspection fees for required public improvements pursuant to subdivision, site plan or special exception permits to be paid prior to the stamping of plans by the Planning Board Chairman	4% of the estimated cost of the required public improvements
f. Inspection fees for private roads, retaining walls and related private improvements pursuant to subdivision, site plan or special exception permits to be paid prior to the stamping of plans by the Planning Board Chairman	4% of the estimated cost of the required private improvements

### B. Section V. Additional fees for professional services.

(1) Legislative intent. The Town Board hereby finds and determines that in order to protect and safeguard the Town of Highlands, its citizens and their property, the Town generally requires professional engineering, legal, planning, technical, and environmental services for applications and implementation measures associated with land use approvals and developments. By enactment of this section, the Town Board of the Town of Highlands recognizes the need of ensuring that the engineering, legal, planning, technical and environmental review costs incurred by the Town in processing and reviewing land use approvals are borne by the applicant/developer and not by the general public. To this end it is the intent of this section to require the applicant/developer subject to the Town of Highlands jurisdiction to deposit with the Town, in escrow, certain fees which are reasonably related to the complexity of the application and necessary review by the Town through its consultants as a condition precedent to the processing, review and approval of any application. Additionally, this section shall also require the deposit of escrow fees with the Town to cover the Town's costs for review of an applicant/developer's environmental impact statement in accordance with Environmental Conservation Law § 8-0113 and 6 NYCRR 617.17.

(2) Professional fees for certain actions before the Planning Board.

(a) Upon application to the Town of Highlands Planning Board for any planning action or approval, the applicant shall deposit with the Building Department/Planning Clerk an escrow to cover the costs being incurred by the Town for all consultant services, including but not limited to engineering, legal and planning, incurred in the processing and reviewing of such application.

(b) Escrow fee deposit.

[1] The initial escrow fee deposit shall be computed in accordance with the following schedule:

[a] Residential subdivision: \$600 per lot for each lot up to five lots and \$300 per lot for each lot over five lots.

[b] Residential lot line change: \$500 per lot affected by the lot line changes.

- [c] Single- and two-family residential site plan/special exception use permit: \$400 per residence.
- [d] Commercial subdivision: \$1,000 per lot for each lot up to five lots and \$500 per lot for each lot over five lots.
- [e] Commercial lot line change: \$700 per lot affected by the lot line changes.
- [f] Multifamily residential site plans and special exception permits: \$350 per unit for each unit up to 50 units and \$100 per unit for each unit over 50 units.
- [g] Mixed-use and commercial or other nonresidential site plans and special exception permits: \$1,000 plus \$200 per 1,000 square feet of building floor area or part thereof.
- [h] Additional escrow charge for State Environmental Quality Review Act (SEQRA):
  - [i] Short environmental assessment form: \$250.
  - [j] Long environmental assessment form: \$1,000.
  - [k] Environmental impact statement: \$7,500.
  - [l] Inspection fee for subdivisions: 5% of amount of performance bond.
- [2] In calculating the total initial escrow fee deposit, each of the above items which are included in the application shall be added and the total escrow charge shall equal the sum of the items. The Town Board may review the schedule of initial escrow fee deposits from time to time and if the Town Board determines that a change, or changes be should made in such schedule of initial escrow fee deposits, the Town Board may adopt such change or changes by resolution.
- (c) Planning Board professional review escrow fee deposits shall be made to the Building Department/Planning Clerk and shall be placed in a separate non-interest-bearing account by the Town Comptroller.
- (d) No review shall be undertaken by the consultants, nor shall the matter be scheduled before the Planning Board until the escrow deposit and all fees as set forth herein are paid.
- (e) Each time the escrow account falls below 80% of the initial deposit, the Planning Board shall require that the applicant pay additional funds into the escrow account to bring up and maintain the escrow account at 80% of the initial deposit, unless this requirement is waived by the Planning Board Chairman upon recommendation of the Planning Board consultants.
- (f) In the event that an applicant shall withdraw its application at any stage of the proceedings or when the application review and approval process has been completed, the balance of funds after payment of all outstanding charges in the applicant's account, together with any interest accrued thereon, shall be either remitted to the applicant within 60 days of final action by the Planning Board or, if so directed by the applicant, shall remain on deposit as the applicant's initial payment during the post-approval inspection requirements.
- (g) The applicant shall be responsible for the payment of all the fees for consultant services incurred by the Planning Board in connection with the review of the application notwithstanding that the escrow account may be insufficient to pay for said fees or expenses.
- (h) In the event that the Planning Board in the course of reviewing an application determines that the proposed action requires a positive declaration under SEQRA, all costs incurred by the Board for the review of any environmental impact statements, whether of a professional or clerical nature, shall be borne by the applicant pursuant to 6 NYCRR 617.8(a). Such costs shall be covered by an escrow account established pursuant to this section within 15 days of said positive declaration, in an amount as set forth in this subsection.
- (i) In cases when the complexity of an application (or lack thereof) or unusual circumstances surrounding the matter require that the initial fee or the percentage of that initial fee to be maintained in escrow be modified, the

Planning Board is authorized to grant or impose such modification within the following guidelines:

- [1]** The amount of any initial fee modification shall be reasonably related to the costs attendant to the Town's review of the application.
  - [2]** The amount of any escrow maintenance percentage shall be reasonably related to the complexity of the project as well as the stage to which the project has progressed as of the time of modification.
- (j)** Each of the Town's and/or Planning Board's engineering, legal and/or planning consultants who render services pertaining to a land use or development application shall submit monthly itemized vouchers to the Planning Board (through the Building Department) reasonably setting forth the services performed and amounts charged for such services.
  - (k)** Copies of said itemized vouchers shall be transmitted to the applicant simultaneously with their delivery to the Planning Board by the Building Department/Planning Clerk, together with a notice notifying the applicant that the failure to object to payment of the amount of the charges contained in said itemized voucher out of escrow funds within 15 days of the sending of said notice shall constitute an agreement by the applicant as to the reasonableness of the charges.
  - (l)** The Planning Board shall review vouchers for services rendered to each and shall communicate its approval of same to the Town Board. The Town Board shall review and audit all such vouchers and shall determine, in its discretion, the engineering, legal and planning fees which are reasonable in amount and necessarily incurred by the Town in connection with the review and/or approval of the land use or development application. A fee or expense or part thereof is reasonable in amount if it bears a reasonable relationship to the customary fee charged by engineers, attorneys or planners within the region for services performed on behalf of applicants or reviewing boards in connection with applications for land use or development. The Town Board may also take into account any special conditions for considerations as the Town Board may deem relevant. A fee and expense or part thereof is necessarily incurred if it was charged by the engineer, attorney or planner for a service which was rendered in order to assist in the protection or promotion of the health, safety or welfare of the Town or its residents; to assist in the protection of public or private property or the environment from potential damage that otherwise may be caused by the proposed land use or development; to assure or assist in compliance with laws, regulations, standards or codes which govern land use and development; to assure or assist in the orderly development and sound planning of a land use or development; to assure the proper and timely construction of public improvements, parks and other facilities which affect the public welfare; to protect the legal interests of the Town; to avoid claims against and liability of the Town; or to promote such other interests that the Town Board may specify as relevant.
  - (m)** After review and audit of such voucher by the Town Board, that Board shall authorize the Comptroller to make payment of same and shall provide to the applicant a copy of the voucher as audited.
  - (n)** The Planning Board is hereby authorized, at the time of action on any project, to make payment of any amount then overdue or likely to be later incurred as a condition of approval. No plat or plans will be signed and no building permit or other permit shall be issued until such time as all reimbursement of costs and expenses, determined by the Town Board to be due, have been fully paid.
  - (o)** Amounts paid pursuant to this chapter shall be placed in a trust and agency account to fund expenses incurred by the Town in processing the application as provided above. The Town shall keep a record of the name of the applicant and project and of all such monies deposited and withdrawn. Monthly vouchers submitted by the Planning Board's engineer, attorney, and/or planner shall be reviewed and audited by the Town Board and provided to the applicant, and the applicant may appeal said audit amount as provided herein.
  - (p)** All fee and expense reimbursement payments are due and payable within 15 days after delivery of a copy of an itemized voucher to the applicant as provided for in Subsection **B(2)(l)** above. Interest shall accrue on any unpaid itemized voucher at the rate of 9% per annum. The pursuance of an appeal under Subsection **B(2)(q)** below shall not affect the obligation to pay interest on any unpaid balance ultimately determined to be due.
  - (q)** An applicant may appeal, in writing, to the Town Board for a reduction in the required reimbursement amount. An appeal must be filed with the Town Board no later than 15 days after mailing or other delivery to the applicant

of the contested voucher. Upon such appeal, the Town Board, in its discretion, may determine that an applicant is not required to reimburse the Town for that part of an engineering, legal or planning fee incurred by the Town for services performed in connection with an application matter for which the Town Board determines the applicant bears no responsibility and which was beyond the reasonable control of the applicant. The Town Board's determination shall be in writing and shall be made no later than 45 days after receipt of the applicant's appeal.

(r) Pending applications. All applicants with matters pending before the Planning Board as of the effective date of this section shall be required to post an escrow in the manner and upon the terms and conditions set forth below:

[1] The Planning Board, in consultation with its consultants and with due consideration to the stage to which the project has progressed as of the time, shall compute the amount of the escrow to be posted with the Town. Such amount shall be reasonably related to the costs attendant to the Town's review of the application as of the effective date of this section. Under no circumstances shall the escrow include amounts attributable to any costs incurred by the Town and not chargeable to the applicant prior to the effective date of this section.

[2] Once computed and established by resolution of the Planning Board, the applicant shall, within 15 days of said resolution, post the escrow fees with the Secretary of the Planning Board. Failure to deliver said escrow fees may result in delay of the further processing of the application.

(3) Professional fees for certain applications to the Zoning Board of Appeals and the Town Board. In addition to the fees set forth above, for applications to the Zoning Board of Appeals, for applications for amendments to the zoning ordinance to the Town Board, for developers agreements, outside user agreements, establishments and extensions of special improvement districts and review and approval of proposed dedication instruments, including deeds, easements, performance and maintenance securities and insurance, each of said Boards may in its sole discretion determine that it requires engineering, legal or other technical review or preparation of the application, agreement or instrument in order to assist the Board in making its determination. Having made such determination, the Board may retain an engineer, attorney or such other professionals as it deems necessary and the cost thereof shall be an additional fee to the applicant. Each application is accordingly required to be accompanied by an initial minimum \$750 escrow fee for the costs of professional review. The Board will secure the professional's cost estimate once an initial review has been completed and advise the applicant if additional funds are required to be paid based on the estimate. The applicant will additionally be advised if review costs exceed the amounts on deposit and be required to deposit additional funds to cover the excess costs. Planning review fee deposits shall be placed in a separate non-interest-bearing account by the Town Comptroller. All vouchers submitted by professional consultants shall be reviewed and audited by Town officials in the same manner as other charges. Payment will be approved of only such fees as are reasonable in amount and are necessarily incurred by the Board in connection with the review. A fee shall be considered reasonable in amount if it bears a reasonable relationship to fees prevailing in the surrounding geographical area for similar services on similar projects. In determining similarity of services and projects, the Town may consider the size of the project and installations, the topography, soil conditions, drainage conditions, surface water conditions, other site constraints, the nature of the improvements to be installed or constructed, the nature of the planning, landscaping engineering or legal issues arising in the factual context of the application. In determining whether the fees were necessarily incurred, the Board may consider, in addition to the factors listed above, the nature of the materials provided by the applicant, the manner in which the service relates to the issues which must be decided by the Board in reviewing the application, whether the service provided reasonably assists the Board in performing a function required by law or regulation, and such other factors as may be relevant in the factual context of the application. Records shall be maintained showing all amounts deposited and all amounts paid from the escrow account and all bills and vouchers submitted by the Board's professional consultant. The applicant's account shall in no case be billed for more than has actually been expended for consultant review fees, and review fees attributable to environmental reviews under the State Environmental Quality Review Act (SEQR) shall in no event exceed the maximum amounts to be charged pursuant to the SEQR regulations. No permit shall be issued for applications granted final approval unless the fees provided in this section have been paid in full.

(4) Professional fees for review of stormwater pollution prevention plans and estimates. In the event any land development activity is proposed which does not require Planning Board or other Board approval, but does require the review and approval of a stormwater pollution prevention plan, specifications and related documents and the posting of a performance guaranty, the administering Town official shall obtain an estimate from a qualified engineer

approved by the Town Board in accordance with the provisions of Subsection B(3) above for the required review and the procedures set forth in Subsection B(3) subsequent to obtaining an estimate shall be followed with respect to the payment and disbursement of escrow fees for those review services.

- (5) Professional fees for certain inspections.
- (a) In order to ensure that erosion and sediment control measures and stormwater management facilities are designed and installed in a competent and workmanlike manner and in conformity with approved stormwater pollution prevention plans and all applicable government codes, rules and regulations, it is essential for the Town to have competent professionals retained by the Town perform inspections.
- (b) A person who installs erosion and sediment control measures and/or stormwater management facilities within or in conjunction with an approved subdivision, site plan or stormwater pollution prevention plan in the Town shall reimburse the Town for all reasonable and necessary professional expenses incurred by the Town in connection with the inspection of the installation and construction of the erosion and sediment control measures and stormwater management facilities.
- (c) Prior to the stamping of a subdivision or site plan by the Planning Board Chairman, the applicant shall deposit with the Building Department/Planning Clerk an escrow to cover the professional costs anticipated to be incurred by the Town in performing inspections of erosion and sediment control measures and stormwater management facilities.
- (d) The initial deposits required to fund escrow accounts for erosion and sediment control measure and stormwater management facility inspections are established by the Town Board as follows and the Town Board may increase or decrease said amounts by resolution from time to time:
- Approved Estimated Cost:  
 \$1 - \$49,999.99: \$2,000  
 \$50,000 - \$99,999.99: \$3,000  
 \$100,000 and over: \$4,000
- (e) Upon receipt of such sums, the Comptroller shall cause such sums to be deposited in a non-interest-bearing trust and agency account in the name of the Town and shall keep a separate record of all such monies so deposited.
- (f) Itemized vouchers shall be submitted, copied, reviewed, appealed and paid for professional inspection services in accordance with same procedures as set forth in Subsection B(2) above, except that the vouchers shall be submitted directly to the Town Board without prior review by the Planning Board. The Town Board shall approve payment of only such fees as are reasonable in amount and are necessarily incurred by the Town in connection with the inspection. A fee shall be considered reasonable in amount if it bears a reasonable relationship to fees prevailing in the surrounding geographical area for similar services in similar projects. In determining similarity of services and projects, the Town may consider the size of the project and installations, the topography, soil conditions, drainage conditions, surface water conditions, other site constraints, the nature of the measures and improvements to be installed or constructed, the nature of the engineering issues associated with the inspections and findings. In determining whether the fees were necessarily incurred, the Town may consider, in addition to the factors listed above, the nature of the materials provided by the applicant, the manner in which the service relates to the issues which must be decided by the Town in reviewing the inspection findings, whether the service provided reasonably assists the Town in performing a function required by law or regulation and such other factors as may be relevant in the factual context of the application. Records shall be maintained showing all amounts deposited, and all amounts paid from the escrow account and all bills and vouchers submitted by the Town professional consultants. The applicant shall in no case be billed for more than the Town has actually expended for consultant fees.
- (g) No building permits or certificates of occupancy or use shall be issued unless all professional inspection fees charged in connection with the project prior to the date of issuance have been paid and reimbursed.

- (h)** Any balance remaining in the escrow account shall be refunded within a reasonable time upon applicant's request, upon completion of the project, or upon withdrawal of an application, after all fees already incurred by the Town are first paid and deducted from the escrow account.

# EXHIBIT 7

Project Id: Z-KOPALD  
Category Id: ZONING ESCROW

Project Name: Deborah Kopald

Statement Date Range: 01/01/19 to 03/30/20  
Project Status: Active

Deborah Kopald  
88 Forest Hill Road  
PO Box 998  
Fort Montgomery NY 10922

Map:  
Block:  
Lot: .

Date	Type	Description	Amount	Balance
		Vendor Id Name		
		Opening Balance:		0.00
11/05/19	Deposit Ck: 1358	Establish escrow	1,200.00	1,200.00
12/06/19	Expenditure PO 19-02024 1	ZONING-KOPALD NOV27,19 Pd TERHU005 ALYSE D TERHUNE, ESQ.	1,025.00-	175.00
12/23/19	Deposit Ck: 35737	Replenish escrow	1,025.00	1,200.00
01/24/20	Encumbrance PO 20-00064 1	ZONING BD-KOPALD Open TERHU005 ALYSE D TERHUNE, ESQ.	758.50-	441.50
01/31/20	Encumbrance PO 20-00213 1	JAN2020 D.KOPALD Open TERHU005 ALYSE D TERHUNE, ESQ.	1,517.00-	1,075.50-
03/05/20	Encumbrance PO 20-00419 1	ZONING-D.KOPALD Open TERHU005 ALYSE D TERHUNE, ESQ.	250.10-	1,325.60-

Total Transactions:

Opening Balance:	0.00
Deposits:	2,225.00
Adjustments:	0.00
Developer Interest:	0.00
Expenditures:	1,025.00
	-----
Unencumbered Balance:	1,200.00
Encumbrances:	<u>2,525.60</u>
Closing Balance:	1,325.60-

\* Denotes Transaction that is not included in Balance. The Transaction was previously incurred and billed.

# TOWN of HIGHLANDS



Kelly Pecoraro  
Comptroller

254 Main Street  
Highland Falls, NY 10928  
(845) 446-4280 ext 325  
Fax: (845) 446-6507

Chartered December 3rd, 1872

## Town of Highlands Insufficient Balance Notice

Project Id: Z-KOPALD

Project Name: Deborah Kopald

December 9, 2019

Deborah Kopald  
88 Forest Hill Road  
PO Box 998  
Fort Montgomery NY 10922

Map:  
Block:  
Lot:

The Escrow Account that has been established for your above named project has a current balance of \$ 175.00 .  
This balance is below the required minimum balance of \$ 1,200.00 . You are required to immediately make an  
additional deposit of \$ 1,025.00 or no further action will be taken on this project.

Please make checks payable to TOWN OF HIGHLANDS and mail to the following address:

Town of Highlands  
Comptroller's Office  
254 Main Street  
Highland Falls, NY 10928

Phone: (845)446-4280 Ext: 325

Fax: (845)446-6507

Copies of all engineering and attorneys fees are available in this office for your review.

Sincerely yours,

Kelly Pecoraro

# TOWN of HIGHLANDS



Kelly Pecoraro  
Comptroller

254 Main Street  
Highland Falls, NY 10928  
(845) 446-4280 ext 325  
Fax: (845) 446-6507

Chartered December 3rd, 1872

## Town of Highlands Insufficient Balance Notice

Project Id: Z-KOPALD

Project Name: Deborah Kopald

March 12, 2020

Deborah Kopald  
88 Forest Hill Road  
PO Box 998  
Fort Montgomery NY 10922

Map:  
Block:  
Lot:

The Escrow Account that has been established for your above named project has a current balance of \$ 1,325.60-. This balance is below the required minimum balance of \$ 1,200.00. You are required to immediately make an additional deposit of \$ 2,525.60 or no further action will be taken on this project.

Please make checks payable to TOWN OF HIGHLANDS and mail to the following address:

Town of Highlands  
Comptroller's Office  
254 Main Street  
Highland Falls, NY 10928

Phone: (845)446-4280 Ext: 325

Fax: (845)446-6507

Copies of all engineering and attorneys fees are available in this office for your review.

Sincerely yours,

A handwritten signature in cursive script that reads 'Kelly Pecoraro'.

Kelly Pecoraro

# TOWN of HIGHLANDS



Kelly Pecoraro  
Comptroller

254 Main Street  
Highland Falls, NY 10928  
(845) 446-4280 ext 325  
Fax: (845) 446-6507

Chartered December 3rd, 1872

## Town of Highlands

### Insufficient Balance Notice

Project Id: Z-KOPALD

Project Name: Deborah Kopald

June 25, 2020

Deborah Kopald  
88 Forest Hill Road  
PO Box 998  
Fort Montgomery NY 10922

Map:

Block:

Lot:

The Escrow Account that has been established for your above named project has a current balance of \$ 1,946.75. This balance is below the required minimum balance of \$ 1,200.00. You are required to immediately make an additional deposit of \$ 3,146.75 or no further action will be taken on this project.

Please make checks payable to TOWN OF HIGHLANDS and mail to the following address:

Town of Highlands  
Comptroller's Office  
254 Main Street  
Highland Falls, NY 10928

Phone: (845)446-4280 Ext: 325

Fax: (845)446-6507

Copies of all engineering and attorneys fees are available in this office for your review.

Sincerely yours,

Kelly Pecoraro

# EXHIBIT 8

## Re: The 2nd Kopald ZBA appeal Record - No need to read until after the holiday

---

From: Richard Golden (rgolden@bmglawyers.com)

To: aterhune@ldzhlaw.com

Cc: jahearn@bmglawyers.com

Date: Sunday, September 6, 2020, 09:51 PM EDT

---

Alyse

As you know the Record for a ZBA appeal is supposed to be straight forward and transparent. I am not sure that occurred on the first ZBA appeal, but that decision is now rendered and what constituted the Record, properly or improperly (regardless of intent) will be addressed in an Article 78.

I do want to ensure that the Record is clear for the second ZBA appeal (re C of Os). I am prepared to make an appointment to have my associate John (copied on this email) inspect the ZBA file on the day of the hearing, so that he can identify and memorialize what constitutes the Record on the second appeal, i.e., documents that have been received by the ZBA after the filing of the second appeal and relate to that appeal. The only additional Record documents then will be those admitted during the hearing.

If the ZBA file is for some reason not the measure of what you contend the record will be, I need to know. If, for example, you will instead consider what is being posted on the Town's website as the totality of the Record, so be it, and I will have John identify those documents shortly before the public hearing, which may be supplemented if there are any documents or testimony received during the hearing.

Wherever the Record is being archived I need to know; I cannot be left guessing what is or is not in the Record.

Obviously, what I determine should be presented at the hearing on behalf of my client depends on what is in the Record that merits comment.

Please let me know where I should direct John to ascertain the totality of the Record, subject only to what is admitted during the public hearing by us or any member of the public.

Thank you.

Rick

Sent from my iPhone

Richard B. Golden, Esq.

Burke, Miele, Golden & Naughton, LLP

P.O. Box 216

40 Matthews St., Suite 209

Goshen, New York 10924

845-294-4080 (Office)

845-551-0895 (Cell)

On Sep 5, 2020, at 4:31 PM, Alyse Terhune <aterhune@ldzhlaw.com> wrote:

[Rick, you are correct. I had simply forgotten that the Chairman made this request.](#)

Alyse Terhune, Esq.

82 East Allendale Road

Saddle River, NJ 07458

(201) 934-9800

This transmission contains information from the law firm of Alyse D. Terhune, Esq., which may be confidential and/or privileged. This information is intended to be for the exclusive use of the individual or entity named above. If you are not the intended recipient, be advised that any disclosure, copying, distribution or other use of this information is strictly prohibited. If you have received this transmission in error, please notify us by telephone at 201 934-9800 or 212 772-0943 or by e-mail immediately and delete the message.

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**From:** Richard Golden [mailto:rgolden@bmgllawyers.com]  
**Sent:** Saturday, September 05, 2020 12:31 PM  
**To:** Alyse Terhune <aterhune@ldzhlaw.com>  
**Cc:** Jack Jannarone <jjannarone@highlands-ny.gov>  
**Subject:** Re: 20\_9\_4 affidavit

Alyse

I am taken aback by your comment.

My office was advised that any submittal by Ms. Kopald for the upcoming hearing on her second appeal had to be filed in-hand, with the requisite number of copies, with the Building Department by yesterday in order for it to be considered by the ZBA. Putting aside that I have been unable to find any rule of the ZBA that all submissions (in contrast with an application) have to be filed 10 days prior to the hearing, or that Friday was 12 days (not 10 days) prior to the hearing, we were prepared to file a supplemental affidavit on that day. However, we were also advised that we could not file it at anytime on Friday, because the Building Department was only accepting papers by appointment. Thus, we were required to make an appointment for the filing with the Building Department, which we did. It was scheduled that we could file with the Building Department between 3:30 and 4:30 on Friday.

Because Ms. Kopald's draft of the affidavit was not finalized until late Friday afternoon, my office did not have time to physically drive to Ms. Kopald's home to have someone from my office hand-deliver the affidavit and required copies 12 days prior to the hearing. Thus, Ms. Kopald went to Town Hall during the pre-scheduled appointment time to hand-deliver the affidavit with 8 copies. However, the Building Department was closed at that time, preventing us from following these rules (which I doubt are being applied to the Tonnesons). Ms. Kopald then filed the papers with the Town Clerk, who graciously accepted them. However, this was contrary to the ZBA rule that submissions had to be with the Building Department.

To avoid the possibility that this Chairman (whom I believe is clearly biased against my client, based upon his statements in the prior appeal) would refuse to accept the affidavit because the Building Department, and by extension, the ZBA was not notified of the affidavit 12 days prior to the hearing, Ms. Kopald took the very unremarkable precaution of timely putting the ZBA on notice of the affidavit by sending it to the Chairman. If we are to be held to these rules, then it is reasonable to assume that the Building Department would as well. That did not happen.

It is beyond me that the sending of the affidavit to the Chairman under these circumstances merited a chastising comment.

Rick

Sent from my iPhone  
Richard B. Golden, Esq.  
Burke, Miele, Golden & Naughton, LLP  
P.O. Box 216  
40 Matthews St., Suite 209  
Goshen, New York 10924  
845-294-4080 (Office)  
845-551-0895 (Cell)

On Sep 5, 2020, at 11:24 AM, Alyse Terhune <[aterhune@ldzhlaw.com](mailto:aterhune@ldzhlaw.com)> wrote:

Rick: This was submitted by Kopald directly to the Chairman. Again, I ask that anything she submits to the Board come through your office.

Alyse Terhune, Esq.  
82 East Allendale Road  
Saddle River, NJ 07458  
(201) 934-9800

This transmission contains information from the law firm of Alyse D. Terhune, Esq., which may be confidential and/or privileged. This information is intended to be for the exclusive use of the individual or entity named above. If you are not the intended recipient, be advised that any disclosure, copying, distribution or other use of this information is strictly prohibited. If you have received this transmission in error, please notify us by telephone at 201 934-9800 or 212 772-0943 or by e-mail immediately and delete the message.

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To ensure compliance with requirements imposed by the IRS, we inform you that any U.S. federal tax advice contained in this communication (including any attachments) is not intended or written to be used, and cannot be used, for the purpose of (i) avoiding penalties under the Internal Revenue Code or (ii) promoting, marketing or recommending to another party any transaction or matter addressed herein.

---

**From:** Jack Jannarone [<mailto:jjannarone@highlands-ny.gov>]  
**Sent:** Friday, September 04, 2020 4:56 PM  
**To:** Alyse Terhune <[aterhune@ldzhlaw.com](mailto:aterhune@ldzhlaw.com)>  
**Subject:** Fw: 20\_9\_4 affidavit

I just forwarded the Kopald affidavit that was sent to me by the Deputy Town Clerk at 4:30. I also received this at 4:39 directly from DK. I believe that the Tonneson Affidavit reference is to the Appeals Court, but it was subsequently sent to us and posted.

Jack

---

**From:** Deborah Kopald <[deborah\\_kopald@ymail.com](mailto:deborah_kopald@ymail.com)>  
**Sent:** Friday, September 4, 2020 4:38 PM  
**To:** Lisa Alvarado <[lalvarado@bmgjlawyers.com](mailto:lalvarado@bmgjlawyers.com)>; Jack Jannarone <[jjannarone@highlands-ny.gov](mailto:jjannarone@highlands-ny.gov)>  
**Subject:** 20\_9\_4 affidavit

Chairman Jannarone,

Eight copies were delivered to Town Hall today

Sincerely,

Deborah Kopald  
<20\_9\_4 affidavit.pdf>

# EXHIBIT 9



art

Debra Hood  
Box  
R Montgomery  
New York 10922

1092230001

NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

HARTFORD CT 061  
06 MAY 2000 PM 3 1



**Tectonic**

PRACTICAL SOLUTIONS. EXCEPTIONAL SERVICE.

36 British American Boulevard, Suite 101  
Latham, NY 12110



7

Restres Ltd

P.O. Box 571

Ft Montgomery NY 10922

109220516 B009

May 1, 2020

Restrs Ltd  
PO Box 516  
Ft Montgomery NY 10922

RE: Potential Lease for Telecommunications Tower Facility, Verizon Wireless

To Whom It May Concern,

Tectonic Engineering has been retained by Verizon Wireless, for site acquisition services to identify potential properties in your area that would be suitable for the installation of a telecommunications tower facility. This potential new facility would enhance the existing Verizon Wireless network. Your property, fronting US 9W, has been identified as a potential location that may meet the Verizon Wireless network design criteria.

The property considered is identified as parcel number 11-1-1.1, a 2.10 acre parcel located in the Town of Highlands, NY. Verizon Wireless is interested in leasing land for a tower facility. Please contact me 518-320-4766 or email [fmurray@tectonicengineering.com](mailto:fmurray@tectonicengineering.com) to discuss further.

If I do not receive a response by Friday May 22, 2020, I will assume that you do not have any interest in leasing land / infrastructure to Verizon Wireless at this time and your property will no longer be considered for further evaluation.

Sincerely,



Frank Murray  
Site Acquisition Specialist  
Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C.

## Project Contact Info

36 British American Boulevard, Suite 101 | Latham, NY 12110  
518.783.1630 Tel | 518.783.1544 Fax

tectonicengineering.com  
Equal Opportunity Employer

STATE OF NEW YORK  
 COUNTY - Orange  
 TOWN - Highlands  
 SWIS - 333689

2 0 1 9 F I N A L A S S E S S M E N T R O L L  
 T A X A B L E SECTION OF THE ROLL - 1  
 TAX MAP NUMBER SEQUENCE  
 UNIFORM PERCENT OF VALUE IS 100.00

PAGE 295  
 VALUATION DATE-JUL 01, 2018  
 TAXABLE STATUS DATE-MAR 01, 2019

TAX MAP PARCEL NUMBER	PROPERTY LOCATION & CLASS	ASSESSMENT	EXEMPTION CODE	COUNTY	TOWN	SCHOOL
CURRENT OWNERS NAME	SCHOOL DISTRICT	LAND	TAX DESCRIPTION	TAXABLE VALUE		
CURRENT OWNERS ADDRESS	PARCEL SIZE/GRID COORD	TOTAL	SPECIAL DISTRICTS	ACCOUNT NO.		
***** 10-4-6 *****						
	20 Torne Rd					
10-4-6	210 1 Family Res		COUNTY TAXABLE VALUE	200,500		
Lomonaco Thomas	Highland Falls 333601	47,700	TOWN TAXABLE VALUE	200,500		
1032 Elsmore Dr	FRNT 100.00 DPTH 200.00	200,500	SCHOOL TAXABLE VALUE	200,500		
Matthews, NC 28104	EAST-0630466 NRTH-0913456		AM004 Highland ambul	200,500	TO	
	DEED BOOK 6145 PG-299		FD016 Ft mtgy fire	200,500	TO	
	FULL MARKET VALUE	200,500	LT006 Ft mtgy lt	200,500	TO	
			RG003 Ft mtgy rub & garb	200,500	TO	
***** 10-4-9 *****						
	Torne Rd					
10-4-9	311 Res vac land		COUNTY TAXABLE VALUE	4,200		
LaGuardia Jane	Highland Falls 333601	4,200	TOWN TAXABLE VALUE	4,200		
137 Canterbury Rd	FRNT 50.00 DPTH 200.00	4,200	SCHOOL TAXABLE VALUE	4,200		
PO Box 491	EAST-0630461 NRTH-0913382		AM004 Highland ambul	4,200	TO	
Fort Montgomery, NY 10922	DEED BOOK 11177 PG-725		FD016 Ft mtgy fire	4,200	TO	
	FULL MARKET VALUE	4,200	LT006 Ft mtgy lt	4,200	TO	
			RG003 Ft mtgy rub & garb	4,200	TO	
***** 10-4-10 *****						
	28 Torne Rd					
10-4-10	210 1 Family Res		COUNTY TAXABLE VALUE	298,300		
Bennett James R	Highland Falls 333601	48,500	TOWN TAXABLE VALUE	298,300		
Diemer Carol A	FRNT 150.00 DPTH 193.80	298,300	SCHOOL TAXABLE VALUE	298,300		
1982 Seville St	EAST-0630419 NRTH-0913294		AM004 Highland ambul	298,300	TO	
Santa Rosa, CA 95403	DEED BOOK 13734 PG-1324		FD016 Ft mtgy fire	298,300	TO	
	FULL MARKET VALUE	298,300	LT006 Ft mtgy lt	298,300	TO	
			RG003 Ft mtgy rub & garb	298,300	TO	
***** 10-4-12 *****						
	36 Torne Rd					
10-4-12	210 1 Family Res		COUNTY TAXABLE VALUE	171,000		
McCutchen Dennis J	Highland Falls 333601	48,800	TOWN TAXABLE VALUE	171,000		
36 Torne Rd	FRNT 193.80 DPTH 200.40	171,000	SCHOOL TAXABLE VALUE	171,000		
PO Box 542	BANKC030400		AM004 Highland ambul	171,000	TO	
Fort Montgomery, NY 10922	EAST-0630351 NRTH-0913161		FD016 Ft mtgy fire	171,000	TO	
	DEED BOOK 11469 PG-252		LT006 Ft mtgy lt	171,000	TO	
	FULL MARKET VALUE	171,000	RG003 Ft mtgy rub & garb	171,000	TO	
***** 11-1-1.1 *****						
	Us Hwy 9W					
11-1-1.1	330 Vacant comm		COUNTY TAXABLE VALUE	134,000		
Hudson Hghlnds Rlty	Highland Falls 333601	134,000	TOWN TAXABLE VALUE	134,000		
Restrs Ltd	EASEMENT/SEWER and	134,000	SCHOOL TAXABLE VALUE	134,000		
PO Box 183	EASEMENT/UTILITY to		AM004 Highland ambul	134,000	TO	
Ft Montgomery, NY 10922	TOWN of HIGHLANDS		FD016 Ft mtgy fire	134,000	TO	
	ACRES 2.10		LT006 Ft mtgy lt	134,000	TO	
	EAST-0634020 NRTH-0912219		RG003 Ft mtgy rub & garb	134,000	TO	
	DEED BOOK 2387 PG-00306		SW010 Ft mtgy swr bond	14.70	UN	
	FULL MARKET VALUE	134,000	WD102 Water Dist #2	10.00	UN	
*****						

# NYS Department of State

## Division of Corporations

### Entity Information

The information contained in this database is current through May 14, 2020.

---

Selected Entity Name: HUDSON HIGHLANDS REALTY RESTORATIONS, LTD.

Selected Entity Status Information

**Current Entity Name:** HUDSON HIGHLANDS REALTY RESTORATIONS, LTD.

**DOS ID #:** 615076

**Initial DOS Filing Date:** MARCH 13, 1980

**County:** ORANGE

**Jurisdiction:** NEW YORK

**Entity Type:** DOMESTIC BUSINESS CORPORATION

**Current Entity Status:** ACTIVE

Selected Entity Address Information

**DOS Process (Address to which DOS will mail process if accepted on behalf of the entity)**

DAVID TONNESON  
35 HEMLOCK ST BOX 183  
FORT MONTGOMERY, NEW YORK, 10922

**Chief Executive Officer**

DAVID TONNESON  
BOX 183 HEMLOCK ST  
FORT MONTGOMERY, NEW YORK, 10922

**Principal Executive Office**

HUDSON HIGHLANDS REALTY RESTORATIONS, LTD.  
BOX 183 HEMLOCK ST  
FORT MONTGOMERY, NEW YORK, 10922

**Registered Agent**

NONE

directors of nonprofessional corporations except the chief executive officer, if provided, which would be listed above. Professional corporations must include the name(s) and address(es) of the initial officers, directors, and shareholders in the initial certificate of incorporation, however this information is not recorded and only available by [viewing the certificate](#).

#### **\*Stock Information**

<b># of Shares</b>	<b>Type of Stock</b>	<b>\$ Value per Share</b>
200	No Par Value	

\*Stock information is applicable to domestic business corporations.

#### **Name History**

<b>Filing Date</b>	<b>Name Type</b>	<b>Entity Name</b>
MAR 13, 1980	Actual	HUDSON HIGHLANDS REALTY RESTORATIONS, LTD.

A **Fictitious** name must be used when the **Actual** name of a foreign entity is unavailable for use in New York State. The entity must use the fictitious name when conducting its activities or business in New York State.

NOTE: New York State does not issue organizational identification numbers.

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# EXHIBIT 10

**Town of Highlands Building Department**  
254 Main St. Highland Falls, NY 10928  
Phone: 845-446-4280 ext. 316 Fax: 845-446-4298

Appl No: 2019-069

File Date: 07/12/2019

Permit No: 2019-069

Expire Date: 01/12/2020

## **BUILDING PERMIT**

Permit Fee: \$100.00

SEC-BLK-LOT: 11-1-1.52

Receipt #

A permit is hereby given by the Building Department, TOWN OF HIGHLANDS,  
COUNTY OF ORANGE, N.Y., for the project described herein:

Owner: David, Deborah, & Jaidin Tonneson  
PO Box 183  
Fort Montgomery, NY10922

**Location of Work:** Poplar St Prop, T/O Highlands

**Description of Work:**  
DRILL WELL FOR FUTURE  
SINGLE FAMILY HOME

**\*\*NOTE\*\***

WELL SHALL BE DRILLED IN ACCORDANCE WITH ALL APPLICABLE STATE AND  
LOCAL CODES.

**Cost of Construction:** \$0.00

---

Bruce Terwilliger  
Code Enforcement Officer

### **IMPORTANT**

Upon completion of work and PRIOR TO OCCUPYING areas covered by the permit, a final inspection must be performed and a valid CERTIFICATE OF COMPLIANCE or a CERTIFICATE OF OCCUPANCY must be issued by the Building Department. (Please note that a failure to obtain a valid certificate could adversely affect property owner's future ability to sell or refinance the property).

A permit under which no work has commenced within six (6) months after issuance, shall EXPIRE by limitation, and a new permit must be secured before work can begin.

All work shall be performed in ACCORDANCE with the construction documents which were submitted with and accepted as part of the application for the building permit.

# EXHIBIT 11

## Fwd: Kopald #2

From: Richard Golden (rgolden@bmglawyers.com)  
To: deborah\_kopald@ymail.com  
Cc: jahearn@bmglawyers.com; lalvarado@bmglawyers.com  
Date: Monday, August 31, 2020, 11:40 AM EDT

Begin forwarded message:

**From:** Alyse Terhune <aterhune@ldzhlaw.com>  
**Subject:** FW: Kopald #2  
**Date:** August 31, 2020 at 9:55:19 AM EDT  
**To:** Richard Golden <rgolden@bmglawyers.com>

Rick – see below.

Alyse Terhune, Esq.  
82 East Allendale Road  
Saddle River, NJ 07458  
(201) 934-9800

This transmission contains information from the law firm of Alyse D. Terhune, Esq., which may be confidential and/or privileged. This information is intended to be for the exclusive use of the individual or entity named above. If you are not the intended recipient, be advised that any disclosure, copying, distribution or other use of this information is strictly prohibited. If you have received this transmission in error, please notify us by telephone at 201 934-9800 or 212 772-0943 or by e-mail immediately and delete the message.

**IRS CIRCULAR 230 DISCLOSURE:**

To ensure compliance with requirements imposed by the IRS, we inform you that any U.S. federal tax advice contained in this communication (including any attachments) is not intended or written to be used, and cannot be used, for the purpose of (i) avoiding penalties under the Internal Revenue Code or (ii) promoting, marketing or recommending to another party any transaction or matter addressed herein.

**From:** Jack Jannarone [mailto:jjannarone@highlands-ny.gov]  
**Sent:** Saturday, August 29, 2020 9:52 AM  
**To:** Alyse Terhune <aterhune@ldzhlaw.com>  
**Subject:** Kopald #2

Submissions by the applicant in eight copies are due at The Building Department in Town Hall 10 days prior to our next meeting on September 16th. Normally, that would be Monday, September 7th. However, the Town Hall will be closed on that date because of the Labor Day

holiday. Please advise Mr Golden that any new submissions must be received by the close of business at Town Hall on Friday, September 4th.

Jack

# EXHIBIT 12

# Who Gets Left Behind in the Work-From-Home Revolution?

An increase in remote workers won't automatically usher in a gender-equal utopia. If we want it, we have to make it so.



**By Bryce Covert**

Contributing Opinion Writer

June 25, 2020, 5:15 a.m. ET

Ever since the coronavirus pandemic began keeping most of us sheltered at home, work has rapidly shifted from the cubicle to the kitchen table. A number of surveys indicate that about half of the American work force is now doing their work at home. Companies that may have once been resistant to letting employees off the in-person leash are finding that yes, work can still get done outside the confines of an office building.

That realization may last long after stay-at-home orders are lifted, leading to a permanent change in how we work. Silicon Valley is leading the way, with Twitter, Square and Facebook announcing that employees will be able to work remotely after the pandemic subsides. Companies in other white-collar industries are certain to follow. Nearly two-thirds of surveyed hiring managers say that their workforces will be more remote moving forward.

But offices are already starting to reopen, and it's likely to be up to individual workers to decide whether to return. We may end up, then, in a world of haves and have-nots — those who have more ability to start commuting again and those who can't, because they have increased health risks or they have children at home and no child-care options. And among heterosexual couples, it's not hard to guess which parent will almost certainly be stuck at home longer until child-care options are open again. Will these employees be treated differently, even inadvertently?

It's hard to predict just how these shifts will play out — but as things stand, women are in a poor position to benefit.

The rise in remote work represents an opportunity to shift the anachronistic view that the only good work that gets done happens in an office setting. To do so without sidelining some groups, however, we must also lift the stigma from working in untraditional ways. And that's no easy lift.

Despite the existence for years of the technology to facilitate remote work — Zoom was founded in 2011, Slack was launched in 2013, email has been around for decades, telephones for more than a century — managers have, until the past few months, still placed a premium on face time.

Even those who allowed for flexible working arrangements often treated men and women differently. A 2014 survey found that far more men worked at home than women — 36 percent versus 23 percent of women. Men are also more likely to be granted flexible working hours. Female-dominated jobs are actually less likely to be flexible, despite the potentially greater need among women, who are still the default caretakers, to wedge caring for children and other family members into the confines of the typical workday.

Part of the problem is how employers view the need for flexibility. At the moment, we're at home because we're stuck there. But when we aren't in the midst of a global health crisis, there are different reasons to want the ability to work remotely or outside of standard hours. Some might want to take on projects that don't fit into traditional work arrangements but could advance their careers, such as writing a book. Others need it to stitch child care into the patchwork of their days.

But employers tend to grant the former and look down upon the latter. Employers are more likely to agree to flexible arrangements for high-status male employees who want it to advance their careers. Women are less likely to be granted the same privilege than men for any reason, whether to further their careers or something else. Employers seem to assume that women want flextime to care for children — regardless of whether that's the real reason — and that such steps are just the beginning of a slow exit from the work force. Little wonder, then, that working remotely doesn't close the gender wage gap or boost more women into top jobs.

Already, employers are offering remote work with a built-in penalty. Facebook will let employees work from home for good, but could cut their pay if they move to cheaper locations, no matter how much value they create for the company.

So even if the pandemic causes employers to wake up to the fact that work can still get done just as easily from home as from an office, their change of heart won't usher in a gender-equal utopia. If we want it, we have to make it so.

One way to make any increase in working from home more gender neutral would be for men to do it too and for them to be more transparent about when it's for family obligations. (That rests, of course, on men actually shouldering at least half of the home responsibilities.) If workplaces start asking people to return before schools are open and before child care centers are functioning, men have to raise their hands and ask to keep remote and flexible schedules so that they can help juggle caregiving and career; such transparency can help suck the gendered venom out of the request to work from home. If men do it too, then it can't be seen as just something women do on their way to full-time motherhood.

In addition, employers have to modernize their expectations of employees. As author Brigid Schulte recently wrote, “remote workers are often more productive, more engaged, less stressed, more satisfied and less likely to quit than their in-office counterparts.” The pandemic has demonstrated that workers don’t have to be in an office building from 9 to 5 to get their jobs done; the danger is that employers forget and revert to the face-time premium once offices open back up.

Without a deliberate culture shift, any increase in our ability to work from home is going to play out the same way that all workplace policies do: Women will get penalized while men use them to get promoted. We can use this unique moment to do better, but such change won’t happen simply because we were forced to be remote this year. We have to work for it.

Bryce Covert is a contributor at The Nation and a contributing opinion writer.

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# EXHIBIT 13

## BUILDING PERMIT – ATTACHMENT

### Town of Highlands Building Department

The following information is attached for informational purposes and the convenience of Building Permit Applicants:

1. Issuance of a Building Permit indicates that the submitted application and associated documents have been reviewed and found to be in general compliance with the NYS Uniform Building Codes and with local codes. The applicant/contractor is responsible for constructing the project in full compliance with all applicable codes and regulations. Any necessary permits or approvals from other agencies (i.e. NYSDEC, OCDOH, NYSDOT, etc.) must be procured, by the applicant, prior to commencement of construction.
2. Construction of the project must proceed in accordance with the plans and specifications submitted with the approved application. Any changes or modifications must be brought to the attention of the Building Department for approval **before** being implemented. Issuance of amendments to the Permit may be necessary in cases where the changes are significant.
3. The applicant/contractor must schedule inspections by the Building Department for all aspects of work. Inspection appointments are available Monday through Friday, except Holidays, between the hours of 8:00AM and 3:00 PM. A minimum notice of 2 business days must be given to ensure inspection personnel can be available (less notice will be accommodated if possible).
4. Final inspection and issuance of a Certificate of Occupancy/Compliance is required at the completion of the project, prior to expiration of the Permit.
5. Permits are valid until the date of expiration shown on the Permit. A onetime renewal may be granted for a period not to exceed one year. Permit renewals are subject to an additional fee.
6. It is recommended that the applicant/contractor research any possible requirements of deed restrictions, covenants of record, easements, rights of way, homeowners' association by-laws, etc., prior to commencing construction. The Building Department does not take responsibility for reviewing the project for conflict with such private restrictions.
7. Hours of operation – It is recommended by the Building Department, that hours of construction activity be limited to 7AM through 6PM on weekdays and 8AM through 5PM on Saturdays. Sunday and Holiday work is not prohibited, however it is discouraged by the Building Department. *Please keep your neighbors and the community in mind regarding noise and nuisance related to the project.*

**IMPORTANT: ALWAYS CONSIDER SAFETY YOUR FIRST PRIORITY!**

# EXHIBIT 14

# **The effects of soundscapes on humans - literature review**

**Prepared by Robert J. Laverne, Ph.D., April 28, 2020**

Quality of life in urban neighborhoods is affected by many variables including levels of noise. Noise from dense traffic, construction, and emergency vehicles is reflected by hardscape surfaces. Loud, persistent noise is known to negatively affect reported levels of stress in humans (Nassiri et al., 2013), but recent studies suggest that more pleasing sounds may positively affect human health (Alvarsson, Wiens, & Nilsson, 2010). The effects of sound on human quality of life are explored in this literature review.

## **Soundscape Ecology**

Much of the research concerning the effects of urban conditions on humans has focused on what we see of cities, either out of our windows or how we respond to images of landscapes with varying degrees of vegetation and built elements. Vision, however, provides a limited field of sensory stimuli, where hearing is broader and more far-reaching. Based in the study of landscape ecology, the emerging field of soundscape ecology allows us to investigate landscapes with sound. A pioneer in the field of soundscape ecology, Krause notes:

In a matter of seconds, a soundscape reveals much more information from many perspectives, from quantifiable data to cultural inspiration. Visual capture implicitly frames a limited frontal perspective of a given spatial context. But soundscapes widen that scope to a full 360-degree hemisphere – completely enveloping us. Based on the data these records show, accurate projections about habitat sustainability can be made concerning the effects of

human enterprise, like resource extraction and land transformation (Krause 2015, page 126).

On the topic of the value of listening to a landscape Krause notes: “A picture may be worth a thousand words, but a natural soundscape is worth a thousand pictures” (Krause 2015, page 43).

The term “soundscape” was coined by urban planner Michael Southworth who wrote about the characteristics of sounds in Boston’s public spaces (Southworth, 1969). The term was then made popular by R. Murray Schafer, a Canadian musician and composer who initially became interested in natural sounds as inspiration for music. The more he listened to sounds in the environment, the more he recognized how sounds reflected the characteristics of the place, and how humans impacted the sounds of a place. In the introduction to his seminal book *The Soundscape: The Sonic Environment and the Tuning of the World*, Schafer (1994) writes:

The soundscape of the world is changing. Modern man is beginning to inhabit a world with an acoustic environment radically different than any he has hitherto known. These new sounds, which differ in quality and intensity from those of the past, have alerted many researchers to the dangers of an indiscriminant and imperialistic spread of more and larger sounds into every corner of man’s life (Schafer, 1994, Page 3).

Schafer also moved beyond the perspective of urban sounds as unwanted noise to be abated. He recognized that in addition to noise pollution an urban soundscape had favorable sound components that helped define the spaces. Schafer introduced three components of soundscapes: keynote sounds, signals, and soundmarks. Keynote sounds can be thought of as the background sounds of a place. Schafer writes:

Even though keynote sounds may not always be heard consciously, the fact that they are ubiquitously there suggests the possibility of a deep and pervasive influence on our behavior and moods. The keynote sounds of a given place are important because they help outline the character of men

living among them. The keynote sounds of a landscape are those created by its geography and climate: water, wind, forests, plains, birds, insects and animals. Many of these sounds may possess archetypal significance; that is, they may have imprinted themselves so deeply on the people hearing them that life without them would be sensed as a distinct impoverishment. They may even affect the behavior or life style of a society (Schafer, 1994, pages 9-10)

Schafer defines signals as foreground sounds that are listened to consciously. Some of these signals carry messages, such as sirens, that demand attention. Soundmarks are acoustic landmarks, such as church bells that help define a community (Schafer, 1994).

According to Dr. Brian Pijanowski of Purdue University's Laboratory of Human Environment Modeling and Analysis, "Schafer shifted emphasis away from just the noise aspect, which had been the main focus when thinking about soundscapes up until that point, to considering more positive soundscape design" (Hawkins, 2012, Page 6).

Bernie Krause, who has invested his career in recording soundscapes around the world commented on the range of disciplines that the study of soundscapes affects: "...aspects of the soundscape inform disciplines as far-reaching as medicine, religion, politics, music, architecture, dance, natural history, literature, poetry, biology, anthropology, and environmental studies" (Krause 2015, page 7). Krause also recognizes the implications for urban studies: "...as our lives became more urban-centered, the connections to those guiding beacons of the natural world began to lose their significance and consequently grew to be scarcely acknowledged" (Krause 2015, page 8).

Most recently it has been Dr. Pijanowski and his colleagues that have advanced the field of soundscape ecology. In an interview with *Ecologist* magazine, Pijanowski commented on the diversity of professional disciplines who have collaborated to study soundscapes:

It's based on a lot of work that's been done by bioacoustics experts - who have been studying birdsong and vocalization and communication in animals for decades. We're also building upon the work of acoustic ecologists who have turned their ears to natural sounds and who are often musicians. They have provided us with a rich vocabulary to begin to think about these natural soundscapes. Then there are cognitive psychologists who know how vertebrates process acoustic information and how certain kinds of sounds can give us an emotional response. .... soundscape is fully a reflection of the landscape (Hawkins, 2012, Page 5).

Up until Schafer's work, sounds in urban environments had been studied mostly quantitatively from the perspective of monitoring the intensity of noise and seeking methods of attenuating the offensive or irritating sounds. As Schafer identified both negative and positive components to urban soundscapes, categories of sounds were identified. Krause (2015) explains the three categories of sounds within a soundscape:

The first is geophony, the non-biological natural sounds produced in any given habitat, like wind in the trees or grasses, water in a stream, waves at the ocean shore, or movement of the earth. The second is biophony, the collective sound produced by all living organisms that reside in a particular biome. And last is anthropophony<sup>1</sup>, or all of the sounds we humans generate. Some of these sounds are controlled, like music, language, or theatre. But most of what humans produce is chaotic or incoherent – sometimes referred to as noise (Krause, 2015, page 12).

For the purpose of research outlined in this discussion, anthropophony will be divided into the following sub-categories:

- Anthropophony Type 1: sounds from human voices and music
- Anthropophony Type 2: sounds from human mechanical devices.

---

1. Most of the soundscape ecology literature employs the term “anthrophony” to refer to human-sourced sounds. However due to the Greek origins of the prefix “anthro” meaning caves, and not human, the more accurate term for human-sourced sounds is “anthropophony.” For consistency with the majority of published literature on the topic I will continue to use the more popular if less accurate spelling of anthropophony.

The proportions of biophony, geophony, and anthrophony in a soundscape, and particularly the diversity of sounds within the biophony may be indicators of the health of an ecosystem (Farina, Lattanzi, Malavasi, Pieretti, & Piccioli, 2011; Hawkins, 2012), which may in turn may also have implications for the physical and mental health of the people within the ecosystem. The change in proportion of sound categories over time may be indicators of changing ecosystem health (Pijanowski et al., 2011). According to Dr. Pijanowski, “The idea is to study the patterns of all of these, how they occur and emerge in different landscapes around the world. From this we can learn about ecosystems and how they function, and how these ecosystems might be threatened by the measure of anthrophony, because anthrophony provides us with a reflection of the amount of human activity that occurs in a landscape” (Hawkins, 2012, Page 5).

There is a fundamental difference in the function of biophony and anthrophony - type 2 (the mechanical sounds). Animals including birds, amphibians, insects and mammals use sound to communicate for the purposes of mating, territory defense, location, and predator alert. Human mechanical sounds contain little or no communication value but can overpower and interfere with biophony (Farina et al., 2011; Pijanowski et al., 2011) (as will be discussed in a following section). The increase in human mechanical noise has prompted some bird species to alter the intensity and/or pitch with which they sing. Other species, particularly amphibians and insects that cannot alter intensity or pitch may experience reductions in reproductive rates (Farina et al., 2011). Laverne and Kellogg (2019) found that as an urban community’s tree canopy was diminished as a result of the damage caused by Emerald Ash Borer (*Agilus planipennis*) the proportion of anthrophony increased while biophony and geophony decreased. If urban noise can

interfere with the functions of animals, can it also interfere with the functions of humans? As will be discussed in the upcoming section titled “The effect of anthrophony, biophony and geophony on humans” the answer is yes, but the full extent to which a soundscape affects human cognitive function, both negatively and positively is not yet fully understood (Schulte-Fortkamp & Fiebig, 2006).

### **Noise attenuation by vegetation.**

According to Wiley (2015) sound attenuates during transmission from the source to the receiver in three ways. First is attenuation as the energy spreads from the source. As the sound moves the energy covers an increasingly large area and the energy becomes diluted. The second type of sound attenuation is absorption, which happens when the energy from a sound wave is transferred as minute movements of particles within the medium (such as air or water) through which the sound wave travels. Vibrations induced in vegetation by absorption are very small when compared to absorption by the medium through which a sound wave travels. The third type of sound attenuation is by scattering of sound waves by physical objects including trees. Foliage, branches and trunks of trees reflect sound energy in many directions reducing the amount of sound energy that reaches a receiver.

The degree of sound energy scattering is strongly dependent on frequency, and therefore wavelength. If the wavelength of the sound energy is much smaller than the diameter of the object it encounters, most of the sound energy will be reflected backwards and perceived by the listener as an echo. When the wavelength is

approximately equal (from one-tenth to ten times the diameter) to the size of the object it encounters the reflection of the sound waves becomes much more scattered in many directions. Trunks and large branches of trees scatter sound most effectively in the wavelengths above 1,000 Hz (wavelengths less than approximately 1.1 feet (0.3 meters)), broad-leaf foliage scatters sounds above 2,000 Hz to 4,000 Hz (wavelengths between 6.8 inches (17.2 centimeters) and 3.4 inches (8.6 centimeters)), and conifer foliage scatter sounds most effectively above 4,000 to 8,000 Hz (wavelengths between 3.4 inches (8.6 centimeters) and 1.7 inches (4.3 centimeters)). These are the frequency ranges within which many animals and birds communicate by sound, and within the range of human hearing (20 Hz to 20,000 Hz) (wavelengths between 57 feet (17 meters) and 0.7 inches (1.7 centimeters)).

Numerous studies have considered the noise attenuation properties of trees and other vegetation. In general, the density of the vegetation and the height of the vegetation are the variables that affect noise attenuation the most. Dense vegetation at the same height as the source of the noise and the receiver reduced the amount of sound energy at the receiver more effectively than taller trees (Fang & Ling, 2003).

In his book *Urban Forest Acoustics*, Bucur (2006) explains the sound attenuation variables of individual trees: “Scattering effectiveness is consistent with the geometry of the scatterers such as trunk, branches, and leaves. The bigger the scatterer, the lower the frequency at which the scattering phenomenon becomes effective” (Bucur 2006, page 53). He continues to then explain the sound attenuation variables of stands of trees:

...the main dendrological, and physical characteristics of the stand effecting excess attenuation in a tree belt...are: the biomass of the stand, the structure of the stand in a horizontal plane (size and shape of the canopy) and the quality of the surfaces (size and shape of the leaves and needles, soil). The

characteristics allow admitting that mixed stands composed of coniferous and deciduous trees and bushes would be the most effective for noise attenuation (Bucur 2006, page 54).

Kragh (1981) found that rows of trees 3 to 25 meters deep and positioned between a road and the sound receiver were no better at dampening traffic noise than grass-covered ground except for frequencies above 2,000 Hz. A later study (Samara & Tsitsoni, 2011) came to a different conclusion. A row of pine trees positioned between a roadway and the sound receiver significantly improved noise attenuation, suggesting that the species of vegetation and the arrangement of the vegetation affects the degree of noise attenuation.

Another study found that noise attenuation of groups of trees, especially in the lower frequencies associated with traffic noise could be significantly improved by positioning the trees in a repeatable pattern similar to a periodic lattice. Specific patterns of vegetation may act at dampening specific ranges of sound energy (Martínez-Sala et al., 2006).

Bucur (2006) summarizes the extent to which urban trees have the potential to attenuate sound: “In urban areas, trees can be used as noise buffers, able to reduce noise by 5 – 10 dB, if some general recommendations are respected (plant trees near the noise source, plant trees / shrubs with dense foliage as close as possible, plant belt trees of 7 – 17 m wide, etc.)” (Bucur 2006, page 127).

### **Ecological consequences of anthropogenic noise.**

Numerous studies have considered the effects of human sounds on animals. Many animals including some amphibians, insects, mammals, and certainly birds use

vocalizations for a variety of purposes. These important functions may include location of a mate, territory announcement and defense, alarm of predation, announcement of food location, and communication between group members. It has been well-documented that human mechanical sounds may disrupt these functions both spatially and temporally (Barber et al., 2011; Brumm, 2006; Farina et al., 2011; Slabbekoorn & den Boer-Visser, 2006; Slabbekoorn & Ripmeester, 2008).

Krause (2015, pages 12-13) describes sound partitioning by organisms such as cicadas in which they “carve out unique acoustical spaces where they can communicate without their voices being masked by others.....Contours of the landscape itself can help determine how different organisms adjust their vocalizations to accommodate to those acoustic permutations.” He goes on to describe how “each type of organism evolved to vocalize within a specific bandwidth – based on either frequency or time. That, in turn, shed light on the bioacoustic relationships between all of the organisms present in a particular biome. In other words, in order to be heard, vocal organisms must find appropriate temporal or acoustic niches where their utterances are not buried by other signals” (Krause 2015, pages 39-40).

A study in Puerto Rico found that traffic noise did not affect the calls of frogs and toads, but bird species diversity and occurrence, especially with those species with songs and calls in lower frequencies, was diminished in proximity to roadways (Herrera-Montes & Aide, 2011).

Several studies have considered the change in land use associated with urbanization, particularly with increasing volumes of vehicle traffic, on bird species diversity and vocalization. Bird biodiversity as measured by recording birdsong was found to be

inversely correlated with anthropony, and that both were correlated with human land use along an urban-rural gradient (Joo, Gage, & Kasten, 2011). A European study found far less bird diversity in cities than in rural areas. For those species found in both urban and rural areas, the songs of urban birds were shorter, faster and sung at higher minimum frequencies than for their rural counterparts (Slabbekoorn & den Boer-Visser, 2006). Similar results were found for song sparrows (*Melospiza melodia*) in Oregon (Wood, Yezerinac, & Dufty, 2006).

Red-winged blackbirds (*Agelaius phoeniceus*) were found to change the timing and complexity of their calls as anthropogenic background noise from traffic increased. In urban areas red-winged blackbirds sang more frequently at mid-day when traffic sounds diminished and less during morning and evening traffic commute periods as compared to their rural counterparts. More traffic noise also was associated with less-complex birdsong (Cartwright, Taylor, Wilson, & Chow-Fraser, 2014).

Proximity to noisy industrial compressors was found to be associated with a decrease in nesting rates for gray flycatchers (*Empidonax wrightii*), but an increase in the survival rates for chicks in those nests, presumably because the noise also affected the presence of the main predator of flycatcher nests, the western scrub-jay (*Aphelocoma californica*) (Francis, Paritsis, Ortega, & Cruz, 2011).

Goodwin and Shriver (2011) studied eight forest-breeding bird species in areas with little and with much traffic background noise. They found that the traffic noise, which is most prevalent in lower frequencies, masked the birdsong that occupies the same frequency range. Those bird species that sing or call in these lower frequencies were ten times less likely to be found in the areas with greater traffic noise.

In what frequency ranges is there the greatest potential for anthrophony to interfere with bird song? Bucur (2006) reports: “The frequency of vocalization depends on body size...It is also accepted that the larger the wavelength relative to the size of the bird, the lower the intensity of the emitted sound. For everyday life, a practical solution to produce intense sounds and avoid losses due to attenuation and distortion leads to the optimum frequency. For the majority of song birds, for which the body size is between several centimeters and < 0.5 m, the optimum frequency range is between 1 kHz and 6 kHz” (Bucur 2006, page 140).

### **The effect of anthrophony, biophony and geophony on humans.**

The word “noise” generally refers to undesirable sounds, and therefore is a subjective term. Noise is defined as “unwanted or meaningless sound that apart from auditory adverse health effects may distract attention from cues that are important for task performance” (Nassiri et al., 2013, Page 87).

According to Szalma and Hancock (2011, Page 682) “Noise is a pervasive and influential source of stress. Whether through the acute effects of impulse noise or the chronic influence of prolonged exposure, the challenge of noise confronts many who must accomplish vital performance duties in its presence.” They also state “noise increases levels of general alertness/activation and attentional selectivity. It does not influence performance speed, but it reduces performance accuracy and short-term/working memory performance” and “noise has been found to increase the mental

workload imposed by a given task environment, thereby reducing the cognitive resources available for allocation to task performance” (Szalma & Hancock, 2011, Page 683).

Wiley (2015, Page 9) describes noise as “sound that has no interest for us yet it makes sounds of interest hard to hear.” Therefore, one definition of noise is sound energy that carries no information and interferes with communication between individuals or groups. Many animals, particularly birds but also some insects, amphibians and mammals, communicate through sound to establish territories, attract mating partners and announce danger. Noise that interferes with this communication is usually associated with humans but may also come from weather such as excessive wind or precipitation. According to Wiley one appropriate measure of noise is the amount of mistakes made by a receiver due to the corruption of the information within an auditory communication caused by noise (such as a pair of potentially mating birds being unable to locate one another due to excessive vehicle traffic, or you bringing home the wrong brand of laundry detergent due to noise that interferes with the phone call from your spouse).

Numerous studies have documented the negative effects of industrial noise on the performance and health of workers. In an effort to determine what types of noise were most damaging, Nassiri et al., (2013) considered several variables of mechanical sound including sound pressure level (“loudness”), noise schedule (the timing of sounds) and noise type (treble vs. bass). Their study found that intermittent noise (as opposed to continuous) at high pressure levels (loud) resulted in the greatest decrease in human performance.

Schapkin, Falkenstein, Marks, and Griefahn (2006) subjected participants to a quiet night of sleep and also a night of sleep accompanied by traffic noise and found that

performance on several tests given the following day to measure cognitive performance and inhibitory brain activity differed in the two groups. While the nocturnal traffic noise affected task performance and inhibitory brain activity to varying degrees, it was reported that overall the psychological costs for inhibitory functioning associated with sleep disturbance from noise were measurable, even when no change in task performance was observed.

A study conducted near the Auckland International Airport in New Zealand found that residents experienced noise-related sleep disturbance and had associated health problems and reported diminished quality of life (Shepherd, Welch, Dirks, & Mathews, 2010).

The severity of negative effects of traffic noise may be dependent on human population demographics including gender. Belojevic, Evans, Paunovic, and Jakovljevic (2012) found that exposure to traffic noise was associated with decreased measures of executive functioning in male school children but not significantly in females. The researchers believe that in that age group (7 to 11 years) boys may be more susceptible to chronic stressors including noise than are girls. Cohen, Glass, and Singer (1973) report that children living on the lower levels of apartment buildings and therefore exposed to greater levels of outside traffic noise showed greater impairment of ability to discriminate between sounds and impaired reading achievement compared to children with lower exposure to traffic sounds.

Alvarsson et al. (2010) recorded physiological measures of stress in humans that were exposed to either noisy environments (human mechanical sounds) or natural sounds and found that recovery from stress tests tended to be faster in the population exposed to natural sounds compared to those exposed to mechanical sounds.

Most previous work on mitigating the negative effects of urban noise has focused on reducing offensive, unwanted sounds – usually those associated with traffic. Urban vegetation, including trees, has been shown to reduce noise levels (Fang & Ling, 2003) and therefore reduce the level of human stress. But it seems that simply reducing noise levels is not the full story. Increasingly the focus of research is changing to also include preserving or enhancing favorable sounds. Quality of urban life seems to be affected by the setting in which a person finds quiet. Krause (2015, page 113) notes: “Although there is considerable evidence of negative impact from incoherent and loud acoustic signals, the emotional consequences of natural soundscapes on urban-living humans may have a large positive effect on our sense of well-being.”

One study questioned 500 residents of apartment buildings next to busy roads in Sweden. The premise of the study is that some of the apartments faced the noisy roads but also had a face to a quiet side away from the road. Other apartments faced busy streets on two sides and had no quiet side. The apartments were also judged for their distance from local parks with quiet places. Residents were asked about the noise conditions and psychosocial conditions (tired, irritated and angry, stressed). The accessibility to local greenspaces had a greater influence on resident’s perception of noise and psychosocial conditions than did the presence or absence of a quiet side of their apartment. The conclusions of the study are: “availability to nearby green areas can moderate or buffer the effects of chronic-noise exposure on health and well-being... significantly less residents with ‘better’ availability to green areas exhibited stress-related psychosocial symptoms than residents with ‘poorer’ availability to green area” (Gidlöf-Gunnarsson & Öhrström, 2007, Page 123).

Some sounds have been found to have detrimental effects on humans while other sounds have been found to be beneficial. Not all people consistently perceive all sounds to be favorable or unfavorable. The effects of various sounds on humans can be measured qualitatively, by gathering people's opinions on various sounds for example, or quantitatively, by measuring people's physiological or emotional responses to various sounds. Dzhambov and Dimitrova (2015) report that the single most important variable in determining the degree of noise annoyance for residents of Plovdiv, Bulgaria was the distance between a person's residence and the closest green space. It seems that those residents who could easily reach the relative tranquility of a nearby greenspace reported less overall noise annoyance with their occupation of the city.

In general, tranquil (quieter) urban spaces are believed to provide more restorative experiences for humans, and therefore contribute to health and quality of life. The acoustical criteria for perceived tranquility obviously include relatively low energy (quieter) sounds, but also the absence of not-fitting sounds. Other attributes of favorable soundscapes include contributing to a sense of place, enhancing interactions with landscape elements, and revelation of wildlife (Dumyahn & Pijanowski, 2011).

The degree to which humans find sounds to be pleasing or objectionable seems to be related to the context of the setting in which the sounds are heard. Variables that can affect listeners' perception of an urban soundscape include the activity of the listener, daily, weekly and seasonal variations in sounds, the type and intended use of the space, and architectural, cultural and historic characteristics of the space (Cain et al., 2008).

Irwin, Hall, Peters, and Plack (2011) controlled recorded sound level ("loudness") but varied recordings by setting and content. Participants in the study listened to recordings

of different urban sounds while researchers monitored brain activity and heart rate. Urban sounds reported as being pleasant including the dawn chorus of birds and a string quartet playing music were found to elicit responses in different areas of the brain and were associated with lower heart rates than were most mechanical sounds, which were reported as less pleasant. The conclusion of the study is that “urban soundscapes with similar loudness can have dramatically different effects on the brain’s response to the environment” (Irwin, Hall, Peters, and Plack, 2011, Page 258).

Anderson, Mulligan, Goodman, and Regen (1983) report that listeners found recorded sounds of nature to enhance scenes of wooded areas more than scenes of urban areas where the nature sounds may have seemed out of place. Similarly, traffic sounds were reported to be more undesirable when shown with wooded scenes than when shown with urban scenes.

One study considered the effect of several levels of urban noise, including heavy construction noise, on willingness of people to help others. In areas of varying degrees of mechanical sounds researchers provided opportunities for passers-by to offer altruistic actions ranging from responding to requests for directions, to picking up dropped keys, to attempting to contact the owner of a found medical card. Quieter situations resulted in greater willingness for passers-by to communicate and to engage in helpful actions than did noisier situations. This may be because noise creates more stress in individuals and/or effectively reduces the sphere of attentiveness in individuals. Researchers report that “noise appears to be the most important component of overload, affecting both the subjects’ attentiveness in implicit helping demands, as well as the refusal to engage in verbal interaction” (Moser, 1988, Page 287).

Several studies have considered opinions of visitors to national parks relative to experienced sounds. In general visitors prefer biophony and geophony (sounds of nature) over anthrophony (sounds from humans). Sounds associated with air and ground traffic are reported to be particularly irritating (Benfield, Bell, Troup, & Soderstrom, 2010).

In a study conducted in Italian urban parks visitors reported their park experience to be good or excellent even when sound pressure level (perceived as “loudness”) was nearly twice as high as guidelines set for quiet areas. Researchers believe this is true because of the presence of trees, natural features and the relative tranquility of the parks compared to the surrounding city (Brambilla, Gallo, Asdrubali, & Alessandro, 2013). A study conducted in parks in the United Kingdom questioned park visitors about preferences of sound and found that most people preferred natural sounds over mechanical sounds. Sound level, both objective and perceived, also was important to reported satisfaction – quieter parks were generally preferred over louder parks (Irvine et al., 2009). A similar study in Hong Kong found that visitors to parks preferred sounds associated with nature over sounds associated with heavy vehicles or motor bikes (Tse et al., 2012).

There are many components of a soundscape that can be categorized as anthrophony, biophony, and geophony. Some researchers have investigated which elements within each of these categories may be most detrimental and lead to fatigue, and which may help to reverse these effects. As previously discussed, many studies have considered the detrimental effects of the mechanical noise element of anthrophony. Several studies are now considering the beneficial elements of biophony. Birdsong is one aspect of a soundscape that seems to be perceived by many people as pleasing. Ratcliffe,

Gatersleben, and Sowden (2013) report that study participants who listened to a range of soundscape recordings rated birdsong as the component most commonly associated with perceived stress recovery and attention restoration, although no measures for stress or attention fatigue were employed. The researchers recommend that “future studies should quantitatively examine the potential of a variety of bird sounds to aid attention restoration and stress recovery, and how these might be predicted by acoustic, aesthetic, and associative properties, in order to better understand how and why sounds such as birdsong might provide restorative benefits” (Ratcliffe, Gatersleben, and Sowden, 2013, Page 221).

The seminal book *Silent Spring* by Rachel Carson (1962) alerted us to the detrimental effects of over-use of insecticides. While the impetus of the book focused attention on the threat to human health, it also proved to fuel a rapidly growing environmental awareness movement. The title to the book is in reference to the diminished amount of birdsong, which was a result of the decline of many bird species due to DDT poisoning of insects that were then consumed by songbirds (Carson, 1962). Loss of species affects ecosystems in many ways, and the loss of aesthetically, emotionally and perhaps spiritually valued characteristics of some species, including song birds, may affect humans. The renowned ecologist Stephen Kellert writes:

A world without warblers would be mute and barren, lacking the richness of sound, color, the promise of hope, rebirth, and transcendence. Their exuberant passage reaffirms connections with the miracle of tenuous life. Their diminution contracts our tiny world of organized and purposeful matter and spirit; without them, the edge of a more universal deadness and dissolution advances (Kellert, 2002, Page 53).

### **Perception of visual and auditory stimuli.**

Human perception of a soundscape surprisingly is not simply a function of the energy received and interpreted by the auditory system. It seems that what we see also affects how we interpret sounds. Non-acoustical criteria including the presence of natural elements such as trees within sight can affect the perception of sound (De Coensel, Boes, Oldoni, & Botteldooren, 2013).

Payne (2013) introduced the Perceived Restorativeness Sound Scale (PRSS) that is used to “assess park visitor’s perceptions of a soundscape’s potential to provide psychological restoration” (Payne, 2013, Page 255). Using this method in several locations it was determined that rural soundscapes were perceived as highest in restorative potential followed by urban parks, and non-park urban soundscapes were determined to have the least potential for attention restoration.

A study conducted in Belgium gathered opinions from residents on their level of noise annoyance as experienced from within their home. Interestingly the researchers found that reported noise annoyance was not simply a function of the sound that originated around the homes but also a function of what the residents could see from their living room window. Eight percent of people who could see vegetation from their window reported some level of noise annoyance while 34% of people without a view of vegetation reported some level of noise annoyance. All of the homes faced a roadway and had similar levels of measured sound levels outside the home (Van Renterghem & Botteldooren, 2016).

These studies suggest that sound and vision are not perceived independently in humans. Our perception of sound is influenced by what we see and is further influenced by whether the information arriving through our eyes and ears is consistent and contextually matched. Therefore the role of vegetation in attenuating unwanted sounds is not limited to the ability of foliage to dampen sound energy, but it seems that the visual masking of the sound source affects our perception of the sound as well (Bucur, 2006).

## **Summary**

It is well documented that the urban environment affects human physical, mental and emotional health. The mechanisms include increasing (or decreasing) stress, which is primarily a physiological function. Urban conditions void of the sights and sounds associated with nature can contribute to mental fatigue and access to nature can help restore human attention. Most research in the area of access to nature in cities has focused on the visual aspect of “greenness,” but greenness can also be represented by sound. The discipline of soundscape ecology is revealing that the composition of sounds in a landscape can be a reliable indicator of biodiversity as well as a source of damage or wellness to human health. As Krause (2015, page 151) notes: “Natural sounds that define the field of soundscape ecology are the voices we need to heed closely. For they are balanced somewhere between creation and destruction – and we silence them at our own peril.”

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