

**HARDING TOWNSHIP BOARD OF ADJUSTMENT MINUTES
REGULAR MEETING
DECEMBER 17, 2020
7:30 PM**

CALL TO ORDER AND STATEMENT OF COMPLIANCE

The Board of Adjustment Chair, Mike Flanagan called the regular meeting of the Board of Adjustment to order at 7:30 and announced that adequate notice of the meeting had been made in accordance with the New Jersey State Open Public Meetings Act and State Executive Order 103.

ROLL CALL

Ms. Taglairino called the roll. It went as follows:

Ms. Sovolos	Present	Mr. Newlin	Present
Mr. Flanagan	Present	Mr. Maselli	Present
Mr. Rosenbaum	Excused	Mr. Addonizio	Present
Mr. Symonds	Present	Ms. Chipperson	Excused
Mr. Cammarata	Excused		

MINUTES

Mr. Flanagan noted that the November 19, 2020 minutes will be tabled until the January 21, 2020 meeting.

NEW BUSINESS

Application BOA# 03-20

James Carifa and Sara Conine

7 Lees Hill Road B17/L55, R-1 & R-2 Zones

Applicant is requesting variance relief for building coverage and a front setback as per NJSA 40:55D 70(c)

Presenting:

Joseph Hyland, Architect

James Carifa and Sarah Conine, Owners

- Mr. Flanagan noted that there was a site inspection of the property.
- Mr. Hall noted that the question of whether or not this was an expansion of a non-conforming structure was answered by the site inspection and that this application remains a "C" variance.
- Ms. Conine noted they were trying to take the house back to the original look with a front porch and adding an addition to the rear for a kitchen.
- Mr. Maselli questioned the length and depth of the front porch.

- Mr. Hyland stated that the long front porch would break up the façade architecturally.
- Ms. Conine added that the lilacs would remain in the front for screening with plans for additional plantings.
- There was a discussion about the actual setback and it was noted that the setback would start at the steps.
- There was a discussion about the bulk, the roof line and the front porch.
- Mr. Hyland explained the roof line and front porch in Elevation A-2.
- Board members requested a reduction in the porch to span only the main portion of the house to reduce the variance bulk and columns.
- Mr. Symonds asked about the proposed additional parking coverage on the rear of the house.
- Mr. Carifa noted that they are removing coverage from the front of the house.
- There was an addition discussion about plans for plantings.

Mr. Flanagan made a motion to approve the application on the condition of the reduction of the front porch to span the main part of the home. Mr. Newlin seconded the motion. A roll call vote went as follows:

For: Maselli, Addonizio, Symonds, Newlin, Sovolos, and Flanagan.

Against: None.

Mr. Flanagan made the announcement that Ms. Chipperson was elected to the Township Committee and was recusing herself from further applications.

OLD BUSINESS

Application BOA# 17-18

New York SMSA Limited Partnership d/b/a Verizon Wireless

8 Millbrook Road, B17/L1, PL Zone

Applicant requesting variance relief for use, per NJSA 40:55D-70(d) for a cell tower.

Presenting:

Richard Schneider, Attorney

Frances Boshulte, RF Manager

Dr. Eisenstein, RF Specialist

Mr. Mlenak is acting Board Attorney for this application.

Robert Simon is an objecting attorney for this application.

A transcript of the testimony is appended to the minutes.

OTHER BUSINESS

None

ADJOURNMENT

Mr. Flanagan adjourned the meeting at 10:20

Lori Taglairino

Respectfully submitted by Lori Taglairino, Board of Adjustment Secretary

HARDING TOWNSHIP
BOARD OF ADJUSTMENT

IN THE MATTER OF: : TRANSCRIPT
:
CASE: BOA# 17-18 : OF
New York SMSA Limited Partnership:
d/b/a Verizon Wireless : REMOTE PROCEEDINGS
8 Millbrook Road :
Block 17; Lot 1; PL Zone :
X

Thursday, December 17, 2020
Zoom Remote Videoconference
Commencing at 8:13 p.m.

BOARD MEMBERS PRESENT:

MIKE FLANAGAN, Chairman
ALF NEWLIN,
DAN MASELLI
HUGH SYMONDS
ELIZABETH SOVOLOS
THOMAS ADDONIZIO

ALSO PRESENT:

LORI TAGLAIRINO, Board Administrator
PAUL D. FOX, P.E., CME
M. McKINLEY MERTZ, PP, AICP
DR. BRUCE EISENSTEIN, Cellular Communications
Consultant

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1 A P P E A R A N C E S:

2

3 GREENBAUM, ROWE, SMITH & DAVIS, LLP
4 BY: STEVEN G. MLENAK, ESQUIRE
5 Attorneys for the Board

6

7 VOGEL, CHAIT, COLLINS & SCHNEIDER, ESQUIRES
8 BY: RICHARD SCHNEIDER, ESQUIRE
9 Attorneys for the Applicant

10

11 HEROLD LAW, PA
12 BY: ROBERT F. SIMON, ESQUIRE
13 Attorneys for the Objectors: SGSL, LLC; Harsh and
14 Nina Bansal; Michael and Susan Koenek;
15 David and Eunice Conine; Brian and
16 Christina McKittrick; Livio Saganic and
17 Christel Engel; James M. Carifa and
18 Sarah G. Conine; Ted Cotton

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I N D E X

WITNESS:	PAGE
FRANCES BOSCHULTE.....	10

E X H I B I T S

IN EVD.	DESCRIPTION	PAGE
A-25	Scanned data of dB levels of Service at 700 megahertz frequency band	11
A-26	Scanned data of dB levels of service at 2100 megahertz band	11

NO PUBLIC MEMBERS ARE SWORN

1 CHAIRMAN FLANAGAN: All right. Do we have
2 Rita yet?

3 SECRETARY TAGLAIRINO: We do not have Rita
4 yet.

5 CHAIRMAN FLANAGAN: We do not. All right.
6 You know, Gary, as we kick off this Verizon does it
7 merit any discussion? I was hoping she would be here
8 but -- or I should say Steve, actually. Sorry. Gary,
9 are you --

10 MR. HALL: I'm still here. I was going to
11 stick around for Rita. I did talk to her last week and
12 certainly -- I'm sure we will be talking again. So I
13 -- I don't think she will show up at the Board for
14 everyone else, but I'm okay.

15 CHAIRMAN FLANAGAN: Okay. I mean, to spare
16 everyone the surprise, Rita has, as most of us know,
17 been elected to the Township Committee. She was
18 elected in November. Her term will start -- when does
19 it start, Alf, on January 20th? Does someone know
20 this?

21 MR. HALL: We re-organize on the 4th, I
22 believe.

23 CHAIRMAN FLANAGAN: There you go. So it
24 starts immanently. And given her new responsibilities
25 on the Township Committee Rita has -- and I've

1 struggled with this -- she has resigned as of today, or
2 she has recused herself until she resigns in January.
3 Either way, she is no longer going to be hearing any
4 application. She is, I forget when, but has stopped
5 hearing applications. She didn't go to the site visit
6 for the Conine (ph.) property, for example, but Rita
7 will no longer be with us. So we will miss Rita, but
8 just so everyone knows, she is no longer going to be
9 hearing any of these applications and either is
10 resigned or will be resigning in January.

11 MR. HALL: We'll get a replacement.

12 CHAIRMAN FLANAGAN: Yes. In the interim
13 our former first alternate, Elizabeth, where are you
14 Elizabeth? Oh, there you are. So congratulations, you
15 are now a full voting member.

16 MR. HALL: Well technically, the Mayor and
17 Council have to do that.

18 CHAIRMAN FLANAGAN: Oh, I'm over-stepping
19 my bounds.

20 MR. HALL: It's not automatic that you move
21 up. It's established practice that you move up, but
22 it's not by statute automatic. They will have to wait
23 for a replacement directly as a full member. I'm not
24 sure I've ever seen that happen, but they could.

25 BOARD MEMBER NEWLIN: But it is highly

1 expected.

2 MR. HALL: Yes.

3 MR. MLENAK: I don't think we can expect a
4 vote tonight so that will be resolved I'm sure by next
5 meeting.

6 CHAIRMAN FLANAGAN: There you go. All
7 right. Good.

8 MR. HALL: And the new member, Steve, can
9 read transcripts and be fully eligible.

10 MR. MLENAK: Yes.

11 CHAIRMAN FLANAGAN: Right. And I do expect
12 we'll have a new member. I'm not sure if it will be
13 January, but in the very near future.

14 SECRETARY TAGLAIRINO: I'm pretty sure all
15 those appointments are in the works.

16 CHAIRMAN FLANAGAN: Yes. Okay. All right.
17 So that is a Rita story. With that we're back to the
18 Verizon application.

19 MR. HALL: I'll say good night and wish
20 everyone happy holidays.

21 CHAIRMAN FLANAGAN: You too, Gary. (Off the
22 record conversation.)

23 Mr. Schneider, welcome back. Mr. Simon,
24 welcome back. You're on mute, Mr. Schneider.

25 SECRETARY TAGLAIRINO: They're on mute.

1 That's the quote of the year.

2 MR. SCHNEIDER: Good evening.

3 CHAIRMAN FLANAGAN: Good evening. How are
4 you? So as I recall last meeting we were in the midst
5 of Mr. Simon, his cross-examination, and I don't think
6 we finished that up, if I'm correct, Mr. Simon, is that
7 correct?

8 MR. SIMON: That is correct. Although, I
9 do know or believe that Mr. Snyder has submitted some
10 additional exhibits, it seems in part in response to or
11 in reaction to some question that had for the witness.
12 So I don't know whether it seems prudent and
13 appropriate for those exhibits to be entered into and
14 discussed now by the witness or at the conclusion, et
15 cetera.

16 CHAIRMAN FLANAGAN: Mr. Schneider, I'd like
17 to hear your thoughts. My view is does it make sense
18 to have those exhibits presented tonight? I still
19 can't hear you.

20 MR. SCHNEIDER: Can you hear me now?

21 CHAIRMAN FLANAGAN: Yes, there we go.

22 MR. SCHNEIDER: Yes. I think -- there's
23 one of two ways. As Mr. Simon indicated it's in
24 response to his questioning. If it facilitates and
25 expedites the process I can go out of turn and briefly

1 ask Frances to hopefully concisely take us through the
2 exhibits so that if Mr. Simon has any questions I won't
3 interrupt him or we don't have to go back and forth. I
4 have no issue with that, if that facilitates the
5 presentation.

6 CHAIRMAN FLANAGAN: That will certainly be
7 my preference. Mr. Simon, does that work for you?

8 MR. SIMON: That's exactly why I raised it.
9 I think that is the appropriate way to proceed.

10 CHAIRMAN FLANAGAN: Okay. Mr. Schneider?

11 MR. SCHNEIDER: That's fine. And just for
12 the record, Mr. Chairman, the exhibit that is
13 referenced, Lori, do you know what exhibit number we're
14 up to?

15 SECRETARY TAGLAIRINO: You know what, I
16 don't.

17 MR. SCHNEIDER: We're up to A-25.

18 SECRETARY TAGLAIRINO: I was going to say
19 26. Okay. So I was close. Which one do you want to
20 see first, the Z-1 scan or the Z-2 scan?

21 MR. SCHNEIDER: Why don't we go with
22 these -- for consistency purposes let's go with Z-1,
23 we'll have that designated as A-25. And we'll have,
24 just so I don't have to interrupt, Z-2 will be A-26, if
25 that works.

1 SECRETARY TAGLAIRINO: Let me get the --
2 hold on one minute here.

3 MR. SCHNEIDER: Before I -- Dr. Eisenstein
4 is on, correct?

5 SECRETARY TAGLAIRINO: Yes. He is.

6 DR. EISENSTEIN: Yes, I'm here.

7 MR. SCHNEIDER: Good evening, Bruce. And
8 just for the record while Lori is getting those up,
9 those exhibits have been previously shared and
10 transmitted to Dr. Eisenstein.

11 SECRETARY TAGLAIRINO: Can everybody see
12 this? Wait. I'm trying to get it squared away on the
13 screen. Hold on. Is that clear for everybody?
14 Because I know what I'm seeing, but I don't know if
15 that's --

16 CHAIRMAN FLANAGAN: Yes. Maybe Lori if you
17 can scroll down or scroll back up a little bit just one
18 notch. All right. There's no happy medium. Maybe
19 that's the best.

20 MR. MLENAK: Lori, maybe zoom out one
21 notch. Maybe that will get it full screen. On the
22 bottom of your screen is there a zoom in and zoom out?

23 CHAIRMAN FLANAGAN: I think we can see.
24 What is cut off, just the -- I don't think there is
25 anything in that section that is cut off on the screen,

1 is there? There's nothing north of Morristown 3 Re-lo,
2 right?

3 MR. SCHNEIDER: Correct.

4 CHAIRMAN FLANAGAN: Actually, Lori, if you
5 keep your cursor away from the top line of the screen.

6 SECRETARY TAGLAIRINO: All right. I'm
7 going to just leave it over here. Okay.

8 CHAIRMAN FLANAGAN: Okay. Does that work
9 for everyone? I should say, does this not work for
10 anyone? (No reply.) Perfect.

11 MR. SCHNEIDER: May I proceed, Mr.
12 Chairman? Are we all good?

13 CHAIRMAN FLANAGAN: Please do, Mr.
14 Schneider. Yes.

15 MR. SCHNEIDER: Thank you. Frances, you
16 are on and I'm just going to remind you that you are
17 still under oath.

18 MS. BOSCHULTE: I am.

19 F R A N C E S B O S C H U L T E, having
20 been previously sworn, testifies as follows:

21 BY MR. SCHNEIDER:

22 Q. Thank you. Good evening, Frances. Without
23 me hopefully interrupting you, at the last Board
24 hearing held on November 19th in conjunction with Mr.
25 Simon's cross-examination of you, he made certain

1 inquiries and the Board ultimately requests that you
2 provide a supplemental exhibit. And as I understand it
3 the purpose of the supplemental exhibit was to
4 summarily show the specific dB levels of the existing
5 coverage.

6 As I recall it, the previous RF
7 documentation had just shown different colors based on
8 the neg 95 dBm level of service and now you
9 essentially, as requested by the Board, refine that
10 based on the testing that you had done. Is that a
11 correct and concise summary of the purpose of the
12 exhibit?

13 A. Yes.

14 Q. Okay. So without me interrupting you, and
15 by the way, let me just ask you this. You've done that
16 at two respective frequency bands; is that correct?
17 That being the 700 megahertz frequency band that being
18 reflected as Z-1, and the 2100 megahertz band that
19 being reflected as Z-2; is that correct?

20 A. That is correct.

21 Q. Okay. If I could just ask you to just keep
22 your voice up, if you would. And if you can take us
23 through both Z-1 and Z-2, and indicate what is
24 reflected, and specifically your analysis of the
25 specific levels of service in terms of dB at various

1 locations without going through obviously each of the
2 respective locations and numbers?

3 A. Sure. Basically, this is a exhibit that
4 shows precisely what the dBm RSRP levels are before --
5 with the schematic mapping of just what was greater
6 than or equal to neg 95 in green, and what's less than
7 neg 95 in green didn't give you a view of just how far
8 below the threshold of neg 95 in the areas that were in
9 gray depicted.

10 So this map I've labeled along the test
11 points the signal strength levels for a clear
12 indication. And as you can see where the pink dot in
13 the center, the Harding DPW you have signal strengths
14 that are significantly below the neg 95. You have neg
15 107 at the intersection, neg 110. And in other areas
16 you'll see even going north off -- up Glen Alpin Road
17 you'll see neg 115, neg 111, neg 114.

18 So this isn't a case where we are in the
19 neg 95, maybe neg 96, neg 97 level, but you are worse
20 than that. Due to the topography and the terrain and
21 the dense foliage you can see that as you are moving
22 further away from the surrounding sites that you start
23 to decrease significantly worse than even the
24 in-vehicle which is neg -- the threshold for in-vehicle
25 is neg 105.

1 Q. So just to put some reference on it,
2 because I think that the, at least the inquiry if not
3 the suggestion by Mr. Simon may have been whether the
4 levels that you had analyzed were close to the neg 95
5 dB level in various locations. I'm gathering from your
6 answer that using my expression these were not near
7 misses in terms of neg 95, but that there are
8 predominant areas of the township that have levels
9 significantly below or worse than the neg 95. Is that
10 the conclusion you are drawing from the analysis that
11 is reflected in these two exhibits?

12 A. Yes.

13 Q. Okay. One final question, just to put some
14 frame of reference on it. There had been previous
15 discussion throughout the course of the prior public
16 hearings about -- and specifically in conjunction with
17 testimony by Chief Heller, as to the levels of service
18 that might be realized at the Harding Township
19 Elementary School.

20 Just to provide the Board with some
21 reference point, what would the levels of service be in
22 the school area or on the school property?

23 CHAIRMAN FLANAGAN: Mr. Schneider, I'm
24 sorry. Lori, can you Zoom in around the tower? I just
25 want to see that school area.

1 The plus sign in the lower right-hand
2 corner.

3 Do you see it over to the right, Lori? You
4 had it up there for a moment.

5 I'm sorry, Mr. Schneider.

6 Take your cursor down, Lori. Take your
7 cursor down. There you go. Down a little bit. Down.
8 Down. Right there.

9 SECRETARY TAGLAIRINO: Look, I'm learning
10 on the job. Okay. Where do we want to go with this?

11 CHAIRMAN FLANAGAN: It may be just recent
12 or around -- yes. Perfect. Right there.

13 THE WITNESS: So the school is right near
14 where the "H" is in Harding in pink slightly to my
15 left. Correct. And you can see that there are
16 levels neg 105, neg 107 in that area for 700. And for
17 the 2100 it's lower than that.

18 MR. SCHNEIDER: Lori, can we quickly go to
19 Z-2, if you wouldn't mind.

20 SECRETARY TAGLAIRINO: Hold on one second.
21 So we have got to take this one out.

22 MR. SCHNEIDER: Just take your time. If
23 you can just focus on that same area, Lori, if you
24 wouldn't mind.

25 THE WITNESS: So you'll see on the 2100 map

1 along Lees Hill Road you had signal strengths as low as
2 neg 125, neg 123, neg 127.

3 BY MR. SCHNEIDER:

4 Q. Okay. Last question. I'll let Dr.
5 Eisenstein, if he feels appropriate, give his opinion,
6 but in term of the format that you've prepared this
7 exhibit that was shared with Dr. Eisenstein, and he was
8 satisfied with the format in which you presented this
9 data?

10 A. Yes, he was.

11 MR. SCHNEIDER: Okay. Chairman, thank you.
12 I was trying to be brief and hopefully that responds to
13 the Board's inquiry as to those specific signal
14 strength levels?

15 DR. EISENSTEIN: If I can just kind -- this
16 is Bruce Eisenstein. I've actually not seen these
17 numbers on a drive test data before and I found it very
18 helpful. As I suspected the drop-off is quite rapid
19 because of the exponential decay of the signal
20 strength.

21 And, you know, bear in mind that these are
22 logarithmic scales so that every dB difference is a
23 factor of two in terms of power level. Ten dB is a
24 factor of ten difference in power level. So you see,
25 when you go from neg 95 to neg 98 that's a drop of

1 one-half. It's not just a simple percentage. It looks
2 like only 3 dB, but that's a factor of two difference.

3 CHAIRMAN FLANAGAN: Thank you. Is anyone
4 on the Board --

5 BOARD MEMBER NEWLIN: Mike? Yes, can I ask
6 a question of Dr. Eisenstein? This is Alf Newline.

7 You probably have covered this before. Can
8 you repeat again, in term of looking at usability, can
9 you say that there's a certain dB level which is --
10 it's clearly not usable?

11 So for example, you can get coverage at
12 110, but you're unlikely to get coverage of something
13 greater, or is it just not that simple?

14 DR. EISENSTEIN: Well, it's not that
15 simple, but, yes, I can give you rough numbers.

16 When they designed at neg 95 what they're
17 really doing is they're allowing a 10 dB or a factor of
18 10 guard zone in there, because if they designed at neg
19 105, remember, this is drive test data. On a certain
20 day it's a snapshot. It's not absolute. It's not the
21 way it would be all the time. Depending on whether
22 conditions, depending on a lot of other things, on the
23 average you're going to get a swing in power.
24 Sometimes better than what you see here, sometimes
25 worse.

1 So on a factor of ten down from neg 95
2 would be neg 105, and there you would be, I think, well
3 below the level that you would want to design at.

4 Now, if you're asking would the phones
5 work, and you know, I've been given this testimony in a
6 number of different areas, excuse me if I'm repeating
7 myself, the way the systems work now since it's all
8 internet protocol on voice out on data, the way it
9 works is when the signal strength gets too low the bit
10 error rate, that is the number of bits that are in
11 error per second starts going up and that slows
12 everything down.

13 So that's unacceptable for voice calls.
14 And what happens is the calls start getting very
15 spotty, and people just say I can't hear you, or you
16 can't hear me or something like that and eventually you
17 hang up and try it again.

18 And sometimes, you know, it's funny with
19 these wireless systems sometimes you have a lousy
20 connection, you try it again you get a great
21 connection. It's just because the frequency band that
22 you are then assigned has just moved over a little bit
23 and that happens to be a more clear band. It seems to
24 be a little bit better.

25 So what I would say is that at neg 105

1 you're in very poor area. It's very iffy. A neg 95
2 it's a decent design criteria. And a good fraction of
3 time even with these kinds of drive test data the
4 signal strength will be better than what you see there
5 and sometimes worse.

6 BOARD MEMBER NEWLIN: Okay. That's
7 helpful. I have anecdotal experience as a Verizon
8 customer. I'm in one of these areas and I can see my
9 numbers are in the 110s, 108s and I have okay coverage.
10 My neighbor who's right next door has no coverage.
11 It's been consistent.

12 DR. EISENSTEIN: So this is the other
13 aspect of wireless signals. There is all kinds of
14 interference that occurs, and it can change from room
15 to room in the house. It can change from whether
16 you're near a window or not near a window. It can
17 change from whether you're facing north or facing
18 south. It's just really the way the wireless signal,
19 and unlike a wired signal that always goes through the
20 wire the same way, a wireless signal has a lot of
21 obstructions in the way and you can get interference of
22 all kinds.

23 BOARD MEMBER NEWLIN: That's helpful. And,
24 Mike, I'm just going to mention one thing. And I don't
25 want to suggest that we do it now, but it has come up

1 from the question from last session about the ODAS and
2 that there's an ODAS plan. And when it's appropriate,
3 and I don't know if it's Dr. Eisenstein, or it's going
4 to come out in the testimony from Mr. Schneider, how
5 that ODAS plan works with the cell tower is -- seems to
6 me quite important.

7 And it seems like there's a relation
8 between how tall the tower is and how many units you
9 would have, maybe, I don't know. I actually don't
10 know, but at some point I hope that gets covered in
11 this hearing pretty soon.

12 DR. EISENSTEIN: Just to clear the air --
13 this is Bruce Eisenstein again -- just to clear the air
14 on that, Alf, I've heard bits and pieces during the
15 hearing about an application for an ODAS system. I
16 know nothing about this. I haven't seen a plan. I
17 haven't seen any diagrams. I haven't seen any -- so
18 I'm totally ignorant of it aside from the little
19 tidbits that I've heard at the hearing.

20 BOARD MEMBER NEWLIN: Would it be relevant,
21 Dr. Eisenstein, one way or the other?

22 DR. EISENSTEIN: I have no way of knowing
23 that, because I haven't seen anything.

24 BOARD MEMBER NEWLIN: Okay. Thank you.
25 Thanks Mike.

1 CHAIRMAN FLANAGAN: And Alf, I agree and I
2 think it was to touched on a little bit last meeting.
3 I'd like to hear more. It seems as if there was --
4 maybe there is some plan, maybe there was some thought
5 by Verizon or some work done by Verizon to investigate
6 the possibility.

7 And I agree with you, and Mr. Schneider I
8 think it's worth -- if it's something that could be
9 spoken to tonight, that would be great. If not, you
10 know, certainly the next meeting or sooner rather than
11 later.

12 MR. SCHNEIDER: Understood.

13 CHAIRMAN FLANAGAN: All right. With that
14 said, is there anything else, Mr. Schneider, you had to
15 present this evening?

16 MR. SCHNEIDER: I have nothing relative to
17 that exhibit, Mr. Chairman. So I guess it would be
18 appropriate at this point to proceed with the further
19 cross-examination of Mr. Simon.

20 CHAIRMAN FLANAGAN: Okay. Mr. Simon, I
21 don't see you on my screen, but are you prepared to
22 resume?

23 MR. SIMON: Sure. I will resume on Zoom.
24 That's the first time I've used that, Mr. Chairman, in
25 nine months.

1 SECRETARY TAGLAIRINO: Went well.

2 CHAIRMAN FLANAGAN: That was a good one.

3 (Laughter.)

4 BOARD MEMBER NEWLIN: Might be the last.

5 (Laughter.)

6 CHAIRMAN FLANAGAN: I liked it.

7 MR. SIMON: It's a tough crowd.

8 SECRETARY TAGLAIRINO: Do you need these
9 Exhibits, Mr. Simon?

10 MR. SIMON: So Lori, why don't we go back
11 to Z-1 which is A-25, only because I may have a couple
12 of questions on that.

13 SECRETARY TAGLAIRINO: Good.

14 MR. SIMON: Yes. I mean, we're good for
15 now. Sure. Thank you very much, Lori. I appreciate
16 that.

17 EXAMINATION BY MR. SIMON:

18 Q. Frances, good evening.

19 A. Good evening. How are you.

20 Q. So I'm going to try to pick up where I left
21 off, but I may want to -- let me start with what you
22 just talked about.

23 So first of all, with regard to A-25 and
24 A-26, those exhibits reflect some scanned data that was
25 put on those exhibits; correct?

1 A. Yes.

2 Q. Did you create those exhibits yourself?

3 A. I did.

4 Q. And the data from those exhibits, where was
5 that data taken from?

6 A. The data is taken -- are you saying how did
7 I get the data?

8 Q. Yeah. I want to know how did it come about
9 that those particular numbers and figures ended up in
10 the particular location on each of A-25 and A-26?

11 A. The scan data, how a scan is conducted,
12 utilizes a scanner which collects not just the RSRP,
13 but also has a GPS attached to it. The GPS gives you
14 the latitude and longitude for the locations that is
15 being recorded.

16 Q. And based on the latitudes and longitudes
17 you then transposed the data onto the exhibit?

18 A. Correct. I utilized a mapping tool called
19 MapInfo, and I'm able to put that -- from the scanner
20 I'm able to export that information into an excel
21 format and import that excel with that information into
22 MapInfo where then I can create points based on the
23 latitude and longitude.

24 Q. And have you provided any of that backup
25 data that formed the basis for these exhibits to the

1 Board?

2 A. No. That has not been asked for. If
3 you're asking, that could be put on a USB drive. Yes.

4 Q. Great. Thank you. And with regard to the
5 data that we're looking at, was that from the -- and I
6 apologize, I might get this wrong, the February 14th,
7 2020, test?

8 A. Yes. The data that you see on the map, the
9 same thematic mapping, the same signal levels that you
10 see is all from the data that was collected during the
11 drive.

12 Q. On February 14th?

13 A. Yes. That's correct. It's the same data
14 they used.

15 Q. Do you have any other scanned data, more to
16 Dr. Eisenstein's comment that it can change from
17 day-to-day. Do you have any other scanned data, you or
18 Verizon or Verizon's consultants for this area?

19 A. I have not asked Verizon if they have any
20 data. This is the only data. On the day of the actual
21 CW test for the proposed location where I did the scan
22 drive, that's the only data that I've collected.

23 Q. And are you aware of whether anyone else
24 has collected any data on behalf of Verizon or even on
25 behalf of AT&T or T-Mobile for the area in question,

1 scan data?

2 A. No.

3 Q. And with regard to the exhibit itself --

4 MR. SIMON: Lori, if you can scroll just
5 down a little bit to where the key is.

6 SECRETARY TAGLAIRINO: Hold on.

7 MR. SIMON: I'm sorry.

8 SECRETARY TAGLAIRINO: That's all right.
9 We're good. Okay.

10 MR. SIMON: It's good enough. Sure. Thank
11 you. It's actually great.

12 BY MR. SIMON:

13 Q. So Frances, I'm looking at Exhibit A-25 and
14 the key on the bottom of that exhibit. Do you see that
15 on the screen?

16 A. Yes.

17 Q. And do you see it distinguishes between
18 existing reliable in-building LTE coverage and existing
19 unreliable in-building LTE coverage; correct?

20 A. Yes.

21 Q. And it's based on neg 95 dBm RSRP; correct?

22 A. Yes.

23 Q. And the readings that you took, that you
24 transposed onto these Exhibits A-25 and A-26, those
25 exhibits were based on your scan test; correct?

1 A. Oh, yes.

2 Q. Right. But the scan test, those readings
3 are on the street based on scan readings from a receive
4 antenna mounted to the roof of a drive test vehicle;
5 correct?

6 A. Yes.

7 Q. So given that, what is the significance of
8 the key on the bottom of A-25 that we're looking at
9 that references in-building LTE coverage?

10 A. So the map that's provided is the same map
11 that was provided previously with just the green and
12 gray color code. So the legend that you see on the
13 bottom was to let you know that the green shows
14 Verizon's existing coverage that is greater than or
15 less than neg 95, and the gray was existing unreliable
16 for the threshold of less than neg 95.

17 Q. For in-building, right?

18 A. Correct. So the reference to in-building,
19 just to go back to what Dr. Eisenstein was mentioning
20 about neg 95 and it being a level that's used with a
21 buffer built in. And the neg 95 is a reflection of
22 what is on the street. And that signal level is the
23 level that is used so that when you enter into your
24 home you no longer have neg 95. When you enter into
25 your home you're going to have something less than neg

1 95.

2 So it's going to be within that buffer,
3 that range. If you start at neg 105 on the street as
4 your threshold, and when you enter your home you're not
5 going to be at neg 105 in your home because you're
6 going to be coming into contact with all sorts of
7 obstacles that's going to affect your signal. So
8 you're going to be less than neg 105 at that point.
9 And that can range anywhere between neg 110 or neg 120.

10 So the neg 95 is a signal threshold for on
11 the street so that when you go into your home there is
12 a -- an allowance of attenuation when you enter your
13 home so that you still can have a decent level -- a
14 reasonable level of service.

15 Q. Okay. Let me ask it, Frances, a different
16 way. If there were hypothetically no homes in this
17 coverage area, just roads, would it be safe to say that
18 the desired signal strength would be neg 105 because
19 that's the threshold for in-vehicle?

20 A. Yes.

21 Q. Okay. So if there were no buildings and
22 just roads based on your drive test that there would
23 be, looking at A-25, there certainly would be many more
24 dots that would be green based on an in-vehicle
25 threshold; correct?

1 A. Correct. You would see for -- if you were
2 looking at this map and you were only interested in
3 using your phone outside of your home or in your car,
4 yes. You would have more green for neg 105 for
5 in-vehicle, still the areas that are neg 107 like on
6 Lees Hill Boulevard is beyond that, but, yes, there
7 would be more green if those numbers had changed.

8 And if you notice, the numbers coincide
9 with the color code thematic.

10 Q. Right. So -- so the -- to your point, the
11 neg 107 that's right by the school, for example, as you
12 testified earlier, that would be just outside the neg
13 105 threshold for in-vehicle; correct?

14 A. Correct.

15 Q. All right. Thank you for that. So -- did
16 you provide any CW or Continuous Wave Test results
17 similar to what you've provided?

18 And I thank you, and I concur with Dr.
19 Eisenstein, this is the first time in all the hearings
20 I've done that I've seen so many numbers on the drive
21 test information. So thank you for that.

22 But do you have a similar document or that
23 you can create showing the Continuous Wave Test
24 results?

25 A. Yes. That can be done as well. On the

1 maps that I've provided for the continuous waves I used
2 a color code schematic, and I can label those points
3 with the actual CW signal strengths.

4 Q. I may have asked you this last time, and I
5 may be asking that question a lot unfortunately.
6 Although, I did review my notes. Did you, during the
7 February 14th scan test or Continuous Wave Test, did
8 you also put your own phone in test mode to measure the
9 signal yourself?

10 A. You did ask that before. I mentioned that
11 my particular iPhone I'm not capable to do that.

12 Q. I apologize. I don't want to waste anymore
13 time. I apologize.

14 With regard to the data that we're seeing
15 on A-25 and A-26, is that actual raw data readings or
16 is that adjusted in any way, shape or form?

17 A. This is adjusted. It's the same -- it
18 follows the same as the drive test report because we
19 drove during winter with no foliage. I did take a
20 correction factor to account for the attenuation of the
21 leaves on the trees. And since that was not present I
22 did discuss that level with from Dr. Eisenstein. That
23 was 7 dB that was taken.

24 Q. So hold on a second. And I'll just use
25 just as an example the elementary school, because we're

1 looking at that 107.39 reading just as an example,
2 Frances?

3 A. Yes.

4 Q. So when the scan actually took the reading
5 and you provide us with the raw data, the raw data is
6 going to show a reading of approximately negative
7 100.39 for that particular reading; correct?

8 A. That's correct.

9 Q. Okay. So, and that difference, that
10 correction factor to account for attenuation level of 7
11 dB you applied to every single number that we're seeing
12 on both A-25 and A-26; correct?

13 A. Yes. To make it uniform, yes.

14 Q. And with regard to this area of Harding to
15 account for the attenuation level of what, leaves on
16 the trees?

17 A. Correct.

18 Q. Right. Did you do any type of analysis as
19 to -- in a particular area within the gap area, whether
20 the trees were deciduous or evergreen?

21 A. Yes. While I was out doing the CW test I
22 did notice that there is a mix. There are evergreens
23 present, as well as deciduous. Evergreens can
24 attenuate the signal even more. So you can have a
25 range of attenuation.

1 Also, including the thickness and the
2 density of the trees can increase the attenuation, but
3 as I mentioned that can range anywhere from 5 dB even
4 up to 15 to 20 dB of loss. And 7 dB was more on the
5 conservative side. I discussed that with Dr.
6 Eisenstein, and he felt that that was a fair number.

7 Q. When you say a fair number --

8 A. Meaning that it could actually be worse
9 based on the mix of evergreens and deciduous trees and
10 the height of the trees and the density, meaning that
11 there are certain sections in Harding where you aren't
12 just passing through one single row of trees but
13 actually several rows of trees. That attenuation can
14 be greater than seven.

15 Q. If you are hypothetically driving through
16 an area that is reflected in one of the readings on
17 A-25, and there are no, zero deciduous trees in the
18 area, all evergreen, then under those circumstances
19 your reading as reflected on A-25, with my hypothetical
20 Frances, is going to be off by 7 dB, correct? Just
21 based on my hypothetical.

22 A. You're saying that if you're in an area
23 where you're driving through all evergreens?

24 Q. That there is nothing -- there's no
25 deciduous trees. There are only evergreen trees. And

1 the reading that you're getting from the scan test
2 based on the antenna on the roof is a 100 percent
3 accurate figure; is that possible?

4 A. It is possible if it's just, you know, one
5 single row of evergreens. I mean, Mr. Simon, you have
6 to understand that we're looking at an entire -- a
7 large geographic area, and we know that the signal
8 levels are not stationary. As you move -- as Dr.
9 Eisenstein said, this is a radio wave, this is a signal
10 that has peaks and valleys.

11 So you know, with engineering practice you
12 try to take into account certain environments. So 7 dB
13 is on the low end. There could be areas where it is
14 more than seven. There could be areas where it is
15 slightly less than seven. But the idea is to have an
16 image of the general signal strengths in the area that
17 are not within that buffer of being close to neg 95.

18 Q. And with regard to choosing the 7 dB as
19 your correction factor to account for attenuation
20 level, is there any type of treatise, book, finding,
21 that that number was based on?

22 And I'm not trying to be argumentative,
23 Frances, at all. I'm just wondering, like, why was it
24 not at 9 dB? Why wasn't it 6 dB? Where did the 7 dB
25 come from in terms of an actual, let's say, engineering

1 or other journal?

2 A. So, let me put it to you this way. And
3 this is just in my experience having driven areas in
4 Summer and then in Winter and seeing the difference in
5 those drive tests and having done drive tests on my
6 own.

7 Those levels are going to vary between,
8 yes, the type of trees, and as I mentioned the
9 thickness and the buffers, whether you're going through
10 maybe 50 feet worth of trees or 200 feet worth of trees
11 that signal is going to vary.

12 What I have come across is, it usually lies
13 between five and 20 dB. So we could have chosen ten as
14 a mid, or somewhere -- a mid point, but seven is closer
15 to the lower end of the spectrum.

16 Q. Let me ask it a different way. Was there
17 any reason why, Frances, there was no scan test done or
18 Continuous Wave Test done in the Spring or Summer when
19 the leaves were on the trees?

20 A. I mean, that would be -- my preference
21 would be to do the drive -- do the drive test in the
22 Summer so you can actually have the -- see the
23 worst-case scenario. So there's no particular reason.
24 I think how it came to be was once we saw the
25 irregularities of the Chatham 2 site and propagation.

1 And then once we did the CW test it just made sense
2 while doing the CW test to also do a scan drive. That
3 happened to fall in the Winter.

4 MR. SIMON: Okay. I noticed on top, Lori,
5 if you can scroll up a little bit. I'm looking top
6 left.

7 Q. So on the top left corner right where it
8 sort of says Harding 3 there's a scale, a one-mile
9 scale?

10 A. Yes.

11 Q. In your other propagation exhibits that
12 you've provided to the Board in both submissions, you
13 had a scale of a half of a mile. And when I compared
14 the two or the three really there was a little bit of a
15 discrepancy in terms of measurement. Do you know why
16 that would be?

17 A. There really shouldn't be. I don't create
18 the scale. The actual mapping tool has a distance tool
19 built in where it creates the scale based on the size
20 of your map. So the scale should be accurate if you
21 measure using the scale actually on the map. In that
22 particular -- on that particular exhibit they should
23 match up.

24 Q. And sticking with what we're seeing on the
25 screen as A-25, on the top right-hand corner it states:

1 Morristown 3 Re-Lo (D).

2 A. Correct.

3 Q. And I don't think I asked you this, and if
4 I did I apologize. What is Re-Lo (D)? What's the
5 significance of that, if you know?

6 A. I don't know. That's just the name of the
7 site that they have in the database. I don't know the
8 significance of it at all.

9 Q. You don't know why it says Re-Lo or
10 Relocation or what the "D" stands for?

11 A. Typically if I see Re-Lo it would be some
12 indication of a relocation, but I don't know for sure.
13 I didn't investigate the name of the site or why
14 someone named it that.

15 MR. SCHNEIDER: To help move things along,
16 Re-Lo would generally mean that there was an original
17 Morristown 3 site and then essentially the site was
18 relocated, but they kept the same site designation.
19 That would explain why it's called "Re-Lo."

20 MR. SIMON: Mr. Schneider, do you know what
21 the "D" stands for?

22 MR. SCHNEIDER: "D" would generally signify
23 what candidate they may have looked at, but that's a
24 guess. I don't know that for a fact.

25 BY MR. SIMON:

1 Q. Ms. Boschulte, do you know if Morristown 3
2 Re-Lo (D) is that a site that's currently on the
3 active?

4 A. It is active.

5 Q. And how much, if you can, just getting away
6 for a moment from A-25 and A-26, between -- how much
7 overlap are we talking about in terms of percentage
8 between existing and proposed coverage per A-5 of your
9 August 28th, 2018, report compared to propagation
10 exhibit, I think it's "I" or "J" on your March 3rd,
11 2020, report?

12 It appears, and this is why I'm asking you.
13 I don't want to misread it. It appears that there's a
14 significant amount of overlap between existing coverage
15 and proposed coverage from the propagations.

16 MR. SCHNEIDER: Do you understand the
17 question, Frances?

18 A. The long question? If you could bring up
19 the exhibit that you're referring to that would be
20 helpful.

21 Q. Do you have your --

22 A. Are you referencing the first report?

23 Q. Well, I'm referencing both reports. So
24 there's -- if you look at A-5 of your report dated
25 August 28th, 2018, and then you look at -- and then you

1 compare that with propagation Exhibit "J" of your
2 March 3rd, 2020, report.

3 A. Correct.

4 Q. It appears that there is a -- my term --
5 good amount of overlap from a propagation standpoint
6 between what's existing coverage currently and what is
7 being proposed from a propagation tool perspective?

8 A. I think in my supplemental report when I
9 submitted the drive test data and I was doing the
10 comparison between the two that there were areas where
11 the propagation was over predicting.

12 Q. Right. You noticed four little pockets
13 where that took place?

14 A. Right.

15 Q. But even if you exclude those four little
16 pockets it appears that there is a good amount, again,
17 my term, of overlap. And is there a way that you can
18 estimate, if you can, what the percentage of overlap in
19 coverage is between existing and proposed?

20 If you can't you can't.

21 SECRETARY TAGLAIRINO: Do you need any of
22 these things put up?

23 THE WITNESS: Not at this moment. So if I
24 look at the two I wouldn't say it's excessive, because
25 it's not even anywhere near a half. Maybe a quarter.

1 Q. A quarter to a third?

2 A. I think less -- I would say less than a
3 third, because if you look, especially near Sands
4 Spring Lane, okay, you'll see, and you'll notice also
5 in the drive data the signal starts to drop off. And
6 it drops off pretty quickly. That's due to the
7 terrain.

8 And then if you look at the proposed the
9 proposed is barely getting to Sands Spring Road. It
10 becomes very spotty and you just have that one little
11 section along James Street that there is a little bit
12 of an overlap. So if you look at the two coverage
13 footprints together they're not really overlapping that
14 much at all.

15 Q. So your answer is approximately 25 percent?

16 MR. SCHNEIDER: If you don't know --

17 BY MR. SIMON:

18 Q. If you don't know you don't know. That's
19 fine.

20 A. I wouldn't say 25 percent. I would say
21 something less than that.

22 Q. Like what?

23 A. I'm not sure why you think it's 25 percent.

24 Q. Well, I'm asking -- I'm not being
25 argumentative. I'm just asking. If you don't know --

1 I just want the answer. That's all.

2 A. I say less than 25 percent.

3 Q. Can you estimate what percentage?

4 A. Let's say, I would say probably anywhere
5 probably ten percent.

6 Q. Sticking with your August 2018 report, on
7 page six you state that "Verizon Wireless subscribers
8 currently cannot reliably initiate, receive or continue
9 voice and/or data connections in the gap coverage area
10 in question." Do you recall stating that?

11 A. Yes.

12 Q. Are you basing that on any complaints that
13 have been made by Verizon Wireless subscribers?

14 A. I'm basing that on a few things: One,
15 noting that within the gap that the terrain creates
16 obstructions for the existing wireless facilities that
17 creates a scenario where the signal strengths are
18 extremely weak in the center of Harding Township.

19 Two, I'm also basing that on the fact that
20 in conversations with Verizon at the time they said
21 that there were several complaints in the area of
22 dropped calls.

23 Q. When were those complaints made?

24 A. Back when I was writing the report.

25 Q. Did anyone show you any data or

1 documentation to substantiate the "several complaints
2 of dropped calls"?

3 A. No. Not at that time.

4 Q. Did you ever see or ask for any
5 dropped-call data?

6 A. I do have dropped-call data, yes.

7 Q. And you have dropped-call data for this
8 area in question?

9 A. I have dropped-call data, yes, for this
10 area. On the dropped-call data is on the serving
11 sectors of this area, yes.

12 Q. And have you provided that to the Board?

13 A. No.

14 Q. And what was the dropped-call data time
15 frame?

16 A. The dropped-call data that I have is for
17 this year, 2020.

18 Q. And do you recall what percentage of
19 Verizon Wireless subscribers in this area had dropped
20 calls?

21 A. What I can tell you is that the
22 dropped-call rate is greater than one percent on most
23 of the sectors serving here.

24 Q. For what time period?

25 A. This is from a time period from January up

1 to August, I have.

2 Q. And with regard to the dropped-call
3 information that you reviewed does it identify the
4 reason for the dropped call?

5 A. Meaning?

6 Q. Meaning, was it the caller's fault, was it
7 the receiver's fault? Was it a dropped phone? Was it
8 a battery that went dead? Was it a bought phone?

9 A. For that I have to investigate further. I
10 have to request more information. What I have is the
11 dropped calls and failures on those serving sectors
12 that serve where the gap is located.

13 Q. And does the dropped-call information that
14 you have that you haven't provided yet to the Board,
15 does that demonstrate what band the caller was on,
16 whether it was on a lower frequency or a higher
17 frequency?

18 A. What I have are dropped-call percentages
19 for all the bands on each of the sites for that sector.

20 Q. So you don't know -- you have no idea
21 whether -- well, let me ask you, and I apologize --

22 A. Well, it's broken down by bands. So there
23 are going to be users on each of those bands. There's
24 going to be users on the high bands, there's going to
25 be users on the low bands. What I have data for are

1 the users that are on each of those bands --

2 Q. And when -- go ahead. I'm sorry.

3 A. -- for that time frame.

4 Q. And when the user -- and we talked about

5 this a little bit the last time -- is on the higher

6 band or starts out on a higher band, there's instances

7 where it gets switched to a lower band; correct?

8 A. Yes.

9 Q. So are those reflected as a dropped call or
10 do you not know?

11 A. Or they're not -- when the hand down was
12 successful?

13 Q. Yes.

14 A. I think that would be -- that would
15 probably be a different -- okay. I would have to
16 investigate all the drops to see, as you mentioned, the
17 reason for the drop. Whether or not that happened --
18 occurred because of low signal strengths, or that
19 occurred because of a hand down or handover failure. I
20 don't know the reasons for the drops.

21 Q. Okay. With going back to your report, I
22 think you also stated, Frances, that, or you
23 referenced, excuse me, that this application is being
24 brought as part of a -- some sort of comprehensive plan
25 to provide Harding Township with seamless and reliable

1 wireless service; correct?

2 A. Yes. You mentioned that in my report as to
3 why I utilized the reference of comprehensive and
4 seamless, and when I say "seamless" I mean that you
5 can -- when you're mobile -- when you're moving from
6 one area to the next wherever you are that during the
7 handover process that you are able to continue your
8 data connection.

9 Q. Right. But let me ask you about the terms
10 comprehensive plan. Where are the other cell towers or
11 sites that you're looking at so to provide Harding
12 Township with a comprehensive plan for reliable
13 service?

14 A. So when I wrote the report my idea was the
15 fact that looking at where the existing sites are, and
16 where the proposed is there's still a lot left in
17 Harding that needs coverage. So at that time I did not
18 have any other candidates being identified.

19 Q. Okay. So to be fair, there's no plan, per
20 se, other than that Verizon wants to fill the gaps?

21 A. That's correct. That was my understanding
22 at the time. Yes.

23 Q. You said as part of your report in this
24 particular case Verizon Wireless focused on the major
25 road and central areas within Harding Township such as

1 the municipal court, police department, and fire
2 department, correct?

3 A. Yes. They're all in the center of town.
4 Yes.

5 Q. So when you talk about the major road
6 you're talking about Lees Hill Road, Blue Mill Road,
7 and I guess Glen Alpin?

8 A. Yes. Where everything kind of comes to the
9 intersection point, and then you have the buildings
10 that I mentioned. And if you also look it's also where
11 the density -- a good portion density area of
12 residential is located. If you're looking at the map
13 you have a large number of residents in that triangle.
14 You have Village Road, Pleasantville Road, and Long
15 Hill Road, and Lees Hill Road, all in the center of the
16 township.

17 Q. And with regard to that area are you aware
18 of any type of traffic counts that have been performed
19 by anyone as to the number of cars per day?

20 A. That's not really an RF question. I
21 didn't. I'd have to ask Mr. Schneider if he knows.
22 I'm not sure if the --

23 MR. SCHNEIDER: I would know, but I think
24 the simple answer is that you're not aware of
25 whether -- or you didn't perform any traffic counts or

1 rely on any traffic counts; is that correct?

2 THE WITNESS: That's correct.

3 BY MR. SIMON:

4 Q. Have you conducted any continuous wave test
5 for this gap area at any other location beside the DPW?

6 MR. SCHNEIDER: I think, Rob, I think you
7 asked that last time, and I think there was one
8 correction. Frances, just to move it along why don't
9 you just respond.

10 THE WITNESS: So, yes. Last time I was
11 under the impression you were asking about the scan
12 test, but in reference to the CW test we did do a test
13 at the church, at the New Vernon Church. We did
14 conduct a CW test with a bucket truck to the height of
15 the roof of the church.

16 And a couple of days, I'm not sure, but
17 shortly after I was told that it was no longer a viable
18 candidate. So I stopped any further processing of
19 that.

20 BY MR. SIMON:

21 Q. Did you do any propagation or CW test for
22 Bayne Park?

23 A. Bayne Park? I did not. I did not.

24 Q. Do you know if anyone did?

25 A. No one has told me.

1 Q. And what about the municipal building or
2 otherwise known as Kirby Hall Park, are you aware of
3 any propagation or CW testing done assuming a tower at
4 that location, anywhere on that location, including in
5 the rear?

6 A. I didn't conduct any CW test at the
7 municipal park. I don't know if anyone else did. I
8 did do an analysis on the municipal as part of my
9 alternate analysis.

10 Q. Have you submitted that to the Board?

11 I'm asking, Frances, because if we go back
12 and I barely remember and you don't either. I think it
13 was actually the first or the second hearing. I
14 believe that the Board had asked you to provide
15 propagation for the municipal building. So I don't
16 know -- I haven't seen it and I apologize if I just
17 missed it.

18 A. I don't know if I did or didn't. I don't
19 know in the time frame. I know that I did the analysis
20 on it, and I know that it came back that the municipal
21 building was not going to be a viable candidate.

22 Q. Okay. Do you recall item municipal
23 building was not going to be a viable candidate?

24 MR. SCHNEIDER: The answer is because the
25 municipality has and continues not to make it

1 available, so there's no point in providing any
2 analysis of the site that's not available.

3 MR. SIMON: Well, that's your answer, Mr.
4 Schneider. I'm asking the witness the question.

5 THE WITNESS: Well, I know that I did the
6 analysis as part of the alternate analysis, but I was
7 told that it wasn't a viable candidate. So I wasn't
8 sure when I was told that it's not a viable candidate
9 and whether or not we submitted anything. But based on
10 Mr. Schneider's response I don't believe anything was
11 submitted because it came back that it was not an
12 option.

13 BY MR. SIMON:

14 Q. And you understand that the municipal
15 building site is owned by the township, as is the
16 Harding DPW site; correct?

17 A. Yes. Correct.

18 Q. And you referenced also in your report, I
19 believe, that there is a capacity issue during an
20 emergency situation at the Harding Township Elementary
21 School. Do you recall stating that?

22 A. I'm not sure if you're taking that out of
23 context. Where are you reading that?

24 Q. I believe that in your original
25 August 28th, 2018, report you use the term "capacity

1 issue during an emergency situation at the Harding
2 Township Elementary School."

3 Do you recall stating that?

4 A. Actually I don't. I know that you would
5 have -- I can see why I would be concerned having the
6 number of students and personnel in a situation, in an
7 emergency situation where parents and students, et
8 cetera, are all trying to call at the same time, that
9 there could be.

10 Q. Do you know whether the Harding Township
11 elementary school has the ability to install
12 in-building DAS?

13 A. I don't know if the school has the ability
14 to install.

15 Q. Do you know if the school has the ability
16 to install small cells outside the building on the face
17 of the building?

18 A. I don't know.

19 Q. Do you know if the Harding Township
20 Elementary School has the ability to install cell
21 antennas, wireless antennas on the roof of that
22 building?

23 A. No. I do not know. I have not -- I do not
24 have any knowledge of any discussions with the school.

25 Q. And you have not inquired; correct?

1 A. I personally --

2 Q. As to whether any of those possibilities
3 that I just listed are possible?

4 A. Typically I don't look to install in
5 schools.

6 Q. Are you aware whether schools -- all
7 schools in New Jersey have either in-building DAS,
8 small cells on the face of their buildings, and/or
9 antennas on the roofs of their buildings?

10 A. Did you just say "all schools"?

11 Q. Do you know whether schools have any of
12 those three?

13 A. I do know some schools in the state of New
14 Jersey have installations. I don't know if all schools
15 have installations.

16 Q. I didn't ask whether all schools. I asked
17 whether schools have them. That's my fault. I'm
18 sorry.

19 So do you know how many -- how many schools
20 are you aware of that have one of those options?

21 A. I don't have a count of how many schools in
22 the state of New Jersey have some type of wireless
23 installation. I don't know.

24 Q. Have you worked on any projects that
25 involve those?

1 A. No. I've only worked on projects that
2 involve putting in public safety systems inside
3 schools. Not wireless.

4 Q. When you say "public safety systems inside
5 schools" what does that mean?

6 A. Two-way portable radio, putting emergency
7 responders for fire department. Some jurisdictions
8 require.

9 Q. Have you been asked or have you inquired to
10 do that for the Harding Township Elementary School?

11 A. No.

12 Q. Dr. Eisenstein earlier tonight, and I
13 apologize Bruce, I know I'm going to get this wrong as
14 I usually do, but talked about a wireless user in a bad
15 area -- my term -- experiencing I think he said bit
16 rate errors which slows everything down. I think that
17 was his term.

18 Do you understand what he was talking about
19 when he said that?

20 A. The amount of bit error rates?

21 Q. Yeah.

22 A. As the signal gets weaker -- yes.

23 Q. Have you seen any data for this area in
24 question that demonstrates bit error rates going up?

25 A. I haven't seen any data. I have to -- I

1 have to check, but the scan data that I took may
2 include signal quality which could also be a
3 demonstration of high bit error rate, but I'm not sure
4 if I have that information for this area.

5 Q. And do you have that information for not
6 just Verizon but do you have it for any other carrier
7 for this area?

8 A. No.

9 Q. And you know what, and I apologize Frances.
10 The drop-call data that you were referencing earlier, I
11 neglected to ask you, do you know whether that, or do
12 you recall whether those were drivers or business
13 owners or homeowners?

14 A. I mean, what you're asking is personal
15 information for me to ask Verizon for. That's not
16 going to be on regular statistical data.

17 Q. I don't want to know anyone's name. I just
18 want to know whether the person who was making, as you
19 stated in your sworn testimony, a complaint as to a
20 dropped call whether that person was a driver or
21 whether that person was someone in a house, or in a
22 building like the post office?

23 MR. SCHNEIDER: If you know, Frances.

24 THE WITNESS: Oh, I don't know. I don't
25 know.

1 BY MR. SIMON:

2 Q. And you -- I guess in terms of the roadways
3 that you provided the scan test data for, is it true
4 that the speed at which you're driving is related in
5 some regard to whether or not you're going to drop a
6 call?

7 A. Speed can have an effect.

8 Q. So when you're walking or you're stationary
9 and outside, are you less likely to drop a call than if
10 you're driving fast?

11 A. I mean, you're going through a residential
12 neighborhood, how fast can you be going?

13 Q. Thank you. Does your analysis take into
14 account possible enhancements that can be placed within
15 a building such as a Femtocell, or a cell enhancer, or
16 Wi-Fi or a cell booster?

17 A. Sorry. Can you repeat the question?

18 Q. Sure. Does your analysis and the opinions
19 that you're providing on behalf of Verizon take into
20 account the ability of a property owner to make a
21 signal -- wireless signal stronger with a cell enhancer
22 or a repeater or extender or Wi-Fi or a Femtocell?

23 MR. SCHNEIDER: I'll object to the
24 question. I'm not going to understand the question.
25 You're asking whether her analysis show -- accounts for

1 that. Her analysis shows what the existing level of
2 service is and what the proposed coverage is. It
3 doesn't obviously account for what may an individual
4 homeowner have or not have. How would she know?

5 MR. SIMON: Well, Ms. Boschulte is
6 providing expert opinion testimony on a variety of
7 topics dealing with radio frequency. She has provided
8 opinions dealing with in-building, reliable in-building
9 coverage and stating that the applicant, the carrier
10 needs neg 95 dBm RSRP as a reliable signal strength.
11 And I'm asking her whether that conclusion takes into
12 account the possibility that a homeowner or property
13 owner has purchased and are using enhancers modes to
14 strengthen a signal.

15 MR. SCHNEIDER: My objection is to the use
16 of the phrase "takes into account." I don't know what
17 that means, and I don't know that Frances knows what it
18 means.

19 BY MR. SIMON:

20 Q. Frances, if I'm in a home, if you're using
21 negative 95 as your in-building reliable signal
22 strength; correct?

23 A. Yes.

24 Q. Right. If I have a Femto -- do you know
25 what a Femtocell is?

1 A. Yes.

2 Q. What is a Femtocell?

3 A. It's a small device that boosts your signal
4 strength inside your home. It doesn't have a very
5 large footprint but --

6 Q. If I had a Femtocell in my home and my home
7 is located in an area that has, for example, negative
8 105 coverage -- go ahead. Right?

9 A. Typically when you look at these
10 specifications for these devices that are meant to
11 boost your signal from the outside coming to -- to come
12 into your home, you have to have something better than
13 really neg 105 to work with.

14 Q. How do you know that?

15 A. Because there's only a certain amount of
16 gain that's going to be allowed to amplify so -- to
17 amplify your signal. And you're only going to have a
18 small coverage footprint. So you may have it maybe
19 upstairs and then you may need more than one device to
20 cover your whole entire home.

21 Q. So let's assume for a moment that I
22 purchased enough devices, based on your answer, to
23 cover my entire home, how much amplification of my
24 signal am I going to get?

25 A. It's going to be a reflection on what

1 you're getting from the outside.

2 But I have to say, Mr. Simon, because the
3 question is really odd because when you're designing a
4 network and you're looking to fill a gap in service you
5 have to design it for everyone. And what you're asking
6 is to make the assumption that the average person
7 purchases these things. And, you know, I don't believe
8 that's the way to design a system thinking that the
9 average person is going to purchase, every person is
10 going to purchase a booster.

11 MR. SCHNEIDER: The answer, Frances, is
12 your analysis didn't include any assumptions as to
13 whether any individuals purchased or utilized a
14 Femtocell. And my objection is that is a beyond
15 unreasonable position to take to suggest that that's a
16 regulatory -- that every individual should be required
17 to provide a Femto service as a means of providing
18 reliable service.

19 MR. SIMON: I did not ask her --

20 MR. SCHNEIDER: Well, you asked her whether
21 her analysis took into account. And she's indicated --

22 CHAIRMAN FLANAGAN: Okay. Gentlemen, can
23 we move along? Your objection is noted. Steve, I
24 don't know, do you want to do some lawyer stuff here?

25 Mr. Simon, can we -- did you get an answer

1 to your question.

2 MR. SIMON: Well, the --

3 THE WITNESS: Well, the answer is I didn't
4 take that into account. No.

5 BY MR. SIMON:

6 Q. If a building or a home has a Femtocell or
7 a mini cell site that transmits and receives a signal
8 Verizon -- for that particular building or home Verizon
9 would need to design to a desired signal strength to
10 neg 95; correct?

11 MR. SCHNEIDER: My objection is noted, but
12 if you can answer the question, fine. But my objection
13 is continued to be noted.

14 THE WITNESS: I'm going to say, no, Simon
15 (sic), because I already said that it's already noted
16 that these -- these Femtocells do not cover a large
17 radius. So if you have -- depending on your home
18 environment you may only cover two bedrooms. And what
19 do you do with the rest of your house. And again, I
20 didn't investigate how many people in Harding have this
21 device.

22 BY MR. SIMON:

23 Q. So let's move onto just nonresidential
24 buildings, because we're talking about downtown Harding
25 Township.

1 Those buildings can have antennas on the
2 roof or on the face of their buildings or even
3 in-building DAS; correct?

4 A. Can they?

5 Q. Yes.

6 A. I don't know.

7 Q. You don't know?

8 A. I don't know if they're landmarked. I
9 don't know. That's not how I was -- this is not how I
10 evaluated the gap.

11 Q. Did you look and consider any of those
12 alternatives for any building or any other site other
13 than the DPW as part of your radio frequency analysis
14 for this application?

15 A. We did go through the alternate analysis.

16 Q. I'm asking you whether -- did you consider
17 placing antennas on the roof of any building in the
18 coverage area, either independently or in combination
19 with the monopole location at the DPW?

20 A. We did investigate the municipal.

21 Q. I'm sorry?

22 A. We did investigate the church. We did a CW
23 test on the church.

24 Q. Did you perform any of those analysis --
25 you just said you did an analysis on the municipal

1 building? Is that what you said? I'm sorry.

2 A. I did an analysis on the municipal building
3 to investigate that.

4 Q. When you did an analysis, what does that --
5 are you talking about a monopole, are you talking about
6 some other type of installation?

7 A. I'm talking about a monopole-type
8 structure, not the actual rooftop structure.

9 Q. So did you consider, other than the I think
10 it was the church, did you consider a rooftop structure
11 in combination with the DPW yard anywhere?

12 A. The height of the building at the DPW yard
13 is, I would have to say, even below 50 feet. It's not
14 even above the tree line.

15 Q. Have you looked at installing the monopole
16 at the DPW yard in conjunction with any alternative to
17 a monopole in an effort to potentially lower the height
18 of the DPW monopole?

19 A. No. And I'm going to tell you why. When I
20 looked at the DPW -- and I have spent time, Simon,
21 looking at the terrain and surrounding area and seeing
22 what's the best way to fill the gap in the center of
23 town. And if you look at the surrounding existing
24 sites and you see what they cover, okay, let's just
25 take, for an example, we're looking at the drive test

1 map. If you can scroll up a little -- maybe zoom out a
2 little bit so we can see the entire map.

3 SECRETARY TAGLAIRINO: Not good, Frances?
4 Wait. I can't get this thing --

5 THE WITNESS: Okay. That's good.

6 SECRETARY TAGLAIRINO: Is that good enough?

7 THE WITNESS: That's good. That's good.

8 Looking at the challenges for an RF environment in this
9 area with the hills and the valleys changing from 50
10 feet to 100 feet, and then you have areas of dense
11 trees, you have tall trees, and you look at the
12 existing footprint of the existing sites, and these
13 sites are about a hundred feet. Verizon has an antenna
14 centerline of about a hundred feet. Chatham 2 is a
15 hundred feet. Harding 2 has -- is an antenna
16 centerline of 98 feet. The Harding site is a hundred
17 feet.

18 So if you just look at those coverage
19 footprints they don't reach very far, and they don't
20 reach very far even at 700 because of function of
21 distance, terrain, foliage, all the obstructions in its
22 path. If I'm looking at the DPW and I know that there
23 is a ridge to the east, there's a ridge to the west
24 going down Lees Hill Boulevard where, you know, you get
25 to the top and then once you pass Long Hill Road your

1 -- pretty much line-of-sight is lost.

2 If you look at the CW test at the DPW site
3 it shows that even at 120 you don't make it past Long
4 Hill Road, you don't make it past Long Hill Road
5 because the terrain is so severe. The valleys are
6 severe. So to look for small little rooftops to put
7 something on, it's not going to make a dent into trying
8 to provide adequate service to this area trying to
9 resolve these dropped calls, trying to resolve the
10 issues that users are experiencing in the service.

11 So this is a heavily challenging area for
12 an RF environment. And even at a hundred feet you can
13 see as you go towards the center of town that it's a
14 challenge. The signals are weak. Very weak in some
15 areas. And again, if you look at the CW test for the
16 DPW you'll see -- you'll see as you drop from 120 down
17 to 80 you see what happens in the environment.

18 So whether or not -- I mean, to look at a
19 small rooftop that's surrounded by trees and it's a
20 dense foliage area it's not going to propagate very far
21 in this type of environment.

22 Q. So Frances, the answer to the question that
23 I asked you is no, that you did not take that into
24 consideration; right?

25 A. I did. Based on what I know in terrain of

1 the area I took it into consideration that it's not
2 going to be very helpful.

3 MR. SCHNEIDER: So just so we're clear, the
4 answer is that she did take -- just so we're not
5 obfuscating the record, she did take it into
6 consideration and determined that no existing rooftop
7 would meet their existing needs in combination for the
8 reasons just articulated.

9 BY MR. SIMON:

10 Q. Did you propagate any rooftop in Harding
11 Township in combination with the DPW yard because you
12 took it into consideration?

13 A. No. I didn't propagate. No.

14 Q. And do you -- if a -- if the municipal --
15 hypothetically, if the municipal building had
16 in-building DAS you wouldn't need a macro site to
17 provide that particular building with negative 95 RSRP
18 in-building coverage; correct?

19 A. I wouldn't need to provide service to that
20 building if they had an in-building DAS solution, if
21 that's what you're asking.

22 Q. Yes. With regard to the data that you have
23 provided from the adjacent sites and the facilities,
24 have you provided the power of those radios stated in
25 watts?

1 A. I'm sorry. You said adjacent sites. Are
2 you talking about the existing sites on the map?

3 Q. Yes. I'm sorry.

4 A. I haven't provided the transmit powers of
5 those existing sites.

6 Q. And were the propagation maps that you have
7 provided to the Board, were they done at maximum power
8 that the radios can put out like 400 watts, or
9 operational powers such as 200 watts?

10 A. So they are done based on the -- let me
11 see. The maximum power that they're able to transmit
12 at.

13 Q. And not operational power?

14 A. I don't know what you mean by operational
15 power.

16 Q. In other words, were they done -- I guess
17 to cut to the chase, were they done at the maximum
18 power that the radios can put out?

19 A. They're done at what they're allowed to be
20 licensed to operate at.

21 Q. Well, no. That's not what I asked. I'm
22 asking --

23 A. They can't operate more power than what
24 they're licensed for.

25 Q. But were the propagation maps created based

1 at maximum power that their radios can put out?

2 A. The propagation is based on the actual
3 power at the site that it's currently operating on.

4 Q. What about for the proposed site?

5 A. The proposed site is operating on the same
6 transmit power that the surrounding sites are operating
7 on.

8 Q. Okay. Is that operational power which is
9 less than maximum power, or is it maximum power, do you
10 know?

11 A. It will be operational. What they're
12 licensed for.

13 Q. Is there a reason why -- when you talk
14 about clutter class in your March 3rd, 2020, report,
15 what do you mean by that?

16 MR. SCHNEIDER: Where are you referring to,
17 Mr. Simon?

18 THE WITNESS: You're referring to the
19 supplemental report?

20 MR. SIMON: I am.

21 THE WITNESS: Propagations, parameters,
22 drive test data?

23 MR. SIMON: I am. I'm looking at -- this
24 is not a numbered -- Mr. Schneider, third page under
25 the table.

1 THE WITNESS: Section two?

2 BY MR. SIMON:

3 Q. Yes, Frances. Do you see where I'm
4 referring to?

5 A. Yes.

6 Q. On the right. It says --

7 A. -- clutter class.

8 Q. Right. And so why does Harding 2 have a
9 clutter class of forest and Harding 3 have a clutter
10 class of none? Do you see what I'm referring to?

11 A. Correct. And that was part of the problem
12 that was arising in this supplemental report. I speak
13 of Verizon migrating from one former propagation
14 software Geoplan to Atoll. And at times when you do a
15 transfer between software sometimes everything doesn't
16 line up how the two softwares interpret the
17 information.

18 So the clutter class, obviously, it should
19 not be none. Probably utilized some generic clutter
20 class because whatever was in Geoplan originally Atoll
21 did not know how to interpret it. So the site
22 parameters below on the next page showed the revision,
23 and you have -- it's no longer none. It's listed as
24 forest. If you look at the propagational model you'll
25 see that it has SU stands for Suburban New Jersey, Tall

1 meaning tall trees in the area. And so you'll see that
2 the clutter classes for Harding 3 have been updated and
3 rectified.

4 Q. And do you know what the -- why it would be
5 forest and not residential such as Chatham 2?

6 A. First, when you have a geographical
7 database that is purchased, and is usually purchased
8 from like the United States geo-database, and they have
9 all sorts of classifications. So it could be that
10 Harding's are surrounded predominantly by forest before
11 reaching residential areas.

12 Q. Okay. With regard to the data that was
13 inputted into the model, you didn't do that, somebody
14 else did that; right?

15 A. When you say "data put into models" --

16 Q. In other words, the data that comprises --
17 that's put into this propagation model, did you input
18 that yourself?

19 A. If you're referring to like the transmit
20 power?

21 Q. Yes.

22 A. The transmit power it comes out of their --
23 it's tied into their network database, their
24 performance database which takes that information from
25 their switch information as to what's at the site.

1 Q. And that's the same, Frances, for
2 calibration for like path loss?

3 A. What you're asking are two different
4 things. So if you ask for parameters, certain
5 parameters are put in by the user.

6 Q. Uh-hum.

7 A. So like for the proposed site I would look
8 at the drawings and I would put in the antenna model
9 information. I would put in the height information. I
10 would put in the coordinates. I would put in the
11 azimuths and the tilts, that information. For the
12 existing sites what frequency they're going to be, you
13 know, what frequency -- what frequency band, those
14 other type of parameters would come from their
15 database, their live database and performance at the
16 switch on how the site is configured. That would come
17 through a dump of parameters and input into the tool.

18 Q. Did you input that into the tool or did
19 someone else do that?

20 A. No. Someone else maintains that database
21 for the existing sites.

22 CHAIRMAN FLANAGAN: Mr. Simon, are you
23 coming to a point where you could pause? I don't want
24 to interrupt any continuous questions.

25 MR. SIMON: Mr. Chairman, I can definitely

1 take a pause right now.

2 CHAIRMAN FLANAGAN: Okay. Everybody can we
3 just take a five minute break here? We're going to
4 take a five-minute break or six-minute break. We'll
5 start up again at 10 o'clock exactly.

6 BOARD MEMBER NEWLIN: Thank you, Mike.

7 (Whereupon, a break is taken at 9:54 p.m.)

8 (Back on the record at 10:01 p.m.)

9 CHAIRMAN FLANAGAN: All right. Do we have
10 everyone back?

11 MR. MLENAK: Do you want to do a roll call,
12 Lori?

13 SECRETARY TAGLAIRINO: Okay. Mr. Maselli?
14 Sell Lee.

15 BOARD MEMBER MASELLI: Here.

16 SECRETARY TAGLAIRINO: Mr. Addonizio?

17 BOARD MEMBER ADDONIZIO: Here.

18 SECRETARY TAGLAIRINO: Mr. Newlin?

19 BOARD MEMBER NEWLIN: Here.

20 SECRETARY TAGLAIRINO: Mr. Symonds?

21 BOARD MEMBER SYMONDS: Here.

22 SECRETARY TAGLAIRINO: Ms. Sovolos?

23 BOARD MEMBER SOVOLOS: Here.

24 SECRETARY TAGLAIRINO: Mr. Flanagan?

25 CHAIRMAN FLANAGAN: Here. All right.

1 Great. Mr. Simon, I'll hand it back over to you.

2 MR. SIMON: Thank you, Mr. Chairman.

3 BY MR. SIMON:

4 Q. Frances, are you there?

5 A. I'm here.

6 Q. Okay. I'm sorry. I neglected -- oh,
7 regarding the -- just remind me here. Regarding the CW
8 tests, are those tests done in -- measured by RSSI,
9 whereas, the scan tests are measured RSRP?

10 A. The CW test is done in RSSI. In the
11 supplemental report, I believe --

12 Q. You talked about that. I'm just curious
13 for purposes of these Exhibits A-25 and A-26, are they
14 all in RSRP, or are they in RSSI that was converted?

15 A. They are in RSRP.

16 Q. Thank you. With regard to the CW test that
17 you provided at 700 megahertz, it didn't appear to me
18 at least that there was much difference between
19 120 feet and 80 feet. So my question is, did you
20 attempt to go lower than 80 feet to provide those
21 measurements?

22 A. I'm looking at my report and at 80 feet I
23 mention that there are exceptions of the following
24 areas: Kennedy Lane, Fawn Hill Drive, Featherbed Lane,
25 Village Road, and Millbrook Road. So there are

1 differences between 120 and 80 at 700 megahertz.

2 Q. Did you attempt to go lower than 80 by way
3 of either propagation or via the continuous wave drive
4 test?

5 A. No. We did not go lower than 80.

6 Q. And do you know whether 80 would be desired
7 by any of the other carriers? Have you spoken to any
8 other carriers?

9 A. No. I have not spoken to any other carriers
10 about this application.

11 Q. Have you considered -- and I think Mr.
12 Newlin asked you this, but I'm going to ask it maybe a
13 little bit differently.

14 Did you consider this monopole installation
15 in combination with any ODAS or Outdoor Distributed
16 Antenna System technology?

17 A. No, because --

18 Q. Go ahead. I'm sorry. I interrupted you.
19 Because why?

20 A. When looking at the location for the DPW,
21 and based on the coverage gap, this site needs to cover
22 this residential area and the buildings I mentioned.
23 So kind of in this triangle. And just based on
24 topography the proposed solution is really the best
25 solution.

1 Q. You've heard a reference or mention to an
2 ODAS application that was filed in Harding Township by
3 Verizon and then withdrawn?

4 A. You mentioned that last time. I don't know
5 anything about that. I was asking you. You knew more
6 than I did.

7 Q. Have you done any type of investigation or
8 even asked -- well I shouldn't say this.

9 Have you done any investigation into any
10 ODAS application that was filed with Harding Township
11 in the last five years?

12 A. No.

13 MR. SCHNEIDER: Can we define application?

14 MR. SIMON: An application or permission to
15 install an ODAS system in Harding Township with either
16 the Harding Township Planning Board, Board of
17 Adjustment, or governing body.

18 MR. SCHNEIDER: If you've been involved at
19 all, Frances.

20 A. I haven't been involved at all.

21 Q. Are you aware of any such application, an
22 ODAS application being filed with the Planning Board,
23 Board of Adjustment or governing body in the past five
24 years?

25 A. Mr. Simon, I haven't seen any -- I don't

1 know what has been filed. You keep asking me if I know
2 what's been filed. I don't know what's been filed.

3 Q. Have you asked anyone?

4 A. No.

5 Q. And with regard to the monopole if it's
6 approved and installed, you're aware that state and
7 Federal law allowed the tower once approved to be
8 increased without any subsequent Board approval?

9 MR. SCHNEIDER: Objection. That's beyond
10 this witness' expertise and that calls for a legal
11 conclusion.

12 MR. SIMON: She's a radio frequency expert.

13 MR. SCHNEIDER: She's not aware, Rob, of
14 what -- you know that as well as anybody. That's
15 beyond this witness' expertise to determine under what
16 circumstances a tower may or may not be extended. And
17 I think you know that, with all due respect.

18 MR. MLENAK: I don't think this witness
19 needs to answer a question like that.

20 BY MR. SIMON:

21 Q. Do you know, Ms. Boschulte, whether any of
22 the towers in the surrounding area that you show on
23 your propagation maps have been raised or extended
24 since they were first installed?

25 A. That I don't know. I don't know if they

1 have been extended since they were first installed.

2 No.

3 Q. And do you know how it was determined that
4 the township's public bid mandated the tower height be
5 140 feet?

6 A. Simon, I wouldn't know.

7 Q. And you talked about terrain in providing a
8 number of your answers. The property along Lees Hill
9 Road in particular has a higher elevation than the
10 other areas in question including the DPW yard;
11 correct?

12 A. Yes. As you go to the west along Lees Hill
13 Boulevard you start to rise, and pretty much by
14 Lindsley Road you then drop down in elevation.

15 Q. Do you know whether Verizon has -- or let
16 me ask you this.

17 Are you aware of anyone looking into siting
18 a wireless installation on higher elevation such as
19 along Lees Hill Road that may result in a lower tower
20 height.

21 MR. SCHNEIDER: Can you repeat the
22 question?

23 MR. SIMON: Sure.

24 BY MR. SIMON:

25 Q. Are you aware of any inquiry into siting a

1 wireless facility on ground elevation that is higher
2 than the ground elevation of the DPW yard?

3 MR. SCHNEIDER: By Verizon or anybody else?

4 MR. SIMON: By anyone.

5 A. No.

6 Q. And with regard to the desired signal
7 strength of negative 95 dBm RSRP was that determined by
8 Verizon for this application?

9 A. Say that again about the neg 95? Repeat.

10 Q. The neg 95 desired signal strength, was
11 that desired by Verizon for this application?

12 A. Verizon has made it known that they follow
13 a neg 95 signal strength. We have also done our own
14 internal calculation based on path loss, receiver
15 sensitivity, and other factors as far as the link
16 budget, and we found that the neg 95 was reasonable for
17 the type of service that they were looking to provide.

18 So yes, they utilize neg 95. There are
19 other carriers that have utilized different thresholds.
20 We do our internal analysis and we do voice our
21 opinions on whether or not we feel that that's an
22 acceptable value.

23 Q. But there's no -- to your knowledge as a
24 radio frequency expert there's no governmental or FCC
25 standards that require a carrier to use a particular

1 signal strength, right?

2 A. Not that I'm aware of.

3 Q. And there's no Federal standard for
4 reliable in-building residential LTE coverage; right?

5 A. Federal? I haven't come across any
6 Federal --

7 MR. SCHNEIDER: Empirical standard.

8 THE WITNESS: Empirical standards. No. I
9 have come across other standards that utilize neg 95
10 requirement.

11 BY MR. SIMON:

12 Q. What standards are those?

13 A. One, for the public safety coalition. They
14 look at a similar neg 95 dBm threshold for their
15 communications systems in relation to what they would
16 consider to also provide a decent DAQ, which is a
17 digital audio quality for being able to be heard
18 without noise on a portable radio.

19 So there are other engineering practices
20 that do have based on link budget of what an acceptable
21 signal strength is. So neg 95 is not the first time
22 that we have seen this type of threshold.

23 Q. When you talk about link budget, Frances,
24 what is that?

25 A. A link budget is where you look to see what

1 is an allowable path loss between your transmitter and
2 your receiver and vice versa. So you're looking for a
3 balanced path.

4 So let's say for an example, say you have a
5 very tall site, very high on the tower, and you know,
6 you can crank it all the way up. And you go around and
7 you record your signal strength and you're getting --
8 oh, you're getting neg 50, you know, because you're
9 putting out "X" amount of watts. And you say that's
10 great; however, then you're in that area and no one can
11 hear you, and you're like I don't understand. I have
12 all these bars saying I have neg -- the problem is that
13 your path isn't balanced.

14 So your path has to be balanced because
15 your phone is not putting out 200 watts. And so
16 although you can hear from the base station, the base
17 station can't hear you. So that path loss between the
18 two communicating to each other has to be balanced.

19 And when you do your link budget you can
20 determine based on the equipment specifications of your
21 smart device and the equipment specifications of your
22 base station what is the allowable path loss between
23 the two so that they can communicate with each other.

24 And so link budgets are used. It's a
25 standard engineering practice whenever you start a

1 design that you have to take into account not just the
2 transmit power on one end but the transmit power on
3 both and the receivers and the receivers sensitivity on
4 both and determine at what is the maximum allowable
5 path loss between the two.

6 Q. Thank you. And with regard to -- I just
7 want to get an update. We heard Chief Heller provide
8 some testimony regarding working with Verizon to
9 address communication issues.

10 Do you have any update -- are you privy,
11 I'm sorry, to any update with regard to any discussions
12 between the Chief and Verizon?

13 A. I haven't inquired since my last inquiry.
14 So, no. I don't have an update.

15 Q. And with regard to the outdoor DAS, and I
16 got your answer earlier that you're not aware of any
17 applications. Do you know whether Verizon has made a
18 written request to Harding generally to install ODAS
19 nodes in the right-of-way?

20 A. Simon, I can only guess.

21 Q. I don't want you to guess. If you don't
22 know just --

23 A. I don't know for sure. I don't know for
24 sure.

25 Q. The -- with regards to, and I asked you

1 some questions last time as to ODAS systems that have
2 been installed, outdoor systems that had been
3 installed.

4 Are you familiar with any outdoor systems
5 that had been installed in Morris County.

6 A. Why do I feel like we went down this road
7 before?

8 MR. SCHNEIDER: Are you asking is she
9 familiar with or did she work on any?

10 MR. SIMON: Familiar with.

11 A. Morris County. Would that be
12 Bernardsville/Mendham.

13 Q. Well, that's Somerset County. WE talked
14 about that last time.

15 MR. SCHNEIDER: Well, Mendham would be in
16 Morris.

17 BY MR. SIMON:

18 Q. Mendham is Morris. Right. That's right.
19 Mendham is Morris. Bernardsville is Somerset.

20 A. Okay. So I am familiar. It's a long time
21 ago, but I am familiar with nodes being done in
22 Mendham. I don't know if it was implemented or not. I
23 can't confirm if it was implemented.

24 Q. I'm sorry, Frances. When you say you
25 worked on some nodes in Mendham what are you referring

1 to?

2 A. I'm referring to like a conceptual design
3 of what it would look like, but I don't know where it
4 went.

5 Q. And on whose behalf did you put that
6 conceptual design together?

7 A. With Verizon on behalf of Verizon. Well,
8 you know, we call it Bernardsville and Mendham, so I
9 must have -- yeah. I think some of the nodes did go
10 into Mendham Township.

11 Q. Was that the same project or was it two
12 separate projects?

13 A. No. It was part of the same project, but,
14 again, I don't know what that implemented.

15 Q. Other than the in-building DAS system that
16 was installed in the municipal building fairly
17 recently, are you aware of any other in-building DAS
18 systems installed within the coverage gap area?

19 A. No. I'm not aware. I've asked that
20 question and that's the only one.

21 Q. When you say you've asked that question --

22 A. I've asked that question to Verizon if
23 there were any other in-building solutions like they
24 did at the police department and they said no.

25 Q. When you have an in-building DAS system

1 like the one for the municipal building does it provide
2 coverage immediately outside the building as well?

3 A. When you say immediate, what do you mean?

4 Q. I mean, let's say within 10 feet? Good
5 question. Good follow up.

6 A. I would think that there is some immediate
7 outside coverage. Maybe -- I don't know, I can't say
8 for sure. I've never done any test on that type of
9 installation, but I would assume having done other
10 DAS-type installations depending on the power that
11 there would be some residual coverage coming from
12 outside of the building.

13 I don't know how far that gets. I wouldn't
14 anticipate it covering too far, only because when you
15 have several -- when you start to have a significant
16 number of outdoor or indoor type of solutions and they
17 are not -- their power is not controlled so that
18 they're operating just inside the building. It can
19 create noise for the rest of the network if too much is
20 actually going outside beyond its purpose and can
21 create network issues as far as interference and
22 raising the noise floor.

23 Q. With regard -- getting back to the
24 municipal building site that you propagated but didn't
25 provide the information to the Board on, do you have a

1 recollection as to what areas a municipal building site
2 would cover?

3 A. I'd have to re-look at the map to see what
4 the coverage footprint and where the signal begins to
5 die off. I'd have to look back.

6 Q. Let me see if I've -- I'm trying to think
7 if I've -- just give me a second.

8 Mr. Chairman, I'm sorry. Just give me a
9 minute to see if I have anything else.

10 CHAIRMAN FLANAGAN: Sure.

11 Q. I'm sorry. Frances, are you aware of any
12 other planned or proposed sites by any other carriers?

13 A. I haven't. Not in the town of Harding. I
14 don't know any plans from any other carriers. I
15 haven't spoken to any other carriers in regards to this
16 application.

17 Q. Do any of the other carriers have any
18 existing sites whether they are macro sites or small
19 cell sites or DAS sites other than what you're showing
20 in your exhibits?

21 MR. SCHNEIDER: If you know, Frances. And
22 if you can speak to any other -- the scope of any other
23 carriers.

24 A. I mean, I drove down Pleasantville Road and
25 I know that there is a carrier there. I believe that

1 is AT&T.

2 Q. And can you maybe identify -- why don't we
3 use A-25 because we introduced it this evening. Can
4 you just identify on A-25 approximately what we're
5 talking about?

6 A. I'm trying to remember where -- let's see.
7 If you -- no, that's not it. I'm getting my bearings
8 wrong.

9 If you go to the west -- or east, right, go
10 to east and down right where the road starts to bend.
11 Follow Valley Road.

12 SECRETARY TAGLAIRINO: Spring Valley Road?

13 THE WITNESS: No. Village Road, I'm sorry,
14 and go toward Chatham like you're going toward Chatham.
15 Right there. Sorry. Go more near the intersection. I
16 thought I saw a carrier there. Somewhere there.

17 MR. SCHNEIDER: But you're not specifically
18 familiar with the nature and the type of the carrier;
19 is that correct?

20 THE WITNESS: I thought it was -- for some
21 reason I thought it was AT&T. But for some reason I'm
22 looking --

23 Q. So if we're looking at Exhibit A-25 for the
24 record, and you're looking at the Chatham 2 site it's
25 to the west of the Chatham 2 site?

1 A. You know what, it's not. Sorry. It's not
2 Pleasantville Road. It's Millbrook Road where I saw
3 the carrier. Sorry. So, yeah. Near the DPW, right.
4 Right at that intersection of Village Road and
5 Millbrook.

6 BOARD MEMBER NEWLIN: Excuse me, Steve.
7 Are we allowed to say that the Board of Adjustment
8 heard an application from AT&T to enhance their
9 antennas?

10 MR. MLENAK: It's all part of the public
11 record. Yeah.

12 BOARD MEMBER NEWLIN: I forget when it was,
13 but it wasn't that long ago. So I presume that's what
14 you're referring to. There's antennas on --

15 THE WITNESS: On the roof.

16 BOARD MEMBER NEWLIN: On the roof of the
17 firehouse. I'm certain that was AT&T.

18 MR. SCHNEIDER: Mr. Newlin is a hundred
19 percent correct. In fact, it was on the Agenda during
20 one of the nights we were there. It was a modification
21 to the existing rooftop at the fire department.

22 BOARD MEMBER NEWLIN: And I believe, Rich,
23 that includes broadband, does it not? I believe it is
24 a broadband-type antenna. It's not just for public
25 safety.

1 MR. SCHNEIDER: And I think they were
2 before your Board just for a modification. The
3 facility had existed. You are correct.

4 BOARD MEMBER NEWLIN: Thanks. Just to
5 spare some time here.

6 MR. SCHNEIDER: To move it along. Yes.

7 BY MR. SIMON:

8 Q. Thank you. So Frances, what Mr. Newlin and
9 Mr. Schneider had described a moment ago, does that
10 accurately reflect the site that you're referring to,
11 the AT&T site?

12 A. Yes.

13 Q. And do you know -- have you said any --
14 seen any propagation from that site?

15 A. I haven't seen any propagation from that
16 site. I haven't seen any information from AT&T.

17 Q. So other than that rooftop site, are you
18 aware of any other sites by non-Verizon carriers?

19 A. No.

20 Q. And do you know whether Verizon has
21 requested or received collocation requests from other
22 carriers for the DPW site?

23 MR. SCHNEIDER: You did ask that previously
24 and she answered she wasn't aware.

25 A. I don't know.

1 MR. SIMON: I have nothing further for Ms.
2 Boschulte. Thank you.

3 CHAIRMAN FLANAGAN: Okay. Thank you, Mr.
4 Simon.

5 Mr. Schneider, what else did you have
6 planned for this evening, if anything? We have
7 32 minutes left. Do you have any other testimony you
8 wanted to present?

9 MR. SCHNEIDER: Not tonight, Mr. Chairman.
10 It would not be appropriate. There's a couple of
11 follow-up items that I think have been raised during
12 the testimony this evening, some supplemental data that
13 that was referenced.

14 So my request would be to call it an
15 evening. Come back at the meeting in January. My hope
16 and expectation is that Mr. Simon -- well, I'm going to
17 confirm that Mr. Simon has concluded his
18 cross-examination subject to only additional
19 cross-examination that may be necessary as a result of
20 the supplemental information that we will come back
21 with at the January meeting.

22 So to answer your question directly I'm
23 done for the evening. There's no point in me doing
24 re-direct at this point. I'd rather just defer that
25 until I conclude the matter, at least Ms. Boschulte's

1 testimony in January. And I think that works out of
2 fairness for everybody given the time of tonight's
3 meeting.

4 CHAIRMAN FLANAGAN: And I'm sorry, Mr.
5 Schneider. Maybe I misunderstood. Is Ms. Boschulte's
6 testimony done? And I'm asking because I don't think
7 we have any -- well, actually, do we have members of
8 the public present? Is this not the time, Steve, to
9 ask --

10 MR. SCHNEIDER: Let me answer your
11 question, if I can. I think there is one or two items
12 that was asked for that Frances said that she would
13 review, and if appropriate provide. So I don't want to
14 say she's done, but I would be clear in the sense that
15 I think when she does return in January I would not
16 expect it to be -- famous last words -- lengthy.

17 CHAIRMAN FLANAGAN: Okay. As long as she
18 comes back in January, that's fine.

19 MR. MLENAK: Mr. Chairman?

20 CHAIRMAN FLANAGAN: Sure. Was that you
21 Steve?

22 MR. MLENAK: Yes. I don't know if it's
23 worth recommending seeing if anybody in the public does
24 have a question, or Dr. Eisenstein does. Because I
25 think we'd all agree what we don't want is for

1 supplemental questions in January to have Ms. Boschulte
2 have to come back in February because she needs to
3 produce additional exhibits. So maybe it's worth that
4 check?

5 CHAIRMAN FLANAGAN: Okay. Fair enough.

6 Are there any members of the public that
7 have any questions for Ms. Boschulte? (No reply.)

8 Dr. Eisenstein, do you have any follow-ups
9 for Ms. Boschulte for next month?

10 DR. EISENSTEIN: Next month? No. I think
11 I'm okay at this point.

12 CHAIRMAN FLANAGAN: Okay. Good. So Mr.
13 Schneider, the topic of ODAS systems has come up
14 repeatedly. I know the township at one point I don't
15 know how many years ago had actually passed an
16 ordinance which I think it related to ODAS systems.

17 I believe at the time they were in
18 discussion with Verizon surrounding those systems. Ms.
19 Boschulte's testified she has no knowledge of those
20 systems. Certainly Verizon does. So do you have
21 someone from Verizon that you plan to present that can
22 testify to what work, if any, they've done on these
23 systems?

24 MR. SCHNEIDER: I think the logical thing
25 would be to have Ms. Boschulte review what may have

1 been submitted and what the status of that and have her
2 respond rather than a separate witness who should
3 address your concerns. And you're referring, I think,
4 Mr. Chairman, to what I'll call generically an ODAS
5 ordinance that was adopted in 2018.

6 So to answer your question, I'll have Ms.
7 Boschulte review what may have been submitted or may
8 not have been submitted and relevant details concerning
9 that. She would be the appropriate witness. I would
10 not intend to bring someone else. I think she would be
11 the appropriate person.

12 CHAIRMAN FLANAGAN: Okay. That's fine.
13 Whoever you think is best to present that. But I do
14 want to hear from the Applicant about what plans
15 they've made, if any. If there was any designs. If
16 they've done any preliminary work as to where the
17 placement of these towers or devices may be. But, you
18 know, any and all information you have about what
19 Verizon was planning with those towers.

20 And Alf -- go ahead.

21 MR. SCHNEIDER: And specific, and I think
22 Mr. Newlin raised it, if there's no issue we'll be
23 prepared to respond, understanding that the scope of
24 what may or may not have been submitted may very well
25 be predicated. And I think Ms. Boschulte was pretty

1 clear about this at the last hearing, whatever plans
2 may have been submitted were presumably dependant upon
3 approval of the site at the DPW.

4 So that I just want to set the groundwork
5 that whatever plans may or may not have been submitted
6 were contingent or at least based on a plan assuming
7 approval at the DPW. But with that understanding I
8 have no issue with responding to your request, as well
9 as Mr. Newlin's.

10 BOARD MEMBER NEWLIN: Can I ask --

11 CHAIRMAN FLANAGAN: Go ahead. I just --

12 BOARD MEMBER NEWLIN: Go ahead, Mike. I
13 just want to ask something when you're done.

14 CHAIRMAN FLANAGAN: I just -- you know,
15 words are important. I want to be careful with the
16 term "submitted." Because I don't know if anything was
17 submitted. What I would like to know is what was
18 designed, regardless of whether it was submitted for
19 approval or have gone through any formal steps to gain
20 approval of the township.

21 MR. SCHNEIDER: I was not playing semantics
22 about submitted or not, but I understand the import of
23 your question about what I'll refer to as the
24 conceptual plan as it may relate to in combination with
25 the macro site of the DPW.

1 CHAIRMAN FLANAGAN: Great. And Alf, I'm
2 sorry. I interrupted you.

3 BOARD MEMBER NEWLIN: No, it's perfect. So
4 Rich, just to clarify, at least where I'm coming from
5 is. Is it the case that the ODAS units work in
6 conjunction with the tower, generally?

7 MR. SCHNEIDER: Yes.

8 BOARD MEMBER NEWLIN: So is it -- and
9 perhaps this is naive, it's okay, but does the higher
10 the tower mean you potentially have to do less ODAS
11 units? Lower the tower potentially more with the
12 understanding that that train is -- I'm not trying to
13 be accurate, but to some degree there is a tradeoff; is
14 that true?

15 MR. SCHNEIDER: I understand what you're
16 saying, and you're probably giving, frankly, me too
17 much credit as being an RF expert, but I think the
18 basic parameters of what you said from my limited
19 perspective would be accurate that the amount of ODAS
20 nodes in their layout would be in large measure
21 dependent upon the height and the design of the tower.

22 Frances, am I -- I don't want to open up
23 the whole issue here, but what me and Mr. Newlin just
24 went back and forth, as a general principal, is that an
25 accurate statement?

1 BOARD MEMBER NEWLIN: On a firth-grade
2 level is all we're looking for.

3 THE WITNESS: The nodes -- the ODAS, the
4 Outdoor DAS are typically used to provide an extension
5 or to fill a small gap. So more to compliment a macro
6 facility. So whether or not this can reflect on
7 changing the height of the proposed structure is going
8 to be dependent upon the locations of the nodes, where
9 they can be placed, and because this area is very
10 challenging as far as terrain all that's going to play
11 into effect.

12 BOARD MEMBER NEWLIN: So the answer is,
13 yes. They are related. So Rich, let me ask you
14 another question. And this comes from --

15 DR. EISENSTEIN: Well, before you go on
16 maybe I should just add something here. There is a
17 relationship. You're absolutely correct, but it's a
18 very non-linear relationship. It's not you lower it a
19 little bit and you get a little more.

20 BOARD MEMBER NEWLIN: No. I understand.

21 DR. EISENSTEIN: The area covered goes as
22 to square of the radius of coverage. So when you drop
23 the tower a little the radius of coverage goes down,
24 but the area that it covers is now down by -- it's
25 reduced -- if you cut it in half you have one-fourth

1 the area that you're covering, which means you would
2 need four times as many ODAS nodes to cover the area
3 that's no longer covered.

4 So it's highly non-linear. It's not
5 something where you just go in and say just drop it a
6 little or add a couple of nodes. It can go up very
7 rapidly.

8 BOARD MEMBER NEWLIN: I'm not looking for
9 the easy answer, but it is clear, I think, that they
10 are related and that we consider the essential problem
11 of coverage in this area. Of course we should look at
12 the entire configuration at some level to understand
13 are we being responsive to the residents and responsive
14 to Verizon?

15 So to me it's obvious we need to see that.
16 And it sounds like it's just a logical request.

17 Second request, Rich, and again this is
18 kind of a dreaded thing, but the 5G aspect, I
19 understand too that in part that's marketing, in part
20 it is technology and that 5G is kind of a service and
21 it runs over -- it can run over the low frequency as
22 well as the high frequency, but it does seem relevant
23 to ask what 5G -- what the 5G plans would be and how it
24 might impact, particularly having smaller towers
25 around.

1 And I understand that's a little bit in the
2 future, but I to think it would be good to hear from
3 Verizon how that might impact what you would like and
4 what you intend to do.

5 You understand where I'm coming from,
6 right?

7 MR. SCHNEIDER: I do.

8 BOARD MEMBER NEWLIN: And this is a
9 tradeoff between tower height and a fairly dense area
10 in Harding. Those are the two things we're trying to
11 look at here.

12 CHAIRMAN FLANAGAN: And my goal is not to
13 keep everyone here till eleven o'clock, but we do have
14 a little bit of time, and I want to ask one question.
15 I'll start with asking it of Steve, and I'm happy to
16 hear from Mr. Schneider and Mr. Simon.

17 Mr. Simon made a statement tonight, I think
18 I heard it previously in one of the meetings, that once
19 the tower is built that the owner of the tower can
20 increase its height by right. Is that correct? Steve,
21 let me ask you first.

22 MR. MLENAK: Yeah. That's something when I
23 heard I made a note of to inquire further about and
24 research further, because it's nothing I'm personally
25 familiar with.

1 CHAIRMAN FLANAGAN: Okay. Mr. Simon, you
2 said it. I'll ask you.

3 Is it your understanding that an owner can
4 extend the height -- increase the height of the tower
5 by right once it's built?

6 MR. SIMON: Yes. So there is, and Mr.
7 Schneider is well aware of this, but there's certainly
8 both state and Federal law that talks about the fact
9 that once there is an approval for a tower that you
10 can, for example, under 40:55D-46.2 of the Municipal
11 Land Use Law, I believe that is the particular
12 statutory provision of the MLUL, that you can increase
13 the height under almost all circumstances by ten
14 percent without any type of additional site plan
15 approval. And there's also regulations under the FCC,
16 I believe, that may be applicable as well that I know
17 that Boards have utilized and relied upon.

18 So I think the bottom line is that I think
19 there's state and Federal law that allows a tower, once
20 it is approved, to increase in height without any
21 subsequent Board approval.

22 CHAIRMAN FLANAGAN: With -- and I think --
23 it sounds like there are some limitations. It can be
24 increased by ten percent perhaps.

25 Mr. Schneider, do you want to share your

1 thoughts on that? What is your understanding on that
2 topic?

3 MR. SCHNEIDER: Well, I have a firm
4 understanding, and I don't know that there's a
5 simple -- there are rights both under the FCC as well
6 as state law which do allow for essentially the right
7 to extend the tower.

8 If you'll recall, Mr. Chairman, this was
9 broached I think by you probably the first or the
10 second hearing. You asked that question, and there was
11 a lengthy -- well, there was a discussion between
12 myself, Dr. Eisenstein, and Counsel at the time. So
13 the simple answer is there are rights, but there are
14 also conditions such as whether the extension of the
15 tower is in accordance with the terms and conditions of
16 the original approval, whether they defeat any
17 concealment efforts associated with the original
18 approval. And there is yet an additional aspect which
19 deals with whether you have the right as a matter of
20 the underlying lease with the property owner to extend
21 the height.

22 Hypothetically, let me pose to you this
23 scenario. In this case the township is the land owner.
24 The township as all will recall had only authorized a
25 140-foot tower. The Applicant ultimately determined

1 that it could meet its technical objectives at a
2 120 feet. But in any event, the tower in my opinion,
3 regardless of the FCC or the state law could not
4 theoretically exceed 140 because the township has put
5 essentially its own limitations as a matter of lease as
6 to the height of the tower.

7 So the answer is, there are unilateral
8 rights to extend it. They're not necessarily as simple
9 and straight forward as may be perceived. And in terms
10 of the more global picture the -- if you'll recall,
11 there was -- I think actually you were the one who
12 raised the issue -- whether you have to balance what
13 that right is vis-a-vis the ability to accommodate
14 collocators.

15 What then gets a little more complicated
16 here, and I'm probably giving you a long-winded answer,
17 but if you're dealing with a flagpole design if you'll
18 recall Dr. Eisenstein and the applicant and the Board
19 had a lengthy discussion about taking two elevations.
20 So it becomes a far more complicated issue. But the
21 short answer to your question is, yes. Under both FCC
22 and the Municipal Land Use Law there are significant
23 rights to extend the rights of the tower up to 20 feet,
24 but they're subject to certain conditions. So I don't
25 know if that --

1 DR. EISENSTEIN: This is in the Middle
2 Class Tax Relief Act, Section 6409(a). And the right
3 is to extend by ten percent or 20 feet, whichever is
4 greater. And there are conditions on the ground
5 disturbance as well. It's not just the height of the
6 tower. There are limitations on the number of
7 cabinets, the ground disturbance, and some other
8 aspects of it.

9 CHAIRMAN FLANAGAN: By the way, that's
10 exactly the bill I would have expected. The limitation
11 or an allowment (sic) to extend the tower height in the
12 Middle Class Tax Relief Bill. Is that what you said,
13 Dr. Eisenstein?

14 DR. EISENSTEIN: Yes. Where else would you
15 put it.

16 BOARD MEMBER NEWLIN: Great camouflage.

17 MR. MLENAK: Mr. Chairman, I'm happy to put
18 that in a memo for the Board.

19 MR. SIMON: Mr. Chairman, can I say
20 something, I guess, for edification for the
21 purposes of the Board and the public. That I've been
22 involved in a number of applications where the carrier,
23 for what it's worth, has stated well, our lease says
24 "X" so therefore we are limited by lease in terms of
25 what we can do, but of course the PS of the story is

1 that the lease ultimately gets amended or revised to
2 provide for that extra tower height. So that just
3 happens. I just wanted to add that. Thank you.

4 CHAIRMAN FLANAGAN: Yes, and can the Board
5 -- and Steve, yes, I would like to see a memo on this.
6 Specifically, obviously to this location. And whatever
7 input you want to get from Mr. Schneider or Mr. Simon,
8 you know, however you guys work that out.

9 I have one question, too. Would it be
10 possible for the Board to grant a variance with a
11 condition that it is not extended? Is that a condition
12 that would hold up against this right, you know, this
13 presumed right in the Middle Class Tax Relief Bill? We
14 don't have to answer it now but that's --

15 MR. MLENAK: That's part of the memo to be
16 produced.

17 DR. EISENSTEIN: When you see the wording
18 in the Act you'll understand the answer to that
19 question.

20 CHAIRMAN FLANAGAN: I'm sure I will
21 understand it less. All right.

22 Does anyone else have any other questions
23 they have.

24 We have more time, but for future meetings.

25 MR. SCHNEIDER: So we understand that there

1 are a couple of follow up items. The hope would be,
2 Mr. Chairman, that we can address those, hopefully,
3 issues concisely, I think the next meeting would be
4 January 21st?

5 CHAIRMAN FLANAGAN: Lori, is that correct?
6 Yes. That's correct, January 21st.

7 MR. SCHNEIDER: Okay. So we'll return with
8 -- Frances, I assume you're available on January 21st?
9 (No reply.) I'll take that as a yes.

10 CHAIRMAN FLANAGAN: Okay.

11 MR. SCHNEIDER: So we'll carry the matter
12 to the 21st to address the outstanding items, at least
13 just those couple of items that have been addressed by
14 the Board tonight. Just to give a preview, depending
15 on the Agenda will determine what additional testimony
16 we'll be prepared to proceed with depending upon what
17 the rest of your Agenda looks like.

18 CHAIRMAN FLANAGAN: Okay.

19 MR. SCHNEIDER: And we'll grant an
20 extension of time under both the Municipal Land Use Law
21 and the FCC Shot Clock order subject to the Board
22 granting the mutual extension.

23 CHAIRMAN FLANAGAN: The Board grants the
24 mutual extension.

25 MR. SIMON: Can I just raise -- I'm just

1 looking at my calendar right now and, of course, as
2 luck would have it on January 21st I already have
3 another hearing scheduled in Paramus on another
4 application.

5 I'm available the week before on that
6 Thursday. I'm available the week after on that
7 Thursday. I'm available January 7th that Thursday.
8 Unfortunately, that's the only day the 21st that I am
9 currently not available.

10 CHAIRMAN FLANAGAN: So I will say --

11 SECRETARY TAGLAIRINO: Go ahead, Mike.

12 CHAIRMAN FLANAGAN: Mr. Simon, is it
13 possible you could reschedule your Paramus hearing?

14 MR. SIMON: There's many attorneys
15 involved, so I do not believe so. I'm just being
16 honest.

17 CHAIRMAN FLANAGAN: And I do want to give
18 everyone a fair crack, but in fairness, we meet the
19 third Thursday of every month since the beginning of
20 time. So it shouldn't be a surprise that we're going
21 to meet January 21st.

22 You know, I am not looking to have a
23 Special Meeting for this. I think we have had ample
24 time to discuss this in the meetings we have had. I
25 don't know.

1 Mr. Schneider, would you be willing to
2 postpone the January meeting to February?

3 MR. SCHNEIDER: No. I respectfully, that's
4 the Board's regular meeting date and I think we should
5 proceed.

6 SECRETARY TAGLAIRINO: Well, it's also
7 re-organization and that's -- that is our re-org. We
8 can't do it earlier because I will tell you that all
9 the other Boards will be having their re-orgs the week
10 prior and the 7th is HPC re-organization. So those
11 dates are definitely not available for us.

12 CHAIRMAN FLANAGAN: Okay. Mr. Simon,
13 perhaps there's someone that can cover for you in
14 either this meeting or in Paramus? And I do want to be
15 fair to everyone, but in fairness to everyone else here
16 we always meet on the third Thursday.

17 MR. SIMON: I'll see what I can do.

18 CHAIRMAN FLANAGAN: Okay. All right. Is
19 there any other business?

20 MR. SCHNEIDER: And we're just carrying out
21 without further notice to the public, Mr. Chairman.

22 CHAIRMAN FLANAGAN: Do I need to say
23 anything -- do I need to agree to that, Steve? I mean,
24 not that I disagree, but is that just --

25 MR. MLENAK: It's just you're carrying it

1 for notice purposes that the applicant does not have to
2 re-notice.

3 CHAIRMAN FLANAGAN: Okay. All right.
4 Let's carry it for notice purposes. Excellent. All
5 right. Then with that said, thank you everybody.

6 MR. SIMON: Is there extensions of time
7 that need to be --

8 CHAIRMAN FLANAGAN: Oh, we did that, the
9 shot clock.

10 MR. MLENAK: We just did that.

11 CHAIRMAN FLANAGAN: All right. Thank you,
12 everyone. Meeting's adjourned. Good night.

13 MR. SCHNEIDER: Happy Holidays.

14 BOARD MEMBER NEWLIN: You too.

15 CHAIRMAN FLANAGAN: Thank you. You too.

16 SECRETARY TAGLAIRINO: Good night.

17 (Whereupon, the hearing on the application
18 concludes at 10:52 p.m.)
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C E R T I F I C A T E

I, IRIS LA ROSA, a Notary Public and Certified
Shorthand Reporter of the State of New Jersey, do
hereby certify that the foregoing is a true and
accurate transcript of the testimony as taken
stenographically by and before me at the time, place,
and on the date hereinbefore set forth.

I DO FURTHER CERTIFY that I am neither a
relative nor employee nor attorney nor counsel of any
of the parties to this action, and that I am neither a
relative nor employee of such attorney or counsel, and
that I am not financially interested in the action.

IRIS LA ROSA, CSR, RPR
Certificate No. 30XI 00162800

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