## In The Matter Of:

*Eco-Site, Inc. and T-Mobile Northeast, LLC application for a Certificate of Environmental Compatibility* 

> Public Hearing November 16, 2017

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STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL Docket No. 476 Eco-Site, Inc. and T-Mobile Northeast, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at 248 Hall Hill Road, Somers, Connecticut Public Hearing held at the Somers Town Hall, 600 Main Street, Somers, Connecticut, on Thursday, November 16, 2017, beginning at 3 p.m. Held Before: ROBERT STEIN, Chairman 

1 Appearances: 2 3 Council Members: 4 SENATOR JAMES J. MURPHY, JR., Vice Chairman 5 6 7 ROBERT HANNON, DEEP Designee 8 9 10 LARRY P. LEVESQUE, ESQ., PURA Designee 11 12 13 MICHAEL HARDER DR. MICHAEL W. KLEMENS 14 15 DANIEL P. LYNCH, JR. 16 ROBERT SILVESTRI 17 18 Council Staff: 19 MELANIE BACHMAN, ESQ. 20 Executive Director and 21 Staff Attorney 22 MICHAEL PERRONE 23 24 Siting Analyst 25

Appearances: (Cont'd.) For Eco-Site, Inc. and T-Mobile Northeast: CUDDY & FEDER LLP 445 Hamilton Avenue, 14th Floor White Plains, New York 10601 BY: DANIEL M. LAUB, ESQ. 

1 THE CHAIRMAN: Good afternoon, ladies 2 and gentlemen. I'd like to call to order this 3 meeting of the Connecticut Siting Council today, 4 Thursday, November 16, 2017, at approximately 3 5 p.m. My name is Robin Stein. I'm Chairman of the 6 Connecticut Siting Council. 4

7 Other members of the Council present 8 are Senator James Murphy, our Vice Chairman; 9 Mr. Hannon, our designee from the Department of 10 Energy and Environmental Protection; Mr. Levesque, 11 designee from the Public Utilities Regulatory 12 Authority; Mr. Silvestri; Mr. Lynch; Mr. Harder; 13 and Dr. Klemens.

Members of the staff present are our Staff Attorney Melanie Bachman, who's also executive director; and Mr. Perrone, our siting analyst.

18 This hearing is held pursuant to the provisions of Title 16 of the Connecticut General 19 Statutes and of the Uniform Administrative 20 Procedure Act upon an application from Eco-Site, 21 22 Inc. and T-Mobile Northeast, LLC for a Certificate of Environmental Compatibility and Public Need for 23 24 the construction, maintenance, and operation of a 25 telecommunications facility located at 248 Hall

1 Hill Road, Somers, Connecticut. This application was received by the Council on July 20, 2017. 2 As a reminder to all, off-the-record 3 communication with a member of the Council, or a 4 5 member of the Council's staff, upon the merits of this application is prohibited by law. 6 7 The party to the proceeding is the 8 applicant, Eco-Site, Inc. and T-Mobile Northeast 9 with Attorney Laub representing from Cuddy & 10 Feder. 11 We will proceed in accordance with the 12 prepared agenda, copies of which are available at the table in the back. Also available here are 13 copies of the Council's Citizens Guide to Siting 14 15 Council Procedures. At the end of this afternoon's 16 evidentiary session, we will recess and resume 17 18 again at 6:30 for the public comment session. The public comment session will be reserved for the 19 public to make brief oral statements into the 20 I wish to note for those who are here, 21 record. and for the benefit of your friends and neighbors 22 23 who are unable to join us for the public comment 24 session, that you or they may send written 25 statements to the Council within 30 days of the

date hereof, and such written statements will be 1 given the same weight as if spoken at the hearing. 2 A verbatim transcript will be made of 3 this hearing and deposited with the Town Clerk's 4 5 Office in Somers for the convenience of the public. 6 7 And we'll start. I believe we have a member from the fire service. I don't know if I 8 9 will pronounce it right. 10 DOUGLAS RACICOT: That's okay. My name is Doug Racicot. 11 THE CHAIRMAN: And if you could spell 12 your last name for the --13 DOUGLAS RACICOT: For the record, 14 15 R-A-C-I-C-O-T. I am the operations director of the Regional 911 Public Safety Answering Point 16 located in Tolland. We are the PSAP for the Town 17 18 of Somers. We also dispatch fire and EMS for the Town of Somers. 19 And we have requested, if the tower is 20 approved, through some communication with Attorney 21 Laub yesterday, if we have the ability to 22 23 co-locate at that facility upon construction so we 24 may more adequately provide public safety radio 25 communications to the Town of Somers and the

surrounding towns we provide service to. 1 THE CHAIRMAN: Thank you very much. 2 DOUGLAS RACICOT: 3 Thank you, sir. THE CHAIRMAN: The applicant has 4 5 submitted a motion for protective order, dated November 9, 2017, related to the disclosure of the 6 7 monthly rent and financial terms contained within 8 the lease agreement. 9 The Chair will entertain a motion. 10 MR. LYNCH: So moved. 11 DR. KLEMENS: Second. Motion and second. 12 THE CHAIRMAN: 13 All those in favor, signify by saying 14 aye. 15 THE COUNCIL: Aye. 16 THE CHAIRMAN: Opposed? Abstention? 17 (No response.) 18 THE CHAIRMAN: Motion carries. 19 I wish to call your attention to those items shown on the hearing program marked as Roman 20 Numeral I-D, Items 1 through 66. 21 22 Does the applicant have any objection 23 to the items that the Council has administratively 24 noticed? 25 MR. LAUB: No objection, Mr. Chairman.

1 THE CHAIRMAN: Thank you. Accordingly, the Council hereby 2 administratively notices these existing documents, 3 statements and comments. 4 5 (Administrative Notice Items I-D-1 through I-D-66: Noted for the record.) 6 7 THE CHAIRMAN: Now, Attorney Laub, will 8 you present your panel for the purposes of taking 9 the oath? And if you want to introduce them first? 10 MR. LAUB: Certainly, Mr. Chairman. 11 12 I'll introduce them, and then ask that they stand to be sworn. 13 To my far left, and to your far right, 14 15 is Mr. Matthew Allen from Saratoga Associates as 16 our visual consultant. To his immediate right is Mr. Chris Bond from CBRE, who is from our 17 18 environmental review team who will be able to speak on the wetland question out there. 19 To my immediate left is Mr. Chuck Bruttomesso with 20 Airosmith Development, who is the site acquisition 21 22 consulting firm for this project. To my immediate right is Mr. Steve Ruzzo with Eco-Site. Mr. Scott 23 24 Heffernan is to his right, from Centerline 25 Communications, who can speak to the radio

1 frequency questions regarding this docket. And then to his far right, and to your far left, is 2 Mr. AJ DeSantis, our project engineer. 3 I would ask at this time that they 4 5 stand and be sworn. MATTHEW W. 6 ALLEN, 7 CHRISTOPHER S. BOND, 8 CHUCK BRUTTOMESSO, 9 DeSANTIS, III, ΑJ 10 SCOTT HEFFERNAN, RUZZO, STEVE 11 12 called as witnesses, being first duly sworn by Ms. Bachman, were examined and testified 13 on their oaths as follows: 14 15 MS. BACHMAN: Thank you. THE CHAIRMAN: We will continue with 16 verification of the exhibits that you've 17 18 submitted. 19 MR. LAUB: Certainly. Under agenda Item II-B, exhibits for identification include 20 II-B-1, the application for a Certificate of 21 Environmental Compatibility submitted by the 22 23 applicants, including the bulk file exhibits so 24 noted. Item II-B-2 is the responses to Siting 25 Council interrogatories submitted as part of this

1	docket proceeding. II-B-3 is an Eco-Site and
2	T-Mobile's sign posting affidavit and photographs,
3	dated November 2nd. II-B-4 is the witnesses'
4	resumes and professional biographies which we
5	submitted as part of our hearing information.
6	Finally, II-B-5 is a Late-Filed, but was a
7	clarification regarding the backup power that
8	T-Mobile would deploy at the site, and that is
9	dated November 15, 2017.
10	DIRECT EXAMINATION
11	MR. LAUB: I would ask at this time,
12	starting with Mr. Allen, did you prepare and/or
13	supervise, and are you otherwise familiar with the
14	materials so noted that I just described?
15	THE WITNESS (Allen): I am.
16	MR. LAUB: Mr. Bond?
17	THE WITNESS (Bond): I am.
18	MR. LAUB: Actually, could you just
19	make sure you turn on the microphone?
20	THE WITNESS (Bond): I am.
21	MR. LAUB: And Mr. Bruttomesso?
22	THE WITNESS (Bruttomesso): I am.
23	MR. LAUB: Mr. Ruzzo?
24	THE WITNESS (Ruzzo): I am.
25	MR. LAUB: Mr. Heffernan?

THE WITNESS (Heffernan): I am. 1 MR. LAUB: Mr. DeSantis? 2 THE WITNESS (DeSantis): I am. 3 MR. LAUB: And do you have at this time 4 5 any corrections or clarifications that you'd like to note for the Council? 6 7 THE WITNESS (Allen): I have no 8 changes. 9 THE WITNESS (Bond): I have no changes. 10 THE WITNESS (Bruttomesso): I have no 11 changes. 12 MR. LAUB: Actually, I do have one 13 change. On page 27 of the application it turns out the tower foundation cost is not -- we listed 14 15 it as zero, so it's 100,000. It was 1-0-0, comma, 16 0-0, so there was one zero that was missing. Mr. Ruzzo, do you have any corrections 17 18 or clarifications at this time? 19 THE WITNESS (Ruzzo): No, I don't. MR. LAUB: Mr. Heffernan? 20 THE WITNESS (Heffernan): No changes. 21 MR. LAUB: Mr. DeSantis? 22 23 THE WITNESS (DeSantis): Yes. The only 24 change that I would like to bring to the board's 25 attention would be in regards to the area of

disturbance, as it was questioned on the site 1 visit this afternoon. The question came in as far 2 as what was the total area of disturbance and how 3 that was calculated. The calculation was based on 4 5 the 12 foot gravel access, plus a 3 foot utility trench. Multiplying that out by the length of the 6 7 access drive and adding in the square footage of 8 the 100 by 100 lease area, the approximate total 9 area of disturbance is 27,000 square feet, which corresponds to about .62 acres. 10 11 MR. LAUB: And with those corrections, 12 I'd like to note, starting with Mr. Allen, do you believe that the materials are true and accurate 13 to the best of your belief? 14 15 THE WITNESS (Allen): Yes, they are. MR. LAUB: Mr. Bond? 16 17 THE WITNESS (Bond): Yes, they are. 18 MR. LAUB: Mr. Bruttomesso? 19 THE WITNESS (Bruttomesso): Yes, they 20 are. Mr. Ruzzo? 21 MR. LAUB: 22 THE WITNESS (Ruzzo): Yes, they are. 23 MR. LAUB: Mr. Heffernan? 24 THE WITNESS (Heffernan): Yes. 25 MR. LAUB: Mr. DeSantis?

1 THE WITNESS (DeSantis): Yes. MR. LAUB: And do you adopt them as 2 3 your sworn testimony today? THE WITNESS (Allen): I do. 4 5 THE WITNESS (Bond): I do. THE WITNESS (Bruttomesso): I do. 6 7 THE WITNESS (Ruzzo) I do. 8 THE WITNESS (Heffernan): I do 9 THE WITNESS (DeSantis): I do. MR. LAUB: And with that, Mr. Chairman, 10 I'd ask that they be entered into the record as 11 full exhibits? 12 13 THE CHAIRMAN: I guess since you're the only party, unless you have an objection, your 14 15 exhibits are admitted. (Applicants' Exhibits II-B-1 through 16 II-B-5: Received in evidence - described in 17 18 index.) 19 THE CHAIRMAN: We'll now begin with cross-examination by staff, Mr. Perrone. 20 MR. PERRONE: Thank you, Mr. Chairman. 21 CROSS-EXAMINATION 22 23 MR. LAUB: I'd like to get started with 24 one possible technical correction. On page 18 of 25 the application there is discussion about the

1 northern long-eared bat, NLEB. In the center of the page it has "NLEP." Did the applicants intend 2 "NLEB"? 3 4 MR. LAUB: NLEB was intended. 5 MR. PERRONE: And one other possible technical correction. In the sign affidavit it 6 7 depicts the evidentiary hearing beginning at 3:30. 8 Is that correct? 9 THE WITNESS (DeSantis): The sign does depict 3:30 p.m. 10 11 MR. PERRONE: And that was not correct, 12 it says 3:30 right now? THE WITNESS (DeSantis): It does, 13 14 correct. 15 MR. PERRONE: Did the applicants fly a 16 balloon today? THE WITNESS (Allen): Yes, we did. 17 18 MR. PERRONE: What was the diameter of 19 the balloon? THE WITNESS (Allen): The diameter was 20 21 approximately 3 feet. 22 MR. PERRONE: And what was the string 23 length, in other words, the height to the bottom 24 of the balloon? 25 THE WITNESS (Allen): The string length

was 180 feet to the bottom of the balloon. 1 MR. PERRONE: So the top of the balloon 2 would be about 183? 3 THE WITNESS (Allen): That is correct. 4 5 MR. PERRONE: Which, for visual analysis purposes, would you say that's 6 7 conservative? 8 THE WITNESS (Allen): Yes. 9 MR. PERRONE: What color was the balloon? 10 11 THE WITNESS (Allen): The balloon was 12 red. 13 MR. PERRONE: Could you describe the weather conditions during the field review? 14 15 THE WITNESS (Allen): Sure. The 16 balloon was put up about 7 o'clock this morning, a few minutes before. The weather was overcast and 17 18 relatively calm from about 7 until 9 o'clock. 19 Between 9 and approximately 10:30, a weather front 20 came through with rain and wind, at which case the balloon was blown down quite a bit. About 10:30 21 22 the rain dissipated, and by 11 o'clock the winds 23 calmed and remained calm for the rest of the 24 balloon float. 25 MR. PERRONE: So during the Council's

field review, did the balloon reach its full 1 2 height? THE WITNESS (Allen): During the 3 Council's field visit the balloon was very close 4 to full height, yes. 5 MR. PERRONE: And finally, if you could 6 7 provide the hours of the balloon flight, start and 8 end? 9 THE WITNESS (Allen): Yes. The balloon was put up a few minutes before 7 a.m. this 10 morning, and will remain aloft until 4 p.m. this 11 12 afternoon. 13 MR. LYNCH: Would you speak up a little louder? Your voice isn't carrying down here. 14 15 THE WITNESS (Allen): Oh, I'm sorry. Yes, the balloon was put up a little 16 bit before 7 a.m. this morning, and it will remain 17 18 aloft until 4 p.m. today. 19 MR. PERRONE: In the Council's interrogatories the applicant was asked about a 20 search ring, and the coordinates were provided. 21 22 But just for the reader to explain generally, is 23 the center of the search ring approximately 24 located at the Northern Correctional Institute? 25 THE WITNESS (Bruttomesso): Yes.

1 MR. PERRONE: And given that the search ring has a half-mile radius, is the proposed tower 2 actually located outside of your search ring? 3 THE WITNESS (Bruttomesso): It's 4 5 slightly outside, yes, sir. MR. PERRONE: In terms of tower 6 7 co-location, is it correct to say that on November 8 15th Tolland County Mutual Aid, the public safety 9 answering point for Somers, requested space on the 10 tower for emergency services antennas? 11 MR. LAUB: Mr. Perrone, yes. An email 12 was sent to my attention requesting that. And I 13 did speak with the Tolland County Mutual Aid immediately after receiving that, and then 14 15 conferenced with Eco-Site to confirm that they 16 would be willing to work with Mutual Aid in order to see if they could accommodate them on the 17 18 tower. The request in the letter 19 MR. PERRONE: 20 mentioned the antennas, cabling, and a shelter or cabinet? 21 22 MR. LAUB: Correct. There were some details provided, but it's going to be -- there's 23

24 going to have to be some further discussions about 25 exact details and the ways that their equipment 1 can be accommodated.

MR. PERRONE: But it is under review by 2 3 the applicants? MR. LAUB: Yes. 4 5 MR. PERRONE: And page 33 of the application notes that the tower would have a gray 6 7 finish. Just to be more precise, would that be a 8 galvanized steel finish? 9 THE WITNESS (DeSantis): Yes, it would. 10 MR. PERRONE: Turning to the response to Council Interrogatory 32, is it correct to say 11 12 that the in-building signal threshold for 13 commercial it's a stronger signal strength than for residential? 14 15 THE WITNESS (Heffernan): That is 16 correct. MR. PERRONE: And why is that? 17 18 THE WITNESS (Heffernan): Typically the makeup of structures used for commercial purposes 19 have much more attenuation for the radio signal to 20 transmit through say corrugated metal, concrete, 21 22 steel, things like that, as opposed to a wood 23 structure which a typical residence would be. 24 MR. PERRONE: And I see in the response 25 to Number 33, the existing signal strength ranges

from -91, which is basically the commercial level, 1 to -97. So is your target level -91 or better? 2 THE WITNESS (Heffernan): The overall 3 target to the edge of our footprint is -97, the 4 5 indoor residential coverage. However, we do try to maximize as much in-building commercial 6 7 coverage as possible. A lot of what is in this area, there are a lot of residences that we are 8 trying to target with this site. So the -97 would 9 be the minimum design threshold. 10 11 MR. PERRONE: And in response to Number 12 34, it mentions average dropped call rates 13 exceeding 2 percent. Is 2 percent or less a target? 14 15 THE WITNESS (Heffernan): 2 percent or 16 less is an industry standard and has been for a long time for standard dropped call rates. 17 18 T-Mobile in this market really strives to be less than 1 percent on the dropped call rate. 19 MR. PERRONE: Is it correct to say that 20 the coverage plots and areas and distances were 21 22 all based on 2100 megahertz? 23 THE WITNESS (Heffernan): That is 24 correct. 25 MR. PERRONE: Is it fair to say that

1 that would be conservative because you would get a 2 smaller coverage area than 700?

3 THE WITNESS (Heffernan): That is
4 correct.

5 MR. PERRONE: Would the proposed 6 facility provide coverage to the Northern 7 Correctional Institute, or is that facility too 8 far to the north?

9 THE WITNESS (Heffernan): The Northern 10 Correctional facility is pretty much at the 11 boundary where existing coverage and potential 12 coverage from the site would end up matching up 13 with each other at pretty common signal levels. 14 So you may have an instance where you're getting a 15 handover point at the facility.

MR. PERRONE: And one last minor detail in the RF. There's a DeLorme, D-E-L-O-R-M-E, map in the application after the coverage plots, and it was revised in the interrogatories. I didn't see a legend or header on the top. Does that basically just depict the proposed site and the existing adjacent sites?

THE WITNESS (Heffernan): Correct. The DeLorme map that was provided was to show the existing on-air T-Mobile sites, as well as the

center of the search ring. This is something 1 that's produced at the very beginning of the 2 search process, and it's just a part of the 3 record. 4 5 MR. PERRONE: All right. And I understand that the tower, besides the panel 6 7 antennas, there's a microwave dish proposed. 8 Would that dish have this tower communicate with 9 another adjacent tower? THE WITNESS (Heffernan): That is 10 11 correct. 12 MR. PERRONE: If you have the site 13 number on the other tower, that will be great. THE WITNESS (Heffernan): As of right 14 15 now we don't. Typically that would be designed by the transport group at a later date. 16 17 MR. PERRONE: Okay. Moving on to the response to Council Interrogatory Number 60, it 18 notes that there's attached correspondence from 19 the State Historic Preservation Office. I did not 20 21 see the attachment. Does the applicant have that 22 document in hand, or perhaps could it be read into 23 the record? 24 MR. LAUB: I'll have to double check, 25 Mr. Perrone. I thought that was included.

1 MR. PERRONE: Okay. MR. LAUB: If not, we'll have to make a 2 supplemental submission. 3 MR. PERRONE: Okay. And as far as 4 5 wildlife, is it correct to say that the proposed project would not be located within the shaded 6 7 area of DEEP's Natural Diversity Data Base? 8 THE WITNESS (Bond): It would not be 9 located within those shaded areas. MR. PERRONE: Only if you have this 10 11 handy, do you know the distance to the NDDB area at its closest point? 12 THE WITNESS (Bond): I do not have that 13 14 exact measurement. 15 MR. PERRONE: And in response to 16 Council Interrogatory Number 51, the applicants note that no important bird areas are located in 17 18 Tolland County. Did you look at bordering Hartford County as well? 19 20 THE WITNESS (Bond): No, just Tolland 21 County. MR. PERRONE: I understand there was a 22 23 wetland report letter, but if you could reference 24 the drawing Z2? Could you approximate the closest distance from the limits of construction to the 25

1 wetlands?

2	THE WITNESS (Bond): I can't
3	approximate the exact distance, but if you
4	reference attachment 6, it shows the map of the
5	delineated area where the wetland is. And before
6	that map there's a statement just saying that no
7	wetlands will be impacted by the construction.
8	MR. PERRONE: I understand that there
9	would not be any direct impacts. Would it be
10	correct to say that the proposed E&S controls
11	would protect against indirect impacts?
12	THE WITNESS (DeSantis): That is
13	correct.
14	MR. PERRONE: And I understand that the
15	proposed project is located in FEMA Zone X, an
16	area outside of the 100 and 500 year flood zones.
17	So just to be precise, is that the unshaded zone
18	X?
19	MR. LAUB: Which drawing are you
20	looking at, Mr. Perrone?
21	MR. PERRONE: I'm just asking generally
22	in response to Council Interrogatory 59.
23	THE WITNESS (Bond): I actually have
24	the FEMA map in front of me. And according to the
25	map, it's not located within the shaded area.

1 MR. PERRONE: Okay. Great. Regarding cut and fill, turning to the 2 response to Council Interrogatory Number 7, the 3 projected amount of cut is 39 cubic yards, and the 4 amount of fill is 9 cubic yards. So would your 30 5 cubic yards of net cut, would that be hauled away 6 7 from the site? 8 THE WITNESS (DeSantis): Yes, it would. 9 MR. PERRONE: And the fill, that would come from the site itself? 10 11 THE WITNESS (DeSantis): That is 12 correct. 13 MR. PERRONE: In response to Council Interrogatory Number 19, I understand that there's 14 15 prime farmland soils on the subject property. But 16 is the compound and/or the access drive located within the prime farmland soils? 17 18 MR. LAUB: Yes, I believe they are, Mr. Perrone. 19 In their entirety? 20 MR. PERRONE: MR. LAUB: I'm not sure about the 21 22 entirety, but I know that the compound is. I'm 23 not sure about all of the access drive. I did 24 take a look at the USDA maps. I don't recall if 25 it was all there, if the entire access drive was

1 in prime farmland soil.

MR. PERRONE: Okay. So if you could 2 estimate the disturbance? Would it be just the 3 size of the compound itself, or the whole lease 4 5 area? MR. LAUB: Yes, that was the area. 6 The 7 .37 of an acre is what we were estimating what was from the USDA mapping. 8 9 MR. PERRONE: Because if you had 100 by 10 100, or 10,000 square feet, would that be a little less than a quarter of an acre, .23? 11 MR. LAUB: I believe that calculation 12 13 is correct, yes. MR. PERRONE: Okay. And I understand 14 15 the disturbance numbers were revised. So would 16 that include tree clearing area? 17 THE WITNESS (DeSantis): Yes, the figure that I gave previously of 27,000 square 18 19 feet would include the area of trees to be removed. 20 MR. PERRONE: And would the tree stumps 21 22 be removed within your tree clearing area? 23 THE WITNESS (DeSantis): Yes, they would. 24 25 MR. PERRONE: And with the wooded areas

1 around the proposed compound, is it correct to say that no landscaping is proposed at this time? 2 3 THE WITNESS (DeSantis): That is 4 correct. 5 MR. PERRONE: And I understand there was some discussion on the noise topic. Just to 6 7 be precise, would the proposed project comply with the DEEP noise control standards at the property 8 9 boundaries? 10 THE WITNESS (DeSantis): Yes, it would. MR. PERRONE: And lastly, I was looking 11 12 at the backup power exhibit. Would the generator 13 have an exerciser to operate it periodically for maintenance purposes? 14 15 MR. LAUB: We double checked. We 16 anticipated that question. We double checked with 17 T-Mobile today, actually. We don't believe it 18 does, but we're going to confirm with the manufacturer for any specifications just to make 19 sure. We don't believe it does because of the 20 fuel source, but it may be one thing where it may 21 22 be tested periodically just to make sure it's 23 operational. So that's what we want to double 24 check. Because I don't think it's -- it's 25 dissimilar from a diesel generator which would

have to be operated once a week generally. 1 MR. PERRONE: And if it does have that 2 capability, would you see if it could possibly --3 if this project is approved -- if the testing 4 hours could be during daylight time? 5 MR. LAUB: It certainly would be during 6 7 daylight hours, if necessary. MR. PERRONE: And one last item on the 8 9 backup power. On the specification sheet, part 10 number 4, it appears that you could use your on-site batteries, or you could have your own 11 12 dedicated battery for starting. Is that right? 13 MR. LAUB: Yes, that's correct. MR. PERRONE: 14 Okay. 15 MR. LAUB: And it can use the cell site 16 battery as a starting -- yes. 17 MR. PERRONE: Have you considered which one, or not yet? 18 THE WITNESS (Ruzzo): What was the 19 20 question again, explain --MR. LAUB: Batteries that are dedicated 21 to the actual unit versus the cell site batteries 22 that are backup batteries to the facility in 23 24 general. So which ones --25 THE WITNESS (Ruzzo): I think they're

1 the same.

4

2 MR. LAUB: Do you have extra batteries 3 is the question.

THE WITNESS (Ruzzo): Yes.

5 MR. LAUB: So we don't know the answer 6 whether there's going to be extra batteries for 7 the APU.

8 Is that the question, basically, if 9 there's going to be extra batteries singularly 10 dedicated to the APU?

MR. PERRONE: Correct. Exactly.
MR. LAUB: I don't think we're clear on
that at this point yet. It's still -- it is very
new in this market. It's new to being deployed.
So I apologize that it's not entirely clear, but
it is something that's being deployed, so we're
still getting final details.

18 MR. PERRONE: Okay. And if this project is approved, could the final generator 19 details be included in a development and 20 management plan? 21 22 MR. LAUB: Yes. 23 MR. PERRONE: Thank you very much. 24 That's all I have. 25 THE CHAIRMAN: Thank you.

1 We'll now proceed with questions from the Council. 2 3 Senator Murphy. Thank you, SENATOR MURPHY: 4 5 Mr. Chairman. I only have a few items. We've heard the discussion about the 6 7 mutual aid and working with them. Just to button 8 it down, if it can be worked out, is the intention 9 of the applicant to allow them to go on with no 10 charge for the Tolland County Mutual Aid? THE WITNESS (Ruzzo): We've considered 11 12 that, yes. We haven't seen all the details yet, 13 so once --SENATOR MURPHY: My question is, if it 14 15 can be worked out reasonably, is your intention --THE WITNESS (Ruzzo): If it can be 16 17 worked out reasonably, yes. 18 SENATOR MURPHY: On the propagations --Mr. Heffernan, it's long time no see. Good to see 19 20 you back. 21 In looking at the propagations, it just struck me that there's an awful lot of duplication 22 to the west on this proposed tower site. And the 23 24 response to the interrogatories, and what have 25 you, indicates that you have no sectors that are

really in jeopardy adjacent to this proposed site. 1 Wouldn't the site more to the east have 2 been a better site and provide greater coverage in 3 the overall picture for the applicant? 4 5 THE WITNESS (Heffernan): Just so that I have this clear, you're wondering if a site to 6 7 the east would be a better fit? 8 SENATOR MURPHY: Yes. 9 THE WITNESS (Heffernan): Well, any 10 time the search ring is deployed, obviously we have to look at usable candidates, and there's a 11 lot of different layers that go into what gets 12 13 decided upon as the ultimate candidate. The initial search ring was put in to provide coverage 14 15 along the 186 corridor just north of 190, but to 16 really hit a lot of those residential areas out there, you can tell just by where the actual star 17 18 on the search map was that we are really trying to provide that in-building coverage to the 19 20 customers. Now, once the search is deployed and we 21 22 start looking at usable candidates, we then have

23 to make a decision based upon using the best 24 candidate that's available to us that will provide 25 either 100 percent of the coverage or a majority

of the coverage to the intended target area, but 1 we also factor in issues such as setback 2 requirements, zoning requirements, wetlands, 3 everything that the other --4 5 SENATOR MURPHY: Along 186 that was the 6 primary purpose? 7 THE WITNESS (Heffernan): 186 and the residential areas right around there heading up 8 9 towards the correctional facility. 10 SENATOR MURPHY: Where are the businesses on 186, because one of your other 11 12 answers says both businesses and residences? 13 THE WITNESS (Heffernan): Right. We do design the sites for any type of small business 14 15 structure or residential structure within that 16 area. That is why we do show the two different coverage thresholds on here. The initial target 17 18 for dwellings in this area, as we all know, is primarily made up of residences. And based upon 19 where we know the existing T-Mobile customers 20 reside and where we do lack any coverage on 21 22 targeting these residential areas, while the site 23 didn't fall exactly in the center of the search 24 map, it was approved as an RF candidate because it 25 did provide coverage to a majority of the intended

search area, as well as the targeted residences to
 the north of the facility.

3 SENATOR MURPHY: In that regard -- this is just an observation from someone who kind of 4 5 fumbles through these things, and what have you -but the various maps, and what have you, that are 6 7 provided in this application, such as the DeLorme 8 map -- the propagation maps are okay -- but on the 9 site search maps, and what have you, north is always in a different direction. And when you go 10 to compare one with the other as to where you are 11 looking, and what have you, it takes quite a while 12 13 to put them together. Between the three of them, north, it turns out, is in three different 14 directions, which is not so much of a problem if 15 you've earmarked which is north on these various 16 maps and make it easy, but in each case there's no 17 18 delineation. And it's just a suggestion to make things easier in that regard. 19

And on the question in the interrogatory about the height of the tower, it's 180 feet. But the question as to whether or not increasing it by 10 percent depends upon who comes along. But what is the current plan by the applicant as far as the foundation, the strength

of the foundation? Is it 180, or is it for a 1 tower that could be increased about 180 feet, 2 3 which I think really was the crux of the question being asked? 4 5 THE WITNESS (Ruzzo): Okay. The current plan that we have as our lead tenant, 6 7 T-Mobile, and their need, was 180 feet, and that's what we would have designed it for. 8 9 SENATOR MURPHY: That takes care of you 10 guys? 11 THE WITNESS (Ruzzo): Currently, yes. 12 SENATOR MURPHY: Okay. THE WITNESS (Ruzzo): Although Verizon 13 has expressed interest, and they, I believe, 14 15 accepted the tower at its current max height so 16 they --17 SENATOR MURPHY: So they would go 18 underneath you? 19 THE WITNESS (Ruzzo): So they would 20 understand, correct, that T-Mobile currently occupies the top area, and that they would need to 21 take the next area down. That's the general 22 23 understanding, correct. 24 SENATOR MURPHY: Okay. But my question 25 really is, is the base of the tower where you put

1 it up, should this be approved, going to be strong enough to permit the increase without you having 2 to strengthen it or do something? 3 THE WITNESS (Ruzzo): Without a 4 structural modification of the foundation? 5 SENATOR MURPHY: Correct. 6 THE WITNESS (Ruzzo): There was no plan 7 8 at that point, but that can certainly be --9 SENATOR MURPHY: The answer to that question tells me a lot. 10 11 THE WITNESS (Ruzzo): Right. But that 12 can definitely be taken into consideration, you 13 know, if we were approved, for any modification up to a certain height. We generally would like to 14 15 keep it under 200 feet. SENATOR MURPHY: I understand that. 16 THE WITNESS (Ruzzo): Okay. But 10 17 18 percent, we would definitely make accommodations, if needed, to -- you know, obviously from the 19 20 standpoint, a development cost standpoint, it would be best to put that in the ground at the 21 22 initial phase rather than at a future time. 23 SENATOR MURPHY: Okay. That will show up in your D&M plan? 24 25 THE WITNESS (Ruzzo): Yes.

1 SENATOR MURPHY: Okay. I have nothing else, Mr. Chairman, at this point. 2 3 THE CHAIRMAN: Thank you. Mr. Harder? 4 MR. HARDER: Yes. 5 Thank you, Mr. Chairman. 6 7 Just a couple of questions. Mr. 8 DeSantis, you and I had a conversation on the 9 site -- I just want to get that on the record --10 concerning the access road as it gets to the actual site. It's presently proposed for I think 11 the west side. And we talked about -- my question 12 13 was, was there a technical reason or something that dictates that that's where it has to go, or 14 15 could you enter the site from the north side, and to the extent it makes any difference, increase 16 the distance between any disturbance and the 17 18 wetland area? Does that present any technical difficulty, or any other issues that would state 19 that you should not do that? 20 THE WITNESS (DeSantis): 21 No. As discussed on site, I think that is a viable 22 23 consideration. Certainly if we were to -- looking 24 at sheet Z3 of the drawings, if that last portion

of the access road were to be located to the

25

1 north, there would be some design changes that would need to be implemented, but nothing -- I 2 don't believe it would be a gating issue. 3 For example, the location of the 4 5 utility transformer and the telco boxes, those were located at the end of the access drive. 6 The 7 design was put as such to get it off of the open farm area, out of the farmers field, and in back 8 tucked away into the back of the site, but 9 10 certainly we can consider that. MR. HARDER: You could still get it off 11 12 the field, I assume? THE WITNESS (DeSantis): Certainly. 13 MR. HARDER: And maintain the proposed 14 15 location of the lease area and the fence area? THE WITNESS (DeSantis): Correct, yes. 16 17 MR. HARDER: Just, I guess, kind of a 18 detail regarding the location, distances. If you look at page 25 of the first section, it talks 19 about Section D, Somers Inland Wetlands 20 Watercourses Regulations. It talks about the dry 21 22 ditch and the only area where there's any hydric soils is near the seasonal on-site pond, a short 23 24 distance from the pond. 25 And then it says, "The lease area is

1 located over 200 feet from this area."

wetland.

12

But if you look at any of the drawings, 2 or at least some of the drawings, and by the scale 3 presented, for example, on drawing EC3, the lease 4 5 area appears to be, I would say, definitely less than 100 feet from the wetland anyway. 6 7 So maybe I'm misreading that narrative 8 on page 25, but I'm not sure what was intended to 9 refer to over 200 feet from the area. The lease 10 area is definitely not 200 -- at least by that drawing anyway -- is not over 200 feet from the 11

THE WITNESS (DeSantis): So, if I may 13 clarify? On sheet Z -- it appears on Z2, and more 14 15 clearly on sheet Z2C. There is an area that is 16 shaded, and that was obtained from the inland wetlands soils from the Somers, Connecticut GIS 17 18 database, and that may be the area that is in question here. The wetland delineation that was 19 completed shows that the wetland is the seasonal 20 dry pond to the southwest. 21

22 MR. HARDER: So what you're saying is 23 that the last indication you mentioned was that 24 the dry pond area is the, I guess, the 25 northeasterly extent of the wetland. Is that

1 correct? THE WITNESS (DeSantis): Northwesterly, 2 I believe. 3 MR. HARDER: What's the closest wetland 4 5 area to the lease area? I guess that's the question. 6 7 THE WITNESS (DeSantis): That would be 8 the pond area, I believe, to the southwest of the 9 site. MR. HARDER: And what's that distance? 10 THE WITNESS (DeSantis): I don't have 11 12 that. I can certainly provide that. 13 MR. HARDER: Okay. THE WITNESS (Bond): So the wetland 14 15 area, again, that's referenced in attachment 6. The only area where hydric soils were identified, 16 17 and thus wetlands, was that, again, the seasonal 18 pond and the small area just to the north of that. 19 MR. LAUB: Do you know the distance? THE WITNESS (Bond): I don't know the 20 exact distance, but again, it's referenced in 21 22 attachment 6, if you'd like to take a look. 23 MR. HARDER: So it seems like some of the drawings, anyway, are not consistent with some 24 25 of the other drawings. There's some that show

kind of a linear depiction of the wetland area, 1 which I thought was between -- the extent of that 2 3 was between the dry pond and the lease area, but you're saying that the dry pond is the closest 4 5 extent on that wetland area? THE WITNESS (Bond): No. What I'm 6 7 saying is the dry pond highlighted in blue on that 8 attachment, that was the area that was depicted as the wetland. The area that parallels the access 9 road was considered dry and not the wetland area. 10 11 MR. HARDER: Okay. 12 MR. LAUB: Maybe, Mr. Harder, if I can clarify? 13 Mr. DeSantis, on sheet Z2C, there 14 15 are -- I think the question is because there's two 16 sort of amorphous shapes, one is sort of striped, and one is sort of a darker gray, where did that 17 18 information come from for your drawings? 19 THE WITNESS (DeSantis): The striped 20 area is obtained from the Somers, Connecticut GIS database. 21 22 As potential wetland soils? MR. LAUB: 23 THE WITNESS (DeSantis): As identified as potential wetland soils, correct. 24 25 MR. LAUB: And then the gray, the

darker gray, is that also from the GIS? 1 THE WITNESS (DeSantis): That is also 2 obtained from the GIS. 3 MR. LAUB: So it didn't include the 4 5 data from Mr. Bond's report? THE WITNESS (DeSantis): That is 6 7 correct. 8 MR. LAUB: Does that help clarify, Mr. 9 Harder, somewhat? 10 MR. HARDER: Possibly. But part of the problem is at the same time you're talking -- I 11 12 apologize -- I've been looking at some of these 13 maps, including Exhibit A, Tab 6, which I thought depicts a wetland area extending a fair part of 14 15 the distance between the pond and the lease area, 16 similar to drawing number EC3 or ZD, I guess. Okay. Although, it doesn't -- there's no wording, 17 18 but by the little icons it seems to indicate there's a wetland area, and by that scale it's 19 20 less than 100 feet. I mean, I think, rather than beating it to death, if you can clarify it and 21 22 make sure you double check these drawings because 23 it seems like there's inconsistencies. 24 MR. LAUB: Just so I understand, so are 25 you looking at the road as the lease area or

1 that --

No, I'm looking at that 2 MR. HARDER: 100 by 100 roughly that's cut out of the woods. 3 MR. LAUB: 4 Okay. 5 MR. HARDER: And as it's shown now, the access road, that comes into the wooded area or 6 7 the cleared area on the drawing ZD or EC3, the new edge of the wooded area after it's cleared by that 8 9 scale is less than 100 feet. 10 MR. LAUB: So we'll get that clarified for the record. 11 12 MR. HARDER: Okay. The only other 13 question -- and this may display my technical ignorance -- but is it technically feasible to use 14 15 a pole where the antennas are incorporated in the 16 pole and not visible; and if so, would you consider that? 17 18 THE WITNESS (Heffernan): Technologically could it happen? Yes. 19 There are 20 many reasons why that doesn't happen. The first off would be the fact that T-Mobile does broadcast 21 22 on different frequency bands in different areas. 23 So the ability to be able to broadcast over 24 several different frequency bands both now and in 25 the future that's going to be required, typically

requires the use of separate antennas. The separate antennas will get better performance at different frequency bands. Additionally, a lot of the radios these days are being put up near the antennas, whether they're RRUs, remote radio units, or active antennas that have the radios built into the back of the antennas themselves.

8 One of the big downfalls with 9 internally mounted antennas is that there's no air exchange. So you run into a lot of problems with 10 these units overheating because they can't 11 12 dissipate heat, as well as the space to actually contain the radios themselves. When you try to 13 keep things slim and aesthetically pleasing with 14 15 the internal mount solution, you're really trying 16 to stuff a lot of equipment in there. You have remote radios, you have fiber demarc boxes, you 17 18 have coaxial cables, the antennas themselves.

19 So there is a lot of equipment which 20 really would require it to be a much wider 21 structure. Typically carriers tend to stay away 22 from those, especially in areas where you have 23 more of a rural environment and you're trying to 24 provide a much bigger footprint. Typically the 25 amount of equipment and the size of the radios are

probably going to be a little bit bigger just because typically they're higher powered than comparing it to other small cell or a very small capacity driven solution that you might get in a dense urban area. So while the answer to your question is yes, technically it can be done, it's not a good practice from a performance standpoint.

Another downside of that is that 8 9 antennas internally mounted typically limit them 10 to one antenna per sector at each antenna level. So if T-Mobile were to be approved at 175 feet, 11 12 for them to put additional antennas, they would 13 either have to go higher or lower by 10 feet. So it really takes up a lot of space, and it limits 14 15 the ability to co-locate on that facility. So there really are a lot of downfalls to providing 16 17 that.

18 The internal mount these days are 19 typically done on the much smaller sites where 20 they have less equipment. They're really used for 21 those small pocket capacity offloads. They're not 22 so much in the macro footprint site design. 23 MR. HARDER: Okay. Thank you. I

actually remembered I had one other question, or
two related questions on the visibility analysis.

1 On Figure 4b, which is the proposed -or the simulated condition, it indicates there's 2 the location of the tower behind the intervening 3 vegetation. Is the intervening vegetation 4 5 intended to mean that single tree in the foreground, so that if that tree were not there, 6 7 you could still see the tower over the tops of the trees in the background, or would it be hidden by 8 9 the trees in the background?

THE WITNESS (Allen): I understand the 10 question. And I just drove out to that location 11 to confirm the simulation this afternoon. 12 No, 13 there's a grove of pine trees behind that single tree that would block the balloon. I did find the 14 15 location about 200 feet away from here where the 16 balloon was peeking up above the trees forming a 17 very small footprint area. But no, to answer your 18 question, that one tree is not blocking the view from this specific spot or the immediate vicinity. 19 20 However, there is a very small spot of visibility about 100 to 150 feet away from where this photo 21 22 was taken.

23 MR. HARDER: Thank you. The other 24 question was on Figure 10B, which, if you look by 25 the table, it lists all these figures and whether

it's yes or no visibility or not. Figure 10B was 1 listed as a yes, and it's a simulated condition. 2 And unless my eyes are completely shot, I don't 3 see a tower. 4 5 THE WITNESS (Allen): I don't think it's your eyes. My eyes are probably about the 6 7 same. Let me check. 8 THE WITNESS (Ruzzo): If you look on 9 the fold at the halfway point, you see the tip of 10 a gray --11 MR. HARDER: Right above that --12 THE WITNESS (Ruzzo): Yes, the tip of 13 the tower on top of the pine. 14 THE WITNESS (Allen): Yes. I believe, 15 if my memory serves me correctly, in working on 16 this on my computer screen, if you zoom in, you can see a little bit of the tower. So rather than 17 18 calling this a no visibility --19 MR. HARDER: It didn't have that helpful huge arrow. 20 THE WITNESS (Allen): That wasn't out 21 there when we were in the field, that's correct. 22 23 MR. HARDER: All right. That's all I 24 have. Thank you. 25 THE CHAIRMAN: Mr. Silvestri.

1 MR. SILVESTRI: Thank you, Mr. Chairman. I want to just go back to the 2 3 generator that you're proposing. The first question I have, is there natural gas available to 4 5 use instead of propane? MR. LAUB: We asked about that. 6 We 7 don't believe there's any natural gas available in 8 the area. 9 Then regarding the MR. SILVESTRI: 10 propane tank, that will be above ground as opposed to underground? 11 12 MR. LAUB: Yes, that will be above 13 ground. MR. SILVESTRI: And we had the question 14 15 before about testing, and you mentioned you're 16 going to be looking into that to see how it would 17 be tested. But would you have personnel on site 18 testing it, or would it be a remote testing? 19 MR. LAUB: Typically our understanding is that there's ability to do remote testing when 20 it cycles on. You know, for example, with diesel 21 22 generators, it typically cycles on once a week on 23 its own, but it's monitored remotely. So we're 24 checking to see. Presumably if it does have to 25 exercise, it would be done remotely or some

automatic mechanism on the generator -- on the
 APU.

3 MR. SILVESTRI: Then for refueling, I 4 would think that you'd have -- the access road 5 that's being proposed would be the road to bring 6 in a propane truck to refuel the tank. Is that 7 correct?

MR. LAUB: Correct.

8

9 MR. SILVESTRI: If I could turn your 10 attention to the supplemental submission that you 11 have regarding the backup power on November 15th. 12 A question on page 2 under the heading 6, Ordering 13 Information. What is a "2.5 gallon jug of special 14 oil for PowerGen 7500"?

15 MR. LAUB: I don't think any of us 16 quite know that at this point, but we can find out 17 for you.

MR. SILVESTRI: And again, the reason I'm asking, it says "Required for EPA emissions," so I'm trying to put that in context with, okay, we're going to be burning propane, but what do we need a special oil for. Okay.

All right. If I could turn your attention to Tab 5, Section C, and the heading on it is "Land." It states that "No trees will be

1 removed in order to construct the compound or the new access drive." Yet, we saw under Tab 6 with 2 3 the colored aerial photo that the compound is within a treed area. When we walked it today, 4 it's within a treed area. Is Tab 5 incorrect? 5 MR. LAUB: Tab 5 is incorrect. 6 7 MR. SILVESTRI: Then a clarification on 8 Tab 3 where we have the general facility 9 description. It comments that access will be 10 provided starting at the location of an old farm access gate. That's where the sign was today. 11 12 MR. LAUB: Correct. MR. SILVESTRI: Then it mentions over a 13 gravel access drive, but the gravel access drive 14 15 is going to be constructed. Is that correct? MR. LAUB: Correct. It's the proposed 16 17 gravel access drive, not existing. 18 MR. SILVESTRI: Right. That's the clarification I need. Okay. 19 20 Regarding the site, did you have any discussion with the town as to whether the town 21 had a town-owned parcel that could be suitable for 22 23 a location of the cell tower? 24 MR. LAUB: As part of the municipal 25 consultation, Mr. Bruttomesso and I met with town

staff, and we discussed this property, and we 1 asked them if there were any other alternatives, 2 town owned or not, that they could think of, and 3 there was nothing forthcoming. They said they 4 would sort of double check and make sure if 5 anything did come up. I said please let us know. 6 7 And there was never any indication that they had sites that that felt they should suggest to us. 8 9 MR. SILVESTRI: Thank you. This one I want to differ slightly from 10 Senator Murphy's question, and I'm going to 11 reference Tab 1, the colored on-air maps of 12 13 existing and proposed coverage. 14 The question I have for you: Would the 15 proposed cell tower actually be better located to the west of Route 186 to afford better coverage in 16 the areas between 186 and Route 220? 17 18 THE WITNESS (Heffernan): The answer to the question is, I don't know if I can give you a 19 direct yes or no. It would be obviously candidate 20 dependent. We would have to review on that. 21 The initial search ring at the center of the search 22 area was to the west, as you're pointing out. And 23 24 again, part of that was because we wanted to cover 25 the 186 corridor but also those residential areas

1 that are in that immediate vicinity. However,
2 that does bring up other complications with in
3 residential areas putting a facility in somebody's
4 backyard, smaller than some of the farm parcels,
5 and some of the existing larger parcels.

So as to whether or not we could 6 7 provide adequate coverage, to say no I'd be lying 8 to you because I haven't done an analysis on any 9 of the candidates over there. The way it would work from an RF standpoint is the site acquisition 10 or the development team would go out and scrub for 11 12 any usable lots within that area. Once they come 13 to our attention, they say, okay, this is something that would meet setback requirements, 14 15 basically the whole list of requirements for the 16 site to be a viable solution. We then look at it 17 from a coverage standpoint. So that process would 18 have to happen.

So I guess the answer is, and I hate to say this, maybe, only because there weren't any viable candidates that were brought into our attention to provide that analysis on, outside of the initial location of where that center of the ring was put, and that was done from a purely theoretical standpoint knowing that here's the radius that we're trying to cover and roughly the
 area and the objectives that we're trying to hit
 with the site.

MR. SILVESTRI: So let's assume you have the cell tower being approved. How do you then go and optimize adjacent cell sites to obtain maximum coverage of the area?

8 THE WITNESS (Heffernan): Well, we try 9 to do that initially through proper site design. But in areas like this, especially this happens a 10 lot in areas like New England where a lot of your 11 areas are very terrain challenged. So from an RF 12 13 standpoint, we have in a vacuum we look at an area 14 and say, all right, the perfect circle or a 15 square, whatever that perfect coverage looks like, 16 we know that we're most likely never going to get 100 percent of what we're trying to get out of 17 18 every one of these candidates.

19 So what we'll do is we'll modify the 20 azimuth that we intend to point at, the type of 21 antenna that we use, and we'll incorporate it and 22 make sure it's integrated with the surrounding 23 sites so that it doesn't cause performance issues. 24 That's something that we can do on the performance 25 side.

1 The only thing that we can't compensate for are areas where there's no coverage. 2 So if we have one site, and then it falls well below the 3 design threshold, and then there's another site, 4 5 our only solution for that would be an additional site in the middle there. The other areas where 6 7 we have overlapping coverage, we can look at 8 moving azimuths on different antennas so that one 9 site can cover maybe a little bit of a different 10 area to be able to use that useable coverage to the best of our ability. And that's typically 11 12 done -- it's done more so in dense urban areas 13 where you have a clustering of sites on top of each other, but there are ways to make that 14 15 happen.

16 MR. SILVESTRI: Okay. Thank you. 17 Should the tower be approved, what's 18 your experience with painting it, if you will, perhaps two colors so it doesn't stand out at this 19 bright galvanized tower? I'm familiar with towers 20 that are painted two color, if you will. 21 The 22 lower part might be a brownish to blend in with existing trees, and the upper part might be a 23 24 somewhat blue color to try to blend in with the 25 sky. What's your feelings on that?

1 THE WITNESS (Ruzzo): We definitely have painted portions of the tower, especially, 2 3 you know, up against tree backgrounds, you know, the bottom portion. We actually tend to find that 4 5 the galvanized surface typically handles more days better than the blue would. Because on a gray day 6 7 the blue actually stands out more than the 8 galvanized reflective surface does on a clear day. Some say that's a matter of opinion, but that's 9 10 been typically the case.

THE WITNESS (Allen): If I could add to 11 12 that? What I found in my career with the two-tone 13 painting, you have to remember that when you're looking at a cell tower, depending on your 14 15 location, you're seeing different elevations. So 16 you obviously, when you paint half at a particular elevation below, which is a darker color, to match 17 18 the vegetation above, which is a lighter color to match the sky, depending on where you are 19 20 standing, that elevation may not be exactly at the tree line. So you're never going to match that 21 perfectly except for the one study location. 22 So it's going to look odd if you do that. 23

24 Secondly, as far as a blue or that type 25 of color to represent sky, I've never found a blue

1 that looks natural when put on a structure. Particularly looking at things like water towers 2 that have been intentionally painted blue to match 3 with the sky, they rarely look natural. 4 They 5 always look odd. Generally, when seeing something against the sky, a gray is the most neutral color 6 7 which, when you're talking about a galvanized structure, tends to be a pretty good selection for 8 9 taller structures. 10 MR. SILVESTRI: Okay. Thank you. 11 Stay on visual for the time being, if you will. And I'd like to refer to Figures 6 12 13 alpha and 6 bravo, 6A and B. This is VP4. And I'm curious as to what location on Old Farm Road 14 15 where the picture was taken. 16 THE WITNESS (Allen): There is a photo 17 location map provided as Figure 2. 18 MR. SILVESTRI: I'm trying to track it down to an address, or at least close to an 19 20 address. THE WITNESS (Allen): I don't have the 21 22 Again, that's a place I just visited address. 23 this afternoon. Old Farm Road takes a 90 degree 24 turn to the south if you're driving easterly on 25 it. It's about the center point of that 90 degree

1 curve.

2 THE WITNESS (Ruzzo): There's a mailbox 3 with number 8 on it as well.

4 MR. SILVESTRI: Then a similar question
5 for Figures 13 alpha and 13 bravo. This is VP11.
6 What location on High Meadow Crossing?

7 THE WITNESS (Allen): I have it. I'm 8 sorry. What was your question?

9 MR. SILVESTRI: VP11 is the rendering 10 I'm looking at. What location on High Meadow 11 Crossing were those taken from?

12 THE WITNESS (Allen): That is taken on 13 High Meadow Crossing it looks like about 100 yards 14 to the north of the intersection of George Wood 15 Road.

16 MR. SILVESTRI: North of George Wood.
17 Okay. Thank you.

18 And did I hear before that you're not19 proposing to screen the compound at all?

20 THE WITNESS (DeSantis): That is 21 correct.

22 MR. SILVESTRI: Regarding the location, 23 proposed location, how did you determine that 24 proposed location on the site? 25 THE WITNESS (DeSantis): The site, as

we experienced today during the site visit, is 1 generally flat. So throughout the site design 2 process it was communicated to us from the 3 underlying property owner that the current open 4 5 field area is used for farming activities, and to the most extent possible we'd like it to remain 6 7 that way. So tucking the compound into the tree area and limiting the access drive close to the 8 existing growth allowed the maximum useable area 9 10 of the farming area.

MR. SILVESTRI: All right. So a follow-up question for you. Could the proposed tower -- where we parked today -- could the proposed tower be located closer to the barn on the other side of the tree line, such that where we parked, you'd go behind the barn and there's the tower?

18 THE WITNESS (DeSantis): I'm just 19 thinking that through in my head. I think it is 20 something of a consideration. From a design 21 standpoint, certainly it is achievable, something 22 that we would have to discuss.

23 MR. SILVESTRI: Why I was looking at 24 it, that potential position would give you a much 25 shorter run from the street for access and power,

or whatever else that you might need, which is why
 I posed the question.

THE WITNESS (DeSantis): Certainly.

4 MR. SILVESTRI: Let's talk about power. 5 You have power poles that are located across the 6 street on Hall Hill Road. You're proposing that 7 you would be underground feeding to the site. But 8 how are you going to get across the street?

9 THE WITNESS (DeSantis): That's 10 correct. The current proposal would be to have underground alongside of the access drive. 11 То 12 cross the street there's two ways that it can be 13 done, either an underground across the public right-of-way, or set a pole on our side of the 14 15 street and span an aerial, and then transition to 16 underground at the beginning of the access drive and go back to the site. 17

MR. SILVESTRI: Has there been any
discussion maybe with Eversource as to which one
would be more feasible or more likely to happen?
THE WITNESS (DeSantis): Not to my

22 knowledge.

3

23 MR. SILVESTRI: I'm going to change 24 gears, and I want to talk about the wetlands part 25 of it. I need some clarification. We mentioned

before drawing Z2C contains the inland wetlands 1 soil designations from Somers, and Tab 6 contains 2 the CBRE wetlands delineation letter and an aerial 3 map by Bagdon Environmental. 4 5 The first question I have is, who did the actual delineation? 6 7 THE WITNESS (Bond): Bagdon 8 Environmental, and that was on December 7th. 9 MR. SILVESTRI: Bagdon identified on 10 that map photos and have a whole bunch of numbers. The photos weren't included in the report. Do you 11 12 know what the photos were of? THE WITNESS (Bond): I believe the 13 photos were of the individual locations where the 14 15 soil tests were conducted. 16 MR. SILVESTRI: So were soil pit 17 samples actually extracted from those areas and 18 analyzed? 19 THE WITNESS (Bond): As part of the 20 wetland delineation process, yes. MR. SILVESTRI: Did they provide you 21 22 with data sheets? 23 THE WITNESS (Bond): I don't have them 24 on me at the time. MR. SILVESTRI: Because they weren't in 25

1 the filing either, which is where I was leading 2 with my question. And a related one, was any 3 ecological study performed on the ditch or on the 4 pond?

5 THE WITNESS (Bond): As far as I know, 6 no.

7 MR. SILVESTRI: One last topic for you. 8 What do you foresee for the future of cell towers? 9 Are we still going to be putting cell towers up 10 all over, or are things like distributed antenna 11 systems or LTE Direct device-to-device 12 technologies, would these be replacing cell towers 13 any time soon?

THE WITNESS (Heffernan): Well, I guess 14 15 right now that's up to a lot of personal opinion. 16 My opinion is no, cell towers aren't going anywhere in the foreseeable future. If you 17 18 remember, 20 years ago everyone thought that ten years from that point everybody would be using 19 satellite phones. It's not technologically 20 feasible in many areas. 21

When you look at a solution such as distributed antenna systems, small cells, towers, they all kind of go in the bag of RF design tricks. And you have to look at what the scenario

is and what the individual solution is for that 1 When you get into very rural areas where 2 area. 3 you're trying to cover a very large footprint, and maybe you don't have the density of either 4 5 residences or office buildings to really justify the small cell approach, the way a carrier would 6 7 typically want to build up that area would be to put up a tower because you cover a very large 8 area. You cover a lot of areas that might not 9 even have utility poles, and things like that, 10 state parks. So the ability to cover and 11 establish an initial footprint is typically going 12 13 to be done by traditional towers.

The DAS and the small cell, those are 14 15 really augmentations of existing networks where, 16 if you get into an urban area, you already have 17 that existing footprint, but now because of either 18 interference on the system or an overload of capacity in a given area, that's a great design 19 20 solution to really target a very specific area. But to really -- to try to push that into an area 21 22 such as this where you have a lot of area that's uncovered to a given signal strength level, to try 23 24 to design a DAS system or a small cell system that 25 would be able to provide coverage to the entire

1 footprint that you're trying to cover, as well as to hit the secondary streets, a lot of the lateral 2 coverage off of the main roads that may be the 3 only areas that have utility poles or fiber or 4 5 utilities needed to back all these, I think towers and DAS systems will, you know, be the design 6 7 solutions for a good long time. I don't think --8 there's so much area that just doesn't even have 9 initial footprint coverage that to really start 10 trying to push small cells into those areas is kind of putting the cart before the horse. 11 12 MR. SILVESTRI: I appreciate that. What I'm hearing is that rural is definitely 13 different from urban. 14 15 THE WITNESS (Heffernan): Definitely, 16 yes. MR. SILVESTRI: 17 Thank you. 18 Thank you, Mr. Chairman. 19 THE CHAIRMAN: Thank you. 20 Mr. Hannon. MR. HANNON: Thank you, Mr. Chairman. 21 22 I have a limited number of questions. 23 I asked a couple of questions out in 24 the field. I just want to get them for the 25 record. The topography that was used in the maps,

I guess EC2 and EC3, I believe, were those field 1 done, or was it aerial? 2 THE WITNESS (DeSantis): Those were 3 conducted -- those were collected by a surveyor, 4 5 so they are field conditions as obtained from a Connecticut surveyor. 6 7 MR. HANNON: Another question I asked out in the field was related to the ditch. And I 8 9 was asking if any testing was done there to determine wetland soils associated with the ditch. 10 11 THE WITNESS (DeSantis): Infinigy has not completed a wetland delineation. I would 12 defer down to CBRE. 13 THE WITNESS (Bond): Yes, there were 14 15 areas along that ditch adjacent to the access road 16 that were tested. MR. HANNON: And the results were? 17 18 THE WITNESS (Bond): They were not 19 wetland areas. 20 MR. HANNON: Okay. One of the questions I had was already answered, and that was 21 22 my Where's Waldo question, and that was map 10B. 23 So thank you for the answer there. 24 In terms of what's laid out for erosion 25 sedimentation control, I do have a question.

1 Looking at the site, it may not necessarily be required, but along the southern and western side 2 of the gravel drive you're proposing, would you 3 consider putting in something like silt socks or 4 5 straw wattles rather than a silt fence? It's just an added measure of protection between a potential 6 7 area that can transmit water. It's just a little bit safer, and it picks up a greater degree of 8 9 particles. 10 THE WITNESS (DeSantis): Certainly. MR. HANNON: And then my last 11 question -- this one is for Mr. DeSantis because 12 13 you're the one that raised it -- I'd like you to clarify. You were talking about how you 14 15 calculated the area on the site that was going to 16 be disturbed, and this goes directly to the map Z6, and I realized that the driveway section is 17 18 not to scale. However, I'm having a hard time reading what's on this detail and your explanation 19 in terms of how you calculate the width of the 20 It's a typical 12 foot wide gravel drive, 21 road. 22 but with the swale and the 2 to 1 slope, you also have a note saying the "Ditches shall have a 23 24 one-foot flat bottom with rip-rap installed in 25 heavy erosion area." So it looks as though there

are a number of variables that come into play. 1 So based on your explanation, I believe 2 it was 12 foot wide gravel drive and 3 feet on 3 each side, but I'm not sure that I agree with the 4 5 swales only being 3 feet wide. So can you explain, please? 6 7 THE WITNESS (DeSantis): Certainly. 8 For clarification, detail 2, sheet Z6, is a 9 typical detail. The site characteristics at this 10 location, it is generally flat. Swales, rip-rap on swales are typically used for slopes where 11 water will need to be channeled and drained; 12 whereas, in this instance I don't believe that 13 would be the case. 14 15 So I would stand behind my statement of 16 the 12 foot wide gravel drive and the 3 foot utility trench, and then obviously placing that 17 18 back as part of my area of disturbance calculation, whereas I don't think the swales 19 along the side of the drive would be utilized. 20 MR. HANNON: Thank you. That clarified 21 22 it. I have no further questions. 23 THE CHAIRMAN: Dr. Klemens? 24 DR. KLEMENS: Thank you, Mr. Chairman. 25 Mr. Silvestri began to unpackage a lot of my

1 questions, which I'm going to continue.

2	So, as I understand it, looking at
3	attachment 6, which is the documentation of the
4	wetland, I see a page report from Mr. Bond. I see
5	a map provided by the person who actually
6	delineated, Bagdon. And we have resolved the fact
7	that the photographs are not in the record, and
8	we've resolved the fact that Bagdon was in fact
9	the people that did the delineation.
10	And then we have a series of maps, one
11	of them that the first one, which does show the
12	woods, and the other two, which I don't really
13	understand why they're even in the wetland tab
14	or your CV I understand why but why we have a
15	picture of the tower in that.
16	So I'm seeing basically, at best, three
17	to four pages explaining the wetlands on the site.
18	Did Bagdon give you a proper wetland report?
19	THE WITNESS (Bond): This is the
20	current information that I have at this time.
21	This was the delineation that we were given. I
22	can check to see if there are
23	DR. KLEMENS: The delineation you were
24	given. This is your letter?
25	THE WITNESS (Bond): Right.

DR. KLEMENS: This is all you've got? 1 THE WITNESS (Bond): This is what I 2 have on me right now. But if there's additional 3 information, we can certainly include that. 4 5 DR. KLEMENS: I'm just trying to understand how we got to this point. You have no 6 7 idea how many auger holes were dug, or how deep? 8 THE WITNESS (Bond): The locations are 9 on the map on attachment 6. 10 DR. KLEMENS: That's where the photos 11 are? 12 THE WITNESS (Bond): Uh-huh. 13 DR. KLEMENS: Those equate to auger holes? 14 15 THE WITNESS (Bond): Yes. DR. KLEMENS: So those are the areas 16 17 where augering was done? 18 THE WITNESS (Bond): Yes. 19 DR. KLEMENS: The yellow dots only? THE WITNESS (Bond): Yes. 20 DR. KLEMENS: And yet, you have 21 concluded that none of the area on the Somers GIS 22 23 wetland soil map are wetlands? 24 THE WITNESS (Bond): Based on the 25 wetland delineation, yes.

1 DR. KLEMENS: But there's a huge area from the pond. If you look at this and look at 2 the Bagdon -- at the pond, there's this huge area 3 that Somers has classified as wetland soils. 4 There are no yellow dots in that. So going back 5 to the question that Mr. Harder asked you about 6 7 the proximity of the proposed tower to the wetlands, there were no augering done in a lot of 8 9 the areas. Is that correct? 10 THE WITNESS (Bond): Yes, the information provided is all I have. 11 12 DR. KLEMENS: So where you have the 13 words written out "dry soil" in what ostensibly is shown on the "Somers" -- Somers, excuse me. 14 Ι 15 worked in New York, and they call it "Somers" --16 Somers, on the Somers map where you have the words 17 "dry soil," you have no proof that in fact it is 18 dry soil. There is no auger boring in that spot. THE WITNESS (Bond): Again, based off 19 20 the delineation done by Bagdon Environmental, there were no wetlands indicated. That's all --21 22 DR. KLEMENS: The delineations were the yellow dots on the map. Correct, sir? 23 24 THE WITNESS (Bond): I believe so, yes. 25 DR. KLEMENS: So a large area that you

have calling dry soil, or maybe Bagdon is calling 1 dry soil, there's no data to support that? 2 THE WITNESS (Bond): I can follow up 3 and submit additional information. 4 5 DR. KLEMENS: I don't know that we need I'm just trying to get -- I mean, that's up 6 that. 7 to the Chairman. 8 What did we say the land use history of 9 the forest that we were in was, I mean, recently, 10 the last 20 years where the compound is going? 11 THE WITNESS (Bruttomesso): The 12 property was acquired from -- the property owner 13 unfortunately passed away a few years ago, but Debra inherited it about three to five years ago. 14 15 Her father owned it in 1960. That land, I 16 presume, was farmland. 17 DR. KLEMENS: Thank you. It was 18 farmland. 19 How deep, when you till farmland, do you go into the soil, or the plot, roughly? 20 THE WITNESS (Bruttomesso): I don't 21 have that answer, sir. 22 23 DR. KLEMENS: I can't tell you. The 24 executive director will hit me. 25 Okay. If that area -- and we define

wetland soils basically how? How are wetland 1 soils defined? 2 3 THE WITNESS (Bond): As not well 4 drained. 5 DR. KLEMENS: But are there characteristics of the soils, signatures? 6 7 THE WITNESS (Bond): There are, but I 8 cannot list them off right now. 9 DR. KLEMENS: Are generally wetland 10 soils characterized by iron nodules from anaerobic conditions by inundation, which is one of the key 11 when you look at wetland soils. Correct? 12 13 THE WITNESS (Bond): I would say that's 14 correct. 15 DR. KLEMENS: So, if you're disturbing, 16 let's say for arguments sake, the top, let's say 17 foot of soil through plowing, even if it's a 18 wetland, would you expect to see those signatures left or not? 19 THE WITNESS (Bond): 20 I'm not really 21 following the question. Can you repeat it? 22 DR. KLEMENS: If the top layer of soil in a wetland, which is characterized by clay 23 24 mottling, iron nodules, from basically anaerobic 25 lack of oxygen conditions, if that wetland soil,

you run a plow through it, would you expect those
 signatures to remain?

THE WITNESS (Bond): I can't really say for sure.

5 DR. KLEMENS: So might it not be 6 reasonable before one discounts the fact that this 7 is -- going back to Mr. Harder's question -- that 8 this is not a wetland, might not the answer lie 9 not in the conventional depth of an auger, but may 10 have to go deeper and do deeper pits to get below 11 the plow line?

12 THE WITNESS (Bond): If necessary, yes. 13 DR. KLEMENS: So I'm just trying to get -- because I'm looking at that map, that soils 14 15 I mean, I understand that GIS soils maps are map. just that, they're approximations. But what you 16 have in the record of where the wetlands are 17 18 versus what the town has in their GIS, the dissonance is so great, I'm trying to look for a 19 20 reason why you're categorizing this as not being a wetland. And I think I'm understanding -- and 21 22 please correct me if I'm wrong -- two things. Firstly, a lot of the area was already augered to 23 24 look at, judging by the yellow dots. Correct? 25 THE WITNESS (Bond): The delineation

was conducted just to see if any wetlands were
 being impacted by the lease area and the access
 road.

DR. KLEMENS: All right. I'm not going to pursue this. But I think that, going back to Mr. Harder's question, I would think that there's a good -- we should consider the possibility that the wetlands are larger than maybe what is being shown.

10 You were also asked by Mr. Silvestri, 11 no biological evaluation was done by this dry 12 pond, the seasonal pond. Would that conceivably 13 be -- could that be a vernal pool?

14 THE WITNESS (Bond): It potentially
15 could but, as stated before, it won't be impacted.

16 DR. KLEMENS: Let's go into that in a So we don't know if it's a vernal pool or 17 minute. 18 not because the studies weren't done, and I understand the delineation was done in December. 19 20 Are you aware of the way the Council and generally people look at the impacts to vernal pools in 21 22 regard to the terrestrial habitat surrounding the 23 pools?

24THE WITNESS (Bond): I'm not familiar.25DR. KLEMENS: All right. I don't know

1 if I can go any further with this. There's 2 nothing more I can say. We don't know if it's a 3 vernal pool, and we don't know what to do about 4 the potential impacts to vernal pool species by 5 the proposed tower.

6 MR. LAUB: I think your points are well 7 taken, Dr. Klemens, and we will pursue with both 8 CBRE and Bagdon to follow up with sufficient 9 information for the record.

10DR. KLEMENS: I'll leave that really up11to my colleagues, if they want to do that.

12 And I'm just trying to understand. At 13 the very beginning -- we're going back to the disturbance, Mr. DeSantis -- and I'm trying to 14 15 understand when you opened up and started making a 16 correction, were you in fact correcting 17 Interrogatory 19, because Interrogatory 19, we're 18 talking about 0.37 of an acre? Are we now talking about 0.62 of an acre? That's the figure you 19 20 gave. Are you in fact correcting Interrogatory 21 Number 19?

THE WITNESS (DeSantis): It was not my intention to correct Interrogatory Number 19. My total square footage calculation was for the overall project.

1 DR. KLEMENS: I see. So the facility in its entirety refers to the compound only, not 2 the driveway. This is what I'm trying to -- I'm 3 trying to understand this. I'm trying to 4 understand how much disturbance is there. 5 THE WITNESS (DeSantis): The overall 6 7 project development, including the 1,125 foot 8 access drive and the 10,000 square foot compound, sum totals to approximately 27,000 square feet .62 9 10 acres. 11 MR. LAUB: I think A19 was trying to 12 respond to the soils, the farmland soils, trying 13 to compare the USDA mapping, not the entire area of disturbance. 14 15 DR. KLEMENS: Okay. I get it now. So 16 basically you stand by that figure for the USDA soils? 17 18 MR. LAUB: We can double check that --19 DR. KLEMENS: No, I'm trying to 20 understand. MR. LAUB: -- but I think that was sort 21 22 of the approach. It was the entire area of 23 disturbance for the entire like gravel access 24 drive and the compound. 25 DR. KLEMENS: So it's 0.37 of an acre

of agricultural soils, .62 of an acre overall 1 2 total disturbance? 3 MR. LAUB: Correct. DR. KLEMENS: Okay. Thank you for that 4 5 clarification. I have no other questions. Thank 6 you. 7 THE CHAIRMAN: Mr. Levesque? 8 MR. LEVESQUE: Mr. Allen, on your 9 visual resource assessment, Tab 7, page 1, do you have it? 10 11 THE WITNESS (Allen): I do. 12 MR. LEVESQUE: And then on your 13 landscape setting paragraph you called the property, you described it as 34 acres. I just 14 15 want to clarify the size of the parcel first. THE WITNESS (Allen): That's what the 16 17 report says, yes. 18 MR. LEVESQUE: Now, take a look at the 19 assessor's map that you used for -- that the application used for abutter's map Z2E. I can't 20 read the acreage that the assessor used. 21 22 THE WITNESS (Allen): I don't have that 23 document in front of me. If one of my 24 colleagues could --25 MR. LEVESQUE: The print is too small

1 or faded to see. Maybe -- you probably won't be able to see it anyway. But it comes up because 2 3 the application summary calls it a 38 and a half acre parcel, not 34. 4 5 THE WITNESS (Allen): Okay. That is possible. I believe I got my number from 6 7 measuring data that I got from the state GIS 8 database, so it could be a plus or minus factor. 9 MR. LEVESQUE: Do you want to submit 10 something later that's more accurate? 11 MR. LAUB: We'll clarify and resolve 12 that. 13 MR. LEVESQUE: Mr. Allen, since your firm is the -- was there a title search done for 14 15 the property by anybody? THE WITNESS (Allen): I can't speak to 16 17 that. If any of my colleagues can --18 THE WITNESS (Bruttomesso): There was a title search. 19 20 MR. LEVESQUE: Are there any existing easements located on the subject parcel? 21 THE WITNESS (Bruttomesso): At this 22 time I can't recall if there was existing 23 24 easements. I don't think there was. We usually 25 have to take care of them. But I don't recall the

1 title search, reading the whole title. It was just confirming ownership. 2 3 MR. LEVESQUE: Okay. Because you're using that, you want a new easement. 4 THE WITNESS (Bruttomesso): Right. 5 MR. LEVESQUE: And you want to see if 6 7 they cross any others or anybody has any to share. 8 THE WITNESS (Bruttomesso): Again, I'm 9 not a lawyer, but the attorney at the title 10 company would make sure that we addressed that when we got the lease signed. So I think they 11 would have told me or made me aware of any issues 12 like that. 13 MR. LEVESQUE: It sounds like you don't 14 15 know. 16 Do you know if there's any voluntary 17 farmland preservation easements on the property, 18 if you know? 19 MR. LAUB: The owner confirmed that 20 they didn't convey any interest in the farmland to, you know, for example, the Department of 21 22 Agriculture, but they have taken advantage of the 23 tax program which may have to be altered if this 24 site is approved. 25 MR. LEVESQUE: Okay. I don't have

1 anymore questions. Thank you.

Mr. Lynch? THE CHAIRMAN: 2 MR. LYNCH: Let me start with 3 Mr. Heffernan. The first thing. I wouldn't let 4 5 the inmates at Northern know they can't use their smuggled in cell phones. 6 7 I don't know if this applies to T-Mobile or not, but I know we're close to the 8 9 border of the Commonwealth and you may -- your 10 frequency may be too high to cause any type of transfer interference. Am I correct in that, or 11 how does that work? 12 THE WITNESS (Heffernan): You are 13 correct. With the frequency bands that T-Mobile 14 15 would be transmitting here, there isn't any concern with interfering outside of their licensed 16 area for these frequencies. Any time that the 17 18 carriers do transmit close to the borders, they do contours and they do determine the level of signal 19 that would be projected over the border to keep 20 that within federal limits. But, as you said, 21 22 where the site is geographically, the levels from 23 this particular location would not exceed the 24 allowable limits over the state line. And T-Mobile does have licenses in Massachusetts as 25

1 well --

That was where I was going. 2 MR. LYNCH: THE WITNESS (Heffernan): -- so they do 3 4 coordinate that. 5 MR. LYNCH: How does that transfer take place from Connecticut to the commonwealth? 6 7 THE WITNESS (Heffernan): Well, from a 8 technology standpoint, we just work with the 9 different switches and allow the handovers to happen between the individual sites themselves. 10 So that's just handover resources between the two 11 12 different systems. However, in looking at the 13 frequencies themselves for any of the border sites, whether it be a state border or a country, 14 15 you know, if we were looking at sites up on the Canadian border or Mexican border, we do have to 16 account for any of the signals that will transmit 17 18 over those borders. And typically we'll coordinate with whoever that licensed entity is 19 20 above that. So let's say if AT&T owned a set of 21 licenses, we would run contours and just ensure 22 23 that we are not causing an undue interference 24 above the allowable limit in Massachusetts. And

25 that is something that's taken seriously from a

1 frequency standpoint.

2 MR. LYNCH: I thought I remembered that 3 from a few years back.

In answering a couple questions from I 4 5 think Senator Murphy and Mr. Silvestri, you kept referring to residential coverage. Now, I know 6 7 over the past few years things have evolved from providing road coverage to delivering services at 8 residences or commercial places, establishments, 9 10 you know, such as the phone as well as data and streaming, and so on. 11

How much of that change has taken placewith T-Mobile's coverage?

THE WITNESS (Heffernan): There's been 14 15 a lot of change on that. T-Mobile customers have been pushing for more and more ability to use 16 17 their phone indoors. We're finding that a lot of 18 customers don't even have landline phones anymore, so they're using these devices for their sole 19 20 purpose of communicating voice. Many are using it as a Wi-Fi hot spot, especially the folks that 21 22 have the unlimited data plans. So there's no need to really have another Wi-Fi solution, you know, 23 24 whether it's Comcast or a cable provider, when you 25 have an unlimited data plan.

1 So a lot of the customers are switching to the bigger smart phones, they're getting the 2 cellular service on their iPads and tablets, and 3 things like that, so they really don't even have 4 to go through an auxiliary Wi-Fi for it. They can 5 just use their devices right off the T-Mobile 6 7 network themselves. And those are really where a 8 lot of the complaints come from, you know, they're 9 getting poor streaming video, they're not able to establish proper data sessions, they're getting a 10 lot of retransmissions on their data sessions, 11 12 which really leads to poor customer service, and 13 it goes downhill from there. But the trend is that customers want to be able to use their phone 14 15 in either their residence, in their place of employment, and it's not just in the car anymore. 16 MR. LYNCH: So would it be safe to say 17 that your priority now at T-Mobile, or any other 18 carrier, is to deliver that service to the 19 20 residential home or to the business that may be in that area? 21 22 THE WITNESS (Heffernan): That's And we would dictate what that lowest 23 correct. 24 minimum design threshold would be based upon the

makeup of the surroundings. In an area like this

25

where you're primarily made up of residences, our lowest minimum design threshold would be the -97, which is the in-building residents. If we were to get into downtown Hartford, downtown Boston, those thresholds do shrink accordingly.

6 MR. LYNCH: Understood. If public 7 safety were to come onto the tower, I'm assuming 8 they come on with either a whip or a dish of some 9 type, maybe for microwave, what location on the 10 pole would they have to -- on the tower, rather, 11 would they have to go to not cause interference 12 with your separation?

THE WITNESS (Heffernan): 13 That's the million dollar question. The answer is we could 14 15 work with them to make sure that there is proper 16 isolation between the systems. However, for us to 17 really give an answer on that, we would need to 18 look at the systems that they're putting up there, what are they putting up for frequency bands, what 19 20 are they putting up for antennas, where are those antennas going to be located. And we've done this 21 22 on numerous sites. So the answer is, I can't give you an exact separation of what would be needed 23 24 without doing that full analysis.

25

MR. LYNCH: You gave me the answer I

was looking for that you would do an analysis with
 them.

3 THE WITNESS (Heffernan): Correct.
4 MR. LYNCH: So both systems would work
5 properly?

6 THE WITNESS (Heffernan): Yes. And 7 T-Mobile wants to ensure that obviously they're 8 not interfering with public safety, and they 9 obviously don't want public safety interfering 10 with their equipment as well.

11 MR. LYNCH: Now, my last question is 12 actually to go back to the backup power propane tanks. And a little information is dangerous. 13 Ι had in my office last week the gas and oil people 14 15 from Connecticut, and I learned more about propane 16 than I ever wanted to know. And they were 17 saying -- and you're using the small commercial 18 propane facility -- but they were saying that they have to be located within a certain distance from 19 20 a structure or a facility, you know, and depending on the size of the tank. And as I look at Z3, 21 your detailed site layout, it looks like where the 22 propane tank is going to be placed is actually 23 24 right next to everything. There's no separation 25 of 25 feet, or whatever it is, that they look for

1 on the propane regulations.

2	THE WITNESS (DeSantis): So if I may					
3	comment to that, I believe the question, the					
4	separation requirements from the NFPA are based on					
5	the volume of the propane cylinder.					
6	MR. LYNCH: That's correct. That's					
7	what they said, yes.					
8	THE WITNESS (DeSantis): Correct. And					
9	based on the sizing of the volume of said tank,					
10	that distance varies. We are not					
11	MR. LYNCH: So what you're saying then					
12	is that your 120 gallon tank is within a safe					
13	limit?					
14	THE WITNESS (DeSantis): This exact					
15	depiction was done prior to the concept of the APU					
16	being deployed at this site. So the physical					
17	location of the generator or the propane tank					
18	really the propane tank is the controlling design					
19	element because that has that setback					
20	requirement may have to be altered. Do I					
21	believe that it could fit within this compound?					
22	Certainly.					
23	MR. LYNCH: All right. And what would					
24	that approximate setback be from the structures?					
25	THE WITNESS (DeSantis): So based on					

the 120 gallon tank size, using a certain valve that is shipped with these, the setback distance can be reduced to 5 feet or, if not, it's a 10 foot setback.

5 MR. LYNCH: The other thing that came 6 up that I never realized, but propane freezes. 7 And if you're in the middle of winter and you have 8 a blizzard or something and it's a cold day, could 9 the propane be -- what do you do to insulate the 10 propane tank, I guess, so the propane doesn't 11 freeze?

12 THE WITNESS (DeSantis): Ultimately, I 13 would defer to the propane tank suppliers and the propane delivery companies, but typically it is a 14 15 prolonged exposure to a very cold climate. In all my years of doing this, I have not seen excessive 16 17 freezing of propane tanks. There are other 18 implementations that can be used to prevent it, but generally in this general location it's not of 19 20 real concern. If we were in a much colder climate, it would be a bigger design 21 22 consideration.

23 MR. LYNCH: This group is sending me 24 more information on propane, so at a later date we 25 may bring this up again.

1 Thank you very much, Mr. Chairman. THE CHAIRMAN: 2 Thank you. Go ahead, Dr. Klemens. 3 DR. KLEMENS: Thank you, Mr. Chairman. 4 5 Just to short circuit Late-Files and trying to figure out the whole wetland issue, I'm 6 7 going to ask, I guess, Mr. Laub, or whoever, as I 8 think there's a question that we have a vernal 9 pool there, and vernal pool species you have 10 extensive upland habitat use far beyond the vernal pool, would the applicant agree to a construction 11 restriction from February 15th to April 15th to 12 13 ensure that there are no impacts to those vernal pool species? 14 15 MR. LAUB: Absolutely, Dr. Klemens. 16 DR. KLEMENS: Thank you. 17 Thank you, Mr. Chairman. 18 THE CHAIRMAN: Thank you. 19 I just want to say, I mean, there are a 20 number of people on this panel that certainly should know by now that the Council, among the 21 22 many things that we're concerned with, are things 23 such as wetlands and vernal pools. And to not --24 I think Dr. Klemens may have given you the best 25 news yet of the evening. But to not have someone

1	here who did the actual delineation and is				
2	knowledgeable about that subject I think does				
3	yourselves a disservice. So I'm disappointed,				
4	given your experience, that you would not have				
5	provided particularly when you maybe that				
6	was your mistake provided this GIS delineation,				
7	and then, you know, which we all agree is not				
8	we know it's not accurate and then to not be				
9	better prepared to deal with that, I think is				
10	frankly a disappointment. But, as I said, I think				
11	Dr. Klemens may have we do realize there appear				
12	to be no direct impacts.				
13	MR. LAUB: I understand, Mr. Chairman.				
14	I appreciate your candor. I fully understood.				
15	THE CHAIRMAN: Can you get us the SHPO				
16	letter? Can you get it emailed to us before we				
17	break this evening?				
18	MR. LAUB: I believe I can, yes.				
19	THE CHAIRMAN: Okay. It would be				
20	appreciated. Okay. We're going to break now, and				
21	we're going to resume the deliberations with the				
22	public hearing at 6:30.				
23	(Whereupon, the witnesses were excused,				
24	and the above proceedings were adjourned at 4:45				
25	p.m.)				

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	CERTIFICATE
2	I hereby certify that the foregoing 86 pages
3	are a complete and accurate computer-aided
4	transcription of my original stenotype notes taken
5	of the Public Hearing in Re: DOCKET NO. 476,
6	ECO-SITE, INC. AND T-MOBILE NORTHEAST, LLC
7	APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL
8	COMPATIBILITY AND PUBLIC NEED FOR THE
9	CONSTRUCTION, MAINTENANCE, AND OPERATION OF A
10	TELECOMMUNICATIONS FACILITY LOCATED AT 248 HALL
11	HILL ROAD, SOMERS, CONNECTICUT, which was held
12	before ROBERT STEIN, Chairman, at the Somers Town
13	Hall, 600 Main Street, Somers, Connecticut, on
14	November 16, 2017.
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17	Lisa Warry
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19	Lisa L. Warner, L.S.R., 061
20	Court Reporter
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24	Need	filed by Eco-Site, Inc. and		
25	T-Mob	oile Northeast, LLC, received		

Index: (Cont'd) 1 2 II-B-1 - Continued 3 4 July 20, 2017, and attachments and bulk file exhibits including: 5 6 a. Town of Somers Plan of Conservation 7 and Development 8 b. Town of Somers Zoning Regulations 9 c. Town of Somers Zoning Map d. Town of Somers Inland Wetlands and 10 11 Watercourses Regulations e. Technical Report 12 II-B-2 Eco-Site and T-Mobile's responses to 13 13 14 Siting Council Interrogatories, Set 1, 15 dated November 9, 2017 Eco-Site and T-Mobile's sign posting 16 II-B-3 13 affidavit and photographs, 17 18 dated November 2, 2017 19 II-B-4 Witnesses resumes/professional 20 biographies: 13 21 a. Matthew W. Allen 22 b. Christopher S. Bond 23 c. Chuck Bruttomesso 24 d. AJ DeSantis III 25

Index: (Cont'd) e. Scott Heffernan f. Steve Ruzzo II-B-5 Eco-Site and T-Mobile's supplemental submission regarding backup power for T-Mobile, dated November 15, 2017