

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

BEFORE THE HEARING EXAMINER
FOR THE CITY OF SEATTLE

In the Matter of the Appeals of)	Hearing Examiner File:
)	W-17-006 through
WALLINGFORD COMMUNITY)	W-17-014
COUNCIL, ET AL.)	
)	
Of Adequacy of FEIS Issued by the)	
Director, Office of Planning and)	
Community Development)	
)	

FRIENDS OF RAVENNA-COWEN

TRANSCRIPT EXCERPTS OF MIKE LEECH

1 not?
 2 A. That's a good question.
 3 Q. And to be totally fair, I would love it if you had a
 4 computer open that had good PDF's and search function so
 5 that we could do this.
 6 A. Me, too. I believe they were included for within those --
 7 those designations.
 8 Q. Were you here when I testified before lunch, or right after?
 9 I can't even remember --
 10 A. Today, yes.
 11 Q. Yes. Did you hear me testify about the loss of right-of-way
 12 trees next to projects?
 13 A. Yes.
 14 Q. Was that kind of impact included somehow in this data
 15 analysis, or in your -- in your subjective determination of
 16 where there was -- where there were impacts?
 17 A. So in the data analysis, that was not included when we were
 18 doing the calculations in these summary tables, no.
 19 HEARING EXAMINER: Pause there. Come back at 3:15. Thank
 20 you.
 21 (Recess)
 22 HEARING EXAMINER: We return with cross of Mr. Leech.
 23 MR. THALER: Okay. Thank you.
 24 Q. (By Mr. Thaler) So how are we to determine whether the
 25 right-of-way trees are included or not? That's really a key

1 A. On the assessment methodology on page 3.317. We stepped
 2 through the assessor's methodology, continuing on to 3.318.
 3 Q. So my question earlier about the -- how could you determine
 4 that there was zero percent change from an LR1 to an LR3-M
 5 is buried in that last paragraph there where it says, "For
 6 example, a zone change from LR to LR would not represent a
 7 change." Is that correct?
 8 A. Yes.
 9 Q. The right-of-way assumption is not explicit in here, is it?
 10 Or if it is, please point it out to me.
 11 A. It's not explicit.
 12 Q. Okay. Who on the team was the ultimate decider for making
 13 the decisions as to what was in and out in the assumptions
 14 and how they were to be addressed?
 15 A. That would be Geoff and Sharese.
 16 Q. So between the two of them, I'd have to ask?
 17 A. Yes.
 18 Q. That includes the assumption of full build-out and how it
 19 relates to land use changes and how the zoning code is
 20 applied?
 21 A. Yes.
 22 Q. Is there any -- was there any ground truthing done?
 23 A. For the -- to --
 24 Q. For the assessment that you worked on.
 25 A. The assessment that was provided to us?

1 question. So a question that relates to that is, does it --
 2 even assuming that right-of-way trees are not going to
 3 change, wouldn't including the right-of-way trees in the
 4 analysis skew the data?
 5 A. We -- we wanted to -- we included the right-of-way areas
 6 within the designations as part of our analysis.
 7 Q. Okay. Did the assumptions include -- what did the
 8 assumptions -- how did the assumptions deal with changes to
 9 the right-of-way trees as a result of the zoning changes?
 10 HEARING EXAMINER: Did you have a response?
 11 A. I'm sorry. Can you repeat the question again?
 12 Q. (By Mr. Thaler) How would you include in your impact
 13 analysis what's happening -- what assumptions did you make
 14 in your impact analysis in all these tables of percentage
 15 changes without having the tree -- the right-of-way trees
 16 separately accounted for? In other words, how do -- what
 17 assumptions did you make with respect to the change in the
 18 right-of-way trees as opposed to the private land trees?
 19 A. They were -- they were grouped together as part -- within
 20 each -- within a zoning designation, we included the
 21 right-of-way trees as part of that designation. So there's
 22 areas that -- that are part of the right-of-way within each
 23 of those zoning designations, and we included those, all of
 24 those areas in our calculations.
 25 Q. Where are the assumptions spelled out?

1 Q. Either the data that you got from Vermont through the city,
 2 or -- well, correct me if I'm wrong, back up one step -- I'm
 3 assuming that you're testifying here because you're
 4 responsible for the 2016 assessment document.
 5 A. I'm responsible for the analysis that was performed in the
 6 EIS.
 7 Q. In the EIS. And who was ultimately responsible for the 2016
 8 document?
 9 A. The -- are you referring to the -- the tree canopy
 10 assessment that was done by the University of Vermont
 11 Spatial Analysis Lab?
 12 Q. So they are the author of that document?
 13 A. Yes.
 14 Q. Did you have any feedback into how it was edited or --
 15 A. I did not.
 16 Q. Okay. And an impact analysis and an impact assessment of
 17 the changes to be imposed in a number -- in over two dozen
 18 urban villages around the city, do you think it would make
 19 sense to do -- to separate the data to do it urban village
 20 by urban village?
 21 A. We made a determination that for this programmatic level,
 22 that the analysis that we had completed was sufficient for
 23 this EIS.
 24 Q. Did you do any analysis of the distinction between inside
 25 and outside urban villages?

Page 157

1 A. We evaluated the areas within each of the proposed zoning
 2 alternatives. So that was within -- within the project
 3 extent.
 4 **Q. But no division by land to be in urban villages; i.e., urban**
 5 **villages as expanded, and all the L and C and NC zones**
 6 **outside the urban villages?**
 7 A. To my knowledge, we didn't do an evaluation outside of those
 8 areas, only within the -- the project extent.
 9 **Q. Okay. The project extent includes all of it. It's the**
 10 **division that I'm curious about. How do you define the**
 11 **project area? Do you need to look at a map?**
 12 A. If I can go back to the --
 13 **Q. The project area will be in section 1 of the EIS or 2.1,**
 14 **1.2.**
 15 **(Inaudible colloquy)**
 16 **Q. (By Mr. Thaler) Try 2.3, study area. Exhibit 2-1 on page**
 17 **2.3. So you understand that the dark outlined areas are**
 18 **urban villages, but that there is significant study area**
 19 **outside the urban villages?**
 20 A. Yes.
 21 **Q. So the question is, was there any analysis based on that**
 22 **distinction, in and out?**
 23 A. The analysis that was performed for the tree canopy
 24 assessment was presented in --
 25 **Q. Well, no, for the EIS. Well, no, that's a question. If**

Page 158

1 **you're doing an analysis of impacts in the study area, and**
 2 **considering it on this large spatial extent, but you're**
 3 **relying on a report from somebody else; i.e., the Vermont**
 4 **group, if that report is limited in terms of the assumptions**
 5 **and how the data is displayed, then your analysis is going**
 6 **to be likewise limited, isn't it?**
 7 A. No. The data set that was provided to us by Vermont was one
 8 input data layer. Then we were provided -- the city
 9 provided us the data sets, GIS data layers for the various
 10 alternatives. And through the process of an overlay
 11 operation, we -- we can assess the tree canopy cover for the
 12 various alternatives.
 13 **Q. Okay. So the project team could have pulled out an**
 14 **inside/outside urban village?**
 15 A. Yes. Yeah. It's possible that we, you know, we could've --
 16 could've done more.
 17 **Q. And you could've done the urban village itself, each one?**
 18 A. Yes, those calculations could be made.
 19 **Q. Okay. I think I'm almost done. The 2016 Seattle canopy**
 20 **assessment -- and my apology if I've asked this -- it was**
 21 **not peer reviewed, was it?**
 22 A. To my knowledge, no.
 23 **Q. Have you ever worked on a peer-reviewed document? Have you**
 24 **published?**
 25 A. I have not published a peer-reviewed document.

Page 159

1 **Q. Is there any place in the EIS or the documents directly**
 2 **referenced by it, the 2016 document being the primary one,**
 3 **that explain how the leaf-off LIDAR data was accounted for**
 4 **in the impact assessment?**
 5 A. To my knowledge, those methods were not detailed in the
 6 impact assessment.
 7 **Q. Or in the 2016 document, other than the reference?**
 8 A. Yeah, by reference, the methods are described, but not --
 9 **Q. Okay.**
 10 MR. BRICKLIN: You done?
 11 MR. THALER: Unless you want to feed me something, or
 12 you've got something.
 13 MR. BRICKLIN: We can ask our own.
 14 MS. BENDICH: I have a few.
 15 HEARING EXAMINER: They can ask their own questions.
 16 MS. BENDICH: I have a --
 17 MR. BRICKLIN: We can ask our own.
 18 HEARING EXAMINER: Yeah. Separate parties.
 19 MS. BENDICH: Yes, Your Honor.
 20 MR. THALER: Go for it. I'm done. Thank you very much.
 21 THE WITNESS: Thank you.
 22 C R O S S E X A M I N A T I O N
 23 BY MS. BENDICH:
 24 **Q. So, Mr. Leech, I just have a few follow-up questions based**
 25 **on what Mr. Thaler was asking you, if you'll bear with me.**

Page 160

1 A. Sure.
 2 **Q. You mentioned something about a significant amount of ground**
 3 **work. I just want to know what that means.**
 4 A. Oh. In terms of an accuracy assessment for remote sensing
 5 methods, there's various ways to assess the accuracy of data
 6 products. In some cases, there is ground data collection
 7 that is ground truthing, to go out in the field and collect
 8 point data, or within fixed radius polygons, various
 9 techniques for collecting data on the ground to confirm or
 10 validate that the areas to be mapped are -- are what -- what
 11 they say they are from the classification.
 12 **Q. But that wasn't done in this case; is that correct?**
 13 A. That's correct.
 14 **Q. And why is that signif- -- I mean, what I want to know is,**
 15 **why do people even do -- you said to make sure it was**
 16 **verifiable, I suppose.**
 17 A. Yeah, there's various methods for conducting, kind of
 18 assessing the overall accuracy of data products. So with
 19 traditional remote sensing methods, that was the traditional
 20 approach was to either put people on the ground to collect
 21 the data within the study area, or use high resolution
 22 imagery, different imagery from what's being used in the --
 23 in the classification to confirm that, yes, this is a tree
 24 in that location. So there's different methods to doing
 25 accuracy assessments. And based on the resources available

Page 157

1 A. We evaluated the areas within each of the proposed zoning
 2 alternatives. So that was within -- within the project
 3 extent.
 4 **Q. But no division by land to be in urban villages; i.e., urban**
 5 **villages as expanded, and all the L and C and NC zones**
 6 **outside the urban villages?**
 7 A. To my knowledge, we didn't do an evaluation outside of those
 8 areas, only within the -- the project extent.
 9 **Q. Okay. The project extent includes all of it. It's the**
 10 **division that I'm curious about. How do you define the**
 11 **project area? Do you need to look at a map?**
 12 A. If I can go back to the --
 13 **Q. The project area will be in section 1 of the EIS or 2.1,**
 14 **1.2.**
 15 **(Inaudible colloquy)**
 16 **Q. (By Mr. Thaler) Try 2.3, study area. Exhibit 2-1 on page**
 17 **2.3. So you understand that the dark outlined areas are**
 18 **urban villages, but that there is significant study area**
 19 **outside the urban villages?**
 20 A. Yes.
 21 **Q. So the question is, was there any analysis based on that**
 22 **distinction, in and out?**
 23 A. The analysis that was performed for the tree canopy
 24 assessment was presented in --
 25 **Q. Well, no, for the EIS. Well, no, that's a question. If**

Page 158

1 **you're doing an analysis of impacts in the study area, and**
 2 **considering it on this large spatial extent, but you're**
 3 **relying on a report from somebody else; i.e., the Vermont**
 4 **group, if that report is limited in terms of the assumptions**
 5 **and how the data is displayed, then your analysis is going**
 6 **to be likewise limited, isn't it?**
 7 A. No. The data set that was provided to us by Vermont was one
 8 input data layer. Then we were provided -- the city
 9 provided us the data sets, GIS data layers for the various
 10 alternatives. And through the process of an overlay
 11 operation, we -- we can assess the tree canopy cover for the
 12 various alternatives.
 13 **Q. Okay. So the project team could have pulled out an**
 14 **inside/outside urban village?**
 15 A. Yes. Yeah. It's possible that we, you know, we could've --
 16 could've done more.
 17 **Q. And you could've done the urban village itself, each one?**
 18 A. Yes, those calculations could be made.
 19 **Q. Okay. I think I'm almost done. The 2016 Seattle canopy**
 20 **assessment -- and my apology if I've asked this -- it was**
 21 **not peer reviewed, was it?**
 22 A. To my knowledge, no.
 23 **Q. Have you ever worked on a peer-reviewed document? Have you**
 24 **published?**
 25 A. I have not published a peer-reviewed document.

Page 159

1 **Q. Is there any place in the EIS or the documents directly**
 2 **referenced by it, the 2016 document being the primary one,**
 3 **that explain how the leaf-off LIDAR data was accounted for**
 4 **in the impact assessment?**
 5 A. To my knowledge, those methods were not detailed in the
 6 impact assessment.
 7 **Q. Or in the 2016 document, other than the reference?**
 8 A. Yeah, by reference, the methods are described, but not --
 9 **Q. Okay.**
 10 MR. BRICKLIN: You done?
 11 MR. THALER: Unless you want to feed me something, or
 12 you've got something.
 13 MR. BRICKLIN: We can ask our own.
 14 MS. BENDICH: I have a few.
 15 HEARING EXAMINER: They can ask their own questions.
 16 MS. BENDICH: I have a --
 17 MR. BRICKLIN: We can ask our own.
 18 HEARING EXAMINER: Yeah. Separate parties.
 19 MS. BENDICH: Yes, Your Honor.
 20 MR. THALER: Go for it. I'm done. Thank you very much.
 21 THE WITNESS: Thank you.
 22 C R O S S E X A M I N A T I O N
 23 BY MS. BENDICH:
 24 **Q. So, Mr. Leech, I just have a few follow-up questions based**
 25 **on what Mr. Thaler was asking you, if you'll bear with me.**

Page 160

1 A. Sure.
 2 **Q. You mentioned something about a significant amount of ground**
 3 **work. I just want to know what that means.**
 4 A. Oh. In terms of an accuracy assessment for remote sensing
 5 methods, there's various ways to assess the accuracy of data
 6 products. In some cases, there is ground data collection
 7 that is ground truthing, to go out in the field and collect
 8 point data, or within fixed radius polygons, various
 9 techniques for collecting data on the ground to confirm or
 10 validate that the areas to be mapped are -- are what -- what
 11 they say they are from the classification.
 12 **Q. But that wasn't done in this case; is that correct?**
 13 A. That's correct.
 14 **Q. And why is that signif- -- I mean, what I want to know is,**
 15 **why do people even do -- you said to make sure it was**
 16 **verifiable, I suppose.**
 17 A. Yeah, there's various methods for conducting, kind of
 18 assessing the overall accuracy of data products. So with
 19 traditional remote sensing methods, that was the traditional
 20 approach was to either put people on the ground to collect
 21 the data within the study area, or use high resolution
 22 imagery, different imagery from what's being used in the --
 23 in the classification to confirm that, yes, this is a tree
 24 in that location. So there's different methods to doing
 25 accuracy assessments. And based on the resources available

Bricklin: [00:40:33] Can you take a look at, do you have the EIS there? Can you turn to page 3.329?

Leech: [00:40:41] Yes.

Bricklin: [00:40:42] Right there?

Leech: [00:40:43] I actually was already there.

Bricklin: [00:40:43] Perfect.

HE: [00:40:45] What page was that?

Bricklin: [00:40:45] 3.329. And I'm looking at the bottom exhibit 3.6-6, which shows tree cover by different groupings of urban villages. You see that, the first line are urban villages that are in the high displacement risk, a high access to opportunity, and next line is high displacement low access, etc.

Leech: [00:41:28] I see the table, yes.

Bricklin: [00:41:29] Right. Were you involved in the creation of that table?

Leech: [00:41:33] Yes I was supported the calculations.

Bricklin: [00:41:36] And did those, did that table aggregate then, it identified the urban villages in the first category of high displacement high access and averaged them out and came up with those numbers?

Leech: [00:41:51] Specifically, there, the data was coded with these categories for displacement and access. So in GIS it's very easy to do the overlay and then quantify the amount of tree canopy by that, by how the data is represented in the data set.

Bricklin: [00:42:09] So it'd be very easy then to code it. Instead of just doing it by one of these four categories doing it by the Urban Village designation right?

Leech: [00:42:18] It'd be very easy to run the calculation, again there's the whole steps of then, once you finish the calculation going through to review and then all the way to the development of the reports. So I say it's easy but there is a process to do it, but yes. In general it can be done.

Bricklin: [00:42:41] Given the scope of the amount of work you were doing it would not have taken a lot more effort to code it, to break it out by UV instead of by one of these four categories right?

Leech: [00:42:49] It's possible yes.

Bricklin: [00:43:02] Thank you. That's all I have.

HE: [00:43:05] Redirect.

Mitchell: [00:43:09] Let's start where are we where we left off. I think you, we started looking at exhibit 3.6-6 and you indicated that you hadn't gone to the granular, to the level of looking at tree