

STATE OF WISCONSIN            CIRCUIT COURT            SAWYER COUNTY

= = = = =

JAMES HAUSMAN,

Plaintiff,

vs.

Case No. 03-CV-167

SAWYER COUNTY,

Defendant.

= = = = =

Deposition of:

NANCY JOHNSON DENT, P.E.

= = = = =

Date: Tuesday, January 18, 2005

Time: 9:00 o'clock a.m.

Reported by GREGORY GASSEN

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

= = = = =

DEPOSITION of NANCY JOHNSON DENT, P.E.,  
a witness in the above-entitled action, taken at the  
instance of the defendant, under the provisions of  
Chapter 804 of the Wisconsin Statutes, pursuant to  
notice, before GREGORY GASSEN, a Notary Public in and for  
the State of Wisconsin, at the offices of Stafford  
Rosenbaum LLP, Attorneys at Law, Three South Pinckney  
Street, in the City of Madison, County of Dane, and State  
of Wisconsin, on January 18, 2005, commencing at  
9:00 o'clock a.m.

A P P E A R A N C E S

LAUREN L. AZAR,  
MICHAEL, BEST & FRIEDRICH, LLP,  
Attorneys at Law, 1 South Pinckney Street  
Madison, Wisconsin, appearing on behalf  
of the plaintiff;

JOSEPH P. WRIGHT,  
STAFFORD ROSENBAUM LLP, Attorneys at Law,  
Three South Pinckney, Madison, Wisconsin,  
appearing on behalf of the defendant.

ALSO PRESENT: STEPHEN GAFFIELD  
JAMES HAUSMAN  
JEFFREY LEE

(No exhibits were marked for identification)

= = = = =

1  
2  
3

NANCY JOHNSON DENT, P.E.,  
called as a witness, after being first  
duly sworn in the above cause, testified

4 under oath as follows:

5 EXAMINATION

6 BY MR. WRIGHT:

7 Q What is your full name.

8 A Nancy Johnson Dent.

9 Q Where do you live?

10 A Hanover, Minnesota.

11 Q Where do you work?

12 A Barr Engineering Company.

13 Q And what's your position at Barr?

14 A I'm a vice president.

15 Q And in the exhibit that we've marked, I believe, as

16 Exhibit 125, maybe it's 126, there is a resume for

17 you. Have you had a chance to review that resume

18 recently?

19 A Yes.

20 Q Okay. Is that resume current as of today?

21 A Fairly current.

22 Q Okay. What additions, if any, would you make or

23 subtractions?

24 A I would make one addition.

25 Q Okay. It's in Exhibit 125, correct?

3

1 A Yes.

2 Q What addition would you make?

3 A An addition of, I'm involved with another litigation

4 case.

5 Q Okay. What's the nature of that case?

6 A The nature of the case is a water control structure.

7 Q Where is that?

8 A Nicollet County, Minnesota.

9 Q And who are you working for in that case? I don't  
10 need the name of the party, but categorize the party  
11 for me.

12 A The county.

13 Q Okay. What's the nature of the issue with respect to  
14 the control structure?

15 A Replacement, the level at which it should be replaced  
16 at.

17 Q Does the level have anything to do with lake level, or  
18 what do you mean by level in that description?

19 A The elevation at which the control structure should  
20 allow water to flow out of the lake.

21 Q Okay. And what role are you playing in that project,  
22 are you the project manager, are you a resource as  
23 Mr. Solseng was?

24 A I'm a resource.

25 Q And I assume you're doing that work through Barr?

4

1 A Yes.

2 Q When were you first contacted about Mr. Hausman's  
3 case?

4 A In 2003, Spring of 2003.

5 Q And who contacted you?

6 A Lauren Azar.

7 Q Had you worked with Ms. Azar or the Michael, Best &  
8 Friedrich law firm before that time?

9 A I had not.

10 Q Do you know whether Barr Engineering had?

11 A I do not know.

12 Q So this was your first assignment from either Ms. Azar  
13 or the law firm?

14 A Yes.

15 Q What did Ms. Azar tell you during that first contact?

16 A She stated that she was looking for an expert witness,  
17 a person to assist them with a case, and determine  
18 what was the cause of some shoreline erosion, and  
19 evaluate whether or not the water levels had anything  
20 to do with the erosion.

21 Q Were you the first person at Barr to be contacted by  
22 Ms. Azar or was this referred by someone else within  
23 your firm?

24 A Someone initially contacted Bill Forsmark at my firm,  
25 I don't know who he talked to, I believe it was

5

1 Ms. Azar but I'm not positive.

2 Q What's Mr. Forsmark's position at the firm?

3 A He is a vice president as well.

4 Q And what is his area of expertise?

5 A He is a structural engineer.

6 Q And what do you consider yourself to be?

7 A Water resources engineer.

8 Q What was the next step beyond that initial

9 conversation with Ms. Azar?

10 A I believe we had several, at least one other telephone  
11 conversation, and I faxed -- excuse me, I E-mailed a  
12 few resumes to her to review.

13 Q Do you know at what point you were formally engaged to  
14 do work on the project?

15 A I don't remember the date.

16 Q Okay. Was it before or after you sent the E-mail and  
17 the resumes?

18 A After.

19 Q What was the next step after you sent the E-mail and  
20 the resumes?

21 A I don't recall the exact steps. At some point we  
22 received a contract to sign and we conducted a site  
23 visit. I don't remember which one occurred before or  
24 after.

25 Q The site visit was in early May, 2003, is that right,

6

1 the first site visit?

2 A I believe it was in April.

3 Q Okay. That was the site visit where you and  
4 Mr. Solseng were present along with --

5 A No.

6 Q No? You had a visit before Mr. Solseng went?

7 A Yes.

8 Q Okay. Let me back up then in my mind at least to that  
9 visit and ask you about that. When did that happen,

10 the first visit that you made?

11 A April.

12 Q Okay. Of 2003?

13 A Yes.

14 Q And who was present for that visit?

15 A My husband Michael, Mr. Hausman. I believe that was  
16 it.

17 Q No lawyers there?

18 A Yes. I've been there so many times.

19 Q I understand.

20 A It gets confusing. We met Lauren Azar there. Lauren  
21 was there for some other purpose.

22 Q Yesterday at the end of Mr. Solseng's deposition you  
23 kindly mentioned that your husband and his wife were  
24 at one of the other visits. Is either of those two  
25 people an engineer?

7

1 A No -- well, excuse me. My husband is not an  
2 engineer. I do not know what Mrs. Solseng does for a  
3 profession.

4 Q Did either your husband or Mrs. Solseng have anything  
5 to do with the investigation or the work that was done  
6 at Mr. Hausman's property on any visit that you made?

7 A Besides assisting me, no.

8 Q How did your husband assist you in the work that you  
9 did?

10 A He helped me paddle the canoe on occasion.

11 Q Did you let him hold the dumb end of the measuring

12 tape?

13 A Sometimes.

14 Q Other than that, did he do any work on this project?

15 A No.

16 Q Okay. Now, during the first visit --

17 A Oh.

18 Q Go ahead. Did you have something you wanted to add?

19 A Sometimes he would videotape a meeting or something,  
20 but no, he did no professional engineering work.

21 Q All right. Going back to that visit in April, 2003

22 where your husband, Mr. Hausman and Ms. Azar were

23 present, first off, was there anybody else there?

24 A I believe Carol Hausman may have been there, I'm not

25 positive, but I believe she was.

8

1 Q How long did you visit that first time?

2 A Two days, one overnight, I believe.

3 Q Did you spend two full days out at the property?

4 A No.

5 Q Can you estimate for me how many hours you spent

6 actually working on that trip?

7 A Four to five hours estimated.

8 Q And at that point had you been formally retained to

9 work for Mr. Hausman?

10 A Can you define formally?

11 Q Let me put it another way, did you expect to get paid

12 for visiting the site on that trip?



13 A Yes.

14 Q Okay. This wasn't an interview or an audition to  
15 decide whether Barr was the right company to do the  
16 work?

17 A No.

18 Q What work did you do while you visited the house and  
19 property in April, 2003?

20 A I was given a set of documents, historical documents,  
21 and they kind of walked through a history of some of  
22 those documents, and we looked at the shoreline, the  
23 tension cracks. There was still ice on the lake, so  
24 we walked along the lake and looked at erosion both  
25 north and south of the property.

9

1 Q What else did you do while you were there?

2 A I took a video of the site and photographs.

3 Q You said you walked out on the ice and looked at  
4 property to the north and the south. Can you estimate  
5 for me how far you made it up and down the shoreline  
6 from Mr. Hausman's property on those inspection walks?

7 A When we walked south of the property 50 to 100 feet,  
8 it wasn't very far. North of the property, it was  
9 further.

10 Q As far as you knew was it just the adjacent property  
11 north and the adjacent property south that you  
12 observed?

13 A No, there were several properties to the north that we  
14 went, several properties, probably at least 1,000

15 feet.

16 Q Did you only walk or did you also snowmobile?

17 A No snowmobiling. We may have gotten in the car to go  
18 to another house, I don't recall.

19 Q While you were there on that visit, did you talk to  
20 any landowners other than Mr. Hausman?

21 A I don't recall.

22 Q Tell me what you observed when you looked at the  
23 adjacent properties or any of the properties that you  
24 looked at, what did you observe?

25 A On the property to the south in the forested area

10

1 there were tension cracks. On the property to the  
2 north, the thing that I remember the most is there's a  
3 hillside that was about five feet high that had been  
4 eroded.

5 Q Was that on the property immediately adjacent to the  
6 house and property?

7 A No.

8 Q Do you know the name of the owner of the property?

9 A No.

10 Q What else did you observe either north or south of  
11 Mr. Hausman's property on that trip?

12 A The ice.

13 Q What did you observe about the ice?

14 A The ice was not, did not -- it was not up against the  
15 shoreline, it was lower than where the erosion was.

16 Q So there was erosion higher on the bank than there was  
17 ice is what you're saying, am I putting it the right  
18 way?

19 A The ice level was at the beach. The erosion was up  
20 the beach from the ice.

21 Q What conclusion did that lead you to, if any?

22 A The ice was not causing that erosion at the time.

23 Q Do you know how thick the ice was?

24 A I do not know.

25 Q Any other work that you did during that visit in

11

1 April, 2003? Did you take any measurements, for  
2 example?

3 A I did not take any measurements that I remember.

4 Q What, if anything, did Mr. Hausman tell you during  
5 that visit about when the tension cracks appeared in  
6 his property?

7 A He mentioned that they occurred sometime recently but  
8 I don't recall when.

9 Q What did you observe, if anything, about any missing  
10 shoreline from Mr. Hausman's property or what did he  
11 explain to you about loss of shoreline?

12 A On the north side of his property he mentioned that he  
13 had lost a lot of shoreline in that area.

14 Q Did he tell you how much?

15 A I don't remember.

16 Q Were there any markers or other indications of where  
17 shoreline had been lost?

18 A I don't remember.

19 Q What did it look like where the area where he claimed  
20 he'd lost shoreline, can you describe it for me?

21 A Well, there was the ice, so you couldn't see into the  
22 lake at all, and there was riprap that was, in this  
23 area looked, did not look like a wall, it looked like  
24 it was flatter. And behind, well, a ways behind that  
25 riprap it looked like it had, it was sunken a little

12

1 bit. It appeared as though there may have been  
2 another crack forming but you couldn't tell, it was  
3 frozen, the ground was frozen.

4 Q When was the next time you visited the Hausman  
5 property?

6 A In May of 2003.

7 Q Was that the trip where you and Mr. Solseng were both  
8 there?

9 A Yes.

10 Q You were present for his deposition yesterday,  
11 correct?

12 A Yes.

13 Q He described taking some measurements from the, I  
14 believe he said the northeast corner of the Hausman  
15 home down to, I believe the top of the riprap, do you  
16 remember that testimony?

17 A Yes.

18 Q Is he correct, is that where you measured to and from,

19 the corner of the house down to the top of the riprap?

20 A I believe so. I was holding the end by the riprap.

21 Q And that's the picture that we looked at that's part

22 of the report that shows you with the tape measure

23 down near the riprap, correct?

24 A Yes.

25 Q Did you take any measurements other than the

13

1 measurement from the corner of the house to the top of

2 the riprap during that visit?

3 A We took measurements along the dock showing the depth

4 to the shoreline or depth to the ground.

5 Q To the lake bottom?

6 A Yes.

7 Q Anything else?

8 A We measured the tension cracks.

9 Q During that visit did you make any observations of

10 properties other than Mr. Hausman's?

11 A Yes.

12 Q Which properties did you look at?

13 A The property on the south side and several properties

14 to the north.

15 Q The same things you'd looked at in April?

16 A Yes. However, I looked at a lot more.

17 Q In May?

18 A In May.

19 Q Where were the other properties that you looked at in

20 May that you had not viewed in April?

21 A Where were they?

22 Q Yes.

23 A We took a boat trip around the lake, and my husband  
24 and I took a canoe trip through Osprey Creek down to  
25 County Highway NN.

14

1 Q Who went on the boat trip?

2 A My husband Michael, Mr. Hausman, I believe that was  
3 it.

4 Q When you say you took a boat trip around the lake, are  
5 you telling me that you took a boat ride literally  
6 along the entire shoreline of Round Lake?

7 A Not along the entire shoreline.

8 Q Okay. Where did you go?

9 A We went and viewed the inflows at Lovejoy Lake, from  
10 Lovejoy Lake, from the wetlands on the northeast side  
11 of the lake, the channel, the diversion channel where  
12 it comes into the lake. And we viewed the property  
13 north and a little bit northwest of Mr. Hausman's  
14 property where there's a large cliff.

15 Q Is that the Eagle's Nest or Eagle's Point property?

16 A Yes.

17 Q Okay.

18 A I believe that includes everywhere we went.

19 Q And that's on the boat trip we're talking about now,  
20 right?

21 A Yes.

22 Q Did you take the boat down to the Little Round Lake  
23 dam area at all?

24 A Not that boat.

25 Q Okay. You took a canoe down the channel?

15

1 A Yes.

2 Q On the boat trip did you view any part of the western  
3 shore of Round Lake?

4 A We may have viewed the northern, the northern part, I  
5 don't recall. You could see the western shore, but it  
6 was from a distance.

7 Q Probably at least a half a mile, right, across the  
8 lake?

9 A I don't recall on the northern edge where we stopped  
10 and started.

11 Q Do you know how far south you went in the boat from  
12 Mr. Hausman's property?

13 A No.

14 Q Was it just you and your husband who took the canoe  
15 trip down the channel and down to NN?

16 A Yes.

17 Q What did you observe on that canoe trip?

18 A We looked at the Little Round Lake dam, we canoed down  
19 the channel.

20 Q Were you able to canoe unimpeded all the way down to  
21 NN?

22 A Yes.

23 Q What did you observe, if anything, in the channel by

24 way of obstructions on the way through?

25 A In the northern channel there was a few branches, but

16

1 we were not, we did not have to get out of the canoe.

2 In the channel downstream of Osprey Lake there was

3 some debris in one section that we did not have to get

4 out of the canoe. Further down there was a beaver dam

5 that we did have to get out of the canoe.

6 Q Portage over the dam?

7 A We didn't have to -- can you define portage for me?

8 Q Well, you got out of the canoe and pulled it over the

9 dam, I guess, or did you go around it?

10 A I believe my husband got out, I don't know if I got

11 out.

12 Q The debris that you mentioned downstream of Osprey,

13 what kind of debris was that, naturally occurring

14 debris as far as you could tell or was it man placed

15 there?

16 A I could not tell.

17 Q What kind of stuff was it, was it tree branches, was

18 it rocks?

19 A It was tree branches.

20 Q Any other obstructions or impediments you observed in

21 the channel from Little Round Lake dam all the way

22 down to NN other than what you've just described?

23 A Impediments, excuse me?

24 Q Any obstructions besides what you've already



25 described. Put another way, was there anything else

17

1 that you observed that you felt would have impeded the  
2 flow of water between the dam and the culverts on NN?

3 A There appeared, in the channel downstream of Osprey  
4 Lake there appeared to be some branches that were,  
5 they looked like a fish crib. I don't know if it was  
6 a fish crib, but they kind of looked like that. It  
7 was underneath the water.

8 Q Anything else?

9 A No.

10 Q Aside from what you've already told me, what other  
11 work did you do while you visited the Hausman property  
12 in May of 2003?

13 A I took some flow measurements.

14 Q Where did you take those?

15 A At the inflows as I described before to Long Lake, at  
16 the Little Round Lake dam, at the County Highway NN  
17 culverts, and I believe at the Lake Placid dam.

18 Q Anything else that you did during that visit?

19 A Not that I can remember.

20 Q When did you next visit the Hausman property?

21 A I believe in June of 2003.

22 Q Who was along on that visit?

23 A Jeff Lee and myself.

24 Q Was Mr. Hausman present for that visit?

25 A Yes, and my husband Michael.

18

1 Q What was the work that was done during that visit?

2 A Jeff Lee and myself took a boat ride around the lake  
3 looking at erosion.

4 Q Where did you go?

5 A I believe we started at -- I don't know, I don't know  
6 where we started at.

7 Q How long of a boat ride was it?

8 A Several hours, it was not a fast boat. We started  
9 from the south end, it took us quite awhile to get to  
10 the north.

11 Q Did you go along the eastern shore or the western  
12 shore?

13 A Both. We tried to see as much of the shoreline as we  
14 could.

15 Q So how much of the shoreline of Round Lake do you  
16 think you saw on that trip?

17 A I would need to see a map in order to give you an  
18 idea.

19 Q How far from the shoreline were you traveling during  
20 that trip on average?

21 A I'm not very good at estimating distances, somewhere  
22 between a couple hundred feet, somewhere around a  
23 couple hundred feet.

24 Q Did you put ashore anywhere?

25 A Yes.

1 Q Where?

2 A I believe we did.

3 Q Where?

4 A At some of the inlets to the lake, I believe I took  
5 flow measurements again.

6 Q Other than those stops, did you put ashore to inspect  
7 any properties?

8 A Not that I can recall.

9 Q Other than the boat ride that you and Mr. Lee took,  
10 what work was done during the June, 2003 visit?

11 A Jeff and I also took a canoe trip down the Osprey  
12 Creek channel from Little Round Lake dam to County  
13 Highway NN.

14 Q The same trip you'd taken with your husband?

15 A Approximately.

16 Q Were there any new or different items that you  
17 observed that were important for your work?

18 A The natural growth was, the natural vegetation was  
19 higher at that time, so it allowed me to get a better  
20 idea of the roughness in the channel.

21 Q What did you conclude about the roughness in the  
22 channel?

23 A There were weeds in different portions of the channel,  
24 lots of weeds.

25 Q Anything else that you took note of as significant for

1 your work during that canoe trip beyond what you saw  
2 during your May canoe trip?

3 A Only things that Jeff mentioned to me, his  
4 observations.

5 Q Such as?

6 A The vegetation in Osprey Lake.

7 Q Anything else?

8 A No.

9 Q During the visit in June, 2003, did you have any  
10 discussions with any landowners other than  
11 Mr. Hausman?

12 A I don't recall.

13 Q Okay. Any other work that you did during the visit in  
14 June, 2003?

15 A I attended a meeting with the lake association, I  
16 believe it was.

17 Q I don't expect you to know who all the members were  
18 that were at that meeting, but besides yourself, who  
19 did you know going into the meeting that also attended  
20 the meeting? In other words, was Mr. Lee there, was  
21 Mr. Hausman there?

22 A Mr. Lee was there, my husband was there, Mr. Hausman  
23 was there.

24 Q Was Mr. Hirschfield there?

25 A I don't remember. I believe Carol Hausman was there

1 but I don't remember.

2 Q Tell me, if you can, what was said at the meeting,  
3 what was the topic of the meeting?

4 A The high water levels in Round Lake . Dan Carthel  
5 made a presentation and I made a presentation, and  
6 then there was discussion.

7 Q Is this the meeting at the high school?

8 A No.

9 Q Okay. Where was the meeting held?

10 A I'm not sure, I believe it was a town hall or  
11 something.

12 Q What was the nature of Mr. Carthel's presentation?

13 A What I remember is that he had a, I believe he had a  
14 map that had some photos on it from his, from a canoe  
15 trip down the Osprey Creek channel, and he was  
16 describing the drainage system out of Round Lake.

17 Q Did he discuss at all, first of all, whether he  
18 thought the water levels on Round Lake were too high?

19 A I don't remember.

20 Q Did he say anything about what might cause any of the  
21 water levels on Round Lake that were in existence  
22 then, did he offer any opinions?

23 A I don't remember.

24 Q What else, if anything, do you remember that  
25 Mr. Carthel said at the meeting about the water levels

22

1 on Round Lake?

2 A The only thing that I remember was that it didn't  
3 appear that, it did not appear that he and I had  
4 drastically differing opinions. It appeared that our  
5 analyses were somewhat similar.

6 Q What did he say that led you to that conclusion?

7 A I don't recall his exact words.

8 Q Well, give me the gist of it, if you can.

9 A I don't recall his presentation. I do recall after  
10 the meeting he and I discussing the fact that the  
11 results of our analysis appeared similar.

12 Q Was anyone from the county in attendance at that  
13 meeting?

14 A I don't recall.

15 Q Was Mr. Hirschfield there?

16 A I don't recall.

17 Q Did Mr. Hausman speak at that meeting?

18 A He did not make a presentation. I don't recall if he  
19 participated in the general discussion.

20 Q Did the owners association take any action at that  
21 meeting?

22 A Not that I recall.

23 Q What other work, if any, did you do during your visit  
24 in June, 2003?

25 A I mentioned that I took flow measurements?

23

1 Q Yes, you did.

2 A I took flow measurements at Lake Placid dam and County  
3 NN and the dam as well, I believe.

4 Q Any other work that you remember doing during your  
5 visit in June, 2003?

6 A Not that I recall.

7 Q When was your next visit to Round Lake and the Hausman  
8 property?

9 A I attended another meeting at the high school, I  
10 believe. I don't know what the date was.

11 Q Was that a large public meeting?

12 A Yes.

13 Q Was that the meeting at which the four options for  
14 Round Lake were discussed or the survey results were  
15 considered and so on?

16 A I believe they were discussed.

17 Q Did you make a presentation at that meeting?

18 A Yes.

19 Q Did anyone speak on behalf of the county at that  
20 meeting?

21 A I believe so.

22 Q Do you know who it was?

23 A No.

24 Q Do you remember anything that person said?

25 A No.

24

1 Q When was your next visit to the area?

2 A I don't remember.

3 Q Okay. You came up in the Summer of 2004 when we were  
4 conducting some depositions, do you remember that?

5 A Yes.

6 Q Did you do any work other than attending those  
7 depositions while you were visiting for those  
8 depositions?

9 A Yes.

10 Q What did you do?

11 A Took some flow measurements.

12 Q Okay. Where were those taken?

13 A At the Lake Placid dam, at County Highway NN and at

14 the Little Round Lake dam. I believe that was it.

15 Q Any other work you did during those visits?

16 A Looked at the Tiger Cat dam.

17 Q Was that your first visit to the Tiger Cat dam?

18 A Yes.

19 Q What did you observe, if anything, about the dam?

20 A It appeared to be a stoplog structure. There appeared

21 to be a low flow discharge pipe of some sort.

22 Q Anything else of significance to your work that you

23 observed about the dam during that visit?

24 A No.

25 Q Was that in late June or early July, 2004?

25

1 A It was in 2004, I can't recall the date.

2 Q Have you visited the area since then as a part of your

3 work on this project?

4 A The Tiger Cat dam?

5 Q No, the area of Round Lake and the Hausman property in

6 general since that visit.

7 A Since the depositions?

8 Q Yes.

9 A I don't believe so.



10 Q Besides yourself, Mr. Solseng and Mr. Lee, who from  
11 Barr Engineering has been involved in this project?

12 A Aaron Grosser, Ray Wuolo.

13 Q Can you spell the last name, please?

14 A W-u-o-l-o, I believe. Tina Pint, P-i-n-t, Dave Loss,

15 L-o-s-s, Theresa Kes, K-e-s, Jamie Smedsmo,

16 S-m-e-d-s-m-o, Bob Dickson, D-i-c-k-s-o-n, Dean

17 Skallman, S-k-a-l-l-m-a-n.

18 Q Anybody else?

19 A I believe that's about it.

20 Q Aside from Mr. Lee, Mr. Solseng and yourself, have any

21 of these other individuals ever visited the Hausman

22 property as far as you know?

23 A No.

24 Q Did any of them attend any meetings in Sawyer County

25 in connection with the Hausman issue?

26

1 A No.

2 Q Can you tell me briefly what Mr. Grosser did on the  
3 project?

4 A Analyzed the proposed shoreline protection.

5 Q And Mr. Wuolo?

6 A Evaluation of groundwater flows.

7 Q And Tina Pint?

8 A Evaluation of groundwater.

9 Q Mr. Loss?

10 A Review of the shoreline loss report.

11 Q Ms. Kes?

12 A Copying files, editing, helping me with the report.

13 Q And Jamie Smedsmo?

14 A Gathering data.

15 Q What kind of data?

16 A Precipitation, wind, ice, soils.

17 Q How about Mr. Dickson?

18 A Reviewing some of the survey data.

19 Q Mr. Skallman?

20 A Evaluating shoreline loss.

21 Q Are any of these people, for lack of a better phrase,

22 higher up in Barr Engineering than you are as a vice

23 president, or were you their supervisor in doing this

24 work?

25 A I was the project manager.

27

1 Q Okay. So they were all in essence working for you on

2 this project in one way or another?

3 A Yes.

4 Q Did any of these people have involvement in gathering

5 data, historical data about the water levels on Round

6 Lake?

7 A No.

8 Q Who had primary responsibility for gathering data

9 about historic water levels on Round Lake?

10 A I had primary responsibility.

11 Q Who else was involved in gathering the water level

12 data?

13 A At Barr Engineering?

14 Q Yes.

15 A Myself.

16 Q I've seen in your report, and we'll look at them  
17 shortly, the tables that had been created that show  
18 the historical data and various dots and so on  
19 indicating different dates of measurement and so on.  
20 Are you telling me that at Barr Engineering you were  
21 the only person involved in gathering that historical  
22 data and plotting it on the tables, or was there  
23 someone else who assisted you with that?

24 A I did that.

25 Q Okay. Was there anyone else at Barr Engineering

28

1 involved in that?

2 A No.

3 Q Okay. Did you rely on anyone outside Barr Engineering  
4 to provide you with water level data?

5 A I received a lot of historical documents from Michael,  
6 Best & Friedrich.

7 Q Any other sources of water level data that you relied  
8 on in your work besides work you did yourself and the  
9 historical documents you received from the Michael  
10 Best law firm?

11 A Not that I remember.

12 Q For example, did you receive any water level data from  
13 Mr. Hausman separate from what you got from Michael,  
14 Best & Friedrich?

15 A I may have gotten some photos but I believe they came  
16 through Michael, Best & Friedrich, I don't remember.

17 Q Did you ever receive any information about water  
18 levels from John Hirschfield?

19 A No.

20 Q Did you ever talk to Mr. Hirschfield?

21 A Yes.

22 Q When was the first time you met him?

23 A I believe it was the May, 2003 trip.

24 Q What did you talk about with him on that trip?

25 A Just general discussions.

29

1 Q Did you ever talk with Mr. Hirschfield about the  
2 notion that Sawyer County was telling Mr. Carthel not  
3 to complete his work?

4 A I don't recall Mr. Hirschfield saying that.

5 Q Did Mr. Hausman ever say that to you?

6 A He may have.

7 Q When did you first hear that from Mr. Hausman?

8 A I don't recall.

9 Q Do you have an understanding what the basis was for  
10 that statement?

11 A I believe it had been a long time since the, since  
12 Mr. Carthel had been hired, but you would have to ask  
13 Mr. Hausman, I don't know.

14 Q Did you ever talk with Mr. Carthel about why he had  
15 not completed his work?

16 A I called Mr. Carthel to ask him when he was going to  
17 complete his work.

18 Q When did you make that call, approximately?

19 A Summer of 2003, I don't remember when.

20 Q What did he tell you?

21 A He told me it will be done in a couple weeks.

22 Q Did you ever ask him whether anyone at the county had  
23 told him not to complete the work?

24 A No.

25 Q Did you ever have any conversations with

30

1 Mr. Hirschfield about whether any county board members  
2 or county employees would benefit from high lake  
3 levels on Round Lake?

4 A I don't recall. He may have said that, I don't  
5 remember.

6 Q Did Mr. Hausman ever say that to you?

7 A He has mentioned that.

8 Q And what was your understanding of the basis for that  
9 statement?

10 A Can you repeat the statement?

11 Q Well, my question is, did Mr. Hausman ever tell you  
12 that he thought that county board members or county  
13 employees would benefit from high water levels on  
14 Round Lake?

15 A He mentioned that property values may go up. I don't  
16 know if he mentioned that Sawyer County staff were  
17 going to benefit, I don't recall that.

18 Q As a part of your work on this project, did you visit  
19 any other lakes in Wisconsin?

20 A As part of this project?

21 Q Yes.

22 A No.

23 Q Are there any other lakes that you consider comparable  
24 to Round Lake in terms of the kind of erosion that you  
25 have said you've seen on Round Lake?

31

1 A I've not studied that.

2 Q Did you attempt to make any comparison between Round  
3 Lake and any other lake in Wisconsin or Minnesota as  
4 to erosion?

5 A I didn't study the erosion.

6 Q Okay. Have you worked on any projects that you  
7 consider to be similar to this project in terms of the  
8 hydrology and hydraulic issues that you've studied?

9 A I've analyzed lots of other lakes for hydrology and  
10 hydraulics.

11 Q Have you ever been involved in a project similar to  
12 this as in trying to determine whether the control  
13 structures on a given lake are adequate to maintain a  
14 certain elevation?

15 A Yes.

16 Q Tell me what projects you've been involved in that  
17 were similar to this in that nature.

18 A I've looked at the outflow capacity for -- do you want

19 me to list the lakes?

20 Q Please.

21 A Lakes in the City of Lakeville, Lake Marion, Orchard

22 Lake . There's other lakes, I can't remember the

23 names.

24 Q And were any of those lakes situations where there was

25 a state ordered lake level and you were looking at the

32

1 question of whether the control structures were

2 adequate to maintain that state ordered level?

3 A Not specifically a state ordered level.

4 Q Were there lakes where there was a level that was

5 either agreed upon or was to be maintained and you

6 were looking at that control structure issue?

7 A Not specifically that I can recall.

8 Q What was similar about those lakes that you mentioned

9 in Lakeville and Orchard Lake, what was similar about

10 those two as compared to this project?

11 A Hydrology and hydraulics review of the capacity.

12 Q And what was the purpose of the study that you were

13 doing?

14 A To determine the 100-year flood levels.

15 Q Okay. Let me take you back to the visit that you made

16 to Mr. Hausman's property in May of 2003 where you

17 took the measurements of the tension cracks and the

18 measurements from the corner of the house to the

19 riprap, do you remember that visit?

20 A Yes.

21 Q At the time of your visit in May, 2003, did you gain  
22 an understanding of how much shoreline Mr. Hausman  
23 claimed to have lost?

24 A Yes.

25 Q And was it your understanding that Mr. Hausman claimed

33

1 that there was a wave event in 2002 that caused him to  
2 lose some portion of his shoreline?

3 A Yes.

4 Q And when you visited in May, 2003, were there stakes  
5 in the water?

6 A Yes.

7 Q And what did you understand those stakes to represent?

8 A The location of his shoreline prior to his erosion.

9 Q And when you looked at that issue with him during that  
10 visit, what did you discuss with him about what repair  
11 might be done to the shoreline?

12 A That was mostly Phil's area, how to repair the  
13 shoreline.

14 Q Did you have an understanding of what the goal of the  
15 repair was, I mean, what was the purpose of the  
16 repair?

17 A To establish the shoreline where it had been.

18 Q All right. And to the best of your understanding was  
19 that accomplished through the repair that Barr  
20 engineered?

21 A Yes.



22 Q I assume that you didn't design a repair that went  
23 beyond where the shoreline used to be, correct?

24 A Correct.

25 Q And conversely, you didn't do a repair that was short

34

1 of where the shoreline used to be either, true?

2 A True.

3 Q Is it fair for me to assume then that to the best of  
4 your knowledge that Barr's efforts -- strike that. To  
5 the best of your knowledge did the repair that Barr  
6 effected restore the shoreline to where it had been  
7 according to what Mr. Hausman told you?

8 A I don't know where the shoreline was prior. Our  
9 design was based on the stakes.

10 Q And your understanding was that the stakes were based  
11 on where the shoreline used to be?

12 A Yes.

13 Q Okay. Did you have any involvement in determining  
14 what the failure mechanism was with respect to the  
15 shoreline that was lost and then marked by the stakes?

16 A No.

17 Q Did you have any involvement in determining the  
18 failure mechanism with respect to the tension cracks  
19 that were observed in May, 2003?

20 A No.

21 Q That was all Mr. Solseng?

22 A Yes.

23 MR. WRIGHT: Off the record.

24

(A short recess is taken)

25 Q Ms. Dent, I'm going to get to the two reports,

35

1 Exhibits 125 and Exhibit 126 in a second, but I wanted  
2 to start out by asking you to give me a summary of one  
3 point that I want to understand as clearly as I can,  
4 and that is, in the report Barr Engineering has, for  
5 lack of a better word, adjusted the, what it refers to  
6 as the state ordered maximum for Round Lake downward  
7 about a half a foot or so based on some  
8 interpretations you've made of datum and lake levels  
9 historically. And I wanted to understand what the  
10 basis was for the adjustment that you've made in the  
11 datum and which is so important to your reports. Can  
12 you summarize for me what caused you to change the  
13 datum?

14 A There were several historic documents that noted  
15 differences in elevations between the benchmarks.

16 Q Okay. And tell me what that means, what that led you  
17 to conclude?

18 A If you were to take a lake level reading using one  
19 benchmark, you would get a different elevation than if  
20 you were to take the same lake level reading the same  
21 exact time using a different benchmark.

22 Q And can you tell me which benchmarks you were looking  
23 at when you decided to adjust the datum downward?

24 A Lake Placid dam, Kaisers Resort, K-a-i-s-e-r, Little

25 Round Lake dam, County Highway NN and Tiger Cat dam.

36

1 Q So there were five benchmarks you considered in  
2 establishing what you believed was the correct datum  
3 for the state ordered maximum, is that a fair way to  
4 put it?

5 A The NN datum was not used for that, the NN benchmark.

6 Q Why not?

7 A It wasn't pertinent.

8 Q Why wasn't it pertinent?

9 A Because the lake level was not established using the  
10 County Highway NN datum.

11 Q Because the NN culverts were not there in 1941, is  
12 that what you mean?

13 A There's a benchmark at County Highway NN.

14 Q And that benchmark was not there in 1941?

15 A It was not used to establish the lake level.

16 Q Okay. The other Little Round Lake dam and Tiger Cat  
17 dam, your testimony is, were used as benchmarks to  
18 establish the state ordered level in 1941?

19 A the Little Round Lake dam benchmark was not used to  
20 establish the state ordered maximum, I believe.

21 Q Okay. And but the other three were, is that your  
22 belief?

23 A Yes.

24 Q And what about those benchmarks caused you to adjust  
25 the datum for purposes of your work in this case?

37

1                               THE WITNESS: Can you read it back,  
2           please?  
3                               (Reporter reads back last question)  
4 A They did not relate to the same level.  
5 Q Okay. Was one of them off or why didn't they all  
6       relate to the same level?  
7 A They appeared to be different from each other.  
8 Q Okay. And what did you do to confirm that they were  
9       different from each other?  
10 A A GPS survey was conducted.  
11 Q Who did the GPS survey?  
12 A Mike, I don't remember the organization he was, he is  
13       with.  
14 Q You don't know his last name or the company he worked  
15       for?  
16 A I don't recall it off the top of my head. He was  
17       hired by Dave Rieder, R-i-e-d-e-r.  
18 Q Do you know what type of GPS was used for the survey?  
19 A Are you asking for the brand name?  
20 Q First I'm asking for the category of GPS. There are  
21       various types of GPS, correct?  
22 A Correct.  
23 Q Various levels of accuracy or sensitivity?  
24 A Correct.  
25 Q And do you know what level of accuracy or sensitivity

1 this GPS was that was used in doing the survey work?

2 A I have the information.

3 Q Okay. You don't remember it off the top of your head?

4 A No.

5 Q Okay. You don't know the brand or model of the GPS  
6 that was used right now?

7 A I don't know the brand or model.

8 Q And what did those measurements tell you about these  
9 benchmarks?

10 A Different conversions have been used in the past to  
11 the local datum.

12 Q Tell me in layman's terms, if you can, what you mean  
13 by conversion to a local datum, explain that to me,  
14 please.

15 A Whenever you have more than one datum, there is  
16 typically a conversion between the two. In this case  
17 since there's many different benchmarks, there have  
18 been conversions that have been different. So you  
19 take the local datum and add a number to it and you  
20 get a mean sea level elevation. And in this case that  
21 conversion number has been different depending on who  
22 has been, depending on different documents.

23 Q Okay. Which conversion number did you use for your  
24 calculations of the lake levels in this case?

25 A I used a conversion from the Tiger Cat dam.

1 Q And what was the conversion there?

2 A 1268.02.

3 Q And how does that relate to the -- strike that. Are  
4 there conversions for, for example, the Lake Placid  
5 dam benchmark? What other -- let me ask it a  
6 different way, a more general way. What other  
7 conversions could one have used in doing these  
8 calculations?

9 A There's numerous conversions you could use.

10 Q Okay. What are they?

11 A A local datum is a datum that someone established for  
12 a local area.

13 Q Okay. And what other options did you have with  
14 respect to conversions to do your work in this case?

15 A I could have used a conversion from a historical  
16 document from a different benchmark.

17 Q Okay. For example, the Lake Placid dam?

18 A Sure.

19 Q Okay. And did you make any calculations using, for  
20 example, the conversion related to the Lake Placid  
21 dam?

22 A To determine the conversion?

23 Q Yes.

24 A No.

25 Q Why not?

40

1 A Because the Lake Placid dam benchmark was developed  
2 from the Tiger Cat dam benchmark.

3 Q Okay. And what other benchmarks -- strike that. The

4 other benchmarks that you could have referred to were  
5 the Kaisers Resort, is that correct?

6 A There wasn't enough information for the benchmark at  
7 Kaisers Resort.

8 Q Because it was gone, because the benchmark was gone  
9 there?

10 A There was a staff gauge and a benchmark at Kaisers  
11 Resort. There was very little information on the  
12 benchmark at Kaisers Resort.

13 Q Okay. Did you ever try and locate the benchmark at  
14 Kaisers Resort?

15 A Physically?

16 Q Yes.

17 A No.

18 Q And why then did you choose the Tiger Cat dam over any  
19 other option that you might have had?

20 A The Tiger Cat dam was -- all of the other benchmarks  
21 were established from the Tiger Cat dam.

22 Q And using the Tiger Cat dam, why did that result in  
23 76.75 being your view of what the state ordered  
24 maximum was?

25 A In one of the historical documents, I believe it was

1 the PSC order for the Little Round Lake dam, it  
2 described how the state designated levels were  
3 developed. And it notes that they were developed  
4 based on some state staff who went out at Round Lake,  
5 tried to determine what the level should be. When

6 they determined what the level should be, they looked  
7 at the Kaisers Resort gauge and based their levels on  
8 that gauge.

9 That gauge, that staff gauge was noted in many  
10 different documents to be off, to read, I believe it  
11 was 0.38 feet too high. And that staff gauge was  
12 developed from the Lake Placid dam benchmark which  
13 was, according to the GPS elevations, was  
14 approximately .12 feet off. Combining those you get a  
15 half a foot difference.

16 Q So historically, you're going back to DNR documents or  
17 PSC documents that seem to reflect that the Kaisers  
18 gauge was 0.38 feet off, correct, that's point one of  
19 your adjustment?

20 A I'm not sure who developed those documents, I'd have  
21 to look.

22 Q But the historical documents that you relied on show a  
23 0.38 error in the staff gauge at Kaisers Resort?

24 A Yes.

25 Q And you then tie that back to the Lake Placid

42

1 benchmark, correct?

2 A Correct.

3 Q And that benchmark is, according to the GPS readings  
4 that were done in the last year or two as a part of  
5 this case, .12 feet off, correct?

6 A Correct.



7 Q And the measurement was on the high side again? In  
8 other words, that the measurement at the Lake Placid  
9 benchmark was .12 feet too high?

10 A Correct.

11 Q Which combined with the 0.38 results in an one-half  
12 foot adjustment in your view to each lake level  
13 measurement that historically has been taken?

14 A Correct. At Kaisers Resort only.

15 Q Okay. So that each measurement historically that was  
16 taken at Kaisers Resort was a half foot off?

17 A Only the measurements that referred to the Kaisers  
18 staff gauge, yes.

19 Q How do you know when the measurement refers to the  
20 Kaisers staff gauge that the 0.38 feet wasn't already  
21 taken into account?

22 A The documents, several documents noted the elevation  
23 and then noted that however it appears to be .38 feet  
24 off.

25 Q So you think the adjustment was already made at that

43

1 point in time?

2 A I tried to use the best information available.

3 Q Were there any, other than the 0.38 feet with respect  
4 to the Kaisers Resort gauge and the .12 feet at Lake  
5 Placid dam, were there any other components that went  
6 into your adjustment of a half a foot in the  
7 measurements?

8 A The only measurements that were adjusted using that

9 conversion were any measurements that were taken at  
10 Kaisers, referring to Kaisers staff gauge.

11 Q Okay. Let me ask you to take a look at Exhibit 126,  
12 if you would, please, and open it to figure 6. Do you  
13 have figure 6 in front of you?

14 A Yes.

15 Q Can you explain to me maybe by reference to the decade  
16 or years which of these measurements that are  
17 reflected on figure 6 would have been adjusted on the  
18 basis of the half foot that we just described and  
19 discussed?

20 A I would have to look at each individual point.

21 Q So it was a point by point analysis of each  
22 measurement to decide whether it was based on the  
23 Kaiser gauge and therefore should be adjusted by a  
24 half a foot?

25 A Each point was evaluated and brought to the local

44

1 datum, adjusted to the local datum.

2 Q Okay. And that was, for example, if there was a  
3 measurement at Kaisers gauge, the staff gauge at  
4 Kaisers Resort in the 1950s, let's say, you would look  
5 at that and decide whether that measurement needed to  
6 be adjusted?

7 A Yes.

8 Q And what about the measurements in the 1990s and the  
9 2000s, were those adjusted in any way?

10 A All of the points were adjusted based on bringing it  
11 to the same GPS elevation.

12 Q Okay. And is there any table or data within  
13 Exhibit 126 that shows us how you adjusted each  
14 measurement?

15 A No.

16 Q Okay. Is that in the work papers you've produced  
17 here?

18 A Yes.

19 Q Were there any other factors that you took into  
20 account in adjusting any of the measurements that are  
21 shown in figure 6 other than the .38 at Kaisers Resort  
22 and the .12 at the Lake Placid dam?

23 A Yes, each benchmark had a different adjustment.

24 Q Okay.

25 A So if they were a point that were related to the

45

1 County Highway NN datum or the Little Round Lake dam  
2 datum, the adjustment, the water level would have been  
3 adjusted per that benchmark.

4 Q Were there any other benchmarks besides the Lake  
5 Placid dam and the Kaisers Resort benchmark that you  
6 believed were in error in any way?

7 A Yes.

8 Q Which other benchmarks were in error?

9 A I believe the Little Round Lake dam benchmark was off  
10 slightly.

11 Q And do you know how much?

12 A I don't recall.

13 Q Was it more than a tenth of a foot?

14 A I don't recall.

15 Q And what's your basis for saying it was off slightly,

16 was that a result of the GPS survey or historical

17 documents or some other source?

18 A The GPS survey.

19 Q Any other benchmarks that you believe were in error in

20 any respect?

21 A No.

22 Q If you could take a look at Exhibit 125, the shoreline

23 report. Do you have that in front of you?

24 A Yes.

25 Q I want to ask you some questions about the different

46

1 aspects of the report that you authored, and I think

2 we established with Mr. Solseng yesterday that you,

3 being Barr Engineering in this case, assigned

4 different parts of the report to different people and

5 you were responsible for the parts that show prepared

6 by Nancy Johnson Dent, is that correct?

7 A Yes.

8 Q Turning to the first substantive part of the report,

9 Part II, Overview of Factors Affecting Round Lake

10 Water Levels, did you draft that portion of the

11 report?

12 A Yes.

13 Q Okay. I want to ask you about some of the  
14 calculations that you've put into the report and your  
15 source for some of the information that's included  
16 there. You have a section of the report called Major  
17 Inflows on the Page 4 of the exhibit?

18 A Yes.

19 Q What was the, explain to me the calculation of 1 cubic  
20 foot per second that goes into the groundwater inflow  
21 that you've described here, how did you arrive at  
22 that?

23 A It was computed based on the difference in normal  
24 water level between the Tiger Cat flowage and the  
25 level of Round Lake and the physical distance between

47

1 the two lakes and the soil type in that area.

2 Q What physical inspection of that area between the  
3 Tiger Cat flowage and Round Lake did you make as a  
4 part of your work here?

5 A I have viewed that area and I took some soil samples.

6 Q When you say viewed that area, how did you view it?  
7 Did you walk it, did you drive through there?

8 A Both.

9 Q How much of the area did you walk?

10 A Just portions.

11 Q And what did you observe going through there?

12 A The soils were fairly consistent.

13 Q And what was the nature of the soil there?

14 A I'm not a geotechnical engineer, but it was sandy,

15 sandy loam.

16 Q Okay. Going down to paragraph 3 on that same page  
17 where you talk about the seepage through the stoplog  
18 joints, do you see that?

19 A Yes.

20 Q How was the stoplog joint seepage flow calculated?

21 A It was measured using gauging equipment.

22 Q And when was that measurement taken?

23 A May 3rd, 2003.

24 Q And are you aware that since that time the county has  
25 added a stoplog to the Lake Placid dam?

48

1 A No, I did not know.

2 Q So any additional stoplogs that might be in that dam  
3 was not taken into account in your calculation?

4 A This is seepage through the stoplogs, not over the  
5 stoplogs.

6 Q And if the stoplogs were replaced in the Lake Placid  
7 dam, you haven't taken that into account?

8 A I'm not sure what you mean by having taken into  
9 account.

10 Q Well, are you aware of whether the stoplogs in the  
11 Lake Placid dam have been replaced since May 3 of  
12 2003?

13 A I was told that they were.

14 Q Okay. And you have not gone back to see whether  
15 there's any seepage occurring now through the Lake

16 Placid dam?

17 A I have been back there since the new stoplogs were in  
18 place.

19 Q And was there any seepage?

20 A Yes.

21 Q Did you measure it?

22 A No.

23 Q Okay. Was it greater or less than what you'd observed  
24 in May, 2003?

25 A Less.

49

1 Q With respect to paragraph 4, you have some information  
2 there about the Lake Placid dam and overtopping?

3 A Yes.

4 Q Would the addition of one stoplog to the Lake Placid  
5 dam make a difference to your calculation here?

6 A I've provided a range of flows to account for the fact  
7 that the stoplog, the top of the stoplog elevation  
8 does appear to change over time.

9 Q Can you tell me what heights or elevations of the  
10 stoplogs go into the range that you've calculated  
11 here?

12 A The stoplogs, the height of the stoplogs would be .1  
13 to .6 feet above the normal water level of Tiger Cat  
14 flowage.

15 Q And the .6 is the highest elevation, meaning the  
16 highest point on stoplogs, at least in your  
17 calculation here, correct?

18 A Yes.

19 Q And does that .6 take into account any stoplog that  
20 has been added to the Lake Placid dam since you  
21 observed it on April 4, 2004?

22 A I did not measure the height of the stoplog on  
23 April 4, 2004.

24 Q Where did you get the numbers that go into the .1 to  
25 .6 feet that you've put in paragraph 4 here?

50

1 A Historic documents.

2 Q Did you ever actually measure the elevation of the  
3 stoplogs at Lake Placid dam then?

4 A I did not.

5 Q Did the surveyors who were part of the Barr effort  
6 measure those?

7 A I don't recall.

8 Q What historic documents were there that you used to  
9 come up with .1 to .6 feet?

10 A NWBE and Dan Carthel had measured the top of the  
11 stoplogs.

12 Q Their work was the source of your calculation here?

13 A One of the sources.

14 Q Okay. Do you remember any other sources?

15 A There may have been something from Dave Rieder, I  
16 don't remember. That would have been another source.

17 Q Okay. And tell me again, how did you calculate the  
18 range of 30 to 70 cubic feet per second, what's the



19 basis for that?

20 A The basis for that is depending on the height of the  
21 stoplogs and assuming that the Tiger Cat flowage is at  
22 its overtopping elevation.

23 Q Okay. I want to move on to paragraph 5 on that same  
24 Page 5 of Exhibit 125 there. You say there that water  
25 from Lake Placid and Burns Lake may flow into Round

51

1 Lake through a series of wetlands, do you see that?

2 A Yes.

3 Q And you say that may occur when the elevation of Tiger  
4 Cat Flowage is high. What do you mean when you say  
5 when the elevation of Tiger Cat Flowage is high, what  
6 elevation are you talking about?

7 A I don't have a specific elevation.

8 Q And you say may flow over land, did you at any time  
9 observe water flowing through that area of wetlands  
10 into Round Lake?

11 A No.

12 Q Did anyone from Barr walk the overflow pathways that  
13 you're hypothesizing about here to confirm whether  
14 they were active?

15 A I tried to walk one of them.

16 Q How far did you get?

17 A How far did I get?

18 Q Well, what happened?

19 A I couldn't tell exactly where we were, and I couldn't  
20 find the location of where the overflow would have

21       been.

22   Q   Okay.  So physically you never observed a location  
23       where you'd believe an overflow would occur?

24   A   No.

25   Q   You did not observe any physical location where an

52

1       overflow would occur?

2   A   I did not.

3   Q   Okay.  What's the basis then for saying that there may  
4       be overflow through this series of wetlands into Round  
5       Lake?

6   A   I didn't walk all the potential overflow outs.

7   Q   But what's your basis for saying there's a possibility  
8       of flow over land through a series of wetlands into  
9       Round Lake when Tiger Cat is high?

10  A   Based on historical documents and aerial photographs.

11  Q   And the aerial photographs indicate either surface  
12       water or a shadow, correct?

13  A   Correct.

14  Q   And you couldn't discern from looking at those photos  
15       whether it was surface water or a shadow, right?

16  A   No.

17  Q   So what historical documents leads you to believe that  
18       there may be a flow over land through a series of  
19       wetlands into Round Lake?

20  A   I recall one from the Lac Courte Oreilles tribe  
21       sometime ago discussing overflow.

22 Q Do you know when?

23 A I don't remember.

24 Q With respect to this overflow, what's the control on  
25 the overflow?

53

1 A Natural ground.

2 Q And what's the rationale for calculating flows under  
3 the three culverts at McClaine Road with respect to  
4 these overflows?

5 A The culverts would be more restrictive and would  
6 restrict the amount of flow into Round Lake.

7 Q But what's the basis for assuming that the flow would  
8 go through those culverts?

9 A That's the natural drainage route.

10 Q Did you physically observe that that's a drainage for  
11 water overflowing these wetlands into Round Lake?

12 A You can tell from the topography maps.

13 Q But did you observe any flow through those wetlands  
14 and through the culverts under McClaine Road?

15 A Yes.

16 Q When did you observe that?

17 A On one of my site visits in 2004.

18 Q And where were you when you observed the flow, at the  
19 McClaine Road culverts?

20 A Yes.

21 Q And how could you tell where that water was coming  
22 from?

23 A Based on the topography, it was coming from the

24 wetlands upstream.

25 Q Did you go into those wetlands to confirm that they

54

1 were active and the source water that was going  
2 through the culverts at McClaine Road?

3 A The wetlands are, you can visually see the wetlands  
4 from the road.

5 Q And could you see flow from those wetlands or did you  
6 only see the flow at the culverts?

7 A The wetland abuts the road.

8 Q It's right up against the culverts?

9 A Yes.

10 Q Okay. You say in the report that overflows are  
11 mentioned as having been noted in the past. Aside  
12 from the Lac Courte Oreilles tribe, what other  
13 historical source do you have for these overflows that  
14 you describe here?

15 A I don't recall.

16 Q You indicate that the outflows would be limited to  
17 around 15 to 20 cubic feet per second prior to  
18 overtopping McClaine Road, do you see that?

19 A Yes.

20 Q Did you take any measurements to determine what the  
21 capacity was there? What's the basis for saying 15 to  
22 20 cubic feet per second?

23 A The size of the culverts and the height before the  
24 water overtops the road.

25 Q In the third paragraph under No. 5 you say, "This

55

1 increase in water levels increases the frequency and  
2 duration of overflows through adjacent wetlands." Do  
3 you see that?

4 A Yes.

5 Q And this is the same wetland area that we're talking  
6 about that may flow through the culverts at McClaine  
7 Road?

8 A There's a series of wetlands that extend in those  
9 reaches.

10 Q What is the frequency of overflows through those  
11 wetlands?

12 A I did not analyze that.

13 Q Then how can you say that this increases the frequency  
14 of overflows if you don't know what the frequency is?

15 A The Tiger Cat flowage starts out at a higher elevation  
16 prior to a storm event.

17 Q And before there was any change to the level of the  
18 Tiger Cat flowage in your view through Sawyer County's  
19 actions, what was the frequency of any flow through  
20 those wetlands?

21 A I did not evaluate that.

22 Q And so you have no empirical data showing what the  
23 frequency of flows was through those wetlands before  
24 the county did anything at all with respect to Tiger  
25 Cat, true?

56

1                               THE WITNESS:  Can you read that  
2                   back to me, please.  
3                   (Reporter reads back last question)  
4  A  True.  
5  Q  Do you have any data at all on what the duration of  
6       any overflows would be through that area?  
7  A  No.  
8  Q  What is the basis for your statement at the end of  
9       Page 5, "In addition, there is a potential for  
10      periodic inflows of up to about 90 CFS when Tiger Cat  
11      Flowage levels are high"?  
12  A  That would include the flows through the wetlands and  
13      the flows over the top of the Lake Placid dam.  
14  Q  And so 70 of that 90 CFS comes from your view that the  
15      maximum discharge over the Lake Placid dam would reach  
16      70 cubic feet?  
17  A  Yes.  
18  Q  And where does the other 20 come from?  
19  A  The wetlands.  
20  Q  So you believe that the peak flow through the wetlands  
21      could be as much as 20 cubic feet per second into  
22      Round Lake?  
23  A  Could be, yes.  
24  Q  And that means that at that point you've overtopped  
25      the Lake Placid dam, correct?

1 A Yes.

2 Q And you've come as close as you can to overtopping  
3 McClaine Road, correct?

4 A Yes.

5 Q Are you aware of any historical incidents where  
6 McClaine Road has been overtopped by flow through  
7 those wetlands?

8 A No.

9 Q Did you see any evidence that the flow through those  
10 wetlands had ever reached 20 CFS?

11 A No.

12 Q Do you have any historical data to support the --  
13 strike that. Do you have any historical data that  
14 shows that there's ever been a flow of 70 CFS over the  
15 top of the Lake Placid dam?

16 A There was historical documents when they allowed flows  
17 into Round Lake at one point --

18 Q And that was back --

19 A -- by reducing the stoplogs.

20 Q And when was that, approximately?

21 A Late 1930s, early 1940s.

22 Q And that flow was achieved by removing all of the  
23 stoplogs, correct?

24 A The flow that was going into the lake was, yes.

25 Q Do you have any historical evidence that there's ever

1 been a flow of 70 CFS over the top of the Lake Placid  
2 dam when the stoplogs were in place?

3 A No.

4 Q I want to move on to the section of the report that's  
5 on Page 6 labeled Major Outflows. Has Barr conducted  
6 any surveying in the areas of the historical outflows?

7 A I don't understand your question.

8 Q Have you surveyed any of the outflows to determine  
9 their elevations in conjunction with determining their  
10 capacities?

11 A I've taken flow measurements.

12 Q Other than that, have you done any surveying work in  
13 the vicinity of the outflows?

14 A Yes.

15 Q What have you done?

16 A The survey work was completed by Dave Rieder.

17 Q Did Barr Engineering do any surveying independent of  
18 what Mr. Rieder did?

19 A No surveying.

20 Q Just flow measurements?

21 A Yes.

22 Q I want to ask you to take a look at figure 7, Round  
23 Lake Elevation Discharge Curve. Can you explain to me  
24 how you developed figure 7?

25 A It was developed using a HEC-RAS model.

1 Q And how did you reach the conclusion that only 15 CFS  
2 capacity is available if we're at what you view is the  
3 state designated maximum of 76.75?



4 A Primarily through that HEC-RAS model.

5 Q Where did you get the data that you plugged into that?

6 A Various sources.

7 Q Did you make any measurements yourself of cross  
8 sections, for example, of the channel or any of that  
9 data that went into your HEC-RAS model?

10 A I believe I may have measured the channel width.

11 Q Which channel and where?

12 A The channel downstream of the Little Round Lake dam.

13 Q When did you do that?

14 A In one of my site visits.

15 Q And how far down the channel were you when you  
16 measured the cross section?

17 A I believe we took a couple to verify the surveying  
18 that Dan Carthel and NWBE had reported.

19 Q And were you able to verify what they had reported?

20 A Yes, it seemed fairly accurate.

21 Q Okay. By the way, in your work with Barr on this  
22 project, did you find any instances where the  
23 surveying work that was done by NWBE or Mr. Carthel  
24 was in error?

25 A There may have been one point that I questioned in

60

1 Mr. Rieder's survey.

2 Q What was that?

3 A It was in the Anderson channel, the channel to the  
4 east of Little Round Lake there was one point that  
5 didn't make sense to me.

6 Q How far was it off?

7 A I don't recall. I believe it may have been some  
8 swapping, swapping of data, but I don't recall.

9 Q Kind of a transpositional error?

10 A Yes.

11 Q Okay. Any other errors that you found in the work of  
12 Mr. Rieder or NWBE or Mr. Carthel?

13 A Not that I recall.

14 Q Okay.

15 A Excuse me, in the survey work?

16 Q Yes.

17 A No.

18 Q Okay. How about in other work? Your answer seemed to  
19 imply that there was another error that you found or  
20 more.

21 A In Mr. Carthel's hydrologic analysis and hydraulic  
22 analysis there appeared to be some errors.

23 Q Can you tell me generally what the nature of those  
24 errors were?

25 A For example, in the channel roughness figures he

61

1 appears to have misplaced the decimal point.

2 Q What was the effect of that error?

3 A The model predicting a flood level, that was higher  
4 than it would have with a lower number.

5 Q Any other errors you noticed in his work?

6 A I believe there were but I would have to look at my

7 notes.

8 Q Okay. I'd like you to take a look on Page 9 of this  
9 section, No. 2, Round Lake Water Level, and in  
10 conjunction with that, figure 19, do you have those?

11 A Yes.

12 Q What I want to understand is how you arrived at the  
13 water levels that you've listed in figure 19. Tell me  
14 what steps you took to do the work that led to the  
15 conclusions shown in Section 2 on Page 9.

16 A Historic data was obtained on water levels at Round  
17 Lake during May, 2002.

18 Q And what was the source or were the sources of that  
19 data?

20 A I believe there were several sources, I don't recall  
21 all of them. Some of them were taken by Mr. Rieder  
22 and Mr. Hausman.

23 Q And you adjusted them according to the datum that you  
24 were using?

25 A Yes.

62

1 Q What did you do next?

2 A Using the HEC-RAS model I estimated the, tried to  
3 determine the profile based on that water level in  
4 Little Round Lake.

5 Q Now, on figure 18 it appears to show the recorded  
6 measurements of Round Lake level in 2002, is that  
7 correct?

8 A Yes.

9 Q Do you have any ability to tell me what the source was  
10 for each of those measurements?

11 A That information is in my files.

12 Q Okay, maybe we'll come back to that, but you took  
13 those data points for what you plugged into the  
14 HEC-RAS model to create the figure that's shown as  
15 No. 19?

16 A The peak level, I believe it was the peak level of  
17 77.65.

18 Q And when was that peak achieved?

19 A I would have to look at the exact date.

20 Q Is it depicted approximately on figure 18?

21 A Yes.

22 Q I'm assuming, but I want to make sure I'm right about  
23 this, that you're saying that the highest diamond  
24 shown on figure 18 is the peak level at the water on  
25 Round Lake achieved in 2002?

63

1 A The diamond shown on figure 18 is the peak recorded  
2 level.

3 Q Okay. And is that different than what your model  
4 showed to be the estimated peak level? In other  
5 words, was there a day where you estimate the water  
6 level was even higher than the highest diamond on  
7 figure 18?

8 A I did not try to simulate the 2002 event using a  
9 hydrologic model.

10 Q Okay. So the peak level shown on figure 19 then  
11 should be the same, shouldn't it, as the highest  
12 diamond shown on figure 18?

13 A Yes.

14 Q So you're not saying that you're estimating a level, a  
15 peak level that's higher than the diamond that  
16 reflects apparently an actual measurement of the water  
17 level on a given date in May of 2002?

18 A I did not simulate what the peak level would have  
19 been.

20 Q Okay. Going back to Page 9 of the report, I want to  
21 make sure that I'm talking to the right person about  
22 one point. The second sentence under No. 2 says,  
23 "These high water levels caused the shoreline erosion  
24 (failure) as discussed above." Is that a reference  
25 back to Mr. Solseng's work?

64

1 A Yes.

2 Q You're relying on him for that statement?

3 A Yes.

4 Q Did you do any work yourself to independently verify  
5 that high water levels caused the erosion or failure  
6 that Mr. Solseng describes?

7 A No.

8 Q On the next page, on Page 10, you talk about  
9 overtopping of Lake Placid dam, do you see that, in  
10 the third bullet point?

11 A Yes.

12 Q Do you have any data that shows that Lake Placid dam  
13 was actually overtopped during the Spring, 2002?

14 A No.

15 Q Do you have any data that allows you to say whether  
16 there in fact was an overflow from Lake Placid through  
17 the wetland in Spring, 2002?

18 THE WITNESS: Can you repeat that  
19 question?

20 (Reporter reads back last question)

21 A No.

22 Q The next sentence on Page 10 says, "Some of these  
23 inflows were continuous during the Spring 2002  
24 event." Which inflows do you believe were continuous?

25 A The groundwater inflows and the seepage through the

65

1 stoplogs at the Lake Placid dam.

2 Q What's your basis for saying that the groundwater  
3 inflow was continuous?

4 A Because it's based on the normal water level between  
5 the lakes.

6 Q You say that the groundwater inflow was about 1 cubic  
7 foot per second, do you see that at the top of that  
8 page?

9 A Yes.

10 Q Do you have a margin of error that you would apply to  
11 that estimate? How accurate, in other words, is  
12 1 cubic foot per second?

13 A I don't have a precise estimate of error.  
14 Q Do you have any estimate of whether you're within a  
15 given range of error with that estimate?  
16 A Not off the top of my head.  
17 Q Are you within, can you say that you're within 25  
18 percent?  
19 A I don't know that number.  
20 Q How about with respect to the seepage through the  
21 stoplogs, is that based on a measurement on a given  
22 date?  
23 A It's based on my observations in 2003.  
24 Q Did you actually measure the outflow of the seepage  
25 through the stoplogs on that date?

66

1 A Yes.  
2 Q And what did you come up with?  
3 A I believe it was 1.1 cubic feet per second.  
4 Q And did you attempt to correlate the elevation on the  
5 date when you took that measurement with the  
6 elevations that were observed in the Spring, 2002?  
7 A Elevations Tiger Cat flowage?  
8 Q Yes.  
9 A No.  
10 Q In that same report, I want to move on to the next  
11 section, letter C. Excuse me, let me back up and make  
12 sure I'm in the right place here. No, I missed one  
13 section I wanted to ask you about. On Page 13 I guess  
14 it would be Section B-4, Potential Continued Impacts

15 of High Water to Mr. Hausman's Property, do you see  
16 that?

17 A Yes.

18 Q Explain to me what you think the danger is of any  
19 continued impacts to Mr. Hausman's property.

20 THE WITNESS: Can you repeat that  
21 question?

22 (Reporter reads back last question)

23 A They're discussed in this section and include the  
24 potential for impacts to his residence.

25 Q How high does the water have to go before there's an

67

1 impact to his residence?

2 A There can be impacts to his residence from several  
3 different causes, from high groundwater or from the  
4 lake level.

5 Q Let's start with the lake level. How high does the  
6 lake level have to go before there's any impact of any  
7 kind on his residence?

8 A It's going to depend on the wave action and the level  
9 of his residence.

10 Q Right now based on what you consider to be the state  
11 ordered maximum level of Round Lake, how high does his  
12 sheet pile extend above that state ordered level?

13 A The top of the sheet pile is 2.3 feet above the state  
14 designated maximum level.

15 Q Okay. So the lake level is going to have to rise over



16 two feet not accounting for wave action before there's  
17 any overtopping of the sheet pile, right?

18 A Yes.

19 Q Is there any evidence in the materials that you've  
20 reviewed that the lake level has ever gotten that high  
21 in the last 20 years?

22 A No.

23 Q Okay. You also indicate, "High water may also impact  
24 Mr. Hausman's property from the rear side." Do you  
25 see that in the second paragraph under No. 4, second

68

1 sentence?

2 A Yes.

3 Q How high does the water have to get to impact his  
4 property from the rear side?

5 A I didn't do a detailed analysis of it, and it would,  
6 it would be impacted by the Lovejoy Lake elevation.

7 Q Okay. And you didn't study those potential impacts,  
8 true, is what your report says?

9 A No.

10 Q I want to ask you about the options that you've  
11 presented for what you say is minimizing the damage to  
12 Round Lake and that starts on Page 14 of Exhibit 125.

13 Do you see that?

14 A The options on Page 14?

15 Q The section Minimizing Damage starts there --

16 A Yes.

17 Q -- and includes the options on the next page.

18 A I see that section.

19 Q Okay. Have you made any analysis of, let's start with  
20 option 1, what option 1 would cost to complete?

21 A I did some preliminary costs, I believe, but it was  
22 before this option was finalized. So there was never  
23 a complete cost estimate of that option.

24 Q Can you give me a range of costs that you might  
25 anticipate with option 1?

69

1 A I cannot.

2 Q Can you give me a minimum that it would cost?

3 A No.

4 Q You can't put any figure on it at all?

5 A I haven't done an analysis to give you that.

6 Q Have you considered what permits would be necessary to  
7 achieve option 1?

8 A I did not evaluate which permits would be needed.

9 Q Well, can you tell me today what permits might be  
10 needed to lower the culverts at Highway NN to the  
11 natural stream bed elevation and to put in four,  
12 48-inch culverts, or is that not your area of  
13 expertise?

14 A I'm not familiar enough with the Sawyer County and  
15 Wisconsin regulations to list those.

16 Q Okay. Is the same true then with respect to widening  
17 the channel downstream of the Little Round Lake dam  
18 and lowering the bottom of the channel, you don't know

19 what permits would be required?

20 A Not offhand, no.

21 Q Do you know who owns the land adjacent to the area  
22 that you suggest would be excavated to a width of  
23 about 40 feet for a distance of 450 feet?

24 A I don't know who owns it.

25 Q Did you do anything to evaluate what the downstream

70

1 impact would be of widening the excavated channel  
2 downstream of the Little Round Lake dam and lowering  
3 the bottom of the channel?

4 A No.

5 Q Let me divide that into two categories. Did you give  
6 any consideration to the impact on downstream  
7 riparians if one widened the channel downstream in the  
8 Little Round Lake dam and lowered the bottom of the  
9 channel as you suggest here?

10 A That's beyond my expertise.

11 Q Did you give any consideration to the environmental or  
12 ecological effects of widening the channel downstream  
13 of the Little Round Lake dam?

14 A That's beyond my expertise.

15 Q Did you consider what it would cost to widen the dam  
16 to a total width of about 40 feet and lower the sill  
17 to elevation 74.2?

18 A No.

19 Q Did you give any consideration to what permits might  
20 be necessary for that work?

21 A No.

22 Q Did you give any consideration to what effect that  
23 change to the dam would have upstream or downstream,  
24 environmental effect, I mean?

25 A No.

71

1 Q With respect to option 2, did you do anything to  
2 estimate the cost that might be involved in taking  
3 that course of action?

4 A That was beyond the scope of what I was asked to do.

5 Q So is it fair to say that as to option 1 and option 2,  
6 since you haven't considered cost, permitting or  
7 environmental or riparian effects, you don't have an  
8 opinion on whether either of these two options is  
9 reasonable to suggest?

10 THE WITNESS: Can you read that  
11 back to me, please?

12 (Reporter reads back last question)

13 A I would have to have more information to know whether  
14 or not they were reasonable.

15 Q You'd want to know what they cost, right?

16 A Yes.

17 Q And you'd want to know what permits might be  
18 necessary, right?

19 A Yes.

20 Q And you'd want to know what construction methods and  
21 equipment might be necessary to do the work, true?

22 A Yes.

23 Q And that's because unless you know what construction  
24 methods and equipment are going to be used, you can't  
25 really evaluate what the environmental effect might be

72

1 of the work that has to be done to implement these  
2 options, correct?

3 THE WITNESS: Can you read that  
4 back, please?

5 (Reporter reads back last question)

6 A Evaluating the environmental effects is beyond my  
7 level of expertise.

8 Q Did you do any work to attempt to design the, for  
9 example, the widened dam that option 2 recommends?

10 THE WITNESS: Can you read that  
11 back again?

12 (Reporter reads back last question)

13 A I did a hydrologic and hydraulic analysis.

14 Q Did that include an analysis that made assumptions  
15 along the lines of what you've suggested here with  
16 respect to the channel width, length and width of the  
17 dam?

18 A Yes.

19 Q Okay. Other than that work, did you do any work to  
20 actually design the structure that you suggest be put  
21 in place in place of the Little Round Lake dam that  
22 exists today?

23 A That was beyond the scope of my work.

24 MR. WRIGHT: Take a break for a  
25 minute, go off the record.

73

1 (A short recess is taken)

2 Q Ms. Dent, I want to ask you a few questions about  
3 Exhibit 126, the County Highway NN report. Do you  
4 have that in front of you?

5 A Yes.

6 Q Is this report a product of your work or was anyone  
7 else at Barr involved? Let me back up. That isn't a  
8 good way to ask the question. Let me ask it  
9 differently. Are you the responsible author with  
10 respect to Exhibit 126?

11 A I am.

12 Q Okay. I don't need a whole list of people at Barr who  
13 might have helped you, it's just I want to make sure  
14 I'm asking the right person questions as among you and  
15 Mr. Lee and Mr. Solseng, okay?

16 A Yes.

17 Q Coming back to the GPS issue, I see on Page 1 of the  
18 report that you refer to the GPS measurements that  
19 were used as a part of establishing the datums and  
20 elevations, do you see that?

21 A Yes.

22 Q And I just want to make sure I understand, and maybe  
23 you've recalled better since we talked earlier this  
24 morning, who did the measurements using the GPS

25 equipment?

74

1 A I don't recall the name of the firm. I dealt directly  
2 with Dave Rieder, and Dave Rieder doesn't have the  
3 expertise in GPS, and he worked with this other guy.

4 Q Okay. But it's through Mr. Rieder, if I want to find  
5 out what equipment was used, that I should go to him  
6 as far as you're aware?

7 A Yes, some of that information is in my files as well.

8 Q Okay. You say on Page 2 that the Kaiser staff gauge  
9 was noted to read 0.38 feet high on various occasions,  
10 and we talked a little bit before about that. Was  
11 there any historical data that showed either that the  
12 Kaiser staff gauge was noted on other occasions to be  
13 correct or that it was noted to be off by some  
14 measurement other than 0.38 to your memory?

15 A I believe there was one occasion where it was noted to  
16 be off by .37 feet, but other than that, no, there  
17 was, that was it.

18 Q Now, I want to ask you about the County Highway NN  
19 analysis that starts on Page 3. And this analysis  
20 related, did it not, to the 100-year flood levels  
21 within the Round Lake system? That was one of the  
22 goals of the analysis was to analyze that situation of  
23 a 100-year flood?

24 A The goal of the analysis was to evaluate the impacts  
25 of the County NN culverts on the 100-year flood level.

75

1 Q Okay. And what we're assuming, though, is that there  
2 is a 100-year flood event as a part of this analysis,  
3 right?

4 A Yes.

5 Q Now, what I want to understand is what elevations you  
6 assumed were occurring or in place at the time the  
7 100-year event begins, okay?

8 A Okay.

9 Q So if you can walk me through, what I understand to be  
10 the case is that you assumed for this analysis that  
11 the groundwater inflows are 1 cubic foot per second  
12 greater than the outflows?

13 A That's correct.

14 Q And is that the same groundwater inflow assumption  
15 that was made in Exhibit 125 with respect to a study  
16 of the inflows into Round Lake?

17 A Yes.

18 Q So that hasn't changed when you're doing this analysis  
19 at all, your assumption remains 1 CFS of groundwater  
20 inflow?

21 A That's correct.

22 Q Now, with respect to the Lake Placid dam, you've  
23 assumed, have you not, that there are no stoplogs in  
24 the dam?

25 A That's correct.



1 Q Why have you made that assumption?

2 A Wisconsin Administrative Code NR 116 requires that  
3 assumption.

4 Q And why does it require that assumption?

5 A Because the Lake Placid dam is classified as a  
6 significant hazard dam.

7 Q So you're assuming that the operator of that dam  
8 recognizing the hazard from a 100-year event would  
9 remove all the stoplogs in order to minimize the  
10 buildup of water behind that dam to the extent  
11 possible?

12 A I didn't make any assumptions. I did what was  
13 required in NR 116.

14 Q Okay. Now, did you also assume that the Tiger Cat dam  
15 would be overtopped?

16 A No.

17 Q What did you assume about the Tiger Cat dam?

18 A I didn't make any assumptions about the Tiger Cat dam.

19 Q What did you assume the level of the Tiger Cat flowage  
20 to be for purposes of this analysis?

21 A I assumed the level to be at the overtopping elevation  
22 of the Tiger Cat dam.

23 Q Okay. And you also state that at the overtopping  
24 elevation the Tiger Cat dam in effect would be on the  
25 verge of failure, true?

77

1 A True.

2 Q And then you assume the flow from that area of the

3 Lake Placid and then the culverts under McClaine Road  
4 is limited to 30 CFS?

5 A Can you repeat that, please?

6 Q Let me ask it a different way. You're assuming, and  
7 let me direct you to the point where I'm referring to,  
8 you say on Page 3 next to No. 2, Lake Placid Dam  
9 Outflows, that the flow is estimated to be 30 CFS, do  
10 you see that?

11 A Yes.

12 Q And then you go on to say on the next page that the  
13 McClaine Road culverts act as a dam to restrict flows  
14 to 30 CFS, the culverts under the road?

15 A Yes.

16 Q So what you're assuming is that the maximum inflow  
17 into Round Lake is 30 CFS through that mechanism of  
18 the Lake Placid dam and into the culverts at McClaine  
19 Road?

20 A Yes.

21 Q Okay. I just want to make sure I understand what  
22 you're assuming there. Now, with respect to the Lake  
23 Placid Natural Overflow Routes, which is No. 4 on  
24 Page 4, do you see that?

25 A Yes.

1 Q Are these the same overflows that we were discussing  
2 earlier and which are reflected in Exhibit 125?

3 A Yes.

4 Q The same area of overflow through a wetland, isn't  
5 that what you're talking about?

6 A Through several wetlands, yes.

7 Q Okay. And so what assumption did you make about the  
8 level of Round Lake at the time that the 100-year  
9 event begins?

10 A I assumed that the lake was at the elevation where the  
11 outflows are equivalent to the base flow.

12 Q Can you say that again for me?

13 A I assumed that the lake was at an equilibrium  
14 elevation so that the outflows would equal the  
15 inflows, the base flow.

16 Q The base inflow into the lake would equal the outflow  
17 that's achievable through the existing control  
18 structures?

19 A That's true.

20 Q Okay. And what was in fact then assumed to be the  
21 elevation of Round Lake at the start of this 100-year  
22 event?

23 A I would have to look that up in the document.

24 Q It's not reflected in any of the tables or the --

25 A I don't recall. I believe in looking at Appendix C

79

1 that the elevation was 1345.77.

2 Q How does that convert to our 76.75 that you say is the  
3 state ordered maximum?

4 A You would use a conversion of 1268.02, subtract that  
5 from 1345.77.

6 Q 12 what?

7 A 68.02.

8 Q So you're a foot above the state ordered maximum, my  
9 math says that comes out to 77.75 which is a foot  
10 above the state ordered maximum?

11 A I would have to verify that in my head.

12 Q Well, the record will reflect what numbers you gave me  
13 and we can all add it up later, but I'm going to ask  
14 you to assume that if I come up with 77.75, that would  
15 be a foot above what you considered to be the state  
16 ordered maximum, right?

17 A Yes.

18 Q Okay. And that is above the peak water level in 2002  
19 shown in figure 19 of Exhibit 125, correct?

20 A I would have to look.

21 Q Please do.

22 (Witness examines document)

23 A No.

24 Q Or is it a tenth of a foot below? Well, let me ask it  
25 this way. The peak water level that was measured in

80

1 2002 according to your figures 18 and 19 was 77.65,  
2 true?

3 A I believe so.

4 Q And so if my math was correct with the numbers you  
5 just gave me and we start out your analysis in  
6 Exhibit 126 with a Round Lake level of 77.75, that

7 means you're assuming a lake level above the peak  
8 level that was measured in 2002, true?

9 A Yes.

10 Q Why would you assume that the lake level would be that  
11 high before you start your analysis of the 100-year  
12 flood event?

13 A My assumptions are based on the requirements of  
14 NR 116.

15 Q Which requires you to assume what?

16 A Requires you to assume that any significant hazard  
17 dams be -- I would have to look at the exact wording.

18 Q Well, paraphrase it for me, give me your best memory  
19 of what it required you to do.

20 A I believe it requires something about that the gates  
21 are fully open. I would have to read it.

22 Q That essentially any significant hazard dams have been  
23 opened to the extent that's possible?

24 A Yes.

25 Q And what does that mean for an assumption about the

81

1 Little Round Lake dam, anything? Does it have any  
2 application to that?

3 A Does NR 116 -- I'm sorry?

4 Q Did you make any assumptions about the Little Round  
5 Lake dam as a part of this analysis based on the  
6 requirements of NR 116?

7 A Yes.

8 Q What was your assumption about the Little Round Lake

9 dam?

10 A My assumption was that all the stoplogs are out of the  
11 dam.

12 Q So you're achieving the maximum outflow that that dam  
13 would permit?

14 A Yes.

15 Q And it's your belief that at the point of equilibrium  
16 the lake would be at, if my math is right, 77.75,  
17 making the assumption that the stoplogs are out and  
18 the inflows are as we've discussed?

19 A Yes.

20 Q I wanted to ask you about the table that starts on  
21 Page 7 of Exhibit 126, and it comes under the heading  
22 Hydraulic Analysis of Outflow Capacity?

23 A Yes.

24 Q This table shows the data source for each of the cross  
25 sections that you used in your HEC-RAS model?

82

1 A That's correct.

2 Q And when it says USGS quads and approximate depths,  
3 what does that mean?

4 A The USGS quadrangle maps were used to determine the  
5 cross sections in the lakes, in Little Round Lake.

6 Q How did you get the approximate depths?

7 A From the quadrangle map.

8 Q Okay. And did you assume a particular margin of error  
9 with respect to those data sources that were not

10 survey results?

11 A I'm not sure what you're asking.

12 Q Well, what I'm wondering is, first of all, you would  
13 agree with me, wouldn't you, that you would assume  
14 that the NWBE and Rieder surveys are more accurate  
15 measurements of what the cross sections were than are  
16 the USGS quads and the approximate depths from those?

17 A That's true.

18 Q And so what I'm wondering is whether you factored into  
19 your analysis any assumption about the range of error  
20 that might be inherent in the USGS quads?

21 A The cross sections that were obtained from the USGS  
22 quads were in reaches that were very wide in the  
23 lakes.

24 Q So what does that mean?

25 A Small errors would not have an impact on the analysis.

83

1 Q Did you do any testing to measure the sensitivity of  
2 the HEC-RAS model that you created?

3 A Yes.

4 Q What did you do?

5 A I looked at changes in the roughness coefficients.

6 Q You tested with different levels of hydraulic  
7 roughness?

8 A Yes.

9 Q What else did you do, if anything?

10 A I may have done some sensitivity with the ineffective  
11 flow areas around the crossing, stream crossing.

12 Q Anything else that you did to test the sensitivity of  
13 your model?

14 A That's all I can recall.

15 Q Okay. And generally speaking, I know you don't have  
16 the figures in front of you, but generally speaking,  
17 what did those sensitivity tests tell you about your  
18 model?

19 A The model with the water levels are highly dependent  
20 on the structures, the crossings over the streams  
21 less, there's -- small impacts in the sensitivity  
22 analysis did not make much difference on the water  
23 levels.

24 Q So the Round Lake water level did not change much if  
25 you changed the hydraulic roughness of the channel,

84

1 for example?

2 A Not significantly.

3 Q Okay. But it did change significantly if you changed  
4 the control structures?

5 A Yes.

6 MR. WRIGHT: Off the record.

7 (Discussion off the record)

8 Q Let me just ask you a general question about the wave  
9 event that Mr. Hausman contends caused a loss of  
10 shoreline in the Spring of 2002. Are you familiar  
11 generally with the claim that there was a loss of  
12 shoreline approximately eight feet or so as



13 Mr. Hausman says that occurred in the Spring of 2002?

14 A Yes.

15 Q I noted in going through the documents that you  
16 produced yesterday that your firm collected a lot of  
17 weather data related to May, 2002 and times either  
18 side of that, I think, but I don't see anything in  
19 your reports that reflects any analysis of what may  
20 have caused the shoreline loss in 2002 aside from the  
21 work that Mr. Solseng did, and none of that seems  
22 particularly related to weather other than some  
23 rainfall. Can you tell me generally what work your  
24 firm did to analyze the weather in 2002 and its effect  
25 or impact on Mr. Hausman's property?

85

1 A We did some preliminary calculations to see if we  
2 could estimate a wave height. We realized we needed  
3 more data. We tried to collect some data so that we  
4 could estimate the wave heights. There isn't a lot of  
5 data available, and therefore, we didn't take the  
6 analysis any further, because it would not change the  
7 opinion of Mr. Solseng. He didn't request that we  
8 take it any further.

9 Q So there was an effort started to determine what the  
10 wave heights might have been on Round Lake in Spring,  
11 2002, correct?

12 A Yes.

13 Q And as a part of that, from what I see in your file,  
14 you gathered wind data from places like Duluth and

15 Rice Lake and Hayward and I think maybe Spooner and  
16 other areas in the north land to try to determine what  
17 the winds might have been around that time, true?

18 A True.

19 Q And you also gathered rainfall data for those areas,  
20 right?

21 A Correct.

22 Q You also looked at temperatures that may have been  
23 present throughout April and May of 2002?

24 A Correct.

25 Q And was there any modeling done to try and model Round

86

1 Lake and determine what wave heights might be achieved  
2 at different wind speeds?

3 A No.

4 Q And was that simply because you lacked data that was  
5 close enough in proximity to Mr. Hausman's property to  
6 be reliable?

7 A Yes.

8 MR. WRIGHT: Go off the record for  
9 a second.

10 (A short recess is taken)

11 Q Can you tell me off the top of your head what Barr  
12 Engineering's total fees have been to date on this  
13 project?

14 A Not off the top of my head.

15 Q Can you estimate for me, I won't hold you to it, I

16 just want a range. I know you'll give me bills later  
17 or Lauren will.

18 A Greater than 50,000 but probably less than 100,000.

19 MR. WRIGHT: That's all the  
20 questions I have for you, thank you.

21 MS. AZAR: I have a few follow-up  
22 questions.

23 REEXAMINATION

24 BY MS. AZAR:

25 Q Ms. Dent, when Mr. Wright was asking you questions

87

1 about a presentation you gave at the same time as  
2 Mr. Carthel, you had mentioned that you were having a  
3 discussion with Mr. Carthel after the presentation, do  
4 you remember that?

5 A Yes.

6 Q And he asked -- strike that. You had stated that  
7 after the presentation you and Mr. Carthel were  
8 discussing the Round Lake situation, and that you  
9 discovered that you agreed on one or more items  
10 concerning the Round Lake situation, do you recall  
11 that testimony?

12 A Yes.

13 Q Could you tell me what items you and Mr. Carthel  
14 discovered that you agreed on?

15 A We agreed on the approximate capacity of the outflow  
16 from the Little Round Lake dam.

17 Q Do you recall agreeing upon anything else?

18 A The resulting flood levels, that was it. That's all  
19 that I can remember.

20 Q Mr. Wright also asked you some questions concerning  
21 options 1 and option 2 on Page 15 of Exhibit 125. Do  
22 you remember that line of questions?

23 A Yes.

24 Q Specifically, he asked you whether or not Barr  
25 Engineering or you specifically had rendered any

88

1 opinions concerning the reasonableness of option 1 and  
2 option 2, do you recall that?

3 A Yes.

4 Q And you stated no. Has Barr Engineering been retained  
5 to render an opinion on the reasonableness of  
6 options 1 and 2 on Page 15 of Exhibit 125?

7 A Not in specifics, no.

8 Q If Barr Engineering was asked to render an opinion  
9 concerning the reasonableness of option 1 and  
10 option 2, could Barr Engineering conduct the analysis  
11 that is necessary and render such an opinion?

12 MR. WRIGHT: Object to the form,  
13 foundation. Go ahead and answer.

14 A Yes.

15 MS. AZAR: What's wrong with the  
16 form?

17 MR. WRIGHT: It's leading.

18 MS. AZAR: No further questions. I

19 wanted to just let Joe know that I had mentioned  
20 to the court reporter that we wanted to reserve  
21 signature on everything.

22 MR. WRIGHT: That's fine. No other  
23 questions, thank you.

24 (12:15 p.m.)

25

89

1 STATE OF WISCONSIN )  
 )ss.  
2 COUNTY OF DANE )

3 I, GREGORY GASSEN, a Notary Public in and for the  
4 State of Wisconsin, do hereby certify that the above  
5 deposition was taken before me at the offices of Stafford  
6 Rosenbaum LLP, Attorneys at Law, Three South Pinckney  
7 Street, in the City of Madison, County of Dane and in  
8 said State, on January 18, 2005, commencing at  
9 9:00 o'clock a.m.; that it was taken at the request of  
10 the defendant, upon verbal interrogatories; that it was  
11 taken in shorthand by me, a competent court reporter and  
12 disinterested person, approved by all parties in  
13 interest, and thereafter reduced to writing by me using  
14 computer-aided transcription; that said deposition is a  
15 true record of the deponent's testimony; that said  
16 deposition is to be used in the above-entitled action now  
17 pending in Circuit Court; that the appearances were as  
18 shown on Page 2 of the deposition; that reading and  
19 signing was not requested; that the said NANCY JOHNSON  
20 DENT, P.E., before examination, was sworn by me to

21 testify the truth, the whole truth, and nothing but the  
22 truth relative to said cause.

23 Dated January 25, 2005.

24

25

---

Notary Public, State of Wisconsin  
90