## BEFORE THE STATE OF WISCONSIN

DIVISION OF HEARING AND APPEALS

In the Matter of Manual Code 3565.1 for the Approval Authorizing the Department of Natural Resources to Grade More Than 10,000 Square Feet On the Bank of North Lake, Install A Boat Launch Structure and Two Case No. IP-SE-2009-68 Outfall Structures on the Bed of -05745, -05746, -0547, North Lake, Install Four Culvert -05748, -05749, -05750 Crossings Over Wetlands, and Fill Up to 0.16 Acres of Wetland For Construction of a Public Boat Launch on North Lake and Adjacent Property Located in the Town of Merton, Waukesha County, Wisconsin

Examination of ANDY HUDAK, taken at the instance of Reddelien Road Neighborhood Association, under and pursuant to all applicable rules, before JESSICA R. WAACK, Registered Merit Reporter, Certified Realtime Reporter, Registered Diplomate Reporter and Notary Public in and for the State of Wisconsin, at Quarles & Brady, 411 East Wisconsin Avenue, Milwaukee, Wisconsin, on Thursday, August 25, 2011, commencing at 1:04 p.m. and concluding at 5:35 p.m.

```
1
                     APPEARANCES
 2
    MR. WILLIAM C. GLEISNER, III,
    ATTORNEY AT LAW,
    300 Cottonwood Avenue, Suite 3,
 3
    Hartland, Wisconsin 53029,
    appeared on behalf of the Reddelien Road Neighborhood
 4
    Association.
 5
    QUARLES & BRADY, LLP, by
    MR. WILLIAM H. HARBECK,
 6
    411 East Wisconsin Avenue,
 7
    Milwaukee, Wisconsin 53202,
    appeared on behalf of Reddelien Road Neighborhood
 8
    Association.
 9
    REINHART, BOERNER, VAN DEUREN, S.C., by
    MR. DONALD P. GALLO,
    N16 W23250 Stone Ridge Drive, Suite 1,
10
    Waukesha, Wisconsin 53188,
11
    appeared on behalf of the North Lake Metropolitan
    District.
12
    STATE OF WISCONSIN,
13
    DEPARTMENT OF NATURAL RESOURCES, by
    MS. EDWINA KAVANAUGH,
    101 South Webster Street,
14
    Madison, Wisconsin 53707-7921,
    appeared on behalf of the Department of Natural
15
    Resources.
16
                    ALSO
                              PRESENT
17
    DR. NEAL T. O'REILLY
18
    MR. DONALD E. REINBOLD
    MR. ROBERT MOEBIUS
19
    MS. DORIS LATTOS
20
                            * * * * *
21
22
23
24
25
```

1 INDEX 2 Examination: Page 3 By Mr. Gleisner..... 7 4 By Mr. Gallo..... 128 By Mr. Gleisner..... 163 5 Exhibit Identified: 6 Page 7 No. 00 -Notice of Examination..... 8 No. 1 -Manual Code Approval Granting 8 Permission to Construct a Boat Launch... 23 Wisconsin Department of Natural No. 1-A -9 Resources' Witness List ..... 8 Document Entitled, "Waterway and No. 1-B -10 Wetland Handbook, Chapter 30, Navigability"..... 89 No. 1-C -Training Materials.... 11 163 No. 1-D No. 1-E -12 No. 1-F -Training Documents..... 168 No. 2 -13 Plat of Survey Done By Welch Hanson ..... 25 No. 3 -Final Plans of the DNR For the North 14 Lake Site..... 64 No. 4 -DNR's Answers to Interrogatories..... 45 No. 5 -15 Kapur Report..... 168 No. 6 -Set of Site Plans That Accompanied the 16 Kapur Report..... 170 No. 7 -Gestra Report.... 169 17 No. 8 -Drawing Done By the DNR on December 4, 104 2008...... No. 9 -Drawing With Station Markers..... 18 71 No. 10 -Drawing Done By North Lake Management 19 82 District..... No. 11 -86 Photograph..... 20 No. 12 -Aerial Photograph Done By Reddelien Road's Engineers..... 80 21 No. 13 -Drawing Done By the DNR..... 27 No. 14 -Drawing Done By the DNR..... 27 22 23 24 25

INDEX 1 CONT'D 2 Exhibit Identified: Page 3 No. 100 -Flyover Air Photo of the Eastern Extent of the DNR Site Encompassing the 4 Parking Area..... 93 No. 100-A -Same Picture As Exhibit 100 and Also 5 Marked on By Mr. Hudak..... 143 Photograph Taken Facing South Looking No. 101 -6 At the Parking Lot Area, DNR Launch Side..... 106 7 No. 102 -Photograph of the Boat Launch Site ..... 113 No. 103 -North-Facing Vantage Point of the DNR 8 Launch Side..... 114 No. 104 -Series of Emails With Attachments..... 131 9 No. 105 -Design Drawings Dated February '08..... 134 No. 106 -Photograph Titled, "Winter 1968"..... 145 Photograph Titled, "Predevelopment No. 107 -10 1937"..... 145 11 No. 108 -Letter Comment From Mr. Gallo Dated December 10, 2008 to Jim Ritchie..... 150 12 No. 109 -Document Dated October 12, 2010..... 152 13 Disposition Of Original Exhibit/s: 14 Exhibits Nos. 00 through 14 were returned to Mr. Gleisner. Exhibit Nos. 100 through 109 were 15 returned to Mr. Gallo. A copy of the original exhibits in 8 1/2 X 11 size was included in the 16 original transcript. 17 18 Requests: Page Line 19 By Mr. Gleisner - For Mr. Hudak to Check His File Regarding Site 20 Elevations Taken From Under the Road..... 10 52 21 22 23 24 25

1 TRANSCRIPT OF PROCEEDINGS 2 (Exhibits were marked prior to the start of the deposition.) 3 ANDY HUDAK, called as a witness 4 herein, having been first duly sworn on oath, was 5 examined and testified as follows: 6 MR. GLEISNER: I'd like to first state, 7 8 for the record, that I received yesterday 9 afternoon about 250 pages of material that I hadn't had before. I've put those materials into 10 11 separate packets. Edwina? 12 MS. KAVANAUGH: Are you talking about 13 that training stuff? 14 MR. GLEISNER: Yeah. And I've also marked them, et cetera. I haven't had a chance to 15 completely digest them. And depending on what we 16 17 learn today, it may be possible I'll need to recall him as a witness based on some of the 18 19 material that I only got possession of yesterday. 20 MS. KAVANAUGH: Well, I don't know what Andy's got -- it's training material. Basically, 21 it speaks for itself. 22 23 MR. GLEISNER: Yeah. 24 MS. KAVANAUGH: You know, it's PowerPoints. So I don't think Andy's going to be 25

1 able to tell you very much about it. And just in 2 an effort to be inclusive, since you were asking about navigability and Bob had mentioned somebody 3 had compiled all the stuff onto one place, the 4 5 training materials on navigability ... 6 MR. GLEISNER: Are you going to tape 7 record this? 8 MS. KAVANAUGH: Yes. 9 MR. GLEISNER: Maybe I'll wait while you get that situated. Maybe while you're doing that, 10 I'll ask you a couple questions that won't slow 11 12 you down. Is this your 804.52(e) witness? 13 MS. KAVANAUGH: Yes, it would have to 14 be. 15 MR. GLEISNER: Okay. Fine. MS. KAVANAUGH: Again, like I said, some 16 17 of those other questions about, you know, the manual code approval, I would say it speaks for 18 19 itself. I don't know whether Andy can answer 20 simple questions about it. MR. GLEISNER: Sure. We'll do our very 21 best to make it relevant to navigability 22 23 throughout. 24 MS. KAVANAUGH: Because that is the 25 issue.

1	MR. GLEISNER: That certainly is the
2	issue. You tell me when you're ready, Edwina.
3	MS. KAVANAUGH: Yes.
4	(Discussion held off the record.)
5	EXAMINATION
6	BY MR. GLEISNER:
7	Q Would you please state your name for the record.
8	A Andrew Hudak.
9	Q What is your present condition?
10	A My present position is water resource specialist.
11	Q For the Department of Natural Resources?
12	A For the Department of Natural Resources.
13	Q And how long have you been with the DNR?
14	A I started I was hired on permanently in
15	January of 2006.
16	Q Now, I'm going to show you
17	MS. KAVANAUGH: I want to make sure this
18	is working first, Bill.
19	MR. GLEISNER: Pardon me?
20	MS. KAVANAUGH: I want to make sure
21	first this is working, and it doesn't seem to be.
22	(Discussion held off the record.)
23	BY MR. GLEISNER:
24	Q Now, I'm going to show you what has been marked
25	RRNA Exhibit 00.

1 MR. GLEISNER: For the record, every 2 time I mention an exhibit number that I am offering, we'll just assume RRNA, Madame Reporter. 3 BY MR. GLEISNER: 4 5 Have you seen that, Mr. Hudak? Q 6 If this is the most recent, yeah, I would say I Α 7 have seen it, but I have not read it thoroughly. 8 Well, we're just going to make that part of the Q 9 record. That was the notice of examination that was served on you under 804.05(2)(e), which says 10 we want to ask you certain questions on behalf of 11 12 the agency. 13 And this is going to be different -- a 14 little bit different than the questions that we're 15 going to ask you with respect to your responsibilities on the Kraus site and your other 16 17 responsibilities with regards to navigability, et 18 cetera. 19 I would like to start in that regard by 20 having you take a look at what has been marked here as Exhibit 1-A. This was prepared by your 21 22 counsel. 23 MR. GLEISNER: You want your own copy, 24 Edwina? 25 MS. KAVANAUGH: Yes.

1 BY MR. GLEISNER:

2	Q	Your counsel has stated that you'll be able to
3		testify to the materials that are set forth in
4		that first paragraph. Take a moment and look at
5		them and see if those comport with your
6		understanding to what you will be testifying to
7		today.
8	A	It's accurate.
9	Q	All right. Would you please read that into the
10		record for me so we have a road map here?
11	A	"Mr. Hudak is the DNR water management specialist
12		who processed the application and issued the
13		manual code approval for the DNR North Lake boat
14		launch."
14 15		launch." "He may be called to testify to issues
15		"He may be called to testify to issues
15 16		"He may be called to testify to issues related to this matter of which he has knowledge
15 16 17		"He may be called to testify to issues related to this matter of which he has knowledge including DNR processing and analysis of the
15 16 17 18		"He may be called to testify to issues related to this matter of which he has knowledge including DNR processing and analysis of the application for a manual code approval, DNR
15 16 17 18 19		"He may be called to testify to issues related to this matter of which he has knowledge including DNR processing and analysis of the application for a manual code approval, DNR determination that the project met the standards
15 16 17 18 19 20		"He may be called to testify to issues related to this matter of which he has knowledge including DNR processing and analysis of the application for a manual code approval, DNR determination that the project met the standards to issue manual code approval, DNR determination
15 16 17 18 19 20 21		"He may be called to testify to issues related to this matter of which he has knowledge including DNR processing and analysis of the application for a manual code approval, DNR determination that the project met the standards to issue manual code approval, DNR determination of the location and extent of navigable waterways
15 16 17 18 19 20 21 22		"He may be called to testify to issues related to this matter of which he has knowledge including DNR processing and analysis of the application for a manual code approval, DNR determination that the project met the standards to issue manual code approval, DNR determination of the location and extent of navigable waterways of the State on and adjacent to the DNR, formerly

1 properties." 2 Q Thank you very much. Now, all of the exhibits that I'm going to give to you, just keep in front 3 of you, because those are going to become the 4 5 exhibits --MR. GLEISNER: With your permission, 6 Edwina, we'll just let the court reporter take 7 8 charge of the exhibits when the deposition is 9 over. Once we're done? 10 MS. KAVANAUGH: 11 MR. GLEISNER: Yes. That's my 12 preference. 13 BY MR. GLEISNER: Now, the first part of that is what I want to 14 Q 15 inquire into for a short while. We want to understand how the agency operates with regard to 16 17 manual code. Now, we're not trying to get a -- you 18 19 know, everything that manual code stands for. I'm 20 only interested in manual code as it relates to issues of navigability or similar issues. 21 So could you explain to us how the DNR 22 23 actually employs the manual code process and when 24 it employs it? 25 I can specifically state during the manual code Α

1 process as far as waterway or wetland regulatory 2 projects are concerned that what portion of the DNR is actually applying for the application, 3 whether it would be a wildlife project or a 4 5 fishery's project that are doing projects in or near navigability waterways or wetlands, will seek 6 7 to have that project reviewed under the manual 8 code process. 9 Can you explain to me how the manual code process Q works? When is it triggered? Let's start there. 10 11 Α When a project has been identified to potentially 12 impact or be adjacent to a navigable waterway or 13 wetland. And I'm afraid I'm not quite clear. 14 Is the manual Q 15 code a process that the DNR uses when it's applying for a permit as opposed to a citizen? 16 17 Α It's the process that the entity within the DNR is proposing a project, comes to the appropriate 18 19 staff to ensure that specific standards or 20 concerns are met as it relates to navigable waterways or wetlands. 21 22 Q Let's back up a moment. Let's just take the 23 specific Kraus property here. The DNR owns that 24 property, correct? Α To the best of my knowledge, correct. 25

1 Q So when the DNR applies for a manual code permit, 2 it's actually --MS. KAVANAUGH: I object. 3 It's not a permit. Remember? It's approval. We're not 4 5 subject to permitting. 6 MR. GLEISNER: Very, very good. 7 BY MR. GLEISNER: 8 When it applies for an approval, it is, in effect, Q 9 applying for the same type of device that a citizen would use when applying for a permit? 10 I'll object. Clarify 11 MS. KAVANAUGH: 12 "device." I mean, the manual code speaks for 13 itself, and it says when it's employed in the manual code, and you've been provided a copy of 14 15 the manual code. MR. GLEISNER: And I don't 16 Sure. understand how it works. I'm trying to 17 18 understand. BY MR. GLEISNER: 19 20 Is the manual code what the DNR uses when it's 0 applying for approval from itself? 21 The manual code is the process that the DNR uses 22 Α 23 to apply the similar standards that a private 24 entity or a private citizen would have to gain 25 approval to do a similar-type project in a

1

navigable waterway or wetland.

2	Q	So, in other words, if a corporation, say the
3		Walgreen corporation came to the Kraus site and
4		said, "We want to do certain things there that
5		relate to construction of putting in pavement,
6		putting in a building," whatever, they would
7		they would apply to the DNR for a permit, is that
8		correct?
9	A	Provided what activity they're doing
10	Q	Let's say putting in pavement.
11	A	is under DNR jurisdiction.
12	Q	Yes, yes. Putting in pavement in the type of land
13		that is there, would they apply for a permit?
14	A	Putting in pavement may not assert jurisdiction on
15		that site. That may not be the sole regulatory
16		factor that would require a permit on that site.
17	Q	And so a private citizen such as the Walgreens
18		corporation wouldn't have to apply for a permit
19		for the Kraus site?
20	A	Depending upon the location of the pavement,
21		depending upon the extent of size of disturbance,
22		they may not need to. It all depends upon, again,
23		the regulatory authority of the DNR on the
24		particular project that they're proposing.
25	Q	And when they apply for a manual code approval,

1 the DNR -- one department of the DNR is applying 2 to another department of the DNR? Is that how it works? 3 MS. KAVANAUGH: That's not a 4 clarification. The department is the department. 5 6 BY MR. GLEISNER: So the department is applying to the department? 7 Q 8 MS. KAVANAUGH: One -- there are 9 subdivisions --MR. GLEISNER: Uh-huh. 10 MS. KAVANAUGH: -- of the department. 11 12 And if one bureau or one section or one division 13 wants to undertake an activity --14 MR. GLEISNER: Sure. 15 BY MR. GLEISNER: Now, Mr. Hudak, I'd like you to answer this -- and 16 0 17 I appreciate the comments of counsel, but I'd like you to answer this: When you sought manual code 18 19 approval for the Kraus site, what subdivision or 20 part of the DNR made the application, and what part or subdivision of the DNR acted on the 21 22 application? 23 I would say that it was an application by the -- I Α 24 don't know the exact title, but it would be 25 basically kind of the land management portion of

1		
1		the DNR that would be in charge of doing
2		improvements on DNR property. And in this case,
3		it would be the public access.
4	Q	Okay. And who would they apply to?
5	A	They aren't applying. They're submitting
6		paperwork to determine whether or not their
7		project meets applicable standards for the
8		jurisdiction that may be asserted on that site.
9	Q	Now, if a company came along, wouldn't they have
10		to also make certain that they were complying with
11		applicable regulations?
12	А	Yes.
13	Q	They'd have to come and talk to you, right?
14	A	Not necessarily. It all depends on whether or not
15		the application they're making is meets one of
16		the criteria, one of the authorities the
17		department has to review in association with
18		navigability waterways or wetlands.
19	Q	But if a corporation made an application for
20		whatever work they were going to do on a site like
21		the Kraus site, you would be acting as a neutral
22		enforcer of environmental laws in reviewing that,
23		correct?
24	A	I would say that would be correct, that I would
25		review any applicable activity that would have

Brown & Jones Reporting, Inc. 414-224-9533

1 department jurisdiction over that activity. 2 Q And who has oversight over the DNR when it decides that it's going to grant itself manual code 3 4 approval? 5 MS. KAVANAUGH: That's a vague guestion. MR. GLEISNER: Let me be more specific. 6 7 MS. KAVANAUGH: Yeah, be more specific 8 as to the DNR agency. 9 BY MR. GLEISNER: Yeah, we should remember the record, all of us. 10 Q 11 One person speaks at a time. Who makes certain 12 that the DNR is playing by the same rules as the 13 public? MS. KAVANAUGH: And object, it's vague. 14 15 What do you mean by "the same rules as the public"? Are you asking whether it's the same 16 17 statutory standards? BY MR. GLEISNER: 18 19 Q I am asking that in the same circumstance where 20 the DNR is seeking manual code approval and a private citizen is seeking the same kind of 21 approval on a different piece of land, where all 22 23 things are equal except that one case you're 24 seeking manual code approval for DNR property and 25 in another case a private citizen is seeking a

1 permit from you as an enforcement agency, who or 2 what in the DNR ensures that the DNR plays by the same rules as the private citizen? 3 MS. KAVANAUGH: And, again, I'll object 4 5 "the same rules." Are you asking who ensures that it meets the statutory standards? 6 7 MR. GLEISNER: Counsel, the question's 8 clear. 9 MS. KAVANAUGH: The question isn't It's vague. The same rules? Playing by 10 clear. the same rules? 11 12 MR. GLEISNER: Let's see if he can 13 answer it. The only answer that I can 14 THE WITNESS: 15 provide is that a water management specialist is entrusted to enforce Chapter 30 and wetland rules 16 17 with projects that may impact, be adjacent to, in 18 proximity to wetlands or navigable waterways of 19 the State. 20 BY MR. GLEISNER: Okay. Let's go with that. Let's say, for 21 Q example, that Walgreens decides they're going to 22 23 build a building where there is clearly wetlands 24 present, okay? 25 And they come to you, and they apply

1 under Chapter 30, probably under -- well, let's 2 say that there may be navigable water on there, just to bring this closer to home, under 3 Chapter 30.10. 4 5 And they say, "We want to put something in the navigable waters here," okay? What would 6 7 that private entity have to do to get a permit 8 from you? 9 MS. KAVANAUGH: I would object. The question is so confusing. You've thrown in 10 wetlands, you've thrown in the definition of 11 12 navigable waters, you've thrown in Chapter 30. If 13 you would clarify your question ... 14 MR. GLEISNER: Certainly. 15 MS. KAVANAUGH: What type of application are they seeking? 16 BY MR. GLEISNER: 17 If a private corporation wants to build a building 18 0 19 or a structure in a place where there are 20 navigable waters, what permit would they have to seek? 21 There may be, and I'll say maybe, because we don't 22 Α 23 know the extent of the project --24 Q Uh-huh. -- Chapter 30 jurisdiction. Or in a case of 25 Α

1		wetlands, potentially water quality certification
2		requirements or permits needed to build that
3		Walgreens.
4	Q	And who would, in the DNR, determine whether they
5		needed a permit?
6	А	That would be the water management specialist.
7	Q	And when the DNR seeks to build a comparable
8		structure, we're not necessarily talking Kraus
9		here, but a comparable structure where there's
10		navigable waters, who do they apply to in the DNR?
11	A	They would seek guidance and provide plans to a
12		water management specialist to determine whether
13		or not there is jurisdiction, whether or not there
14		are applicable standards that need to be met with
15		that particular project.
16	Q	Being sensitive to counsel's concerns now, we have
17		identical plans, an identical the DNR wants to
18		put a structure A in navigable water or near
19		navigable water, and the DNR wants to put a
20		structure in navigable water (sic).
21		Who in the DNR ensures that the same
22		standards that apply to the private citizen apply
23		to the DNR?
24		MS. KAVANAUGH: And just object. You
25		say in or near. Are you talking about either one

1 or one or the other? 2 MR. GLEISNER: Counsel, you're being an obstructionist. 3 MS. KAVANAUGH: No, I'm not. 4 I'm trying to get you to ask clear questions. 5 6 BY MR. GLEISNER: 7 Q The question is: If the DNR wants to put a 8 structure in navigable water, period, and a 9 private citizen wants to put a structure in navigable water, period, who ensures that the same 10 standards apply to both? 11 12 Α That would be the water management specialist. 13 Q And the water specialist person would be somebody 14 such as you? 15 Depending upon the location, within the western Α half of Waukesha County at that time, that would 16 17 have been me. So if someone representing Walgreens came to you 18 Q 19 and said, "I want to put a structure in navigable 20 waters," just briefly, not in great detail, what process would you go through? 21 That's very vague. I'm not really sure what 22 Α 23 activity you're asking me to answer as to what 24 process, because there's potentially different processes with different activities. 25

1	Q	Okay. What standards would you look to in
2		assessing an application to put a structure in
3		navigable waters?
4	А	The five basic standards are whether there's an
5		navigational impact from that structure; whether
6		or not there's a recreational impact from that
7		structure; whether or not there's fish and
8		wildlife impact from that structure; whether or
9		not there's a natural scene of beauty impact from
10		those structures.
11	Q	Okay. Now, when you put when you're put in the
12		position of the DNR asking to put an identical
13		structure in navigable waters, what are the
14		standards that you apply in assessing that
15		request?
16	A	The same.
17	Q	The same standards?
18	А	Correct.
19	Q	Now, meaning no offense, because I'm sure you're a
20		very fair and honest man, who oversees you to make
21		sure you apply the same standards with an equal
22		hand?
23	А	I would have to say the DNR section chief.
24	Q	And that would be who?
25	A	Liesa Lehmann-Kerler.

I		
1	Q	And this lady is what in the DNR? What's her
2	А	She's the section chief of the basically she's
3		the water management specialist section chief that
4		oversees both the water management division and
5		also the dam safety division. They're the same
6		under her, same bowl.
7	Q	And who oversees her to make sure that she is
8		ensuring that the DNR and the private citizen are
9		treated the same in the circumstance we've
10		described?
11	A	I would have to say probably the division
12		administrator.
13	Q	Who is?
14	A	Currently?
15	Q	Uh-huh.
16	A	Ken Johnson.
17	Q	And who oversees him?
18	A	I would have to say probably the up to the top
19		would be the secretary. I believe that's
20		again, keep in mind, things are changing a little
21		bit now.
22	Q	Yeah, I understand.
23	A	So I'm trying to understand. That right now,
24		that's pretty much the process.
25	Q	So if I understand you correctly, and you tell me

Г

1 if I'm wrong, for most purposes, a permit applied 2 for by an individual to place a structure in navigable waters and a permit applied for by the 3 DNR to put a structure in navigable waters are the 4 same, but the DNR is passing judgment on itself 5 quite a ways up the ladder? 6 7 Α Project standards are similar, identical. The 8 review process is the permit path for the private 9 individual and the manual code process for DNR projects. 10 We'll come back to this, but I'd like to turn to 11 Q 12 the specifics now of what you did. I'm going to 13 show you what has been marked as Exhibit 1, and 14 I'm going to pass that over to Edwina. Would you 15 identify this for the record, please. 16 This would be the manual code approval granting Α 17 permission to construct a boat launch at the DNR property on the west side of North Lake. 18 19 And we'll get back to this in a little while, but Q 20 is this still an accurate survey? This was done in 2008. I mean, I can give you a copy, and I 21 will in a little while. But does that look 22 accurate to you? 23 24 I don't know the origin of that, but it's vaguely Α similar to the general aerial extent of the DNR 25

1 site on the west side of North Lake. 2 Q Okay. The witness is referring MR. GLEISNER: 3 to a plat of survey done by the DNR in 2008, and 4 5 we will -- it is marked as an exhibit, and we'll get back to it. 6 7 BY MR. GLEISNER: 8 Q But I just wanted to understand that this 9 Exhibit 1 relates to the Kraus site and relates to the manual code approval of the boat launch that 10 11 you proposed putting into that site, is that 12 correct? 13 Exhibit 1 relates to the DNR's approval for Α construction to have a boat launch at the DNR site 14 15 on the west side of North Lake, also formerly known as the Kraus site. 16 17 Q Take a moment and tell me where in there you talk about navigability. 18 19 THE WITNESS: Can you provide additional 20 detail of what you want to know about navigability as it relates to the findings of this --21 BY MR. GLEISNER: 22 23 Tell you what, I'll make you a deal. Find me the Q 24 word "navigability" or "navigable" in there. 25 MS. KAVANAUGH: I can.

Counsel, you're not 1 MR. GLEISNER: 2 testifying. But thank you. THE WITNESS: She's a faster reader than 3 Under findings of fact No. 2. 4 I am. 5 BY MR. GLEISNER: And what tests were performed to substantiate 6 Q 7 finding of fact No. 2? 8 The discussion about North Lake and the Oconomowoc Α 9 River are taken from a lake drainage -- or basically, yeah, our lake book to describe the 10 characteristics of North Lake as it's deemed as a 11 12 navigable waterway and the Oconomowoc River. 13 The portions of the wetland complex and portions of the site that were determined to be 14 15 navigable would have been analyzed during the field visits that were -- occurred in the fall of 16 17 October. Did you supervise these field visits? 18 Q 19 I was -- I was in attendance. Α 20 I'm going to show you what was marked as 0 Exhibit 2. And now we'll get to --21 MR. GLEISNER: Edwina. 22 23 BY MR. GLEISNER: 24 Q And now we'll get to the plat that's up here on 25 the easel. This is a plat of survey. It is done

1 by Welch Hanson. It's now part of Yaggy Colby. 2 I've confirmed that this is a DNR survey, and it's represented as such on the face of the survey. 3 I'd like you to do something for me. 4 5 I'm going to give you a nice purple pen here. And prior to -- I want to be specific about this. 6 7 Prior to the issuance of the manual code approval on November 4, 2010, would you show me --8 9 this is identical to what you got in front of you. Would you show me where you did navigability tests 10 on the property? 11 12 Α Prior to what date? 13 Q Prior to November 4, 2010, the date that you 14 issued the manual code approval for this property. 15 MS. KAVANAUGH: Would you clarify what you mean by "navigability test"? 16 17 MR. GLEISNER: Any navigability test. BY MR. GLEISNER: 18 19 In fact, in other words, the type of tests that 0 20 were done in the Village of Menomonee Falls, DNR, for example. But any tests that were done to 21 22 confirm navigability. 23 MS. KAVANAUGH: Okay. 24 THE WITNESS: There were no, in fact, 25 navigability tests done prior to the 2010

1 decision. During the field visits prior to the 2 decision, there were professional judgment observations documented that led to the ultimate 3 areas of potential navigability. 4 5 BY MR. GLEISNER: 6 Okay. I'm going to skip ahead here for a moment Q 7 and pull out another exhibit. 8 MR. GLEISNER: Edwina, here's your copy. 9 MS. KAVANAUGH: Thank you. 10 MR. GLEISNER: You're welcome. BY MR. GLEISNER: 11 This has been marked as Exhibit No. 13. 12 0 When did 13 the DNR do this drawing? 14 It's not a drawing I did. I do not know the Α 15 information on that. I'm going to show you what has been marked as 16 Q Exhibit 14. 17 18 MR. GLEISNER: Edwina, here's your copy. BY MR. GLEISNER: 19 20 Did the DNR do that one? 0 Again, I did not produce this, so I can't confirm 21 Α or deny that it was a DNR document. 22 23 Fair enough. Using this light blue pen and Q 24 referring back now to Exhibit No. 2, tell me, if 25 you would, the location of any streams on that

1 And I'm saying the Kraus property now. property. 2 MS. KAVANAUGH: The former Kraus 3 property. 4 MR. GLEISNER: Yes, yes. Thank you, 5 Edwina. THE WITNESS: Would you like me to 6 7 identify streams or --BY MR. GLEISNER: 8 9 I would like -- I'm sorry. I apologize. Q Go ahead. 10 Α I apologize. I would like to know, first of all, 11 Q 12 are there any streams on the Kraus property? 13 Let's start there. 14 Α An area identified as a waterway that had 15 potential navigable characteristics was located along the northern portion of the property 16 boundaries. 17 Would you mind, if you can, taking this light blue 18 Q 19 pen, could you draw a line where that --20 understanding it's going to be an approximation --21 where that stream or that waterway was or is? On Exhibit 2? 22 Α 23 Yes, ma'am -- yes, sir. Sorry about that. Q Yes, 24 sir. 25 Α That was a location where a defined waterway was

1 present.

Ŧ		present.
2	Q	Would you, please, initial that? What you just
3		wrote on Exhibit 2, would you just initial that,
4		please?
5	A	(Witness complies.)
6	Q	Now, could you just pass that to me for a moment
7		and let me just
8	A	(Witness complies.)
9	Q	So you've identified an area to the north of the
10		former Kraus parcel, and you've gone back to
11		you've gone back approximately 200 feet?
12	A	Approximation.
13	Q	Yes, of course. That stream does not continue on?
14	A	A stream with perceivable flow, no.
15	Q	Is there a stream that connects to that?
16	A	There is additional water courses to the west that
17		have navigability features.
18	Q	Could you draw here, let's not be unclear. I
19		want to make sure the record is clear.
20	A	Sure.
21	Q	Take this green pen. We both will prosper if we
22		have a clear record here. And draw for me from
23		that blue point west where that waterway with
24		navigable features is located, please.
25	A	There is not great detail on this, but I will draw

1		approximations.
2	Q	I appreciate that.
3	A	(Witness complies.)
4	Q	Thank you very much. Now, could you, please, just
5		put your
6	A	Yep, I got one here.
7	Q	Thank you very much.
8	A	(Witness complies.)
9	Q	So, now, if I may have that back for just a
10		moment.
11	A	Yep.
12	Q	Thank you very much. You have drawn a green line
13		around the western portion of the former Kraus
14		site, and you've intersected the northwest corner
15		of the Hanson property where the DNR now owns an
16		easement, is that correct?
17	A	I have drawn a line across the Hanson property.
18	Q	Is that the northwest corner of the Hanson
19		property? Can we agree to that?
20	A	That is the northwest corner of the Hanson
21		property, the northern northwest corner of the
22		Hanson property.
23	Q	Thank you very much. Now, this area that you've
24		drawn a green line around, to the south of the
25		western portion of the Kraus property, can you
1		

т		
1		describe what that is, if you know?
2	A	Sure. It is a shrub-carr, vegetated dominant
3		wetland with periods of inundation.
4	Q	Would you mind taking a I assume this entire
5		area that you've circled here in green to the
6		south of the western portion of the Kraus site is,
7		as you've described it, a wetland?
8	A	Yes.
9	Q	Could you just I feel guilty having to take
10		Edwina's pen. I'll give you one of mine. Can you
11		just write "wetland" in the middle of that and put
12		your initials so we're clear on what you're
13		talking about?
14	A	(Witness complies.)
15	Q	Now, I notice that you have, in effect, carved out
16		a channel, for want of a better word, or a space
17		between the northern green circle that you've
18		drawn and the southern green circle that you've
19		drawn, is that correct?
20	A	There is a an existing access road
21	Q	Uh-huh.
22	A	in that current location that is above and
23		would be considered not having or containing
24		characteristics of a navigable waterway.
25	Q	Is that road denominated on Exhibit 2 as a gravel

1 drive? 2 Α It is labeled that on Exhibit 2. 3 And have you ever observed that to have gravel in Q it? 4 5 I have been on the site multiple times, and I Α could not make a point in my observation whether 6 7 there's exposed gravel on that road or not. 8 Fair enough. Do you know how wide that existing Q 9 path is at this point? Offhand, without looking at the file, I do not. 10 Α Okay. Let me ask you this then, if I may. 11 Q I'm 12 going to go up here and point so that we can maybe 13 have an easier way of communicating, if you wouldn't mind. 14 15 I am going to point up here to this -what is the northwest corner of the Hanson 16 17 property and ask if these double lines that go -these, what do you call them? dotted lines that go 18 19 up to the northeast and through the Kraus 20 property, that's the easement, is that correct? That's the northern tier of the easement, is that 21 22 correct? 23 To the best of my knowledge, that is an easement Α 24 the DNR holds. Now, there is a notation on Exhibit 2 25 0 Very good.

1 that states, "Parcel 5, 60 degree 60-foot 2 ingress/egress easement." Is that your 3 understanding that the easement is 60 feet wide 4 that point?	
3 understanding that the easement is 60 feet wide	
4 that point?	
5 A To the best of my knowledge, this exhibit states	
6 it's a 60-foot wide easement, but I don't know	
7 whether it's a 60-foot wide easement or not. I	
8 can just tell you this says it's a 60-foot wide	
9 easement.	
10 Q Has anyone at the DNR confirmed that?	
11 A That it's truly a 60-foot wide easement? I have	
12 had limited discussions about the exact length o	f
13 that easement. I would basically need to go bac	k
14 and look at the record and look at the file to	
15 determine what information was provided to me in	1
16 the course of the review.	
17 Q Now, there are a number of exhibits that I'm goi	ng
18 to be showing you this afternoon, and so I I	
19 don't want to get there right now, because this	
20 will become very disjointed. But you should kno	w
21 that we have final plans of the DNR available to	
22 us.	
23 So I'm not trying this isn't a tric	k
24 question. I'd like to know if you know how wide	
the final road is going to be as it traverses th	е

1 Hanson northwest corner. 2 Α I would have to look back at the file to determine exactly what it states. 3 Fair enough. 4 Q I don't know exactly the width. 5 Α Okay. Fair enough. And we'll wait until we get 6 Q 7 there then. Now, the area that you have drawn or 8 surrounded in green, you described that a few moments ago. 9 I could look it up here, but you 10 described that a few moments ago as being a shrub 11 12 and tall grass, I think, wetland with -- I thought 13 you said navigability characteristics? Did I say 14 that right? 15 You -- check back. I believe I said navigability Α characteristics. 16 17 Q Can you explain what that means? Sure. A navigability characteristic would be 18 Α 19 something identified to have a potential bed and 20 bank and appear to have the ability to have adequate water at a given point to be able to 21 float a watercraft. 22 23 I know that there are some Can I stop you there? Q 24 administrative regulations that talk about bed and 25 bank. But there is a statute, which I think you

1 would agree -- well, I don't want you to make a 2 legal conclusion. There is a statute that you would -- you 3 would certainly agree that is different than an 4 5 administrative regulation. And it's 30.10. I'm sure you're familiar with it, sub 2. 6 7 It talks about navigable in connection 8 with streams, sloughs, bayous and marsh outlets. 9 Are you familiar with that statute? I would have to review it. I don't have the exact 10 Α language in front of me to know it. 11 12 Fair enough. Do you happen to know how the DNR Q 13 defines slough? I've never heard the term "slough" before. 14 Α Can 15 you explain exactly what you mean by that? Slough, slough. S-L-O-U-G-H, slough. 16 Q Okay. 17 Α To my understanding, there's no regulatory definition of a slough. 18 19 And how about a marsh? Q 20 To my knowledge, there's no regulatory definition Α for marsh for navigable waterways. 21 And how about a bayou? 22 Q 23 Similarly. Α 24 Q Okay. I think that I want to --And, Counsel, I will be 25 MR. GLEISNER:

1 happy to have Mr. Harbeck get us a copy if you 2 need it. If you will permit, I would just like to read you 30.10(2). Do you have your statute book 3 there? 4 5 MS. KAVANAUGH: I do not have mine. MR. GLEISNER: If you need to have me 6 7 clarify this or get verification, I would be happy 8 to do that. 9 MS. KAVANAUGH: You can read the 10 statute. 11 MR. GLEISNER: That's all I'm going to 12 do. 13 MS. KAVANAUGH: I'll assume you're reading it correctly. 14 15 MR. GLEISNER: So we can see if I did it correctly. It will be on the record. 16 BY MR. GLEISNER: 17 Sub 2 of section 30.10 reads, "Except as provided 18 0 19 under (4)(c) and (d)," which I would represent is 20 not relevant, "all streams, sloughs, bayous and marsh outlets which are navigable in fact for any 21 22 purpose whatsoever are declared navigable." 23 And I didn't read the whole thing, but 24 that gets the idea. So, apparently, a bayou, a 25 marsh outlet or a slough or stream can be
1 navigable? 2 Α Per that definition, I would say correct. 3 And you don't have any regulations that deal with Q sloughs, bayous or marsh outlets; am I 4 understanding you correctly? 5 That's incorrect. 6 Α 7 Q Okay. Please elucidate me. 8 Navigable waterways associated with sloughs, Α 9 bayous, marsh outlets, rivers, streams, lakes encompass the entire definition of what a 10 navigable waterway is. 11 If it meets the definition of navigable 12 13 waterways, per that it has a defined bed and bank and the ability to float watercraft, Chapter 30 14 15 jurisdiction can be asserted. 16 Do you know, as we're sitting here, whether or not Q 17 a marsh outlet has a bed and bank? Define "marsh outlet" for me. 18 Α 19 I asked you first. Q 20 I would define a marsh outlet as a characteristic Α between two different type of systems, whether it 21 be a system of a lake or a system of a stream, and 22 23 having, in that situation, a difficult bed and 24 bank determination because of the characteristics and nature of the aquatic plants that would be 25

1 growing in that particular setting. 2 Q Are you familiar with this book, Wetland Soils? 3 Α No. This is a book by -- just for the record, a book 4 Q 5 by Richardson and Veoraskas, V-E-P-R-A-S-K-A-S. MS. KAVANAUGH: And, I guess, I would --6 7 MR. GLEISNER: I understand. 8 MS. KAVANAUGH: You can ask questions 9 about wetlands --I'm not going to use this 10 MR. GLEISNER: book if he's not familiar with it, Counsel. 11 BY MR. GLEISNER: 12 13 Q You are familiar with, say, for example, the 14 Horicon Marsh? 15 Correct. Α 16 What are the characteristics of the Horicon Marsh 0 17 in terms of hydrology and in terms of bed and bank? 18 19 MS. KAVANAUGH: And I guess you're 20 asking him to assume something. You know, unless he's inspected the Horicon Marsh, he's not going 21 to know if he's done navigability 22 determinations --23 24 BY MR. GLEISNER: 0 Have you done --25

1	A	I haven't done navigability tests or made
2		determinations on the Horicon Marsh.
3	Q	Fair enough. With regard to the green areas on
4		Exhibit 2, and I'm now specifically referring to
5		the so-called gravel drive that runs between those
6		two green areas that you've identified, were any
7		navigability tests done before you issued the
8		November 4, 2010 approval?
9	A	On the road? No navigability tests were done on
10		the road.
11	Q	And how close to the road were they done?
12	А	As I stated previously, in the fall site visits
13		that I was present on to inspect the site, these
14		were observed to have navigability
15		characteristics.
16	Q	And I want I don't want to unfairly press you,
17		but I want to understand more about this term
18		"navigability characteristics," if you could
19		please elaborate.
20	A	As having a defined bed and bank with capability
21		of having enough water on a reoccurring basis to
22		float a watercraft.
23	Q	Now, I'm not going to at this point ask you to
24		mark on that Exhibit 2. I just would like you to
25		point, for my own information, as to where

т		
1		approximately water was located in connection with
2		that gravel road that had navigability
3		characteristics. You don't have to mark on it
4		right now. Just point to it.
5	A	Can you repeat that question?
6	Q	Oh, sure. I can.
7	A	I'm trying to catch you.
8	Q	No. And I'm trying to be clear. Here's the
9		gravel road
10	A	Correct.
11	Q	or gravel path; whatever it is right here. Do
12		you agree with that?
13	A	Correct.
14	Q	And I want to know with reference to this gravel
15		path where it begins at the west and moves
16		northwest or northeast, excuse me, between the
17		two green
18	A	Uh-huh.
19	Q	areas you've identified. I want to know what
20		navigability tests were done or where navigable
21		where navigability characteristics existed, et
22		cetera, with reference to that gravel path.
23	A	Based on the October site visit before the permit
24		was issued
25	Q	Uh-huh.

1 Α -- I would say here and here. 2 MR. GLEISNER: Just let the record show that you've identified the northwest portion of 3 the top green area and the central portion of the 4 5 southern green area. BY MR. GLEISNER: 6 7 Q Would that be a fair statement? 8 There is one located on the northern portion and Α 9 one located on the southern portion. Using this nice orange pen, would you, please, 10 Q show me where the northern portion on -- where the 11 12 area on the north -- to the north of the gravel 13 trail that has navigable characteristics, can you 14 show me where this is located? Again, this is an 15 approximation. The green has navigability characteristics. 16 Α All of it? 17 Q All of it. 18 Α 19 Q Okay. 20 But you asked me before the decision being made. Α And before the decision date, was 21 Q Uh-huh. 22 anything done to test those areas that had 23 navigability characteristics? 24 The green areas, no. Α Other --25 0

1 A I'll elaborate.

±	A	I'II etabolace.
2	Q	Yeah. Okay.
3	A	Other than professional observation and judgment.
4	Q	Okay. Now, I'm going to just step up here again
5		so we can all be clear, and counsel and everybody
6		else can see what I'm doing. You see on Exhibit 2
7		what I'm pointing to right now?
8	A	The northwest corner of the Hanson property?
9	Q	Yes, exactly. And the two green wetland areas
10		that you've identified in Exhibit 2, this gravel
11		drive that goes between them, it appears now, I
12		don't want to I don't want to put you in a
13		situation where you're saying something you don't
14		mean, but it appears that that northern circle,
15		that northern wetland area embraces and
16		encompasses the northwest corner of the Hanson
17		property. Am I correct?
18	A	These are very approximate, so I will not make
19		such assertion unless I saw exactly where that
20		would be located in the field.
21	Q	Okay.
22	A	These are too broad to be able to make that
23		distinction.
24	Q	Okay. But you've been at the northwest corner of
25		the Hanson property?

1 Α I have not been on the northwest corner of the 2 Hanson property. I've been along the DNR easement through the Hanson property. 3 That's a fair observation. 4 Q Okay. That easement, 5 according to Exhibit 2, which I will represent, again, is a DNR plat of survey, or so it 6 7 represents itself, that easement at the point, 8 shall we say, at the apex of what is a scalene 9 triangle -- it appears to be a scalene triangle. It has a shorter side here, a much longer side 10 here and a shorter base. 11 12 At the point where the scalene triangle 13 comes to a head, if you went about 10 degrees off 14 bubble southeast, it looks like that easement at that point encompasses fully the northwest corner 15 of the Hanson property, am I correct? 16 17 Α Can you re-describe your description of that? 18 Q Sure. I'd be happy to. 19 I'm trying to --Α 20 MS. KAVANAUGH: I guess the document speaks for itself. 21 That's fine. 22 MR. GLEISNER: 23 MS. KAVANAUGH: It shows lines and it 24 describes things. Whether it's accurate or not, 25 we don't know.

1 BY MR. GLEISNER:

2	Q	Okay. Do you stand by the approximation that
3		you've given, recognizing it's an approximation,
4		that the wetland area does encompass a part of the
5		northwest corner of the Hanson property?
6	A	As depicted on this exhibit, yes.
7	Q	Okay. Let's move along now for a moment. So
8		there were no now, I don't want to put words in
9		your mouth. But there were no navigability tests
10		such as the Menomonee Falls versus DNR, where you
11		float a skiff, et cetera, there were no
12		navigability studies done on the Kraus property,
13		am I correct?
14	A	That is correct.
15	Q	And the extent of any navigability tests that were
16		done anywhere on the Kraus property prior to
17		November 4, 2010, comprised professional
18		observations? Was that your word?
19	A	Professional judgment and observations of
20		waterways, water courses and potential navigable
21		waterways.
22	Q	Who made those judgment calls, Mr. Hudak?
23	A	That would have been me.
24	Q	By the way, do you read maps as a in your
25		business, in your line of business? Is it your

1 job to read maps? What type of maps are you referring to? 2 Α 3 Q Surveys. It is very common for me to review surveys, 4 Α 5 engineering plans, drawings, to basically assert DNR jurisdiction over projects. 6 7 Q Before we move along, I just want to, for a 8 second, just shift gears slightly. One of the 9 things that we are here about is a grove of trees. Are you familiar with that grove of trees? 10 I am not familiar with the grove of trees other 11 Α 12 than the language of a few of the documents that 13 you've produced describing a grove of trees. I do 14 not know exact locations. 15 I see. I'd like to move on for right now and hand 0 to you -- I'd like to hand to you Exhibit No. 4. 16 MR. GLEISNER: Edwina, here's your copy. 17 18 You have this, of course. BY MR. GLEISNER: 19 20 This is the answers to interrogatories that were 0 provided by your counsel on your behalf. And I 21 note, first of all, at the end of this document 22 23 that you signed it. 24 And I also note at the end of this 25 document that it was signed by a number of other

1 people from the DNR, Christine Gengler, and a --2 MS. KAVANAUGH: Christine Gengler is the --3 MR. GLEISNER: Yeah. 4 5 MS. KAVANAUGH: What do you --MR. GLEISNER: 6 Notary. 7 BY MR. GLEISNER: 8 Q James Morrissey. 9 Thank you, Counsel. MR. GLEISNER: Ι apologize. 10 BY MR. GLEISNER: 11 Patricia Trochlell, Robert Wakeman. And I just 12 Q 13 would like, for openers, for you to identify to me the portions of Exhibit 4 that you were 14 responsible for, if you know. 15 16 I would have to look through all of these Α 17 independently to see what portions of these answers were developed by myself. 18 MS. KAVANAUGH: And the document 19 20 identified those, as it's required to do. 21 MR. GLEISNER: Let me just --BY MR. GLEISNER: 22 23 Let me just rephrase that then. Take a look at --Q 24 I'm most particularly interested in page 4. And I'm interested in the DNR answer that appears at 25

1		
1		the top, which I read as almost an index of the
2		attachments or most of the attachments to the
3		DNR document that you have in front of you. Were
4		you responsible for that?
5	A	I am responsible for portions of this answer.
6	Q	Okay. That's fair.
7	A	I can't validate that I'm all of it.
8	Q	That's fair. Let me before we I'd like to
9		ask questions about the documents that are
10		attached to this
11	A	Sure.
12	Q	in a moment, but before we do that, I'd like to
13		understand, after the issuance of the November 4,
14		2010 manual code approval, were there any
15		navigability tests conducted on the Kraus
16		property?
17	А	Following, I believe, a few motions or legal
18		issues brought forth, there was additional work
19		taken into effect, basically, reaffirm our initial
20		findings within the manual code decision on
21		navigability locations on the site.
22	Q	Well, turning our attention, for a moment, from
23		Exhibit 4 back to Exhibit 2, if we could.
24	A	Okay.
25	Q	And, now, I'll let you use that nice pretty orange

1 Could you just put Xs where the pen. 2 navigability -- now, I don't want to put words in your mouth. Did you say navigability test? 3 What did you say? 4 5 MS. KAVANAUGH: You can have her read it back. 6 7 MR. GLEISNER: I'm reading it right now. 8 BY MR. GLEISNER: 9 "It was additional work taken into effect, 0 basically reaffirm our initial findings within the 10 manual code decision on navigability locations on 11 12 the site." 13 MR. GLEISNER: Thank you for that, 14 Counsel. 15 MS. KAVANAUGH: Yes. BY MR. GLEISNER: 16 17 Q Let me back up as foundational -- some foundational questions are in order. What do you 18 19 mean when you say "additional work"? Let's start 20 there. As I identified previously, the initial manual 21 А code approval and the review of that, that took 22 23 place prior to the November decision. 24 Q Yeah. There was professional judgment, professional 25 Α

1		
1		opinion as to what were potential navigable
2		waterways on the site.
3	Q	And that judgment was yours?
4	A	That judgment was mine. As a follow up to my
5		judgment and to reaffirm the case of what portions
6		of the site are navigable and non-navigable,
7		additional work was completed.
8	Q	Can you explain what you mean by "additional
9		work"?
10	A	Sure.
11	Q	That's what I was
12	A	Site investigation. I'll call it witness
13		observations. And survey work of topographic
14		elevations throughout the site.
15	Q	Okay. Let's stop right there. That was a nice
16		list, and I guess I would like to go back to that
17		now. Let's start with survey work. What survey
18		work was done and by whom?
19	A	To my knowledge, Kapur & Associates had conducted
20		spot elevation survey work throughout the parking
21		area on the site.
22	Q	And the parking area on the site, looking at
23		Exhibit 2, if we looked south of the blue line
24		that you have put on Exhibit 2 and east of the
25		green line top green line that you put on

1		Exhibit 2, that would be the approximate location
2		of the parking lot that we're talking about?
3	A	You can see the approximate location on your
4		Exhibit 14.
5	Q	Right. I understand that. I just want to
6		understand we're going to have we're going
7		to have a lot of fun with that in a minute, but
8		right now, I want to understand that's the area
9		we're talking about, right?
10	A	South of the blue line, east of the green blue
11		line.
12	Q	Why don't you use that orange pen and make a note
13		or put an X where the survey work was done, you
14		think. Approximation, of course.
15	A	I'll just draw a polygon on here
16	Q	Sure.
17	A	in an approximation.
18	Q	Understood.
19	A	Broad approximation.
20	Q	Understood. And why don't you put your initials
21		on there so we can
22	A	(Witness complies.)
23	Q	Thank you very much. Now, regarding survey work,
24		was there anything else in terms of surveys or
25		survey work done anywhere else on the Kraus

1		property or on the area where the access road will
2		be?
3	A	By a certified surveyor, not to my knowledge.
4	Q	And by an uncertified surveyor?
5	A	Survey work as far as taking spot elevations?
6		No.
7	Q	Okay. So let me just extrapolate on that just a
8		moment. That was an interesting comment. Have
9		there been site elevations done on the Kraus site?
10	A	To my knowledge, yes.
11	Q	By whom and when?
12	A	Kapur & Associates.
13	Q	And do you know what areas they did site
14		elevations on?
15	A	What I just discussed, the parking lot area.
16	Q	Okay. Let me let me
17	A	I'll state it this way: Lakeward of the joining
18		of the access road. So west I'm sorry. East
19		of the access road.
20	Q	Very good.
21	A	Maybe that's a little easier way to explain it.
22	Q	Let me take us back for a moment to the channel
23		that exists between your top and lower green lines
24		there. And I'm now referring again to the gravel
25		drive.

On either side of that gravel drive, 1 2 that's this area right here between your top green circle and your bottom green circle, did anybody, 3 to your knowledge, do site elevations? 4 5 They could have. I'd have to check the file to Α see if they extended that way under the road. 6 7 0 You don't know? 8 Α I'd have to check the file. 9 MR. GLEISNER: Counsel, could you get back to me on that? 10 MS. KAVANAUGH: I'll have him check the 11 12 file, sure. 13 MR. GLEISNER: That's what I meant. 14 THE WITNESS: At that time, they could 15 have done. I don't know. I'd have to look at the file. 16 BY MR. GLEISNER: 17 Now -- okay. Let's go back to Exhibit 4, if we 18 Q 19 could. And is there anything in Exhibit 4 that 20 relates to the survey? I'm not accusing counsel of being less than complete. I just want to know 21 if there's anything in there. 22 23 MS. KAVANAUGH: Were there any questions 24 asked about survey work done? 25 MR. GLEISNER: I just want to know if

1 there is anything in here about surveying being 2 done. As I say, I'm not making an accusation that you were incomplete. I just wanted to know if 3 there was anything in there. 4 5 THE WITNESS: To the best of my knowledge, Exhibit B is the survey work I was 6 7 referring to. 8 BY MR. GLEISNER: 9 Thank you very much. Let's look at Exhibit B Q together then. We're looking at -- we're looking 10 at our Exhibit 4, and we're looking at DNR 11 12 counsel's yellow Exhibit B. 13 MR. GLEISNER: Does that make sense to the record? Exhibit 4, sub-Exhibit B. 14 15 BY MR. GLEISNER: Now, that appears to me to be, among other things, 16 Q 17 a topographical map. Would you say that's 18 correct? 19 That's accurate. Α 20 Can you read topographical maps, Mr. Hudak? 0 I can. Not to this scale. This is pretty tiny. 21 Α If you're asking me specifics, these are pretty 22 23 small, even for my eyes. 24 Q That's fair, that's fair. The circles in red and the circles in blue denote what? 25 Do you know

1 that?

1	that?	
2	A They d	enote site photographs that were taken at
3	the si	te, and the dates are indicated in the upper
4	right	corner.
5	Q I see	that. And do you know if there was any
6	does t	his identify the work of the Kapur
7	engine	ering firm?
8	A To the	best of my knowledge, their name is on the
9	side o	f the page. They did the survey work.
10		MS. KAVANAUGH: I'm asking you to
11	clarif	y. You're talking about the map itselves
12	and no	t the additions, not the circles?
13		MR. GLEISNER: I am asking that's a
14	good q	uestion, Counsel.
15	BY MR. GLEI	SNER:
16	Q Iama	sking about who did the map itself, and that
17	would 1	be Kapur & Associates, is that correct?
18		MS. KAVANAUGH: You're asking me?
19		MR. GLEISNER: I'm asking, actually,
20	Mr. Hue	dak
21		THE WITNESS: Again, stating their
22	name i	s on the plan sheet. I would assume they
23	did th	e survey work.
24	BY MR. GLEI	SNER:
25	Q Do you	know who would have put the red circles and

1		the blue circles?
2	A	That would have been myself.
3	Q	Did you take photographs at that point?
4	A	That would be correct.
5	Q	Are those exhibits attached to Exhibit 4?
6	A	I believe they would be. Let me check. That
7		would be accurate.
8	Q	And so are the I'm looking at Exhibit D, which,
9		I presume, is where you start. Are the red
10		circles that are adjacent to the photographs
11		starting at D corresponding to the red circles on
12		Exhibit B sub-Exhibit B of 4?
13	A	To the best of my knowledge, they are
14		corresponding. They should have been when I put
15		them together.
16	Q	Do you know if all of the photographs that you
17		shot in red on Exhibit sub-Exhibit B of 4 are
18		attached to this Exhibit 4?
19	A	I believe they are. Again, I'm trying to pick out
20		my small handwriting here.
21	Q	Is it your handwriting?
22	A	Yes. Yep. No, I see that. 14 isn't circled on
23		this one, but 14 is still located on the sheet
24		here.
25	Q	Now, am I correct that Exhibit E sub-Exhibit E

Г

1		of Exhibit 4 contains the photographs that you
2		took of the Kraus site that are shown on
3		sub-Exhibit B of 4?
4	A	The blue under Exhibit E correlates to the blue on
5		Exhibit B.
6	Q	So then am I correct in saying that most of the
7		items identified on page 4 of Exhibit 4 are
8		photographs? Or your contribution?
9		MS. KAVANAUGH: You mean the circles?
10		MR. GLEISNER: Yes.
11		THE WITNESS: Repeat that again.
12	BY M	IR. GLEISNER:
13	Q	Sure. I apologize. Look back at page 4 of that
14		document that you have in front of you, page 4 of
15		Exhibit 4.
16	A	Okay.
17	Q	Besides the photographs, did you contribute
18		anything else to that answer?
19	A	I contributed Exhibit C.
20	Q	And what is Exhibit C, if you don't mind?
21	A	Exhibit C is an aerial photo, a flyover taken from
22		Bingmaps.com.
23	Q	When was that done, do you know?
24	A	I want to believe it was done in either 2004, 2008
25		or 2010. That's not a great way to be able to

1 identify the date of those pictures. They have a 2 copyright date on there, but that's not always I don't know the exact date of that. 3 accurate. Okay. Can we just go to Exhibit C of Exhibit 4 --4 Q 5 actually -- yeah, Exhibit C, yellow Exhibit C of Exhibit 4. Am I correct that's water? What is 6 7 that in that picture? Is that water there? 8 Yeah, the photo doesn't show it very well, but Α 9 that is the extent of inundation. And if you were to line that up with this, the photo is actually 10 orientated to the east, facing east. 11 12 Let me see if we can get the record clearer. Q 13 Exhibit C -- sub-Exhibit C of 4 is an aerial 14 photograph looking east out of the large green 15 circle that you've drawn on Exhibit 2 toward North Lake, is that correct? 16 17 Α It incorporates more than just the one green It would incorporate the location of the 18 circle. 19 launch, parking lot as well. 20 I see Silver Spring and Silver Spring Q Yes. Drive --21 22 Α Yep. 23 -- and that's Reddelien Road up there. It looks Q 24 like this inundation stretches quite far into the 25 Kraus site, am I right?

1 Α Based on my review of this photograph, the 2 inundation depicted in this photograph is very similar to the inundation or the navigability 3 characteristics identified on Exhibit 2. 4 5 Let's get back to the navigability characteristics 0 for a moment, Mr. Hudak. When you say 6 7 "navigability characteristics," do you mean that the area that possesses those characteristics 8 9 would be navigable by a skiff or a canoe? I would say with the investigation, the 10 Α navigability characteristics depicted in this site 11 12 could be navigated by a skiff or small watercraft. 13 And you say "navigability characteristics," which Q leads me to assume that you feel that it's not a 14 full-blown navigability situation? 15 I say "navigability characteristics," because 16 Α No. 17 I did not encompass and walk the entire boundary of this waterway or wetland complex. 18 So based on the characteristics I could 19 20 observe from the locations along the DNR access road, air photo interpretation of having 21 22 hydrology, it appeared to me this waterway could be considered navigable. 23 24 Let's return to your discussion, which we started Q a few moments ago. Keep Exhibit 4 in front of 25

1 Thank you. you. 2 We had started talking about what additional work you had done --3 Uh-huh. 4 А 5 -- after November 4, 2010. Now, you've identified 0 survey work as one of those components. And 6 7 we've --8 MS. KAVANAUGH: Are you asking whether 9 he did it? MR. GLEISNER: 10 No. 11 MS. KAVANAUGH: Okay. Because you said 12 work he did, just to clarify your question. 13 MR. GLEISNER: I said -- actually, your witness said that there was additional work 14 15 performed --MS. KAVANAUGH: Yes. But you said --16 17 MR. GLEISNER: -- to verify his judgment --18 19 MS. KAVANAUGH: Yes. 20 MR. GLEISNER: And let me retract the question and rephrase it this way, Counsel. 21 22 MS. KAVANAUGH: Okay. Thank you. 23 BY MR. GLEISNER: 24 Q There was survey work done either at your direction or with your knowledge by Kapur & 25

1		Associates as identified by the orange circle?
2	A	With my knowledge. Not by my direction.
3	Q	What other additional work was done to verify your
4		judgment?
5	A	Back to before, the additional site investigation
6		along the indicated waterways in green and blue
7		and other potential areas located within the
8		orange polygon or the potential parking lot area.
9	Q	"Additional site investigation," what does that
10		mean?
11	А	It means basically going out, conducting a site
12		visit, looking at characteristics of the site,
13		plant species, trying to identify whether or not
14		there may be an ordinary high water mark,
15		determining whether there's a valid or justifiable
16		bed and bank and the capability or capacity to be
17		able to float a watercraft on a reoccurring basis.
18	Q	Fine. Who did that site investigation?
19	A	That was performed by me and accompanied by I'm
20		drawing a blank Kyle Drake, the warden.
21	Q	Kyle Drake, the warden?
22	A	Correct.
23	Q	Does he have any hydrology training? He's just a
24		warden, correct? carries a gun?
25	A	He was accompanying me on the site knowing that
1		

1 there are a few upset neighbors in the area. And 2 as a means -- as negotiable -- negotiating and basically allowing me to be on the site. 3 Because it is basically a 4 development-proposed site. So as to not draw any 5 questions about what I was doing out there, he was 6 7 with me. 8 The warden was there for protection; is that what Q 9 you're saying? 10 Α Not in so many words. I'm a pretty -- I don't 11 need any protection. But he was accompanying me 12 to the site. I believe that. Okay. What I'm getting at, 13 Q though, is this: The additional site inspection 14 to confirm your judgment was done by you? 15 That is correct. 16 Α 17 Q So nobody else confirmed your judgment? The only other person that confirmed my judgment 18 Α 19 would have been an associate, Geri Radermacher. 20 And what is he or she? Q 21 Α She is a water management specialist. What did she do? 22 Q 23 She basically reviewed the information that I Α 24 presented, collected, went over it with me and reaffirmed that I made a correct judgment call 25

1 that these are navigable waterways.

Ŧ		that these are havigable waterways.
2	Q	"These are navigable waterways." That's a phrase
3		you haven't quite used before. I could search my
4		realtime, but I don't think I heard that before.
5	A	You've never asked that question.
6	Q	And I'm glad I heard it, because now I do have a
7		couple questions. Where are the navigable
8		waterways on this property?
9	A	The area indicated in blue and green.
10	Q	So both the northern green circle, southern green
11		circle and the blue line, which denotes a stream,
12		are navigable waterways?
13	A	Navigable, that would meet the definition of the
14		State, correct.
15	Q	And let me just back up here a moment, if I may.
16		It seems to me that among the documents that were
17		furnished to me by your counsel yesterday well,
18		I know where it is. Bear with me a moment.
19		343.03
20	A	Okay.
21	Q	sub 7 defining navigable as having a bed or
22		bank, but the statute 30.10(2) doesn't. I'm
23		curious, now that you've defined the green areas
24		on Exhibit 2 and the blue area on Exhibit 2 as
25		navigable waterways. I'm curious, are you saying

1		
1		that there's bed and bank present there? Or what
2		are you saying exactly?
3	A	I'm saying that through the investigations that
4		I've conducted both pre and post
5		November decision, all features of these waterways
6		could be determined as or meeting the State's
7		definition of having defined bed and bank with
8		capacity to float a boat.
9	Q	Now, forgive me, but I want the record to be
10		really clear here. The area in blue on Exhibit 2,
11		the area encompassed by the top green circle on
12		Exhibit 2 and the area encompassed by the large
13		green circle on Exhibit 2 all have are all
14		navigable waterways that meet the State definition
15		of navigable?
16	А	That would be correct.
17	Q	That gravel road looks kind of lonely there,
18		doesn't it?
19	А	Correct.
20	Q	Let me let me just skip ahead to that, because
21		I think otherwise I'm being unfair to you. Let's
22		go to Exhibit 3.
23		MR. GLEISNER: Edwina, this is a big
24		one.
25		MS. KAVANAUGH: Thank you.
J		

1 MR. GLEISNER: You're welcome. 2 BY MR. GLEISNER: Keep those in front of you, if you wouldn't mind. 3 Q Thank you very much. Exhibit 3 are the actual 4 final plans of the DNR for this site. 5 If you go to C116, I think we now see, 6 7 would you agree, a pretty clear picture of the 8 access road and the parking lot where it's going 9 to be. We don't see, however, where the Hanson 10 property is going to be. Are you familiar with C116 or any other 11 12 drawing in Exhibit 3 that you could identify where 13 the Hanson property would intersect with that 14 drawing of the final roadway? 15 Not to be able to draw it on here, no. Α I mean, I could approximate it. 16 17 Q I'll settle for right now if you just point to where you think it is. 18 19 Well, based upon, to my knowledge, the Hanson Α 20 property is in or adjacent to where the road actually gets extended or bumped away from the 21 original road alignment. 22 23 So would it be safe to say, looking at Exhibit 3, Q 24 C116, that the denomination PC21 plus 4926, 25 between that and PT21 plus 73.24 is the

1		
1		approximate location of the bump?
2	A	That would be correct, between stations 2100
3		I'm sorry, 2100 and 2200 would be the
4		approximate
5	Q	We haven't used orange nearly enough. Would you
6		mind taking the orange marker and making a circle
7		around that area?
8	A	Make a circle between 2100 and 2200 stations?
9	Q	Yeah. Would you agree that is the approximate
10		location of where the Hanson property might
11		intersect or come near to the road?
12	A	Yes.
13	Q	What I would like you to do, if you can I would
14		assume that these drawings would be pretty much
15		familiar to you?
16	A	Familiar.
17	Q	You sort of live with these animals, right?
18	A	Reviewed them a time or two.
19	Q	Yes, sir, I would think so. Can you tell me how
20		wide that access road is going to be if there is
21		a let me rephrase that. That was a poorly-put
22		question.
23		At its widest, before it intersects with
24		the parking lot, how wide is the access road going
25		to be?

1	A	Based on the scale of this drawing
2	Q	Yes, sir.
3	~ A	I would say between 20 to 25 feet wide.
4	Q	Now, you are because you are the water resource
	×	
5		specialist, you have some knowledge of what is
6		going to be involved in putting that road down; I
7		mean, you have some knowledge of that, correct?
8	A	Correct.
9	Q	Okay. What's going to go under that road?
10	A	I can't answer that question. I'd have to look at
11		the
12	Q	Okay.
13	A	engineering specification, which I
14	Q	No, I appreciate that.
15	A	Yeah.
16	Q	And let me rephrase that. Generally, what's going
17		to go under that road?
18	A	I would anticipate some type of a road base prior
19		to that pavement.
20	Q	Would it be fair to say, again, not putting words
21		in your mouth, but would it be fair to say that
22		the base of that road, the 20- to 25-foot wide
23		road is going to involve fill that extends beyond
24		the boundaries of the roadway itself, some kind of
25		shoulder, in other words?

Г

1 Α Typically, a roadway would contain a side-sloped 2 shoulder depending upon the current elevation and the proposed elevation of the roadway. 3 Let me ask you this: Would it be fair to say that 4 Q 5 that road could be as wide as 30 feet? I think calling for 6 MS. KAVANAUGH: 7 speculation. 8 THE WITNESS: Outside my --9 MS. KAVANAUGH: The plans show what the --10 11 THE WITNESS: Out of my knowledge. 12 BY MR. GLEISNER: 13 Q Okay. That's fair. Now, let me ask you this: 14 When that roadway is put down, what steps have 15 been taken to make certain that the roadway, when it settles as all roads do, doesn't impinge upon 16 17 the wetlands that surround the original path? The extent of disturbance has been permitted based 18 Α 19 upon the extent of roadway fill. To the best of 20 my knowledge, that is the extent of disturbance that we've assessed, reviewed, analyzed and 21 I recall permitted or reviewed. 22 permitted. 23 Let me, first of all, make clear that I respect Q 24 the limitations of this proceeding and what we're 25 This is navigable water we're talking about.

1 about, okay? 2 So what I'm -- what I'm getting at is: If you look at the original gravel drive here and 3 you look at the 60-foot wide -- or ostensibly 4 5 60-foot wide easement there, what -- since your job is navigability, your job as a water resource 6 7 manager is assuring that navigable waters aren't 8 impinged upon. 9 What steps have been taken to ensure that the navigable waters, which we now agree are 10 very close to that channel, aren't going to be 11 12 impinged upon by this construction? 13 I'm not sure the clarification that you're looking Α 14 for with that question. 15 Okay. Let me rephrase it. Q It's very broad. 16 Α 17 Q Okay. Let me see --Refine that. 18 Α 19 Yeah, let me do that, because this is important. Q 20 MS. KAVANAUGH: And, I guess, I have an The hearing was granted on the basis 21 objection. of whether the area that you guys identify as a 22 23 grove of trees contains or is a navigable water. 24 MR. GLEISNER: Unfortunately not. The North Lake Management District also has a petition 25

1 in the document. 2 MS. KAVANAUGH: The North Lake Management District --3 Yes, they do. 4 MR. GLEISNER: 5 MS. KAVANAUGH: I'll pull out the petition. 6 7 MR. HARBECK: Let's not argue about what 8 it says or not. 9 MR. GLEISNER: Let's just proceed. MS. KAVANAUGH: I think he's asking 10 questions that go beyond the scope of what the 11 12 hearing will be. I know it's discovery, but 13 discovery is only permitted for stuff that's potentially admissible. 14 15 And as to -- if what you asked for a hearing for was on an allegation that an area that 16 17 you identified as a grove of trees was a navigable water and that's the only issue for which the 18 19 hearing was granted --20 MR. GLEISNER: That's not the only issue 21 the hearing was granted for. MS. KAVANAUGH: I'll pull out the 22 23 hearing. 24 MR. GLEISNER: Yeah. BY MR. GLEISNER: 25

1	Q	The question is, though ,you are responsible to
2		ensure that the navigable waters in the top and
3		the lower green circles are not impinged upon,
4		correct?
5	A	I'm responsible to review a project based on the
6		standards and adverse impacts, cumulative impacts
7		to those standards.
8	Q	Have you examined the grove of trees?
9	A	I don't know what grove of trees you're referring
10		to on that site.
11	Q	Have you examined the site where the central
12		portion of the parking lot is going to be located?
13	A	Can you draw that on a plan sheet for me so I
14		can
15	Q	I can show you.
16	A	indicate what area you're discussing?
17	Q	This is the area right here. We're not going to
18		mark this as an exhibit, at least not right now.
19		This is the area we're talking about.
20		This is the proposed parking lot. This
21		is what we believe, just between us now the
22		record is going to be a little unclear for a
23		moment where the grove of trees is located.
24		MS. KAVANAUGH: And would you identify,
25		for the record, the exhibit? Exhibit E is an

1 exhibit prepared by --2 MR. GLEISNER: It's an Exhibit E prepared by one of our engineers, and it is --3 MS. KAVANAUGH: Reddelien Road's 4 5 engineers? MR. GLEISNER: Yes. And it is something 6 7 that we're only showing to the witness so he can 8 get an idea of where we're talking about. 9 THE WITNESS: So repeat your question. BY MR. GLEISNER: 10 The parking lot is going to be 275 feet 11 Q Okay. 12 long? 13 I'd have to check the plans. Α Let's do that. Here is a drawing, Exhibit 9, 14 Q 15 which was done by the Department of Natural Resources, which I am passing over to Edwina and 16 17 I'm handing to you. So you want me to look at Exhibit 9? 18 Α Exhibit 9. 19 Q 20 Α Okay. Now, can you answer how long and how wide the 21 Q parking lot's gonna be from looking at that? 22 23 If these are 100-foot station markers, I would Α 24 make the estimation that it would be between 250 25 and 300 feet long.

1	Q	And how wide?
2	A	An approximation, a hundred.
3	Q	Okay.
4	A	I'd have to look.
5	Q	Yeah. Now, I'm going to point to Exhibit 9, and
6		I'm going to point to the what is ostensibly
7		the eastern area of the parking lot. And you see
8		where I'm pointing?
9	A	Correct.
10	Q	All right. And I will represent for the record
11		that it is probably the eastern third of what is
12		shown as the parking lot on Exhibit 9. Would you
13		agree that that's approximately right?
14	A	The area you were pointing to was the eastern
15		third of the parking lot area.
16	Q	On Exhibit 9. Okay. Have you what
17		examination, what type of inspection have you made
18		of that area?
19	A	Visual observations of site characteristics
20		related to defined bed and bank, plant
21		communities, to some degree hydrology. And when I
22		say "some degree," looking at photo documentation,
23		air photo surveys.
24	Q	Have you done any type of soil borings in that
25		area?

Γ
1 A I have not.

4	A	I have not.
2	Q	Has anybody that you are aware of in the DNR done
3		any soil boring investigation in that area?
4		MS. KAVANAUGH: I guess I would object.
5		What does soil have to do with navigability?
6		MR. GLEISNER: Well, Counsel, I'll
7		represent for the record, a great deal. Because
8		the soil, if it is saturated, is going to be much
9		more likely to be navigable at different times of
10		the year.
11		MS. KAVANAUGH: The soil is going to
12		be
13		MR. GLEISNER: The soil will support
14		navigable water.
15		MS. KAVANAUGH: So it won't permeate as
16		much, is that what you're saying?
17		MR. GLEISNER: Right.
18		MS. KAVANAUGH: Okay.
19	BY M	IR. GLEISNER:
20	Q	Now, you said you've done a good inspection of the
21		eastern third of where the parking lot is going to
22		be, right?
23	A	I've done visual inspection and relied upon my
24		professional judgment on that eastern third to
25		make navigability determinations that there are no

1

navigable waterways present.

1		navigable waterways present.
2	Q	Did you happen to see any trees there?
3	A	Off the top of my knowledge, I don't know
4		exactly in that specific eastern third of a
5		parking lot where the trees are located in
6		relation to the question you're asking.
7		I am aware that there are trees located
8		throughout the parking lot area. Again, what
9		what you're asking for is this has never been
10		staked out. So to be able to field-truth the
11		location of this parking structure in relationship
12		to the trees, I don't we have never done that
13		type of detail.
14	Q	Even to this day?
15	A	Even to this day.
16	Q	Well then, tell me something, how do you know, as
17		you sit here right now, whether or not that area
18		that I have identified as the eastern third of the
19		proposed parking lot, how do you know that that
20		isn't marshland?
21	A	I rely on the fact that it's not marshland in that
22		it does not meet the Corps' or State's definition
23		of wetland, nor did it meet my professional
24		judgment of the State's definition of a navigable

1	Q	Let's just have an understanding here. I'm sure
2		you're very familiar with the case law like Gainer
3		and the Village of Menomonee Falls. Again
4	A	Conceptually.
5	Q	because of your background
6	A	Correct.
7	Q	you're a specialist and expert in navigability.
8		Am I correct in stating that navigability does not
9		turn on a permanent state of saturation or a
10		permanent state of being capable of being
11		navigated?
12	A	Can you repeat that assessment again?
13	Q	Sure. That was poorly said. Let me try it this
14		way: Can a stream or an area of navigable water
15		be navigable a couple or three times a year and
16		still be navigable within the meaning of 30.10(2)?
17	A	Yes, it can.
18	Q	What tests have you done or what type of
19		assessments have you made to ensure that that
20		isn't navigable at various times of the year?
21	A	Based upon my professional judgment on the
22		historic work I've completed, my trainings, I did
23		not declare that as a reasonable area that would
24		have a definable bed and bank or have the ability
25		to float a boat on a reoccurring basis on the

Γ

1 limited knowledge I had on the hydrology of the 2 area. 3 Have you done anything to attempt to inspect that Q property after spring freshets? 4 5 I have been out there multiple times of the year Α during multiple given times, and those inspections 6 7 ranged in variable -- depending upon the weather, 8 rainfall patterns. 9 And have you done anything following significant Q I'll define that. Let me define that. 10 storms? 11 Storms with one- to two-year, maybe three-year 12 storm ratings. 13 A site visit was conducted -- again, I'm not sure Α 14 what the date is. I'd have to go back and check 15 It was very recently after a fairly, my records. fairly wet period of time. 16 And have you ever attempted to float a skiff or 17 Q 18 any type of canoe or boat in that area? 19 I have not. Α 20 In fact, as I understand your testimony, there's 0 never been an effort to float a skiff or a boat 21 anywhere on the Kraus -- the former Kraus 22 23 property, is that correct? 24 That is correct. Α So all we really have to answer for whether or 25 0

1		
1		not or to the extent of which navigability
2		exists anywhere on the Kraus site would be your
3		judgment?
4	А	That would be correct.
5	Q	And did you think it was important to strike
6		that. That was verging on argumentative. I
7		apologize.
8		Let me phrase it this way: Do you think
9		it was appropriate, referring again to Exhibit 2,
10		to do navigability tests in the blue areas you
11		have identified on the north portion of the Kraus
12		property the former Kraus property?
13	A	I did not believe it was important to do an in
14		fact navigability along the blue portion of that
15		property that was identified in Exhibit 2.
16	Q	And why?
17	A	It was very apparent on the multiple site visits I
18		was there, through all ranges of weather patterns,
19		that that portion of the site contained defined
20		bed and banks with a capacity to be able to float
21		a watercraft at a reoccurring basis.
22	Q	Did you ever assess the relationship between the
23		blue line that you've identified and the ground
24		that is or comprises the area where the eastern
25		portion of the parking lot is going to be

constructed? 1 2 MS. KAVANAUGH: And I'll object to 3 vagueness --4 MR. GLEISNER: Okay. 5 MS. KAVANAUGH: -- in relationship --MR. GLEISNER: Don't want vagueness in 6 7 my record. 8 BY MR. GLEISNER: 9 Let's just do it this way. Here's the blue line Q where the stream is. 10 11 Α Yep. 12 Q Did you ever attempt to determine the relationship 13 between that blue line where you've said it is a 14 stream and the orange area where we are certain 15 that the parking lot is going to be? MS. KAVANAUGH: And, again, I would 16 17 object to "relationship." Can you clarify what you mean by "relationship"? 18 19 MR. GLEISNER: I think he's a pretty 20 bright man. 21 BY MR. GLEISNER: 22 Q Do you understand what I'm saying? 23 Can you direct me on your --Α 24 Q Sure. I'd be happy to. -- Exhibit 9? Let me just show you something. 25 Α

I think I would like to 1 MR. GLEISNER: 2 just -- we actually have this exhibit in a smaller form so we can mark it, Edwina. Let me pull it 3 out so you have a -- I'm now pulling out 4 5 Exhibit 12. Edwina, here's your copy. MS. KAVANAUGH: 6 Thank you. 7 MR. GLEISNER: You're welcome. 8 BY MR. GLEISNER: 9 Here's your copy, Mr. Hudak. Q 10 MS. KAVANAUGH: Can you refresh me, 11 Counsel? The orange area is the whole DNR site 12 or --13 MR. GLEISNER: That would be Mr. Hudak's 14 job. 15 MS. KAVANAUGH: You've got the record. MR. GLEISNER: I've got the record. 16 17 This is the area that he identified as being the 18 parking lot and where the Kapur engineers did 19 their elevations. 20 BY MR. GLEISNER: Am I correct, the surveying? 21 Q Included but maybe not limited to. 22 Α 23 Yeah. Okay. I just want to show you this, Q 24 because I think -- you have in front of you 25 Exhibit 12. I'm showing you an enlarged version

1 of Exhibit 12, only because I think it more 2 dramatically helps us understand where we're at. MS. KAVANAUGH: And, sir, could you 3 identify that? Did we do that? Did you do that? 4 5 MR. GLEISNER: This was done by our engineers. 6 7 MS. KAVANAUGH: Okay. By Reddelien Road 8 engineers. If you identify who prepares them so 9 we know what we're looking at. 10 MR. GLEISNER: Right. BY MR. GLEISNER: 11 12 Q Let me just explain. This is an aerial 13 photograph, Exhibit 12 I'm talking about. 14 Overlaid on that exhibit is the parking lot and 15 access drive that was done by our engineers based on a review of the drawings and engineering plans, 16 17 including mine, of the DNR. Does that make it 18 clear? 19 MS. KAVANAUGH: Yes. Thank you. 20 You're very welcome. MR. GLEISNER: BY MR. GLEISNER: 21 22 Q Now, the reason I wanted to show this is I wanted 23 to ask a question. This Exhibit 12 represents a 24 parking lot that seems fairly close to the Hanson 25 and fairly close to the Peters' property.

1 So I'd like to ask you, first of all, do you know the distance between the southern 2 boundary of the parking lot in the Hanson property 3 line? 4 5 I do not, without referring back to a plan. Α 6 Same with the Peters? Q 7 Same goes with the top. Α 8 Now, what I was asking about was there's this Q 9 stream here that I am pointing out to the northern part of Exhibit 12. And there's a red line and a 10 yellow line on the exhibit going east and west 11 12 near the Peters' home. 13 And I'm going to represent, for the record, that that is the approximate location of 14 15 the stream. MS. KAVANAUGH: The orange line? 16 I'm 17 sorry. Right. This line. 18 MR. GLEISNER: The 19 red and yellow. 20 MS. KAVANAUGH: Oh, the red and yellow. MR. GLEISNER: Yes. There's two lines 21 going east and west on that. 22 23 BY MR. GLEISNER: 24 Q And what I'm asking you is: Has anybody made a 25 study of or made an investigation of how the

1 stream interacts with or impacts on or is involved 2 with the area where the eastern portion of the parking lot's going to be located? 3 A particular study to investigate that? 4 Α No. Okay. Thank you. All right. Now, thank you for 5 0 Let me switch gears just a little bit here. 6 that. 7 I'm going to show you now what's been marked as Exhibit 10. 8 9 MR. GLEISNER: And I'm giving you a copy, Edwina. 10 11 MS. KAVANAUGH: Thank you. 12 BY MR. GLEISNER: 13 Q This is being shown for, at this point, just informational purposes. 14 15 MS. KAVANAUGH: Again, that was --MR. GLEISNER: This was done by an 16 17 expert for the North Lake Management District, Attorney Gallo's client. 18 19 BY MR. GLEISNER: 20 And I'm showing you this, because I have some 0 21 follow-up questions. But it's very, very bright 22 and very easy to see. 23 This expert states that the only place 24 there are wetlands on the Kraus property at or 25 about the parking lot is going to be in the yellow

1 area. 2 Now, I'm not going to stop there, because if I stop there, then that would be 3 verging on argumentative. I want to, instead, 4 take Exhibit 9 up again. 5 And if you take a look at Exhibit 9, 6 7 there is a hash mark area at the approximate 8 location where the yellow area is on Exhibit 10. 9 Do you see that? Let me just point to it. Right here. 10 11 Yes, in approximation, yep. Α 12 Q And this is foundational. We're not -- we're not 13 here about wetlands, and we understand that. But this is foundational. Is that your understanding 14 of the approximate location of where wetlands are 15 located on this property? 16 17 Α The entire property? No. 18 Q No, no. I understand. Thank you for that. Where 19 the parking lot will be. 20 In the location of the parking lot, yes. Α Okay. So then let me ask you this: 21 Q How was that identified, Mr. Hudak, if you know? 22 23 To the best of my knowledge, that wetland area was Α 24 identified by department personnel and personnel 25 from the Southeastern Wisconsin Regional Planning

1		
1		Commission.
2	Q	And did you have any part in determining that?
3	A	I did not.
4	Q	Now, relating that to navigability, for a moment,
5		are you familiar with the soil borings that were
6		done on this property by the Gestra Corporation?
7	A	I am not.
8	Q	Okay. Fair enough. Have you
9		MS. KAVANAUGH: I'm sorry, can you say
10		who did those?
11		MR. GLEISNER: G-E-S-T-R-A.
12		MS. KAVANAUGH: Are they a DNR
13		MR. GLEISNER: Yeah, they are. They're
14		a DNR engineering report. But if the witness
15		doesn't have any knowledge of it, then I'm not
16		going to go there. At least not now.
17	BY M	R. GLEISNER:
18	Q	So now let me just say that I'm a little unclear
19		as to what was done regarding the eastern end of
20		the parking lot. It was only you who did the
21		investigation of that area?
22	A	I would say it's as relating to the manual code
23		approval and asserting regulatory standards on the
24		site, I was the one in charge or entrusted to
25		determine what jurisdiction authority was

1 associated with this project. 2 Q Now I'd like to change gears a little bit, if I might, and redirect us in a different direction 3 for a moment. 4 5 Prior to your manual code approval, on June 30 of 2010, you received a preliminary 6 7 approval from the Army Corps of Engineer, and on 8 the 30th of July, you received final approval from 9 the Army Corps of Engineers. Did they -- do you know that? 10 11 MS. KAVANAUGH: I guess I'd object to 12 the relevance of this in terms of navigable 13 waters. MR. GLEISNER: 14 I have --15 MS. KAVANAUGH: Because this isn't a Section 10 law. So they're not going to be making 16 17 navigability determinations. 18 MR. GLEISNER: And I have questions 19 about that. I'm going somewhere with this. 20 BY MR. GLEISNER: Do you know about that? 21 Q I knew that the DNR, and I'll say that loosely, 22 Α 23 was granted permit approval to fill wetlands for 24 the boat launch, and that that was received by the Army Corps in approximate -- the dates that you 25

1 mentioned.

Ŧ		mentioned.
2	Q	Did the what steps were taken by the Army Corps
3		of Engineers to identify wetlands of
4		navigability
5	A	I don't have any knowledge of that.
6	Q	Okay. Fair enough. Now I'd like to show you some
7		photographs here that were taken, and I will
8		represent that they were also taken by the NRC.
9		And that's Exhibit 11. I'm passing it over to you
10		as well, Mr. Hudak.
11		Have you first of all, are you
12		familiar with the area that is represented here?
13	A	I am not I don't have any reference to where
14		these are facing, looking or at.
15	Q	Then I'll just ask a general question.
16		MS. KAVANAUGH: Can you say, again, who
17		took these?
18		MR. GLEISNER: NRC.
19		MS. KAVANAUGH: That is Natural
20		MR. GLEISNER: Right.
21		MS. KAVANAUGH: So North Lake Management
22		District's
23		MR. GLEISNER: Right, right. They're
24		co-counsel.
25		MS. KAVANAUGH: Okay.
•		

1 BY MR. GLEISNER:

2QNow, what I'd like to know about this is: Did you3ever see this type of ponding on the Kraus site at4or near the area where the boat launch is going to5be located?6AA Again, I don't have any reference of where these7pictures are taken or where this is in relation to8the boat launch.9Q9I certainly accept that. And that's not what I'm10asking. I'm just asking it as a representation of11ponding, did you ever see ponding of this sort at12or near the boat launch?13And understanding that this is not I14would say it is near the boat launch, but that15isn't necessary for what I'm asking for. I just16want to know, did you ever see ponding like this?17MS. KAVANAUGH: Anywhere on the18property19MR. GLEISNER: Uh-huh.20MS. KAVANAUGH: or on the eastern21part of the property?22MR. GLEISNER: On the boat launch.23MS. KAVANAUGH: The boat launch isn't24there yet.25MR. GLEISNER: The area where the boat	-		
<ul> <li>a or near the area where the boat launch is going to be located?</li> <li>A Again, I don't have any reference of where these pictures are taken or where this is in relation to the boat launch.</li> <li>Q I certainly accept that. And that's not what I'm asking. I'm just asking it as a representation of ponding, did you ever see ponding of this sort at or near the boat launch?</li> <li>And understanding that this is not I would say it is near the boat launch, but that isn't necessary for what I'm asking for. I just want to know, did you ever see ponding like this?</li> <li>MS. KAVANAUGH: Anywhere on the property</li> <li>MR. GLEISNER: Un-huh.</li> <li>MS. KAVANAUGH: or on the eastern part of the property?</li> <li>MR. GLEISNER: On the boat launch.</li> <li>MS. KAVANAUGH: The boat launch isn't there yet.</li> </ul>	2	Q	Now, what I'd like to know about this is: Did you
<ul> <li>be located?</li> <li>A Again, I don't have any reference of where these pictures are taken or where this is in relation to the boat launch.</li> <li>Q I certainly accept that. And that's not what I'm asking. I'm just asking it as a representation of ponding, did you ever see ponding of this sort at or near the boat launch?</li> <li>And understanding that this is not I would say it is near the boat launch, but that isn't necessary for what I'm asking for. I just want to know, did you ever see ponding like this?</li> <li>MS. KAVANAUGH: Anywhere on the property</li> <li>MR. GLEISNER: Uh-huh.</li> <li>MS. KAVANAUGH: or on the eastern part of the property?</li> <li>MR. GLEISNER: On the boat launch.</li> <li>MS. KAVANAUGH: The boat launch isn't there yet.</li> </ul>	3		ever see this type of ponding on the Kraus site at
<ul> <li>A Again, I don't have any reference of where these pictures are taken or where this is in relation to the boat launch.</li> <li>Q I certainly accept that. And that's not what I'm asking. I'm just asking it as a representation of ponding, did you ever see ponding of this sort at or near the boat launch?</li> <li>And understanding that this is not I would say it is near the boat launch, but that isn't necessary for what I'm asking for. I just want to know, did you ever see ponding like this?</li> <li>MS. KAVANAUGH: Anywhere on the property</li> <li>MR. GLEISNER: Uh-huh.</li> <li>MS. KAVANAUGH: or on the eastern part of the property?</li> <li>MR. GLEISNER: On the boat launch.</li> <li>MS. KAVANAUGH: The boat launch isn't there yet.</li> </ul>	4		or near the area where the boat launch is going to
pictures are taken or where this is in relation to the boat launch. Q I certainly accept that. And that's not what I'm asking. I'm just asking it as a representation of ponding, did you ever see ponding of this sort at or near the boat launch? And understanding that this is not I would say it is near the boat launch, but that isn't necessary for what I'm asking for. I just want to know, did you ever see ponding like this? MS. KAVANAUGH: Anywhere on the property MR. GLEISNER: Uh-huh. MR. GLEISNER: On the boat launch. MR. GLEISNER: On the boat launch. MS. KAVANAUGH: The boat launch isn't there yet.	5		be located?
<ul> <li>the boat launch.</li> <li>Q I certainly accept that. And that's not what I'm</li> <li>asking. I'm just asking it as a representation of</li> <li>ponding, did you ever see ponding of this sort at</li> <li>or near the boat launch?</li> <li>And understanding that this is not I</li> <li>would say it is near the boat launch, but that</li> <li>isn't necessary for what I'm asking for. I just</li> <li>want to know, did you ever see ponding like this?</li> <li>MS. KAVANAUGH: Anywhere on the</li> <li>property</li> <li>MR. GLEISNER: Uh-huh.</li> <li>MS. KAVANAUGH: or on the eastern</li> <li>part of the property?</li> <li>MR. GLEISNER: On the boat launch.</li> <li>MS. KAVANAUGH: The boat launch isn't</li> <li>there yet.</li> </ul>	6	A	Again, I don't have any reference of where these
9 Q I certainly accept that. And that's not what I'm asking. I'm just asking it as a representation of ponding, did you ever see ponding of this sort at or near the boat launch? 13 And understanding that this is not I would say it is near the boat launch, but that isn't necessary for what I'm asking for. I just want to know, did you ever see ponding like this? 17 MS. KAVANAUGH: Anywhere on the property 19 MR. GLEISNER: Uh-huh. 20 MR. GLEISNER: On the boat launch. 21 part of the property? 22 MR. GLEISNER: On the boat launch isn't there yet.	7		pictures are taken or where this is in relation to
10asking. I'm just asking it as a representation of11ponding, did you ever see ponding of this sort at12or near the boat launch?13And understanding that this is not I14would say it is near the boat launch, but that15isn't necessary for what I'm asking for. I just16want to know, did you ever see ponding like this?17MS. KAVANAUGH: Anywhere on the18property19MR. GLEISNER: Uh-huh.20MS. KAVANAUGH: or on the eastern21part of the property?22MR. GLEISNER: On the boat launch.23MS. KAVANAUGH: The boat launch isn't24there yet.	8		the boat launch.
11ponding, did you ever see ponding of this sort at12or near the boat launch?13And understanding that this is not I14would say it is near the boat launch, but that15isn't necessary for what I'm asking for. I just16want to know, did you ever see ponding like this?17MS. KAVANAUGH: Anywhere on the18property19MR. GLEISNER: Uh-huh.20MS. KAVANAUGH: or on the eastern21part of the property?22MR. GLEISNER: On the boat launch.23MS. KAVANAUGH: The boat launch isn't24there yet.	9	Q	I certainly accept that. And that's not what I'm
12 or near the boat launch? 13 And understanding that this is not I 14 would say it is near the boat launch, but that 15 isn't necessary for what I'm asking for. I just 16 want to know, did you ever see ponding like this? 17 MS. KAVANAUGH: Anywhere on the 18 property 19 MR. GLEISNER: Uh-huh. 20 MS. KAVANAUGH: or on the eastern 21 part of the property? 22 MR. GLEISNER: On the boat launch. 23 MS. KAVANAUGH: The boat launch isn't 24 there yet.	10		asking. I'm just asking it as a representation of
13And understanding that this is not I14would say it is near the boat launch, but that15isn't necessary for what I'm asking for. I just16want to know, did you ever see ponding like this?17MS. KAVANAUGH: Anywhere on the18property19MR. GLEISNER: Uh-huh.20MS. KAVANAUGH: or on the eastern21part of the property?22MR. GLEISNER: On the boat launch.23MS. KAVANAUGH: The boat launch isn't24there yet.	11		ponding, did you ever see ponding of this sort at
<ul> <li>would say it is near the boat launch, but that</li> <li>isn't necessary for what I'm asking for. I just</li> <li>want to know, did you ever see ponding like this?</li> <li>MS. KAVANAUGH: Anywhere on the</li> <li>property</li> <li>MR. GLEISNER: Uh-huh.</li> <li>MS. KAVANAUGH: or on the eastern</li> <li>part of the property?</li> <li>MR. GLEISNER: On the boat launch.</li> <li>MS. KAVANAUGH: The boat launch isn't</li> <li>there yet.</li> </ul>	12		or near the boat launch?
<ul> <li>15 isn't necessary for what I'm asking for. I just</li> <li>16 want to know, did you ever see ponding like this?</li> <li>17 MS. KAVANAUGH: Anywhere on the</li> <li>18 property</li> <li>19 MR. GLEISNER: Uh-huh.</li> <li>20 MS. KAVANAUGH: or on the eastern</li> <li>21 part of the property?</li> <li>22 MR. GLEISNER: On the boat launch.</li> <li>23 MS. KAVANAUGH: The boat launch isn't</li> <li>24 there yet.</li> </ul>	13		And understanding that this is not I
<ul> <li>16 want to know, did you ever see ponding like this?</li> <li>17 MS. KAVANAUGH: Anywhere on the</li> <li>18 property</li> <li>19 MR. GLEISNER: Uh-huh.</li> <li>20 MS. KAVANAUGH: or on the eastern</li> <li>21 part of the property?</li> <li>22 MR. GLEISNER: On the boat launch.</li> <li>23 MS. KAVANAUGH: The boat launch isn't</li> <li>24 there yet.</li> </ul>	14		would say it is near the boat launch, but that
<ul> <li>MS. KAVANAUGH: Anywhere on the</li> <li>property</li> <li>MR. GLEISNER: Uh-huh.</li> <li>MS. KAVANAUGH: or on the eastern</li> <li>part of the property?</li> <li>MR. GLEISNER: On the boat launch.</li> <li>MS. KAVANAUGH: The boat launch isn't</li> <li>there yet.</li> </ul>	15		isn't necessary for what I'm asking for. I just
<pre>18 property 19 MR. GLEISNER: Uh-huh. 20 MS. KAVANAUGH: or on the eastern 21 part of the property? 22 MR. GLEISNER: On the boat launch. 23 MS. KAVANAUGH: The boat launch isn't 24 there yet.</pre>	16		want to know, did you ever see ponding like this?
19MR. GLEISNER: Uh-huh.20MS. KAVANAUGH: or on the eastern21part of the property?22MR. GLEISNER: On the boat launch.23MS. KAVANAUGH: The boat launch isn't24there yet.	17		MS. KAVANAUGH: Anywhere on the
20 MS. KAVANAUGH: or on the eastern 21 part of the property? 22 MR. GLEISNER: On the boat launch. 23 MS. KAVANAUGH: The boat launch isn't 24 there yet.	18		property
21 part of the property? 22 MR. GLEISNER: On the boat launch. 23 MS. KAVANAUGH: The boat launch isn't 24 there yet.	19		MR. GLEISNER: Uh-huh.
22 MR. GLEISNER: On the boat launch. 23 MS. KAVANAUGH: The boat launch isn't 24 there yet.	20		MS. KAVANAUGH: or on the eastern
23 MS. KAVANAUGH: The boat launch isn't 24 there yet.	21		part of the property?
24 there yet.	22		MR. GLEISNER: On the boat launch.
	23		MS. KAVANAUGH: The boat launch isn't
25 MR. GLEISNER: The area where the boat	24		there yet.
	25		MR. GLEISNER: The area where the boat

1 launch will be, the 275 foot --2 MS. KAVANAUGH: The boat launch parking lot? 3 4 MR. GLEISNER: Yes. Thank you, Counsel. 5 MS. KAVANAUGH: You don't even know what you're talking about. 6 7 THE WITNESS: I would say the entire 8 vicinity, including the entire Reddelien 9 neighborhood. On certain visits, I had observed ponding throughout that area. And the area I'm 10 referencing is the entire Reddelien Road area. 11 BY MR. GLEISNER: 12 13 Q First of all, I just want to make sure I 14 understand this correctly. You've stated on the 15 record that you believe that navigability requires some sort of bed or bank? 16 17 Α Correct. I'm going to show you now what's been marked as 18 Q 19 our Exhibit 1-B, and I'm going to pass that over 20 also to Edwina. And I'm going to ask you to turn in here to page -- bear with me a moment. 21 I think 22 I've got it. Page 15 and 16. 23 MR. GLEISNER: I'm going to anticipate 24 an objection here. I understand that it's the 25 position of the DNR that these memos aren't

1 necessarily binding on the agency and that they 2 aren't -- that they aren't necessarily part of the regulations --3 MS. KAVANAUGH: Correct --4 5 MR. GLEISNER: -- of the handbook --MS. KAVANAUGH: -- they're guidance. 6 7 MR. GLEISNER: Guidance. 8 BY MR. GLEISNER: 9 I would like to read into the record or have you 0 read into the record on page 16 the 10 paragraph beginning -- if you wouldn't mind, if 11 12 you would read it into the record, the 13 paragraph beginning, "The real issue to be considered." 14 15 "The real issue to be considered when evaluating Α lakes and ponds including wetlands is whether 16 17 they're navigable in fact by the above criteria." "Although one might argue that there 18 19 should be some minimum cutoff size for a body of 20 water to be considered navigable, any body of water capable of floating a canoe is valuable and 21 should be considered navigable." 22 23 "To support this conclusion, consider 24 the resource value associated with using a tiny spring pond or isolated wetland pond. They have 25

1		fishery and/or wildlife values, and preserving
2		these values is in the public interest even if
3		they are not readily accessible to the public."
4	Q	Thank you very much, Mr. Hudak. Do you agree or
5		disagree with that statement?
6	A	I would agree with that statement.
7	Q	Thank you. Now, you used this or do you I
8		apologize. Do you use this "Waterway and Wetland
9		Handbook" on a regular basis?
10	A	On a regular basis it is used for reference for
11		certain issues.
12	Q	Is it safe to say and I'm not now just
13		referring to page 15 or 16. Is it safe to say
14		that this document is the primary manual that you
15		utilize if you have a question about navigability?
16	A	I would say that would be correct.
17	Q	Are there any other documents that you refer to?
18	A	For navigability?
19	Q	Yes.
20	A	One that is often handed out to public citizens is
21		a little brochure of navigability. That would be
22		maybe the only other one sort of given.
23	Q	Is it a green color?
24	A	I couldn't tell you the color. There's one on
25		navigability and two on unordinary high water

1 marks. 2 MR. GLEISNER: Counsel, it would be a convenient time for a short potty break. 3 MS. KAVANAUGH: 4 Sure. 5 MR. GLEISNER: Off the record then. (A brief recess is taken.) 6 7 MR. GLEISNER: Back on the record. 8 BY MR. GLEISNER: 9 Mr. Hudak, before we took our break, there were Q some discussions about elevations and so on and so 10 forth and what the Kapur engineering firm did on 11 12 the eastern part of the proposed parking lot. 13 And I wonder if you could, if it's possible, expand for me a little bit on what the 14 15 Kapur people actually did. Do you know? 16 Besides... 17 Α I can expand on the fact that I know that they did spot elevations and used those to generate an 18 19 on-site topol. 20 Do you know if they ever did an onsite elevation Q before or not? 21 I do not. 22 Α 23 Do you happen to know if there was --Q 24 MR. GLEISNER: Can we take a very short break? 25

1 (Exhibit Nos. 100 through 103 were 2 marked.) MR. GLEISNER: Back on the record. What 3 I've done is I've informally marked your copy, 4 Edwina, and my copy. 5 BY MR. GLEISNER: 6 7 Q And now I'm going to show you a packet of 8 exhibits, Mr. Hudak, that I've been told -- first 9 of all, these are NMLD exhibits, North Lake Management District's exhibits. I've been told by 10 Mr. Gallo that these were taken from your files. 11 12 Α I notice them to be taken from the Bing's website 13 or bird's eye view from Bing. Now it -- used to 14 be able to get access from Waukesha County server. 15 But Bing has this access. So I know I have pictures of here somewhere. So this could be from 16 17 our time. MR. HARBECK: Bill, what exhibit number 18 19 are you on? 20 MR. GLEISNER: I have 100 through 104 (sic) in front of me, and I will make copies for 21 22 our group. 23 MR. HARBECK: You just didn't get it on 24 the record. That's all. 25 MR. GLEISNER: Sorry, I apologize.

1 BY MR. GLEISNER:

2	Q	Let's take Exhibit 100 first of all.
3	A	Okay.
4	Q	Do you recognize what that is?
5	A	Yes.
6	Q	Can you describe for the record what that is?
7	A	It appears to be a flyover air photo of the
8		eastern extent of the DNR site encompassing the
9		parking area.
10	Q	Okay. Now, if I were to maybe you could use
11		the orange pen there. Do you see the Peters'
12		house on that?
13	A	Would that be north or south of the parking lot?
14	Q	North.
15	A	Yes.
16	Q	And can you is that the stream that you're
17		talking about that runs just a little bit to the
18		south of the Peters' house there?
19	A	You cannot pick that up on this air photo, but the
20		stream would be located in the general vicinity to
21		the on this photograph looking right of that
22		Peters' house.
23	Q	Could you do us the favor of taking your orange
24		pen and drawing where you think the stream would
25		
25		be? realizing it's an approximation, of course.

1 Α Sure. 2 Q Now, if you could just initial that. I would appreciate that. 3 (Witness complies.) 4 Α 5 Now, to the right or as you look to the right, Q actually to the south, do you see the Hanson 6 7 house? 8 If that is the immediate house south of the DNR Α 9 parcel, yes. Okay. Now, I don't mean to be flip here, but in 10 Q between the Peters' house and the Hanson's house, 11 12 I see this big clump of trees. Am I imagining 13 that? That's argumentative. 14 MS. KAVANAUGH: 15 MR. GLEISNER: It's a little --MS. KAVANAUGH: There's several clumps 16 of trees there. 17 MR. GLEISNER: A little argumentative. 18 I'll withdraw that. 19 20 BY MR. GLEISNER: 21 What that's? Q Can you identify that? 22 MS. KAVANAUGH: 23 THE WITNESS: What are you pointing at 24 there? This? This? BY MR. GLEISNER: 25

	_	
1	Q	That.
2	A	The second circle?
3	Q	Yes.
4	A	I would stipulate that those are trees.
5	Q	Would you call that a grove of trees?
6	A	I don't know the exact definition of "grove," but
7		I would say that there are trees present at that
8		location.
9	Q	A stand of trees, perhaps?
10	A	A stand of trees.
11	Q	Would you take your orange pen and draw a circle
12		around the trees that we're talking about? Yes.
13	A	(Witness complies.)
14	Q	And, in fact, that circle may even be little bit
15		bigger because the trees go up in the air there?
16	A	Well, you have to take the vantage point of this
17		photograph. This isn't straight looking down.
18		This is looking at the angle. These are tops of
19		the trees but not the extent I drew the
20		approximate extent of the location of the bottom
21		trees.
22	Q	Okay. Answer me this: Did you see those trees
23		when you were making an inspection of the eastern
24		end of where the parking lot was going to be?
25	A	I haven't inspected the portion of the DNR site.

Γ

1 Q And what was your assessment of the DNR site? 2 MS. KAVANAUGH: Object. That is a vague question. 3 That is a vague guestion, 4 MR. GLEISNER: 5 Counsel. MS. KAVANAUGH: Can you clarify? 6 7 BY MR. GLEISNER: 8 What was your impression of the trees that you've Q 9 drawn a circle around? What was your -- when I say, "Impression," we're going to go beyond that. 10 But what was your -- what was your reaction when 11 12 you saw those trees? 13 MS. KAVANAUGH: And those are all vague. MR. GLEISNER: 14 They're deliberately 15 vague. MS. KAVANAUGH: Is there something that 16 17 you want to know about what he thought about the trees? Ask him that. An impression is, you 18 19 know... 20 BY MR. GLEISNER: What did you think when you saw those trees, 21 Q Mr. Hudak? 22 Beautiful trees. 23 Α 24 And were they large trees? Q I would say there is a mix of trees with different 25 Α

1		
1		diameter base, DBH, diameter at breast height,
2		circumference, anywhere from 6 inches to 24
3		inches. Very, very broad approximation.
4	Q	And would you say those were very tall trees,
5		Mr. Hudak?
6	A	"Tall" is a very relative word. I'll give it an
7		approximation of 15 to 60 feet.
8	Q	Now, let's get more specific so we don't get in
9		trouble with counsel again. In that area where
10		those trees exist in, where they're planted, where
11		they're growing, did you go in there and inspect
12		the soil?
13	A	No.
14	Q	You did not?
15	A	No, I did not inspect the soil.
16	Q	At any time?
17	A	No.
18	Q	And, to your knowledge, were soil borings ever
19		done at that point?
20	A	Not to my knowledge.
21	Q	Okay. Now, did you make an assessment where those
22		trees are located? Did you make an assessment as
23		to whether or not there was a bed and bank in
24		there?
25	A	I made a professional judgment that I did not

1 discern a bed or bank. 2 Q Could there have been a bed or bank that you didn't discern? 3 4 MS. KAVANAUGH: Again --5 THE WITNESS: My opinion, no. 6 BY MR. GLEISNER: 7 Q Did you ever see water standing in -- at any depth 8 in those trees? I'm saying at any depth. I'm not 9 trying to be cute here. I couldn't speculate if I've ever seen zero or six 10 Α inches of water. I don't have any recollection of 11 12 that area and water depth in that particular area. 13 Like I stated earlier, I had visited the 14 site during wet periods where there was ponding 15 throughout this Reddelien Road neighborhood --16 Uh-huh. 0 17 Α -- however, my recollection at that date when there was probably the wettest period I was out 18 19 there, I can't recollect whether or not there was 20 water or not in that specific location. Do you know if anybody else in the DNR inspected 21 Q 22 those trees, inspected where those trees were at, 23 is what I mean, excuse me? 24 Inspected for what? Α I apologize. For anything. Was there ever a DNR 25 0

1 inspection that you know of where those trees are 2 located? That's very broad. I don't know what you're 3 Α asking me what they inspected for. 4 5 Okay. I just am trying to get an idea if anybody 0 from the DNR has ever really taken a hard look at 6 7 those trees and where they are located. 8 MS. KAVANAUGH: For what? 9 THE WITNESS: For what? BY MR. GLEISNER: 10 For the type of soil they're in, whether or not 11 Q 12 there's an elevation that would be above or below 13 the high water mark, whether or not there's any 14 kind of unusual characteristics of that grouping 15 of trees. I can't speak to any other department personnel or 16 Α 17 consultant for the DNR. My own investigations did have me look at that area, again, to determine is 18 19 there a discernible bed and bank; are there 20 indicators that there may be a navigable waterway there? Those are findings -- or, I should say, 21 investigations that I had conducted. 22 23 I'm curious about the concept of bed and bank. Q 24 And I heard you use that term, and I see it in the 25 DNR, and I understand the concept in general.

1		But when we're talking bed and bank, how
2		high, low is a bed and bank? Are we talking about
3		something that's got to be six inches high or a
4		foot or two feet? Could it be as low as an inch
_		
5		or two? I'm wondering
6	Α	I can relate to historic sites I've seen, and the
7		bed and bank can be any discernible change in
8		substrate. And whether that's an elevation of
9		zero inches or whether that's an elevation of six
10		feet, it's highly variable, per se.
11	Q	Now, can you explain for the record what
12		"substrate" is?
13	A	In context?
14	Q	In any form. I just want you to define
15		"substrate."
16	A	I don't have a Webster's dictionary to define
17		"substrate."
18	Q	What is it?
19	A	I don't have the definition of substrate.
20		MS. KAVANAUGH: Are you trying to ask
21		him how he's using the term?
22		MR. GLEISNER: Yeah, I guess I am.
23	BY M	R. GLEISNER:
24	Q	Because you just used it a moment ago, and I guess
25		I was trying to figure out

Brown & Jones Reporting, Inc. 414-224-9533

l		
1		MS. KAVANAUGH: So you want to ask him
2		what does he mean by "substrate"?
3		MR. GLEISNER: Yeah.
4	BY M	R. GLEISNER:
5	Q	Here's what you said. You said, and I quote, "I
6		can relate to historic sites I've seen. And the
7		bed and bank can be any discernible change in
8		substrate. And whether that's an elevation of
9		zero inches or whether that's an elevation of six
10		feet" That's what you said.
11	A	Correct.
12	Q	So you used the word "substrate," so I don't
13		understand.
14	A	In context
15	Q	Okay.
16	A	in relationship to identifying a bed and bank,
17		that is often one of the observations that is made
18		by a WMS as to discern is there a bed and bank.
19		And that would be a change in substrate or
20		material compromising the bed or the bank.
21	Q	Let me just see if I understand. And I'm really
22		struggling here to understand, and that's all I
23		want your help in understanding this.
24		Are you saying that a bed and bank can
25		exist if there is a flat surface that consists of

1		
1		the type of soils you would find at the bottom of
2		a bed of a river and another surface that's the
3		same height but of a different makeup, for
4		example, grass or some other type of am I
5		understanding you correctly?
6	A	No. If you want to use your example
7	Q	Okay.
8	A	of a river
9	Q	Yeah.
10	A	and discerning the substrate types and the
11		elevations associated with that, as a river
12		meanders, it has different characteristics along
13		those ways, whether it's a cut or a bend where
14		it's deposited or where it cuts.
15		A lot of times in depositional areas you
16		can have a change in substrate that's very
17		gradual. In other places you can have a substrate
18		cut that's very distinct.
19	Q	I infer from what you're saying let me just
20		read what you said again a moment ago. "The bed
21		and bank can be any discernible change in
22		substrate. Whether that's an elevation of zero
23		inches or whether that's an elevation of six
24		feet"
25		I infer from what you're saying that the

Г

1 bank -- I think that's what we're talking about --2 that's the sides of whatever we're talking about, like the side of the river, side of the stream --3 can actually be almost the same height as the bed? 4 5 Depending upon the way that that particular bank Α is formed under any particular process, again, 6 7 could be the height elevation change that I stated 8 previously. 9 All right. Now, let's reapply what we just Q learned to Exhibit 100. Where those trees are, 10 11 was there any effort made by you or anyone at the 12 DNR to determine if there was a substrate change 13 between the area in those trees and the area 14 surrounding those trees? 15 There was no investigation made by me, I don't Α believe anybody else at the DNR, to specifically 16 17 identify the substrate change with the area below 18 the grove of trees and outside the area of trees. 19 Of note during those inspection was, 20 i.e., lack of vegetation due, in part -- again, to partially, in my professional judgment, of shade 21 22 occurring from the tree canopy in that particular 23 area. 24 The tree canopy was pretty thick, was it there? Q Well, as you can see, there are deciduous and 25 Α

1 evergreen species, conifer species, that, again, 2 provide year-round shading of that area. MR. GLEISNER: Counsel, I'm not going to 3 go very far field here, but I do have a question 4 that relates to --5 BY MR. GLEISNER: 6 I am going to show you Exhibit 8. 7 0 8 MR. GLEISNER: Counsel, here's your 9 copy. BY MR. GLEISNER: 10 And this purports to be a drawing done by the DNR. 11 Q 12 It purports to be a drawing done on December 4, 13 2008. Now, where are those trees that appear on Exhibit 100? They don't seem to be marked. 14 Am I 15 missing something? What's your question? 16 Α 17 Q Okay. Take a look at the eastern end of -- first of all, strike that. 18 19 You recognize this, do you not, as being 20 a topographical of the area where the parking lot is going to be located? 21 The Exhibit 8? 22 Α 23 Yeah. Yes. Q 24 Α Exhibit 8, to the best of my knowledge, would be a 25 topographical map. I don't know the exact -- who

1 developed this. It looks like it was provided by 2 us, but, again, I don't see any other specific information to let me know exactly where it is or 3 what it's from. 4 5 I'm going to show you --Q MR. GLEISNER: That's a fair response, 6 7 by the way, Counsel. 8 BY MR. GLEISNER: 9 I understand you didn't make that, so you would Q have a problem testifying about what it shows. 10 Let's go back to Exhibit 9, if we could 11 12 for a moment. Now, Exhibit 9 is a map of the 13 parking lot. I also don't find there any indication 14 15 of the trees on the eastern end of where the parking lot -- the proposed parking lot's going to 16 17 be. At least I don't see the same kind of large canopy trees that appear in Exhibit 100. Help me. 18 19 Am I missing something? 20 I still don't know -- I understand you're trying Α to understand where these trees are that are 21 located on this map in relationship to this plan 22 23 set. 24 Thank you. Q Yes. And I can't relate to why particularly the trees 25 Α

l		
1		are identified or not identified on this plan set.
2		What trees they chose to identify or not identify,
3		I can't testify as to why
4	Q	I understand
5	A	or presently locate on there
6	Q	Above your pay grade. I understand that. The
7		point I'm making, I guess, would you agree with me
8		that on Exhibit 9, that the trees that are on
9		Exhibit 100 don't exist?
10	A	I
11	Q	There's no reference
12	A	To me, there are trees that exist. Again, which
13		trees they chose to indicate on this map, I don't
14		know.
15	Q	Okay.
16	A	Which trees are
17	Q	That's fair.
18	A	Which trees are located on this map as far as
19		which trees are located in this circle
20	Q	That's a fair response. You testified to as much
21		as you can. I understand. Now, let's take a look
22		at Exhibit 101, NLMD Exhibit 101. Do you
23		recognize that?
24	A	It would appear to be a different vantage point.
25		This one would be would appear to be facing

I		
1		south looking at the parking lot area, DNR launch
2		side.
3	Q	And looking at this, do you see where the stream
4		would be that we're we've been talking about
5		all afternoon, the blue stream that you identified
6		in Exhibit 2 earlier?
7	A	I would be able to identify an approximate
8		location where the stream would be.
9	Q	And I would state that anything that you say with
10		regard to these exhibits are understood to be
11		approximations.
12		Could you draw with the let's do it
13		with the purple this time. I like colors. Could
14		you draw where the stream would be approximately
15		on Exhibit 101?
16	A	(Witness complies.)
17	Q	So we've run pretty close to the Peters' house by
18		your drawing there?
19	A	And, again, you're distorting the photo because of
20		the vantage point.
21	Q	Understood.
22	A	So it is located beyond the house, but, again, it
23		is close to that property line between the DNR and
24		the Peters' house.
25	Q	I'm going to stand up, because I think we can

Г

1		communicate better if I point here. Is that the
2		Hanson house?
3	A	That would be the approximate location of the
4		Hanson house.
5	Q	And I'm going to ask you a specific question in a
6		moment, but I just want to get myself oriented.
7		Is this the rough area where the parking lot's
8		going to be located?
9	A	Rough approximation, yep.
10	Q	Okay.
11		MS. KAVANAUGH: Could you identify for
12		the record the part you're pointing to?
13		MR. GLEISNER: I certainly will. I'm
14		going to do that really specifically right now.
15	BY M	R. GLEISNER:
16	Q	Are these the trees you had in Exhibit 100?
17		MS. KAVANAUGH: Can you identify them so
18		she has what you're pointing to in the record?
19		THE WITNESS: I would say that's the
20		approximate grove of trees that I've identified in
21		Exhibit 100.
22	BY M	R. GLEISNER:
23	Q	Okay. Would you please take your purple pen and
24		draw a circle around the grove of trees or the
25		trees that we're talking about?
1	A	(Witness complies.)
----	------	--
2	Q	And, again, you've drawn a circle around where you
3		think the base of the trees are?
4	A	Correct.
5		MR. GLEISNER: And so, Counsel, for your
6		edification, what I was pointing to on Exhibit 101
7		is now identified by the purple circle on
8		Exhibit 101.
9		MS. KAVANAUGH: Thank you.
10	BY I	MR. GLEISNER:
11	Q	Do you know what this is back here? And now I'm
12		pointing to the west of the circle and where the
13		stream has been identified.
14	A	It appears to be the wetland complex that would be
15		located along the western portion of the DNR
16		parking lot area.
17	Q	Could you take the orange pen to your right and
18		draw a circle around that wetland complex, please?
19	A	(Witness complies.)
20	Q	Thank you. Now, earlier on Exhibit 2, I asked you
21		to extrapolate out from the stream. Can you take
22		the green and show me where you think the stream
23		goes after it after this point, if you know?
24	A	I don't believe it's channelized after that point.
25	Q	What do you believe happens to it?

T		
1	A	I don't know what you're what happens to what?
2	Q	Okay. The stream that let me do it this way.
3		When one is on the property owned by Peters,
4		looking south, you can see a stream. You can
5		actually see a stream.
6	A	You can see a water course.
7	Q	A water course, thank you. If one walks back
8		along that water course?
9	A	Direction? Which direction?
10	Q	To the west.
11	A	Okay.
12	Q	At what point does the water course cease to
13		exist, in your opinion? Where
14	A	The water course of the purple and the orange is
15		the same approximate water course; however, you do
16		not have as narrow of a channel through the
17		purple sorry, through the orange location as
18		you do through the purple.
19	Q	Okay. Thank you very much for that. Now let me
20		see if I understand what you just said to me. The
21		blue line to the south of the Peters' home running
22		from the lake west, in effect, diffuses and
23		becomes a generalized wetland at the point where
24		your orange circle begins, am I correct?
25	A	I would consider at that orange portion

]		
1		intersection you would consider the wetland
2		complex navigable.
3	Q	And that would be navigable right there?
4	A	Correct.
5	Q	And do you happen to if you don't, I'll
6		understand. Do you happen to know where the point
7		is and I'm going to point up here just for the
8		purposes of clarification. Can you see where this
9		is on that photograph?
10	A	I don't believe so.
11	Q	Okay. Very good. Thank you very much. Now,
12		let's go to Exhibit 102 for a moment, NLMD
13		Exhibit 102. Do you recognize that?
14	A	It is a secondary this is the third orientation
15		of the DNR launch site facing to the west.
16	Q	And to the right on that picture as we look west,
17		that would be the Peters' home?
18	A	That would be correct.
19	Q	And to the left at the edge of the picture, that
20		would be the Hanson home?
21	A	That would be correct.
22	Q	Now, so I don't get in trouble with counsel again,
23		to the immediate north of the Hanson home, are
24		there trees there?
25	A	According to that photograph, yes.

1	Q	Would you draw a circle around those trees for me?
2	A	What color?
3	Q	I think we'll use green this time. What do you
4		say? You got green. Go ahead.
5	A	To the extent of the grove of trees on the DNR
6		property or this vantage point you're able to pick
7		them up as a grove even up onto the Hanson
8		property?
9	Q	Around the grove.
10	A	(Witness complies.)
11	Q	Now, this is a better vantage point, is it, for
12		purposes of getting the borderline of the trees,
13		would you say?
14	A	You're able to identify trees in locations that
15		you weren't able to identify on other vantage
16		points.
17	Q	Now, Exhibit 102 where you've drawn the green line
18		around there, that is the trees that you didn't go
19		in and inspect before or look at before or take
20		any measurements before, is that correct?
21	A	Before what?
22	Q	At any time, let me put it that way.
23	А	I've walked that portion of trees.
24	Q	And what have you done in that portion of trees?
25	A	I've explained previously that I've used

Г

1		professional judgment to assess, identify whether
2		any navigable waterways are present.
3	Q	By the way, did you make any tests to see whether
4		or not there was a bank there?
5	A	What do you refer to as a "test" to determine
6		bank? Can you
7	Q	Well, you testified I'm sorry. I apologize.
8	A	There's I'm trying to understand what test you
9		want me to
10	Q	That's fair.
11	A	describe if I've completed there.
12	Q	You know, I don't know. Let me just do it this
13		way. What did you do to determine whether or not
14		there was a bank there or not?
15	A	I used professional judgment through the course of
16		site investigation to rule out the presence of
17		bank and bed.
18	Q	Did you make any effort to determine whether or
19		not now I'm pointing back to Exhibit 103 at
20		this point 102, I apologize.
21		Did you make any effort to determine
22		whether or not there was a difference in substrate
23		between what's inside the green circle and what's
24		outside the green circle on Exhibit 102?
25	A	Substrate as far as visual only. And the site

1		characteristics led me to believe that there was
2		lack of vegetation below that tree canopy as
3		opposed to thicker, denser vegetation outside that
4		tree canopy. But as far as substrates are
5		concerned, no tests or study were done.
6	Q	So let me see if I understand you correctly. And
7		I don't want to put words in your mouth, but
8		you're testifying then that you never did anything
9		to confirm whether there was a bank whether
10		there was or wasn't a bank there, other than your
11		observations?
12	A	No tests were completed other than my professional
13		judgment.
14	Q	And thank you. Now, let's take a look at
15		Exhibit 103, NLMD Exhibit 103. Do you recognize
16		that?
17	A	It's a north-facing vantage point of the DNR
18		launch site.
19	Q	Okay. Now, taking your purple pen, can you
20		because that will be consistent can you draw
21		where the approximate location of the stream bed
22		would be that we've talked about so often?
23	A	(Witness complies.)
24	Q	Thank you. And am I correct, take your orange
25		if you wouldn't mind, take your orange marker, and

Г

Ī		
1		am I correct that that blends into what appears to
2		be another vantage point of the wetland?
3	A	I will draw on the map in the orange location
4		where the navigable portion of wetlands
5	Q	Very good.
6	A	would likely begin.
7	Q	Thank you.
8	A	Approximation.
9	Q	Of course. I appreciate that. Thank you. Now,
10		you can see the Peters' house just north of the
11		blue line or purple line that you drew in there,
12		correct?
13	A	Correct.
14	Q	And you can see in the lower left-hand corner of
15		Exhibit 103 the Hanson house, correct?
16	A	Correct.
17	Q	Now, here's our old friends the trees again. Do
18		you see them there?
19	A	I would see them there.
20	Q	Would you mind doing me the favor of doing a green
21		circle around those?
22	A	(Witness complies.)
23	Q	Do you have an approximate and I realize you
24		can't do it from this picture and your memory may
25		not be clear on this, but do you have an

1		approximation as to how much ground is covered by
2		those trees?
3	A	I do not.
4	Q	Okay. Would it be fair looking at those trees
5		there, the grouping of trees there would be about
6		three times as big as the Hanson house?
7	A	I wouldn't make that approximation only as this
8		vantage point is very deceiving. So I don't want
9		to use it as a reference point.
10	Q	Okay. Fair enough, fair enough. All right then.
11		MR. GLEISNER: I want to leave time for
12		Mr. Gallo to do some questioning, Counsel, so I'm
13		going to ask permission to just take a very short
14		break so we can confer outside.
15		MS. KAVANAUGH: Sure.
16		(A brief recess is taken.)
17		MR. GLEISNER: Back on the record.
18	BY M	R. GLEISNER:
19	Q	First of all, I'd like to ask you a couple of
20		fairly brief questions. The area that is depicted
21		in Exhibits NLMD Exhibits 100 through 103,
22		pretty beautiful area, would you agree?
23	A	It's a nice area, yeah.
24	Q	What do you think an asphalt
25		MS. KAVANAUGH: Object. That has

1 nothing to do with navigability, Bill. 2 MR. GLEISNER: Hold on. I'm going to tie this in this way. 3 BY MR. GLEISNER: 4 5 A number of the cases, including the Menomonee 0 Falls case, say that once, if navigability has 6 7 been assessed, the next step -- and, in fact, this 8 is right out of the Menomonee Falls case -- is to 9 determine whether or not there is an impact on the right to beauty and the right to aesthetics. 10 MS. KAVANAUGH: The Menomonee Falls case 11 12 deals with the stream with an established bed and 13 bank. 14 MR. GLEISNER: But would you agree with 15 me that if navigability is established --MS. KAVANAUGH: I would agree that if 16 17 there is a navigable water body, that one of the public interest factors is natural scenic beauty. 18 19 MR. GLEISNER: There you go. 20 MS. KAVANAUGH: If there is a navigable water body. 21 MR. GLEISNER: Will you give me a little 22 23 latitude? I'm going to ask about three questions 24 on it. I don't think -- I think 25 MS. KAVANAUGH:

1 the question here --2 MR. HARBECK: Why don't we get the question out? We don't know what the question is 3 Fight about it after you hear it. 4 about. 5 MS. KAVANAUGH: But the issue of whether -- if what we're looking at is if there's 6 7 navigable waters here, that's what he's trying to 8 establish, whether there's a navigable water body 9 here and if -- for which you know -- you would need to look at that type of thing. 10 And then he can argue whether or not, if 11 12 there is a navigable water body here, whether they 13 should have granted it, whether they gave the 14 proper impact to that in making --15 MR. GLEISNER: Edwina. Would you agree, Edwina, that the hearing examiner, just as in the 16 17 Menomonee Falls case -- and I've got most of the transcript -- the hearing examiner is not going to 18 19 make a determination on navigability and say, "You 20 folks come back in a couple weeks and we'll take 21 up beauty"? 22 MS. KAVANAUGH: No. The hearing 23 examiner is not determining whether the permit 24 should have issued. 25 The only issue that it went to the

1 hearing for is whether or not -- and DNR is the 2 one who makes the determination of jurisdiction in that -- that we granted it for, and that was the 3 presence of navigable waters and navigable water 4 body, whether this area that you're claiming is a 5 navigable water of the State -- is a navigable 6 7 water to the State. 8 Whether or not the manual code of 9 approval -- approval should have been granted to build a parking lot there is something that you 10 11 get at court --12 MR. GLEISNER: I'm going to short 13 circuit this. 14 MR. HARBECK: My only purpose was let 15 him ask the question. It's the deposition process. You can object on relevance. Let's get 16 17 through it. It's past relevance. 18 MS. KAVANAUGH: 19 It's jurisdiction of the examiner here, you know? 20 MR. GLEISNER: Oh, my goodness. BY MR. GLEISNER: 21 22 Q Oh, my goodness. Let's do it this way. With 23 having reference to Exhibits 100 and 103, with the 24 red pen could you draw for me the approximate location where this parking lot is going to be 25

1		located?
2	A	On all four of these?
3	Q	Yeah.
4	A	To the best of my ability, approximation of
5		these of the boat launch parking structure?
6	Q	Yeah.
7	A	(Witness complies.)
8	Q	Thank you.
9	A	Very approximate.
10	Q	I see.
11	А	(Witness complies.)
12	Q	And that's going to be two feet above grade,
13		right?
14	A	Based on the plan review, that there is a grade
15		change. And the depth of fill is variable along
16		the site.
17		MR. GLEISNER: For the record, Mr. Hudak
18		has, on Exhibits 100 through 103, kindly noted the
19		approximate location of the parking lot
20		proposed parking lot in red, in the color red.
21	BY M	R. GLEISNER:
22	Q	Now, I just have a couple of wrap-up questions
23		here for you, Mr. Hudak. First of all, with
24		respect to the notice what we call in the trade
25		the 804.02(2)(e) notice, I just have a couple of

1 questions for you. 2 Is there -- No. 1 says in the notice -would you like a copy? 3 Just what exhibit is it? I probably have it. 4 Α Is 5 it Exhibit 00? 00, uh-huh. Got it there? 6 Q 7 Α Yeah. 8 Just take a look at page 2. Go to No. 1. "The Q 9 manner, method" -- this is No. 1 from the notice. "The manner, method or procedure by 10 which DNR assesses, evaluates, tests or determines 11 12 the presence of navigable waters in connection 13 with its permitting process." My question to you, is there anything at 14 15 the Kraus site regarding the issues addressed there, method, procedures, tests, et cetera, that 16 17 you have not testified to? Have you testified to everything that 18 was done at the Kraus site to determine 19 20 navigability? I can testify to what I've personally conducted. 21 А Understood. Which is the way to do it. 22 Q 23 And that's kind of vague for me to try and Α 24 explain. I believe we touched on everything that 25 you've asked, but I...

1 Q Let me explain 804.05(2)(e). And your counsel can 2 help out here. This -- you've been identified as the person to speak on behalf of the DNR. 3 So is there anything else that you're 4 aware of that the DNR has done on the Kraus site 5 to determine navigability? 6 7 Other than the field work that I conducted and my Α 8 professional judgment and, I believe, I would say 9 the -- the little bit confirmation work that we discussed previously, that was the extent of the 10 11 DNR's work to investigate navigable waterways on this site. 12 13 No. 2, "Any and all tests, evaluations, analyses, Q studies or similar evaluative techniques utilized 14 15 by the DNR or anyone on its behalf or by others on the Kraus site intended to determine the existence 16 17 of navigable waters at any time." 18 And that's the -- the answer that you 19 gave to one is the same as to two. Is there 20 anything else that you're aware of? Yeah, one and two are pretty much the same 21 Α discussing all test evaluation, analysis or 22 23 manner, means or methods of how that was 24 conducted. I would say they're similar in that And the answer to one is suffice to 25 regard.

1 No. 2. 2 Q No. 3 talks about the manual code process, which you've testified to. And No. 4, the identity, 3 duties and responsibilities of those who 4 5 participated in the determination issues of November 4, 2011 manual code approval for the 6 7 Kraus site. 8 MS. KAVANAUGH: Again, I still object to 9 the relevance of that. But, you know, if he remembers in terms of who --10 MR. GLEISNER: You're the one who wants 11 12 to get out at 5:30, Edwina. 13 MS. KAVANAUGH: And I'm also the one who 14 wants to make the right objections. 15 BY MR. GLEISNER: What I'm asking there, I'm not asking about -- I 16 Q 17 just want to know the identity of other people. Were there any other people besides you who 18 19 participated in the manual code approval for the 20 Kraus site? Who participated in the manual code approval? 21 А That's what it says, who participated in the 22 Q 23 determination to issue the manual code approval 24 for the Kraus site. Α There's a lot of different responsible people that 25

1 were involved in issuing the manual code approval. 2 Q And I don't expect you to name all of them --3 Α Okay. 4 Q -- just the principals. Who are the main people who worked with you on that? 5 6 Typically what the water management specialist Α 7 will do is elicit comments from the resource 8 managers. The resource managers on this case --9 Tim Lazotte, Heidi Bunk, Craig Helker, tough. I'll throw out Bob Wakeman, and I will throw 10 out -- one I just totally drew a blank on as a 11 12 resource manager. 13 Pete Woods? Q Pete Wood was -- I don't believe he really played 14 Α a role in giving expert opinion as to the impacts 15 of the site as it relates to the manual code 16 17 approval. Did he do -- did he do work on the 18 19 procedure to develop plans and those type of 20 things? I believe he did work in that capacity. Exactly what he all did, you're going to 21 22 have to ask him that question. I can't testify as 23 to what he all has completed. I want to make sure 24 I didn't forget anybody in that resource managers that I just lifted off. Did I say Sue Beyler? 25

1 0 Sue Bevler?

1	Q	Sue Beyler?
2	A	Sue Beyler would be the fishery biologist.
3	Q	Now, let me just ask you to take a look at
4		Exhibit 1-A. And we're just about done.
5		We've already talked about what you did
6		in terms of the manual code. It states that you
7		may be called to testify about issues within your
8		knowledge including whether the project met the
9		standards to issue a manual code approval, talked
10		about that.
11		DNR determination of the location and
12		extent of navigable waters of the State and
13		adjacent to the DNR, formerly Kraus property.
14		Yes, I'd like to ask you about that.
15		Did you do anything to assess or
16		determine the navigability of land adjacent to the
17		Kraus site other than the large green circle on
18		Exhibit 2?
19	A	On adjacent properties, I have not done any
20		navigability determinations other than the
21		immediate adjacent portions of the larger wetland
22		complex and the DNR lot here in proper.
23	Q	How about the access road?
24	A	Yes, that's included.
25	Q	And so is that why, going back to Exhibit 2, you

1		said that the access of the area to the east of
2		the access road was navigable waters?
3	A	I never stated to the east of the access road as
4		navigable waters.
5	Q	Let's get Exhibit 2 out. Got it?
6	A	I'm just looking at is that is it's that
7		exhibit up there, isn't it? That's a blow-up of
8		that? Too many here to look through.
9	Q	We have to get these all in order before we run
10		off here. That's it.
11	A	East as it relates to the access road as it
12		relates to this portion or that portion?
13	Q	Thank you for that. Let's take a look at the
14		large green area to the south of the what we
15		call the gravel road. You denominated that as
16		navigable water?
17	A	That is correct.
18	Q	And that is not DNR property?
19	A	That is correct.
20	Q	And you denominated the area north, of course, as
21		navigable water, and the blue stream is navigable
22		water.
23		Now, with regard to the Kraus's existing
24		home or with regard to anything to the west of the
25		access road or anything such as that, you did not

1		do any work on attempting to ascertain navigable
2		waters in those areas, correct?
3	A	To the extent to the locations that I attempted to
4		ascertain navigable water locations would be
5		immediately east of the access road as it adjoined
6		Reddelien Road.
7	Q	Uh-huh.
8	A	Adjacent to the east-west portion of the access
9		road as it transects the wetland
10	Q	The two green circles?
11	A	The two green circles indicated on Exhibit 2. And
12		the large portion of the DNR lot that is adjacent
13		to North Lake where the launch and parking
14		structure would be located.
15	Q	Would you agree that the southern end of the large
16		green circle is at or near Becks Road?
17	A	I don't have any reference for where Becks Road is
18		on this.
19	Q	Reddelien Road is bisecting it. Reddelien Road
20		runs to the west, as you can see denoted there on
21		the map. Then there's Becks Road, and it runs
22		east and then what is known as Lower Reddelien
23		Road begins.
24		Why I'm asking that is there are a
25		number of what appear to be wetland areas south of

1 Becks Road below your finger there. You didn't do 2 any work there? I did not do any work there. 3 А 4 Q Okay. 5 MR. GLEISNER: Okay. I am done, except I want to now gather up all of the, exhibits so we 6 don't have a problem, and give them to our 7 8 friendly court reporter. 9 (Discussion held off the record.) EXAMINATION 10 BY MR. GALLO: 11 12 Q Andy, I want to ask you just a few background --13 Α Sure. 14 -- questions. Can you state for the record your Q 15 date of birth? 9/11/82. 16 Α 17 Q And can you describe briefly your professional I don't mean kindergarten or 18 education? 19 elementary school, but college. 20 I have a bachelor's degrees from the University of Α Stevens Point with a major in water shed 21 management hydrology and also a soils and 22 23 chemistry background minor. 24 Okay. And your employment history, did you start Q 25 work at -- with the DNR out of college?

1	A	Yep, very close.
2	Q	How long have you worked for the DNR?
3	A	Since the spring of 2006.
4	Q	And have you received any formal training on
5		assessing navigability?
6	A	Can you explain "formal training"? The process
7		how I was trained?
8	Q	Yes.
9	A	That's what you'd like to know?
10	Q	That's fine.
11	A	Would be assigned a mentor, typically for the
12		first six months to learn the program, learn the
13		rules, learn the statute, learn the field
14		investigation techniques that are required for a
15		certain jurisdiction for projects.
16	Q	And the mentor would go into the field with you,
17		or you would go into the field with
18	A	That's correct.
19	Q	he or she? Who was your mentor?
20	A	Geri Radermacher.
21	Q	I'm going to ask you some questions that just
22		to confirm some of your answers earlier.
23	A	Uh-huh.
24	Q	When you when Bill was asking questions with
25		regard to surveying, you commented on the parking

Γ

1 lot area. 2 And what I'm interested in is then from the parking lot area back up the hill on the 3 access road -- are you familiar with surveying 4 5 that was performed by the DNR or contractors with the DNR? 6 7 Α I am aware that surveying was conducted or 8 completed to develop the plans associated with the 9 manual code process. And also for the design? 10 Q 11 I use those interchangeably, one and the same. Α 12 Design, construction, review. 13 Q Okay. I have a series of exhibits. MR. GALLO: Maybe I'll just give you 14 15 each a package. I'm just going to ask questions regarding these exhibits to enter them into the 16 17 process. MS. KAVANAUGH: And these all have to 18 19 deal with navigability? 20 MR. GALLO: Yeah. 21 BY MR. GALLO: I have some questions regarding the establishment 22 Q 23 of ordinary high water mark at the site and some 24 emails. And we can number this 104. (Exhibit No. 104 was marked.) 25

1 BY MR. GALLO:

2	Q	Andy, can you take a minute and review the email
3		and the attached drawing? And this is a series of
4		emails, but more importantly, it ends with Jim
5		Morrissey sending an email to Dale Pfeiffle at
6		Army Corps, and you were copied on it. Are you
7		familiar with this email?
8	A	I see I was copied on this email. I can't say I'm
9		familiar with it. I have it in my record. Let me
10		review it a little bit more here.
11	Q	It refers to a question that Dale at the Corps
12		asked with regard to various ordinary high water
13		mark determinations.
14		And is it your understanding that this
14 15		And is it your understanding that this is the kind of the definitive answer from the
15		is the kind of the definitive answer from the
15 16	А	is the kind of the definitive answer from the department from Jim Morrissey that the ordinary
15 16 17	A	is the kind of the definitive answer from the department from Jim Morrissey that the ordinary high water mark at this location is 897.76?
15 16 17 18	A	is the kind of the definitive answer from the department from Jim Morrissey that the ordinary high water mark at this location is 897.76? I believe 897.76 is the elevation that we were
15 16 17 18 19	A Q	is the kind of the definitive answer from the department from Jim Morrissey that the ordinary high water mark at this location is 897.76? I believe 897.76 is the elevation that we were utilizing as the ordinary high water mark for
15 16 17 18 19 20		is the kind of the definitive answer from the department from Jim Morrissey that the ordinary high water mark at this location is 897.76? I believe 897.76 is the elevation that we were utilizing as the ordinary high water mark for purposes of this application for this project.
15 16 17 18 19 20 21		is the kind of the definitive answer from the department from Jim Morrissey that the ordinary high water mark at this location is 897.76? I believe 897.76 is the elevation that we were utilizing as the ordinary high water mark for purposes of this application for this project. Andy, I'm going to refer to RRNA Exhibit No. 1.
15 16 17 18 19 20 21 22		is the kind of the definitive answer from the department from Jim Morrissey that the ordinary high water mark at this location is 897.76? I believe 897.76 is the elevation that we were utilizing as the ordinary high water mark for purposes of this application for this project. Andy, I'm going to refer to RRNA Exhibit No. 1. And are you the question is: Are you the

1 Q This would be --2 Α -- Exhibit 1? 3 -- the manual code memo. Q MR. GLEISNER: Your manual code 4 approval. 5 MS. KAVANAUGH: Oh, approval. 6 7 THE WITNESS: Yeah, I am the author of 8 that manual code approval. 9 BY MR. GALLO: Did you work with other people in the department? 10 Q The development of this memo was a compilation of 11 Α all of the comments that I had received in review 12 13 of this project and the standards. So there was additional input from additional parties, also 14 basic things such as grammar. But basically the 15 start, the development of -- of myself. 16 As to the technical information that was submitted 17 Q to you in evaluating the site and for the manual 18 19 code approval, it's my understanding that other 20 people may have provided some of the technical information. 21 But the question I have for you is: 22 Did 23 you work through that technical information, and 24 do you have a good understanding of -- reasonably 25 good understanding of that information to then

1 complete an approval of this nature? 2 Α I believe I have technical knowledge of the site to have been able to develop this document, yes. 3 These are just foundational questions. 4 Q Okay. Uh-huh. 5 Α Andy, when you review all sorts of wetland or --6 Q 7 not necessarily wetlands, but waterway permits, 8 I'm going to use the term broadly "Chapter 30" --Uh-huh. Α -- type permits, you mentioned that you often 10 Q review plans and drawings and engineering 11 12 drawings. 13 And so over the past five years, do you 14 feel that you had a fair amount of experience 15 doing that, and you do understand those drawings sufficient to make the analysis for permit 16 17 applications, approval of permit applications as well as manual code approvals? 18 19 Yes. Α 20 So then when you were reviewing this 0 Okav. project for the manual code approval, you reviewed 21 22 probably several Kapur drawings. Is that a fair 23 statement?

9

24 There was a multiple plan sheet submitted with Α this -- or with this approval process. 25

1 Q I'm familiar with, you know, various versions of 2 the Kapur drawings. And I have a set here today. I'm not sure if -- I'd like you to take a look at 3 this. These were dated -- these were design 4 drawings that are dated February '08. 5 And we'll mark this set of drawings as 6 7 105. Do you want to step down here and look at 8 those? Or I can hand them to you. Are you 9 familiar with this set? Yeah. Again, the date of 2/15/2008, I don't know 10 А how that correlates with the final approval, but, 11 12 yeah, this is a -- vaguely familiar set of plans that I've seen. 13 Okay. And do you think it fairly, within a 14 Q 15 reasonable degree of accuracy, reflects conditions during the design of the access road and the 16 17 parking lot on this project? I guess can you kind of restate that? 18 Α 19 Q Yeah. 20 I don't understand how you're... Α I'm just trying to establish how this set of 21 Q drawings was a set that, in the progression of the 22 23 final design, was prepared by Kapur and accurately 24 represents the conditions at the time of the drawings that -- the date on the drawings. 25

1 Α I could state that this would be a similar set of 2 plans that was used throughout the process. But, again, what stage this is at, whether it was 3 beginning or end -- you know, it's a 2/15/2008. 4 And I don't know what part of the review or 5 revision process this is -- this is at. 6 7 Q That's fine. That's fair. And to prepare this 8 set of drawings, are you familiar with the fact 9 that Kapur would have to do some surveying to document existing conditions? 10 On this plan sheet? I would assume there would 11 Α 12 have been some degree of survey work that would 13 have been completed to produce this. 14 If you don't mind taking the time, can you just Q 15 flip through this plan of drawings, and let's talk about them a little bit. This, I think -- is 16 17 this -- I'm pointing to -- maybe we should use 18 these -- those colors. 19 MR. GLEISNER: Sure. 20 THE WITNESS: We're on sheet C100-2. And I'll just say revision date of 7/10/08. 21 BY MR. GALLO: 22 23 It's a little bit newer. And can Q That's good. 24 you take this blue -- and then we'll point to this 25 area and circle it. And can you identify that as

1 the start of the project? 2 MS. KAVANAUGH: Just to clarify for me. You said it was 105, it was February 2008. 3 So it's multiple sheets in Exhibit 105, is that 4 5 correct? MR. GALLO: Yes. 6 7 MS. KAVANAUGH: And then they may have 8 different dates on them? 9 MR. GALLO: Let's identify all the They're going to have -- they don't have 10 sheets. 11 sequential numbers. 12 BY MR. GALLO: 13 They jump around, don't they? Q 14 Yeah. Α 15 0 So we'll refer to each drawing --MS. KAVANAUGH: Yeah, as you look at 16 17 them. That's fine. BY MR. GALLO: 18 Is this --19 Q 20 The blue location circled on sheet C100-2, Α revision date 7/10/2008, is the approximate 21 intersection of the Reddelien Road and proposed 22 DNR access to the launch location. 23 Okay. 24 Thank you. Can you just initial that? Q (Witness complies.) 25 Α

1 And I'm going to jump ahead here, Andy --Q 2 Α Okay. -- in the interest of time. Bill had you mark 3 Q wetland areas and the stream. And we're going to 4 do these on these drawings so we have a general --5 6 Α Sure. 7 Q -- location. What I'm most interested in, this is 8 fairly high. And I think this is the turn that 9 goes between the wetland areas. Is that a fair statement? 10 11 That station approximately, 1950, would be the Α 12 direction heading east. 13 And you might -- I think you stated at around Q these -- these stations, 1960 -- 19 plus 67.27 was 14 15 essentially the transition from the higher elevations through the wetlands? Is that --16 17 MS. KAVANAUGH: I don't understand what 18 you're asking. 19 THE WITNESS: A very generalistic view 20 would say that you have a transitional area between ridges, upland areas and approaching 21 wetland corridor at station 1950. 22 23 BY MR. GALLO: 24 Q Okay. Thank you very much. I'm going to jump 25 around a little bit. I want to refer to

1 Exhibit RRNA 4. It's sub-Exhibit J. And I'm 2 going to hand that to you --3 Α Okay. -- Andy. Can you explain for me what is being 4 Q discussed in that? And you can refer to --5 6 I'll read directly. This is an email from Pete Α Wood to Jim McNelly, Jim Ritchie, Lynette Check 7 8 and Jim Morrissey with an attachment. 9 And the email from Pete states that it's a general depiction of the flow path from the 10 proposed parking lot area -- the existing 11 12 depression of the proposed parking lot area. 13 Blue shaded area drains west to the wetland complex at elevation 898.7. The southern 14 15 portion of the wetland complex drains north through the culvert at elevation 897.6. 16 The 17 portion -- or the northern portion of the wetland complex then drains to the lake through the outlet 18 channel at elevation 897.5. 19 20 Okay. And then this email -- and this exhibit is Q referring to the drawing attached. And do you 21 know whether or not that exhibit was then prepared 22 23 by Pete Wood? 24 I can only estimate that this was the one that was Α developed by Pete Wood. I believe he developed 25

1 something very similar to this, if this is the one 2 he developed. MS. KAVANAUGH: And you can ask --3 MR. GALLO: We'll ask Pete tomorrow. 4 THE WITNESS: Yeah. 5 6 BY MR. GALLO: 7 0 But on this attached exhibit, you can see these -there's elevations and kind of a flow area that 8 9 describes the circuitous flow to the lake? Very generalistic flow path, yes. 10 Α It would flow to the southwest and then curving back around to 11 12 the north and then eventually flowing east. 13 Q Okay. I'm going to ask you to correlate those 14 elevations to these drawings. And we'll kind of 15 flip through here. There's a culvert right here that goes 16 17 under this access road. And we're trying to find -- I think this may be it. I'm pointing to 18 19 an eight-inch PVC, cross-culvert... 20 I can't -- I can't -- I can't positively identify Α what culvert he is pointing to with this location. 21 This may be one of the proposed culverts. 22 It may 23 be an existing culvert. I don't know. 24 It says "existing culvert." So I don't believe this is this cross-culvert here, because 25

Г		
1		this would be a proposed culvert, so.
2	Q	Okay. I think that's fair.
3	A	I don't know if the existing culverts are depicted
4		on these plan sets. Yeah, there's no indication
5		exactly what the what the existing culvert is
6		on that set.
7	Q	Okay. I think that's a question I can ask Pete
8	A	Yeah, yeah.
9	Q	That's fine. On this particular plan sheet and
10		let's get the number. It's C101-2. Could you
11		draw for me in orange the location of the ditch
12		that you were referring to earlier? This is the
13		ditch?
14		MS. KAVANAUGH: Of the what?
15		THE WITNESS: I'll draw the location of
16		a water course that was identified on the northern
17		portion of the parking lot.
18		MS. KAVANAUGH: The approximate
19		location.
20		THE WITNESS: The approximate location.
21	BY N	IR. GALLO:
22	Q	And the question I have here is: Are there any
23		elevations on this drawing for the bottom of that
24		ditch?
25	A	On this drawing? I don't see any.

1		
1	Q	Are you aware of any elevations that were taken at
2		the on that ditch along the bottom?
3	A	I believe, to the best of my knowledge, there was
4		survey work done to identify the elevations
5		throughout that ditch line.
6	Q	Do you know who might have done that?
7	A	Kapur & Associates.
8	Q	And can we, on this same drawing, C101-2, can you
9		mark in green the area of transition from the
10		existing road onto the easement that was referred
11		to this is on the Hanson property or at
12		the at the west end of the Hanson property?
13	A	Can you just explain a little bit better in detail
14		what transition part
15	Q	Sure.
16	A	location you want me to mark?
17	Q	The way I read this drawing, it's the access
18		road is being constructed on an existing driveway.
19		And then at this point where it goes onto the
20		Hanson property, it needs to move onto the actual
21		access easement which is, I think, depicted by the
22		lines on this drawing. So what I'm asking you to
23		point out is and identify is the point of
24		transition.
25		MS. KAVANAUGH: Transition from?

1 BY MR. GALLO: 2 Q Or the point of traverse from the roadway into --I'll identify the location of construction of new 3 Α access road off of the existing alignment. 4 5 Excellent. And then the question that I --Q follow-up question is: What -- is this roadway 6 7 then, when it transitions off of the existing 8 roadway, in wetland? 9 Can you explain that again real quick? А 10 Q Okay. I can't --11 Α 12 Q You had identified an area to the west -- I have 13 to get my directions --14 Α Yep. -- that is wetland. And I'm asking whether this 15 Q is a transition into the wetland. And I think 16 that this shading is, in essence, the wetland 17 flow? 18 19 To the best of my knowledge, the shading on sheet Α 20 C101-2, revision date 2/15/2008, does depict the location of wetland impact by the shading, dashed 21 22 area. 23 I'm going to jump around a little bit here. Okay. Q 24 I'm going to Exhibit North Lake Management 25 District 100. And I'm going to hand that to you,

1 Andy. And I want to ask you to look at the 2 exhibit. And what I want to point out to you --3 If you can -- if you can see, there's 4 let me see. 5 maybe a blue here and some blue within this area. And I think that that's water. Would you agree 6 7 that that's water? 8 I would agree that that would be water picked up А 9 in this photo. Okay. And could you identify -- and I think you 10 Q have, but if you don't mind drawing the ditch --11 the ditch line --12 13 I'll identify the approximate ditch location. Α Maybe you should do it in red. 14 There's a lot of Q 15 So you're going to mark that in red. green on it. MR. GLEISNER: Go off the record. 16 (Exhibit Nos. 105 and 100-A were 17 18 marked.) 19 BY MR. GALLO: 20 So we are on Exhibit 100-A. And you marked the 0 approximate location of the stream, unnamed 21 tributary and initialled it. And then can you 22 23 also identify in green the wetland that's to the 24 west? Α (Witness complies.) 25

1 Q And I want to confirm this. I think you stated 2 earlier, and I want to confirm, your opinion is that that's the stream, and the wetland to the 3 west of that is navigable? 4 5 Correct. Α Andy, in RRNA Exhibit 1, I think -- let me make 6 Q 7 sure of the -- I think it's Exhibit 4, the 8 interrogatories. There's some discussion 9 regarding stream history. And you were asking --10 MS. KAVANAUGH: I'm sorry, what exhibit 11 are we on? 12 MR. GALLO: I'm sorry. We're on 13 Exhibit RRNA 4. 14 RRNA 4, okay. MS. KAVANAUGH: 15 BY MR. GALLO: And there's an Exhibit I. Exhibit I. I'll let 16 0 17 you look at this. And you're corresponding with 18 Lois Simon. Can you explain what Lois's job 19 description or duties or why you were going to 20 Lois for information? Lois Simon assists water management specialists 21 А with historic waterway review and has the ability 22 23 to access and is very good at interpreting older 24 government surveys to -- that may or may not have presence of navigable waterways as they transect 25
1 throughout Wisconsin. 2 Q So if I can just clarify this. You were going to Lois to better understand what the history, stream 3 history was of the unnamed tributary in the 4 5 wetlands in this area? I was -- I asked Lois for assistance to look at 6 Α 7 the old government surveys and to indicate to me 8 whether or not there were any waterways identified 9 in those surveys for the close proximity of the North Lake boat launch and access road. 10 11 Okay. Thank you. I'm going to hand you some Q 12 photographs. 13 MR. GALLO: And, Edwina, I will provide 14 an affidavit of how those -- these photographs 15 were obtained. BY MR. GALLO: 16 17 Q And let's mark those -- this first photograph as an Exhibit 106. And we'll do the second 18 19 photograph as Exhibit 107. Can you take a minute 20 and just look at those? 21 Α Sure. MR. GALLO: 106 is titled Winter 1968, 22 23 and 107 is "Predevelopment 1937." 24 BY MR. GALLO: Andy, I believe that the 1968 aerial photograph 25 0

1 shows the Reddelien Road area and the DNR proposed 2 site as developed at this stage. There are cottages or houses along the lake. Is that your 3 interpretation? 4 5 My interpretation of this air photo is that -- I Α can identify Reddelien Road and houses that 6 7 were -- having been constructed between Reddelien 8 Road and North Lake. 9 And I can also identify a -- what appears to be the same access road the department 10 11 is proposing to construct as the access to the 12 boat launch that transects north and then heads 13 east to the current DNR-loaned access location. Okay. And this photo is a photo with snow cover 14 Q on it and -- what appears to be snow cover, and 15 the lake appears to be frozen, is that fair? 16 17 Α I don't necessarily state that there would be snow I would state that it -- you can identify 18 cover. 19 And from this photo, it could appear that water. 20 is ice covered, especially on the lake and on two locations and the, quote/unquote, wetland areas to 21 the west of Reddelien Road. 22 23 Okay. Thank you. You had mentioned the wetland Q 24 Could you identify those areas with this areas. green on that map? It would be --25

1 Α I can give some crude approximations --2 Q Yes, exactly ---- as to what the area is --3 Α 4 Q -- sure. 5 -- as they're located west of the Reddelien Road Α neighborhood. Again, very general. 6 7 Q Do you have an opinion as to whether or not the 8 tributary, the unnamed tributary can be identified 9 in that drawing? I believe the label that says "frozen ditch line" 10 Α could be an indication of the location of that 11 ditch or a ditch at that time. 12 13 Q Thank you. Can you mark that in red? And I'll let you initial that as well. 14 15 (Witness complies.) Α 16 And then if you could look at the 1937 map and Q 17 give me your thoughts on what you see there. 18 MS. KAVANAUGH: The photo you mean? 19 MR. GALLO: I'm sorry, the photo. 20 THE WITNESS: I would say in the 1937 air photo, there is a lack of development along 21 the western side of North Lake. The access road 22 has not been constructed in its current location. 23 24 There is no indicators of open water or water 25 present at the surface.

1 There is a -- I'll call it vegetation 2 line that could be in the same approximate location as the frozen ditch line that had been 3 identified in the 1968 air photo. 4 5 BY MR. GALLO: 6 Thank you. I'm going to move back to the Q Okay. manual code memoranda. And this -- in this 7 8 memoranda on page -- I'm sorry, do you have a 9 copy? MS. KAVANAUGH: What exhibit? 10 THE WITNESS: This is the manual code. 11 MS. KAVANAUGH: What exhibit is it? 12 13 MR. GALLO: 1. THE WITNESS: Do we have these two 14 15 labeled as exhibits? (Exhibit Nos. 106 and 107 were marked.) 16 BY MR. GALLO: 17 Andy, with regard to this manual code evaluation, 18 Q 19 did the ordinary high water mark -- was that a 20 consideration on any of the navigable determinations? 21 Are you asking was an ordinary high water mark 22 Α determination identified for the additional 23 24 navigable waterways on the site aside from the one identified at North Lake? 25

1 Q I'm sorry. I'll withdraw the question and No. 2 restate it. Is it your opinion, and is it your 3 understanding, that any land that's below the 4 5 ordinary high water mark that's connected to the lake, part of the lake yet? 6 7 Can you expand on that in context? Α 8 Thank you. I'm happy to do that. I'm Q Sure. 9 going to refer to RRNA Exhibit 4, and I'm looking at Exhibit J and the map attached. I think this 10 would be a good example. Here's the invert of the 11 12 outlet of the lake. Can you read that elevation? 13 897.5. Α 14 Okay. And earlier we agreed that the ordinary Q 15 high water mark for purposes of this project was 897.76, is that correct? 16 17 Α That is correctly identified on this plan. Okay. So as to that location, that would be below 18 Q 19 the ordinary high water mark and considered to be 20 part of the public trust? I would consider the swale as a navigable waterway 21 Α subject to the public trust. 22 23 Okay. And at that location, you would agree Q Yes. 24 that it's lower than the ordinary high water mark? 25 It's not --

1 Α At the invert outlet to the lake --2 Q Yeah. -- it is lower than the ordinary high water mark 3 Α to North Lake. 4 5 Okay. Thank you. Are you familiar with -- I'm Q going to mark these as exhibits. They're large. 6 7 108. This is a letter comment from myself dated 8 December 10, 2008 to Jim Ritchie. 9 MS. KAVANAUGH: And is that -- okay, I got it. 10 MR. GALLO: Yeah. 11 12 BY MR. GALLO: 13 I'm just asking the question, are you familiar Q with this comment? 14 15 MS. KAVANAUGH: And what exhibit is this? 16 BY MR. GALLO: 17 And generally familiar, not specifically. 18 Q There's 19 a lot of information. And we're talking --20 MS. KAVANAUGH: What exhibit is this? MR. GALLO: North Lake Management 21 District 108. 22 23 MS. KAVANAUGH: 108. 24 MR. GALLO: And it's dated December 10 to Jim Ritchie. 25

1 MR. GLEISNER: October 12. 2 MR. GALLO: There's two of them. We'll get to the second one. 3 MS. KAVANAUGH: You're at the second 4 5 You're at the December 10, right? one. THE WITNESS: I'm familiar with it as 6 7 this is a letter addressed to Jim Ritchie 8 regarding the environment assessment for the 9 public access. BY MR. GALLO: 10 11 Q Did you look at this when you were preparing the 12 manual code approval? Are you referring to the letter or the 13 Α environmental assessment? 14 15 Q The letter and the comments that are attached. I'm -- predominantly deals with the environmental 16 17 assessment, but it also addresses a couple other issues within the letter. Do you want to take a 18 19 minute --20 I mean, I can't say that I addressed specifically Α every item in this letter in the manual code 21 approval. Is there an additional -- specific 22 23 point you'd like me to draw attention to? 24 First of all, are you aware of this? Q Α I'm aware it exists, yeah. 25

1		
1	Q	Okay. And it is in the file that constitutes the
2		file that you reviewed with regard to the manual
3		code approval?
4	A	I believe if I would have been CC'd on this or if
5		Jim would have been directed to provide a copy to
6		me, then I would have it in my files. It looks
7		I've seen a lot of things from you over the course
8		of these projects, Jim, so I'm assuming I have
9		this in the file.
10		I don't want to assume that. I would
11		err on the side that I would have this included in
12		my files that we reviewed in preparation of the
13		manual code.
14	Q	Okay. That's all I wanted to do on this one.
15		Let's go on. I appreciate your response. I want
16		to now direct you to the other one.
17	А	Okay.
18	Q	And this is probably more relevant in terms of the
19		manual code approval, because it was closer in
20		time. This is Exhibit 109. It's dated
21		MR. GLEISNER: October?
22	BY M	R. GALLO:
23	Q	October 12, 2010. And it's addressed to Andy and
24		Jim Richard Jim Ritchie?
25	A	Jim Ritchie.

1 Q Ritchie, I'm sorry. So take a minute to look at 2 it. And this was North Lake Management District's comment just before -- you know, as part of the 3 comment period just before you produced to them 4 5 the manual code approval. And so are you more familiar with this document? 6 7 Α Yeah. If I have specifically received this one? I believe I would have reviewed it and its 8 9 contents throughout the manual code review 10 process. Thank you. Just give me a minute. 11 Okay. I think Q 12 we're pretty close to being done. 13 MR. GALLO: Can we go off the record for 14 a minute. 15 (A brief recess is taken.) MR. GALLO: Let's go back on the record. 16 BY MR. GALLO: 17 And I'm going to RRNA Exhibit 4, and I'll hand 18 Q 19 this to you. 20 Α Okay. There's a diagram in this exhibit, Andy, we're 21 Q trying to understand better. 22 23 А Okay. 24 Q Oh, it's G, thank you. This is Exhibit G. MR. HARBECK: Of Exhibit 4. 25

T	BY	MR. GALLO:
2	Q	Andy, are you familiar with that exhibit?
3	A	Yes, I am.
4	Q	Can you explain to us what that exhibit is all
5		about?
6	A	Sure. This was a summary of notes that I had
7		taken in the course of reaffirming my navigability
8		determination of the swale along the northern
9		portion of the property.
10	Q	Can you walk us through this?
11	A	Sure. Basically, there are a few points
12		identified as stars of where I took particular
13		measurements or identified particular
14		characteristics that I thought were important.
15	Q	If you don't mind, let's go over them one by one.
16		Flag No. 1.
17	A	Sure. Flag No. 1 at the time of this site visit
18		of 9/22/2010 was the point of main overflow, flow
19		entering North Lake from the swale. So the flow
20		direction of water was from the swale into North
21		Lake.
22	Q	And you also I don't mean to interrupt you, but
23		can you also identify the width and the depth of
24		the water?
25	A	That would be correct. At that point, it was a

1 again, it was an overland flow. It wasn't a very well-defined bed or bank. The majority of the 2 channel was -- I'll call it closed off due to, in 3 my professional opinion, of ice heave and wind and 4 5 wave action accumulating sediment in that channel from the lake. 6 7 Again, the water depth located at the 8 small overland locations were approximately 1 1/2 9 inches deep at a depth -- or at a width of 1.4. Is that inches or feet? 10 Q That would be 1.4 feet width and 1.5 inches deep. 11 Α Okay. And this is what I would characterize as 12 Q 13 kind of fanned -- fanned outflow? It's not a 14 defined bed. And this is right on the shore --15 If you look at the circle that I Α Correct. identified as the high point between these two 16 17 small flow paths, it was a -- again, a composition 18 of brush and curvaceous vegetation that really 19 impeded a channelized flow and just correlated to 20 small little -- two small overland paths across that area of deposition. 21 Let's go to flag No. 2. 22 Q 23 Flag No. 2 was -- looked to be an identification Α 24 of where the main flow enters that northern

channel. That really is kind of overland. I

25

1 refer to it on here as a channel, but it's a 2 very -- again, overland type situation. But that is probably the origin of where that, again, 3 channelizes toward the lake. 4 5 It looks to me like I identified a map of vegetation at that location with no exposed 6 7 sediment with a -- again, a width of this area 14 feet -- I'm sorry, four feet wide and 2 1/2 inches 8 9 of water, and some other species I identified at that location. 10 11 I want to ask you a question. When I read further Q 12 down flags four and five, it says, "No discernible 13 flow with six inches of water depth." And that's on flag four. And on flag five, it says, "Nine 14 inches water depth. No discernible flow." 15 When you say "discernible," are you 16 17 characterizing the flow regime? I'm characterizing you cannot discern which 18 Α 19 direction and a velocity. 20 Q Okay. And I'll reference that to the point of this 21 Α accumulation of material at the mouth of the 22 23 outlet was at an elevation where it was just at 24 the point of water barely making its way over there flowing into the lake. 25

1 So in my estimation, it was very near 2 the end of even being able to discharge into the lake. And so that's why you see that lack of 3 discernible flow. 4 5 Yet, this area, this unnamed tributary, you've Q said numerous times today that this is navigable 6 7 waterway, though? 8 That would be correct. Α 9 And at this date, October 22, 2010, these are just Q the conditions that you noted? 10 That's correct. 11 Α 12 Q Okay. 13 MS. KAVANAUGH: September 22. 14 MR. GALLO: I'm sorry. I think I said 15 October. September. MR. GLEISNER: Uh-huh, you did. 16 BY MR. GALLO: 17 Within the same RRNA number or exhibit, I'm going 18 0 19 to go now to Exhibit B. This is RRNA 4. 20 MR. GLEISNER: Yes, correct. BY MR. GALLO: 21 Andy, that's a map or drawing that 22 Q Exhibit B. 23 has -- I think it's red and blue stars on it with 24 numbers, circles. And those -- you testified 25 earlier, those were photo identification points.

Ī		
1		But I want to ask you about the map
2		itself. There are contour lines and elevations.
3		Can you tell us who generated that map?
4	A	Again, I'll refer back to that. It was a spot
5		elevation developed by Kapur & Associates. And
6		the numbers identifying site photographs was
7		labeled and depicted by me.
8	Q	Okay. Thank you. Can I have that exhibit?
9	A	Yes, you may.
10	Q	Thanks. Within the same RRNA 4 exhibit, I'm
11		looking at Exhibit A. If you want to take a
12		minute to look at that.
13	A	Okay.
14	Q	Andy, can you describe what that document is and
15		its purpose?
16	A	This was a memo to the file that I produced which
17		took into account the summary developed by the
18		resource managers during our site visits to
19		investigate the two potential boat launches on the
20		lake.
21	Q	Okay. So it's, in essence, a summary of your
22		notes from documents or memos that were prepared
23		by other specialists?
24	A	And firsthand discussions.
25	Q	Yes, okay. Thank you. And one last question on

1 that document. You used that document then in 2 support of your manual code approval? That would be correct. 3 А 4 Q Thank you. 5 MR. GLEISNER: I have a few follow-up It won't take very long. 6 questions. 7 MR. GALLO: One more question. 8 MR. GLEISNER: Sorry. 9 BY MR. GALLO: Andy, you mentioned there were elevations shot in 10 Q the unnamed tributary by Kapur. We've never seen 11 12 those. Do you have copies of those, or are you 13 aware of those? 14 I believe those spot elevations that I referred to Α 15 would be all inclusive on Exhibit B of --No. 4? 16 Q No. 4. 17 Α The question is: 18 Q All right. Those -- those 19 elevations don't go in the ditch themselves? They 20 go up to the ditch, but as I interpret them, there's no elevations, like, at the invert of the 21 ditch? 22 23 There are the low point invert elevations at the Α 24 ditch as identified in this map. And, I believe, 25 to the best of my knowledge, the lowest invert

that's indicated on this exhibit is also indicated 1 2 in that drainage flow path that was developed by Pete Wood. 3 Can I see that for a minute? 4 Q Thank you. 5 MR. GALLO: Do you have -- this was supplied by the department as a response to 6 7 interrogatories. Do you have a better copy of 8 this that we can read? I mean, it's -- the actual 9 elevations are so small. MS. KAVANAUGH: Can you blow it up on a 10 11 copier? Could we? MR. GALLO: 12 13 MS. KAVANAUGH: Couldn't you do that now 14 if you want to ask questions about it now? 15 Couldn't you expand it on a copier? MR. GALLO: I don't need to ask 16 17 questions about it now, but I do need to be able to read the elevations. 18 BY MR. GALLO: 19 20 And this is what you were referring to, right? 0 The ditch itself and there's contours and some 21 elevations in the ditch? 22 23 Yeah. Again, to the best of my knowledge, there Α 24 is -- there are spot elevations within this ditch 25 and, particularly, at the outlet of the water

1 course to the lake. 2 MR. GALLO: Edwina, can the department ask Kapur for a better copy of that or larger 3 4 copy? 5 MS. KAVANAUGH: I guess we can. THE WITNESS: It would be in my files. 6 7 MS. KAVANAUGH: I mean, we probably have 8 a big one. 9 THE WITNESS: Yeah, I do. So I can --MR. GALLO: Then we can make 10 arrangements to maybe pick it up at Andy's office? 11 12 THE WITNESS: I mean, I don't have a 13 plotter, so I couldn't copy it that big. 14 MR. GALLO: Can you send it to me 15 electronically? (Discussion held off the record.) 16 17 MR. GALLO: Okav. BY MR. GALLO: 18 19 One more question, Andy. Sorry. What relevance Q 20 would those elevations within the end tributary have with regard to navigability? 21 MS. KAVANAUGH: Of what? 22 23 BY MR. GALLO: 24 Q Your determination of the navigability. Of the creek or the --25 MS. KAVANAUGH:

1 MR. GALLO: The unnamed tributary, 2 correct. Those elevations weren't THE WITNESS: 3 used for me to define the navigability of that 4 5 waterway. 6 BY MR. GALLO: 7 Q They were not? They were not. 8 They were used to support my Α 9 professional judgment of how the navigability between the lake and the other additional water 10 courses on the site, the wetlands and swale 11 12 interacted and as they existed in their current 13 condition. And the following question would be then: 14 Did you Q 15 use that drawing and those elevations in your evaluation for the manual permit -- or manual code 16 17 approval? The spot elevations were not developed prior to 18 Α 19 manual code approval. So my professional judgment 20 of the navigable waterways on site were confirmed, reaffirmed by the spot elevation use of that -- in 21 that document. 22 23 Thank you. Q 24 MR. GLEISNER: Edwina, what I want to do here is I want to make sure I understood him 25

1 correctly that -- there were a number of documents 2 that you produced in the last couple of days. Ι just want to make sure he's not relying on 3 4 anything. 5 EXAMINATION 6 BY MR. GLEISNER: I'm going to show you, first of all, what has been 7 Q 8 marked as Exhibit 1-C. 9 MR. GLEISNER: There's your copy, Edwina. 10 BY MR. GLEISNER: 11 12 Q There's yours. 13 Madame Reporter, there's MR. GLEISNER: 14 yours. 15 BY MR. GLEISNER: Just take a quick glance there. Is there any 16 Q 17 material in there that you relied on or used in connection with the Kraus site? 18 You'd like me to review this entire document? 19 Α 20 I mean, I don't think there is, actually, is what 0 I'm saying. But I want to make sure there is 21 nothing. Your counsel produced these things in 22 23 the last couple days, and I'd like to avoid having 24 to come back. 25 Α I guess I can't answer what's in this document and

1 how it relates to my knowledge of navigable 2 waterways and how that would have reflected in my decision on the manual code. 3 MS. KAVANAUGH: We'll say, Bill, that 4 they're training documents. 5 MR. GLEISNER: 6 Okay. 7 MS. KAVANAUGH: I pulled them off -- you 8 know, they were put together, you know, all the 9 training documents that we had for navigability. BY MR. GLEISNER: 10 11 Q The reason that I'm going to ask, though, these 12 other questions is because these appear to be 13 training documents. This one is marked as Exhibit 1-D. 14 That 15 seems to have a great deal of information about how you go about navigability. And I want to know 16 17 if there's anything in there that you used in doing the navigability, any of the standards, 18 19 other things that you used in doing the 20 navigability assessment at Kraus. MS. KAVANAUGH: So just to clarify, 21 you're asking whether he used these documents or 22 23 whether he used any of the particular 24 techniques --25 MR. GLEISNER: Concepts.

1 MS. KAVANAUGH: -- or concepts --2 MR. GLEISNER: Exactly. MS. KAVANAUGH: 3 Okay. I'm still struggling with 4 THE WITNESS: the question that you're asking me. 5 6 BY MR. GLEISNER: 7 Q Is there anything in there that you used either 8 directly or the concepts that are embodied there? 9 Very generally, all these concepts are what I've Α been trained to do as a water management 10 specialist. These are very generalistic training 11 12 documents that -- I mean, the answer is yes, would 13 -- I have used these concepts in my decision, determination, review and approval of the manual 14 15 code. 16 Let me do it this way. I would like to be able to Q 17 look at the documents that Edwina has produced and be able to say that these are the standards that 18 19 you used and the concepts and the methodologies 20 that you used. I just want to be sure that that's an accurate statement. 21 22 Α I'm sorry. Repeat that just one more time. Sure. I want to know that -- let's do it this 23 Q 24 way. Best practices. I want to know that you adhere to the practices that are outlined here in 25

1 doing your navigability test. 2 MS. KAVANAUGH: If you could clarify --I guess by "adhere," are you talking about whether 3 he goes through and applies every one of the tests 4 5 or things to look at, or whether those things inform his general knowledge --6 7 MR. GLEISNER: To the extent they're 8 relevant --9 MS. KAVANAUGH: Yes. MR. GLEISNER: -- to what he's doing on 10 the Kraus site. 11 12 THE WITNESS: To the extent that they're 13 relevant, I utilize the information contained 14 within these training documents --15 BY MR. GLEISNER: 16 Q Okay. Great. 17 Α -- to make permit decisions. 18 0 Take a look at 1-E then. Same question. I mean, 19 we don't have to go through all of those at all. 20 I just want to make sure -- are you prepared to say that you would have used those 21 standards and informed your training and your --22 23 informed your skill set that you used to make 24 navigation assessments? I'm prepared to say without knowing these 25 Α

1 documents, that I utilized all my knowledge and 2 training as a WMS, which, I believe, would adhere closely to what's within these. 3 But without knowing exactly what is in 4 5 these, without reading them, I'm not going to state any specifics that, yes, they do. But in a 6 7 generalistic view, these do or will summarize my 8 review and procedure as in regards to the review 9 and approval of the manual code. MR. GLEISNER: Edwina, I think it's 10 appropriate to ask counsel at this point, would 11 12 you stipulate that these are the training manuals, 13 training materials that are used to educate people 14 who are going to do navigability tests? 15 MS. KAVANAUGH: I would stipulate that these are documents that when I asked Liesa about, 16 17 you know, "Is there anything else on navigability?" a water management specialist had 18 19 compiled these, you know, so that we had an 20 electronic copy of things that we used, PowerPoints and things used in training people, 21 22 you know. 23 MR. GLEISNER: Thank you. That's good. 24 BY MR. GLEISNER: 25 0 Okay. Then --

1 MS. KAVANAUGH: Whether they were each 2 done -- you know, whether Andy would have sat through each one of these, I don't think we can 3 say. I don't even think they had dates on them. 4 5 MR. GLEISNER: I understand. I just want to get some relevance here or some 6 7 understanding of what they are since you produced 8 them to me. 9 BY MR. GLEISNER: Okay. 1-F, same thing. 10 Q 11 MR. GLEISNER: Or maybe I should say to 12 you, Edwina, same stipulation? 13 MS. KAVANAUGH: They would be the things that were told -- that I was given that are the 14 15 compilation of training documents on navigability. BY MR. GLEISNER: 16 17 Q Okay. Then I want to get two reports out of the 18 way, if I may, and then I'll be done. 19 MS. KAVANAUGH: Okay. 20 BY MR. GLEISNER: 21 Exhibit 5 --0 22 MS. KAVANAUGH: Okay. 23 BY MR. GLEISNER: 24 Q -- is called the Kapur report. 25 MS. KAVANAUGH: Okay.

1 BY MR. GLEISNER:

2	Q	Have you seen that before?
3	A	I would say I have knowledge of this report, but
4		its contents are I would I would not be able
5		to speak professionally about the contents of this
6		as there is a lot of modeling and other associated
7		elements of this.
8	Q	Not highly relevant to your job
9	A	Correct.
10	Q	as a navigability specialist? And, finally,
11		Exhibit 7, copy of the Gestra report. You
12		testified earlier you didn't know what that was.
13		Have you seen it, refresh your recollection?
14	A	I have seen this and probably reviewed its
15		contents. But as far as in-depth analysis of
16		this, no, I did not do an in-depth analysis of
17		this report.
18	Q	And you didn't use it I'm just asking for
19		completeness. You didn't use it in terms of its
20		soil borings or in terms of its assessment of what
21		would happen when you put this large amount of
22		asphalt in there? This was not relevant to your
23		navigability study?
24	A	I did not use this geotechnical report of soil
25		borings for any navigability determination.

1 Q Exhibit 6 is a set of site plans that Bingo. 2 accompanied the Kapur report. And I would like you to take a look at that. 3 MS. KAVANAUGH: So it accompanied 4 5 Exhibit 5? MR. GLEISNER: 6 Yes. Thank you, yes, 7 Counsel, that's correct. 8 MS. KAVANAUGH: Okay. 9 BY MR. GLEISNER: And have you seen it? 10 Q What's your question? 11 Α 12 Q The question is: Have you seen this and relied on 13 it in any way in doing navigability assessments? 14 Α These appear to be portions of the plan that I --15 were submitted and I have reviewed, but the exact dates and what process of the review -- I looked 16 17 at what exactly is in this Exhibit 6. I can't give exact detail of when I would have seen 18 19 them --20 Q Okay. -- and when in the process of me reviewing the 21 Α 22 navigability. 23 Thank you very much. Good. Q 24 (Proceedings concluded at 5:35 p.m.) 25

1 STATE OF WISCONSIN ) ) SS: 2 COUNTY OF MILWAUKEE ) 3 4 5 I, JESSICA R. WAACK, a Registered Merit 6 Reporter, Certified Realtime Reporter, Registered 7 Diplomate Reporter and Notary Public in and for the State of Wisconsin, do hereby certify that the above 8 9 examination of ANDY HUDAK was recorded by me on August 25, 2011, and reduced to writing under my 10 personal direction. 11 I further certify that I am not a 12 13 relative or employee or attorney or counsel of any of the parties, or a relative or employee of such attorney 14 15 or counsel, or financially interested directly or indirectly in this action. 16 In witness whereof I have hereunder set 17 my hand and affixed my seal of office at Milwaukee, 18 19 Wisconsin, on September 1, 2011. 20 21 Notary Public In and for the State of Wisconsin 22 23 24 My Commission Expires: September 1, 2013. 25

	156:7	65:2,3,8		133:3;157:2;160:17;
0	15 (3)	22 (2)	6	165:16,18;169:4
	88:22;90:13;97:7	157:9,13		above (5)
00 (3)	16 (3)	2200 (2)	6 (3)	31:22;89:17;99:12;
7:25;121:5,6	88:22;89:10;90:13	65:3,8	97:2;170:1,17	106:6;120:12
08 (1)	19 (1)	24 (1)	60 (3)	accept (1)
134:5	137:14	97:2	33:1,3;97:7	87:9
	1937 (3)	25 (1)	60-foot (7)	access (34)
1	145:23;147:16,20	66:3	33:1,6,7,8,11;68:4,5	15:3;31:20;51:1,18,
	1950 (2)	250 (2)	67.27 (1)	19;58:20;64:8;65:20,24;
1 (13)	137:11,22 <b>1960 (1)</b>	5:9;71:24 <b>25-foot (1)</b>	137:14	80:15;92:14,15;125:23;
23:13;24:9,13;121:2,	137:14	66:22	_	- 126:1,2,3,11,25;127:5,8; 130:4;134:16;136:23;
8,9;131:21;132:2;144:6;	<b>1968 (3)</b>	275 (2)	7	130.4,134.10,130.23, 139:17;141:17,21;
148:13;154:16,17;155:8	145:22,25;148:4	71:11;88:1	- /->	142:4;144:23;145:10;
1.4 (2)	1+5.22,25,146.4 1-A (2)	/1.11,00.1	7 (2)	146:10,11,13;147:22;
155:9,11	8:21;125:4	3	62:21;169:11	151:9
1.5 (1)	<b>1-B</b> (1)	5	7/10/08 (1)	accessible (1)
155:11	88:19	3 (5)	135:21	90:3
1/2 (2)	1-C (1)	63:22;64:4,12,23;	7/10/2008 (1)	accompanied (3)
155:8;156:8	163:8	123:2	136:21	60:19;170:2,4
10 (7)	<b>1-D</b> (1)	30 (8)	73.24 (1)	accompanying (2)
43:13;82:8;83:8;	164:14	17:16;18:1,12,25;	64:25	60:25;61:11
85:16;150:8,24;151:5	1-E (1)	37:14;67:5;85:6;133:8	8	according (2)
100 (13)	166:18	30.10 (3)	0	43:5;111:25
92:1,20;93:2;103:10; 104:14;105:18;106:9;	<b>1-F</b> (1)	18:4;35:5;36:18	8 (3)	account (1)
104:14,105:18,106:9, 108:16,21;116:21;	168:10	30.102 (3)	104:7,22,24	158:17
119:23;120:18;142:25		36:3;62:22;75:16	804.022e (1)	accumulating (1)
119.25,120.18,142.25 100-A (2)	2	300 (1)	120:25	155:5
143:17,20		71:25	804.052e (2)	accumulation (1)
<b>100-foot (1)</b>	2 (41)	30th (1)	8:10;122:1	156:22
71:23	25:4,7,21;27:24;	85:8	804.52e (1)	accuracy (1)
101 (5)	28:22;29:3;31:25;32:2,	343.03 (1)	6:12	134:15
106:22,22;107:15;	25;35:6;36:18;39:4,24;	62:19	<b>897.5</b> (2)	accurate (8)
109:6,8	42:6,10;43:5;47:23;		138:19;149:13	9:8;23:20,23;43:24;
102 (5)	49:23,24;50:1;57:15;	4	897.6 (1)	53:19;55:7;57:3;165:21
111:12,13;112:17;	58:4;62:24,24;63:10,12,		138:16	accurately (1)
113:20,24	13;77:9,15;107:6;	4 (43)	897.76 (3)	134:23
103 (8)	109:20;121:8;122:13;	26:8,13;39:8;44:17;	131:17,18;149:16	accusation (1)
92:1;113:19;114:15,	123:1;125:18,25;126:5;	45:16;46:14,24;47:13,	898.7 (1)	53:2
15;115:15;116:21;	127:11;155:22,23;156:8	23;52:18,19;53:11,14;	138:14	accusing (1)
119:23;120:18	2/15/2008 (3)	55:5,12,17,18;56:1,3,7,7,		52:20
104 (3)	134:10;135:4;142:20	13,14,15;57:4,6,13;	9	across (2)
92:20;130:24,25	20 (1)	58:25;59:5;104:12;		30:17;155:20
105 (4)	66:3	123:3,6;138:1;144:7,13,	9 (12)	acted (1)
134:7;136:3,4;143:17	20-(1)	14;149:9;153:18,25;	71:14,18,19;72:5,12,	14:21
106 (3)	66:22 200 (1)	157:19;158:10;159:16,	16;78:25;83:5,6;105:11,	acting (1)
145:18,22;148:16	200 (1)	17	12;106:8	15:21
107 (3)	29:11	4926 (1)	9/11/82 (1)	action (1) 155:5
145:19,23;148:16	2004 (1)	64:24	128:16	
108 (3)	56:24	4c (1)	9/22/2010 (1)	activities (1)
150:7,22,23	<b>2006 (2)</b> 7:15;129:3	36:19	154:18	20:25 activity (5)
109 (1)	<b>2008 (6)</b>	5		13:9;14:13;15:25;
152:20		5	Α	
11 (1)	23:21;24:4;56:24; 104:13;136:3;150:8	5 (3)		- 16:1;20:23 actual (3)
86:9	<b>2010</b> (11)	33:1;168:21;170:5	ability (5)	64:4;141:20;160:8
12 (8)	26:8,13,25;39:8;		34:20;37:14;75:24;	actually (14)
79:5,25;80:1,13,23;	20:8,13,25;39:8; 44:17;47:14;56:25;59:5;	<b>5:30 (1)</b> 123:12	120:4;144:22	10:23;11:3;12:2;
81:10;151:1;152:23	85:6;152:23;157:9	5:35 (1)	able (20)	54:19;57:5,10;59:13;
13 (1)	<b>2011 (1)</b>	170:24	6:1;9:2;34:21;42:22;	64:21;79:2;91:15;94:6;
27:12	123:6	170.24	56:25;60:17;64:15;	103:4;110:5;163:20
14 (5)			74:10;77:20;92:14;	additional (18)
27:17;50:4;55:22,23;	2100 (3)		107:7;112:6,14,15;	additional (18)

24:19:29:16:47:18: 48:9.19:49:7.8:59:3.14: 60:3,5,9:61:14:132:14, 14;148:23;151:22; 162:10 additions (1) 54:12 addressed (4) 121:15;151:7,20; 152:23 air (8) addresses (1) 151:17 adequate (1) 34:21 adhere (3) 165:25;166:3;167:2 adjacent (12) 9:22,25;11:12;17:17; 55:10;64:20;125:13,16, 19,21;127:8,12 adjoined (1) 127:5 administrative (2) 34:24:35:5 administrator (1) 22:12 admissible (1) 69:14 adverse (1) 70:6 aerial (5) 23:25;56:21;57:13; 80:12:145:25 aesthetics (1) 117:10 affidavit (1) 145:14 afraid (1) 11:14 afternoon (3) 5:9;33:18;107:5 Again (50) 6:16;13:22;17:4; 22:20;27:21;41:14;42:4; 43:6;51:24;54:21;55:19; 56:11;66:20;74:8;75:3, 12;76:13;77:9;78:16; 82:15;83:5;86:16;87:6; 97:9;98:4;99:18;102:20; 103:6,20;104:1;105:2; 106:12:107:19.22; 109:2;111:22;115:17; 123:8;134:10;135:3; 142:9;147:6;155:1,7,17; 156:2,3,7;158:4;160:23 agency (5) 8:12;10:16;16:8;17:1; 89:1 ago (5) 34:9,11;58:25;100:24; 102:20 agree (19) 30:19;35:1,4;40:12;

61:3

57:2

90:1

7:8

65:17

64:7;65:9;68:10;72:13; 43:8 apologize (10) 90:4.6:106:7:116:22: 117:14,16;118:15; 28:9,11:46:10:56:13; 127:15:143:6.8:149:23 77:7;90:8;92:25;98:25; agreed (1) 113:7,20 149:14 apparent (1) ahead (5) 77:17 27:6:28:10:63:20: apparently (1) 112:4;137:1 36:24 appear (9) 58:21;72:23;93:7,19; 34:20;104:13;105:18; 106:24,25;127:25; 95:15;146:5;147:21; 148:4 146:19;164:12;170:14 alignment (2) appeared (1) 64:22;142:4 58:22 allegation (1) appears (11) 42:11,14;43:9;46:25; 69:16 allowing (1) 53:16;93:7;109:14; 115:1;146:10,15,16 almost (2) applicable (4) 47:1;103:4 15:7,11,25;19:14 application (11) along (16) 15:9;28:16;43:2;44:7; 9:12,18;11:3;14:20, 45:7;58:20;60:6;77:14; 22,23;15:15,19;18:15; 102:12;109:15;110:8; 21:2;131:20 applications (2) 120:15;141:2;146:3; 147:21;154:8 133:17,17 Although (1) applied (2) 89:18 23:1.3 always (1) applies (3) 12:1,8:166:4 among (2) apply (13)53:16:62:16 12:23;13:7,13,18,25; amount (2) 15:4;17:25;19:10,22,22; 133:14;169:21 20:11;21:14,21 analyses (1) applying (8) 11:3,16;12:9,10,21; 122:13 analysis (5) 14:1.7:15:5 9:17;122:22;133:16; appreciate (6) 169:15,16 14:17:30:2:66:14; analyzed (2) 94:3;115:9;152:15 25:15:67:21 approaching (1) and/or (1) 137:21 appropriate (3) 11:18;77:9;167:11 Andrew (1) approval (55) **ANDY (20)** 6:18;9:13,18,20;12:4, 5:4;6:19;128:12; 8,21,25;13:25;14:19; 131:2,21;133:6;137:1; 16:4,20,22,24;23:16; 138:4;143:1;144:6; 24:10,13;26:8,14;39:8; 145:25;148:18;152:23; 47:14;48:22;84:23;85:5, 153:21;154:2;157:22; 7,8,23;119:9,9;123:6,19, 158:14;159:10;161:19; 21,23;124:1,17;125:9; 168:2 132:5,6,8,19;133:1,17, Andy's (3) 21,25;134:11;151:12,22; 5:21,25;161:11 152:3,19;153:5;159:2; angle (1) 162:17,19;165:14;167:9 95:18 approvals (1) animals (1) 133:18 approximate (27) anticipate (2) 42:18;50:1,3;64:16; 65:1,4,9;81:14;83:7,15; 66:18:88:23 85:25;95:20;107:7; apex (1)

108:3,20:110:15; 114:21:115:23:119:24: 120:9,19:136:21:140:18, 20;143:13,21;148:2 approximately (6) 29:11;40:1;72:13; 107:14;137:11;155:8 approximation (18) 28:20;29:12;41:15; 44:2,3;50:14,17,19;72:2; 83:11;93:25;97:3,7; 108:9;115:8;116:1,7; 120:4 approximations (3) 30:1;107:11;147:1 aquatic (1) 37:25 area (98) 28:14;29:9;30:23; 31:5;34:7;41:4,5,12; 42:15;44:4;49:21,22; 50:8;51:1,15;52:2;58:8; 60:8;61:1;62:9,24; 63:10,11,12;65:7;68:22; 69:16;70:16,17,19;72:7, 14,15,18,25;73:3;74:8, 17;75:14,23;76:2,18; 77:24;78:14;79:11,17; 82:2;83:1,7,8,23;84:21; 86:12;87:4,25;88:10,10, 11:93:9:97:9:98:12,12; 99:18:103:13.13.17.18. 23;104:2,20;107:1; 108:7;109:16;116:20,22, 23;119:5;126:1,14,20; 130:1,3;135:25;137:20; 138:11,12,13:139:8; 141:9;142:12,22;143:5; 145:5;146:1;147:3; 155:21:156:7:157:5 areas (20) 27:4;39:3,6;40:19; 41:22,24;42:9;51:13; 60:7;62:23;77:10; 102:15;127:2,25;137:4, 9,21;146:21,24,24 argue (3) 69:7;89:18;118:11 argumentative (4) 77:6;83:4;94:14,18 Army (5) 85:7,9,25;86:2;131:6 around (17) 30:13,24;65:7;95:12: 96:9;108:24;109:2,18; 112:1,9,18;115:21; 136:13;137:13,25; 139:11;142:23 arrangements (1) 161:11 ascertain (2) 127:1,4 aside (1)

148:24 asphalt (2) 116:24:169:22 assert (2) 13:14;45:5 asserted (2) 15:8;37:15 asserting (1) 84:23 assertion (1) 42:19 assess (3) 77:22;113:1;125:15 assessed (2) 67:21;117:7 assesses (1) 121:11 assessing (3) 21:2,14;129:5 assessment (9) 75:12;96:1;97:21,22; 151:8,14,17;164:20; 169:20 assessments (3) 75:19;166:24;170:13 assigned (1) 129:11 assistance (1) 145:6 assists (1) 144:21 associate (1) 61:19 associated (6) 37:8;85:1;89:24; 102:11;130:8;169:6 Associates (6) 49:19;51:12;54:17; 60:1;141:7;158:5 association (1) 15:17 assume (9) 8:3;31:4;36:13;38:20; 54:22;58:14;65:14; 135:11;152:10 assuming (1) 152:8 assuring (1) 68:7 attached (8) 47:10:55:5,18:131:3; 138:21;139:7;149:10; 151:15 attachment (1) 138:8 attachments (2) 47:2,2 attempt (2) 76:3;78:12 attempted (2) 76:17;127:3 attempting (1) 127:1

**Min-U-Script**®

Brown & Jones Reporting, Inc. 414-224-9533

(2) additions - attempting

attendance (1)	21:4;132:15	beyond (4)	book (6)	
25:19	<b>Basically</b> (14)	66:23;69:11;96:10;	25:10;36:3;38:2,4,4,	С
attention (2)	5:21;14:25;22:2;	107:22	11	
47:22;151:23	25:10;33:13;45:5;47:19;	big (5)	borderline (1)	C100-2 (2)
Attorney (1)	48:10;60:11;61:3,4,23;	63:23;94:12;116:6;	112:12	135:20;136:20
82:18	132:15;154:11	161:8,13	boring (1)	C101-2 (3)
author (2)	basis (7)	bigger (1)	73:3	140:10;141:8;142:20
131:23;132:7	39:21;60:17;68:21;	95:15	borings (5)	C116 (3)
<b>authorities (1)</b> 15:16	75:25;77:21;90:9,10	<b>Bill (6)</b> 7:18;92:18;117:1;	72:24;84:5;97:18;	64:6,11,24
authority (2)	<b>bayou (2)</b> 35:22;36:24	129:24;137:3;164:4	169:20,25 <b>both (5)</b>	call (8)
13:23;84:25	bayous (4)	binding (1)	20:11;22:4;29:21;	32:18;49:12;61:25;
available (1)	35:8;36:20;37:4,9	89:1	62:10;63:4	95:5;120:24;126:15;
33:21	Bear (2)	Bing (2)	bottom (5)	148:1;155:3
avoid (1)	62:18;88:21	92:13,15	52:3;95:20;102:1;	called (4)
163:23	Beautiful (2)	Bingmapscom (1)	140:23;141:2	5:4;9:15;125:7;168:24 calling (1)
aware (9)	96:23;116:22	56:22	boundaries (2)	67:6
73:2;74:7;122:5,20;	beauty (4)	Bingo (1)	28:17;66:24	calls (1)
130:7;141:1;151:24,25;	21:9;117:10,18;	170:1	boundary (2)	44:22
159:13	118:21	Bing's (1)	58:17;81:3	came (3)
away (1)	Becks (4)	92:12	bowl (1)	13:3;15:9;20:18
64:21	127:16,17,21;128:1	biologist (1)	22:6	can (139)
	become (2)	125:2	break (4)	6:19;10:25;11:9;
В	10:4;33:20	bird's (1)	91:3,9,25;116:14	17:12,14;23:21;24:19,
	becomes (1)	92:13	breast (1)	25;28:18;30:19,25;
bachelor's (1)	110:23	birth (1)	97:1	31:10;32:12;33:8;34:17,
128:20	bed (36)	128:15	brief (4)	23;35:14;36:9,15,25;
back (39)	34:19,24;37:13,17,23;	bisecting (1)	91:6;116:16,20;	37:15;38:8;40:5,6;
11:22;23:11,19;24:6;	38:17;39:20;60:16;	127:19	153:15	41:13;42:5,6;43:17;
27:24;29:10,11;30:9;	62:21;63:1,7;72:20;	bit (14)	briefly (2)	48:5;49:8;50:3,21;
33:13;34:2,15;47:23;	75:24;77:20;88:16;	8:14;22:21;82:6;85:2;	20:20;128:17	53:20,21;57:4,12;65:13,
48:6,17;49:16;51:22;	97:23;98:1,2;99:19,23;	91:14;93:17;95:14;	bright (2)	19;70:13,14,15;71:7,21;
52:10,18;56:13;58:5;	100:1,2,7;101:7,16,18,	122:9;131:10;135:16,	78:20;82:21	75:12,14,17;78:17,23;
60:5;62:15;76:14;81:5; 91:7;92:3;105:11;	20,24;102:2,20;103:4; 113:17;114:21;117:12;	23;137:25;141:13; 142:23	<b>bring (1)</b> 18:3	79:3,10;84:9;86:16;
109:11;110:7;113:19;	155:2,14	blank (2)	broad (5)	91:17,24;93:6,16;94:22;
116:17;118:20;125:25;	begin (1)	60:20;124:11	42:22;50:19;68:16;	96:6;100:6,7,11;101:6,7,
130:3;139:11;148:6;	115:6	blends (1)	97:3;99:3	24;102:16,17,21;103:4,
153:16;158:4;163:24	beginning (3)	115:1	broadly (1)	25;106:21;107:25;
background (3)	89:11,13;135:4	blow (1)	133:8	108:17;109:21;110:4,4, 6;111:8;113:6;114:19,
75:5;128:12,23	begins (3)	160:10	brochure (1)	20;115:10,14;116:14;
bank (38)	40:15;110:24;127:23	blow-up (1)	90:21	118:11;119:16;121:21;
34:20,25;37:13,17,24;	behalf (4)	126:7	brought (1)	122:1;127:20;128:14,
38:18;39:20;60:16;	8:11;45:21;122:3,15	blue (30)	47:18	17;129:6;130:24;131:2;
62:22;63:1,7;72:20;	below (6)	27:23;28:18;29:23;	brush (1)	134:8,18;135:14,23,25;
75:24;88:16;97:23;98:1,	99:12;103:17;114:2;	49:23;50:10,10;53:25;	155:18	136:24;138:4,5,24;
2;99:19,23;100:1,2,7;	128:1;149:4,18	55:1;56:4,4;60:6;62:9,	bubble (1)	139:3,7;140:7;141:8,8,
101:7,16,18,20,24;	bend (1)	11,24;63:10;77:10,14,	43:14	13;142:9;143:4,4,22;
102:21;103:1,5;113:4,6,	102:13	23;78:9,13;107:5;	build (5)	144:18;145:2,19;146:6,
14,17;114:9,10;117:13;	Besides (3)	110:21;115:11;126:21;	17:23;18:18;19:2,7;	9,18;147:1,8,13;149:7,
155:2	56:17;91:16;123:18	135:24;136:20;138:13;	119:10	12;153:13;154:4,10,23;
banks (1)	best (16)	143:5,5;157:23	building (3)	158:3,8,14;160:4,8,10;
77:20	6:22;11:25;32:23;	boat (21)	13:6;17:23;18:18	161:2,5,9,10,14;168:3
barely (1)	33:5;53:5;54:8;55:13;	9:13;23:17;24:10,14;	<b>bump</b> (1) 65:1	canoe (3)
156:24	67:19;83:23;104:24; 120:4;141:3;142:19;	63:8;75:25;76:18,21;		58:9;76:18;89:21
<b>base (5)</b> 43:11;66:18,22;97:1;	120:4;141:3;142:19; 159:25;160:23;165:24	85:24;87:4,8,12,14,22, 23,25;88:2;120:5;	<b>bumped (1)</b> 64:21	canopy (5)
43:11,00:18,22,97:1, 109:3	better (8)	145:10;146:12;158:19	Bunk (1)	103:22,24;105:18;
based (11)	31:16;108:1;112:11;	Bob (2)	124:9	114:2,4
5:18;40:23;58:1,19;	141:13;145:3;153:22;	6:3;124:10	bureau (1)	capability (2)
64:19;66:1;67:18;70:5;	160:7;161:3	body (7)	14:12	39:20;60:16
75:21;80:15;120:14	Beyler (3)	89:19,20;117:17,21;	business (2)	<b>capable (2)</b> 75:10;89:21
basic (2)	124:25;125:1,2	118:8,12;119:5	44:25,25	capacity (4)
/	,		7 -	capacity (4)

60:16:63:8:77:20; 124:20 carries (1) 60:24 carved (1) 31:15 case (11) 15:2;16:23,25;18:25; 49:5;75:2;117:6,8,11; 118:17:124:8 cases (1) 117:5 catch (1) 40:7 CC'd (1) 152:4 cease (1) 110:12 central (2) 41:4;70:11 certain (9) 8:11;13:4;15:10; 16:11;67:15;78:14;88:9; 90:11;129:15 certainly (5) 7:1;18:14;35:4;87:9; 108:13 certification (1) 19:1 certified (1) 51:3 cetera (5) 5:15:8:18:40:22: 44:11:121:16 chance (1) 5:15 change (10) 85:2:100:7:101:7.19: 102:16,21;103:7,12,17; 120:15 changing (1) 22:20 channel (9) 31:16;51:22;68:11; 110:16;138:19;155:3,5, 25;156:1 channelized (2) 109:24;155:19 channelizes (1) 156:4 Chapter (7) 17:16;18:1,4,12,25; 37:14:133:8 characteristic (2) 34:18;37:20 characteristics (28) 25:11;28:15;31:24; 34:13,16;37:24;38:16; 39:15,18;40:3,21;41:13, 16.23:58:4.5.7.8.11.13. 16.19:60:12:72:19: 99:14;102:12;114:1; 154:14

17:23 characterize (1) 155:12 client (1) characterizing (2) 82:18 156:17.18 close (9) charge (3) 39:11;68:11;80:24,25; 10:8;15:1;84:24 107:17,23;129:1;145:9; check (8) 153:12 34:15;52:5,8,11;55:6; closed (1) 71:13;76:14;138:7 155:3 chemistry (1) closely (1) 128:23 167:3 chief (3) closer (2) 21:23;22:2,3 18:3;152:19 chose (2) clump (1) 106:2,13 94:12 Christine (2) clumps (1) 46:1,2 94:16 circle (33) co-counsel (1) 31:17,18;42:14;52:3, 86:24 3;57:15,18;60:1;62:10, code (67) 6:18;9:13,18,20; 11;63:11,13;65:6,8;95:2, 11,14;96:9;106:19; 10:17,19,20,23,25;11:8, 108:24;109:2,7,12,18; 9,15;12:1,12,14,15,20, 110:24;112:1;113:23, 22;13:25;14:18;16:3,20, 24;115:21;125:17; 24;23:9,16;24:10;26:7, 127:16;135:25;155:15 14;47:14,20;48:11,22; circled (3) 84:22;85:5;119:8;123:2, 31:5;55:22;136:20 6,19,21,23;124:1,16; circles (12) 125:6,9;130:9;132:3,4,8, 53:24,25;54:12,25; 19:133:18,21:148:7,11, 55:1,10,11:56:9:70:3; 18:151:12,21:152:3,13, 127:10.11:157:24 19;153:5,9;159:2; circuit (1) 162:16,19;164:3; 119:13 165:15;167:9 circuitous (1) Colby (1) 139:9 26:1 collected (1) circumference (1) 97:2 61:24 college (2) circumstance (2) 16:19:22:9 128:19,25 citizen (10) color (4) 11:16;12:10,24;13:17; 90:23,24;112:2; 16:21,25;17:3;19:22; 120:20 20:9;22:8 colors (2) 107:13;135:18 citizens (1) 90:20 comment (5) claiming (1) 51:8;150:7,14;153:3,4 119:5 commented (1) clarification (3) 129:25 14:5;68:13;111:8 comments (4) Clarify (12) 14:17;124:7;132:12; 151:15 12:11;18:13;26:15; 36:7;54:11;59:12;78:17; **Commission** (1) 96:6;136:2;145:2; 84:1 164:21;166:2 common (1) clear (14) 45:4 11:14;17:8,10;20:5; communicate (1) 29:19,22;31:12;40:8; 108:1 42:5;63:10;64:7;67:23; communicating (1) 80:18;115:25 32:13 communities (1) clearer (1) 57:12 72:21 clearly (1) company (1)

15:9 comparable (2) 19:7.9 compilation (2) 132:11:168:15 compiled (2) 6:4;167:19 complete (2) 52:21;133:1 completed (7) 49:7;75:22;113:11; 114:12;124:23;130:8; 135:13 completely (1) 5:16 completeness (1) 169:19 complex (9) 25:13;58:18;109:14, 18;111:2;125:22; 138:14,15,18 complies (19) 29:5,8;30:3,8;31:14; 50:22;94:4;95:13; 107:16;109:1,19; 112:10;114:23;115:22; 120:7,11;136:25; 143:25;147:15 complying (1) 15:10 components (1) 59:6 comport (1) 9:5 composition (1) 155:17 comprised (1) 44:17 comprises (1) 77:24 compromising (1) 101:20 concept (2) 99:23,25 **Concepts (6)** 164:25;165:1,8,9,13, 19 Conceptually (1) 75:4 concerned (2) 11:2:114:5 concerns (2) 11:20:19:16 concluded (1) 170:24 conclusion (2) 35:2;89:23 condition (2) 7:9:162:13 conditions (4) 134:15,24;135:10; 157:10 conducted (9)

47:15:49:19:63:4: 76:13;99:22;121:21; 122:7,24;130:7 conducting (1) 60:11 confer (1) 116:14 confirm (7) 26:22;27:21;61:15; 114:9;129:22;144:1,2 confirmation (1) 122:9 confirmed (5) 26:2;33:10;61:17,18; 162:20 confusing (1) 18:10 conifer (1) 104:1 connected (1) 149:5 connection (4) 35:7;40:1;121:12; 163:18 connects (1) 29:15 consider (4) 89:23;110:25;111:1; 149:21 consideration (1) 148:20 considered (7) 31:23:58:23:89:14,15, 20.22:149:19 consistent (1) 114:20 consists (1) 101:25 constitutes (1) 152:1 construct (2) 23:17:146:11 constructed (4) 78:1;141:18;146:7; 147:23 construction (5) 13:5;24:14;68:12; 130:12;142:3 consultant (1) 99:17 contain (1) 67:1 contained (2) 77:19;166:13 containing (1) 31:23 contains (2) 56:1:68:23 contents (4) 153:9:169:4.5.15 context (3) 100:13;101:14;149:7 continue (1)

29:13 contour (1) 158:2contours (1) 160:21 contractors (1) 130:5 contribute (1) 56:17 contributed (1) 56:19 contribution (1) 56:8 convenient (1) 91:3 copied (2) 131:6,8 copier (2) 160:11,15 copies (2) 92:21;159:12 **copy** (23) 8:23;12:14;23:21; 27:8,18;36:1;45:17; 79:5,9;82:10;92:4,5; 104:9;121:3;148:9; 152:5;160:7;161:3,4,13; 163:9;167:20;169:11 copyright (1) 57:2 corner (14) 30:14.18.20.21:32:16: 34:1;42:8,16,24;43:1,15; 44:5;54:4;115:14 corporation (6) 13:2,3,18;15:19; 18:18:84:6 Corps (6) 85:7,9,25;86:2;131:6, 11 Corps' (1) 74:22 correctly (9) 22:25;36:14,16;37:5; 88:14;102:5;114:6; 149:17;163:1 correlate (1) 139:13 correlated (1) 155:19 correlates (2) 56:4;134:11 corresponding (3) 55:11,14;144:17 corridor (1) 137:22 cottages (1) 146:3 counsel (33) 8:22;9:2;14:17;17:7; 20:2;25:1;35:25;38:11; 42:5;45:21;46:9;48:14; 52:9,20;54:14;59:21;

62:17;73:6;79:11;88:4; 91:2;96:5;97:9;104:3,8; 105:7;109:5;111:22;	D
116:12;122:1;163:22; 167:11;170:7	<b>Dale (2)</b> 131:5,11
<b>counsel's (2)</b> 19:16;53:12	dam (1) 22:5
<b>County (2)</b> 20:16;92:14	<b>dashed (1)</b> 142:21
<b>couple (10)</b> 6:11;62:7;75:15;	date (15)
116:19;118:20;120:22,	26:12,13;41:21;57:1, 2,3;76:14;98:17;128:15;
25;151:17;163:2,23 course (18)	134:10,25;135:21;
29:13;33:16;45:18;	136:21;142:20;157:9 dated (5)
50:14;93:25;110:6,7,8, 12,14,15;113:15;115:9;	134:4,5;150:7,24; 152:20
126:20;140:16;152:7; 154:7;161:1	dates (5)
courses (3)	54:3;85:25;136:8; 168:4;170:16
29:16;44:20;162:11 court (3)	<b>day (2)</b> 74:14,15
10:7;119:11;128:8 cover (3)	days (2)
146:14,15,18	163:2,23 DBH (1)
<b>covered (2)</b> 116:1;146:20	97:1 <b>deal (5</b> )
<b>Craig (1)</b> 124:9	24:23;37:3;73:7;
creek (1)	130:19;164:15 deals (2)
161:25 criteria (2)	117:12;151:16 deceiving (1)
15:16;89:17 cross-culvert (2)	116:8
139:19,25	<b>December (4)</b> 104:12;150:8,24;
<b>crude (1)</b> 147:1	151:5 decides (2)
<b>culvert (7)</b> 138:16;139:16,21,23,	16:2;17:22
24;140:1,5	<b>deciduous (1)</b> 103:25
<b>culverts (2)</b> 139:22;140:3	<b>decision (10)</b> 27:1,2;41:20,21;
<b>cumulative (1)</b> 70:6	47:20;48:11,23;63:5;
curious (3)	164:3;165:13 <b>decisions (1)</b>
62:23,25;99:23 current (5)	166:17
31:22;67:2;146:13;	declare (1) 75:23
147:23;162:12 Currently (1)	<b>declared (1)</b> 36:22
22:14 curvaceous (1)	<b>deemed (1)</b> 25:11
155:18	deep (2)
<b>curving (1)</b> 139:11	155:9,11 definable (1)
<b>cut (2)</b> 102:13,18	75:24 <b>Define (7)</b>
<b>cute (1)</b> 98:9	37:18,20;76:10,10;
cutoff (1)	100:14,16;162:4 <b>defined (8)</b>
89:19 cuts (1)	28:25;37:13;39:20; 62:23;63:7;72:20;77:19;
102:14	155:14

defines (1) 35:13 defining (1) 62:21 definition (13) 18:11;35:18,20;37:2, 10,12;62:13;63:7,14; 74:22,24:95:6:100:19 definitive (1) 131:15 degree (5) 33:1;72:21,22;134:15; 135:12 degrees (2) 43:13;128:20 deliberately (1) 96:14 denominated (3) 31:25;126:15,20 denomination (1) 64:24 denote (2) 53:25;54:2 denoted (1) 127:20 denotes (1) 62:11 denser (1) 114:3 denv (1) 27:22 **Department** (19) 7:11,12;14:1,2,5,5,7,7, 11:15:17:16:1:71:15: 83:24;99:16;131:16; 132:10;146:10;160:6; 161:2 depending (7) 5:16;13:20,21;20:15: 67:2:76:7:103:5 depends (2) 13:22;15:14 depict (1) 142:20 depicted (7) 44:6;58:2,11;116:20; 140:3;141:21;158:7 depiction (1) 138:10 deposited (1) 102:14 deposition (4) 5:3;10:8;119:15; 155:21 depositional (1) 102:15 depression (1) 138:12 depth (9) 98:7.8.12:120:15: 154:23;155:7,9;156:13, 15 describe (6)

25:10:31:1:93:6; 113:11:128:17:158:14 described (4) 22:10;31:7;34:8,11 describes (2) 43:24;139:9 describing (1) 45:13 description (2) 43:17;144:19 design (5) 130:10,12;134:4,16,23 detail (6) 20:20;24:20;29:25; 74:13;141:13;170:18 determination (13) 9:19,20;37:24;118:19; 119:2;123:5,23;125:11; 148:23;154:8;161:24; 165:14;169:25 determinations (7) 38:23;39:2;73:25; 85:17;125:20;131:13; 148:21 determine (19) 9:24;15:6;19:4,12; 33:15;34:2;78:12;84:25; 99:18;103:12;113:5,13, 18,21;117:9;121:19; 122:6,16;125:16 determined (2) 25:14:63:6 determines (1) 121:11 determining (3) 60:15;84:2;118:23 develop (3) 124:19;130:8;133:3 developed (10) 46:18;105:1;138:25, 25;139:2;146:2;158:5, 17;160:2;162:18 development (3) 132:11,16;147:21 development-proposed (1) 61:5 device (2) 12:9,12 diagram (1) 153:21 diameter (2) 97:1,1 dictionary (1) 100:16 difference (1) 113:22 different (15) 8:13,14;16:22;20:24, 25;35:4;37:21;73:9; 85:3:96:25:102:3,12; 106:24;123:25;136:8 difficult (1) 37:23

diffuses (1)	DNR (113)	32:18	easel (1)	49:20;67:2,3;91:20;
110:22	7:13;9:11,13,17,18,20,	double (1)	25:25	99:12;100:8,9;101:8,9;
digest (1)	22,23;10:22;11:3,15,17,	32:17	easement (18)	102:22,23;103:7;
5:16	23;12:1,20,22;13:7,11,	down (6)	30:16;32:20,21,23;	131:18;138:14,16,19;
direct (2)	23;14:1,1,2,20,21;15:1,	6:12;66:6;67:14;	33:2,3,6,7,9,11,13;43:2,	149:12;156:23;158:5;
78:23;152:16	2;16:2,8,12,20,24;17:2,	95:17;134:7;156:12	4,7,14;68:5;141:10,21	162:21
directed (1)	2;19:4,7,10,17,19,21,23;	drainage (2)	easier (2)	elevations (29)
152:5	20:7;21:12,23;22:1,8;	25:9;160:2	32:13;51:21	49:14;51:5,9,14;52:4;
direction (8)	23:4,5,9,17,25;24:4,14;	drains (3)	east (16)	79:19;91:10,18;102:11;
59:25;60:2;85:3;	26:2,20;27:13,20,22;	138:13,15,18	49:24;50:10;51:18;	137:16;139:8,14;
110:9,9;137:12;154:20;	30:15;32:24;33:10,21;	Drake (2)	57:11,11,14;81:11,22;	140:23;141:1,4;158:2;
156:19	35:12;43:2,6;44:10;	60:20,21	126:1,3,11;127:5,22;	159:10,14,19,21,23;
directions (1)	45:6;46:1,25;47:3;	dramatically (1)	137:12;139:12;146:13	160:9,18,22,24;161:20;
142:13	53:11;58:20;64:5;73:2;	80:2	eastern (16)	162:3,15,18
directly (2)	79:11;80:17;84:12,14;	draw (20)	72:7,11,14;73:21,24;	elicit (1)
138:6;165:8	85:22;88:25;93:8;94:8;	28:19;29:18,22,25;	74:4,18;77:24;82:2;	124:7
disagree (1)	95:25;96:1;98:21,25;	50:15;61:5;64:15;70:13;	84:19;87:20;91:12;93:8;	else (10)
90:5	99:6,17,25;103:12,16;	95:11;107:12,14;	95:23;104:17;105:15	42:6;50:24,25;56:18;
discern (4)	104:11;107:1,23;	108:24;109:18;112:1;	east-west (1)	61:17;98:21;103:16;
98:1,3;101:18;156:18	109:15;111:15;112:5;	114:20;115:3;119:24;	127:8	122:4,20;167:17
discernible (8)	114:17;119:1;121:11;	140:11,15;151:23	easy (1)	elucidate (1)
99:19;100:7;101:7;	122:3,5,15;125:11,13,	drawing (23)	82:22	37:7
102:21;156:12,15,16;	22;126:18;127:12;	27:13,14;60:20;64:12,	edge (1)	email (7)
157:4	128:25;129:2;130:5,6;	14;66:1;71:14;93:24;	111:19	131:2,5,7,8;138:6,9,20
discerning (1)	136:23;146:1	104:11,12;107:18;	edification (1)	emails (2)
102:10	DNR-loaned (1)	131:3;136:15;138:21;	109:6	130:24;131:4
discharge (1)	146:13	140:23,25;141:8,17,22;	educate (1)	embodied (1)
157:2	DNR's (2)	143:11;147:9;157:22;	167:13	165:8
discovery (2)	24:13;122:11	162:15	education (1)	embraces (1)
69:12,13	document (18)	drawings (17)	128:18	42:15
discussed (3)	27:22;43:20;45:22,25;	45:5;65:14;80:16;	Edwina (27)	<b>employed (1)</b> 12:13
51:15;122:10;138:5	46:19;47:3;56:14;69:1;	133:11,12,15,22;134:2,	5:11;7:2;8:24;10:7;	
discussing (2)	90:14;133:3;135:10;	5,6,22,25,25;135:8,15; 137:5;139:14	23:14;25:22;27:8,18;	<b>employment (1)</b> 128:24
70:16;122:22 <b>Discussion (7)</b>	153:6;158:14;159:1,1; 162:22;163:19,25	drawn (10)	28:5;45:17;63:23;71:16; 79:3,5;82:10;88:20;	employs (2)
7:4,22;25:8;58:24;	documentation (1)	30:12,17,24;31:18,19;	92:5;118:15,16;123:12;	10:23,24
128:9;144:8;161:16	72:22	34:7;57:15;96:9;109:2;	145:13;161:2;162:24;	encompass (3)
discussions (3)	documented (1)	112:17	163:10;165:17;167:10;	37:10;44:4;58:17
33:12;91:10;158:24	27:3	drew (3)	168:12	encompassed (2)
disjointed (1)	documents (16)	95:19;115:11;124:11	Edwina's (1)	63:11,12
33:20	45:12;47:9;62:16;	drive (8)	31:10	encompasses (2)
distance (1)	90:17;158:22;163:1;	32:1;39:5;42:11;	effect (5)	42:16;43:15
81:2	164:5,9,13,22;165:12,	51:25;52:1;57:21;68:3;	12:8;31:15;47:19;	encompassing (1)
distinct (1)	17;166:14;167:1,16;	80:15	48:9;110:22	93:8
102:18	168:15	driveway (1)	effort (5)	end (11)
distinction (1)	dominant (1)	141:18	6:2;76:21;103:11;	45:22,24;84:19;95:24;
42:23	31:2	due (2)	113:18,21	104:17;105:15;127:15;
distorting (1)	done (60)	103:20;155:3	eight-inch (1)	135:4;141:12;157:2;
107:19	10:10;23:20;24:4;	duly (1)	139:19	161:20
District (5)	25:25;26:20,21,25;	5:5	either (5)	ends (1)
68:25;69:3;82:17;	38:22,25;39:1,7,9,11;	during (8)	19:25;52:1;56:24;	131:4
142:25;150:22	40:20;41:22;44:12,16;	10:25;25:15;27:1;	59:24;165:7	enforce (1)
District's (3)	49:18;50:13,25;51:9;	76:6;98:14;103:19;	elaborate (2)	17:16
86:22;92:10;153:2	52:15,24;53:2;56:23,24;	134:16;158:18	39:19;42:1	enforcement (1)
disturbance (3)	59:3,24;60:3;61:15;	duties (2)	electronic (1)	17:1
13:21;67:18,20	71:15;72:24;73:2,20,23;	123:4;144:19	167:20	enforcer (1)
ditch (19)	74:12;75:18;76:3,9;		electronically (1)	15:22
140:11,13,24;141:2,5;	80:5,15;82:16;84:6,19;	Ε	161:15	Engineer (1)
143:11,12,13;147:10,12,	92:4;97:19;104:11,12;		elementary (1)	85:7
12;148:3;159:19,20,22,	112:24;114:5;121:19;	earlier (9)	128:19	engineering (7)
24;160:21,22,24	122:5;125:4,19;128:5;	98:13;107:6;109:20;	elements (1)	45:5;54:7;66:13;
division (4)	141:4,6;153:12;168:2,18	129:22;140:12;144:2;	169:7	80:16;84:14;91:11;
14:12;22:4,5,11	dotted (1)	149:14;157:25;169:12	elevation (20)	133:11

eve (1)

engineers (8) 71:3,5;79:18;80:6,8, 15:85:9:86:3 even (9) enlarged (1) 79:25 enough (12) 27:23;32:8;34:4,6; 35:12;39:3,21;65:5; 84:8;86:6;116:10,10 ensure (4) 11:19;68:9;70:2;75:19 ensures (4) 17:2,5;19:21;20:10 ensuring (1) 22:8 enter (1) 130:16 entering (1) 154:19 enters (1) 155:24 entire (8) 31:4;37:10;58:17; 83:17;88:7,8,11;163:19 entity (3) 11:17;12:24;18:7 entrusted (2) 17:16:84:24 environment (1) 151:8 environmental (3) 15:22:151:14.16 equal (2)16:23;21:21 err (1) 152:11 especially (1) 146:20 essence (2) 142:17:158:21 essentially (1) 137:15 establish (2) 118:8;134:21 established (2) 117:12,15 establishment (1) 130:22 estimate (1) 138:24 estimation (2) 71:24;157:1 et (5) 5:15;8:17;40:21; 44:11;121:16 evaluates (1) 121:11 evaluating (2) 89:15;132:18 evaluation (3) 122:22;148:18;162:16 evaluations (1)

42:5

evaluative (1) 127:11:130:25:131:21; 122:14 132:2:136:4:138:1.20. 22;139:7;142:24;143:2, 53:23:74:14.15:88:5: 17,20;144:6,7,10,13,16, 90:2;95:14;112:7;157:2; 16;145:18,19;148:10,12, 168:4 16;149:9,10;150:15,20; eventually (1) 152:20;153:18,21,24,25; 139:12 154:2,4;157:18,19,22; evergreen (1) 158:8,10,11;159:15; 104:1 160:1;163:8;164:14; everybody (1) 168:21;169:11;170:1,5, 17 exact (9) Exhibits (19) 14:24;33:12;35:10; 5:2;10:2,5,8;33:17; 45:14;57:3;95:6;104:25; 55:5;92:8,9,10;107:10; 170:15,18 116:21,21;119:23; exactly (14) 120:18;128:6;130:13, 34:3,5;35:15;42:9,19; 16;148:15;150:6 63:2;74:4;105:3;124:21; exist (5) 140:5;147:2;165:2; 97:10;101:25;106:9, 12;110:13 167:4;170:17 **EXAMINATION (5)** existed (2) 7:5;8:9;72:17;128:10; 40:21;162:12 163:5 existence (1) examined (3) 122:16 5:6;70:8,11 existing (13) examiner (4) 31:20;32:8;126:23; 118:16,18,23;119:19 135:10;138:11;139:23, example (6) 24;140:3,5;141:10,18; 17:22;26:21;38:13; 142:4,7 102:4,6;149:11 exists (3) 51:23;77:2;151:25 Excellent (1) 142:5 expand (4) except (3) 91:14,17;149:7; 16:23;36:18;128:5 160:15 excuse (2) expect (1) 40:16:98:23 124:2 experience (1) Exhibit (187) 7:25;8:2,21;23:13; 133:14 24:5,9,13:25:21:27:7,12, expert (4) 75:7;82:17,23;124:15 17,24;28:22;29:3;31:25; 32:2,25;33:5;39:4,24; explain (16) 42:6,10;43:5;44:6; 10:22;11:9;34:17; 45:16;46:14;47:23,23; 35:15;49:8;51:21;80:12; 100:11;121:24;122:1; 49:23,24;50:1,4;52:18, 129:6;138:4;141:13; 19;53:6,9,11,12,14;55:5, 142:9;144:18;154:4 8,12,17,18,25;56:1,4,5,7, 15,19,20,21;57:4,4,5,5,6, explained (1) 13,15;58:4,25;62:24,24; 112:25 63:10,12,13,22;64:4,12, exposed (2) 23;70:18,25,25;71:1,2, 32:7;156:6 14,18,19;72:5,12,16; extended (2) 52:6;64:21 77:9,15;78:25;79:2,5,25; 80:1,13,14,23;81:10,11; extends (1) 82:8;83:5,6,8;86:9; 66:23 88:19;92:1,18;93:2; extent (20) 9:21,24;13:21;18:23; 103:10;104:7,14,22,24; 105:11,12,18;106:8,9, 23:25;44:15;57:9;67:18, 22,22;107:6,15;108:16, 19,20;77:1;93:8;95:19, 21;109:6,8,20;111:12, 20;112:5;122:10; 13;112:17;113:19,24; 125:12;127:3;166:7,12 114:15,15;115:15;121:4, extrapolate (2) 51:7;109:21 5;125:4,18,25;126:5,7;

92:13 eyes (1) 53:23 F face (1) 26:3 facing (4) 57:11;86:14;106:25; 111:15 fact (13) 25:4,7;26:19,24; 36:21;74:21;76:20; 77:14;89:17;91:17; 95:14;117:7;135:8 factor (1) 13:16 factors (1) 117:18 fair (32) 21:20;27:23;32:8; 34:4,6;35:12;39:3;41:7; 43:4;47:6,8;53:24,24; 66:20,21;67:4,13;84:8; 86:6;105:6;106:17,20; 113:10;116:4,10,10; 133:14,22;135:7;137:9; 140:2:146:16 fairly (7) 76:15,16:80:24,25; 116:20;134:14;137:8 fall (2) 25:16;39:12 Falls (7) 26:20;44:10;75:3; 117:6,8,11;118:17 familiar (26) 35:6,9;38:2,11,13; 45:10,11;64:11;65:15, 16;75:2;84:5;86:12; 130:4;131:7,9;134:1,9, 12;135:8;150:5,13,18; 151:6;153:6;154:2 fanned (2) 155:13,13 far (8) 11:1;51:5;57:24; 104:4;106:18;113:25; 114:4:169:15 faster (1) 25:3 favor (2) 93:23;115:20 features (3) 29:17,24;63:5 February (2) 134:5;136:3 feel (3) 31:9;58:14;133:14 feet (16) 29:11;33:3;66:3;67:5;

71:11,25;97:7;100:4,10; 101:10;102:24;120:12; 155:10,11:156:8.8 few (9) 34:8,11;45:12;47:17; 58:25;61:1;128:12; 154:11;159:5 field (9) 25:16,18;27:1;42:20; 104:4;122:7;129:13,16, 17 field-truth (1) 74:10 Fight (1) 118:4 figure (1) 100:25 file (11) 32:10;33:14;34:2; 52:5,8,12,16;152:1,2,9; 158:16 files (4) 92:11;152:6,12;161:6 fill (4) 66:23;67:19;85:23; 120:15 final (7) 33:21,25;64:5,14; 85:8;134:11,23 finally (1) 169:10 Find (4) 24:23;102:1;105:14; 139:18 finding (1) 25:7 findings (5) 24:21;25:4;47:20; 48:10;99:21 Fine (7) 6:15;43:22;60:18; 129:10:135:7:136:17; 140:9 finger (1) 128:1 firm (2) 54:7;91:11 first (22) 5:5,7;7:18,21;9:4; 10:14;28:11;37:19; 45:22;67:23;81:1;86:11; 88:13;92:8;93:2;104:17; 116:19;120:23;129:12; 145:17;151:24;163:7 firsthand (1) 158:24 fish (1) 21:7 fishery (2) 90:1:125:2 fishery's (1) 11:5 five (4)

122:13

21:4;133:13;156:12,	128:8
14	friends (1
Flag (6)	115:17
154:16,17;155:22,23;	front (9)
156:14,14	10:3;26
flags (1) 156:12	56:14;58 92:21
flat (1)	frozen (3)
101:25	146:16
flip (3)	full-blow
94:10;135:15;139:15	58:15
float (10)	fully (1)
34:22;37:14;39:22;	43:15
44:11;60:17;63:8;75:25;	fun (1)
76:17,21;77:20	50:7
floating (1)	furnished
89:21	62:17
flow (18) 29:14;138:10;139:8,9,	further (1 156:11
10,10;142:18;154:18,19;	130.11
155:1,17,19,24;156:13,	
15,17;157:4;160:2	
flowing (2)	gain (1)
139:12;156:25	12:24
flyover (2)	Gainer (1
56:21;93:7	75:2
folks (1)	Gallo (58
118:20	92:11;1
follow (1)	130:14,
49:4	132:9;1
Following (3)	12,18;1
47:17;76:9;162:14	140:21;
follows (1) 5:6	144:12,1
follow-up (3)	24;147:1 150:11,
82:21;142:6;159:5	151:2,10
foot (2)	16,17;15
88:1;100:4	21;159:7
forget (1)	19;161:
124:24	23;162:
forgive (1)	Gallo's (1
63:9	82:18
form (2)	gather (1)
79:3;100:14	128:6
formal (2)	gave (2)
129:4,6	118:13
formed (1)	gears (3)
103:6 former (5)	45:8;82
28:2;29:10;30:13;	general (8 23:25;8
76:22;77:12	99:25;1
formerly (3)	147:6;1
9:22;24:15;125:13	generalis
forth (3)	137:19
9:3;47:18;91:11	165:11:
foundational (5)	generaliz
48:17,18;83:12,14;	110:23
133:4	generally
four (4)	9:23;66
120:2;156:8,12,14	165:9
freshets (1)	generate
76:4 friendly (1)	91:18
friendly (1)	generated

		r
3:8	158:3	
ls (1)	Gengler (2)	
5:17	46:1,2	go
( <b>9</b> )	geotechnical (1)	gu
3;26:9;35:11;47:3;	169:24	
4;58:25;64:3;79:24;	Geri (2) 61:19;129:20	
21		g0
n(3)	Gestra (2)	~ ~
5:16;147:10;148:3	84:6;169:11	go
lown (1)	G-E-S-T-R-A (1)	
15	84:11	
(1)	gets (2)	
15	36:24;64:21	
l)	given (5)	
7	34:21;44:3;76:6;	go
shed (1)	90:22;168:14	
17	giving (2)	go
er (1)	82:9;124:15	
5:11	glad (1)	gr
	62:6	
G	glance (1)	gr
	163:16	0
1)	GLEISNER (243)	gr
24	5:7,14,23;6:6,9,15,21;	8-
er (1)	7:1,6,19,23;8:1,4,23;9:1;	gr
2	10:6,11,13;12:6,7,16,19;	8-
(58)	14:6,10,14,15;16:6,9,18;	gr
11;116:12;128:11;	17:7,12,20;18:14,17;	<b>5</b> 1
):14,20,21;131:1;	20:2,6;24:3,7,22;25:1,5,	
:9;135:22;136:6,9,	22,23;26:17,18;27:5,8,	ar
18;137:23;139:4,6;	10,11,18,19;28:4,8;	gr
		an
:21;142:1;143:19;	35:25;36:6,11,15,17;	gr
12,15;145:13,16,22,	38:7,10,12,24;41:2,6;	
47:19;148:5,13,17;	43:22;44:1;45:17,19;	gr
):11,12,17,21,24;	46:4,6,7,9,11,21,22;48:7,	
2,10;152:22;153:13,	8,13,16;52:9,13,17,25;	
7;154:1;157:14,17,	53:8,13,15;54:13,15,19,	
59:7,9;160:5,12,16,	24;56:10,12;59:10,13,	
161:2,10,14,17,18,	17,20,23;63:23;64:1,2;	gr
162:1,6	67:12;68:24;69:4,9,20,	
's (1)	24,25;71:2,6,10;73:6,13,	
18	17,19;78:4,6,8,19,21;	gr
r (1)	79:1,7,8,13,16,20;80:5,	
8:6	10,11,20,21;81:18,21,	
(2)	23;82:9,12,16,19;84:11,	
3:13;122:19	13,17;85:14,18,20;	
(3)	86:18,20,23;87:1,19,22,	
8;82:6;85:2	25;88:4,12,23;89:5,7,8;	
al (8)	91:2,5,7,8,24;92:3,6,20,	
25;86:15;93:20;	25;93:1;94:15,18,20,25;	
25;137:5;138:10;	96:4,7,14,20;98:6;99:10;	
':6;166:6	100:22,23;101:3,4;	
alistic (4)	104:3,6,8,10;105:6,8;	
/:19;139:10;	108:13,15,22;109:5,10;	gr
5:11;167:7	116:11,17,18;117:2,4,	0
alized (1)	14,19,22;118:15;119:12,	gr
):23	20,21;120:17,21;123:11,	
ally (4)	15;128:5;132:4;135:19;	gr
3;66:16;150:18;	143:16;151:1;152:21;	5
5,00.10,150.10, 5:9	157:16,20;159:5,8;	gr
ate (1)	162:24;163:6,9,11,13,	51
18	15;164:6,10,25;165:2,6;	
ated (1)	166:7,10,15;167:10,23,	
aicu (1)	100.7,10,15,107.10,25,	

24;168:5,9,11,16,20,23; 7.9 169:1;170:6,9 oes (7) 42:11;81:7;109:23; guess (14) 137:9;139:16;141:19; 166:4 onna (1) 71:22 ood (14) 166:3 12:6;32:25;51:20; 54:14;73:20;111:11; 115:5;132:24,25; guilty (1) 135:23;144:23;149:11; 31:9 167:23;170:23 gun (1) oodness (2) 60:24 119:20,22 guys (1) overnment (2) 68:22 144:24;145:7 rade (3) 106:6;120:12,14 half (1) radual (1) 102:17 20:16 rammar (1) hand (8) 132:15 rant (1) 16:3 153:18 ranted (7) 68:21;69:19,21;85:23; 118:13;119:3,9 handed (1) ranting (1) 90:20 23:16 rass (2) 71:17 34:12:102:4 ravel (16) 55:20,21 31:25;32:3,7;39:5; 40:2,9,11,14,22;41:12; 42:10;51:24;52:1;63:17; 68:3;126:15 reat (6) 20:20;29:25;56:25; 73:7;164:15;166:16 reen (48) 29:21;30:12,24;31:5, 17,18;34:8;39:3,6; 94:11 happen (6) 40:17;41:4,5,16,24;42:9; 49:25,25;50:10;51:23; 52:2,3;57:14,17;60:6; 62:9,10,10,23;63:11,13; 70:3;90:23;109:22; 112:3,4,17;113:23,24; happy (5) 115:20;125:17;126:14; 127:10,11,16;141:9; 149:8 143:15,23;146:25 round (2) 77:23;116:1 roup (1) hard (1) 92:22 99:6 rouping (2) hash (1) 99:14;116:5 83:7 rove (17) head (1) 45:9,10,11,13;68:23; 43:13 69:17;70:8,9,23;95:5,6; heading (1) 103:18;108:20,24;112:5, 137:12

growing (2) 38:1:97:11 38:6,19;43:20;49:16; 68:20;73:4;85:11; 100:22,24;106:7; 134:18;161:5;163:25; guidance (3) 19:11;89:6,7 Η 21:22;45:15,16;134:8; 138:2;142:25;145:11; handbook (2) 89:5;90:9 handing (1) handwriting (2) Hanson (32) 26:1;30:15,17,18,20, 22;32:16;34:1;42:8,16, 25;43:2,3,16;44:5;64:9, 13,19;65:10;80:24;81:3; 94:6:108:2.4:111:20.23: 112:7;115:15;116:6; 141:11,12,20 Hanson's (1) 35:12;74:2;91:23; 111:5,6;169:21 happens (2) 109:25;110:1 36:1,7;43:18;78:24; Harbeck (7) 36:1;69:7;92:18,23; 118:2;119:14;153:25

heads (1) houses (2) 146:12 hear (1) 118:4 heard (4) 35:14;62:4,6;99:24 hearing (10) 68:21:69:12,16,19,21, 23;118:16,18,22;119:1 heave (1) 79:13 155:4 Heidi (1) 72:2 124:9 height (4) 97:1;102:3;103:4,7 held (4) 7:4,22;128:9;161:16 Helker (1) 124:9 ice (2) help (3) 101:23;105:18;122:2 idea (3) helps (1) 80:2 herein (1) 5:5 26:9 here's (11) 27:8,18;40:8;45:17; 78:9;79:5,9;101:5; 104:8;115:17;149:11 high (18) 60:14:90:25:99:13: 100:2.3:130:23:131:12. 17,19;137:8;148:19,22; 149:5,15,19,24;150:3; 155:16 higher (1) 137:15 highly (2) 100:10:169:8 hill (1)130:3 hired (1) 7:14 historic (4) 75:22;100:6;101:6; 144:22 history (4) 128:24;144:9;145:3,4 Hold (1) 117:2 154:23 holds (1) 32:24 home (7) identity (2) 18:3;81:12;110:21; 111:17,20,23;126:24 ie (1) honest (1) 103:20 21:20 Horicon (4) 94:12 38:14,16,21;39:2 house (15) 93:12,18,22;94:7,8,11, 11;107:17,22,24;108:2, 127:5 4;115:10,15;116:6 impact (9)

11:12;17:17;21:5,6.8, 146:3.6 9:117:9:118:14:142:21 **HUDAK (19)** impacts (4) 5:4:7:8:8:5:9:11: 70:6,6;82:1;124:15 impeded (1) 14:16;44:22;53:20; 54:20;58:6;79:9;83:22; 155:19 impinge (1) 86:10;90:4;91:9;92:8; 96:22;97:5;120:17,23 67:16 impinged (3) Hudak's (1) 68:8,12:70:3 hundred (1) important (4) 68:19;77:5,13;154:14 hydrology (6) importantly (1) 38:17;58:22;60:23; 131:4 72:21;76:1;128:22 impression (3) 96:8,10,18 Ι improvements (1) 15:2 inch (1) 146:20;155:4 100:4 inches (13) 36:24;71:8;99:5 97:2,3;98:11;100:3,9; identical (5) 101:9;102:23;155:9,10, 19:17,17;21:12;23:7; 11:156:8.13.15 Included (3) identification (2) 79:22;125:24;152:11 including (6) 155:23:157:25 identified (43) 9:17;80:17;88:8; 11:11;28:14;29:9; 89:16;117:5;125:8 34:19;39:6;40:19;41:3; inclusive (2) 6:2:159:15 42:10:46:20:48:21:56:7: incomplete (1) 58:4:59:5:60:1:69:17; 74:18:77:11.15.23: 53:3 79:17;83:22,24;106:1,1; incorporate (1) 107:5;108:20;109:7,13; 57:18 122:2;140:16;142:12; incorporates (1) 145:8;147:8;148:4,23, 57:17 incorrect (1) 25;149:17;154:12,13; 155:16:156:5,9:159:24 37:6 independently (1) identify (36) 46:17 23:15:28:7:46:13: 54:6:57:1:60:13:64:12: in-depth (2) 68:22;70:24;80:4,8; 169:15,16 index (1) 86:3;94:22;103:17; 47:1 106:2,2;107:7;108:11, indicate (3) 17;112:14,15;113:1; 70:16;106:13;145:7 135:25;136:9;139:20; indicated (6) 141:4,23;142:3;143:10, 13,23;146:6,9,18,24; 54:3;60:6;62:9; 127:11;160:1,1 identifying (2) indication (3) 105:14;140:4;147:11 101:16;158:6 indicators (2) 123:3,17 99:20;147:24 individual (2) 23:2,9 infer (2) imagining (1) 102:19,25 immediate (3) inform (1) 94:8;111:23;125:21 166:6 immediately (1) informally (1) 92:4 information (13)

27:15:33:15:39:25; 61:23:105:3:132:17.21. 23,25;144:20;150:19; 164:15:166:13 informational (1) 82:14 informed (2) 166:22,23 ingress/egress (1) 33:2 initial (8) 29:2,3;47:19;48:10, 21;94:2;136:24;147:14 initialled (1) 143:22 initials (2) 31:12;50:20 input (1) 132:14 inquire (1) 10:15 inside (1) 113:23 inspect (5) 39:13;76:3;97:11,15; 112:19 inspected (6) 38:21;95:25;98:21,22, 24;99:4 inspection (7) 61:14;72:17;73:20,23; 95:23:99:1:103:19 inspections (1) 76:6 instead (1) 83:4 intended (1) 122:16 interacted (1) 162:12 interacts (1) 82:1 interchangeably (1) 130:11 interest (3) 90:2;117:18;137:3 interested (5) 10:20;46:24,25;130:2; 137:7 interesting (1) 51:8 interpret (1) 159:20 interpretation (3) 58:21;146:4,5 interpreting (1) 144:23 interrogatories (3) 45:20;144:8;160:7 interrupt (1) 154:22 intersect (2) 64:13:65:11

intersected (1) 30:14 intersection (2) 111:1:136:22 intersects (1) 65:23 into (20) 5:10;9:9;10:15;24:11; 47:19;48:9;57:24;89:9, 10,12;115:1;129:16,17; 130:16;142:2,16; 154:20;156:25;157:2; 158:17 inundation (5) 31:3;57:9,24;58:2,3 invert (5) 149:11;150:1;159:21, 23,25 investigate (3) 82:4;122:11;158:19 investigation (11) 49:12;58:10;60:5,9, 18;73:3;81:25;84:21; 103:15;113:16;129:14 investigations (3) 63:3;99:17,22 involve (1) 66:23 involved (3) 66:6;82:1;124:1 isolated (1) 89:25 issuance (2) 26:7:47:13 issue (11) 6:25;7:2;9:20;69:18, 20:89:13.15:118:5.25: 123:23:125:9 issued (5) 9:12:26:14:39:7; 40:24:118:24 issues (9) 9:15;10:21,21;47:18; 90:11;121:15;123:5; 125:7;151:18 issuing (1) 124:1 item (1) 151:21 items (1) 56:7 itselves (1) 54:11 J James (1) 46:8 January (1) 7:15 Jim (13) 131:4,16;138:7,7,8; 150:8,25;151:7;152:5,8,

24,24,25 iob (6) 45:1;68:6,6;79:14; 144:18:169:8 Johnson (1) 22:16 joining (1) 51:17 judgment (27) 23:5:27:2:42:3:44:19, 22;48:25;49:3,4,5; 59:18:60:4:61:15,17,18, 25;73:24;74:24;75:21; 77:3;97:25;103:21; 113:1,15;114:13;122:8; 162:9,19 July (1) 85:8 jump (4) 136:13;137:1,24; 142:23 June (1) 85:6 jurisdiction (12) 13:11,14;15:8;16:1; 18:25;19:13;37:15;45:6; 84:25;119:2,19;129:15 justifiable (1) 60:15

Κ

**Kapur** (18) 49:19;51:12;54:6,17; 59:25;79:18;91:11,15; 133:22;134:2,23;135:9; 141:7;158:5;159:11; 161:3;168:24;170:2 **KAVANAUGH (164)** 5:12.20.24:6:8.13.16. 24;7:3,17,20;8:25; 10:10;12:3,11;14:4,8,11; 16:5,7,14;17:4,9;18:9, 15;19:24;20:4;24:25; 26:15,23;27:9;28:2; 36:5,9,13;38:6,8,19; 43:20,23;46:2,5,19;48:5, 15;52:11,23;54:10,18; 56:9;59:8,11,16,19,22; 63:25;67:6,9;68:20; 69:2,5,10,22;70:24;71:4; 73:4,11,15,18;78:2,5,16; 79:6,10,15;80:3,7,19; 81:16,20;82:11,15;84:9, 12;85:11,15;86:16,19, 21,25;87:17,20,23;88:2, 5;89:4,6;91:4;94:14,16, 22;96:2,6,13,16;98:4; 99:8;100:20;101:1; 108:11,17;109:9;116:15, 25;117:11,16,20,25; 118:5,22;119:18;123:8, 13;130:18;132:6;136:2,

7,16;137:17;139:3;	103:20;114:2;147:21;	27
140:14,18;141:25;	157:3	left (
144:10,14;147:18;	ladder (1)	11
148:10,12;150:9,15,20,	23:6	left-
23;151:4;157:13;	lady (1)	11
160:10,13;161:5,7,22,	22:1	lega
25;164:4,7,21;165:1,3;	Lake (43)	35
166:2,9;167:15;168:1,	9:13;23:18;24:1,15;	Leh
13,19,22,25;170:4,8	25:8,9,10,11;37:22;	21
keep (4)	57:16;68:25;69:2;82:17;	leng
10:3;22:20;58:25;64:3	86:21;92:9;110:22;	33
Ken (1)	127:13;138:18;139:9;	less
22:16	142:24;145:10;146:3,8,	52
kind (13)	16,20;147:22;148:25;	lette
14:25;16:21;63:17;	149:6,6,12;150:1,4,21;	15
66:24;99:14;105:17;	153:2;154:19,21;155:6;	21
121:23;131:15;134:18;	156:4,25;157:3;158:20;	Lies
139:8,14;155:13,25	161:1;162:10	21
kindergarten (1)	lakes (2)	lifte
128:18	37:9;89:16	12
kindly (1)	Lakeward (1)	light
120:18	51:17	27
knew (1)	land (5)	likel
85:22	13:12;14:25;16:22;	73
knowing (3)	125:16;149:4	limi
60:25;166:25;167:4	language (2)	67
knowledge (37)	35:11;45:12	limi
9:16;11:25;32:23;	large (10)	33
33:5;35:20;49:19;51:3,	57:14;63:12;96:24;	line
10;52:4;53:6;54:8;	105:17;125:17;126:14;	28
55:13;59:25;60:2;64:19;	127:12,15;150:6;169:21	44
66:5,7;67:11,20;74:3;	larger (2)	50
76:1;83:23;84:15;86:5;	125:21;161:3	77
97:18,20;104:24;125:8;	last (3)	11
133:2;141:3;142:19;	158:25;163:2,23	11
159:25;160:23;164:1;	latitude (1)	14
166:6;167:1;169:3	117:23	14
1 (1)		
known (2)	launch (22)	lines
24:16;127:22	9:14;23:17;24:10,14;	lines 32
24:16;127:22 Kraus (44)	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12,	<b>lines</b> 32 81
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3,	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1;	lines 32 81 list (
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8;	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5;	lines 32 81 list ( 49
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10;	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10;	lines 32 81 list ( 49 little
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19;	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12	lines 32 81 list ( 49 little 8:
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25;	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1)	lines 32 81 list ( 49 little 8: 51
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9.16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22,	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19	lines 32 81 list ( 49 little 8: 51 85
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9.16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24;	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2)	lines 32 81 list ( 49 little 8: 51 85 94
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9.16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5,	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16	lines 32 81 list ( 49 little 8: 51 85 94 12
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13,	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1)	lines 32 81 list ( 49 little 8: 51 85 94 12 23
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20;	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20; 166:11	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22 Lazotte (1)	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14 live
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20; 166:11 <b>Kraus's (1)</b>	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22 Lazotte (1) 124:9	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14 live 65
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20; 166:11 <b>Kraus's (1)</b> 126:23	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22 Lazotte (1) 124:9 leads (1)	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14 live 65 loca
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20; 166:11 <b>Kraus's (1)</b> 126:23 <b>Kyle (2)</b>	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22 Lazotte (1) 124:9 leads (1) 58:14	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14 live 65 loca 10
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20; 166:11 <b>Kraus's (1)</b> 126:23	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22 Lazotte (1) 124:9 leads (1) 58:14 learn (5)	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14 live 65 loca 10 loca
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20; 166:11 <b>Kraus's (1)</b> 126:23 <b>Kyle (2)</b> 60:20,21	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22 Lazotte (1) 124:9 leads (1) 58:14 learn (5) 5:17;129:12,12,13,13	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14 live 65 loca 10 loca 28
24:16;127:22 <b>Kraus (44)</b> 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20; 166:11 <b>Kraus's (1)</b> 126:23 <b>Kyle (2)</b>	9:14;23:17;24:10,14; 57:19;85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22 Lazotte (1) 124:9 leads (1) 58:14 learn (5) 5:17;129:12,12,13,13 learned (1)	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14 live 65 loca 10 loca 28 41
24:16;127:22 Kraus (44) 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20; 166:11 Kraus's (1) 126:23 Kyle (2) 60:20,21 L	9:14;23:17;24:10,14; 57:19:85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22 Lazotte (1) 124:9 leads (1) 58:14 learn (5) 5:17;129:12,12,13,13 learned (1) 103:10	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14 live 65 loca 10 loca 28 41 60
24:16;127:22 Kraus (44) 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20; 166:11 Kraus's (1) 126:23 Kyle (2) 60:20,21 L label (1)	9:14;23:17;24:10,14; 57:19:85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22 Lazotte (1) 124:9 leads (1) 58:14 learn (5) 5:17;129:12,12,13,13 learned (1) 103:10 least (3)	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14 live 65 loca 10 loca 28 41 60 82
24:16;127:22 Kraus (44) 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20; 166:11 Kraus's (1) 126:23 Kyle (2) 60:20,21 L label (1) 147:10	9:14;23:17;24:10,14; 57:19:85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22 Lazotte (1) 124:9 leads (1) 58:14 learn (5) 5:17;129:12,12,13,13 learned (1) 103:10 least (3) 70:18;84:16;105:17	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14 live 65 loca 10 loca 28 41 60 82 97
24:16;127:22 Kraus (44) 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20; 166:11 Kraus's (1) 126:23 Kyle (2) 60:20,21 L label (1) 147:10 labeled (3)	9:14;23:17;24:10,14; 57:19:85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22 Lazotte (1) 124:9 leads (1) 58:14 learn (5) 5:17;129:12,12,13,13 learned (1) 103:10 least (3) 70:18;84:16;105:17 leave (1)	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14 live 65 locai 10 locai 28 41 60 82 97 10
24:16;127:22 Kraus (44) 8:16;9:23;11:23;13:3, 19;14:19;15:21;19:8; 24:9,16;28:1,2,12;29:10; 30:13,25;31:6;32:19; 44:12,16;47:15;50:25; 51:9;56:2;57:25;76:22, 22;77:2,11,12;82:24; 87:3;121:15,19;122:5, 16;123:7,20,24;125:13, 17;163:18;164:20; 166:11 Kraus's (1) 126:23 Kyle (2) 60:20,21 L label (1) 147:10	9:14;23:17;24:10,14; 57:19:85:24;87:4,8,12, 14,22,23;88:1,2;107:1; 111:15;114:18;120:5; 127:13;136:23;145:10; 146:12 launches (1) 158:19 law (2) 75:2;85:16 laws (1) 15:22 Lazotte (1) 124:9 leads (1) 58:14 learn (5) 5:17;129:12,12,13,13 learned (1) 103:10 least (3) 70:18;84:16;105:17	lines 32 81 list ( 49 little 8: 51 85 94 12 23 14 live 65 loca 10 loca 28 41 60 82 97

7:3:114:1 (1) 11:19 -hand (1) 15:14 al (2) 5:2:47:17 mann-Kerler (1) 1:25zth (1) 3:12 (1) 2:21er (6) 50:7;151:7,13,15,18, 1 sa (2) 1:25;167:16 d (1) 24:25 t (2) 7:23;28:18 ly (2) 3:9;115:6 itations (1) 7:24 ited (3) 3:12;76:1;79:22 (30) 8:19:30:12,17,24; 4:25;49:23,25,25; 0:10,11;57:10;62:11;7:23;78:9,13;81:4,10, ,16,18;107:23;110:21; 12:17;115:11,11; 41:5;143:12;147:10; 48:2,3 s (7) 2:17,18;43:23;51:23; 1:21;141:22;158:2 (1) 9:16 e (24) :14;22:20;23:19,22; :21;70:22;82:6;84:18; 5:2;90:21;91:14;93:17; 4:15,18;95:14;117:22; 22:9;131:10;135:16, 3;137:25;141:13; 42:23;155:20 (1) 5:17te (1) 06:5 ted (31) 8:15;29:24;40:1; 1:8,9,14;42:20;55:23; 0:7;70:12,23;74:5,7;2:3;83:16;87:5;93:20; 7:22;99:2,7;104:21; 05:22;106:18,19; 07:22;108:8;109:15; 20:1;127:14;147:5;

155:7 location (50) 9:21,24;13:20;20:15; 27:25;28:25;31:22;50:1, 3;57:18;65:1,10;74:11; 81:14;83:8,15,20;95:8, 20;98:20;107:8;108:3; 110:17;114:21;115:3; 119:25;120:19;125:11; 131:17:136:20.23; 137:7;139:21;140:11,15, 19,20;141:16;142:3,21; 143:13,21;146:13; 147:11,23;148:3;149:18, 23;156:6,10 locations (9) 45:14;47:21;48:11; 58:20;112:14;127:3,4; 146:21;155:8 Lois (5) 144:18,20,21;145:3,6 Lois's (1) 144:18 lonely (1) 63:17 long (6) 7:13;71:12,21,25; 129:2;159:6 longer (1) 43:10 look (48) 8:20;9:4;21:1;23:22; 33:14,14;34:2,10;46:16, 23;52:15;53:9;56:13; 66:10;68:3,4;71:18; 72:4;83:6;94:5;99:6,18; 104:17:106:21:111:16; 112:19;114:14;118:10; 121:8;125:3;126:8,13; 134:3,7;136:16;143:1; 144:17;145:6,20; 147:16;151:11;153:1; 155:15;158:12;165:17; 166:5,18;170:3 looked (3) 49:23;155:23;170:16 looking (25) 32:10;49:22;53:10,10, 11;55:8;57:14;60:12; 64:23;68:13;71:22; 72:22:80:9:86:14:93:21; 95:17,18;107:1,3;110:4; 116:4;118:6;126:6; 149:9;158:11 looks (6) 43:14;57:23;63:17; 105:1;152:6;156:5 loosely (1) 85:22 lot (54) 50:2,7;51:15;57:19; 60:8;64:8;65:24;70:12, 20;71:11;72:7,12,15;

	Γ		Γ	
72.21.74.5 8 10.77.25.	10 17 10 20 22 25 11 7	05.14.00.20.115.24.	165.10	(4.4.(5.14.72.9.1(.
73:21;74:5,8,19;77:25;	10:17,19,20,23,25;11:7,	95:14;99:20;115:24;	165:19	64:4;65:14;73:8,16;
78:15;79:18;80:14,24;	9,14;12:1,12,14,15,20,	125:7;132:20;136:7;	methods (1)	90:4;106:20;110:19;
81:3;82:25;83:19,20;	22;13:25;14:18;16:3,20,	139:18,22,22;144:24,24;	122:23	111:11;116:1;122:21;
84:20;88:3;91:12;93:13;	24;23:9,16;24:10;26:7,	158:9;168:18	middle (1)	137:24;170:23
95:24;102:15;104:20;	14;47:14,20;48:11,21;	Maybe (15)	31:11	multiple (6)
		6:9,10;18:22;32:12;		
105:13,16;107:1;	84:22;85:5;90:14;119:8;		might (5)	32:5;76:5,6;77:17;
109:16;119:10,25;	123:2,6,19,21,23;124:1,	51:21;76:11;79:22;	65:10;85:3;89:18;	133:24;136:4
120:19,20;123:25;	16;125:6,9;130:9;132:3,	90:22;93:10;130:14;	137:13;141:6	myself (5)
125:22;127:12;130:1,3;	4,8,18;133:18,21;148:7,	135:17;143:5,14;	mind (13)	46:18;55:2;108:6;
134:17;138:11,12;	11,18;151:12,21;152:2,	161:11;168:11	22:20;28:18;31:4;	132:16;150:7
140:17;143:14;150:19;	13,19;153:5,9;159:2;	McNelly (1)	32:14;56:20;64:3;65:6;	152.10,120.7
				Ν
152:7;169:6	162:16,16,19;164:3;	138:7	89:11;114:25;115:20;	1
lot's (4)	165:14;167:9	mean (27)	135:14;143:11;154:15	
71:22;82:3;105:16;	manuals (1)	12:12;16:15;23:21;	mine (4)	name (4)
108:7	167:12	26:16;35:15;42:14;	31:10;36:5;49:4;80:17	7:7;54:8,22;124:2
low (3)	many (2)	48:19;49:8;56:9;58:7;	minimum (1)	narrow (1)
100:2,4;159:23	61:10;126:8	60:10;64:15;66:7;78:18;	89:19	110:16
lower (6)	map (19)	94:10;98:23;101:2;	minor (1)	Natural (6)
51:23;70:3;115:14;	9:10;53:17;54:11,16;	128:18;147:18;151:20;	128:23	7:11,12;21:9;71:15;
127:22;149:24;150:3	104:25;105:12,22;	154:22;160:8;161:7,12;	minute (9)	86:19;117:18
lowest (1)	106:13,18;115:3;	163:20;165:12;166:18	50:7;131:2;145:19;	nature (2)
159:25	127:21;146:25;147:16;	meanders (1)	151:19;153:1,11,14;	37:25;133:1
		102:12		
Lynette (1)	149:10;156:5;157:22;		158:12;160:4	navigability (90)
138:7	158:1,3;159:24	meaning (2)	missing (2)	6:3,5,22;8:17;10:21;
	maps (4)	21:19;75:16	104:15;105:19	11:6;15:18;24:18,20,24;
Μ	44:24;45:1,2;53:20	means (4)	mix (1)	26:10,16,17,22,25;27:4;
	mark (26)	34:17;60:11;61:2;	96:25	29:17;34:13,15,18;
(1)	39:24;40:3;60:14;	122:23	modeling (1)	38:22;39:1,7,9,14,18;
ma'am (1)				
28:23	70:18;79:3;83:7;99:13;	meant (1)	169:6	40:2,20,21;41:16,23;
Madame (2)	130:23;131:13,17,19;	52:13	moment (23)	44:9,12,15;47:15,21;
8:3;163:13	134:6;137:3;141:9,16;	measurements (2)	9:4;11:22;24:17;27:6;	48:2,3,11;58:3,5,7,11,13,
main (3)	143:15;145:17;147:13;	112:20;154:13	29:6;30:10;44:7;47:12,	15,16;68:6;73:5,25;75:7,
124:4;154:18;155:24	148:19,22;149:5,15,19,	meet (4)	22;51:8,22;58:6;62:15,	8;77:1,10,14;84:4;
major (1)	24;150:3,6	62:13;63:14;74:22,23	18;70:23;84:4;85:4;	85:17;86:4;88:15;90:15,
128:21	marked (20)	meeting (1)	88:21;100:24;102:20;	18,21,25;117:1,6,15;
majority (1)	5:2,15;7:24;8:20;	63:6	105:12;108:6;111:12	118:19;121:20;122:6;
155:2	23:13;24:5;25:20;27:12,	meets (4)	moments (3)	125:16,20;129:5;
makes (2)	16;82:7;88:18;92:2,4;	15:7,15;17:6;37:12	34:9,11;58:25	130:19;154:7;161:21,
16:11;119:2	104:14;130:25;143:18,	memo (5)	months (1)	
				24;162:4,9;164:9,16,18,
makeup (1)	20;148:16;163:8;164:14	131:23,24;132:3,11;	129:12	20;166:1;167:14,18;
102:3	marker (2)	158:16	more (14)	168:15;169:10,23,25;
making (8)	65:6;114:25	memoranda (2)	16:6,7;39:17;57:17;	170:13,22
15:15;53:2;65:6;	markers (1)	148:7,8	73:9;80:1;97:8;131:4,	navigable (102)
85:16;95:23;106:7;	71:23	memory (1)	10;152:18;153:5;159:7;	9:21,24;11:12,20;
118:14;156:24	marks (1)	115:24	161:19;165:22	13:1;17:18;18:2,6,12,20;
man (2)	91:1	memos (2)	Morrissey (4)	19:10,18,19,20;20:8,10,
21:20;78:20	marsh (14)	88:25;158:22	46:8;131:5,16;138:8	19;21:3,13;23:3,4;
management (22)	35:8,19,21;36:21,25;	Menomonee (7)	most (7)	24:24;25:12,15;28:15;
9:11;14:25;17:15;	37:4,9,17,18,20;38:14,	26:20;44:10;75:3;	8:6;23:1;46:24;47:2;	29:24;31:24;35:7,21;
19:6,12;20:12;22:3,4;				
	16 21.39.2			36.21 22.37.1 8 11 12.
61:21;68:25;69:3;82:17;	16,21;39:2	117:5,8,11;118:17	56:6;118:17;137:7	36:21,22;37:1,8,11,12;
	marshland (2)	117:5,8,11;118:17 <b>mention (1)</b>	56:6;118:17;137:7 motions (1)	40:20;41:13;44:20;49:1,
86:21;92:10;124:6;	<b>marshland (2)</b> 74:20,21	117:5,8,11;118:17 mention (1) 8:2	56:6;118:17;137:7 motions (1) 47:17	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12,
128:22;142:24;144:21;	marshland (2) 74:20,21 material (6)	117:5,8,11;118:17 mention (1) 8:2 mentioned (5)	56:6;118:17;137:7 motions (1) 47:17 mouth (5)	40:20;41:13;44:20;49:1,
	<b>marshland (2)</b> 74:20,21	117:5,8,11;118:17 mention (1) 8:2	56:6;118:17;137:7 motions (1) 47:17	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12,
128:22;142:24;144:21; 150:21;153:2;165:10;	marshland (2) 74:20,21 material (6) 5:9,19,21;101:20;	117:5,8,11;118:17 mention (1) 8:2 mentioned (5) 6:3;86:1;133:10;	56:6;118:17;137:7 <b>motions (1)</b> 47:17 <b>mouth (5)</b> 44:9;48:3;66:21;	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12, 13,21,25;63:14,15; 67:25;68:7,10,23;69:17;
128:22;142:24;144:21; 150:21;153:2;165:10; 167:18	marshland (2) 74:20,21 material (6) 5:9,19,21;101:20; 156:22;163:17	117:5,8,11;118:17 mention (1) 8:2 mentioned (5) 6:3;86:1;133:10; 146:23;159:10	56:6;118:17;137:7 <b>motions (1)</b> 47:17 <b>mouth (5)</b> 44:9;48:3;66:21; 114:7;156:22	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12, 13,21,25;63:14,15; 67:25;68:7,10,23;69:17; 70:2;73:9,14;74:1,24;
128:22;142:24;144:21; 150:21;153:2;165:10; 167:18 manager (2)	marshland (2) 74:20,21 material (6) 5:9,19,21;101:20; 156:22;163:17 materials (4)	117:5,8,11;118:17 mention (1) 8:2 mentioned (5) 6:3;86:1;133:10; 146:23;159:10 mentor (3)	56:6;118:17;137:7 <b>motions (1)</b> 47:17 <b>mouth (5)</b> 44:9;48:3;66:21; 114:7;156:22 <b>move (5)</b>	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12, 13,21,25;63:14,15; 67:25;68:7,10,23;69:17; 70:2;73:9,14;74:1,24; 75:14,15,16,20;85:12;
128:22;142:24;144:21; 150:21;153:2;165:10; 167:18 manager (2) 68:7;124:12	marshland (2) 74:20,21 material (6) 5:9,19,21;101:20; 156:22;163:17 materials (4) 5:10;6:5;9:3;167:13	117:5,8,11;118:17 mention (1) 8:2 mentioned (5) 6:3;86:1;133:10; 146:23;159:10 mentor (3) 129:11,16,19	56:6;118:17;137:7 <b>motions (1)</b> 47:17 <b>mouth (5)</b> 44:9;48:3;66:21; 114:7;156:22 <b>move (5)</b> 44:7;45:7,15;141:20;	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12, 13,21,25;63:14,15; 67:25;68:7,10,23;69:17; 70:2;73:9,14;74:1,24; 75:14,15,16,20;85:12; 89:17,20,22;99:20;
128:22;142:24;144:21; 150:21;153:2;165:10; 167:18 manager (2) 68:7;124:12 managers (4)	marshland (2) 74:20,21 material (6) 5:9,19,21;101:20; 156:22;163:17 materials (4) 5:10;6:5;9:3;167:13 matter (1)	117:5,8,11;118:17 mention (1) 8:2 mentioned (5) 6:3;86:1;133:10; 146:23;159:10 mentor (3) 129:11,16,19 met (4)	56:6;118:17;137:7 <b>motions (1)</b> 47:17 <b>mouth (5)</b> 44:9;48:3;66:21; 114:7;156:22 <b>move (5)</b> 44:7;45:7,15;141:20; 148:6	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12, 13,21,25;63:14,15; 67:25;68:7,10,23;69:17; 70:2;73:9,14;74:1,24; 75:14,15,16,20;85:12; 89:17,20,22;99:20; 111:2,3;113:2;115:4;
128:22;142:24;144:21; 150:21;153:2;165:10; 167:18 manager (2) 68:7;124:12	marshland (2) 74:20,21 material (6) 5:9,19,21;101:20; 156:22;163:17 materials (4) 5:10;6:5;9:3;167:13	117:5,8,11;118:17 mention (1) 8:2 mentioned (5) 6:3;86:1;133:10; 146:23;159:10 mentor (3) 129:11,16,19	56:6;118:17;137:7 <b>motions (1)</b> 47:17 <b>mouth (5)</b> 44:9;48:3;66:21; 114:7;156:22 <b>move (5)</b> 44:7;45:7,15;141:20;	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12, 13,21,25;63:14,15; 67:25;68:7,10,23;69:17; 70:2;73:9,14;74:1,24; 75:14,15,16,20;85:12; 89:17,20,22;99:20;
128:22;142:24;144:21; 150:21;153:2;165:10; 167:18 manager (2) 68:7;124:12 managers (4) 124:8,8,24;158:18	marshland (2) 74:20,21 material (6) 5:9,19,21;101:20; 156:22;163:17 materials (4) 5:10;6:5;9:3;167:13 matter (1)	117:5,8,11;118:17 mention (1) 8:2 mentioned (5) 6:3;86:1;133:10; 146:23;159:10 mentor (3) 129:11,16,19 met (4)	56:6;118:17;137:7 <b>motions (1)</b> 47:17 <b>mouth (5)</b> 44:9;48:3;66:21; 114:7;156:22 <b>move (5)</b> 44:7;45:7,15;141:20; 148:6	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12, 13,21,25;63:14,15; 67:25;68:7,10,23;69:17; 70:2;73:9,14;74:1,24; 75:14,15,16,20;85:12; 89:17,20,22;99:20; 111:2,3;113:2;115:4; 117:17,20;118:7,8,12;
128:22;142:24;144:21; 150:21;153:2;165:10; 167:18 manager (2) 68:7;124:12 managers (4) 124:8,8,24;158:18 manner (3)	marshland (2) 74:20,21 material (6) 5:9,19,21;101:20; 156:22;163:17 materials (4) 5:10;6:5;9:3;167:13 matter (1) 9:16 may (26)	117:5,8,11;118:17 mention (1) 8:2 mentioned (5) 6:3;86:1;133:10; 146:23;159:10 mentor (3) 129:11,16,19 met (4) 9:19;11:20;19:14; 125:8	56:6;118:17;137:7 <b>motions (1)</b> 47:17 <b>mouth (5)</b> 44:9;48:3;66:21; 114:7;156:22 <b>move (5)</b> 44:7;45:7,15;141:20; 148:6 <b>moves (1)</b> 40:15	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12, 13,21,25;63:14,15; 67:25;68:7,10,23;69:17; 70:2;73:9,14;74:1,24; 75:14,15,16,20;85:12; 89:17,20,22;99:20; 111:2,3;113:2;115:4; 117:17,20;118:7,8,12; 119:4,4,6,6;121:12;
128:22;142:24;144:21; 150:21;153:2;165:10; 167:18 manager (2) 68:7;124:12 managers (4) 124:8,8,24;158:18 manner (3) 121:9,10;122:23	marshland (2) 74:20,21 material (6) 5:9,19,21;101:20; 156:22;163:17 materials (4) 5:10;6:5;9:3;167:13 matter (1) 9:16 may (26) 5:17;9:15;13:14,15,	117:5,8,11;118:17 mention (1) 8:2 mentioned (5) 6:3;86:1;133:10; 146:23;159:10 mentor (3) 129:11,16,19 met (4) 9:19;11:20;19:14; 125:8 method (3)	56:6;118:17;137:7 <b>motions (1)</b> 47:17 <b>mouth (5)</b> 44:9;48:3;66:21; 114:7;156:22 <b>move (5)</b> 44:7;45:7,15;141:20; 148:6 <b>moves (1)</b> 40:15 <b>much (22)</b>	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12, 13,21,25;63:14,15; 67:25;68:7,10,23;69:17; 70:2;73:9,14;74:1,24; 75:14,15,16,20;85:12; 89:17,20,22;99:20; 111:2,3;113:2;115:4; 117:17,20;118:7,8,12; 119:4,4,6,6;121:12; 122:11,17;125:12;126:2,
128:22;142:24;144:21; 150:21;153:2;165:10; 167:18 manager (2) 68:7;124:12 managers (4) 124:8,8,24;158:18 manner (3) 121:9,10;122:23 manual (69)	marshland (2) 74:20,21 material (6) 5:9,19,21;101:20; 156:22;163:17 materials (4) 5:10;6:5;9:3;167:13 matter (1) 9:16 may (26) 5:17;9:15;13:14,15, 22;15:8;17:17;18:2,22;	117:5,8,11;118:17 mention (1) 8:2 mentioned (5) 6:3;86:1;133:10; 146:23;159:10 mentor (3) 129:11,16,19 met (4) 9:19;11:20;19:14; 125:8 method (3) 121:9,10,16	56:6;118:17;137:7 <b>motions (1)</b> 47:17 <b>mouth (5)</b> 44:9;48:3;66:21; 114:7;156:22 <b>move (5)</b> 44:7;45:7,15;141:20; 148:6 <b>moves (1)</b> 40:15 <b>much (22)</b> 6:1;10:2;22:24;30:4,7,	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12, 13,21,25;63:14,15; 67:25;68:7,10,23;69:17; 70:2;73:9,14;74:1,24; 75:14,15,16,20;85:12; 89:17,20,22;99:20; 111:2,3;113:2;115:4; 117:17,20;118:7,8,12; 119:4,4,6,6;121:12; 122:11,17;125:12;126:2, 4,16,21,21;127:1,4;
128:22;142:24;144:21; 150:21;153:2;165:10; 167:18 manager (2) 68:7;124:12 managers (4) 124:8,8,24;158:18 manner (3) 121:9,10;122:23	marshland (2) 74:20,21 material (6) 5:9,19,21;101:20; 156:22;163:17 materials (4) 5:10;6:5;9:3;167:13 matter (1) 9:16 may (26) 5:17;9:15;13:14,15,	117:5,8,11;118:17 mention (1) 8:2 mentioned (5) 6:3;86:1;133:10; 146:23;159:10 mentor (3) 129:11,16,19 met (4) 9:19;11:20;19:14; 125:8 method (3)	56:6;118:17;137:7 <b>motions (1)</b> 47:17 <b>mouth (5)</b> 44:9;48:3;66:21; 114:7;156:22 <b>move (5)</b> 44:7;45:7,15;141:20; 148:6 <b>moves (1)</b> 40:15 <b>much (22)</b>	40:20;41:13;44:20;49:1, 6;58:9,23;62:1,2,7,12, 13,21,25;63:14,15; 67:25;68:7,10,23;69:17; 70:2;73:9,14;74:1,24; 75:14,15,16,20;85:12; 89:17,20,22;99:20; 111:2,3;113:2;115:4; 117:17,20;118:7,8,12; 119:4,4,6,6;121:12; 122:11,17;125:12;126:2,

149:21;157:6;162:20; 164:1 navigated (2) 58:12:75:11 navigation (1) 166:24 navigational (1) 21:5 near (10) 11:6:19:18.25:65:11; 81:12;87:4,12,14; 127:16:157:1 nearly (1) 65:5 necessarily (6) 15:14;19:8;89:1,2; 133:7;146:17 necessary (1) 87:15 need (10) 5:17;13:22;19:14; 33:13;36:2,6;61:11; 118:10;160:16,17 needed (2) 19:2,5 needs (1) 141:20 negotiable (1) 61:2 negotiating (1) 61:2 neighborhood (3) 88:9:98:15:147:6 neighbors (1) 61:1 neutral (1) 15:21 new (1) 142:3newer (1) 135:23 next (1) 117:7 nice (5) 26:5;41:10;47:25; 49:15;116:23 Nine (1) 156:14 **NLMD (4)** 106:22;111:12; 114:15:116:21 NMLD(1) 92:9 nobody (1) 61:17 non-navigable (1) 49:6 nor (1) 74:23 North (35) 9:13;23:18;24:1,15: 25:8,11;29:9;41:12,12; 57:15;68:25;69:2;77:11;

objections (1) 82:17:86:21:92:9:93:13, 123:14 14:111:23:115:10: observation (3) 126:20;127:13;138:15; 139:12;142:24;145:10; 32:6:42:3:43:4 observations (7) 146:8,12;147:22; 27:3;44:18,19;49:13: 148:25;150:4,21;153:2; 72:19;101:17;114:11 154:19.20 observe (1) northeast (2) 32:19;40:16 58:20 observed (3) northern (14) 28:16;30:21;31:17; 32:3;39:14;88:9 obstructionist (1) 32:21:41:8,11:42:14,15; 62:10;81:9;138:17; 20:3 140:16;154:8;155:24 obtained (1) north-facing (1) 145:15 114:17 occurred (1) northwest (14) 25:16 30:14,18,20,21;32:16; occurring (1) 34:1;40:16;41:3;42:8, 103:22 16,24;43:1,15;44:5 **Oconomowoc** (2) Nos (3) 25:8,12 92:1;143:17;148:16 October (7) Notary (1) 25:17;40:23;151:1; 46:6 152:21,23;157:9,15 notation (1) off (15) 32:25 7:4,22;43:13;74:3; note (4) 91:5;124:25;126:10; 45:22,24;50:12; 128:9;142:4,7;143:16; 103:19 153:13;155:3;161:16; noted (2) 164:7 120:18;157:10 offense (1) 21:19 notes (2) 154:6;158:22 offering (1) notice (7) 8:3 8:9;31:15;92:12; Offhand (1) 120:24,25;121:2,9 32:10 office (1) November (9) 26:8,13;39:8;44:17; 161:11 47:13;48:23;59:5;63:5; often (4) 123:6 90:20;101:17;114:22; **NRC (2)** 133:10 86:8,18 old (2) 115:17;145:7 number (10) older (1) 8:2;33:17;45:25; 144:23 92:18;117:5;127:25; Once (2) 130:24;140:10;157:18; 10:10;117:6 163:1 numbers (3) one (60) 136:11;157:24;158:6 6:4;14:1,8,12,12,12; numerous (1) 15:15,16;16:11,23; 157:6 19:25;20:1;27:20;30:6; 31:10:41:8.9:45:8: 0 55:23;57:17;59:6;63:24; 71:3;84:24;89:18;90:20, oath (1) 22,24;101:17;106:25; 110:3,7;117:17;119:2; object (14) 122:19,21,25;123:11,13; 12:3,11;16:14;17:4; 124:11;130:11;138:24; 18:9;19:24;73:4;78:2, 139:1,22;148:24;151:3, 17;85:11;96:2;116:25; 5;152:14,16;153:7; 119:16:123:8 154:15,15;158:25; objection (2) 159:7;161:8,19;164:14; 68:21:88:24 165:22;166:4;168:3

one- (1) 76:11 only (17) 5:19;10:20;17:14; 61:18;69:13,18,20;71:7; 80:1;82:23;84:20;90:22; 113:25;116:7;118:25; 119:14:138:24 onsite (1) 91:20 on-site (1) 91:19 onto (5) 6:4;112:7;141:10,19, 20 open (1) 147:24 openers (1) 46:13 operates (1) 10:16 opinion (8) 49:1;98:5;110:13; 124:15;144:2;147:7; 149:3;155:4 opposed (2) 11:16;114:3 orange (22) 41:10;47:25;50:12; 60:1,8:65:5,6:78:14; 79:11:81:16:93:11.23; 95:11:109:17:110:14.17. 24,25;114:24,25;115:3; 140:11order (2) 48:18;126:9 ordinary (12) 60:14;130:23;131:12, 16,19;148:19,22;149:5, 14,19,24;150:3 orientated (1) 57:11 orientation (1) 111:14 oriented (1) 108:6 origin (2) 23:24;156:3 original (3) 64:22;67:17;68:3 ostensibly (2) 68:4:72:6 others (1) 122:15 otherwise (1) 63:21 out (30) 27:7;31:15;55:19; 57:14;60:11;61:6;67:11; 69:5,22;74:10;76:5; 79:4,4;81:9;90:20; 98:18;100:25;109:21; 113:16;117:8;118:3;

122:2;123:12;124:10, 11:126:5:128:25: 141:23;143:3;168:17 outflow (1) 155:13 outlet (9) 36:25;37:17,18,20; 138:18;149:12;150:1; 156:23;160:25 outlets (4) 35:8;36:21;37:4,9 outlined (1) 165:25 Outside (5) 67:8;103:18;113:24; 114:3;116:14 over (13) 10:9;16:1,2;23:14; 45:6;61:24;71:16;86:9; 88:19;133:13;152:7; 154:15:156:24 overflow (1) 154:18 Overlaid (1) 80:14 overland (5) 155:1,8,20,25;156:2 oversees (4) 21:20;22:4,7,17 oversight (1) 16:2 own (3) 8:23:39:25:99:17 owned (1) 110:3 owns (2) 11:23:30:15 Р package (1) 130:15 packet (1) 92:7 packets (1) 5:11page (11) 46:24;54:9;56:7,13, 14;88:21,22;89:10; 90:13:121:8:148:8 pages (1) 5:9 paperwork (1) 15:6paragraph (3) 9:4;89:11,13 parcel (3) 29:10;33:1;94:9 Pardon (1) 7:19 parking (55) 49:20,22;50:2;51:15; 57:19;60:8;64:8;65:24;

5:5

70:12,20;71:11,22;72:7, 12.15:73:21:74:5.8.11. 19:77:25:78:15:79:18; 80:14,24;81:3;82:3,25; 83:19,20;84:20;88:2; 91:12;93:9,13;95:24; 104:20;105:13,16,16; 107:1:108:7:109:16: 119:10,25;120:5,19,20; 127:13:129:25:130:3; 134:17;138:11,12; 140:17 part (18) 8:8;10:14;14:20,21; 26:1;44:4;81:10;84:2; 87:21;89:2;91:12; 103:20;108:12;135:5; 141:14;149:6,20;153:3 partially (1) 103:21 participated (4) 123:5,19,21,22 particular (12) 13:24;19:15;38:1; 82:4;98:12;103:5,6,22; 140:9;154:12,13;164:23 particularly (3) 46:24;105:25;160:25 parties (1) 132:14 pass (3)23:14;29:6;88:19 passing (3) 23:5;71:16;86:9 past(2)119:18;133:13 path(9)23:8;32:9;40:11,15, 22;67:17;138:10; 139:10:160:2 paths (2) 155:17,20 Patricia (1) 46:12 patterns (2) 76:8;77:18 pavement (6) 13:5,10,12,14,20; 66:19 pay (1) 106:6 PC21(1) 64:24 pen (15) 26:5;27:23;28:19; 29:21;31:10;41:10;48:1; 50:12;93:11,24;95:11; 108:23;109:17;114:19; 119:24 people (10) 46:1;91:15;123:17,18, 25;124:4;132:10,20; 167:13,21

Per (3)

29:14

130:5

95:9

period (5)

153:4

75:9,10

7:14

73:15

166:17

122:3

121:21

Pete (9)

Peters (2)

131:5

93:21:95:17:111:9.25: 37:2.13:100:10 145:17,19,25 perceivable (1) photographs (11) 54:2;55:3,10,16;56:1, performed (4) 8,17;86:7;145:12,14; 25:6;59:15;60:19; 158:6 phrase (2) perhaps (1) 62:2:77:8 pick (4) 55:19:93:19:112:6; 20:8,10;76:16;98:18; 161:11 picked (1) periods (2) 143:8 31:3;98:14 picture (5) permanent (2) 57:7;64:7;111:16,19; 115:24 permanently (1) pictures (3) 57:1;87:7;92:16 permeate (1) piece (1) 16:22 permission (3) place (5) 10:6;23:17;116:13 6:4;18:19;23:2;48:23; permit (23) 82:23 11:16;12:1,4,10;13:7, places (1) 13,16,18;17:1;18:7,20; 102:17 19:5;23:1,3,8;36:2; plan (13) 54:22;70:13;81:5; 40:23;85:23;118:23; 105:22;106:1;120:14; 133:16,17;162:16; 133:24;135:11,15;140:4, permits (3) 9:149:17:170:14 19:2:133:7.10 Planning (1) 83:25 permitted (4) 67:18,22,22;69:13 plans (14) permitting (2) 19:11,17;33:21;45:5; 12:5;121:13 64:5;67:9;71:13;80:16; person (4) 124:19;130:8;133:11; 134:12;135:2;170:1 16:11;20:13;61:18; plant(2)60:13;72:20 personally (1) planted (1) personnel (3) 97:10 83:24,24;99:16 plants (1) 37:25 124:13,14;138:6,9,23, plat (4) 24:4;25:24,25;43:6 25;139:4;140:7;160:3 played (1) 124:14 81:6;110:3 **Peters'** (11) playing (2) 80:25;81:12;93:11,18, 16:12;17:10 22;94:11;107:17,24; plays (1) 110:21;111:17;115:10 17:2 please (12) petition (2) 68:25;69:6 7:7;9:9;23:15;29:2,4, Pfeiffle (1) 24;30:4;37:7;39:19; 41:10;108:23;109:18 photo (19) plotter (1) 56:21;57:8,10;58:21; 161:13 72:22,23;93:7,19; plus (3) 107:19;143:9;146:5,14, 64:24,25;137:14 14,19;147:18,19,21; pm (1) 148:4;157:25 170:24 photograph (11) point (53) 57:14;58:1,2;80:13; 29:23;32:6,9,12,15;

33:4:34:21:39:23.25; 40:4:43:7.12.15:55:3: 64:17;72:5,6;82:13; 83:9;95:16;97:19;106:7, 24;107:20;108:1; 109:23,24;110:12,23; 111:6,7;112:6,11; 113:20;114:17;115:2; 116:8,9;128:21;135:24; 141:19,23,23;142:2; 143:3;151:23;154:18, 25;155:16;156:21,24; 159:23;167:11 pointing (13) 42:7;72:8,14;81:9; 94:23;108:12,18;109:6, 12;113:19;135:17; 139:18,21 points (3) 112:16;154:11;157:25 polygon (2) 50:15;60:8 pond (2) 89:25,25 ponding (6) 87:3,11,11,16;88:10; 98:14 ponds (1) 89:16 poorly (1) 75:13 poorly-put (1) 65:21 portion (32) 11:2;14:25;28:16; 30:13,25;31:6;41:3,4,8, 9,11;70:12;77:11,14,19, 25;82:2;95:25;109:15; 110:25;112:23,24; 115:4;126:12,12;127:8, 12;138:15,17,17;140:17; 154:9 portions (8) 25:13,14;46:14,17; 47:5;49:5;125:21; 170:14 position (3) 7:10;21:12;88:25 positively (1) 139:20 possesses (1) 58:8 possession (1) 5:19 possible (2) 5:17;91:14 post (1)63:4 potential (8) 27:4:28:15:34:19: 44:20;49:1;60:7,8; 158:19 potentially (4)

11:11:19:1:20:24; 69:14 potty (1) 91:3 **PowerPoints (2)** 5:25;167:21 practices (2) 165:24,25 pre (1) 63:4 **Predevelopment (1)** 145:23 predominantly (1) 151:16 preference (1) 10:12 preliminary (1) 85:6 preparation (1) 152:12 prepare (1) 135:7 prepared (8) 8:21;71:1,3;134:23; 138:22;158:22;166:21, 25 prepares (1) 80:8 preparing (1) 151:11 presence (4) 113:16;119:4;121:12; 144:25 present (10) 7:9,10;17:24;29:1; 39:13;63:1;74:1;95:7; 113:2:147:25 presented (1) 61:24 presently (1) 106:5 preserving (1) 90:1 press (1) 39:16 presume (1) 55:9 pretty (13) 22:24;47:25;53:21,22; 61:10;64:7;65:14;78:19; 103:24;107:17;116:22; 122:21;153:12 previously (5) 39:12;48:21;103:8; 112:25;122:10 primary (2) 90:14;131:23 principals (1) 124:4 prior (12) 5:2;26:6,7,12,13,25; 27:1;44:16;48:23;66:18; 85:5;162:18

private (12)	properties (2)	44:8;48:1,2;49:24,25;	realize (1)	22;131:24;136:22;
12:23,24;13:17;16:21,	10:1;125:19	50:13,20;54:25;55:14;	115:23	146:1,6,7,22;147:5
25;17:3;18:7,18;19:22;	property (60)	67:14;112:22;114:7;	realizing (1)	re-describe (1)
20:9;22:8;23:8	9:23;11:23,24;15:2;	164:8;169:21	93:25	43:17
probably (11)	16:24;23:18;26:11,14;	putting (8)	really (9)	redirect (1)
18:1;22:11,18;72:11;	28:1,1,3,12,16;30:15,17,	13:5,6,10,12,14;24:11;	20:22;63:10;76:25;	85:3
98:18;121:4;133:22;	19,21,22,25;32:17,20;	66:6,20	99:6;101:21;108:14;	refer (9)
152:18;156:3;161:7;	42:8,17,25;43:2,3,16;	<b>PVC</b> (1)	124:14;155:18,25	90:17;113:5;131:21;
169:14	44:5,12,16;47:16;51:1;	139:19	realtime (1)	136:15;137:25;138:5;
problem (2)	62:8;64:10,13,20;65:10;	157.17	62:4	149:9;156:1;158:4
105:10;128:7	76:4,23;77:12,12,15;	Q	reapply (1)	reference (10)
procedure (3)	80:25;81:3;82:24;83:16,	×	103:9	40:14,22;86:13;87:6;
121:10;124:19;167:8	17;84:6;87:18,21;	quality (1)	reason (2)	90:10;106:11;116:9;
procedures (2)	107:23;110:3;112:6,8;	19:1	80:22;164:11	119:23;127:17;156:21
9:23;121:16	125:13;126:18;141:11,	question's (1)	reasonable (2)	referencing (1)
proceed (1)	12,20;154:9	17:7	75:23;134:15	88:11
69:9	proposed (13)	quick (2)	reasonably (1)	referred (2)
proceeding (1)	24:11;67:3;70:20;	142:9;163:16	132:24	141:10;159:14
67:24 PROCEEDINGS (2)	74:19;91:12;105:16;	quite (4)	recall (2)	<b>referring (14)</b> 24:3;27:24;39:4;45:2
	120:20;136:22;138:11,	11:14;23:6;57:24;62:3	5:18;67:22	
5:1;170:24	12;139:22;140:1;146:1	quote (1)	received (7)	51:24;53:7;70:9;77:9
process (25)	proposing (3)	101:5	5:8;85:6,8,24;129:4;	81:5;90:13;138:21;
10:23;11:1,8,9,15,17;	11:18;13:24;146:11	quote/unquote (1)	132:12;153:7	140:12;151:13;160:20
12:22;20:21,24;22:24;	prosper (1)	146:21	recent (1)	refers (1)
23:8,9;103:6;119:16;	29:21	D	8:6	131:11
121:13;123:2;129:6;	protection (2)	R	recently (1)	Refine (1)
130:9,17;133:25;135:2,	61:8,11		76:15	68:18
6;153:10;170:16,21	provide (6)	Radermacher (2)	recess (3)	reflected (1)
processed (1)	17:15;19:11;24:19;	61:19;129:20	91:6;116:16;153:15	164:2
9:12	104:2;145:13;152:5	rainfall (1)	recognize (5)	reflects (1)
processes (1)	provided (7)	76:8	93:4;104:19;106:23;	134:15
20:25	12:14;13:9;33:15;	ranged (1)	111:13;114:15	refresh (2)
processing (1)	36:18;45:21;105:1;	76:7	recognizing (1)	79:10;169:13
9:17	132:20	ranges (1)	44:3	regard (12)
produce (2)	proximity (2)	77:18	recollect (1)	8:19;10:16;39:3;
27:21;135:13	17:18;145:9	ratings (1)	98:19	107:10;122:25;126:23,
produced (7)	PT21 (1)	76:12	recollection (3)	24;129:25;131:12;
45:13;153:4;158:16;	64:25	reaction (1)	98:11,17;169:13	148:18;152:2;161:21
163:2,22;165:17;168:7	public (10)	96:11	record (48)	regarding (7)
professional (19)	15:3;16:13,16;90:2,3,	read (20)	5:8;6:7;7:4,7,22;8:1,9;	50:23;84:19;121:15;
27:2;42:3;44:17,19;	20;117:18;149:20,22;	8:7;9:9;36:3,9,23;	9:10;16:10;23:15;29:19,	130:16,22;144:9;151:8
48:25,25;73:24;74:23;	151:9	44:24;45:1;47:1;48:5;	22;33:14;36:16;38:4;	regards (2)
75:21;97:25;103:21;	pull (4)	53:20;89:9,10,12;	41:2;53:14;57:12;63:9;	8:17;167:8
113:1,15;114:12;122:8;	27:7;69:5,22;79:3	102:20;138:6;141:17;	70:22,25;72:10;73:7;	regime (1)
128:17;155:4;162:9,19	pulled (1)	149:12;156:11;160:8,18	78:7;79:15,16;81:14;	156:17
professionally (1)	164:7	reader (1)	88:15;89:9,10,12;91:5,7;	Regional (1)
169:5	pulling (1)	25:3	92:3,24;93:6;100:11;	83:25
program (1)	79:4	readily (1)	108:12,18;116:17;	regular (2)
129:12	purple (9)	90:3	120:17;128:9,14;131:9;	90:9,10
progression (1)	26:5;107:13;108:23;	reading (3)	143:16;153:13,16;	regulation (1)
134:22	109:7;110:14,17,18;	36:14;48:7;167:5	161:16	35:5
project (21)	114:19;115:11	reads (1)	records (1)	regulations (4)
9:19;11:4,5,7,11,18;	purports (2)	36:18	76:15	15:11;34:24;37:3;89:3
12:25;13:24;15:7;18:23;	104:11,12	ready (1)	recreational (1)	regulatory (6)
19:15;23:7;70:5;85:1;	purpose (3)	7:2	21:6	11:1;13:15,23;35:17,
125:8;131:20;132:13;	36:22;119:14;158:15	reaffirm (3)	red (15)	20:84:23
133:21;134:17;136:1;	purposes (6)	47:19;48:10;49:5	53:24;54:25;55:9,11,	relate (4)
149:15	23:1;82:14;111:8;	reaffirmed (2)	17;81:10,19,20;119:24;	13:5;100:6;101:6;
projects (7)	112:12;131:20;149:15	61:25;162:21	120:20,20;143:14,15;	105:25
11:2,5;17:17;23:10;	<b>put (29)</b> 5.10.18.5.10.18 10.	reaffirming (1)	147:13;157:23	related (2)
45:6;129:15;152:8	5:10;18:5;19:18,19;	154:7	<b>Reddelien (17)</b> 57.22.71.4.90.7.99.9	9:16;72:20
proper (2)	20:7,9,19;21:2,11,11,12;	real (3)	57:23;71:4;80:7;88:8,	relates (12)
118:14;125:22	23:4;30:5;31:11;42:12;	89:13,15;142:9	11;98:15;127:6,19,19,	10:20;11:20;24:9,9,
	L	L	t	I

13,21;52:20;104:5;	88:15	River (6)	141:8;146:10;148:2;	5:11	
124:16;126:11,12;164:1	resource (9)	25:9,12;102:2,8,11;	157:18;158:10;166:18;	September (2)	
relating (2)	7:10;66:4;68:6;89:24;	103:3	168:10,12	157:13,15	
84:4,22	124:7,8,12,24;158:18	rivers (1)	sat (1)	sequential (1)	
relation (2)	Resources (3)	37:9	168:2	136:11	
74:6;87:7	7:11,12;71:16	road (65)	saturated (1)	series (2)	
relationship (8)	respect (3)	9:10;31:20,25;32:7;	73:8	130:13;131:3	
74:11;77:22;78:5,12,	8:15;67:23;120:24	33:25;39:9,10,11;40:2,9;	saturation (1)	served (1)	
17,18;101:16;105:22	response (4)	51:1,18,19;52:6;57:23;	75:9	8:10	
relative (1)	105:6;106:20;152:15;	58:21;63:17;64:8,20,22;	saw (3)	server (1)	
97:6	160:6	65:11,20,24;66:6,9,17,	42:19;96:12,21	92:14	
relevance (6)	responsibilities (3)	18,22,23;67:5;80:7;	saying (14)	set (14)	
85:12;119:16,18;	8:16,17;123:4	88:11;98:15;125:23;	28:1;42:13;56:6;61:9;	9:3;105:23;106:1;	
123:9;161:19;168:6	responsible (6)	126:2,3,11,15,25;127:5,	62:25;63:2,3;73:16;	134:2,6,9,12,21,22;	
relevant (7)	46:15;47:4,5;70:1,5;	6,9,16,17,19,19,21,23;	78:22;98:8;101:24;	135:1,8;140:6;166:23;	
6:22;36:20;152:18;	123:25	128:1;130:4;131:24;	102:19,25;163:21	170:1	
166:8,13;169:8,22	restate (2)	134:16;136:22;139:17;	scale (2)	sets (1)	
relied (3)	134:18;149:2	141:10,18;142:4;	53:21;66:1	140:4	
73:23;163:17;170:12	retract (1)	145:10;146:1,6,8,10,22;	scalene (3)	setting (1)	
rely (1)	59:20	147:5,22	43:8,9,12	38:1	
74:21	return (1)	roads (1)	scene (1)	settle (1)	
relying (1)	58:24	67:16	21:9	64:17	
163:3	review (25)	Road's (1)	scenic (1)	settles (1)	
Remember (2)	15:17,25;23:8;33:16;	71:4	117:18	67:16	
12:4;16:10	35:10;45:4;48:22;58:1;	roadway (10)	school (1)	several (2)	
remembers (1)	70:5;80:16;120:14;	64:14;66:24;67:1,3,	128:19	94:16;133:22	
123:10	130:12;131:2,10;	14,15,19;142:2,6,8	scope (1)	shade (1)	
reoccurring (4)	130:12,131:2,10, 132:12,133:6,11,135:5;	Robert (1)	69:11	103:21	
39:21;60:17;75:25;	144:22;153:9;163:19;	46:12	se (1)	shaded (1)	
77:21	165:14;167:8,8;170:16	role (1)	100:10	138:13	
repeat (5)	reviewed (11)	124:15	search (1)	shading (4)	
40:5;56:11;71:9;	11:7;61:23;65:18;	rough (2)	62:3	104:2;142:17,19,21	
40.3,30.11,71.9, 75:12;165:22		108:7,9	second (5)	shall (1)	
rephrase (5)	67:21,22;133:21;152:2,	<b>RRNA (12)</b>		43:8	
46:23;59:21;65:21;	12;153:8;169:14;170:15		45:8;95:2;145:18;		
46:25;59:21;65:21; 66:16;68:15	reviewing (3) 15:22;133:20;170:21	7:25;8:3;131:21;	151:3,4 secondary (1)	<b>shed (1)</b> 128:21	
,	revision (4)	138:1;144:6,13,14;	111:14		
report (7) 84:14;168:24;169:3,		149:9;153:18;157:18,		sheet (9)	
	135:6,21;136:21; 142:20	19;158:10	<b>secretary (1)</b> 22:19	54:22;55:23;70:13;	
11,17,24;170:2	<b>Richard (1)</b>	rule (1)		133:24;135:11,20;	
<b>Reporter (4)</b>		113:16	section (6)	136:20;140:9;142:19	
8:3;10:7;128:8;163:13	152:24 <b>Dishandron (1)</b>	rules (8)	14:12;21:23;22:2,3;	sheets (2)	
reports (1)	Richardson (1)	16:12,15;17:3,5,10,11,	36:18;85:16	136:4,10	
168:17	38:5	16;129:13	sediment (2)	shift (1)	
represent (6)	ridges (1)	run (2)	155:5;156:7	45:8	
36:19;43:5;72:10;	137:21	107:17;126:9	seek (3)	shore (1)	
73:7;81:13;86:8	right (52)	running (1)	11:6;18:21;19:11	155:14	
representation (1)	9:9;15:13;22:23;	110:21	seeking (5)	short (5)	
87:10	33:19;34:14;40:4,11;	runs (4)	16:20,21,24,25;18:16	10:15;91:3,24;116:13;	
represented (2)	42:7;45:15;48:7;49:15;	39:5;93:17;127:20,21	seeks (1)	119:12 shorton (2)	
26:3;86:12	50:5,8,9;52:2;54:4;	S	19:7	shorter (2)	
representing (1)	57:25;64:17;65:17;	0	seem (2)	43:10,11	
20:18	70:17,18;72:10,13;	6 (2)	7:21;104:14	shot (2)	
represents (3)	73:17,22;74:17;80:10;	safe (3)	seems (3)	55:17;159:10	
43:7;80:23;134:24	81:18;82:5;83:9;86:20,	64:23;90:12,13	62:16;80:24;164:15	shoulder (2)	
request (1)	23,23;93:21;94:5,5;	safety (1)	send (1)	66:25;67:2	
21:15	103:9;108:14;109:17;	22:5	161:14	show (24)	
require (1)	111:3,16;116:10;117:8,	same (36)	sending (1)	7:16,24;23:13;25:20;	
13:16	10,10;120:13;123:14;	12:9;16:12,15,16,19,	131:5	26:8,10;27:16;41:2,11,	
required (2)	139:16;151:5;155:14;	21;17:3,5,10,11;19:21;		14;57:8;67:9;70:15;	
46:20;129:14	159:18;160:20	20:10;21:16,17,21;22:5,	53:13	78:25;79:23;80:22;82:7;	
requirements (1)	Ritchie (7)	6,9;23:5;81:6,7;102:3;	sensitive (1)	86:6;88:18;92:7;104:7;	
19:2	138:7;150:8,25;151:7;	103:4;105:17;110:15;	19:16	105:5;109:22;163:7	
requires (1)	152:24,25;153:1	122:19,21;130:11;	separate (1)	showing (4)	

33:18:71:7:79:25; sitting (1) 82:20 shown (3) 56:2;72:12;82:13 shows (3) 43:23;105:10;146:1 shrub (1) 34:11 six (7) shrub-carr (1) 31:2 sic (2) size (2) 19:20:92:21 side (12) skiff (5) 23:18;24:1,15;43:10, 10;52:1;54:9;103:3,3; 107:2;147:22;152:11 skill (1) sides (1) 103:2 skip (2) side-sloped (1) 67:1 signed (2) 45:23.25 significant (1) 76:9 Silver (2) 57:20,20 similar (9) 10:21;12:23;23:7,25; 58:3;122:14,24;135:1; slow (1) 139:1 Similarly (1) small (8) 35:23 similar-type (1) 12:25 Simon (2) 144:18,21 snow (3) simple (1) 6:20 sit (1) 74:17 soil (13) site (91) 8:16:13:3,15,16,19; 14:19;15:8,20,21;24:1,9, Soils (3) 11,14,16;25:14;30:14; 31:6;32:5;39:12,13; 40:23;47:21;48:12;49:2, sole (1) 6,12,14,21,22;51:9,9,13; 52:4;54:2,3;56:2;57:25; 58:11;60:5,9,11,12,18, 25;61:3,5,12,14;64:5; 70:10,11;72:19;76:13; 77:2,17,19;79:11;84:24; 87:3;93:8;95:25;96:1; 98:14;111:15;113:16, sorry (20) 25;114:18;120:16; 121:15,19;122:5,12,16; 123:7,20,24;124:16; 125:17;130:23;132:18; 133:2;146:2;148:24; 154:17;158:6,18;162:11, 20;163:18;166:11;170:1 sort (4)

37:16

6:10

156:2

21

45:8

36:25

35:16

6:11

79:2

39:5

13:15

20:18

90:22

sorts (1) 133:6 situated (1) sought (1) 14:18situation (4) south (13) 37:23;42:13;58:15; 30:24;31:6;49:23; 50:10;93:13,18;94:6,8; 107:1;110:4,21;126:14; 98:10;100:3,9;101:9; 127:25 102:23;129:12;156:13 southeast (1) 43:14 13:21:89:19 Southeastern (1) 83:25 44:11;58:9,12;76:17, southern (7) 31:18:41:5,9:62:10; 81:2;127:15;138:14 166:23 southwest (1) 139:11 27:6;63:20 space (1) slightly (1) 31:16 speak (3) 99:16;122:3;169:5 slough (7) 35:13,14,16,16,16,18; speaks (5) 5:22;6:18;12:12; S-L-O-U-G-H (1) 16:11;43:21 specialist (15) sloughs (4) 7:10;9:11;17:15;19:6, 35:8;36:20;37:4,8 12;20:12,13;22:3;61:21; 66:5;75:7;124:6;165:11; 167:18:169:10 specialists (2) 53:23:55:20:58:12: 144:21:158:23 155:8,17,20,20;160:9 species (4) smaller (1) 60:13;104:1,1;156:9 specific (11) 11:19,23;16:6,7;26:6; 146:14,15,17 74:4;97:8;98:20;105:2; so-called (1) 108:5:151:22 specifically (7) 10:25:39:4:103:16; 72:24;73:3,5,8,11,13; 108:14;150:18;151:20; 84:5;97:12,15,18;99:11; 153:7 169:20,24 specification (1) 66:13 specifics (3) 38:2;102:1;128:22 23:12;53:22;167:6 speculate (1) somebody (2) 98:10 speculation (1) 6:3;20:13 someone (1) 67:7 spot (8) 49:20;51:5;91:18; somewhere (2) 85:19:92:16 158:4;159:14;160:24; 162:18,21 28:9,23;51:18;65:3; Spring (5) 81:17;84:9;92:25; 57:20,20;76:4;89:25; 110:17;113:7;144:10, 129:3 staff (1) 12;147:19;148:8;149:1; 153:1;156:8;157:14; 11:19 159:8;161:19;165:22 stage (2) 135:3:146:2 65:17;87:11;88:16; staked (1) 74:10

stand (4) 44:2:95:9.10:107:25 standards (23) 9:19:11:19:12:23: 15:7;16:17;17:6;19:14, 22;20:11;21:1,4,14,17, 21;23:7;70:6,7;84:23; 125:9;132:13;164:18; 165:18;166:22 standing (1) 98:7 stands (1) 10:19 stars (2) 154:12;157:23 start (10) 5:2;8:19;11:10;28:13; 48:19;49:17;55:9; 128:24;132:16;136:1 started (3) 7:14;58:24;59:2 starting (1) 55:11 state (20) 5:7;7:7;9:22,25;10:25; 17:19;51:17;62:14; 63:14;75:9,10;107:9; 119:6,7;125:12;128:14; 135:1;146:17,18;167:6 stated (8) 9:2:39:12:88:14; 98:13:103:7:126:3: 137:13:144:1 statement (6) 41:7;90:5,6;133:23; 137:10;165:21 states (6) 33:1,5;34:3;82:23; 125:6:138:9 State's (3) 63:6;74:22,24 stating (2) 54:21;75:8 station (3) 71:23;137:11,22 stations (3) 65:2,8;137:14 statute (7) 34:25;35:3,9;36:3,10; 62:22;129:13 statutory (2) 16:17;17:6 step (3) 42:4;117:7;134:7 steps (3) 67:14;68:9;86:2 Stevens (1) 128:21 still (6) 23:20:55:23:75:16; 105:20;123:8;165:4 stipulate (3) 95:4;167:12,15

stipulation (1) 168:12 stop (4) 34:23;49:15;83:2,3 storm (1) 76:12 storms (2) 76:10,11 straight (1) 95:17 stream (35) 28:21;29:13,14,15; 36:25;37:22;62:11; 75:14;78:10,14;81:9,15; 82:1;93:16,20,24;103:3; 107:3,5,8,14;109:13,21, 22;110:2,4,5;114:21; 117:12;126:21;137:4; 143:21;144:3,9;145:3 streams (6) 27:25;28:7,12;35:8; 36:20:37:9 stretches (1) 57:24 strike (2) 77:5;104:18 structure (18) 18:19;19:8,9,18,20; 20:8,9,19;21:2,5,7,8,13; 23:2,4:74:11:120:5; 127:14 structures (1) 21:10 struggling (2) 101:22;165:4 studies (2) 44:12:122:14 study (4) 81:25;82:4;114:5; 169:23 stuff (3) 5:13;6:4;69:13 sub (3) 35:6;36:18;62:21 subdivision (2) 14:19,21 subdivisions (1) 14:9 sub-Exhibit (7) 53:14;55:12,17,25; 56:3;57:13;138:1 subject (2) 12:5:149:22 submitted (3) 132:17;133:24;170:15 submitting (1) 15:5 substantiate (1) 25:6 substrate (17) 100:8,12,15,17,19; 101:2,8,12,19;102:10, 16,17,22;103:12,17;

100:6;101:6

sites (2)

113:22,25 substrates (1) syste 114:4 Sue (3) syste 124:25;125:1,2 suffice (1) 122:25 sufficient (1) 133:16 talk summarize (1) 167:7 summary (3) talke 154:6;158:17,21 talki supervise (1) 25:18 supplied (1) 160:6 support (4) 73:13;89:23;159:2; 162:8 talks Sure (49) 6:21;7:17,20;12:16; 14:14;20:22;21:19,21; tall ( 22:7;29:19,20;31:2; 34:18;35:6;40:6;43:18; tape 47:11;49:10;50:16; 52:12;56:13;68:13;75:1, techi 13;76:13;78:24;88:13; 91:4;94:1;116:15; techi 124:23;128:13;134:3; 135:19:137:6:141:15: term 144:7;145:21;147:4; 149:8;154:6,11,17; 162:25;163:3,21;165:20, term 23:166:20 surface (3) 101:25;102:2;147:25 surround (1) test ( 67:17 surrounded (1) 34:8 testif surrounding (1) 103:14 survey (23) testif 23:20;24:4;25:25; 26:2,3;43:6;49:13,17,17, 20;50:13,23,25;51:5; 52:20,24;53:6;54:9,23; testif 59:6,24;135:12;141:4 surveying (6) testir 53:1;79:21;129:25; 130:4,7;135:9 tests surveyor (2) 51:3,4 Surveys (7) 45:3,4;50:24;72:23; 144:24;145:7,9 swale (5) Thar 149:21;154:8,19,20; 162:11 thick switch (1) 82:6 thick sworn (1)

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
37:22,22   74:4,18;111:14   to     ystems (1)   8:7   to     37:21   8:7   to     T   though (1)   8:7   to     T   164:11   though (2)   61:14;70:1;157:7;   to     15:13;24:17;34:24;   135:15   though (3)   14:12;96:17;154:14   tr     14ked (3)   147:17   three (3)   tr   147:17   tr     114:22;125:5,9   three (3)   75:15;116:6;117:23   tr   15:13:24:17;00:1,   6:23;49:14,20;74:8;   2:103:12;107:4;108:25;   88:10;98:155:2;   150:19;166:3   141:5;145:1;153:9   tr     18:693:17;95:12;100:1,   6:23;49:14,20;74:8;   2:103:12;107:4;108:25;   88:10;98:155:2;   150:19;166:3   141:5;145:1;153:9   tr     11(3)   throw (2)   13:14:5;12:13:1;   141:5;145:1;153:9   tr     12:14;129:14;164:24   124:10,10   T   11:17:3   tr     12:14;129:14;164:24   124:9   tr   11:17:3   tr     12:14;129:14;164:24   124:9   tr   13:5;12:13:16:6;17:13:5;15;164:8   tr     12:14;129:14;164:24   124:9   tr	5:5	third (7)	to
systems (1)     thoroughly (1)     s:7     to       37:21     8:7     to       T     61:14:70:1;157:7;     to       164:11     164:11     though (3)     tr       135:15     164:11     though (3)     tr       114:22;125:5,9     three (3)     tr       114:22;125:5,9     three (3)     tr       114:17,95:12;100:1,     6:23;49:14,20;74:8;     2       50:2,9;54:11;59:2;     76:11     tr       50:2,9;54:11;59:2;     76:11     tr       67:25;70:19;71:88:013;     throughout (10)     tr       88:693:17;95:12;100:1,     6:23;49:14,20;74:8;     2       150:19;166:3     141:5;145:1;153:9     tr       18k (2)     thrown (3)     141:5;145:1;153:9     tr       18k (2)     thrown (3)     141:5;145:1;153:9     tr       132:17,20,23;133:2     124:10,10     T     tite (1)       132:17,20,23;133:2     32:21     tr     tr       schnical (4)     122:14;129:14;164:24     124:9     tite (1)     tr       132:17	ystem (2)		
37:21   8:7   to     T   though (4)   61:14;70:1;157:7;   to     164:11   though (3)   164:11   though (3)   tr     151:3;24:17;34:24;   34:12;96:17;154:14   though (3)   tr     144:22;125:5,9   three (3)   tr   147:17   tr     114:22;125:5,9   three (3)   tr   r   r     50:2,9;54:11;59:2;   76:11   r   r   r     67:25,70:19;71:8,80:13;   three-year (1)   r   r   r     88:69:31:795:12;100:1,   6:23;49:14,20;74:8;   z   z   r     88:69:31:795:12;100:1,   6:23;49:14,20;74:8;   z   throwg (2)   z   z   r     141:5;145:1;153:9   th   throwg (2)   z   z   z   z   r   r   r     132:17,20,23;133:2   124:10,10   T   thrown (3)   r<			to
T     though (4) 61:14;70:1;157:7; 164:11     to 164:11       alk (4)     though (3)     tr       15:13;24:17;34:24;     34:12:96:17;154:14     tr       135:15     though (3)     tr       alked (3)     147:17     three (3)       alking (23)     75:15;116:6;117:23     three.year (1)       50:2,9;54:11;59:2;     76:11     tr       50:2,9;54:11;59:2;     76:11     throughout (10)       88:693:17:95:12;100:1,     6:23;49:14,20;74:8;     2;103:1,2107:4;108:25;       150:19;166:3     141:5;145:1;153:9     tr       alkis (2)     throw (2)     throw (3)       35:7;123:2     124:10,10     T       alk:10;11,12     tr     tier (1)       6:6     117:3     tr       9:112:17,20,23;133:2     32:21     tr       9:112:14;129:14;164:24     124:9     tr       122:14;129:14;164:24     124:9     times (9)       12:17,18;0:23;     32:17;39;75:15,20;     100:21;13:38       76:5:6;102:15;116:6;     tr     157:6       122:14;129:14;14:42:2     title (1) <td></td> <td></td> <td>to</td>			to
T     61:14:70:1;157:7; 164:11     to 164:11       ibk (4)     thought (3)     tr       15:13;24:17;34:24;     34:12;96:17;154:14     thought (1)     tr       ilking (23)     147:17     thought (1)     tr       51:12;19:8,25;31:13;     50:2,9;54:11;59:2;     76:11     tr       67:25;70:19;71:8;80:13;     throughout (10)     6:23;49:14,20;74:8;     s8:10;98:15;135:2;       150:19;166:3     throw (2)     35:7;123:2     124:10,10     T       ikk (2)     throw (2)     35:7;123:2     124:10,10     T       ikk (2)     throw (3)     tr     tr       j22:14;129:7:4,6     18:10,11,12     tr       ige (1)     tier (1)     32:17,20,23;133:2     32:21     tr       j21:14;129:14;164:24     124:9     tr     135:14;39:17;99:24;     32:5;73:9;75:15,20;       j10:21;13:8     76:5,6;102:15;116:6;     tr     157:6     tr       j31:17;25:24;85:12;     times (9)     tr     j3:10;55:15;164:8;     today (4)     tr       j5:10;02;113:7;     53:10;55:15;164:8;     j3:10;55:15;164:8;	57.21		u
164:11     thought (3)     tr       15:13;24:17;34:24;     34:12;96:17;154:14     thought (3)     tr       135:15     14wought (1)     tr     thought (1)     tr       114:22;125:5,9     three (3)     three.year (1)     tr       512;19:8,25;31:13;     three.year (1)     tr       67:25;70:19;71:8;80:13;     throughout (10)     6:23;49:14,20;74:8;     throughout (10)       88:69:31:79:51:2;100:1,     6:23;49:14,20;74:8;     throw (2)     35:7;123:2     124:10,10     T       35:7;123:2     124:10,10     T     throw (3)     throw (3)     three (1)     tier (1)     tr     three (9)     tr     tr     three (9)     tr     three (3)     thr     tier (1)     tier (1) <td>Т</td> <td></td> <td>to</td>	Т		to
15:13;24:17;34:24;   34:12;96:17;154:14     135:15   thoughts (1)   tr     14:22;125:5,9   three (3)   tr     14:22;125:5,9   three (3)   tr     14:22;125:5,9   three (3)   tr     14:22;125:5,9   three (3)   tr     15:19;16:6;117:23   75:15;116:6;117:23   tr     5:12;19:8,25;31:13;   three-year (1)   tr     5:0:29;54:11;59:2;   76:11   tr     67:25;70:19;71:8;80:13;   throughout (10)   6:23;49:14,20;74:8;     150:19;166:3   141:5;145:1;153:9   tr     141:5;145:1;153:9   tr   throw (2)     35:7;123:2   124:10,10   T     141:5;145:1;153:9   tr   throw (3)     34:12;97:4,6   18:10,11,12   tr     pe (1)   tie (1)   122:14;129:14;164:24   124:9     remns (9)   times (9)   tr   32:5;73:9;75:15,20;     35:14;39:17;99:24;   32:5;73:9;75:15,20;   tr     100:21;133:8   76:5,6;102:15;116:6;   tr     rms (9)   157:24;169:12   53:10;55:15;164:8   tr     124:19		164:11	
135:15   thoughts (1)   tr     114:22;125:5,9   147:17   tr     114:22;125:5,9   three (3)   75:15;116:6;117:23     stilling (23)   three-year (1)   tr     5:12;19:8,25;31:13;   fbroughout (10)   6:3:49:14,20;74:8;     88:6;93:17;95:12;100:1,   6:23;49:14,20;74:8;   88:10;98:15;135:2;     150:19;166:3   141:5;145:1;153:9   tr     1dl (3)   thrown (2)   35:7;123:2   124:10,10   T     ask:10;98:15;135:2;   141:5;145:1;153:9   tr     ask:10;11,12   tr   tr   thrown (2)     35:7;123:2   124:10,10   T   tr     ast:10;12;97:4,6   18:10,11,12   tr     tie (1)   tier (1)   32:21   tr     132:17,20,23;133:2   32:21   tr     schniques (3)   122:14;129:14;164:24   124:9   times (9)     35:14;39:17:99:24;   100:21;5;116:6;   tr     100:21;133:8   76:5,6;102:15;116:6;   tr     rms (9)   32:5;73:9;75:15,20;   tr   tr     35:14;39:17;99:24;   tile (1)   tr   tr	alk (4)		tr
ilked (3)   147:17   tr     114:22;125:5,9   three (3)   r5:15;116:6;117:23     ilking (23)   75:15;116:6;117:23   three-year (1)     5:12;19:8,25;31:13;   three-year (1)   tr     67:25;70:19;71:8:80:13;   throughout (10)   6:23;49:14,20;74:8;   88:69:317;95:12;100:1,     67:25;70:19;71:8:80:13;   throughout (10)   6:23;49:14,20;74:8;   88:10;98:15;135:2;     150:19;166:3   141:5;145:1;153:9   tr     ilks (2)   thrown (3)   thrown (3)   ts     35:7;123:2   124:10,10   T   thrown (3)     34:12;97:4,6   18:10,11,12   tr     epen (1)   tier (1)   32:21   tr     6:6   117:3   tr     schnical (4)   124:9   times (9)   35:6;102:15;116:6;     122:14;129:14;164:24   124:9   times (9)   157:6     38:17,17;50:24;85:12;   time (2)   tr     123:10;125:6;152:18;   53:21;89:24   tipe (1)     tiste (1)   tr   ts   ts     13:5,8;122:22;166:1   today (4)   tr     5:6;106:20;113:7;   53:10;55:15			
114:22,125:5,9three (3)tr $314:12,27;125:5,9$ $35:12;19:8,25;31:13;$ $75:15;116:6;117:23$ $50:29,54:11;59:2;$ $76:11$ $76:11$ $67:25;70:19;71:8;80:13;$ $36:693:17:95:12;100:1,$ $6:23;49:14,20;74:8;$ $2:103:1,2;107:4;108:25;$ $88:10;98:15;135:2;$ $141:5;145:1;153:9$ $150:19;166:3$ $141:5;145:1;153:9$ tr $91(3)$ $34:12;97:4,6$ $18:10,11,12$ tr $9pe(1)$ tie (1)tie (1)tie (1) $6:6$ $117:3$ tr $echnical(4)$ $32:21$ tr $122:14;129:14;164:24$ $124:9$ tr $rem(5)$ times (9)tr $35:14;39:17:99:24;$ $32:5;73:9;75:15,20;$ $100:21;133:8$ $76:5,6;102:15;116:6;$ tr $rems(9)$ $157:6$ tr $38:17,17;50:24;85:12;$ times (9)tr $35:14;39:17:99:24;$ $157:6$ tr $100:21;133:8$ $76:5,6;102:15;116:6;$ tr $rems(9)$ title (1)tr $31:17,17;50:24;85:12;$ today (4)tr $5:6;106:20;113:7;$ $5:17;97:7;134:2;157:6$ tr $5:17;97:7;134:2;157:6$ today (4)tr $5:16(6):20;113:7;$ $5:17;97:7;134:2;157:6$ tr $5:17;97:7;134:2;157:6$ tode (3) $92:8;10;168:14$ $124:22;125:7$ tode (6) $8:tify(6)$ $92:8;10;168:14$ $139:4$ $9:19;154:12;158:17$ $139:4$ $92:6;51:23;52:2;63:11;$ $76:20$ $91:9;154:12;158:17$ $139:4$ $9:19;154:12;158:17$ <td></td> <td></td> <td>tr</td>			tr
alking (23)   75:15;116:6;117:23     5:12;19:8,25;31:13;   free-year (1)     67:25;70:19;71:8;80:13;   freouphout (10)     88:693:17;95:12;100:1,   6:23;49:14,20;74:8;     2:103:1,2;107:4;108:25;   141:5;145:1;153:9     alks (2)   throw (2)     35:7;123:2   124:10,10   T     alks (2)   throw (3)   throw (3)     34:12;97:4,6   18:10,11,12   tr     ape (1)   tier (1)   13:17;20,23;133:2   32:21   tr     cchniques (3)   122:14;129:14;164:24   124:9   times (9)   tr     35:14;39:17;99:24;   100:21;133:8   76:5,6;102:15;116:6;   tr     100:21;133:8   76:5,6;102:15;116:6;   tr     stifle (8)   53:21;89:24   title (1)   tr     13:5;8;122:22;166:1   14:24   title (1)   tr     13:5;106:3;121:21;   92:8,10;168:14   today (4)   ts     5:6;106:20;113:7;   53:10;55:15;164:8   toda (3)   92:8,10;168:14     124:22;125:7   tomorrow (1)   139:4   took (6)     settifying (4)   92:5,123;52:2;63:11;   70:2;74:3;81:7   139:			tr
5:12;19:8,25;31:13; $50:2,9;54:11;59:2;$ $67:25;70:19;71:8;80:13;$ $88:693:17;95:12;100:1,$ $2:103:1,2;107:4;108:25;$ $150:19;166:3$ three-year (1) $76:11$ tr $76:11$ $170uphout (10)$ $6:23;49:14,20;74:8;$ $88:10;98:15;135:2;$ $141:5;145:1;153:9$ throw (2) $141:5;145:1;153:9$ throw (3) $113(3)$ $34:12;97:4,6$ $18:10,11,12$ 			
67:25;70:19;71:8;80:13; $88:69:317;95:12;100:1,$ $2:103:1,2;107:4;108:25;$ $150:19;166:3$ throughout (10) $6:23;49:14,20;74:8;$ $88:10;98:15;135:2;$ $141:5;145:1;153:9$ throw (2) $124:10,10$ $34:12;97:4,6$ $6:6$ $117:3$ $18:10,11,12$ the (1) $6:6$ $117:3$ $18:10,11,12$ the (1) $6:6$ $117:3$ $1132:17,20,23;133:2$ $32:21$ thim (1) $122:14;129:14;164:24$ $122:14;129:14;164:24$ $122:14;129:14;164:24$ $122:14;129:14;164:24$ $122:14;129:17;99:24;$ $100:21;133:8$ $57:66$ $38:17,17;50:24;85:12;$ $100:21;133:8$ $57:66$ $38:17,17;50:24;85:12;$ $100:21;133:8$ $57:66$ $38:17,17;50:24;85:12;$ $157:66$ $157:66$ $157:66$ $157:66$ $157:66$ $121:17,18;123:3;$ $157:24;169:12$ $53:10;55:15;164:8$ tode (3) $9:3,15;106:3;121:21;$ $22:18;41:4;47:1;$ $139:4$ $9:6;25:2;105:10;114:8tode (3)9:3,15;106:3;121:21;9:8;10;168:14139:49:6;25:2;105:10;114:8tode (3)9:3,15;106:3;121:21;9:9:1,7,9:40:20;44:9,15;48:22;56:2;86:17;91:9;154:12;158:17top (10)22:18;41:4;47:1;49:13top (10)22:18;41:4;47:1;49:13top (10)139:449:25;51:23;52:26;311;70:274:3;81:7top (10)13:3;114:5,12;121:11,16;122:13;166:4;167:1449:13thanks (1)158:1013:2491:19tops (1)tops (1)tops (1)tops (1)throughout (1)13:1913:1913:2491:1913:1913:2491:1913:1913:2491:1913:10throughout (1)13:14:5,12:121:17,13:13:14:5,12:121:17,13:13:14:5,12:121:17,13:13:14:5,12:121:17,13:13:14:5,12:121:17,13:13:14:5,12:121:17,13:13:14:5,12:121:17,13:13:14:5,12:121:17,13:13:14:5,12:121:17,13:13:14:5,12:121:17,13:13:14:5,12:121:17,13:13:14:5,12:121:17,13:13:14:5,12:121:17,13:13:14:5,12:121:17,13:13$			tr
88:6:93:17:95:12:100:1, $2:103:1,2:107:4;108:25;$ $150:19;166:3$ $6:23;49:14,20;74:8;$ $88:10;98:15;135:2;$ $141:5;145:1;153:9$ throw (2) $124:10,10$ $34:12;97:4,6$ $6:6$ $117:3$ $34:12;97:4,6$ $6:6$ $117:3$ $18:10,11,12$ thrown (3) $13:12;17,20,23;133:2$ $2:chniques (3)$ $122:14;129:14;164:24$ $122:14;129:14;164:24$ $122:14;129:14;164:24$ $122:14;129:14;164:24$ $122:14;129:14;164:24$ $122:14;129:14;164:24$ $122:14;129:14;164:24$ $122:14;129:14;164:24$ $122:14;129:17;90:24;35:14;39:17;99:24;100:21;133:8rems (9)35:14;39:17;99:24;100:21;133:8rems (9)35:17,17;50:24;85:12;135:8;122:22;166:1145:22today (4)14:24145:22today (4)13:3;113:5,8;122:22;166:1145:22today (4)5:6;106:20;113:7;15:7;24;169:125:17;9:7;134:2;157:6together (3)5:17;9:7;134:2;157:6tod (3)9:3,15;106:3;121:21;9:8;10;168:14124:22;125:7together (3)5:17;9:7;134:2;157:6together (3)5:17;9:7;134:2;157:6together (3)5:17;9:7;134:2;157:6together (3)139:448:22;56:2;86:17;91:9;154:12;158:17top (10)22:18;41:4;47:1;49:25;51:23;52:2;63:11;70:274:3;81:7topographical (4)53:17,20;104:20,25tr103:2491:19tops (1)tr$			
2:103:1,2:107:4:108:25;   88:10;98:15;135:2;     150:19;166:3   141:5;145:1;153:9 <b>ulk (2)</b> 35:7;123:2     34:12;97:4,6   124:10,10 <b>ppe (1) thrown (3)</b> 6:6   117:3 <b>cennical (4)</b> 122:14;129:14;164:24 <b>122:14;129:14;164:24</b> 32:21 <b>threwn (5)</b> 32:14;39:17;99:24;     100:21;133:8   76:5,6;102:15;116:6; <b>rerms (9) title (1)</b> 38:17,17;50:24;85:12; <b>title (1)</b> 100:21;133:8   76:5,6;102:15;116:6; <b>rerms (9) title (1) tr</b> 38:17,17;50:24;85:12; <b>title (1) tr</b> 123:10;125:6;152:18;   132:17;9:7;134:2;157:6 <b>today (4)</b> 56:6;106:20;113:7;   121:17,18;123:3;   145:22 <b>today (4) tr</b> 53:10;55:15;164:8 <b>today (4)</b> 5:6;106:3;121:21;   53:10;55:15;164:8 <b>todd (3)</b> 9:3,15;106:3;121:21;   92:8,10;168:14 <b>tomorrow (1)</b> 9:3,15;106:3;121:21;   39:4 <b>topographic (1)</b> 9:25;51:23;52:2;63:11;   70:2;74:3;81:7 <b>topographic (1)</b> 9			
150:19;166:3 $141:5;145:1;153:9$ tr $31ks$ (2) $141:5;145:1;153:9$ tr $35:7;123:2$ $141:5;145:1;153:9$ tr $312:17;20;23;133:2$ $124:10,10$ T $6:6$ $18:10,11,12$ tr $echnical$ (4) $132:17,20,23;133:2$ $32:21$ Tr $csehnical$ (4) $122:14;129:14;164:24$ $32:21$ tr $132:17,20,23;133:2$ $32:21$ tr $echnical$ (4) $32:21$ tr $132:17,20,23;133:2$ $32:21$ tr $csehnical$ (4) $32:21$ tr $132:17,20,23;133:2$ $32:21$ tr $erm$ (5) $35:14;39:17;99:24;$ $100:21;133:8$ $76:5,6;102:15;116:6;$ $rms$ (9) $35:14;39:17;99:24;$ $157:6$ tr $100:21;133:8$ $14:24$ $124:9$ $rms$ (9) $14:24$ $14:24$ $26:16,17;41:22;48:3;$ $14:24$ $14:24$ $133:5,8;122:22;166:11$ $14:24$ $14:24$ $133:5,8;122:22;166:11$ $14:24$ $14:24$ $26:16,17;41:22;48:3;$ $14:24$ $14:24$ $26:16,17;41:22;48:3;$ $14:24$ $14:24$ $12:17,18;123:3;$ $157:6$ $14:24$ $12:17,18;123:3;$ $157:6$ $139:4$ $56:106:20;113:7;$ $139:4$ $139:4$ $12:42:2;125:7$ $139:4$ $139:4$ $8stifw$ (6) $48:22;56:2;86:17;$ $9:3,15;106:3;121:21;$ $139:4$ $9:6;25:2;105:10;114:8$ $49:25;51:23;52:2;63:11;$ $70:2;74:3;81:7$ $109:24,12;158:17$ $9:19:1,79:40:20;44:9;15;$ $49:25;51:$			
Iks (2)throw (2) $35:7;123:2$ $124:10,10$ $34:12;97:4,6$ $124:10,10$ $34:12;97:4,6$ $18:10,11,12$ $pe (1)$ $18:10,11,12$ $6:6$ $117:3$ $erm (1)$ $12:17,20,23;133:2$ $erm (2)$ $32:21$ $rrm (5)$ $32:21$ $122:14;129:14;164:24$ $124:9$ $erm (5)$ $35:14;39:17;99:24;$ $100:21;133:8$ $76:5,6;102:15;116:6;$ $rrms (9)$ $157:6$ $38:17,17;50:24;85:12;$ $157:6$ $100:21;133:8$ $76:5,6;102:15;116:6;$ $rrms (9)$ $157:6$ $38:17,17;50:24;85:12;$ $145:22$ $100:21;13:3;$ $145:22$ $100:21;13:7;$ $145:22$ $121:17,18;123:3;$ $5:17;9:7;134:2;157:6$ $157:24;169:12$ $53:10;55:15;164:8$ $setify (6)$ $9:3,15;106:3;121:21;$ $9:3,15;106:3;121:21;$ $53:10;55:15;164:8$ $124:22;125:7$ $124:14;47:1;$ $25:6;26:10,19,21,25;$ $32:10;55:15;164:8$ $setify (6)$ $9:3,15;106:3;121:21;$ $9:3,15;106:3;121:21;$ $139:4$ $124:22;125:7$ $129:13;164:14;47:1;$ $9:6;25:2;105:10;114:8;$ $48:22;56:2;86:17;$ $9:19;154:12;158:17$ $22:18;41:4;47:1;$ $9:6;25:2;105:10;114:8;$ $49:23;51:23;52:2;63:11;$ $70:27,4:3;81:7$ $70:2;74:3;81:7$ $13:3;114:5,12;12:11,$ $16;122:13;166:4;167:14$ $16;122:13;166:4;167:14$ $49:13$ $113:24$ $9:19$ $103:24$ $9:19$ $103:24$ $9:1$			tr
$\begin{array}{llllllllllllllllllllllllllllllllllll$			u
III (3)thrown (3) $34:12;97:4,6$ $18:10,11,12$ $ape (1)$ $18:10,11,12$ $6:6$ $117:3$ $cehnical (4)$ $117:3$ $132:17,20,23;13:2$ $32:21$ $cehniques (3)$ $122:14;129:14;164:24$ $122:14;129:14;164:24$ $124:9$ $cerm (5)$ $35:14:39:17;99:24;$ $35:14:39:17;99:24;$ $32:5;73:9;75:15,20;$ $100:21;133:8$ $76:5,6;102:15;116:6;$ $cerm (5)$ $38:17,17;50:24;85:12;$ $100:21;133:8$ $76:5,6;102:15;116:6;$ $cerm (9)$ $14:24$ $123:10;125:6;152:18;$ $53:21;89:24$ $169:19,20$ $14:24$ $26:16,17;41:22;48:3;$ $14:24$ $169:19,20$ $14:24$ $26:16,17;41:22;48:3;$ $14:24$ $169:19,20$ $14:24$ $26:16,17;41:22;48:3;$ $14:24$ $169:19,20$ $14:24$ $26:16,17;41:22;48:3;$ $14:24$ $157:24;169:12$ $53:10;55:15;164:8$ $26:16,17;41:22;21:21;7$ $53:10;55:15;164:8$ $26:16,17;41:22;21:21;7$ $53:10;55:15;164:8$ $codd (3)$ $92:8,10;168:14$ $124:22;125:7$ $53:10;55:123;52:2;63:11;$ $76:20$ $91:9;154:12;158:17$ $9:6;25:2;105:10;114:8$ $48:22;56:2;86:17;$ $9:19;154:12;158:17$ $22:18;41:4;47:1;$ $9:19;154:12;158:17$ $109:0graphic (1)$ $13:3;14:5,12;12:11,1$ $16;12:13;166:4;167:14$ $16;12:13;166:4;167:14$ $49:13$ $113:3;14:5,12;12:11,1$ $103:24$ $9:19$ $119$ $1$			т
34:12:97:4,6 $18:10,11,12$ tr $ape (1)$ $13:17,20,23;133:2$ $cehnical (4)$ $117:3$ tr $132:17,20,23;133:2$ $32:21$ tr $cehniques (3)$ $122:14;129:14;164:24$ $124:9$ $trm (5)$ $32:5;73:9;75:15,20;$ $100:21;133:8$ $2st (3)$ $123:10;125:6;152:18;$ $157:6$ $38:17,17;50:24;85:12;$ $169:19,20$ $tile (1)$ $sst (8)$ $14:24$ $26:16,17;41:22;48:3;$ $14:24$ $109:19,20$ $14:24$ $2st (8)$ $14:24$ $2stified (8)$ $5:6;106:20;113:7;$ $5:6;106:20;113:7;$ $122:17,18;123:3;$ $157:24;169:12$ $5:17;9:7;134:2;157:6$ $stifying (4)$ $9:6;25:2;105:10;114:8$ $9:6;25:2;105:10;10;114:8$ $stifying (4)$ $9:6;25:2;105:10;114:8$ $9:6;25:2;105:10;114:8$ $stifying (4)$ $9:6;25:2;105:10;114:8$ $stifying (4)$ $9:6;25:2;105:10;114:8$ $2stify (6)$ $9:3,15;106:3;121:21;$ $124:22;125:7$ $stifying (4)$ $9:6;25:2;105:10;114:8$ $stifying (4)$ $9:6;25:2;105:10;114:8$ $25:6;26:10,19,21,25;$ $39:1,7,9;40:20;44:9,15;$ $49:13$ $topographical (4)$ $53:17,20;104:20,25$ $tr$ $topographical (4)$ $53:17,20;104:20,25$ $tr$ $topog (1)$ $91:19$ $topog (1)$			-
6:6 $117:3$ tr $cehnical (4)$ $132:17,20,23;133:2$ $cehniques (3)$ $32:21$ tr $122:14;129:14;164:24$ $32:21$ tr $cenniques (3)$ $122:14;129:14;164:24$ $124:9$ $cenn (5)$ $35:14;39:17;99:24;$ $124:9$ $35:14;39:17;99:24;$ $124:9$ times (9) $100:21;133:8$ $76:5,6;102:15;116:6;$ tr $serms (9)$ $32:5;73:9;75:15,20;$ $38:17,17;50:24;85:12;$ $157:6$ $109:19,20$ title (1)tr $set (8)$ $14:24$ $26:16,17;41:22;48:3;$ $145:22$ $109:19,20$ titled (1) $set (8)$ $14:24$ $26:16,17;41:22;48:3;$ $145:22$ $121:17,18;123:3;$ $53:10;55:15;164:8$ $157:6$ together (3) $5:6;106:20;113:7;$ $51:7;9:7;134:2;157:6$ $121:17,18;123:3;$ $157:6$ $124:22;125:7$ $139:4$ $setify (6)$ $9:3,15;106:3;121:21;$ $9:3,15;106:3;121:21;$ $9:2(8,10;168:14)$ $124:22;125:7$ $139:4$ $setifying (4)$ $9:3:4$ $9:6;25:2;105:10;114:8$ $48:22;56:2;86:17;$ $9:19;154:12;158:17$ $22:18;41:4;47:1;$ $9:19;154:12;158:17$ $22:18;41:4;47:1;$ $9:19;154:12;158:17$ $100;22:13;166:4;167:14$ $133;114:5,12;121:11,$ $16pographic (1)$ $16;122:13;166:4;167:14$ $49:13$ $tr$ $133;14:5,12;121:11,$ $103:24$ $91:19$ $103:24$ $91:19$ $103:4$ $103:24$ $91:19$ <t< td=""><td></td><td></td><td>tr</td></t<>			tr
cehnical (4)tier (1) $132:17,20,23;133:2$ $32:21$ cehniques (3) $122:14;129:14;164:24$ $122:14;129:14;164:24$ $124:9$ times (9) $124:9$ $35:14;39:17;99:24;$ $124:9$ $100:21;133:8$ $76:5,6;102:15;116:6;$ trms (9) $157:6$ $38:17,17;50:24;85:12;$ $157:6$ $109:19,20$ title (1)ext (8) $14:24$ $26:16,17;41:22;48:3;$ titled (1) $113:5,8;122:22;166:1$ $145:22$ today (4)tr $5:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ $121:17,18;123:3;$ together (3) $157:24;169:12$ $53:10;55:15;164:8$ extify (6)told (3) $9:3,15;106:3;121:21;$ $92:8,10;168:14$ $124:22;125:7$ tomorrow (1)extifying (4) $139:4$ $9:6;25:2;105:10;114:8$ $48:22;56:2;86:17;$ $9:19;154:12;158:17$ $22:18;41:4;47:1;$ $49:25;51:23;52:2;63:11;$ $70:2;74:3;81:7$ $76:20$ $22:18;41:4;47:1;$ $9:19;1,7,9;40:20;44:9,15;$ $49:25;51:23;52:2;63:11;$ $70:2;74:3;81:7$ $133:14:5,12;121:11,$ $16;122:13;166:4;167:14$ $49:13$ $103:24$ $91:19$ $103:24$ $91:19$ $103:24$ $91:19$ $103:24$ $91:19$	ape (1)	tie (1)	
132:17,20,23;133:232:21trcehniques (3)32:21tr122:14;129:14;164:24Tim (1)122:14;129:14;164:24124:9erm (5)times (9)tr $35:14;39:17;99:24;$ $32:5;73:9;75:15,20;$ $76:5,6;102:15;116:6;$ tr $100:21;133:8$ $76:5,6;102:15;116:6;$ tr $38:17,17;50:24;85:12;$ $157:6$ times (9)tr $38:17,17;50:24;85:12;$ $157:6$ tile (1)tr $123:10;125:6;152:18;$ $157:6$ tile (1)tr $26:16,17;41:22;48:3;$ tiled (1)tr $113:5,8;122:22;166:1$ $145:22$ today (4)tr $5:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ together (3)tr $5:6;106:20;113:7;$ $5:10;55:15;164:8$ told (3) $92:8,10;168:14$ $24:22;125:7$ $91:9;154:12;158:17$ $92:8;10;168:14$ towl (6) $8stify (6)$ $92:8;10;168:14$ $139:4$ $48:22;56:2;86:17;$ $91:9;154:12;158:17$ $76:20$ $91:9;154:12;158:17$ $92:5;1:23;52:2;63:11;$ $70:2;74:3;81:7$ $70:2;74:3;81:7$ $8stifying (4)$ $22:18;41:4;47:1;$ $49:25;51:23;52:2;63:11;$ $70:2;74:3;81:7$ $76:20$ $22:18;41:4;47:1;$ $49:25;51:23;52:2;63:11;$ $70:2;74:3;81:7$ $71:3:3;114:5,12;121:11,$ $60:0;10;104:20;25;$ $11:13:3;114:5;12;121:11,$ $49:13$ $11:13:11,12:12:13;166:4;167:14$ $103:24$ $91:19$ $91:19$ $11:19$ $11:19$ $11:19$ $103:24$ $91:19$ $11:19$ $11:19$ $10:12:13:10;10:1$			tr
cchniques (3)Tim (1) $122:14;129:14;164:24$ $124:9$ erm (5) $35:14;39:17;99:24;$ $35:14;39:17;99:24;$ $32:5;73:9;75:15,20;$ $100:21;133:8$ $76:5,6;102:15;116:6;$ erms (9) $157:6$ $38:17,17;50:24;85:12;$ $100:21;133:8$ $2ms (9)$ $157:6$ $38:17,17;50:24;85:12;$ $100:21;13:89:24$ $169:19,20$ $title (1)$ $tr (1)$ $tr (1)$ $26:16,17;41:22;48:3;$ $14:24$ $169:19,20$ $titled (1)$ $tr (8)$ $14:24$ $26:16,17;41:22;48:3;$ $titled (1)$ $113:5,8;122:22;166:1$ $145:22$ $today (4)$ $tr (1)$ $5:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ $121:17,18;123:3;$ $todd (3)$ $9:3,15;106:3;121:21;$ $92:8,10;168:14$ $124:22;125:7$ $53:10;55:15;164:8$ $told (3)$ $92:8,10;168:14$ $9:6;25:2;105:10;114:8$ $took (6)$ estifying (4) $92:8,10;168:14$ $9:6;25:2;105:10;114:8$ $48:22;56:2;86:17;$ $9:1:9;154:12;158:17$ $139:4$ $9:6;25:10,19,21,25;$ $22:18;41:4;47:1;$ $99:19;154:12;158:17$ $100$ $25:6;26:10,19,21,25;$ $22:18;41:4;47:1;$ $99:1,7,9;40:20;44:9,15;$ $49:25;51:23;52:2;63:11;$ $70:2;74:3;81:7$ $100$ $13:3;114:5,12;121:11,$ $1000$ $158:10$ $53:17,20;104:20,25$ $10:k (1)$ $91:19$ $103:24$ $91:19$ $103:24$ $91:19$			
122:14;129:14;164:24124:9erm (5) $35:14;39:17;99:24;$ $124:9$ $35:14;39:17;99:24;$ $32:5;73:9;75:15,20;$ $100:21;133:8$ $76:5,6;102:15;116:6;$ tr $38:17,17;50:24;85:12;$ $157:6$ $123:10;125:6;152:18;$ $157:6$ $169:19,20$ tile (1)trest (8) $14:24$ $26:16,17;41:22;48:3;$ tiled (1)tr $13:5,8;122:22;166:1$ $145:22$ today (4)tr $5:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ $121:17,18;123:3;$ today (4) $5:6;106:20;113:7;$ $5:10;55:15;164:8$ tod (3) $9:3,15;106:3;121:21;$ $9:3,15;106:3;121:21;$ $92:8,10;168:14$ took (6)estifying (4) $139:4$ $9:6;25:2;105:10;114:8$ took (6)estifying (4) $9:19;154:12;158:17$ $9:6;25:2;105:10;114:8;$ $49:25;51:23;52:2;63:11;$ $76:20$ $22:18;41:4;47:1;$ $25:6;26:10,19,21,25;$ $39:1,7,9;40:20;44:9,15;$ $47:15;75:18;77:10;$ $70:2;74:3;81:7$ $13:3;114:5,12;121:11,$ $49:13$ tr $16;122:13;166:4;167:14$ $49:13$ $13:8:10$ $53:17,20;104:20,25$ tick (1) $91:19$ $103:24$ $91:19$ $103:24$ $91:19$			tr
erm (5)times (9)tr $35:14;39:17;99:24;$ $32:5;73:9;75:15,20;$ $100:21;133:8$ $76:5,6;102:15;116:6;$ $as:17,17;50:24;85:12;$ $157:6$ $38:17,17;50:24;85:12;$ $1y (2)$ $123:10;125:6;152:18;$ $53:21;89:24$ $169:19,20$ title (1) $est (8)$ $14:24$ $26:16,17;41:22;48:3;$ titled (1) $113:5,8;122:22;166:1$ $145:22$ $estified (8)$ today (4) $5:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ $121:17,18;123:3;$ $145:22$ $157:24;169:12$ $53:10;55:15;164:8$ $estify (6)$ $9:3,15;106:3;121:21;$ $9:3,15;106:3;121:21;$ $92:8,10;168:14$ $124:22;125:7$ $eok (6)$ $estifying (4)$ $139:4$ $9:6;25:2;105:10;114:8$ $48:22;56:2;86:17;$ $9:6;25:2;105:10;114:8$ $139:4$ $139:4$ $139:4$ $9:6;25:2;105:10;114:8$ $48:22;56:2;86:17;$ $9:19;154:12;158:17$ $91:9;154:12;158:17$ $76:20$ $22:18;41:4;47:1;$ $9:19;154:12;158:17$ $13:3;114:5,12;12:11;$ $47:15;75:18;77:10;$ $70:2;74:3;81:7$ $13:3;114:5,12;12:11;$ $49:13$ $158:10$ $53:17,20;104:20,25$ $12:19$ $119$ $103:24$ $91:19$ $91:19$ $119$			
$\begin{array}{llllllllllllllllllllllllllllllllllll$			tr
100:21;133:8 $76:5,6;102:15;116:6;$ tr $38:17,17;50:24;85:12;$ $157:6$ $38:17,17;50:24;85:12;$ $157:6$ $123:10;125:6;152:18;$ $157:6$ $123:10;125:6;152:18;$ $157:24;189:24$ $169:19,20$ title (1) $est (8)$ $14:24$ $26:16,17;41:22;48:3;$ titled (1) $113:5,8;122:22;166:1$ $145:22$ $estifed (8)$ $145:22$ $csified (8)$ today (4) $5:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ $121:17,18;123:3;$ $157:24;169:12$ $estify (6)$ $9:3,15;106:3;121:21;$ $9:3,15;106:3;121:21;$ $92:8,10;168:14$ $124:22;125:7$ todd (3) $9:3,15;106:3;121:21;$ $92:8,10;168:14$ $124:22;125:7$ $139:4$ $estifying (4)$ $139:4$ $9:6;25:2;105:10;114:8;$ $48:22;56:2;86:17;$ $9:6;25:2;105:10;114:8;$ $49:25;51:23;52:2;63:11;$ $76:20$ $22:18;41:4;47:1;$ $9:19;154:12;158:17$ $109$ $25:6;26:10,19,21,25;$ $22:18;41:4;47:1;$ $39:1,7,9;40:20;44:9,15;$ $49:25;51:23;52:2;63:11;$ $70:2;74:3;81:7$ $109$ $13:3;114:5,12;121:11,$ $16;122:13;166:4;167:14$ $158:10$ $53:17,20;104:20,25$ $103:24$ $103:24$ $91:19$ $103:24$ $91:19$ $103:24$ $91:19$ $103:24$ $91:19$			u
erms (9) $157:6$ $38:17,17;50:24;85:12;$ $tiny (2)$ $tr$ $123:10;125:6;152:18;$ $53:21;89:24$ $tile (1)$ $169:19,20$ $tile (1)$ $tr$ $2st (8)$ $14:24$ $tile (1)$ $26:16,17;41:22;48:3;$ $tiled (1)$ $tr$ $113:5,8;122:22;166:1$ $145:22$ $today (4)$ $2stifed (8)$ $today (4)$ $tr$ $5:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ $today (4)$ $25:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ $today (4)$ $121:17,18;123:3;$ $together (3)$ $tr$ $5:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ $tod (3)$ $9:3,15;106:3;121:21;$ $92:8,10;168:14$ $tod (3)$ $9:3,15;106:3;121:21;$ $92:8,10;168:14$ $took (6)$ estifying (4) $139:4$ $took (6)$ $9:6;25:2;105:10;114:8$ $took (6)$ estifying (4) $91:9;154:12;158:17$ $9:6;25:2;105:10;114:8$ $top (10)$ $25:6;26:10,19,21,25;$ $22:18;41:4;47:1;$ $39:1,7,9;40:20;44:9,15;$ $49:25;51:23;52:2;63:11;$ $76:20$ $21:18;41:4;47:1;$ $39:1,7,9;40:20;44:9,15;$ $49:13$ $47:15;75:18;77:10;$ $10:2;74:3;81:7$ $113:3;114:5,12;121:11,$ $topographical (4)$ $53:17,20;104:20,25$ $tr$ $103:24$ $91:19$ $103:24$ $91:19$ $103:24$ $91:19$ $103:24$ $91:19$			tr
$\begin{array}{llllllllllllllllllllllllllllllllllll$			
169:19,20title (1)tr $est (8)$ $14:24$ $26:16,17;41:22;48:3;$ $14:24$ $113:5,8;122:22;166:1$ $145:22$ $estified (8)$ $tody (4)$ $5:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ $121:17,18;123:3;$ $together (3)$ $157:24;169:12$ $53:10;55:15;164:8$ $estify (6)$ $9:3,15;106:3;121:21;$ $9:3,15;106:3;121:21;$ $92:8,10;168:14$ $124:22;125:7$ $tomorrow (1)$ $estifying (4)$ $139:4$ $9:6;25:2;105:10;114:8$ $took (6)$ $estimony (1)$ $25:6;26:10,19,21,25;$ $76:20$ $91:9;154:12;158:17$ $ests (22)$ $22:18;41:4;47:1;$ $25:6;26:10,19,21,25;$ $22:18;41:4;47:1;$ $39:1,7,9;40:20;44:9,15;$ $49:25;51:23;52:2;63:11;$ $47:15;75:18;77:10;$ $70:2;74:3;81:7$ $113:3;114:5,12;121:11,$ $topographic (1)$ $16;122:13;166:4;167:14$ $49:13$ $tanks (1)$ $53:17,20;104:20,25$ $158:10$ $53:17,20;104:20,25$ $tick (1)$ $91:19$ $103:24$ $91:19$ $picker (1)$ $tops (1)$			tr
est (8) $14:24$ $26:16,17;41:22;48:3;$ titled (1)tr $113:5,8;122:22;166:1$ $145:22$ estified (8)today (4)tr $5:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ tr $121:17,18;123:3;$ together (3)tr $157:24;169:12$ $53:10;55:15;164:8$ tdestify (6)9:3,15;106:3;121:21;92:8,10;168:14 $124:22;125:7$ tomorrow (1) $25:6;25:2;105:10;114:8$ took (6)estimony (1) $139:4$ $76:20$ 91:9;154:12;158:17ests (22) $22:18;41:4;47:1;$ $25:6;26:10,19,21,25;$ $22:18;41:4;47:1;$ $39:1,7,9;40:20;44:9,15;$ $49:25;51:23;52:2;63:11;$ $47:15;75:18;77:10;$ $70:2;74:3;81:7$ $113:3;114:5,12;121:11,$ topographic (1) $16;122:13;166:4;167:14$ $49:13$ tnanks (1) $53:17,20;104:20,25$ $158:10$ $53:17,20;104:20,25$ trtopol (1) $103:24$ $91:19$ nick (1) $91:19$ nicker (1)tops (1)			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			tr
113:5,8;122:22;166:1 $145:22$ estified (8)today (4)tr $5:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ today (4) $121:17,18;123:3;$ $5:17;9:7;134:2;157:6$ tr $121:17,18;123:3;$ $5:17;9:7;134:2;157:6$ tr $121:17,18;123:3;$ $5:17;9:7;134:2;157:6$ tr $121:17,18;123:3;$ $5:10;55:15;164:8$ tr $157:24;169:12$ $5:10;55:15;164:8$ tr $setify (6)$ $9:3,15;106:3;121:21;$ $9:28,10;168:14$ tomorrow (1) $124:22;125:7$ $139:4$ took (6) $setifying (4)$ $139:4$ took (6) $9:6;25:2;105:10;114:8$ $48:22;56:2;86:17;$ $91:9;154:12;158:17$ $76:20$ $91:9;154:12;158:17$ top (10) $25:6;26:10,19,21,25;$ $22:18;41:4;47:1;$ $99:25;51:23;52:2;63:11;$ $76:20$ $91:9;154:12;158:17$ $70:2;74:3;81:7$ $91:15;75:18;77:10;$ $70:2;74:3;81:7$ $133:3;114:5,12;12:111,$ $16;122:13;166:4;167:14$ $49:13$ trhanks (1) $53:17,20;104:20,25$ tr $158:10$ $53:17,20;104:20,25$ trnick (1) $91:19$ $103:24$ $91:19$ nicker (1)tops (1)			
estified (8)today (4)tr $5:6;106:20;113:7;$ $5:17;9:7;134:2;157:6$ $121:17,18;123:3;$ $5:17;9:7;134:2;157:6$ $121:17,18;123:3;$ $together (3)$ $157:24;169:12$ $53:10;55:15;164:8$ estify (6) $9:3,15;106:3;121:21;$ $9:3,15;106:3;121:21;$ $9:8,10;168:14$ $124:22;125:7$ $tomorrow (1)$ $25:6;25:2;105:10;114:8$ $took (6)$ estimony (1) $139:4$ $76:20$ $91:9;154:12;158:17$ $25:6;26:10,19,21,25;$ $22:18;41:4;47:1;$ $39:1,7,9;40:20;44:9,15;$ $49:25;51:23;52:2;63:11;$ $47:15;75:18;77:10;$ $70:2;74:3;81:7$ $113:3;114:5,12;121:11,$ $topographical (4)$ $158:10$ $53:17,20;104:20,25$ $tick (1)$ $91:19$ $103:24$ $91:19$ $nicker (1)$ $tops (1)$			tr
5:6;106:20;113:7; $5:17;9:7;134:2;157:6$ $121:17,18;123:3;$ $together (3)$ $tr$ $157:24;169:12$ $53:10;55:15;164:8$ $told (3)$ $9:3,15;106:3;121:21;$ $92:8,10;168:14$ $124:22;125:7$ $2stifying (4)$ $139:4$ $9:6;25:2;105:10;114:8$ $took (6)$ $estimony (1)$ $48:22;56:2;86:17;$ $76:20$ $91:9;154:12;158:17$ $25:6;26:10,19,21,25;$ $22:18;41:4;47:1;$ $39:1,7,9;40:20;44:9,15;$ $49:25;51:23;52:2;63:11;$ $47:15;75:18;77:10;$ $70:2;74:3;81:7$ $113:3;114:5,12;121:11,$ $topographical (4)$ $158:10$ $53:17,20;104:20,25$ $tick (1)$ $91:19$ $103:24$ $91:19$ $nicker (1)$ $tops (1)$			fr
$\begin{array}{llllllllllllllllllllllllllllllllllll$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			tr
$\begin{array}{llllllllllllllllllllllllllllllllllll$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	estify (6)		
estifying (4)   139:4     9:6;25:2;105:10;114:8   took (6)     estimony (1)   48:22;56:2;86:17;     76:20   91:9;154:12;158:17     ests (22)   22:18;41:4;47:1;     39:1,7,9;40:20;44:9,15;   49:25;51:23;52:2;63:11;     47:15;75:18;77:10;   70:2;74:3;81:7     113:3;114:5,12;121:11,   topographic (1)     16;122:13;166:4;167:14   49:13   tr     hanks (1)   53:17,20;104:20,25   tr     158:10   53:17,20;104:20,25   tr     nick (1)   91:19   91:19     nicker (1)   tops (1)   91:19			
9:6;25:2;105:10;114:8took (6)estimony (1) $48:22;56:2;86:17;$ $76:20$ $91:9;154:12;158:17$ ests (22)top (10) $25:6;26:10,19,21,25;$ $22:18;41:4;47:1;$ $39:1,7,9;40:20;44:9,15;$ $49:25;51:23;52:2;63:11;$ $47:15;75:18;77:10;$ $70:2;74:3;81:7$ $113:3;114:5,12;121:11,$ topographic (1) $16;122:13;166:4;167:14$ $49:13$ thanks (1) $53:17,20;104:20,25$ trick (1) $91:19$ $103:24$ $91:19$ nicker (1)tops (1)	,		
$\begin{array}{llllllllllllllllllllllllllllllllllll$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{c} \text{sts} (\textbf{22}) \\ 25:6;26:10,19,21,25; \\ 39:1,7,9;40:20;44:9,15; \\ 47:15;75:18;77:10; \\ 113:3;114:5,12;121:11, \\ 16;122:13;166:4;167:14 \\ \textbf{hanks} (\textbf{1}) \\ 158:10 \\ \textbf{hick} (\textbf{1}) \\ 103:24 \\ \textbf{hops} (\textbf{1}) \\ \textbf{tops} (\textbf{1}$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
47:15;75:18;77:10; 113:3;114:5,12;121:11, 16;122:13;166:4;167:1470:2;74:3;81:7 topographic (1) 49:13trhanks (1) 158:10topographical (4) 53:17,20;104:20,25trhick (1) 103:2491:19 91:1991:19 tops (1)			
113:3;114:5,12;121:11, 16;122:13;166:4;167:14topographic (1) 49:13trhanks (1)topographical (4) 53:17,20;104:20,25trick (1)topol (1) 91:1991:19icker (1)tops (1)	39:1,7,9;40:20;44:9,15;	49:25;51:23;52:2;63:11;	
16;122:13;166:4;167:14   49:13   tr     hanks (1)   topographical (4)   tr     158:10   53:17,20;104:20,25   tr     nick (1)   topol (1)   91:19     nicker (1)   tops (1)   10			
hanks (1)     topographical (4)       158:10     53:17,20;104:20,25     tr       nick (1)     topol (1)     91:19       nicker (1)     tops (1)     103:24			
158:10 53:17,20;104:20,25 tr   nick (1) topol (1) 91:19   nicker (1) tops (1) 103:24			tr
nick (1) topol (1)   103:24 91:19   nicker (1) tops (1)			<b>t</b> =
103:24 91:19   nicker (1) tops (1)			u
nicker (1) tops (1)			
			tr

otally (1) 124:11 ouched (1) 121:24 ough (1) 124:9 oward (2) 57:15:156:4 rade (1) 120:24 rail (1) 41:13 rained (2) 129:7;165:10 raining (17) 5:13,21;6:5;60:23; 129:4,6;164:5,9,13; 165:11;166:14,22;167:2, 12,13,21;168:15 rainings (1) 75:22 **TRANSCRIPT** (2) 5:1;118:18 ransect (1) 144:25 ransects (2) 127:9;146:12 ransition (6) 137:15;141:9,14,24, 25;142:16 ransitional (1) 137:20 ransitions (1) 142:7 raverse (1) 142:2 raverses (1) 33:25 reated (1) 22:9 ree (4) 103:22,24;114:2,4 rees (75) 45:9,10,11,13;68:23; 69:17;70:8,9,23;74:2,5, 7,12;94:12,17;95:4,5,7, 9,10,12,15,19,21,22; 96:8,12,18,21,23,24,25; 97:4,10,22;98:8,22,22; 99:1,7,15;103:10,13,14, 18,18;104:13;105:15,18, 21,25;106:2,8,12,13,16, 18,19;108:16,20,24,25; 109:3;111:24;112:1,5, 12,14,18,23,24;115:17; 116:2,4,5 riangle (3) 43:9,9,12 ributary (8) 143:22;145:4;147:8,8; 157:5;159:11;161:20; 162:1 rick (1)

33:23 triggered (1) 11:10 Trochlell (1) 46:12 trouble (2) 97:9;111:22 truly (1) 33:11 trust (2) 149:20,22 try (2) 75:13;121:23 trying (20) 10:18;12:17;20:4; 22:23;33:23;40:7,8; 43:19;55:19;60:13;98:9; 99:5;100:20,25;105:20; 113:8;118:7;134:21; 139:17;153:22 turn (4) 23:11;75:9;88:20; 137:8 turning (1) 47:22 two (21) 37:21;39:6;40:17; 42:9;65:18;81:21;90:25; 100:4,5;120:12;122:19, 21;127:10,11;146:20; 148:14:151:2:155:16, 20;158:19;168:17 two-year (1) 76:11 type (20) 12:9;13:12;18:15; 26:19;37:21;45:2;66:18; 72:17,24;74:13;75:18; 76:18;87:3;99:11;102:1, 4;118:10;124:19; 133:10;156:2 types (1) 102:10 Typically (3) 67:1;124:6;129:11 U ultimate (1) 27:3 uncertified (1) 51:4 unclear (3) 29:18;70:22;84:18 under (15) 8:10;11:7;13:11;18:1, 1,3;22:6;25:4;36:19; 52:6;56:4;66:9,17; 103:6:139:17 Understood (6) 50:18,20;107:10,21;

121:22;162:25

undertake (1)

14:13	131:19	visits (7)	31:24;37:11;58:18,22;	137:4,9,22;138:14,15,
unfair (1)		25:16,18;27:1;39:12;	74:25;90:8;99:20;133:7;	17;142:8,15,16,17,21;
63:21	V	77:17;88:9;158:18	144:22;149:21;157:7;	143:23;144:3;146:21,23
unfairly (1)	-	Visual (3)	162:5	wetlands (20)
39:16	vague (9)	72:19;73:23;113:25	waterways (27)	11:6,21;15:18;17:18,
Unfortunately (1)	16:5,14;17:10;20:22;	72.17,75.25,115.25	9:21;11:6,21;15:18;	23;18:11;19:1;38:9;
		W		
68:24	96:2,4,13,15;121:23	vv	17:18;35:21;37:8,13;	67:17;82:24;83:13,15;
University (1)	vaguely (2)		44:20,21;49:2;60:6;	85:23;86:3;89:16;115:4;
128:20	23:24;134:12	wait (2)	62:1,2,8,12,25;63:5,14;	133:7;137:16;145:5;
unless (2)	vagueness (2)	6:9;34:6	74:1;113:2;122:11;	162:11
38:20;42:19	78:3,6	Wakeman (2)	144:25;145:8;148:24;	wettest (1)
unnamed (6)	valid (1)	46:12;124:10	162:20;164:2	98:18
143:21;145:4;147:8;	60:15	Walgreen (1)	Waukesha (2)	What's (11)
157:5;159:11;162:1	validate (1)	13:3	20:16;92:14	22:1;66:9,16;82:7;
unordinary (1)	47:7	Walgreens (4)	wave (1)	88:18;104:16;113:23,
90:25	valuable (1)	13:17;17:22;19:3;	155:5	23;163:25;167:3;170:11
unusual (1)	89:21	20:18	way (25)	whatsoever (1)
99:14	value (1)	walk (2)	32:13;44:24;51:17,21;	36:22
up (29)	89:24	58:17;154:10	52:6;56:25;59:21;75:14;	whole (2)
11:22;22:18;23:6;	values (2)	walked (1)	77:8;78:9;103:5;105:7;	36:23;79:11
25:24;32:12,15,19;	90:1,2	112:23	110:2;112:22;113:3,13;	wide (17)
34:10;42:4;48:17;49:4;	vantage (9)	walks (1)	117:3;119:22;121:22;	32:8;33:3,6,7,8,11,24;
57:10,23;62:15;83:5;	95:16;106:24;107:20;	110:7	141:17;156:24;165:16,	65:20,24;66:3,22;67:5;
93:19;95:15;107:25;	112:6,11,15;114:17;	wants (8)	24;168:18;170:13	68:4,5;71:21;72:1;156:8
111:7;112:7,7;118:21;	115:2;116:8	14:13;18:18;19:17,19;	ways (2)	widest (1)
126:7;128:6;130:3;	variable (3)	20:7,9;123:11,14	23:6;102:13	65:23
143:8;159:20;160:10;	76:7;100:10;120:15	warden (4)	weather (2)	width (5)
161:11			76:7;77:18	
	various (3)	60:20,21,24;61:8		34:5;154:23;155:9,11;
upland (1)	75:20;131:12;134:1	water (89)	website (1)	156:7
137:21	vegetated (1)	7:10;9:11;17:15;18:2;	92:12	wildlife (3)
upon (15)	31:2	19:1,6,12,18,19,20;20:8,	Webster's (1)	11:4;21:8;90:1
13:20,21,22;20:15;	vegetation (6)	10,12,13;22:3,4;29:16;	100:16	wind (1)
64:19;67:2,16,19;68:8,	103:20;114:2,3;148:1;	34:21;39:21;40:1;44:20;	weeks (1)	155:4
12;70:3;73:23;75:21;	155:18;156:6	57:6,7;60:14;61:21;	118:20	Winter (1)
76:7;103:5	velocity (1)	66:4;67:25;68:6,23;	Welch (1)	145:22
upper (1)	156:19	69:18;73:14;75:14;	26:1	Wisconsin (2)
54:3	Veoraskas (1)	89:20,21;90:25;98:7,11,	welcome (4)	83:25;145:1
upset (1)	38:5	12,20;99:13;110:6,7,8,	27:10;64:1;79:7;80:20	withdraw (2)
61:1	V-E-P-R-A-S-K-A-S (1)	12,14,15;117:17,21;	well-defined (1)	94:19;149:1
use (18)	38:5	118:8,12;119:4,6,7;	155:2	within (16)
12:10;38:10;47:25;				
	verging (2)	124:6;126:16,21,22;	weren't (2)	11:17;20:15;47:20;
50:12;90:8;93:10;99:24;	77:6;83:4	127:4;128:21;130:23;	112:15;162:3	48:10;60:7;75:16;125:7;
102:6;112:3;116:9;	verification (1)	131:12,17,19;140:16;	west (23)	134:14;143:5;151:18;
130:11;133:8;135:17;	36:7	143:6,7,8;144:21;	23:18;24:1,15;29:16,	157:18;158:10;160:24;
162:15,21;169:18,19,24	verify (2)	146:19;147:24,24;	23;40:15;51:18;81:11,	161:20;166:14;167:3
used (28)	59:17;60:3	148:19,22;149:5,15,19,	22;109:12;110:10,22;	without (5)
62:3;65:5;90:7,10;	version (1)	24;150:3;154:20,24;	111:15,16;126:24;	32:10;81:5;166:25;
91:18;92:13;100:24;	79:25	155:7;156:9,13,15,24;	127:20;138:13;141:12;	167:4,5
101:12;112:25;113:15;	versions (1)	160:25;162:10;165:10;	142:12;143:24;144:4;	witness (60)
135:2;159:1;162:4,8;	134:1	167:18	146:22;147:5	5:4,18;6:12;17:14;
163:17;164:17,19,22,23;	versus (1)	watercraft (6)	western (6)	24:3,19;25:3;26:24;
165:7,13,19,20;166:21,	44:10	34:22;37:14;39:22;	20:15;30:13,25;31:6;	28:6;29:5,8;30:3,8;
23;167:13,20,21	vicinity (2)	58:12;60:17;77:21	109:15;147:22	31:14;49:12;50:22;
uses (3)	88:8;93:20	waters (22)	wet (2)	52:14;53:5;54:21;56:11;
11:15;12:20,22	view (3)	9:25;18:6,12,20;	76:16;98:14	59:14;67:8,11;71:7,9;
Using (4)	92:13;137:19;167:7	19:10;20:20;21:3,13;	wetland (42)	84:14;88:7;94:4,23;
27:23;41:10;89:24;	Village (2)	23:3,4;68:7,10;70:2;	11:1,13;13:1;17:16;	95:13;98:5;99:9;107:16;
100:21	26:20;75:3	85:13;118:7;119:4;	25:13;31:3,7,11;34:12;	108:19;109:1,19;
utilize (2)	visit (4)	121:12;122:17;125:12;	38:2;42:9,15;44:4;	112:10;114:23;115:22;
90:15;166:13	40:23;60:12;76:13;	126:2,4;127:2	58:18;74:23;83:23;	120:7,11;132:7;135:20;
utilized (2)	154:17	waterway (20)	89:25;90:8;109:14,18;	136:25;137:19;139:5;
122:14;167:1	visited (1)	11:1,12;13:1;25:12;	110:23;111:1;115:2;	140:15,20;143:25;
utilizing (1)	98:13	28:14,21,25;29:23;	125:21;127:9,25;133:6;	140.15,20,145.25, 147:15,20;148:11,14;
uunzing (1)	20.15	20.14,21,23,29.23;	123.21,127.9,23,133.0;	147.13,20,140.11,14;

151:6;161:6,9,12;162:3; 165:4;166:12 <b>WMS (2)</b> 101:18;167:2	78:11;83:11;108:9; 129:1;142:14 <b>yesterday (3)</b> 5:8,19;62:17		
<b>wonder (1)</b> 91:13	Z	-	
wondering (1) 100:5 Wood (5) 124:14;138:7,23,25;	<b>zero (4)</b> 98:10;100:9;101:9; 102:22		
160:3 Woods (1)			
124:13 word (5)			
24:24;31:16;44:18; 97:6;101:12 words (8)			
13:2;26:19;44:8;48:2; 61:10;66:20,25;114:7 work (39)			
15:20;47:18;48:9,19; 49:7,9,13,17,18,20;			
50:13,23,25;51:5;52:24; 53:6;54:6,9,23;59:3,6, 12,14,24;60:3;75:22; 122:7,9,11;124:18,20;			
127:1;128:2,3,25; 132:10,23;135:12;141:4 worked (2)			
124:5;129:2 working (2) 7:18,21			
works (3) 11:10;12:17;14:3 wrap-up (1)			
120:22 write (1)			
31:11 wrong (1) 23:1			
wrote (1) 29:3			
X	_		
<b>Xs (1)</b> 48:1	-		
Y	-		
Yaggy (1) 26:1			
year (4) 73:10;75:15,20;76:5 year-round (1) 104:2			
<b>years (1)</b> 133:13			
yellow (7) 53:12;57:5;81:11,19, 20;82:25;83:8 Yep (9)			
30:6,11;55:22;57:22;			