2003 - 0331-A

# WHITEFORD, TAYLOR & PRESTON

210 WEST PENNSYLVANIA AVENUE Towson, Maryland 21204-4515

> 410 832-2000 FAX 410 832-2015 www.wtplaw.com

1025 CONNECTICUT AVENUE, NW WASHINGTON, D.C. 20036-5405 TELEPHONE 202 659-6800 FAX 202 331-0573

1317 KING STREET ALEXANDRIA, VIRGINIA 22314-2928

RECEIVED

APR 3 2003

ZONING COMMISSIONER

JENNIFER R. BUSSE

SEVEN SAINT PAUL STREET BALTIMORE, MARYLAND 21202-1626

TELEPHONE 410 347-8700

FAX 410 752-7092

20 COLUMBIA CORPORATE CENTER

10420 LITTLE PATUXENT PARKWAY

COLUMBIA, MARYLAND 21044-3528

TELEPHONE 410 884-0700 FAX 410 884-0719

> DIRECT NUMBER 410 832-2077 jbusse@wtplaw.com

> > April 2, 2003

The Honorable Lawrence E. Schmidt **Baltimore County Zoning Commissioner** 4th Floor, Room 405 401 Bosley Avenue Towson, Maryland 21204

> Re: Woodholme Reserve Case # III-377, 03-331-A

Dear Mr. Schmidt:

Enclosed please find a copy of the testimony of David S. Thaler from the hearing in the above-referenced matter which occurred on March 13, 2003. It is my understanding that you requested a copy of this transcript for the record.

Please feel free to contact me with any questions or concerns.

Sincerely

Jennifer R. Busse

JRB:sll Enclosure

CC:

David S. Thaler, P.E., L.S. Iron Horse Properties, LLC

27282802

IN RE:

\* BEFORE HEARING OFFICER/

WOODHOLME RESERVE

DEVELOPMENT PLAN

\* ZONING COMMISSIONER

Case No. III-377

\* OF BALTIMORE COUNTY

Case No. 03-331-A

\* March 13, 2003

Testimony of DAVID S. THALER, taken in the

above-entitled matter before the Hearing Officer/Zoning

Commissioner of Baltimore County at the Baltimore

County Office Building, 111 West Chesapeake Avenue,

Room 106, Towson, Maryland 21204, at 10:40 a.m., March

13, 2003.

\* \*

BEFORE:

LAWRENCE E. SCHMIDT, Esquire
Hearing Officer/Zoning Commissioner

### APPEARANCES:

- C. WILLIAM CLARK, Esquire
  On behalf of Cobblestone Homeowners'
  Association, Inc., Rhona Fisher, and
  Nadine Weinstein
- G. SCOTT BARHIGHT, Esquire On behalf of Developer

Reported By:

Susan E. Smith, RPR

Personal appropriate to Monthly

AA C	odnomie Reserve Multi	-Pa	ige	David Thater - 3/13/03
	Page 2			Page 4
-1	* * * *	1		MR. SCHMIDT: Every now and then stand
2	DAVID S. THALER,	2	up or	something so we don't lose sight of you,
3	called as a witness, having first duly affirmed to tell	3	Mr.	Clark. I'm sorry.
4	the truth, the whole truth, and nothing but the truth,	4	100	MR. BARHIGHT: I like that role where
5	was examined and testified as follows:	5	he ju	st keeps on saying no objection.
6	MR. SCHMIDT: Mr. Thaler, your name and	6	Q	Mr. Thaler, you're familiar with the
7	business address for us is fine, for the record.	7	Wood	dholme Reserve project?
8	THE WITNESS: David S. Thaler, Box	. 8	Α	Intimately.
9	47428, Baltimore, Maryland 21244. I'm the	9	Q	And so we can get this introduced as an
10	president of D.S. Thaler & Associates, and I	10	actua	l exhibit, the developer's exhibit that's
11	appreciate the commissioner's indulgence today for	11	ident	ified as 1A and 1B on the board, which has
12	letting me hop around.	12	been	introduced so far for identification purposes
13	MR. SCHMIDT: Not a problem.	13	only,	was this created by your office and at your
14	DIRECT EXAMINATION	14	direc	tion and supervision?
15	BY MR. BARHIGHT:	15	A	Yes.
16	MR. BARHIGHT: Mr. Schmidt, let me ask	16		MR. BARHIGHT: I'd like to introduce
17	two or three really quick questions to qualify Mr.	17	this a	s Developer's Exhibit No. 1A and 1B.
18	Thaler as an expert, principally because there are	18		MR. SCHMIDT: Any objection, Mr. Clark?
19	many people in the room who aren't familiar with	19		MR. CLARK: No.
20	his background and qualifications.	20		MR. SCHMIDT: So admitted.
21	Q I can combine them all, and you can	21		(Developer's Exhibits 1A and 1B,
- 4	Page 3			Page 5
1	just tell me the answers: your educational	1	admi	tted into evidence.)
2	background and work-related background and whether	2	Q	Mr. Thaler, I'd also like to direct
3	you've testified previously as an expert in civil	3	your	attention to any past activities that you
4	engineering, development, planning and zoning	4	have	had an opportunity to be involved with as it
5	issues in Baltimore County.	5	relate	es to the Woodholme Reserve property or the
6	A I have a bachelor's in civil, two	6	Taste	et (phonetic) property as others might know
7	master's degrees, did my Ph.D. work all except for	7	it. I	lave you had an opportunity to be involved in
8	the dissertation. I've taught at more than a	8	this p	project in the past?
9	dozen colleges and universities. I've been	9	. A	Yes. We've done numerous projects in
10	accepted as an expert at numerous courts and	10	this 1	particular area. Specifically we did the
11	quasi-judicial bodies. I've testified here for	11	Cobb	plestone project. And it's already been
12	almost thirty years.	12	allud	ed to several times: I'm sure the
13	MR. BARHIGHT: I'd like to offer	13	comi	nissioner well remembers the 1996 case where w
14	Mr. Thaler as an expert in civil engineering, land	14	testif	ied.
15	development, planning and zoning.	15	. Q	Okay. To lay a further foundation,
16	MR. SCHMIDT: Okay. Mr. Thaler has	16	have	you had an opportunity to review the storm
17	testified numerous times, and I will accept him.	17	wate	r management issues relative to the subject
18	MR. CLARK: No objection.	18	prop	osal?
19	MR. SCHMIDT: Mr. Clark, I'm sorry.	19	. A	Yes, sir.
20	MR. CLARK: I realize I'm just a potted	20	Q	Have you also had an opportunity on
			* *	4

21 plant over here.

21 several occasions, perhaps numerous, to visit the

Page 9

Page 6

1 field to be able to verify the suitability of

- outfalls in this case?
- A Well, I've been out here at least 25 3
- times in the last ten years or so, as recently as
- the day before yesterday.
- Q With all that foundation laid, the 6
- question that Mr. Hekler wants to ask more than
- any other, and I'm sure is on everybody's mind, is
- if you said the outfall was not suitable in 1996,
- how can you possibly say that it's suitable today? 10
- A That's a fair question, but the real 11
- answer is it's a different outfall. Okay. There 12
- was a problem in 1996. We believed -- we still 13
- believe -- that the outfall proposed in 1996 was
- unsuitable. This is a different outfall, and we
- believe that we have solved the problem. 16
- Q Could you please explain that opinion. 17
- Q (MR. SCHMIDT) And Mr. Thaler, just 18
- because I took a look at the opinion I wrote, but 19
- I didn't review the old plan, the old case, so if
- you could, for my benefit, and maybe it would be

1 come down the right-of-way on the south side of

- 2 the road, and the fourth was to wait for the
- county to fix it.
- And the commissioner -- the only
- outfall that was available at that time was to
- come down the middle of the road and tie into the
- 24-inch storm drain.
- Q Because I recall there was testimony
- from the landowner on the other side of Mount
- Wilson --
- A It was Mr. Hekler. 11
- Q -- Mr. Hekler, that he was not going to 12
- agree to convey or allow any kind of easement
- 14 across his property.
- A That's absolutely right. So you had 15
- the title situation, let me remind the 16
- commissioner. On the north side land was owned by 17
- the predecessor of Cobblestone, Mr. Greenebaum or
- one of his companies. He said he wasn't giving
- the right-of-way. Mr. Bennett was at the hearing.
- On the south side there was a 30-foot 21

Page 7

- helpful to others, compare what was proposed then
- even as opposed to what you're doing now.
- A Okay. It's similar, and that's why I 3
- think everybody is a little bit confused. But
- it's really a completely different outfall.
- The old case -- well, there is an old 6
- 24-inch corrugated pipe, corrugated metal pipe
- that goes under Mount Wilson Lane that must be 50
- or 75 years old. The pipe is undersized, like
- they all are of that age, and certainly won't
- carry a hundred-year storm. It probably carries a 11
- two-year storm, I would guess. And the prior
- outfall, though I don't want to belabor this, was
- to come down Mount Wilson Lane and tie into that
- pipe. 15
- The commissioner may recall that there 16
- were four so-called options proposed at that time.
- One was to come in on a right-of-way to the north
- side of the road. The other -- they were a little
- combined. One was to come down the middle of the
- road. The other was to come -- the third was to

strip of land owned by the prior developer of

- 2 Pikesville Farms. Nobody knew who he was. He
- wasn't giving a right-of-way. And Mr. Hekler, who
- lived on the south side yet said he wasn't giving
- a right-of-way.
- And the commissioner characterized the
- testimony as "trust me," and apparently didn't
- trust the solution that one of these -- that
- sufficient right-of-way was going to be --
- Greenebaum wasn't going to give it. Nobody knew
- where the Pikesville Farms guy was. Mr. Hekler
- wasn't going to give it, and the county may
- condemn it sometime in the future. And you
- characterized that testimony -- as you said it was
- "trust me" testimony and you didn't feel
- comfortable with it.
- Again, we feel -- we felt then -- that 17
- tying to that 24-inch was -- you can't do it.
- It's full of water. You couldn't put more water
- into a pipe that's already full. We felt it was
- unsuitable then. We haven't changed that opinion.

Page 13

-		4 /
L	2000	
	azu	. 10

- But that's not what we're doing, okay.
- 2 We're not tying into the 24-inch, and let me
- 3 explain it. Quite a few things have changed since
- 4 then. Principally what's changed is the
- 5 right-of-way got acquired, and it got acquired
- 6 about two and a half years after the prior
- 7 hearing. And I have a deed from December 9, 1998.
- 8 It's actually from Fred Homan to Baltimore County.
- 9 And the deed number is 13441, Folio 550. It's a
- 10 right-of-way deed. And it acquires the -- it
- 11 acquires the 30 feet of land on the south side of
- 12 the road that was owned by, I think it's called
- 13 Pikesville Farms, although that fellow's name
- 14 isn't in here. And it relates to a tax sale. I
- 15 think Mr. Homan bought it in a tax sale and
- 16 acquired it for Baltimore County.
- 17 So you may wish to put this deed in, if
- 18 Mr. Clark has no objections.
- MR. CLARK: No. 19
- A And that's the principal, that's the 20
- 21 most relevant changed circumstance.

- Q Where is that right-of-way located,
- 2 Mr. Thaler?
- A That right-of-way -- I'm going to show
- 4 you a picture of it, but it's the 30 feet
- 5 immediately south of Mount Wilson Lane. And it's
- 6 from here to here. It's that 30 feet just before
- you get to Mr. Hekler's property.
- MR. HEKLER: It's including my
- property, because I will make a point -
- THE WITNESS: Well, let me finish,
- 11 Milo, and then it's your turn. Just hang on.
- Q (MR. BARHIGHT) Perhaps I could ask 12
- 13 Mr. Thaler to approach, and using the exhibit
- 14 that's before Mr. Schmidt right now, which is page
- 15 515 of that deed. You've highlighted the portion
- 16 that you believe is especially appropriate to
- 17 point out to Mr. Schmidt. If you could use that
- 18 document and go ahead and relate it to the
- 19 document that's on the board, Developer's Exhibit
- 20 No. 1A.
  - A This is a right-of-way deed, and it has

- 1 the old, a piece of the old plat that goes back to
- 2 1998 associated with this. And here is the
- 3 30 feet between the prior existing right-of-way
- 4 for Mount Wilson Lane and Mr. Hekler's property.
- 5 So here is 30 feet that's been acquired by
- 6 Baltimore County.
- Q (MR. SCHMIDT) So this strip which is
- highlighted in yellow, this is a right-of-way that
- 9 has been acquired?
- A Yes, sir. 10
- O So who is the underlying fee owner?
- A Baltimore County. 12
- 13 Q Okay. So Baltimore County.
- A What I presume is, although frankly 14
- 15 I've never seen one quite like this, is that Mr.
- Homan bought it back in at tax sale and conveyed
- 17 it to Baltimore County. And so the grantor is
- Fred Homan and the grantee is Baltimore County,
- Maryland. And this is a fee simple deed.
- 20 Q (MR. CLARK) And just for the record, if
- 21 I might interject just for a second, on this Leo
- 1 Rader plat that's attached, what is referred to as
- 2 lot No. 3, this is actually Hekler's property.
- A Yes. 3
- MR. HEKLER: And to clarify --
- THE WITNESS: Just hang on, Milo. 5
- A And he may be -- of course Mr. Hekler
- is going to speak for himself, but there is a
- little springhouse that two-thirds of it is out in
- what is now county fee simple ownership, and I'm
- not going there.
- 11 Q (MR. SCHMIDT) Okay. All right. So
- what you're saying, Mr. Thaler, is that Pikesville
- 13 Farms owned this strip originally?
- A Yes. 14
- Q Baltimore County bought it because 15
- 16 taxes were not paid on it?
- 17 A I believe, yes.
- Q And now Baltimore County is the owner 18
- 19 of this 30-foot strip?
- 20 A Yes.
- 21 Q Okay.

			.8-
	Page 14		Page 16
1	MR. BARHIGHT: I'd like to introduce	1	MR. SCHMIDT: I'll mark it as
2	that as Developer's Exhibit No. 2, please.	2	Developer's No. 4A, since there are others to
3	MR. SCHMIDT: Well, it's actually No. 3	3	follow.
4	because No. 2 was the letter.	4	(Developer's Exhibit 4A, marked for
5	MR. BARHIGHT: Excuse me. Thank you.	5	identification and admitted into evidence.)
6	(Developer's Exhibit No. 3, marked for	6	A And I think I'm going to maybe talk
7	identification and admitted into evidence.)	7	from that one. This outfall, the end of this
8	MR. SCHMIDT: Mr. Hekler, I'm going to	8	outfall is right, will be right in this area. So
9	give you a chance to ask questions and all that.	9	it will I'll talk about it a little bit more,
10	MR. HEKLER: I just wanted to see the	10	but a pipe is going to run down Mount Wilson Lane,
11	plat.	11	and it's going to discharge into a Gabion velocity
12	MR. SCHMIDT: You want to take a look	12	brake right here in this area now owned by the
13	at it again?	13	county and go into the stream, completely
14	MR. HEKLER: Because, you know, it's	14	different than what was proposed last time, which
15	coming back.	15	was to tie into the culvert that you can see in
16	THE WITNESS: Mr. Barhight, may I carry	16	the picture. It will come down the road, go
17	on?	17	through that little bank, and has this whole area
18	MR. BARHIGHT: Yes, please.	18	in here upon which to discharge into that stream.
19	THE WITNESS: I've already shown this	19	Q So that, Mr. Thaler, this photograph
20	to Mr. Clark. This is the picture of the area	20	and the culvert that's sort of hidden, but I can
21	that you just looked at. I took that picture on	21	see it, this is, just so I'm clear, this is where
	Page 15		Page 17
1	Page 15 Tuesday morning.		Page 17 the 24-inch pipe is right now?
2	Q (MR. SCHMIDT) And I assume this small	2	
3	building with the brown roof is the springhouse	3	Q So the 24-inch pipe is not going to be
1	building that's partly on the county property	1	used at all in connection with this property?
	apparently?	5	A Correct. And that's the difference.
5		3	
6	A Yes. And you can see that the property line comes through just about like that,	6	
7		7	
8		8	
9		9	
10		10	
11	MR. BARHIGHT: The witness is	11	Q South side. The development is on the
12		12	
13		13	
14		14	
15	MR. SCHMIDT: Okay.	15	
16		16	
17		17	
18		18	
19		19	
20		20	
21	objection.	21	ahead.

- 1 A But this is the outfall end, and then
- 2 it discharges into a little stream that runs --
- 3 Q That's the stream that goes behind
- 4 Mr. Hekler's property, among others?
- A Yes. And here are some pictures of it,
- 6 also taken by me. I don't think I showed
- 7 Mr. Clark that one. Here's another picture where
- 8 you can see the outfall. And that's a little
- 9 stream that runs down through Pikesville Farms.
- MR. BARHIGHT: I'd like to introduce
- 11 these as Developer's Exhibits 4B and 4C showing
- 12 the actual stream outfall.
- 13 (Developer's Exhibits 4B and 4C,
- 14 marked for identification and admitted into
- 15 evidence.)
- 16 Q Now, I know there was concern last time
- 17 at the last hearing about the capability of this
- 18 stream and whether this stream might get eroded as
- 19 a result of water being dumped into it, I believe.
- 20 A I'd like to come to that in just a
- 21 minute in the context of the storm water
- Page 19

- 1 management.
- 2 Q As long as you cover it somewhere along
- 3 the line, that's fine.
- 4 A But you can see what the real problem
- 5 with the stream is, is that the back yards are
- 6 graded right down to the stream. Well, you know,
- 7 the stream will handle somewhere between a
- 8 one-year and a two-year storm. When a
- 9 hundred-year storm comes down, of course the water
- 10 is out, you know, over the banks. And that was
- 11 sort of the issue. But I'd like to explain the
- 12 rest of it in the context of the whole storm water
- 13 management.
- 14 The storm water management well, one
- 15 other thing. This picture, these are the two
- 16 houses right across the street, and these two
- 17 homes are right here. These are the two houses
- 18 just upstream of Mr. Hekler's house. It's Lot 20
- 19 -- it's Bowler and Bowler, Jennifer Bowler and
- 20 Betty Bowler. And what you can see is, in the
- 21 current condition, that the water is running over

- 1 their front yards right now.
- 2 MR. BARHIGHT: I'd like to introduce
- 3 that as Developer's Exhibit 4D, please.
- 4 MR. SCHMIDT: Okay.
- 5 (Developer's Exhibit 4D, marked for
- 6 identification and admitted into evidence.)
- And the last picture I want to bring to
- 8 the commissioner's attention, this is a picture of
- 9 the corner of Iron Horse Lane and Mount Wilson
- 10 Lane. And what I want to bring to the
- 1 commissioner's attention is the ice in the middle
- 2 of the road, which I slipped on and did not help
- 13 this antique body at all. But there was a big ice
- 14 patch right down the middle of the road.
- 15 And what you can see, that's visual
- 16 evidence that the water is running across the road
- 17 and then across the front yards of the two
- 18 Bowler -- running across the road and then across
- 19 the front yards of the two Bowler properties.
- 20 That's what's happening now.
- 21 So right now you have about two-thirds
  - Page 21
  - of the site, of the water off the site, leaving
- 2 the corner, which you can see in that picture.
- 3 It's going across the intersection of Mount Wilson
- 4 Lane, Orchard Road, and Iron Horse Lane, and it's
- 5 running across the front yards of the two Bowler
- 6 properties, across Mr. Hekler's front yard, and
- 7 then finding its way to the stream. That's the
- 8 existing condition.
- Now, here is the proposal. Several
- things have changed since 1996. This right-of-way
- 11 on the south side has been acquired. Just for
- 12 your information, the right-of-way on the north
- 13 side has also been acquired. Mr. Greenebaum
- 14 granted that to -- one of his companies granted
- 15 that to Baltimore County.
- Just for background, in 1996 a new
- 17 culvert was being designed at Mr. Greenebaum's
- 18 expense by our firm to replace this existing
- 19 culvert in Mount Wilson Lane. That was not done
- 20 at that time. That is now done, a plan is
- 21 approved, and Mr. Greenebaum has posted \$56,000 as

Page 22

- 1 his share for the construction of that culvert.
- 2 Although I understand from Mr. Bowling's office
- 3 that there may be some slightly different
- 4 modifications to it.
- 5 Q Now, is that to replace the 24-inch
- 6 culvert?
- A It's to replace the 24. Not that
- 8 that's really relevant to the outfall, but I just
- 9 want to bring that -- everybody has raised the
- 10 question -- I think it's a fair question -- why do
- 11 we appear to be 180 degrees opposite, and the
- 12 answer is a lot of things have changed since 1996.
- 13 So you have rights-of-way on both sides
- 14 acquired, you have the culvert that was
- 15 anticipated now designed and approved, and you
- 16 have the private money posted up to construct it.
- 17 But that culvert has nothing to do with this
- 18 outfall. That's only information.
- 19 Now, something else has changed. And
- 20 what that is is we have new, dramatically
- 21 different storm water management regulations than

Page 23

- we did in 1996, and I'm not sure if the
- 2 commissioner has heard any recent cases on the new
- 3 regulations.
- 4 O I have.
- 5 A Okay. Then I'll be
- 6 uncharacteristically brief. We are proposing a
- 7 series of facilities in the lower corner of this
- 8 property. And these facilities actually do five
- 9 things. And what they are is, first of all, it's
- 10 kind of a sedimentation pit. Then it's a sand
- 11 filter. Then it's a gravel storage area under
- 12 that. And then it's a detention basin. That's
- 13 what it is physically and is shown on the plan.
- 14 The calculations that support this have all been
- 15 submitted to DEPRM.
- Now, here is what it does. In terms of
- 17 the management, it manages the one-year storm,
- 18 which is the new regulation. They call that
- 19 channel protection management. It manages the
- 20 ten-year storm, and it manages the hundred-year
- 21 storm. So you have three things in terms of

1 quantity, in terms of discharge that are managed.

- Now, discharge is, of course, rate.
- 3 It's volume per unit of time, cubic feet per
- 4 second or gallons per minute. In addition to
- 5 that, it has two other things: it has a water
- 6 quality volume and it has a recharge volume under
- 7 the new regulations. And the sand filter and the
- gravel bed are sized for these two new volumes.
- They are far from insignificant. The
- 10 water quality volume, for instance, is 0.27 acre
- 11 feet. Now, that extraction out of the volume of
- 12 the storm, the amount of water, it is an
- 13 extraction away from the volume that's currently
- 14 leaving the site. So that you're managing the
- 15 discharge at one, ten, and a hundred, and you're
- 16 extracting further volume that you didn't have to
- 17 used to do in terms of both ground water recharge
- 18 and water quality.
- 19 Now, after the water goes through that
- 20 facility, it then goes into a proper storm drain
- 21 system. Now, because it will go into a proper

- 1 storm drain system, it will prevent the ice, the
- 2 water from flowing across the intersection that
- 3 you can see in the picture, and it will pick up
- 4 all the water that is now flowing across the
- 5 fronts of the two Bowler houses. So that the
- 6 flooding of those front yards that we understand,
- 7 we've talked to them, we've heard from them enough
- 8 so that we know it exists, but I can see the
- 9 evidence of it in the field, that will be picked
- 10 up and put into a storm drain. It will go to a
- 11 manhole. It will then make a 90-degree turn and
- 2 come out into a proper and suitable outfall under
- 13 a Gabion mat here just north of the existing
- 14 culvert.
- The stream itself is stable. It's well
- 16 defined. It's almost a textbook case of a -- when
- 17 you're not going in the pipe, it's really a
- 18 textbook case of a suitable outfall.
- 19 Now, you've mentioned this stream has
- been reported to filood, and of course it floods
  - because it's mowed right up to its edge. And

Page 26

1 anything more than a two-year storm, you're going

2 to see the water rise up. But quite a few things

3 have happened in the last six years.

Levinson's has developed, Cobblestone

5 has developed, this will develop, Howard Brown

6 shopping center, Woodholme Square and Woodholme

7 Square addition, Festival on the other side of the

8 street has developed. We've done, our firm has

9 done Cobblestone, Festival, hopefully this one,

10 and each of those have had storm water management.

11 And as each of the ones have come in, they have

12 all improved or lowered the amount of release of

13 water that's coming off the site. We have also

14 done some work on Woodholme Country Club, which is

15 the property owner -- for two facilities down

16 there, which is the property owner that's sort of

17 at the receiving end of all this.

18 And so that over time, all the

19 discharges on -- each party as it's come along has

20 reduced the discharges that have come off and have

21 improved the situation on this stream. And of

1 O I also want to identify a statement

2 that has been placed on the exhibit, Developer's

3 Exhibit No. 1B. It's identified as Suitable

4 Outfall Statement. Without reading this long

5 statement, could you please briefly explain the

6 nature and meaning of that statement as it relates

7 to this development plan.

8 A Well, I basically drafted that, and

9 that's the shorter version of what I just

10 testified to. I personally have gone out here as

11 late as Tuesday. I have personally verified this.

12 It is my professional opinion that this is a

13 stable and well-defined outfall, and under --

14 there's no real county regulations on it, but on

15 sort of the understanding or the customary

16 regulations -- they haven't been legally

17 adopted -- this is the textbook definition of

18 suitable outfall.

19 Q The last thing to address, which I'm

sure Mr. Hekler is going to have concerns about,

21 is we have an existing condition in the field that

Page 27

1 course, this one is going to do it, this property

2 would do it significantly, assuming the

3 commissioner wishes to approve it, because it's

4 coming in under the new regulations and has the

5 water quality and recharge volumes.

6 O (MR. BARHIGHT) Let me highlight a

7 couple of issues to make sure the record is clear.

8 I believe you've identified an existing condition

9 that relates to water flowing overland, if you

10 will, through the intersection of Iron Horse Lane

and Mount Wilson Lane, across the yards of the two

12 properties identified as Bowler in both cases on

13 the front of Mount Wilson Lane, and then into the

14 stream, across Mr. Hekler's property and into the

15 stream. How will our proposed condition change

16 that overland flood?

17 A Well, it won't be there anymore. It

18 will capture that water before it gets there. It

19 will go through the facility and be discharged in

20 a pipe that runs down the middle of Mount Wilson

21 Lane and out into the stream.

Page 29

1 relates to the flooding that occurs at the stream

2 banks today.

3 A Yes.

4 Q Are we going to in any way improve that

5 situation, or are we going to make that situation

6 worse?

7 A We're going to -- it's going to be

8 better after this construction.

9 MR. BARHIGHT: I have no other

o questions of this witness at this time. Again, we

11 are only focusing for this particular purpose on

12 the storm water management issue. If later we

13 need to go back to ask Mr. Thaler other issues,

14 I'd like to reserve the right to do that.

MR. SCHMIDT: Very well. Mr. Clark, do

16 you have any questions of Mr. Thaler?

17 MR. CLARK: I do. They're sort of in a

8 different venue, towards different pieces of this.

19 I don't know whether it might be easier for

Mr. Hekler, who probably has things fresh in his

21 mind about this particular stuff, to do that and

Page 30

1 then come back to my questions.

2 MR. SCHMIDT: Very well. And before we

3 get that, though, I wanted to ask Mr. Seeley,

4 because Mr. Seeley indicated about the comment,

5 the written comment from Mr. Wood of his agency

6 regarding storm water management.

Mr. Seeley, any questions of

8 Mr. Thaler, or just any comment at this particular

9 time?

10 MR. SEELEY: Yes, I do have a couple of

11 quick questions. I appreciate your allowing me to

12 ask him.

13 Q (MR. SEELEY) On the plan, Mr. Thaler,

14 you have it labeled as a Proposed Temporary

15 Outfall. I was wondering if you could explain

that and then describe what the permanent outfall

17 would be. You've crossed it off. But can you

18 just describe it a little bit, about the Gabion

19 velocity dissipater?

20 A Let me talk about why it said temporary

21 on that. We have designed, we had an approved

1 A Yes, sir.

2 MR. SCHMIDT: Okay.

3 Q If you don't mind, I understand it but

4 I was wondering if you can put it in laymen's

5 terms. When you develop a property and you put

6 more impervious surfaces on the property,

7 additional water running off the property, could

8 you just briefly explain how that water is held

9 back in this facility, and also the volume of

0 water which will be coming out of this outfall

11 after development as opposed to before

12 development, so it's clear for the people here?

13 A Are you interested in volume or

14 discharge?

15 Q Essentially both, if you could briefly

6 describe that.

17 A Okay. What storm water, what

18 traditional storm water management says and

19 basically what the case law in Maryland says,

20 which is the natural flow rule, is that the

21 upstream -- the downstream property owner is

Page 31

1 plan for a new culvert to replace the 24-inch

2 culvert and do a road widening. So our thought

3 was that when that gets built, that this would be

4 picked up and put into the end wall of that new

5 culvert.

12

16

6 But I understand that Mr. Bowling's

7 section is redesigning it, and so I don't know

8 exactly whether this is permanent or temporary.

9 It works either way.

10 Q (MR. BARHIGHT) When you say "this,"

11 what do you mean by this?

A The outfall which we've shown on the

13 plan, it is possible that the county, when it

14 builds the culvert, may incorporate this into the

15 end wall of the new culvert.

Q But that will be up to the county to

17 determine one way of the other?

18 A That's up to them. And it doesn't

19 matter one way or the other.

20 Q (MR. SEELEY) That's a Phase 2 design

21 issue basically?

Page 33

1 burdened with a servient easement that must accept

2 the so-called natural flow coming off the upstream

3 property owner, who is the dominant easement

4 holder, has the easement to pass the so-called

5 natural flow that comes off the property.

6 And the way that's sort of interpreted

since about 1975 under statewide and local storm

8 water management regulations is that when you

9 develop a property and you take trees down and you

10 build houses instead of grass, you inevitably

11 increase the amount of water. So that water must

12 be managed in certain ways. And until two years

13 ago, it was two, ten, and usually a hundred in

14 Baltimore County, and now it's one, ten, and a

15 hundred. And so that the water leaving the

16 property after it's developed can be no more -- it

17 has to be a little bit less than it was before on

18 those designs. And that's what it's designed to.

19 What's a little bit different about the

20 new regulations is that they also address volume,

21 really for the first time. And the difference --

- 1 discharge is volume over time, cubic feet per
- 2 second or gallons per minute. So what you would
- 3 do is you would take the increased volume and have
- 4 an orifice or some sort of structure to detain it
- 5 over time and release it at a rate that was less
- 6 than went out before there was development.
- 7 But what's addition to that now is you
- 8 have two additional volume controls. One is water
- 9 quality, which is a volume that you have to sort
- 10 of suck out of the mass of the storm, and the
- 11 other is ground water recharge. And these are
- 12 established by county law. How much volume you
- 13 have to manage is established by county law and by
- 14 state law.
- Does that answer your question,
- 16 Mr. Seeley?
- 17 Q (Indicating yes.)
- 18 Q (MR. BARHIGHT) So that if I understand
- 19 it correctly, not only under the new regulations
- 20 do we continue to have to minimize in some degree
- 21 the rate of flow of the water from our property to
  - Page 35
  - 1 downstream properties, but we're also now having
- 2 to manage additionally the volume --
- 3 A Yes.
- 4 Q -- regardless of the rate?
- 5 A That's correct.
- 6 Q (MR. SCHMIDT) So that actually what
- 7 you're saying, Mr. Thaler, is that the amount of
- 8 water, because of the storm water management
- 9 facility, as I understand your testimony,
- 10 notwithstanding the addition of the impervious
- 11 surface, the new road on this property, the
- 12 houses, the sidewalks, the driveways, but this
- 13 facility is going to collect that water,
- 14 essentially hold it and manage its quality as
- 15 well, and release it at a rate that is less than
- 16 what actually is happening out there today?
- 17. A That's correct.
- 18 O Okay. Obviously it will be okay.
- 19 Obviously it will be released at a slower rate, so
- 20 that typically now water may come at a very heavy
- 21 volume and in a very hard rate immediately after a

- 1 storm, and this will be a controlled release --
- 2 A Right.
  - Q -- both of volume and of rate?
- 4 A And what people are usually interested
- 5 in is rate, because you have a channel section.
- 6 And a higher rate raises the flood level, a lower
- 7 rate lowers the flood level. So sort of under
- 8 Maryland law and what your average homeowner is
- 9 concerned about is reducing the rate. And that's,
- 10 among other things, that's exactly what we're
- 11 doing here.
- 12 O Okay. Now, the design, the proposal
- 13 that you've submitted with the new, what I would
- 14 call the new outfall, not being the old 24-inch
- 15 culvert but the new outfall taking advantage and
- 16 utilizing the right-of-ways that you have
- 17 acquired, that's what has been submitted to DEPRM
- 18 for review?
- 19 A Yes, sir.
  - MR. SCHMIDT: And, Mr. Seeley, I've
- 21 been looking at Mr. Wood's comments, who is the
- Page 37
  1 reviewer. As I understand it, from a technical
- 2 standpoint Mr. Wood does not have an objection and
- 3 believes this meets the County's requirements in
- 4 terms of the computations and the technicality.
- 5 His last two sentences in there expressed a
- 6 concern that in view of a prior decision that I
- 7 had made that that issue be explained and
- 8 revisited during the public hearing.
- 9 But is it fair to say that -- I'm not
- 10 trying to put words in your mouth. I just want to
- 11 make sure that Mr. Wood is satisfied -- that from
- 12 a number of standpoints and a computation
- 13 standpoint, this will work from an engineering
- 14 standpoint?
- 15 MR. SEELEY: Yes, sir.
- 16 MR. SCHMIDT: Okay. Okay. All right.
- 17 Mr. Seeley is there anything else that you'd like
- 18 to ask Mr. Thaler?
- MR. SEELEY: No. I'd just like to make
- 20 one more statement, and that is I don't believe
- 21 Mr. Wood has seen this red-lined plan with the

Page 38

1 outfall statement on it.

- 2 Q (MR. SEELEY) Do you know if he's seen
- 3 that?
- 4 A He hasn't, but it's in the -- it's the
- 5 suitable outfall evaluation. It's virtually --
- 6 it's virtually the same statement.
- 7 THE WITNESS: Just give me about ten
- 8 seconds, Mr. Chairman.
- 9 MR. SCHMIDT: Sure.
- 10 A Here it is. That one is slightly
- 11 different.
- MR. SEELEY: The only thing I request
- 13 is that Mr. Wood gets to see this plan.
- 14 MR. SCHMIDT: Sure. And obviously, I
- 15 know in terms of Phase 2 issues, he'll do design
- 16 then. Okay.
- 17 MR. SEELEY: Right.
- 18 Q I don't know if part of your testimony
- 19 is reflected in that document or not, what you
- 20 just told us here about the difference between the
- 21 outfalls.

Page 39

- 1 MR. BARHIGHT: May I ask Mr. Seeley to
- 2 speak up.
- 3 MR. SEELEY: I'm sorry. I just wanted
- 4 to make sure what Mr. Wood is aware of what
- 5 Mr. Thaler testified to today.
- 6 A I actually did not highlight -- the
- 7 storm water management calculations and suitable
- 8 outfall statement just refer to this job as if it
- 9 were a brand new job. Today I highlighted my
- 10 testimony to highlight the differences between
- 11 1996 and today. That's not specifically going
- 12 to -- and I did that because the question was
- 13 raised.
- 14 Q (MR. SCHMIDT) But as I asked before, I
- 15 wanted to make sure what Mr. Wood has looked at in
- 16 connection with the project is the proposal that's
- 17 on the table today.
- 18 A Yes, sir.
- 19 Q He has seen this, maybe not the full
- 20 explanation of the distinction between now and
- 21 1996, but he has checked the technical. I know

- 1 that you're required to submit the computations
- 2 which show the amount, the volumes of the water,
- 3 the flows of the water in terms of those
- 4 mathematical calculations that are made under the
- 5 regulations, and I wanted to make sure that's what
- 6 he has seen.
- 7 MR. SCHMIDT: Mr. Barhight, the other
- 8 question is, I know we have the deed in, but these
- 9 right-of-ways have been acquired, correct? Just
- 10 to be sure.
- MR. BARHIGHT: That's my understanding
- 12 based upon Mr. Thaler's review of these records,
- 13 that that deed has actually been recorded among
- 14 the land records of Baltimore County.
- 15 THE WITNESS: It's got a recording
- 16 reference on it.
- MR. SCHMIDT: The reason I say that, I
- 18 just want to make sure, as Mr. Thaler
- 19 characterized my sort of opinion of the prior
- 20 testimony as "rust me, we're going to work this
- 21 out," and I was unwilling to trust them that they

- 1 would work it out, and that's why I denied the
- 2 plan in part.
- 3 O But my question and the focus of my
- 4 question is that this plan, this storm water
- 5 management plan, Mr. Thaler, is feasible because
- 6 the rights-of-vay which are necessary to build the
- 7 pipe, to build the storm water management
- 8 facility, obviously that's on your property. But
- 9 to actually insall the pipe, install the
- 10 hardware, as t were, as you have described it, is
- in place so that the developer can do that?
- 12 A Yes, sii. All rights-of-way to
- 13 implement this our to perfect this are existing.
- 14 All that has to be: done is actually do it.
- 15 Q So this is 1 10t -- because as we
- 6 discussed before, Mr. Hekler said no as to his
- 17 property last time, which certainly I understand
- 18 why he did that. But it's not necessary at this
- 19 point in time o acquire any kind of right-of-way
- 20 from him?
- 21 A Or anylodly else.

-			8
	Page 42		Page 44
1	Q Or anybody else.	1	it clear for everyone how it was done. So that is
2	MR. HEKLER: But what gave him the	2	my first answer to this dedication and all this.
3	right to discharge amount of water in my yard?	3	At this time I was not concerned with
4	MR. SCHMIDT: Well, I'm not sure	4	the future. When they designed, when they
5	well, let's get to that. Before we answer that	5	designed the Cobblestone, 115 houses, \$35 million,
6	question, Mr. Seeley, is there anything else that	6	nobody was thinking how to do it and how to do it
7	you have from Environmental Protection?	7	not to affect our life. They just dump it into
8	MR. SEELEY: That's basically it. I	8	the 24 inches here, ten years today.
9	just wanted to be clear that Mr. Wood gets to see	9	Now, the next question what I - I
10	this plan. I'd like to ask Mr. Thaler to present,	10	would like to take this calculation, what they
11	to give to Mr. Wood a brief synopsis of what he	11	said that's normal, to check with another, a
12	said today in writing so we have it for the file.	12	second opinion, to see if it's right.
13	THE WITNESS: Sure.	13	The second question what I have today,
14	MR. SCHMIDT: That might be helpful so	14	to the end of this discussion you still dump it in
15	it's in the file, given the history of this	15	my yard here. Is that normal to affect my life
16	project.	16	here?
17	MR. BARHIGHT: What I'll suggest, if	17	MR. SCHMIDT: Yes.
18	it's appropriate under the circumstances, is that	18	MR. HEKLER: Yes?
19	we'll have a transcript made of Mr. Thaler's	19	MR. SCHMIDT: I mean the answer is
20	testimony and put in the file.	20	this, and this is what Mr. Thaler has just said,
21	MR. SCHMIDT: Okay. That would	21	and I will say this, Mr. Hekler. Let's start at
	Page 43		Page 45
1	hopefully resolve the concerns that Mr. Seeley has	1	the beginning. Water runs down hill.
2	properly raised.	2	MR. HEKLER: Yeah, nothing God made
3	MR. SEELEY: That's fine.	3	it this way and that will continue after that.
4	MR. SCHMIDT: Thank you, Mr. Seeley.	4	I'm agree with that.
5	All right, Mr. Hekler, any questions	5	MR. SCHMIDT: We understand that. The
6	that you have of Mr. Thaler?	6	concerns that the county has is that the
7	MR. HEKLER: Let me to explain small	7	development, once it occurs, that the water that
8	thing here about the right-of-way, which is	8	is running downhill, that is presently running
9	misunderstanding here. When I built my house,	9	downhill from this property into the stream and
10	which is on 25 Mount Wilson Lane, which I believe	10	into your property, does not run downhill either
11	is lot No. 3 that's me?	11	faster, in terms of its rate because if it
12	MR. SCHMIDT: Yes.	12	would do that, it would cause more erosion to the
13	MR. HEKLER: - the deal with the	13	stream or that there would be more water
14		14	running downhill.
15		15	If after this development, the water
16		16	comes either at the same or a slower rate onto
17	corporation that I'm part of this corporation.	17	your property, the speed of the water, and there
18	MR. SCHMIDT: Okay.	18	is the same or less amount of water coming off
19		19	this property onto your property, then this plan
20		20	
1	The start was the sound total the we need that	120	The sound requirements that my

21 understanding of --

21 to widen, so we dedicated to the county, to make

Page 49

1	Mr. Thaler, how am I doing so far?
2	MR. THALER: You're doing great.
3	MR. SCHMIDT: Mr. Seeley, is that a
4	fair statement of the law?

I mean, the concerns are that the water runs off your property, right off this property

right now and goes downhill across other people's

8 properties, including yours, correct?

9 MR. HEKLER: Yes.

MR. SCHMIDT: So the concern is to make sure that after this project is built that you

12 don't get more water than you're getting now and

3 it's not coming any faster. Because if you got

more water, it would flood you; if it came faster,

15 it would cause erosion to your stream.

What Mr. Thaler is saying is they're going to capture the water, hold the water, and release it in such a manner that you're going to get less water and it's going to come slower.

20 That's his expert opinion, as I understand it.

21 MR. HEKLER: I cannot debate or argue

Page 46

1 satisfied with it, Mr. Thaler is satisfied with

2 it. Certainly you're free to get another engineer

3 to take a look at it if you would like.

4 MR. HEKLER: But the conclusion here,

5 the amount of water what I have now, if that's

6 going to be upward or not lower, will increase

7 amount of water, what I have today.

8 MR. SCHMIDT: If you have an increase,

9 then you have a problem and I can't approve this

10 plan.

MR. HEKLER: I'm sure I will have

12 increase because right now I don't have the water

13 from this project in my property. I will have

14 later when they will connect it, right?

15 MR. SCHMIDT: No, no. Mr. Thaler is

16 saying that the water, that property -- isn't this

17 property uphill from you?

18 MR. HEKLER: Yeah, it's uphill. It's

19 not uphill. I don't know exactly if it's uphill

20 or not. I have to --

21 MR. SCHMIDT: Well, when the snow melts

Page 47

1 with you because I'm not, it's not my field. The

2 only thing what I would like from his is to give

3 me the calculation and I will ask the second

4 opinion to it.

16

17

18

19

5 MR. SCHMIDT: Well, and I don't know if

6 Mr. Thaler has any -- he's shaking his head that

7 he doesn't have any objection to that. I would

8 say this to you, Mr. Hekler.

9 MR. HEKLER: Yes.

MR. SCHMIDT: That was the basis, your

11 very same thought is what I just asked Mr. Seeley

2 as to whether or not Mr. Wood at the county, who

13 is also an engineer, has looked at this and said

14 that from a technical standpoint, yes, what Mr. --

5 not that we doubt Mr. Thaler, but, yes, what he is

6 saying is true, that from a technical engineering

17 standpoint this can happen.

18 And Mr. Seeley, my understanding is

that Mr. Wood has said yes, this can happen.

20 MR. SEELEY: Yes, sir, he has.

21 MR. SCHMIDT: So the county is

1 and when it rains, doesn't the water -- I mean, I

2 have this picture showing the water coming across

3 the street. Doesn't the water -- I mean, if it

4 doesn't evaporate, doesn't it come down in this

5 direction from up here, down the street and

6 eventually into your stream? Isn't that the

7 general flow of the direction it goes?

8 MR. HEKLER: We have the sewer line

9 over here. I don't believe that the water is

10 coming on my property. The property it's coming,

it's coming from Cobblestone and the funeral home

12 to my property. That is not coming on my

13 property, sir.

14 MR. SCHMIDT: Okay. Mr. Thaler --

15 MR. THALER: Yes, sir.

16 MR. SCHMIDT: Mr. Hekler has said that

17 he doesn't believe the property is draining in

18 that direction. You believe it does drain in that

19 direction.

20 MR. THALER: I just have to

1 respectfully disagree. We know to a mathematical

19

Page 53

Page 50

- 1 certainty -- and there may be a drainage area map.
- 2 I think it's in the package I gave you -- about
- 3 two-thirds of the property drains down to this
- 4 corner, runs down the street and runs right behind
- 5 his house. That's a mathematical certainty.
- 6 Water runs downhill.
- 7 MR. SCHMIDT: Okay. Mr. Hekler, I want
- 8 to give you a chance to ask Mr. Thaler any
- 9 questions about anything that he has said,
- 10 anything that you don't understand.
- 11 MR. HEKLER: Well, I don't understand
- 12 one thing. I'm a simple man. The amount of water
- 13 what I have now will not be the same after he
- 14 finish the job.
- 15 MR. SCHMIDT: It will be less. Right,
- 16 Mr. Thaler?
- 17 MR. THALER: Yes, sir.
- 18 Q (MR. HEKLER) How can it be that?
- 19 A Because we designed it that way. We
- 20 designed facilities to inject it into the ground
- 21 and -- you're a builder. It's a storm water

- 1 four facilities. This is the hole, sand, gravel
- 2 that injects it into the ground and what's left
- 3 over goes into this. This is like a big bathtub.
- 4 It catches all the water coming off the property
- 5 and holds it so that it doesn't flood you.
  - Q But holds it. After that, when you
- 7 feel it or something, you have a certain level
- 8 which will flood, you discharge here, right?
- 9 A Yes, but X, 10 gallons -- I'll make it
- 10 easy. 10 gallons are coming to you now. We hold
- 11 this so only 9 gallons are coming after we're
- 12 finished. You know this.
- 13 Q I want you to do me a favor.
- 14 A Yes, sir.
- 15 Q To come when it's water coming from
- 16 your project and the funeral to see what happened.
- 17 A It's my pleasure, Milo. You call me.
- 18 I'll give you my cell phone, and I'll come out any
- 19 time.
- 20 Q You know what happen, you know what
- 21 happen.

- 1 management pond. We design to catch it and 1 A I'll gi
- 2 release it at a lower rate than is coming off now.
- 3 You know that.
- 4 Q I understand, but I still don't
- 5 understand where you are going to go underneath
- 6 the water. I cannot figure out that. That's my
- 7 point.
- 8 A I'm sorry, I didn't understand.
- 9 Q The water what you collect from this
- 10 project, what you going to do with that?
- 11 A It goes --
- 12 Q And this, too.
- 13 A It goes into three facilities. First
- 14 it goes into a little collection basin.
- 15 Q Right here.
- 16 A Right there. Then it goes into a sand
- 17 filter.
- 18 O Yes.
- 19 A And then under that is a gravel storage
- 20 area. It's a big storage bin. And then it runs
- 21 into this thing. So you have, you really have

- 1 A I'll give you my home number.
- 2 Q Middle of the night I'm going to wake
- 3 you up.
- 4 A Don't you dare.
- 5 MR. CLARK: Can I have your home
- 6 number, too?
- 7 (Discussion off the record.)
- 8 MR. SCHMIDT: Mr. Hekler, is there
- 9 anything else you'd like to ask Mr. Thaler?
- 10 MR. HEKLER: He guaranteed me I will
- 11 not have any more problem. I don't believe that.
- 12 I tell you the truth, like I told you the last
- 13 time: I don't believe it because I live there for
- 14 ten years.
- 15 MR. SCHMIDT: I understand.
- MR. HEKLER: 120 houses, it's coming in
- 17 the street. If he said he can stop that --
- 18 MR. SCHMIDT: Okay.
- 19 MR. HEKLER: So how we conclude it?
- 20 MR. SCHMIDT: I'll have to listen to it
- 21 all. This is an exhibit. I have to keep this.

Page 54 1 But I will certainly listen to it all and make my 1 drain. 2 decision. O And that will be at what elevation? 2 3 MR. HEKLER: According to you, to the 3 A I need my technical assistant. O Is it about 496? county --MR. SCHMIDT: Hang on one second. Is A Approximately. 5 5 there any -- let me just make sure, because there MR. THALER: Ms. Miller, is that 6 7 are some other -- hang on one second, Mr. Hekler, 7 correct? Milo's got my calculation. because we have some other folks here, while MS. MILLER: The pond bottom is at 8 Mr. Thaler is technically testifying, to try to 492.5, so riser structure, 496, 498. 10 keep the record and the transcript clean. 10 MR. SCHMIDT: Hang on one second. So 11 Is there anyone else that has any that we're clear, that is Ms. Miller from D.S. 11 12 questions of Mr. Thaler? Mr. Clark, other than Thaler? 12 13 you. But do any of the other folks from the MR. THALER: It's Mariceleste Miller. 13 community have any questions of Mr. Thaler, who is a storm water management project manager at 14 particularly regarding the storm water management D.S. Thaler & Associates. proposal, because that may have impacted other MR. SCHMIDT: Okay. Off the record. 16 (Discussion off the record.) people who may have an interest in that. Okay, 17 all right. MR. SCHMIDT: Back on the record. Go 18 18 19 Mr. Thaler is still on the stand. I ahead, Mr. Clark. know you have questions about the variances and 20 O So in months when we have little or no 21 such. We haven't opened that case. rainfall, the bottom of this facility will be Page 55 MR. BARHIGHT: That comes later. 1 grassed, I guess, and this concrete outbox will 2 Mr. Scoll will do that. 2 sit there?

Page 57

MR. SCHMIDT: Mr. Clark, what I'm

- 4 thinking is having Mr. Clark ask his questions,
- 5 and then we'll get Mr. Thaler down, and then I'll
- 6 let Mr. Thaler testify and offer any statements
- 7 that he wants to do, just to try to keep it
- somewhat orderly.
- 9 Mr. Clark, go ahead.
- MR. CLARK: I may be a little younger 10
- 11 than Mr. Thaler -- I'm not sure -- but is it all
- 12 right if I stand and approach the board?
- 13 MR. SCHMIDT: You may.
- CROSS EXAMINATION 14
- 15 BY MR. CLARK:
- Q Mr. Thaler, if you would, just by way 16
- 17 of information, what is proposed at the bottom of
- 18 this facility on the corner here to take the water
- 19 out to the street?
- 20 A Well, it's an inflow structure,
- 21 concrete inflow structure at the concrete storm

- A Yes.
- Q And on times during heavy storms, if it
- rains for two or three days in a row, there may be
- a foot or two of water in the bottom of this,
- 7 until it gets to the point where it rises over the
- top of this outflow device and then --
- A Yeah, but not more than -- it's
- designed to drain in either 12 or 24 hours. So 10
- yes, but not two or three days' worth. 11
- Q Well, but it may take two or three days 12
- 13 for the rain to get to that point and it will be
- there for 12 to 24 hours?
- 15 A Okay.

16

- Q And then it would go out, and then it
- 17 would go through an underground pipe?
- A Yes, sir. 18
- 19 Q And that pipe, none of that pipe would
- 20 be exposed or showing anywhere between the bottom
- 21 of this facility and the middle of Mount Wilson

Page 61

Page 58	P	age	5	8
---------	---	-----	---	---

- 1 Lane?
- 2 A Yes, sir.
- 3 Q And I guess since 1996 the regulations
- 4 have changed so that there can be landscaping in
- 5 the storm water management facility and on its
- 6 banks and that sort of thing? Because at one
- 7 point in time you couldn't put woody vegetation
- and all this other kind of stuff around it.
- 9 A I'm trying to say this in lay terms.
- 10 This is an excavated facility. This is a hole.
- 11 Q This is a dug pond.
- 12 A Not a dam.
- 13 Q Right.
- 14 A Dams, as far as I know, still have that
- 15 requirement. Because this is a hole, it's
- 16 impossible to fail, and therefore you can plant it
- 17 up. And they want you to plant it up.
- 18 Q Which is different from the way it was
- 19 in 1996 in the facility that was proposed here
- 20 before?
- 21 A That's a very good point. I'm glad you

built here will not interfere with that existing

O But whatever is being proposed here and

- 2 built here will not interfere with that existing
- 3 swale?
- A No. That's what it's there for.
- 5 O That's what it's there for, okay.
- 6 Coming around on this side, you said about
- 7 two-thirds of the property will drain this way,
- 8 but there is an area here that drains this way?
- 9 A Yes, sir.
- 10 Q And you're being required to get an
- 11 easement for Baltimore County to discharge the
- 12 water under their property?
- 13 A I don't know that we're required, but
- 14 we got one.
- 15 Q Okay. And there is a second storm
- 16 water management facility being proposed back
- 17 here?
- 18 A Yes, sir.
- 19 O Are you aware that there's some water
  - o that collects in this area now, I guess because
- 21 there's no drainage at all?

- 1 brought that up. I want to emphasize that, yes.
- 2 That was an embankment facility, this is a hole.
- Q Okay. And on the red-line plan, we're
- 4 now showing, in agreement with Cobblestone's
- 5 request, a little evergreen screen of 100 feet in
- 6 each direction to help shield that from the
- 7 public's view?
- 8 A Yes, sir.
- 9 Q Okay. Now, going around the property
- 10 up here, there is a drainage area up here, and
- 11 there is a facility actually on Cobblestone's
- 12 property. Do you recall that?
- 13 A Not offhand, no.
- 14 Q But there's a box here and a pipe that
- 15 goes down the middle of the street.
- 16 A I see it drawn, yes.
- 17 O Will you be discharging any water in
- 18 this direction to go into that swale and down that
- 19 pipe?
- 20 A Maybe a little off the back of the
- 21 houses, whatever is coming there now.

- 1 A I'm not, but you ought to bring that to
- 2 our attention so we can pick it up.
- Okay. We'll do that. Because as we
- 4 understand from Ms. Fisher who lives along there,
- 5 there is some water she lives here there is
- 6 some water that collects here. And I presume that
- 7 your grading and regrading of the property will
- 8 take it so that this water goes down this way and
- 9 not this way?
- 10 A I presume that, but bring I want to
- 11 make sure that we do that, so bring it to our
- 12 attention.
- 13 MR. HEKLER: Can I ask one final
- 14 question?
- 15 MR. THALER: Sure. Is that okay, Mr.
- 16 Commissioner?
- 17 MR. SCHMIDT: Sure.
- 18 O (MR. HEKLER) So you come one, two,
- 19 three. I live here.
- 20 A Yes.
- 21 Q Now, on here, that is the pipe, on this

Jav	riu Thalet - 3/13/03	-I a	ige woodhollie Reserve
	Page 62		Page 64
1	side, water from here and to here, right?	1	MR. HEKLER: Because nobody was
2	A Yes.	2	thinking this thing here, the way the business is
3	Q You have to go under the Mount Wilson	3	done, just to solve the problem from this
4	Lane, right?	4	gentleman here. To create the rest, it's nothing.
5	A Yes.	5	We don't value human here when it comes to that.
6	Q And that is the pipe?	6	It's the third time. Please understand
7	A Yes.	7	again. We discuss how it will affect my life and
8	Q And you come here?	8	my property and my life.
9	A Yes, sir.	9	MR. SCHMIDT: Mr. Hekler, I understand
0	Q And you come here. And this same pipe,	10	exactly what you're saying.
1	what happens with the pipe that's on the	11	MR. HEKLER: Thank you.
2	A Stays there.	12	MR. SCHMIDT: Any other questions of
3	Q Stays there?	13	Mr. Thaler? Mr. Clark, do you have anything
4	A Yes, sir. It's right here.	14	further?
5	MR. BARHIGHT: The witness is	15	MR. CLARIK: No, sir.
6	indicating the approximate location of what?	16	MR. BARHIGHT: My notes indicate that I
7	Q The 24 inches, what is existing now.	17	may have failed to ask you to introduce
18	He comes, you don't come to that 24 inches. So I	18	Developer's Exhibit No. 4E, one of the
9	have another question here from you.	19	photographs.
20	A Yes, except if the county,	20	MR. SCHMIDT: Okay. To the extent I've
21	presumably go ahead.	21	been marking them, Mr. Barhight, and yes, I didn't
	Page 63		Page 6.
1	MR. HEKLER: I like you to understand	1	mark 4E, so [ will do that now.
2	my situation, Mr. Schmidt, at this point.	2	(Developer's Exhibit 4E, marked for
3	MR. SCHMIDT: There's going to be two	3	
	pipes draining into there.	4	MR. THALER: Am I excused, Mr.
5	MR. HEKLER: I have the 24 inches,	5	Commissioner?
6	which is not enough to collect from Cobblestone	6	MR. SCHMIDT: Yes. You may step down,
7	and the funeral. After that he comes with another	7	3.5 PM 1 PM 1
8	pipe here and put me in my yard here, this drain.	8	* * * * *
9	Is the county agreed to this design?	9	
10	MR. SCHMIDT: Yes. The Department of	10	
11	Environmental Protection and Resource Management	11	
12	has agreed to that design.	12	
13	MR. HEKLER: But I don't have to agree	13	
14	with nothing here on my property? It will affect	14	
15	my life and my taxes. And if everything doesn't	15	
16	connect together to like, Mr. Schmidt, my	16	
TO	depreciation of my house? Please think about my	17	
17	depresentation of my mouse. I leade time about my		
	situation	112	
18	situation.	18	
17 18 19 20	situation.  MR. SCHMIDT: I understand your situation and I'll take that all into	19 20	

20

		Manual Lugo	D	avid Thaler - 3/13/03
	3 [6] 13:2 14:3,6 15:14	admitted [7] 4:20 5:1	attention [5] 5:3 20:8	box [2] 2:8 59:14
-\$-	43:11 67:8	14:7 16:5 18:14 20:6	20:11 61:2,12	brake [1] 16:12
\$35 [1] 44:5	30 [5] 10:11 11:4,6 12:3	65:3	attorney [1] 66:8	brand [1] 39:9
\$56,000 [1] 21:21	12:5	adopted [1] 28:17	available [1] 8:5	brief [2] 23:6 42:11
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<b>30-foot</b> [3] 8:21 13:19 15:13	advantage [1] 36:15	Avenue [1] 1:9	briefly [3] 28:5 32:8,15
-&-	15:13	affect [4] 44:7,15 63:14	average [1] 36:8	bring [6] 20:7,10 22:9
		64:7	aware [2] 39:4 60:19	61:1,10,11
& [2] 2:10 56:15	-4-	affirmed [1] 2:3	away [1] 24:13	brought [1] 59:1
_1_	4 [2] 15:19 67:6	affixed [1] 66:11		brown [2] 15:3 26:5
	47428 [1] 2:9	aforesaid [1] 66:4	-B-	build [3] 33:10 41:6,7
<b>'88</b> [1] 43:15	492.5 [1] 56:9	again [4] 9:17 14:13 29:10 64:7	bachelor's [1] 3:6	builder [1] 50:21
-0-	<b>496</b> [2] 56:4,9 <b>498</b> [1] 56:9	age [1] 7:10	background [4] 2:20 3:2,2 21:16	building [5] 1:9 15:3,4 15:10 43:16
0.27 [1] 24:10	4A [3] 16:2,4 67:9	agency [1] 30:5	Baltimore [19] 1:3,8,8	builds [1] 31:14
03-331-A [1] 1:4	4B [3] 18:11,13 67:10	ago [1] 33:13	2:9 3:5 10:8,16 12:6,12	built [4] 31:3 43:9 46:11
05-551-A [I] 1.4	4C [3] 18:11,13 67:10	agree [3] 8:13 45:4 63:13	12:13,17,18 13:15,18	60:2
-1-	4D [3] 20:3,5 67:11	agreed [2] 63:9,12	21:15 33:14 40:14 60:11	burdened [1] 33:1
	4E [4] 64:18 65:1,2 67:12	agreement [1] 59:4	66:2	business [2] 2:7 64:2
1 [1] 66:16	12 [4] 07.10 03.1,2 07:12	ahead [5] 11:18 17:21	bank [1] 16:17	[2] 21.7 OT.2
10 [2] 52:9,10	-5-	55:9 56:19 62:21	banks [3] 19:10 29:2	-C-
100 [1] 59:5		allow [1] 8:13	58:6	
<b>106</b> [1] 1:10	50 [1] 7:8	allowing [1] 30:11	Barhight [27] 1:18 2:15	C [1] 1:16
10:40 [1] 1:10	515 [1] 11:15	alluded [1] 5:12	2:16 3:13 4:4,16 11:12	calculation [3] 44:10
<b>111</b> [1] 1:9	55 [1] 67:4	almost [2] 3:12 25:16	14:1,5,16,18 15:11,17 18:10 20:2 27:6 29:9	47:3 56:7
115 [1] 44:5	550 [1] 10:9	along [3] 19:2 26:19 61:4	31:10 34:18 39:1 40:7	calculations [3] 23:14 39:7 40:4
12 [2] 57:10,14		among [3] 18:4 36:10	40:11 42:17 55:1 62:15	cannot [2] 46:21 51:6
120 [1] 53:16	-6-	40:13	64:16,21	
13 [3] 1:4,11 67:2	65 [1] 67:12	amount [10] 24:12 26:12	based [1] 40:12	capability [1] 18:17
13441 [1] 10:9	15 (5)	33:11 35:7 40:2 42:3	basin [2] 23:12 51:14	capture [2] 27:18 46:17
14[1] 67:8	-7-	45:18 48:5,7 50:12	basis [1] 47:10	carries [1] 7:11
<b>16</b> [1] 67:9	75 [1] 7:9	answer [6] 6:12 22:12	bathtub [1] 52:3	carry [2] 7:11 14:16
18 [1] 67:10	75 [1] 7:9	34:15 42:5 44:2,19	bed [2] 17:17 24:8	case [10] 1:3,4 5:13 6:2 6:20 7:6 25:16,18 32:19
180 [1] 22:11	0	answers [1] 3:1	beginning [2] 43:15 45:1	54:21
1975 [1] 33:7	-9-	anticipated [1] 22:15	behalf [2] 1:16,19	cases [2] 23:2 27:12
<b>1996</b> [12] 5:13 6:9,13,14	9 [2] 10:7 52:11	antique [1] 20:13	behind [2] 18:3 50:4	catch [1] 51:1
21:10,16 22:12 23:1	90-degree [1] 25:11	appear [1] 22:11	belabor [1] 7:13	catches [1] 52:4
39:11,21 58:3,19		APPEARANCES [1]	believes [1] 37:3	cell [1] 52:18
1998 [2] 10:7 12:2	-A-	1:15	benefit [1] 6:21	center [1] 26:6
1A [5] 4:11,17,21 11:20	a.m [1] 1:10	appreciate [2] 2:11 30:11	Bennett [1] 8:20	certain [2] 33:12 52:7
67:6	able [1] 6:1	approach [2] 11:13	better [1] 29:8	
1B [5] 4:11,17,21 28:3	above-entitled [1] 1:7	55:12	Betty [1] 19:20	certainly [4] 7:10 41:17 48:2 54:1
67:6	absolutely [1] 8:15	appropriate [2] 11:16	between [6] 12:3 19:7	certainty [2] 50:1,5
	accept [2] 3:17 33:1	42:18	38:20 39:10,20 57:20	certify [2] 66:4,7
-2-	accepted [1] 3:10	approve [2] 27:3 48:9	big [3] 20:13 51:20 52:3	Chairman [1] 38:8
2 [6] 14:2,4 31:20 38:15	According [1] 54:3	approved [3] 21:21	bin [1] 51:20	
67:4,7		22:15 30:21	bit [5] 7:4 16:9 30:18	chance [2] 14:9 50:8
20 [2] 19:18 67:11	accurate [1] 66:5	approximate [2] 15:13	33:17,19	change [1] 27:15
2003 [4] 1:4,11 66:12	acquire [1] 41:19	62:16	board [3] 4:11 11:19	changed [8] 9:21 10:3,4
67:2	acquired [10] 10:5,5,16	area [11] 5:10 14:20 16:8	55:12	10:21 21:10 22:12,19 58:4
2006 [1] 66:16	12:5,9 21:11,13 22:14 36:17 40:9	16:12,17 23:11 50:1	bodies [1] 3:11	channel [2] 23:19 36:5
21204 [1] 1:10	acquires [2] 10:10,11	51:20 59:10 60:8,20	body [1] 20:13	characterized [3] 9:6
21244 [1] 2:9		argue [1] 46:21	bottom [5] 55:17 56:8	9:14 40:19
<b>24</b> [7] 22:7 44:8 57:10,14	acre [1] 24:10	assistant [1] 56:3	56:21 57:6,20	check [1] 44:11
62:17,18 63:5	activities [1] 5:3	associated [1] 12:2	bought [3] 10:15 12:16	checked [1] 39:21
24-inch [9] 7:7 8:7 9:18	actual [2] 4:10 18:12	Associates [2] 2:10	13:15	
10:2 17:1,3 22:5 31:1	addition [4] 24:4 26:7	56:15	boundary [1] 15:13	Chesapeake [1] 1:9
36:14	34:7 35:10	Association [1] 1:17	Bowler [9] 19:19,19,19	circumstance [1] 10:21
25 [2] 6:3 43:10	additional [2] 32:7 34:8	assume [1] 15:2	19:20 20:18,19 21:5 25:5	circumstances [1] 42:18
	additionally [1] 35:2	assuming [1] 27:2	27:12	civil [3] 3:3,6,14
-3-	address [3] 2:7 28:19	attached [1] 13:1	Bowling's [2] 22:2 31:6	clarify [1] 13:4
	33:20			

Clark 1261 1:16 3:18.19 3:20 4:3,18,19 10:18,19 12:20 14:20 15:19,20 18:7 29:15,17 53:5 54:12 55:3,4,9,10,15 56:19 64:13,15 clean [1] 54:10 clear [6] 16:21 27:7 32:12 42:9 44:1 56:11 Club [1] 26:14 Cobblestone [8] 1:16 5:11 8:18 26:4,9 44:5 49:11 63:6 Cobblestone's [2] 59:4 59:11 collect [3] 35:13 51:9 63:6 collection [1] 51:14 collects [2] 60:20 61:6 colleges [1] 3:9 combine [1] 2:21 combined m 7:20 comfortable [1] 9:16 coming [20] 14:15 26:13 27:4 32:10 33:2 45:18 46:13 49:2,10,10,11,12 51:2 52:4,10,11,15 53:16 59:21 60:6 comment [3] 30:4,5,8 comments [1] 36:21 commission [1] 66:16 commissioner [12] 1:2 1:8,14 5:13 7:16 8:4,17 9:6 23:2 27:3 61:16 65:5 commissioner's 131 2:11 20:8,11 community [1] 54:14 companies [2] 8:19 21:14 compare [1] 7:1 completely [2] 7:5 16:13 computation [1] 37:12 computations [2] 37:4 40:1 concern [3] 18:16 37:6 concerned [2] 36:9 44:3 concerns [4] 28:20 43:1 45:6 46:5 conclude [1] 53:19 conclusion [1] 48:4 concrete [3] 55:21,21 57:1 condemn [1] 9:13 condition [5] 19:21 21:8 27:8,15 28:21 confused [1] 7:4 connect [2] 48:14 63:16 connection [2] 17:4 39:16 consideration [1] 63:21 construct [1] 22:16

construction [2] 22:1 29:8 context [3] 17:18 18:21 19:12 continue [2] 34:20 45:3 controlled [1] 36:1 controls [1] 34:8 convey [1] 8:13 conveyed [1] 12:16 corner [5] 20:9 21:2 23:7 50:4 55:18 corporation [2] 43:17 43:17 correct [6] 17:5 35:5,17 40:9 46:8 56:7 correctly [1] 34:19 corrugated [2] 7:7,7 counsel [1] 66:7 Country [1] 26:14 county [41] 1:3,8,9 3:5 8:3 9:12 10:8,16 12:6,12 12:13,17,18 13:9,15,18 15:4.10 16:13 21:15 28:14 31:13,16 33:14 34:12,13 40:14 43:14,15 43:20,21 45:6,20 47:12 47:21 54:4 60:11 62:20 63:9 66:2,4 County's [1] 37:3 couple [2] 27:7 30:10 course 151 13:6 19:9 24:2 25:20 27:1 courts m 3:10 cover [1] 19:2 create [1] 64:4 created [1] 4:13 Cross [2] 55:14 67:3 crossed [1] 30:17 cubic [2] 24:3 34:1 culvert [15] 16:15,20 21:17,19 22:1,6,14,17 25:14 31:1,2,5,14,15 36:15 current [1] 19:21 customary [1] 28:15 -D-D [3] 2:2,2 67:1

-DD [3] 2:2,2 67:1
D.S [3] 2:10 56:11,15
dam [1] 58:12
Dams [1] 58:14
dare [1] 53:4
David [3] 1:6 2:8 67:4
days [2] 57:5,12
days' [1] 57:11
deal [1] 43:13
debate [1] 46:21
December [1] 10:7
decision [2] 37:6 54:2
dedicate [1] 43:14
dedicated [1] 43:21

dedication [1] 44:2 deed [9] 10:7,9,10,17 11:15,21 12:19 40:8,13 defined [1] 25:16 definition [1] 28:17 degree [1] 34:20 degrees [2] 3:7 22:11 denied [1] 41:1 Department [1] 63:10 depreciation [1] 63:17 DEPRM [2] 23:15 36:17 describe [3] 30:16,18 32:16 described m 41:10 design [6] 31:20 36:12 38:15 51:1 63:9,12 designed [9] 21:17 22:15 30:21 33:18 44:4,5 50:19 50:20 57:10 designs [1] 33:18 detain [1] 34:4 detention (1) 23:12 determine [1] 31:17 develop [3] 26:5 32:5 33:9 developed [4] 26:4,5,8 33:16 developer [3] 1:19 9:1 41:11 developer's [19] 4:10 4:17,21 11:19 14:2,6 15:14,19 16:2,4 18:11 18:13 20:3,5 28:2 64:18 65:2 67:3,5 development [10] 1:2 3:4,15 17:11 28:7 32:11 32:12 34:6 45:7,15 device [1] 57:8 difference [3] 17:5 33:21 38:20 differences [1] 39:10 different nn 6:12.15 7:5 16:14 22:3,21 29:18 29:18 33:19 38:11 58:18 direct 131 2:14 5:2 67:3 direction [7] 4:14 49:5 49:7,18,19 59:6,18 disagree [1] 49:21 discharge [10] 16:11,18 24:1,2,15 32:14 34:1 42:3 52:8 60:11 discharged [1] 27:19 discharges [3] 18:2 26:19,20 discharging [1] 59:17 discuss [1] 64:7 discussed [1] 41:16 discussion [3] 44:14 53:7 56:17

dissertation [1] 3:8

dissipater [1] 30:19

distinction [1] 39:20

document [3] 11:18,19 38:19 doesn't [9] 31:18 47:7 49:1,3,4,4,17 52:5 63:15 dominant m 33:3 done [9] 5:9 21:19,20 26:8,9,14 41:14 44:1 64:3 doubt [1] 47:15 down [23] 7:14,20 8:1,6 16:10.16 18:9 19:6.9 20:14 26:15 27:20 33:9 45:1 49:4,5 50:3,4 55:5 59:15,18 61:8 65:6 downhill [6] 45:8,9,10 45:14 46:7 50:6 downstream [2] 32:21 35:1 dozen [1] 3:9 drafted [1] 28:8 drain [9] 8:7 24:20 25:1 25:10 49:18 56:1 57:10 60:7 63:8 drainage [3] 50:1 59:10 60:21 draining [2] 49:17 63:4 drains [2] 50:3 60:8 dramatically [1] 22:20 drawn [1] 59:16 driveways [1] 35:12 dug [1] 58:11 duly [1] 2:3 dump [2] 44:7,14 dumped [1] 18:19 during [2] 37:8 57:4

-E-E [6] 1:14,21 2:2 66:3,14 67:1 easement [5] 8:13 33:1 33:3,4 60:11 easier [1] 29:19 easy [1] 52:10 edge [1] 25:21 educational [1] 3:1 either [4] 31:9 45:10,16 57:10 elevation [1] 56:2 embankment [1] 59:2 emphasize [1] 59:1 end [6] 16:7 18:1 26:17 31:4,15 44:14 engineer [2] 47:13 48:2 engineering [4] 3:4,14 37:13 47:16 Environmental [2] 42:7 63:11 eroded [1] 18:18 erosion [2] 45:12 46:15 especially [1] 11:16

Esquire [3] 1:14,16,18

essentially [2] 32:15 35:14 established [2] 34:12 34:13 evaluation [1] 38:5 evaporate [1] 49:4 events [1] 66:9 eventually [1] 49:6 evergreen [1] 59:5 everybody [2] 7:4 22:9 everybody's [1] 6:8 evidence [8] 5:1 14:7 16:5 18:15 20:6,16 25:9 65:3 exactly [4] 31:8 36:10 48:19 64:10 EXAMINATION [2] 2:14 55:14 examined [1] 2:5 excavated [1] 58:10 except [2] 3:7 62:20 Excuse [1] 14:5 excused [1] 65:4 exhibit [17] 4:10,10,17 11:13,19 14:2,6 15:14 15:19 16:4 20:3,5 28:2,3 53:21 64:18 65:2 Exhibits [4] 4:21 18:11 18:13 67:5 existing [9] 12:3 21:8,18 25:13 27:8 28:21 41:13 60:2 62:17 exists m 25:8 expense [1] 21:18 expert [5] 2:18 3:3,10 3:14 46:20 expires [1] 66:16 explain [7] 6:17 10:3 19:11 28:5 30:15 32:8 explained [1] 37:7 explanation [1] 39:20 exposed [1] 57:20 expressed [1] 37:5 extent [1] 64:20 extracting [1] 24:16 extraction [2] 24:11.13

-F-

facilities [6] 23:7,8 26:15 50:20 51:13 52:1 facility [15] 24:20 27:19 32:9 35:9,13 41:8 55:18 56:21 57:21 58:5,10,19 59:2,11 60:16 fail [1] 58:16 failed [1] 64:17 fair [4] 6:11 22:10 37:9 46:4 familiar [2] 2:19 4:6 far [4] 4:12 24:9 46:1

	vy oodinonne Reserve
	58:14
	Farms [5] 9:2,11 10:13 13:13 18:9
	faster [3] 45:11 46:13,14
	favor [1] 52:13
	feasible [1] 41:5
	fee [3] 12:11,19 13:9
	feet [9] 10:11 11:4,6 12:3 12:5 24:3,11 34:1 59:5
	fellow's [1] 10:13
	felt [z] 9:17,20
	Festival [2] 26:7,9
	few [2] 10:3 26:2
	field [4] 6:1 25:9 28:21 47:1
	figure [1] 51:6
1	file [3] 42:12,15,20
	filter [3] 23:11 24:7
	51:17
	final [1] 61:13
	finding [1] 21:7
	fine [3] 2:7 19:3 43:3
	finish [2] 11:10 50:14
	finished [1] 52:12
	firm [2] 21:18 26:8
	first [5] 2:3 23:9 33:21 44:2 51:13
	Fisher [2] 1:17 61:4
	five [1] 23:8
	fix [1] 8:3
	flood [7] 25:20 27:16
	36:6,7 46:14 52:5,8
	flooding [2] 25:6 29:1
	floods [1] 25:20
	flow [5] 32:20 33:2,5 34:21 49:7
	flowing [3] 25:2,4 27:9
	flows [1] 40:3
	focus [1] 41:3
	focusing [1] 29:11
	Folio [1] 10:9
	folks [2] 54:8,13
	follow [1] 16:3
	follows [1] 2:5
	foot [1] 57:6
	foregoing [1] 66:5
	foundation [2] 5:15 6:6
	four [2] 7:17 52:1
	fourth [1] 8:2
	frankly [1] 12:14
	Fred [2] 10:8 12:18
	free [1] 48:2
	fresh [1] 29:20
	front [7] 20:1,17,19 21:5 21:6 25:6 27:13
	fronts [1] 25:5
	full [3] 9:19,20 39:19
	funeral [3] 49:11 52:16
	63:7
	SMITH HEDGES &

	future [2] 9:13 44:4 -
	-G-
	G[1] 1:18
	Gabion [3] 16:11 25:13 30:18
	gallons [5] 24:4 34:2 52:9,10,11
	general [1] 49:7
	gentleman [1] 64:4
	given [1] 42:15
	giving [3] 8:19 9:3,4 glad [1] 58:21
	God [1] 45:2
	goes [14] 7:8 12:1 18:3
	24:19,20 46:7 49:7 51:11 51:13,14,16 52:3 59:15
	61:8
	gone [1] 28:10 good [1] 58:21
	graded [1] 19:6
	grading [1] 61:7
	granted [2] 21:14,14
	grantee [1] 12:18
	grantor [1] 12:17
	grass [1] 33:10
	grassed [1] 57:1
	gravel [4] 23:11 24:8 51:19 52:1
	great [1] 46:2
	Greenebaum [4] 8:18
	9:10 21:13,21 Greenebaum's [1]
	21:17
	ground [4] 24:17 34:11 50:20 52:2
	guaranteed [1] 53:10
	guess [4] 7:12 57:1 58:3 60:20
	guy [1] 9:11
	-H-
	H [1] 2:2
	half [1] 10:6
	hand [1] 66:11
	handle [1] 19:7
	hang [5] 11:11 13:5 54:5 54:7 56:10
	happening [2] 20:20 35:16
	hard [1] 35:21
	hardware [1] 41:10
	head [1] 47:6 heard [2] 23:2 25:7
١	
	hearing [7] 1:1,7,14 8:20 10:7 18:17 37:8
١	heavy [2] 35:20 57:4

Hekler [48] 6:7 8:11,12

9:3,11 11:8 13:4,6 14:8

14:10,14 28:20 29:20

41:16 42:2 43:5,7,13,19 44:18.21 45:2 46:9.21 47:8,9 48:4,11,18 49:8 49:16 50:7,11,18 53:8 53:10.16.19 54:3,7 61:13 61:18 63:1,5,13 64:1,9 64:11 Hekler's [8] 11:7 12:4 13:2 15:9 18:4 19:18 21:6 27:14 held [1] 32:8 help [2] 20:12 59:6 helpful [2] 7:1 42:14 hereby m 66:4 hereunto m 66:10 hidden [1] 16:20 higher [1] 36:6 highlight [3] 27:6 39:6 39:10 highlighted [3] 11:15 12:8 39:9 hill [1] 45:1 himself [1] 13:7 history [1] 42:15 hold 131 35:14 46:17 52:10 holder [1] 33:4 holds [2] 52:5.6 hole [4] 52:1 58:10,15 59:2 Homan [4] 10:8,15 12:16 12:18 home [3] 49:11 53:1,5 homeowner [1] 36:8 Homeowners' [1] 1:16 homes [1] 19:17 hop [1] 2:12 hopefully [2] 26:9 43:1 Horse [3] 20:9 21:4 27:10 hours [2] 57:10,14 house [4] 19:18 43:9 50:5 63:17 houses [8] 19:16,17 25:5 33:10 35:12 44:5 53:16 59:21 Howard [1] 26:5 human m 64:5 hundred [3] 24:15 33:13 33:15 hundred-year [3] 7:11 19:9 23:20 -Iice [3] 20:11,13 25:1 identification តេ 4:12 14:7 16:5 18:14 20:6 65:3 identified [5] 4:11 15:14

27:8,12 28:3

identify [1] 28:1

III-377 [1] 1:3

immediately [2] 11:5 keeps [1] 4:5 35:21 impacted [1] 54:16 impervious [2] 32:6 35:10 implement [1] 41:13 impossible m 58:16 improve [1] 29:4 improved [2] 26:12,21 Inc [1] 1:17 inches [4] 44:8 62:17,18 63:5 including [2] 11:8 46:8 incorporate [1] 31:14 increase [4] 33:11 48:6 48:8,12 increased [1] 34:3 indicate [1] 64:16 indicated [2] 30:4 66:6 indicating [3] 15:12 34:17 62:16 indulgence [1] 2:11 inevitably [1] 33:10 inflow [2] 55:20.21 information [3] 21:12 22:18 55:17 inject [1] 50:20 injects [1] 52:2 insignificant [1] 24:9 install [2] 41:9,9 instance m 24:10 instead m 33:10 interest [1] 54:17 interested [3] 32:13 36:4 66:9 interfere [1] 60:2 interject [1] 12:21 interpreted [1] 33:6 interrupt [1] 17:20 intersection [3] 21:3 25:2 27:10 Intimately [1] 4:8 introduce [6] 4:16 14:1 15:18 18:10 20:2 64:17 introduced [2] 4:9,12 involved [2] 5:4.7 Iron [3] 20:9 21:4 27:10 issue (4) 19:11 29:12 31:21 37:7 issues [5] 3:5 5:17 27:7 29:13 38:15 itself [1] 25:15 -J-Jennifer [1] 19:19 job [3] 39:8,9 50:14 -K-

keep [3] 53:21 54:10 55:7

kind [4] 8:13 23:10 41:19 58:8 knew [2] 9:2,10 -L-L m 2:2 labeled [1] 30:14 laid m 6:6 land [6] 3:14 8:17 9:1 10:11 40:14 43:14 landowner [1] 8:9 landscaping [1] 58:4 Lane [18] 7:8,14 11:5 12:4 16:10 17:9 20:9.10 21:4,4,19 27:10,11,13 27:21 43:10 58:1 62:4 last [11] 6:4 16:14 17:6 18:16,17 20:7 26:3 28:19 37:5 41:17 53:12 late [1] 28:11 law [6] 32:19 34:12,13 34:14 36:8 46:4 LAWRENCE [1] 1:14 lay [2] 5:15 58:9 laymen's [1] 32:4 least m 6:3 leaving [3] 21:1 24:14 33:15 left (1) 52:2 legally in 28:16 Leo [1] 12:21 less [6] 33:17 34:5 35:15 45:18 46:19 50:15 letter in 14:4 letting [1] 2:12 level [3] 36:6,7 52:7 Levinson's [1] 26:4 life is 44:7.15 63:15 64:7 line [4] 15:7,13 19:3 49:8 listen [2] 53:20 54:1 live [2] 53:13 61:19 lived m 9:4 lives [2] 61:4,5 local m 33:7 located m 11:1 location [2] 15:13 62:16 look 131 6:19 14:12 48:3 looked [3] 14:21 39:15 47:13 looking [1] 36:21 lose (1) 4:2 lower [4] 23:7 36:6 48:6 51:2 lowered [1] 26:12 lowers m 36:7

-M-

man [1] 50:12

manage [3] 34:13 35:2 35:14 managed [2] 24:1 33:12 management [23] 5:17 17:19 19:1,13,14 22:21 23:17,19 26:10 29:12 30:6 32:18 33:8 35:8 39:7 41:5,7 51:1 54:15 56:14 58:5 60:16 63:11 manager [1] 56:14 manages [3] 23:17,19 23:20 managing [1] 24:14 manhole [1] 25:11 manner [1] 46:18 map [1] 50:1 March [4] 1:4,10 66:12 67:2 Mariceleste [1] 56:13 mark [2] 16:1 65:1 marked [5] 14:6 16:4 18:14 20:5 65:2 marking [1] 64:21 Maryland [6] 1:10 2:9 12:19 32:19 36:8 66:1 mass [1] 34:10 master's [1] 3:7 mat [1] 25:13 mathematical [3] 40:4 49:21 50:5 matter [4] 1:7 31:19 66:9 67:2 may [18] 7:16 9:12 10:17 13:6 14:16 22:3 31:14 35:20 39:1 50:1 54:16 54:17 55:10,13 57:5,12 64:17 65:6 mean [6] 17:20 31:11 44:19 46:5 49:1,3 meaning [1] 28:6 meets [2] 37:3 45:20 melts m 48:21 mentioned [1] 25:19 metal [1] 7:7 middle [8] 7:20 8:6 20:11 20:14 27:20 53:2 57:21 59:15 might [5] 5:6 12:21 18:18 29:19 42:14 Miller [4] 56:6,8,11,13 million [1] 44:5 Milo [3] 11:11 13:5 52:17 Milo's [1] 56:7 mind [3] 6:8 29:21 32:3 minimize [1] 34:20 minute [3] 18:21 24:4 34:2 misunderstanding [1] 43:9 modifications [1] 22:4 money [1] 22:16 months [1] 56:20

morning [1] 15:1 most [1] 10:21 Mount [16] 7:8,14 8:9 11:5 12:4 16:10 17:9 20:9 21:3.19 27:11.13 27:20 43:10 57:21 62:3 mouth [1] 37:10 moves [1] 15:17 mowed [1] 25:21 Ms [4] 56:6,8,11 61:4 must [3] 7:8 33:1,11

-N-N m 67:1 Nadine [1] 1:17 name [2] 2:6 10:13 natural [3] 32:20 33:2,5 nature [1] 28:6 necessary [2] 41:6,18 need [3] 29:13 43:20 56:3 never [1] 12:15 new [17] 21:16 22:20 23:2 23:18 24:7,8 27:4 31:1,4 31:15 33:20 34:19 35:11 36:13,14,15 39:9 next [1] 44:9 night [1] 53:2 nobody [4] 9:2,10 44:6 64:1 none m 57:19 normal [2] 44:11,15 north [5] 7:18 8:17 17:9 21:12 25:13 notarial [1] 66:11 Notary [2] 66:3,15 notes [1] 64:16 nothing [5] 2:4 22:17 45:2 63:14 64:4 notwithstanding [1] 35:10 November [1] 66:16 now [45] 4:1 7:2 11:14 13:9,18 16:12 17:1,7 18:16 20:1,20,21 21:9 21:20 22:5,15,19 23:16 24:2,11,19,21 25:4,19 33:14 34:7 35:1,20 36:12 39:20 44:9 46:7,12 48:5 48:12 50:13 51:2 52:10 59:4.9.21 60:20 61:21 62:17 65:1 number [4] 10:9 37:12 53:1,6 numerous [4] 3:10,17

-0-

5:9,21

objection [6] 3:18 4:5 4:18 15:21 37:2 47:7 objections [1] 10:18 obviously [4] 35:18.19 38:14 41:8

occasions [1] 5:21 occurs [2] 29:1 45:7 off no 21:1 26:13.20 30:17 32:7 33:2,5 45:18 46:6,6 51:2 52:4 53:7 56:16,17 59:20 offer [2] 3:13 55:6 offhand [1] 59:13 office [3] 1:9 4:13 22:2 OFFICER/[1] 1:1 Officer/Zoning [2] 1:7 1:14 old [8] 6:20,20 7:6,6,9 12:1,1 36:14 once [1] 45:7 one [28] 7:18,20 8:19 9:8 12:15 16:7 18:7 19:14 21:14 24:15 26:9 27:1 31:17,19 33:14 34:8 37:20 38:10 43:16 50:12 54:5.7 56:10 58:6 60:14 61:13,18 64:18 one-third [1] 15:8 one-year [2] 19:8 23:17 ones (1) 26:11 onto [2] 45:16,19 opened [1] 54:21 opinion [8] 6:17,19 9:21 28:12 40:19 44:12 46:20 opportunity [4] 5:4,7 5:16.20 opposed [2] 7:2 32:11 opposite [1] 22:11 options [1] 7:17 Orchard [1] 21:4 orderly [1] 55:8 orifice m 34:4 originally [1] 13:13 otherwise [1] 66:8 ought [1] 61:1 outbox [1] 57:1 outfall [30] 6:9,12,14,15 7:5,13 8:5 16:7,8 17:6,7 18:1,8,12 22:8,18 25:12 25:18 28:4,13,18 30:15 30:16 31:12 32:10 36:14 36:15 38:1,5 39:8 outfalls [2] 6:2 38:21 outflow [1] 57:8 overland [2] 27:9.16 owned [5] 8:17 9:1 10:12 13:13 16:12 owner [6] 12:11 13:18 26:15,16 32:21 33:3 ownership [2] 13:9

-Ppackage [1] 50:2 page [2] 11:14 67:5 paid [1] 13:16

15:10

part [3] 38:18 41:2 43:17 particular [4] 5:10 29:11,21 30:8 particularly [1] 54:15 partly [1] 15:4 party [2] 26:19 66:8 pass [1] 33:4 past [2] 5:3,8 patch [1] 20:14 people [4] 2:19 32:12 36:4 54:17 people's [1] 46:7 per [5] 24:3,3,4 34:1,2 perfect [1] 41:13 perhaps [2] 5:21 11:12 permanent [2] 30:16 31:8 personally [2] 28:10,11 Ph.D [1] 3:7 Phase [2] 31:20 38:15 phone [1] 52:18 phonetic m 5:6 photograph [2] 15:12 16:19 photographs [1] 64:19 physically [1] 23:13 pick [2] 25:3 61:2 picked [2] 25:9 31:4 picture [11] 11:4 14:20 14:21 16:16 18:7 19:15 20:7,8 21:2 25:3 49:2 pictures [1] 18:5 piece [2] 12:1 43:14 pieces [1] 29:18 Pikesville [5] 9:2,11 10:13 13:12 18:9 pipe [24] 7:7,7,9,15 9:20 16:10 17:1,3,8,16 25:17 27:20 41:7,9 57:17,19 57:19 59:14.19 61:21 62:6,10,11 63:8 pipes [1] 63:4 pit [1] 23:10 place [1] 41:11 placed [1] 28:2 plan [17] 1:2 6:20 21:20 23:13 28:7 30:13 31:1 31:13 37:21 38:13 41:2 41:4,5 42:10 45:19 48:10 59:3 planning [2] 3:4,15 plant [3] 3:21 58:16,17 plat [3] 12:1 13:1 14:11 pleasure [1] 52:17 point 191 11:9.17 41:19 51:7 57:7,13 58:7,21 63:2

pond [3] 51:1 56:8 58:11

portion [1] 11:15

possible [1] 31:13

possibly [1] 6:10

posted [2] 21:21 22:16 potted [1] 3:20 predecessor m 8:18 present m 42:10 presently [1] 45:8 president [1] 2:10 presumably [1] 62:21 presume [3] 12:14 61:6 61:10 prevent [1] 25:1 previously [1] 3:3 principal [1] 10:20 principally [2] 2:18 10:4 private m 22:16 problem [7] 2:13 6:13 6:16 19:4 48:9 53:11 64:3 proceedings [1] 66:6 professional [1] 28:12 project [10] 4:7 5:8,11 39:16 42:16 46:11 48:13 51:10 52:16 56:14 projects [1] 5:9 proper [3] 24:20,21 25:12 properly [1] 43:2 properties [5] 20:19 21:6 27:12 35:1 46:8 property [53] 5:5,6 8:14 11:7,9 12:4 13:2 15:4,6 17:4,15 18:4 23:8 26:15 26:16 27:1,14 32:5,6,7 32:21 33:3,5,9,16 34:21 35:11 41:8,17 45:9,10 45:17,19,19 46:6,6 48:13 48:16,17 49:10,10,12,13 49:17 50:3 52:4 59:9,12 60:7,12 61:7 63:14 64:8 proposal 151 5:18 21:9 36:12 39:16 54:16 proposed [10] 6:14 7:1 7:17 16:14 27:15 30:14 55:17 58:19 60:1.16 proposing [1] 23:6 protection [3] 23:19 42:7 63:11 public [3] 37:8 66:3,15 public's [1] 59:7 purpose [1] 29:11 **purposes** [1] 4:12 put [10] 9:19 10:17 25:10 31:4 32:4.5 37:10 42:20 58:7 63:8

-0-

qualifications [1] 2:20 qualify [1] 2:17 quality [6] 24:6,10,18 27:5 34:9 35:14 quantity [1] 24:1 quasi-judicial [1] 3:11 questions [14] 2:17 14:9 29:10,16 30:1,7,11 43:5 50:9 54:12,14,20 55:4 64:12 quick [2] 2:17 30:11 quite [3] 10:3 12:15 26:2

### -R-

R m 2:2 Rader [1] 13:1 rain [1] 57:13 rainfall [1] 56:21 rains [2] 49:1 57:5 raised [3] 22:9 39:13 43:2 raises [1] 36:6 rate [15] 24:2 34:5,21 35:4,15,19,21 36:3,5,6,7 36:9 45:11,16 51:2 RE [1] 1:1 reading [1] 28:4 real [3] 6:11 19:4 28:14 realize m 3:20 really [6] 2:17 7:5 22:8 25:17 33:21 51:21 reason [1] 40:17 receiving [1] 26:17 recent [1] 23:2 recently [1] 6:4 recharge [4] 24:6,17 27:5 34:11 record isi 2:7 12:20 27:7 53:7 54:10 56:16,17,18 recorded m 40:13 recording [1] 40:15 records [2] 40:12,14 Recross [1] 67:3 red-line [1] 59:3 red-lined [1] 37:21 redesigning [1] 31:7 Redirect [1] 67:3 reduced [1] 26:20 reducing [1] 36:9 refer [1] 39:8 reference [1] 40:16 referencing [1] 15:12 referred [1] 13:1 reflected [1] 38:19 regarding [2] 30:6 54:15 regardless [1] 35:4 regrading [1] 61:7 regulation [1] 23:18 regulations [11] 22:21 23:3 24:7 27:4 28:14,16 33:8,20 34:19 40:5 58:3 relate m 11:18 relates [5] 5:5 10:14 27:9 28:6 29:1 relative [2] 5:17 66:8 release [6] 26:12 34:5 35:15 36:1 46:18 51:2

released [1] 35:19 relevant [2] 10:21 22:8 remembers m 5:13 remind [1] 8:16 replace [4] 21:18 22:5.7 reported [2] 1:20 25:20 request [2] 38:12 59:5 required [3] 40:1 60:10 60:13 requirement m 58:15 requirements [2] 37:3 45:20 reserve [5] 1:1 4:7 5:5 29:14 67:2 resolve [1] 43:1 Resource [1] 63:11 respectfully [1] 49:21 rest [2] 19:12 64:4 result m 18:19 review [4] 5:16 6:20 36:18 40:12 reviewer [1] 37:1 revisited m 37:8 Rhona [1] 1:17 right [36] 8:15 11:14 13:11 16:8,8,12 17:1 19:6,16,17 20:1,14,21 25:21 29:14 36:2 37:16 38:17 42:3 43:5 44:12 46:6,7 48:12,14 50:4,15 51:15,16 52:8 54:18 55:12 58:13 62:1,4,14 right-of-way [18] 7:18 8:1,20 9:3,5,9 10:5,10 11:1,3,21 12:3,8 21:10 21:12 41:19 43:8,20 right-of-ways [2] 36:16 rights-of-way [3] 22:13 41:6,12 rise [1] 26:2 riser [1] 56:9 rises [1] 57:7 road [15] 7:19,21 8:2,6 10:12 16:16 17:16,17 20:12,14,16,18 21:4 31:2 35:11 role [1] 4:4 roof [1] 15:3 room [2] 1:10 2:19 row [1] 57:5 RPR [1] 1:21 rule [1] 32:20 run [2] 16:10 45:10 running [8] 19:21 20:16 20:18 21:5 32:7 45:8,8 runs [9] 18:2,9 27:20

45:1 46:6 50:4,4,6 51:20

-S-

S [4] 1:6 2:2.8 67:4 sale [3] 10:14,15 12:16 sand [4] 23:10 24:7 51:16 52:1 satisfied [3] 37:11 48:1 48:1 says [2] 32:18,19 Schmidt [73] 1:14 2:6 2:13,16 3:16,19 4:1,18 4:20 6:18 11:14,17 12:7 13:11 14:3,8,12 15:2,15 16:1 20:4 29:15 30:2 32:2 35:6 36:20 37:16 38:9,14 39:14 40:7,17 42:4,14,21 43:4,12,18 44:17,19 45:5 46:3,10 47:5,10,21 48:8,15,21 49:14,16 50:7,15 53:8 53:15,18,20 54:5 55:3 55:13 56:10,16,18 61:17 63:2,3,10,16,19 64:9,12 64:20 65:6 Scoll [1] 55:2 SCOTT [1] 1:18 screen [1] 59:5 seal [1] 66:11 second (10) 12:21 24:4 34:2 44:12,13 47:3 54:5 54:7 56:10 60:15 seconds [1] 38:8 section [2] 31:7 36:5 sedimentation [1] 23:10 see [18] 14:10 15:6 16:15 16:21 18:8 19:4.20 20:15 21:2 25:3,8 26:2 38:13 42:9 43:16 44:12 52:16 59:16 Seeley [25] 30:3,4,7,10 30:13 31:20 34:16 36:20 37:15,17,19 38:2,12,17 39:1,3 42:6,8 43:1,3,4 46:3 47:11,18,20 sentences [1] 37:5 series [1] 23:7 servient in 33:1 set m 66:10 several [3] 5:12,21 21:9 sewer [1] 49:8 shaking [1] 47:6 share [1] 22:1 shield m 59:6 shopping [1] 26:6 shorter [1] 28:9 show [2] 11:3 40:2 showed [1] 18:6 showing [5] 15:18 18:11 49:2 57:20 59:4 shown [3] 14:19 23:13 31:12 side [16] 7:19 8:1,9,17,21 9:4 10:11 17:9,10,11,12 21:11,13 26:7 60:6 62:1 sides [1] 22:13

sight [1] 4:2 significantly [1] 27:2 similar [1] 7:3 simple [3] 12:19 13:9 50:12 sit [1] 57:2 site [4] 21:1,1 24:14 26:13 situation [7] 8:16 26:21 29:5,5 63:2,18,20 six [1] 26:3 sized [1] 24:8 slightly [2] 22:3 38:10 slipped [1] 20:12 slower [3] 35:19 45:16 46:19 small [2] 15:2 43:7 Smith [3] 1:21 66:3,14 snow [1] 48:21 so-called [3] 7:17 33:2,4 solution [1] 9:8 solve [1] 64:3 solved [1] 6:16 sometime [1] 9:13 somewhat [1] 55:8 somewhere [2] 19:2.7 sorry [4] 3:19 4:3 39:3 51:8 sort [11] 16:20 19:11 26:16 28:15 29:17 33:6 34:4.9 36:7 40:19 58:6 south [8] 8:1.21 9:4 10:11 11:5 17:10,11 21:11 speak [2] 13:7 39:2 specifically [2] 5:10 39:11 speed [1] 45:17 springhouse [2] 13:8 15:3 Square [2] 26:6,7 SS [1] 66:1 stable [2] 25:15 28:13 stand [3] 4:1 54:19 55:12 standpoint [5] 37:2,13 37:14 47:14,17 standpoints [1] 37:12 start [1] 44:21 state [3] 34:14 66:1,4 statement [9] 28:1,4,5,6 37:20 38:1,6 39:8 46:4 statements [1] 55:6 statewide [1] 33:7 Stays [2] 62:12,13 step [1] 65:6 still [6] 6:13 15:8 44:14 51:4 54:19 58:14 stop [1] 53:17 storage [3] 23:11 51:19

sidewalks m 35:12

51:20 storm [37] 5:16 7:11,12 8:7 17:19 18:21 19:8,9 19:12,14 22:21 23:17,20 23:21 24:12,20 25:1,10 26:1,10 29:12 30:6 32:17 32:18 33:7 34:10 35:8 36:1 39:7 41:4,7 50:21 54:15 55:21 56:14 58:5 60:15 storms [1] 57:4 stream [23] 16:13,18 18:2,3,9,12,18,18 19:5,6 19:7 21:7 25:15,19 26:21 27:14,15,21 29:1 45:9 45:13 46:15 49:6 street [9] 17:12 19:16 26:8 49:3,5 50:4 53:17 55:19 59:15 strip [4] 9:1 12:7 13:13 structure [4] 34:4 55:20 55:21 56:9 stuff [2] 29:21 58:8 subject [1] 5:17 submit [1] 40:1 submitted [3] 23:15 36:13,17 such [2] 46:18 54:21 suck [1] 34:10 sufficient [1] 9:9 suggest [1] 42:17 suitability [1] 6:1 suitable 181 6:9.10 25:12 25:18 28:3,18 38:5 39:7 supervision [1] 4:14 support [1] 23:14 surface m 35:11 surfaces [1] 32:6 Susan [3] 1:21 66:3,14 swale [2] 59:18 60:3 synopsis [1] 42:11 system [2] 24:21 25:1 -T-

T [1] 2:2 table [1] 39:17 taking [1] 36:15 Tastet [1] 5:6 taught [1] 3:8 tax [3] 10:14,15 12:16 taxes [2] 13:16 63:15 technical [5] 37:1 39:21 47:14,16 56:3 technicality [1] 37:4 technically [1] 54:9 temporary [3] 30:14,20 31:8 ten [7] 6:4 24:15 33:13 33:14 38:7 44:8 53:14 ten-year [1] 23:20

terms [10] 23:16,21 24:1 24:17 32:5 37:4 38:15 40:3 45:11 58:9 testified [7] 2:5 3:3,11 3:17 5:14 28:10 39:5 testify [1] 55:6 testifying [1] 54:9 testimony [10] 1:6 8:8 9:7,14,15 35:9 38:18 39:10 40:20 42:20 textbook [3] 25:16,18 28:17 Thaler [58] 1:6 2:6,8,10 2:18 3:14,16 4:6 5:2 6:18 11:2.13 13:12 15:17 16:19 29:13,16 30:8,13 35:7 37:18 39:5 40:18 41:5 42:10 43:6 44:20 46:1,2,16 47:6,15 48:1 48:15 49:14,15,20 50:8 50:16,17 53:9 54:9,12 54:14,19 55:5,6,11,16 56:6,12,13,15 61:15 64:13 65:4,7 67:4 Thaler's [2] 40:12 42:19 Thank [4] 14:5 43:4 64:11 65:7 therefore [1] 58:16 thinking [3] 44:6 55:4 64:2 third [2] 7:21 64:6 thirty [1] 3:12 thought [2] 31:2 47:11 three [7] 2:17 23:21 51:13 57:5,11,12 61:19 through [8] 15:7,8 16:17 18:9 24:19 27:10,19 57:17 tie [3] 7:14 8:6 16:15 times [4] 3:17 5:12 6:4 57:4 title [1] 8:16 today [12] 2:11 6:10 29:2 35:16 39:5,9,11,17 42:12 44:8,13 48:7 together [1] 63:16 too [2] 51:12 53:6 took [2] 6:19 14:21 top [1] 57:8 towards [1] 29:18 Towson [1] 1:10 traditional [1] 32:18 transcript [2] 42:19 54:10 transcription [1] 66:5 trees [1] 33:9 true [2] 47:16 66:5 trust [5] 9:7,8,15 40:20 40:21 truth [4] 2:4,4,4 53:12 try [2] 54:9 55:7 trying [2] 37:10 58:9 Tuesday [2] 15:1 28:11

turn [2] 11:11 25:11 two [24] 2:17 3:6 10:6 19:15,16,17 20:17,19 21:5 24:5,8 25:5 26:15 27:11 33:12,13 34:8 37:5 57:5,6,11,12 61:18 63:3 two-thirds [5] 13:8 15:9 40:2 20:21 50:3 60:7 two-year [3] 7:12 19:8 26:1 tying [2] 9:18 10:2 typically [1] 35:20 -Uuncharacteristically [1] 23:6 under [15] 7:8 17:16 23:11 24:6 25:12 27:4 28:13 33:7 34:19 36:7 40:4 42:18 51:19 60:12 62:3 underground [1] 57:17 underlying [1] 12:11 underneath [1] 51:5 undersized m 7:9 understand [21] 22:2 25:6 31:6 32:3 34:18 35:9 37:1 41:17 45:5 46:20 50:10,11 51:4,5,8 53:15 61:4 63:1.19 64:6 64:9 Weinstein [1] 1:17 unit [1] 24:3 universities m 3:9 unsuitable [2] 6:15 9:21 unwilling [1] 40:21 up [18] 4:2 22:16 25:3,10 25:21 26:2 31:4,16,18 39:2 49:5 53:3 58:17,17 59:1,10,10 61:2 uphill [4] 48:17,18,19,19 upstream [3] 19:18 32:21 33:2 upward [1] 48:6 used [2] 17:4 24:17 using [1] 11:13 usually [2] 33:13 36:4 utilizing [1] 36:16 -V-V [1] 2:2 value [1] 64:5 variances [1] 54:20 vegetation [1] 58:7

velocity [2] 16:11 30:19 venue [1] 29:18 verified m 28:11 verify [1] 6:1 version [1] 28:9 view [2] 37:6 59:7 virtually [2] 38:5,6 visit m 5:21

visual [1] 20:15 volume [18] 24:3,6,6,10 24:11,13,16 32:9,13 33:20 34:1,3,8,9,12 35:2 35:21 36:3 volumes [3] 24:8 27:5

-W-

wait [1] 8:2 wake [1] 53:2 wall [2] 31:4,15 wants [2] 6:7 55:7 water [92] 5:17 9:19,19 17:14,19 18:19,21 19:9 19:12.14.21 20:16 21:1 22:21 24:5,10,12,17,18 24:19 25:2,4 26:2,10,13 27:5,9,18 29:12 30:6 32:7,8,10,17,18 33:8,11 33:11,15 34:8,11,21 35:8 35:8.13.20 39:7 40:2.3 41:4,7 42:3 45:1,7,13,15 45:17,18 46:5,12,14,17 46:17,19 48:5,7,12,16 49:1,2,3,9 50:6,12,21 51:6,9 52:4,15 54:15 55:18 56:14 57:6 58:5 59:17 60:12,16,19 61:5 61:6,8 62:1 ways [1] 33:12

well-defined [1] 28:13 West m 1:9 whereof [1] 66:10 whole [4] 2:4 16:17 17:18 19:12 widen [1] 43:21 widening [1] 31:2

WILLIAM [1] 1:16 Wilson [16] 7:8,14 8:10 11:5 12:4 16:10 17:9 20:9 21:3,19 27:11,13 27:20 43:10 57:21 62:3 wish [1] 10:17

wishes [1] 27:3 Without [1] 28:4 witness [15] 2:3,8 11:10 13:5 14:16,19 15:11,16 29:10 38:7 40:15 42:13 62:15 66:10 67:3

wondering [2] 30:15 32:4

Wood [11] 30:5 37:2,11 37:21 38:13 39:4,15 42:9 42:11 47:12,19

Wood's [1] 36:21 Woodholme [7] 1:1 4:7 5:5 26:6,6,14 67:2 woody [1] 58:7

words [1] 37:10 work-related [1] 3:2 works [1] 31:9

worse [1] 29:6 worth [1] 57:11 writing [1] 42:12 written [1] 30:5 wrote [i] 6:19

-X-

X [2] 52:9 67:1

-Y-

yard [4] 21:6 42:3 44:15 63:8 yards [7] 19:5 20:1,17 20:19 21:5 25:6 27:11 years [8] 3:12 6:4 7:9 10:6 26:3 33:12 44:8 53:14 yellow [1] 12:8 yesterday [1] 6:5 yet [1] 9:4 younger [1] 55:10

-Zzoning [3] 1:2 3:4,15