

STATE OF SOUTH CAROLINA
IN THE COURT OF APPEALS

APPEAL FROM THE ADMINISTRATIVE LAW COURT
Ralph King Anderson, III, Chief Administrative Law Judge

Docket No. 21-ALJ-07-0433-CC
Appellate Case No.2023-000006

Friends of Gadsden Creek,.....Appellant,

vs.

South Carolina Department of Health and Environmental Control, and
WestEdge Foundation, Inc., ...Respondents.

RECORD ON APPEAL
VOLUME III OF VI

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1 events, potential contaminants can reach road
2 systems in the community and the nearby Gadsden
3 Green area?

4 A: Yes, ma'am.

5 Q: And you also reached the conclusion that
6 fillings of -- filling of tidelands critical
7 area within the drainage system known as
8 Gadsden Creek will provide for a permanent cap?

9 A: Yes, ma'am.

10 Q: And that that would remove the potential harm
11 to the environment and the public?

12 A: Yes, ma'am.

13 Q: And you further reviewed -- you mentioned the
14 Terracon sediment sampling or leachate sampling
15 and the general engineering lab sampling that
16 was done.

17 A: Yes, ma'am.

18 Q: Okay. And that sampling was done in -- both
19 sets of samples were done at some time in 2020,
20 is that correct?

21 A: That's my understanding.

22 Q: And if you recall, I think we've participated
23 in your deposition at some point?

24 A: Yes, ma'am.

25 Q: And it might have been a virtual deposition.



1 We may not have been in person, but you recall
2 giving a deposition?

3 A: Yes, ma'am.

4 Q: Do you recall discussing how you read 30-12-
5 G(2), which is one of the regulations that Mr.
6 Churdar had up on the screen?

7 A: Yes, ma'am.

8 Q: And 30-12-M, do you recall a discussion of how
9 you read those?

10 A: Yes, ma'am.

11 Q: Okay. And wasn't it your position that you had
12 discretion in applying those based on the
13 language of those regulations, you had some
14 discretion?

15 A: Yes, ma'am.

16 Q: Okay. You did not read the regulation to
17 require you to deny this application?

18 A: Yes, ma'am.

19 Q: You be -- and -- and is that traditionally how
20 you've applied these regulations that it gives
21 you discretion to review dredge and fill
22 activities?

23 A: Yes, ma'am.

24 Q: Okay. And to grant them if they meet the
25 regulatory -- or to potentially approve them if



1 they meet the regulatory requirements?

2 A: Yes, ma'am.

3 Q: Okay.

4 **MS. SHAHID:** Hold on. I'm going to talk to Mr.
5 Traynham for a minute. Your Honor, do you mind
6 if we step outside?

7 **THE COURT:** No.

8 **MS. SHAHID:** For just a second.

9 A: Is there -- can I take -- just get more water?

10 **THE COURT:** Well, we're just going to take a five-
11 minute break now.

12 **MS. SHAHID:** Okay.

13 **(Off the record from 3:29 p.m. until 3:38 p.m.)**

14 **THE COURT:** Ms. Shahid.

15 **MS. SHAHID:** Yes, sir, Your Honor.

16 **THE COURT:** Keep on. Keep on.

17 Q: Okay. So, you applied this regulation in
18 making your decision, right?

19 A: Yes, ma'am.

20 Q: 30-12-G. And would you agree with me that A
21 uses the word shall and B uses the word should?
22 And I can help you there.

23 A: I -- yes, ma'am.

24 Q: Shall be denied or should be undertaken only.

25 A: Yes, ma'am.



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1 Q: Okay. And when I took your deposition, I think
2 we had a similar discussion ---

3 **THE COURT:** Where -- where I could be clear, when
4 you are having a discussion about having
5 discretion, I didn't quite understand that.
6 So, is it should where you were talking about
7 having discretion or ---

8 A: Yes, sir.

9 **THE COURT:** Okay.

10 Q: Okay.

11 **MS. SHAHID:** I think that's all I've got, Your
12 Honor. Hold on. Just let me -- oh.

13 **MR. TRAYNHAM:** Sorry, Your Honor.

14 **MS. SHAHID:** I think that's all I've got, Your
15 Honor.

16 **THE COURT:** Oh, she's just faking you out.

17 **MR. CUNNINGHAM:** She overruled it. You can leave
18 that up just for a minute.

19 **MR. WILLIAMS - CROSS-EXAMINATION BY MR. CUNNINGHAM:**

20 Q: Good afternoon, Mr. Williams. I -- this is 30-
21 12-G(2)(b) and it -- it does say should, but it
22 also says, only if, is that right?

23 A: Yes.

24 Q: And you're -- you're bound to -- or DHEC is
25 bound to apply the regulations as they are



1 written, correct?

2 A: Yes, sir.

3 Q: And the policies in the CMP as they are
4 written, correct?

5 A: Yes, sir.

6 Q: And you're bound to apply the definitions in
7 the -- in 30-1, in the glossary of the CMP,
8 right?

9 A: Yes, sir.

10 Q: All right. And in your deposition, you've
11 testified under oath that with a respect to
12 G(2)(b) and it's application here, there is no
13 discretion to refuse to apply the water
14 dependency or the feasible alternative
15 limitation. And you said, correct. Do you
16 recall that?

17 A: Yes, sir.

18 Q: That's -- that's accurate, right?

19 A: Yes.

20 **THE COURT:** Well, can I inter- -- how can both be
21 accurate?

22 A: Well, I mean, it does have an ability to be
23 should, but the Department turned -- determined
24 that the activity is non-water dependent. So,
25 it -- it -- and -- and I think I clarified that



1 in the deposition when Mary Shahid asked me a
2 question further in the deposition, but again,
3 as you go -- as you -- under b ---

4 **THE COURT:** I -- just where I can understand then.

5 A: Yes, sir.

6 **THE COURT:** It says should be undertaken only if,
7 but if you decide that it's water dependent ---

8 A: Yes, sir.

9 **THE COURT:** --- then that ends it. It -- it would
10 at least according -- you can't interrupt the
11 law, but you -- I -- according to how the
12 Department interpret -- interprets it. Is that
13 -- well, I want to be clear here. It just
14 seemed like I'm getting both.

15 A: Right. So, I believe there is discretion there
16 because if you look under 1, it says there are
17 cases and as I mentioned earlier, however,
18 where such unavoidable environmental effects
19 are justified if legitimate public needs are to
20 be met. And so, if it's non-water dependent,
21 it allows you to look at those non-water
22 dependents based upon -- under 1, there are
23 there are cases and that directs us to 30-12-M.
24 Kind of like the policies under the CMP for
25 non-water dependent structures, if you read



1 through that, it directs you to go 30-12-M for
2 analysis for non-water dependent structures.

3 Q: First of all to clarify, when I asked you that
4 question in the deposition, that was follow-up
5 to Ms. Shahid. That was the end of the
6 deposition. Do you recall that?

7 A: I don't. I don't specifically recall. I
8 remember Ms. Shahid asking a question, is there
9 discretion in the word should and I said, yes.

10 Q: I'm going to refresh your recollection here.
11 It's -- it's right here in the deposition. Do
12 you see that?

13 A: Yes.

14 Q: That was the -- the ab- -- shortly after you
15 said, the deposition concluded, is that
16 correct?

17 A: Yeah. You say, and the Department's not at
18 liberty to decline to apply 30-12-2(b),
19 correct? And I said, correct. And you said,
20 has the language dredging and filling should be
21 undertaken only if the water -- it actually is
22 water dependent and there are no feasible
23 alternatives, correct? I said, correct. You
24 said, there's no discretion to refuse to apply
25 the -- to apply the water dependency or



1 feasible alternative limitations there, is
2 there? I said, correct, as instructed under
3 (b) .

4 **THE COURT:** All right. I understand now.

5 Q: My point in that is -- and shortly after that,
6 the deposition concluded without any more
7 questioning by Ms. Shahid, is that right?

8 A: No. But she had questions that earlier.

9 Q: Right.

10 A: And earlier in the deposition where ---

11 Q: Right.

12 A: --- we clarified the word should.

13 Q: Right. And then we came back and we talked
14 about it at the end, correct?

15 A: Correct.

16 Q: Right. Okay. Did you take that deposition
17 under oath?

18 A: I did.

19 Q: And you stand by what you said in that
20 deposition?

21 A: Yes.

22 Q: Okay. Now, let's talk a little bit about
23 should and shall and everything else. G-2(b)
24 says should. In other words -- well that --
25 that applies to the dredging and filling



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1 operations, right? Should they may be
2 undertaken if -- only if, these are the two
3 criteria met, right?

4 A: Right.

5 Q: Okay. Now, there's no mention or reference in
6 30-12-G to -- to 30-12-M, right?

7 A: There is not a reference to 30-12-M. No.

8 Q: And the reference up here with respect to
9 public needs, there is a reference to public
10 needs or -- or public interest in 2(a), right?

11 A: Right.

12 Q: There is no reference to public interest or
13 need in 2(b), is there?

14 A: No.

15 Q: Let's see now. Let's talk a little bit about
16 our earlier testimony today. You mentioned
17 that the current iteration of Gadsden Creek is
18 located or it transects some of the original
19 areas where the original areas where the
20 original Gadsden Creek flows, is that right?

21 A: Yes.

22 Q: All right. And it's located in the -- the mar-
23 -- or what was the marsh all around the former
24 Gadsden Creek, right?

25 A: Yes.



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1 Q: Are you aware that the affordable housing
2 contribution of this project is required by
3 ordinance in the City of Charleston?

4 A: I believe -- I believe I'm aware that there is
5 some type of requirement by the city, yes. But
6 I'm not sure of the level of contribution.

7 Q: Okay. You're aware of an ordinance that the
8 City of Charleston has related to certain
9 development and a requirement to contribute to
10 affordable housing fund or provide workforce
11 housing, right?

12 A: Yes.

13 Q: Let's go briefly to ---

14 **MR. CUNNINGHAM:** Would you mind going to 30-12-M?
15 And I'll stop annoying you.

16 **THE COURT:** Where are you going?

17 **MR. CUNNINGHAM:** 30-12-M, Your Honor.

18 **THE COURT:** Okay.

19 Q: This is a separate section from dredging and
20 filling, right?

21 A: Yes.

22 Q: And -- and before -- just -- we'll get this out
23 of the way, 30-12-G uses the word filling,
24 right?

25 A: Yes.



1 Q: And this uses the word structures, right?

2 A: Yes.

3 Q: And the structures that are elucidated here
4 include buildings, houses, and offices, right?

5 A: Yes.

6 Q: And those can be put on pilings over or in
7 critical area. And the critical area can still
8 be underneath them, right?

9 A: Yes.

10 Q: All right. Fill on the other hand, which is
11 not used here, once you put fill over critical
12 area, that stops being critical area, right?

13 A: Yes.

14 Q: You mentioned about reestablishing the cap.
15 Now, you would agree that there are just
16 portions of the cap that may have been eroded.
17 It's not the entire cap that's gone, right?

18 A: My understanding there's portions of the -- of
19 the cap.

20 Q: Right. And so, portions of it are still in
21 place, right?

22 A: Yes.

23 Q: And not in need of capping?

24 A: I don't know that it's not a need, but I know
25 there -- there's areas that's not exposed.



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1 Q: Okay. One of the provisions under 30-12-M(2)
2 talks about no significant environmental
3 impact, is that right?

4 A: Yes.

5 Q: That's -- and you have to have all three of
6 those prongs, I think Mr. Churdar said, to
7 satisfy 30-12-M(2), right?

8 A: Correct.

9 Q: And the significant environmental impact, that
10 relates to potential impacts from the non-water
11 dependent structures themselves, right?

12 A: Correct.

13 Q: Okay. And the overriding public need is a
14 separate criteria that has to be met.

15 A: Under -- yes.

16 Q: And let's talk a little bit about the non-
17 option alternative. About -- I -- I think you
18 testified that if this permit doesn't go
19 forward, then nothing will happen, right?

20 A: That's my understanding.

21 Q: Well, you're aware that the city has an
22 obligation in the Corps permit, right?

23 A: Yes.

24 Q: And that the obligation is to maintain the cap.
25 So, the city is obligated to to the extent



1 there's been erosion of the cap. The city is
2 already obligated to do something to remedy
3 that, correct?

4 A: That's my understanding.

5 Q: I don't want to belabor this point too much,
6 but -- because the -- as we said, the language
7 of commercial development is what it is and
8 you're -- you're not saying that it reads
9 otherwise than how it reads, right?

10 A: Can you ---

11 Q: Sure.

12 A: --- be more specific or ---

13 Q: Yeah.

14 A: --- clarify?

15 Q: You're not saying the words should be altered
16 here in these policies, are you? You don't
17 have that authority, right?

18 A: No.

19 **THE COURT:** You're in the CMZ ---

20 **MR. CUNNINGHAM:** The CMP, Your Honor. Yes.

21 **THE COURT:** P. All right.

22 Q: And policies under 1(a) cover the entire
23 coastal zone, right?

24 A: Yes.

25 Q: And included in the coastal zone are critical



1 areas.

2 A: Yes.

3 Q: And 2, are like the critical areas themselves,
4 right?

5 A: Yes.

6 Q: So, that's -- that's something a little extra
7 just for the critical areas.

8 A: Say it again? I didn't hear you.

9 Q: That -- that -- that provision is something a
10 little extra, beyond this, there's also this
11 for the critical areas.

12 A: It's specific to activities in the critical
13 areas.

14 **MR. CUNNINGHAM:** And well, it might be easier. Do
15 you want -- would you mind putting that up?

16 Q: I just want to ask you one question about this.

17 **MR. CUNNINGHAM:** And what I'm -- I just need to ---

18 **MS. MILTON:** It's the CMP, Commercial ...

19 **MR. CUNNINGHAM:** Yes, ma'am. 2(a).

20 **THE COURT:** When you say 2(a), what's the page
21 number?

22 **MR. CUNNINGHAM:** It's III-41, Your Honor.

23 **THE COURT:** Oh, going back there again.

24 **MR. CUNNINGHAM:** All right. 2(a). Thank you very
25 much, Ms. Poole.



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1 Q: All right. And this is the -- one of the
2 policies you applied in this case -- sorry, Mr.
3 Williams. I'll let you finish your drink.

4 A: Excuse me.

5 Q: I'll take one myself while I'm at it. Okay.
6 Mr. Williams, you applied 2(a) in this case,
7 correct? Or you evaluated ---

8 A: Yes.

9 Q: --- the project to see whether it complied with
10 2(a), right?

11 A: Yes, sir.

12 Q: All right. In 2(a), we're talking again about
13 parking garages, apartments, restaurants, shops
14 that are capable of being built and situated in
15 or over critical area. And the critical --
16 critical area still exist underneath those,
17 right?

18 A: Yes.

19 Q: And in fact, it talks about shading out
20 vegetation, which in other words, vegetation in
21 the critical area.

22 A: Correct.

23 Q: All right. Mr. Hodges, who you mentioned, he's
24 not in charge of applying critical area
25 policies whatsoever, is he, in his -- in his



1 duties?

2 A: No, sir.

3 Q: He's not -- he is entitled?

4 A: No, sir. What did you say?

5 Q: I -- I think we're ---

6 A: I got bad -- my hearing is bad.

7 Q: I think we're doing some double negatives here,
8 Mr. Williams. Mr. Hodges, is not in charge of
9 applying critical area policies, is that
10 correct?

11 A: He is not.

12 Q: Now, you mentioned some public comments that
13 the Department received in this matter?

14 A: Yes, sir.

15 Q: And you got a lot of public comments in this
16 one, didn't you?

17 A: We did.

18 Q: All right. And most of them were against the
19 filling of Gadsden Creek, weren't they?

20 A: Yes.

21 Q: Let me ask you just a few more questions really
22 quickly. And I think you've said this in your
23 deposition. I just want to make sure, 30-12-
24 G(1) is a general statement where as G(2) have
25 the specific project standards, is that your



1 recollection?

2 A: Yes.

3 Q: Let's see. I want to make sure -- I don't want
4 to go over stuff I've already designated in
5 your testimony, Mr. Williams. So, let me try
6 and avoid that, if I can. I think you
7 testified with the deposition all of the
8 alternatives submitted by the applicant to you
9 anyway involved filling Gadsden Creek, is that
10 right?

11 A: I'm -- I'm having a hard time hearing. I'm
12 sorry.

13 Q: Oh, here. I'll speak up. Sorry.

14 A: Thanks.

15 Q: All the alternatives submitted by the applicant
16 to you in your evaluation of this and DHEC
17 Department, involved filling Gadsden Creek, is
18 that right?

19 A: Initially, yes. There was offsite alternatives
20 and then no action, and during, I think
21 comments to the applicant, they provided
22 responses of onsite alternatives, which I think
23 they did have discussion as it relates to muted
24 -- going through a discussion as it relates to
25 onsite design alternatives.



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1 Q: Right. And -- but -- but as far as the actual
2 proposals, they didn't actually get there with
3 something that ---

4 A: Oh, no. No. No. No. No. No. Yes, sir.

5 Q: You are unaware of a report of any member of
6 the public being harmed by pollutants that came
7 from the landfill underneath Gadsden Creek?

8 A: I'm unaware of any reports.

9 Q: You are unaware of DHEC acting in any way to
10 protect the public while the permit challenge
11 is being litigated?

12 A: No.

13 Q: You are aware?

14 A: I'm not aware of them.

15 Q: The Department has not sampled Gadsden Creek
16 itself in the past 20 years, is that correct?
17 At least.

18 A: I can't speak for the Bureau of Land Waste
19 Management on that, but I'm unaware of any
20 status with them on that as it relates to that.

21 Q: I think in your deposition, you agreed that
22 pollutants may enter Gadsden Creek or its
23 wetlands from the Ashley River, is that
24 correct?

25 A: There's -- yes. There's a possibility of that



1 occurring.

2 Q: And there -- sorry. I didn't mean to talk over
3 you.

4 A: Yes.

5 Q: There's a -- pollutants may come into Gadsden
6 Creek and its storm -- and its wetlands through
7 stormwater.

8 A: Correct.

9 Q: The seepage samples you referred, they -- they
10 weren't -- they weren't intended to be surface
11 water samples, were they? We're talking about
12 seepage as opposed to surface.

13 A: Correct. There's two type of samplings that
14 were done. There's water surface samples that
15 were done and there were seepage samples that
16 were done.

17 Q: And the surface samples said, Gadsden Creek
18 same roughly as the Ashley River, right?

19 A: The majority of the results I saw show that
20 they were -- they were some -- I believe there
21 was a few that were not.

22 Q: You defer to whatever is in the documents
23 though, is that right?

24 A: Correct.

25 Q: DHEC is not issued any advisories to the public



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1 about a threat to public health from
2 contaminants in Gadsden Creek, is that correct?

3 A: Not that I'm aware of.

4 Q: And it's not correct or you -- they haven't
5 issued any?

6 A: I'm not aware of any advisories DHEC issued.

7 Q: You're not aware of DHEC ever conducting
8 sampling of flood waters that have emanated
9 from Gadsden Creek?

10 A: Not that I'm aware of.

11 Q: Unaware of any action by DHEC to require the
12 City of Charleston to address public health
13 issues associated with the lack of maintenance
14 for the landfill cap.

15 A: I'm not -- I'm not aware of any.

16 Q: At any time period, is that correct?

17 A: Yeah. Again, I can't speak for the Bureau of
18 Land Waste Management. But I'm not aware from
19 Critical Area permitting per se.

20 Q: And just -- I think we're -- we know this, but
21 the Department in considering this permit has
22 to apply the policies and statements and
23 statutes, 48-38-20, 48-39-39, and 48-39-150, is
24 that correct?

25 A: Correct.



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1 Q: Now, among the comments, you got some from
2 resource agencies, is that right?

3 A: That's correct.

4 Q: And U.S. Fish and Wildlife was one of them.

5 A: That's correct.

6 Q: And South Carolina Department of Natural
7 Resources was one of them.

8 A: That's correct.

9 Q: And NOAA or the National Marine Fishery Service
10 was one of them.

11 A: That's correct.

12 Q: And not one of those resource agencies
13 supported filling Gadsden Creek.

14 A: Initially, they all had concerns as it relates
15 to it. The U.S. Fish and Wildlife and SCDNR
16 maintain their objections to the project. The
17 National Marine Fisheries did change their
18 position on it, as it relates to the -- they
19 said that based on the Corps' determination to
20 effect not likely to effect -- adversely
21 effect, and they concurred with that. And
22 remove -- basically, that removed their
23 objections to the project.

24 Q: But they still didn't support the project
25 though, even they didn't object?



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1 A: Well, I have to go on -- based on what the
2 letter said and the letter -- and typically,
3 when we receive a letter like that, it gives
4 the okay for the Army Corps or Engineers to
5 move forward with a project.

6 Q: All right. Well, let me ask this, the -- the
7 project as proposed will result in the
8 elimination of essential fish habitat?

9 A: Yes.

10 Q: All right. And habitat of areas of particular
11 concern?

12 A: No. When we did our review and in
13 coordination, there was no threatened
14 endangered species identified.

15 Q: Okay.

16 A: There was no critical habitat identified. It
17 is a functional system. However, we added
18 conditions that what the -- the fill must
19 happen during the winter months of low
20 biological activity. That is -- and my
21 understanding it's going to happen at low tide.
22 So, it minimizes that environmental impact to
23 that system. But it will fill that entirety of
24 that drainage system.

25 Q: And it will remove that habitat forever?



1 A: Yes.

2 Q: To at least to that extent, correct?

3 A: Yes. Within that drainage system.

4 Q: I believe that's all I have. That's all I
5 have. Thank you, Mr. Williams.

6 A: Yes, sir.

7 **THE COURT:** Redirect?

8 **MR. CHURDAR:** Just one moment.

9 **MS. SHAHID:** Your Honor, I was asking Mr. Churdar to
10 help me with a definition. Can I take just a
11 minute? He's looking at -- looking at it for
12 me?

13 **THE COURT:** With the definition?

14 **MS. SHAHID:** Yes.

15 **THE COURT:** You want us to get your Miriam Webster?

16 **MS. SHAHID:** It's not one of those definitions.
17 It's all right. We're not used to having
18 trouble with the internet. So, we'll -- we'll
19 move on.

20 **THE COURT:** Well, what is the ---

21 **MS. SHAHID:** Oh, wait. You're next. Not me.
22 Sorry.

23 **MR. WILLIAMS - REDIRECT EXAMINATION BY MR. CHURDAR:**

24 Q: All right. So -- so, Mr. Williams, I wanted to
25 you ask you about the issue of non-water



1 dependent structures. Mr. Cunningham made a
2 point with you and I'm standing up here and my
3 computer is acting up. I apologize for that.
4 Made the point that if the Gadsden Creek is
5 filled, there would be no more critical area.
6 Do you recall his question about that?

7 A: Yes.

8 Q: Okay. And when you look at the regulatory
9 definition of 30-12-M -- not the definition,
10 but the regulation 30-12-M(2) with regard to
11 non-water dependent structures, why is that not
12 a problem from the Department's perspective?

13 A: Can you rephrase that?

14 Q: I guess the -- the -- the -- would you -- would
15 you agree that the fill is the structure,
16 that's the structure?

17 A: Yeah. I mean, the -- the purpose of that fill
18 is to serve as an environmental cap to
19 reestablish that environmental cap. That
20 environmental cap is a structure.

21 Q: Okay.

22 **THE COURT:** So, I wanted to be -- I was going to ask
23 a follow-up question on that because I didn't
24 quite get it. So, the position you're taking
25 is -- and -- and I would like to see an outline



1 where the landfill original was.

2 A: Yes. I mean, there's -- there's aerals.

3 **THE COURT:** But there was a landfill.

4 A: Yes, sir.

5 **THE COURT:** And this drainage ditch was part of the
6 landfill and now you -- you're -- you're saying
7 that by filling the drainage ditch, you're
8 capping the landfill?

9 A: Yes, sir. So, Gadsden Creek -- so, it was in
10 this location. As this fill came in, they
11 started filling Gadsden Creek and kind of
12 shifting to be -- to continue to allow runoff
13 coming from the community up in the upland.
14 They kept shifting the drainage feature over.
15 So, the original location of Gadsden Creek
16 would start over here and then kind of go from
17 southeast to northwest. And as the fill came
18 in, it kept shifting that feature over and they
19 kept -- it -- it kept realigning it, reshaping
20 it. I think it was reshaped twice. And so,
21 the ultimate shape -- and we talked about the
22 federal permit and I think the -- the federal
23 permit when it's close out, it -- it put a
24 drainage ditch along the perimeter of that
25 landfill. And -- and -- to continue to have



1 runoff come out through the mouth of the
2 original location of Gadsden Creek underneath
3 Lockwood Boulevard. And so, what that fill
4 does, is it comes in -- it's -- it's settling
5 and eroding. What it does, it comes in and
6 reestablishes that cap that was once there.

7 **THE COURT:** But the drainage ditch -- was it ever
8 capped? Was it is what I'm trying to figure
9 out.

10 A: The dan- -- the dana- -- the drainage ditch is
11 within the limits of the landfill and it was
12 set directly along the perimeter of the
13 landfill.

14 **THE COURT:** All right.

15 **MR. CHURDAR:** I need to get 1, 2, and 3. I'm not
16 sure what numbers they would be, but just
17 Respondent DHEC's 1, 2, and 3. Would that be
18 right?

19 **COURT REPORTER:** DHEC hasn't entered any yet.

20 **MR. CHURDAR:** Okay. Thank you.

21 Q: All right. Mr. Williams, I'd like to hand you
22 what I have marked as -- as Respondent DHEC
23 exhibits 1 and 2. And can you look at those
24 and tell me if you recognize those?

25 A: This document contain -- I do recognize it.



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1 Q: Okay. And -- and -- and at the top of that is
2 -- is the critical area permit CZC and 401
3 water quality certification?

4 A: Yes.

5 Q: Okay. And are those other documents documents
6 that helped inform the Department's decision in
7 this matter?

8 A: There -- they are -- they were documents that
9 were submitted as part of the permit
10 application and other studies. And there's a
11 lot of supporting documentation here that came
12 along with the permit application, as well as
13 the 401 water quality memorandum. I think
14 there's some agency comment letters in here,
15 some site photos.

16 Q: Okay. Now, Exhibit 2, if you could take a look
17 at that. Those are the public's comments, is
18 that correct?

19 A: Yes. This appears to be public comments
20 associated with permit app.

21 Q: Okay.

22 **MR. CHURDAR:** Your Honor, I'd like to offer DHEC
23 Respondent's Exhibit 1 and 2 into evidence.

24 **MR. CUNNINGHAM:** I'll object. They're hearsay and
25 this is way beyond the scope of cross too.



1 **THE COURT:** All right. Hold ---

2 **MR. CHURDAR:** Your Honor, I believe when Mr.
3 Cunningham discussed the letters, he opened the
4 door and prior to him doing that, I had made a
5 strategic decision not to either -- to present
6 either exhibits 1 or 2, but since he opened the
7 door, I think that -- that's the basis for my
8 wanting to put it in.

9 **THE COURT:** Well, if I let them in, it's not going
10 to be for the truth of the matter asserted.
11 It's only going be for those will be exhibits
12 that -- or those are the documents the
13 Department considered.

14 **MR. CHURDAR:** Right.

15 **THE COURT:** Which this is a de novo hearing, so.
16 What the Department considered doesn't carry a
17 lot of weight for me, but I think that pla- --
18 places me in an interesting position because on
19 one hand, there -- there are very little
20 prejudicial value to you because I get them
21 very little weight. But on the other hand, do
22 they have enough weight to come in?

23 **MR. CUNNINGHAM:** Well, exactly. And -- and you
24 know, to the extent I have discussed three
25 public comment letters, I don't think I opened



1 up the entire file either.

2 **THE COURT:** Well, I would say you -- you opened up
3 maybe put the rest of the comment letters in.
4 If you wish to do that.

5 **MR. CHURDAR:** Well, I just -- I -- I will -- only
6 wanted to put that in the -- the file as a --
7 as a combination. So ---

8 **THE COURT:** Well, no -- no combination.

9 **MR. CHURDAR:** Okay. All right, then.

10 Q: One final question, Mr. Williams. When you
11 were making your determination as to the harm
12 caused by contaminants in the water and
13 leachate, I would like to -- you had mentioned
14 the -- the GEL report. I'd like to hand you
15 that, Respondent -- DHEC Respondent's Exhibit
16 3. Do you recognize that document?

17 A: Yes.

18 Q: Okay. And is that the document that you
19 testified to in -- in your direct that -- that
20 the -- the water quality contamination levels
21 that are in that document is what you were
22 considering in making the permitting decision?

23 A: As it relates to the GEL Sampling report, yes.

24 Q: Yes. Okay. All right. Thank you.

25 **MR. CHURDAR:** Your Honor, I'd like to offer that ex-



1 -- DHEC's Respondent's Exhibit 3 into evidence.

2 **MR. CUNNINGHAM:** Well, it came up on cross, so I'm
3 not objecting on that. But it is still hearsay
4 upon hearsay.

5 **THE COURT:** What's it offered for?

6 **MR. CHURDAR:** Well, that Mr. Williams as -- as apart
7 of his analysis considered what was in that
8 report in making his permitting decision.

9 **THE COURT:** Well, okay, he considered the report.
10 Are you offering it for the truth of the matter
11 asserted that's within the report? And if not,
12 why would it be appropriate?

13 **MR. CHURDAR:** Because he relied on it.

14 **MR. CUNNINGHAM:** He's already testified he relied on
15 it, so that's already ---

16 **THE COURT:** Yeah.

17 **MR. CUNNINGHAM:** --- in the record.

18 **THE COURT:** But it does show what he relied on. I'm
19 going to let that one in, but not for the truth
20 of the matter asserted. Just for what he
21 relied on, so. What that accomplishes, I don't
22 know.

23 **(Respondent DHEC's Exhibit Number 3 was admitted into**
24 **evidence.)**

25 **MR. CHURDAR:** All right. Thank you. I don't have



1 any further questions. I -- I'll just take
2 those there.

3 **THE COURT:** Ms. Shahid, do you ---

4 **MS. SHAHID:** I'm going to use the ELMO.

5 **MR. WILLIAMS - RECROSS-EXAMINATION BY MR. SHAHID:**

6 Q: Mr. Williams, I don't normally carry my phone
7 with me when I'm conducting cross-examination,
8 but I wanted to read you a regulatory
9 definition of critical area and just get you to
10 confirm if that is your understanding.
11 Critical area, any of the following; coastal
12 waters -- one, coastal waters; two, tidelands;
13 three, beach dune system; and four, beaches.
14 Does that sound your regulation in 30-12-1?

15 A: Yes. That's the four types of critical areas.

16 Q: Okay. So, I don't think we're talking about
17 beach dune system or beaches here, right?

18 A: Right.

19 Q: Okay. So, we're talking about coastal waters
20 and tidelands, correct?

21 A: Yes, ma'am.

22 Q: Both of them?

23 A: Yes, ma'am.

24 Q: Correct? Okay. And I'm going to show you --
25 if I can use this -- and I will submit to you



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1 that this is cutting and pasting from South
2 Carolina Legislature online, 30-12.

3 A: Okay.

4 Q: Okay. And I'll ask you, first of all, 2(a)
5 permit applications for the filling of wetlands
6 and submerged lands for these purposes shall be
7 denied, and the purposes of course stated
8 above. But I'm focused on the word shall. Do
9 you shall there?

10 A: Yes, ma'am.

11 Q: Okay. And then next one. Dredging and filling
12 in wetland areas should be undertaken only if
13 that activity is water dependent and there are
14 not feasible alternatives. And you see the
15 word should there.

16 A: Yes, ma'am.

17 Q: Then in C, to the maximum extent feasible,
18 dredging and filling activities should be
19 restricted. Okay. So, it's qualified with the
20 word -- the words maximum extent feasible. So,
21 it's not an outright denial, correct? And
22 outright prohibition is what I meant to say.

23 A: Yes, ma'am.

24 Q: Okay. And it used the word should.

25 A: Correct.



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1 Q: Okay. Dredging and excavation shall not create
2 stagnate water conditions. That's an outright
3 prohibition, correct?

4 A: Correct.

5 Q: As you apply the regulation.

6 A: Yes, ma'am.

7 Q: Okay. Designs for dredging and excavation
8 project shall where feasible include protective
9 measures. So, it's prohibitory language, but
10 you take into account feasibility, I guess ---

11 A: Yes, ma'am.

12 Q: --- when you apply that regulation. Okay.
13 Application for dredging and submerged and
14 wetland areas for purposes other than shall,
15 and then it lists the purposes. Shall be
16 denied unless and over lighting --riding public
17 need or interest can be demonstrated. Okay.
18 And then, the regulation continues and there's
19 at least two other instances where the word
20 shall is not -- is used. And this is all in
21 30-12-G. Now, have you in your 14 years in the
22 Department been involved in the evaluation and
23 issuance of a permit for critical area impacts
24 for non-water dependent use, other than this
25 project.



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1 A: There's -- there's none that I can recall.

2 Q: Okay. So, this is something relatively unique.

3 A: It's very unique. And again, like I said, it's
4 a -- there's a much more stringent higher
5 regulatory test in order to be able to permit
6 a non-water dependent structure and given, you
7 know, you're -- we're dealing with a landfill
8 with a manmade drainage ditch that has
9 naturalized. It still has that connection to
10 the original Gadsden Creek location. It is a
11 very unique project.

12 Q: Okay. And are you familiar in working with
13 DHEC with permits that were issued in the past,
14 before your time, related to filling for
15 similar purposes as the purposes we described?
16 And I'll give you an example. Are you familiar
17 with the South Carolina Aquarium permit?

18 A: Yes.

19 Q: Okay. Are you aware that in evaluating the
20 aquarium permit, the coastal counsel staff
21 performed the same evaluation you did, looking
22 first at 30-12-G and then at 30-12-M?

23 A: I'm not familiar that it -- it followed that
24 exact same process, but I'm familiar of the
25 case and the -- as far as the aquarium being



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1 water dependent and I believe a -- a -- some
2 type of tour boat facility was not.

3 Q: Right. A restaurant.

4 A: Restaurant. I'm sorry.

5 Q: Yeah. The restaurant. But it was -- it was
6 allowed.

7 A: Yes.

8 Q: Campson's Restaurant.

9 A: That's correct.

10 Q: Okay. As a non-water dependent use. Okay.

11 **THE COURT:** Was -- was there fill placed in the
12 wetlands for that restaurant or was it placed
13 on ---

14 A: I don't recall the details of that. I believe
15 -- I believe the -- the restaurant did have
16 fill associated with it. And as -- I don't --
17 I don't recall the specific details of that.

18 Q: Okay. And then, I want to look at 30-12-M.
19 And not to beat dead horse, but I want to make
20 sure my understanding is correct. So, there's
21 some general language about the general lack of
22 support for non-water dependent structures in
23 Number 1. These ---

24 A: Yeah.

25 Q: These are not things that you'd like to see.



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1 A: Yes, ma'am.

2 Q: Out of how the -- the water being used. Then,
3 non-water dependent structures in matter -- in
4 30-12-M(2), including buildings, houses or
5 offices that float shall be prohibited from
6 being constructed, moored or otherwise placed
7 in or over tidelands and coastal water critical
8 areas, correct?

9 A: Yes.

10 Q: All right. Now, would you describe the three
11 acres -- three plus acres of -- of marsh that's
12 associated with this project as tidelands?
13 Critical area ---

14 A: Yes.

15 Q: I'm sorry. I didn't mean to interrupt.

16 A: Yeah. Yes. It's a combination. I mean, it is
17 tidelands, but it also -- the coastal waters
18 which come in with the flooding tide, that
19 limit of the ebb and flows coastal waters. But
20 it -- yes, it is. Once it's drained, then all
21 of it would considered tidelands as well.

22 Q: Okay. All right. And the regulation says,
23 otherwise placed in or over, correct?

24 A: Correct.

25 Q: So, it certainly doesn't seem to me to state



1 that everything contemplated in this regulation
2 is on pilings, does that ---

3 A: It does not.

4 Q: That's your -- that's your con- -- your
5 conclusion too?

6 A: Yes, ma'am.

7 Q: Okay. And if I could for a minute, two
8 exhibits came in I believe. One was -- yeah.
9 Can I hold the two exhibits that ---

10 A: Which two?

11 Q: Did they all three come in?

12 A: No.

13 **MR. CUNNINGHAM:** Only one came in.

14 **MS. SHAHID:** Only one.

15 A: One. This one.

16 **THE COURT:** Yep.

17 **MS. SHAHID:** The comment letter? Oh, this one.

18 A: No. The GEL report.

19 Q: Gotcha. Okay. Gotcha. You know, I don't have
20 any further questions, Your Honor.

21 **MR. WILLIAMS - CLARIFICATION BY THE COURT:**

22 **THE COURT:** Well, one thing I asked about earlier is
23 if somebody could help me, I'd like to see an
24 outline of the -- of the landfill when it was
25 completed.



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1 **MR. CHURDAR:** Your Honor, the -- the image that --
2 well, it was on there. I think we had put on
3 there, but the -- there is a ---

4 A: Are ---

5 **MS. SHAHID:** It's not the whole landfill.

6 A: Are you talking about the entirety, the
7 original ---

8 **MS. SHAHID:** That's just the WestEdge project.

9 **THE COURT:** Yeah.

10 A: I think some of the -- I think -- and I don't
11 know if this can be submitted, but there's a --
12 there's a stack of historic -- historical
13 aerial photos that shows that when fill was
14 first being placed all the way until it's
15 developed with the original outline of Gadsden
16 Creek, as well as the drainage system that was
17 - that's in place today. And it -- there's
18 like a time lapse of the ---

19 **THE COURT:** All right. So ---

20 A: --- document.

21 **THE COURT:** So, the landfill started.

22 A: Yeah.

23 **THE COURT:** Obviously, it didn't get all filled at
24 once.

25 A: Correct.



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1 **THE COURT:** So, what you're telling me is it started
2 on the ---

3 A: I think in '50 ---

4 **THE COURT:** --- northern ---

5 A: The late -- late '50s.

6 **THE COURT:** What ---

7 A: On into the mid '60s.

8 **THE COURT:** Did it ---

9 A: And it ---

10 **THE COURT:** --- start at the northern end?

11 A: Northwest.

12 **THE COURT:** Northwest. Okay.

13 A: And so ---

14 **THE COURT:** I get that.

15 A: --- if you're standing in the Ashley River, the
16 banks of the Ashley River looking back towards
17 the WestEdge development, this is my
18 understanding, it started in the northwest and
19 it started creeping south and southeast.

20 **THE COURT:** As they filled it.

21 A: As they filled it. And the Gadsden Creek would
22 come up, it would actually come up over here,
23 and then comes in a -- from a southeast to a
24 north-northwest pattern. But you guys had
25 talked about sinuosity. It -- it had curves



1 that come in and out. So, as it was filled,
2 portions of that creek was filled and -- and --
3 and the drainage system was being relocated to
4 connect.

5 **THE COURT:** And the drainage system was being
6 relocated by the individuals doing the
7 landfill?

8 A: I -- I'm -- I'm assuming it was done by the
9 city or whoever they had in charge of -- of
10 filling the landfill to preserve runoff and
11 drainage from -- from the development and the
12 filling coming back out to the Ashley River.

13 **THE COURT:** So, where we are now then is there's a
14 drainage -- in your phrase, the drainage ditch,
15 but -- but it's naturalized.

16 A: Yes, sir.

17 **THE COURT:** So, it has -- I don't know what the
18 grasses are. The one I'm ---

19 A: It has -- it has spartina. I mean ---

20 **THE COURT:** Well, that's the one I know about.

21 A: There -- there's -- all the flora and fauna
22 that was testified to here is present there.
23 It's the same flora and fauna that's present
24 all along Brittlebank in the -- the part of
25 Gadsden Creek that's not being impacted. It's



1 the -- you know, anywhere from the fiddlers to
2 the mud minnows that come in with the tides to
3 the spartina grass, oyster shell. It is a
4 functional system.

5 **THE COURT:** Okay.

6 A: It -- but it -- it's a -- it's a -- it's a ---

7 **THE COURT:** It goes with the ebb and flow of the
8 tides.

9 A: Yes, sir. Through -- there's Lockwood
10 Boulevard, which is a four-lane highway. It
11 goes through a series of pipes that comes into
12 what was a manmade drainage system, that we're
13 talking about just now, naturalized. It comes
14 in through those pipes and there is an ebb and
15 flowing tide in there with associated marsh
16 grass, as it was seen in the aerials, adjacent
17 to it.

18 **THE COURT:** Any follow-up of what I've asked?

19 **MR. CUNNINGHAM:** No, Your Honor.

20 **MR. CHURDAR:** Your Honor, if -- if you could give
21 Janet control, I think she can ---

22 **MS. POOLE:** I think we found an image that might
23 help.

24 **THE COURT:** Well, you -- do you object?

25 **MR. CUNNINGHAM:** I -- I haven't seen it. I don't



1 know.

2 **THE COURT:** Well ---

3 **MR. CUNNINGHAM:** --- what it is.

4 **THE COURT:** Well, I tell you what, it's only going
5 to be for demonstrative if they ---

6 **MR. CUNNINGHAM:** Oh.

7 **THE COURT:** --- stick it up on the screen anyway.

8 **MR. CUNNINGHAM:** Okay.

9 **MR. WILLIAMS - REDIRECT EXAMINATION BY MR. CHURDAR:**

10 Q: And Mr. Williams, what -- what is the -- what
11 is the red line and what is the yellow line?

12 A: The red line is the boundary, the boundary
13 limits of the landfill. The yellow line is the
14 actual proposed WestEdge development.

15 **THE COURT:** When was that taken? Do you ---

16 A: If you scroll down to the bottom, I think it's
17 at the bottom left. I think it was in the
18 1949.

19 **THE COURT:** Oh, okay.

20 A: And I -- yeah.

21 **THE COURT:** And ---

22 **MS. POOLE:** Keep going?

23 **THE COURT:** This may sound like a stupid question,
24 but from a legal standpoint I want to --
25 obviously, there was no houses or anything. It



1 -- but this was just water or marshland.

2 A: All of this was -- if -- if you -- if you can
3 -- it's hard to see, but this is a very large
4 estuarine system that had multiple tributaries
5 braided throughout this large estuarine system.
6 The bunch of a little tidal creeks that ebbed
7 and flowed all throughout this area and so,
8 we're -- where you basically see the shoreline
9 of Ashley River -- I mean, yeah, basically
10 where you see that red line is now all --
11 except for the -- the drainage system that
12 we're speaking to today is all upland basically
13 fill.

14 **THE COURT:** Okay.

15 A: And it's -- you know, you got the -- you know,
16 Brittlebank park is there. You have the Joe
17 Riley stadium where the River Dogs are. The
18 police station. All -- all of that stuff there
19 now.

20 **THE COURT:** All right. I don't know Charleston that
21 well, so that doesn't do a lot for me, but ---

22 A: Yes, sir. But I'm just -- yeah. Yes, sir. I
23 understand.

24 **THE COURT:** Yeah. Any follow-up?

25 **MR. CUNNINGHAM:** No, Your Honor.



1 **THE COURT:** Follow-up?

2 **MR. CHURDAR:** I don't have follow-up. Would it be
3 all right if Mr. Williams is excused?

4 **THE COURT:** Ms. Shahid, any follow-up?

5 **MS. SHAHID:** No follow-up.

6 **THE COURT:** Okay.

7 **MR. CUNNINGHAM:** No objection.

8 **THE COURT:** Excused.

9 **MR. WILLIAMS:** Thank you, sir.

10 **THE COURT:** All right. How we doing on witnesses
11 and moving along?

12 **MR. SMITH:** Your Honor, we have one additional
13 witness for the Department that we're prepared
14 to call this afternoon, but ---

15 **THE COURT:** Oh.

16 **MR. SMITH:** --- we defer to the Court.

17 **THE COURT:** All right. Do you still have any?
18 Y'all ready to go?

19 **MR. CUNNINGHAM:** I -- I think so. My colleague is
20 handling this one.

21 **MS. MILTON:** I'm ready to roll.

22 **THE COURT:** Okay. Call way.

23 **MR. SMITH:** Pre-marked Exhibit 4.

24 **COURT REPORTER:** Sir, would you raise your hand. Do
25 you solemnly swear the following testimony to



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1 be the truth, the whole truth, and nothing but
2 the truth, so help you God?

3 **MR. HIGHTOWER:** I do.

4 **COURT REPORTER:** Thank you.

5 **MR. SMITH:** And Your Honor, the Department calls
6 Charles Hightower as it's next witness.

7 **CHARLES HIGHTOWER,** having been duly sworn, testifies
8 as follows:

9 **MR. HIGHTOWER - DIRECT EXAMINATION BY MR. SMITH:**

10 Q: Mr. ---

11 **THE COURT:** I guess you're not kin to the other Mr.
12 Hightower, now, are you?

13 A: I don't think so. I hope not. If -- only if
14 it's a bad thing, I'm not. Oh, you're talking
15 about Mr. Steven Hightower.

16 **THE COURT:** Yeah. Yeah.

17 A: No. No. No. We're -- we've been asked that
18 question quite a bit though.

19 Q: Would you please state your full name for the
20 record?

21 A: Yes. It's Charles Wesley Hightower.

22 Q: All right. And your educational background
23 please.

24 A: Have a B.S. in Biology. B.S. in Biology from
25 the University of South Carolina.



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1 Q: What's your current job title at DHEC?

2 A: I manage the 401 Water Quality Certification
3 and Wetlands section.

4 Q: What does that job entail?

5 A: It entails managing project managers who
6 process 401 Water Quality Certification
7 applications, as well as applications for
8 permits in state navigable waters.

9 Q: How long overall have you held that position?

10 A: Approximately 15 years.

11 Q: 15 years?

12 A: That's correct.

13 Q: Are you familiar with the WestEdge project site
14 and the permit application we've been
15 discussing in this case?

16 A: Yes.

17 Q: And what has your role been in the Department's
18 permitting review?

19 A: My role ended very differently than it started.
20 I -- originally the project was assigned to one
21 of my project managers. He -- during the time
22 he was processing the application or reviewing
23 the application, he received a full scholarship
24 to graduate school in Scotland and decided he
25 wanted to do that. So, I reassigned it to a



1 different project manager, who applied and was
2 accepted to law school. And he decided to
3 pursue that. So, at that point, I just decided
4 to review the project myself.

5 Q: Have you -- has your handling of the project
6 throughout been focused on water quality rather
7 than other -- other aspects of the project?

8 A: Mainly water quality. Yes.

9 Q: And what -- what regulatory purpose does the
10 401 Water Quality Certification serve in this
11 case?

12 A: Okay. So, any time that there's an application
13 to fill waters of the U.S., that requires a
14 permit from the Army Corps of Engineers under
15 Section 404 of the Clean Water Act. And the
16 Corps of Engineers cannot issue that federal
17 404 permit without a Section 401 Water Quality
18 Certification from the state.

19 Q: Okay. And what federal law just for context --
20 what federal law provides for DHEC's issuance
21 of the Water Quality Certification?

22 A: That's the Clean Water Act.

23 Q: Okay. Which section?

24 A: Section 401.

25 Q: Okay. Thank you. How does the 401 Water



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1 Quality Certification relate to other state
2 permits required by the -- currently required
3 by the WestEdge project?

4 A: In this case, that regulation states that if
5 there's a critical area permit required, that
6 we will coordinate with the critical area
7 permitting authority and the critical area
8 permit will serve as the 401.

9 Q: Is a standalone or independent 401
10 certification required?

11 A: No. It's issued as part of the critical area
12 permit.

13 Q: Okay. What regulation -- what South Carolina
14 regulation governs the Department's review --
15 review for -- of an application for Water
16 Quality Certification?

17 A: Sure. It's regulation 61-101, Water Quality
18 Certification.

19 Q: Okay. And which DHEC employees have you
20 coordinated with concerning the critical area
21 permit?

22 A: That would be Mr. Blair Williams and Ms. Tess
23 Trumbull.

24 Q: All right. And in general, what sort of
25 coordination have you provided throughout this



1 process?

2 A: Just lots of different aspects of the project.
3 Feasible alternatives analysis, we -- we
4 discussed those. And different information
5 request. You know, resource agency comments.
6 But mainly, I provide them with a assessment
7 and a memo regarding any potential impacts to
8 water quality.

9 Q: Okay. And that goes to my question, which is
10 have you produced any sort of writing
11 documenting your completion of the water
12 quality review in this -- for the project?

13 A: I did.

14 **MR. SMITH:** All right. And, Your Honor, if I could,
15 I'll -- I'll present what's pre-marked Exhibit
16 4, Respondent DHEC's Exhibit 4.

17 Q: Mr. Hightower, do you recognize this document?

18 A: Yes.

19 Q: Who authored it?

20 A: I did.

21 Q: Who addressed it or who is it addressed to?
22 Excuse me.

23 A: Mr. Blair Williams.

24 Q: All right. And what is the date of the
25 document?



1 A: May 21st, 2021.

2 Q: And is this sort of memorandum, is that
3 customary for critical area permits that
4 require the Water Quality Certification?

5 A: It is.

6 Q: All right.

7 **MR. SMITH:** Your Honor -- Your Honor, I would move
8 to enter this into exhibit as Respondent DHEC's
9 Exhibit 4.

10 **MS. MILTON:** No objection.

11 **MR. TRAYNHAM:** No objection, Your Honor.

12 **THE COURT:** It's admitted.

13 **(Respondent DHEC's Exhibit Number 4 was admitted into**
14 **evidence.)**

15 Q: All right. Mr. Hightower, what was the purpose
16 of this memorandum within DHEC's overall
17 permitting process?

18 A: To provide OCRM with an assessment of an
19 potential water quality impacts of the proposed
20 project.

21 Q: And what documents or technical materials were
22 reviewed for the project before preparation of
23 this memorandum?

24 A: The permit application, any additional
25 information during the process submitted by the



1 applicant, and informa- -- other information
2 received.

3 Q: Were public comments and submissions also
4 considered?

5 A: Sure.

6 Q: How will the WestEdge project activities at
7 issue in this case affect water quality?

8 A: In this case, the Department has reasonable
9 assurance that the proposed project will not
10 cause or contribute to any impacts on water
11 quality.

12 Q: We'll get more into the basis of that
13 conclusion, but let's look at the second page
14 of the memorandum and that's Bates Number,
15 South Carolina DHEC-BMW 01559. Would you look
16 down at the conditions noted at the bottom
17 there and would you tell the Court what the
18 purpose of those conditions is?

19 A: Those are conditions that are added to the
20 analysis to ensure that water quality will be
21 protected.

22 **MR. SMITH:** Could we give Janet control for a
23 moment?

24 Q: All right. Mr. Hightower, are you able to see
25 Section F-3 or Subsection F-3 there on the



1 screen?

2 A: Yes.

3 **THE COURT:** Should be in front of you as well.

4 A: Oh, you're right. Sorry, Your Honor.

5 Q: Could you please describe for the Court what
6 you've -- what the Department has done to
7 address the factors listed there, starting with
8 project purposes and water dependence?

9 A: Yeah. Absolutely. So, yeah. I am -- we had
10 determined the project is non-water dependent,
11 which opens a scope of feasible alternatives,
12 which were provided by the applicant and which
13 were reviewed.

14 Q: Okay. And what is your understanding of the
15 project purpose?

16 A: It's a mixed use development.

17 Q: Okay. And that project purposes leads to ---

18 A: And it -- and additionally capping the land --
19 capping the landfill.

20 Q: Okay. And how does that project purpose relate
21 to the question of water dependence?

22 A: I'm sorry. Can you rephrase that?

23 Q: Sure. Once you have established the project
24 purpose, how does that related to the question
25 or issue of water dependence?



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1 A: In this case, we would -- we would look at the
2 project purpose, but we'd also look at the --
3 the project plans to determine whether the use
4 of the project and the purposes of the project
5 depend -- depend -- are water dependent.

6 Q: Okay. I see. And I think you may have already
7 said this, but if a project is not water
8 dependent as you've said, how does that affect
9 your review of feasible -- feasible
10 alternatives to the project?

11 A: It -- it broadens your scope of feasible
12 alternatives. It allow- -- I mean, it opens up
13 the -- the offsite alternatives, which may not
14 be available if the project is water dependent.

15 Q: Okay. And what was the Department's conclusion
16 and your conclusion with respect to whether
17 there were feasible alternatives?

18 A: The Department determined based on the
19 alternatives analysis provided by the applicant
20 that there were no feasible alternatives that
21 met the project purpose and need.

22 Q: Do you recall some of the information you
23 received or reviewed from the applicant
24 concerning feasible alternatives?

25 A: I couldn't read -- I couldn't state for --



1 verbatim, but yeah.

2 Q: Sure. Did you personally review information
3 submitted by the applicant before completing
4 your water quality review?

5 A: Yes.

6 Q: And did you coordinate with Mr. Williams or
7 other DHEC employees concerning the issue of
8 feasible alternatives?

9 A: Yes.

10 Q: All right. Looking at subsection C there, how
11 were potential water quality impacts of the
12 project activities addressed in this case?

13 A: Well, we -- we look at the design of the
14 project, the design of any potential -- any --
15 anything that's in the project that could
16 potentially impact water quality like
17 stormwater runoff. So, we'd look at, you know,
18 the stormwater design, what they're -- how
19 they're treating their stormwater runoff. That
20 sort of thing.

21 Q: And what was your conclusion respect -- with
22 respect to water quality impacts?

23 A: That the project would not cause or contribute
24 to any impacts to water quality.

25 Q: And let's -- let's look finally at subsection



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1 D or rather item 4 under -- excuse me -- C-4
2 there. How -- yes. How did you evaluate and
3 address cumulative impacts during your review
4 of the project?

5 A: Sure. The same way we always evaluate
6 cumulative impacts. Those are addressed
7 through multiple facets of the review. It
8 starts with feasible alternatives, avoidance,
9 minimization, and for impacts that can't be
10 mini- -- avoided, there's mitigation. And we
11 do that for ev- -- for ever project. So -- and
12 no project is the same, so they had -- all the
13 projects have to meet those same standards.

14 Q: What is your understanding of the current
15 condition of the landfill at the WestEdge
16 project site?

17 A: It -- it's my understanding of the current
18 condition of the landfill that -- is that it's
19 not properly capped and continuing to erode.

20 Q: Okay. And did the condition of the landfill
21 influence your decision with respect to issuing
22 the water quality certification?

23 A: In this case, it did not. I was strictly
24 looking did the project itself -- did the
25 project itself cause or contribute any impact



1 to water quality.

2 Q: With that being said, do you believe there's
3 any potential water quality benefit from the
4 project's proposed changes to the landfill?

5 A: I do believe there -- if there's continued
6 erosion, there could be a potential benefit to
7 capping the landfill.

8 Q: Okay. And could you elaborate on that? How --
9 how would that benefit come about?

10 A: If you have continued erosion, it could -- it
11 could cause -- uncover contaminants that could
12 enter the Ashley River ecosystem.

13 Q: All right. You stated earlier, you addressed
14 the -- the memorandum you produced to Mr.
15 Williams. What occurred after you sent that
16 memorandum?

17 A: The critical area permit was issued and we
18 received a request for final review.

19 Q: Okay.

20 **MR. SMITH:** Your Honor, if I could approach briefly.
21 This is just the permit that ---

22 **MR. CUNNINGHAM:** It's already in.

23 **MR. SMITH:** It's already in there?

24 **MS. MILTON:** Yeah.

25 **MR. SMITH:** Okay. We have the permit itself, which



1 is already in evidence.

2 Q: Mr. Hightower, would you please turn to Page 7
3 of that permit? Are the -- are -- are you able
4 to see the water quality conditions previously
5 ---

6 A: Yes.

7 Q: --- discussed?

8 A: Yes.

9 Q: Comparing those conditions to the conditions
10 that were included in the 401 memorandum
11 prepared, how do those relate?

12 A: There the -- the conditions that were included
13 in my memo.

14 Q: They are?

15 A: Yes.

16 Q: Okay. Do you have any other comments you'd
17 like to address to the Court regarding DHEC's
18 401 Water Quality Certification and your
19 conclusions?

20 **MS. MILTON:** Objection.

21 **MR. SMITH:** All right.

22 **MS. MILTON:** Yeah. Calls for a narrative.

23 **THE COURT:** I was waiting for that. Okay.

24 **MS. SMITH:** Okay.

25 **THE COURT:** Sustain the objection.



1 **MR. SMITH:** All right. That's all I have on direct.

2 **MR. HIGHTOWER - CROSS-EXAMINATION BY MR. TRAYNHAM:**

3 Q: Afternoon, Mr. Hightower.

4 A: Afternoon, Mr. Traynham.

5 Q: Glad you're feeling better.

6 A: Thank you, sir. Glad to be feeling better.

7 Q: Yeah.

8 **THE COURT:** Oh, is this the one that possibly had
9 COVID?

10 **MR. TRAYNHAM:** This is -- this is the false alarm
11 for 'rona, Your Honor.

12 **THE COURT:** Well -- well, I hope you're not spewing
13 out any germs. Maybe one of you ---

14 A: I can ---

15 **THE COURT:** --- should move that air purifier real
16 close to you.

17 A: I can promise you I have had my brain tickled
18 more times this week ---

19 **THE COURT:** Oh, okay.

20 A: --- than I would care to admit.

21 **THE COURT:** It doesn't tickle.

22 A: (Laughs) You're right.

23 Q: Mr. Hightower, I have a handful of questions
24 and -- and follow-up. Regulation 61-101 also
25 -- is also referred to as Water Quality



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1 Certification regulation, correct?

2 A: Correct.

3 Q: Under that regulation, are you -- is the
4 Department required to hold a public hearing
5 where 20 or more people provide written
6 requests for such hearing?

7 A: That's correct.

8 Q: And was such a public hearing held in this
9 case?

10 A: Yes.

11 Q: All right. Do you or your staff attend?

12 A: I did not. My staff attended.

13 Q: Okay. To your knowledge, were all in
14 attendance afforded the opportunity to make
15 public comments on the record?

16 A: Yes.

17 Q: You've gone through many of the specific
18 considerations under the Water Quality
19 regulation. Fair to say your staff considered
20 all of the considerations under 61101 ---

21 A: Yes.

22 Q: --- in drawing its conclusion? All right.
23 With regard to water dependency, I believe it
24 was your testimony that a determination of
25 water dependency for purposes of the 401



1 Certification is not the end of the analysis,
2 correct?

3 A: Say that again. I'm sorry. Say that -- say
4 that again.

5 Q: In other words, you -- you can still get a 401
6 Certification, even if something is not water
7 dependent, is that correct?

8 A: Correct.

9 Q: It just informs what is necessary in the
10 alternatives analysis?

11 A: That's correct.

12 Q: Is that correct? All right. And in terms of
13 evaluating feasible alternatives under 61-101,
14 does the Department apply the section 404 --
15 the 404 guidelines?

16 A: Yes.

17 Q: Okay. And do -- do those guidelines define
18 feasible for purposes of this analysis?

19 A: Yes.

20 Q: And does that involve multiple factors beyond
21 simply technical possibility?

22 A: That's correct.

23 Q: Is cost a consideration?

24 A: Yes.

25 Q: Is logistics a consideration?



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1 A: Yes.

2 Q: Is existing technology a consideration?

3 A: It is.

4 Q: Did the Department in this case make a
5 determination whether the proposed activity
6 would permanently alter the aquatic eco --
7 ecosystem in the vicinity of the project ---

8 A: Yes.

9 Q: --- such that's its functions and values are
10 eliminated or impaired?

11 A: Yes.

12 Q: And what was your conclusion?

13 A: The conclusion is the ecosystem in the vicinity
14 of the project is the Ashley River ecosystem,
15 and it will -- it will not be affected by the
16 project.

17 Q: And how does the Department define vicinity for
18 purposes of this regulatory test?

19 A: The vicinity of the project is the area of the
20 pro- -- area outside of the impact area.

21 Q: In context of a 61-101 Water Quality
22 Certification, projects you're considering
23 always involved fill, is that fair to say?

24 A: Fill or dredge, correct.

25 Q: Okay. And if you are defining vicinity solely



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1 to the area of direct impact, you'd never be
2 able to issue a permit, would you?

3 A: No.

4 Q: So, it's necessary that vicinity involve more
5 than simply the area of the project.

6 A: Correct.

7 Q: I believe you testified that the Department
8 received adequate assurance that there would
9 not be water quality standard violations as a
10 result of this project, is that correct?

11 A: That's correct.

12 Q: And did the Department receive the same
13 assurance of appropriate and practical steps
14 including stormwater management would be taken
15 to minimize adverse impacts on water quality in
16 the aquatic ecosystem?

17 A: Yes. That was part of the water quality
18 review.

19 Q: What were some of those appropriate practical
20 steps that were considered in this decision?

21 A: Just the added stormwater retention, stormwater
22 treatment as part -- that's part of the project
23 itself.

24 Q: You testified that your staff's conditions as
25 reflected in the memorandum were included in



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1 the final department decision document, is that
2 correct?

3 A: That's correct.

4 Q: And so, do you feel that you are and your staff
5 were afforded the opportunity to discuss all
6 the considerations and that your input was
7 reflected in the final department decision?

8 A: Yes.

9 Q: Was -- are you aware of any input received from
10 the Bureau of Land and Waste Management as part
11 of your consideration in the certification
12 request?

13 A: It -- I was -- we received input from Land and
14 Waste Management, however it -- it was not a
15 consideration for the 401 decision.

16 Q: Fair enough. I'll leave that alone. Does
17 regulation 61-101 contain any provision
18 addressing flooding?

19 A: No.

20 Q: Does the regulation contain any provision
21 addressing historic use of a project site?

22 A: No.

23 Q: Does the regulation contain any provision
24 addressing environmental justice concerns?

25 A: No. It -- no.



1 **MR. TRAYNHAM:** One second, Your Honor.

2 Q: Thank you, Mr. Hightower.

3 **MR. TRAYNHAM:** Nothing further, Your Honor.

4 **MS. MILTON:** Good afternoon, Mr. Hightower. How are
5 you?

6 **THE COURT:** I'll tell you what, I'm going to take --
7 I've got to handle one quick matter.

8 **MS. MILTON:** Absolutely.

9 **THE COURT:** So, hopefully I'll be back in like three
10 minutes, but I -- I got to run out.

11 **(Off the record from 4:51 p.m. until 4:57 p.m.)**

12 **THE COURT:** Ms. Milton.

13 **MS. MILTON:** Let's get right to it. Hopefully, I'm
14 going to be quick.

15 **MR. HIGHTOWER - CROSS-EXAMINATION BY MS. MILTON:**

16 Q: Good afternoon, Mr. Hightower. How are you?

17 A: Hey. Good afternoon, Ms. Milton. How are you?

18 Q: Pretty good. So, you agreed with the Corps of
19 Engineers that this project was not water
20 dependent, that's correct?

21 A: That's correct.

22 Q: And would you agree that stormwater runoff and
23 -- can contribute to waterway pollution?

24 A: Untreated stormwater runoff, yes.

25 Q: Okay. And you have not reviewed a final



1 stormwater construction plan for this project,
2 have you?

3 A: I have not. I've reviewed a conceptual plan.

4 Q: And you testified at your deposition on April
5 4th, that you would have needed both onsite and
6 offsite alternatives, is that correct?

7 A: Well, did we review onsite and offsite
8 alternatives or that we would need -- based on
9 that was non-water dependent.

10 Q: You said you would have needed both onsite and
11 offsite alternatives analysis. Would you like
12 ---

13 A: Yes.

14 Q: --- to see that? Okay. And can you tell me
15 about the onsite alternatives analysis that you
16 reviewed in this project?

17 A: I don't recall the layout designs that we
18 looked at right off the top of my head.

19 Q: Okay. Is there any document that I could bring
20 to you to refresh you, such as your memo that
21 we just entered into evidence?

22 A: And I know we looked at -- I mean, I know no
23 build alternative was one of the onsite
24 alternatives. It was discussed for sure.

25 Q: Okay. Any others?



1 A: I am not positive.

2 Q: Okay. The only feasible alternatives that you
3 received in this matter were submitted by
4 WestEdge, is that correct?

5 A: That's correct.

6 Q: And they didn't submit any feasible alternative
7 to you that involved preserving the creek, did
8 they?

9 A: Preserving the ---

10 Q: The creek.

11 A: No.

12 Q: And do you recall testify that the project as
13 proposed and approved by DHEC does not allow
14 for the protection and restoration of Gadsden
15 Creek?

16 A: I'm sorry. Will you -- could you ask that
17 again?

18 Q: Do you recall testifying that the project that
19 was proposed and was ultimately approved by
20 DHEC does not allow for the protection and
21 restoration of Gadsden Creek?

22 A: That's correct.

23 Q: Nothing further.

24 **MR. SMITH:** Nothing on redirect, Your Honor.

25 **MR. TRAYNHAM:** Nothing from WestEdge, Your Honor.



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1 **THE COURT:** All right. You may step down. I'm
2 waiting for the normal excuse though.

3 **MR. SMITH:** Your Honor, we'd like to request that
4 Mr. Hightower be excused.

5 **THE COURT:** Yeah. There we go. Any?

6 **MR. CUNNINGHAM:** No objection.

7 **THE COURT:** You're excuse.

8 A: Thank you, Your Honor.

9 **THE COURT:** All right. Was that it for today?

10 **MR. CUNNINGHAM:** Yes, sir.

11 **MR. TRAYNHAM:** Your Honor, I don't want to speak for
12 DHEC. Our next witness, I think, will be very
13 lengthy, even on direct, so I don't think we
14 want to start that one today.

15 **THE COURT:** No. Okay. Well, then let's be back
16 tomorrow at 9:30 or earlier or ---

17 **MR. CUNNINGHAM:** 9:30 is fine with us, Your Honor.

18 **THE COURT:** Okay.

19 **MR. TRAYNHAM:** 9:30.

20 **THE COURT:** How many more witnesses do we have?

21 **MS. SHAHID:** We have ---

22 **MR. TRAYNHAM:** Five.

23 **MS. SHAHID:** Yes.

24 **MR. TRAYNHAM:** Five witnesses remaining, Your Honor.

25 **THE COURT:** Oh, okay.



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1 **MR. TRAYNHAM:** Two of them we expect will be
2 somewhat lengthy. Three, relatively brief.

3 **THE COURT:** So, we're going to make it?

4 **MS. SHAHID:** Your Honor, one of those witnesses is
5 under subpoena to arrive on Friday morning. If
6 I -- if -- you think we're going to get to him
7 tomorrow, I don't think we would, but I don't
8 want inconvenience you on Friday ---

9 **THE COURT:** My goal is just to get done this week.

10 **MS. SHAHID:** Good. Okay.

11 **MR. TRAYNHAM:** I think we can do it, Your Honor.

12 **THE COURT:** I mean, I don't know, maybe there --
13 maybe some of y'all in this courtroom just like
14 staying here. I don't think so.

15 **MR. CUNNINGHAM:** It's fun, but ...

16 **THE COURT:** You're not there. Okay. Tomorrow at
17 9:30.

18 **MR. TRAYNHAM:** Thank you, Judge.

19 **MR. CUNNINGHAM:** One thing, Your Honor. I don't
20 know if that has to be on the record but you
21 had asked me ---

22 **THE COURT:** Well, yeah.

23 **MR. CUNNINGHAM:** But we'll go ahead and put it on.
24 You asked me if -- gave me a little bit of a
25 homework assignment about ---



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1 **THE COURT:** Well ---

2 **MR. CUNNINGHAM:** --- disputed facts.

3 **THE COURT:** We're about -- we're about halfway
4 through now.

5 **MR. CUNNINGHAM:** Well, exactly. And the other part
6 of that is, you know, I'm not entirely sure
7 what all facts are disputed yet because I have
8 ---

9 **THE COURT:** I'm going to ---

10 **MR. CUNNINGHAM:** I have some idea, but ---

11 **THE COURT:** Let me -- I wanted to know what facts
12 you were relying on.

13 **MR. CUNNINGHAM:** Ours fa- ----

14 **THE COURT:** Yeah. I mean, just what the topics.

15 **MR. CUNNINGHAM:** Okay.

16 **THE COURT:** Is what I wanted, but we're far enough
17 now where I ---

18 **MR. CUNNINGHAM:** Well, I apologize, Your Honor.

19 **THE COURT:** I -- I hereby relieve you of your
20 assignment.

21 **MR. CUNNINGHAM:** Thank you, Your Honor. Sounds like
22 I got a lot of work to do tonight anyway.

23 **THE COURT:** Okay.

24 **(DAY THREE of the hearing adjourned at 5:02 p.m.)**

25 **(DAY FOUR - THURSDAY, JUNE 9, 2022. The hearing**



1 reconvened at 9:23 a.m.)

2 MS. SHAHID: WestEdge calls Shannon Scaff.

3 COURT REPORTER: Would you raise your right hand
4 please, sir? Do you solemnly swear the
5 following testimony to be the truth, the whole
6 truth, and nothing but the truth, so help you
7 God?

8 MR. SCAFF: I do.

9 COURT REPORTER: Thank you.

10 SHANNON SCAFF, having been duly sworn, testifies as
11 follows:

12 MR. SCAFF - DIRECT EXAMINATION BY MS. SHAHID:

13 Q: Good morning, Mr. Scaff.

14 THE COURT: Now, there's a benefit, the witness
15 chair used to be so low.

16 MS. SHAHID: Yes. I remember.

17 THE COURT: You couldn't see the person.

18 MS. SHAHID: Yeah.

19 THE COURT: And now I can actually see the witness.

20 MS. SHAHID: Yeah.

21 THE COURT: Okay.

22 MS. SHAHID: Public benefit.

23 THE COURT: Yeah.

24 Q: Mr. Scaff, I'm going to stand over here because
25 your answering my questions, but you're



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1 communicating with the Court, so I want to make
2 sure you're in the position to also make eye
3 contact with the Court. Where are you
4 currently employed?

5 A: I'm currently employed with the City of
6 Charleston.

7 Q: Okay. And what is your title?

8 A: I am the Director of Emergency Management.

9 Q: Okay. And my understanding is that your
10 employment tenure is about to end, is that
11 true?

12 A: Yes, ma'am. This is my last official day.

13 Q: Okay. And ---

14 **THE COURT:** Wow.

15 Q: And -- but you're still employed with the City
16 as of today?

17 A: Yes, ma'am.

18 Q: And for how many years?

19 A: Right at four years now, ma'am.

20 Q: Okay. And what are you leaving the City to do?

21 A: I'm going back into the air rescue world,
22 ma'am. I'm a retired Coast Guard veteran and
23 I flew for a number of years in Coast Guard
24 helicopters. And so, I'm going to Arizona to
25 get back to flying.



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1 Q: Is that something you want to do?

2 A: Yes, ma'am. It is.

3 Q: Congratulations.

4 A: Thank you.

5 Q: And tell me again your title.

6 A: I'm the Director of Emergency Management.

7 Q: Okay. And as Director of Emergency Management,
8 do you have a staff?

9 A: I have a -- a very small staff. Yes, ma'am.
10 Two staff members.

11 Q: What are your duties with -- and you're with
12 the City?

13 A: Yes, ma'am. With -- with the City. I have
14 counterparts in -- in the county and the -- and
15 the neighboring municipalities, but my -- my
16 responsibilities are to mitigation preparedness
17 response and recovery.

18 Q: Okay. What does that encompass just upon a
19 daily basis? Can you give us any examples?

20 A: Yes, ma'am. Every day is -- is kind of a new
21 day. There's -- as you may or -- may be aware,
22 a lot of flooding issues in the City of
23 Charleston. We're -- we're very sep- --
24 susceptible to -- to flooding either tideland
25 induced or -- or rainfall induced flooding.



1 So, a great deal of my energy goes into that
2 and planning aspects of it, and acquisition of
3 road closing -- close -- closure bar- --
4 barricades. You know, ensuring that our -- our
5 staff is prepared to respond appropriately and
6 activation of our Public Safety Operations
7 Center. It's planning for the Cooper River
8 Bridge Run every year. I take about four
9 months to -- to plan for that. It's one of the
10 largest runs in the world, so that takes a --
11 a lot of work. And then, hurricane season is
12 pretty much year round for me. So, it's --
13 it's really about acquisition of equipment,
14 outreach to our community. Charleston's
15 growing by leaps and bounds in terms of its
16 citizens and visitors every year. So, it's
17 really about educating the public on the risks
18 associated with hurricanes and storm surge and
19 those sorts of things.

20 Q: Okay. So, when you talk about preparedness, do
21 you have plans in place or you develop plans or
22 how ---

23 A: Yes, ma'am. We have an emergency operations
24 plan with several functional an -- annexes and
25 one of those annexes relates specifically to



1 flooding.

2 Q: Okay. And when -- do -- do you consider
3 yourself to have any concern over life or
4 property?

5 A: Yes, ma'am. My -- my main focus in my career
6 is the safety of lives and -- and property.

7 Q: And is that a focus in your -- the scope of
8 your job responsibilities?

9 A: Yes, ma'am. It's the main focus.

10 Q: Okay. And I skipped a little. I want to go
11 back. What's your educational background?

12 A: It's sort of a -- a mixed bag. Predominantly,
13 Coast Guard Academy, the one in Connecticut.
14 I'm a graduate of Officer Candidate Training up
15 there. I received a commission in December of
16 2004. Also, you know, I mentioned the -- the
17 aviation aspect, so lots of aviation training
18 vi- -- via naval flight training.

19 Q: Okay.

20 A: And then -- excuse me -- getting into the
21 emergency management world, as an officer in
22 the Coast Guard, and all of the required
23 trainings to do that.

24 Q: Do you need some water?

25 A: I'm -- I'm okay. Thanks.



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1 Q: You're okay. Okay. And did -- did that
2 include your employment background? Was that
3 a description of your education and employment
4 or is there any additional employment you want
5 to discuss?

6 A: I think that covers it.

7 Q: Okay. All right. So, I think you just
8 testified that flooding response and
9 preparation is a significant part of your
10 concerns?

11 A: Yes, ma'am.

12 Q: And your responsibilities. Are there flood-
13 prone areas in Charleston?

14 A: Yes, ma'am.

15 Q: Are there flood-prone areas on the peninsula of
16 Charleston?

17 A: Yes, ma'am.

18 Q: Is it a few, a little, several?

19 A: I -- I'd say it's several.

20 Q: Okay. And do you interact with City officials
21 and emergency responders regarding flooding?

22 A: Yes, ma'am. Often.

23 Q: Okay. And what's that interaction? Why is
24 that necessary or is it necessary?

25 A: Well, you know, I have a responsibility to try



1 to maintain the safety of our -- our first
2 responders, as much as I focus on our citizens
3 and visitors.

4 Q: Okay.

5 A: So, it's -- it's really about collaboration and
6 ensuring that we're responding in the most
7 appropriate, effective ways prior to enduring
8 a -- a flooding incident.

9 Q: Okay. Are emergency responders part of
10 emergency preparedness?

11 A: They're a critical part of it. Yes, ma'am.

12 Q: And in the course of your four years with the
13 City, have you inspected flooded intersections?

14 A: What do you mean inspected?

15 Q: Well, have you been called out to sites where
16 there's flooding?

17 A: I -- I have. Yes, ma'am.

18 Q: Is that something that happens frequently?

19 A: It is. But I -- I have to say that my -- in my
20 role, I'm more of a -- a strategic player, so
21 I'm usually in the -- in our Public Safety
22 Operations Center or our Emergency Operations
23 Center for the city.

24 Q: Okay.

25 A: I'm -- I'm not really working at a tactical



1 level, but I'm very connected to our first
2 responders that would be out in the field in
3 real time.

4 Q: Okay. So, you may not go look at a flooded
5 intersection, but you don't question the fact
6 that it may be flooded?

7 A: Correct.

8 Q: Okay.

9 A: And we have in -- in our Safety Operations
10 Center, we have cameras that are showing us
11 live feed of different areas of the city.

12 Q: Okay. Do you interact with city officials in
13 this role?

14 A: Elected officials, ma'am?

15 Q: Yes.

16 A: Yes, ma'am.

17 Q: Do you advise them?

18 A: Yes, ma'am.

19 Q: Who do you advise?

20 A: Mayor and City Council.

21 Q: Okay. And is -- are flooding concerns raised
22 by the Mayor and City Council?

23 A: Yes, ma'am.

24 Q: Okay. And are you the person they rely on to
25 provide information?



1 A: I am one of many ---

2 Q: Okay.

3 A: --- they rely on.

4 Q: Is this a topic that comes up frequently?

5 A: I -- I would say compared to other emergency
6 managers in my profession and around the
7 country, yes, ma'am, and it's just based on the
8 vulnerability and the frequency in Charleston.

9 Q: Okay. And -- and have you noticed an increase
10 frequency, particularly in sunny day flooding?

11 A: Well, I've been with the City for four years
12 now and -- and it feels like it's almost an
13 nonstop issue for me. I -- we mentioned a --
14 a vulnerability assessment that's been done and
15 -- and there's -- there's math there where
16 they've looked at it and said that there's been
17 increase over the last several years and that
18 we expect based on trends that that would
19 continue to increase. But my four years is
20 really just a -- a small snippet in time.

21 Q: Okay. Did you participate in that
22 vulnerability assessment?

23 A: Yes, ma'am. I did.

24 Q: And did you help in the preparation of it?

25 A: I was part of the selection committee to select



1 the contractor that would complete the
2 vulnerability assessment and then, that
3 contractor visited the city on several
4 occasions with a -- sort of a tiger team, if
5 you will, to talk us through how the -- the
6 project was progressing.

7 Q: Okay. What was the purpose of having a
8 vulnerability assessment prepared?

9 A: It's really a staged approach. You know, kind
10 of the first stage in helping to build our city
11 to be more resilient, if you will. I think
12 step one is really understanding what our
13 vulnerabilities are and how those would be
14 defined, and flooding happened to be one of the
15 main vulnerabilities for the City of Charleston
16 ---

17 Q: Okay.

18 A: --- that we focused on.

19 Q: All right. And did you -- do you classify
20 between areas that are at significant risk and
21 then areas that are at moderate risk? Was
22 there any kind of classification done?

23 A: Yes, ma'am. And -- and -- and particular with
24 flooding, they talk about at the -- the report
25 talks about the specific areas in the city that



1 would be more vulnerable and how they would be
2 more vulnerable.

3 Q: Okay. Okay. Based on your experience, is the
4 Hagood-Fish-ben- -- -burne area and hospital
5 district -- based on your experience over four
6 years, considered vulnerable?

7 A: Yes, ma'am.

8 Q: Okay. And do you have any specific concerns as
9 an emergency responder about vulnerability
10 around the hospital district?

11 A: Yes, ma'am. I do.

12 Q: What are those concerns?

13 A: Well, you know, we -- that area is just -- it's
14 been noted that it's just a problematic area,
15 particularly when you have an alignment of a
16 high tide situation and what we call rain bombs
17 in the city, where you have high amounts of
18 rain that fall in a very short period of time
19 and the drainage systems are just not able to
20 keep up with it. You get standing water. That
21 obviously affects, you know, the transportation
22 system in and around the city. And it creates
23 tremendous safety concerns that -- that -- they
24 keep me up at night because we have so many
25 people that are visiting the city that are not



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1 familiar with these different areas and if they
2 were to, you know, plow their car into high
3 water, you're -- you're looking at a
4 potentially life-threatening situation around
5 the medical district.

6 Q: Okay. And you're familiar with the location
7 our project area, the WestEdge project?

8 A: Yes, ma'am.

9 Q: You're familiar with the City Police Station
10 that's located in our project?

11 A: I am.

12 Q: Or adjacent to our project. And are we in
13 proximity to the medical district?

14 A: Yes, ma'am.

15 Q: Close proximity?

16 A: I -- I would say so. Yes, ma'am.

17 Q: How does flooding impact emergency responders?

18 A: Much in the same way it impacts our everyday
19 citizens and visitors. You know, it's sort of
20 a cascading effect when you have that alignment
21 of tidal induced flooding and -- and rain. It
22 just slows traffic and you -- you'll have, you
23 know, one or two intersections that'll close
24 off with barricades and before you know it,
25 you've got 36 of them around the city. And



1 with each one, you have to reroute traffic.
2 And you know, the -- the first responders are
3 -- are not excused from that same challenge.
4 They've got to get from point A to point B, and
5 they've got to get through that traffic then to
6 -- to make those responses happen. So, it's
7 going to slow them down.

8 Q: And are the employees at the City Police
9 Station considered first responders?

10 A: Yes, ma'am.

11 Q: Do you have a concern about the inability -- do
12 you have a concern about accidents and injuries
13 during these flood events?

14 A: I do.

15 Q: Okay. And do you have a concern about the
16 inability to -- for an ambulance to respond and
17 get somebody to the medical district safely?

18 A: Yes, ma'am. I do. And in fact, I'm not alone
19 there. I am, as you might imagine, heavily
20 engaged with my emergency management partners
21 in other jurisdictions and they have expressed
22 their concern from the county level, which is
23 who manages our emergency medical services.
24 They've expressed concern about that.

25 Q: Okay. And tell me a little bit more about the



1 cascade effect. What -- describe to us how
2 that could be problematic, what kind of
3 problems it creates.

4 A: It's really about trying to keep up with the
5 flooding as it's -- as it's happening. We'll
6 deploy pumps and that sort of thing to -- to
7 try to help. But essentially, these systems
8 when they come in, they come in fast and
9 furious, and they may, again, affect a few
10 roads in the -- initially. And it just -- it's
11 al- -- it's almost like a domino effect. It --
12 it continues to get worse and the -- and the
13 more intersections are affected, the more our
14 first ro- -- responders are affected, the more
15 we begin to see stalled vehicles by citizens
16 who have either driven around barricades or
17 have met an intersection that's got standing
18 water before a barricade was able to be
19 deployed. And the first responders are just
20 having a hard time, you know, keeping up with
21 that. You have an individual that's in high
22 water, they make a decision to egress out of
23 their vehicle on their own and -- and they put
24 themselves in harm's way.

25 Q: And that's the sort of scene that keeps you up



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1 at night?

2 A: It is.

3 Q: Now, these high water events, are they over in
4 four, six hours or they extend longer than
5 that?

6 A: Well, it just depends. They're -- they're kind
7 of all different. Sometimes we'll see high
8 water situations pop up where we haven't seen
9 them before. Other times, we expect if we have
10 a forecasted event, we expect that this area
11 will flood and then it -- it doesn't. It's --
12 no rhyme or reason to it. And so, if you've
13 seen one, you've seen one kind, I think. But
14 we -- we -- we -- we are confident in when we
15 get our -- those forecasts, we know that we're
16 going to see flooding in and around the city.

17 Q: And have you ever seen flood events that linger
18 for more than a day?

19 A: Yeah. We've got situations where we've had
20 two, three, four days of ongoing, you know --
21 that the tide will go out, we'll -- we'll --
22 we'll have some benefit to that and then it
23 comes right back, and it'll flood again, so.
24 Yeah. There's sometimes two, three, four days
25 of that.



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1 Q: Have you in your conversations with the City or
2 in your planning seen efforts by the City to
3 begin to address flooding problems?

4 A: Yes, ma'am.

5 Q: Okay. Does that appear to be a -- a
6 significant focus for the City?

7 A: It does.

8 Q: Okay. Do you -- do you believe it would be
9 beneficial at least in the role of emergency
10 response to address any particular flooding oc-
11 -- flooding location?

12 A: Absolutely.

13 Q: Okay. And do you see a benefit, even if we're
14 only addressing at one particular flooding
15 location?

16 A: I do.

17 Q: Okay. And so eliminating one location, you
18 would perceive that as a benefit?

19 A: I would.

20 Q: Okay.

21 **MS. SHAHID:** Your Honor, if I could just take a
22 minute to consult with Mr. Traynham. I think
23 we're going to step outside for just a second.

24 **THE COURT:** Okay.

25 **MS. SHAHID:** I don't have any additional questions



1 for Mr. Scaff at this point.

2 **MR. SMITH:** Nothing from the Department, Your Honor.

3 **THE COURT:** Ms. Milton.

4 **MR. SCAFF - CROSS-EXAMINATION BY MS. MILTON:**

5 Q: Morning, Mr. Scaff.

6 A: Good morning.

7 Q: So, would you characterize flooding response
8 and preparation as a main part of your job?

9 A: Yes, ma'am.

10 Q: And you haven't spoken with any city employees
11 about flooding at the intersection of Fishburne
12 and Hagood, have you?

13 A: I -- I wouldn't -- I wouldn't say I haven't
14 spoken to anybody about that.

15 Q: Okay. Do you recall having your deposition
16 taken on April 22nd of 2022?

17 A: Yes, ma'am.

18 Q: And do you recall testifying under oath, just
19 like you took an oath here today?

20 A: Yes, ma'am.

21 Q: And did you have an opportunity to prepare for
22 that deposition beforehand?

23 A: Yes, ma'am.

24 Q: And were you giving a chance to read the
25 transcript afterward and make corrections to



1 it?

2 A: Yes, ma'am.

3 Q: Do you recall testifying on April 22nd, 2022
4 that specifically about this proposed project
5 site, you do not recall any conversations that
6 you had with City employees or the Mayor about
7 flooding?

8 A: Can you repeat that for me?

9 Q: I can do one better. I could hand you your
10 deposition, if that would help.

11 A: Okay.

12 Q: And I would direct you Page 12, Line 5 through
13 9. And that says specifically about this
14 proposed project site, you don't recall any
15 conversations you've had with any City
16 employees or the Mayor about flooding, is that
17 fair? And your response was, that fair (sic).
18 Did I read that correctly?

19 A: Yeah.

20 Q: Okay.

21 A: Yes, ma'am.

22 Q: So, you haven't had conversations about -- with
23 any City employees or the Mayor about flooding
24 in this project area, is that correct?

25 A: Well, now that I'm -- I'm reading this, I mean,



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1 I've talked about flooding around the city and
2 I -- I haven't spoken to anyone specifically
3 about the project.

4 Q: Yes.

5 A: But I -- I've spoken at length with everyone
6 about flooding around the city.

7 Q: Okay. And you serve as a senior advisor to the
8 Mayor on flooding issue, is that correct?

9 A: Yes, ma'am.

10 Q: And you also serve as the senior advisor to
11 City Council on flooding issues, is that
12 correct?

13 A: As -- yes, ma'am, as -- as an advisor.

14 Q: But you do not recall any conversations that
15 you've had with City employees about flooding
16 at the intersection of Fishburne and Hagood?

17 A: I do not recall specifically about that
18 location.

19 Q: And you don't recall an conversations with the
20 Mayor about flooding at that intersection,
21 correct?

22 A: Correct.

23 Q: And have you spoken with any representative of
24 WestEdge Foundation about flooding at the
25 intersection of Fishburne and Hagood?



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1 A: No, ma'am.

2 Q: Do you recall every being called to the
3 intersection of Fishburne and Hagood for
4 flooding that is solely from tidal land floods?

5 A: I don't recall ever doing that.

6 Q: And has anyone at the fire department ever
7 reported an interrupt or delay in emergency
8 response due to flooding at the intersection of
9 Fishburne and Hagood?

10 A: Reported to me, no, ma'am. Not reported to me.

11 Q: And have you ever encountered and emergency
12 response vehicle trapped in traffic at the
13 intersection of Fishburne and Hagood?

14 A: I don't recall. No, ma'am.

15 Q: There are several areas in the City of
16 Charleston that flood, is that correct?

17 A: Yes, ma'am.

18 Q: And have you taken steps to alert anybody else
19 or anybody outside of your department in the
20 city government about steps you believe should
21 be taken to address the flooding issue in the
22 project area?

23 A: No, ma'am. Not in the project area.

24 Q: And are you aware of any temporary measures
25 that you've taken or the City has taken in the



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1 project area to alleviate flooding?

2 A: No, ma'am.

3 Q: And have you taken steps to alert anybody
4 outside of your department about steps that you
5 believe should be taken to address the flooding
6 in the project area?

7 A: No, ma'am.

8 Q: Have you personally reported any flooding
9 issues at the intersection of Fishburne and
10 Hagood to City Council?

11 A: Not specific to that location. Again, my -- my
12 conversations are more broad about the entire
13 city.

14 Q: Okay. Can you recall any slow down of an
15 emergency vehicle specifically at the
16 intersection of Fishburne and Hagood?

17 A: No, ma'am. I don't operate those vehicles, so
18 I -- and they're not -- the -- that wouldn't be
19 reported to me. I just know that on my
20 observations, it's -- there's standing water
21 and there's been traffic in that area as a
22 result of it, which would affect everyone,
23 including emergency vehicles.

24 Q: Okay. Do you recall any specific instances of
25 traffic gridlock at the intersection of Hagood



1 and Fishburne?

2 A: In terms of dates and times, no, ma'am. No.

3 Q: And have you encountered any situations where
4 flooding at the intersection of Hagood and
5 Fishburne caused backups to I-26?

6 A: No, ma'am.

7 Q: All right. I believe that's all I've got for
8 you. Thank you so much, Mr. Scaff.

9 **THE COURT:** Redirect?

10 **MS. SHAHID:** Yes.

11 **MR. SCAFF - REDIRECT EXAMINATION BY MS. SHAHID:**

12 Q: Mr. Scaff, in your four years at the City of
13 Charleston, have you had a lot of discussions
14 about flooding?

15 A: Yes, ma'am.

16 Q: Is that daily?

17 A: I wouldn't have any problem tell- -- saying
18 that I -- I wouldn't be surprised if every day
19 I haven't had some conversation in the last
20 four years about flooding in the City of
21 Charleston.

22 Q: And the topic, is it -- is it generally related
23 to specific sites or specific problems or is it
24 related to just trying to respond the -- the
25 problem as a whole?



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1 A: It's -- yeah. The problem as a whole.

2 Q: Okay. And when you responded to that question
3 in your deposition, you basically cannot
4 remember a specific conversation?

5 A: That's correct.

6 Q: Generally speaking, can you remember this
7 intersection being an issue along with all the
8 other problems intersections the City has?

9 A: Absolutely.

10 Q: Okay. And if the fire department stalled out,
11 who would it call?

12 A: Someone else from the fire department.

13 Q: Okay. So, you -- you -- you've never gotten a
14 call in that regard?

15 A: No, ma'am.

16 Q: You're not the appropriate responder for that?

17 A: Correct.

18 Q: Okay. That's all I've got.

19 **THE COURT:** Recross?

20 **MR. SMITH:** No, Your Honor.

21 **THE COURT:** You may step down. Being his last day,
22 I know you want him to be excused.

23 **MS. SHAHID:** He's got to go clean out his office.

24 **THE COURT:** Any objection?

25 **MR. TRAYNHAM:** No objection.



1 **THE COURT:** You're excuse, sir.

2 A: Thank you, sir.

3 **MR. TRAYNHAM:** Your Honor, at this time, WestEdge
4 Foundation would call Matt Fountain to the
5 stand.

6 **COURT REPORTER:** Would you raise your right hand
7 please, sir? Do you solemnly swear the
8 following testimony to be the truth, the whole
9 truth, and nothing but the truth, so help you
10 God?

11 **MR. FOUNTAIN:** I do.

12 **COURT REPORTER:** Thank you.

13 **MATTHEW FOUNTAIN,** having been duly sworn, testifies
14 as follows:

15 **MR. FOUNTAIN - DIRECT EXAMINATION BY MR. TRAYNHAM:**

16 Q: Good morning, Mr. Fountain.

17 A: Morning.

18 Q: Tell me, who's your current employer?

19 A: I'm currently employed by the City of
20 Charleston.

21 Q: And what is your role with the City?

22 A: I'm the Director of Stormwater Management.

23 Q: How long have you been in that role?

24 A: Just over three years.

25 Q: And can you describe generally what duties your



1 -- your current role entails?

2 A: Again, the -- the Director of Stormwater
3 Management oversees the Department of
4 Stormwater Management. The Department manages
5 the city's major stormwater capital projects.
6 So, those are large scale civil construction
7 projects we build to relieve flooding. We also
8 manage the small scale neighborhood and street
9 level project work, again, for flood relief.
10 We oversee the City MS4 Regulatory Program,
11 which is basically stormwater regulations on
12 new and redevelopment activities. We also
13 manage the flood plain management program,
14 which is the City's membership in the National
15 Flood Insurance Program and the community
16 rating systems program that we use to basically
17 provide flood insurance discount rates to
18 citizens through that FIP at their level. We
19 also manage the -- what would -- I guess more
20 traditionally be thought of as a Stormwater
21 Department, which is the Field Operations side,
22 operating Vactor trucks, ditch cleaning, hand
23 cleaning crews. That's the -- the general set
24 of our department.

25 Q: Okay. Is part of your department's MS4 duties,



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1 do y'all review applications and where
2 appropriate issue permits for specific
3 construction activity within the City?

4 A: Yes.

5 Q: Is that conducted under the NPDES regulations?

6 A: Correct.

7 Q: Are you a professional engineer?

8 A: I am.

9 Q: As part of your role overseeing the Stormwater
10 Department, do you have a general awareness of
11 areas within the City that are subject to
12 frequent recurring stormwater flooding?

13 A: I do.

14 Q: Would it fair to say there a number of such
15 locations within the City that fall within your
16 purview?

17 A: Yes.

18 Q: Is the intersection of Hagood and Fishburne one
19 such location?

20 A: It is.

21 Q: Can you describe the type of flooding issues
22 that recur at this location?

23 A: Yes. So, the -- the particular intersection or
24 the corridor in the area?

25 Q: Let's start with the corridor in the area.



1 A: Okay. So, the -- the corridor experiences a
2 number of different types of flooding. One of
3 the challenges of any description of flooding
4 is that every individual flood event is unique
5 in what leads to that flood event. But -- but
6 typically, you're looking at a combination of
7 factors that all exacerbate each other if they
8 occur simultaneously. So, the -- I guess the
9 starting point would be you look at -- at
10 basically the tide situation, whether you have
11 a high tide, a king tide, an extreme tide or a
12 storm surge event. That can lead to flooding
13 in this area. As a standalone, we call it
14 sunny day flooding. You also could have
15 basically -- totally exempting the tide, if you
16 have a heavy enough rainstorm, you could have
17 a -- con- --basically, a restriction in your
18 conveyance capacity, can't get the water out
19 fast enough through pipes or ditches. That can
20 happen from an intense enough rainstorm. You
21 have then -- separate from an intensity event,
22 you have a total volume event we would call it.
23 So, if you have a very long duration rainstorm,
24 even if it's not that intense, you run into a
25 potential issue where there's -- even if there



1 is conveyance capacity, initially for the water
2 to be moved out through pipes, wherever that
3 water is trying to go to does not have
4 downstream capacity to except more and more
5 volume of water, so that can lead to a backup
6 in -- in certain areas of this pro- -- overall
7 project area, I would call it. And then you
8 could have obviously the layering of any of
9 those events on top of each other, which will
10 lead to a worsening. So, for instance, if you
11 had a relatively intense rain with a very high
12 tide, you need less intensity of rain to cause
13 flooding than if you were to have a very low
14 tide when that rain appeared.

15 Q: And for the project location, the intersection
16 of Fishburne and Hagood, for instance, would
17 all of those circumstances you were describing
18 occur there from time to time?

19 A: They -- they do. The -- the areas we -- we
20 focus on the most in the area is Hagood, Line,
21 Hagood and Allway, which are a little bit
22 further to the south. They're still in the
23 same kind of overall project area, but the --
24 the Hagood and Fishburne intersection does
25 experience all three of those at -- at varying



1 levels of intensity.

2 Q: Can that intersection experience flooding
3 because of rainfall, even during low tide?

4 A: It can.

5 Q: Can that intersection experience tidal related
6 flooding, even when there is no contributing
7 rainfall?

8 A: You can.

9 Q: And the combination of the two would obviously
10 cause the same type of flooding.

11 A: Correct.

12 Q: Would you describe flooding events as frequent
13 at the location?

14 A: Yes. That -- that corridor has frequent
15 flooding events.

16 Q: And it's frequent both for high or king tide
17 related flooding and heavy precipitation
18 related flooding?

19 A: It is frequent for tide -- tidal flooding as
20 well as intense rainstorm flooding.

21 Q: With regard to the tidal flooding, is it your
22 understanding that the water feature known as
23 Gadsden Creek is the conduit for the tide that
24 floods that area?

25 A: It is one of the conduits in the area. Yes.



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1 Q: Are you familiar with the current stormwater
2 infrastructure conditions at that location or
3 -- or serving that drainage basin?

4 A: I am generally familiar with them.

5 Q: Where does the water in the vicinity of that
6 intersection drain when it is draining
7 appropriately?

8 A: So, there are different locations for drainage.
9 There's obviously the drainage route out
10 through the creek system, which connects down
11 across Lockwood into the -- the river. There
12 are some pipe systems still along the kind of
13 Lockwood-Fishburne corridor. And then there is
14 a pipe system to some extent that flows south
15 to Savannah Highway -- or I'm sorry -- Highway
16 17 in this location. And I would say none of
17 those are extremely effective systems, but
18 there is some level of presence of
19 infrastructure in those areas.

20 Q: It is fair to say for the area you're
21 describing, the majority of the drainage goes
22 out through the culvert at Lockwood that's fed
23 by Gadsden Creek?

24 A: It depends on the -- the level of the flooding.
25 Certainly, some of the roads can trap water as



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1 the flood levels recede and then you'll see
2 different corridors activate. There is
3 initially quite a bit of water that comes out
4 through the creek. And then as you basically
5 have water levels lessen depending where you
6 are in different intersections, you may have
7 overland obstructions where it'll start to use
8 those other routes. Hence, some of the
9 flooding.

10 Q: I think I understand. Does your role with the
11 City include coordination related to drainage
12 and flood concerns with developers and
13 engineers?

14 A: It does.

15 Q: And does the City enforce standards intended to
16 address flooding with new development or
17 redevelopment?

18 A: Yes.

19 Q: Does the City place emphasis or importance on
20 its efforts to address drainage and flooding?

21 A: Yes.

22 Q: And do you regularly participate in meetings
23 with City leaders regarding flooding or
24 drainage issues?

25 A: I do.



1 Q: And what are the general topics of discussion
2 in those meetings?

3 A: It varies widely. We have meetings to discuss
4 capital project funding, basically where we
5 will see allocation of resources into potential
6 flood relief projects. We have projects to
7 look at emergency pumping responses and things
8 to flood events to consider what are the most
9 effective options for basically a short-term
10 emergency style responsiveness to -- especially
11 to unpredicted extreme weather. And we have
12 meetings to discuss recovery activities related
13 to flooding. We have meetings to discuss
14 regulations that we propagate in order to
15 reduce future flood risks. We talk about
16 maintenance activities in certain areas where
17 there may be different feelings about the
18 condition of infrastructure or what options
19 might be to improve infrastructure. I could
20 probably go on for -- for a while, but that's
21 probably the -- the general sense of it.

22 Q: The general sense of the discussion topics.
23 You -- you mentioned major capital projects.
24 In -- in lay terms, that sounds like expenses
25 on water infrastructure.



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1 A: Correct. When we say major, we generally mean
2 over half a million dollars, over a million
3 dollars as a minimum threshold.

4 Q: Do y'all have a number of those projects in the
5 City?

6 A: We do.

7 Q: Do you know approximately how many you have
8 identified?

9 A: It somewhat depends on if you separate out
10 phases as standalone projects or include those
11 within a project. If you lump projects together
12 where you're not separating phases into
13 standalone projects despite their cost.
14 Somewhere in the order of 15 capital projects,
15 major capital projects.

16 Q: Are those in the process of being implemented?

17 A: They range anywhere from conceptual work to
18 construction.

19 Q: Do you have any identified major capital
20 projects that are currently unfunded?

21 A: We do.

22 Q: Do you know approximately how many?

23 A: It -- it's a challenging question that we don't
24 generally continue to seek out additional
25 projects when we know we are short all -- have



1 a shortfall in existing funding. I would say
2 there are probably, again, 10 to 15 relatively
3 well identified projects without funding.

4 Q: Okay. And I take it from your testimony that
5 there likely other areas of the city that would
6 require some drainage improvement that have not
7 been identified formally as major capital
8 improvements because of a lack of funding?

9 A: Yes. That's certainly what I was intimating is
10 that there are a number of areas we know we
11 could develop the project that we have not
12 furthered the development of a project to the
13 point of an actual concept.

14 Q: Are you familiar with the WestEdge drainage
15 project that is the subject of the litigation
16 you're here about today?

17 A: I'm familiar with portions of it.

18 Q: Is it your understanding that this project is
19 intended at least in part to address some of
20 the existing conditions we've discussed?

21 A: I understand that a portion of the design
22 considerations are to address the stormwater
23 and flooding considerations in the area. Yes.

24 Q: Do you consider the existing conditions in that
25 area a problem that should be addressed?



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1 A: Yes.

2 Q: If the City were to undertake a fix at this
3 area. If it were in a position to do so, would
4 it be considered a major capital project?

5 A: Yes.

6 Q: How have you become familiar to the extent you
7 are familiar with the proposed project?

8 A: So, there's two aspects of familiarity. One
9 that we haven't touched on strongly as the --
10 the work of the Spring Fishburne project, which
11 ties into the proposed drainage plan for the
12 WestEdge facility. That's something that's one
13 of the major capital projects that we are
14 managing. So, I have knowledge of our portions
15 in the discussions of how those projects would
16 interconnect. Separately, when -- as we
17 mentioned earlier, when projects come in for
18 development or redevelopment activity, they
19 have to go through our stormwater regulatory
20 permitting process. So, the WestEdge project
21 has come in for what's referred to as Phases 0
22 and 1 for that permit activity. So, I -- I'm
23 familiar with it based on that application.

24 Q: The current phase, what we're here about today,
25 has not been submitted to the City for



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1 construction permitting at this point, correct?

2 A: Correct.

3 Q: So, it's not been formerly reviewed or
4 permitted by the City at this time for
5 construction purposes?

6 A: For construction purposes, no.

7 Q: Additional construction details would have to
8 be submitted to the City before that kind of
9 permitting is granted, correct?

10 A: That's correct.

11 Q: Have you reviewed a master plan for the
12 WestEdge development?

13 A: I have.

14 Q: And what is a master plan?

15 A: So, a master plan is a storm -- for stormwater
16 purposes is a document that is put together as
17 part of a larger -- a larger multi-phase
18 development activity or redevelopment activity.
19 Basically, it is a stormwater computer model
20 laying out how the overall project area will
21 function according to stormwater regulations to
22 set expectations for different sub-basins
23 within the overall project area to ensure that
24 any infrastructure being installed in an early
25 phase is capable of handling and managing water



1 being generated by future phases.

2 Q: And -- and what is the City's role in reviewing
3 or approving those master plans?

4 A: So, the City reviews the master plan as part of
5 an initial construction activity application to
6 ensure that in -- initial construction work is
7 being performed with a understanding of how the
8 overall project will impact that construction
9 activity.

10 Q: And how does the master plan interrelate with
11 any additional applications for phases of said
12 construction projects?

13 A: So, as future phases come in for construction
14 activity applications, if they are utilizing
15 infrastructure installed in previous phases,
16 they need to demonstrate how the new phase is
17 complying with the limitations that were placed
18 upon that location in the master plan or they
19 need to be able to demonstrate basically how
20 they are taking into account changes or
21 modifications from that phase beyond what was
22 envisioned in the original master plan. So,
23 it's a -- it's a guidance document.

24 Q: So, I don't want put words in your mouth, but
25 if I understand, the master plan puts a box



1 around entirety of the stormwater design for a
2 project and the individual components or phases
3 that are -- that come in for specific
4 permitting must fit within that box?

5 A: It's -- it's very close to that. It's a little
6 bit different in that if there are sections of
7 the development that are not feeding through
8 prior phases, the box can shift based on
9 regulations within those additional phases.
10 So, it -- it's a tighter box for areas with
11 shared infrastructure and a slightly more
12 flexible box for good and bad sometimes, for --
13 depending on who you're looking at -- for
14 phases that don't have that shared
15 infrastructure.

16 Q: Outside of the master plan -- or getting back
17 to the master plan for the WestEdge
18 development. Has -- so, the City has reviewed
19 that document?

20 A: We have.

21 Q: And approved it?

22 A: Yes.

23 Q: And the City has granted specific construction
24 permitting for prior phases of the WestEdge
25 project, correct?



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1 A: When the prior phases were submitted for
2 application, they were granted approvals. Yes.

3 Q: Thank you. Have you reviewed any other
4 documents related to this portion of the
5 project we're here about today?

6 A: I have seen a few other documents related to
7 this portion.

8 Q: Do you recall what documents you've seen?

9 A: So, I -- I am sure that I have in the past seen
10 the general permit applications for
11 environmental work. I have not reviewed those
12 in very significant details. They're not a
13 part of our regulatory process. But I -- I'm
14 sure I have seen those and looked at them. I
15 have seen some initial documentation of some of
16 the environmental concerns for the -- the
17 project area from the city side. I have seen
18 some conceptual layout work for the stormwater
19 design for the current phases, currently
20 planned phases. I've seen documents related to
21 right-of-way, look in -- I look at right-a-ways
22 as they're completed, negotiate drainage
23 easements for future phases, the connections
24 into this Spring-Fishburne system design. So,
25 there is a number of other do- -- documents and



1 details.

2 Q: Based on your review of the documents involved
3 with this project, do you have a general
4 understanding of where the stormwater is
5 designed to flow if the project is constructed?

6 A: Yes.

7 **MR. TRAYNHAM:** Exhibit 10. Thank you, sir.

8 Q: Mr. Fountain, I'd like to show you a previously
9 admitted exhibit to ask you a couple of
10 questions. This is a document I believe
11 WestEdge put together to demonstrate -- I'll
12 represent to you to demonstrate the basic
13 drainage directions post-construction. First
14 of all, have you ever seen this before?

15 A: I believe I've seen this exact figure, but if
16 not, certainly figures very similar to this.

17 Q: Okay. Based on your understanding of the
18 project, does this generally depict the
19 drainage flow direction post-construction of
20 this project?

21 A: Yes.

22 Q: All right. So, the finished project would
23 drain to three separate outfalls, correct?

24 A: That's correct.

25 Q: The -- the current condition, subject to the



1 few drainage areas we talked about earlier, is
2 -- is generally going to be a single outfall,
3 is that correct?

4 A: As we talked about earlier, the -- the
5 functional drainage is going to a single
6 outfall. Yes.

7 Q: Fair enough.

8 **MR. TRAYNHAM:** Thank you.

9 Q: This is another document from the same exhibit
10 showing kind of a side by side of the existing
11 drainage system and a proposed drainage system.
12 Now, obviously, these are not engineered design
13 drawings. But in general, does this, to the
14 best of your knowledge, accurately depicts the
15 current drainage situation and the proposed
16 drainage situation?

17 A: Yes.

18 Q: Do you have a general understanding based on
19 your review of the documents of how the
20 proposed conditions would perform with regard
21 to stormwater drainage as compared to the
22 current conditions?

23 A: I do have a -- a -- a general understanding of
24 the minimum that would be required for the
25 performance.



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1 Q: Okay. City stormwater requirements at minimum
2 require that new developments not worsen
3 existing conditions, correct?

4 A: That's correct.

5 Q: And in some cases, permitting would require
6 some demonstrated improvement over current
7 conditions, correct?

8 A: That's correct.

9 Q: And you applied those requirements in every
10 case that you permit out of your department,
11 correct?

12 A: Correct.

13 Q: So, at a minimum, no worsening condition
14 permitting -- for WestEdge to get a permit,
15 correct?

16 A: Correct.

17 Q: Based on your understanding of what is proposed
18 in your work with the City, would there be any
19 stormwater benefit to the area around the site
20 from the permitted activity?

21 A: Yes.

22 Q: And what would those benefits be?

23 A: There's a series of different potential
24 benefits. The disconnection of the tidal
25 inflow through the creek system, certainly



1 reduces sunny day flooding that we discussed.
2 The redirection of flow from su- -- the sub-
3 basin you can see in the map down into the
4 south, at -- which is the tie into our deep
5 tunnel system or Spring-Fishburne project.
6 That basin would basically have actual -- an
7 actual drainage outfall, functional drainage
8 outfall. So, that's a significant benefit for
9 that sub-basin. Then the -- the disconnection
10 of basins in this -- I'm -- I'm going to try to
11 not make it too technical. The -- you can see
12 on the upper right of the figure, there's sort
13 of a -- new blue lines that come in and
14 separate out the drainage basins. Basically,
15 the -- what -- what is termed the President
16 Street basin in the upper right figure is
17 directed into the city deep tunnel system, as
18 the Spring-Fishburne project. In order to do
19 that, you have to disconnect the tidally
20 impacted portions of the systems because you
21 can't bring tide water into the deep tunnel
22 pump system or else the pump system won't
23 basically provide drainage relief to the
24 rainfall drainage. So, this approach allows
25 that rainfall basin, which is sort of the



1 section being segmented off to -- just to the
2 bottom left of the President Street basin to
3 have a dedicated outfall down kind of behind
4 the River Dog Stadium, out into the marsh,
5 which basically improves that outfall and
6 reduces how much water is trying to flow
7 through these different locations providing a
8 higher level of service.

9 **THE COURT:** Can you show by touching the screen
10 where you were just talking about?

11 A: I can. So, the -- the President Street basin
12 that we're talking about is here. He's going
13 to draw ---

14 Q: You can ---

15 A: --- it looks like for me. So, that basin is
16 going to flow to this green arrow here, which
17 goes into the City's deep tunnel system, the
18 Spring-Fishburne project, and will basically be
19 pumped out into the Ashley River through a very
20 large pump station that we're preparing to
21 construction between the -- the bridges to West
22 Ashley, which is a little bit south of this --
23 this project area. The current tidal inflow
24 here comes in and basically consumes available
25 storage and overfills it in a high enough tide



1 event or during rain, during a high tide event.
2 Basically, floods kind of the area here,
3 especially. That is being changed to have a
4 higher invert here as part of the -- the
5 project, basically raising the level of the
6 pipes so that water can no longer flow up from
7 the tidal system and into the project area.
8 So, you won't see the influx of tidewater. It
9 only acts an outflow. But in order to do that,
10 of course, you're now cutting off the low lying
11 areas that used to be able to drain through
12 that pipe because you've raised the entry of
13 the pipe. So, the areas that are now below the
14 elevation of that pipe can't come out through
15 that pipe. So, that's that redirection here.
16 A portion of the basin down into the Spring-
17 Fishburne deep tunnel system, to say this low
18 lying area that can longer flow through the
19 existing creek outfall gets redirected down
20 into a pipe system and into the deep tunnel
21 pump system. Separately, that's also why this
22 new outfall has to go and improved because
23 you're going to experience that same issue here
24 in what was previously this tidally impacted
25 low lying area that we have to disconnect from



1 the deep tunnel system because if you bring
2 tidewater into the tunnel, you're basically
3 trying to pump the river into the river and it
4 just takes up all the capacity of your pumps.
5 So, that section gets -- gets disconnected
6 through here. That water then can gravity flow
7 through the new outfall, which we'll have to
8 tide protection on it as well to basically be
9 able to discharge into the -- this -- the --
10 the marsh river system in this location. That
11 does provide a little bit of secondary relief
12 for some of these other slightly less
13 functional pipes that now have more -- less
14 land they're trying to drain through them as
15 well we now have defined drainage outfalls for
16 each of these sub-basins we just talked about.
17 I'm happy to go into that in any more detail,
18 if anyone would like me to.

19 **THE COURT:** No. I'm fine.

20 A: Okay.

21 Q: You mentioned the Spring-Fishburne project
22 earlier. This is another of the City's major
23 capital improvements, is that correct?

24 A: It is.

25 Q: Approximately, how much is the City spending on



1 the Spring-Fishburne project?

2 A: A little bit less than 200 million dollars of
3 total funding. Not all of that is -- is City
4 funds, but funds that City is expending.

5 Q: So, a very capital -- very major capital
6 project?

7 A: It is the largest capital project in the City.

8 Q: Why it the Spring-Fishburne project not
9 directly accepting or -- or taking the drainage
10 from the entirety of this area if that much is
11 going into it?

12 A: So, that -- that's based on the -- the areas
13 with tidal impact. Again, we -- we touched on
14 that briefly. If you have an area where there
15 will be water from a tide event coming into the
16 system -- basically a tide event, right, is the
17 -- is the ocean coming up to a certain level.
18 So, if you put a drain here, you don't drain
19 the ocean lower. The ocean stays constantly
20 because there's so much water. You just
21 basically are using up the capacity of your
22 drain without being able to lower the height of
23 the ocean.

24 Q: Now, you haven't been here previously, but we
25 have heard some testimony regarding



1 disconnection of the President Street portion
2 of this basin and -- and the redirection of
3 that to the deep tunnel system. Would you
4 expect or do you anticipate that this
5 disconnection is going to solve the flooding
6 issues at Fishburne and Hagood in and of
7 itself?

8 A: No.

9 Q: Is it going to have any impact at all on the
10 tidal flooding at Fishburne and Hagood?

11 A: It does not have an impact on the sunny day
12 flooding. It does have an impact on rainfall
13 and tide in combination in that you have
14 reduced some of the rainfall that's going in
15 that direction. But it does not impact the
16 sunny day flooding.

17 Q: Do you expect it to resolve all storm related
18 flooding?

19 A: No.

20 Q: And as you mentioned earlier, the -- the
21 current City stormwater manual requires some
22 level of baseline improvement in conditions in
23 approving new projects, correct?

24 A: It -- it does in special production areas, and
25 ---



1 Q: And is this a special production area?

2 A: It is.

3 Q: So, at least part of the proposed project is
4 going to be subject to the new stormwater
5 manual requirements, correct?

6 A: Correct.

7 Q: So, is it fair to say that if WestEdge cannot
8 build to the minimum requirements of the
9 stormwater manual and show an improvement, they
10 can't build?

11 A: Correct.

12 Q: And a permittee can go beyond the minimum
13 requirements to make further improvements in
14 drainage conditions, correct?

15 A: Yes.

16 Q: Is it your understanding that the permittee,
17 the applicant has expressed an intention to do
18 that in this case?

19 A: They have.

20 Q: Would you expect that these improvements are
21 constructed as you understand them that there
22 would be more than minimum level of improvement
23 in the conditions in the area?

24 A: There are areas of the project that certainly
25 are going to be above the minimum based on the



1 way the engineering is set up. Such -- such as
2 the section flowing down to the -- the deep
3 tunnel system.

4 Q: Based on your understanding of the project, is
5 there a potential that the project could
6 alleviate compound flooding issues near the
7 project site?

8 A: There is.

9 Q: Earlier, I -- we talked a little about the
10 number of sites with frequent, recurring
11 stormwater flooding in the City and -- and you
12 agreed that there are a number of such sites,
13 correct?

14 A: Yes.

15 Q: is it fair to say that the City currently has
16 more priority stormwater work than it can pay
17 for?

18 A: Yes.

19 Q: What are the general sources of funding the
20 City looks to for funding priority projects?

21 A: There are a series of options. The -- there's
22 the -- the dra- -- what we call the Drainage
23 Fund, which is a -- basically, a portion of a
24 few different revenue sources that are
25 dedicated and directed annually into a set



1 aside for capital drainage project
2 improvements. For very small scale work, we
3 have a utility fund that's based on a
4 stormwater user utility fee that funds some of
5 the street scale minor improvement work. We
6 use a series of different TIFs around the city
7 to do stormwater improvement work. We have had
8 great success in grant applications varying
9 from different federally competitive grants to
10 awards from the South Carolina Transportation
11 Infrastructure Bank to the South Carolina Rural
12 Infrastructure Agency. We have used -- I'm
13 going to try to remember the -- the formal name
14 for it, but I'm going to completely fail.
15 Colloquially, it would be called mini bottle
16 money, which is basically the tax revenue on
17 the -- the very small liquor bottles that are
18 brought in. That gets directed in drainage
19 projects frequently. It's possible I am
20 missing something, but those are certainly some
21 of the -- the larger sources.

22 Q: You spoke earlier about your -- your meetings
23 with other City officials to talk about
24 flooding and drainage issues. Funding for
25 these major capital projects is a major subject



1 or a topic of discussion in these meetings,
2 correct?

3 A: Yes.

4 Q: Does the City spend a significant amount of
5 time identifying and obtaining funding for
6 major capital projects?

7 A: We do.

8 Q: Are you involved in any of the grant funding
9 efforts for the City?

10 A: Yes.

11 Q: Do you get every grant you apply for?

12 A: No.

13 Q: It is a significant effort to apply for a
14 grant?

15 A: It is.

16 Q: Are those competitive?

17 A: They are very competitive.

18 Q: Is it your understanding that the WestEdge
19 drainage project will be paid for with TIF
20 funds?

21 A: That is my understanding.

22 Q: In the absence of TIF funding intended for this
23 project, are you aware of any plan B source of
24 funding for a flooding fix at Hagood and
25 Fishburne?



1 A: No.

2 Q: Given the number of unfunded or underfunded
3 priority projects the City currently has and --
4 and those that have not formally been
5 identified, if this project is not moved
6 forward as currently proposed, would you hazard
7 any guess when or if an alternative fix might
8 be implemented for the current conditions at
9 Fishburne and Hagood?

10 A: We have allocated all of the potential
11 available funding that we see for at least the
12 next five years through capital improvement
13 plan. There are few projects within even the
14 current allocation that are only allocated for
15 preliminary engineering and would require a
16 significant amount of additional money to go
17 through design and permitting. So, it -- it
18 would depend upon the competitiveness of the
19 project for outside that five-year window with
20 the other projects the City is considering, so.

21 Q: You -- you can't say sitting here today when or
22 if?

23 A: No.

24 Q: Thank you, Mr. Fountain.

25 **THE COURT:** Mr. Churdar or Smith?



1 **MR. CHURDAR:** The Department has no cross.

2 **THE COURT:** I think Ms. Milton is it.

3 **MR. CUNNINGHAM:** She's giving me a break.

4 **MR. FOUNTAIN - CROSS-EXAMINATION BY MS. MILTON:**

5 Q: Morning, Mr. Fountain.

6 A: Morning.

7 Q: So, I just heard a little bit of testimony that
8 you gave about TIF funds, is that correct?

9 A: I mentioned the TIF funding is a source we use
10 for drainage projects. Yes.

11 Q: Where do TIF funds come from?

12 A: So, that's a -- a good question for a finance
13 professional, but in general, it is a -- my
14 understanding is that they are -- you take a
15 baseline of property values and then as
16 property values increase, basically any
17 increased -- and depends who you get to
18 participate in the TIF. There's a whole series
19 of different people who receive tax funding.
20 Those funds get allocated into a pot that I
21 believe you can fund off of and use that
22 revenue to pay your bond costs.

23 Q: So, would it be a fair characterization to say
24 that that money comes from taxes?

25 A: Yes.



1 Q: And that money would then come from taxpayers,
2 is that correct?

3 A: That is -- yes. I -- I would say that is how
4 you get taxes. Yes.

5 Q: Changing gears a little bit, you're mentioning
6 some meetings and you're mentioning permitting.
7 Would you say that resource agencies seek to
8 avoid ecological impacts of projects?

9 A: Yes.

10 Q: And in your experience, if avoidance isn't
11 feasible, would you agree that the regulatory
12 agencies encourage the minimization of adverse
13 impacts to ecological systems?

14 A: I'm sorry. Will you say that one more time?

15 Q: If avoidance isn't feasible, in your
16 experience, would you agree that the regulatory
17 agencies encourage minimization to avoid or
18 minimizing the adverse impacts to the
19 ecological systems?

20 A: Yes.

21 Q: This phase has not been submitted for a
22 construction activity application. You haven't
23 seen one yet, have you?

24 A: Correct. It has not been submitted yet.

25 Q: And you've not looked at the actual modeling



1 results related to this phase, is that correct?

2 A: We have only reviewed the modeling results from
3 the master plan, which would have encompassed
4 all the phases, but not the specifics through
5 this construction style phase of how they would
6 meet those modeling requirements.

7 Q: So, you don't know whether or not the proposed
8 project that we're here about today is going to
9 lead to an increase of impervious surface in
10 the project area?

11 A: That's correct.

12 **THE COURT:** Say that again.

13 **MS. MILTON:** He does not know whether the -- or not
14 the proposed project we're here about is going
15 to lead to an increase of impervious surface.

16 **THE COURT:** Oh, impervious surface. Okay.

17 Q: And you've not evaluated how a future phase
18 would comply with a master plan requirements,
19 are you?

20 A: No. That evaluation would -- would take place
21 at the time of the submission of the
22 construction activity application.

23 Q: So, you do not know how the construction
24 details would impact the stormwater modeling,
25 is that correct?



1 A: So, it's -- it's an interesting question. It
2 -- we do not know what method of construction
3 detail they would use to meet the requirements
4 of the modeling. Does that make sense?

5 Q: Say that one more time?

6 A: Yeah. I -- I -- I'm trying to figure out
7 exactly how to answer it. We don't know what
8 method of construction they would use to meet
9 the modeling and regulatory requirements at
10 this time. That -- that's correct.

11 Q: So, you don't know the con- -- construction
12 details would impact the stormwater modeling,
13 correct?

14 A: Well, we -- we do know that the construction
15 details have to meet the stormwater modeling,
16 so they can't impact the modeling in a way that
17 we're not basically already accounting for.
18 But we don't know what method they will use of
19 construction details to make their modeling
20 work, basically.

21 Q: Do you recall testifying at a deposition on
22 April 22nd of 2022?

23 A: I don't recall the exact date, but yes, I do --
24 I did testify in a deposition.

25 Q: And did have an opportunity to prepare for that



1 deposition beforehand?

2 A: I did.

3 Q: And were you given a chance to read the
4 transcript afterwards and make corrections?

5 A: I was given a chance to read the transcript.
6 I don't believe I had an opportunity to make
7 corrections. But I did read the transcript.

8 Q: Okay. Do you know that on April 22nd, 2022,
9 you testified that you have not evaluated how
10 a future phase would comply with the master
11 plan requirements or how the construction
12 details would impact the stormwater modeling?

13 A: Correct.

14 Q: And you haven't made a determination about
15 whether or not this phase of the project would
16 meet the minimum requirements, have you?

17 A: I'm sorry. Say that one more time.

18 Q: You have not made a determination about whether
19 this phase of the project would meet the
20 minimum requirements?

21 A: Only within the master plan, which would have
22 had the stormwater modeling. We have not seen,
23 again, if the proposed construction activity
24 would be able to meet the requirements or not.

25 Q: So, for this phase, you have not made a



1 determination about that?

2 A: So, the -- the phase is located within the
3 master plan. But we have not seen if the
4 construction details will meet the requirements
5 of that master plan. That's correct.

6 Q: So, in order to fully calculate the benefits
7 for the stormwater with respect to this
8 project, you would need to see the modeling
9 related to the final stormwater design,
10 wouldn't you?

11 A: Yes. That's correct to see if they'll go
12 exceedance of the minimum requirements of the
13 manual.

14 Q: And the stormwater manual was updated around
15 2020, is that correct?

16 A: Yes. I believe it was summer of 2020.

17 Q: And those updates plan for climate impacts in
18 the design so that the sites still work in 50
19 years, is that correct?

20 A: Correct.

21 Q: Is this project located in a tidal flood plain?

22 A: I believe it is. I have not reviewed the flood
23 map specifically, but I would imagine certainly
24 from the tidal impacts that it is.

25 Q: But you haven't checked the exact numbers in



1 order to have an opinion on how this area
2 floods prior to king tides, have you?

3 A: So, I have looked at the elevations of the
4 ground within the roadways, but not looked at
5 the -- what's called the FIRMs, the Flood
6 Insurance Rate Maps, to see what zone you would
7 need to reach for a hundred year flood plan.

8 Q: Are you able to ascertain the percentage of
9 flooding from extreme high tide events versus
10 other rain events?

11 A: Percentage of instances of flooding at this
12 location you're referring to?

13 Q: Yes, sir.

14 A: Not an exact percentage. There's quite a bit
15 of overlap again in the different styles of
16 flooding. So, determining any individual fact
17 -- I believe our GIS departments kept track of
18 sunny day flood events that would have impacted
19 this intersection, but I don't have those
20 numbers off the top of my head now.

21 Q: But you -- you haven't seen those?

22 A: I have probably seen them. Robert tends -- our
23 GIS Director, tends to present them to Council
24 and to staff not infrequently because there's
25 been such a severe increase in the last 5 years



1 or so versus the previous 20 years. But I --
2 I want to say it's something like 80 instances
3 per year in the last couple of years. But I
4 don't have the exact number.

5 Q: And the project area will see some flood
6 reduction just by virtue of the Spring-
7 Fishburne project taking some of the water that
8 just used to flow out through the area, is that
9 correct?

10 A: So, if you can define the project area for me
11 that would be very helpful.

12 Q: Let's say Hagood and -- the corner of Hagood
13 and Fishburne and then continuing along Hagood.

14 A: So, as you move south along Hagood, you are
15 going to see more improvement because of the
16 deep tunnel system from that disconnected
17 portion. As you move north on Hagood, you will
18 not see substantial improvements. You may see
19 a minor improvement again during rainfall --
20 rainfall focused flood events. There'll be
21 slightly more disconnection from that President
22 Street basin we talked about earlier coming
23 out. So, you won't see as much water flowing
24 through, but it's -- it's a pretty non-
25 functional system, so it's hard to tell how



1 much quantitative improvement you will see, but
2 it will be better.

3 Q: Okay. But that's just by virtue of the Spring-
4 Fishburne project, not accounting for WestEdge?

5 A: Yes. That's correct.

6 Q: And you participate in the Dutch Dialogues,
7 correct?

8 A: I did.

9 Q: And did that involve consultation with
10 international, national and local experts with
11 expertise in stormwater and flood management?

12 A: It did.

13 Q: And did that result in a report?

14 A: Yes.

15 Q: And about when was that report released?

16 A: Probably 2019.

17 Q: And afterwards, the City voted to support the
18 concepts that were adopted in the Dutch
19 Dialogues report, is that correct?

20 A: Yes. I -- I -- and I -- I remember this from
21 my deposition. I did not go back and check.
22 There -- Council definitely talked about the
23 Dialogues and definitely took some type of non-
24 binding action to support the concept of the
25 Dialogues.



1 Q: And you found the Dutch Dialogues beneficial to
2 your work, didn't you?

3 A: Yes. Absolutely.

4 Q: And the Dutch Dialogues recommendations were
5 used when laying out land and water analysis
6 that then informed the City comprehensive plan,
7 is that correct?

8 A: That is my understanding. Yes.

9 Q: And do you know what the Dutch Dialogues has
10 said about filling waterways in order for more
11 impervious service in buildings?

12 A: Yes.

13 Q: Do you want to discuss that?

14 A: We can.

15 Q: Do you know what the Dutch Dialogues
16 specifically said about filling in Gadsden
17 Creek?

18 A: I believe I recall the discussions of the
19 Gadsden Creek area. Yes.

20 Q: Okay. Do you know what they said about filling
21 in Gadsden Creek?

22 A: I believe I do.

23 Q: Developers didn't solicit advice from you on
24 their general stormwater management plan, did
25 they? They just informed you of the approach



1 they were going to take, is that correct?

2 A: For the stormwater master plan, no. I
3 certainly -- I was not here at the time and I
4 do not believe that they had -- well, that's
5 not -- I shouldn't say that. There was a
6 component of collaboration because of the Spri-
7 -- Spring-Fishburne connection. I don't know
8 if there was collaboration on the remainder of
9 the project or not. I was -- was not present
10 at the time. On the current approach, we had
11 a -- we did have a brief discussion only
12 related to the City encouraging the development
13 team to consider some open drainage systems.
14 But no detailed coordination work. The general
15 plan had certainly been presented I believe
16 before any of those discussions.

17 Q: But you still have not seen the final
18 construction design for this project, right?

19 A: That's correct.

20 Q: And you've not done any calculations with
21 respect to the storage capacity for stormwater
22 in the Gadsden Creek tidelands area, is that
23 correct?

24 A: Correct.

25 Q: And you've not even looked at BMPs for this



1 phase of construction, is that correct?

2 A: Correct.

3 Q: Are you aware of any city money that has been
4 budgeted to clean or otherwise revitalize
5 Gadsden Creek?

6 A: I've not.

7 Q: And do you know whether or not there are green
8 infrastructure elements in the stormwater
9 management plan for this phase?

10 A: Only in the discussion we had to incorporate
11 potential open drainage, but that's not been
12 finalized in the construction activity
13 application. So, it may or may not happen.

14 Q: And would you agree that the City uses tide
15 gates in many areas to reduce tidal flooding?

16 A: We do.

17 Q: Nothing further.

18 **THE COURT:** Redirect?

19 **MR. TRAYNHAM:** Thank you, Your Honor.

20 **MR. FOUNTAIN - REDIRECT EXAMINATION BY MR. TRAYNHAM:**

21 Q: Hello again, Mr. Fountain.

22 A: Hello.

23 Q: I'll try to be brief on redirect. I believe
24 you said that Council's actions with regard to
25 the Dutch Dialogues were non-binding. Is that



1 your understanding?

2 A: It is.

3 Q: To the extent that the Dutch Dialogues informed
4 a city comprehensive plan, is it your
5 understanding that the comprehensive plan is a
6 guidance document or implement for the City?

7 A: Yes.

8 Q: Is the comprehensive plan a directly
9 enforceable requirement in any respect?

10 A: Not that I'm aware of.

11 Q: To the extent that the Dutch Dialogues informed
12 any elements within the stormwater manual,
13 you've already testified that this project
14 would have to meet the minimum requirements of
15 the stormwater manual in order to permitted,
16 correct?

17 A: It would. There are two different com- --
18 manuals that will apply to two different
19 portions of the project, but the -- anything
20 not connected to the existing drainage will
21 have to comply with the new stormwater manual.
22 Anything connected to the prior drainage has to
23 comply with the preexisting manual because of
24 the -- that master plan infrastructure layout.

25 Q: To the extent that the Dutch Dialogues is in



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1 any way enforceable, WestEdge would have to
2 comply with it from your perspective to get
3 permitting from your department, correct?

4 A: Any of the enforceability located within the
5 stormwater ---

6 Q: Within the ---

7 A: --- manual, yes. Correct.

8 Q: Thank you for the caveat. You were asked
9 generally about tide gates. There are multiple
10 kinds of tide gates, are there not?

11 A: There are.

12 Q: Do you have any experience permitting or
13 attempting to permit muted tide gates in your
14 experience at the City?

15 A: We do.

16 Q: Fair to say that there is resistance to getting
17 such permits?

18 A: Yes.

19 Q: In your role with the stormwater department, do
20 you review projects which require not only
21 stormwater permitting, but critical area or
22 401, 404 permits from time to time?

23 A: We do.

24 Q: Are you generally familiar with the
25 requirements for those permits and



1 authorizations?

2 A: I am generally familiar. Our MS4 manager,
3 Kinsey Holton, is -- is our lead technical
4 person on that process, but I am generally
5 familiar.

6 Q: Do you find it unusual to not have the level of
7 stormwater detail in front of you that has been
8 asked about by opposing counsel at this stage
9 of a permitting for a project like this?

10 A: No.

11 Q: And again, if the subsequent phases of this
12 project, if this phase of the project does not
13 demonstrate to the City that it can comply with
14 the master plan modeling that you have
15 reviewed, will it get a permit?

16 A: No.

17 Q: Thank you, Mr. Fountain.

18 **THE COURT:** Recross on any of that?

19 **MS. MILTON:** None, Your Honor.

20 **THE COURT:** You may step down.

21 A: Thank you, Your Honor.

22 **MR. TRAYNHAM:** Your Honor, we would ask that Mr.
23 Fountain be excused.

24 **MR. CUNNINGHAM:** No objection.

25 **THE COURT:** He's excused. Can we take a five-minute



1 break?

2 **MR. TRAYNHAM:** Thank you, Your Honor.

3 **THE COURT:** Is the next witness a lengthy one?

4 **MR. TRAYNHAM:** Yes, Your Honor.

5 **THE COURT:** Okay.

6 (Off the record from 10:40 a.m. until 10:49 a.m.)

7 **MS. SHAHID:** We call Andy Ruocco.

8 **COURT REPORTER:** Would you raise your right hand
9 please, sir? Do you solemnly swear the
10 following testimony to be the truth, the whole
11 truth, and nothing but the truth, so help you
12 God?

13 **MR. RUOCCO:** I do.

14 **JOSEPH ANDREW RUOCCO,** having been duly sworn,
15 testifies as follows:

16 **MR. RUOCCO - DIRECT EXAMINATION BY MS. SHAHID:**

17 Q: Mr. Ruocco, could you state your full name
18 please?

19 A: Joseph Andrew Ruocco.

20 Q: Okay. Ruocco. I'm sorry.

21 **THE COURT:** Okay.

22 Q: And how old are you?

23 A: 44. Well, 44 this month.

24 Q: Okay. And where do you live?

25 A: In Mount Pleasant, South Carolina.



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1 Q: Okay. What's your educational background?

2 A: I have a Bachelor's degree in Biology from the
3 University of South Carolina, a Masters degree
4 in Environmental Studies from College of
5 Charleston.

6 Q: Okay. And what's your work experience leading
7 up to your present employment?

8 A: So, I started out at DHEC right after college.
9 I worked in the UST program.

10 Q: What's the UST program?

11 A: That's the Underground Storage Tank program.

12 Q: Which ---

13 A: Worked there -- I'm sorry. Go ahead.

14 Q: What'd you do there?

15 A: I was in Underground Storage Tank Inspector.

16 Q: Okay.

17 A: Yeah. I did that four years and during that
18 time, I started my Masters degree and started
19 in a company called WPC as a Field Scientist.
20 I worked my way up to Project Manager and got
21 bought out by Terracon in 2009. And by 2012, I
22 had worked my way up to the Department Manager.

23 Q: Okay. And what department do you manage?

24 A: I manage the Environmental Department.

25 Q: Environmental Department?



1 A: Yes.

2 Q: Okay. And how many people do you manage?

3 A: I manage eight people locally. But I'm also
4 the southeast lead for Environmental Planning,
5 which means that I have mentorship and training
6 responsibilities for all the Environmental
7 Planning staff in the southeast division of
8 Terracon.

9 Q: Okay.

10 A: I'm also the Waters of the U.S. Ecology
11 subcommittee lead on the national level for
12 Terracon.

13 Q: Okay. And what type of work does Terracon do?

14 A: We have a broad range of environmental
15 services. Primarily, environmental planning
16 consists of Waters of the U.S. delineations,
17 permitting 404, permitting 401 permitting,
18 threatened and endangered species and cultural
19 resources. We also do phase I environmental
20 site assessments, voluntary cleanup contracts,
21 and state -- state brownsfields and federal
22 brownsfields.

23 Q: Okay.

24 **MS. SHAHID:** And I'm going to approach the Court
25 Reporter and mark this Exhibit as WestEdge 4.



1 **THE COURT:** So, you're going to approach the Court
2 Reporter and mark the exhibit?

3 **MS. SHAHID:** Ask him to mark it. I left some words
4 out.

5 **THE COURT:** Yeah. That's fine.

6 **MS. SHAHID:** He probably wouldn't mind if I did it.

7 **(Respondent's Exhibit Number 4 was marked for**
8 **identification purposes.)**

9 **Q:** I'm going to hand you what's been marked
10 WestEdge Exhibit 4. Is that the equivalent of
11 your resume?

12 **A:** Yes. It is.

13 **Q:** Okay. And what does -- does that document,
14 Exhibit 4, describe your qualifications, your
15 company and certain projects that you've worked
16 on?

17 **A:** Generally, yes it does.

18 **Q:** Okay.

19 **MS. SHAHID:** And, Your Honor, I would offer Exhibit
20 4 into evidence.

21 **MR. CUNNINGHAM:** No objection

22 **MR. CHURDAR:** No objections, Your Honor.

23 **THE COURT:** It's admitted.

24 **(Respondent's Exhibit Number 4 was admitted into**
25 **evidence.)**



1 **MS. SHAHID:** Okay.

2 **Q:** And do you have any professional registrations?

3 **A:** I'm a professional wetland scientist.

4 **Q:** Okay. What is a wetland scientist?

5 **A:** That is a designation you receive from the
6 Society of Wetland Scientists. It's based on
7 years of experience and education.

8 **Q:** Okay. And what is that intended to qualify you
9 to do?

10 **A:** There is various aspects of that designation.
11 What I was approved for is based on my
12 experience with 404, 401 permitting,
13 mitigation, and that -- that's a pretty good
14 summary.

15 **Q:** And when you use the phrase 404, 401
16 permitting, you're talking about permitting for
17 a fill?

18 **A:** Permitting for impacts to a jurisdictional
19 aquatic resources. Correct.

20 **Q:** Okay. All right. And have you had any
21 specialized training?

22 **A:** I've had a lot of specialized training over the
23 last 21 years. Some notable training courses
24 that I've taken are multiple NEPA courses.

25 **Q:** And NEPA is an acronym used by the Corps of



1 Engineers?

2 A: Correct. That as part of the evaluation
3 process for permitting processes. It is using
4 the National Environmental Policy Act
5 considerations. That -- that -- that is one of
6 the things they take into consideration. So,
7 you need to know that pretty well for
8 permitting. Also, taken actual permitting
9 courses for 404, 401 permitting courses
10 specifically designed to help people learn the
11 process. I've -- I've taken mitigation
12 training. As part of my designation within
13 Terracon requires me to conduct training on a
14 national level, across the company -- you know,
15 I see myself as a trainer to some extent and we
16 develop templates for reports. Some of the
17 templates that I've developed are used on a
18 nationwide basis in Terracon.

19 Q: Okay. And is -- is Terracon a national company
20 or international?

21 A: It's just national. It's a 5,000 -- about
22 5,500 people, 160 offices nationwide.

23 Q: Okay. And it is what we call an environmental
24 consulting company?

25 A: Yes. We also do geo-technical facilities and



1 materials testing services as well.

2 Q: And in the course of your employment with
3 Terracon, which has been for how many years?

4 A: I've been employed between WPC, it was bought
5 out by Terracon, for approximately 17 years.

6 Q: 17?

7 A: Correct.

8 Q: Have you been employed primarily in the fields
9 of environmental and regulto- -- regulatory
10 compliance?

11 A: Exclusively, yes.

12 Q: Okay. Well, when you say exclusively, does
13 your employment extend to brownsfields?

14 A: Yes. And I would lump that under regulatory
15 compliance.

16 Q: Okay. And can you tell the Court what a
17 brownsfield is?

18 A: A brownsfield is -- typically, most people
19 think of it as a contaminated site. It can be
20 a site with perceived contamination as well.
21 But these are properties that have some level
22 of contamination that will inhibit --
23 potentially inhibit the development of that
24 property.

25 Q: Okay. And when you are working on a



1 brownsfield site, are you facing the
2 possibility of somebody having to remediate
3 contamination?

4 A: Yes. That is one of the outcomes of pursuing
5 a brownsfield redevelopment project is there's
6 potential that remediation would have to be
7 conducted if there is environmental
8 contamination that exceeds regulatory limits
9 and the applicable regulatory agencies have
10 identified it as a -- a threat to human health
11 or the environment.

12 Q: Okay. And in the course of identifying
13 pollution or contamination on property, do you
14 have occasion to do sampling?

15 A: Throughout my career, I've taken hundreds, if
16 not thousands of environmental samples. I'm
17 frequently involved in planning for brownsfield
18 redevelopment projects and Phase II
19 environmental site assessments, which consist
20 of soil and groundwater sampling, soil gas
21 sampling and sometimes sediment sampling as
22 well.

23 Q: Okay. And is it common practice for sampling
24 to be analyzed at a lab that may not be in
25 Terracon's building? Maybe a separate entity?



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1 A: That's the way Terracon handles it. We use
2 third party certified laboratories, use
3 laboratories who obtain certifications through
4 the state and federal processes and they have
5 instrumentation used to analyze the media that
6 we send them for contamination.

7 Q: Okay. And are -- do you have experience in
8 reviewing reports received from laboratories of
9 sampling data?

10 A: Yes. It's something that I do on a regular
11 basis, almost every day.

12 Q: And do you do that for advisory purposes for
13 your clients with -- what's the importance of
14 that?

15 A: The importance of that is -- yes. Absolutely,
16 we do that on a regular basis for our clients.
17 That's something that I deal with on a daily
18 basis. And the importance is for them to
19 understand, typically, we're dealing with
20 property transactions, people who are
21 purchasing the properties, they need to
22 understand essentially what they're purchasing.

23 Q: Okay.

24 A: Whether or not it's contaminated. Whether
25 offsite properties may be contributing to that



1 contamination.

2 Q: Okay. And if remediation is necessary, are you
3 -- do you make a decision about the necessity
4 of remediation based on the sampling data?

5 A: Absolutely. We evaluate the sample results,
6 compare them to applicable regulatory limits.
7 And if there are significant exceedances, there
8 -- there is potential that remediation would
9 ne- -- would need to be conducted. That is
10 usually conducted in coordination with what we
11 refer to with resource agencies in -- in our
12 state it's DHEC.

13 Q: Uh-huh. And do you have any experience in
14 proposing or designing mediate -- remediation
15 plans?

16 A: Yes. Extensively.

17 Q: And when I say remediation plan, I'm -- I guess
18 I'm talking about a cleanup plan. Is that what
19 remediation is?

20 A: That's right. And it would consist of
21 groundwater remediation, soil remediation, and
22 sometimes sediment remediation, depending on
23 the type of project.

24 Q: Is capping or blocking exposure a method
25 incorporated into medi- -- remediation plans?



1 A: In terms of a voluntary cleanup contract, that
2 is common practice to cap potential areas that
3 contain contamination to prevent exposure of
4 that contamination to the -- the public.

5 Q: Okay. And that's a little bit different from
6 removing contaminants, right?

7 A: Correct.

8 Q: Is -- in some remediation, do contaminants have
9 to be removed?

10 A: Yes. If the state or the federal agencies
11 determine that the contamination is high enough
12 levels, then there -- and it's impacting human
13 health or the environment, yes, it can result
14 in a remediation.

15 Q: Are you knowledgeable of the parameters that
16 the Corps of Engineers uses to identify
17 wetlands?

18 A: Yes. It's something I do on a daily basis.

19 Q: Okay. You actually place flags to identify the
20 jurisdictional line to be picked up by the
21 surveyor?

22 A: Okay. So, I should back up a little bit. So,
23 as far as the field work associated with
24 wetland delineations, yes, I'm very familiar
25 with that. That's part of the -- the training



1 requirements that I have in my position at
2 Terracon to keep other staff up to speed. I --
3 I don't necessarily get in the field to
4 delineate wetlands very often now, but yes, I'm
5 very familiar with it.

6 Q: Have you delineated them in the past?

7 A: Thousands and thousands of acres.

8 Q: Okay. And does the Corps of Engineers give you
9 any guidance on delineating waters of the state
10 or -- I mean, waters of the United States?

11 A: Yeah. There's several guidance documents. The
12 1987 manual is the primary one. There's also
13 supplemental regional manuals that are used
14 depending on where you are in the country.

15 Q: Okay.

16 A: And those documents dictate how you delineate
17 and what you delineate.

18 Q: And are you familiar with the parameters that
19 the Corps uses to help you identify wetland
20 areas?

21 A: Yeah. That -- that would be soil, vegetation
22 and hydrology. Yes.

23 Q: Soil, vegetation and hydrology?

24 A: Correct.

25 Q: Now, in the course of your work as --



1 particularly as a wetland scientist, are you
2 familiar with the functions and values of
3 wetlands?

4 A: Very familiar and it's something I deal with on
5 a daily basis. Mainly, you're talking about
6 habitat, water quality, and flood mitigation.

7 Q: Okay. And similarly, are you familiar with
8 what can impair or impact wetland functions and
9 values?

10 A: Very familiar. Again, it's something that I
11 look at on a daily basis. Part of the process
12 of determining the correct amount of mitigation
13 is understanding the -- the loss or the -- the
14 type of wetland or aquatic resource that's
15 being impacted and whether it is impaired and
16 what level of impairment it has.

17 Q: And what is your knowledge about mitigation?
18 And I assume you're talking about Corps and --
19 the Corps of Engineers and DHEC requirements
20 for mitigation.

21 A: I've been working on mitigation projects the
22 vast majority of my career and I would consider
23 myself to be -- have an expert understanding
24 specifically in using the Army Corps guidelines
25 for preparing compensatory mitigation plans in



1 the Charleston district.

2 Q: Okay. And you -- you mentioned environmental
3 site assessments, which was -- kind of fell
4 under the brownsfield category. Do you
5 understand why property owners need to have
6 those site assessments done?

7 A: Yes. I do. I'd like to start by saying that
8 an internal designation within Terracon is an
9 approved project reviewer. It is a rigorous
10 process that you have to go through, that's
11 vetted all the way to the corporate leadership,
12 and you -- I'm very familiar with the process.
13 I review five to ten environmental site
14 assessments per week from mainly in my
15 division, but also from across the country.
16 What you're trying to do there is establish all
17 appropriate inquiries so that you can obtain
18 CERCLA liability protection for a potential
19 purchaser and bona fide perspective purchaser.

20 Q: Okay. Is -- is it your understanding that a
21 property owner, whether they can -- whether
22 they were the source of pollution or not has
23 responsibility for polluted conditions on their
24 property?

25 A: Yes. They do.



1 Q: Okay. And the purpose of the environmental
2 site assessment is to inform the pro- -- the
3 potential property owner?

4 A: To inform the potential property owner and in
5 some cases, the state agencies that may be
6 concerned about the findings of such
7 activities.

8 Q: Does the Environmental Protection Agency
9 establish limits or parameters for certain
10 contaminants or pollutants?

11 A: The Environmental Protection Agency maintains
12 what's referred to as the regional screening
13 limits. That is the standard list of
14 constituents, typically, con- -- contaminants.
15 It's a long list and it's based on what would
16 be acceptable in soil, groundwater, air,
17 etcetera. It's a very comprehensive list that
18 -- that's typically used. And there's also
19 multiple other regulatory screening levels that
20 are available through different agencies that
21 we often compare sample results to.

22 Q: Okay. And so, you're knowledgeable as to
23 exposure limits?

24 A: Yes.

25 Q: Okay. And what are the purposes of those



1 limits?

2 A: To protect human health and the environment.

3 Q: Okay. Approximately, how many projects have
4 you been involved with that included sampling,
5 review of sampling data and advising clients on
6 appropriate land uses and necessary protective
7 measures?

8 A: Hundreds. Potentially thousands.

9 Q: And with regard to WestEdge, have you had two
10 separate roles, the 404, 401 person and the
11 potential interaction with regard to the
12 contamination?

13 A: Yes. My -- my involvement in WestEdge did
14 evolve into evaluation of contamination given
15 the -- the circumstances that we're dealing
16 with.

17 Q: Okay.

18 **MS. SHAHID:** Your Honor, at this time I would offer
19 Mr. Ruocco as an expert in wetland sciences,
20 which includes the assessment of the function
21 and values of wetlands, and additionally, he
22 has special expertise in assessing and
23 controlling contamination or pollution.

24 **MR. CUNNINGHAM:** I don't have an objection to
25 wetland sciences and I guess Mr. Roco -- Ruo-



1 -- Ruocco -- Ruocco -- geez. Talked about
2 experience related to contaminants in the
3 context of brownsfields, and that's a different
4 -- as I understand it, a different area and one
5 that he -- at least in his deposition, he
6 wasn't talking about. I asked him, what's your
7 area of expertise and he said -- and -- and
8 that's why I don't object to the wetland part.
9 He said, permitting and mitigation related to
10 wetlands. And then, I asked him, anything else
11 in your area of expertise currently? No. I
12 would consider that to be comprehensive area of
13 expertise. So, to the extent that he's talking
14 about wetlands function, no objection. To the
15 extent he's talking about brownsfields,
16 objection.

17 **THE COURT:** Objection on brownsfields?

18 **MR. CUNNINGHAM:** On brownsfields. Yes, Your Honor.

19 **THE COURT:** Okay.

20 **MS. SHAHID:** Your Honor, I -- I don't like this idea
21 of these gotcha questions in depositions.
22 There was a lengthy examination between Mr.
23 Cunningham and Mr. Ruocco regarding ---

24 **THE COURT:** What -- what was it -- just tell me,
25 what was your request again?



1 **MS. SHAHID:** Oh, I'm sorry. It was in assessing --
2 expertise in assessing and controlling
3 contamination or pollution. And he's claiming
4 he -- that it was notified. And my response is
5 that there was -- he questioned Mr. Ruocco at
6 length on sampling data that he collected, at
7 length, and Mr. Ruocco responded. And then at
8 the end of the deposition, he says, anything
9 else? He says, no, that's about it. I think
10 he was given full disclosure of this -- the
11 role this witness has in this trial and I -- I
12 just -- I just feel like this gotcha question
13 is -- you know, my witnesses, when they are in
14 depositions, they are truthful, they are
15 honest, they divulge all information. And if
16 there was any indication that he was not
17 truthful or, you know, not cooperative, that
18 would be different.

19 **MR. CUNNINGHAM:** That's not an indication at all,
20 Your Honor. And -- and I'm not objecting to
21 Mr. Ruocco testifying about his own personal
22 knowledge about sampling, which he conducted.
23 And he can testify about that, absolutely.
24 That's his personal knowledge. Expert
25 testimony is a different thing. This isn't a



1 gotcha question. This is a discovery question.
2 What all areas are going to be coming later to
3 testify about? Sampling, he can talk about
4 that himself without being an expert.

5 **THE COURT:** Okay. I think your objection, based on
6 what I've heard of this -- this -- the
7 discovery deposition, goes to the weight of the
8 evidence. In other words, in evaluating
9 whether or not to qualify him, I know you can
10 only use the weight of the evidence -- I may
11 need to determine that as well, I'd qualify, so
12 -- but based on what I've heard, I'm going to
13 take that type of evaluation and -- and put
14 into the deposition and I'm going to qualify
15 him -- I mean, do you have a position?

16 **MR. CHURDAR:** No objection, Your Honor.

17 **THE COURT:** All right. I'm going to qualify him as
18 you have asked.

19 **MS. SHAHID:** But based on your statement, there's an
20 indication you would give less weight to his
21 opinions?

22 **THE COURT:** No. I'm saying, a lot of times when a
23 judge is making a determination about whether
24 to qualify a witness as an expert, they'll say,
25 the weaknesses of that qualification goes to



1 the weight of his testimony, not the
2 qualification thereof.

3 **MS. SHAHID:** Okay.

4 **THE COURT:** And I'm saying, I've evaluated that
5 aspect -- that analytical view, and I'm placing
6 it over a depositional situation and I'm
7 saying, following that line of reasoning, I
8 think that -- that he is qualified as an expert
9 in the aspects of which you have asked.

10 **MS. SHAHID:** Thank you, Your Honor.

11 **THE COURT:** It wasn't -- it was more -- it may be a
12 more recondite approach, but it -- it -- it
13 gets me there.

14 **MS. SHAHID:** I appreciate that effort.

15 Q: Mr. Ruocco, can you describe for the Court how
16 you became involved in the WestEdge permit
17 process?

18 A: I was initially approached to evaluate
19 mitigation opportunities onsite for potential
20 impacts that may be associated with the
21 proposed development.

22 Q: Okay. And was there some reason that the
23 WestEdge team needed help with mitigation?

24 A: Yes. There was -- obviously, there are
25 wetlands located on the site. Through



1 planning, it was clear that there was going to
2 be some level of impact at the time. This was
3 very early on in the process. And any time you
4 have impacts to aquatic resources, you're going
5 to have the need for mitigation. So, that --
6 that was the reason.

7 Q: Okay. And in this case, what -- what aquatic
8 resource is being impacted?

9 A: In this case it was what's being referred as
10 the Gadsden Creek. It's the -- the drainage
11 ditch or perimeter landfill ditch around
12 WestEdge.

13 Q: Okay. And is that a tidal or freshwater
14 system?

15 A: That's a tidal system. It's a -- a section 10
16 system because it receives tidal water at a
17 certain elevation. Because of its section 10
18 designation, it's part of the reason that its
19 jurisdictional at the federal level.

20 Q: Okay. And section 10, you're referring to the
21 Rivers and Harbors Act?

22 A: Correct.

23 Q: Okay. And what, if any, constraints exists in
24 terms of determining appropriate mitigation for
25 tidal impacts?



1 A: The -- the factors are the -- the type of
2 impact, the impairment of how long the impact
3 will take place, and I don't have my ---

4 Q: That's all ---

5 A: --- my sheet in front of me with all those
6 different parameters, but there's several
7 parameters that go into determining the level
8 of mitigation necessary for any individual
9 aquatic resource.

10 Q: All right. And is mitigation credit purchase
11 one way to mitigate?

12 A: Correct. The 2008 mitigation rule established
13 a hierarchy of mitigation. The Army Corps of
14 Engineers prefers that you go to mitigation
15 banks first because of the potential for there
16 to be a successful mitigation. The reason for
17 that is in the past, smaller mitigation
18 projects offset individual projects have been
19 unsuccessful, which has ---

20 Q: Okay.

21 A: --- led to that change. The other option if a
22 mitigation bank is not available is to pursue
23 permittee responsible mitigation and there's
24 also In-Lieu Fee mitigation, which is often set
25 up by a government entity that allows you to



1 purchase mitigation and then the mitigation can
2 be conducted after a project has been
3 completed.

4 Q: Okay. And at the time that you got involved,
5 which was several years ago I believe, was
6 there available tidal credits at a mitigation
7 bank that could have been utilized?

8 A: Yes. There was a bank referred to as
9 Clydesdale Mitigation Bank. It's down in -- on
10 -- it's on the Savannah River. It's tidal
11 marsh on the Savannah River. It was an
12 impoundment that the -- the mitigation planners
13 intended to restore back to tidal marsh. It
14 was very controversial. There was a lot of
15 opposition from resource agencies in the
16 formation of that bank. And during our
17 permitting process, there was some specific
18 comments that we received indicating that they
19 would not be supportive of use of mitigation
20 from the Clydesdale Mitigation Bank.

21 Q: And so, what alternative was then available to
22 WestEdge?

23 A: Well, you have to mitigate based on a
24 watershed basis. That's -- that's one of the
25 main intentions of the 2008 Mitigation Rule.



1 We reach out -- I -- I should mention also, we
2 reached out to Clydesdale Mitigation Bank early
3 on in the process, and they were not interested
4 in selling us credits at that time during that.
5 Between the fact that it was located almost
6 five, eight digit hydrologic unit codes away
7 from our project site, and it was a
8 controversial bank that resource agencies don't
9 like for applicants to use for mitigation. We
10 decided the potential best path forward was to
11 pursue permittee responsible mitigation.

12 Q: Okay. And we'll get into more detail later,
13 but that was the solution you provided
14 WestEdge?

15 A: That's correct.

16 Q: Okay. And then, did your role expand from
17 mitigation to a larger role?

18 A: Yes. During planning stages, I became very
19 involved in the preparation of the supporting
20 documentation and alternative analysis.

21 Q: Okay. And that -- is that information related
22 to a permit application?

23 A: Yes. It is. It's the -- the cornerstone of a
24 permit application.

25 Q: And did you serve as agent for WestEdge before



1 the DHEC and the Corps of Engineers?

2 A: Yes.

3 Q: Okay. And I'm going to show you a document
4 that's been marked WestEdge Exhibit 23 and ask
5 you if you're familiar with this document.

6 A: Yes. I am familiar with that.

7 Q: What is this?

8 A: That is a voluntary cleanup contract report
9 that was prepared for a property that is
10 located within WestEdge?

11 Q: Okay. And who did this report?

12 A: Terracon completed it. I -- I was involved in
13 it.

14 Q: Okay. And did -- did this report inform you as
15 to site conditions on the WestEdge property?

16 A: Yes. It did. Part of the process was
17 collecting soil and groundwater samples from
18 this pro- ---

19 Q: Okay. Let me -- let me get this in first and
20 then we can ---

21 A: Sure. I'm sorry.

22 Q: We can talk about that. And -- and is this
23 property the subject of this -- this assessment
24 report, is this property part -- within the
25 project area?



1 A: Yes. It is. It is actually located on the
2 southeast portion of WestEdge property.

3 Q: All right. And is this your signature in the
4 letter back to your ---

5 A: Yes.

6 Q: --- to DHEC?

7 A: Yes. It is.

8 Q: You're providing this report.

9 **MS. SHAHID:** Your Honor, at this time I would offer
10 WestEdge Exhibit 23 into evidence.

11 **MR. CUNNINGHAM:** Objection. Hearsay. And there are
12 two other authors on that. And I don't even
13 know -- I -- I believe it incorporates other
14 information aside from Mr. Ruocco's personal
15 knowledge.

16 **MS. SHAHID:** Your Honor, he's an expert witness. He
17 prepares reports for properties. He inspects
18 properties. I think he can -- I think this is
19 a document he would rely on in informing
20 himself about the WestEdge property. And it's
21 also a -- he was personally responsible for --
22 he authored the document.

23 **MR. CUNNINGHAM:** He was a co-author and experts
24 absolutely can allow hearsay, they just can't
25 be a mouthpiece for it, as Your Honor pointed



1 out yesterday.

2 **THE COURT:** Yeah. But the -- the data is within the
3 -- but the -- I'd have to -- all right. So,
4 you're offering the exhibit itself, which has
5 underlying data in it.

6 **MS. SHAHID:** Conclusions that Mr. Ruocco made.

7 **THE COURT:** Well, the -- I'm okay with his
8 conclusions.

9 **MS. SHAHID:** Yeah.

10 **THE COURT:** It's just -- Mr. Cunningham is objecting
11 to the data that's in there.

12 **MS. SHAHID:** Okay.

13 **THE COURT:** And he's saying that that's hearsay.
14 Now, you -- we can address that issue if you
15 wish, but you have to lay a foundation to --
16 for that. I will allow that in for -- is it --
17 I'm not so bothered by the fact that there's
18 more than one signature. As long as it's his
19 signature on it and it -- he's representing his
20 authority over that document. But the
21 underling data I am concerned about. So, I
22 would allow it in except for the underlying
23 data.

24 **MS. SHAHID:** And may I attempt to lay a foundation,
25 Your Honor?



1 **THE COURT:** You may.

2 **MS. SHAHID:** Okay.

3 Q: Mr. Ruocco, in the course of your work in
4 remediation in brownsfield sites, do you
5 research the history of sites and including the
6 existence of previous reports made on the site?

7 A: Absolutely. In order to qualify for a gon- --
8 a voluntary cleanup contract, you must conduct
9 an environmental site assessment under ASTM-
10 1527-13; more recently, 1527-21. Part of that
11 process is evaluating the history of a site and
12 reviewing previous environmental or other
13 reports that may be associated with the site.

14 Q: Okay. And -- and in the case of the work you
15 did for WestEdge, did you rely on exhibit 23 to
16 inform you to some degree of site conditions?

17 A: Yes.

18 **MS. SHAHID:** And, Your Honor, I -- I believe it is
19 admissible in his role as an expert witness, as
20 ---

21 **THE COURT:** You ---

22 **MS. SHAHID:** --- documents that he relies on.

23 **THE COURT:** You haven't asked him about whether the
24 data is commonly relied up by an expert or have
25 you? I ---



1 **MS. SHAHID:** I will.

2 **THE COURT:** Well, I -- I haven't heard that.

3 **MS. SHAHID:** Okay.

4 **THE COURT:** I ---

5 **MS. SHAHID:** We ---

6 **THE COURT:** Sorry, Mr. Cunningham.

7 **MR. CUNNINGHAM:** It's okay, Your Honor.

8 **THE COURT:** But ---

9 **MR. CUNNINGHAM:** I still have objections we'll get
10 to.

11 **THE COURT:** Yeah. Well, go ahead down that path and
12 ---

13 Q: Mr. -- okay. Mr. Ruocco, you -- you mentioned
14 that you are required to look at the history of
15 the site including prior reports on the site.
16 Are you looking -- what are you looking at
17 those prior reports for? What information are
18 you trying to obtain?

19 A: The types of reports that we would typically
20 review during a Phase I environmental site
21 assess- -- assessment, which is the precursor
22 to a voluntary cleanup contract, include
23 previous environmental site assessments that
24 may have been conducted on the site or a large
25 common property that includes a site. We also



1 would review any soil and groundwater sampling
2 that may have been conducted on the site or
3 nearby, that may give us an indication of
4 potential contamination, petroleum or hazardous
5 materials specifically, on the property that
6 we're assessing. We also look at reports from
7 nearby or adjacent properties to identify
8 potential petroleum matters -- materials that
9 could be impacting our -- our site that we're
10 assessing.

11 **MS. SHAHID:** Your Honor, I believe we laid the
12 adequate foundation for his reliance on these
13 types of documents and the data that is
14 contained therein.

15 **THE COURT:** Mr. Cunningham.

16 **MR. CUNNINGHAM:** Thank you, Your Honor. We still
17 object on hearsay. It's still hearsay. And --
18 and I also noted that Mr. Ro- -- Ruocco said he
19 is obtaining information from this and yet
20 earlier was representing these are his
21 conclusions. Now, she can just ask him his
22 conclusions about it, if any. She doesn't need
23 this document.

24 **MS. SHAHID:** I ---

25 **MR. CUNNINGHAM:** Now, in any event, State v.



1 Jenkins, as Your Honor mentioned yesterday,
2 specifically ruled about experts getting in
3 hearsay and the test that's involved in the
4 that. And that's what this is.

5 **THE COURT:** Well, it -- in listening to it -- and,
6 Mr. Cunningham, I want you to respond to this
7 -- is therein the test the Court laid out in
8 Jenkins was whether the expert's opinions are
9 -- the probative value of the information
10 substantially outweigh other prejudicial
11 effect. Now, you haven't challenged whether
12 the underlying data is inaccurate or something
13 that would mislead me and it's something that
14 he says that they use these third party people
15 who are trained to conduct this data and they
16 utilize this data. And in this instance -- the
17 other day when I ruled in your favor, I saw
18 your point on prejudicial effect of the data.
19 In this instance, the data to me helps evaluate
20 whether his conclusions were indeed accurate.
21 So, then I have to say, okay, if that appears
22 to be so, something that would occur, then what
23 is the prejudicial effect of allowing that
24 information to assist me in informing or
25 determining whether the opinion is an accurate



1 one.

2 **MR. CUNNINGHAM:** Thank you, Your Honor. Well, first
3 of all, I think we're getting the cart before
4 the horse respectfully. Typically ---

5 **THE COURT:** Well, I don't want to do that.

6 **MR. CUNNINGHAM:** Typically, the expert offers his
7 opinion on an issue and then, the discussion is
8 about the basis of that opinion. And then you
9 talk about well, I relied on this document or
10 that document or the other document. And then
11 you have discussion about whether or not that
12 underlying information can get in through the
13 witness or not. And that's typ- -- and that's
14 what happened with State v. Jenkins.

15 **THE COURT:** Yeah. I -- I do agree with you on that
16 approach. But she's offered ---

17 **MR. CUNNINGHAM:** And -- and the ---

18 **THE COURT:** --- the report. So, I'll tell you what.
19 At this point in time, I'm going to follow Mr.
20 Cunningham's suggestion on that to -- although,
21 I don't know if you're treating it as a
22 suggestion. You're objecting. But I'm going to
23 allow the report in subject to the potential
24 redaction of the data, but I will allow him to
25 testify as to his conclu- -- to his



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1 conclusions. And then as we reach the
2 precipice of -- of the reliance upon the data,
3 I'll make my determination about the data at
4 that point.

5 **MS. SHAHID:** Thank you, Your Honor.

6 **MR. CUNNINGHAM:** Thank you, Your Honor.

7 **THE COURT:** Okay.

8 **MS. SHAHID:** WestEdge 23.

9 **MR. CUNNINGHAM:** I don't want to be misconstrued.
10 I'm still relying on that objection.

11 **THE COURT:** Yeah. That -- that -- thank you can go
12 two ways. Of course, you can thank me at this
13 point because I haven't ruled against you yet.

14 Q: I think I'll hand the exhibit to you ---

15 A: Okay.

16 Q: --- to review.

17 A: All right.

18 Q: And then, when you're ready, if you could
19 provide the Court the conclusions you reached
20 upon reviewing that information.

21 A: So, the conclusions that we had from this
22 investigation indicated that there was
23 environmental contamination on this property.
24 We've tested for volatile organic compounds,
25 semi-volatile organic compounds, and metals. We



1 found ---

2 **MR. CUNNINGHAM:** I'll object on hearsay at this
3 point, Your Honor. He's getting into the data.

4 **THE COURT:** All right.

5 **MS. SHAHID:** Well, he's not telling ---

6 **THE COURT:** He said, we found.

7 **MS. SHAHID:** Okay. And ---

8 **THE COURT:** The next word that was going to come as
9 what he found or words.

10 Q: Mr. Ruocco, not to interrupt you, but can you
11 explain to the Court what those compounds are?
12 Just not the results, but what the compounds
13 themselves are.

14 **MS. SHAHID:** You looked like you were hopping.

15 **MR. CUNNINGHAM:** I was leaning. It's -- in these
16 fancy new chairs, I ---

17 **THE COURT:** We've got these new chairs and they are
18 not comfortable enough to keep Mr. Cunningham
19 in them.

20 **MR. CUNNINGHAM:** Spring up, Your Honor.

21 **THE COURT:** Oh. Oh. So, now I need to lock them
22 and so you don't ---

23 A: So, volatile organic compounds are typically
24 hydrocarbons. They're more volatile than semi-
25 volatile organic compounds. These are typical



1 constituents that we evaluate for when we're
2 testing environmental media for contamination.
3 For example, volatile organic compound list is
4 done under 8260. That's a -- a laboratory
5 method used by a third party laboratory to
6 identify what constituents are above their
7 method detection limit. So, when they run it
8 through their instrumentation what it tells
9 them is how much of that substance exists
10 within the media that was evaluated. And the
11 same holds true for all the constituents,
12 including volatile organic compounds, semi-
13 volatile organic compounds, and metals. It's
14 -- it's a similar process. There's different
15 methods used for evaluating those contaminants.
16 But they're all generally evaluated the same
17 way at the laboratory. They have
18 instrumentation that tells you what it actually
19 consist of. Now, I -- I don't -- I'm not an
20 expert in laboratory analysis. We use third
21 party laboratories and we rely -- re- -- rely
22 on their data.

23 Q: Okay. And are volatile organic compounds,
24 semi-volatile organic compounds and metals
25 considered contamination or pollution?



1 A: Yes. If they exceed the applicable regulatory
2 limits.

3 Q: Okay.

4 A: That would be considered contamination.

5 Q: Okay. And did you conclude that there was
6 contamination at the Rushmark site?

7 A: There were several metals ---

8 **MR. CUNNINGHAM:** Objection. Hearsay.

9 Q: If -- I think ---

10 A: Yes. Yes.

11 Q: Yeah. Okay. Was there the -- was there a
12 visual inspection?

13 A: Yes. There was.

14 Q: Was there the presence of trash or waste?

15 A: We conducted soil borings as a component of
16 this investigation in order to collect the
17 samples. We did observe buried waste debris in
18 the footprint of the property. Absolutely.

19 Q: Approximately how far down?

20 A: It probably says it in this document, but off
21 of a memory, it was probably somewhere in the
22 range of five to ten feet below the ground
23 surface, that range.

24 Q: Okay. And when you're presented with the
25 presence of semi or- -- semi-volatile organic



1 compound, volator -- volatile -- VOCs and
2 metals, what are typical remediation methods
3 that you would apply to that particular
4 condition?

5 A: Well, if it's severe enough, sometimes you have
6 to implement some sort of remediation
7 technology. An example, would be if you had a
8 release of petroleum for example, aggressive
9 fluid vapor recovery, which is essentially
10 removing different phases of that contamination
11 in the subsurface. So, aggressive fluid vapor
12 recovery would remove water and vapor
13 predominantly from the subsurface through that
14 -- you know, it's essentially a -- a giant vac
15 truck. That's -- that's a very common
16 remediation technology that's used. Another
17 method would be actual physical removal of
18 material and taking it to a proper disposal
19 facility. Mitigation could also be ---

20 Q: Remediation. Do you mean remediation?

21 A: I'm sorry. Yes. Remediation can also be
22 dealing with it in place. If agencies involved
23 have determined that it in its current
24 location, it's not going to impact receptors
25 and be a threat to human health and



1 environment, the severity of the contamination
2 isn't so much the issue, as long it can --
3 controls can be put in place. So, at -- land
4 use controls, activity use limitations can be
5 established for that property to prevent that
6 exposure.

7 Q: What, what do those controls look like?

8 A: The most common one by far is capping of
9 contamination. We also for this, for many
10 projects, we design vapor mitigation systems
11 that consist if there is volatile organic
12 compounds typically is or other gases that can
13 be hazardous, and the subsurface could find
14 their way into a building based on some
15 screening tools that we used internally. We
16 design vapor mitigation systems that consists
17 of a spray applied material to the foundation
18 that seals all of the penetrations. And in
19 some cases, we have to install a, a venting
20 system in the building that generally consists
21 of slotted pipes within gravel trenches being
22 installed underneath the foundation. It's
23 vented typically through the wall of a
24 structure to the roof. If the severity -- if
25 the severity of the contamination is bad



1 enough, sometimes it's an active venting system
2 where there's a fan on the top that runs
3 continuously to suck that contam- --
4 contaminated air from underneath a building so
5 it doesn't find its way into the structure.

6 Q: What combination or single pollutant condition
7 could exist to warrant the need for vapor
8 removal?

9 A: Can you repeat that?

10 Q: What, what types of contaminants or conditions
11 would lead to the, the concern about methane
12 and vapors?

13 A: Well, a landfill is a, a great example.
14 Everyone knows landfills generate methane. If
15 we can talk about this site specifically ---

16 Q: You can speak generally.

17 A: Just speak generally, okay. So, if you have
18 high levels of methane on a site, that would
19 constitute the need for an active venting
20 system with a spray applied vapor barrier in
21 that case.

22 Q: What is it? What is it about a landfill that
23 causes it to emit methane?

24 A: The deterioration of trash and debris over time
25 produces methane.



1 Q: Do you have any knowledge as to why methane is
2 harmful?

3 A: It can cause groundwater contamination, it can
4 cause soil contamination. It's explosive.

5 Q: Okay. We're going to switch gears here and I'm
6 going to show you a document -- oops wrong
7 document -- which I've marked as WestEdge 35.
8 And it's a Permittee Responsible Mitigation
9 Plan. And does this relate to what you were
10 describing a little bit earlier to the Court
11 about WestEdge's need for mitigation?

12 A: Yes. This is our Permittee Responsible
13 Mitigation Plan that we pursued instead of
14 purchasing credits from a mitigation bank.

15 Q: Okay. And was this plan developed as -- was
16 this plan required by the agencies? Di- -- can
17 you just go in and tell them what you're going
18 to do or do you need to prepare plans with each
19 miti- -- mitigation proposal?

20 A: Yep. So there are equivalent standards,
21 regardless of the type of mitigation that
22 you're using. A permittee responsible plan,
23 for example, has to follow the same procedures
24 as a mitigation bank, for example. So, you
25 know, essentially, what we've done here is



1 created a mitigation site to the same extent as
2 if it was a mitigation bank, just specifically
3 to offset one project. In this case, it was
4 the WestEdge property. So, we had to prove
5 because we did not go the mitigation credit
6 purchase route, we had to prove that this was
7 an environmentally preferable mitigation plan.
8 And we were able to achieve that and gain
9 approval verbally, at this point from the Army
10 Corps of Engineers, and of course, DHEC has
11 approved this mitigation.

12 Q: Okay. And did you prepare this mitigation
13 plan?

14 A: Yes.

15 Q: And it's marked Exhibit 35. And in approving
16 it, did you apply the regulatory requirements
17 as they're set forth in the core mitigation
18 rule and DHEC's mitigation regulations?

19 A: Yes.

20 Q: And did you prepare it for pur- -- purposes of
21 supporting the permit application?

22 A: Correct. Yes.

23 Q: Was this document submitted to the permitting
24 agencies?

25 A: Yes, it was.



1 Q: Okay. Your Honor, at this time, I would offer
2 up the Permittee Responsible Mitigation Plan,
3 Exhibit 35 into evidence.

4 **MR. CUNNINGHAM:** Objection I'm afraid, Your Honor.
5 It's got on there ---

6 **THE COURT:** You're afraid?

7 **MR. CUNNINGHAM:** --- lab data in it, it's got
8 pictures, it's got other conclusions beyond
9 anything Mr. Ruocco covered.

10 **MS. SHAHID:** I'm not ---

11 **THE COURT:** Oh, you said, Objection?

12 **MR. CUNNINGHAM:** Yes, Your Honor.

13 **THE COURT:** Oh, I thought you said no objection.

14 **MR. CUNNINGHAM:** No, I'm afraid I'm objecting again,
15 Your Honor.

16 **THE COURT:** Okay.

17 **MS. SHAHID:** Your Honor, I am not offering it for
18 the purposes of any attachments it may have
19 related to lab data or conclusions. I'm just
20 offering it for the purposes of informing the
21 Court on our mitigation project. And there's
22 documentation in here that helps inform the
23 Court about the mitigation project, which we
24 think is very important to our case, in terms
25 of valuating harm versus benefit, Your Honor.



1 **MR. CUNNINGHAM:** If it's excising the data, and the
2 other hearsay evidence, if it's just about the
3 actual mitigation plan, as opposed to what up
4 -- led up to the decision to pursue mitigation
5 plan, that the end result mitigation plan,
6 that's fine. I'm not objecting to that.

7 **THE COURT:** Okay, well, I'll follow the same
8 approach I did as the other ones. At this
9 point, excising the data, but I'm not saying
10 I'm excluding, I'm just until it's offered, I
11 have to make that my conclusion about that.
12 Like I said, when I get to that precipice, so
13 but this is in -- it's gonna be treated just
14 like the other one. And that is it comes in,
15 I would like the data to be blackened out if we
16 don't get to point of allowing it in.

17 **MS. SHAHID:** Some of the data is already in
18 evidence, Your Honor.

19 **THE COURT:** Well then that data will come in to
20 evidence.

21 **MR. CUNNINGHAM:** I got the lab data and everything
22 else that's noted.

23 **MS. SHAHID:** The GEL report.

24 **THE COURT:** The GEL report was, was in evidence not
25 for the truth of the matter asserted, if you



1 recall. But it was just for essentially notice
2 for whatever -- if that's even relevant.

3 **MR. CUNNINGHAM:** Yeah.

4 **MS. SHAHID:** I would -- okay. I understand the
5 boundaries by which I can use this exhibit. I
6 would prefer not to have to exercise it today.

7 **THE COURT:** Well then, you have two options. Well
8 you -- well you can -- you don't have to
9 exercise it today.

10 **MS. SHAHID:** Okay.

11 **THE COURT:** Your two options or to exercise it later
12 or to pursue the data, the entry of that data.
13 So, you have to decide that.

14 **MS. SHAHID:** And that's not the purpose for this
15 plan, for my introduction of this plan.

16 **THE COURT:** Okay.

17 **MR. CUNNINGHAM:** I don't mind talking to Ms. Shahid
18 at some point during the break but, but again,
19 you know, I, I -- she's offering it now, so the
20 decision I think is you come to now as far as
21 it's admissibility, but.

22 **THE COURT:** Well I, I've allowed people to, to
23 submit a properly excised document later on.

24 **MR. CUNNINGHAM:** Sure. I -- please don't
25 misunderstand me, Your Honor, I just meant if



1 she's trying to use the whole thing now, I
2 don't -- like I said, I don't object to just
3 the mitigation portion of it.

4 **THE COURT:** Well plus, if she offers but based on my
5 previous ruling, if she attempts to introduce
6 the data, and I subsequently find that that
7 data is admissible, then the whole document
8 comes in is my struggle right now is why excise
9 it until I've made my final ruling?

10 **MR. CUNNINGHAM:** I guess at that point, the data
11 would be cumulative, but, yeah, whatever.

12 **THE COURT:** No. The data would be -- I would
13 determine that the data was admissible and
14 therefore it would be admissible in that
15 document also. I mean, maybe you would say
16 accumulative but. Are you following me Ms.
17 Shahid?

18 **MS. SHAHID:** I think so, Your Honor.

19 **THE COURT:** Okay, we'll proceed.

20 **MS. SHAHID:** Can I get this marked?

21 **THE COURT:** Uh-huh.

22 **MS. SHAHID:** WestEdge 35.

23 **THE COURT:** It is admitted with a lengthy caveat
24 that I have (Laughter) set forth.

25 **(Respondent's Exhibit Number 35 was admitted into**



1 **evidence.)**

2 Q: Mr. Ruocco, this Permittee Responsible
3 Mitigation Plan, did it include some aerial
4 images that address sort of the movement of the
5 creek and the filling of the, the historic
6 filling of the landfill over time?

7 A: Yes, it did. I felt that it was important to
8 include that information as it was a stand
9 alone document.

10 Q: Okay. And so, I'm looking at page 18 of the
11 Permittee Responsible Mitigation Plan where
12 you're sticky notes said, start here.

13 **MR. CUNNINGHAM:** I'm going to object. Now we're
14 showing photos that have foundation, Your
15 Honor. As far as where they are ---

16 **MS. SHAHID:** Well, that's a ...

17 **THE COURT:** Ms. Shahid?

18 **MS. SHAHID:** Yes, sir?

19 **THE COURT:** Any response?

20 Q: Did you evaluate the drainage feature for
21 manip- -- manipulation over the years?

22 A: Yeah. We used what would be referred to as
23 remote sensing. It's using historical data,
24 aerial photographs, USGS Topographic maps,
25 there's a lot of government data. We use that



1 information to evaluate the filling of the
2 landfill over the course of its use. And to
3 determine the location and relocation of the
4 original drainage easement that was constructed
5 as the perimeter landfill ditch at the end --
6 at the end of the construction of the landfill.

7 Q: And was that information important in terms of
8 it, it persuading the Corps and DHEC permittee
9 responsible mitigation would be adequate? In
10 other words, the manipulation of the ditch, was
11 that important in your calculation and
12 mitigation?

13 A: It was important because it weighs in on the --
14 whether or not the resource is impaired or not.

15 Q: Okay. And did you collect some aerial imagery
16 in order to support your designation of
17 impairment to the resource?

18 A: Yes, we did. As well as USGS Topographic maps.

19 Q: Say -- I'm sorry?

20 A: We, we utilized historical aerial photographs
21 and USGS Topographic maps.

22 Q: Okay. And what is it that you were trying to
23 demonstrate?

24 A: We wanted to understand the timeframe when the
25 landfill was constructed. And we wanted to



1 understand the location of what was being
2 called Bac- -- Gadsden Creek and the location
3 of the perimeter landfill ditch.

4 Q: And how is that relative to your mitigation
5 plan?

6 A: Again, that is to determine the type of aquatic
7 resource that we're dealing with, impairments
8 and the other parameters that we would evaluate
9 for determining the level of mitigation
10 necessary.

11 Q: Okay. And I've put up a 1949 photograph. Is
12 this something that you obtained?

13 A: Yes. We obtained in 1949 aerial photograph
14 from -- I forget the source of it, but we, we
15 geo referenced it in GIS, overlaid our boundary
16 and what you're seeing on this depiction. Can
17 I mark on this? Okay.

18 Q: I'm trying to make it come down a little lower.
19 I may not know how to do that. Okay.

20 A: Okay. So in 1949, obviously, the landfill had
21 not been started. What you're seeing here is
22 tidal marsh and in this aerial photograph, you
23 can see there is a -- several tidal creeks
24 extending through what we're calling the
25 WestEdge boundary.



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1 A: And do you see or were you able to locate the
2 original Gadsden Creek?

3 A: Yes. Gadsden Creek is located here
4 (indicating). Approximately.

5 Q: Okay. And that red boundary that is over what
6 appears to be mud flat and marsh, that's the
7 project boundary?

8 A: That's, that's correct, generally, yes.

9 Q: Okay. And I'm going to show you another image
10 that was provided and this one's taken in 1963.
11 What was the significance of this image for
12 purposes of your mitigation plan?

13 A: Can you slide it down just a little bit?

14 Q: This way?

15 A: There you go. So as you can see on the
16 northern side of the boundary, the landfill is
17 being constructed at the time a significant
18 portion of the WestEdge boundary had been
19 filled by 1963, as well as areas to the north.

20 Q: And had portions of Gadsden Creek disappeared?

21 A: At this time, Gadsden Creek had not been
22 impacted.

23 Q: Okay. I'm going to show you another aerial
24 imagery from 1973. What does this image
25 reflect?



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1 A: In 1973, what you see here is a completed
2 landfill.

3 Q: Okay.

4 A: The area that is outlined in green is what's
5 being referred to as the perimeter landfill
6 ditch.

7 Q: Uh-huh. And also is that referred to as
8 Gadsden Creek?

9 A: It is commonly referred to as Gadsden Creek.

10 Q: Okay. And is this the first aerial imagery in
11 time to reflect manipulation of the ditch?

12 A: Based on the information we had, yes.

13 Q: Okay.

14 A: 1963 did not show that Gadsden Creek had been
15 impacted. By 1973, it had been impacted.

16 Q: Okay. And I'm going to show you 1979. Does
17 this show any additional information?

18 A: By 1979, the perimeter ditch had been rerouted
19 through the landfill to a new location. And
20 that's what you're seeing outlined there in, in
21 purple.

22 Q: Okay. All right.

23 **THE COURT:** So, in the past it just went over the
24 boundaries of the landfill?

25 A: Yes, sir.



1 **THE COURT:** Now, it's been rerouted where it runs
2 partially through the landfill, is that like a
3 dogleg there?

4 A: Yes, sir. This -- let me see if I can draw on
5 it. Give me one second. Okay, so this is the
6 portion that was rerouted and I've highlighted
7 it in yellow there.

8 **THE COURT:** How about the, the purple going up, is
9 that anything?

10 A: Well, we'll get to that. A portion of that was
11 rerouted as well.

12 **THE COURT:** All right.

13 Q: And so, was there an additional effort to
14 manipulate or change the location of the creek
15 following 1979?

16 A: Yes, there was. It was based on a plat
17 obtained from the city of, or the, the county.

18 Q: And when you say plat, are you referring to
19 this plat?

20 A: Yes.

21 Q: 1984?

22 A: Yes. That's the one. Yes.

23 Q: And ---

24 A: So ---

25 Q: --- what does this plat inform you about the



1 movement of the drainage easement?

2 A: It's a -- in 1984, this depicts the south
3 eastern portion of the site had been relocated,
4 or the channel had been relocated to this
5 location here (indicating). Now, this is
6 oriented in a different direction, but the
7 original ---

8 Q: Which, which way should I orient it?

9 A: No, you can leave it there.

10 Q: Okay. I'm sorry, now I messed up your drawing.

11 A: No, that's okay. Be clear, let's ---

12 **THE COURT:** Veer the line forward, plat down some.

13 A: There you go.

14 Q: So, the original location was the yellow line
15 that you drew. Original being the ---

16 A: No.

17 Q: --- 1979 location?

18 A: No. The original line that I just drew a
19 second ago was the rerouting of Gadsden Creek
20 in 1984.

21 Q: Okay. And ---

22 A: This was Gadsden Creek prior to rerouting in
23 this particular location. So in 1984, it was
24 rerouted to here. (Indicating)

25 Q: Okay.



1 A: This area ---

2 **THE COURT:** So, what I refer to when I was talking
3 about the dogleg is when it's running, part of
4 it runs straight through the landfill now.
5 It's just been pushed along the perimeter. At
6 least this part of it?

7 A: Yes, sir. In fact, part of this relocation of
8 the drainage easement, it's clear that this
9 portion was filled as a component of that
10 relocation as well. Over time this area
11 (indicating) that was filled has settled
12 substantially because of the settlement taking
13 place in landfill and it has become tidally
14 influenced again.

15 Q: And did you attempt to prepare an exhibit that
16 reflected on one photograph, all of that
17 movement?

18 A: Yes, I did.

19 Q: And I may not be able to find it without your
20 help. Could you take a minute to look for
21 that? These are the pages I was looking at.

22 A: Appear to be missing a page.

23 Q: Okay. We can look through that later if you
24 don't see it in there.

25 A: What, you just got it out of order?



1 Q: Yeah.

2 A: Look through there real quick.

3 Q: Yeah, there's one that we just passed. It's
4 not here.

5 A: Okay. Yeah, I don't know, I'd have to look.

6 Q: Yeah, we'll find it.

7 A: Okay.

8 Q: We'll get to it. All right. And based on your
9 review of aerial imagery, how many times has
10 the creek been manipulated or moved?

11 A: Three times.

12 Q: Okay. And how was that material in your
13 assessment of mitigation?

14 A: Not, not significant regarding the movement of
15 it. The movement of it through the landfill
16 and the impairment caused by moving the creek
17 drainage easement through the landfill is what
18 heavily contributed to the level of mitigation.
19 Now, I should caveat that by saying that the
20 calculations used to determine mitigation are
21 not influenced significantly based on whether
22 it's impaired or not impaired. There's very
23 little loss of mitigation that results if you
24 have -- if you're mitigating for an impaired
25 feature or a slightly impaired feature. It's



1 all based on a -- you assign a, a value. It's
2 a model. And overall, the, the mitigation that
3 was proposed is based heavily on acreage, more
4 so than it is on the impairment. But the
5 impairment does have some influence on the
6 total amount of mitigation, but not very much
7 in the model.

8 Q: And in this particular situation, what factors
9 other than manipulation of the channel or the
10 creek, what factors contributed you to come --
11 to your conclusion that there's impairment of
12 these resources?

13 A: Well, the fact that it was constructed through
14 the landfill. Now as, as far as the
15 observations that we conducted during the
16 project, it was clear that the, the ditch
17 during its last rerouting, or I'm sorry, the
18 second rerouting, there was an attempt to
19 confine it to a specific location utilizing
20 bulkheads. Those bulkheads which we'll show
21 you, I think, if we can get to it is they have
22 failed, they failed evidently a long time ago,
23 based on the existing condition of them. And
24 the failure of those bulkheads to contain that
25 ditch in one location has resulted in the



1 formation of a lot of the wetlands that we're
2 mitigating for today. That erosion eroded not
3 only the landfill cap but also portions of the
4 buried debris within the landfill,
5 significantly.

6 Q: And I'm going to show you from your Permittee
7 Responsible Mitigation Plan, page 28. Is this
8 what you're talking about when you refer to a
9 bulkhead?

10 A: Yes. What you're seeing here is a set of
11 timber piles that were installed within the --
12 on either side of the channel when it was
13 originally rerouted through the landfill. And
14 obviously, it was constructed to contain the
15 flow in one location and to prevent, I'm
16 assuming, the contents of the landfill from
17 getting into the drainage feature. So, what's
18 difficult to see is ---

19 **THE COURT:** Go ---

20 A: --- what this is about.

21 **THE COURT:** Bring it back down.

22 **MS. SHAHID:** You want me to keep it back down,
23 sorry.

24 **THE COURT:** I don't want to interrupt you, but is
25 this how it exists now?



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1 A: Yes, sir.

2 **THE COURT:** Okay. This is, what I'm looking at,
3 what has been labeled as Gadsden's Creek. This
4 is a wetland that went through here. Is that
5 ---

6 A: Yes, sir, when we refer to ---

7 **THE COURT:** That sounded leading but I was willing
8 to ask.

9 A: Yes, sir. When we refer to Gadsden Creek,
10 we're also referring to its adjacent wetlands.

11 **THE COURT:** Okay.

12 A: So what you're seeing here is the actual
13 channel where the water is located. And then
14 it's hard -- it's difficult to see, maybe the
15 photograph below this potentially shows this
16 better.

17 **THE COURT:** Yeah.

18 A: So, here you can see that both sides of the
19 channel have timber piles. So here's a set of
20 timber piles running this way. (Indicating)
21 Here's one of them. (Indicating) And they're
22 hard to see on this side. But the other set of
23 timber piles runs this way. (Indicating) And
24 this would have been the, the channel that was
25 constructed when it ran through the landfill.



1 And as you -- no one would have created a
2 bulkhead without filling up to the bulkhead,
3 there would have been material behind it. And
4 at some point, it failed. It was never
5 maintained, which was necessary as a component
6 of the landfill permit to maintain the
7 structure. Over time, it continued to erode a
8 significant portion of the wetlands that we're
9 now proposing to impact formed as a result of
10 the erosion of the cap and the landfill
11 contents itself. This happened over
12 potentially several years, potentially decades
13 since the failure of this particular location
14 of this bulkhead.

15 Q: Okay. And did you ---

16 **THE COURT:** Well, is this a channel that's deep
17 enough to take a kayak in. I -- I can't
18 discern what this is. I've heard testimony
19 about a channel going around the outside of the
20 landfill now. Unless I've been missing it,
21 this was the first I'm hearing of the channel
22 going in any other direction. So ...

23 A: Yes, sir. That, that has not come to light
24 yet.

25 **THE COURT:** Okay. Well, at least I didn't miss it.



1 A: Yes, sir. The, the, the channel was rerouted
2 through the landfill. And ---

3 **THE COURT:** This one?

4 A: Correct. And, and what you're seeing here is
5 the, the location where the water is in this
6 photograph, this would be what's been referred
7 to as Gadsden Creek and it's adjacent wetlands.
8 All are referred to as Gadsden Creek. So, this
9 is at a low tide right here. So during high
10 tide, the water would be all the way up into
11 the grasses that you see adjacent to these
12 timber piles. So, if you were to take a kayak
13 out here at low tide, depending on, or, or high
14 tide rather or mid tide, you would find your
15 way navigating through these timber piles that
16 are sticking up out of the water.

17 **THE COURT:** But you would you be navigating on top
18 of a landfill?

19 A: That's exactly right. This, this what you're
20 seeing here is a -- is a landfill with a tidal
21 feature extending through it.

22 Q: And ---

23 **THE COURT:** Is all of Gadsden Creek right now on --
24 over, you know on top of a landfill or is it
25 portions of it?



1 A: Based on our understanding of the depth of the
2 subsurface debris when the landfilling was
3 taking place, we believe that the vast majority
4 of it is on top of the landfill. We think that
5 it extends to approximately 12 to 15 feet below
6 ground surface, it's going to vary across the
7 landfill because it's so large. But we just
8 don't have the data to conclude that the entire
9 reach of these wetlands is on top of the
10 landfill. We would, you know -- we would
11 really have to do borings in order to identify
12 subsurface debris to confirm that but all
13 indications seem to be that it is running
14 through and on top of the landfill.

15 **MS. SHAHID:** Your Honor, I think we're going to
16 present a video that Mr. Ruocco prepared of the
17 creek.

18 **THE COURT:** You never know, that might not come in.
19 (Laughter)

20 **MR. CUNNINGHAM:** That's, I mean, it's got some other
21 things in there, but ...

22 **THE COURT:** Okay. Well, then it -- I'll shut up and
23 wait for the video.

24 **MR. TRAYNHAM:** Can you give me control?

25 **MS. SHAHID:** You might need to erase those lines.



1 A: I'm having trouble getting that to show up over
2 here or somewhere.

3 **MR. TRAYNHAM:** Mary, you'll have to shout out and
4 pause. If you need it to pause over there.

5 **MS. SHAHID:** It was -- okay. And Andy, I think ---

6 **THE COURT:** So, we coming to the video now?

7 **MS. SHAHID:** Yeah.

8 **THE COURT:** All right.

9 Q: So, Mr. Ruocco, did, did you prepare -- pause
10 (Laughter) -- did you prepare a video for our
11 efforts here in this coat- -- courtroom to show
12 this project to the Court?

13 A: I participated in the collection of this drone
14 footage that you're about to see. I did not
15 prepare the video.

16 Q: Okay. Who prepared the video?

17 A: Michael Maher.

18 Q: Okay. You provided footage to him?

19 A: That's correct.

20 Q: Okay. And were you -- what, what area did you
21 capture with your drone?

22 A: We captured the extent of Gadsden Creek from
23 its mouth, all the way to its termination at
24 the corner of Fishburne and Hagood Avenue.

25 Q: Okay. All right.



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1 **MS. SHAHID:** And we're going to offer this video
2 into evidence, Your Honor.

3 **MR. CUNNINGHAM:** No objection.

4 **THE COURT:** DHEC?

5 **MR. CHURDAR:** No objection.

6 **MS. SHAHID:** In ---

7 **THE COURT:** Okay, it's admitted.

8 **(Respondent's Exhibit Number 36 was admitted into**
9 **evidence.)**

10 **MS. SHAHID:** Thank you.

11 **THE COURT:** One moment. What's the exhibit number?

12 **MS. SHAHID:** Well ---

13 **MR. TRAYNHAM:** Believe we marked it as 36 on our
14 list, Your Honor.

15 **THE COURT:** All right.

16 **MR. TRAYNHAM:** Discuss how to submit it.

17 **MS. SHAHID:** If you ---

18 **THE COURT:** You better discuss how to submit it
19 later after ...

20 **MR. TRAYNHAM:** It's been admitted, Your Honor. We,
21 we have to get a copy to the Court. It's a
22 large file.

23 **THE COURT:** So, you're going to give it to me as a
24 flash drive?

25 **MR. TRAYNHAM:** Yes, Your Honor.



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1 **THE COURT:** Are you going to give it to them as a
2 flash drive?

3 **MR. TRAYNHAM:** We ---

4 **THE COURT:** Or you just going to give it me and then
5 hide it from everybody else?

6 (Laughter)

7 **MR. TRAYNHAM:** We provided a copy via Dropbox.

8 **THE COURT:** Okay. So you have it?

9 **MR. CUNNINGHAM:** I have it somewhere in the ether.

10 **MS. SHAHID:** And ---

11 **THE COURT:** Okay, well then I'll accept that
12 approach.

13 **MS. SHAHID:** And Mr. -- I'm sorry. You ready for
14 me?

15 **THE COURT:** I'm done with my part.

16 **MS. SHAHID:** Okay.

17 Q: Mr. Ruocco, we have frozen on a screen but it's
18 a screen that gives us some information
19 regarding surroundings in the WestEdge project.
20 Can you point to the feature that is
21 Brittlebank Park? I don't know if you can
22 point to it.

23 **MR. TRAYNHAM:** You can still mark the screen.

24 **MS. SHAHID:** You can mark the screen?

25 A: Okay. All right. Brittlebank Park is



1 approximately here. (Indicating)

2 Q: Okay. And is that Lockwood Boulevard where
3 Brittlebank Park is located?

4 A: This is Lockwood Boulevard. (Indicating)

5 Q: Okay. And is the Bristol condominium located
6 on Lockwood, visible?

7 A: That's the Bristol one.

8 Q: Okay.

9 **THE COURT:** And just for the record, that's been
10 circled.

11 **MS. SHAHID:** Okay.

12 Q: And is the city police station visible?

13 A: I don't think that I see that on here.

14 Q: Do you see the Marriott?

15 A: I think so.

16 Q: Is that the city police station on the other
17 side of the Marriott, the smaller building?
18 Were we not throu- -- yeah.

19 A: Yes.

20 Q: Okay. And then the Marriott Hotel, circle
21 that.

22 (Witness complies.)

23 Q: Okay. And there's two buildings across the
24 tree line area. Is that part of the WestEdge
25 development?



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1 A: Yes. This is 22 WestEdge and I forget what
2 this building is called. But it's the one with
3 the Publix's in it.

4 Q: Do you recall if that parking garage that
5 appears further down in the image, past the
6 police station, if that was part of the
7 WestEdge development? Down at the bottom?

8 A: This?

9 Q: Yes.

10 A: Yes. This was part of the WestEdge
11 development.

12 Q: Okay. And do you see some cars parked on the
13 other side of the parking garage?

14 A: Yes. This is a large surface parking lot on
15 top of the landfill.

16 Q: Okay. And between the Marriott and the two
17 WestEdge buildings, is that the location of the
18 creek?

19 A: Yes, it is.

20 Q: Okay. So ---

21 A: This is the approximate mouth. It would flow
22 this direction in between all those buildings
23 out to Hagood and then back up along Hagood.

24 Q: Okay. All right. And based on your review of
25 aerial images of the landfill, and



1 superimposing the WestEdge project area over
2 landfill, does that inform your conclusion
3 about the creek being located over the
4 landfill?

5 A: Yes.

6 Q: Okay. And -- all right, I think we can start
7 the video now. And describe for the Court ---

8 A: Can, can you pause? Okay, what you're looking
9 at here is what we're referring to is the mouth
10 of Gadsden Creek. This is -- the drone is
11 positioned over the Ashley River facing east.
12 So, the mouth is not necessarily shown here but
13 this is the box culvert that Mr. Karkowski was
14 discussing. And this Lockwood Boulevard.

15 **THE COURT:** Is the Ashley River tidally influenced?

16 A: Yes sir.

17 Q: Okay. And does WestEdge have any plans to
18 perform any fill of this stretch of the creek
19 which is on the other side of Lockwood
20 Boulevard from WestEdge?

21 A: No, this is not part of our project.

22 Q: Okay. And that is the Bristol Condominiums to
23 the right?

24 A: Correct, this is Bristol.

25 Q: Okay.



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1 A: Which if I could add, was actually constructed
2 on top of a portion of the mouth of Gadsden
3 Creek.

4 Q: And you base that on what?

5 A: Review of historical aerial imagery.

6 Q: Okay. So, the current mouth of Gadsden Creek
7 was not in its natural, or original position?

8 A: That's correct.

9 Q: All right. Do you want him to continue?

10 A: Yes. Can we clear the screen? I'm sorry, I'm
11 having trouble operating.

12 Q: Now, you're where?

13 A: So, this is the portion that we're not
14 impacting and leading up to the box culvert.

15 Q: Okay.

16 A: Right now we're about to cross over Lockwood,
17 headed east. We had to raise the drone, zoom
18 back in. This -- pause please. This is the
19 portion of the channel that has been relocated
20 through the landfill.

21 Q: Okay.

22 A: A, a portion of it. And some things to note in
23 this particular area, the left side of your
24 screen there. As we are conducting this drone
25 footage, there was evidence of seepage or



1 leachate coming from the left boundary during
2 this -- during footage that we collected.

3 Q: And tell the Court what leachate is.

4 A: Leachate is rainwater that percolates through
5 a landfill. As it percolates through the
6 landfill and picks up whatever's in the
7 landfill. Potential contaminants, solids.

8 Q: Okay. And what made you conclude it was
9 leachate leaking from the landfill? Have you
10 seen it before in this site?

11 A: This particular location I had not witnessed it
12 before, I just thought that it would be notable
13 to bring it up.

14 Q: Okay. Have you witnessed it in other
15 locations?

16 A: Yes.

17 Q: How is it distinctive to you? How are you able
18 to locate it?

19 A: It's a discolored liquid that forms a channel
20 going down the bank. There is a specific
21 location where it is -- coming from the bank
22 you can discern that location based on visual
23 observations.

24 Q: Are landfills that exists today allowed to have
25 leachate run off its sides of the landfill.



1 A: No they're not. It's one of the main concerns
2 of a landfill. Modern landfills are required
3 to have liners that capture that leachate. And
4 collection systems that contain it prior to
5 disposal. It, it is a waste material and many
6 times that material has to be at very low
7 levels before it can even be sent to a
8 wastewater treatment facility.

9 Q: Okay. So, on the left and the right of this
10 portion of the stream, what properties are we
11 looking at?

12 A: I believe the left side past the vegetation is
13 a parking area for the Marriot.

14 Q: Okay.

15 A: You can see the bridge there. To the right is
16 a parking lot that is utilized by 22 WestEdge.

17 Q: Okay. All right. You ready to keep going?

18 A: Yes. It was a very windy day, difficult to
19 control the drone. Okay. Okay. This is --
20 pause it. Pause there. Okay. So, what you
21 saw there was the substrate of Gadsden Creek.
22 And what it flipped to here is a ---

23 **THE COURT:** So, we need to back up for you to
24 describe that?

25 A: Yes, sir, if you don't mind. Okay so, this is



1 what Gadsden Creek looks like when you're
2 standing in it and looking at it. So, what
3 you're seeing here is a thin layer of sediment
4 on top of garbage, trash, debris, tires,
5 unidentifiable metals, building materials,
6 plastics, bottles. We even found medical
7 waste. The oysters you're seeing, most of them
8 are attached to garbage. Okay, stop here.
9 What we've done here is attempted to
10 demonstrate essentially what we're dealing with
11 in this channel. This, this is a thin layer of
12 sediment, one to two inches across the landfill
13 that has obscured surface debris that is in the
14 landfill. So, if you want to -- as you can
15 see, as we're getting there, what we're
16 encountering is significant unidentifiable
17 landfill debris. It's as deep as you can -- we
18 have hand augers which is a instrument that we
19 use to sample soil. It's so porous that you
20 can take the auger and literally stick it into
21 the side of the bank. And it's because it's
22 porous with garbage. So, that's what you're
23 seeing there and then in the videos here just
24 -- they don't do it justice. For some reason
25 the, the color of the imagery is, is not really



1 making it easily discernible what's garbage and
2 what's mud. But it's mud on top of nothing but
3 garbage.

4 Q: Do you see garbage in that screen?

5 A: Yes. What you're seeing here is unidentifiable
6 metal, unidentifiable plastic, potentially
7 building materials that have been crushed up.
8 Here's another piece of potential sheet
9 flooring, for example. You can -- you can
10 continue. Okay, stop here. So, one of the
11 notable things about this particular portion of
12 Gadsden Creek, I spent a lot of time on the
13 site looking at it, is and, and again, you
14 cannot tell on this photograph. But it has a,
15 a rust color to it. And that rust, I believe
16 as a result of the landfill debris, the metal
17 is corroding, finding their way out leaching
18 into this channel right here. (Indicating) So
19 notable --- this is actually a depiction of
20 what we're determining to be leachate. So,
21 this is close to one of the sample locations
22 that we're going to talk about later.

23 **THE COURT:** So, the wa- -- the water is rust colored
24 because of what it has in it?

25 A: The banks are actually rust color because of



1 what the contents of the landfill. I believe
2 that the rust color is caused by the corrosion
3 of metals in the landfill. So, along these
4 banks here is where you're going to see that
5 rust color. And it's very difficult to see on
6 this video, however, this is a rust colored
7 puddle, if you will. This is what we're
8 referring to is leachate. This is finding its
9 way out of the banks of landfill in multiple
10 locations. As you can see, in this particular
11 portion, it's very little aqueous material.
12 This is what we were tasked with sampling. So,
13 it was difficult to find sampling locations
14 because of the porosity that's caused by the
15 garbage in the landfill. It just -- there's no
16 specific points of exit of this leachate for
17 you to actually to be able to collect into a
18 sample jar. It's just difficult to sample
19 because of the nature. But in this particular
20 instance this is -- was a sampleable location
21 because there was this puddle of discolored
22 aqueous material. And you can see the channel
23 that it forms as it exits the bank directly
24 into the surface water associated with Gadsden
25 Creek, this is at low tide obviously. At high



1 tide the water is up to there. (Indicating)
2 That's your typical high tide. So, the
3 porosity of this garbage is inundated by tidal
4 water twice a day. The leachate, other
5 contaminants that are inside of it are then --
6 find their way into Gadsden Creek and then flow
7 out to the Ashley River. Same holds true for
8 incoming tides. As the tide rises and it goes
9 up these banks, during incoming tide it's
10 collecting that same contamination and taking
11 it into the surrounding areas. At an extreme
12 high tide during a sunny day flooding event,
13 for example, it's very safe to assume that any
14 contamination that's resulting from this
15 leachate, is finding its way into areas that
16 are used as residences.

17 **THE COURT:** Did you say very safe to assume, is that
18 to a reasonable degree of expert certainly? I
19 don't know what safe to assume is.

20 **A:** I understand. So, because we know the leachate
21 exists and we can see it visually. And we
22 know that this is a tidally influenced feature
23 that brings water into the community. I'll
24 just use the term community to describe the
25 entire area. We feel that during an incoming



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1 tide, it commingles with the tidal water and
2 eventually finds its way into the other
3 reaches.

4 Q: And when you say, other reaches, you're talking
5 about Hagood Fishburne intersection, the
6 Gadsden Green Community front lawn?

7 A: Yes.

8 **THE COURT:** I would prefer, I'll just turn to you,
9 Ms. Shahid. When someone says, we feel as a
10 expert, that's not testifying.

11 **MS. SHAHID:** Right.

12 **THE COURT:** I mean, I don't know how to evaluate
13 that.

14 **MS. SHAHID:** Okay.

15 **THE COURT:** So ...

16 **MS. SHAHID:** Well, I'll -- I can ---

17 **THE COURT:** Okay.

18 **MS. SHAHID:** --- ask him very simply.

19 Q: You're aware that the tide inundates this creek
20 feature twice a day?

21 A: Correct.

22 Q: We get high tide twice, twice in a 24 hour
23 period?

24 A: Yes.

25 Q: And when the truck -- when the tide covers the



1 banks, are there conditions along the banks,
2 liquid conditions that'd be -- could be carried
3 by the tide elsewhere?

4 A: Yes.

5 Q: Okay.

6 A: That's based on our observation, but that's
7 correct.

8 Q: Is leachate that you've described, and seen, is
9 that in a location where at a high tide, it
10 will be caught up by the water?

11 A: Yes. Pretty much every high tide would find
12 its way into this particular location and
13 approximately up to this location twice a day.

14 Q: Okay. And is that an expert opinion or is that
15 just based on your observations of the creek
16 and your knowledge of tidal rise and flow?

17 A: Well, I've been to the site multiple times
18 during high tides, I've seen it at these
19 levels.

20 Q: You've seen the tide at the yellow line level
21 on the current?

22 A: That's correct.

23 Q: And that level is above where the leachate has
24 been located on the banks?

25 A: That's correct.



1 Q: And the leachate is aqueous and would mix with
2 water?

3 A: That's correct. Yes. And anything associated
4 with the leachate would also mix with the
5 incoming tide.

6 **MS. SHAHID:** Can I proceed, Your Honor?

7 **THE COURT:** Yeah. And just for you to note, what
8 I'll ask him about stuff like this, and about
9 the gatekeeper function and the fact finder
10 function and they -- I have to do both, so
11 that's why I ask about these things.

12 **MR. TRAYNHAM:** Ready?

13 A: Yeah, I'm ready. Okay, so then --- yeah this
14 is a zoomed in version, you know, it doesn't --
15 it's, it's difficult to see. But there is a
16 rust color. Some of these areas have sheens to
17 them. That's how it's identifiable Is the
18 discoloration and others visual indications of
19 contamination.

20 Q: And is that the channel that you were referring
21 to that we just passed over from the bank down
22 to the water?

23 A: Yes, I can point that out. So, that's a pretty
24 good depiction of the channelization that I was
25 talking about earlier of the leachate. So,



1 during incoming tides, area fills up, it's very
2 porous, because of all the trash. All of that
3 -- a lot of that tidal influence finds its way
4 into that debris. And then during low tide, it
5 slowly, percolates, trickles out the side of
6 the bank. That's what you're seeing here.
7 That's, that's what's causing that channel is
8 the ---

9 Q: And for my purposes, what is the importance of
10 porosity or porous?

11 A: Well, if there's contamination in the landfill,
12 and it's very porous, it's going to allow that
13 tidal water to find its way to a certain
14 extent, within the landfill, and collect
15 potentially whatever's in that landfill. And
16 then, it's during low tide it'll find its way
17 back.

18 Q: Okay.

19 A: So, we're just continuing down the, the channel
20 here. That was just another example of the --
21 and this is -- these are just examples all
22 along the bank. This is consistent across the
23 entire bank, we only have a few examples of
24 these types of videos. However, you're dealing
25 with surface trash and debris leftover from



1 this landfill with a thin layer of sediment
2 that has accumulated over time on top of it.
3 So ---

4 Q: What ---

5 A: --- again, if you were standing in this
6 location, this that I was discussing earlier,
7 you could take it, stick it into the garbage,
8 it, you know, several feet with very little
9 obstruction. Just depending on what kind of
10 garbage it's going through. And in this
11 particular photo, you can see bottles,
12 unidentifiable materials, fabrics, plastics,
13 unidentifiable metals, etcetera.

14 **MR. TRAYNHAM:** Good?

15 A: Yes, sir.

16 Q: Are we now parallel to Hagood Avenue at this
17 point?

18 A: No?

19 Q: No.

20 A: Not yet, no. So, this is just continuing down
21 the channel. Okay, now's a good place to
22 pause. Yeah, that's a good, good shot. Okay
23 so, on, on this particular shot, what you can
24 see is the timber piles that we had discussed
25 earlier, running along both sides of where the



1 channel was originally constructed. These were
2 assumed to be bulkheads that there's no other
3 explanation for them. So the area would have
4 been filled all the way up to this line on both
5 sides. That's typically how bulkheads are
6 constructed in this case. Anyone even back in
7 the 1960s, '70s would know that they needed to
8 hold back that trash. Right, so I believe that
9 this was ---

10 **MR. CUNNINGHAM:** Objection. That's speculation.

11 **THE COURT:** I, I -- what was something. Any
12 response?

13 **MS. SHAHID:** I don't think we need that statement
14 necessarily.

15 **THE COURT:** Okay. Then I'll strike it.

16 Q: But, Mr. Ruocco, based on your review of aerial
17 imagery, those areas where you drew hatch
18 lines, and you said there'd be fill behind
19 that. Have you confirmed that with your review
20 of imagery that the fill was to that extent?

21 A: Generally, to the extent that we can, based on
22 the clarity of the imagery. Yes, that is
23 consistent.

24 Q: Okay.

25 A: And again, when this bulkhead failed, that was



1 constructed through the landfill, forming the
2 conduit that was the landfill drainage ditch.
3 Over time, these wetlands that you're seeing on
4 either side of the former bulkhead structures
5 have formed on the landfill by erosion of the
6 cap of the landfill and the contents of the
7 landfill as well, to form these wetlands. So
8 you have your, your channel and then your
9 adjacent wetlands on both sides. And we refer
10 to all that as Gadsden Creek. The, the
11 wetlands and its channel. All right, so pause
12 here. Some evidence that this used to be in
13 upland or an area that was landfilled would be
14 this structure right here, this would not have
15 been installed in a lowland.

16 Q: What is it?

17 A: I, I believe that it is part of a stormwater
18 structure.

19 Q: Okay.

20 A: And in this photograph here, you can also see
21 that the timbers extend where the channel was
22 reconstructed through the landfill. And again,
23 same scenario, the areas outside of the channel
24 have formed as a result of erosion of the
25 landfill over time. Same to this side, not to



1 the same extent on the right side of the
2 photograph because there is development right
3 there that's obscured by the trees. It's very
4 close to it.

5 Q: Now, does tidal action cause erosion?

6 A: Yes.

7 Q: Okay. So, when you refer to erosion of the
8 landfill, are you referring to title action,
9 not held back by what once was a bulkhead?

10 A: That's correct. Predominately, heavy rain
11 could have contributed to erosion as well.
12 But, I think in this case, the force that was
13 predominately contributing to this erosion was
14 the tidal flow.

15 Q: I'm sorry.

16 A: And again, this is just more photographs of our
17 -- or more imagery of the, the bulkhead
18 structures. What we've done here, this is one
19 of the sampling locations. Generally -- if you
20 wanted to back up there, Michael, where it
21 paused. That -- this is an area generally
22 where one of our samples was collected from the
23 leachate coming from the bank. Extremely
24 difficult to see based on his drone footage,
25 however, it would have been in this approximate



1 location here. (Indicating) Again, what I was
2 looking for was evidence of discoloration,
3 visual observations that would indicate that
4 there might be contamination. Discoloration
5 sheens is what I mainly see as a result.
6 Timber piles extend to about this portion is
7 where they stop. Okay so, all right, so, we
8 don't have an aerial image to, to tell you
9 exactly where this is located. However, this
10 is consistent with the 1979 location of the
11 channel and where it would have started. And
12 that's difficult to describe without having an
13 aerial to depict that location, however, the
14 channel now was rerouted to go this direction,
15 towards Hagood Avenue. So, the area where,
16 right -- this area was pointing right here
17 (indicating) would be Hagood Avenue, it runs
18 along the top of the screen here. And this
19 area was apparently filled at some point again,
20 it had there has been significant settlement
21 over time as a result of the landfill debris
22 and it settled several feet, the best we can
23 tell based on the best available data that we
24 can get our hands on and our own survey data.
25 So, it's difficult to know how much it has



1 settled but after this fill was placed it
2 settled, this area has become tidal again. But
3 the channel itself was intended to go in this
4 direction after it was rerouted through the
5 landfill. That's good. Okay, so here, stop
6 here. So, you can see that car that just drove
7 by on the right hand side. That is a road
8 adjacent to this parking garage and the channel
9 itself. This was the rerouted location that we
10 saw in the 1984 plat. That's the location to
11 where it was rerouted to. It's notable to
12 point out also in the historical aerial
13 photographs, this entire location was developed
14 over buildings. So at some point those
15 buildings were obviously demolished. The earth
16 that they were sitting on was removed and the
17 channel was diverted to this location. So,
18 based on historical aerials, this was not marsh
19 previously. Now, that, that ---

20 Q: You base that conclusion because you've seen
21 historical aerials that showed structures?

22 A: And USGS topographic maps depicting structures.

23 Q: Good to go?

24 A: And here would -- stop here. We just took a
25 turn, this is where it starts going up Hagood



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1 Avenue, which is right here. Over here is
2 Gadsden Green community which you can see
3 beyond the trees.

4 Q: Want to keep going?

5 A: Uh-huh. So now we've taken turn, we're running
6 parallel to Hagood Avenue right now, if we can
7 stop here. When the rerouting occurred in
8 1984, this was going to be an entrance point to
9 this newly filled area. As you can see,
10 there's culverts that were installed and this
11 is filled, right here. (Indicating) We believe
12 this was also filled based on type of fill
13 material that's in there and has settled over
14 time and that's why you're seeing it contain
15 tidal vegetation. It is tidal now but it has
16 been filled, obviously. And we're just
17 continuing to proceed up parallel to Hagood.
18 Pause there. So, the surface parking that we
19 keep talking about, this, this is actually the
20 -- sorry, wasn't, this was -- this was the
21 Rushmark site, what we were referring to. And
22 then this is surface parking. I believe it's
23 used by MUSC and they shuttle people. This is
24 Hagood Avenue. This is a soccer field, I
25 forget the name of it.



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1 Q: Harmon Field?

2 A: Harmon Field. This is Line Street.

3 **THE COURT:** What's the name of it again?

4 A: Line Street.

5 Q: L-I-N-E.

6 A: This is Gadsden Green community. And obviously
7 you're going to have culverts here underneath
8 Line Street. This is the channel.

9 Q: Is that the extent of the channel or does it
10 continue down Hagood?

11 A: It continues further north, parallel to Hagood.
12 It ends approximately there. (Indicating)

13 Q: And did you get your own footage of the entire
14 extent?

15 A: Yes.

16 Q: Want to keep looking?

17 A: Okay so, this is just a photograph that I
18 believe I saw yesterday, during testimony.
19 What you're seeing here is a vehicle that has
20 obviously stalled out in a sunny day flooding
21 event and it's being towed from the water. I
22 mean, you can see how deep the water is right
23 there. Pretty significant sunny day flooding.

24 Q: Is that the Citadel to the right, Citadel
25 football stadium to the right on Hagood Avenue?



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1 A: Correct. And you can see that the tidal water
2 extends all the way up to that point. This is
3 Hagood Avenue, (indicating) completely
4 underwater. This is Gadsden Green community,
5 undoubtedly impacted by that tidal flood.
6 Okay, so this is from Line Street, heading
7 north with a drone parallel to Hagood Avenue.
8 I'm sorry, we're just now getting to Line
9 Street right here, I apologize. Another,
10 another video of that area Gadsden Green
11 community is here. (Indicating) Flood waters
12 obviously, this is Hagood Avenue. Okay.
13 Multiple culverts come into this area. We
14 believe there's stormwater drainage, surface
15 debris from the landfilling activity that
16 appears to be piping, piping along the terra-
17 -- terra cotta pipe, old, old piping.

18 **THE COURT:** All right. I have a question. Object
19 to it if you want.

20 **MR. CUNNINGHAM:** All right.

21 **THE COURT:** Is the piping that we're seeing, piping
22 that was placed in the landfill or piping that
23 failed?

24 A: If we can back up there, there was some culvert
25 piping and some ---



1 **THE COURT:** That piping ---

2 A: --- keep going. That piping up here to be
3 disposed of in the landfill and ---

4 **THE COURT:** Okay.

5 A: --- it's surfaced as a result we think of, of
6 because of erosion.

7 **THE COURT:** Okay.

8 A: Again, this is staying along the channel
9 heading up to Fishburne Avenue to the north.
10 And this is where the feature ends,
11 essentially, very close to it. Once you get to
12 the top, there's no evidence of a channel
13 anymore. It's filled material -- material
14 everywhere. This is Fishburne that you're
15 looking at where the cars are driving by.
16 We're about to do an overall view. This is the
17 corner of Fishburne and Hagood and I, I believe
18 this would be during a sunny day flooding
19 event. You can see how deep the water is at
20 that intersection. This is turning back around
21 facing south down Hagood Avenue. Once we get
22 it to 400 feet, you can see Gadsden Green
23 community. Gadsden Creek. And this, I believe
24 we have an overall view of that at the end too,
25 that we can mark up a little bit just to make



1 sure everybody's oriented. Does that -- does
2 it go any higher? Okay so, we started out the
3 drone footage approximately here (indicating),
4 worked our way through where you see these
5 trees. The timber piles picked up about here
6 (indicating). Timber piles ended approximately
7 right here, which is consistent with 1984
8 rerouting of the channel from this location.
9 And it was rerouted to this location through a
10 previously developed area.

11 Q: Is that the conclusion of the video?

12 A: Appears to be, yes.

13 Q: Okay. All right. Thank you. We were
14 previously talking about mitigation and I want
15 to ask you, can you give the Court a
16 description of the mitigation project that
17 you've chosen and how we got involved in that?

18 A: Yeah. So, I was approached by Open Space
19 Institute several years ago. They asked me to
20 evaluate a property called Kings Grant. It's
21 a -- was a golf course, located on the Ashley
22 River approximately 14 miles from WestEdge on
23 the same side of the Ashley River as WestEdge.
24 Back when they originally approached us, we
25 told him that it looked like a great site to



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1 conduct mitigation as needed in the future,
2 kind of lost track of it. When I started
3 working on this project, I was in constant
4 communication with Open Space Institute.

5 Q: What is the function of Open Space Institute?

6 A: Open Space Institute is a land trust that -- I
7 understand they're a land trust and a lot of
8 what they do is securing properties and then
9 conserve them, preserve them, transfer them to
10 a government entity. A lot of times it's South
11 Carolina DNR.

12 Q: Okay. And go on about being approached by
13 them.

14 A: Okay. So, I was in constant communication with
15 Open Space Institute in planning for this
16 project. The potential use of the Kings Grant
17 site for mitigation became part of the
18 conversation. So, we, we started looking into
19 it. All things considered, based on the fact
20 that we're dealing with a mitigation bank that
21 was located five HUC units away from us, not in
22 the same watershed. It was -- had a history of
23 opposition from the resource agencies for being
24 able to, to be used to offset mitigation. And
25 the fact that we knew we had a good mitigation



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1 site on the Ashley River within the exact same
2 watershed as the WestEdge site, we determined
3 that would potentially be an environmentally
4 preferable option. And we thought that the
5 agencies, the resource agencies, including
6 DHEC, OCRM and Army Corps would entertain that
7 as an environmentally preferable option. So we
8 pur- -- we pursued that as permittee
9 responsible mitigation site.

10 Q: Okay. And did WestEdge make a commitment to
11 purchase a portion of Kings Grant?

12 A: Yes.

13 Q: And his Kings Grant a development of sorts?

14 A: Kings Grant was a golf course ---

15 Q: Okay.

16 A: --- that was constructed in tidally influenced
17 wetlands of the Ashley River.

18 Q: Okay. And is it still being used as a golf
19 course?

20 A: No, it h- -- it is not. It is -- now it's
21 overgrown. When it was constructed as a golf
22 course obviously it was filled and graded
23 extensively in the wetlands or either filled or
24 extensively impaired as a result of the
25 construction of the golf course.



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1 Q: Okay. And was there concern on the part of OSI
2 that the owner of the land might sell it for
3 development?

4 A: Yes. And in fact, my company had looked at
5 that property multiple times in the past in
6 preparation for development.

7 Q: Okay.

8 A: Single family residential houses.

9 Q: Okay. And is there another permitted entity
10 that is also using Kings Grant for mitigation?

11 A: Yes. Palmetto Railways is part of the -- I
12 always forget the name of that project. But
13 it's the rail terminal that's being constructed
14 in Charleston, still ongoing. They had tidal
15 impacts associated with their project. And
16 they are using a portion of Kings Grant for
17 mitigation as well.

18 Q: Okay. And between their efforts and WestEdge
19 efforts, have we covered all of Kings Grant?

20 A: There is still a portion of Kings Grant that is
21 owned by others. And it is, to my knowledge,
22 potentially going to be developed.

23 Q: Uh-huh.

24 A: However, the area that we're planning for
25 mitigation is directly abutting the previously



1 approved mitigation site that has been used by
2 Palmetto Railways.

3 Q: Okay. All right, so you'll have two contiguous
4 sites?

5 A: That's correct.

6 Q: All right. And how are you going -- what kind
7 of work in your Permittee Responsible
8 Mitigation Plan are you planning to do?

9 A: So, the area is contained by a perimeter berm.
10 We intend to breach that perimeter berm and
11 remove it in some locations to allow tidally
12 influenced water back into the mitigation site.
13 We'll also construct tidal creeks and restore
14 the adjacent Marsh of those tidal creeks to
15 make it a fully functional Marsh again, and ---

16 Q: Why would a property owner put up a berm on
17 tidal property?

18 A: The main reason would be to keep the tidal
19 water out of it. And in this case, it was to
20 fill it and develop it.

21 Q: So is the berm evidence that, that it was
22 existing tidal marsh?

23 A: Absolutely, yes.

24 Q: And does the Corps give you mitigation credit
25 for enhancing, buffering or restoring marsh?



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1 A: Yes, that is -- the, the options that you have
2 available for mitigation include restoration or
3 enhancement and preservation in some cases.

4 Q: If we implement this mitigation project, how
5 many acres of marsh will be restored?

6 A: Between the, the tidal creeks that will be
7 constructed and the adjacent marsh, it'll be
8 approximately 20 to 25 acres.

9 Q: Okay. Have you been involved in restoration
10 projects before?

11 A: Yes.

12 Q: Have you had success in restoring marsh, once
13 you restore the hydrology, restoring tidal
14 marsh once you restore the tidal flow?

15 A: Yes.

16 Q: Is there anything complicated about it?

17 A: The thing about tidally influenced wetlands is
18 res- -- it's easy to restore hydrology.
19 Restoring hydrology to previously impacted
20 wetlands is difficult in a freshwater
21 condition. However, if you can count on semi
22 diurnal tidal influence to an area, you know
23 that you're going to have, hydrology therefore,
24 it greatly increases the chance of a, a
25 positive outcome. A -- that all your



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1 performance standards will be achieved and that
2 you will have a successful mitigation site.

3 Q: Okay. And you said 20 acres of restored mar-
4 -- tidal marsh?

5 A: Approximately 20 acres over ---

6 Q: How about Palmetto Railways, what are they
7 going to restore?

8 A: I believe their's is 30 to 40, I can't remember
9 exactly.

10 Q: All right. And how many acres of marsh and
11 waters are we impacting in this project?

12 A: Approximately 3.9.

13 Q: Did you make the determination regarding the
14 credits we would need? Well, does the
15 permittee responsible bank generate credits?

16 A: Yes, it does.

17 Q: Did you make a determination as how many
18 credits we would need to compensate for impact
19 to the 3.9 acres at WestEdge?

20 A: Yes. Yes, I did.

21 Q: And does the permittee mitigation bank generate
22 enough credits to accomplish the compensation
23 we need?

24 A: It would accomplish the number of credits
25 necessary with surplus credits as a result.



1 Q: Okay.

2 A: The 20 acres would it -- is more than what is
3 necessary. Using the Army Corps guidelines,
4 it's more than what's necessary to completely
5 mitigate or offset impacts to, to WestEdge.

6 Q: And I'm going to show you what's been marked as
7 WestEdge Exhibit 34. I haven't marked it yet.
8 I'm sorry.

9 **(Respondent's Exhibit Number 34 was marked for**
10 **identification purposes.)**

11 Q: Thank you. Can you identify this document?

12 A: Yes. This is the section 404 individual permit
13 application supporting documentation that we
14 prepared as part of the permit application for
15 the WestEdge project.

16 Q: Okay.

17 **MS. SHAHID:** Your Honor, I'm offering 34 into
18 evidence. Not for the truth of anything that
19 it contains but to demonstrate that WestEdge
20 did provide information to the Department,
21 resulting in the issuance of the permit.

22 **MR. CUNNINGHAM:** We can stipulate to that without
23 the exhibit, Your Honor. I mean, we, we
24 quibble about this sufficiency of it, but you
25 know it was submitted. They did submit an



1 application.

2 **MS. SHAHID:** Well, Your Honor?

3 **THE COURT:** Please?

4 **MS. SHAHID:** I have to build a record.

5 **THE COURT:** Yeah.

6 **MR. CUNNINGHAM:** That's fine.

7 **THE COURT:** Okay. It's admitted.

8 **(Respondent's Exhibit Number 34 was admitted into**
9 **evidence.)**

10 **MS. SHAHID:** Thank you.

11 **THE COURT:** With a caveat.

12 **MS. SHAHID:** Thank you.

13 Q: And in addition to Exhibit 34, did you provide
14 any additional information, or was additional
15 information requested by the Department?

16 A: Yes. After the submittal of this document,
17 with our permit application, as is similar with
18 every -- almost every individual permit, we
19 received comments as a result of the public
20 notice. Both DHEC and Army Corps of Engineers
21 put the project on public notice. And we were
22 responsible for responding to the comments
23 received during that public notice period.

24 Q: Okay. And did you -- did you provide the
25 agency everything that it requested?



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1 A: Yes. We spent extensive time reviewing the --
2 all of the comments that were received, and we
3 responded to all the applicable comments.

4 Q: Okay. And did was there a second more recent
5 public notice of the project?

6 A: There was a second public notice. During the
7 coordination of the project, it was -- we
8 identified an area on the landfill where an
9 outfall was planned to help with the stormwater
10 infrastructure that Mr. Karkowski discussed.
11 As a result of that change, Army Corps of
12 Engineers and DHEC required us to put the
13 project on public notice for a second time.

14 Q: Okay. And that outfall was located off of
15 Fishburne beside the football stadium?

16 A: That's correct.

17 Q: Okay. And what were you -- what, what
18 triggered the need for a permit with the work
19 being done in that outfall? Well, did an
20 impact critical area?

21 A: Well, yes. So, we had to take a step back and
22 look at that. It, it was also an existing
23 drainage ditch. And a portion of it was
24 determined to be tidally influenced by Army
25 Corps during, during a brief site visit. So,



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1 because of that, they wanted us to include that
2 in the overall impacts. So, did I answer your
3 question?

4 Q: Yes, you did. Now, do the Corps' regulations
5 and DHEC's regulations require a demonstration
6 of lack of feasible alternatives?

7 A: Absolutely, yes. The Alternatives Analysis
8 portion of the 404 permit application consisted
9 of developing Purpose and Need. In this case,
10 the purpose in need was -- the basic purpose,
11 purpose was development of research facilities
12 and supporting infrastructure, housing,
13 commercial. The overall purpose was to promote
14 economic development in support of MUSC. After
15 we determined a Project Purpose and Need, we
16 continued the alternatives analysis process by
17 evaluating the no action alternative, on site
18 alternatives, and off site alternatives. We
19 had to evaluate those and ex- -- in detail and
20 the documentation that was submitted. The, the
21 objective of the Alternatives Analysis is to
22 identify the least environmentally damaging
23 practicable alternative, LEDPA. So, in our
24 Alternatives Analysis assessment, we determined
25 that the project that was submitted for the



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1 permit application was the LEDPA.

2 Q: LEDPA being least environmentally damaging?

3 A: Correct.

4 Q: Okay. And is there a process compelled by
5 federal regulations by which you analyzed your
6 alternatives?

7 A: Yes, 404(b)(1) guidelines set the stage for
8 that requirement. And that's why you have to
9 go through it.

10 Q: Okay. And so did you develop screening
11 criteria -- did you develop like the
12 fundamental things that are necessary in order
13 to achieve your project purpose in considering
14 alternatives?

15 A: Yes. By the time I was involved in the
16 project, there had been a lot of planning, many
17 years of planning that had taken place. And I
18 had to become familiar with the planning
19 process and understand the criteria that was
20 used to come to the conclusion to develop the
21 WestEdge site. There was what we call site
22 selection criteria that we evaluated and
23 screened alternative sites against to determine
24 what would be -- what the -- what the applicant
25 was looking for. So, their Site Selection



1 Criteria consisted of ---

2 Q: And I see you're reading from the exhibit. Is
3 this to refresh your memory?

4 A: Yes, it is.

5 **THE COURT:** How much longer are we talking?

6 **MS. SHAHID:** I mean, this topic and one more topic
7 and we'll be done.

8 **THE COURT:** Okay.

9 **MS. SHAHID:** But ---

10 **THE COURT:** I'm not hurrying you, I'm just trying to
11 decide when to break for lunch.

12 A: So, our site selection criteria were, that the
13 property need to be located within three miles
14 of -- MUSC and the city's Medical District,
15 a site size of at least 30 contiguous acres had
16 to be available, conformity with the City of
17 Charleston comprehensive plan, zoned properly
18 accessible, access to utilities and must have
19 public interest.

20 Q: Okay. And why is proximity to MUSC part of the
21 site selection criteria?

22 A: The purpose of need and the development was
23 specifically in support of MUSC.

24 Q: Okay. And where did you get 30 acres?

25 A: That is my understanding of the area of land



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1 necessary to make the project economically
2 feasible.

3 Q: And that's from the perspective of a tax
4 increment financing district?

5 A: Yes, there's a lot that goes into it. And a
6 lot, a lot of financial information, obviously
7 to come up with that. And that, that is a big
8 part of it, yes.

9 Q: Okay. And were you able to identify any on site
10 alter- -- I mean, sorry, any off site
11 alternatives that would satisfy the project
12 purpose?

13 A: No, not, not initially. One of the comments we
14 received from the Army Corps of Engineers is
15 that they felt we needed to evaluate another
16 alternative that was within three miles. So,
17 in all I believe we ended up evaluating four
18 alternative sites ---

19 Q: What were the obstacles to those four
20 alternative sites?

21 A: Well, I'll start with the, the latter, which
22 was referred to as the Magnolia site, which is
23 a former Superfund property and it wasn't
24 available and had been under plans for
25 development for quite some time. So, access or



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1 availability was an issue for that one. The
2 other one that we discussed previously during
3 the testimony was Laurel Island, also a
4 landfill. Limited accessibility. Previous
5 attempts to develop that site by others had
6 been unsuccessful because of the lack of
7 access. We also reviewed Union Pier Terminal
8 and believe it was already spoken for, under
9 planning for development. And I'm having
10 trouble remembering the fourth. Yeah, the
11 WestEdge site obviously. Okay, I think I've
12 covered them, there might, might only been ---

13 Q: Okay.

14 A: --- three others other than WestEdge.

15 Q: Okay. In your opinion, I'm sorry, jumping
16 ahead. And so, was that the extent of your
17 evaluation of on site alternatives?

18 A: That was extent of the on site (sic)
19 alternatives.

20 Q: Off site alternatives.

21 A: However we did do on site alternative as well.
22 One of the alternatives -- on site alternatives
23 that we evaluated, and this is based not only
24 on this document what the follow-up comments
25 that we prepared or the responses that we



1 prepared to comments.

2 Q: Well were you asked to do further looking for
3 alternative analysis by one of the agencies?

4 A: Yes. One of the agencies, I can't remember
5 whether it was DHEC or Army Corps of Engineers,
6 asked us to provide additional information
7 regarding on site alternatives.

8 Q: Okay.

9 A: Which is common to have these types of requests
10 when you're pursuing an individual permit.
11 There's a lot of back and forth between the
12 agencies. One of the on site alternatives that
13 we evaluated was based on a 2008 concept plan,
14 which I believe has been discussed in this --
15 this court previously. But in that concept
16 plan there was documentation that included the
17 use of what's now referred to as Gadsden Creek
18 as a -- as an ammenitized feature I believe.
19 That was the intention of that 2008 concept
20 plan. As you dig deeper into that conceptual
21 document, what you'll see is the -- the actual
22 plan for that was going to be to fill the
23 channel and create a storm -- more or less a
24 stormwater feature. In looking at it a little
25 more closely, the applicability, the



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1 practicability, the potential to actually
2 achieve what they were saying from this very
3 high level conceptual evaluation of keeping
4 this water course in place, in it's current
5 location, was that it was proposed to have
6 positive drainage. And what positive drainage
7 means is it flows in one direction and you --
8 that's typically a component of a stormwater
9 feature. Now in order for this Gadsden Creek,
10 which is approximately 2,200 linear feet, the
11 channel where it exists now, in order for it to
12 maintain positive drainage, the portion of the
13 creek adjacent to the intersection of Hagood
14 and Fishburne Avenue would of had to have been
15 raised by several feet. So in other words, the
16 area, the creek itself, would of had to have
17 been raised to nine feet in elevation. I
18 believe it sits at approximately five now. So
19 you had to of filled the entire creek at that
20 location to create this feature. At that point
21 it would have been above the grade of the
22 adjacent intersection. If that had been
23 achievable, based on what we know about tidal
24 flow, as it exists now, only 850 linear feet of
25 it would have remained tidal as a result of



1 that activity. Furthermore, the -- the filling
2 that was depicted in that very high level
3 conceptual plan, not only did it show filling
4 of the -- the channel itself, it also was going
5 to use the area for utilities and other
6 infrastructure. So, again, all of that pointed
7 to it being more a stormwater feature than an
8 ammenitized tidal feature, especially
9 considering the fact that only a very small
10 portion of it would have received tidal
11 influence after it was constructed that way.
12 And, you know, if you've ever seen one of these
13 high level plans that get submitted, they are
14 not getting into the details of a project.
15 They're just -- you know, it's basically a
16 qualifications package at that point and
17 they're trying to show a potential. And it's
18 clear based on what we had seen there, there
19 had not been any detailed studies. And it's
20 not to say that there wasn't some merit to the
21 information they presented but it just hadn't
22 had the level evaluation that the WestEdge
23 project team has done for several years now.
24 So that would be one example of what we keep
25 hearing about this ammenitized feature to



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1 memorialize the location of Gadsden Creek. It
2 just -- it's challenging. It's challenging and
3 not practical, in our opinion.

4 Q: Okay. Any other on site alternatives?

5 A: So in a situation like this, where we're
6 dealing with a channel that extending through
7 a landfill with open landfill debris in it,
8 high levels of contamination, you have to
9 provide a reasonable range of alternatives.
10 For us to demonstrate the least environmentally
11 damaging practical alternative, it was
12 difficult to identify another on site
13 alternative that didn't result in the need to
14 cap the landfill.

15 Q: Okay.

16 A: So not much more went into it. Other than
17 that, we had discussed the use of a muted tide
18 gate, which has come up during this testimony.
19 That solves sunny day flooding issues only if
20 it was actually technologically possible. It
21 wouldn't solve the fact that you're dealing
22 with a contaminated water course. It wouldn't
23 solve the fact that it's continuing to settle.

24 Q: So did that satisfy the project purpose if
25 those problems aren't addressed?



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1 A: No, it did not.

2 Q: And, in your opinion as a wetland scientist, do
3 you -- is it your opinion that the existing
4 con- -- conditions are somewhat compromised by
5 the presence of the landfill?

6 A: I'd say it is severely compromised.

7 Q: It being the feature of Gadsden Creek and
8 surrounding marshes?

9 A: That's correct.

10 Q: And is that opinion based on your
11 investigations?

12 A: It's based on my investigations that I've
13 conducted personally on Gadsden Creek and 20 --
14 and 17 years of experience working in the
15 wetland field.

16 Q: And, in your opinion as an environmental
17 consultant, is there environmental benefit
18 accomplished that outweighs any environmental
19 harm by implementing this project as permitted?

20 A: Absolutely.

21 Q: And why is that?

22 A: The no action alternative in this case couldn't
23 be identified as the least environmentally
24 damaging practical alternative because allowing
25 the existing condition to be maintained is not



1 advisable.

2 Q: Okay.

3 A: And clearly the levels of contamination that
4 have been identified prevents that from being
5 a least environmentally damaging practical
6 alternative. Furthermore, there have been
7 other projects, unrelated, one other project
8 that comes to mind is the Spring-Fishburne
9 Drainage Project. It's being conducted by
10 others. They submitted a mitigation plan that
11 included use of portions adjacent to Gadsden
12 Creek and they were going to utilize those
13 areas for mitigation on that project. Army
14 Corps of Engineers issued a permit and in that
15 permit was a condition that indicated -- and I
16 don't have the exact language in front of me,
17 but they said the -- utilizing the portions of
18 the uplands adjacent to Gadsden Creek would
19 cause more harm than good and they are
20 adamantly opposed to using that as mitigation.

21 Q: Did that inform or support your opinion that
22 the marsh was severely compromised -- marsh and
23 creek are severely compromised?

24 A: It ---

25 Q: It additional to all the other factors?



1 A: Right. It supported it significantly. And the
2 -- the significance of seeing a condition like
3 that in a permit, it's not something you
4 typically see. To see such strong language
5 with underlined words come from -- be issued in
6 a permit by a federal agency responsible for
7 overseeing the Clean Water Act, implementation
8 of sections of it, was something that you just
9 don't ever see. So what that showed me is
10 there is a very strong opposition to conducting
11 any level of restoration within Gadsden Creek
12 or the landfill itself.

13 MS. SHAHID: I'm gonna ask the Court Reporter to
14 mark WestEdge Exhibit 11.

15 **(Respondent's Exhibit Number 11 was marked for**
16 **identification purposes.)**

17 Q: Mr. Ruocco, do you recognize Exhibit 11?

18 A: Yes.

19 Q: Is Exhibit 11 a report that you prepared
20 related to sampling data that you collected in
21 and around the site?

22 A: This ---

23 Q: This site?

24 A: That's correct. This ---

25 Q: Or within the creek?



1 A: That's right.

2 Q: Okay. And if you could, what prompted your
3 examination that you performed of the leachate
4 on the banks of the creek?

5 A: Okay. So, several comments that we had
6 received from resources agencies seemed to
7 indicate there was -- that there was an
8 understanding that the area may not be
9 contaminated. And that's despite decades of
10 historical documentation which stated opposite.
11 There is documentation dating back to the '60s,
12 '70s where leachate has been documented as a
13 concern for this specific landfill. I believe
14 there was -- in my opinion, the agencies felt
15 that there had been some level of natural
16 attenuation over time in this landfill and that
17 there was a potential that contamination didn't
18 currently exist due to the tidal influence. I
19 strongly believe that to be the case. So ---

20 Q: In other words, the tidal influence would
21 dilute whatever was there over time?

22 A: Dilute -- mother nature would take over and do
23 it's thing, which is a common remediation
24 practice for different types of contaminated
25 sites. For example, you -- underground storage



1 tank releases of petroleum. Once DHEC gets
2 those sites to a certain level of -- of clean,
3 quote unquote, and they feel that it's no
4 longer a threat to human health or the
5 environment, in that existing condition, they
6 allow it to enter into what's called monitored
7 natural attenuation. And over time you simply
8 sample the monitoring wells within that
9 contaminated area and verify that the levels
10 are continuing to attenuate or go down over
11 time. That's mother nature taking over. To
12 see the levels of contamination in a tidally
13 influenced, highly porous area like this, 30,
14 40 years, 50 years after it has been completed
15 is alarming, in my opinion.

16 Q: Well, the -- did you determine that some
17 additional data was needed?

18 A: Based on -- yes. I should back up. Based on
19 the comments that were received from multiple
20 resource agencies that implied that this site
21 may not have contamination as had been
22 documented in our previous submittals, we felt
23 that it was necessary to collect some samples,
24 reluctantly.

25 Q: Okay.



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1 A: To help identify where that contamination is.
2 Also, other consultants had been hired to
3 collected samples of Gadsden Creek. We collect
4 surface samples of the tidal water within the
5 channel. At that point it would be so diluted
6 from an incoming tide twice a day, it would be
7 very difficult to have concentrations at
8 detectable levels. It would just be too
9 dilute. So I felt strongly, based on past site
10 visits that there were obvious indicators of
11 contamination, discolored liquids, sheens. So
12 I was tasked with sampling the creek to
13 determine, you know, what these areas consisted
14 of. And when I collected the samples ---

15 Q: Is this leachate sampling?

16 A: It turned into leachate sampling.

17 Q: Okay.

18 A: My intention going into it, you gotta remember
19 my position in the project team at this point
20 was permit. So yes, I did have experience with
21 contamination. That's a big part of what I do
22 on a daily basis. So I realized there were
23 areas within the landfill that had evidence of
24 discoloration, sheens, other evidence of --
25 visual evidence of contamination. So with a



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1 very limited budget I collected some samples
2 that -- sample containers that we just keep in
3 the office when we need to go grab a sample.
4 I ran down to the site based on a phone call.
5 I walked through the creek with my snake boots
6 and my hand auger and all my other personal
7 protective equipment. I was able to traverse
8 the creek by, you know, stepping on concrete
9 and tires and other garbage and debris that's
10 in the -- the channel. And I found two
11 locations that, at that time when I sampled,
12 had a discernible seepage or leachate coming
13 from the bank of Gadsden Creek.

14 Q: And -- and let me interrupt you. And those are
15 the locations that you pointed out to us
16 earlier when we were looking at the video.

17 A: That's correct.

18 Q: Okay.

19 A: So these areas were chosen for a sample because
20 they had an aqueous product that you could put
21 into a sample container, put it on ice, fill
22 out a chain of custody, shoot it off to your
23 third party laboratory, they'll tell you what's
24 in it. It's a simple as that. It's a grab
25 sample. Anyone can do it. And didn't



1 anticipate the results that we got back,
2 honestly. I felt that there would be some
3 levels of contaminates in them. I had no idea
4 what we would find as a result of that sample.

5 Q: And are those results and the analysis
6 reflected in Exhibit 11?

7 A: Yes.

8 Q: Okay.

9 **MS. SHAHID:** And, Your Honor, at this time I would
10 offer Exhibit 11 into evidence.

11 **MR. CUNNINGHAM:** I'm gonna object because it's not
12 just his notes, it's the results, which was
13 done by a third party lab. And they're
14 attached to that and included in that.

15 **MS. SHAHID:** Well, Your Honor, I can remove his
16 notes. Happy to do that.

17 **MR. CUNNINGHAM:** Well, the problem is that the notes
18 are referring to the data.

19 **THE COURT:** Yeah. Is the data that you collected
20 commonly relied upon by experts in your field?

21 A: Yes, sir.

22 **THE COURT:** And in forming of opinions.

23 A: Absolutely.

24 **THE COURT:** This one, I'm gonna have to rule against
25 you on.



1 **MR. CUNNINGHAM:** I just want my objection noted for
2 the record, Your Honor.

3 **THE COURT:** That's fine. And then I rely on
4 Jenkins, this one sufficiently reflects or
5 gives me insight into whether his opinion is
6 properly supported. That is substantially
7 outweighs any prejudicial effect that I have
8 seen so far indicated.

9 **MS. SHAHID:** Thank you, Your Honor.

10 **THE COURT:** So I overrule your objection.

11 **(Respondent's Exhibit Number 11 was admitted into**
12 **evidence.)**

13 Q: All right, Mr. Ruocco. You collected the
14 samples, you put them on ice, you sent them to
15 Shealy Laboratory?

16 A: That's correct.

17 Q: And you received a lab report back, correct?

18 A: That's right.

19 Q: And is that pretty much the procedure for any
20 time you undertake ground water sampling, soil
21 sampling, surface water sampling? That's the
22 procedure you follow?

23 A: That's exactly right, yes.

24 Q: Okay. And is Shealy one of many labs you use
25 or is there any particular reason it went to



1 Shealy?

2 A: No, it just happened to be the lab we were
3 using the most at the time. We use many labs
4 throughout the country. National laboratories,
5 local laboratories, they're all certified
6 independently, third party. It prevents there
7 from being a conflict of interest. We believe
8 as a company, that's our position. That's why
9 we use third party laboratories.

10 Q: And what did the Shealy analysis provide, or
11 what information was provided from the
12 analysis?

13 A: Well part of the chain of custody, we asked
14 them to evaluate the samples for SVOCs, semi-
15 volatile organic compounds, target analyte list
16 of metals, which is essentially a full list of
17 potential metals. They evaluated for PCBs.
18 And that appears to be it.

19 Q: Okay. And did they show any exceedances in
20 those particular substances?

21 A: Substantial.

22 Q: Okay. And when you say substantial, can you
23 give us an example of the limit versus the
24 amount that was detected in the sample?

25 A: Right. So a good example of a significant



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1 exceedance of a toxic metal is lead. In this
2 case the maximum contaminant level established
3 by EPA for safe drinking water is 15 micrograms
4 per liter. The leachate sample that was
5 diluted and sampled with a grab sample in the
6 field contained 15,000 parts per -- parts per
7 billion, which is micrograms per liter. So it
8 was 1,000 times higher than the MCL. That was
9 in sample one. We also found a detectable
10 level of PCBs in sample one.

11 Q: Refresh my memory, what is a PCB?

12 A: Polychlorinated biphenyl. They were outlawed
13 in the United States in the late 1970s because
14 of the toxicity.

15 Q: Okay.

16 A: I'm just looking for the ones with applicable
17 MCLs for comparison. And I'm gonna tell you
18 the bad ones. Arsenic, the MCL is 10; we found
19 arsenic in sample one at 1,100 parts per
20 billion, compared to 10 as the MCL. Chromium,
21 the MCL is 100; we found it at 2,300 in this
22 grab sample, this diluted grab sample seeping
23 from the side of Gadsden Creek.

24 **THE COURT:** That would be 230 times?

25 A: I'm not great at math in my head, but yes, I



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1 believe that's right. Mercury, which we very
2 rarely find in sample media was identified at
3 22 parts per billion. The MCL is 2. So it was
4 11 times higher. And I should note that during
5 the course of Shealy's evaluation, we typically
6 have no interaction with them. All we do is
7 send them a cooler with ice, samples and a
8 chain of custody. They take it from there. We
9 hear from them one time, when they send us the
10 results, about ten days later typically. This
11 case, as they were running the analysis, a
12 preliminary result of mercury became available
13 and they took it upon themselves, without any
14 narrative whatsoever, to provide that
15 preliminary sample result to us in an email.
16 Now we looked at it and we thought, wow, this
17 is -- this is a high result for mercury. And
18 I believe they provided that information
19 because they understood, based on their
20 knowledge of the environmental field that there
21 is a -- there was a problem here. So once they
22 saw that level of mercury, which is something
23 that you don't at these levels in the natural
24 environment, I believe they were concerned.
25 But again, no narrative associated with that.



1 But it's notable that they sent us that
2 preliminary result that is out of -- out of the
3 ordinary for them to do. And the list of
4 metals that exceed applicable regulatory limits
5 goes on and on. There's, you know, aluminum
6 for example. It does not have a MCL. It does
7 have ecological values for screening. It was
8 found at 860,000 parts per billion. Just
9 looking at one of these screening values. It's
10 50 to 200 would be the acceptable screening
11 value for ecological evaluation. So we are at
12 860,000; the ecological value is 50 to 200.
13 And that -- there was other semi-volatile
14 organic compounds that were identified at
15 estimated values when the laboratory analyzes
16 a sample and it comes back below their -- I
17 forget the terminology. But they have a
18 threshold that they are -- they know that it's
19 accurate. You know, if you're below that
20 threshold, they -- they flag it as an estimated
21 value. So we had several estimated values of
22 various semi-volatile organic compounds as
23 well. Not necessarily evidence of high
24 contamination, but those constituents are
25 there.



1 Q: Why does that have any meaning to you that the
2 constituents are there if they're not exceeding
3 limits?

4 A: It means there's a source of these contaminates
5 in the landfill. And at the specific snap shot
6 in time, at those locations, we may not have
7 gotten high results. But because the landfill
8 is a non -- it a non-point source pollution
9 situation, meaning the pollution is diffuse and
10 wide-spread, it's difficult to determine where
11 the highest levels of contamination and where
12 the lowest of contamination. It's all gonna be
13 diffuse and dispersed and probably moving
14 around because of the tidal influence in this
15 particular situation.

16 Q: Okay. These contaminants that were detected,
17 are you knowledgeable as to what could be the
18 sources of these types of contaminates?

19 A: In my opinion, its from the landfill, 100
20 percent.

21 Q: Okay.

22 **MR. CUNNINGHAM:** I'm gonna object. I would strike
23 that as non-response to the question and it's
24 outside his expertise. She said are you
25 knowledgeable and then he said ---



1 **THE COURT:** Oh, are you knowledgeable?

2 A: Yes. Yes I am.

3 **MR. CUNNINGHAM:** At this point I'm gonna object as
4 to outside his expertise. This is getting to
5 brownfield area, as opposed to just wetland
6 science.

7 Q: In the course of your examination of these lab
8 reports and of properties that are asking you
9 about the remediation efforts, have you gained
10 knowledge as to where your likely to find
11 certain contaminates or what the source of
12 certain contaminates are?

13 A: Again, I believe we're dealing with a non-point
14 source pollutant situation. It's -- I don't
15 want to use the term impossible, but extremely
16 difficult to determine the source of these
17 contaminants.

18 Q: Okay.

19 A: And, you know, if you think about a landfill,
20 you throw a bunch of materials together, put
21 them under pressure, bury them, I mean, it's a
22 pressure cooker. There's a lot of reactions
23 occurring, there's a lot of things that could
24 happen in the subsurface. And this is just a
25 snapshot in time from these two sample



1 locations.

2 Q: Okay. If you had -- have you ever received
3 reports, such as the Shealy report, that showed
4 that degree of contamination in your years of
5 handling remediation?

6 A: In terms of exceedances of widely acceptable
7 screening values, these are among, if not the
8 most contaminated samples I've ever personally
9 collected.

10 Q: Out of how many?

11 A: I've collected thousands of samples,
12 environmental samples.

13 Q: Okay. And if -- hypothetically speaking, if
14 you had a client who was looking into
15 purchasing property and this was the
16 information that they had, what would you
17 recommend in order to address the contaminated
18 condition?

19 A: In a situation like this, given the
20 circumstances of the existing conditions, what
21 I know about the ability to practically
22 remediate this situation, the only logical
23 option that I am personally aware of would be
24 to cap it to prevent exposure.

25 Q: How come you can't dig it up and put it in



1 somebody else's landfill?

2 A: That's a possibility but other landfills,
3 they're not looking to accept waste from this
4 type of situation. This is a problem for them.
5 DHEC, in my experience, prefers for
6 contaminants to stay onsite for the most part.
7 Movement of contamination is not something that
8 is looked upon very highly. It just -- the
9 practical aspect of removing however much would
10 need to be removed in this particular area is
11 just daunting. I mean, I can't -- I wouldn't
12 know where to begin for that.

13 Q: Is there some danger or health risk associated
14 with even trying to manage these -- the waste?

15 **MR. CUNNINGHAM:** I'm gonna object on the health
16 risk. He's not qualified on that topic.

17 Q: Are you aware of precautions that you have to
18 take in working in situations like -- with
19 refuse and waste?

20 A: Yeah, I mean, if you're talking about different
21 types of personal protective equipment that may
22 need to be utilized ---

23 Q: Or material management?

24 A: Absolutely. Material management, there would
25 have to be some level of segregation in order



1 to make sure you're taking it to a proper
2 disposal facility. Excavating this material,
3 the -- the runoff from the excavation, the --
4 you're prohibited from allowing that to find
5 it's way back into the same water course where
6 it was just excavated. That's a violation of
7 the Clean Water Act. So just the practical
8 nature of what a remediation of this situation
9 would look like is -- it's difficult to
10 understand. And we haven't planned -- we
11 haven't talked about that. That's not
12 something we've looked at in extreme detail.

13 Q: You have a materials management plan?

14 A: Materials management plan, we have put together
15 a -- a version of that, a conceptual version in
16 order to respond to a comment from the Army
17 Corps of Engineers. They were interested to
18 know how we would handle this material for
19 construction of the stormwater conveyance that
20 was gonna be -- or that's planned right now at
21 the intersection of Fishburne and Hagood. So
22 that was the intention of their feedback
23 regarding the materials management plan.

24 Q: Okay.

25 MS. SHAHID: Your Honor, if I could just take a



1 minute and talk to Mr. Traynham?

2 **THE COURT:** I'll tell you what, I'm just gonna go
3 ahead and take a break right now.

4 **MS. SHAHID:** Okay.

5 **THE COURT:** We're at 1:30.

6 **MS. SHAHID:** I think we're done, Your Honor.

7 **THE COURT:** Well, I'll let -- if you've got a few
8 more questions, we can come back that's fine.
9 I'll deal with that then. But we'll -- when do
10 y'all want to come back. It's 1:30 now.

11 **MR. CUNNINGHAM:** 2:45, 3:00 o'clock.

12 **MR. TRAYNHAM:** 2:45 is fine.

13 **THE COURT:** 2:45. Thank you.

14 **MR. CUNNINGHAM:** Thank you, Your Honor.

15 **(Off the record from 1:31 p.m. until 2:44 p.m.)**

16 **THE COURT:** I'm ready if you are. Are you okay over
17 there?

18 Q: Mr. Ruocco, while we were on break, I believe
19 I found the missing page from the permittee
20 responsible mitigation, Respondents WestEdge
21 Exhibit 33. And this would just sort of close
22 the loop on the -- is this the drawing that we
23 were looking for?

24 A: Yes, that's it.

25 Q: And it's page 27 of permittee responsible



1 mitigation plan?

2 A: Yes.

3 Q: Okay. And if you could, explain to the Court
4 what this drawing shows.

5 A: Okay. So what we've done here is taken the
6 historical aerial photographs and kind of
7 depicted the various locations of the landfill
8 over time, as well as the original location of
9 Gadsden Creek and the perimeter landfill ditch.
10 And it kind of depicts the -- the various
11 locations over time.

12 Q: Okay.

13 A: So, you want me to explain it there?

14 Q: Yeah, just the colors and what they -- which
15 year they relate to and the change.

16 A: Okay. So, the shading on the property itself
17 corresponds with the legend, which is, you
18 know, what it looked like at that period of
19 time as the landfill was being constructed. So
20 the different shading is representative of what
21 it looked like. And then you can see Gadsden
22 Creek was outlined over there. That's the blue
23 one. That's where it's original location was
24 relative to the WestEdge boundary.

25 Q: So it's the one I'm pointing out with my pen?



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1 A: That's correct. And the -- okay, so the green
2 boundary was where it was relocated to when the
3 landfill was completed.

4 Q: In or around 1973?

5 A: Correct.

6 Q: Okay.

7 A: And then by 1979 it was diverted to the yellow
8 location.

9 Q: Okay.

10 A: So at that point it was taken from the original
11 perimeter landfill ditch location and for some
12 reason it was constructed through the landfill
13 at that point. And I think what we don't know
14 is whether proper authorizations were obtained
15 prior to doing that. It's -- I think that's an
16 unknown. But regardless, that's where it was
17 relocated.

18 Q: Okay.

19 A: And then again, the southeastern portion of the
20 boundary was developed in the 1949, 1954, 1963,
21 and 1973.

22 Q: Is that this area I'm pointing at?

23 A: Correct. And that outline is consistent with
24 the location of multiple buildings in the past.
25 So that was a, you know, an upland essentially.



1 The red channel depicts the location of Gadsden
2 Creek today.

3 Q: Okay. Okay, and one more question, just to
4 confirm something. Is it your opinion to a
5 reasonable degree of professional certainty
6 that restoring the creek is not a reasonable
7 alternative?

8 A: In my opinion it is not a reasonable
9 alternative.

10 Q: Okay. And is that because it doesn't serve the
11 project purpose?

12 A: It doesn't serve the project purpose and it
13 doesn't result in the least environmentally
14 damaging practical alternative.

15 Q: Okay. No further questions.

16 **MR. CHURDAR:** Your Honor, the Department does not
17 have any cross-examination.

18 **MR. CUNNINGHAM:** I do.

19 **THE COURT:** Did you say you don't?

20 **MR. CUNNINGHAM:** Not on your life, Your Honor.

21 **MR. RUOCCO - CROSS-EXAMINATION BY MR. CUNNINGHAM:**

22 Q: All right. Mr. Ruocco, how are you doing this
23 afternoon?

24 A: I'm doing well, how are you?

25 Q: Good to see you again.



1 A: Good to see you.

2 Q: All right. So leachate, and I understand you
3 testified a little bit about your familiarity
4 -- familiarity with it, typically flows
5 downward, right? Gravity and rainwater
6 percolating into a landfill, that's why those
7 leachate collection systems are at the bottom,
8 right?

9 A: I'd say that's accurate, yes.

10 Q: All right. And your -- to your knowledge,
11 there hasn't been any new landfill debris
12 deposited at this location since the late '60s,
13 early '70s, is that right?

14 A: Based on the documentation it was closed in
15 1969, so I'm not aware of any additional land
16 filling after that.

17 Q: And that fill has been largely -- the vast
18 majority of that fill has been underground
19 since that time, is that right?

20 A: I'd say that's fair to say, yes.

21 Q: Now you're aware -- you're familiar with
22 various sold borings that have been done at
23 this location, right? Through the years?

24 A: Yes, I am familiar with them.

25 Q: And you're aware that some of those soils



1 borings, up to five feet in depth found no
2 trash, right?

3 A: I'm not specifically familiar with that, no.
4 I can't recollect the depth of the trash around
5 the landfill. I would say that there's a good
6 potential that it varies considerably across
7 the landfill.

8 Q: Meaning that some borings might show trash and
9 others might not, is that right?

10 A: I'd say that's a possibility, but I don't
11 recall specific scenarios where that's been
12 identified.

13 Q: What's been identified?

14 A: No trash has been identified.

15 Q: Okay. Well, you're familiar with S&MEs soil
16 boring recorded May 2015?

17 A: Yes, I am familiar with that.

18 Q: All right, let me -- do you recall any of the
19 -- the boring results of this document?

20 A: You know, I haven't spent a bunch of time
21 looking at that but I am aware of it.

22 Q: Okay.

23 A: And I know that there was some soil hand auger
24 borings I believe that were conducted.

25 Q: Down to five feet in depth?



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1 A: Yeah, five feet is the typical depth of a hand
2 auger.

3 Q: Right.

4 A: That makes sense.

5 Q: And this report often -- in several instances
6 found marsh mud, no trash, right? Do you
7 recall that?

8 A: Yeah, I'm familiar with that.

9 Q: Okay. That occurred in multiple locations,
10 right? In and along Gadsden Creek?

11 A: I don't know. I don't know if it was one or
12 multiple.

13 Q: Would you like to refresh your recollection?

14 A: Sure.

15 Q: I've highlighted the ones that show no trash.
16 Does that refresh your recollection?

17 A: Yeah, honestly I haven't studied this in detail
18 ---

19 Q: Sure, sure, sure.

20 A: --- in the past. But I am familiar with the
21 document. But based on what you've highlighted
22 here, it does indicate that no trash was
23 identified in several locations.

24 Q: Okay. I believe there are 11. Does that look
25 about right?



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1 A: Yeah, without counting it looks about right.

2 Q: Around abouts. And that's of 24 samples taken.
3 I'll let you confirm that one.

4 A: Okay. Yep, there it is.

5 Q: All right. Thank you. You know, I think you
6 testified that the focus of the two samples
7 that you took at Gadsden Creek for the leachate
8 anyway -- that was the focus of those samples,
9 right? To try and attempt to take a sample of
10 leachate you believe was from the former
11 landfill, right?

12 A: Yeah, the objective was to identify what the
13 contaminants were. And upon inspection and
14 trying to figure out what were looking at, I
15 think we're dealing with leachate.

16 Q: Right. And you didn't do obviously the
17 laboratory analysis yourself, right?

18 A: Correct. We sent it to a third party
19 laboratory.

20 Q: And you went at low tide deliberately to try
21 and avoid dilution of any sample, right?

22 A: I went at low tide in order to -- for
23 accessibility. If we went at high tide we
24 wouldn't have been able to collect the samples
25 in the ditch, the channel.



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1 Q: Then you'd be sampling basically surface water,
2 not leachate, right?

3 A: Yeah, if we were to collect samples at high
4 tide, that would be the only aqueous solution
5 that would be available to sample, that's
6 right.

7 Q: Surface water, right?

8 A: Surface water, yeah.

9 Q: And you weren't attempting to assess the
10 surface water quality in Gadsden Creek for your
11 sampling purposes, were you?

12 A: No.

13 Q: You were, or -- I think we're getting a double
14 negative. It's correct that you ---

15 A: Okay, I'm sorry.

16 Q: --- were not attempting to -- to sample for
17 surface water quality of Gadsden Creek when you
18 took your sample, that's correct?

19 A: Not necessarily, my intention was to identify
20 the contaminants out there, not necessarily to
21 sample the surface water.

22 Q: You wouldn't characterize your samples, a
23 sample of surface water, would you?

24 A: You know I guess it would depend on your
25 definition of surface water. This was an



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1 aqueous solution, if you will, and it was
2 present at low tide. I mean I guess you could
3 call that surface water to some extent, but
4 when I think of surface water, I'm thinking of
5 water in the channel as a result of, you know,
6 it either being a natural feature or being
7 tidal inundated in this case.

8 Q: Right. And this -- the sample -- both samples
9 you took weren't in the channel, they were --
10 they were separated from the channel, which is
11 why you got them right? They weren't in the
12 middle of the -- the channel, were they?

13 A: Well, you know, again I think, you know, not
14 trying to be difficult here, but I -- it
15 depends on what you call the channel, I guess.
16 You know, if you're looking at the lower lying
17 area of the wetlands, I mean the channel is --
18 could be as far up as the high tide goes, you
19 know?

20 Q: Okay.

21 A: But the channel that, you know, we have zeroed
22 in as being the -- the water course that
23 contains water, then yeah, it would have been
24 outside of that, yes.

25 Q: Okay. At the time the samples were taken?



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1 A: Correct.

2 Q: All right. And I think you testified there
3 wasn't a whole lot of water -- water to collect
4 in the samples that you took, is that right?

5 A: Right, it was percolating out of the side of
6 the bank.

7 Q: Yeah, I think you testified that at the time
8 you took those two samples, you had not sampled
9 a tidal creek for contaminants ever, is that
10 right?

11 A: Correct, again, our involvement started out as
12 mitigation and morphed into alternatives
13 analysis and supporting documentation, primary
14 responsible mitigation plan, and then has -- I
15 was more involved with the project, that's when
16 we collected those samples.

17 Q: Right, well I'm talking about in your career in
18 ---

19 A: Oh.

20 Q: --- total. You've taken samples, but not of a
21 tidal creek for contamination purposes, right?
22 That's -- that's true, right? That's what you
23 testified to in your deposition.

24 A: I have not sampled Gadsden Creek surface water.

25 Q: All right. Okay. Well I'm talking about tidal



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1 creeks, and I'm talking about -- I believe you
2 testified in your deposition, you hadn't
3 sampled tidal creeks for contamination ever
4 prior to sampling Gadsden Creek, you've done
5 one for a background I think, one other tidal
6 creek for a background sample. That's --
7 that's true, right?

8 A: Right, we sampled Yellow House Creek on
9 multiple occasions as a background for some
10 sediment sampling projects that we did for
11 South Carolina Ports Authority prior to dredge
12 projects, and I believe we've collected
13 elutriate samples, which is kind of a mixture
14 of sediment. I mean it's difficult to describe
15 it, it is an aqueous sample I guess you would
16 categorize that, but as far as just sampling
17 the water column itself in Yellow House, I
18 can't specifically recall doing that or needing
19 to do it.

20 Q: Right. And that was related more to
21 sedimentation, correct?

22 A: Yes, it was to understand a background level of
23 contaminants in a controlled environment ---

24 Q: Right.

25 A: --- compared to the sediment at the dredge



1 locations where we'd be dredging.

2 Q: You testified in your deposition, it's
3 difficult to avoid solid particles at low flow
4 when you're trying to get a sample, is that
5 right?

6 A: Yes, but low flow would be something specific
7 to collecting a groundwater sample, where you
8 have instrumentation that -- that -- it allows
9 the ground water to be removed from the well
10 slowly, and that's -- that's what I consider to
11 be low flow. Can -- can you maybe elaborate on
12 that?

13 Q: Well here's what I'm getting at. It's fair to
14 say that there -- I think you testified to
15 this, there's some solids within samples that
16 you took, right?

17 A: Yes.

18 Q: And the presence of suspended solids in any
19 kind of sample can affect contaminant
20 concentration numbers, can't they?

21 A: That's true. Leachate samples, leachate in
22 general is not just the water portion of the
23 leachate, it's anything that the water picks up
24 as it percolates through a landfill. So if you
25 look at specific definitions of leachate, it --



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1 it includes whatever's in the sample. The
2 leachate is ju- -- the water is just what
3 mobilizes that contamination.

4 Q: But we're talking about water contamination, in
5 the presence of suspended solids in water --
6 water samples for contamination, can affect the
7 concentration of your contaminants, right?

8 A: That's true.

9 Q: And you can't say whether suspended solids or
10 turbidity affected the laboratory analysis in
11 this case one way or the other, that's true?

12 A: I can't say that specifically that's true.

13 Q: And you weren't sampling ground water?

14 A: No.

15 Q: And you wouldn't -- with the caveat before, you
16 weren't attempting to sample surface water as
17 it's commonly understood, is that correct?

18 A: Correct.

19 Q: All right, and you're -- you weren't sampling
20 drinking water either at the time?

21 A: No.

22 Q: All right, and the -- the measures that you
23 compared your samples to, one was EPA MCL,
24 which is safe drinking water act.

25 A: That's correct.



1 Q: It's drinking water.

2 A: That's right.

3 Q: And another one related to -- a couple others
4 related to surface water?

5 A: I believe so. The NOAA standards

6 Q: In ground water.

7 A: In ground water.

8 Q: That's right. And certain standards related to
9 water quality require filtration, don't they?

10 A: There are times in certain circumstances, for
11 example, if you are sampling a release of
12 petroleum from a UST, an underground storage
13 tank that potentially had lead in that
14 gasoline, in order to understand how much of
15 the contaminat- -- that lead contamination that
16 could potentially exist, you would sometimes
17 need to filter it in order to understand how
18 much lead is actually dissolved in that aqueous
19 sample. So in terms of leachate, I can think
20 of no scenario where you would filter a
21 leachate sample to determine the contents.

22 Q: Well leachate from a landfill is not surface
23 water, correct?

24 A: I would not categorize it as surface water, no.

25 Q: Nor -- nor ground water?



1 A: You know, certainly is some coming off ground
2 water in this situation. I would say that it's
3 not ground water, I've -- my opinion is
4 leachate.

5 Q: And I think you testified before that this was
6 just a snapshot of a sample that you took at
7 this particular -- two samples you took at this
8 particular time, one of which wasn't large
9 enough to do a full analysis, is that right?

10 A: Right. You know, again, you have to put the
11 samples that I collected into context. This
12 was not something that we really put a lot of
13 planning into. We simply collected -- or
14 grabbed some sample containers from the office
15 and went to the site at low tide, found two
16 locations, tried our best to get a sample from
17 those locations and, you know, there was a
18 limited amount of time associated with that, a
19 very limited budget also, it was mostly just
20 sample costs.

21 Q: And you ---

22 A: Or laboratory costs.

23 Q: I'm sorry.

24 A: I'm sorry.

25 Q: You'd agree with me that more samples over a



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1 broader period of time and more locations would
2 give you a better understanding of exactly what
3 the contaminant levels are or aren't within
4 Gadsden Creek and it's tidelands?

5 A: Yes.

6 Q: And I think you mentioned before that it's your
7 opinion that, in the deposition, it's likely or
8 very likely that leachate is entering that
9 Ashley River from some source other than
10 potentially Gadsden Creek and its tidelands, is
11 that correct?

12 A: I would say that's probably accurate, just
13 given the nature of what I know about landfills
14 and the location of this landfill in a tidal
15 marsh.

16 Q: And the Ashley River flows through this
17 conveyance and -- into and makes up Gadsden
18 Creek, right?

19 A: I'd say that's -- that's accurate, yes.

20 Q: All right. And you're aware of contamination
21 that may be introduced into a tidal creek from
22 stormwater runoff, correct?

23 A: I'm aware of -- of concerns regarding
24 contamination in tidal creeks from stormwater
25 runoff, but I'd like to caveat that by saying



1 that I don't believe that the contamination
2 that we've identified is a result of
3 stormwater.

4 Q: I understand that. Let's talk about then.
5 First of all, in Charleston area, many tidal
6 creeks that are in urban areas have high levels
7 of contamination, is that right?

8 A: I don't have that data to -- to assume that to
9 be correct, but I would imagine that there's
10 probably situations, yes, where there's
11 contamination in urban tidal creeks.

12 Q: And I believe you testified to that effect in
13 your deposition, so let's just see. Let's see,
14 I believe the question -- you -- you recall
15 your deposition, right?

16 A: Yes.

17 Q: And you were under oath, you and I talked for
18 a little while?

19 A: Yes.

20 Q: And you recall my question, generally speaking,
21 are you aware of whether or not urban tidal
22 creeks in the Charleston area have the same
23 level of contamination?

24 A: Oh, okay. I remember that question, and I
25 think during the course of our permitting



1 process, I found a document that was prepared
2 by NOAA, and the document was specifically
3 addressing contamination from stormwater runoff
4 of impervious surfaces into urban creeks, and
5 I believe that must have been what I was
6 referencing.

7 Q: And you said yes, and then you mentioned
8 stormwater runoff can introduce pollutants in
9 an urban setting in the tidal creeks, right?

10 A: Yes, it -- yes, it can.

11 Q: All right. Because there could be pollutants
12 in parking lots nearby?

13 A: That's right.

14 Q: And there could be pollutants on roadways
15 nearby?

16 A: Correct.

17 Q: And there could be pollutants coming from
18 buildings that are nearby and maybe the
19 stormwater systems are -- is main- --
20 maintained like they should be?

21 A: That's true.

22 Q: All right. And some of the contaminants that
23 are found in parking lots can be heavy metals,
24 can't they?

25 A: If there was a source, absolutely.



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1 Q: You don't know to what extent stormwater has
2 introduced any contaminants into Gadsden Creek,
3 do you?

4 A: I don't have that data, no.

5 Q: And you don't know to what extent, if any, the
6 Ashley River has introduced contaminants into
7 Gadsden Creek, do you?

8 A: We have not studied it to that extent, no.

9 Q: All right. And you aren't offering testimony
10 and wouldn't consider yourself an expert in
11 offering testimony attempting to characterize
12 the risk to any member of the public from
13 contaminants that could be present in or around
14 Gadsden Creek, that's correct, right?

15 A: Yeah, I'm -- I'm not a healthcare professional,
16 and I can't make that determination.

17 Q: And with respect to feasible alternatives, you
18 weren't actually the one in charge of
19 conceptualizing any specific alternative, that
20 was the engineer's job. That's what you told
21 me at your deposition, right?

22 A: That's -- that's accurate.

23 Q: And you might have helped out a little bit,
24 really the -- the major conceptualization was
25 from other people?



1 A: Yes, the -- the civil engineers who planned the
2 design, absolutely.

3 Q: All right. And you never got to estimating
4 some kind of cost for potential revitalization
5 of Gadsden Creek, did you?

6 A: No, I was not involved in that.

7 Q: All right, and you don't have any experience
8 trying to formulate any kind of creek cleanup
9 alternative in the present setting, do you?

10 A: No, I don't.

11 Q: All right. And I believe you testified that
12 you never really spent a lot of time talking
13 about remediating the situation, do you recall
14 that in your deposition?

15 A: I don't recall saying that specifically, but I
16 would say that is -- that's fairly accurate,
17 aside from the fact that we've looked at
18 previous attempts or evaluation to restore the
19 creek, and we found that they were not
20 practical or realistically achievable.

21 Q: You -- you testified that you had only really
22 skimmed the surface of various factors needing
23 to be evaluated in order to address this level
24 -- this really high level alternative, which
25 would be the remediation of the creek, correct?



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1 A: Did I use the term skim the surface?

2 Q: I -- I represent that you do, but if you want
3 to refresh your recollection, I'm happy to do
4 that for you.

5 A: If you have it written down in the deposition,
6 I believe you. Can you repeat the question?

7 Q: Well I think what I asked -- well first of all,
8 let's do this. Let me -- let me hand you your
9 deposition, and it's page 118. It's 4 -- lines
10 4 through 7, see if that refreshes your
11 recollection about.

12 A: Okay. Yeah, I vaguely remember saying that,
13 and I'm -- I'm sure what I was referring to was
14 an evaluation of the 2008 conceptual plan that
15 we discussed previously.

16 Q: Okay.

17 A: And the fact that it was not practical, it was
18 clearly not practical, given the -- the
19 scenario that they were presenting the
20 information by, you know, I -- I'd reiterate
21 the need in order to maintain positive
22 drainage. In order to do that, you would have
23 to fill the portion of Gadsden Creek located at
24 the intersection of Fishburne and Hagood,
25 approximately four feet if I remember



1 correctly, to -- to get that positive drainage
2 to actually happen.

3 Q: Well at this point in the deposition we're
4 talking about creek restoration or remediation,
5 in other words, doing something to clean up the
6 creek. Would you agree with that?

7 A: Yeah, we -- when I say skim the surface, I, you
8 know, when I use that term I can't think of a
9 specific meaning for that. I, you know, if I
10 could expand on that a little bit, I would say
11 it was definitely talked about, and you know,
12 I believe the intention originally, under the
13 previous applications, was to leave an am- --
14 ammenitized feature there, so.

15 Q: You're talking about the tidal influence with
16 what now is just kind of a stormwater
17 management conveyance at the corner of Hagood
18 and Fishburne, right?

19 A: Well, I was talking about, again, the 2008
20 conceptual plan that showed the creek as being
21 filled, capped, and then would have a -- a
22 positive drainage. And as I discussed earlier,
23 if that were to occur, a large -- the majority
24 of the creek would lose its tidal influence
25 based on elevation.



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1 Q: All right, and you skimmed the surface of that
2 alternative, or potential alternative?

3 A: Right, that must have been what I was referring
4 to. You don't need to go much further than
5 that, I would call that skimming the surface.

6 Q: Public health, you don't know how much exposure
7 of any is occurring from the landfill
8 contaminants, any particular person, is that
9 true?

10 A: Can you repeat that? I'm sorry.

11 Q: You don't know how much exposure and any
12 potential contaminants from Gadsden Creek or
13 its tidelands is occurring to any particular
14 person?

15 A: No, I don't know.

16 Q: And you haven't sampled the contamination or
17 content of any flooding water eliminated from
18 Gadsden Creek, have you?

19 A: Personally, I have not. But I -- I am aware of
20 samples that have been collected and -- in
21 Gadsden Creek, and they were analyzed for
22 Enterococcus and E. Coli I believe.

23 Q: Okay, those ---

24 A: Yeah.

25 Q: --- are bacteria?



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1 A: Yes.

2 Q: And bacteria is found in high levels in
3 Brittlebank Park?

4 A: Yes. So I'm familiar with the Charleston
5 Waterkeeper's website, I do look at that
6 sometimes, and a lot of their sample locations
7 are located in the Ashley River along
8 Brittlebank Park.

9 Q: You don't know whether any bacterial findings
10 and samples from Gadsden Creek came from the
11 landfill or some other source though, do you?

12 A: Right, we can't confirm where it came from.

13 Q: Let's see. Are you aware, or you tell me.
14 You're aware that when the city got the permit
15 in the '70s to do the cap and stop using the
16 landfill and everything else, they -- they used
17 brick and other heavy materials to essentially
18 armor what is Gadsden Creek and that trench,
19 right?

20 A: I've heard that, I've seen no evidence of it.

21 Q: Okay. You're aware that that was the intent,
22 correct?

23 A: Honestly, this is -- might be the first time
24 that I'm really hearing that.

25 Q: You don't know whether or not that's true one



1 way or another?

2 A: I don't know.

3 Q: Okay. You mentioned with respect to the
4 Spring-Fishburne Tunnel permit condition that
5 prohibited the -- the use of excav- --
6 excavation of upland adjacent to Gadsden Creek
7 for mitigation purposes, correct?

8 A: Right.

9 Q: And those are uplands, not critical area
10 wetlands or creek itself, that's true, correct?

11 A: I believe they have been designated as uplands
12 during other delin- -- wetland delineation
13 efforts, and I'd like to say the reason that
14 it's applicable is because these areas would
15 expand the footprint of Gadsden Creek. So
16 essentially, they would become part of Gadsden
17 Creek and that was, you know, strongly
18 unadvisable based on the Army Corps position.

19 Q: This project poses an excavation to various
20 areas throughout the former landfill, doesn't
21 it?

22 A: Correct, but not for restoration purposes.

23 Q: No, but they will be excavated, won't they?
24 You're going to have to excavate for the storm-
25 -- for stormwater stuff, aren't you?



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1 A: Well, the -- yes, that's, that's true.

2 Q: And you're going to have to excavate -- plan to
3 excavate along Hagood, for almost an acre,
4 correct? For ---

5 A: Yeah, there is going to be -- that's correct.
6 There's going to be a large, I believe we're
7 calling it a stormwater conveyance feature at
8 the corner of Fishburne and Hagood.

9 Q: And to the extent you have any landfill from
10 that excava- -- those excavation activities,
11 you're going to have to find a place to put
12 them, aren't you?

13 A: Yes.

14 Q: And, and so it can be done?

15 A: Yes.

16 Q: All right. And doing that kind of excavation
17 work, you're going to have to be careful to
18 avoid any potential events to trigger a
19 liability, correct?

20 A: And can you clarify events?

21 Q: From runoff related to the landfill that you're
22 excavating?

23 A: Yes.

24 Q: And that is, in your opinion capable of being
25 done, though?



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1 A: Yes. With engineering controls in place,
2 absolutely. At that, that specific location,
3 and in looking at the, or, or thinking back to
4 the S&ME sample results that you showed me
5 earlier, it seems like a good place to do it
6 because there's fewer locations of buried
7 debris in that location. So yeah, I think you
8 would probably run into, to less debris that
9 you had to segregate and deal with as another
10 waste disposal issue.

11 Q: In that particular location, meaning the corner
12 of Hagood and Fishburne?

13 A: Right. That's, that's kind of where I remember
14 looking at maps, from that study that you
15 showed me that appeared to have fewer locations
16 of buried debris. So ---

17 Q: But that wasn't the only place that had no
18 debris present?

19 A: You know, I think there was some debris in that
20 area too. It was just, you know, again, a, a
21 hand auger boring is a discrete sample
22 location. It's, it's again, just one three
23 inch hole in a particular location. You know,
24 just because you didn't encounter buried debris
25 at that specific hole doesn't mean there's not



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1 something right next to it.

2 Q: Well, sure. My, my point is, is that that's
3 not the only location where no trash was found.
4 They found other places, other, other boring
5 samples later on down that didn't have any
6 evidence of trash. At least at the five foot
7 auger level. Yeah, you want ---

8 A: Can I -- can I see??

9 Q: I'm looking, for one, B17.

10 A: Uh-huh.

11 Q: Here is B17 and that other page, well, here you
12 go now.

13 A: Yeah, I apologize. I am aware of this but
14 haven't studied it ---

15 Q: That's fine.

16 A: --- in detail enough to understand the
17 contents. Okay yeah, this document's kind of
18 a you got some hits, you got some misses.

19 Q: Sure.

20 A: Along this -- along the entire stretch.

21 Q: All on one. Sometimes you might find your
22 answer, sometimes you might not.

23 A: Uh-huh.

24 Q: Now you in the course of assembling some of the
25 permitting documents, had occasion to -- well,



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1 you were the -- I think you, and no offense to
2 you of course, this is a word in your
3 deposition. You're kind of a scribe, right?
4 Meaning ---

5 A: Yeah.

6 Q: --- you take other peoples comments and kind of
7 combine them into a document?

8 A: Right. The, the preparation of the Alternate
9 Analysis in the supporting documentation was
10 absolutely a team approach and a lot of the
11 information that I was gathering from the team,
12 I had to memorialize in these documents in
13 order to submit them to the agencies for
14 review.

15 Q: And some of the edits that were requested came
16 directly from the City of Charleston, didn't
17 they?

18 A: Can you say that one more time?

19 Q: Some of the edits that were requested and some
20 of the permitting materials came directly from
21 the City of Charleston?

22 A: I don't recall.

23 Q: Let me -- let me draw your attention to an
24 email, dated January 11th, 2018. In which you
25 are according to -- well, let ask you this will



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1 refresh your recollection. And you're
2 purporting to relay the city's requested edits
3 to a submittal for WestEdge, related to the
4 permits. It's that first sentence there.

5 A: Yeah, so I, I see this email, I see that it
6 does reference City's requested edits. But
7 this email was written in -- on January 11th,
8 2018 and I have no idea what was in that link.

9 Q: I, I'm not asking for any particular edit, I'm
10 just -- you recall relaying city of Charleston
11 requested edits, don't you?

12 A: I don't recall that at all. This is the first,
13 I mean, this information right here appears --
14 that appears to be the case, but I, I just
15 don't have a recollection of it.

16 Q: You're not disputing the authenticity of that
17 email, are you?

18 A: No, I'm not.

19 Q: That's your email address?

20 A: Yes.

21 Q: And that's -- and you're emailing members of
22 the WestEdge team related this permit?

23 A: That's correct. And I, I just do not recall
24 what the city's requested edits would be. I
25 honestly don't recall them ever reviewing the



1 information that we submitted.

2 Q: And yet that documents purports to convey
3 requested edits from the City of Charleston,
4 correct?

5 A: I don't deny that.

6 Q: Okay.

7 **MR. CUNNINGHAM:** Just a moment, please, Your Honor.

8 **THE COURT:** Sure.

9 **MR. CUNNINGHAM:** I don't have anything else. Thank
10 you.

11 **MR. RUOCCO - REDIRECT EXAMINATION BY MS. SHAHID:**

12 Q: Mr. Ruocco, would you have participated in the
13 excavation of pits associated with construction
14 at WestEdge excavation pits?

15 A: Was I associated with them?

16 Q: Yeah. Did you have any experience with the
17 excavation of a pit -- what is an excavation
18 pit?

19 A: So ---

20 Q: A test pit?

21 A: Yeah. So, I, I, I think what you're referring
22 to is a photograph that was obtained from
23 Trident Construction. You know, we refer to it
24 as a test pit. We had to give it a label, but
25 what it was, was a large hole in the ground, we



1 estimated it to be 12 feet wide, 12 feet by 12
2 feet, about 15 feet in depth.

3 Q: Okay.

4 A: And we referred to that as a test pit, but I,
5 I was not on site when that was constructed.

6 Q: Okay. But have you been shown the photo?

7 A: Yes.

8 Q: Do you know the location?

9 A: I am vaguely familiar with the location, I
10 believe it was north of WestEdge, or 22
11 WestEdge where that building is now. But I
12 can't give you a specific pinpoint location of
13 where that was conducted.

14 Q: You understand the purpose why before
15 proceeding with construction, a test pit
16 contractor might do a test pit?

17 A: In, in this circumstance, I, I believe they
18 were using piles. There's all kinds of reasons
19 that a hole would have needed to be constructed
20 during the construction of those buildings.

21 Q: Okay. And from your Permittee Responsible
22 Mitigation Plan, you included a picture on page
23 30. Is this the test pit that I was asking you
24 about?

25 **MR. CUNNINGHAM:** Object on relevancy. This is not



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1 in the location of the project area, at least
2 the, the critical area. And it's also outside
3 the scope of cross. I was asking about
4 specific soil borings in Gadsden Creek when the
5 tidelands are in.

6 **THE COURT:** Ms. Shahid?

7 **MS. SHAHID:** This isn't the project area. It's at
8 the WestEdge project area. And ...

9 **THE COURT:** I'll let you proceed then.

10 **MS. SHAHID:** I can't get the ELMO? How do you zoom
11 out? I forget, yeah, there you go. There we
12 go.

13 Q: Did you -- were you provided this photo?

14 A: Yes, I was provided this photo.

15 Q: And was it from Michael Maher?

16 A: I believe Michael obtained it from Trident
17 Construction.

18 Q: Okay. And did you consider this informative to
19 be included in your Permittee Responsible
20 Mitigation Plan?

21 A: Yes. Because I believe this is the best visual
22 evidence of what we're dealing with at this
23 landfill.

24 Q: Okay. And can you describe what we're dealing
25 with?



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1 A: Absolutely. I've looked at this picture many
2 times. And the first thing that I noticed when
3 I saw this photograph was the sheens.

4 Q: Okay.

5 A: That are obvious on this side.

6 Q: Why is the sheen indicative of something that
7 would give you concern?

8 A: Well, you're dealing with something that is
9 floating on the top of water, it's means it's
10 not water, and sheens, discoloration, foams,
11 these are all visual things that you look for
12 when you're trying to identify contamination.
13 In fact, a good example of that would be the
14 Industrial Stormwater General permit that DHEC
15 has is part of their monitoring process for
16 that is to literally conduct visual monitoring
17 for contamination. And some of the specific
18 things that they asked you to look for are
19 sheens, discoloration, and foams. So, if I was
20 -- if this was an industrial site, and I was
21 filling out that form, this would be an area of
22 obvious concern.

23 Q: Okay. Anything else about this photo?

24 A: Foam.

25 Q: Okay.



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1 A: It's difficult to see in this photograph, but
2 -- okay, so this is -- this is a good reference
3 for the size of this hole, that bottle, we
4 determined that to be the size of a, a large
5 liquor bottle. And that's floating on the
6 water surface there. So I think everyone has
7 a good understanding of the size of what that
8 bottle would look like. And, you know, it
9 looks pretty small in this picture, it's a big
10 hole. And ...

11 Q: Okay.

12 A: The other things that you can note here is the,
13 I'm going to refer to it as the lithology for
14 lack of a better term, but your landfill debris
15 is approximately in this depth right here, in
16 this location.

17 Q: And based -- what do you base that conclusion
18 on?

19 A: Just visual evidence of debris.

20 Q: Okay. And what look like little white marks or
21 flags, is that what you're calling debris?

22 A: Yes. And there's lots of other trash it's,
23 it's difficult to see in this photograph. Down
24 here is some, what appears to be some building
25 materials. They're obviously uncovered in that



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1 test pit. Yeah, very, very difficult to
2 identify the, the contents of this time.
3 They've been severely degraded over time,
4 obviously.

5 Q: Okay. And you at least labeled the picture
6 when you send it with the PRM, the Permittee
7 Responsible Mitigation Plan, as representative
8 of the exposed landfill debris within the
9 jurisdictional areas located on the WestEdge
10 site. How did you confirm that?

11 A: Well, I, you know based on what we're seeing in
12 Gadsden Creek, if you think back to the video
13 where we were scraping off the sediment, and
14 uncovering the, the debris, it was about in the
15 general same depth as what you're seeing the
16 debris in, in this, this test pit, what we're
17 calling it. So I believe, that's where I --
18 where I was coming from in that statement.

19 Q: Okay.

20 A: And again, that was just to help someone who's
21 not familiar with the project to understand
22 what we're dealing with. Again, it was
23 difficult to hear about this project, and then,
24 you know, truly understand until you see it in
25 photographs of the -- again, I was just trying



1 to provide clarification for the reader.

2 Q: In your investigation of this typical sites
3 that come up for commercial sale where the
4 potential buyer seeks an environmental site
5 assessment, is it typical, or not typical for
6 you to see brown liquid running out of the bank
7 of the creek?

8 A: It's very rare.

9 Q: Okay. It's atypical?

10 A: Atypical.

11 Q: Okay. And when you saw that, and within
12 Gadsden Creek, did that trigger a concern?

13 A: Yes.

14 Q: And are there really any sampling standards
15 that exist for leachate?

16 A: There are no regulatory comparison limits.
17 Now, there are effluent limitations that have
18 been established, but we're talking about a
19 waste. This is a wastewater that needs to be
20 disposed of properly. Let's take Bees Ferry
21 landfill, which is about a 200 acre landfill in
22 Charleston County. It has modern landfill
23 controls, including leachate liners and
24 collection systems. That concentrated leachate
25 from the bottom of that landfill gets pumped



1 into storage tanks. And my company used to
2 have the contract that we, we sampled that
3 leachate, I can't remember if it was quarterly
4 or monthly. But we would literally open a
5 spigot, fill up a sample container, send it off
6 to a laboratory and they would tell us what's
7 in it. Based on the findings of that
8 laboratory analysis that allowed us to dispose
9 of that material at the wastewater treatment
10 facility, the Charleston Waterworks. And they
11 have their in-house chemists and professionals
12 that they have set their own limits to what
13 they're willing to accept. So from a
14 regulatory perspective, you can't discharge
15 leachate into a water without it being treated
16 first. If you treat it to a certain level, I'd
17 imagine to the drinking water standards, at
18 least unless you can get some sort of variance.
19 I guess there could be scenarios where you
20 could discharge leachate into a water. But
21 that's, I think you'd be very -- it'd be very
22 hard to find a situation where that's occurring
23 in a, a permitted lined landfill and a modern,
24 modern day landfill.

25 Q: Okay. So you saw evidence of a landfill by



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1 seeing what you've determined or what you
2 concluded was the waste for leachate, right?

3 A: That's right.

4 Q: And, and that derives from landfill operations?

5 A: Yes.

6 Q: Okay. And you considered that to be a possible
7 contaminant because of the tidal action that
8 would inundate the banks where that was seeping
9 from?

10 A: So, can you repeat that?

11 Q: So, did you consider that to be a potential for
12 contamination, because it would come into
13 regular contact with other waters and be
14 carried off site or on site?

15 A: Absolutely. I mean, if you think of a modern
16 landfill, that leachate is specifically
17 segregated from the rest of the materials
18 within the landfill, because it is a separate
19 type of waste that has to be handled completely
20 separately.

21 Q: And in this regulated environment, leachate is
22 accepted if it's treated based on your
23 explanation of what Charleston Water Simple --
24 System ---

25 A: Right. They'll accept it at certain levels for



1 treatment. But the other option would be doing
2 your own treatment on site. And then if you
3 could get the levels low enough with your own
4 treatment system, which would be, you know, a
5 tremendous expense, you could potentially then
6 discharge into a, a water body with an NPDES
7 permit.

8 Q: So leachate's not something you regularly see
9 in open a open creek, right?

10 A: I've never seen it in my career other than this
11 situation.

12 Q: And you're -- are you comfortable concluding
13 that it could be a source of contamination?

14 A: Yes.

15 Q: And is it a source potentially because it can
16 disperse elsewhere with water movement?

17 A: Yes, that's a concern. Absolutely.

18 Q: Okay.

19 A: And, you know, we talked about this being
20 habitat, and I agree that it is but you know,
21 the animals, the plants, they can't make a
22 decision not to inhabit this location because
23 of its contaminants. We understand it's
24 contaminated, I believe it's our obligation to
25 prevent that exposure from happening. American



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1 Journal of Public Health, as documented in the
2 1970s, going that far back, what, what we know
3 is what's common sense basically. If there's
4 leachate entering the environment, where we
5 have organisms living, that's going to
6 potentially work its way up through the food
7 chain, and according to the American Journal of
8 Public Health, potentially cause health
9 problems for humans.

10 Q: And would that be the reason we line landfills?

11 A: Yes, absolutely.

12 Q: And would that, that be the reason that
13 Charleston Water Systems wants leachate treated
14 before it discharges into the Ashley River or
15 Charleston Harbor.

16 A: Yes. 100 percent.

17 Q: And has -- at any time during your involvement
18 with this project, have you been provided with
19 anything that would lead you to conclude that
20 that is not leachate coming out the sides of
21 that creek?

22 A: Leachate is a term that I used, or because it
23 makes sense for the scenario that we're dealing
24 with and, you know, call it whatever you want.
25 This is liquid coming from the landfill. And,



1 you know, I know, know that GEL referred to it
2 as seepage. I don't think the terminology you
3 use is important. I think what's important is
4 that this is aqueous or, or water, regardless
5 of the source of the water, filtering through
6 the landfill, and picking up contamination.
7 That's, that's what con- -- leachate is and
8 that's why I've determined it's leachate.

9 Q: Thank you.

10 **MR. CUNNINGHAM:** I've got a little follow-up based
11 on this.

12 **THE COURT:** Uh?

13 **MR. CUNNINGHAM:** I've got a little follow-up based
14 on it.

15 **MR. RUOCCO - RECROSS-EXAMINATION BY MR. CUNNINGHAM:**

16 Q: Test pit ---

17 **THE COURT:** On a new matter raised?

18 **MR. CUNNINGHAM:** Yeah. Absolutely. And a little
19 bit on the last part too.

20 Q: Test pit was excavated with heavy machinery?

21 A: Yes, it would have had to have been excavated
22 with a track hoe, I would imagine.

23 Q: To a depth of 30, 40 feet?

24 A: No, I believe that was -- we estimated it to be
25 approximately 12 feet if I remember correctly,



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1 I may be mistaken.

2 Q: You don't recall precisely how deep that was?

3 A: No, we never knew. I estimated the depth based
4 on looking at the photograph.

5 Q: Okay. So you couldn't say for certain what
6 exactly the depth was?

7 A: No.

8 Q: Below five feet, certainly?

9 A: It certainly appeared to be below five feet.

10 Q: Likely below 10 feet?

11 A: I, I would say in some places around that test
12 pit, I, I, I could say that it was probably
13 around 10 feet, yeah.

14 Q: And would you agree that solution to pollution
15 is dilution?

16 A: No.

17 Q: No? You don't think the more you dilute a
18 potential contaminant, the safer it becomes
19 until it becomes a level where it is safe?
20 That's the whole point of MCLs, right?

21 A: Well I, I believe there are specific laws
22 against diluting pollutants so you can dispose
23 of them without analysis.

24 Q: That wasn't my question at all. I wasn't
25 talking about disposal of leachate. I was



1 talking about in general. You have a
2 contaminant, potential contaminant in a
3 potential water body. It could be a surface
4 water body. Just because you have a little bit
5 of contaminants doesn't mean the entire surface
6 water bodies unsafe too?

7 A: Well I, I would say this Bee's Ferry Landfill
8 has a perimeter landfill ditch. It's got
9 plenty of wildlife in it. I've see deer,
10 alligators, I've been to the site many times.
11 I would suppose because of the water in that
12 ditch, if just dumped the leachate in the
13 collection system directly into that ditch, it
14 would be diluted enough that you can sample it
15 and say, Hey, we don't really have a problem
16 here, so.

17 Q: That wasn't my question.

18 A: I'm sorry, can you repeat it? I apox- -- I
19 apologize.

20 Q: Sure. I said, if you have a big water body
21 that has, has a little bit of contamination
22 doesn't make the entire thing unsafe, because
23 it's been diluted by the rest of the water?

24 A: Yeah, I guess you could say that.

25 Q: Right. And the more you have, that's why you



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1 didn't want to have a sample at that time
2 because it would have been diluted right? The
3 leachate?

4 A: And, and it wouldn't have been representative
5 of the contamination if it's diluted.

6 Q: Well, it'd be representative of the surface
7 water at that point, wouldn't it?

8 A: I believ- -- I believe that's accurate, yes.

9 Q: Okay. You haven't done any bio accumulation
10 sampling whatsoever, have you?

11 A: No.

12 Q: That's talking about what kind of contaminants
13 are in organisms in this creek?

14 A: That's right, we have not conducted that type
15 of analysis.

16 Q: Thank you.

17 **THE COURT:** You may step down.

18 (Witness complies.)

19 **MS. SHAHID:** WestEdge calls ---

20 **THE COURT:** Everybody else? Okay. Everyone ready?
21 Okay.

22 **COURT REPORTER:** Raise your right, please.

23 (Witness complies.)

24 **COURT REPORTER:** Do you solemnly swear the following
25 testimony to be the truth, the whole truth and



1 nothing but the truth so help you God?

2 **MR. MAHER:** I do.

3 **MICHAEL MAHER,** having been duly sworn, testifies as
4 follows:

5 **COURT REPORTER:** Thank you.

6 **MR. MAHER - DIRECT EXAMINATION BY MS. SHAHID:**

7 Q: Mr. Maher, if you could state your full name
8 for the record, please?

9 A: Michael Thomas Maher.

10 Q: Okay. And where do you live?

11 A: 1 Cool Blow Street in Charleston, South
12 Carolina.

13 Q: Okay. Tell us a little bit about your
14 educational background, please.

15 A: Undergraduate degree is in Architecture,
16 Bachelor of Science in Architectural Studies
17 from the University of Wisconsin in Milwaukee.
18 I hold a Master's degree in architecture from
19 Rice University in Houston, Texas.

20 Q: Okay. And your work experience?

21 A: I have a varied experience. I am a registered
22 architect in the state of Wisconsin and worked
23 as an architect both in Wisconsin, Illinois,
24 and in South Carolina, although I'm not
25 licensed here, working in collaboration with



1 others. I have also been a professor of
2 architecture for Clemson University, University
3 of Arizona, University of Wisconsin, Milwaukee,
4 and also a couple of universities in Europe.
5 I hold the certification from the American
6 Institute of Planning and American Planning
7 Association, AICP. My work history in South
8 Carolina, I came to South Carolina first to
9 teach for Clemson University. And then
10 subsequently left the University and started
11 working for the City of Charleston in 2001 was
12 hired by the City of Charleston to start an
13 urban design office, what became the Civic
14 Design Center, which was a special office of
15 the Mayor in the executive department and urban
16 design center to study urban design and
17 redevelopment in downtown Charleston. I worked
18 in that role from 2001 through 2013.

19 Q: Okay. And then what did your role become in
20 2013?

21 A: In 2013, for, for a period of six months, I had
22 a dual appointment with the City of Charleston,
23 and with at the time the Horizon Project
24 Foundation. And then subsequently in 2014
25 began working full time for the what was the



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1 Horizon Project Foundation, now the WestEdge
2 Foundation.

3 Q: Okay. And tell us about the Horizon Project
4 Foundation.

5 A: If, if it's okay to call it the WestEdge
6 Foundation, I would prefer it?

7 Q: That's fine. WestEdge Foundation is a
8 501(c)(3) organization that was a collaboration
9 -- has been a collaboration between the City of
10 Charleston and the Medical University and its
11 foundation. It was formally established in
12 2011 as the Horizon Project Foundation. Went
13 through a couple of amendments to its
14 incorporation and ultimately in 2016 was
15 renamed the WestEdge Foundation in concert with
16 the project being renamed from Project Horizon
17 or the Horizon Project to the WestEdge
18 district.

19 Q: Okay. I'm going to show you some documents,
20 assuming I can lay hands on them. Can you
21 identify what I have labeled WestEdge 2?

22 A: This is the, I believe the original bylaws for
23 the Horizon Project Foundation.

24 Q: Okay. And if I can hold your pen for a second.
25 I've also marked WestEdge 3.



1 A: And so these are the amended restated bylaws of
2 the WestEdge Foundation.

3 Q: Okay.

4 A: I believe these were adopted in 2020.

5 Q: All right, and what I really meant to show you
6 was the articles of incorporation. I'm sorry
7 about that. Well, I think they're embedded
8 some of these, but I'm going to hand you back
9 WestEdge 2 because it speaks to the purposes in
10 objective, I'm sorry, just to -- just for you
11 to refresh your memory.

12 A: Sure.

13 Q: It speaks to the purposes and objectives of the
14 foundation. Here's WestEd- -- here's the one
15 that actually says WestEdge on it. Sorry about
16 that.

17 A: That's all right.

18 Q: And, and I, I note that those purposes and
19 objectives were also included in the articles
20 of incorporation. Can you explain to the Court
21 what these founding documents explain about the
22 function of the WestEdge Foundation?

23 A: Sure, the WestEdge Foundation was created as a
24 nonprofit, specifically as the agency to work
25 on behalf of the City Medical University, its



1 foundation, if you will, as a steward of the
2 redevelopment of WestEdge. We were created as
3 a -- as I mentioned, a 501(c)(3), we're
4 actually a specific designation in the tax code
5 of a 509(a)(2) organization, which is a
6 nonprofit that is specifically created to
7 support public agencies. So through that
8 designation, our specific role is to, as
9 steward of the -- of the project, work on
10 behalf and to support the, the organization's,
11 the City of Charleston, the Medical University
12 of South Carolina Foundation. It's embedded
13 within our mission and our purpose as being
14 organized for charitable, scientific and
15 educational purposes. And that our creation to
16 support those two organizations manifests
17 themselves first, in supporting the Medical
18 University's efforts in educational, scientific
19 and research and clinical activities, as well
20 as support the City's efforts in economic
21 development and improvement of quality of life
22 in it's neighborhoods, particularly on the west
23 side in the area of WestEdge.

24 Q: And that's embedded in the bylaws, was it also
25 embedded in the articles of incorporation that



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1 was filed with the Secretary of State?

2 A: Yes.

3 Q: Identical language is same for the purposes of
4 the foundation?

5 A: Yes.

6 Q: Okay. And what is -- what is meant by
7 supported organization, what's the relationship
8 with the supported organizations?

9 A: The relationship is that the the entity, the
10 WestEdge Foundation, if at any time or in its
11 efforts within its mission, its efforts should
12 go to help support literally, both through
13 financial means potentially, as well as through
14 its programs and activities, the, the goals and
15 mission of the two supported organizations.

16 Q: Okay.

17 A: So, it can manifest itself by programs that are
18 conducive to supporting the mission of those
19 two organizations. It could also be through
20 potential charitable distributions back to
21 those organizations.

22 Q: Okay.

23 **THE COURT:** And the two organizations are?

24 A: The City of Charleston and the Medical
25 University of South Carolina Foundation. The



1 Medical University of South Carolina Foundation
2 is also a 501(c)(3) and I believe it's also a
3 509(a)(2). And it is -- it's supported
4 organization is the Medical University of South
5 Carolina, which is the state agency.

6 Q: Okay. And what is the connection between the
7 City and MUSC and the WestEdge foundation?
8 What, what brings those entities together?
9 What con- -- shared concerns do they have?

10 A: They -- I, I believe that the collaboration
11 between the City and the Medical University
12 goes back a long way. But in regards to
13 WestEdge's and earlier Horizon, the
14 collaboration is really focused around the
15 Medical University's presence on the peninsula
16 of Charleston, and its ongoing activities
17 within the City of Charleston. And the long
18 term success and viability of the Medical
19 University and its activities within the City.
20 And so, the collaboration that all of us are
21 working towards is to make sure that the, the
22 City's efforts to promote economic development
23 and quality of life and the Medical
24 University's efforts to advance Life Sciences
25 and Health and health outcomes can work



1 together to, to continue to forge a positive
2 relationship and for that relationship to occur
3 within the City of Charleston, in the location
4 of the Medical District where it is today.

5 Q: Okay. What if any threats does the Medical
6 University face in its current location or the
7 Medical District?

8 A: The Medical District is -- as is the case in
9 many parts of Charleston, is an -- in an area
10 that has been fully developed for a long time.
11 And so, as a campus, it is physically bounded
12 by established neighborhoods, some of which are
13 residential in character, some of which are
14 smaller scale in character. And so, one of the
15 challenges for the Medical University as a
16 growing institution, both as a research
17 university and as a clinical enterprise, is
18 their ability to grow in that location. With
19 the consideration of its of its boundaries, and
20 with the fact that the campus is already
21 densely populated with buildings and other
22 activities, their ability to grow their
23 enterprise within that footprint is always
24 challenged. And has been for much of the 21st
25 century.



1 Q: Has the Medical University explored the option
2 of leaving the City?

3 A: Yes, the -- back in 2004, the Medical
4 University was engaged in its long term
5 strategic plan and included within that a long
6 term plan that was called the MUSC 2020. So
7 it's hard to call it a long term plan now that
8 we're in 2022. A long term plan about their
9 campus and, and how they could accommodate, or
10 if they could accommodate the long term growth
11 of their enterprise in the existing Medical
12 District. As a part of that study, it's my
13 understanding the Board of Trustees had also
14 started to explore opportunities for relocating
15 the campus to, what we call a greenfield site
16 further north along I-26, as a place to plant
17 their flag for the long term future. And so,
18 in my role with the city in 2004, myself and a
19 -- and a couple other city staff members were
20 tasked with working with the Medical University
21 and their staff and with their planning team to
22 come up with strategies that can ensure their
23 long term survival and their long term success
24 in their current location within the City of
25 Charleston on the peninsula.



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1 Q: In your role with the City, did you understand
2 the City's concerns about losing MUSC?

3 A: Absolutely.

4 Q: What were those concerns?

5 A: Will it be many-fold for the city. You know,
6 the Medical University, one is a prestigious
7 institution, losing a prestigious institution,
8 outside the city limits would have been
9 certainly detrimental to the life and, and
10 quality of life within the City. The Medical
11 University is one of our -- is the largest
12 single employment area, the Medical District,
13 single employment center within the City. So,
14 it has a very significant economic impact. It
15 is -- besides being a significant place of
16 employment, it is also a very significant
17 provider of health care. And being located
18 within the City and within its area on the west
19 side of the peninsula makes it obviously much
20 more convenient, much more accessible to the
21 population of the City. Those are many reasons
22 why it's very important.

23 Q: Okay. So, was that the impetus for the forming
24 of the foundation?

25 A: In, in a manner of speaking. The, the process



1 began in 2004. It first began as a task force
2 between the City and the Medical University.
3 And that task force was focused on looking at
4 strategies for planning and entitlement efforts
5 to try to make possible and to ensure their
6 long term presence on the peninsula. It was
7 also driven by the Medical University's
8 commitment at that time to building a new --
9 the first of three new hospitals. But at that
10 time, the Ashley River Retire which now was
11 built. They were in the planning stages of and
12 we're trying to determine where they should
13 build that. And part of our task was to make
14 sure that they built that on the campus within
15 the City of Charleston.

16 Q: Okay.

17 A: And to work with their team to come up with a
18 framework where they could do so. That
19 taskforce then worked for several years to
20 expand upon that idea.

21 Q: Okay.

22 MS. SHAHID: I'm going to mark two exhibits.
23 WestEdge 2 and 3.

24 (Respondent's Exhibit Numbers 2 and 3 were marked for
25 identification purposes.)



1 Q: Mr. Maher, do you recognize Exhibit 2?

2 A: Yes.

3 Q: Is that the articles of incorporation that I
4 had trouble finding earlier?

5 A: Yes. This is the articles of incorporation.
6 This is actually an amendment that was done in
7 2016 when the organization changed its name
8 from Horizon Project Foundation to WestEdge
9 Foundation. But it was simply an amendment of
10 an original articles.

11 **MS. SHAHID:** Your Honor, at this time, I would offer
12 Respondents Exhibit 2 into evidence.

13 **MR. CUNNINGHAM:** I don't have an objection. I just
14 thought Exhibit 2 was the bylaws. I don't have
15 2 on the table.

16 **MS. SHAHID:** Yeah, it -- misnamed them in my earlier
17 testimony. In my earlier -- okay.

18 **THE COURT:** Mr. Churdar?

19 **MR. CHURDAR:** I have no objection.

20 **MS. SHAHID:** And I'm also going to share ---

21 **THE COURT:** Keep on going, I'll admit it latter,
22 maybe. (Laughter).

23 **MS. SHAHID:** I move for admission of Respondent's --
24 -

25 **THE COURT:** It's admitted.



1 (Respondent's Exhibit Number 2 was admitted into
2 evidence.)

3 Q: I'm also going to show you Respondent's Exhibit
4 3. And do you recognize Exhibit 3?

5 A: I do.

6 Q: Okay. And I talked earlier about the purposes
7 that were set forth, at least in the initial
8 articles of incorporation, and in the bylaws.
9 Are those -- what is Exhibit 3?

10 A: Exhibit 3 is an ordinance for the City of
11 Charleston establishing the Horizon TIF
12 district, on the west side of the peninsula.

13 Q: Okay. And it's -- an, an ordinance still in
14 effect today?

15 A: It is.

16 Q: Does it have a citation at the top of the page?

17 A: Yes

18 Q: Yes.

19 A: 2008-166.

20 Q: Okay. And are you familiar with this?
21 ordinates?

22 A: I am.

23 **MS. SHAHID:** Okay. Your Honor. I would offer into
24 evidence this copy of the City ordinance. It's
25 still in place.



1 **MR. CUNNINGHAM:** No objection. It's already in, I
2 think we introduced it ---

3 **THE COURT:** Okay. You all right, accumulative
4 evidence, right?

5 **MR. CUNNINGHAM:** For that one, I am, Your Honor.
6 (Laughter)

7 **THE COURT:** All right.

8 **MS. SHAHID:** And I might take that with me.

9 **THE COURT:** Mr. Churdar?

10 **MR. CHURDAR:** I have no objection, I'm sorry.

11 **THE COURT:** It's admitted. Again.

12 **(Respondent's Exhibit Number 3 was admitted into**
13 **evidence.)**

14 Q: And, looking at Exhibit 3. If I can get the
15 ELMO.

16 **THE COURT:** She wants the ELMO.

17 Q: What do you -- what is your understanding of a
18 TIF district?

19 A: Well, TIF -- TIF is tax increment financing.
20 And it is a mechanism that's enabled by a state
21 statute, South Carolina state statute that
22 defines tax incre- -- increment financing as a
23 mechanism for facilitating redevelopment in
24 areas that may be -- the, the technical term is
25 blighted. May be blighted due to various



1 reasons. It's a mechanism by which the taxing
2 authorities in that area can facilitate
3 redevelopment through a dedicated stream of tax
4 revenues that are the increment, if you will,
5 the increased taxes that occur by virtue of
6 redevelopment to finance public improvements
7 and public benefits.

8 Q: Okay. In order for your land to be put into a
9 tax district, there has to be a finding that
10 it's blighted?

11 A: Yes. There -- you, you -- there, there's a
12 number of steps. The first is that you have
13 to, as you say, determine and, and demonstrate
14 that there are challenges in the area that
15 represent or are caused by blighted conditions.
16 And blighted conditions are defined in the
17 statutes, can include a various number of
18 things which are, are here in, whereas clauses.
19 Do you want me to read?

20 Q: Yes.

21 A: Okay. Things such as age, dilapidation,
22 obsolescence deterioration, presence of
23 structures below minimum code standards,
24 excessive vacancies, presence of or potential
25 environmental hazards, lack of storm drainage



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1 facilities, deleterious land use or layout,
2 depreciation and physical maintenance and
3 static or declining land values.

4 Q: Okay. And what, what piece of property is this
5 ordinance referring to?

6 A: In this case, and as a part of establishing the
7 district, you define actual boundaries of the
8 district and include, within the ordinance
9 which I don't believe is included in this
10 portion or this copy here, all of the tax map
11 numbers for each of the properties. And so,
12 all of those are established as being within
13 the district. And I'm sorry I lost my train of
14 thought.

15 Q: Is it your understanding this is the West- --
16 WestEdge area?

17 A: Yeah. This is -- it's called the Horizon TIF
18 District. We didn't change the name when we
19 changed the name to WestEdge, it still is
20 enforced as the Horizon redevelopment area or
21 Horizon TIF District. It encompasses all of
22 the WestEdge area, but also encompasses some
23 areas in and around WestEdge, both to the east
24 along Spring Street, across the river along the
25 Ashley River Bridge, and a little bit down the



1 coast over towards Calhoun Street. It, it has
2 a relatively odd shape when you look at the
3 map, but it includes all those parcels that
4 have been identified when we established the
5 district.

6 Q: So the district itself exceeds the boundaries
7 of the WestEdge project as we've seen them in
8 various maps ---

9 A: That's correct.

10 Q: --- during the course of this trial.

11 A: That's correct. Although the intent in
12 creating the district was specifically for
13 facilitating the redevelopment of what is not
14 WestEdge.

15 Q: Okay. And how, how do you have knowledge of
16 the intent?

17 A: I wrote the ordinance.

18 Q: Okay. And ---

19 A: In collaboration with the City's legal team,
20 but was, was instrumental in writing both the
21 ordinance and the TIF plan that goes with the
22 ordinance.

23 Q: So, at the point that the ordinance was
24 written, had, had a site already been selected
25 that might be appropriate to further the goals



1 of the foundation?

2 A: Yes.

3 Q: Okay. And what was the criteria for selecting
4 the, the site that you found? Was it the
5 proximity?

6 A: I have to correct the last answer because it
7 wasn't -- at the time, the foundation's still
8 did not exist.

9 Q: Okay.

10 A: But it was for advancing the, the concept of
11 the project that, that ultimately, WestEdge
12 Foundation, Horizon Project Foundation, then
13 WestEdge was created to essentially be the
14 steward of.

15 Q: Okay. And why that location?

16 A: And again, it comes out of the early studies
17 with the Medical University and with its
18 planning teams had been identified for a lot of
19 reasons as being an ideal location for the type
20 of effort that WestEdge would become. Its
21 close association, its proximity to the Medical
22 University, the overall conception of it, which
23 was a mixed use district that would include and
24 help facilitate the growth of biotechnology and
25 life science companies and, and incumbent



1 research and other activities that would go
2 with that, which may very important, its
3 location directly adjacent and just to the
4 north of the Medical District. That proximity
5 given that the research and the potential
6 commercialization of that research would be
7 likely driven by researchers and doctors who
8 are working in the Medical District.

9 Q: Okay. And do you understand how tax increment
10 financing works?

11 A: I do.

12 Q: Can you explain that to the Court?

13 A: The -- as I mentioned, there's a number of
14 steps in establishing the district. In
15 addition to defining blight, there is also a
16 test within the statute, which is essentially
17 the but for test, which is a recognition that
18 the area needs new investment in order for
19 redevelopment and positive growth in the
20 activities and the quality of life in that area
21 to happen, and that but for the creation of a
22 TIF district or mechanism like tax increment
23 financing, the area will not of its own accord
24 or of the private sectors accord thrive in that
25 way because of the missing pieces that are



1 defined in the blighted conditions, whether
2 it's, in our case, in particular environmental
3 conditions, lack of infrastructure or
4 substandard infrastructure, draining problems
5 and so forth.

6 Q: Okay. And then how does the funding mechanism
7 -- how do you benefit from that?

8 A: So, once you establish the district, the county
9 assessor does an assessment of all of the
10 properties that have been identified within the
11 plan and establishes a baseline tax revenue
12 that are -- that is at that date coming from
13 all of those properties. And that baseline
14 essentially, with an escalator that's built in
15 through the statute, that baseline continues to
16 flow to the, the taxing agencies that are
17 within the -- that govern over that area. So
18 you have the city as a taxing authority, you
19 have the county, the county's parks and
20 recreation is a separate millage, the school
21 board the school district is a separate
22 millage, so all of those entities continue to
23 receive during the life of the district, that
24 baseline plus escalation of the tax revenues.
25 The increment is an -- a recognition that as



1 you make the investments in the area, the
2 property values will go up, whether it's from
3 increases that, that occur within the overall
4 district because improvements you've made. But
5 in our case, in particular, because of the
6 amount of left vacant land. New development
7 creates a significant increase in tax revenues
8 from land that is either vacant or in the cases
9 of properties that are publicly owned, or
10 paying no tax revenue. And so the increment is
11 the mechanism of identifying all of the tax
12 revenue that occurs above that baseline and
13 creating a dedicated funding stream through
14 that for funding improvements, public
15 improvements, public benefits within that TIF
16 district.

17 Q: Okay. And at some point, do you get a
18 disbursement resulting from the accrued taxes?

19 A: Yes. I mean, one of the challenges of, of TIF
20 is that it's predicated on if you make
21 investments in infrastructure to improve the
22 area, then redevelopment can also then be
23 facilitated. By that redevelopment increased
24 property tax revenues will create -- be
25 created. But the increased property tax



1 revenues come after you've had to make the
2 investments. So there's a kind of a chicken
3 and egg challenge you have. And so the
4 mechanism of bonding against future tax
5 revenues is one of the key pieces of how a TIF
6 district works.

7 Q: Okay.

8 A: So as increases in increment occur, you can
9 bond against those increased revenues over the
10 life of the TIF, which in this case, began as
11 a 15 year TIF district. You can essentially
12 bond against that 15 years of future revenue in
13 order to pay for the infrastructure. It still
14 creates a problem because that bonding won't
15 occur until after you've built the
16 infrastructure as well. But we can -- that's
17 one of the challenges and one of the beauties
18 of trying to work in a TIF district.

19 Q: Now, were you responsible for envisioning the
20 infrastructure necessary to make the WestEdge
21 project successful?

22 A: At a very conceptual level in their -- in the
23 establishment of the TIF district, yes.

24 Q: I, I guess what I'm asking you is, what type of
25 infrastructure are we talking about? What did



1 the area need with this first began?

2 A: Certainly, the most glaring and obvious need
3 was improvements to drainage infrastructure.
4 The area also suffered from really a lack of,
5 of good road systems. Both roads that were
6 deteriorating, as well as within the overall
7 area, not enough road structure to actually
8 support development. Other utilities,
9 communications, electricity, so forth, as well
10 as infrastructure that helps support the
11 quality of life. Improvements to existing
12 green spaces, improvements to connectivity,
13 pedestrian and bike and transit connectivity.
14 So all of these types of infrastructure
15 elements are put together in, in a TIF plan and
16 identified within the TIF plan as investments
17 that are expected to be made over the life of
18 the TIF district within that TIF district.

19 Q: The type of -- or the degree of improvements
20 that you're speaking of, are they pretty
21 expensive?

22 A: Very expensive.

23 Q: Okay. And is it -- would it be difficult to
24 get somebody privately to make that investment?

25 A: Yes. And it goes partly back to the but for



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1 test, but for creating this mechanism, there
2 was not another man mechanism by which the
3 investments in these necessary pieces of
4 infrastructure could occur.

5 Q: Okay.

6 A: They're too significant for the private sector
7 to be expected to make -- to, to invest in.

8 Q: It -- so, did you sort of have a wish list
9 within the concept plan that kind of showed how
10 you wanted things to proceed?

11 A: I'll -- I prefer to call it a strategy map than
12 a wish list.

13 Q: Okay. You, you've made some items, is there
14 anything, you know, you've talked about roads,
15 you've talked about the flooding, the
16 contamination issue. I mean, are there any
17 other amenities or is the sky the limit on what
18 you can do to make the community better or the
19 area better?

20 A: Well, within creating the TIF district, you,
21 you establish the TIF plan, which defines what
22 the monies will be used for. Now you, you
23 establish that in pretty general terms, because
24 you are creating a 15 year plan. So it's, it's
25 a little bit of fortune telling, if you will.



1 So you do want to identify what you think the
2 infrastructure and other public needs will be
3 over the next 15 years. And then try to write
4 those into the plan so that when you have an
5 opportunity to design and construct a piece of
6 infrastructure or an improvement to a green
7 space, or whatever it might be, it's it's
8 already in the TIF plan, because you're only
9 allowed to spend to TIF funds on elements that
10 have been identified in the TIF plan up-front.
11 You certainly can amend and add things later.
12 But it's through an amendment process.

13 Q: And am I correct that those elements can only
14 be elements that are public infrastructure?

15 A: Not public, not only public infrastructure, but
16 they do have to be publicly owned facilities,
17 or facilities that provide an overreaching
18 public benefit, if you will.

19 Q: Okay.

20 A: So, it's certainly fair to say that TIF funds
21 are not used to support private development.

22 Q: Okay.

23 **MS. SHAHID:** If I could mark this. That's 2a.

24 **(Respondent's Exhibit Number 2a was marked for**
25 **identification purposes.)**



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1 Q: Finally found what I was looking for. Do you
2 recognize 2(a)?

3 A: This is the first amendment to the articles ---

4 Q: Right.

5 A: --- of incorporation.

6 Q: But does it include some language about the
7 purpose ---

8 A: It does.

9 Q: --- of the ag -- of the organization?

10 A: It does.

11 **MS. SHAHID:** Your Honor, at this time, these are
12 articles -- amendments to articles of
13 incorporation, I'd offer them as Exhibit 2(a).

14 **MR. CUNNINGHAM:** Okay.

15 **MR. CHURDAR:** No objections.

16 **THE COURT:** It's admitted.

17 **(Respondent's Exhibit Number 2(a) was admitted at**
18 **this time.)**

19 Q: And so, looking at 2(a), wherein the purposes
20 are set out. The first one is, that you're
21 organized exclusively for charitable,
22 scientific and educational purposes and
23 established to promote and to charitable,
24 educational, scientific research and clinical
25 activities of the Med U. And then the second



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1 one is, no part of the net earnings of the
2 corporation shall inure to the benefit of or be
3 distributable to any member, Trustee officer or
4 director of the corporation or any private
5 individual. So explain, as we look at the
6 WestEdge development, and we see that
7 development has begun, commenced, how the
8 funding works?

9 A: The, the WestEdge Foundation is focused on, if
10 you will, the implementation of the master
11 plan, and facilitating what's generally
12 referred to as the horizontal development, the
13 creation of infrastructure to support and
14 attract vertical development or private
15 development of buildings.

16 Q: Okay.

17 A: And so, the creation -- the construction of the
18 buildings are all done through private, private
19 developers. The creation of the infrastructure
20 is a primary responsibility of the WestEdge
21 Foundation in collaboration with its team. We,
22 we work with consultants and others who help us
23 to do that work, but that's our primary
24 responsibility.

25 Q: Okay. And how about internally? Does the



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1 foundation get to divide profits up or get its
2 own piece of the pie from the TIF funds to
3 spread around with each other?

4 A: No. As indicated in, in line B, but also as
5 indicated in our bylaws. None of the profits,
6 or benefits, or any income that comes to the
7 WestEdge Foundation is distributable to any of
8 the directors or any of the staff or any of the
9 others than through salaries, compensation for
10 work that you do. The intent as a public
11 charity with two supported organizations is
12 that any financial revenues that the WestEdge
13 foundation creates or receives are either used
14 to reinvest in and, and promote and achieve our
15 mission or to redistribute to our two supported
16 organizations, both of whom are public
17 agencies. Well, the City is a public agency.
18 The Medical University Foundation is a
19 nonprofit who supports another public agency
20 being the Medical University.

21 Q: Okay. And do you have a board?

22 A: We have a 13 member board?

23 Q: Is your board paid?

24 A: No.

25 Q: Your boards a volunteer board?



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1 A: It's a volunteer board, yes.

2 Q: Is your board chair here today?

3 A: Cheryl Kenard is here, has been all week.

4 Q: Okay. And she's the chairperson?

5 A: She is the chairperson.

6 Q: Okay. How do you supervise or ensure that
7 development is conducted in a manner that
8 serves the public mission of the foundation?

9 A: So, we worked in -- with our consultant team to
10 develop the master plan and set out within the
11 master plan, what the overall redevelopment and
12 the goals of the redevelopment would be, and
13 how that redevelopment would help to advance
14 our mission. And, by extension, the mission of
15 the City and the Medical University and its
16 foundation.

17 Q: So you have some control over what's proposed
18 or how it's used?

19 A: Yes. We first -- in the in the preparation of
20 the master plan, and in creating the master
21 plan, then it becomes the guiding document for
22 the redevelopment. And then in the
23 implementation of the master plan, you know,
24 each element of the master plan, as its
25 implemented, you know, we -- if you will



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1 control when and how that will occur, if it is
2 an infrastructure, project of infrastructure,
3 or if it is the transfer of a piece of property
4 for private development, in either case, we --
5 the WestEdge board controls where and how and,
6 and when to go forward with those things.

7 Q: Okay. And you've already done some development
8 within WestEdge. When did you break ground on,
9 on this project?

10 A: The, the 99 WestEdge project, the Caroline was
11 the first project to break ground. That broke
12 ground in 2015. And that is a mixed use
13 project, includes 1,000 car parking deck that
14 is now owned and operated by the City of
15 Charleston. It includes an -- an adjacent
16 private development of 237 apartments and some
17 ground floor retail. The second project that
18 was built was -- broke ground in 2016. And
19 that's 10 WestEdge, which is a -- another mixed
20 use building. It's -- it include an 800 car
21 parking deck that was build privately and is
22 owned and operated privately. The ground floor
23 is primarily or significantly occupied by
24 Publix grocery. You've heard about that a
25 couple of times today. Very important part of



1 the -- the project, very important part of the
2 master plan, and a very important goal of both
3 the City and the Medical University to try to
4 create a resource of a supermarket. And in
5 this case, a supermarket with a pharmacy, in an
6 area of the City that was underserved both
7 close to the Medical University, but also on
8 the westside of the peninsula. And then it
9 also has 350 apartments on top of that retail.

10 Q: Okay.

11 A: And then the third project is 22 WestEdge,
12 which is our first research office and
13 laboratory building. It's a hundred -- about
14 150,000 square foot office research and lab
15 building. It has ground floor retail as well.
16 It includes various tenants now, including
17 biotech companies, biotech and life science
18 companies. Both, established and thriving and
19 some startup. As well as research institutes
20 and also, office in activities of the Medical
21 University. Its bioinformatics department is
22 located there. There are other activities
23 within the building, but that -- that's the
24 third project that was completed, for better,
25 for worse, in April of 2020. Not many people



1 needed an office building in April of 2020,
2 unfortunately. And then the fourth project, if
3 you will, in all of this, is the infrastructure
4 that goes with it, that makes it possible. As
5 an example, 22 WestEdge would not have been
6 possible without a new street because it's in
7 the middle of the site. It would not have been
8 accessible to -- to the public without that
9 infrastructure. And so, the infrastructure has
10 been a very significant investment. It's been
11 very expensive infrastructure. Much more
12 expensive than standard infrastructure because
13 of, as you've heard already, challenges of the
14 site; settlement challenges, contamination
15 challenges. They all have in -- in some cases,
16 caused infrastructure to cost as much as ten
17 times what it normally would cost in a -- in a
18 different situation.

19 Q: Okay.

20 A: And again, that goes back to the importance of
21 the TIF. Without that, there would not be the
22 ability to make those investments, especially
23 when those investments exceed normal costs in
24 any other location.

25 Q: And you have work left to do?



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1 A: Yes. What I've just described really
2 represents the first phase of probably three
3 major phases of the project.

4 Q: Okay. And how dependent is your -- the goals
5 of the WestEdge Foundation on the ability to
6 correct the drainage problems and contain the
7 landfill?

8 A: It's very important to us both for the success
9 of WestEdge, but also for the success of the
10 westside. I think as you've heard throughout
11 this week, the challenges that the flooding
12 bring make life on the westside very often,
13 very difficult. I think it could -- it
14 shouldn't be underestimated, the impact of
15 repeated flooding at the intersection of Hagood
16 and Fishburne. In addition to it being the
17 location or adjacent to the location of the
18 City's police headquarters, it's also adjacent
19 to the Army Reserve National Guard headquarters
20 that are located on the peninsula. It's also
21 adjacent to the Army Corps of Engineers
22 headquarters. It is also adjacent to -- to
23 three public schools where students are trying
24 to get to school on a daily basis. So, in
25 addition to those kinds of impacts, it has the



1 potential to reduce the ability and
2 marketability of both offices and residences
3 within WestEdge.

4 Q: And the -- the blight that is referenced in the
5 ordinance and -- and part of the requirements
6 of the TIF statute, is -- are these conditions
7 that you described the basis for blight con- --
8 the blight conclusion?

9 A: Yeah. The -- the -- the flooding conditions,
10 the -- the history of the site as a landfill,
11 the settlement conditions, these are some the
12 factors that went into the -- the -- there are
13 other aspects of the creation of the TIF plan
14 relative to what the statute defines as
15 blighted conditions. That includes the
16 planning of the land and the -- and so forth.
17 But yes. All of these factors fed into the --
18 the need and the -- and the importance of
19 creating the TIF district.

20 Q: Can you continue with WestEdge development
21 without the permits that we're fighting for
22 here today?

23 A: We would -- we would certainly continue. We
24 would be -- we would certainly continue to be
25 negatively impact -- impacted as are the people



1 in Gadsden Green and people on the westside by
2 the flooding. It would continue to make
3 challenges for the success of new buildings
4 within the district, if they're not accessible
5 to the public because of flooding conditions.
6 We certainly would -- would -- would -- with
7 the momentum that we've had, want to continue.
8 We've created a -- a high quality environment
9 and we want to continue to do so. But without
10 the ability to address this problem, which we
11 have an opportunity and a window to do now,
12 this problem will only get worse and will only
13 impact everybody more significant as we move
14 into the future.

15 Q: Why do you think it will only get worse?

16 A: Well, as has been described, the -- the
17 condition where the land continues to settle,
18 but probably more significant is the
19 accelerating level of tide rise; the sea level
20 rise, the increasing occurrence of tidal
21 flooding, the increasing occurrence of high
22 tides, not king tides, not the significant high
23 tides, but simply high tides that close down
24 streets that impact the area. If one accepts
25 that within the next 25 years we may have as



1 much as two feet of sea level rise in areas in
2 tidal swings, you can imagine what that would
3 mean for an area that already is impacted too
4 often.

5 Q: Okay.

6 **MS. SHAHID:** Can I mark this Exhibit 40? My numbers
7 are all over the place. It's because we
8 prepared an exhibit list we haven't followed.

9 **(Respondent's Exhibit Number 40 was marked for**
10 **identification purposes.)**

11 Q: Can you identify Exhibit 40?

12 A: Yes. This is a -- it's essentially a report
13 that I had assembled demonstrating various
14 occasions of -- of tidal flooding, primarily
15 along Hagood Avenue.

16 Q: Okay.

17 A: Through the last probably six years of history,
18 maybe eight years of history.

19 Q: Okay. Are you saying the -- that -- these
20 pictures that we're about to look at are the
21 only events of tidal flooding in the past eight
22 years?

23 A: No.

24 Q: Okay.

25 A: And -- and in fact, most of these represent



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1 just one day of a multi-day type of event.

2 Q: Okay. So, we'll go through these. And you
3 include some information from NOAA. And I'm
4 wondering what did this -- what -- why did you
5 think that information was necessary?

6 A: So, the -- the photograph demonstrates -- and
7 these are all photographs that I took myself.
8 The photo demonstrates visually what that
9 condition is at -- at the high tide at the
10 time.

11 Q: Okay.

12 A: And the observations of both the date and the
13 -- what the weather conditions and I think in
14 most of these cases, these are not compound
15 flooding events. These are mainly tidal
16 events. And then, the graph is historical
17 record of that -- of that date, the NOAA record
18 of what was the predicted high tide and what
19 the observed high tide was on that particular
20 tidal event.

21 Q: So, January 31st, 2014 a sunny day flood event.
22 Did the occurred tide exceed the predicted
23 tide?

24 A: I -- I believe that's correct.

25 Q: Okay.



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1 A: Hard -- the colors are a little bit washed on
2 here.

3 Q: Yeah. Okay. And August 28th, 2015, you took
4 a picture at night for any particular reason?

5 A: Well, the tide happens when it happens.
6 Sometimes it happens during the day. Sometimes
7 it happens at night. I think it's more
8 dangerous at night and probably less recognized
9 at night. But this was an occasion of a -- of
10 a nighttime high tide. And then the -- again,
11 the graph trying to establish the -- the level
12 of that based on observation and the
13 predictions.

14 Q: Okay. And one might have said eight -- I see
15 an eight foot and six foot and two lines at the
16 very right hand side of the graph. Is that
17 where you would derive that data?

18 A: Yes. I -- I can't read ---

19 Q: I know.

20 A: --- on the screen ---

21 Q: Yeah.

22 A: --- unfortunately.

23 Q: Okay. August 31st, 2015. This is again a
24 sunny day event.

25 A: That's correct.



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1 Q: Okay. And this is the intersection of Hagood
2 and Fishburne.

3 A: This is from -- to the -- just to the south of
4 Line Street on Hagood looking towards
5 Fishburne.

6 Q: Okay. February 8th, 2016.

7 A: Yes. This is similar location.

8 Q: Okay. And was it your testimony that you --
9 you got a snapshot, but sometimes these events
10 hang around for a while?

11 A: Yes. If you could go back to that image, I
12 would like to ---

13 Q: Okay.

14 A: Just for understanding, the bus that you see
15 there is part of the Medical University's
16 shuttle system.

17 Q: Okay.

18 A: So, I think has been described earlier, the
19 large gravel lot is a significant resource of
20 parking for the Medical University for
21 employees. There are about 1,200 parking
22 spaces there. And so, they use that during the
23 day and so people then are shuttled from that
24 location. And so, during that shuttling
25 process the buses in -- in a lot of cases have



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1 no other route that they can take than through
2 the -- the edge of the flooding here at -- at
3 Line Street ---

4 Q: In order to pick up their passengers?

5 A: In -- in order to pick up in their route and
6 because of -- because again, of some of the
7 challenges of -- of road infrastructure in this
8 area, there is not as strong a connectivity as
9 we would like and as will be the case after
10 WestEdge is complete. So, the have to make a
11 little bit of circu- -- circuitous route
12 through the area in order to pick up passengers
13 and then to convey them across to the medical
14 district.

15 Q: And we have October 8th, 2016, which was a
16 Category I hurricane.

17 A: That's correct. So, this ---

18 Q: So ---

19 A: --- this is one even that is not obviously a
20 sunny day event. In -- it's -- it's -- in this
21 case, I think truly a compound event. There
22 was a high tide that was in close concert with
23 some of the stronger rainfall components of
24 this event. And -- and so, as you see, this is
25 from the Citadel stadium looking to the north



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1 -- to -- to the south along Hagood.

2 Q: Uh-huh.

3 A: And so, obviously, everything in this case is
4 -- is -- is overwhelmed and -- and I think this
5 is a -- the type of event that our engineers
6 would say, we cannot design for this event.

7 Q: Okay. October 18th, 2016.

8 A: Yeah. So, this -- this actually is a
9 photograph from -- at the time, from my office
10 window. My -- for -- from to -- 2013 until
11 2020, my office was in Harbor View Tower, which
12 is at 19 Hagood Avenue. And so, I looked out
13 over this area and continue to this day in my
14 new office to do so. So, was able, have been
15 able and continuously have the opportunity to
16 observe the conditions all along in WestEdge,
17 but in particular, in the areas along Hagood
18 and -- and through this watercourse.

19 Q: Okay. July 31st, 2019, sunny -- a -- a
20 nighttime sunny day flood, tidal flood.

21 A: It's a starry night flood. This is from the
22 intersection of Fishburne and Hagood looking
23 southward.

24 Q: Okay.

25 A: And again, I think throughout this, I think



1 it's also informative to understand that while
2 there are tide predictions that are based on
3 expectations, and I'm not -- I'm not a clim- --
4 climatologist or any of these types of
5 scientists, but I've been struck by the -- the
6 delta very often between what's been predicted
7 and what the actual high tides were.

8 Q: Okay.

9 A: And I think that's a challenge for somebody,
10 for example, as earlier with the City's
11 emergency management, you know, we have
12 predictions, but they don't always predict that
13 the significance of what the event actually
14 might be.

15 Q: And has -- has there been a period of time when
16 you've seen these events begin to increase?
17 We're looking at October 9th, 2021.

18 A: Yes. I think it's been documented that these
19 events are increasing in frequency and -- and
20 also in intensity. The -- the level of the
21 tide and also the amount of time that the tide
22 -- the number of days in a row for example that
23 the tide may impact an area. And I believe
24 from my -- my recollection, during this
25 particular event, this was for a period of --



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1 of more than five days. I think it was as long
2 as eight days that Hagood Avenue, at least for
3 part of the day, was under water because of
4 high tides.

5 Q: And here's another one from October 29th. Do
6 you remember this incident?

7 A: Yes. So, this -- this reinforces what I just
8 said. This is several days after the previous
9 image. This is from -- in front of Gadsden
10 Green. The -- the vehicle here was stalled out
11 and they were -- a police officer, who had come
12 there to put up the barricades to prevent
13 people from driving through, then worked to
14 assist the -- the owner of that car who lived
15 at Gadsden Green.

16 Q: Okay. And November 7th, 2021, about a month
17 later.

18 A: Yes. This ---

19 Q: Okay.

20 A: This is a little further back because it was a
21 little stronger of a -- of a tide.

22 Q: Okay. And ---

23 A: Same location though.

24 Q: Yeah. And finally, in 2022, you've documented
25 March 1st, 2022. Does that show inundation in



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1 front -- front of Gadsden Green?

2 A: It does.

3 Q: Okay.

4 A: It does. Unfortunately, in that photograph,
5 the -- there's a -- you can see the MUSC bus,
6 but -- shortly before this photograph, there
7 was a -- this was an early morning event.
8 There was also a bus that served -- brought
9 students to the Charleston Development Academy,
10 which is on Line Street, just adjacent to ga-
11 -- in -- in Gadsden Green. And that bus drove
12 through that water and then had to find a place
13 to drop the students off where they could get
14 to school.

15 Q: Okay. Then again on May 12th, 2022.

16 A: Yes.

17 Q: Okay. And actually -- all righty. And so,
18 again, this isn't the only time you've seen
19 flooding, but it's the time you took time to
20 take a picture of it, correct?

21 A: That's correct. These -- these are also times
22 when I happened to have been there. There are
23 people that live there on a daily basis are
24 impacted by that, every day, every night. I --
25 I simply work in that area and observe it.



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1 Q: Okay. So, do you have a view of the creek and
2 the marsh?

3 A: I do.

4 Q: You're ---

5 A: As -- as I mentioned from 2013 until 2020, my
6 office was at 19 Hagood overlooking to the
7 north, the WestEdge area and the creek area was
8 in the immediate foreground.

9 Q: Uh-huh.

10 A: And then in 2020, when we opened 22 WestEdge,
11 my office in there. But again, I have a view
12 a little bit further to the west, but of -- of
13 the same areas.

14 Q: Okay. And I've been in your office. You --
15 you have glass walls.

16 A: Yes.

17 Q: Okay. And have you -- during the times in your
18 office, have you seen the types of activities
19 in and around the creek that have been
20 described by the Petitioners?

21 A: I can honestly say, I have never seen anyone
22 fishing in the creek, swimming in the creek,
23 kayaking in the creek, wading or doing a creek
24 walk. I have not seen anyone doing that.

25 Q: Okay. And you have sort of a bird's eye view



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1 of the creek from your office?

2 A: I do.

3 Q: So, did you attempt to engage the community in
4 your efforts to obtain this permit?

5 A: Well, we began and -- and I'm -- when I say we
6 or I, it's really representing WestEdge, but
7 outreach to the community on this project began
8 before it was really a project. And that in
9 part, when I was working with the City, for
10 example, the development of the TIF plan and
11 ultimately, bringing the TIF plan to City
12 Council, also would require meetings with the
13 community. The City has a -- a mechanism, a
14 political subdivision, if you will, beyond the
15 Mayor and City Council, which are called
16 neighborhood councils. Very often you heard
17 them to referred to -- some of them are named
18 neighborhood associations. But they are --
19 they are effectively established and defined,
20 the boundaries are defined by the City and in
21 various aspect of the City's planning efforts
22 and -- and other components of changes to the
23 City, there is an expectation the engagement
24 with the neighborhood council, the neighborhood
25 association will occur. So, that they're aware



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1 of what's going on. So, they can provide input
2 about what's going on. So, that there voice
3 has a place within the overall process, beyond
4 the representation of their City Council
5 member.

6 Q: Okay.

7 A: And so, each of those organization typically
8 have their own bylaws and their own
9 establishment and their own administration, if
10 you will.

11 Q: Did you make an effort to engage with the
12 individual neighborhood associations?

13 A: On a regular basis, beginning ---

14 Q: Over how many years?

15 A: Beginning -- like I said, before the TIF plan
16 or within the effort to create and implement
17 the TIF plan. And then through the rest of the
18 history, especially once I became full-time
19 director or -- or CEO of the WestEdge
20 Foundation. Our primary neighborhood council
21 that the WestEdge district actually sits within
22 the boundaries of is the Westside Neighborhood
23 Association.

24 Q: Okay.

25 A: And because of that, I -- I -- whenever



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1 possible -- and they meet on a monthly basis.
2 Whenever possible, I do intend those meetings.
3 I have also throughout the history of the
4 project provided presentations, information,
5 updates, as well as, if you will, listening
6 sessions with other neighborhood associations,
7 including Hampton Park Terrace, Cannonbor- --
8 Cannonborough-Elliotborough, which is just to
9 the south of -- of the crosstown. The Bristol,
10 which has its own association -- the Bristol is
11 a condominium and their condominium association
12 is essentially their neighborhood association.
13 They're an immediate neighbor, so we've met
14 with them on -- on number of occasions, as well
15 as Bee Street Lofts, which is just to the
16 south, which is also a condominium association.
17 They are their own neighborhood association.
18 And so, we've presented and worked with them.
19 And then, also Gadsden Green, and their
20 residents association. Gadsden Green is again
21 its own council and has its own residents
22 association. And so, we have also throughout
23 the history of the project, various times, met
24 with them.

25 Q: Okay. And did you get any support from these



1 various associations?

2 A: Yes.

3 Q: Did you feel like you had their support?

4 A: Yes.

5 Q: Okay.

6 A: Yes. Yes.

7 Q: And then, did you lose the support recently of
8 certain neighborhood presidents of
9 associations?

10 A: I will never say I lost.

11 Q: Right.

12 A: We continued to work always to gain the -- the
13 collaboration. So, the Westside neighborhood
14 has recently change the presidency. The --
15 when we began this project, as I mentioned
16 2008, the neighborhood president was a
17 gentleman by the name of Arthur Lawrence. Had
18 been the neighborhood president probably for
19 decades, I think. Very well recognized in the
20 City. In fact, was awarded at the end of his
21 presidency, I believe, what at the time was the
22 Harold Kuhn Award, is now the Robert Ballard
23 Award for community service by the City. After
24 Arthur Lawrence was no longer the president,
25 George Palmer became the president. I believe



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1 he was the president, I'm estimating from 2009
2 until 2021. And then, he, in 2021, decided not
3 to -- to run again. And -- and so, there was
4 a new election and -- and Audrey Lisbon is now
5 the president of that association.

6 Q: Okay. And had you been successful in your
7 outreach efforts prior to Ms. Lisbon taking
8 over ---

9 A: Yes.

10 Q: --- with Westside neighborhood?

11 A: We have. I mean, and it's always -- it's
12 always a back and forth discussion, but we were
13 -- we're -- we're always building our
14 connection and always building a level of
15 trust. And I think that manifested itself most
16 poignantly when this project, which was
17 certainly going through its public hearing
18 process, controversial, and that the
19 neighborhood association after I provided a
20 presentation to them at their meeting, held a
21 vote on their position going forward into the
22 public hearing, and voted to provide a letter
23 of support for our permit application.

24 Q: Okay.

25 A: And that, I believe was presented to DHEC and



1 to the Corps of Engineers.

2 Q: Okay. All right. Now, let's -- you've heard
3 some testimony regarding concerns about issues
4 created by this development that could
5 negatively impact, particularly underserved
6 residents. Are you sensitive to these
7 concerns, this idea of gentrification and
8 displacement?

9 A: I would go beyond saying we are sensitive.
10 We're fully conscious and continue to work to
11 put in place measures to ameliorate those kinds
12 of concerns. The challenges in the Westside
13 are many fold. As I mentioned earlier, the --
14 the -- the work to attract and facilitate the
15 creation of the supermarket was a very
16 important community resource and a community
17 benefit, and not taken lightly by WestEdge or
18 the City, or the Medical University. This was
19 an area of the City that has long been
20 underserved with simply access to healthy food,
21 healthy and -- and affordable food. Providing
22 that access, particularly for a population that
23 is not generally mobile. People that -- living
24 in the Westside Gadsden Green in particular
25 often have to take taxis pr- -- prior to the --



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1 to the Publix. Have to take a taxi or some
2 other means of transport, just to buy their
3 groceries. So, that's important. In the TIF
4 plan and in -- and within our master plan,
5 there is a commitment that WestEdge would not
6 displace residents. And so, both in the first
7 phase of the project and in the future phases,
8 there would be no displacement of any
9 residences.

10 Q: Okay. And have you -- has that occurred or is
11 there ---

12 A: That has not -- we -- there have been no
13 displacements and within the master plan, we
14 expect there to be none.

15 Q: Okay.

16 A: In the overall master plan, there was also
17 sensitivity, you know, WestEdge is a large
18 scale development. The overall master plan
19 tried to recognize and be sensitive to the fact
20 that to our east are mostly residences. And
21 so, while the mixed use project has a very
22 significant commercial, research, laboratory,
23 office component and retail, the master plan is
24 set up so that those are not abutting to the
25 neighborhood, but there is, if you will, a bu-



1 -- plan to be additional residential as a
2 transition to the adjacent neighborhood, so
3 that they're not impacted by buildings that
4 shed their lights on, for example, or other
5 commercial activity that might be happening
6 through the day.

7 Q: What, if any, requirements is WestEdge doing to
8 address affordable housing or public housing?

9 A: So, when -- when we were completing the --
10 well, before we completed the master plan and
11 this was when I was still working for the City,
12 we also rezoned the property, both under -- the
13 City has two different regimes within their
14 zoning. There is the base zoning, which is
15 kind of a use zoning. And then there is a
16 height overlay. And so, I believe it was in
17 2011, that we rezoned the property and as a
18 part of that rezoning, the -- we applied what
19 was at the time a very new concept for the
20 City. It was an ordinance called the mixed use
21 workforce housing zoning classification. That
22 zoning classification established that any
23 development, any residential development within
24 a -- within a project that is in that district,
25 would be required to provide for workforce



1 housing. Originally, in the ordinance, it was
2 that the project -- 15 percent of the housing
3 units, whether for sale or for rent, would meet
4 the City's definitions for income levels and so
5 forth for affordable housing. Subsequent to
6 the establishing of that ordinance, it's been
7 amended to also include the possibility for
8 what's called a fee in lieu. That is instead
9 of building the units, you're -- there's a --
10 a whole calculation that is done whereby a
11 project -- and again, these are projects that
12 are developed privately -- that that private
13 project contributes to the City's affordable
14 housing program, a fund or funding for the City
15 to apply for the creation of -- of either
16 workforce or other types of affordable housing.
17 And so, when we -- when we need the City,
18 applied that zoning to this site, it encumbered
19 all pro- -- all future development that they
20 would provide either the 15 percent workforce
21 housing onsite or contribute into the City's
22 affordable housing fund through the
23 calculations that are established in the VMO.

24 Q: Okay.

25 A: So, going forward and to date, all projects are



1 -- are subject to that and so to date, the two
2 projects that have been completed that are
3 residential in nature, have contributed about
4 2.9 million dollars to the City's affordable
5 housing fund. Into the future, again, future
6 projects may build those units on site or may
7 contribute. But we did a, based on the master
8 plan, a -- a general calculation, a projection
9 of what the total amount of contribution could
10 be expected. It'd be somewhere in the
11 neighborhood of 7 million dollars at the full
12 build out of WestEdge.

13 Q: Did you also coordinate with environmental
14 stakeholders, such as the Waterkeeper and the
15 Coastal Conservation League?

16 A: We have certainly worked all the way through
17 the process with the Charleston Waterkeeper,
18 both in its -- under its earliest leadership,
19 Mr. Cyrus Buffum. And then with Andrew
20 Wunderley, who's the current Charleston --
21 Director of the Charleston Waterkeepers --
22 Waterkeeper, as well as the South Carolina
23 Coastal Conservation League.

24 Q: Okay.

25 A: We certainly had to work to gain there -- as



1 you can imagine, a project like this is not
2 necessarily in their wheelhouse. And so, we
3 worked quite a bit with them to understand
4 their concerns about the project and to try to
5 work with collaboratively to come up with
6 strategies by which they would begin to
7 understand and appreciate the project.

8 Q: Okay.

9 A: And hopefully, be supportive of the project.

10 **MS. SHAHID:** Mark this Exhibit 17. Thank you.

11 **(Respondent's Exhibit Number 17 was marked for**
12 **identification purposes.)**

13 Q: Do you recognize Exhibit 17?

14 A: Yes.

15 Q: Okay. What is Exhibit 17? The wrong exhibit.

16 A: It's the fancy plan.

17 Q: Okay.

18 A: This -- this is a concept plan of improvements
19 to Hagood Avenue, including the provision of,
20 what's now being called the -- the -- the
21 stormwater conveyance. The basin at Hagood
22 between Line and Fishburne Street.

23 Q: Okay.

24 **MS. SHAHID:** At this time, I'd offer Exhibit 17 into
25 evidence.



1 **MR. CUNNINGHAM:** No objection.

2 **MR. CHURDAR:** No objection.

3 **THE COURT:** It's admitted.

4 **(Respondent's Exhibit Number 17 was admitted into**
5 **evidence.)**

6 Q: Mr. Maher, did the design -- does the -- does
7 Exhibit 17 reflect actions that you took
8 following your collaboration or -- or listening
9 process with the League and the Waterkeeper?

10 A: It in -- it include -- I mean, this -- this
11 overall concept came -- came about through
12 collaboration with the Charleston Waterkeeper,
13 Coastal Conversation League, but also with
14 Charleston Moves.

15 Q: Okay.

16 A: And -- and also, in engagement with the
17 Westside Neighborhood Association.

18 Q: Okay. And describe for me what this concept
19 plan represents and the location of it?

20 A: So, let's see. I -- I'm going to be new at
21 this thing, so let me see if I can -- how do I
22 get it to -- give me a pen. There we go.

23 Q: I -- I probably can't help you.

24 A: Okay. So, the length of this, this is Spring
25 Street and Fishburne. And there -- this



1 concept plan represents the -- the full length
2 of Hagood Avenue. One component of it includes
3 the concept that we continue to work towards,
4 which is the extension of Hagood across US-17,
5 the Septima Clark Parkway, which includes
6 Spring Street and -- Spring Street here and
7 Cannon Street to connect directly to the
8 Medical University campus and ---

9 Q: What benefit would that provide?

10 A: That would provide many fold benefits. It
11 would provide a much more convenient access for
12 Medical University employees who either park in
13 WestEdge at the parking lot that we've
14 described or who live in WestEdge. We're very
15 pleased that about -- last -- at -- at our last
16 assessment, about half of the people who have
17 moved into WestEdge, are people who work or
18 study or seek care at the Medical University or
19 in the medical district. They would all have
20 a much safer and direct connection to the
21 medical district, either by shuttle or by -- by
22 foot or by bicycle.

23 Q: Okay.

24 A: The concept also includes what we call road
25 diet, a narrowing or reconfiguration of the



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1 right-of-way to include less lanes and more
2 amenities. So, bike lanes, parking areas,
3 sidewalks, and -- and also traffic -- traffic
4 lanes.

5 Q: Okay.

6 A: And that's for the full length, under this
7 concept, all the way through. Now, again, this
8 is a concept. This -- as been mentioned,
9 Hagood is not a city street. It is an SCDOT
10 street. But we think that in collaboration
11 with the City and with these stakeholders that
12 have already been mentioned, that we would all
13 want to continue to work towards trying to
14 implement this road diet and improvement all
15 the way along Hagood Avenue.

16 Q: So, this -- does this plan represent the water
17 feature?

18 A: It does.

19 Q: Okay. Where is that ---

20 A: So, the water feature is essentially in this
21 location. And so, this -- this version, I
22 think that you have shown a -- a different
23 version or was -- there was another version
24 that was illustrated earlier, but it -- but
25 it's essentially the same concept of a basin



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1 with landscaping features around it. It has
2 yet to be fully designed, but it would serve
3 both technical, stormwater, and -- and -- and
4 also, community amenity services or provisions.

5 Q: Okay.

6 A: And this -- this was incorporated into the
7 plan, again, through the collaboration and --
8 and -- and work with these stakeholders and as
9 part of the permit application.

10 Q: Did you need to have a basin there on Hagood or
11 is this just to try to settle some concerns
12 about cutting people off from water?

13 A: Well, I think there were a number of -- of
14 benefits that would come from it that we
15 recognized and -- and -- and felt were
16 relevant. It is the lowest lying area of the
17 site. And so, it is going to be a natural area
18 where in a storm event water is going to want
19 to collect. There were some explorations of
20 whether this could actually continue to have
21 some tidal influence through the connection to
22 the Fishburne outfall. But for various -- for
23 -- for -- for a number of reasons, that was
24 ruled out for technical challenges and the risk
25 of tidal flooding reintroducing itself. But



1 the addition of the water feature would serve,
2 as I said, the -- some technical stormwater
3 components, but also provide a -- an immediate
4 ameni- -- amenity and extension, if you will,
5 of Harmon Field, in the direct vicinity of
6 Gadsden Green and -- and the homes that are
7 along there. And provide a much more conducive
8 place for relaxation for appreciation of
9 nature, if you will. As a green space with a
10 water feature, obviously, we would expect that
11 it would start to attract birds, and other
12 wildlife. Maybe not to the extent of some of
13 the saltwater fauna that might occur. But
14 nevertheless, a good feature for some of the
15 activities that would be brought to the
16 community in this location.

17 Q: Okay. So, do -- have you done your own sort of
18 determination of what you believe to be the
19 public benefits of both the permit application
20 before the Court today and the resulting
21 infrastructure installations made possible
22 through the TIF financing?

23 A: Yes. And I mean ---

24 Q: You -- do you have that in front of you, the
25 list of public benefits?



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1 A: I -- I -- I do.

2 Q: Okay. Do you need to refer that?

3 A: It'd be helpful.

4 Q: Okay. Could -- and if you could, run through
5 those. Is this information that we have
6 previously provided to the regulatory agencies?

7 A: It -- it has been provided and has been
8 presented into various public forums as well.

9 Q: Okay.

10 A: So, this -- this was a way of trying to
11 encapsulate in -- in -- in one document, the
12 various community benefits in part from the
13 permit application, but also from the continued
14 success of the district as a whole. And so, the
15 community benefits that we identified on -- on
16 the per- -- from the permit application; first,
17 the permanently capping the landfill to protect
18 the health, safety and welfare of the public
19 from the contaminants and the exposures that
20 you've heard about; to stop the on- -- ongoing
21 health risks of exposure to contamination from
22 landfill leachate, to reduce methane and
23 improve Ashley River -- River water quality.
24 To eliminate tidal sunny day flooding and
25 result in exposure of contaminants from that



1 flooding, protecting residents of Gadsden Green
2 homes, students from the Charleston Development
3 Academy, and users of Harmon Field.

4 Q: Okay.

5 A: To provide and restore reliable emergency
6 response routes to the medical district, to the
7 police station, to the Army National Guard, as
8 well as access to schools, residences and
9 employment centers and employment activity. To
10 enhance the stormwater capacity and the
11 performance of -- of the drainage system
12 relative to stormwater by stopping a tidal
13 inundation of the drainage systems and provide
14 a more direct route for the stormwater to get
15 from its location, particularly at that low-
16 lying area at Hagood and Fishburne to the
17 River. To connect as a part of that large
18 drainage plan that you were shown, the three
19 way plan, if you will, an important thing to
20 note from that is that the connection to the
21 Spring-Fishburne deep tunnel system benefits
22 most the Gadsden Green community itself and the
23 adjacent streets of Allway and Ashton Street of
24 the westside. Those areas currently are not
25 connected to the Spring-Fishburne basin, and so



1 they're subject to tidal flooding. They're
2 subject to some of the flooding that occurs
3 because of compound events. Connecting them to
4 the deep tunnel and protecting them from tidal
5 influence would -- would go a long way towards
6 eliminating the kind of drainage and flooding
7 problems that Mr. Flowers referred to in his --
8 his testimony, in the areas of President Street
9 and Bogard and flood streets. The capped
10 landfill would create new TIF revenues that are
11 dedicated to use -- to build the
12 infrastructure, the drainage improvements and
13 other public benefits. And those are funds
14 that wouldn't exist without the ability to cap
15 that landfill. That's not to say there would
16 not be other tax revenues or TIF revenues. But
17 the cap landfill itself would not provide any
18 additional TIF revenue for doing so. The Kings
19 Grant mitigation provides 20 acres of marsh
20 environment in the Ashley River watershed, not
21 in the immediate vicinity, but certainly in the
22 same watershed, adding habitat, improving water
23 quality, which would also improve the Ashley
24 River as it passes by this area. As we just
25 described, the Hagood basin would provide an



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1 amenity and, if you will, a teaching or natural
2 environment directly adjacent to Harmon Field,
3 the Charleston Development Academy, and Gadsden
4 Green. And then, it's also important, I
5 believe, that the recommendations that have
6 been represented in the Dutch Dialogues and the
7 Corps of Engineers collaborative study, include
8 a recommendation of cotect- -- connecting this
9 area to the basin to the north of the Joe, the
10 -- the marsh area there as ---

11 Q: And is that the baseball stadium?

12 A: Of the baseball stadium. Yes. As a part of
13 the larger strategy for perimeter protection
14 and stormwater storage, that the Dutch
15 Dialogues puts forth, and so ---

16 Q: Okay.

17 A: --- this strategy, that three-prong drainage
18 strategic, implements one of those
19 recommendations of the Dutch Dialogues' plan.

20 Q: Okay. Does ---

21 A: The community benefits from the district itself
22 -- I know this is going on a long time.

23 Q: That's fine.

24 A: You want me to keep going?

25 Q: Yeah. We're about wrapped up. Go ahead.



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1 A: The increased in- -- in -- economic development
2 is obviously one of the drivers of our mission,
3 as well as job creation and particularly, in --
4 certainly in all sectors, but particularly in
5 the life science and knowledge based economy
6 that the City and the Medical University are
7 trying to grow. We continue to partner with
8 Burke High School. I sit on the Burke High
9 School's School Improvement Council, as a way
10 of creating a connection between the students
11 at Burke High School and the growth in the life
12 science and medical technology, so that they
13 can have exposure to a field that they might
14 not -- not otherwise have in their community.

15 **THE COURT:** So, you partner with Burke High School?

16 A: Yes.

17 **THE COURT:** And is that near this location?

18 A: It is. Burke High School ---

19 **THE COURT:** Well, I say high school. That's not an
20 elementary school.

21 A: Yeah.

22 **THE COURT:** I had a question about that, but I ---

23 A: Yeah. There are -- there are three public
24 schools within the immediate area. Burke High
25 School has been expanded and actually split, so



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1 there's Burke High School and Sim- -- Simmons
2 Pinckney Middle School, and they both occupy
3 what was at one time the Burke campus. And then
4 the Charleston Development Academy is a K
5 through 8 -- they -- I believe they have a
6 small -- a portion of their chart- -- it's a
7 charter school. There's a portion that occurs
8 here in Gadsden Green in one of the buildings
9 within Gadsden Green and then they have another
10 campus in a different location downtown. So,
11 those three schools are in the immediate
12 vicinity. Charleston Development Academy is the
13 closest. Burke High School is on Fishburne
14 Street about half a block to the east. So, in
15 most of the maps we've been seeing, you -- you
16 could see Burke High School, but it's not been
17 called out. So, the increased tax base that's
18 created during the TIF district, facilitates
19 the investment in public infrastructure and
20 other public benefits. When the TIF district
21 ends, that increment -- the increase in all
22 that property tax revenue, will flow back
23 directly to all of the other taxes authorities;
24 the school district, the county, the city,
25 parks and recreation. Because of all of this



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1 increase that's been created by all of the
2 investment in public benefit and public
3 infrastructure, the amount of tax revenue that
4 the -- these taxing authorities will get the
5 benefit of, starting at the end of the -- the
6 TIF district, will be significantly higher than
7 what it would have been but for the creation of
8 the TIF district. We've already mentioned zero
9 displacement. We've already mentioned the --
10 the 3 mil- -- the 2.9 million dollars of
11 affordable housing funds. The possibility of
12 as much as 7 million. We've already talked
13 about the public supermarket. And then there
14 are other traffic improvements that we've also
15 done. The improvements to Lockwood Boulevard,
16 adding a lane, increasing stor- -- drainage
17 infrastructure to remedy flooding problems that
18 are occurring -- were occurring on Lockwood
19 Boulevard, as well as improvements to
20 Presidents Street, which is actually well off
21 site, but helps the traffic flows in and around
22 the westside area. And so, those are all
23 improvements that have been and put in place
24 already by WestEdge that are benefits off the
25 site of WestEdge.



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1 Q: Okay. You've given a lot of thought to that
2 encompassing list. But ---

3 A: It's ---

4 Q: But ---

5 A: It is part and parcel of our mission, so on a
6 -- on a annual basis, as a nonprofit, and with
7 our board, we have to assess are we achieving
8 our mission, and what have we achieved and what
9 do we have yet to achieve.

10 Q: Okay.

11 A: So, it is important to us.

12 Q: I just want shi- -- shift your attention now
13 briefly to mitigation. Mr. Ruocco described
14 the mitigation. What kind of commitment does
15 -- did you make, financial commitment with
16 regard to this mitigation project?

17 A: So, as Mr. Ruocco mentioned, we partnered with
18 OSI, the Open Space Institute. We committed to
19 them that in order -- and I'm not going to
20 repeat what Andy laid out on how this all came
21 to pass. But for them to acquire the property
22 when it was available, we didn't yet have a
23 permit, so we didn't have an immediate need for
24 a mitigation site. They agreed to purchase the
25 site using their funds under a -- an agreement



1 with us that were we to gain our permit and
2 need that site for mitigation, we would
3 reimburse them for the costs that they outlaid
4 for purchasing it, as well as carrying costs
5 until the time when we got the permit. And so,
6 our commitment to them is that if and when we
7 have our -- our permit and can move forward, we
8 will reimburse them for the cost that they have
9 in the mitigation site. We won't take
10 ownership of the mitigation site. There is a
11 separate agreement with the City of North
12 Charleston, as well as with a long-term
13 steward, to essentially take over control and
14 -- and -- and management of that site. And it
15 would become under the long-term control of the
16 City of North Charleston. But that's our
17 commitment to OSI is to reimburse them for
18 those costs, should we get a permit.

19 Q: Okay.

20 **MS. SHAHID:** Your Honor, I think I'm about finished.
21 I do need to ask Mr. Traynham. I don't want
22 him to be mad at me if I left something off.

23 **THE COURT:** I'm not worried about him being mad at
24 you.

25 **MS. SHAHID:** Can I just take a second ---



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1 **MR. TRAYNHAM:** Thank you, Your Honor.

2 **MS. SHAHID:** --- and talk to him? It won't be long.

3 **THE COURT:** How long do you think your cross will
4 be?

5 **MR. CUNNINGHAM:** Not too long because I got his
6 deposition transcript in, so that's going to
7 cut it down significantly.

8 **THE COURT:** Okay. Well, I tell you what, I'm going
9 to take a short break right now.

10 **(Off the record from 5:03 p.m. until 5:11 p.m.)**

11 **THE COURT:** Y'all be seated. I've got a feeling
12 you've got a few more questions, Ms. Shahid,
13 because you're walking over that direction.

14 **MS. SHAHID:** Yes. I do.

15 **THE COURT:** Mr. Traynham.

16 **MR. TRAYNHAM:** I know. It's all my fault, Your
17 Honor.

18 Q: I just wanted to go back a little bit about how
19 much control you have over the vertical
20 development to ensure its consistency with your
21 goals. Do you utilize development agreements
22 with the developer?

23 A: We do.

24 Q: Does that have a binding effect on the
25 developer?



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1 A: It does.

2 Q: Do your agreements incorporate your objectives,
3 your limitations, your requirements?

4 A: Yes. It does.

5 Q: Okay. Did you make a presentation to City
6 Council in 2020?

7 A: I made more than one.

8 Q: Okay. Did you make one the night that they
9 took a vote?

10 A: I made one essentially an update presentation
11 on July 28th, 2020, which is what I think
12 you're referencing.

13 Q: And is -- was that a virtual meeting?

14 A: It was a virtual meeting.

15 Q: Did you appear virtually or were you ---

16 A: I did.

17 Q: Okay. And did the City take any action after
18 the -- the conclusion of that meeting and of
19 your presentation?

20 A: They did.

21 Q: What was that action?

22 A: They voted one, to add a consideration of a
23 vote to the agenda as -- as a vote was not
24 advertised on the agenda. So, they took a vote
25 based on the findings that it was exigent



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1 circumstances to add an item to the agenda in
2 the meeting. And then, they took a vote to
3 provide a letter of support for WestEdge permit
4 for DHEC and -- and for the Court.

5 Q: Okay. Thank you. That's all I've got.

6 **THE COURT:** Mr. Churdar?

7 **MR. CHURDAR:** I have nothing, Your Honor.

8 **THE COURT:** That means no questions?

9 **MR. CHURDAR:** Yes, sir.

10 **MR. MAHER - CROSS-EXAMINATION BY MR. CUNNINGHAM:**

11 Q: Okay. Mr. Maher, I don't have too much for
12 you. The City Council vote you just
13 referenced, the motion to consider an -- an
14 exigent priority essentially, that was made by
15 -- Dudley Gre- -- Council Member Dud- -- Dudley
16 Gregorie, is that right?

17 A: I'm not certain who made the motion. It would
18 have been either Dudley Gregorie -- Council
19 Member Gregorie or Council Member Waring. I'm
20 not sure which. I can't recall which.

21 Q: I believe it was Council Member Gregorie who
22 made that -- let's put in on the agenda
23 tonight, is that -- is that your recollection?

24 A: Again, I can't recall -- I mean, there was
25 discussion about doing so. Then there was



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1 actually -- there had to be a motion made to do
2 so. I believe it was -- I believe it was
3 Council Member Gregorie who initiated the --
4 the discussions, but I believe it was Council
5 Member Waring who made the motion to take a
6 vote on adding it to the agenda. But I -- I
7 could be wrong. I think you ---

8 Q: You ---

9 A: --- you check -- check the record.

10 Q: You defer to whatever's in the minutes?

11 A: I -- I would certainly.

12 Q: Right. Well, Council Member Gregorie is on the
13 board of WestEdge, is that right?

14 A: Council Member Gregorie is one of our board
15 members. That's correct.

16 Q: Right. And he voted on that, both those
17 proposals in City Council, didn't he?

18 A: He did.

19 Q: And he did not recuse himself, did he?

20 A: He did not. I -- I don't believe there would
21 be a reason for him to do so.

22 Q: But he did not. And neither did Mayor
23 Tecklenburg?

24 A: Mayor Tecklenburg did vote. Yes.

25 Q: And he's on the board as well of WestEdge?



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1 A: He is.

2 Q: You mentioned the Dutch Dialogues. You're
3 aware that Dutch Dialogues concluded that
4 Gadsden Creek should be restored and enhanced?

5 A: There is certainly language in the Dutch
6 Dialogues that makes that assertion. There are
7 other elements of the Dutch Dialogues that are
8 illustrated in the final report that are
9 contrary to that recommendation.

10 Q: Well, the specific recommendation was we cannot
11 recommend the filling of Gadsden Creek,
12 correct?

13 A: As I said, there is language in there that says
14 that. Yes.

15 Q: You mentioned this, but I want to just clarify
16 that with respect to the workforce housing,
17 there has not been any workforce housing built
18 so far as WestEdge, is that right?

19 A: That's correct.

20 Q: And it's uncertain whether it will ever be
21 built. It could. It could not. We don't
22 know. It's ---

23 A: Either it will be -- it will either be built or
24 funds will be provided to the City so that can
25 build affordable housing either in and around



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1 WestEdge or wherever they see -- or are minded
2 to do so.

3 Q: Now, with respect displacement; now, WestEdge
4 can manage the property within its control
5 essentially through various agreements with its
6 supported organizations, right?

7 A: Could you repeat the question?

8 Q: Sure. West- -- well, let me this way; WestEdge
9 doesn't have any authority over what the
10 Charleston Housing Authority does with Gadsden
11 Green, does it?

12 A: We do not.

13 Q: Right. And WestEdge doesn't have any authority
14 to set limits on property tax increases in the
15 area in proximity WestEdge, does it?

16 A: We don't have any -- yeah. We -- we have no
17 ability to control new property tax assessments
18 or anything like that.

19 Q: Right. And -- and in fact, the -- the -- the
20 whole idea of the TIF is that the property
21 taxes in an area go up to help pay for the
22 investments that are made in the area, correct?

23 A: The -- the -- the increase attributable to TIF
24 is typically realized through increases created
25 through the new development.



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1 Q: And the new development ---

2 A: The -- the -- the property tax rate for an
3 individual property owner doesn't change nor
4 does their property tax bill change because of
5 the creation of a TIF.

6 Q: Right. And with respect to money, them -- them
7 paying extra for being in a TIF district. Is
8 that what you're referring to?

9 A: They don't -- they pay no extra for being in a
10 TIF district.

11 Q: Right. It's -- it's just a portion of their
12 property tax that gets diverted to the TIF for
13 use as bonding essentially, is that right?

14 A: Only -- only the portion of their -- if there
15 are -- is any increase in the property tax, the
16 -- the increase would be what would be
17 diverted.

18 Q: Right. Right. Exactly. And when development
19 comes to an area, property taxes have the
20 ability to rise because of the proximity to
21 that development, the new development anyway.

22 A: Property values can rise.

23 Q: And with values rising, property taxes can rise
24 as well.

25 A: It can.



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1 Q: Now, you mentioned never seeing certain events
2 occur at Gadsden Creek. You're not a --
3 professing to keep constant surveillance on
4 Gadsden Creek and its goings on, are you?

5 A: I am not.

6 Q: Okay. With respect to Exhibit 40, some of the
7 stor- -- the tidal events depicted in this are
8 what's been known as king tides, is that
9 correct?

10 A: I can't -- I -- I don't know the difference
11 between a king tide and simply a high tide.

12 Q: So, you don't know whether or not some of these
13 are king tides and some of them are regular
14 tides?

15 A: I'm not sure -- I'm not clear about the
16 definitions of -- of a king tide versus a high
17 tide or an extreme high tide.

18 Q: Okay. So, you don't know whether or not any of
19 these are -- or -- or all of them are king
20 tide. You don't know.

21 A: Yeah. I don't know the -- the data of the date
22 could cert- -- one could certainly find from
23 that whether or not these would qual- -- be
24 classified as king tides. I just -- I'm not as
25 clear about what -- whether king tide is a



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1 specific definition or it's a colloquial
2 moniker for a high tide that happens in the
3 spring or in the fall.

4 Q: Well, it has to do with the -- the lunar cycle,
5 correct?

6 A: Well, the tide always has to do with the lunar
7 cycle.

8 Q: At a particular -- at a particular point in the
9 lunar cycle.

10 A: And that's what I'm saying. I'm not clear
11 about what that point is where it becomes --
12 instead of just being a lunar high tide to
13 becoming a, quote unquote, king high tide.

14 Q: Right. Okay. Then -- so, it's fair to say,
15 you just -- you're unsure whether any of them
16 or all them or some of them were king tides?

17 A: That's correct.

18 Q: Okay. Let's take this. Now, with respect to
19 involvement of the City of Charleston now,
20 you've been to Ops meetings about this project
21 for the City of Charleston, is that right?

22 A: I'm sorry to ---

23 Q: Ops.

24 A: Ops?

25 Q: Yeah. Operational -- operational meetings with



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1 -- for instance, Steven Bedard.

2 A: I'm not sure what you're referencing in terms
3 of Ops. City meetings with Ops.

4 Q: Well, for example, we can talk at the Ops
5 meeting and I can show you a site plan. This
6 is from you to Steven Bedard, an email dated
7 July 22nd, 2015.

8 A: Okay. So, that would have been a -- a WestEdge
9 ---

10 Q: Okay.

11 A: --- meeting. Ops -- well, it's not a city.
12 The Ops is short for operations and so, prior
13 -- you know, earlier in our history, our -- we
14 have -- the board meets on a quarterly basis
15 and then we have a committee that meets on a
16 more regular basis. And for a long time, that
17 was called the Operations Committee. And so,
18 that Ops committee meeting would've been the
19 WestEdge or Horizon Project Foundation
20 Operations Committee.

21 Q: And who's Steven Bedard and what -- or excuse
22 me. Strike that. What position did Steven
23 Bedard have in the Charleston City government
24 in 2015?

25 A: I -- he was the CFO for the City.



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1 Q: Okay. You were meeting with him about the
2 WestEdge project at that time?

3 A: Well, he was also a board member of WestEdge.

4 Q: All right. Well, and he could convey any
5 information he received as a board member to
6 the City, correct?

7 A: Certainly.

8 Q: You're aware of comments received from city
9 attorney to your team regarding a application
10 in this matter? Let me see if I can ---

11 A: I mean ---

12 Q: --- direct your attention to ---

13 A: You -- you might -- there were certainly
14 conversations between us and the City's legal
15 team on various aspects. Yes.

16 Q: Okay. Including 2018, around the time one of
17 the permit applications was submitted?

18 A: Probably. I -- I -- I can't -- I can't recall
19 a par- -- particular instance until you hand me
20 what you're going to hand me. Then, I'll know.

21 Q: Okay. Well, let me just -- this is one of the
22 instances -- see if this jogs your memory.

23 A: Okay. I'm sorry. You ---

24 Q: All -- all my question is is from time to time
25 WestEdge consulted with and received comments



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1 from city attorneys with respect to permit
2 applications, is that correct, and submissions?

3 A: Yes.

4 Q: Okay. Have you provided information to City
5 personnel that was then used in briefing the
6 City about legal liability, related to the
7 project area?

8 A: I'm not sure I would -- I mean, I -- I wouldn't
9 advise on legal liability.

10 Q: No. I'm not -- I'm not saying you -- you
11 advised. I'm saying you provided information
12 by which others advised the City about legal
13 liability with respect to the project area?

14 A: I provide a lot of information. What they did
15 with it, I can't really attest to. I'm not ---

16 Q: What about this specific email? Did you write
17 in an email as to the briefing about legal
18 liability for the City, what can we do to
19 provide you the necessary info to present to
20 City Council? This is an email sent by you to
21 Susan Herdina, July 19th, 2019. You're
22 offering to provide some information.

23 A: Yes. I mean, this would've been a precursor,
24 I believe -- I should read. Okay. So, I'm
25 sorry. Your question.



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1 Q: That -- that -- that -- does that refresh your
2 recollection about offering to provide
3 information to City personnel to be used for
4 briefing with respect to City Council on legal
5 liability associated with the project area?

6 A: Yes.

7 Q: Okay. One more thing about the City and then
8 we'll get off that topic. Now, you received
9 proposed edits to a permit document or a
10 submission document from the City and you then
11 transmitted them onto Mr. Ruocco for inclusion,
12 is that recollection?

13 A: It's -- it's not a recollection. I do recall
14 about an hour ago there being discussion with
15 Mr. Ruocco about it. I -- I don't have an
16 independent recollection of it.

17 Q: Okay. Well, here's -- here's an email from
18 your team, Ms. Shahid actually. January 10th,
19 2018. Let's see if you recall receiving that
20 email. You're copied on it.

21 A: Yeah. I -- I -- I don't recall it. I know --
22 I know that it says -- it indicates that there
23 are relatively minor edits that I would've
24 conveyed them. It makes sense.

25 Q: You don't dispute that you conveyed some edits



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1 from the City to your team relating some permit
2 application materials?

3 A: I -- I don't recall it. That's it described in
4 there that I did, so I most likely did.

5 Q: Okay. You're not disputing that you did. You
6 just don't recall.

7 A: I don't recall.

8 Q: All right. Let's see. Now, you mentioned the
9 master plan. The master plan, is that the 2013
10 master plan, this master plan?

11 A: I -- I'm not sure I remember -- well, I -- in
12 -- in my description, I probably referenced the
13 master plan. Yes. That would be the 2013
14 master plan.

15 Q: That is the master plan. And that's -- that's
16 a lot of work went into the master plan to try
17 and figure out a path forward for this project,
18 is that correct?

19 A: Correct.

20 Q: All right. You would agree with me that the
21 master plan, even back in 2013, recognizes that
22 there are few, if any, instances since 1977
23 when this prohibition was adopted as
24 regulation, the agency has allowed fill of
25 tidal marshes and creeks for non-water



1 dependent uses?

2 A: I'm sorry. I -- I didn't hear everything you
3 said. So, please ---

4 Q: Sure. I'll read it again. You would agree
5 that the master plan states, there have been
6 few, if any, instances since 1977 when this
7 prohibition was adopted as regulation, that the
8 agency has allowed fill or tidal -- of tidal
9 marshes and creeks for non-water dependent
10 uses?

11 A: And you're asking me if that's in the master
12 plan?

13 Q: If you recall.

14 A: I -- I don't recall.

15 Q: Okay.

16 A: So, this is the master plan. This is in the
17 appendices. And it does state that.

18 Q: Okay. Thank you. That's -- that's all I
19 wanted to confirm. During 2015, during the
20 course of your work on this project, you've
21 come to understand the City of Charleston had
22 budget funds in its Spring-Fishburne tunnel
23 project for the cleaning of Gadsden Creek?

24 A: I -- I don't remember that. But I remember the
25 email exchange and there are discussion, I



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1 believe, during my deposition about that.

2 Q: And -- and you don't dispute that you received
3 an email to that effect?

4 A: I don't.

5 Q: And -- and you in turn relayed this information
6 to your team, correct?

7 A: Yes.

8 Q: And the -- the question you posed to your team
9 or -- strike that. The question that was posed
10 to you was whether or not it be advantageous --
11 let's see -- I don't want to mess this up. If
12 -- strike that. The position or the question
13 posed to you was whether you as much then had
14 a position about whether it be advantageous for
15 the city to keep in the cleaning of Gadsden
16 Creek in the scope of the contract, as it stood
17 at that time, correct?

18 A: I'm trying to re- -- I'm trying to recall if I
19 was asking if it was advantageous or ---

20 Q: No.

21 A: --- if -- the city was asking me if it was
22 advantageous?

23 Q: All right. You know what? Let me see if this
24 will re--- refresh your recollection. I
25 believe it was the former -- excuse me -- the



1 latter.

2 A: Yeah. So, the -- I know that the email, Laura
3 Caviness, who was the -- the director of public
4 service, which includes the Stormwater
5 Department, was asking -- it says here, was
6 asking if we had any position of whether it
7 would be advantageous for them to keep the
8 scope in their contract.

9 Q: Right. And -- and you posed that question to
10 your team?

11 A: I did.

12 Q: Right. And -- and suffice it to say that work
13 was not kept within the scope of that contract,
14 is that correct, to your knowledge?

15 A: I -- I don't have any knowledge of whether it
16 was or not.

17 Q: All right. You don't ---

18 A: The project is still ongoing.

19 Q: Right. You don't know of any cleaning that
20 took place in Gadsden Creek with any funds that
21 were allocated in the Spring-Fishburne tunnel
22 project?

23 A: They would have to get a permit to do so. They
24 haven't ---

25 Q: You haven't -- you haven't seen one, have you?



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1 A: I hate to say good luck to them. No. No. I
2 have not.

3 Q: And you don't know what, if anything happened
4 with those funds?

5 A: I -- I don't.

6 Q: All right. Almost done. Currently, over the
7 span or the course of some of the critical
8 areas, it currently stands there are proposed
9 office buildings, at least in the current
10 conception of WestEdge, is that right?

11 A: I'm sorry. Could you repeat that?

12 Q: All right. Well, the current plan for WestEdge
13 envisions the filling of Gadsden Creek, right?

14 A: Yes.

15 Q: All right. And over that fill, a portion of
16 that fill because these are big buildings,
17 there are office buildings planned?

18 A: There would -- there would be one location for
19 an office that would impinge upon areas that
20 are current critical areas.

21 Q: Right. And hotels?

22 A: No. We don't -- WestEdge is -- not in the
23 master plan. There are no hotels that WestEdge
24 is sponsoring or sites that we have identified
25 under our control for hotels.



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1 Q: Okay. Let's -- let me direct your attention
2 then to the Harbor View Hotel. Are you
3 familiar with that?

4 A: Harbor View is an existing building.

5 Q: Oh, okay. All right.

6 A: Which is an of- -- was an office building, is
7 not vacant. There were some proposals for it
8 to be repurposed as a hotel, but it remains
9 vacant.

10 Q: All right. Apartment buildings are proposed?

11 A: But it -- I -- to be clear, Harbor View is not
12 a project or a pro- -- property that's under
13 WestEdge's control.

14 Q: Okay. Fair enough. Apartments, mixed use
15 development is proposed to go over portions of
16 where the critical areas stand?

17 A: Yes. And mixed use is a classification that
18 really applies to almost all of the projects
19 within WestEdge. So, when we talk about an
20 office building, it's really more likely, as is
21 22 WestEdge, an office building which includes
22 research labs, a wet and dry labs, office space
23 and retail. So, in all cases, there -- in
24 almost all cases, projects will be not single
25 purpose, but multipurpose, multi-use buildings.



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1 Q: Okay. And not all of the projects that are
2 proposed to go within the footprint of wet --
3 or excuse me, Gadsden Creek and its tidelands,
4 they're not all research building, are they?

5 A: No.

6 Q: And one project is -- or one parceling is owned
7 by the Rushmark entity, is that right?

8 A: That's correct.

9 Q: All right. And at this point, you're not sure
10 exactly what Rushmark wants to do with that
11 parcel?

12 A: No. Not specifically.

13 Q: All right.

14 A: We -- we ---

15 Q: You would agree with me ---

16 A: I -- I would agree that I don't have any
17 knowledge right now of a specific plan. I
18 don't -- I speak with them on a regular basis.
19 They have not communicated a specific plan of
20 what they will do with their site.

21 Q: And that parcel -- a portion of that parcel has
22 critical area on it, correct?

23 A: Yes. The -- the -- a portion of their parcel
24 has critical area on it. That -- that was a
25 parcel that was originally owned by the South



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1 Carolina Research Authority when they were
2 still -- I didn't describe that earlier, but
3 they were one of our supported organizations in
4 the early times of -- of Horizon Project
5 Foundation. But is now owned by Rushmark. It
6 does have critical area on it. That's correct.

7 Q: And -- and that critical area would be --
8 there's proposed to be filled as part of the
9 project, correct?

10 A: As -- as a part of the permit, it's proposed to
11 ---

12 Q: Yeah.

13 A: --- be filled. Yes.

14 Q: Right. Okay. Nothing further.

15 **THE COURT:** Redirect?

16 **MR. MAHER - REDIRECT EXAMINATION BY MS. SHAHID:**

17 Q: For purposes of su- -- successfully installing
18 the proposed drainage system at WestEdge, do
19 you need to impact the critical area in and
20 around the Rushmark site?

21 A: We do.

22 Q: Okay.

23 A: It's -- it is essentially in the center of the
24 -- the -- the waterway and so, there'd be no
25 fe- -- there'd be no possible way for it to



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1 remain tidal when everything around it on both
2 sides was no longer tidal.

3 Q: Okay. And setting that aside, it's part of the
4 project for ---

5 A: Yes.

6 Q: Okay. And are you aware of the concept of
7 piece mealing applied by regulatory
8 authorities?

9 A: I'm aware that piece mealing is not well
10 received by the regulating authorities.

11 Q: Okay. They want to see the whole project?

12 A: Yes.

13 Q: Okay. That's all I've got.

14 **MR. CHURDAR:** I have no questions.

15 **MR. CUNNINGHAM:** I'm done.

16 **THE COURT:** You may step down.

17 A: Okay.

18 **THE COURT:** Are we through for today?

19 **MS. SHAHID:** Yes.

20 **THE COURT:** All right. How many witnesses tomorrow?

21 Oh, one?

22 **MR. CHURDAR:** A very short one.

23 **MR. CUNNINGHAM:** I might have rebuttal.

24 **THE COURT:** Oh, okay.

25 **MR. CUNNINGHAM:** I'll have to figure that out. I'll



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1 let you know. It would be a short rebuttal.

2 **THE COURT:** Okay. Short is good. All right.
3 Tomorrow at 9:30.

4 **(DAY FOUR of the hearing adjourned at 5:36 p.m.)**

5 **(DAY FIVE - FRIDAY, JUNE 10, 2022. The hearing**
6 **reconvened at 9:25 a.m.)**

7 **MR. TRAYNHAM:** Judge, just an administrative matter
8 before we call our first witness. We do have
9 a flash drive with the video that was
10 previously ---

11 **THE COURT:** Oh ---

12 **MR. TRAYNHAM:** --- admitted ---

13 **THE COURT:** --- a flash drive.

14 **MR. TRAYNHAM:** --- into evidence. Because of some
15 potential technical issues, if it's all right
16 with Your Honor, we would also like to
17 redundantly provide a share file link to your
18 clerk that allows the download of the file
19 directly to your system.

20 **THE COURT:** Okay.

21 **MR. TRAYNHAM:** Just in case there's any technical
22 issues with this. If that's all right with
23 other parties.

24 **MR. CUNNINGHAM:** Provided that it's just the video
25 that we showed ---



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1 **MR. TRAYNHAM:** Just the video that we showed, Your
2 Honor.

3 **THE COURT:** Okay.

4 **MR. TRAYNHAM:** I'll provide this for the clerk.

5 **THE COURT:** All right.

6 **MS. SHAHID:** Your Honor, WestEdge will call Perry
7 Keith Waring to the stand.

8 **COURT REPORTER:** Would you raise your right hand
9 please, sir. Do you solemnly swear the
10 following testimony to be the truth, the whole
11 truth, and nothing but the truth, so help you
12 God?

13 **MR. WARING:** I do.

14 **COURT REPORTER:** Thank you.

15 **PERRY WARING,** having been duly sworn, testifies as
16 follows:

17 **MR. WARING - DIRECT EXAMINATION BY MS. SHAHID:**

18 Q: Good morning, Mr. Waring.

19 A: Good morning.

20 Q: Am I right, is your name Perry Keith or Keith
21 Perry?

22 A: Perry Keith.

23 Q: Perry Keith. Mr. Waring, where do you reside?

24 A: 1962 Ashley Hall Road, Charleston, South
25 Carolina, 29407.



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1 Q: And that is in the West Ashley area of
2 Charleston?

3 A: It is.

4 Q: Okay. And that is a few to several miles from
5 the project site known as the West Edge
6 Development?

7 A: Yeah, about three and a half.

8 Q: Okay. And what is your employment?

9 A: I'm a financial advisor. I have a financial
10 advisory practice.

11 Q: Okay. And do you do any public service?

12 A: I'm on -- proud to represent District 7 on City
13 Council.

14 Q: Okay. And what are the boundaries of District
15 7?

16 A: Oh, they probably go between Ashley Hall Road
17 and Savannah Highway and from Playground Road
18 down to Glenn McConnell.

19 Q: Okay. So also not in the project area known as
20 the WestEdge Foundation.

21 A: It is not.

22 Q: Okay. And are you serving on any civic
23 committees?

24 A: I chair the Public Works Committee for the City
25 of Charleston.



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1 Q: Okay. Any, any others?

2 A: Yeah, the Budget Ad-hoc Committee, the Real
3 Estate Committee, the West Ashley
4 Revitalization Committee. A number of them.

5 Q: Okay. And how long have you lived in
6 Charleston?

7 A: With the exception of coming up here in the
8 Carolina, the college days, all my life.

9 Q: And how old are you?

10 A: 66.

11 Q: And as an elected representative, what
12 constituency base do you serve?

13 A: The district that I represent I guess the
14 diversity is probably 52 percent African-
15 American in their 50s.

16 Q: Okay. You may need to come a little closer to
17 the microphone if you can. You're pretty soft
18 spoken.

19 A: Okay.

20 Q: That's better. Thank you. If -- but in, in
21 your public service do you limit your
22 engagement on issues just to those issue in
23 your district?

24 A: No, we don't. We actually represent -- we get
25 elected from the district, but I'll purview



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1 virtually issues affecting the whole city.

2 Q: Okay. As a elected official do you feel like
3 you have a responsibility for citizens outside
4 your city -- outside your district, I'm sorry.

5 A: Most certain.

6 Q: Yes. And does that include the citizens in the
7 city council district that is in the WestEdge
8 area?

9 A: It does.

10 Q: Okay. When you take a position on the c- -- on
11 any issue in front of -- involving the city, is
12 that position just to -- how it impacts your
13 district?

14 A: No.

15 Q: And are you familiar with the historic project
16 area on Lockwood, Fishburne, around The
17 Citadel, just from your years living in
18 Charleston?

19 A: I am.

20 Q: What is your knowledge of how that area has
21 been used over the years?

22 A: Well, living in West Ashley with every time we
23 came into -- in that area we referred to it as
24 the city, the peninsula as being the city. Our
25 gateway as a child coming in -- that was a



1 landfill.

2 Q: Okay.

3 A: So.

4 Q: Did you ever visually inspect that area as a
5 child?

6 A: No.

7 Q: Okay. What, what was your knowledge that it
8 was a landfill based on?

9 A: I mean you came in you actually could see the
10 dump trucks and the seagulls and the trash
11 blowing about.

12 Q: Okay. What -- approximately what time frame
13 was that?

14 A: Well, I'm born in '55, so. From my memor- --
15 remembrance of '55 -- we attend a church.
16 During that time to access any major service
17 there weren't any hospitals the like in the
18 West Ashley area at that time. Any business
19 that had to be conducted so by our parents or
20 -- and our kids who went to church on the
21 peninsula so we would frequently go back and
22 forth between the West Ashley area and the
23 peninsula.

24 Q: Okay. And, and that gave you to opportunity to
25 look at what I'm called the project area and



1 the landfill?

2 A: That's correct.

3 Q: Okay. 'Cause I initially asked you have you
4 ever visually inspected it and I guess that's
5 a little too technical. But you were aware of
6 it?

7 A: Oh, yes. You, you couldn't enter the city from
8 that area without, without seeing it. It was
9 a big, expanse area that paralleled the city
10 and as you can imagine a landfill you got a lot
11 of seagulls flying over, flying down. So your
12 eyes were just drawn to that area when you came
13 into town.

14 Q: Okay. And what about flooding in certain areas
15 of the city? Is that a concern of yours?

16 A: It's a major concern.

17 Q: Okay. Tell me what the cil- -- the city is
18 grappling with with regard to flooding.

19 A: We've had several major projects going on, but
20 we trying to figure out how to fix our drainage
21 problems. And they kind of two-fold in that we
22 have what is called sunny day flooding. Even
23 when it doesn't rain the rising tides come up
24 through the street drainage and flood our
25 streets. Certain streets.



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1 Q: Okay. Has there been any increase or decrease
2 in that problem over the years?

3 A: I think last year we had 81 days out of 365
4 that were termed sunny day flooding.

5 Q: Okay. Is that a issue of concern for
6 residents?

7 A: It's a major concern. In some cases, depending
8 on where you live, sometimes water threatens to
9 come into your home.

10 Q: Okay. Is that concern voiced to you as a city
11 official by residents?

12 A: It is.

13 Q: When City Council holds a meeting does it have
14 a public comment session before that meeting?

15 A: Every meeting.

16 Q: Is, is, is information provided regarding
17 residents' concerns during those public comment
18 sessions?

19 A: It's provided before hand, some people send in
20 e-mails, some people call and leave messages.
21 And then obviously during the meeting we listen
22 to them as they come up to the microphone.

23 Q: Okay. Looking at the West Edge area and the
24 Fishburne Hagood area, can you identify
25 particular public institutions that exist in



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1 that area? For example, schools or public
2 infrastructure?

3 A: Yes, there's a, there's a charter school right
4 off the Hagood Avenue. Charleston Development
5 Academy. And of course Burke High School,
6 which is one of the oldest high schools in the
7 City of Charleston.

8 Q: Okay.

9 A: It's still active. Obviously, The Citadel in
10 around that area, a municipal courthouse is in
11 that area as well. A police station ---

12 Q: Okay.

13 A: --- also.

14 Q: What is the function of your municipal
15 courthouse?

16 A: I try to stay out of it, but no. (Laughter)
17 Anything that -- when people have -- from
18 paying parking fines to just all the conduct of
19 a high level of breaking laws.

20 Q: Okay. And have you seen sunny day flooding at
21 Hagood and Fishburne?

22 A: Oh, yes.

23 Q: Okay. In sort of the level of significance is
24 it similar to other problematic areas? Is it
25 greater in your observation?



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1 A: I would say it's one of the worst areas and
2 I'll tell you why. I, I drive a Ford F-150
3 truck and during the worst of times I can't
4 drive through that area in my full-size truck.

5 Q: Okay. Approximately what is the height? Not
6 of the water, for you getting into your truck.
7 Is it how, how many feet off the ground?

8 A: I don't know. Maybe 24 inches, maybe 36
9 inches, something like that.

10 Q: Okay. Now, my understanding is you have not
11 always supported the project's proposal to
12 close Gadsden Creek.

13 A: That's correct. I, I like to fish and I, I
14 like to creek fish.

15 Q: Okay.

16 A: So, and I know a lot of, you know, crustaceans
17 breed in the water, so ---

18 Q: Okay.

19 A: --- I'm not a big fan of filling in any marsh.

20 Q: All right. And have you fished in Gadsden
21 Creek?

22 A: No, I've never fished in Gadsden.

23 Q: Okay. Have you heard -- have -- what is your
24 current position as a public official regarding
25 the project?



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1 A: As I said I was initially against it. When I
2 saw the presentation by the consultants hired
3 by WestEdge speaking to the failing cap on the
4 landfill, that was presented to council, I
5 questioned it.

6 Q: Okay.

7 A: And as a result -- and I questioned it because
8 I didn't know whether it was biased or not.
9 You know, when you're in a position like that
10 and you want to have as, as much information
11 for our hands so you can make a good decision.
12 So I was one that was in favor of the City
13 requesting it's own study of the creek.

14 Q: All right. And did you actually make that
15 suggestion to City government?

16 A: I did.

17 Q: Okay. And did they follow through with that?

18 A: We did. We ordered our own study.

19 Q: Okay. Now, is your opinion about solving
20 flooding problems -- did you ever oppose that
21 part of the project?

22 A: I never opposed that part because there's a
23 sizeable public housing development adjacent to
24 this area and when the water rises it goes into
25 the public housing area and you got children



1 sometimes playing in that water.

2 Q: Okay. And are there school children also
3 adjacent to those areas?

4 A: Charleston Development Academy as well as some
5 of the students from Burke High School.

6 Q: Okay. Now, I'm going to show you a document,
7 which is entitled City Council Virtual Meeting,
8 July 28th, 2020. And I'll represent to you
9 that there were multiple topics covered at that
10 meeting, but beginning on or around page 20 --
11 maybe not. Okay, on or around page 26 there
12 begins a discussion regarding WestEdge. Could
13 you just take a look at this document? See if
14 this accurately reflects the format of city
15 minutes?

16 A: It does.

17 Q: Okay. And what is your familiarity with
18 minutes in other recorded -- in other efforts
19 to preserve actions at City Council? What is
20 your knowledge of that?

21 A: We do it at, at length at the City of
22 Charleston and have word-for-word minutes.
23 There's been a big discussion over the years of
24 summarizing minutes, which would make it easier
25 for our clerk. But the overwhelming majority



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1 of council has been a stickler for it to be
2 word-for-word.

3 Q: And are minutes drafted following a meeting and
4 presented to council for approval as to their
5 accuracy?

6 A: Every meeting was -- the minutes from the
7 previous meeting are mailed out on Wednesday --

8 Q: Okay.

9 A: --- e-mailed, mailed out, or Thursday. We get
10 a chance to review it for -- Council, we get a
11 chance to review those minutes from let's call
12 it Wednesday, Thursday until the following
13 Tuesday. And when the meeting comes and we
14 want to approve the minutes ---

15 Q: Okay.

16 A: --- amend the minutes, or whatever. To ---

17 Q: Are ---

18 A: --- accept ---

19 Q: --- you familiar ---

20 A: --- them.

21 Q: Okay. Are you familiar with the Freedom of
22 Information Act?

23 A: I am.

24 Q: Okay. Is it your understanding as a public
25 official that you're required to have such



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1 documentation?

2 A: It is.

3 Q: For when the public would request it?

4 A: Right.

5 Q: Okay. And are you familiar with any instances
6 when the public has searched for records from
7 the city for various reasons?

8 A: Yes.

9 Q: Okay. And is that document that you're
10 holding, that is something that occurs
11 regularly following every City Council minute
12 -- meeting?

13 A: Following every City Council meeting.

14 Q: And if you could look from page 2- -- I don't
15 need you necessarily to read it unless you
16 need to to be comfortable. But the discussion
17 related to WestEdge extends for several pages,
18 pages 26 effectively to page 41. If you would
19 look at that and then I'm gonna ask you a
20 question. We're gonna give you a few minutes
21 to look at that.

22 A: Okay. These are the minutes that were provided
23 to us.

24 Q: Di- -- I understand that but when you looked at
25 the content did that actually refl- -- reflect



1 your recollection of that meeting?

2 A: It does.

3 Q: Okay.

4 **MS. SHAHID:** Did we -- did we get to assign an
5 exhibit number to this document?

6 Q: While Mr. Traynham's looking do you see this
7 information in blue at the bottom of the page?

8 A: I do.

9 Q: What does that say?

10 A: Certified to be a true copy.

11 Q: And who signed that?

12 A: Our Clerk of Council, Ms. Jennifer Cook.

13 Q: Okay.

14 **MS. SHAHID:** All right. I'll make that the number.
15 Your Honor, I would ask the court reporter to
16 mark this as exhibit -- what's the biggest
17 number we've had so far? 4- ---

18 **COURT REPORTER:** 37.

19 **MS. SHAHID:** 47?

20 **COURT REPORTER:** 37.

21 **MS. SHAHID:** 37?

22 **COURT REPORTER:** Yes.

23 **MS. SHAHID:** Okay. How about we mark that 42. And
24 Your Honor, at this time I would offer Exhibit
25 42 into evidence.



1 (Respondent's Exhibit Number 42 was marked for
2 identification purposes.)

3 **MR. CUNNINGHAM:** Now, I object to a portion of that.

4 The portion is I, I think you heard the
5 counselor just talk about verbatim recordation
6 of others and tha- -- and in those meeting
7 minutes are third parties at city councils that
8 are not members of city council that are
9 relaying information and data to the city
10 council and that would constitute hearsay
11 within, but would otherwise be an acceptable
12 use and I have a case for Your Honor.

13 **THE COURT:** This is just -- the world is flipped.

14 I've got environmental group opposing
15 information about the environment coming into
16 evidence. And normally the environmental group
17 would want me to hear all the information about
18 the environment.

19 **MR. CUNNINGHAM:** Well, frankly, I want you to hear
20 some of this information, Judge. But I don't
21 want to -- I don't ...

22 **THE COURT:** And in a other context I wonder how
23 you'd feel about somebody saying oh, well some
24 of the information can come in but not all of
25 it. But here, let me hear your ---



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1 **MR. CUNNINGHAM:** Well ---

2 **THE COURT:** --- but, if you got a case ---

3 **MR. CUNNINGHAM:** I do have a case, Your Honor.

4 **THE COURT:** There's also the, the rules of evidence
5 on public reports. Is that ---

6 **MS. SHAHID:** Yes.

7 **THE COURT:** --- all for you?

8 **MS. SHAHID:** Yes.

9 **THE COURT:** So, so is that what the case is going to
10 be about?

11 **MR. CUNNINGHAM:** This is a 7th Circuit case about
12 Federal Rules of Evidence, which are, of course
13 similar to South Carolina Rules of Evidence.

14 **THE COURT:** I just don't know the federal rules well
15 enough to know -- or the, the analogy of how
16 much they are analogous to the South Carolina
17 Public Reports Rules.

18 **MR. CUNNINGHAM:** Well, do you ---

19 **THE COURT:** Do you?

20 **MR. CUNNINGHAM:** I'm sorry, Your Honor.

21 **THE COURT:** I just asked do you?

22 **MR. CUNNINGHAM:** I, I believe they are virtually
23 identical. But I can read the reasoning of
24 this case for Your Honor and I think ---

25 **THE COURT:** Okay.



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1 **MR. CUNNINGHAM:** --- I might be able to ask any --
2 this case is U.S. vs. Vorrasi -- V-O-R-R-A-S-I.
3 It's 639 F. 3rd 774. It's a 2011 case.

4 **MS. SHAHID:** Can you ---

5 **MR. CUNNINGHAM:** Sure, say it again?

6 **MS. SHAHID:** --- can you give that section number
7 one more time.

8 **MR. CUNNINGHAM:** Sure. It's 639 F. 3rd 774.

9 **MS. SHAHID:** Thank you.

10 **MR. CUNNINGHAM:** And the, the portion that I would
11 direct Your Honor's attention to is at the end
12 of page 739 into page 780. And in it the Court
13 recounts that ---

14 **THE COURT:** I tell you what. I want to ask you to do
15 it one
16 more time. You did it ---

17 **MR. CUNNINGHAM:** Sure.

18 **THE COURT:** --- for her. Now, it's 639 ---

19 **MR. CUNNINGHAM:** F. 3rd ---

20 **THE COURT:** I'll type in Westlaw. I found the page
21 number.

22 **MR. CUNNINGHAM:** Sure. If you want to just -- I
23 think -- I believe you type 780 it'll take you
24 to th- -- that page in the case.

25 **THE COURT:** Okay. Well, let me get the page ---



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1 **MR. CUNNINGHAM:** Oh, the roth- -- other side, yes.
2 639 ---

3 **THE COURT:** I guess I could do 780. Let's see how
4 that works. Yeah, you're right.

5 **MS. SHAHID:** About the motion?

6 **THE COURT:** No, about the page number. U.S. vs.
7 Vorrasi.

8 **MR. CUNNINGHAM:** Yes, Your Honor. And, and at the
9 end of 78- -- 779 into 780 it says Vorrasi,
10 however, challenges the exclusion of the
11 reports referenced in the minutes and any
12 comments in the minutes regarding the substance
13 of those reports. Those reports and these
14 statements therefrom are hearsay as each
15 comprises statements written by physicians not
16 testifying before the Court if Vorrasi wished
17 to introduce for the truth of the matter
18 asserted. And then it skips on down to Federal
19 and that's 805 and statements made by third
20 parties and otherwise admissible business
21 records have to basically meet a hearsay
22 exception on their own.

23 **THE COURT:** Well, I don't know if I needed that --
24 to know that. 'Cause the public reports
25 section also says for provided, however, a



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1 vested -- oh, no. Where is it? Investigative
2 notes involving opinions, judgments, or
3 conclusions are non-admissible. Oh, oh no it
4 says -- I mean I get the concept on that. So
5 he's objecting to hearsay within hearsay. So
6 the public report comes in, but if the public
7 report has other statements in them, those
8 statements can come in. But those statements
9 have a, have an exception to the hearsay rule
10 for those to come in. So are you following me?

11 **MS. SHAHID:** Uh-huh.

12 **THE COURT:** And ---

13 **MS. SHAHID:** I see the rule. Public -- but I am
14 relying on 803(a) Public Records and Reports.

15 **THE COURT:** Okay. Well, I've got that in front of
16 me.

17 **MS. SHAHID:** Yeah, I've got that in front of me.

18 **THE COURT:** So that gets the public record in is
19 what I'm saying.

20 **MS. SHAHID:** A- -- and I would say that when I read
21 8- -- it relates to ---

22 **THE COURT:** 8- ---

23 **MS. SHAHID:** The -- part 803(a) of the South
24 Carolina Rules of Evidence Public Records and
25 Reports ---



1 **THE COURT:** Yeah.

2 **MS. SHAHID:** --- that specific -- that admonition
3 specifically relates to criminal cases and
4 matters observed by police officers and other
5 law enforcement personnel. And that is not the
6 nature of this report.

7 **THE COURT:** Well, it's got -- you see (b) matters
8 observed excluding however criminal ---

9 **MS. SHAHID:** Yeah.

10 **THE COURT:** --- in criminal matters observed by
11 police officers and other law enforcement
12 personnel, semi-colon, provided, however -- so
13 you're stepping back outside into the rule
14 there. Investigative notes involving opinions,
15 judgments, or conclusions are not admissible.
16 And then it takes me back to activities of the
17 office or matters observed. So the matters
18 observed by a public official under the public
19 reports does come in.

20 **MS. SHAHID:** Excluding, however ---

21 **THE COURT:** Yeah.

22 **MS. SHAHID:** --- in criminal cases.

23 **THE COURT:** And then another ---

24 **MS. SHAHID:** This is tough. I still believe that --
25 I would construe that -- and I don't have a



1 case, Your Honor, 'cause I didn't anticipate
2 this particular matter being an issue. But, I
3 would still construe that as being related to
4 the police duties.

5 **THE COURT:** All right. So let me just back up here.
6 I've got the, the City Council minutes and
7 within those minutes is a report that was
8 reformed ---

9 **MS. SHAHID:** No, somebody is speaking about it.

10 **THE COURT:** Somebody's speaking about it.

11 **MS. SHAHID:** Somebody's speaking to council about a
12 report they did. They don't -- I've read the
13 minutes. This person speaking to council about
14 the report doesn't cite the line or page of the
15 report but gives their impressions of what the
16 report says. It's not data. It's not, you
17 know, the, the analysis to the attached some of
18 these reports. It's merely a narrative from
19 somebody who council had asked to do something,
20 they did it, they come back, and they discuss
21 it.

22 **THE COURT:** All right. I'm going to just take a
23 break, go back -- oh, do you have ---

24 **MR. CUNNINGHAM:** I would just say, Your Honor, that
25 this was a third party not a City Council



1 employee. And I believe the, the public
2 records exception talks about -- and this is at
3 the beginning, of course, the compilations a-
4 -- reports of public offices or agencies. And
5 that is not this case. And with respect to the
6 narrative portion of that, he was reciting and
7 relying on data and mentioning data in the
8 recount.

9 **MS. SHAHID:** He gave a very general recount. He did
10 not use any water quality parameters, numbers,
11 maximum contaminant levels. He provided some
12 general description and advice.

13 **THE COURT:** Okay. I, I will say though, y'all have
14 challenged my evidentiary knowledge. Because
15 on this one you say that is that the he is
16 someone who, you're right, apparently he's not
17 a public officer or agency, but is someone who
18 is hired to do something by or for the agency.
19 He's not maybe -- they're acting on behalf and
20 not just some independent third party, but I'm
21 going to go think about it.

22 **MS. SHAHID:** Really? Okay.

23 **THE COURT:** Oh? You don't think I should think
24 about it?

25 **MS. SHAHID:** No, no. I was ---



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1 **MR. CUNNINGHAM:** Unless you are going to go into the
2 actual recitation of those facts, I don't know if
3 we can just ---

4 **MS. SHAHID:** No, ---

5 **MR. CUNNINGHAM:** Are you ---

6 **MS. SHAHID:** --- I, I was planning to ---

7 **MR. CUNNINGHAM:** Oh, okay.

8 **MS. SHAHID:** --- point to particular pages where a,
9 a person advising them gave advice.

10 **MR. CUNNINGHAM:** Okay. All right. Well, then I
11 guess we can ---

12 **THE COURT:** You said oh really ---

13 **MS. SHAHID:** No, no, no. I- -- I'm sorry. That was
14 -- I didn't mean to be sassy.

15 **THE COURT:** Okay.

16 **MS. SHAHID:** You think you've been challenged. I've
17 been challenged.

18 **THE COURT:** Oh. I- -- I'll just take a short break.

19 **MS. SHAHID:** Thank you.

20 **THE COURT:** Thank y'all.

21 (Off the record from 9:53 a.m. until 9:57 a.m.)

22 **THE COURT:** Just give me a second more.

23 **MS. SHAHID:** That's fine.

24 **THE COURT:** Here's what I think. Is from the public
25 reports exception to the hearsay rule, any



1 record of the observation of the person could
2 come in, but any conclusions, opinions, or
3 judgments regarding those observations could
4 not come in. And what is your position on
5 that? And I have a- -- another step or issue
6 that I want to address after that. What's your
7 opinion?

8 **MR. CUNNINGHAM:** I'm not gonna argue with Your
9 Honor, of course. I think it's gonna be hard
10 to ---

11 **THE COURT:** Well ---

12 **MR. CUNNINGHAM:** --- suss exactly what are
13 conclusions versus what are observations in the
14 context of ---

15 **THE COURT:** Observations are I saw this, I saw that.

16 **MR. CUNNINGHAM:** Well, an- -- and that's not really
17 what he's -- he's talking about analysis and
18 conclusions.

19 **THE COURT:** Well, I'll give you -- but, on the other
20 hand if Mr. Waring observes a- -- as the, as an
21 official, observed those statements, he can
22 testify to his conclusions regarding what he
23 heard. And his opinions now as a public
24 official because he's here subject to cross-
25 examination, so. That I am going to allow.



1 **MR. CUNNINGHAM:** Right. I un- -- and it's just a
2 matter of him not -- just funneling all those
3 into the ex- -- verbatim conclusions from the
4 outside party ---

5 **THE COURT:** Yeah.

6 **MR. CUNNINGHAM:** --- in this we're about. Thank you.

7 **MS. SHAHID:** Your Honor, just to understand the
8 constraints that I face, if I show him ---

9 **THE COURT:** And you can proffer that 'cause
10 honestly, if I change my mind I might even
11 adjust my ruling at this point, I want to allow
12 you to proffer that which you seek for me to
13 consider and let me potentially due further
14 research and flip on it, but at this point in
15 time that's my ruling.

16 **MS. SHAHID:** That, that's fair, Your Honor. Thank
17 you.

18 **THE COURT:** Okay. But if you wish to proffer,
19 proffer it now ---

20 **MS. SHAHID:** Yes.

21 **THE COURT:** --- so ---

22 **MS. SHAHID:** But, am I proffering particular
23 statements within the report?

24 **THE COURT:** Well, it -- I tell you what. I'll allow
25 the report to come in, but I am not going to



1 consider it being both Judge here regarding
2 this and fact finder, so on the fact finder's
3 side, I'm not going to consider it, I'm not
4 even going to look at it any of the, any of the
5 statements or conclusions. If I subsequently
6 change my mind and find out that I am wrong in
7 my reasoning, then I, I would consider it. So
8 what -- that Exhibit's 4- -- ---

9 **MS. SHAHID:** 2.

10 **THE COURT:** 42. It's admitted as set for above in
11 my explanation ---

12 **(Respondent's Exhibit Number 42 was admitted into**
13 **evidence.)**

14 **MS. SHAHID:** Thank you, Your Honor. Thank you, Your
15 Honor. And just to understand my constraints,
16 based on your previous description how you
17 think of it should be used, may I refresh the
18 witness's memory as to what was said,
19 understanding that what was said may not be
20 subject to your consideration?

21 **THE COURT:** You can allow him to read that language
22 ---

23 **MS. SHAHID:** Okay.

24 **THE COURT:** --- to refresh his memory.

25 **MS. SHAHID:** Okay.



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1 **THE COURT:** Just not -- that's -- don't read it out
2 loud.

3 **MS. SHAHID:** Okay. All right. Thank you.

4 **THE COURT:** About that. Anything else? Do we need
5 to take a break to allow him to do that?

6 **MS. SHAHID:** No, I'll just hand it to him and ask
7 him to read it to himself.

8 **THE COURT:** Okay.

9 **MS. SHAHID:** It's not an extensive amount of
10 information, Your Honor.

11 **THE COURT:** You following all of that, Mr. Waring?

12 **MR. WARING:** Yes, sir.

13 **MS. SHAHID:** He probably remembers it. Gone through
14 all this and he can just do it from memory,
15 but. All right.

16 **THE COURT:** You ready to be a judge now?

17 **MR. WARING:** No, sir.

18 Q: Mr. Waring, is there another person named
19 Shahid?

20 **THE COURT:** Oh, I'm sorry. It's Waring.

21 **MR. WARING:** It is.

22 **THE COURT:** I've been saying Waring. I apologize.

23 **MR. WARING:** No, no offense taken, Judge.

24 **THE COURT:** Okay.

25 Q: Mr. Waring, is there another person with the



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1 last name Shahid on City Council?

2 A: It is.

3 Q: Is that person related to me?

4 A: It's your husband.

5 Q: Okay. What action did my husband take when the
6 meeting commenced?

7 A: He abstained from the issue.

8 Q: He d- -- do you recall him having any
9 participation in the issue at the meeting?

10 A: He did not.

11 Q: Do you fill out forms when you have a conflict
12 of interest?

13 A: We do.

14 Q: And do you know if my husband filled out a
15 conflict of interest form?

16 A: He did.

17 Q: Okay. And is that for your records?

18 A: Yeah, for all of Council. That's right.

19 Q: Okay.

20 **THE COURT:** Did he cite for better life at home.

21 (Laughter)

22 **MR. WARING:** No comment, Your Honor.

23 Q: Okay. You were present at the meeting.

24 A: I was.

25 Q: And who attended the meeting and made



1 presentations?

2 A: The firm that we hired had a representative.
3 I think it was General Engineering Labs sent a
4 representative.

5 Q: Okay. So you just di- -- refresh your
6 testimony, it was your idea to bring in a
7 second opinion after the Terracon report.

8 A: Oh, that's correct.

9 Q: And so General Engineering Labs provided that
10 second opinion?

11 A: Right. That's the firm that the city hired as
12 a result of my asking for the second in th- --
13 a second opinion so to speak.

14 Q: Okay. And do you recall that the person's name
15 was Bob McPhee?

16 A: It was.

17 Q: Okay. Did Mr. McPhee make a presentation?

18 A: He did.

19 Q: All right. And did anybody else speak about
20 WestEdge? Was Mr. Maher there?

21 A: Mr. Maher was there. I can't remember
22 everybody who spoke.

23 Q: Right.

24 A: Obviously the representative, Mr. McPhee ---

25 Q: Yes.



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1 A: --- was there and obviously, Mr. Maher.

2 Q: Okay.

3 A: Both quite a bit.

4 Q: And then there was some exchange between

5 Council members.

6 A: Right. Asking questions back and forth.

7 Q: Okay. And is there a process where Council can

8 speed a decision up or make that decision

9 available more quickly than following certain,

10 you know, having a second meeting ---

11 A: As we call it existential. That -- yes.

12 Q: Is it exigent?

13 A: Exigent. I'm sorry.

14 Q: Yeah.

15 A: Existential -- exigent.

16 Q: What's your understanding of when something is

17 exigent and can be resolved in one meeting?

18 A: We need a -- there's a urgency to the issue.

19 Q: Okay. And was the exigent circumstance invoked

20 at this meeting?

21 A: It was.

22 Q: Did any particular Council member invoke it?

23 Well, I don't need -- I can just ask you to

24 look at the document. Do you see on page 38 of

25 Exhibit 42 where a motion is asked for?



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1 A: As a matter of fact I asked for the motion.

2 Q: Okay.

3 A: I asked after the discussion, is there a
4 motion?

5 Q: Okay.

6 A: And my colleague on Council, Council Member
7 Gregory, said I so move that we put this on the
8 agenda to support the WestEdge permit. And I
9 seconded that motion.

10 Q: So that meant put it on the agenda for that
11 night?

12 A: Correct.

13 Q: The support of the permit.

14 A: Yes.

15 Q: Okay. Okay. And you seconded the motion as --
16 -

17 A: I seconded the motion.

18 Q: What was the fate of that motion?

19 A: It passed I said unanimous, but obviously
20 Councilman Shahid wa- -- abstained because he
21 didn't participate in the discussion.

22 Q: Okay.

23 A: The- -- there are 12 Councilmen in all,
24 excepting Councilman Shahid, all 11 voted in
25 favor including the mayor, so I guess that's



1 12.

2 Q: Okay. And you can't speak for everybody but
3 was your vote taken based on consideration of
4 what is best for the public in the City of
5 Charleston?

6 A: It was.

7 Q: I think -- is that what in -- based -- your
8 based ---

9 A: That's what my vote was based on. Correct.

10 Q: Were you looking at the good of all citizens?

11 A: I was looking at the comprehensive solution is,
12 is, is -- it's a two-fold issue in the end. We
13 have a, a landfill with -- told to us that's
14 failing. The cap that was on the landfill was
15 failing. And we had the flooding that takes
16 place that goes over into a public housing area
17 where families live. And they, they have to
18 put up with that coming and going of the rising
19 tides, the sunny day flooding, when we have
20 rain bombs with three, four inches of rain in
21 a short period of time the area floods. And as
22 I said before, I don't want my kids -- wouldn't
23 want my grandkids playing in that water.

24 Q: Okay. And what information -- strike that.
25 Let me start that -- just to refresh your



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1 memory, I'm showing you on page 28 and I've
2 kind of indicated what I would like for you to
3 review and ---

4 A: Yes.

5 Q: --- you don't need to review it out loud. Just
6 take a minute to look it over.

7 A: Okay.

8 Q: I ---

9 A: Thank ---

10 Q: --- appreciate it.

11 A: --- you.

12 Q: Thank you. We talked about believing there was
13 a potential -- well, you didn't want your
14 grandchildren in that area. Do you have a
15 concern about contamination?

16 A: I do. As I said there's a -- an elementary
17 charter school in that public housing
18 development. Actually for a period of time I
19 was on the board at that school. They do a
20 wonderful job with those children.

21 Q: That's at Charleston Development Academy?

22 A: Charleston Development Academy.

23 Q: And it's in- -- it's affected by the flooding?

24 A: Actually water comes up -- so maybe a third or
25 sometimes half of the parking lot.



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1 Q: Is ---

2 A: It's a very small site by the way.

3 Q: Are the students at Charleston Development
4 Academy typically from under served areas in
5 Charleston?

6 A: Many of -- not all. But many have actually
7 come from that public housing development. The
8 Gadsden Green development.

9 Q: Okay. And when you voted on the motion that
10 was made to support the WestEdge project as it
11 was permitted, did, did -- was contamination a
12 concern?

13 A: It was. And I said it was two-fold, the
14 contamination from the tide coming and going,
15 which we have a landfill that we now know the
16 cap is eroding, and fixing the, fixing the
17 flooding that encroaches over into the public
18 housing area. So it's two-fold in my part
19 anyway.

20 Q: And the information that Mr. McPhee presented
21 to Council, did that confirm these concerns?

22 A: It did.

23 Q: Has anything occurred since -- to the July of
24 2020 to change your mind about this project?

25 A: No, not to change my mind.



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- 1 Q: Okay. I'm gonna show you one more statement
2 within this document. I put a little green
3 point on and ask you to take a minute and look
4 at that. Did the City have its own
5 environmental attorney appear at this meeting?
- 6 A: Its own environmental attorney?
- 7 Q: I'll show you -- I'll show you another
8 statement to read right above the one I showed
9 you before beginning with Mr. Tecklenburg's.
- 10 A: Thank you.
- 11 Q: You're welcome. I know it was almost two years
12 ago.
- 13 A: Right. Yeah, we did.
- 14 Q: You did. You had ---
- 15 A: We did.
- 16 Q: --- your own -- was his name Shawn Pflug?
- 17 A: It was. When you asked -- the City has a, a
18 group of attorneys that actually work for the
19 City ---
- 20 Q: Right.
- 21 A: --- and, you know, there are times we get
22 outside attorneys who are specific. So I was
23 thinking about in-house attorneys. But yes, we
24 did hire outside Council.
- 25 Q: Did you have any concerns about potential City



1 liability for the conditions at the WestEdge
2 cite?

3 A: I did. I had -- at that point I had been on
4 Council eight years and I had no knowledge
5 that, that the cap on the landfill was failing.

6 Q: Okay. And did the information provided to you
7 in that public meeting by the city attorney
8 confirm any concerns about liability for the
9 City?

10 A: Most certainly.

11 Q: And do you believe that that liability could
12 cost the City some funds in the future?

13 A: A lot of funds.

14 Q: Okay.

15 A: And I'm not -- well anyway. They can speak for
16 themselves, but we all were concerned.

17 Q: Okay. And the City o- -- the City is the
18 primary control within what they call the drain
19 inducement. That's a City drain inducement.

20 A: Oh, yes. That's our responsibility.

21 Q: And the City in fact owns some of the
22 properties that are, that are part of this
23 permit application, is that correct?

24 A: Correct.

25 Q: Now, do you recall in your deposition hearing



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1 an audio of an interview of you?

2 A: Yes.

3 Q: Okay. Could you tell -- a, a -- was there
4 another situation well after this meeting where
5 you were publicly asked to speak about
6 WestEdge?

7 A: I was.

8 Q: Okay. And was an audio played at your
9 deposition?

10 A: It was.

11 Q: What were your comments? Wh- -- di- -- tell
12 the Court about that meeting.

13 A: Yeah, so a wonderful public group that's called
14 CAJM. The Charleston Area Justice Ministry and
15 I'm a -- actually I'm a big supporter at CAJM.
16 They take on tough issues. So that's being
17 one. Myself, two colleagues on Council,
18 Councilman Sakran -- Sakran, and Bowden, along
19 with myself were in attendance at the meeting.
20 And the Gadsden Creek issue came up and they
21 asked each of us basically three questions.
22 First question was about closing the creek and
23 obviously potentially restoring the creek. My
24 two colleagues were against filling the creek
25 and I said I was not. I was for closing the



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1 creek.

2 Q: Okay. Was it a hypothetical questions?

3 A: All of them -- yeah, they were hypotheticals.

4 Q: So your statements were different from the
5 other two council members. Different ---

6 A: When it came to closing the creek or keeping it
7 open mine was different.

8 Q: Yeah, okay. Describe for me -- has the City --
9 I think we've covered this, but has the City
10 struggled with flooding?

11 A: Yeah, we continue -- that's going to be
12 continually for decades to come.

13 Q: Can you list some City flooding projects?

14 A: Well, we have the largest one going on right
15 now. It's just short of \$200 million dollars.
16 The Septima Clark Spring-Fishburne. It's a
17 major highway that cuts through the peninsula
18 from I-26 headed south. It's a project that's
19 been taking I think we are not sixth year on
20 it. Probably still have almost two years to
21 go. But monies had come from the City, federal
22 government, and the state to hopefully complete
23 that project.

24 Q: And that's what we've been referring to in the
25 trial as the Spring-Fishburne Tunnel?



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1 A: Spring-Fishburne, correct.

2 Q: The Deep Tunnel Project?

3 A: Correct.

4 Q: Any other corrections or projects ongoing that
5 you ---

6 A: Well, years ago we did the Meeting Street. We
7 did Market Street. And a number of projects
8 that we've done and obviously a long list of
9 those yet to be com- -- embarked upon.

10 Q: Did you say that you're on the budget committee
11 or ...

12 A: I'm on the Budget Ad-hoc Committee, correct.

13 Q: In your role of the Budget Ad-hoc Committee,
14 have you seen invoices, or bills, or cost
15 projections relating to flooding projects?

16 A: Yes. Not only in the budget committee, that
17 comes through ways and means, which is a body
18 of the whole Mayor and Council, all council
19 members. All those -- anything over \$40,000
20 comes in front of ways and means and on to
21 Council for approval.

22 Q: And does the City struggle to find funding for
23 expensive drainage improvements?

24 A: We struggle. We don't have enough money to do
25 it all. We just don't -- our budget is a --



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1 our annual budget right now is right around
2 about \$230 or 40 million dollars and the
3 Spring-Fishburne Tunnel Project is right at
4 \$200 million itself, so. We just don't have
5 enough money to do it all.

6 Q: Have -- strike that. Do you understand what a
7 tax increment financing district is?

8 A: I am [sic].

9 Q: Does the City have more than one tax increment
10 financing district?

11 A: We have more -- we have approximately five to
12 six and they have been very successful in
13 generating funds. In particular to fix
14 infrastructure.

15 Q: Okay. And are you aware of the Horizon or
16 WestEdge Tax Increment Financing Ordinance?

17 A: I am.

18 Q: And have you observed or witness any success
19 within that district?

20 A: Yes.

21 Q: Okay. And can you give me any examples of
22 projects that are being funded through the tax
23 revenue from that district that are important
24 to you?

25 A: Well, some of the drainage right along Lockwood



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1 has been improved by that. There's a, a street
2 I cou- -- I think the name of it is Horizon
3 Street I believe. All this is being built on
4 top of a former landfill. So the street that
5 serves the buildings on -- in that area was --
6 had to be put on pylons because again, you
7 build on top of a, a landfill to support the
8 weight of the new street. And that was paid
9 for out of TIF revenue.

10 Q: That -- the drainage improvement?

11 A: Right. Drainage improvement. And actually the
12 street itself.

13 Q: Okay. Is there a concept or proposal to
14 provide better connectivity to the medical
15 university?

16 A: It is.

17 Q: Why would that be important?

18 A: Well, some of the new offices and the like
19 that's being built on, on the WestEdge
20 Development have allied -- I'd say allied uses.
21 Some of the lab and research areas are located
22 over there. So it makes it easier to
23 transverse high traffic areas if you have
24 connectivity.

25 Q: Okay. Is -- are there any other projects that



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1 you've been supportive of that have been funded
2 partially or wholly through the TIF funds
3 generated here?

4 A: Yes, one of the pieces there is that some of
5 the funding will help with is the bike
6 pedestrian bridge.

7 Q: Yeah, that's what I was asking you about ---

8 A: Oh, the bike pedestrian bridge connects the
9 peninsula with West Ashley. It goes across the
10 Ashley River. Right now, it's very unsafe for
11 bicyclers to traverse the bridge. There's no
12 bike lanes on the bridges so this would be a
13 dedicated bike pedestrian lane. Again, monies
14 come from Washington, monies come from County
15 Council, monies come from the City, and monies
16 come from this TIF. There's a confluent of
17 funding that- -- that's going to pay for that
18 bike pedestrian bridge.

19 Q: And, and as an elected official is this
20 something citizens have expressed a need for?

21 A: It's been a very volatile subject in our areas
22 because the initial proposal prior to the
23 bridge was to close a lane on the bridge. The
24 main artery coming in from West Ashley and
25 James Island into the peninsula is a four-lane



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1 bridge, the Legree Bridge, and it was proposed
2 to go from -- well, give a picture it -- six
3 lanes now coming into four lanes. And there
4 was a proposal to close one of those four lanes
5 for a bike pedestrian, which was very -- to
6 create a bike p- -- a bike pedestrian lane,
7 which was very volatile. So the proposal came
8 forward to put a separate dedicated area and
9 that's where fortunately we finally now have
10 enough funding to do it.

11 Q: Okay. And part of that funding's from the
12 WestEdge TIF?

13 A: All of it is from that TIF.

14 Q: And is there a biking community that does not
15 oppose this, you know, or that supports wanting
16 this bike lane?

17 A: Yes, a couple a -- bike area -- bike community
18 called Charleston Moves is very volatile ---

19 Q: Okay.

20 A: --- and active -- actually they do a good job.

21 Q: Yeah. Do you believe a bike lane benefits the
22 residents and citizens of Charleston?

23 A: I do. I actually ride a bike for exercise. So
24 I, I know how dangerous it is on the roads.

25 Q: I think that's all I have for Mr. Waring.



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1 You'll have to answer any questions that Mr.
2 Cunningham may have.

3 **MR. CHURDAR:** No questions, Your Honor.

4 **THE COURT:** Okay.

5 **MR. WARING - CROSS-EXAMINATION BY MR. CUNNINGHAM:**

6 Q: Good morning, Council Member Waring, how are
7 you doing today?

8 A: Good, how about you?

9 Q: I'm all right. Good to see you again. Now,
10 you grew up in Charleston, you said?

11 A: Can you say it again?

12 Q: Yeah, you grew up in Charleston, right?

13 A: I did.

14 Q: Yeah, you didn't never have an occasion to get
15 down to visit the marsh or Gadsden Creek as it
16 existed when you were a younger person did you?

17 A: No.

18 Q: Y- -- you did? Or ---

19 A: No. I did not.

20 Q: Okay. This -- you mentioned the Spring and
21 Fishburne project that's finally closing in on
22 the completion.

23 A: Getting close.

24 Q: Okay. 'Cause we're, we're in the latter stages
25 of that now, aren't we?



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1 A: I'd say so.

2 Q: Okay. Now, you agree the City's been heavily
3 involved in the WestEdge project?

4 A: I agree.

5 Q: The City has been aware of flooding in the
6 project area for decades, is that correct?

7 A: Yes.

8 Q: The City's obviously aware of the former
9 landfill in that area.

10 A: Oh, yeah.

11 Q: The City's aware that residents in that
12 community that have been, have been living
13 close to a former landfill?

14 A: I agree with that.

15 Q: And I believe you said in your deposition that,
16 in your opinion, the residents who've been
17 living close to that landfill and had the
18 landfill essentially constructed on their
19 doorstep rescinded to, in your opinion,
20 environment racism, is that correct?

21 A: I agree with that.

22 Q: And that goes all the way back to when they
23 started the landfill in the '50s?

24 A: I would agree with that, too.

25 Q: You are not aware of any efforts in the City to



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1 address flooding in this area previously, is
2 that correct?

3 A: Not in that specific area.

4 Q: And you are not aware of any temporary
5 solutions to flooding that have been offered by
6 the City to residents in that area, correct?

7 A: I am not.

8 Q: The City, to your knowledge anyway, has not
9 sought grant funding to address tidal flooding
10 in that area, is that correct?

11 A: To my knowledge, no.

12 Q: You're not aware of whether or not the City has
13 ever sought money to clean or restore Gadsden
14 Creek from other funding sources.

15 A: No, I'm not.

16 Q: Do you agree with me that the City has an
17 obligation to keep its citizens safe from any
18 potential harm the City may have caused?

19 A: I do agree.

20 Q: Do you agree with me that the City has an
21 obligation under the, the closure permit for
22 the landfill to keep any contaminants from that
23 landfill from leaving the landfill cite?

24 A: I would agree with that.

25 Q: And you're aware of the Dutch Dialogues effort



1 from Charleston?

2 A: Yes.

3 Q: And you were supportive of that effort.

4 A: I was. And I am.

5 Q: An- -- and you would agree that the Dutch
6 Dialogues were important to the City of
7 Charleston?

8 A: Yeah, I think it opened eyes to more solutions
9 than we were looking at prior to the Dutch
10 Dialogues.

11 Q: And that -- the Dutch Dialogues resulted in the
12 completion of the final report, is that
13 correct?

14 A: That's correct.

15 Q: And that added recommendations and conclusions,
16 correct?

17 A: That's correct.

18 Q: And you moved City Council to adopt the final
19 recommendations of the Dutch Dialogues, didn't
20 you?

21 A: I believe I did.

22 Q: And that was in fact adopted?

23 A: It was.

24 Q: You mentioned the TIF district here to -- no --
25 to the extent the City can control a portion of



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1 the TIF. As to whether or not it can extend
2 it, the City has the ability to extend the TIF,
3 right?

4 A: Not unilaterally.

5 Q: But for its portion is what I'm saying.

6 A: Can you define its portion?

7 Q: Yeah, well -- I -- for instance, there are
8 various entities that are involved in the TIF,
9 right?

10 A: Correct.

11 Q: And the City has in the past voted to extend
12 the TIF, the Horizon District TIF, once
13 already, hasn't it?

14 A: It has.

15 Q: And it can do that again?

16 A: With, with the agreement of all of us.

17 Q: Sure.

18 A: Right.

19 Q: Sure. The City has recently spent money to
20 create pocket wetlands and in Shadowmoss,
21 Strict Creek area to help alleviate flooding.

22 A: That's correct.

23 Q: With respect to -- I hope you are familiar with
24 certain areas of the City that -- or certain
25 districts in the City that are -- have worked



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1 towards housing requirements for development.

2 A: Well, I am, but if I can go back to the ---

3 Q: Sure, sure, sure.

4 A: We spend money to do that in conjunction with
5 federal dollars.

6 Q: Right, right. That was a confluence again ---

7 A: Correct, correct.

8 Q: --- and there has not been any confluence of
9 money for funding for cleaning Gadsden Creek,
10 is that correct?

11 A: Not to my knowledge.

12 Q: And there hasn't been a confluence of money to
13 address the tidal flooding in the Gadsden Green
14 area, right?

15 A: I would agree to that.

16 Q: Now, let's get back to -- just for a second on
17 ru- -- workforce housing. Now, I- -- is it
18 your understanding that in certain areas of the
19 City where development occurs there's a
20 requirement by the City to either set aside
21 workforce housing or pay a fee in lieu of
22 setting aside?

23 A: In some areas, that's correct.

24 Q: And this is one of those areas where ---

25 A: It is.



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1 Q: Now, when there is a fee paid in lieu of
2 actually setting aside workforce housing, does
3 that go in a fund that's only dedicated to
4 public housing improvement in that district's
5 area? Or is it a more city-wide?

6 A: No, it's more city-wide.

7 Q: Now, I believe you testified in your deposition
8 that, if we could address flooding and
9 contamination with respect to gas would you be
10 in favor of keeping the creek?

11 A: If we could do it.

12 Q: Okay.

13 A: And fund it.

14 Q: Sure, that's part of it, right?

15 A: Yeah.

16 Q: Now, s- -- you mentioned the City Council vote
17 that affected this project, the City Council's
18 aware that it could be years before there's
19 actually construction and alleviation of any
20 flooding in the project area ---

21 A: That's with any flooding project.

22 Q: Okay.

23 A: Yeah.

24 Q: Now, in the meanwhile, the City hasn't done
25 anything to try and offer some short-term



1 flooding relief to the residents of that
2 community.

3 A: Not to my knowledge. I don't even know how you
4 would do it short-term.

5 Q: Okay. Now, I believe that you testified in
6 your deposition -- I just want to make sure
7 this is true, given the proximity in this
8 community to form a landfill and the flooding
9 that's ongoing right there, you agree that
10 that's should be fixing flooding and any
11 contamination issues in there should be a top
12 priority for the City?

13 A: Yeah, it should be.

14 Q: Well, at least one of the top priorities with
15 respect to flooding anyway.

16 A: We have a lot of top priorities that we just
17 can't fund. It's not that we don't want to do
18 them. We just don't have the money to do it.

19 Q: Okay. These are the other areas is what I'm
20 talking about. Flooding areas. You've got a
21 community that is situated next to a former
22 landfill. You ---

23 A: Right.

24 Q: --- you agree that should be a very high
25 priority ---



1 A: I ---

2 Q: --- for the City.

3 A: --- would agree with that. Yeah.

4 Q: That's all I have. Thank you so much.

5 A: Okay.

6 **THE COURT:** Redirect.

7 **MR. WARING - REDIRECT EXAMINATION BY MS. SHAHID:**

8 Q: Are you aware of the length of time it has
9 taken to obtain a permit for this project?

10 A: Specifically, no. But I know it takes a long
11 time.

12 Q: Okay. How long were the Dutch in town
13 dialoguing with City officials?

14 A: I'd say the better part of maybe six months.

15 Q: The Dutch Dialogues itself took six months.

16 A: I'm including conversations before and after.

17 Q: Okay.

18 A: So and as the Dutch Dialogues continues -- not
19 like it just stopped.

20 Q: Okay. Are you aware that w- -- that the
21 WestEdge Foundation has its own engineers
22 looking at projects?

23 A: I am.

24 Q: And the Dutch Dialogues involved more than one
25 setting that they were looking at.



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1 A: Yeah, they looked at -- I believe they looked
2 at the majority of the City of Charleston.

3 Q: Okay. They weren't focused for that period of
4 time on one location or one problem.

5 A: Oh, no. It was a comprehensive look.

6 Q: Okay. Were the pocket wetlands that the s- --
7 were funded for creation, were those considered
8 to be contaminated?

9 A: No.

10 Q: Okay. I think that's all I've got. Thank you,
11 Mr. Waring.

12 **THE COURT:** Thank you for your testimony.

13 **MR. WARING:** Thank you.

14 **MS. SHAHID:** Can we let Mr. Waring go?

15 **MR. CUNNINGHAM:** No objection.

16 **THE COURT:** All right.

17 **MR. WARING:** Y'all have a good weekend.

18 **MR. TRAYNHAM:** Your Honor, I believe that's the
19 close of the WestEdge Foundation's case.

20 **THE COURT:** All right. Do you have a rebuttal?

21 **MR. CUNNINGHAM:** I do. I don't know if the
22 Department is actually closed yet though.

23 **THE COURT:** Oh.

24 **MR. CUNNINGHAM:** Or rested anyway.

25 **MR. CHURDAR:** I- -- it is closed, Your Honor.



1 **THE COURT:** Okay.

2 **MR. CUNNINGHAM:** We do have a brief rebuttal, Your
3 Honor.

4 **THE COURT:** Well, I'm gonna take a short break and
5 be back.

6 **(Off the record from 10:37 a.m. until 10:39 a.m.)**

7 **MR. CUNNINGHAM:** Petitioner recalls Joshua Robinson
8 in rebuttal.

9 **THE COURT:** Mr. Robinson, you're still under oath.

10 **MR. ROBINSON - DIRECT EXAMINATION BY MR. CUNNINGHAM:**

11 Q: Good morning, Mr. Robinson.

12 A: Good morning.

13 Q: You are a professional engineer and hydrologist
14 with other areas of expertise we've heard about
15 before, aren't you?

16 A: That's correct.

17 Q: All right. Now, in your work as a professional
18 engineer and hydrologist, have you had
19 occasions to prepare cost estimates for repairs
20 projects?

21 A: Yes, quite frequently.

22 Q: What does that process involve?

23 A: There's a number of ways we estimate
24 construction costs. One of the first ways you
25 could do it is to refer to recently constructed



1 projects. Oftentimes, during the design
2 process we'll consult with contractors that
3 we've worked with in the past or that we u- --
4 who we know will be interested in a project,
5 ask them for current unit costs for different
6 materials and things. We also use a software
7 called RSMeans. It's a wil- -- widely
8 available, widely used, subscription based
9 software that has real-time construction cost
10 estimating data. So usually we'll estimate a
11 project in those several different ways to, to
12 have a minimum and maximum expected range of
13 the engineer's probable cost.

14 Q: And what, among various things, are you trying
15 to ascertain a cost of?

16 A: Oftentimes, it involves mass grating, fine
17 grating, installation of stonework or riprap
18 for erosion control, plant material and erosion
19 control devices, different types of barriers,
20 concrete, infrastructure. Especially if it's
21 an area that's like prone where we have to
22 combine more of a natural creek or wetland with
23 urban flooding issues. A lot of times we'll be
24 pricing pipes, concrete pipes, or plastic pipes
25 and junction boxes. All the different sort of



1 concrete, plastic, and, and different
2 structures that'll convey water. Along with
3 erosion control, different appurtenances or
4 different devices that are used during
5 construction. So that's a wide range of, you
6 know, natural materials. Of- -- oftentimes,
7 we'll consult with nurseries. Especially for
8 like a large ecological restoration project
9 where we'll need to order plant material ahead
10 of time. We'll need to make sure the
11 quantities are available. Oftentimes, we'll
12 have a nursery grow plant material for us a
13 year or so ahead of time. So lot's of
14 different steps depending on how naturalistic
15 or how more conventionally engineered a project
16 is.

17 Q: In your work as a professional engineer
18 hydrologist, are you familiar with the various
19 federal, state law regulations regarding
20 working in critical areas, coastal zones, near
21 or in aquatic resources?

22 A: Yes, I do it nearly daily.

23 Q: Okay. And have you had occasion to meet,
24 during the course of your work, with employees
25 of DHEC and Army Corps of Engineers to discuss



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1 proposed projects and how those agencies may
2 evaluate those projects?

3 A: Yes, very frequently.

4 Q: Now, in your testimony you propose as an
5 alternative -- well, various alternatives with
6 respect to this proposed project, yes?

7 A: Yes.

8 Q: Okay. Now, is it your understanding that Mr.
9 Karkowski testified that it would not be
10 technologically feasible to install a muted
11 tide gate at the Lockwood culvert due to the
12 size of that culvert?

13 A: That's my understanding, yes.

14 Q: What is your opinion, to a reasonable degree of
15 scientific certainty, about the technological
16 feasibility of installing a muted tide gate at
17 that location?

18 A: I have a very different opinion. I think it's
19 very feasible, easily so.

20 Q: All right. What is the basis of that?

21 A: Well, I think that perhaps the use of some of
22 these fancy, new acronyms like muted tide gate,
23 you know, MTGs and all these different things
24 have caused some confusion. But tidal
25 regulators have been used in coastal South



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1 Carolina for roughly 300 years. Rice trunks
2 are an early version of a tide regulator that
3 were used for the rice, you know, rice
4 plantation system going back to the late 1600s,
5 early 1700s. Those involve a series of gates
6 that can be opened and closed to manage water
7 levels depending on the tide cycle and the
8 amount of rainfall that's falling. So those
9 types of tide gates have been -- you know,
10 there's many different types up and down the
11 South Carolina coast. In fact, one of these
12 tide gates the City of Charleston has in
13 operation at West Ashley Park to control the
14 flow from Church Creek into a different wetland
15 complex, so. The City of Charleston has a
16 tide, tide gate regulator at Colonial Lake. It
17 meters the amount of water that comes through
18 Cummings Creek into a pipe system and into the
19 historic Colonial Lake Park system there.
20 There are, you know, dozens and dozens of
21 different types of tidal controls up and down
22 the South Carolina coast. So the, the box
23 culvert that's currently at Lockwood could be
24 outfitted in a number of different ways that I
25 can imagine. Whether it's a off the shelf



1 product or whether it would have to be customly
2 fabricated flat gate or hinge door system, I've
3 checked with a variety of different
4 manufacturers and, and investigated several of
5 the projects in large systems similarly sized
6 to this culvert at Lockwood and I have no, no
7 doubt that something could be made quite
8 feasibly and, and relatively inexpensively.
9 And in fact, I think that, that because the
10 culverts beneath Lockwood are two box culverts
11 that are independent of one another, laid side-
12 by-side, I think that that is a really
13 favorable scenario for a, a tide regulator
14 because we know that 20 years ago the, the
15 culvert that was previously under Lockwood was
16 significantly smaller. But that it was
17 enlarged to let more stormwater out. Now that
18 the culvert's so much bigger, there's actually
19 s- -- an opportunity to have, you know, one of
20 the, one of the barrels be closed on the
21 incoming tide, but it could open fully on the
22 outgoing tide.

23 **MR. TRAYNHAM:** Your Honor, I'm gonna object. I
24 don't think we're talking about muted tide
25 gates, which is what Mr. Karkowski testified



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1 about and what Mr. Robinson test ab- --
2 testified about earlier this week. We're
3 talking -- he's using very general terms like
4 tide gates, flat gates, tide regulator. The,
5 the alternative that was discussed previously
6 was muted tide gate.

7 **THE COURT:** I understand that was the question, too.

8 **MR. CUNNINGHAM:** And he also talked buoyancy
9 assisted tide gates as well, but.

10 **THE COURT:** Well, your question started with muted.

11 **MR. CUNNINGHAM:** I di- -- I did. It did, Your Honor.

12 **THE COURT:** So let's get him back on track.

13 Q: Mr. Robinson, I want to just focus your
14 attention on the potential technological
15 feasibility of the muted tide gate. Well,
16 let's start this way. How would you define a
17 muted tide gate?

18 A: Yeah, so a muted tide gate's a pretty general
19 term because a tide like any sort of a harmonic
20 frequency has highs and lows. So to mute that
21 would be to diminish the heights of a specific
22 frequency. So a muted tide gate would be a
23 muted or to lower the amplitude of the tide.
24 So a muted tide gate -- something like a, a
25 flat gate, or a hinge door. A buoyancy



1 assisted tide gate is a self-regulating tide
2 gate. Even the old, you know, constructed wood
3 rice trunks. Those are all forms of muted tide
4 gates. They are gates that control the tide.
5 They're, they're separate from a, a gate that
6 would completely stop the tide. So that would
7 be like a valve. Like a backflow preventer or
8 a tide valve. A gate is something that would
9 still allow water to come in but somewhat less
10 so or somewhat muted. So that's the definition
11 of a muted tide gate.

12 Q: And are the alternatives you were just
13 discussing all versions of the muted tide gate
14 as you understand that term?

15 A: As I understand it and as I've -- as it's used
16 in the literature and in other design manuals
17 and other, other areas for habitat projects,
18 yes.

19 **MR. TRAYNHAM:** All right. I continue my objection.
20 Mr. Karkowski gave his definition of a muted
21 tide gate and the rebuttal is limited to what
22 has been brought up by the Defense or in this
23 case the Respondents.

24 **THE COURT:** I'll overrule that one.

25 **MR. TRAYNHAM:** Thank you, Your Honor. We'll rely



1 on our objection.

2 Q: Just so -- I want to make sure this is in the
3 record. Your -- is it your opinion that there
4 is a reasonable -- to a reasonable degree of
5 scientific certainty, that there is a muted
6 tide gate installed where Lockwood is
7 technologically feasible?

8 A: Yes, I believe it's technologically feasible.
9 Yes.

10 Q: And that is regardless of the size of the
11 Lockwood culvert?

12 A: Yes.

13 Q: All right. And the basis of that is?

14 A: Some of the information I just provided.

15 **THE COURT:** I think that's repetitive.

16 **MR. CUNNINGHAM:** Well, I wanted to make sure though,
17 is there was an objection earlier and then we,
18 we went back to the ---

19 **THE COURT:** Okay.

20 **MR. CUNNINGHAM:** --- the definition. So I just want
21 to make sure that's in the record.

22 **THE COURT:** Okay.

23 Q: Okay. An- -- and the basis of that opinion is?

24 A: The basis of that opinion is having seen
25 similarly sized muted tide gates as a general



1 term used up and down the South Carolina coast
2 in a variety of settings, other large muted
3 tide gates, you know, that are used within, you
4 know, nearby the site, and then just research
5 I've done over the -- a number of years for
6 other projects of similar size, trying to
7 understand what products are available, what
8 things can be fabricated, and those sorts of
9 things.

10 Q: Is it your understanding that Mr. Karkowski
11 also, upon getting a permit for a muted tide
12 gate at the Lockwood culvert, would be doubtful
13 given the discussions he's had with the
14 regulatory agencies about installing muted tide
15 gates?

16 A: That's my understanding, yes.

17 Q: What is your opinion, to a reasonable degree of
18 scientific certainty, about the ability to
19 obtain a permit for a muted tide gate at the
20 Lockwood culvert?

21 A: I believe it's quite feasible to obtain a
22 permit for a muted tide gate at the Lockwood
23 culvert.

24 Q: What is the basis of that opinion?

25 A: Th- -- one of the most important aspects of



1 permitting in the scenario like this is the
2 intent. In fact, one of the first questions
3 that regulators will ask is what is it that you
4 propose and what is the intent of the project.
5 So those two things are paired together. So
6 oftentimes, this same type of solution would be
7 viewed differently depending on the intent
8 behind the solution. So for example, were I to
9 consult with regulators in the pre-application
10 meeting to install a muted tide gate for the
11 purposes of reducing unnaturally high level of
12 flooding, which has been well documented, or to
13 -- o- -- other concerns that we've all -- that
14 we've discussed here. And as a way to begin to
15 restore the natural hydrology of the tidelands
16 that I believe that those would be very
17 fruitful conversations that we could find a
18 regulatory path to, to have one installed. And
19 I know that on the basis of other muted tide
20 gates I've seen. Places like Dewees Island,
21 which I believe I testified to earlier where
22 they use different types of tide gates and
23 they've done so in concert with conservation
24 groups like Ducks Unlimited, an- -- and the
25 regulators. So that's, that's the basis of, of



1 that.

2 Q: All right.

3 A: An- -- and I think further based on the intent,
4 the intent behind changing tidal flow is very
5 different for specifically flood related or
6 even exigent issues like we just -- I just
7 heard about, or, or, you know, the other
8 concerns associated with the site. That's --
9 if, if it's for restoring the natural
10 hydrology, that's a very different regulatory
11 interpretation than if we're trying to change
12 the hydrology specifically to make room for new
13 commercial development. That's a very
14 different interpretation.

15 Q: And could that different interpretation affect
16 a permitability of a -- the installation of a
17 muted ---

18 A: Yes ---

19 Q: --- tide gate?

20 A: --- absolutely. Yes, absolutely.

21 Q: Is it your understanding that Mr. Karkowski
22 opined that a berm alternative would need to be
23 five feet in height to protect the are- -- the
24 nearby area from tidal flooding?

25 A: That's my understanding, yes.



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1 Q: What is your opinion, to a reasonable degree of
2 scientific certainty, about how high a berm
3 would need to be to protect the nearby area
4 from tidal flooding?

5 A: I've reviewed the tidal records and I've
6 reviewed my own measurements of large king
7 tides to try to understand whe- -- when the
8 flooding actually occurs at the cite and the
9 measurements that I've taken. I don't -- I
10 can't understand why you might say that a, a
11 wall would have to be five feet tall. The
12 flooding along the road, based on my
13 measurements, is a, you know, a foot and a half
14 to two feet deep. And I believe that's
15 consistent with other reports of flooding and,
16 and photos, and, and the measurements that
17 we've taken at flood depths. So five feet
18 would certainly provide a significant factor of
19 safety. But if I understand the, the edge of
20 the road there is roughly to elevation three
21 and a five foot wall would be elevation three
22 plus five, elevation eight. That's a very tall
23 wall in terms of elevations. Especially when
24 the king tide through there is roughly
25 elevation four or elevation three even.



1 Something in that, that ballpark. So a five
2 foot wall seems very excessive. I think that,
3 that what we've imagined is more like a knee
4 wall. So oftentimes, you know, a load barrier
5 that's approximately knee high. Or it could
6 even be waist high to have that extra factor of
7 safety, or to blend into the cite
8 characteristics to make it more like a seat
9 wall or something that would be consistent with
10 the urban character.

11 Q: Is it your understanding Mr. Karkowski opined
12 that a berm alternative would cost
13 approximately \$10,000 per foot over the expanse
14 of 4600 feet?

15 **MR. TRAYNHAM:** Objection, Your Honor. I believe
16 that that totally misconstrues and
17 misrepresents Mr. Karkowski's testimony. I
18 believe he stated a thousand or a couple
19 thousand ---

20 **MR. CUNNINGHAM:** Oh, I'm sorry. Okay. Sorry, I, I
21 misunder- -- I misheard him then.

22 Q: Let's ask it the other way. Is it your
23 understanding Mr. Karkowski opined that a berm
24 alternative would cost \$1,0000 to \$2,000 per
25 foot over the expanse of 4600 feet?



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1 A: I agree with part of that and I question
2 another part of it. I think that the
3 construction costs, I can imagine it being --
4 if it were like deep sheet piling that would,
5 you know, restrict subsurface flow and control
6 the above ground flow. I just happened to have
7 on another project gotten pricing from a
8 contractor last week on a 15 foot deep sheet
9 piles to restrict water flow. And those were
10 \$965 a linear foot. So I think that that
11 estimate of per linear foot, \$1,000 to \$2,000
12 if you add decorative concrete work above the
13 pile cap -- excuse me, the sheet pile, I think
14 that's, that's reasonable. But I, I don't, I
15 don't understand why it would have to be so
16 long because the f- -- f- -- area that floods
17 along Hagood and around the corner of Fishburne
18 and the Line Street connection, that's only
19 about 2,000 to 2,500 linear feet to my c- --
20 estimation. And the interior of Gadsden Creek
21 -- on the interior of the WestEdge cite doesn't
22 flood in the way that Hagood does, so. I would
23 think that the, the length required would be,
24 you know, somewhere near half that estimate
25 from Mr. Karkowski.



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1 Q: Is it your understanding that Mr. Karkowski
2 also opined about that the berm alternative
3 would have to address an ingress point with
4 respect to the street?

5 A: Yes. Yes.

6 Q: All right. What is your opinion, to a
7 reasonable degree of scientific certainty,
8 about the ability of the berm alternative to
9 address the street interruption?

10 A: I agree. That street interruption would be a
11 challenge. I, I believe a simple head wall or
12 the barrier could turn to treat head walls at
13 that road crossing. That's a very common
14 practice and it would -- could just be tied in
15 with the existing and proposed grades to allow
16 that road to cross the creek as it does now.

17 Q: Is it your understand -- well, and what is the
18 basis of that conclusion?

19 A: My own observations at the site, having stood
20 on that street crossing and watched it flood
21 during many king tides to try and understand at
22 what specific level water approaches that
23 street crossing. And then solutions I've used
24 on other similar sites where we deal with the
25 road crossing of the stream and how do we



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1 elevate the edges of the stream so the water
2 can continue to flow under the road. Or just
3 common construction practices and ones that
4 I've implemented on, you know, relatively
5 similar project scenarios.

6 Q: Is it your understanding that Mr. Karkowski
7 opined that a creek restoration or
8 renaturalization alternative would cost
9 approximately \$10 million dollars?

10 A: That's my understanding, yes.

11 Q: What is your opinion, to a reasonable degree of
12 scientific certainty, that the cost of the
13 potential creek restoration or renaturalization
14 alternative here?

15 A: I can't imagine how it would cost that much.
16 I think -- I -- I've looked back at
17 construction estimates, including estimates for
18 a significant amount of haul off of material
19 was required, excavation and haul off. The
20 largest number that I could conceive of per
21 linear foot of, of creek work and an associated
22 flood plain and near bank work would be around
23 \$1,000 a linear foot. So the -- th- -- the
24 open creek portion at Gadsden Creek now is, you
25 know, roughly 2,000 linear feet, so. That



1 doesn't get anywhere near \$10 million dollars.
2 It's still shy half of that. A look back at
3 some plant material costs, we've recently just
4 priced out a tidal creek restoration project I
5 mentioned the other day in the Ashleyville
6 community directly across the river. We're
7 working in, in collaboration with the
8 Department of Natural Resources on that project
9 so we have fresh pricing for the plant
10 material, for oyster shell, other materials
11 that would be required to reconstruct tidal
12 creeks that have been obliterated. And that
13 was, you know, in the neighborhood of, of \$1-
14 -- \$1 to \$2 million dollars for seven acres of
15 salt marsh. And that's, that's actually
16 requiring a lot of hand excavation because of
17 site constraints. Whereas this would be very
18 accessible with the public rights-of-way where
19 the equipment could be used. So I can't
20 imagine that -- surely there's other things
21 being added to that. Other amenities or other
22 infrastructure besides the restoration to
23 achieve a price tag of \$10 million dollars.

24 Q: What about the fact that the site in which or
25 around what you're operating is -- in at least,



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1 a former landfill in some areas?

2 A: Right. I'm, I'm assuming to do a really nice,
3 thorough, ecological restoration project, some
4 of that area where the spots that you mentioned
5 before, the cap or the armoring along the
6 channel bank is eroded. I presume some of that
7 material would need to be removed and then
8 repaired of shor- -- shored up as part of
9 construction. So that would require the haul
10 off of some, some landfill materials. So sure,
11 that, that would add some cost, but nowhere in
12 th- -- to my mind, add millions of extra
13 dollars unless the entire area was excavated
14 up. And I just don't -- I don't think that
15 would be necessary.

16 Q: Is it your understanding Mr. Karkowski opined
17 that state and federal agencies prohibit using
18 wetlands for stormwater treatment?

19 A: Yes.

20 Q: Is that also your understanding?

21 A: Yes, in some scenarios. Yes.

22 Q: All right. Was it your proposal to use
23 wetlands for stormwater treatment in any
24 alternative you discussed?

25 A: No, that wasn't my proposal.



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1 Q: What did you actually propose with respect to
2 wetlands?

3 A: I believe we were discussing the amount of
4 stormwater that currently flows to Gadsden
5 Creek and it's a salt marsh. And I was
6 contemplating how much of that area -- excuse
7 me, how much stormwater volume would be flowing
8 to that area after the Spring-Fishburne tunnel
9 and other -- those other improvements have been
10 constructed, which would be significantly less
11 stormwater, so. I meant to convey that that
12 area and the volume of water that's offered by
13 Gadsden Creek and its marsh would be sufficient
14 to handle that stormwater runoff. An- -- and
15 in some cases I have been able by working with
16 the same regulators we've discussed before.
17 I've been able to use natural wetlands to
18 accommodate some of the stormwater runoff
19 volume requirements, provided that that
20 stormwater is treated in some, some minor way
21 before it enters the wetlands or tidelands. So
22 there are ways to do it, but the issue is that
23 wetlands or that tidelands can't be the primary
24 way the stormwater is managed because of the
25 potential harm that runoff can cause. In this



1 case, there's already 200 acres of water
2 draining directly to the wetlands, to the
3 tidelands. So that would be reduced
4 significantly, which would actually improve the
5 hydrology and the water quality of the
6 wetlands. And that would all be part of the
7 regulatory conversation.

8 Q: Nothing further, Your Honor.

9 **MR. TRAYNHAM:** One second, Your Honor.

10 **THE COURT:** You need to take a break?

11 (Off the record from 11:01 a.m. until 11:12 a.m.)

12 **MR. TRAYNHAM:** Thank you, Your Honor.

13 **MR. ROBINSON - CROSS-EXAMINATION BY MR. TRAYNHAM:**

14 Q: Mr. Robinson, do you recall giving a deposition
15 in this matter?

16 A: Yes.

17 Q: Do you recall in the beginning of that
18 deposition you were sworn in, much as you were
19 today?

20 A: Yes.

21 Q: And do you recall my instructing you at the
22 beginning of the deposition that if you had any
23 questions or needed clarification on any
24 question, you should ask me for such?

25 A: Yes.



1 Q: You did on several occasions in the deposition,
2 did you not?

3 A: Yes.

4 Q: Do you recall we had a conversation about muted
5 tide gates during your deposition?

6 A: Yes.

7 Q: One of the questions I asked you was with
8 regard to muted tide gates, have you personally
9 had any experience permitting or constructing
10 muted tide gates. You said none of them have
11 been constructed, no. Do you recall that?

12 A: Yes.

13 **MR. TRAYNHAM:** User error, Your Honor.

14 Q: I also asked you do you have any direct
15 knowledge of the, for lack of a better term,
16 the regulatory feasibility for permitting a
17 muted tide gate in a scenario like this. You
18 said there's not been a lot of that done in
19 this state. Do you recall that?

20 A: Yes.

21 Q: I asked you can you think of any examples in
22 South Carolina where muted tide gates have been
23 permitted. And you answered, I can think of
24 some examples where they may have been
25 underway. Whether they have been permitted and



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1 implemented, I don't know. Do you recall that?

2 A: Yes, I do.

3 Q: You listed several examples that you kind of
4 put under this larger umbrella of muted tide
5 gates including rice trunks. Would you agree
6 with me that rice trunks are currently
7 implemented throughout the state to maintain
8 duck ponds and hunting ponds and things like
9 that?

10 A: That's one of the many used of them, yes.

11 Q: Would rice trunks be appropriate for the
12 Lockwood culvert?

13 A: A type of rice trunk could very well work here,
14 yes.

15 Q: Have you ever seen a rice trunk employed on a
16 culvert the size of Lockwood?

17 A: I have.

18 Q: Where?

19 A: Yeah. Dewees Island culverts are quite large,
20 similarly sized. Some of the rice trunks are,
21 you know, on the order of five, seven, eight
22 feet. Similar to the Lockwood culverts.

23 Q: And when we were talking about muted tide gates
24 in your deposition, why didn't you bring up the
25 Dewees Island example?



1 A: I honestly don't know.

2 Q: Is it possible it's because what you were
3 talking about in your deposition was entirely
4 different from a rice trunk?

5 A: I recall -- -- no, I don't think that's true.
6 I recall that we talked some about Dewees --
7 the D- -- my experience at Dewees Island in
8 terms of the, the tidal influence of the
9 project and so forth during the deposition.
10 But I don't believe the line of questions went
11 so far as to talk about those hydraulic control
12 structures were maybe similar or dissimilar to
13 what I had imagined for the Lockwood culverts.
14 I don't recall that we went into great detail
15 about the definition of the muted tide gate or
16 what would be included or what wouldn't be
17 included. I know there was a lot of
18 conversation about buoyancy assisted tide gates
19 and specifically the type of -- the specific
20 type of tide gates that were in an earlier
21 version of the application for the Fishburne
22 ditch. Such -- in my recollection I was
23 thinking about that particular structure and
24 how it's been employed and how it could be
25 employed here, not sort of broadly what types



1 of structures, you know, could work at the
2 Lockwood culvert.

3 Q: I want to understand your testimony regarding
4 the berms. Is it your position that a berm,
5 wall, whatever you want to call it, should only
6 be built up to the level of the current
7 flooding?

8 A: No, I think some factor of safety would be wise
9 there.

10 Q: You need some freeboard, correct?

11 A: Ri- -- exactly. Some freeboard.

12 Q: You need to build, for example, for future sea
13 level rise, correct?

14 A: Possibly. It depends on the life span of the
15 project, but that would be wise. That would be
16 considered as part of the freeboard
17 requirement. And also whether or not there are
18 any allowed tidal controls such as a muted tide
19 gate probably speaking at the Lockwood culvert.

20 Q: You would agree with me that in the City of
21 Charleston new roads are required to be built
22 to elevation seven and a half, would you not?

23 A: That's not true. Roads in the City of
24 Charleston are required to be built at
25 elevation seven and a half or if an extensive



1 study has been done to show they could be built
2 to an elevation of five and a half.

3 Q: In the absence of such a study elevation of
4 seven and a half is the default in the City of
5 Charleston, correct?

6 A: Except in a special protection area. So the
7 type of study that would be done -- I'm in the
8 midst of one and another -- two other projects
9 for the city so I'm very familiar with these
10 and other parts of the city. This is a special
11 protection area, the WestEdge area, so the type
12 of study that would be done is the type of
13 study that's been done. So I think it would be
14 conceivable that Hagood, you know, could be
15 built slightly higher between five and a half
16 and seven and a half because of the site
17 constraints. I don't know. I haven't studied
18 that issue very specifically, but th- -- you're
19 right on the point that it's seven and a half
20 with an asterisk unless a study has been done
21 to show that it could be lower than seven and
22 a half. But a, a minimum five and a half.

23 Q: You have not conducted such a study, have you?

24 A: I've done the measurements of water levels ---

25 Q: On this area.



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1 A: I've done the measurements of water levels at
2 Hagood, but I haven't done a study to the
3 standards of the City of Charleston. Yeah,
4 I'll admit to that.

5 Q: Part of the reason for the road elevation
6 requirements the City employs to plan for
7 future circumstances such as sea level rise?

8 A: Generally, yes. Generally, yes, but, you know,
9 there, there are not -- well, let me rephrase
10 that. There are a tremendous number of roads
11 within the City that are lower than elevation
12 seven and a half. So that's, that's sort of a,
13 a, a target elevation. It's -- the City is
14 moving toward.

15 Q: You would agree with me that if a wall like
16 this were to cost \$2,000 -- around \$2,000 a
17 linear foot, and 2600 linear feet are required
18 -- I believe that was your estimate, is that
19 correct?

20 A: I think so. Something like ---

21 Q: Roughly.

22 A: --- that, yeah.

23 Q: Yeah, we're still talking about a \$5 million
24 dollar project.

25 A: Sure, yeah.



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1 Q: Simple math. And again, for all of these
2 alternatives that you're discussing, you have
3 not submitted any kind of engineering design to
4 the regulators for the WestEdge Foundation,
5 correct?

6 A: No, I've not been retained to do so.

7 Q: And you have not brought any engineering
8 designs with you today.

9 A: No.

10 Q: Nothing further, Your Honor.

11 **THE COURT:** Mr. Churdar?

12 **MR. CHURDAR:** Your Honor, no questions from the
13 Department.

14 **THE COURT:** Any redirect?

15 **MR. CUNNINGHAM:** No, Your Honor. I ask that Mr.
16 Robinson be excused.

17 **THE COURT:** He's excused. All right. Any further
18 rebuttal?

19 **MR. CUNNINGHAM:** Nothing from the Petitioner.

20 **THE COURT:** All right. So where are we now?

21 **MS. SHAHID:** At the end.

22 **THE COURT:** Well, do you all wish to give closing
23 arguments? How do we wish to proceed on that?

24 **MS. SHAHID:** I would like to not give a closing
25 argument, necessarily, but reply to the Motion



1 for Summary Judgment that did catch your
2 attention and have some discussion earlier in
3 the week. And I can do that via a proposed
4 order or I can file a formal reply. Whatever
5 is most efficient for you.

6 **THE COURT:** Well, the Summary Judgment stage ---

7 **MS. SHAHID:** We're past that.

8 **THE COURT:** We're past that.

9 **MS. SHAHID:** Okay.

10 **THE COURT:** So and now that we're at the conclusion
11 of this case, I'll tell you at beginning of
12 this case I was firmly in the Friends of
13 Gadsden Creek's camp as far as how I thought
14 this case would, would go down. Now, I'm not
15 going to say I'm shocked by y'all's position,
16 but -- 'cause I got to think through this more.
17 But from a factual standpoint, I thought that
18 the Creek was going around the edge and then
19 filled in, but this thing's going through a
20 landfill and the evidence I've seen, bringing
21 children in this area. Finding out about the
22 lead level or potential lead level exposure, I
23 mean, I heard -- I started thinking about that
24 ... Concerned. But I understand that you all
25 wish to reconstruct it. But at least from a



1 factual standpoint what I have heard about
2 going through a landfill -- and even if you fix
3 the walls you still got the floor of the
4 landfill. It's, it's there and, and leachate
5 percolating through. But I- -- I'll hear your
6 closing arguments through -- but I will say I
7 wanna talk to y'all about the law. Just think
8 on the law. Just looking at it off the cuff,
9 thinking about it I still got -- I got to hear
10 your arguments in these proposed orders. But
11 on one hand, at this point in time, the Depart-
12 -- DHEC's view that you can use, you know, a
13 section regulation 30-12-M And I th- -- the
14 way I -- the reason I say that I've got
15 concerns about that is I recognize statutory
16 construction that ---

17 **MS. SHAHID:** We were just having trouble hearing
18 you, Your Honor.

19 **THE COURT:** Oh, I'm sorry. I will speak up louder.

20 **MR. CUNNINGHAM:** Okay.

21 **THE COURT:** I recognize the principles of statutory
22 construction. I, I guess I got a soft voice
23 when, when I started thinking about the facts
24 of this case. And some of it just -- I mean I,
25 I think we've got a responsibility to look out



1 after our environment within the laws and if we
2 got pollution's draining into the Ashley River
3 and people are okay with it. But ---

4 **MR. CUNNINGHAM:** Well I don't know that anyone is ---

5 **THE COURT:** Okay.

6 **MR. CUNNINGHAM:** --- okay with that.

7 **THE COURT:** Okay. Well. And y'all can explain that
8 to me 'cause one of the things of me telling
9 you about how I feel ---

10 **MR. CUNNINGHAM:** No, I appreciate that, Your Honor.

11

12 **THE COURT:** --- is you can respond. But y- -- you
13 have -- there's a principle of legislative
14 intent must prevail if it can be reasonably
15 discovered from the language used and the
16 language must be construed in light of the
17 intended purpose. So -- and I just -- that's,
18 you know, that's the approach I think you'd
19 have to get to utilize regulation M is thinking
20 about its purpose. It just -- I feel like a
21 approach that the Department is taking is one
22 that is a little contrary to how I believe the
23 principles of statutory construction should
24 occur, and that is you don't take purpose and
25 utilize purpose to obtain the textual meaning



1 of the statue of regulation. You use the
2 regulation or the statute to discern the
3 meaning of purpose. And looking at regulation
4 M, it just seems that -- it starts with non-
5 water dependent structures and it speak of, you
6 know, situated over coastal waters. And even
7 though I get that it said otherwise placed in
8 or over, but just contextually I'm just not so
9 sure about the application of that provision.
10 So I'll just tell y'all that. All thought on
11 the other hand, you know, when I was reading
12 through all of this I didn't catch the should
13 in provision B -- or, or 30-12(G)(2)(b), and I
14 do see, I mean, throughout the rest of that
15 provision it's shall, shall, shall. There,
16 there in provision B we've got should and then
17 you've got the sentence in section one that
18 says these cases, however -- these are cases,
19 however, were such an unavoidable environmental
20 effects are justified if legitimate public
21 needs are to be met. I mean, unavoidable
22 environmental impacts. That hits me -- that's
23 the adverse for feasible alternative type
24 issue. And then legitimate public needs that
25 you look at public policy. But that, on the



1 other hand, to me seems to create a
2 consideration under G and the Department didn't
3 think it did. So with that said, I think I
4 need to think through it from that standpoint.
5 That, you know, I'm not really in anybody's
6 camp as far as law facts. This is just a
7 unique case for me. But, with that said,
8 normally I have you submit proposed orders 30
9 days from the day it's made available to you.
10 Is that -- from the date the transcript is made
11 available to you. Is, is that okay?

12 **MR. CUNNINGHAM:** I think so. I don't know the size
13 of this transcript's going to come out.

14 **THE COURT:** Well, if you need more time tell me now
15 or later.

16 **MR. CUNNINGHAM:** Do you want to start with 45 or you
17 want to try 30 and work that out?

18 **MR. TRAYNHAM:** I would -- I think our -- we did seek
19 an expedited hearing on this matter. So I
20 think our client would like to start with 30
21 and if we can, you know, need to request
22 additional time from the Court ---

23 **THE COURT:** Well, with your client sitting behind
24 you I can tell him 30 may be a challenge for
25 the lawyers 'cause the transcript's gonna be



1 pretty big.

2 **MR. TRAYNHAM:** And I don't want to put anybody on the
3 spot. Do you have any idea how long the
4 transcript will take to produce?

5 **THE COURT:** You'll have it by next week.

6 **MS. SHAHID:** Monday

7 **THE COURT:** First of next week?

8 **COURT REPORTER:** That would be expensive. I usually
9 shoot for about three weeks with a week long
10 transcript.

11 **MR. TRAYNHAM:** We can do 45 days from the day we get
12 the transcript.

13 **ADJOURNMENT:**

14 **THE COURT:** Okay. Thank y'all.

15 **(There being no further questions, the deposition**
16 **concluded at 12:34 p.m.)**

17

18

19

20

21

22

23

24

25



FRIENDS OF
GADSDEN CREEK

WILDLIFE AND PLANTS

OBSERVED IN
GADSDEN CREEK
FROM

MARCH 2019 - MAY 2019

GADSDEN CREEK
CHARLESTON
S.C.



OTHER SPECIES NOTED FROM MARCH - MAY 2019

CAROLINA WREN	KILLDEER
MOCKINGBIRD	PALO VERDE
LAUGHING GULL	GLASSWORT
WHIMBREL	BLACKBERRY
BLUE CRAB	PALMETTO
PERIWINKLE	JUNIPER
BROWN THRASHER	GRAY FOX (REMAINS)
BROWN ANOLE	RIBWORT PLANTAIN
PEAR TREE	BROWN PELICAN
BOAT TAILED GRACKLE	SPARTINA
GRAY CATBIRD	DANDELION
VETCH	CHICKADEE
EASTERN REDBUD	EASTERN HONEYBEE
RED-WINGED BLACKBIRD	MARSH WREN (NEST)

FOLLOW
@FRIENDSOFGADSDENCREEK
ON INSTAGRAM FOR MORE



CARDINAL FLEDGLING
SOUTHERN EDGE OF GADSDEN CREEK
BORDERING HARBORVIEW TOWER GARAGE



BLACK CROWNED NIGHT HERON
OVERLOOKING HAGOOD AVE. SOUTH OF LINE ST.
PHOTO BY JOHN SEASE



GREEN HERON
JUST NORTH OF PUBLIX, NEAR THE PEDESTRIAN
CORRIDOR BRIDGE PHOTO BY LINDSEY SHORTER



EASTERN GLASS LIZARD

NEAR MUSC PARKING LOT SOUTH OF
LINE ST. WEST OF HAGOOD AVE.



GREAT EGRET

OVERLOOKING GADSDEN CREEK
ON HAGOOD AVE. & LINE ST.



CAROLINA ANOLE

NEAR MUSC PARKING LOT SOUTH OF
LINE ST. WEST OF HAGOOD AVE.

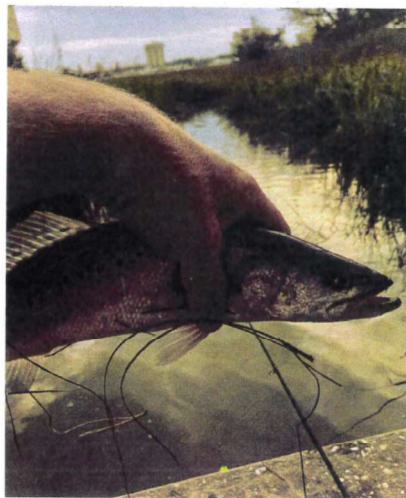


SHEEPSHEAD (AND SAM!)

CAUGHT AT THE MOUTH OF GAITHERS CREEK ON
LOCKWOOD AVE. PHOTO BY DAVE DIBENEDETTO



MULLET AT LOW TIDE
PHOTOGRAPHED FROM THE
PEDESTRIAN CORRIDOR BRIDGE



SPECKLED SEA TROUT
CAUGHT AT THE MOUTH OF GADSDEN CREEK ON
LOCKWOOD AVE. PHOTO BY DAVE DIBENEDETTO



RACCOON
SOUTHEASTERN EDGE OF GADSDEN CREEK
OFF OF HAGOOD AVE. PHOTO BY JOHN SEASE



CHAINY BRIAR (EDIBLE!)
EASTERN EDGE OF GADSDEN CREEK
HAGOOD AVE. & ALLWAY ST.



ONE OF THOUSANDS OF FIDDLER CRABS
32.788907, -79.955916
(GADSDEN CREEK)



SEA OXEYE
COVERING ALL OF GADSDEN CREEK'S
UPPER BOUNDARIES



MALE CARDINAL
SOUTHERN EDGE OF GADSDEN
F0GC 025070
PHOTO BY JOHN SEASE



EASTERN OYSTERS
SOUTHERN EDGE OF GADSDEN CREEK
BORDERING HARBORVIEW TOWER GARAGE





FOGC 027321



FOGC 027322

April 1st 1867
 Backsends Green N.Y.M.



152 NEGRO BAPTISM.

A. SELIGE SOUVENIR POST CARD CO., ST. LOUIS.

PUBLIC INFRASTRUCTURE IMPROVEMENTS AGREEMENT

THIS PUBLIC INFRASTRUCTURE IMPROVEMENTS PURCHASE AGREEMENT (this "**Agreement**") is made effective as of the 13th day of September, 2016 (the "**Effective Date**"), by and between the CITY OF CHARLESTON, SOUTH CAROLINA, a South Carolina municipal corporation (the "**City**"), and HORIZON PROJECT FOUNDATION, INC., a South Carolina non-profit corporation, its successors and assigns (collectively, "**HPF**"). The City and the HPF are sometimes referred to individually as a "**Party**" and together as the "**Parties**" as the context may require.

RECITALS

1. Pursuant to the "Tax Increment Financing Law" codified at Title 31, Chapter 6, Code of Laws of South Carolina, 1976 as amended (the "**TIF Act**") the City is authorized to establish redevelopment project areas, issue obligations to carry out a redevelopment project and pay redevelopment project costs, each as defined in the TIF Act. The City Council of the City ("**City Council**") by ordinance (the "**TIF Ordinance**") adopted December 16, 2008 established the Horizon Redevelopment Project Area (the "**TIF District**"). The Redevelopment Plan attached to the TIF Ordinance describes the expectation that certain public improvements will be funded by TIF Revenues (as defined in the Redevelopment Plan) or will be financed by borrowings secured by a pledge of revenues generated by the TIF District.
2. The City of Charleston and the Medical University of South Carolina Foundation (collectively the "**Present Owner**") owns, in fee simple 17.97 acres of property situated within the TIF District more particularly described in Exhibit A attached hereto and made a part hereof (the "**Property**").
3. The City Council amended the TIF Ordinance by an ordinance approved on July 15, 2014 to among other things extend the term of the TIF District.
4. The City and the Medical University of South Carolina Foundation ("**MUSCF**" and together with the City, the "**Supported Organizations**") joined in the establishment of HPF, the primary function of which, stated generally, is to support (i) the education, research and clinical funding activities of MUSCF on behalf of its supported organizations and (ii) the City's objective to create economic development opportunities and improved quality of life in its neighborhoods, by working to implement the redevelopment project plan for the development of the area known as the "Horizon Redevelopment Project Area" (and sometimes referred to as the "**WestEdge**").
5. The Supported Organizations and HPF entered into that certain Contribution Agreement dated as of September 11, 2012 (as amended, the "**Contribution Agreement**"), the terms of which generally provided, *inter alia*, that the Supported Organizations would contribute, or cause to be contributed, certain lands located within the Horizon District (the "**Contributed Lands**") to a Master Option Agreement granting HPF the right to acquire fee simple title and/or easements and other possessory rights in and to any or all of the Contributed Lands or portions thereof for \$1.00, all as will be more particularly set forth in a Master Option Agreement to be executed by and among the City, MUSCF and HPF (the "**Master Option Agreement**").
6. After acquisition or assignment of all or portion of the Contributed Lands, HPF proposes to develop all or portions thereof in multiple phases (or convey portions of such Property to third parties for development consistent with and subject to this Agreement).

7. In conjunction with the development of all or portions of the Horizon Redevelopment Project Area, subject to the terms and conditions hereof, HPF will undertake certain improvements, which improvements are set forth on **Exhibit B** attached hereto and made a part hereof (collectively the **"Public Infrastructure Projects"** and individually as the context may require a **"Public Infrastructure Project"**). The TIF Ordinance describes revenue bonds to be issued to defray the cost of a portion of such Public Infrastructure Project (**"TIF Bonds"**). The TIF Ordinance, as currently amended and to be amended in the future, describe certain public infrastructure improvements to be undertaken within the TIF District.

8. The parties intend that certain of the costs to be incurred by HPF (or HPF Affiliate) in connection with the remediation, engineering, design, permitting, construction (including development and construction management fees as set forth in **Exhibit C**) and equipping of the Public Infrastructure Projects (collectively the **"Public Infrastructure Costs"**), which shall include all types of costs eligible for reimbursement under applicable law, will be funded from the proceeds available from TIF Bonds (**"TIF Bonds Proceeds"** as hereinafter defined). In addition, funds advanced by HPF for Public Infrastructure Costs will be reimbursed from the TIF Bonds and Excess TIF Revenues. The estimated Public Infrastructure Costs are set forth on **Exhibit C** attached hereto.

9. The City is willing to facilitate the reimbursement described above to the HPF and/or HPF Affiliate from the TIF Bond Proceeds and Excess TIF Revenues for such Public Infrastructure Costs and to disburse TIF Bond Proceeds and Excess TIF Revenues at least once per month on the terms and conditions hereinafter set forth and as set forth.

10. In connection with the City's issuance of TIF Bonds, it is necessary that the City Council by ordinance (the **"Bond Ordinance"**) approve such TIF Bonds and it is further necessary that a successful financing of the TIF Bonds be accomplished.

11. The parties intend to enter into one or more supplemental amendments or addendums to this Agreement in connection with the issuance of TIF Bonds.

NOW, THEREFORE, for and in consideration of the premises, the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

ARTICLE I - RECITALS

Section 1.1 The foregoing Recitals are incorporated into and made a part of this Agreement.

ARTICLE II - DEFINITIONS

Section 2.1 Defined Terms. In addition to the terms defined in the Recitals and elsewhere herein, the following terms shall have the meanings specified herein:

"Applicable Requirements" shall mean, collectively, all requirements contained in this Agreement, the Indenture, the Construction Documents, all City standards and requirements for publicly dedicated infrastructure improvements, and all applicable and duly enacted federal, state, county and City laws, codes, ordinances, rules, regulations, approvals, and permits (all as may have been modified by any documents applicable to the Property, including without

limitation any subsequent Development Agreement executed pursuant to §6-31-160 of the Code of Laws of South Carolina, as amended). The Applicable Requirements shall not include the City procurement code.

"Approved Reviewing Consultant" means an engineer, geotechnical specialist, or other type of consultant ("Reviewing Consultant") whose services are determined by one of the parties to be useful in connection with technical reviews associated with City action on Development Permits, whose qualifications meet the City's requirements for such services and who has been approved by the City. HPF shall have the option, from time to time, to submit a list of qualified Reviewing Consultants to be pre-approved by City. The Approved Reviewing Consultant, when retained, will perform functions otherwise required to be performed by the City, including reviewing designs and plans, inspecting construction and determining satisfaction of project requirements; however, all final approvals shall be made by the City. The City shall approve those Reviewing Consultants who meet the City's qualification requirements. The costs of the Approved Reviewing Consultant shall be included within Public Infrastructure Cost.

"City Project Manager" shall mean the individual appointed by the City who is responsible for coordinating the City's obligations and rights under this Agreement and who is responsible for coordinating all City responses to HPF's applications for Development Permits, for assisting HPF with the application and review process for Development Permits and for obtaining timely and unified City responses to HPF's requests for approvals, permits and consents. The City Project Manager shall be a City employee and HPF shall be entitled to rely on the authority of the City Project Manager to act on behalf of the City in obtaining such approvals, permits and consents unless the City Ordinances explicitly provide otherwise. The costs of the City Project Manager shall be included as a Public Infrastructure Cost and shall not exceed \$150,000 annually and shall not exceed 1% in the aggregate of the total approved budget established pursuant to Section 5.7. All of the City Project Manager's time shall be dedicated to the redevelopment of the Redevelopment Project Area, unless the parties to this Agreement agree otherwise, in which case the costs shall be prorated based upon an allocation formula agreed to between the parties.

"Construction Documents" shall mean, collectively, the Plans, and all construction budgets, engineering reports, Design Professional contracts, construction management agreements, contracts for environmental services and remediation, supply contracts, construction contracts, project schedules, and other documentation pertaining to the design, equipping, and construction of the Public Infrastructure Projects (but not including any construction financing documents with third party construction loan lenders, if any), each as may be amended from time to time in accordance herewith.

"Construction Fund" shall mean a fund established into which TIF Bond Proceeds and Excess TIF Revenues are deposited in order to reimburse HPF for and/or pay directly Public Infrastructure Costs.

"Design Professional" means the properly licensed architects and/or engineers engaged by HPF or an HPF Affiliate for a Public Infrastructure Project as further described in Section 5.13 of this Agreement.

"HPF Affiliate" shall mean any entity owned in whole or part by HPF or by any entity that controls, is controlled by, or is under common control with HPF. For convenience of reference, the term HPF as used herein shall occasionally refer to either HPF or to an HPF Affiliate where appropriate.

"Development Permits" includes a building permit, zoning permit, subdivision approval, rezoning certification, special exception, variance, certificate of occupancy, municipal separate storm sewer system (MS4) permit and/or any other official action of the City having the effect of permitting all or portions of the Project or use of all or portions of the property.

"Disbursement Request" has the meaning set forth in Section 6.2 of this Agreement.

"Indenture" shall mean the master trust indenture, if any, as may be modified or supplemented by one or more supplemental indentures.

"Redevelopment Plan" shall mean that certain Redevelopment Plan (as amended from time to time) for the Redevelopment Project Area, a copy of which is attached as **Exhibit D** and made a part of this Agreement.

"Plans" shall mean the final plans and specifications, including all drawings and design calculations, prepared by a Design Professional and approved by the City in accordance with the procedures set forth in Section 8.2 with respect to a Public Infrastructure Project or portion thereof.

"Project Schedule" has the meaning set forth in Section 5.5 of this Agreement.

ARTICLE III - CONDITIONS TO HPF'S OBLIGATIONS HEREUNDER

Section 3.1 Modification of TIF Ordinance and Related Ordinances and Documents.

The respective obligations of the HPF and City hereunder are conditioned upon, among other conditions set forth in this Agreement, the following:

- (i) Adoption by City Council of an ordinance modifying the Redevelopment Plan as agreed upon between the City and HPF;
- (ii) Agreement of HPF and City that, with respect to future issuance of TIF Bonds, at such time as TIF Revenues exceed 102% of the current bond year's principal and interest payment such Excess TIF Revenues shall transfer to the Construction Fund for reimbursement of HPF Project Infrastructure Costs (such agreement being subject to the obligations imposed by purchaser of such TIF Bonds); provided however, HPF acknowledges, notwithstanding anything herein to the contrary, some or all of the initial and if required subsequent, TIF Bond issuance(s) shall be paid to the MUSCF and the City to reimburse these parties for the construction of the portion of WestEdge Street (formerly Horizon Street) constructed in tandem with the project at 99 WestEdge.
- (iii) The City's commitment to issue subsequent series of TIF Bonds in order to finance Public Infrastructure Costs, recognizing that the principal amount of such future issuance of TIF Bonds is dependent upon such factors as the income stream securing such borrowings as well as interest rates then prevailing;
- (iv) HPF's acquisition of title to (or a valid easement or other right to construct upon) the portion or portions of the Property on which a Public Infrastructure Project is to be located.

ARTICLE IV

Section 4.1 In connection with the issuance of TIF Bonds, HPF and the City shall have the right, upon mutual agreement, to designate additional Public Infrastructure Projects (the existing Public Infrastructure Projects listed on **Exhibit B**) in accordance with the Redevelopment Plan and shall enter into an amendment or addendum hereto or a separate agreement in form and substance equivalent hereto; provided however that TIF Bond Proceeds and Excess TIF Revenues shall first be applied to Public Infrastructure Projects listed on **Exhibit B**. Provided that HPF is not in default hereunder, the City shall proceed with the issuance of such subsequent series of TIF Bonds contemplated under the MOU for the continued development of the Property in accordance with the Improvement Plan. The TIF Bond Proceeds and Excess TIF Revenues shall not be used by the City for any purposes other than as provided hereunder.

Section 4.2 The City agrees to deposit all TIF Bond Proceeds and Excess TIF Revenues generated by the TIF District into the Construction Fund established for the reimbursement of HPF for Public Infrastructure Costs and to apply such TIF Bond Proceeds and Excess TIF Revenues for such purposes. Excess TIF Revenues shall be made available hereunder for payment or reimbursement of Public Infrastructure Costs paid or incurred by HPF or any HPF Affiliate to the extent that such amounts have not been reimbursed. As a final distribution prior to dissolution of the special tax allocation fund as described at Section 31-6-70 of the TIF Act, any funds remaining in such Construction Fund shall be applied to reimburse HPF or any other HPF Affiliate as described in the preceding sentence to the extent such reimbursement shall not previously have been made.

ARTICLE V- CONSTRUCTION REQUIREMENTS

Section 5.1 **Responsibilities with Respect to Construction.**

(a) HPF (or HPF Affiliate) shall cause all work performed by it with respect to the construction of Public Infrastructure Projects to be conducted in a good workmanlike and commercially reasonable manner. HPF (or HPF Affiliate) shall retain at all times adequate staff or consultants to administer and coordinate all work related to the design, engineering, acquisition, construction, and installation of the Public Infrastructure Projects. Pursuant to Sections 5.5 and 5.7 of this Agreement, HPF and the City shall meet prior to commencement of construction of each phase of the Public Infrastructure Projects and develop a schedule and budget for each such phase. The City shall make available the TIF Bond Proceeds and Excess TIF Revenues for reimbursement of Public Infrastructure Costs as set forth herein.

(b) HPF (or HPF Affiliate) shall be paid a construction management fee as set forth in **Exhibit B**.

(c) Public Infrastructure Projects identified on **Exhibit B** will be undertaken by HPF, and the Public Infrastructure Costs incurred in connection as set forth in **Exhibit B** therewith shall be reimbursed and/or directly paid from the TIF Bond Proceeds and Excess TIF Revenues in accordance with the terms of this Agreement.

(d) Upon written agreement of the City and HPF, **Exhibit B** may be amended from time to time to change individual Public Infrastructure Projects provided that such change does not compromise the economic viability of the Property and TIF Bonds as a whole. In addition,