

RED HILL VALLEY PARKWAY INQUIRY

TRANSCRIPT OF PROCEEDINGS
HEARD BEFORE THE HONOURABLE J. WILTON-SIEGEL
held via Arbitration Place Virtual
on Wednesday, May 4, 2022 at 9:30 a.m.

VOLUME 7

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1 Arbitration Place Virtual

2 --- Upon resuming on Wednesday, May 4, 2022

3 at 9:30 a.m.

4 MR. LEWIS: Good morning

5 Commissioner, counsel. Our witness this morning

6 is Mr. Marco Oddi, and if the court reporter could

7 please affirm him.

8 MARCO ODDI; AFFIRMED

9 MR. LEWIS: Thank you.

10 EXAMINATION BY MR. LEWIS:

11 1 Q. So, Mr. Oddi, just to
12 cover a bit of your background, educational, work
13 history, just to begin, I understand that you have
14 a Bachelor's degree in civil engineering from
15 McMaster University from which you graduated in
16 1985. Is that right?

17 A. Yes.

18 2 Q. And you've been employed
19 by the City of Hamilton and its predecessor
20 entity, the Regional Municipality of
21 Hamilton-Wentworth, since 1991. Is that right?

22 A. Yes.

23 3 Q. And you were the project
24 manager of the special projects office from 1991
25 through 2000. Is that right?

1 A. That's correct.

2 4 Q. And am I right that that,
3 among other things, included, you know, design and
4 construction of the LINC, the Lincoln Alexander
5 Parkway?

6 A. That's correct.

7 5 Q. Which was completed in
8 1997. And, as well, the LINC extension to Mud
9 Street that was completed in 1999?

10 A. That's correct.

11 6 Q. Okay. And then you
12 were -- and in that position, am I right that for
13 the entirety of that time, you reported directly
14 to Mr. Gary Moore?

15 A. That's correct.

16 7 Q. And then from 2001 to
17 maybe the end of 2002, am I correct that you were
18 the project manager in the design and construction
19 office?

20 A. Correct.

21 8 Q. Okay. And what were your
22 primary roles and responsibilities in that
23 position?

24 A. After the region and city
25 had amalgamated, our special projects office was

1 disbanded, so this section delivered the normal
2 capital construction, which involved road, sewer,
3 sidewalk, watermain, sewers, bridges, retaining
4 walls, so I was working in that section until --
5 actually, I believe until the spring of 2003.

6 9 Q. Spring of 2003, okay.

7 A. Yeah.

8 10 Q. And am I correct that in
9 that position during that time, you were not
10 reporting to Mr. Moore; it was someone else?

11 A. That's correct.

12 11 Q. And who did you report to
13 at that time, if you recall?

14 A. Jerry Parisotto was the
15 manager of construction, and Gary Moore at that
16 time was the manager of design.

17 12 Q. So you were reporting to
18 Mr. Parisotto?

19 A. Correct.

20 13 Q. And then -- sorry, when
21 in 2003 did you join the Red Hill Valley Parkway
22 project office?

23 A. It was the spring. I
24 can't recall the exact month, but in spring of
25 2003 I joined the Red Hill Valley project office,

1 correct.

2 14 Q. Okay, project office.

3 And at that point, you were back to reporting
4 directly to Mr. Moore?

5 A. Correct. Gary was still
6 the manager of the design for the normal capital
7 projects, but he was also the manager of, I guess
8 you would say, design and construction of the Red
9 Hill Valley project.

10 15 Q. Okay. And were you
11 dedicated full time to the Red Hill Valley Parkway
12 project while you were assigned to the project
13 office?

14 A. Yes.

15 16 Q. And back in the 1990s
16 when you were that the special projects office,
17 were you exclusive to the LINC and the LINC
18 extension, or were there other projects as well
19 during that time?

20 A. To the best of my
21 recollection, it was just the LINC and its
22 associated projects.

23 17 Q. Okay. And then after the
24 Red Hill project was completed, am I correct that
25 beginning in March 2009 to January 2016, you

1 became the senior project manager of the
2 construction office?

3 A. Correct.

4 18 Q. And who did you report to
5 at that time?

6 A. Back to reporting to
7 Jerry Parisotto.

8 19 Q. Okay. Was that for the
9 entire time period?

10 A. Yes.

11 20 Q. And did you report at all
12 to Mr. Moore indirectly or no?

13 A. Gary was -- I believe it
14 was 2008 when they created engineering services,
15 so whatever we were called before now became
16 engineering services. Gary was a successful
17 applicant as the director, so Jerry reported to
18 Gary, so I reported to Gary indirectly.

19 21 Q. Indirectly, okay. And
20 then since January 2016, that's when you became
21 the manager of construction and engineering
22 services. Is that right?

23 A. That's correct.

24 22 Q. So, I guess was that
25 Mr. Parisotto's former position?

1 A. Yes, it was.

2 23 Q. I see. And is that the
3 position you occupy today?

4 A. Yes.

5 24 Q. Registrar, if we could go
6 to overview document 3, image 10, and this is the
7 Red Hill Valley Parkway project charter, and it
8 begins at paragraph 17. This is the March 25 --
9 yeah, thank you. Leave 11 as well. I appreciate
10 that. It's dated March 25, 2003 and it sets out
11 the roles and responsibilities of staff involved
12 in the Red Hill Valley Parkway planning and
13 construction, the individuals at that time who
14 were involved.

15 And so, with the date of
16 March 25, 2003, you referred to the spring, so
17 would I be correct, since you're listed there,
18 that you would have at least started by that point
19 on the Red Hill Valley Parkway project?

20 A. I believe so, yes.

21 25 Q. Okay. And at the bottom
22 of image 11 -- and maybe put up 11 and 12 because
23 Mr. Oddi's description continues on to the
24 following page, so 11 and 12, yeah. At the bottom
25 of 11 and top of 12, it refers to you as the

1 senior project manager and sets out your role and
2 responsibilities overall. Does that accurately
3 set out your job at the time?

4 A. Yes, it does.

5 26 Q. And, generally speaking,
6 does this document accurately set out the roles
7 and responsibilities of the other individuals
8 listed?

9 A. Of the individuals that
10 are listed, yes.

11 27 Q. I appreciate, for
12 example, that project sponsor, Mr. Crockett, he
13 moved on and at some point was no longer part of
14 the project, but the positions themselves and the
15 individuals listed at that time are accurate.
16 Correct?

17 A. That's correct. Our
18 communications officer had changed and then I
19 believe in 2004 an environmental coordinator was
20 also added to the project team.

21 28 Q. I see. Who was that?

22 A. The environmental
23 coordinator was Jim Rockwood.

24 29 Q. Okay. And just generally
25 speaking overall, during the Red Hill, when I say

1 "the Red Hill" I'm talking about the parkway or
2 RHVP or Red Hill Valley Parkway, but during
3 construction, both grading and paving, how much
4 were you onsite as project manager? Was it daily?

5 A. Not necessarily. I was
6 out in the field quite a bit. You know, I
7 might -- it just depended what challenge needed to
8 be addressed at that time, but I was out in the
9 field quite often but not necessarily every day.

10 30 Q. Okay. Would it be fair
11 to say most days but not every day? There might
12 be days when nothing was going on that you needed
13 to be there, but most days were you onsite?

14 A. Oh, no. If there was
15 things going on, I wasn't, you know. We had a
16 team of consultants that was looking after each
17 section, so it wasn't that -- there were sometimes
18 times of not much going on, but I just didn't
19 necessarily go to the site every day.

20 31 Q. Okay. Most days?

21 A. But most days, yes.

22 32 Q. All right. And during
23 the lead-up to and then the paving itself, and we
24 know the paving began at the end of May of 2007,
25 in the lead-up and during the paving, what were

1 your day-to-day responsibilities? What kinds of
2 things were you doing?

3 A. Sorry, in relation to the
4 paving contract or to the overall project?

5 33 Q. No, the paving contract,
6 so just in the lead-up to and then during the
7 paving itself. Maybe we can separate it out two
8 ways. So, after, with respect to the paving
9 contract in the, you know, months leading up to
10 the beginning of paving and then the paving
11 itself?

12 A. Well, we would have
13 monthly site meetings with the contractor and, if
14 required, any of their subcontractors, as well as
15 any of our consultants that needed to be added.
16 But usually we had, sort of, throughout the entire
17 project had fostered a really -- everyone had to
18 be working together to make the project
19 successful, so, you know, we weren't -- so, my
20 typical day would be, back then, I didn't have a
21 Blackberry, a smartphone, it was just basically a
22 flip phone. I did have a laptop, though, so, you
23 know, if you could check e-mails maybe in the
24 morning, if you need to go by the office, pick up
25 whatever, go out to the site, see what was going

1 on, so a lot of our interaction was done in
2 person. If there was something that needed to be
3 dealt with, we wouldn't wait and say, okay, I'll
4 meet you there at this time. We dealt with it.
5 And then, you know, paperwork, e-mails, whatever,
6 if required, would then be sent.

7 So, maybe during the day to
8 catch up, you know, it was dial-up internet
9 connection, so, you know, we had a site trailer
10 that our consultants were using. We would check
11 e-mails maybe at that point, maybe at the end of
12 the day. So, it was sort of if it's urgent, call
13 me, and if I'm busy in a meeting, I won't pick up
14 the phone because the ringer is set to silent.
15 Leave me a message and I will get back to you. If
16 you send me an e-mail, I wouldn't necessarily
17 address it until the next day.

18 So, at that point, though, it
19 was more of a normal project. It was just going
20 through the -- you know, I believe we had started
21 paving in May with the base asphalt. There's all
22 the different layers, the rich bottom mix, the
23 SP25 that went down, the SP19, and then the
24 surface asphalt, either SMA or Superpave 12.5 FC2.

25 34 Q. Right. And just to place

1 it in time, it was the end of May, off the top of
2 my head I'm thinking May 27, was when the RBM
3 began to be laid down and then the SMA began on
4 August 1 and completed on or about the 13th of
5 August, so that's the timeframe of the actual
6 paving placement that we're talking about.

7 A. Okay.

8 35 Q. So, you described your,
9 you know, e-mail and phone practices and is it
10 fair to say that you were, from the City's
11 perspective, I know you had consultants and a
12 bunch of them working with you, for you, were you
13 overseeing the day-to-day construction as the
14 City's representative?

15 A. I was definitely the City
16 contact for the construction. Jim was the contact
17 for our environmental management plan --

18 36 Q. That's Jim Rockwood?

19 A. I apologize, yes. Making
20 sure that we were adhering that the policy that
21 had been committed to. And that was the idea of
22 fostering the team, is that, you know, it's kind
23 of like you know when you create an ISO standard
24 and you say, this is what we said we're going to
25 do. Now we're making sure we're doing it. But

1 despite what Chris Murray will tell you, I was not
2 the person who built Red Hill on my own. We had a
3 great team of consultants and contractors that
4 worked together to make it a successful project.

5 37 Q. I get it. Number one,
6 you weren't on the tools, you weren't placing the
7 gravel, you weren't placing the asphalt and you
8 weren't doing any of that stuff. Nonetheless, I
9 just want to confirm that with the assistance of
10 consultants who were also of course involved, that
11 from the City's perspective, you were on a
12 day-to-day basis overseeing the construction. Is
13 that fair?

14 A. Yes.

15 38 Q. Okay. Thank you. And
16 during construction, how often would you typically
17 speak with or meet with Mr. Moore, we'll start
18 with, and how often would he be onsite?

19 A. Gary, not often. I would
20 definitely see Gary at our team meetings, which I
21 believe we held every -- I believe they were every
22 two weeks, and those would have been back at our
23 offices at the city centre.

24 39 Q. And those were the
25 internal meetings of the people on the project

1 team?

2 A. Correct.

3 40 Q. Sorry, go on. Okay. So,
4 you would see him at the meetings, so how often
5 would Mr. Moore be onsite? Those are offsite.

6 A. I'm sorry, I apologize.
7 I don't recall Gary being onsite very often, you
8 know. I would keep him in the loop if he asked
9 questions.

10 Sorry, my lights just went
11 out, so I think I have to wave. I apologize.
12 Otherwise, they don't come back on. There we go.
13 I love technology. My apologies.

14 So, Gary would only be, you
15 know, if he wanted to see -- I can't recall if
16 when we were putting down the rich bottom mix if
17 he came out. You know, I can't recall when we
18 were doing the SMA test strip if he came out, but
19 he would just come out occasionally. Gary
20 basically -- Gary and Chris trusted us to do our
21 jobs.

22 41 Q. At what sort of point
23 would you bring Mr. Moore into the loop? On what
24 sort of issues?

25 A. I would bring Gary and

1 Chris into the loop if there was something -- at
2 this point -- sorry, your question is regarding
3 paving. Correct?

4 42 Q. Yeah.

5 A. Not the overall project?

6 43 Q. Yeah. Just paving right
7 now, but we can broaden it as well. I would like
8 to do that. I wanted to sort of take it in
9 chunks, but go ahead.

10 A. In terms of the paving,
11 unless there was something really that I needed
12 his assistance for or his technical guidance, but
13 that's why we had Golder onsite. So, not very
14 much at that point while we were paving with Gary.

15 44 Q. Okay. And what about
16 Mr. Murray, then? We know that he left shortly
17 after the paving began in mid-June of 2007, but
18 why don't we talk about prior to the paving,
19 because you were distinguishing between that, with
20 Mr. Moore. What, sort of, was his level of
21 day-to-day involvement? How often do you
22 communicate with him?

23 A. Again, I'm not sure if
24 you're aware of the -- I'm sure you're aware of
25 the controversial history with Red Hill. It

1 wasn't just about building, you know, an
2 expressway. It was also building seven kilometres
3 of natural channel creek construction, which, you
4 know, probably about four kilometres of it wasn't
5 even in the road right-of-way. It was out through
6 the original corridor through King's Forest golf
7 course and in behind Rosedale Arena, so that's why
8 it was called the Red Hill Valley project, not
9 just the Red Hill Valley Parkway.

10 45 Q. More than just a road?

11 A. Yes. You've seen our
12 logo when we created it. So, you know, it was a
13 great project. There was a lot of -- we had
14 people who were obviously opposed to it and,
15 again, that goes back to, you know, the city did
16 the whole due diligence, did the redesigns to make
17 the project more environmentally friendly, and we
18 also installed a combined sewer overflow pipe
19 system that ran from King Street and tied into the
20 water treatment plant. Instead of building three
21 separate CSO storage tanks, which if the parkway
22 had never gone ahead, we would have had to dealt
23 with that. Instead, we built one, if you want to
24 call it, a superpipe at one third of the cost
25 basically, you know, so there was a lot of things

1 going on.

2 So, at the very start of the
3 project, there was probably lots of phone calls
4 with Gary, Chris, because we had protesters onsite
5 occupying things as we were going through
6 contracts, so it was all just very quick pace,
7 lots of things going on. But again, it was the,
8 you know, phone calls, we deal with things, we
9 meet right away, lots of strategy meetings in
10 terms of how to deal with, you know, the different
11 challenges that came up at the project.

12 And then after about, you
13 know, it might have been near the end of 2004,
14 because, as you realize, this project was built in
15 stages. We built and tendered what we could in
16 2003, getting the necessary permits. 2004, we
17 started the grading contracts, and that was broken
18 into three different sections. So, by the end of
19 2004, the creek -- I'm trying to remember.
20 Portions of the natural channel creek construction
21 were happening. The escarpment cut at the top was
22 done. The Rennie Street landfill, we had to
23 remove a portion of it and install a leachate
24 collector system, was done. And the big thing is
25 the Ministry of Transportation started their

1 A. I believe we had two
2 early grading contracts that were done a little
3 earlier. A third one came out a little later, in
4 2004. And then the one in 2005 was basically
5 completing the very north end, completing the
6 creek work through that section and building
7 another structure over top Red Hill -- sorry, it
8 was Red Hill creek there to the -- sorry, I'm
9 getting my bearings here. The lake is north in
10 Hamilton. I was born and raised in Hamilton,
11 worked in Toronto three years. It really messes
12 up your geography. So, the landfill was to the
13 west of the parkway, so there are structures
14 through there that were part of that 2005 grading
15 contract. But it wasn't a grading contract. It
16 was more of a creek and bridge contract.

17 47 Q. Okay. Right. And if we
18 could go, just to cover this off, to image 24 and
19 25, OD3, paragraph 48, the last one you were
20 talking about is in 48(d) on image 25. Is that
21 the one you're talking about, the northernmost
22 section?

23 A. Correct.

24 48 Q. Okay, and the other ones
25 having been issued in 2004. And those were

1 executed by, the first one in paragraph A, by
2 Aecon and that's the southernmost portion. Is
3 that correct?

4 A. Correct.

5 49 Q. And the other ones by
6 Dufferin. Right?

7 A. You know what? I believe
8 Dufferin was the low bidder on all the remaining
9 contracts. Sorry, there was another one, but it
10 was to relocate Nash directly on to Brampton and
11 that was another contractor, but it wasn't working
12 within the valley portion of the project.

13 50 Q. Okay. But for the main
14 line grading contracts, Aecon had the southernmost
15 one and Dufferin was the low bidder and executed
16 the other three. Is that right?

17 A. That's correct.

18 51 Q. And so, if we talk about,
19 then, to come back to it, appreciating the
20 earlier, as you said, the controversial issues,
21 but in terms of construction, you can tell me if
22 it's different during grading or paving, but what
23 sort of, on those mundane, as we could call it,
24 construction issues rather than the controversial
25 ones you were speaking of, what kind of things

1 would you bring Mr. Moore into the loop on, if
2 you're communicating the day-to-day?

3 A. I'm sorry, can you repeat
4 the question, please?

5 52 Q. During the actual
6 construction, you were distinguishing between the
7 things that were going on earlier that were
8 controversial, environmental issues and protesters
9 and so forth which was sort of a different animal,
10 but during the actual construction, whether it's
11 the grading and the structures and then the
12 paving, what sort of issues would you bring
13 Mr. Moore into the loop on? What was your
14 practice, generally speaking?

15 A. If there was something I
16 needed his technical guidance on, I would, but,
17 you know, there really wasn't anything that came
18 up during the execution of the grading contracts
19 that needed to really be discussed with Gary.
20 They were, you know -- so, going back to your
21 comment, yes, if you just looked at the
22 construction, they were more just regular
23 construction. It was the other things that made
24 it a different atmosphere.

25 53 Q. So, principally your

1 biweekly meetings, is that when you would, for the
2 most part, keep Mr. Moore and Mr. Murray updated?

3 A. Generally, but again if
4 something came up, we didn't wait for the
5 bi-weekly meeting. Similar to our contracts, we
6 wouldn't wait to the -- because we had monthly
7 site meetings, so we wouldn't wait to the meeting
8 to discuss issues. Normally any issues that came
9 up in between were dealt with right away,
10 immediately, the ones that could be. The ones
11 that needed more time, you know, to look at
12 because -- okay, in the old days when we didn't
13 have all this technology we have, everyone was a
14 little more cognizant that sometimes, you know,
15 you need time to think about things. It wasn't
16 the case when we were building the paving
17 contract.

18 So, again, if something came
19 up, we dealt with it. We never waited until a
20 meeting to discuss something. Usually at our site
21 meetings or even our team meetings, you know, they
22 really knew what had happened, so it was either a
23 recap of that. At our team meetings though, I was
24 updating probably on a monthly basis this is how
25 we're doing on the contract, this is how I'm

1 forecasting how much money is going to be left,
2 you know, because we were tracking to see, you
3 know, are we on budget, do we need more funds,
4 those type of things, but that's just normal
5 project management, if you want to call it that.

6 54 Q. Okay. And am I correct
7 that technical and engineering questions and
8 decisions, those would lie during the construction
9 of the Red Hill -- those decisions would lie with
10 you and Mr. Moore. Is that right?

11 A. Well, again, we worked --
12 we had three consultants and each of them had a
13 portion of the freeway design, so the same
14 consultants who designed it were the same
15 consultants in the field. So, if we needed
16 clarification, it wouldn't be, oh, I'm going to go
17 ask Gary who goes and asks, you know, McCormick,
18 Stantec or Philips. It was, no, our site reps,
19 deal with your people. Let's get this solved. We
20 need a new drawing. Not that that happened, but
21 we had that relationship. Right? So...

22 55 Q. Consultants recommend
23 things, I get that, and you had lots of
24 consultants, I understand?

25 A. Correct.

1 56 Q. But if a decision needed
2 to be made and direction was given to the
3 consultants or to the contractors and so forth, in
4 terms of the city folks that were working, am I
5 correct that those technical and engineering
6 issues lay with you and Mr. Moore and not
7 Mr. Murray. Is that right?

8 A. Yeah, definitely not with
9 Mr. Murray. In making the overall decision, yes,
10 would lie with myself or Gary. And, again,
11 depending what happened -- if it needed a city
12 decision. Sometimes there's, oh, this rebar
13 needed to be changed and the structure. They
14 weren't waiting for our approval, you know? The
15 drawing was issued or it was revised in the field
16 and the drawing was revised. Right? So, do you
17 know what I mean by that? So, it wasn't, yes,
18 every single decision, Gary and I had to make.

19 57 Q. I understand the
20 contractor has their job to do and there are
21 certain things that are just part of the
22 communication of the contract?

23 A. Correct. And our
24 consultant, who were our contract administrators,
25 you know, would make -- could give them direction,

1 but, you know, we were always on the same page.
2 So, if the contractor brought up an issue, you
3 know, it's not like, you know, you're not going to
4 be able to pit -- in a typical thing, did they pit
5 the owner against the contract administrator?
6 It's like no. You know, everything -- we're all
7 on -- everything was -- all decisions were made
8 with everyone being aware of them or the people
9 that needed to be aware were aware.

10 58 Q. Yeah. And the contract
11 administrator, just so we're clear, that was
12 Philips for the paving phase?

13 A. Correct.

14 59 Q. And we'll get to this,
15 but you referred to the consultants who had done
16 the design. The actual paving tender was broken
17 up into four -- well, three sections, which were
18 Stantec did one for the design and Philips did the
19 second and McCormick Rankin the third. Is that
20 right?

21 A. That's correct.

22 60 Q. We'll get to those
23 separately, but since you referenced them, so we
24 know who we're talking about.

25 Now, as I said, Mr. Murray

1 left for another position within the City in
2 mid-June, just a couple of weeks after the actual
3 paving commenced, and we will get into specifics.
4 But once the paving had begun and he leaves, did
5 anything materially change after that in terms of
6 how you and Mr. Moore were running things, were
7 executing the project?

8 A. No, not to the best of my
9 recollection.

10 61 Q. And I anticipate that
11 Mr. Murray may testify that once he assumed his
12 new position, he had no involvement with the Red
13 Hill construction. Does that accord with your
14 recollections?

15 A. If we ever needed to
16 reach out to Chris, I knew he would always make
17 himself available, so --

18 62 Q. Do you actually recall
19 ever doing so?

20 A. I know I didn't connect
21 with Chris, but in terms of when it came to the
22 opening, you know, Chris was there as well. He
23 was an integral part of getting this whole project
24 going, but I myself didn't contact him about any
25 issues about the paving or the construction. You

1 know, at that point it was, you know, just getting
2 it ready to, you know, get done and open to the
3 general public.

4 63 Q. Right. And I mean at
5 that point, just to put it in general terms, it's
6 technical and engineering execution at that point
7 and paving and that's not really what you would
8 expect Mr. Murray to have been involved in at that
9 stage in any event. Is that fair?

10 A. Again, we would just keep
11 Chris aware of anything so that, you know -- he
12 was also the sort of person at council doing any
13 reporting, so whatever information Chris needed,
14 we provided for him.

15 64 Q. Right. I get that. When
16 I asked if anything materially changed after
17 Mr. Murray left, you said, well, not really. I
18 take from that that, again, aside from keeping
19 Mr. Murray informed, when you were in that
20 construction phase, that his involvement would
21 have been, aside from keeping him informed and so
22 forth, would have been quite limited. Is that
23 right?

24 A. That's right.

25 65 Q. Okay. And prior to

1 construction, there was of course the asphalt
2 specification, so we're talking about paving, but
3 the asphalt specifications had to be developed and
4 issued. And did you work on the paving
5 specifications for the tender with Dr. Uzarowski?

6 A. Yes, yes.

7 66 Q. Okay. And we'll get to
8 some more specifics with that, but that was part
9 of your -- well, I'll back up. We'll talk about
10 the development of the pavement structure and so
11 forth, but in terms of getting those
12 specifications into the tender documents, that is
13 something you were involved with?

14 A. Yes, correct.

15 67 Q. Okay. Now, going back
16 further, I would like to talk about the design
17 phase for the Red Hill. And in your project, Red
18 Hill Valley project, description it talks about
19 being involved in the final detail -- well, from
20 the preliminary engineering to the final detailed
21 design and administration of the design and
22 construction services for the delivery of the
23 various facets of the project.

24 But we know that design went
25 back quite a bit further than your joining the

1 actual Red Hill project team in 2003, as you
2 described. So, the inquiry has received various
3 preliminary design reports for the Red Hill, and
4 if we could go to overview document 3.1,
5 Registrar, and specifically image 4 and
6 paragraph 4, it refers to a preliminary design
7 report was prepared on January 31, 1990 for the
8 whole connection between Highway 403 and the QEW,
9 so what at that time was the entire project that
10 became the LINC and the Red Hill Valley Parkway.

11 And this precedes your
12 involvement and employment with the city and
13 Hamilton-Wentworth. Is that right?

14 A. That's correct.

15 68 Q. Okay. Nonetheless, I
16 take it, given your involvement, it's a document
17 that you were familiar with over the years?

18 A. Yes, I was aware of it.

19 Yes.

20 69 Q. Okay. And just briefly,
21 what's a preliminary design report for? What's
22 its purpose?

23 A. Basically, it sets out
24 your design parameters for -- so, what you would
25 now take the information and preliminary design

1 report, it sets those design parameters that you
2 would use now to complete the detailed design of
3 the project.

4 70 Q. And at the time, back in
5 1990, the contemplation was for a six-lane
6 highway. Is that right?

7 A. On the north-south
8 portion, yes. The LINC -- well, actually, I have
9 to really think back. It's been a long time.

10 71 Q. It has been a long time.

11 A. But I believe the
12 original intent was to -- because, again, when
13 they got approval for the expressway or, you know,
14 the thought of it, it was -- and basically this
15 was a highway to service the City of Hamilton. I
16 believe in the '50s, you know, regional government
17 didn't exist and the plan was to build a highway
18 through the valley and then connect to an arterial
19 road on the escarpment, so that's your connection
20 once you get up the top of the escarpment to go to
21 the west to connect to the 403 because back then
22 the Ministry had -- it was Centennial Parkway and
23 Rymal Road were Ministry roads that were never
24 intended to be upgraded to freeways.

25 And I can't recall. I would

1 have to actually read the report, but the
2 east-west portion might have been shown, but
3 probably by the time they did this it had been --
4 the original intent -- I'm sorry. I'm just giving
5 you the history. What happened was the original
6 intent was to build an arterial road across the
7 mountain and then upgrade it to an expressway when
8 volume warranted. And by the time this was built,
9 I believe, you know, there was a cost-benefit
10 analysis to show here would be the cost if you
11 were to build it, build it as an arterial, and
12 then come back and move it to an expressway or
13 here is the cost savings given where you are at
14 this point in time to build it expressway day one.

15 So, you're right. I apologize
16 for the long-winded answer, but it's six lanes.
17 The original intent was six lanes plus a truck
18 climbing lane from Greenhill to Dartnall, and then
19 two lanes in each direction on the east-west
20 connection to the 403.

21 72 Q. And I think that's what
22 it indicates in paragraph 5 there. It provided
23 for six basic lanes between Dartnall Road and the
24 QEW, and then you said four on the east-west
25 portion of it and then you referred to the

1 climbing lane south of Greenhill on the
2 north-south portion?

3 A. Correct.

4 73 Q. And if we could go to
5 Hamilton 8905, which is the 1990 preliminary
6 design report, and image 6. And this is a very
7 overview, large-scale overview, location plan
8 showing both the east-west portion, which became
9 the LINC, and the north-south, which became the
10 Red Hill.

11 And on the Red Hill portion,
12 it indicates that there will be interchanges
13 located starting at the south part of the
14 north-south section at Mud Street, Greenhill,
15 King, Queenston, Barton and the QEW. Is that
16 right?

17 A. That's correct.

18 74 Q. Okay. And those are the
19 locations of the interchanges on the north-south
20 Red Hill parkway portion that were eventually
21 built. Is that right?

22 A. That's correct.

23 75 Q. Okay. We can pull that
24 down and go back to OD3.1, image 5, please. And
25 there were revisions to the preliminary design

1 report in 2003. Do you recall that?

2 A. I recall the process
3 going on, yes.

4 76 Q. Okay. And, of course, by
5 that point the LINC and the LINC extension had
6 been built, as we discussed, so these iterations
7 of the preliminary design report are specific to
8 the Red Hill Valley Parkway. You said you were
9 familiar with the process that was occurring. Did
10 you have any involvement in the drafting of the
11 2003 preliminary design reports?

12 A. No.

13 77 Q. Okay. Not at all? It
14 was something that you received but were not
15 involved in the creation of. Is that right?

16 A. That's correct.

17 78 Q. Okay. And who was
18 involved in the drafting of it, to your knowledge?

19 A. Do you mean all the
20 players or --

21 79 Q. Well, let's start with
22 the City, with the people in the City. Who were
23 the City people that were involved in --

24 A. I believe it was Gary
25 Moore and Chris Murray.

1 80 Q. Okay. And what about,
2 you said other sub-consultants presumably?

3 A. Correct.

4 81 Q. All right. Do you know
5 who those were?

6 A. Specifically, I believe
7 it was Stantec, McCormick and Philips. I'm not
8 100 percent sure about Stantec at this point, but
9 I know definitely McCormick and Philips because
10 Philips had the expertise to do the natural
11 channel creek construction.

12 82 Q. Okay. And if we could
13 call up footnote 11 at the bottom of the page,
14 because there was a couple of iterations of the
15 2003 preliminary design report. There was one
16 from February 25, 2003, from February 2003,
17 February 25, and then one in November 2003.

18 And, Commissioner, for the
19 record, there's discussion of the February 2003
20 preliminary design report as well in overview
21 document 3, paragraph 20, where it's discussed as
22 well and there's an e-mail between Mr. Moore and
23 Mr. Murray about that.

24 Is that, February 2003, that's
25 prior to your joining the Red Hill project. Is

1 that correct, to your recollection?

2 A. Yes, that's correct.

3 83 Q. And, again, you described
4 the general purpose of the preliminary design
5 report. These preliminary design report drafts,
6 are these the things that you followed in terms of
7 in the way you described, on a go-forward basis?

8 A. Well, once I joined, we
9 were then into the point where we were doing the
10 detailed design of each contract. So, I was aware
11 of the changes that had been made to the project
12 and now we were just, you know, doing the
13 contracts and, you know, preparing the tender so
14 that we could then go and build those different
15 portions of the project.

16 84 Q. Okay. And do you know if
17 there was a final -- these are indicated to be
18 drafts. Do you know if the preliminary design
19 report, if there was a final one issued?

20 A. I can't recall.

21 85 Q. Okay. You are not aware
22 of one or you just can't recall?

23 A. I would be speculating
24 giving an answer. It's like I'm sure we finalized
25 it at one point, but again construction started --

1 I apologize for the wave.

2 86 Q. We can take that as your
3 apology in advance every time the lights go off.
4 We'll understand what it's for.

5 A. Okay. I would try and
6 move my chair and wave, but you would think I'm
7 having a seizure or something like that. I'm
8 sorry, you know what? I forgot. Can you please
9 repeat the question?

10 87 Q. Yes. Whether the
11 preliminary design reports were ever produced in a
12 final form rather than a draft form?

13 A. Yeah. I can't say for
14 certain if they ever were. It wasn't part of my
15 duty to finish that report.

16 88 Q. Okay. And whose
17 responsibility would that have been? Would that
18 be Mr. Moore and Mr. Murray or one of them?

19 A. Could have been either.
20 They could have maybe had Jennifer. Again, I'm
21 speculating, but it could have been Jennifer,
22 sorry, DiDomenico. It could have been any one of
23 those three people.

24 89 Q. Okay. And if we go to
25 image 7, in paragraph 16 and you'll see there were

1 a couple of sections from it titled the "Red Hill
2 Valley Project Design Report" produced to the
3 inquiry, and sections 1 and 2, which are cited in
4 footnote 19, if you could pull that up, footnote
5 19, which are sections 1, which is simply the
6 introduction, and 2, Engineering Design. And
7 that's all we've received, a design report. Is
8 that different than a preliminary design report?

9 A. I'm not sure.

10 90 Q. Were you involved in
11 drafting this at all, the design report?

12 A. I don't believe so.

13 91 Q. Do you recall what the
14 process was? Do you recall the document at all?

15 A. Vaguely, but -- yeah, no,
16 just vaguely. From my perspective at that point,
17 I mean, we're paving, you know. The project is
18 coming to an end. Right?

19 92 Q. Well, not quite paving,
20 but by January 31, 2006, the paving tender had
21 been issued --

22 A. Had gone out.

23 93 Q. Sorry, was out to be
24 issued --

25 A. Sorry, January. I was

1 looking at the -- sorry. Yes, you're correct.

2 94 Q. Yes. So, the paving
3 tender was --

4 A. We're getting ready to
5 put it out. You're correct.

6 95 Q. Yeah. And the grading
7 contract, they had already been issued and I think
8 largely completed by that point. Is that right?

9 A. Except for the ones to
10 the north or the grading had been done but the CSO
11 pipe work had maybe not been completed, the final
12 commissioning, things like that in it. Any
13 restrictions that we needed to make bidders aware
14 would have been put into the paving tender.

15 96 Q. Okay. So, if I
16 understand you correctly, your recollections of
17 the design report are vague at best. Is that
18 right?

19 A. That's correct.

20 97 Q. Do you know if a complete
21 design report was -- if it was finished and
22 finalized?

23 A. I don't know.

24 98 Q. If we could go back to
25 image 6 and paragraph 12. So, the November 2003

1 preliminary design report iteration provided for a
2 design speed of 100 kilometres an hour and a
3 posted speed of 90 kilometres an hour. Is that
4 something you recall?

5 A. Yes, and that was the
6 same parameters in the original 1990 report.

7 99 Q. Right. It goes back to
8 them?

9 A. Correct.

10 100 Q. And so, to answer my
11 question, then, you didn't have any involvement in
12 that, in setting the design or posted speeds. Is
13 that right?

14 A. That's correct.

15 101 Q. Okay. And then with
16 respect to the detailed design, which you referred
17 to, if we go to paragraph 17, we know that --
18 sorry, paragraph 17, image 8, yes. Maybe put up 8
19 and 9, please. So, the detailed design drawings
20 had to be completed for the paving tender.
21 Correct?

22 A. Yes, that's correct.

23 102 Q. And, as indicated in
24 paragraph 17, it's what we talked about before, it
25 was divided up into three parts plus a fourth,

1 which we'll get to, but part A for the detailed
2 design was done by Stantec and that was Mud Street
3 to south of Greenhill. Is that right?

4 A. That's correct.

5 103 Q. And then Philips did part
6 B from south of Greenhill to Queenston Road?

7 A. That's correct.

8 104 Q. And then part C was by
9 McCormick Rankin from Queenston Road to the QEW
10 interchange, not the interchange itself because
11 that was the MTO, but up to the interchange. Is
12 that right?

13 A. That's correct.

14 105 Q. And then there's part D,
15 and all of these form part of the tender for the
16 paving, which is for the entire length of the Red
17 Hill to do with signage, pavement marking,
18 stormwater management, landscaping details for the
19 entire project. Is that right?

20 A. That's correct. There
21 was one form of tender. This is how the drawings
22 were set up. It was set up so that these were 11,
23 approximately 11 by 17, contract books that were
24 prepared for each different section and it made
25 sense to split it up by which consultants had

1 designed it. And I believe for the tender of the
2 paving contract, Stantec was the lead gathering
3 everybody's specifications, putting it all
4 together, you know, I would be reviewing it, and
5 then if there were any questions during the
6 tender, the City staff would then speak with the
7 Stantec representatives to clarify any questions.

8 106 Q. All right. And the
9 parts -- you referred to it being one form of
10 tender. It was one tender rather than it being
11 broken up, but these were the section in which the
12 components of that tender were divided?

13 A. Correct, correct.

14 107 Q. Okay. And, Commissioner,
15 just for reference, in OD3, the date of the tender
16 at paragraph 52 was April 25, 2006, with a closing
17 date of May 25, 2006.

18 And if we could call up
19 footnotes 21 to 24, thank you, on image 8. And
20 the contract drawings, the ones that were marked,
21 that were part of the tender, were marked for
22 tender. You're familiar with that?

23 A. Yes.

24 108 Q. And this is the more
25 detailed design that follows the preliminary

1 design reports that you described?

2 A. Correct.

3 109 Q. And I'm not going to take
4 you through all the drawings, but when you
5 referred to the 11 by 17, you're actually talking
6 about the dimensions of the drawings. Is that
7 right?

8 A. Yes, that's correct.

9 110 Q. Okay. And there were
10 also for construction versions of each of the
11 portions, for construction drawings that were
12 issued. Do you recall that?

13 A. Yes.

14 111 Q. Okay. And so, starting
15 with the four tender drawings, from reviewing
16 them, not all the drawings have a date, but were
17 they done, the four tender drawings, were they
18 done in early 2006, obviously prior to the tender
19 being issued, but is that when they were done, in
20 early 2006? Do you recall?

21 A. Yeah. To the best of my
22 knowledge, yes.

23 112 Q. And in terms of the for
24 construction drawings, do you know when those were
25 done or issued?

1 A. The actual date, I
2 wouldn't be able to tell you. I can give you a
3 general --

4 113 Q. Yeah. Just give me your
5 general recollections and also are there material
6 differences? Maybe you could deal with those
7 together between the for tender and for
8 construction drawings?

9 A. So, the ones issued with
10 the tender, most of the consultants, it depended
11 which consultant, some would stamp the drawings
12 but not sign the tender drawings. Some would
13 stamp or sign the drawings. During your tender
14 period, which ours were out for a minimum of four
15 weeks and we also pre-qualified all the bidders
16 using the Ministry -- it's called the Ministry RAQ
17 system, which basically -- we would ask for
18 different ratings in grading, paving, structures.
19 So, the form of tender was only sent to the
20 qualified bidders.

21 Now, once tender closed, we
22 have someone on board. Now the consultants, if
23 there were any revisions during the tender to the
24 drawings, they then, we should have, I hope we
25 did, that we updated the drawing so that it had

1 anything that came out as addendums and all the
2 consultants signed and sealed the drawings, so
3 that's the major -- that's the difference between
4 your issued for tender set versus the for
5 construction drawings.

6 114 Q. Are you aware of any
7 material differences between the for tender and
8 for construction drawings?

9 A. I can't recall any major
10 changes.

11 JUSTICE WILTON-SIEGEL: Let me
12 just make sure I understand what you're saying,
13 Mr. Oddi. There were tender documents. If there
14 were addenda, obviously addenda would be issued
15 and then the addenda were incorporated into the
16 documents to produce the final construction
17 documents. Is that --

18 THE WITNESS: Well, the
19 question I was asked was about the drawings, so if
20 there were changes during the tender that required
21 revised drawings, that revised drawing would be in
22 the issued for construction set with the
23 appropriate stamp, if a stamp was required.

24 There were also changes to the
25 specifications, so those, we didn't rewrite the

1 entire specifications but those would have been
2 included at the -- you know, with the -- because
3 when we say the tender documents, it's the
4 contract specifications plus the drawings.

5 JUSTICE WILTON-SIEGEL: Yes.

6 THE WITNESS: Did that
7 clarify?

8 JUSTICE WILTON-SIEGEL: So,
9 the construction drawings, so I think I
10 understand, were issued at the end of the process,
11 of the tender process?

12 THE WITNESS: Yeah. The
13 issued for construction drawings and the
14 specifications were only given to the successful
15 bidder.

16 JUSTICE WILTON-SIEGEL: Yes.

17 THE WITNESS: We would then
18 also give them, here, how many full-sized sets of
19 drawings would you like, which are approximately
20 two feet by three feet, how many small sets would
21 you like, because the drawings also contained not
22 only the drawings of the parkway, our drawings
23 were done similar to the MTO style, so we had
24 something called quantity sheets in there, so
25 those are a sort of formalization of the

1 quantities for each item you're building so that
2 you can go and see where does this culvert go,
3 where does this pipe go, where does the guide rail
4 go. Does that help or --

5 JUSTICE WILTON-SIEGEL: Yes.

6 THE WITNESS: -- am I just
7 making it more confusing?

8 JUSTICE WILTON-SIEGEL: No, I
9 understand. Thank you.

10 BY MR. LEWIS:

11 115 Q. And from our review of
12 the for construction, they don't appear to be
13 entirely consistent throughout, but a lot of them
14 have a June 2006 stamp on them, which I think is
15 consistent with what you were talking about after
16 they would be stamped or issued for construction
17 after the completion of the tender. Is that
18 right?

19 A. That's correct.

20 116 Q. After it closed?

21 A. After it closed, yeah.

22 After it was closed and awarded. Right?

23 117 Q. Right. Now, if I
24 understand you correctly, you don't recall there
25 was any materials differences between the for

1 tender and for construction versions. Is that
2 right?

3 A. Of the drawings, yes.

4 118 Q. Of the drawings?

5 A. Yes, correct. Yes.

6 119 Q. Okay. All right. And I
7 understand that you've been involved in searching
8 for what are called as built or as constructed
9 drawings. Is that right?

10 A. Yes.

11 120 Q. Okay. And I'll probably
12 use the term "as constructed" but sometimes people
13 use "as built." Those are the same things.
14 Right? Those are intended to show what was
15 actually built. Right?

16 A. Correct.

17 121 Q. Okay. And these have not
18 made their way yet to that the database,
19 Commissioner, but the city did recently produce
20 some drawings marked as constructed that pertain
21 to part A, which is the Stantec part, and part D,
22 which is the overall markings part of the
23 drawings, if I can call it that, but not for
24 anything else.

25 So, were you involved in the

1 process of locating these documents?

2 A. I know I was asked and I
3 know we didn't formally -- again, I believe I had
4 asked the consultants to get some -- whatever
5 information I had and I think I had asked the
6 consultants, like, I vaguely recall getting
7 whatever information from them. Whatever I had, I
8 gave to our geomatics and corridor management
9 section to input into our records.

10 122 Q. Do you mean after the
11 completion of construction?

12 A. Oh, yeah. Like, you
13 know, probably, you know, could have been even
14 like a year, a year or two, after we were done.
15 Like, we didn't have a formal process of saying,
16 okay, I'm now going to take the for construction
17 drawings and get them marked up and re-sent in.
18 Again, a lot of this project when we started was
19 paper based and went from hand drawing to Leroy
20 drawing. By the time we were in the 2000s,
21 everyone was using computer-aided design drawings.

22 So, I do recall getting some,
23 I believe they were PDFs, as built drawings, and I
24 did request from the consultants, from the three
25 of them, to get their CAD versions of the paving

1 contract, which would maybe help us in the future
2 if we were ever doing contracts. So, all that
3 information was given to the section within
4 engineering services that would then, whatever,
5 scan the document and put it in our drawing
6 repository. I think it's called SPIDER, which
7 stands for spatial index engineering reports.

8 123 Q. Again, if I understand
9 you correctly, you're talking about back in
10 perhaps 2008, 2009, post-construction but --

11 A. Correct.

12 124 Q. -- many years ago?

13 A. Correct.

14 125 Q. Okay. So, a couple of
15 things. Do I understand you correctly in saying
16 that you don't think that complete as built or as
17 constructed drawings were completed? Is that
18 right?

19 A. That's correct.

20 126 Q. Okay. And so, given that
21 there are a few of them, there are some of them,
22 what was the purpose of having some of those
23 issued as constructed or as built?

24 A. Just more of a record
25 drawing. Again, I don't recall any -- usually the

1 intent of an as built drawing is that you say,
2 here, this is what was actually built, so if
3 there's changes, they're important. If there's no
4 changes, then it really doesn't serve much of a
5 purpose. And for most of the project, we weren't
6 getting as built drawings because we were building
7 everything according to the contracts. Again,
8 because the project was coming to an end, you
9 know, the project office is closing up, you start
10 thinking, okay, all these Mylar versions,
11 everything we had of old contracts, we should just
12 make sure they're scanned, that they're in our
13 SPIDER system, whatever information I had gotten
14 from the consultants. I know I did ask for the --
15 the CAD programs we use are MicroStation or
16 AutoCAD. Two of the consultants used AutoCAD and
17 one of them used MicroStation drawings, so I said
18 please give me those drawings so, that way, it
19 will help our -- you know, if we're doing future
20 projects, that we can maybe use those products to
21 produce the base drawings.

22 127 Q. CAD and AutoCAD, is that
23 C-A-D?

24 A. Sorry. CAD is
25 computer-aided design. AutoCAD is one of them.

1 It's software for doing computer-aided design.
2 And the other was MicroStation, which is another
3 computer-aided design software program.

4 128 Q. Okay. And, again, they
5 haven't put into the data set, but I think the
6 limited drawings that are marked as constructed, I
7 believe we were advised they came from
8 ProjectWise, not from SPIDER. Does that make
9 sense? Mr. Chen might be able to correct me if
10 I'm wrong, but that's my understanding. Does that
11 make sense, that they be located in ProjectWise?

12 A. They would either be in a
13 ProjectWise or in a corporate drive in one of
14 our -- where we store all the engineering
15 drawings. So, like, our tender packages would
16 have been scanned and probably placed in this
17 corporate drive, which you would then access
18 through the SPIDER program.

19 129 Q. Which you referred to
20 before?

21 A. Right.

22 130 Q. And this is just the
23 first mention of ProjectWise. Could you just
24 describe what ProjectWise is for the Commissioner?
25 Thank you.

1 A. ProjectWise is basically
2 the server that engineering services use, uses, to
3 store data, information. So, information for
4 engineering services projects are stored in
5 ProjectWise as well as some information stored on
6 corporate drives.

7 The Red Hill Valley project,
8 we didn't use ProjectWise to store our
9 information. We were using corporate drives for
10 that.

11 131 Q. Up until the end of --
12 when you're talking about for the Red Hill Valley
13 project, you mean the construction project, the
14 design, planning and construction?

15 A. Yeah. Even -- yeah,
16 correct. Correct. You know, because we also did,
17 you know, other reports. So, whatever information
18 needed to be shared amongst the team would be
19 stored in a corporate drive, but the Red Hill
20 Valley project office team did not use ProjectWise
21 to store data.

22 132 Q. Now, is it typical or
23 atypical for a road build project to not have as
24 constructed drawings.

25 A. It depends on the

1 municipality, the client.

2 133 Q. Well, you've been at
3 Hamilton and its predecessor since 1991, so let's
4 talk about Hamilton. Has it been Hamilton's
5 practice to do or not do as built drawings for
6 road construction projects?

7 A. We would do -- sorry, can
8 you repeat? Is that for the City of Hamilton
9 projects you're now asking?

10 134 Q. Yeah, where you've been
11 working since 1991.

12 A. Yeah, again, but the
13 different sections would do different things.
14 Like --

15 135 Q. Well, I'm talking about
16 road construction specifically.

17 A. Road construction, okay.

18 136 Q. Yes.

19 A. It depends on the
20 project. If the project has watermain and sewer,
21 our practice in engineering services is to do as
22 built drawings of that underground infrastructure,
23 but they're just sort of single-line drawings
24 showing the infrastructure. It's not an actual --
25 it wouldn't be the tender drawing that gets

1 revised. If it's a resurfacing contract, there
2 are no as built for that.

3 137 Q. For resurfacing, okay. I
4 certainly can understand if there's subsurface
5 pipes and so forth that presumably the purpose is
6 so you know what is there if you're going to dig
7 again. Right? That's the purpose for having as
8 constructed drawings for those some of projects.
9 Is that right?

10 A. Yeah. And when you're
11 investigating, you would use the -- if there are
12 issued for construction drawings or use the tender
13 drawings, and if there are as built, you would use
14 that to then work on that next project.

15 So, generally, with the LINC
16 and Red Hill, it was being constructed as per the
17 drawings, so we didn't produce as built drawings
18 for the different contract tenders.

19 138 Q. Okay. What about -- you
20 referred to resurfacing projects, Hamilton
21 typically does not do as built drawings. What
22 about for the initial road construction projects?
23 I appreciate what you didn't do with the Red
24 Hill --

25 A. No, no, no, no.

1 139 Q. Just generally speaking.

2 A. Because usually within
3 our engineering services, we usually aren't doing
4 greenfield projects. We have done some, but
5 generally we are reconstructing existing roads.
6 So, if we're doing the reconstruction of a
7 particular street, you would only get as built
8 for the sewers and water mains if they were in
9 that. You wouldn't get one for the road.

10 140 Q. Right, for the
11 reconstruction. What about for those limited
12 greenfields projects?

13 A. Again, no, you wouldn't
14 do it for the road, but if there was sewer or
15 watermain, then we would do an as built for that
16 portion of that project.

17 141 Q. Okay. Thank you. Give
18 me one moment, please. If you could take that
19 down, Registrar, and if you could go to OD3,
20 image 19, moving on to a different topic. Still
21 way back in time of course, but I want to talk
22 about the pavement structure specifically.

23 So, in paragraph 35, on
24 September 7, 2005 you e-mailed Mr. Moore asking
25 that he please confirm the proposed pavement

1 structure for the N-S section, i.e. asphalt depth
2 and type for each lift. And then Mr. Moore
3 replied the same day with the pavement structure,
4 all the different layers and the depths for each
5 one and specifying the type of asphalt mix for
6 each layer, and then a reference to the granular
7 base.

8 So, the first thing is this is
9 ultimately the pavement structure that was
10 constructed. Correct?

11 A. Yes. In terms of depths,
12 we didn't use an HLE, but yes, it ended up being
13 220 millimetres of total asphalt.

14 142 Q. The 100 millimetres there
15 was in two different --

16 A. Correct, two different
17 types.

18 143 Q. Right. And with 40
19 millimetres of SMA on the top and the rich bottom
20 layer at the bottom?

21 A. Right. Correct.

22 144 Q. And in the last paragraph
23 about the granular base, Mr. Moore is indicating
24 it has to be reduced by 60 millimetres and in some
25 instances that was already placed granular base

1 and in other instances still to be placed. Is
2 that correct?

3 A. Correct.

4 145 Q. All right. And why was
5 that? He refers to maintaining the original final
6 profile grade. Is that because the asphalt
7 structure is overall a thicker structure and that
8 requires a reduction in the granular base?

9 A. Yes.

10 146 Q. And why is that? Why
11 does that matter?

12 A. Oh, because, again, if
13 you go back to the -- if you look at our time,
14 right, our grading contract started in 2004 and
15 was based on -- I know the LINC was 155
16 millimetres of asphalt on different depths of
17 granular and type depending where you were across
18 the escarpment on Hamilton, so the original
19 intent, I believe they had said it was 160
20 millimetres of asphalt, so it was 40 of top, 120
21 of the base asphalt and then a granular structure,
22 again, which varied depending where you were. Are
23 you on rock? Are you on soils?

24 So, when we started the
25 grading contracts in 2004, when we dug out the

1 road, it was built to accommodate that structure.
2 You know, in 2005, the City at the time, we were
3 using Marshall mixes like most municipalities.
4 Superpave was really only being used, to the best
5 of my knowledge, just by the Ministry of
6 Transportation Ontario, MTO.

7 Gary was very, very good
8 technical base and, you know, said perpetual
9 pavement now, this is what we're doing, so it's
10 deeper strength asphalt. And, you know, I believe
11 I had said -- I recall asking Gary, I can't
12 remember if it was spring or summer of 2005,
13 saying we're doing Superpave? Okay. I've heard
14 of it. Can I go to a seminar, please, get a
15 little more knowledgeable on what's involved?

16 And, basically, Superpave is
17 an end result specification, so it's a different
18 way of designing your asphalt. Marshall is more
19 of a recipe based type design. And then when you
20 looked at, okay, this is what you're supposed to
21 do for each lift of asphalt, the nominal aggregate
22 size, I said, even based on our 160, we're going
23 to have to revise our grading templates.

24 And you are correct, the Aecon
25 contract, that very first one, that contract

1 involved rock excavation, which we were then
2 crushing and creating granular A and granular B.
3 So, in that contract, they had placed the granular
4 and then stockpiled it for the sections to the
5 north. And I believe we had enough granular to
6 cover the Philips portion, the part B that you see
7 in the paving tender, and that we knew we would
8 have to import granular to finish the McCormick
9 section, which was part C.

10 So, I was just getting
11 clarification because if we needed is the granular
12 depth enough, what is it, because, you know, the
13 consultants were starting to get ready to prepare
14 the asphalt tender. They have to prepare -- as
15 part of the assignment, they would use this MTO
16 program to prepare something called grading
17 templates, which is basically cross sections for
18 the contractors to use that show here is the
19 bottom of subgrade, here is your top of granular
20 B, granular A, here is your different asphalt
21 layer, so that way, you know, it's a paper version
22 of what they would build. If you had contractors
23 who are really keen, you can collect all that
24 data, put it into a GPS, they put it in a machine
25 and theoretically everything gets built

1 automatically.

2 So, long story, it's just to
3 clarify, okay, what is it and I needed to revise
4 the grading templates for the paving contract for
5 each of the three different consultants.

6 147 Q. Right. And if you have
7 to take off the -- you have to take off the 60
8 millimetres, why, though, of the granular base?
9 Is that because of overhead structures?

10 A. No, no. Because we had
11 dug the road. So, we had already gone to
12 subgrade, to competent subgrade. Right? And up
13 top we actually had the granular on the road, so I
14 have to remove it. And the other section, I
15 hadn't placed granular but the contract would
16 specify a different depth. If we hadn't gone with
17 perpetual pavement, you wouldn't need to change
18 any of your grading templates for the ones that
19 were produced through the grading contracts. You
20 would only now get the details of the paving. It
21 had nothing to do with overhead structures. It's
22 just we had already dug the ground. Okay, do we
23 need to dig deeper --

24 148 Q. And what's going on top
25 of what you've dug out?

1 A. Right. So, do we put
2 less granular or dig deeper and put that granular
3 depth. Right?

4 149 Q. Right. And the answer
5 then was to do less of --

6 A. Correct, and that was
7 also -- that decision was also based with Golder,
8 as well, because I do recall asking Golder, is
9 this good? Are you good with this with your
10 perpetual design? Because this is when you go,
11 this is a great concept. I'm surprised we didn't
12 do it -- it would have been nice to have been done
13 on the LINC. Right? But, you know, when you do
14 your design, it's not just the asphalt. The
15 granular, you know, and the subgrade material all
16 makes it up, so I wanted to make sure, you know,
17 that Golder said yes, this will still work,
18 because if Golder had said no, we need more
19 granular, then we need -- as part of the paving
20 contract or, you know, if I had time, we would do
21 it in the grading contracts to go the extra depth,
22 whatever we needed, so that we would have the
23 proper amount of granular A and B on the road.

24 150 Q. The answer from Golder
25 was that was acceptable?

1 A. Yes, to the best of my
2 recollection.

3 151 Q. Okay. And who were you
4 conferring with? Was that Dr. Uzarowski?

5 A. Dr. Uzarowski, yes.

6 152 Q. Thank you. And were you
7 involved in any way with the development of the
8 perpetual pavement structure or the idea to use it
9 in the first place?

10 A. No.

11 153 Q. And were you involved in
12 any way in the decision to use an SMA surface
13 course on the perpetual pavement structure?

14 A. No.

15 154 Q. Who made those decisions?

16 A. I believe that was
17 Ludomir Uzarowski and Gary Moore.

18 155 Q. Okay. And when did you
19 become aware of the decision to use the perpetual
20 pavement structure? You referred before, I think
21 you said you had a discussion with Mr. Moore about
22 if we're going to use a perpetual pavement
23 structure. When do you recall that was?

24 A. You know, I believe it
25 was, you know, in around the summer of 2005. You

1 know, Gary would have also been telling the whole
2 group, you know, that this is what we're doing,
3 this is what we're proposing, and I do recall --
4 so, it was either the summer or fall of --

5 156 Q. Well, presumably it had
6 to be before September 7, because your e-mail to
7 him --

8 A. Correct.

9 157 Q. -- was asking about it.
10 Right?

11 A. Correct.

12 158 Q. So, it was sometime prior
13 to that e-mail. Is that right?

14 A. Yes, that's correct.

15 159 Q. Okay. And what about the
16 decision to use SMA as the surface course? When
17 did you become aware of that?

18 A. I believe it was when I
19 received this e-mail.

20 160 Q. The one from Mr. Moore on
21 September 7, 2005?

22 A. Correct, yes. But that's
23 just mainly my best guess. It might have been
24 mentioned before, but I can't really recall. Even
25 the whole use of Superpave, because we had used

1 Marshall mixes on the LINC, which, you know, MTO
2 had at this point in time switched out all their
3 stuff to -- all their specifications were specific
4 to Superpave, but they left in the Marshall, so if
5 you would call it the municipal specs for
6 municipalities to use because most municipalities,
7 to the best of my knowledge, most of them in
8 Ontario are still specifying Marshall mixes.
9 Again, just a different way to design your mixes.

10 161 Q. And on the SMA question,
11 this is the earliest e-mail we have communicating
12 to you about it, so if I understand you correctly
13 you're saying it's possible that you heard about
14 it earlier, but this is the first communication
15 that you're specifically aware of about SMA. Is
16 that right?

17 A. That's correct.

18 162 Q. And had you ever been in
19 a project, involved in a project, before involving
20 the placement of SMA?

21 A. No, I wasn't involved
22 specifically in those. I know the City had done
23 them, but I wasn't specifically involved in them.

24 163 Q. Okay. So, we know that
25 there was a placement on Burlington Street in

1 1999. Is that the one you're referring to?

2 A. Yes, I believe so. I
3 believe it was around the intersection of Victoria
4 Avenue, I think. Victoria or Wellington, one of
5 those two.

6 164 Q. On Burlington?

7 A. On Burlington Street,
8 yes.

9 165 Q. But I think you said
10 specifically involved. Were you involved at all?

11 A. Well, I was aware it was
12 going down, but at that point in time I'm still on
13 special projects. Right? And I knew Burlington
14 Street was concrete, an exposed concrete road that
15 they were doing and they chose exposed concrete
16 because of the contaminants underneath, but
17 through those intersections, lots of heavy trucks,
18 truck movements turning, they used SMA.

19 166 Q. Right. And you said you
20 were in the special projects office still. Who
21 was in charge of that project? Do you know?

22 A. It would have been
23 whatever engineering services was called at the
24 time. I can't remember the names, we had so many
25 different -- it probably would have been I believe

1 they were called the design and construction
2 section within some other division of Public
3 Works.

4 167 Q. Okay. But you believe,
5 you're not quite sure at this point. Is that
6 right?

7 A. It would have been their
8 contract, not -- it wasn't -- like, I didn't have
9 anything to do with the contract, but because it
10 was a City project doing the concrete road base,
11 you know, people were made aware of it, if you
12 wanted to go watch it while it was being placed,
13 that kind of a thing. Right?

14 168 Q. Okay. But, as you said,
15 you were still in the special projects office, so
16 you didn't have any direct involvement with it.
17 Is that right?

18 A. That's correct.

19 169 Q. Okay. So, the Red Hill
20 was your first project involving stone mastic
21 asphalt, SMA. Is that right?

22 A. That's correct.

23 170 Q. And did you have the
24 opportunity to discuss with Dr. Uzarowski the, you
25 know, issues that present with SMA?

1 A. Sorry, during while we
2 were preparing the design?

3 171 Q. At any time. Let's talk
4 about during the -- when you were developing the
5 tender specs, for example?

6 A. Well, during the tender
7 specs, you know, I know there was discussion and
8 it was because at the time -- is it okay if I
9 refer to him as Ludomir or do I have to say
10 Dr. Uzarowski?

11 172 Q. It's fine. You worked
12 with him a lot, so --

13 A. Yeah. I know him as
14 Ludomir.

15 173 Q. That's fine. We'll know
16 who you mean.

17 A. Okay. Perfect. Thank
18 you. So, I asked Ludomir, okay, we're putting SMA
19 on the main line of the highway. We're using a
20 different mix on the ramps. And, you know, it
21 was, well, SMA has superior rut resistance and
22 given the truck volumes, that's why SMA, it's a
23 gap graded mix, so, okay, it makes sense.

24 When we built the LINC, we
25 brought our -- we used, we called it an HL1

1 modified, so it was an HL1 mix specifying dense
2 friction coarse aggregates so that we would get,
3 you know, the proper mix. It's different. It's
4 not a standard MTO mix, if you want to say. And
5 we also placed that on the shoulders.

6 So, I remember asking Ludomir,
7 you know, for contractor, easier, less mix designs
8 to review, you know, why wouldn't we use it on the
9 shoulders? And, you know, Ludomir had said, if it
10 makes sense. You don't need the rut resistance on
11 the shoulders. It's a high quality mix, more
12 expensive, so the shoulders are just basically for
13 stranded vehicles, so, you know, you don't need to
14 spend the money there. Spend it right. You don't
15 need SMA on the ramps because the truck volumes
16 are less on the ramps. It's just the trucks going
17 on and off, so, you know, those were the type of
18 discussions that were going on during designs.
19 It's like, okay, all right, perfect, so let's
20 specify it. So, we had specified an HL1 for the
21 shoulders.

22 As part of the parkway paving
23 project, you know, Gary said, look at the state of
24 King Street and Queenston. Before we open this
25 freeway -- they were at that point where they

1 needed to do a shave and pave on them. So, it's
2 basically where, you know, has the cracking only
3 gone down to certain depths, it's the right time
4 to go and replace the surface asphalt. So, we
5 said, you know what? This will work out in terms
6 of getting a good price on the HL1 because we'll
7 specify the HL1 on King, Queenston and the
8 shoulders of the parkway, and at that time we were
9 also allowing bidders to use a steel slag as the
10 coarse aggregate, which was supplied by Dofasco, a
11 local manufacturer, who was taking the time to
12 process their steel slag. They were using it
13 within their plants to, you know, build very good,
14 very structurally sound, roads that would carry
15 these trucks, and so the City had, you know,
16 developed this relationship. They would basically
17 provide the material for just at their cost to
18 process it.

19 So, it was a very good quality
20 aggregate that was available at a very good price,
21 so we permitted that within our specifications for
22 any bidder to use that product within there.

23 174 Q. Sorry, and that was in
24 the tender?

25 A. That was within our

1 paving tender, yes.

2 175 Q. Right. But for which
3 course are you talking about?

4 A. It was specified for the
5 shoulders and for the resurfacing of King Street
6 and Queenston Road. So, basically what was paved
7 back in 1990 when they first started the project,
8 they grade separated, you know, King and
9 Queenston. Those areas were now, it was at a
10 point where they needed to be resurfaced and Gary
11 said, this makes sense, we should do this, because
12 once you open the parkway, you're going to
13 increase all kinds of traffic, it will be a lot
14 more difficult to do the resurfacing, we should do
15 it before the road is opened.

16 176 Q. So, in terms of the steel
17 slag that was permitted for the shoulders, that's
18 using it as the aggregate instead of the usual
19 stone. Right?

20 A. Correct, as the coarse
21 aggregate in the asphalt mixture. Right? So you
22 have the fine aggregate, the coarse aggregate, you
23 know.

24 177 Q. That was also used on
25 part of the LINC in its original construction.

1 Isn't that right?

2 A. On the LINC we did a test
3 strip because it was an extremely -- at that point
4 they were still experimenting with it, we hadn't
5 used it in large chunks, and so, yeah, there was
6 only a portion in the -- I'm trying to get my
7 bearings right here -- in the eastbound direction
8 between the Mohawk Golf Links interchange and the
9 Garth Street interchange, we placed steel slag
10 across the entire surface, even the shoulders.

11 178 Q. Right. And, again, to be
12 clear, it's using the steel slag aggregate for the
13 coarse aggregates in the surface asphalt mix?

14 A. Correct.

15 179 Q. And traditionally whether
16 it's trap rock or some other sort of aggregate
17 that's being used?

18 A. Correct. Look at you,
19 you're understanding those terms. That's
20 wonderful. I'm teasing.

21 JUSTICE WILTON-SIEGEL: And
22 this is the HL1?

23 THE WITNESS: Modified.

24 JUSTICE WILTON-SIEGEL:
25 Modified product that you're referring to?

1 THE WITNESS: Well, no, no,
2 no. The HL1 modified was what we used for the
3 rest of the LINC, and that was HL1 with dense
4 friction coarse aggregates. Right? So, the trap
5 rock, the sand stones. The steel slag portion was
6 called something different back then, but, you
7 know, the City was using it throughout various
8 projects. It was the region back then. Sorry for
9 that. So, the region was trying it out on
10 different areas and then, you know, we did this
11 test strip. It was put into the paving contract.
12 This way, all the bidders knew that -- and Dofasco
13 gave an extended warranty on it. I believe they
14 gave us a five-year warranty. Because, at that
15 time, you know, we're special projects and then
16 you had our design and construction group, and the
17 design and construction group is saying this is a
18 great product, you should use it, put it down, put
19 it down, it will save taxpayer dollars, it's a
20 great product, and Gary said, well, like, it's
21 still new. So, if it's so great, put it on all
22 your roads. You know, why would we put it on this
23 road that's been waiting so long? So, there was
24 lots of back and forth discussion. Gary said, you
25 know what? Again, a very technically competent

1 person, said, we're going to hire John Emery to
2 give us what kind of asphalt should we be using.
3 Okay. What should we be doing?

4 I can't recall if back then
5 the Ministry was starting to go to Superpave, but
6 there was all these -- I believe they were, so
7 it's the, okay, what do we do where we are with
8 the industry? And John Emery came back with a
9 recommendation. And the steel slag was, yes,
10 looks very promising, looks very good, but it's
11 still new, so do you put it everywhere or do we
12 just try it somewhere? So, that's what was
13 decided. Gary then met, you know, with the design
14 and construction guys. We put out an addendum in
15 this paving contract to put down the test strip
16 and they started using it in their contracts.

17 And, you know, then it worked
18 out to be -- because at that time the Ministry had
19 run into all kinds of problems and just banned
20 steel slag in their mixes. But Dofasco said, you
21 know what? We don't have much real estate. We
22 process it, we use it, and they were just, you
23 know, saying, we're basically providing it for my
24 processing costs and it's a good cheap aggregate,
25 it's an environmentally friendly thing to do, so

1 in the grand scheme of things it made a lot of
2 sense.

3 BY MR. LEWIS:

4 180 Q. So, that was on the LINC
5 ultimately in 1997 when that was placed?

6 A. Correct. And then we
7 used it in specified for use on King, Queenston,
8 and the shoulders.

9 181 Q. And the shoulders on the
10 Red Hill?

11 A. Right.

12 182 Q. But not the SMA main line
13 for the LINC?

14 A. No, not in the SMA, not
15 in the SP12.5 FC2.

16 183 Q. Right. And did you talk
17 to Dr. Uzarowski about SMA placement and some
18 difficulties or trickiness with placing SMA?

19 A. No. You know, a lot of
20 it came out, some with talking with Dr. Uzarowski
21 and also with -- again, we were working closely
22 with the MTO representatives, so their area
23 construction engineer, their construction
24 administrator, because they were, you know, where
25 are you at? Progress? Things like that.

1 And then talking to their CA
2 people, definitely the CA, that yes, yeah, you
3 know, SMA is a tricky -- it's a tricky mix. It's
4 very -- it was a big cost difference on their
5 contracts. They had a difference of something
6 like, you know, \$10 a tonne difference in price,
7 whereas, you know, in our bid, I believe it was
8 only a dollar difference between the SMA and the
9 12.5 FC2.

10 And then at one point, you
11 know, Ludomir said yes, it's -- and I can't recall
12 when exactly that was. I think it was well into
13 while we were paving it or just going to be
14 starting it, said it's a very finicky mix. Very
15 finicky, yes. The Ministry has put it down on
16 highway 401. You know, Ludomir has a great deal
17 of experience and says it either turns out really
18 good or really bad. Right? So then, I was like,
19 if there's all these problems, do we, you know,
20 just go with the 12.5? This is what all the
21 Ministry guys are doing, but they are getting
22 substantial credits. So, you know, the 12.5 is
23 still a very good mix and Ludomir was, no, this
24 has the superior rut resistance. It has good
25 frictional characteristics.

1 And then another, sort of,
2 nice thing is that it was quieter. You know,
3 these characteristics, because it was a gap graded
4 mix, you know, it would be that basically the
5 sound generated from traffic could potentially be
6 lower.

7 184 Q. And these conversations,
8 if I understand you correctly, the ones with
9 Dr. Uzarowski specifically, you think were either
10 shortly before the SMA placement took place or
11 during its placement? Did I understand you
12 correctly?

13 A. Yeah. I believe it was
14 as we were preparing to, yeah, it's coming, here
15 it is, you know. You know, yes, so it was -- I
16 believe to the best of my recollection that it was
17 as we were about to place it.

18 185 Q. Okay. And being a
19 finicky mix that turns out very well or very
20 badly, did he elaborate on what he meant by that?

21 A. I can't recall the
22 details. Ludomir and I would talk about a lot of
23 things. You know, we would be trying to gain
24 knowledge. He's an extremely knowledgeable
25 consultant and he also had the practical

1 experience of actually, you know -- I believe he
2 had worked for a paving contractor, so not only
3 did he know his theoretical, he knew the reality
4 of when you actually, you know, produce it, place
5 it, so he provided -- he brought a great deal of
6 experience to the table.

7 186 Q. With respect to the MTO
8 personnel that you referred to having discussions
9 about SMA, are you talking about during
10 coordination with them, with the MTO, regarding
11 the interchange with the Red Hill and the QEW?

12 A. Correct.

13 187 Q. Is that the context that
14 you're talking about?

15 A. Yes, yes, correct.

16 188 Q. Okay. And what timeframe
17 are you talking about for those discussions?

18 A. It was around the same
19 time, because, you know, getting the information
20 from them would have been -- again, I'm kind of
21 speculating on this, but it's, you know, if I'm
22 speaking to them about, you know, experiences, not
23 that they had specifically because they hadn't
24 placed any asphalt as part of their contracts yet,
25 but it was more on these other MTO jobs this is

1 what's happening, so it was like, Ludomir, are you
2 aware of -- you know? And it was like, no, again,
3 yes, it's a very finicky mix, but when it turns
4 out great it's a fantastic mix, it has all these
5 other properties, so he was like, okay, good, all
6 right, so we're good, we're going to continue
7 putting it down, that's fine.

8 189 Q. Okay. So, what were the
9 issues that the MTO people raised with you and do
10 you recall who raised them?

11 A. It was their contract
12 administration staff, so I can't remember the name
13 of the consultant that was on their tender. And
14 it was just more the -- again, finicky mix and a
15 lot of times they were opting out of -- they were
16 taking the credit and credits, I believe, were in
17 that \$10 a tonne magnitude which, you know,
18 depending how many -- you know, if you're doing a
19 large project, that's a substantial cost savings.

20 190 Q. And in those discussions,
21 were you made aware by anyone about the early age
22 SMA low friction issue that had arisen that the
23 MTO was dealing with at that time?

24 A. No, I wasn't. Not in
25 those discussions.

1 191 Q. Okay. Do you recall when
2 you become aware of that issue?

3 A. To the best of my
4 recollection, it was after that friction testing
5 was done in the fall, is when Ludomir had pointed
6 that out to me.

7 192 Q. Okay. So, we'll come
8 back to that and we'll talk about the October 16,
9 2007 friction testing that was done by the MTO on
10 the Red Hill Valley Parkway, and your best
11 recollection is it was around that time in
12 discussions with Dr. Uzarowski that you first
13 became aware of the SMA early low age friction
14 issue. Is that right?

15 A. That's correct.

16 193 Q. Okay. We'll come back
17 just chronologically to that. I just wanted to
18 close that off for the moment.

19 So, going back to 2005, we
20 know that Golder was conducting a feasibility
21 study for the City and specifically in discussions
22 with Mr. Moore about perpetual pavement and using
23 the perpetual pavement structure for the Red Hill.
24 Was that something you were aware of at the time?

25 A. I don't believe I was

1 aware of it.

2 194 Q. Okay. Were you involved
3 in any way in instructing Golder with respect to
4 the feasibility study?

5 A. No, I wasn't.

6 195 Q. Okay. Did you ever see a
7 copy of it?

8 A. I don't recall seeing a
9 copy of it.

10 196 Q. Does that mean you don't
11 think you did or you just don't recall one way or
12 the other?

13 A. I'm pretty sure I didn't
14 see it. It's more no than, you know, one way or
15 the other.

16 197 Q. Okay. Did you become
17 aware that one existed, even though you don't
18 believe you saw it?

19 A. No. And, again, it's
20 like, you know, by the time you're getting ready
21 to specs, it's more, okay, what are we using?
22 Ludomir, give me the specifications. We got to
23 pull the contract together, so no. And it
24 wouldn't have been something that I would have
25 asked to read and see. It's, well, we're using

1 perpetual pavement and, you know, as we were
2 developing the specs, any questions I had, Ludomir
3 was more than happy to provide answers to.

4 198 Q. Right. But that's after.
5 That's a little bit after that. We know that
6 through 2005, and it was dated in August 2005 is
7 the date of the signed feasibility study, that
8 Golder was doing work. Were you aware that Golder
9 was working on a feasibility study even if you
10 didn't know a report was being developed?

11 A. No, I wasn't aware they
12 were working on it, to the best of my
13 recollection.

14 199 Q. To the best of your
15 recollection, thank you. Now, if we could go to
16 overview document, image 33, I guess 33 and 34.
17 And we know that Dufferin, the paving contractor,
18 proposed using and did ultimately use but first
19 proposed using Demix aggregates as the aggregates
20 for use in the SMA and Superpave surface courses
21 on May 20, 2007?

22 JUSTICE WILTON-SIEGEL: Sorry,
23 I think you mean March 20?

24 MR. LEWIS: Sorry, yes,
25 March 20. I do. Thank you. I should absolutely

1 have that date and month memorized by now.

2 BY MR. LEWIS:

3 200 Q. And in paragraph (b) of
4 66 at the bottom of page 33 and going on to 34,
5 there's a first request by Mr. Gangaram of
6 Dufferin to Philips, Mr. Maranzan, requesting
7 approval to use the Demix aggregates in the
8 Superpave 12.5 and SMA mixes.

9 And then Dr. Uzarowski wrote
10 back, if you can see paragraph 67 -- sorry, I
11 should say they advised at that point it wasn't on
12 the province's, the MTO's, designated source
13 materials list in their initial proposal.

14 Dr. Uzarowski, as you'll see
15 in paragraph 67, if we could pull up images 34 and
16 35, please, wrote back and he sent this memo to
17 Philips and to you with his response to this
18 request, which is the entire memo is reproduced at
19 page 35 there. And do you recall receiving this?

20 A. I received it, but I
21 don't, you know -- it doesn't stick out. I would
22 have received it, but I don't -- because when you
23 say recall receiving it, it's like obviously I did
24 receive it, yes.

25 201 Q. You did receive it?

1 A. Yeah.

2 202 Q. You read it?

3 A. Yeah.

4 203 Q. Okay. I appreciate you
5 don't at this moment recall opening it up and
6 actually reading it at that moment, though, is
7 what you mean?

8 A. Right.

9 204 Q. Okay. And, first of all,
10 does this letter or memo and the request made and
11 then Dr. Uzarowski's memo, does that generally
12 reflect specifically Golder and Dr. Uzarowski's
13 quality assurance role in the lead-up to and
14 during the paving construction, which involved
15 approving or not approving asphalt mixes and
16 aggregates for use in them?

17 A. Correct. Sorry, I was
18 just trying to read through his memo there.

19 205 Q. Take your time. I can
20 re-ask the question. Just tell me when you're
21 done.

22 A. I'm almost there. Sorry.
23 Right, so when read the memo, I think -- and when
24 you look at our -- I believe Dufferin sent it to
25 Walter because Walter -- Philips was the contract

1 administrator. Golder was our geotechnical
2 consultants, but a sub to Philips. So, Walter
3 passed this on and basically Ludomir is saying in
4 order for us to look at it, you need to do
5 these -- the four bullet points. So, he says
6 right now it's not considered, but it was one of
7 those -- because, again, our take was if Golder's
8 approved this aggregate, then you can use it.
9 Okay? Because they would have to be comfortable.
10 There's no way we're going to allow -- again, I
11 said the City, we're not MTO. You know, we had a
12 different mix for the LINC, the elastial slag, you
13 know, the MTQ is using this aggregate and the MTQ
14 is, to the best of my understanding, similar to
15 the MTO, so, again, what he's saying -- but if you
16 read those four paragraphs, if you can basically
17 give all this information, then you would be
18 reconsidered.

19 So, he wasn't rejecting flat
20 out at this point. At least that's my
21 interpretation. He's just saying they're
22 currently not considered, but you have to do all
23 those other things before we could say, yeah, it's
24 an appropriate -- a good aggregate to use.

25 206 Q. But he's explicit about

1 that. He says it's currently not considered
2 acceptable --

3 A. Right.

4 207 Q. -- for use on this
5 project and they need to run through the
6 information --

7 A. You need to give me more
8 data, more testing, for him to make an informed
9 decision. And that, you know, I wouldn't -- for
10 us, it's like if Ludomir is happy, I'm happy.

11 208 Q. And then just to come
12 back to my initial question, which I should have
13 let you review it first but I think you've
14 essentially answered that, that if Golder and
15 specifically -- Golder and specifically
16 Dr. Uzarowski's, at least part of their role was
17 to approve for use or not the mixes and the
18 aggregates used in those for use on the project
19 and you would follow their lead on that. Is that
20 right?

21 A. That's correct.

22 209 Q. Okay. It is 11:29,
23 Commissioner, so this may be an opportune time for
24 the morning break.

25 JUSTICE WILTON-SIEGEL: I

1 think so. Let's return at a quarter to 12:00.

2 --- Recess taken at 11:29 a.m.

3 --- Upon resuming at 11:46 a.m.

4 MR. LEWIS: Commissioner,
5 we're back. May I proceed?

6 JUSTICE WILTON-SIEGEL: Please
7 do.

8 BY MR. LEWIS:

9 210 Q. Just to close off
10 something before the break, Mr. Oddi, we were
11 talking about approving mix designs, aggregates
12 and so forth and your short hand was if Ludomir is
13 happy, I'm happy.

14 Is it fair to say, though, if
15 that's what Dr. Uzarowski says, then you would
16 follow his advice, but am I correct, though,
17 ultimately it's the client's decision whether or
18 not to follow the advice in any particular
19 instance? Is that fair?

20 A. Yes, that's fair.

21 211 Q. Okay. And prior to the,
22 you know, placement of SMA or the paving phase,
23 were you aware of the Ministry of Transportation
24 of Ontario's Designated Sources for Materials
25 list?

1 A. Yes.

2 212 Q. It was something you were
3 familiar with? And that it lists the products and
4 their sources that the MTO deems acceptable for
5 their projects and specifically for high-volume
6 surface courses, asphalt course, the aggregates
7 that are pre-qualified for use. Were you aware of
8 that?

9 A. Yes.

10 213 Q. Okay. And were you aware
11 that one of the purposes of pre-qualifying
12 aggregates by listing them on the DSM is to ensure
13 that those aggregates have adequate frictional
14 qualities. Is that something you were aware of?

15 A. No, not really.

16 214 Q. No? You say not really?

17 A. Well, I was aware that
18 they did, you know, a different type of testing
19 for the different properties of the aggregates,
20 but I didn't realize that friction testing was
21 done as part of that aggregate.

22 215 Q. Okay. And so, at that
23 time, you didn't. That's something you became
24 aware of in the course of this inquiry or between
25 those two events?

1 A. During the course of the
2 inquiry.

3 216 Q. Okay. And going back to
4 the LINC, we were talking about it, we know that
5 steel slag aggregates were used in a portion of
6 it, as we discussed, in the LINC surface course
7 construction. Was using aggregates that were
8 listed on the MTO's DSM, was that a requirement
9 for the LINC surface course or no?

10 A. I believe it was part
11 of -- because we would have used the OPS
12 specifications, so yes, it would have been, just
13 like it was in Red Hill, it would have been in the
14 background, whichever OPS reference it is. I
15 can't recall. I know the paving specifications
16 are 310. That's a material specification, so it's
17 like 1150, 1151, something like that.

18 217 Q. Okay. Sorry, for the Red
19 Hill --

20 A. And the LINC as well.

21 218 Q. Right. For the Red Hill,
22 we know that the DSM-approved aggregates were not
23 a contractual requirement. Was it the same for
24 the LINC or different?

25 A. No, it would have been

1 the LINC.

2 219 Q. Okay.

3 A. It's the same. It's a
4 similar setup. Right? Yeah.

5 220 Q. Okay. And so, did the
6 fact that the Demix aggregates were not on the DSM
7 that were proposed by Dufferin, did that cause you
8 any concern or no?

9 A. No. Again, given our
10 history of looking, you know, the region, the
11 City's history of looking at other things, I'm
12 almost certain I would have mentioned this to
13 Gary. And, again, Golder had to approve the
14 aggregate. You know, if they did not approve the
15 aggregate, then it's not happening.

16 221 Q. Right. You say you
17 believe you talked to Mr. Moore about it. Why is
18 that something you would have discussed with him?

19 A. I would have told him
20 that they're proposing to use this aggregate from
21 Quebec, MTQ, to see if he had any concerns, if he
22 knew about it maybe, but to the best of my
23 recollection, more than likely I would have told
24 Gary. Something like this, I wouldn't have hidden
25 from him. Right?

1 222 Q. It's not a question of
2 hidden --

3 A. I didn't mean to use that
4 word. I'm sure I would have informed him of it
5 and I don't know if I informed the entire team at
6 one of our meetings, but, you know, Gary
7 specifically would have known about it because if
8 he had any reservations then it would have been,
9 hey, okay, why, what do we need to talk about?
10 You know, and things like, you know, we all got to
11 march in the same direction. Right? We had an
12 atmosphere at Red Hill where everyone was allowed
13 to basically give their opinion, state their
14 perspective, so when you really look at it just --
15 in the end, we were always proceeding in the same
16 direction on all the issues, not just -- but there
17 was a few of them through this project. Right?

18 223 Q. Okay. Through the whole
19 project or are you talking about during the paving
20 phase?

21 A. No, during the whole
22 project, the protests, things like that.

23 224 Q. Injunctions?

24 A. Injunctions, yes. All
25 great learning experiences, by the way, so...

1 225 Q. And, just for the record,
2 we're talking, Commissioner, about going back well
3 prior to the construction, the protests and so
4 forth respecting the project itself and court
5 proceedings that were engaged.

6 And when you were -- you said
7 that you were involved with Dr. Uzarowski in
8 developing the tender, paving specifications. I
9 know that Dr. Uzarowski and Golder were engaged to
10 develop those, but you worked with him on it for
11 the purposes of tender. Correct?

12 A. I guess I should clarify
13 that. Whatever Dr. Uzarowski, whatever Ludomir
14 said this is what needs to go in the spec, okay,
15 Evan, make sure you put it in. You know, again,
16 Superpave was new to me, so, like, little things
17 like if I want 6 percent AC, I said, well, why
18 can't we just say that? Why can't we just say you
19 want to use polymers and then you have to use
20 6 percent AC. We would do that in a Marshall mix,
21 but that's not the spirit of Superpave.

22 So, Ludomir would say here is
23 the easel counts, this is what we need to do, I
24 set these parameters really high, and I do this
25 because the only way for them to achieve this is

1 now to use polymer modified AC and, you know, and
2 then the only way to get this -- all these other
3 characteristics of the design is that they're
4 going to have to run the AC close to that whatever
5 the number was, if it was -- I can't recall if it
6 was five, five and a half, six, because when we
7 were doing our Marshall mixes with the City, we're
8 running 6 percent AC, plus or minus, you get those
9 parameters. So, this was a new concept to me and
10 it was -- this is frustrating. Why can't I tell
11 you what I want? It's simpler. Right? So, for
12 me to, you know -- the City in 2007, Gary, the
13 manager of design, said it's coming soon,
14 eventually we're switching to Superpave. Right?
15 So, there's a whole other things with that.

16 You know what? We improved
17 it. He involved Golder in it. Once I joined the
18 group, you realized, oh, my god, we need to revise
19 our specifications to get better quality. So, you
20 know, Ludomir has been instrumental with us at the
21 City developing that and getting a really good
22 asphalt specification. When the rest of the
23 province seemed to be having problems with
24 premature cracking, we weren't experiencing that.
25 And now I call our latest version of Superpave

1 partial Marshall because we come back to saying
2 here is everything but I want a minimum AC of five
3 and a half. That way, we know we're getting what
4 we want and we bump up the AC grades depending on
5 the class of the road.

6 226 Q. Okay. So, to cover that,
7 you're talking about city contracts?

8 A. Yes.

9 227 Q. But first of all, Gary
10 Moore, he wanted 2007 to move over to the
11 Superpave, but I think you're talking about
12 earlier than that if you're talking about the Red
13 Hill?

14 A. Yeah, earlier than Red
15 Hill. But around 2007 I knew I was doing it on
16 Red Hill and I believe, I'm almost certain, that
17 the City contracts, that's when they had switched
18 to Superpave specifications as well.

19 228 Q. And your point about the
20 Marshall mixes is they are more directive at the
21 front end as to what --

22 A. Correct.

23 229 Q. As opposed to end use
24 specification?

25 A. End result and it's up to

1 the person designing the mix to say I can use this
2 much AC, I can use these aggregates and I can
3 achieve all your -- you know, and the voids are
4 different. You know, it starts -- I don't want to
5 get into too much because I'll waste our whole
6 day.

7 230 Q. But those specifications
8 of the specific AC content are then in the mix
9 design?

10 A. Yeah. It's just things
11 like, yeah, you know, and one really quick thing
12 and I promise I won't expand anymore. Okay? When
13 we used to be bridge decks, right? We would put
14 40 mills of surface asphalt, whatever it was, 40
15 mills of base asphalt, which was an HL8, so in
16 simple terms, you know, SP19 is the new HL8.

17 So, I remember when you're
18 going to do bridge decks, but you read the MTO
19 specifications, the minimum depth of an SP19 is
20 50, so now you've got 50 and 40, 90. You now have
21 a 10 millimetre difference. And I remember asking
22 contractors, you know, as this is all happening,
23 what's different? It's the same aggregate.
24 Right? So, what's different? And it's the air
25 voids. It's all those slightly different things.

1 So, you say, oh, now, guess what? When we do a
2 new bridge deck, we put 40, 50, the 10 millimetre
3 board. If we're rehabbing an old bridge deck,
4 unless you have room to taper out the ends, you
5 put in two lifts of 40 millimetre surface asphalt,
6 which can be placed at 40 mills, but those are
7 just standard.

8 I apologize, but it's just
9 kind of like information. So, right?

10 231 Q. So...

11 A. Sorry, did I answer your
12 question, Commissioner, counsel? I apologize if I
13 didn't.

14 232 Q. In part. I was asking
15 you about developing the specifications and you
16 said that you took what Dr. Uzarowski told you and
17 then essentially you were importing those into the
18 tender documents?

19 A. Well, it was given to
20 Evan Wilson, who would then put it into the tender
21 documents.

22 233 Q. Are you saying you
23 weren't involved at all?

24 A. No, I was involved in
25 meetings, whatever, because it's also like, okay,

1 well we're going to use the HL1 on the surface
2 roads. Those would then be pulling in the city
3 specs, so, you know, pulling it together and then
4 sending it for -- but in terms of -- I didn't go
5 through and say -- I was more trying to understand
6 Ludomir's specifications.

7 234 Q. Okay. During that
8 process, did you have any discussions with
9 Dr. Uzarowski or not about requiring the surface
10 course aggregates to be ones that were listed on
11 the DSM?

12 A. No, I don't recall that
13 conversation at all.

14 235 Q. Okay. Now, in the
15 immediate lead-up to the paving and during the
16 paving, who did you deal with directly with each
17 of the players? Well, first of all, you've got
18 Golder, you have -- and I know there were other
19 consultants as well, but Golder, there's Philips,
20 the contract administrator and then there's
21 Dufferin, so let's start with Golder. Who did you
22 deal with primarily at Golder in the immediate
23 lead-up to paving and the paving itself?

24 A. In the field, it was
25 Andro.

1 236 Q. Andro Delos Reyes?

2 A. Yes, that's correct.

3 Ludomir didn't come out to the site every day, but
4 he was reviewing all the submissions with -- so,
5 with Philips. We also had Philips oversaw the
6 whole paving contract, so they were the contract
7 administrator, but we also had staff from Stantec
8 and staff from McCormick, field staff out there,
9 but if we need to liaison back with the design
10 staff, that just made it easier. And, again, you
11 know, we had been working on this project since
12 2003. A lot of these team members were involved
13 in the original LINC, so lots of history between
14 all the disciplines.

15 237 Q. Was that Walter Maranzan
16 at Philips?

17 A. Walter Maranzan would
18 have been usually the person I was dealing with
19 and I can't recall but there were definitely other
20 people from Philips as well as Stantec and
21 McCormick Rankin on the site while they were doing
22 work. I just can't recall specifically who they
23 were.

24 238 Q. That's fine. And then in
25 terms of Dufferin, who did you primarily deal

1 with?

2 A. The primary person we
3 dealt with at Dufferin would have been Dave
4 Hainer. He was the superintendant looking after
5 the whole project. His field engineer, who I
6 believe was James Wharrie. I can't remember if
7 James came in after. We might have had Nick
8 Dietrich at first and then that got switched out.
9 But Dave Hainer came in at some point in 2004 and
10 took over the grading contracts. And then their
11 estimator was Rick Triemstra, but he was usually
12 more -- he would come onsite once in a while, but
13 definitely at all the site meetings.

14 239 Q. Okay. And did you deal
15 with Paul Janicas at all?

16 A. Yes, Paul Janicas once in
17 a while. And then because he was actually up at
18 the portable plant, you know, trying to actually
19 make the product. And then there would have been,
20 you know, Dufferin had their QC people, but I
21 can't recall their names. But, you know, more
22 interactions with Paul, Dave Hainer being the main
23 person.

24 240 Q. Right. And I think
25 Mr. Janicas is often on e-mails that you were on

1 when dealing with mix design and aggregate issues.

2 Is that correct?

3 A. Correct. I was also
4 going to mention I know once in a while Peter
5 Gamble as well, because I believe at that point
6 Peter was running the equipment. I can't remember
7 Dufferin's structure, but he had been the paving
8 guy for sure, so he was still doing that, but I
9 believe he was also now like an equipment
10 operations manager, I believe, but I can't recall
11 that for certain.

12 241 Q. And so, on occasion you
13 communicated with him and we'll get to that?

14 A. Yeah, well get to that.
15 Right.

16 242 Q. In terms of Golder, as
17 you said, Mr. Delos Reyes, he was onsite daily but
18 you would also, on occasion, deal with
19 Dr. Uzarowski as well, right, if he was onsite?

20 A. Yes, or if he wasn't, if
21 we needed to touch base, you know, phone -- again,
22 given my limited e-mail availability, it was
23 normally phone calls or physical site meetings.
24 Right?

25 243 Q. And typically, not

1 exclusively but typically in the e-mail traffic
2 when it deals with mix design approvals and
3 aggregate approvals and so forth, those were
4 typically between Golder, specifically
5 Dr. Uzarowski, and the Dufferin representatives on
6 that issue. Is that fair?

7 A. I believe for the most
8 part, yes, that's fair.

9 244 Q. Okay. Now, if we go to
10 overview document 3, image 43, and paragraph 85,
11 so this is a May 17 letter from Dave Hainer of
12 Dufferin to you. It's about warranty on asphalt
13 on part A of this contract. And he indicates, and
14 you can read it through, but essentially he's
15 saying Dufferin can't warranty any of the asphalt
16 placed on material that was placed by others, and
17 he defines that as the area just south of
18 Greenhill to the south limits of the contract.

19 And that's, as we were
20 discussing before, the part of the grading
21 contract that was executed by Aecon, not Dufferin.
22 Is that right?

23 A. That's correct.

24 245 Q. And you say that they
25 can't warranty that section. First of all, do you

1 recall this issue?

2 A. I recall Dave saying I'm
3 going to be sending you a letter about this.

4 246 Q. Okay, which he then did?

5 A. Yeah.

6 247 Q. And was this position
7 that Dufferin took, was this surprising to you?

8 A. No, no. I mean, they
9 didn't do the underground, so, you know, I
10 understand where they were coming from. They
11 didn't place that granular material. It was
12 placed by Aecon, so, you know, they were just
13 probably doing their due diligence to cover them
14 in case there were anything that happened in that
15 piece of the contract within the two-year
16 warranty. Right?

17 248 Q. Is this something you had
18 experienced in any prior project?

19 A. Not to the best of my
20 recollection, no.

21 249 Q. And is this
22 something that you -- did you inform Mr. Moore
23 about this?

24 A. About this letter? I'm
25 pretty sure I did not share this or I did not --

1 I'm pretty sure, but I don't really recall.

2 250 Q. Okay. So, you think you
3 didn't?

4 A. Yeah.

5 251 Q. It's possible, but you
6 don't think you did?

7 A. Right, correct. And I
8 really wasn't concerned about it. And I said,
9 okay, if something happens, we'll deal with it.
10 Right?

11 252 Q. Okay. And you didn't
12 respond to this or disagree with him, I take it?
13 You don't have any record of that?

14 A. No. I didn't send a
15 reply or anything like that. I don't --

16 253 Q. And if you don't think
17 you shared this with Mr. Moore, would I be correct
18 that you also did not share it with Mr. Murray?

19 A. Yeah. I don't believe
20 I -- no, I wouldn't have shared it with Chris.
21 Definitely if I didn't share it with Gary, I would
22 not have shared it with Chris, no.

23 254 Q. Okay. It does seem, even
24 if it didn't trouble you, it seems like a fairly
25 significant issue if the paving contractor is

1 saying they're not going to warrant the asphalt on
2 one of the three areas of the contract. It does
3 seem like a pretty significant issue, is it not?

4 A. It depends on your
5 perspective.

6 255 Q. Why do you not consider
7 it a significant enough issue to escalate it to
8 Mr. Moore?

9 A. If you read the letter,
10 the letter is saying this is due to unknown
11 quality of granular placed prior to Dufferin
12 Construction commencing work on this contract.
13 So, as part of that contract that Aecon did, they
14 were to obviously blast -- they blasted the rock,
15 crushed it and made granular A, granular B, I
16 believe also some riprap. So, whatever we thought
17 we needed or could use for the next contract, we
18 were producing, storing.

19 As part of the paving
20 contract, they were to go up and use that
21 granular, right, and place it on the -- I believe
22 it was the granular B stockpile where, as they
23 were going up in 2006 and started placing it, we
24 started -- you know, I got a call from Walter. We
25 started noticing pumping of mud through the

1 granular that Dufferin had just placed. Right?
2 So, all right, there was a concern. We looked at
3 it. The formation of rock through our escarpment
4 cut was dolomitic limestone, which produces a very
5 good quality granular A, granular B, but the lower
6 depths of the escarpment were shale, so in the end
7 when you're looking at it, some of that shale,
8 with maybe the blasting, had got incorporated into
9 the granular B and was giving us this now product.
10 So, when this issue happened,
11 I made Gary aware of it, made Chris aware of it.
12 We had all kinds of meetings onsite, looked at it,
13 looked at options, even brought in -- I believe it
14 was Dufferin's quarry people that came in and
15 said, okay, if you could take this granular, put
16 it through some sieves of a certain size, would we
17 be able to get that, what's causing the mud, out
18 of it. So, it's okay, here is the process and
19 time, here is what you would have to do. So, we
20 did say, okay, whatever you've placed on the main
21 line highway, take out. Right? Let's look. I
22 think we said, you know, it's a good material to
23 be used as shouldering, so it's a good material,
24 but we're going I don't think this is a good thing
25 to put down under this asphalt.

1 So, when we looked at
2 everything, we looked at the options of saying,
3 okay, if I was to bring, you know, Dufferin, bring
4 it in, bring the screening, process the material,
5 this is how much material will now be left to now
6 be used. I now have to supplement that with
7 additional granular. Okay, what's the cost of
8 that? It definitely -- it impacted the scheduled
9 completion of the project or at least our portion
10 of opening in 2007. The Ministry contract was set
11 up to open the Niagara-bound direction in 2007 and
12 the Toronto-bound direction in 2008, so from my
13 perspective as we're discussing it, it's not the
14 end of the world to delay it.

15 But then when I looked at the
16 cost of saying, okay, this is good granular and,
17 you know, so instead of us, the project, getting
18 the benefits of it, he said if we want to stay on
19 schedule, I take this material, because our
20 contract already had something in it that said --
21 because I believe we were going to have some
22 granular left over that was to be taken to a city
23 yard so that they could use it. Because under the
24 quarries act, I'm not supposed to be producing
25 granular and then placing it all over the city.

1 Once I'm done with my project, I can now take it
2 to a city yard and they can use it for their
3 needs.

4 So, I had already been in
5 touch with maintenance saying the material that we
6 have left over in 2007, which yard can I bring it
7 to? So, I said, okay, I now have a lot more
8 granular that I'm going to bring for you that you
9 can use it for shouldering, you can use it
10 definitely for, like, sewer main backfill,
11 watermain backfill when you're repairing, you
12 know, a break or things like that. So, it was a
13 very good material. We weren't going to recoup
14 the money from it. When I looked at the two, I
15 said it's the same cost.

16 So, you know, in discussions
17 with Gary and Chris, you know, we made the
18 decision to say, you know what? We're going to
19 basically, okay, take this material there.
20 Dufferin, we already had prices for virgin
21 aggregate from a quarry, so can you bring in that
22 extra aggregate? We're going to do that. And I
23 said to Chris, though, the impact to the project
24 budget, like the overall project budget, is about
25 \$2 million. So, Chris was very transparent,

1 brought this up at council.

2 You know how I mentioned that
3 about giving them updates in terms of dollars,
4 where I thought it was going to be overall in the
5 project? You know, Chris hadn't reported the last
6 one when I said -- at that point, I think I had
7 said we were going to be \$6 million under and I
8 said if we -- option B would be what keeps us on
9 schedule, but instead of saving six, the overall
10 project only saves four. And Chris said that's
11 good. You know, I think in his last update he had
12 only told council that it was a \$4 million
13 savings, something to that -- this is kind of my
14 recollection.

15 So, this is why this letter
16 came out and this is why I said, you know what?
17 It doesn't matter. Because even before we asked
18 Ludomir to please review -- Walter and I said can
19 you please review the existing granular. Let us
20 know if you think it's suitable to be left in or
21 should we remove it because we can already had an
22 item in the contract that's called like
23 scarifying. Because we had construction traffic
24 driving on the existing granular, you're kind of
25 pounding it into the ground, so it needs to be

1 loosened up, freshened up.

2 So, Ludomir, you know,
3 reviewed it and said, no, it's good to leave in
4 place. So, that's why in my knowledge, Ludomir,
5 who is my geotechnical expert, said it's fine to
6 leave in. This is Dufferin just saying, just in
7 case something happens, I wouldn't be liable. But
8 you can also look at it if there is infrastructure
9 across there that settles -- and again, through
10 this area there was some transnorthern pipelines
11 that had been put in through some of the rock cut.
12 That was a coordination thing. They backfilled
13 it. Could there be possible long-term settlements
14 through that area?

15 So, you're always expecting
16 some settlements when you have really deep
17 excavations. Even though you compact it and
18 backfill it to the best of your ability and say,
19 if you have enough construction experience, you
20 say, you know what? Probably seven to ten years,
21 you're going to start to see some dips on the
22 road. Right? And if those dips correlate to the
23 infrastructure underneath, you say I know what
24 caused it. It's not a base failure. It's just
25 that trench consolidating.

1 256 Q. That's a very long answer
2 to a question about --

3 A. Well, because it was we
4 were good with leaving it in. And the key is
5 Ludomir was good with the granular that had been
6 placed. So, sorry, but if you don't know the
7 context of the whole background, you know, then
8 it's -- so I apologize if that was too lengthy.

9 257 Q. That's okay. But the
10 point is this was a very significant issue that
11 led up to it, as you described, and what I'm
12 wondering is because if you didn't inform
13 Mr. Moore of this one, what, by comparison, made
14 you bring up the Demix aggregates not being on the
15 DSM? I'm just trying to get a sense of the issues
16 that you escalate or don't escalate. You did
17 raise that but you didn't raise this.

18 A. Because Gary already knew
19 the problem with the granular and in our minds it
20 was with the granular material that was
21 stockpiled, because the granular that was placed
22 on the base was done through the shallower
23 blasting, so there's no -- oh, my goodness. I
24 just forgot the name of that aggregate. That one
25 that basically gets brittle, that rock material

1 was at the -- and when they blasted to produce the
2 granular, they started at the north end. That
3 other aggregate was at the base of the rock cut as
4 they got to the north end of the project, so they
5 started at the south, moved their way north, so
6 the quality of the aggregate that was placed on
7 the existing road was from the dolomitic
8 limestone. Right?

9 258 Q. Yeah.

10 A. So, basically the last
11 little bits of when they had produced the
12 granular, and I believe it was just the granular,
13 I think it was a granular A pile, I can't remember
14 if it was the -- must have been the granular A and
15 granular B piles. So, because that had gotten
16 incorporated into the pile and -- so it wasn't --
17 so in our minds, the top portion is good.

18 259 Q. No, I understand that.
19 But if the top portion is good and then Dufferin
20 says I'm not going to warrant it and you get this
21 letter and you don't think much of it and I'm
22 wondering why that's not considered by you to be
23 enough of an issue for you to raise to your
24 superiors when you did with the Demix aggregate?

25 A. The Demix aggregate was

1 something, hey, so you know, they're proposing a
2 thing from Quebec, just so he knew. This, he
3 already knew about the unknown quality and, in my
4 mind with my relationship with Dufferin, so from
5 my point of view, I didn't think we were going to
6 have any issues. And if we did, basically the --
7 you know, it's like, okay, if there's an issue
8 there, I need to be reimbursed if you're going to
9 make me remove some asphalt up there. Whereas if
10 there's a dip within the portions that he had done
11 and placed the granular, then, sorry, you know,
12 we're in that ideal situation where if the
13 settlement is due to the infrastructure, can you
14 really blame the paving guy? Oh, guess what? I
15 have the guy who did the grading from Greenhill
16 all the way to the QEW is the same contractor, so
17 that's why I didn't consider it an issue.

18 260 Q. Okay. Can we go to
19 overview document 3, image 49, please. I guess 49
20 and 50, please. In paragraph 100, these are the
21 minutes of a July 10, 2007 site meeting, and you
22 talked about monthly site meetings that occurred,
23 and I guess this was number 9 for the paving
24 construction phase. And the minutes indicate you
25 attended this meeting and there's a reference at

1 the top of image 50 under Material Testing in the
2 second paragraph to:

3 "Golder indicates the
4 vibratory roller
5 currently being used by
6 Dufferin is likely to be
7 heavy for the SP19 and
8 SMA payment layers."

9 Do you recall this issue and
10 can you give us any insight into it?

11 A. You know, vaguely, but
12 it's -- I think just Golder was just pointing out
13 that it's a large roller. So, the one they were
14 using -- so, I'm assuming we would have been
15 placing SP25 at the time, but when I see our
16 progress we were using SP19, so they were just
17 raising a concern that if it's too large of a
18 piece of equipment or if you have the vibratory
19 setting set too high, you could potentially damage
20 the aggregate. So, it's one of Golder brought it
21 up. Given our relationships and everything that
22 happened between the contractor, Golder, all our
23 consultants, I'm sure this was dealt with.

24 261 Q. Okay. So, we know that
25 the -- well, back up for a second. We have heard

1 that aggregates can be damaged or cracked,
2 crushed, during the rolling process and one of the
3 ways that can happen is if the vibratory mode is
4 used, perhaps not necessarily, but that's one way
5 damage can happen. That's a fair assessment.
6 Yes?

7 A. Yes. Can I outline the
8 process of how you place asphalt? Because that
9 might help.

10 262 Q. Yes, sure.

11 A. So, not with SMA but with
12 a regular type of asphalt, we call it a smooth
13 drum roller. They say it's the breakdown roller.
14 So, you know, in this case, the paver lays down
15 the asphalt. Right? We use a material transfer
16 vehicle to put it in the paver. It lays it down.
17 Then the smooth drum roller with vibration, which
18 is called the breakdown roller, goes over top and
19 is giving the asphalt its initial compaction.

20 You then bring in a rubber
21 tire roller, which kneads the asphalt all
22 together. Then you bring your finishing roller,
23 and the finishing roller is normally a smooth
24 drum. Normally if you vibrate, it would be very
25 low settings, okay, or no vibration at all and

1 you're just now finishing it, taking out any marks
2 and bringing up the compaction and it all has to
3 be done while the asphalt is at a certain
4 temperature. Right?

5 Now, the SMA, you can't use
6 the rubber tire on that -- so that second machine
7 that goes on, because of the mastic properties, it
8 would just stick to the tires and make a mess, so
9 you use the first roller would definitely have
10 exaction, that's the breakdown roller, smooth
11 drum. You now have a finishing roller, smooth
12 drum, kneading the SMA together. Right? So, it's
13 not sticking and it's also then used as the
14 finishing roller.

15 So, you're right, in that last
16 operation, that finishing roller, if you put your
17 vibration on, you know, you have that potential of
18 crushing the aggregate. That's why it's usually
19 not run. So, part of the process has the
20 vibratory on, the initial, but not the latter.

21 263 Q. And do you know, going
22 forward, that there was a test strip that was laid
23 on the 25th of July. Do you know what Dufferin
24 did for that placement of the SMA test strip? Did
25 they use the vibratory function for that or do you

1 know?

2 A. You know what? I can't
3 say for certain, but I know your protocol, that
4 initial rolling, you have to have vibration on it.
5 Right? Unless the roller is really oversized and
6 too big, then you wouldn't put the vibration on it
7 because you have to achieve compaction. Right?
8 And when they were placing it, I can't recall
9 paying attention if the vibratory was on
10 initially.

11 264 Q. Okay. What about on the
12 last part of it?

13 A. On the finishing, I would
14 assume they would only put it on if required to
15 get the compaction up, but usually you achieve it
16 by getting on while it's hot and just keep rolling
17 it, keep rolling it. Right? So once you get this
18 pattern, right, that okay, and the testing, so
19 you've got Dufferin's QC people, I had my Golder
20 QA people, everybody is testing compaction with
21 their nuclear devices. Right?

22 So, once everybody says, oh
23 good, the compaction is good, this is good, right,
24 so now everyone knows all right, they placed the
25 asphalt, here is how many passes that breakdown

1 roller has to do and here's how many passes the
2 other roller has to do, so that we know that will
3 give us the compaction. Right? So, you know,
4 that's where that, you know, the interaction
5 between Andro and his staff and Walter and his
6 staff, extremely important, because if they waited
7 for me to be there, we would probably still be
8 paving. But anyway.

9 265 Q. Okay. And then if we
10 could go to image 52 and 53, please. And in
11 paragraph 105(a), this is July 23, 2007, a couple
12 of days before the test strip is placed,
13 Mr. Hainer of Dufferin e-mailed you and Philips,
14 and you can see the e-mail there where he writes,
15 subject, SMA Aggregate Concerns:

16 "Walter, please see the
17 attached correspondence
18 regarding the concerns of
19 the aggregate which are
20 to be used in the FC2 and
21 SMA surface course mixes.
22 As you are aware, we
23 still have the test strip
24 for SMA scheduled for
25 this upcoming Wednesday

1 and trust that the
2 documents below will
3 satisfactory the concerns
4 verbally identified.
5 Should there still be
6 concerns on this matter
7 after reviewing this
8 information, please call
9 me at your earliest
10 convenience so we can
11 arrange a meeting to
12 resolve this matter."

13 And he is forwarding an e-mail
14 from Mr. Janicas dated July 20, 2007. And if we
15 could go to that document, it is DUF1965.

16 A. Is that item C or item A?

17 266 Q. That was A.

18 A. Okay.

19 267 Q. There is a subsequent
20 e-mail as well, which we'll get to.

21 A. Okay.

22 268 Q. And so, you can see at
23 the top this is Mr. Hainer's e-mail to Philips
24 copied to you and Mr. Wharrie and Mr. Triemstra at
25 Dufferin, the e-mail I just read to you. And

1 below that it's Mr. Janicas internally at Dufferin
2 to Mr. Hainer and Mr. Gamble and there's four
3 attachment PDFs listed and we don't have the
4 attachments, we just have the images there.

5 So, do you know what the
6 attached documents were? Do you recall receiving
7 this and receiving the attachments?

8 A. No, I don't recall.
9 Obviously I received it, but I don't recall -- I
10 don't recall the details of everything.

11 269 Q. Okay. And one of them,
12 the first one there, the title on it, we don't
13 have the document, the title of the PDF is "Skid
14 Resistance Report." Do you have any recollection
15 of that attachment?

16 A. No.

17 270 Q. And three times in
18 Mr. Hainer's e-mail he talks about the concerns of
19 the aggregate and the concerns verbally
20 identified. Do you recall what those concerns
21 were?

22 A. No, I don't.

23 271 Q. Do you recall who raised
24 any concerns at that point?

25 A. I would be speculating

1 that it was Ludomir, but I can't recall.

2 272 Q. It was not you. Is that
3 the case?

4 A. No, it wasn't me. No.

5 273 Q. All right.

6 A. And, again, I would
7 have -- I believe the aggregate was approved back
8 in May, so at this point, you know, we're into
9 production, the mix designs have been submitted,
10 they're doing trial batches. Right? So, you
11 know, at this point it's, like, what would be the
12 concern with the aggregate? I don't recall this.
13 I don't recall this issue --

14 274 Q. When you say it was
15 approved back in May, certainly there's
16 correspondence going back and forth, but we know
17 that at this point, in July, there are issues
18 being raised about them?

19 A. Right.

20 275 Q. And so --

21 A. Sorry.

22 276 Q. -- you don't recall what
23 these concerns were at all, though?

24 A. No. And what I had said
25 is that the aggregates were approved for use back

1 in May, so now, good, you have to do your mix
2 designs. So, when you submit your mix design,
3 you're saying, here is what I'm using for the fine
4 aggregate, coarse aggregate, so here is my recipe
5 so that I can meet your specifications, they're
6 doing trial batches. It's a different set of
7 approvals that's going back and forth between
8 Dufferin and Golder.

9 277 Q. If we could go back to
10 OD3, image 41 and 42, paragraph 80 refers to the
11 May 8, 2007 construction meeting number 7. And at
12 the top of 42, it refers to the physical
13 properties of the Quebec trap rock are all
14 acceptable, and then it goes on to describe trials
15 and so forth. Is that what you're talking about
16 when you say they were approved?

17 A. Yes, yes. Basically at
18 this point it's a good aggregate that can be used
19 to produce the SMA and FC2.

20 278 Q. Okay. And then if we
21 could go to OD3, image 51, actually, 50 and 51,
22 these are e-mails on July 17 in paragraph 101 at
23 image 50. This is Mr. Janicas of Dufferin
24 e-mailing Dr. Uzarowski and you about ignition
25 oven test results?

1 A. Okay.

2 279 Q. And other test results.

3 He's talking about the concern expressed over the
4 percent breakdown discovered during the ignition
5 oven testing. Do you recall the issue about
6 ignition oven testing and the breakdown of
7 aggregates?

8 A. Yes.

9 280 Q. Okay. And that involved
10 the process of extracting aggregates from the
11 asphalt mix by using the ignition oven in order to
12 conduct the asphalt content -- to test the asphalt
13 content and the aggregate gradation by ignition
14 oven method which resulted in a breakdown. So,
15 you do recall that specific issue at the time?

16 A. Yes. Ludomir raised it
17 with me.

18 281 Q. And then do you see in
19 the second last paragraph Dufferin raises the
20 question:

21 "DCC's understanding is
22 that if the aggregates
23 continue to meet the
24 physical requirements of
25 contract, that the SMA

1 mix design will be
2 approved for production
3 on the City of Hamilton
4 project, PW-06-243."

5 So, would you agree with me at
6 that point they have not been approved?

7 A. No. The mix designs,
8 again, my understanding or my recollection is that
9 they were approved back in May and this ignition
10 oven thing was a totally different matter. Could
11 I just reread the paragraph?

12 282 Q. Yes.

13 A. I see what it says and I
14 see how you could interpret it to say that we
15 didn't have approval to use the aggregate, but
16 again, my understanding was that yes, they were
17 approved back in May. Now they're just ironing
18 out the details with the mix design and the trial
19 batches going back and forth, and the only two
20 mixes we had to do, the test strips, were the RBM
21 and the SMA.

22 283 Q. Okay. And at the top of
23 102, it's an e-mail the next day, Mr. Janicas to
24 Dr. Uzarowski, when he's again talking about
25 issues about the aggregates, and then he asks in

1 the fourth paragraph:

2 "With the above-mentioned
3 results meeting the
4 contract requirements,
5 are the SMA and 12.5 FC2
6 mixes approved for
7 production on the City of
8 Hamilton PW06243
9 contract?"

10 And then he asks:

11 "If after reviewing these
12 results there is still a
13 question of the
14 suitability of the
15 aggregates, please advise
16 Dufferin Construction
17 Company immediately and a
18 meeting with all the
19 stakeholders involved
20 will be convened at the
21 earliest possibly
22 opportunity."

23 So, do you agree with me at
24 this point there is an issue with the aggregates
25 and the approval?

1 A. It seems that, yeah, from
2 reading this it's that -- and he sent that to
3 Dr. Uzarowski, to Ludomir. Correct? So...

4 284 Q. If we could go to --

5 A. Yeah, that's a potential,
6 but from what I recall, again through the meetings
7 and everything, is that we had verbal approval to
8 use them and that they were good with them, but
9 anyway. That's what I recall from there, but I --

10 285 Q. What's the verbal
11 approval that you're talking about?

12 A. Well, again, back in May
13 it was whatever was noted in the minutes and then,
14 you know, basically that Golder was good with the
15 aggregate. So, again, they were still finalizing
16 the mix designs so they could put it down.

17 286 Q. Okay. And then as we
18 were just discussing, on July 23 you received this
19 e-mail from Mr. Hainer forwarding the package from
20 Mr. Janicas talking about concerns of the
21 aggregate three times mentioned, and this is in,
22 again, image 52 and 53? I had you look at
23 paragraph 105(a) and I took you to that specific
24 e-mail forwarding the e-mail from Mr. Janicas.

25 So, this is direct to you and

1 it's talking about concerns and should there still
2 be concerns on this matter after reviewing this
3 information, please call me at your earliest
4 convenience so we can resolve the matter. It
5 doesn't sound like at that moment that this issue
6 has been resolved. Would you agree with me?

7 A. Sorry, can you repeat the
8 question? I was reading. Sorry, can you repeat
9 the question?

10 287 Q. Three times he mentions
11 that there are concerns. They're forwarding this
12 information to you and Philips to address those
13 concerns, and then they ask to convene a meeting
14 to resolve the issue if there are still concerns?

15 A. If there are still
16 concerns. So, to the best of my recollection, you
17 know, I can't really recall all this and I can't
18 really recall this, the issues back and forth.
19 Was it, you know, that we needed to just, you
20 know, push Ludomir to give the final approval?
21 So, I really can't recall this exchange back and
22 forth.

23 288 Q. Okay, so --

24 A. Obviously I received it,
25 but I don't recall the exact conversations and we

1 didn't have a separate meeting about the use of
2 the aggregates because the test strip was placed
3 on July 25, I believe.

4 289 Q. That's right, two days
5 later.

6 A. I see it in point 107.
7 My memory is not that good.

8 290 Q. Okay. If we go to the
9 top of image 53 then, paragraph C, Mr. Janicas
10 sends a second e-mail on the same day, July 23, to
11 you and Philips with the information about prior
12 use of Demix aggregates by the Quebec Ministry of
13 Transportation. And he says:

14 "That's in addition to
15 the information submitted
16 this morning."

17 Which is the e-mail we were
18 just discussing. And he gives three examples of
19 use by the Quebec Ministry of Transportation of
20 projects using the Demix aggregates.

21 And so, these e-mails come to
22 you and to Philips and not to Golder, not to
23 Dr. Uzarowski. Do you know why that was?

24 A. No, I don't.

25 291 Q. And you've described how

1 you relied on Dr. Uzarowski's advice with respect
2 to all these matters. You said if Dr. Uzarowski
3 is happy, then we're happy, or words to that
4 effect is what you said earlier this morning.
5 Right?

6 A. Correct.

7 292 Q. So, Dr. Uzarowski has
8 testified that he did not receive these e-mails,
9 they weren't forwarded to him and he wasn't told
10 about them. Do you know why that was?

11 A. No. I don't recall why
12 they would -- I would have assumed they had
13 already been given to him, so...

14 293 Q. Well, weren't you reliant
15 on his advice?

16 A. Yes, so if there were any
17 concerns, again, for me, I can't recall, but, you
18 know, given the history and how we worked, I'm
19 sure we would have consulted with at least Andro
20 but probably Ludomir as well, but I don't recall
21 any specific conversations about it.

22 294 Q. Right. And they've
23 testified that they were unaware, so --

24 A. Okay.

25 295 Q. And do you know why,

1 though, this was sent to you and Philips and not
2 to Dr. Uzarowski, given that we've seen that the
3 communications up until that point were between
4 Dufferin and Golder with respect to approval of
5 aggregates, mix designs and so forth?

6 A. No, I don't know.

7 296 Q. And was there any
8 discussion with Dufferin or Philips about not
9 including Golder in the discussions at this point
10 about the aggregates?

11 A. Oh, no, to the best of my
12 recollection, no. That wouldn't have been how we
13 operated. So...

14 297 Q. Right, because it is
15 odd --

16 A. Yeah.

17 298 Q. You would agree. Right?
18 This is unusual and it's not the normal course for
19 how the communications went on this project?

20 A. Absolutely. Based from
21 your perspective, definitely. I mean, I assumed
22 that this had already been sent to Golder, so...

23 299 Q. Well, there's no
24 indication, though, that it had already been sent
25 to Golder. There's nothing that says we have

1 already discussed this with Dr. Uzarowski in
2 either of those e-mails. There's no indication
3 that that took place. Do you agree with that?

4 A. Yeah. I don't see
5 them -- yeah. From this, I can't see anything
6 where it was forwarded to them previously or
7 anything like that. From what I see in front of
8 me, yeah, and that does seem odd.

9 300 Q. And from what you've
10 described, this ought to have been shared with
11 Dr. Uzarowski. Is that right? Because you were
12 relying on Golder's advice to the aggregates and
13 the mix designs, as you described?

14 A. Again, I don't recall
15 this exchange, especially so close to placing the
16 test strip. So, if conversations were required
17 with Golder, they would have taken place, but I
18 don't recall them, so --

19 301 Q. Well, there's no
20 indication that there was any discussion about
21 this information with Golder, so you don't have
22 any different information at this time --

23 A. No.

24 302 Q. -- I take it?

25 A. Yeah. I don't have

1 anything more to add to that, unfortunately.

2 303 Q. Okay. And were you there
3 two days later for the placement of the test
4 strip?

5 A. To the best of my
6 knowledge, I believe I was there.

7 304 Q. Okay. And do you have
8 any specific recollection of that event, the test
9 strip placement?

10 A. No. You know, it
11 appeared that it was going well. You know, I
12 don't recall specifics about it.

13 305 Q. Okay. You don't recall
14 anything notable particularly --

15 A. Yeah. I don't recall
16 anything controversial, nobody being upset, nobody
17 yelling, screaming. It was just, hey, it's going
18 down. Nothing unusual, I guess, you know, would
19 be the answer.

20 306 Q. All right. And then
21 there was -- other than the RBM test strip, are
22 having test strips something that you have been
23 involved with before?

24 A. No. The only -- we've
25 placed it on the LINC, the HL1 modified, asphalt

1 mix.

2 307 Q. You mean the steel slag?

3 A. On that project, we

4 specified a test strip.

5 308 Q. On the LINC, so that was
6 the only project you had done?

7 A. Correct.

8 309 Q. Right. Then there was a
9 meeting on July 27, two days later, onsite and
10 Dr. Uzarowski's notes indicate that you were in
11 attendance. Do you recall attending that meeting
12 about the test strip?

13 A. Yes, because I believe we
14 would have had the results by then. Right? It
15 takes a couple of days to get the lab results.

16 310 Q. And do you recall him
17 informing you and the others at the meeting that
18 the test strip had failed and why that was?

19 A. I don't have specific
20 recollection of the discussion during that
21 meeting.

22 311 Q. Okay. And Dr. Uzarowski,
23 in his notes, indicated that he advised that the
24 test strip had failed and that he gave some
25 reasons, but you don't have any specific

1 recollection of that. Is that correct?

2 A. That's correct, but I'm,
3 you know -- that's correct.

4 312 Q. You don't disagree with
5 it, you just don't recall?

6 A. Yeah. I couldn't say one
7 way or the other. I would be speculating. But
8 again, based on the relationship, I'm assuming
9 Ludomir would have told us about it.

10 313 Q. Right, which --

11 A. Right.

12 314 Q. -- he's indicated he did.
13 And then there's an e-mail, if we go to OD55, and
14 this is paragraph 111, which is a July 31 e-mail
15 to you, Philips, Mr. Janicas and it's also to
16 Mr. Hainer, although it's not indicated in that
17 paragraph.

18 And if you could maybe expand
19 that, Registrar, and if you could just read that
20 and let me know when you're done.

21 A. I'm done reading.

22 315 Q. Great. Thank you. So,
23 Dr. Uzarowski has indicated for a number of
24 reasons that the test strip has not been approved
25 and the paving will be at Dufferin's entire risk,

1 he writes, but he says that he understands
2 Dufferin Construction intends to place the SMA mix
3 on the main line tomorrow. Do you recall if you
4 discussed this issue with Dr. Uzarowski before he
5 sent this e-mail?

6 A. No, but, you know, again,
7 given how we were, I'm assuming this was discussed
8 before with everyone, you know. Dufferin wouldn't
9 have gone and just paved without not telling us.
10 And if you read the context of the e-mail, you
11 know, you've done a lot of research, you realize
12 there's a lot of test parameters, because this --
13 Ludomir's e-mail said the mix did not meet the
14 specified requirements, and then it's the
15 laboratory air void at end design and the one
16 material passing one of the sieve sides, which
17 there's three different --

18 316 Q. And I should say he
19 corrects that the next day to say it's the 4.75
20 millimetre sieve size that it wasn't passing, just
21 to --

22 A. Correct, correct. So,
23 now, what he says in this is basically he's giving
24 us advice. He's saying here is the information,
25 everyone, and he -- this was sent to Dufferin as

1 well. So, everyone receives this and he says the
2 test strip is not acceptable. He didn't say it
3 failed and should be removed, because that's a
4 different -- that's a totally different story.
5 So, this is it didn't quite meet specs. It was
6 out on a couple of parameters.

7 I can't recall conversations,
8 but I know Dufferin was very excited about
9 starting, getting this paved. They thought they
10 could tweak whatever adjustments and start paving,
11 so -- and that's where Ludomir is saying this and
12 I kind of recall that this was sent late on
13 July 3, not but too late. I think it was like --
14 I can't remember, but it wasn't sent, like, first
15 thing in the morning. I think it was sent near
16 the end of the day.

17 And, again, I think this is
18 Ludomir's documenting, you know, being diligent,
19 here, I'm documenting, because he said I
20 understand Dufferin intends to place the SMA.
21 Right? He didn't say no, you can't. He didn't
22 have inspectors lying in front of the paver
23 saying, no, you're not allowed to pave. That's
24 happened on other projects. That's another story.
25 But he basically said the test strip is not

1 acceptable. We recommend a new test strip be
2 completed.

3 I had the contractor telling
4 me that I can make the changes, I'm good, I don't
5 want to do another test strip. Again, I'm kind of
6 expanding here, but between all our
7 conversations -- but what Ludomir says here is
8 that Dufferin should be aware that the test strip
9 has not been approved and the paving will be at
10 their entire risk. This test strip was never
11 removed, so it wasn't to the point -- because if
12 that was the discussion, rip it out. I don't want
13 to hear it. Okay? So, that's the relationship we
14 had.

15 So, basically it was okay to
16 be left in place. He's recommending you do
17 another test strip. Right? Get it right. We've
18 got to get it right. Dufferin is saying, I've
19 done enough, I've done enough. You know, there's
20 a lot of speculation in there, because I do
21 remember telling Peter Gamble and I'm sure I said
22 it to Mr. Janicas as well -- I can't remember
23 if -- that's Paul. Right? I'm pretty sure I said
24 it to Paul. You want to go, you know, like
25 Ludomir says, it's at your risk, and if it doesn't

1 meet all of the specifications, you're going to
2 rip it out. So, you want to proceed, go ahead,
3 but you're going to remove it. Right?

4 And when you look at all --
5 this is why you need an expert, because when you
6 get all your test results back, not necessarily
7 does everyone pass every single one of the
8 criterias you look at, and that's where you say,
9 okay, this didn't meet spec, but how is that going
10 to affect -- is it going to impact the asphalt
11 long term? Is there a problem? If it's really
12 bad, you rip it out. If it looks visually bad,
13 even if you met all the specifications, you're
14 probably going to rip it out. At least we would
15 rip it out. You know?

16 So, basically sometimes what
17 happens within the asphalt industry is that it's
18 left in place and then there's a penalty applied.
19 Right? Because it's an end result specification.
20 So, again, the way I read this is I'm getting
21 advice from my expert. He didn't say, you know,
22 it failed completely, remove it, we got to start
23 again. Totally different context.

24 317 Q. But he recommends that
25 there be another test strip completed?

1 A. Correct, he recommends
2 it. But now, if he hadn't added that last
3 paragraph about they should be aware it hasn't
4 been approved and they're at risk, then I would
5 say it's a different conversation because it's
6 like, no, it hasn't been passed. You have to do
7 it again. Sorry, guys. So, what he's doing here
8 is just saying if Dufferin chooses to proceed, I'm
9 telling you you should put down another test
10 strip, but if they choose to proceed, it's at your
11 risk.

12 But again, even if they got
13 the test strip 100 percent right, as he's paving,
14 if it doesn't meet the specifications and it's bad
15 enough that, you know, Golder says to me, this
16 portion should be removed and replaced and it's
17 not just within the SMA, this is within all the
18 asphalt that we've placed starting from the rich
19 bottom mix to the SP25 to SP19, right, so you look
20 and say they have been achieving everything,
21 things are going well.

22 And I recall the conversation
23 with Peter Gamble because I said, if it doesn't
24 meet spec, you're ripping it out. And, you know,
25 his response was to that order of, Marco, we have

1 a portable plant. It's dedicated to this job. We
2 think we've done everything right, you know. We
3 believe we can get this product down. I'm paving
4 it during the day with no traffic. If I can't put
5 this asphalt down, I should not be in business,
6 period. So, okay. And just rest assured, Peter,
7 if it doesn't pass, okay, and Ludomir says to take
8 it out, it's coming out. I don't want to fight
9 with you over this.

10 318 Q. Okay. So, when was this
11 discussion with Mr. Gamble?

12 A. You know what? That
13 discussion was around this time period.

14 319 Q. Okay. So, either
15 immediately before the paving started or
16 immediately after, within a few days after?

17 A. Like, I had several
18 conversations with Peter about this, so I can't
19 recall. But, you know, I'm sure I said it before,
20 but one day that really sticks in my mind, and I
21 checked it after the -- I think I just checked it
22 like about a month ago or something like that, is
23 because I had called Peter. It was a Sunday
24 morning, because I believe they had a project that
25 they were paving on the 403 and I knew Peter

1 because he really cares about the products they're
2 putting down. You know, all their staff told me
3 Peter keeps his phone on while we're working at
4 night, so if there's an issue, we call him.
5 Sometimes he would call and check with his staff
6 what's going on, so. I couldn't remember when I
7 gave this testimony because I went -- it was when
8 my niece got married. I knew it was around the
9 end of July, August, so I know I definitely called
10 him. When I checked back --

11 320 Q. What did you check?

12 A. Sorry. What I checked?

13 I asked my wife when was my niece's wedding, and
14 it was, oh, it was the August long weekend. So,
15 now from these dates you go back and say, okay,
16 the Wednesday was August 1, I believe, when you go
17 back in the calendar, so I would have talked to
18 Peter that following Sunday morning because after
19 the wedding, which took place, you know, in
20 Hamilton close to where we live, we had family in
21 from the States, so everybody came over to our
22 house and at a certain point I went outside and
23 said, I have to make a phone call, and I called
24 Peter and just to reiterate about the SMA, that,
25 you know -- I actually said, if you don't want to

1 put down SMA, we can talk about putting down
2 SP12.5 FC2.

3 321 Q. That couldn't have been
4 after August 1 because they started paving on
5 August 1 --

6 A. Excuse me, Commissioner,
7 counsel. I know I would have talked to Peter
8 about it before, but the one conversation I recall
9 was that Sunday morning at 2:00 because --

10 322 Q. That would have been
11 August 4?

12 A. That would have been
13 August 4, correct.

14 323 Q. 5th, I guess. Sorry?

15 A. Yeah.

16 324 Q. I don't have the calendar
17 in front of me, but if the 1st was a Wednesday --

18 A. Hang on. It would be
19 2nd, 3rd. It would have been the morning of the
20 5th, I guess, technically. Right?

21 325 Q. Okay. And that's when
22 you told him --

23 A. Well, that was another
24 time that I recall specifically because it was,
25 you know, everybody is over at our house and you

1 still have your suit on and I said I'm going to go
2 out on the back porch, I have to make a phone
3 call. And I called Peter just to say, you know,
4 reiterating what I said, if it don't meet spec,
5 you're ripping it out and we're not going to argue
6 about it.

7 And, you know, that's when he
8 reinforced we should do it. I should be paving.
9 If I can't pave this, I shouldn't be in business.
10 I want to win Paver of the Year. So, you know,
11 there's -- you can't recall. It was a very long,
12 complicated project. A lot of certain things, you
13 know, you do remember. And that one, because it
14 was after a family wedding on a Sunday morning and
15 I wasn't intoxicated so I called Peter just to,
16 you know, confirm.

17 326 Q. Okay. And does that mean
18 if you say it doesn't meet spec you're going to
19 have to mill and replace it, that means if you
20 don't meet the contractual requirements, that they
21 would have to redo it?

22 A. Correct.

23 327 Q. Okay. Coming back to the
24 test strip briefly before we go for lunch, as you
25 described, Golder, Dr. Uzarowski, recommended in

1 his e-mail that a new test strip be completed.
2 That's the recommendation. Was that your decision
3 to then not have a new test strip placed prior to
4 the paving commencing?

5 A. No. That was Dufferin's
6 decision. And if Ludomir hadn't written that
7 second paragraph, then, you know, it could be
8 interpreted differently.

9 328 Q. Well, wait a second.
10 There was an addendum to the contract, addendum 1,
11 and I can take you back to it, that says if the
12 test strip is not acceptable, that the contractor
13 will remove it and do it again. So, the City
14 could, if it chose to, require another test strip
15 be laid, and so the question is: Whose decision
16 is it to allow Dufferin to proceed once the
17 recommendation has been made to do a new test
18 strip?

19 A. A couple of points here.
20 One, Ludomir did not recommend removing the test
21 strip --

22 329 Q. No, he recommended --

23 A. No. I'm just clarifying.
24 You know, it was left in place and we paid for the
25 asphalt as well. Okay? And he recommends a new

1 one. Dufferin was warned, so in the end it's
2 really, you know -- yes, was the City okay with
3 this risk, Dufferin? You want to proceed at your
4 own risk, because they said we can fine tune the
5 things that are out, yes, we can get them right,
6 so we want to get started. We believe we want to
7 get this down. Okay? So, yes, fine. So, was it
8 the City's decision or was it, here, Dufferin, you
9 can do it however? Now, I don't have
10 documentation of that but I know I told them and I
11 know I called Peter that Sunday morning for sure.

12 330 Q. That's fine. I just want
13 to be clear. Someone had to make the decision to
14 allow Dufferin to proceed rather than requiring
15 them to put in a new test strip. Forget about
16 ripping it out, doing a new test strip once
17 Dr. Uzarowski made this recommendation. Was that
18 you? I appreciate Dufferin wanted to proceed.
19 Dr. Uzarowski had said I recommend that you do a
20 new test strip before proceeding?

21 A. Correct.

22 331 Q. Is that you, then, who
23 made the decision to say, okay, Dufferin, you can
24 proceed, but if you don't meet spec, you'll rip it
25 out?

1 A. Yeah.

2 332 Q. That was you?

3 A. From the best of my
4 recollection, Ludomir recommended we do it and
5 that Dufferin should be made aware that they're
6 paving at their own risk. So, to the best of my
7 recollection, but it is sort of -- like, I don't
8 remember, like, even though the whole test strip,
9 I don't remember arguments about it, discussion,
10 because it paints a different picture, a different
11 scenario.

12 333 Q. I'm not asking if there
13 was an argument --

14 A. No, no. I'm just telling
15 you I don't remember it being this controversial.
16 It's fine, so -- but I'm speculating that I made
17 the decision.

18 334 Q. Okay. Did you advise
19 Mr. Moore? Did you ask him?

20 A. I can't recall if I
21 passed this by Gary. You know, again, I would be
22 speculating that I would have advised him of
23 what's going on. More than likely I would have,
24 but I can't recall that specific conversation.

25 335 Q. Okay. So, more than

1 likely you would have told Mr. Moore, but you
2 don't recall?

3 A. Yeah.

4 336 Q. And, again, coming back
5 to the issues before about what you would have
6 told Mr. Moore about and what you wouldn't have, I
7 want to ask you to think about this. Is this a
8 kind of issue that you would have advised
9 Mr. Moore about? Because we know you didn't
10 advise him about the warranty issue, so does that
11 mean you thought this was more significant?

12 A. Okay. The warranty issue
13 was a different matter and he was aware of the
14 granular --

15 337 Q. The underlying facts?

16 A. Yeah, he was aware of the
17 underlying facts. Not a concern in the grand
18 scheme of things. This more than likely, and when
19 I say that I would have told him because just in
20 case Dufferin reached out to him or if Golder
21 reached out to him, you know, everybody was to be
22 on the same page. Right?

23 338 Q. Right.

24 A. So, that's why I believe
25 I would have told him, but if you ask me to swear,

1 I can't recall the conversation. Right?

2 339 Q. Exactly, and you are
3 under oath. So, not to swear, but you've affirmed
4 to tell the truth. So, your best recollection,
5 number one, you can't recall but you think you
6 probably did. Is that right?

7 A. Correct.

8 340 Q. Commissioner, it's 1:04.

9 A. Sorry, I didn't mean
10 that. Someone, I think they're going to try to
11 fix the light thing in here more for future
12 people, so I said come at break time. That's
13 probably a good time to do it. Right?

14 JUSTICE WILTON-SIEGEL: That's
15 fine. We normally take an hour and 15 minutes.

16 THE WITNESS: Sorry. My
17 apologies, Commissioner and commission counsel.

18 JUSTICE WILTON-SIEGEL: Not a
19 problem. We normally take an hour and 15 minutes,
20 Mr. Oddi, so we'll return at 2:20. We stand
21 adjourned until then.

22 --- Luncheon recess taken at 1:05 p.m.

23 --- Upon resuming at 2:20 p.m.

24 MR. LEWIS: Can I proceed,
25 Commissioner?

1 JUSTICE WILTON-SIEGEL: Please
2 proceed.

3 MR. LEWIS: Thank you.

4 BY MR. LEWIS:

5 341 Q. I just want to then
6 continue, then, with the actual main line SMA
7 placement, which we know began on August 1 of 2007
8 through to August 13, 2007. And were you onsite
9 during the SMA placement during that time on a
10 daily basis?

11 A. I can't recall. I didn't
12 go out to the site -- I would go out quite a bit,
13 but depending what was needed to be done, so I
14 probably wasn't out every single day of every
15 single time we were putting down asphalt.

16 342 Q. If they're doing it for
17 however many hours in a day, perhaps you wouldn't
18 have been there for the entire time?

19 A. Correct.

20 343 Q. But that would have been
21 the main event at the time. Correct? The main
22 line surface asphalt placement, that's main event
23 at that point in time. Is that correct?

24 A. What do you mean by main
25 event?

1 344 Q. Well, that's the main
2 thing that's happening? That's the big
3 construction event that's occurring during that
4 period?

5 A. Yes, correct.

6 345 Q. Right. And this is your
7 sole project, so I would have thought if you're
8 not there daily, you would have been out there at
9 least once each day --

10 A. Or every other day. It
11 just, you know, depended. It also depends on, you
12 know, rain days, things like that, but the
13 majority of the time we would definitely drop by
14 because there was other things going on besides
15 paving and --

16 346 Q. Yes. Okay. And now, do
17 you recall the order of the paving in terms of the
18 direction? Like, where they started, northbound
19 or southbound, and the direction that they went?
20 Do you have a recollection of that?

21 A. No, I don't. Sorry.

22 347 Q. Okay. I'm going to
23 suggest something to you and if you just don't
24 remember, let me know. I think from the
25 compaction results what they say to me is that it

1 started in the northbound lanes at the south end
2 of the project and worked their way north and then
3 they did the southbound lanes coming in the
4 southbound direction. Does that sound right?

5 A. I would have to actually
6 see those compaction reports to confirm because I
7 can't recall which direction we started.

8 348 Q. That's fine. And in
9 terms of that, I'm going to take you to an e-mail
10 on August 8 where Dr. Uzarowski e-mailed you
11 regarding concerns about low compaction. Were you
12 seeing the compaction results as they came in or
13 is that not something that you looked at yourself?

14 A. Sorry, can you repeat
15 that again?

16 349 Q. Did you review the
17 compaction results as they came in? We don't have
18 any e-mails that are sending them to you. We have
19 an e-mail from Dr. Uzarowski to you on August 8
20 where he says there's low compaction and I'll take
21 you to that.

22 A. Right.

23 350 Q. But were you actually
24 reviewing the compaction test results?

25 A. I don't recall, but if I

1 would be in the field I would be checking with our
2 guys, our staff, as well as the contractor,
3 Dufferin's QC people to say compaction is good,
4 we're good, that type of thing, but I don't recall
5 specifically looking at test results.

6 351 Q. Okay. So, possibly you
7 would be talking to people about it but you don't
8 recall looking at the results themselves. Is
9 that --

10 A. Correct. That's fair.

11 352 Q. Okay. And if we could go
12 to overview document 3, page 58, please. In
13 paragraph 119, you'll see there's an e-mail from
14 Dr. Uzarowski to you and Philips and
15 Mr. Delos Reyes about his concerns about low
16 compaction. He asked if you can call him on his
17 number and indicates:

18 "There are quite a few
19 locations where the SMA
20 compaction is low. Some
21 are even below
22 91 percent. We are
23 concerned about these
24 locations. Low
25 compaction is almost a

1 constant issue with the
2 SMA paving. I suggest we
3 carry out additional nuke
4 compaction testing at all
5 these locations in the
6 presence of the
7 contractor's
8 representative and then
9 decide what to do. The
10 feasible alternative
11 would be to reduce the
12 payment based on percent
13 compaction."

14 And so, at this point,
15 Dr. Uzarowski is telling you that this has been,
16 as he calls it, an almost constant issue, low
17 compaction, with the SMA paving and this is a week
18 in at this point.

19 And do you recall prior to
20 this e-mail in the context you described with site
21 visits and discussing with people, do you recall
22 prior to this being aware that low compaction was
23 an issue?

24 A. I don't recall, no.

25 353 Q. You don't recall one way

1 or the other?

2 A. Correct.

3 354 Q. Okay. And --

4 A. You said this is the
5 weekend when this e-mail is sent?

6 355 Q. No. I said --

7 A. Sorry, I misunderstood.

8 356 Q. It's a week in.

9 A. Oh, a week, oh, in.

10 There you go. It's still going back to my calls
11 Sunday morning to Peter, which was over the
12 weekend, the long weekend. Right?

13 357 Q. If that was the 5th --

14 A. That would have been the
15 4th, I think. Does that make sense? You have to
16 work it back. Sorry, I digress. I'll be quiet.
17 Commissioner, counsel, my apologies.

18 358 Q. Dr. Uzarowski sends this
19 e-mail on August 8, so you don't recall one way or
20 the other whether you were aware of low compaction
21 concerns prior to this e-mail. Certainly when you
22 receive this e-mail, you're aware of the issue.

23 Correct?

24 A. Correct.

25 359 Q. Do you recall having any

1 further discussions with Dr. Uzarowski? He asks
2 you to call him about it. Do you recall having
3 any further discussions with him about low
4 compaction?

5 A. No, I don't recall any
6 specific conversations.

7 360 Q. All right. Do you think
8 it's likely you did call him or speak to him about
9 it, given his invitation?

10 A. Yeah. There's no reason
11 for me not to call him and it would have been, you
12 know, based on our history, we would have went and
13 addressed it right away. We wouldn't have waited
14 for a month to deal with it, but I don't have any
15 specific recollection and I'm speculating that
16 that's what I would have done.

17 361 Q. Okay. And do you recall
18 what was done about this issue?

19 A. No, I don't.

20 362 Q. Okay. And what
21 Dr. Uzarowski is describing, of course, with low
22 compaction is that it's not in accordance with
23 spec, which as you'll recall from before lunch,
24 you told me you had advised Mr. Gamble if it
25 wasn't according to spec that he would have to rip

1 it out. It wasn't ripped out. Do you recall any
2 discussions or what your thought process was
3 around that issue?

4 THE REGISTRAR: Sorry,
5 counsel. I think we just lost Mr. Oddi.

6 MR. LEWIS: Yes, our first
7 technical glitch in some time. Yeah, he's frozen
8 at my end, too.

9 BY MR. LEWIS:

10 363 Q. Mr. Oddi, can you hear
11 me?

12 A. Yes, I can hear you.
13 Sorry, can you hear me?

14 364 Q. Now, yes.

15 A. Okay. Because I had a
16 little something popped up on this really nice
17 wide screen -- I have to get one for my office --
18 that said bad internet connection. So...

19 365 Q. Okay.

20 A. Sorry. Do I need to
21 repeat anything?

22 366 Q. Probably.

23 JUSTICE WILTON-SIEGEL: I just
24 want to make sure that I have a connection again.

25 MR. LEWIS: I can hear you,

1 Commissioner.

2 JUSTICE WILTON-SIEGEL: Is
3 there any video?

4 MR. LEWIS: Yes.

5 JUSTICE WILTON-SIEGEL: Okay.
6 Thank you. I had a message on my screen that
7 suggested I was not connected.

8 THE WITNESS: We must have the
9 same internet provider.

10 MR. LEWIS: Registrar, can we
11 tell where we went off? Did the court reporter
12 have a blackout there as well?

13 THE STENOGRAPHER: I got your
14 question and then he froze right before he
15 answered.

16 BY MR. LEWIS:

17 367 Q. So, my question, I think
18 where we go back to is, if I'm looking at the
19 real-time transcript, I believe what I asked was
20 what Dr. Uzarowski is describing in his August 8
21 e-mail is low compaction, and he's talking about
22 it not being in accordance with spec. That's what
23 he's meaning. And you'll recall that before lunch
24 you told us you advised Mr. Gamble if it wasn't
25 according to spec, he would have to rip it out.

1 We know it wasn't ripped out.

2 Do you recall any discussions
3 on what your thought process was around this
4 issue? That was the question I asked, Mr. Oddi,
5 and whatever you said wasn't heard by anyone else,
6 so if you could please answer the question again.
7 Thank you.

8 A. Sure. If you read the
9 e-mail, it's a very simple process and doing the
10 additional nuke compaction would not have been an
11 issue, but I can't recall my discussion with
12 Ludomir. But, again, I'm speculating I would not
13 have objected to this, no reason to object to it,
14 to make sure that they were getting it right.

15 368 Q. Right. So, one thing is
16 additional nuke compaction at these locations.
17 That means doing it again at those same locations.
18 Right?

19 A. Correct. But when he
20 says nuke compaction, that's the device they use
21 to measure the compaction.

22 369 Q. Yes, it's the nuclear
23 density test?

24 A. Yes.

25 370 Q. So, he's suggesting do

1 that again?

2 A. Correct.

3 371 Q. For the locations where
4 it's low, that's one possibility, and decide what
5 to do or the other one would be to reduce payment?

6 A. I know we didn't do the
7 latter, but, again, I'm speculating we would have
8 done the former. And, again, I don't recall it
9 being an issue. I don't recall any suggestions of
10 ripping out, removing, any asphalt, so to the best
11 of my knowledge this item was addressed.

12 372 Q. Okay. Well, we know
13 there was no payment reduction, we know it wasn't
14 ripped out and not aware of redoing of the nuclear
15 compaction testing on those areas it had already
16 been done on. So, is it also possible that
17 nothing was done and that you just continued with
18 the paving?

19 A. I would be speculating
20 answering that.

21 373 Q. You don't recall one way
22 or the other?

23 A. I don't recall one way or
24 another.

25 374 Q. Now, we talked earlier

1 about with the test strip and the use of
2 vibratory -- the vibratory mode on the rollers.
3 Do you have any knowledge of what Dufferin was
4 doing with respect to vibratory rollers or any
5 recollection of what they were doing with respect
6 to vibratory rollers or doing with vibratory mode
7 on while paving the main line?

8 A. No. No, I don't. I did
9 describe before, you know, the normal construction
10 process that would happen, but, you know, I wasn't
11 paying that much attention to the -- you know, as
12 it was going down.

13 375 Q. Then the next paragraph,
14 if we could blow this up, paragraph 120, so this
15 is the next day following the e-mail that you
16 received from Dr. Uzarowski about the low
17 compaction results. The next day, August 9, you
18 e-mail Mr. Hainer, Mr. Gamble and Mr. Wharrie, all
19 of Dufferin, and here you write:

20 "This correspondence
21 confirms that the
22 Varennes Demix aggregates
23 have been approved for
24 use in the SMA and
25 Superpave 12.5 FC2

1 surface course asphalt
2 mixes on the Red Hill
3 Valley Parkway main line
4 paving project. The
5 trial batches for both
6 mix designs met the
7 specified requirements.
8 If you have any
9 questions, please call
10 me."

11 So, you sent this e-mail.

12 Correct?

13 A. Correct.

14 376 Q. Why did you send this
15 e-mail?

16 A. I can't recall why I sent
17 this e-mail.

18 377 Q. Well, we know that
19 Dr. Uzarowski was not copied, nor was
20 Mr. Delos Reyes at Golder. Do you know why you
21 didn't copy them?

22 A. No, I don't.

23 378 Q. All right. And you've
24 told us that, again, it was Golder's role to, you
25 know, approve or not approve or to advise on those

1 issues about mix design, aggregates, et cetera,
2 and this e-mail is confirming that those
3 aggregates have been approved. This is you doing
4 it.

5 And so, except for the
6 instances that we talked about on July 23, the
7 communications in this regard were always from
8 Dr. Uzarowski, so do you have any insight as to
9 why you sent this e-mail rather than Dr. Uzarowski
10 sending this e-mail?

11 A. No. No, I can't recall
12 why I sent this e-mail.

13 379 Q. Okay. And you would
14 agree with me that it is out of the normal course
15 on this project for you to send an e-mail of this
16 nature?

17 A. Not necessarily. Again,
18 from the best of my recollection, the aggregates
19 were approved back in May. The SMA was already
20 underway and I believe -- I can't recall if we
21 were paving at this point Superpave 12.5 as well.
22 It was more than likely just SMA, but again, it's
23 speculating. I don't know why I sent this. I
24 don't know who requested. I just don't recall.

25 380 Q. Right. I understand that

1 you don't recall. I'm talking about the normal
2 chain of communications given the roles and
3 responsibilities that you described. Regardless
4 of whether it had previously been approved or not,
5 that was Dr. Uzarowski's role to communicate those
6 things in the normal course of this project with
7 Dufferin and with Philips. Is that correct?

8 A. That's correct. But
9 again, at this point, this is just stating a fact
10 that already had been done months ago that the
11 aggregates are approved. You know, and I can't
12 recall why I sent this e-mail. Was it sent --
13 it's just the Dufferin --

14 381 Q. Yes.

15 A. Just Dufferin?

16 382 Q. Just Dufferin. Not sent
17 to Philips either.

18 A. Right. So, again, I
19 would be speculating, so I just can't recall why I
20 sent this e-mail. And it wasn't overstepping. In
21 my opinion and my view, I'm just stating something
22 that's already been a known fact. And, again, the
23 SMA, it was being placed. I can't recall if the
24 12.5 is being placed. So, unfortunately, I just
25 can't recall why I sent this e-mail.

1 383 Q. To recap, though, you say
2 that they were approved months before and we
3 talked about that reference to the physical
4 properties of the aggregates, the reference in the
5 minutes of May 8 saying that they appear to be
6 satisfactory or the wording that was in that or
7 appeared to be acceptable in the minutes from that
8 meeting, but then we also see the concerns that
9 were expressed, the issues that were raised in
10 e-mails in July about the aggregates and Dufferin
11 seeking approval for them and asking to convene a
12 meeting if there were problems.

13 And so, it appears from the
14 perspective of other people that they were not at
15 least fully approved at that point. But from your
16 perspective, you're saying you understood they had
17 been approved back in May and that was it, despite
18 all of those communications?

19 A. Well, again, we were
20 placing the SMA, so when you think logically and
21 from my perspective, if the aggregate wasn't
22 approved, why were we placing it? So, again, I
23 don't remember this being an issue. I don't
24 recall why I sent this. It's just a written
25 confirmation of what's already been approved.

1 And, again, I'm speculating, but based on how we
2 did the project, I wouldn't have sent this unless,
3 you know, Golder, you know, had said it was okay
4 to send. But I can't even recall if I talked to
5 Ludomir about this or to Walter, so I just can't
6 recall this e-mail and why I sent it.

7 384 Q. I am corrected that
8 Philips was copied on that e-mail, so I apologize.

9 A. Okay.

10 385 Q. I apologize for that. I
11 think that's the answer. Yes, it was sent to
12 Philips and Dufferin, so I correct that.

13 A. So, it could have been a
14 mistake on my part. I don't know. But again, I
15 can't recall why I sent this e-mail. Again, and
16 any further information, I'm just, I'm
17 speculating. Right? Like, there was no -- you
18 know, we worked together. There was no, oh, don't
19 listen to Ludomir. Override him. There wasn't
20 any of that in this project. So, you know, again,
21 like you said about the compaction earlier, great,
22 thank you, we dealt with it. Right?

23 Now, given that I didn't have,
24 you know, a Blackberry to get e-mails, you know, I
25 don't know when I received that e-mail from

1 Ludomir, you know. My mode of operations was if
2 it's urgent, call me and we'll deal with it right
3 away.

4 386 Q. But given the way that
5 you have, again, described it and you say there
6 were no issues with communications, given that we
7 know Golder did not receive -- there's no record
8 this was ever sent to Golder and both
9 Dr. Uzarowski and Mr. Delos Reyes say that it
10 wasn't sent to them and they were unaware of this
11 e-mail being sent, they weren't told about it,
12 that it is out of the normal course on this
13 project. You would agree with that?

14 A. Again, not necessarily,
15 but I guess -- if that's how you read it, sure.

16 387 Q. Okay. By that point in
17 time, had you been advised -- we know that later
18 Dufferin applied for inclusion of Demix aggregates
19 on the MTO's Designated Sources for Materials
20 list. That happened later on. Did anyone tell
21 you prior to your sending this e-mail that that
22 was Dufferin's intention? Were you aware of that?

23 A. I was aware that Dufferin
24 was going to apply to say, you know, we would like
25 to get it on the designated sources list, the DSM

1 list, designated materials list, so I knew that.
2 But again, that's just speculating why I sent this
3 just to Dufferin and Walter. But, you know, it's
4 a logical conclusion, but I can't say 100 percent
5 that's why I sent it. I knew they said they were
6 going to apply and try and get it on that list.

7 388 Q. Right. So, prior to your
8 sending this e-mail, you were aware that that was
9 Dufferin's intention. Is that right?

10 A. To the best of my
11 recollection, yes, but I couldn't tell you, you
12 know, when I knew it, but I know they were going
13 to try to get it on that DSM list.

14 389 Q. Okay. And then to take
15 it further, if I've understood what you've said,
16 you don't know, you don't recall, whether that was
17 the reason you sent them this e-mail on August 9,
18 but it's certainly possible that that is why you
19 sent it?

20 A. That would be a logical
21 explanation, but I can't swear that that's the
22 exact truth. But yes, it could be for that, but
23 again, I can't say 100 percent because I don't
24 have a real good recollection of why I sent this.

25 390 Q. Do you think more likely

1 than not that's why you sent it?

2 A. Well --

3 MR. CHEN: Commissioner, if I
4 could just interject here, commission counsel has
5 asked the same question a number of times now and
6 Mr. Oddi has given his evidence. And I think
7 we're bordering on redundancy here.

8 JUSTICE WILTON-SIEGEL: Okay.
9 Mr. Lewis, I'll let you ask the question. I'll
10 give you one more question on this topic and then
11 we ought to move on.

12 BY MR. LEWIS:

13 391 Q. Okay. You think that's
14 the most likely explanation even though you don't
15 know for sure. Is that right or no?

16 A. Yes, that's correct.

17 392 Q. Okay. Thank you. And
18 then on image 60, paragraph 126, these are the
19 August 21, 2007 construction meeting number 10
20 minutes, which are now, I guess, eight days after
21 the completion of the SMA paving. And in the
22 fifth bullet down in point 1, it says:

23 "Golder has completed
24 their analysis and
25 provided written

1 confirmation indicating
2 the SMA mix design is
3 satisfactory."

4 So, we have that reference but
5 we don't have the written confirmation. Do you
6 have any recollection of that written confirmation
7 or when it was provided?

8 A. No, I don't. They also
9 have it for the 12.5 as well.

10 393 Q. Yes. Sorry, immediately
11 below the point that I was referring to, yeah.

12 A. I assumed that was you
13 highlighting it. Right?

14 394 Q. It wasn't me. It was our
15 Registrar.

16 A. I'm sorry.

17 395 Q. He's very helpful.

18 A. Sorry, was the 12.5 the
19 fifth point or was the SMA the fifth point?

20 396 Q. The SMA was the fifth
21 point. There's two words that start "Golder has
22 completed their analysis." Okay.

23 And then at image 61, I guess
24 61 and 62, there's a series of e-mails that are
25 internal to Golder, only internal to Golder, on

1 August 21 that follow -- they're after that site
2 meeting that we were just looking at regarding the
3 extraction gradation test results for the SMA
4 tests that had been completed. And there's
5 discussion internally about a number of the
6 samples being rejectable and potential
7 mislabelling of some of them.

8 And the question is: Were you
9 made aware of any issues with the SMA test
10 results, the asphalt test results?

11 A. I don't recall.

12 397 Q. You don't recall one way
13 or the other or you don't think you were?

14 A. I don't recall one way or
15 the other.

16 398 Q. Okay. Would you expect
17 to be made aware if the results were not in full
18 compliance with the specifications?

19 A. Given, you know, the open
20 working relationship, if there was a real concern,
21 yes, I believe Golder would have made me aware.

22 399 Q. Right, if there was a
23 real concern. But --

24 A. Correct.

25 400 Q. -- test results, do they

1 tend to be 100 percent in spec?

2 A. Well, you know, if I may
3 quote Ludomir, he said if someone tells -- I think
4 he said throughout his career he only had one job
5 where he had 100 percent everything passed. We've
6 been successful in getting, you know, perhaps
7 2 percent, which is amazing, so it's not the norm
8 where some -- again, I said that before -- where
9 sometimes -- just because some parameters fail
10 doesn't mean that it's bad enough that you have to
11 remove the asphalt. And that's where you rely on
12 someone with Ludomir's and even Andro's, you know,
13 extensive experience as to what's the long-term
14 implication? Does it need to be removed? And,
15 you know, okay, then should a penalty factor be
16 applied? So, that's just how the industry has
17 gone to. Right?

18 401 Q. Your point being, though,
19 that 100 percent compliance is not something
20 that's expected, and does that accord with your
21 own experience?

22 A. Anyone who is actually in
23 the testing and construction of pavement would
24 know this, yes.

25 402 Q. Right. And is that also

1 your own experience?

2 A. Oh, yes, absolutely.

3 403 Q. Thank you.

4 A. The idea of testing,
5 though, is so that -- you know, and we did this on
6 the LINC and this is why we asked Golder to put
7 the lab out on the site, so that you weren't
8 losing time delivering samples to a Whitby lab
9 because, you know, we need to know results right
10 away. You need to know right away. And if
11 there's a problem, you need to then talk to the
12 plant manufacturer, you know, and adjust things,
13 because the idea is just to get everything right.

14 So, we were putting all the
15 pieces together so that, you know, we could
16 achieve it. And not just for the top asphalt,
17 it's for all of them. Again, rich bottom mix,
18 this is the first time it's going down. I don't
19 know if it was in Canada, I wasn't involved in
20 papers, but there's a lot of really good things
21 going on in this project. The rich bottom mix,
22 extremely important. This is the first time I've
23 seen the SP25, that large one, even given my
24 other, you know, experience. Usually it's an HL8,
25 which is like your SP19. So, again, this is just

1 an extremely great project and I keep going back,
2 I wish we would have done it on the LINC just to
3 have that longevity for that portion of the road.

4 404 Q. Okay. Thank you. To
5 turn now to the MTO skid testing which ultimately
6 occurred on October 16, 2007, before we get to the
7 actual testing itself, what do you know about who
8 initiated the skid testing that was ultimately
9 conducted? Do you know?

10 A. I don't know who
11 initiated that. Again, I'm speculating. I sort
12 of assumed it was Ludomir because, you know, I'm
13 almost certain that Ludomir and Gary were going to
14 be writing papers about this project. You know, I
15 believe they were even talking about -- I can't
16 remember if Dufferin was a co-author, but -- so,
17 if Ludomir said we're going to do some skid
18 testing, I would have, yeah, sure, whatever you
19 need.

20 405 Q. Right.

21 A. And then my own -- sorry.
22 Anyway. I don't know who initiated it. I'm
23 sorry.

24 406 Q. You don't know but then
25 you speculate that it was Ludomir for the reasons

1 that you described?

2 A. Correct.

3 407 Q. Do you know if the skid
4 testing was requested in relation to a paper that
5 was going to be written?

6 A. No. Again, that's total
7 speculation on my part.

8 408 Q. Okay. And if we could go
9 to overview document 4, image 50, paragraph 111,
10 image 50 -- sorry, image 50, paragraph 111,
11 September 11, 2007, Chris Raymond of the MTO was
12 e-mailing internally at the MTO about some
13 discussions with Ludomir Uzarowski. And at that
14 time, he's indicating:

15 "There are very limited
16 City of Hamilton staff
17 around this week,
18 including the project
19 manager."

20 So, first of all, are you the
21 project manager?

22 A. Yes, I'm the project
23 manager.

24 409 Q. Okay. So, he's referring
25 to you at that point?

1 A. Yeah. Technically I was
2 the senior project manager, but my kids always
3 joke that you're doing the same job you did on the
4 LINC. Now you're doing it on Red Hill. Did they
5 just give you that because you're older, that
6 title? I digress.

7 410 Q. No, I get it. And then
8 he indicates:

9 "I informed him we would
10 conduct the testing once
11 the request is received."

12 Do you have any recollection
13 about the need for having a written request from
14 the City for the skid testing to take place? Do
15 you recall that issue?

16 A. No. No, I don't.

17 411 Q. Okay. What was your
18 involvement in setting up or organizing the
19 testing?

20 A. From the best of my
21 recollection, it would have been more to, you
22 know, make sure Dufferin is good with it. So,
23 whether I did it, Walter, Andro, again, because we
24 all worked together. What we wouldn't want to do
25 is where are you working, Dufferin? Where can

1 they be on the site? Because then you're into
2 potential constructor issues. So, where is it
3 safe for them to do the testing? Because I
4 believe the testing had to be done at the actual
5 90 kilometres an hour, the posted speed.

6 412 Q. That's right. But it was
7 before the highway was opening and so there was --

8 A. Correct.

9 413 Q. So, it was still under
10 the control --

11 A. Correct.

12 414 Q. -- of Dufferin and
13 Philips at that point. Is that right?

14 A. Yeah, technically. I
15 mean, we did a lot of tours while we were building
16 Red Hill with the different groups, with various
17 people. Chris was instrumental in doing it and it
18 was like, okay, if you're going to do this, you
19 need to coordinate with Jim Rockwood and myself,
20 because we were doing this even as we were
21 building it, so not everywhere was accessible.
22 So, even at this point, you know, I'm bringing out
23 the HSR, which is our Hamilton Street Railway,
24 we're bringing out police, fire, ambulance, you
25 know, so here it is and --

1 415 Q. But you're not bringing
2 that out for the skid testing. You're talking --
3 A. No, no. Again, Dufferin,
4 we might bring out a bus and drive it on here, you
5 know, to see, because I think they were going to
6 get off at Greenhill. So, it was like to do those
7 kind of tests for those -- those other people
8 within the City were meeting with other groups
9 because this project, you go, oh my god, it took
10 years to get to fruition and now we're handing it
11 over to our operations people, so, you know, it's
12 like okay, well you got to operate this. This is
13 how you get to this maintenance hole for the CSO,
14 this is how you can get to the old Red Hill
15 sanitary trunk sewer that snakes its way through
16 the valley, you know, which is totally under the
17 road. So, you know, every group that eventually
18 had to look after something on here was brought
19 in, given tours. At this point, I know they were
20 doing tours for, you know, probably departmental
21 management teams, senior leadership teams, so
22 there was all kinds. It was like we were tour
23 guides for a bit. So, it was --
24 416 Q. Okay. Well, let's talk
25 about the tour guiding for the MTO skid testing.

1 A. Correct. And that was
2 basically just let them come in and where can they
3 go and do this test safely. They just came in and
4 did the work. And I wasn't there when they did
5 it. I was just aware it was going on and when.

6 417 Q. Right. And I think the
7 e-mail traffic shows that predominantly it was
8 Mr. Delos Reyes that was making the arrangements
9 on behalf of the City. Does that accord with your
10 recollection?

11 A. Yeah. Again, like I
12 said, it could have been -- you know, I would have
13 said, Dufferin, this is what's going on, and then
14 the actual coordination was probably Andro or
15 Walter in my best recollection.

16 418 Q. Okay. Now, we know the
17 skid testing took place on October 16. And if we
18 could go to image 63. And we know that on
19 October 18, Dr. Uzarowski forwarded -- this is
20 paragraph 141 -- an e-mail from Chris Raymond at
21 the MTO to you and Mr. Moore attaching the MTO
22 friction test results. And you can see in 141 he
23 says:

24 "Please find attached the
25 results of the friction

1 testing on the Red Hill
2 Valley Parkway completed
3 for us by the MTO. I
4 will call you to discuss
5 the results."

6 A. Oh, sorry. I apologize,
7 Commissioner, counsel. I was reading 142 and I
8 said where are you reading from? I apologize.
9 You were reading 141. Right?

10 419 Q. I was and that's fine.
11 So, if you could have a look at 141 and tell me
12 when you're done.

13 A. Yes, okay. Thank you.

14 420 Q. Okay. And now, the first
15 thing is -- actually, perhaps if we could go up to
16 the preceding, I guess pages 61 and 62, and we'll
17 see what Dr. Uzarowski was forwarding to you. So,
18 in paragraph 139 at the bottom of 62, that's what
19 Dr. Uzarowski forwarded to you, was the e-mail
20 from Mr. Raymond to Dr. Uzarowski and
21 Mr. Delos Reyes, with the results and the results
22 are above there, which were attached.

23 So, if you could just look at
24 that and what he wrote and let me know when you
25 have read it.

1 A. Yep, I'm finished.

2 421 Q. Okay. And so, the first
3 thing is did you understand how to interpret the
4 skid testing results? You've been sent this, you
5 got the e-mail and you got the attachments. Did
6 you have any understanding of how to interpret the
7 results?

8 A. No, I didn't.

9 422 Q. Had you been involved in
10 friction testing previously?

11 A. No, I haven't been.

12 423 Q. Okay. And we know that
13 there was some testing using the British pendulum
14 test done on the LINC back in 1997 and 1999 that
15 Mr. Moore was involved in. Did you have any
16 involvement in that? It was done by JEGEL, John
17 Emery company, and you referred to Mr. Emery
18 earlier, but specifically Dave Hein at that point.
19 Did you have any involvement in that testing or
20 acknowledgement of it when it was occurring?

21 A. No. I can't recall if I
22 was -- I'm pretty sure I wasn't involved in it.

23 424 Q. Okay. You're not copied
24 on the memos and stuff at the time. I'm just
25 wondering if you were aware of it occurring and

1 you don't recall being aware of that?

2 A. No.

3 425 Q. Okay. And I expect that
4 we will hear evidence from Frank Marciello, who is
5 the skid test operator, skid trailer operator for
6 the MTO, that he did perform skid testing on the
7 LINC at some point prior to the Red Hill opening,
8 at some point. Do you have any knowledge of that
9 or recollection of that issue?

10 A. No.

11 426 Q. Okay. So, Dr. Uzarowski,
12 in his e-mail to you and Mr. Moore indicated that
13 he will contact you or both of you to discuss. Do
14 you recall discussing the results with
15 Dr. Uzarowski?

16 A. Yes, vaguely, I do recall
17 discussing it, and I believe we were out like
18 onsite at that point.

19 427 Q. So, you think this was an
20 in-person discussion rather than on the phone, to
21 the best of your recollection?

22 A. I believe so, yes.

23 428 Q. Okay. So, what can you
24 tell us about what you recall from that
25 conversation?

1 A. From what I recall, that
2 was -- I said I don't know what the numbers mean,
3 and Ludomir said they're actually (audio
4 distortion) and he was like, okay.

5 429 Q. I apologize. There was a
6 glitch that I got, I don't know if others got it.
7 So, if you could repeat that to make sure it's
8 covered for the transcript. You had the onsite
9 discussion you recall with Dr. Uzarowski and I
10 think you said that you said you didn't understand
11 the results, and then you said?

12 A. He said they're actually
13 very good, and something to that effect. We
14 didn't get into the technical details of what the
15 numbers mean, what range you had to be in or
16 anything like that, so it was just -- I just
17 remember he said they were very good for SMA.

18 430 Q. For SMA, okay.

19 A. Correct.

20 431 Q. What about for SMA? What
21 did you take from that and was there any further
22 discussion around that issue, about what for SMA
23 means?

24 A. No, I don't recall.

25 432 Q. Well, you referred

1 earlier to becoming aware of the early age low
2 friction SMA issue and you indicated that it might
3 have been around this time that Dr. Uzarowski
4 discussed it. Was this when it was, when he
5 was --

6 A. More than likely because
7 I remember when Ludomir made me aware of it we
8 were in the field and it was late in the project,
9 like, you know, getting close to -- so logically
10 it makes sense then that's when it came up about
11 the initial friction of SMA being low because the
12 aggregates are basically -- it's a gap graded mix,
13 so you have got these large particles of asphalt
14 that that's what gives you the rutting resistance.
15 And then you have the mastic in between. So, that
16 coating of the asphalt cement on the mixture wears
17 off with traffic. And then because when Ludomir
18 sent this, my first -- and I don't recall speaking
19 to him about or saying it or I might have said,
20 then why do we use it? No, it's an initial thing.
21 It wears off and then your friction is very good.
22 You have the rut resistance, it's quiet, and all
23 the other things, the other properties of SMA.

24 And then in my mind logically,
25 you know, I can't recall if I said this to Ludomir

1 or is it something you conclude after to say, you
2 know, you think about MTO highways when they're
3 doing work, it's at night, you know, they don't
4 have the amount of time and construction traffic
5 that maybe we would have had before you open, you
6 know, whatever they had just paved. We finished
7 paving -- to the best of my recollection, we were
8 done paving the main line, you know,
9 mid-September. We might have been working on the
10 shoulders, but that was a different mix.

11 433 Q. The SMA was finished
12 mid-August?

13 A. Mid-August, right. But
14 then I'm saying that all our ramps and the SP12.5
15 was done or maybe it was even the shoulders that
16 were done by mid-September, so now we're out there
17 striping, guide rail, you know, finishing up
18 seating, whatever, so we got all kinds of
19 construction traffic and, you know, inspection
20 traffic driving up and down on the road wearing
21 away that film. So, it was just, you know -- and
22 again, I wasn't aware of the early friction and to
23 the best of my recollection this is when I was
24 informed of it by Ludomir.

25 434 Q. About the early age low

1 friction issue?

2 A. Correct.

3 435 Q. Okay. And did you have
4 any discussion with Dr. Uzarowski about the
5 number 30 that was referred to in Mr. Raymond's
6 e-mail that he forwarded to you?

7 A. No. I can't recall any
8 discussion about that.

9 436 Q. Okay. And now, this
10 discussion, was this just between you and
11 Dr. Uzarowski or was Mr. Moore also present at
12 that time?

13 A. To the best of my
14 recollection, it was just Ludomir and myself.

15 437 Q. Okay. And do you know if
16 Mr. Moore had a separate conversation with
17 Dr. Uzarowski?

18 A. I don't know.

19 438 Q. Do you recall discussing
20 the results with Mr. Moore?

21 A. No, not in particular.

22 No.

23 439 Q. And does that mean that
24 you may have or you may not have, but you don't
25 recall either way?

1 A. Yeah, I don't recall
2 either way. Again, I know Ludomir and Gary were
3 going to be writing papers for TAC. You know, I
4 vaguely remember conversations. Like, I can't
5 recall if Dufferin helped with the first paper. I
6 didn't really keep track of the papers and stuff
7 they were writing as they went to TAC
8 presentations.

9 440 Q. So, you mentioned the
10 papers again and this doesn't appear in a paper
11 later, but was that your impression at that time,
12 that that was the purpose of the friction testing,
13 was for use in a paper? Was that your impression?

14 A. No. Again, I'm
15 speculating, you know, that, oh, okay, they're
16 just gathering data. You know, Ludomir is an
17 extremely intelligent, resourceful man. He's a
18 Ph.D. and this is meaningful to him, I guess. You
19 know, is it for a paper or does it help? I don't
20 know. So, again, but that's total speculation on
21 my part. Because, to the best of my knowledge,
22 you know, the City, as well as most municipalities
23 in Ontario, I'm not aware of any municipalities in
24 Ontario that have a friction management program.
25 You know, we assess -- how we assess roads is

1 basically top-down cracking. Right? Or bottom-up
2 cracking, you know, and potholes.

3 So, again, look at the
4 wonderful concept of perpetual pavement. You've
5 got a -- it's not just deep strength because, you
6 know, when I was told the Don Valley Parkway got a
7 perpetual pavement award, I remember, and that was
8 earlier in the discussions, we're going perpetual
9 pavement, and I said, wow, that's interesting,
10 because, you know, the Don Valley is older than
11 me. Why didn't we do that on the LINC? Right?

12 But then when you look at how
13 it happened, the Don Valley was just because of
14 overlays, so now you had deep strength asphalt and
15 you go, wow, okay. You know, and that's one of
16 those, oh, wow. If I could go back and redo that
17 road, I would have said, yeah, put that extra
18 asphalt in there and do what we're doing here
19 because the flexible rich bottom mix, this is
20 where, you know, Ludomir -- this is why he was
21 doing that design. It's an SP12.5 with a higher
22 AC content that's flexible, so to stop, you know,
23 the propagation of bottom-up cracking, so now all
24 we're dealing with is top-up cracking, which is
25 normal wear and tear, and the whole concept of the

1 perpetual pavement is then to get on that asphalt
2 and replace it before that cracking gets down into
3 the second lift of asphalt. And, you know, you
4 can extend the life of pavement by doing crack
5 sealing which, you know, unfortunately, you know,
6 we used to have a crack sealing program and then
7 we stopped doing it in the City of Hamilton.

8 So, when you look at all this,
9 you go, this is a wonderful thing for the
10 taxpayers because, you know, you need to go in, my
11 understanding was, every 10 to 15 years and if,
12 you know, you do crack sealing, you could probably
13 extend it to the 15. Otherwise, you're in there
14 for the time period, you remove the top asphalt,
15 replace it, and you have got a system that will
16 now last, you know, 50 or longer years.

17 441 Q. Okay. So, that was an
18 answer to my question about what your
19 understanding was of the purpose of the friction
20 testing.

21 A. Oh, sorry.

22 442 Q. On that point, you said
23 it was pure speculation about it being for a
24 paper. Isn't the other possibility that it was
25 because there was a concern about the friction

1 levels? Is that not the other possibility for
2 conducting friction testing?

3 A. You know what? It may
4 have been Ludomir's concern, but no one ever said
5 it to me before we did this testing, so I wasn't
6 aware of that concern of the -- sorry, what did
7 you say?

8 443 Q. A concern about the
9 friction level, a concern about the frictional
10 qualities --

11 A. Sorry. I wasn't aware
12 that the initial friction levels are low until the
13 traffic wears it off.

14 444 Q. I understand, but in any
15 case you're saying that no one told you that --

16 A. No.

17 445 Q. -- there was a concern
18 about friction levels?

19 A. No.

20 446 Q. Okay. Thank you. Now,
21 you received the skid test results. Did you send
22 the results to Dufferin or Philips?

23 A. I don't believe I did. I
24 don't recall forwarding it.

25 447 Q. Okay. And we don't have

1 any e-mails that suggest you did. I'm just
2 asking --

3 A. Okay. I was going ask if
4 you found them, then I did.

5 448 Q. But we don't have
6 100 percent complete records. It's a long time
7 ago.

8 A. Okay.

9 449 Q. Did you tell anyone at
10 Dufferin or Philips about the skid test results?

11 A. I don't recall any
12 conversations except with Ludomir about it.

13 450 Q. Okay. And did you send
14 the skid test results to anyone else in the City?

15 A. Sorry, can you repeat the
16 question again?

17 451 Q. Did you send the skid
18 test results to anyone else inside the City, any
19 other staff, anyone else inside the City?

20 A. In 2007?

21 452 Q. Yes.

22 A. Oh, no. I can't remember
23 what year. It was probably in -- I don't know if
24 it was late 2018 or early 2019, you know, as part
25 of an FOI I would have sent this to the person who

1 was collecting the information.

2 453 Q. Okay. And you're going
3 to be testifying at another point, so you can talk
4 about it then. I'm talking about around and about
5 the time this occurred.

6 A. 2007, I don't recall
7 sending this to anyone.

8 454 Q. Okay. And do you recall
9 telling anyone else in the City about the results
10 around and about that time?

11 A. No.

12 455 Q. Okay. And we know that
13 the MTO conducted further skid testing on the Red
14 Hill Valley Parkway in 2008, 2009, 2010, 2011,
15 2012 and 2014. When did you become aware of those
16 tests having taken place?

17 A. Oh, as part of this
18 judicial inquiry.

19 456 Q. Okay. And just before we
20 take our afternoon break, there's one document.
21 It's just to close the loop on something you said
22 earlier. Registrar, this is the document we sent
23 over to you this afternoon. It's Hamilton 62769.

24 And so, Mr. Oddi, early on in
25 our discussion today we were talking about, you

1 know, for tendered drawings, for construction
2 drawings and as constructed drawings and we were
3 talking about how, for the most part, they weren't
4 done for the Red Hill Valley Parkway, the
5 north-south portion. We do have fairly recently
6 produced as constructed drawings. This is for the
7 LINC. You'll see this one. It's as constructed
8 November 15, 1997 and each of the drawings
9 indicates that there were for tender, for
10 construction and as constructed.

11 And so, this particular one,
12 it's from upper Wellington to Dartnall. It's not
13 called the LINC at the time, of course, but it's
14 from upper Wellington to Dartnall, so that's a
15 portion of what became the LINC. Right? It's
16 about half of it. Am I right?

17 A. Approximately, yes.

18 457 Q. Around and about. So,
19 these are as-constructed drawings for the LINC,
20 but we don't have them for the Red Hill except
21 for, as I said, it appears to be a couple of small
22 portions. Do you know why the difference in
23 the --

24 A. I guess I was better at
25 my paperwork back then. I don't know. But can I

1 explain how this contract went? Because see how
2 it says part A as well on this cover sheet?

3 458 Q. Yes.

4 A. There was two main line
5 paving contracts in 1997, and you're correct that
6 I think the name -- the suggestion of the name
7 came from, I believe it was Chairman Terry Cooke,
8 to name the new facility after Lincoln Alexander
9 Parkway, but anyway.

10 So, the first tender was --
11 and I think it was contract 97225SPO. That would
12 have been the main line paving from upper
13 Wellington all the way to the 403. And this one
14 was part A of, you know, this contract, but that's
15 because the portion, I believe it was Stantec,
16 went to a portion just beyond Upper Ottawa, so
17 part B of this contract was prepared by Philips
18 Engineering, so we would have had a part B to this
19 contract, but they were tendered at the same time
20 and Dufferin got the whole contract. So, it could
21 have been, you know what, we did have a
22 construction tech working with us. More than
23 likely he either followed up or I don't know if I
24 followed up. So...

25 459 Q. I just wanted to close it

1 up. It's not a matter of course that the City did
2 not do as constructed drawings for roads. Right?
3 Is that fair?

4 A. Correct. And it's just
5 one of those little comical things because our
6 construction tech, when we built the LINC, his
7 first name was Marco as well, so he was young
8 Marco and I would say old Marco and a few other
9 things. Anyway. Sorry, I digress again.

10 460 Q. No problem.
11 Commissioner, would this be a good time for the
12 afternoon --

13 JUSTICE WILTON-SIEGEL: It
14 would. It's almost 3:20. How long do you want to
15 take?

16 MR. LEWIS: So, I really have
17 one more topic to do. I mean could do that now.
18 I think it's a five-minute thing and then we could
19 see where we're at with other counsel, or we
20 could --

21 JUSTICE WILTON-SIEGEL: Why
22 don't we do the five minutes and then we'll take a
23 break and you can consult with the counsel during
24 the break.

25 MR. LEWIS: Thank you.

1 BY MR. LEWIS:

2 461 Q. So, we can go back to
3 overview document 3, Registrar, and it's image 69.
4 Actually, it should be 69 and 70, paragraph 146.
5 And so, this is on February 4, 2008. You e-mailed
6 Dennis Billings, who was at the time the head of
7 the geotechnical engineering section, central
8 region, provincial highways management division at
9 the MTO, and the subject line was Red Hill Valley
10 Parkway stone mastic asphalt. And I would like
11 you to read the -- this is the entire e-mail and
12 then there's some photographs that were attached
13 to it as well, but if you could read the e-mail.
14 Just let me know when you're done.

15 A. Almost there. I'm done,
16 commission counsel.

17 462 Q. Thank you. So, in the
18 first couple paragraphs you're talking about, you
19 know, background, this is what the Red Hill Valley
20 Parkway is, and some general information. Then
21 you talk about stone mastic asphalt and the
22 asphalt cement used, HL1 on the shoulders and
23 SP12.5 FC2 on the ramps and ramp shoulders. And
24 then you talk a bit about the echelon placement
25 used for the SMA and Superpave 12.5 and you attach

1 some pictures of the SMA placement, as I
2 mentioned.

3 And then in the last
4 paragraph, you state:

5 "A 280-tonne SMA trial
6 section was placed on the
7 W-S ramp -- "

8 Which I take it is west-south
9 ramp?

10 A. Correct.

11 463 Q.

12 " -- of the Mud Street
13 interchange. The trial
14 section met the contract
15 specifications and was
16 left in place."

17 And then you go on to talk
18 about quantities and costs and you mention the
19 dollar figure, the extra costs of \$1 per tonne
20 more than the Superpave.

21 So, first of all, did you know
22 Dennis Billings?

23 A. No, I didn't.

24 464 Q. Like, not -- okay. Do
25 you recall how you knew to get in contact with him

1 or how you became in contact with him?

2 A. To the best of my
3 recollection, he called me.

4 465 Q. Okay. And did he ask you
5 to send this?

6 A. To the best of my
7 recollection, that would be the only reason I
8 would send it to him. And I can't recall if we
9 talked in person or if he left me a message with
10 his e-mail address and I sent it to him. You
11 know, I'm almost certain the latter was the case,
12 but again that's speculation on my part.

13 466 Q. This is sort of your best
14 guess at this point?

15 A. Correct. That's my best
16 guess at this point.

17 467 Q. Okay. And so, at this
18 point, it's February 4, 2008, the Red Hill had
19 opened a few months earlier, and so you think
20 maybe it was because he made the request. Do you
21 have any other insight as to why you sent it?

22 A. I believe it was at his
23 request and again --

24 468 Q. But for what purpose?

25 A. Well, and, again, I go,

1 you know, I was aware that Dufferin wanted to get
2 this on the DSM list, but again it's speculation
3 and it may be illogical, but I don't know if
4 Dennis, it says here, he's the head geotechnical
5 engineering section. I don't know if he's
6 involved in the DSM, but that's pure speculation
7 on my part.

8 469 Q. Okay. And so, you write
9 in that first sentence of the last full paragraph
10 when you're talking about the trial section, you
11 say:

12 "The trial section met
13 the contract
14 specifications and was
15 left in place."

16 So, we know it was left in
17 place, but we know that it did not meet the
18 contract specifications. You would agree with
19 that?

20 A. It didn't meet all the
21 specifications. Yes, I agree with that.

22 470 Q. Well, Dr. Uzarowski
23 failed the test strip and as a result he said that
24 they were proceeding at their own risk?

25 A. Well, okay. So, in the

1 context of this e-mail, again, I can't recall the
2 controversy of the test strip or the alleged
3 controversy, so, you know, I'm reporting. And,
4 again, I'm more than likely I wouldn't have sent
5 this to Dennis Billings unless he asked for the
6 information. And so, in my mind, I can't recall
7 everything that happened, you know.

8 471 Q. Right, but --

9 A. I guess the intent of the
10 e-mail is that, you know, basically and generally
11 the test strip generally met the contract
12 specifications. It was left in place. Again,
13 Ludomir said he didn't say that it had failed and
14 had to be removed. It was rejectable on
15 everything, it's going to compromise -- because if
16 it was going to compromise the long-term integrity
17 of the road, given everything that was going on,
18 you know, it wouldn't have been left in place.

19 So, now when you think about
20 this, I don't even recall the controversy that
21 was -- it was six to seven months prior. Right?
22 Award winning road, finally opened, there's, you
23 know, awards, there's papers, perpetual pavement,
24 Hamilton on top of things, so I'm just, here, here
25 is the information, and also knowing that, okay,

1 Dufferin had said, yeah, we're going to try and
2 get on the DSM list.

3 472 Q. But what you said wasn't
4 true. Dr. Uzarowski had --

5 A. But --

6 473 Q. Just let me finish,
7 please.

8 A. Sorry.

9 474 Q. He had expressly said in
10 his e-mail on July 31 the test strip is not
11 acceptable, we recommend a new test strip be
12 completed, Dufferin Construction should be aware
13 that the test strip has not been approved and the
14 paving will be at their entire risk. We also know
15 that on the 27th at a meeting you were at,
16 Dr. Uzarowski told Dufferin in your presence that
17 the test strip had failed?

18 So, in light of that
19 information, would you agree with me this is not
20 accurate, what you're saying in your e-mail to
21 Mr. Billings?

22 A. No. The intent of the
23 e-mail, and if I want to be specific, it should
24 have said it generally met the contract
25 specifications and left in place. However, also

1 given, you know, what I said before about not
2 getting 100 percent test results on everything I,
3 you know, it's very safe to assume that Dennis
4 Billings would be aware of that given his role at
5 MTO.

6 So, the intent wasn't to
7 create this lie. Again, in my best recollection,
8 there wasn't this big controversy over leaving
9 that trial section in. If that was documented,
10 then that's different. So, when you look at what
11 happened, you look six to seven months later, that
12 was not my intent, to say something bad against
13 Golder or going against what they said.

14 475 Q. It doesn't say --

15 A. But technically from a
16 legal perspective if I had had that word generally
17 in there, it would have covered, you know, the
18 concern that you're raising.

19 476 Q. But it's not about
20 covering it from a legal perspective. I'm asking
21 about being accurate.

22 A. In my mind --

23 477 Q. Isn't the honest answer
24 for this to say that the test strip has failed?

25 A. No. Again, it wasn't

1 approved. It didn't fail. It wasn't approved.
2 That's different. And that's my point. So, in my
3 mind, because we left it in place, yes, it was
4 good enough to leave in, ergo it meets -- you
5 know, it should have -- if you wanted to be
6 technically correct right to the letter, it should
7 have said met most of the contract specifications.

8 Why I put that even in there,
9 I don't know, you know? Again, I vaguely remember
10 the request coming from Dennis. I didn't know
11 him. You know, obviously he got my name somehow.
12 I don't know. I don't know if he got it from
13 Ludomir, you know. More than likely if it's about
14 the DSM list, he would have got it from someone at
15 Dufferin. So, I just -- I can't recall, you know,
16 the specifics.

17 478 Q. Okay. You mentioned in
18 your initial response when I asked you about what
19 you wrote, you mentioned about awards and articles
20 and so forth. What's the pertinence of that to
21 this issue?

22 A. Oh, no. I'm just
23 saying -- again, it was just trying to prepare you
24 with the context in terms of, you know, the
25 incident back in July, late July, with the test

1 strip. At this point in time it, sort of, you
2 know, I can't even recall it and even at this
3 point it wouldn't be in my mind. Right? So,
4 it's, you know, again, the intent of what I wrote
5 here is that it generally met the specifications
6 because we left it in place.

7 479 Q. Because it was left in
8 place, that means that it was acceptable, that it
9 met the contract specifications?

10 A. Correct.

11 480 Q. Okay. Thank you. We
12 have your evidence. I don't have any further
13 questions, Commissioner. Perhaps if we could
14 now -- I went a little longer than five minutes.
15 If we could take the break now and if I could
16 confer with counsel?

17 JUSTICE WILTON-SIEGEL: Sure.
18 Let's take a ten-minute break, but it looks like
19 we should think about adjourning at 4:00 and
20 having Mr. Oddi come back tomorrow. I'll leave it
21 to you and counsel to discuss the best way to
22 proceed.

23 MR. LEWIS: Thank you.

24 JUSTICE WILTON-SIEGEL: Thank
25 you.

1 --- Recess taken at 3:31 p.m.

2 --- Upon resuming at 3:41 p.m.

3 MS. JENNIFER ROBERTS:

4 Commissioner, Mr. Oddi --

5 MR. LEWIS: If I could do one
6 thing. I realize we didn't make an exhibit of one
7 document. So, Registrar and Commissioner, could
8 we mark as Exhibit 33 HAM62769. That was the LINC
9 drawings that we put up.

10 THE REGISTRAR: Thank you,
11 counsel. Noted.

12 EXHIBIT NO. 33: LINC
13 drawings, HAM62769.

14 MR. LEWIS: Thank you.

15 MS. JENNIFER ROBERTS: May I
16 proceed?

17 MR. LEWIS: Commissioner, I
18 think Ms. Roberts is going to go first and when
19 she's done perhaps we could assess then about the
20 timing of whether to proceed further today.

21 JUSTICE WILTON-SIEGEL: Okay.
22 Good. Please proceed, Ms. Roberts.

23 MS. JENNIFER ROBERTS: Thank
24 you.

25 EXAMINATION BY MS. JENNIFER ROBERTS:

1 481 Q. Mr. Oddi, I'm Jennifer
2 Roberts and I'm counsel for Golder. And I have to
3 ask at the outset for your patience because I am
4 going to move around some documents.

5 First of all, just so that I
6 understand the language, does Hamilton describe
7 this Red Hill Valley Parkway as a mountain cut
8 road? I've seen it written somewhere. Because it
9 comes off Hamilton mountain down towards the --

10 A. Yeah. I guess
11 technically it's an escarpment, but everyone in
12 Hamilton calls it Hamilton mountain, but it
13 doesn't have the height to be classified as a
14 mountain, so...

15 482 Q. I was going to say that.

16 A. Oh, no.

17 483 Q. Okay. Thank you. And
18 I'm just going to refer back to the preliminary
19 design report and the 2006 revision. There's a
20 reference in there to the MTO geometric design
21 manual as being the standard by which the Red Hill
22 Valley Parkway was designed. Was that what
23 ultimately was done?

24 A. Sorry, I didn't hear the
25 question, just the last sentence. Sorry.

1 484 Q. Was the design reference,
2 it says the geometric design manual?

3 A. Yeah. I believe that's
4 correct.

5 485 Q. Okay. And when you say
6 design manual, is the complete name for that the
7 1985 MTO Geometric Design Standards for Ontario
8 Highways?

9 A. I would really have to
10 look it up. I can't recall if that's the name of
11 the document.

12 486 Q. Okay. But are we right
13 in thinking that the design standard was the 1985
14 MTO guide? We describe it more generally that
15 way?

16 A. Yeah. I don't know for
17 sure what the date of the document was. Normally
18 we just refer to it as the MTO geometric design
19 standards. And they revise them, you know, as
20 required. So, I don't know specifically the one
21 that was -- which date of the one that was used
22 for the -- but I assume it would be the most
23 current one.

24 487 Q. Right.

25 A. At that time.

1 488 Q. Well, that's exactly my
2 point. So, at the time, designing in the late
3 1990s, early 2000s, you've got two choices.
4 You've got TAC or MTO and I understand that you
5 designed to the MTO guide?

6 A. Sorry, you know what? I
7 was thinking that IDP redesign. So, you're right.
8 Back in 1990, that was probably the most current
9 MTO standard.

10 489 Q. Okay. Thank you. And in
11 the initial design, there's provision for a
12 six-lane highway and that was revised, was it not,
13 to the four?

14 A. We only -- the road has
15 been designed to accommodate six lanes. We only
16 paved four because they looked back at the traffic
17 volumes and said the widening can occur as
18 required, as the population growth in Hamilton
19 grows. So, if you look at it, most of the
20 widening from the road is done in the centre
21 median. Okay? Except for when you start to --
22 the escarpment mountain cuts, those structures are
23 built to their ultimate width. So, that way, if
24 and when the road is widened, you wouldn't have to
25 adjust that escarpment cut, but to the north you

1 would widen a little bit to the outside because
2 you see there's an existing concrete barrier in
3 the centre. Once you're past that point, the
4 widening would then transition back into the
5 centre median and you run a high wall concrete
6 barrier through there.

7 490 Q. So, notwithstanding only
8 four lanes were constructed, the design actually
9 accommodates a full six for some later time when
10 that would be appropriate to build to?

11 A. Correct. All the
12 stormwater management ponds were constructed to
13 the six lane road so that they wouldn't have to be
14 adjusted in the future.

15 491 Q. Got it. I wanted to go
16 back to a comment you made first thing this
17 morning and ask you to elaborate a little bit
18 about it. You talked about early challenges in
19 the design of the Red Hill Valley Parkway. You
20 talked about protests, injunctions, the importance
21 of environmental issues and the Red Hill creek
22 water course. It would be helpful to understand
23 how some of these issues were reflected in the
24 design of the alignment.

25 And, for example, it would be

1 my understanding that the roadway follows really
2 the curvature of the creek valley. Is that the
3 case?

4 A. More or less, yes.

5 492 Q. Okay. And because of the
6 many constraints, there's quite a confined
7 right-of-way for the construction?

8 A. Correct. It's within the
9 valley. It's definitely confined to within the
10 valley.

11 493 Q. Okay. And, Registrar,
12 can we please pull up overview document 3.1,
13 image 10. Okay. And this is some of a
14 compilation drawing of the part A, which is the
15 Stantec section. Can you see that, sir?

16 A. Yes, I can.

17 494 Q. Okay. And so, this
18 begins, as I understand it, to the left side of
19 the drawing with the beginning at the southern end
20 of the Red Hill Valley Parkway and what you see in
21 the interchanges at the top, that's the mud hill
22 creek interchanges?

23 A. That's the Mud Street
24 interchange, yes.

25 495 Q. Sorry, Mud Street.

1 Forgive me.

2 A. Mud Street, at that time
3 we were only opening the road to Stone Church
4 Road.

5 496 Q. Okay. And when I talk
6 about the confined right-of-way and look at some
7 of these ramps, they're very tight. And does that
8 reflect the fact that you're trying to design the
9 entire -- the alignment and the ramps within this
10 confined space you have available to build?

11 A. Well, once they came up
12 with sort of the preliminary design, I can't
13 remember if the property was acquired prior to,
14 you know, when there was a functional one before
15 the preliminary design was completed. So, up
16 through this portion, the original design of the
17 north-south actually straddled either side of the
18 hydro corridor, so there was no relocations of the
19 hydro towers, which was resulting in two cuts.
20 So, this new design, we relocated a hydro tower
21 and made one cut, stepped it so that it was easier
22 for maintenance, also provided opportunity to
23 plant habitat along there. So, yes.

24 But within this area, there's
25 a little bit more room, if you want to say, but as

1 you proceed northerly, you know, because at this
2 point you're still up on the escarpment. Once you
3 get to where it says radius equals 700, you're
4 getting on to what everyone calls the escarpment
5 viaduct, which is basically a structure, lots of
6 important habitat underneath. And, again, because
7 the original one was cut and fill through here, so
8 when they went back and reassessed the design of
9 the road, they were looking at a lot of things.
10 Right?

11 497 Q. Okay. Let's go to the
12 Philips section, which I think is what you're
13 talking about, and that is image 13, Registrar.
14 And if you could please enlarge that.

15 Okay. Mr. Oddi, does this
16 reflect where the geometry gets a little bit more
17 constrained, as you've got a lot going on around
18 there?

19 A. Correct, correct. What
20 happened is -- you're correct. If you're driving
21 on the LINC, it's designed to 100 kilometres,
22 posted at 90, but the geometrics are a lot more
23 forgiving because it's a very straight road. You
24 hit the first curve as you're heading north, so
25 hopefully drivers are paying attention. When you

1 get to this section and beyond the Greenhill
2 Avenue interchange, you're now into the radiuses
3 that are approaching your design speed. Right?
4 And then, you know, other just -- there is other
5 improvements, but I think you're concentrating
6 more on the geometrics, so I won't elaborate on
7 the improvements or the changes to the Greenhill
8 interchange and there was changes to the Queenston
9 interchange and some minor changes to the Barton
10 Street interchange.

11 498 Q. Okay. But let's go
12 exactly to that geometry that you mentioned. So,
13 as you come down off is the escarpment, you then
14 come into this area where you pass Greenhill where
15 you have a radius turn of 420 metres?

16 A. Mm-hmm.

17 499 Q. And then if you're going
18 northbound towards the lake, you've got then a
19 left turn for 50, I think it is?

20 A. Correct.

21 500 Q. And then 690 and then
22 525, so you've got a series of turns that are
23 quite tight in the radius --

24 A. Correct, but they are
25 within -- I think the minimum radius was 420 for a

1 100 kilometre design speed.

2 501 Q. Right. So, at the time
3 that this was designed?

4 A. Well, this is a
5 modification because, again, if you look at the
6 original alignment, you know, south of this area
7 we were on either side of the existing hydro
8 towers. The old Mount Albion Road alignment was
9 kind of an escape crash lane that was going to be
10 used. The new alignment, it was relocated further
11 west, but Albion Road was left in as a pedestrian
12 trail connection to connect to the top. Greenhill
13 Avenue was what we would describe in the industry
14 as a trumpet interchange, which is a great big
15 curve that looks like a trumpet. That's why it's
16 given the name. Which, you know, great for moving
17 traffic. Very similar to what the Dartnall road
18 interchange is, but it was taking up a lot more of
19 the natural environment, so through the IADP
20 process, Greenhill was shrunken to this
21 interchange, which had less impact -- it's a
22 diamond interchange, is what it's referred to.

23 502 Q. Right.

24 A. The King Street
25 interchange, I don't believe there was any changes

1 to it, unless -- I know one of the things we
2 looked at was to help pedestrians. Because if you
3 look at -- when I look at King Street and I look
4 at Barton Street, those are called partial
5 clovers. Right? So, because the loops look like,
6 you know, four-leaf clovers. If you had ramps
7 within every quadrant, it would be a park low A4
8 or a B4 and all that means is these are park low
9 A2s or maybe it's A4, but basically it means the
10 exit. When you say A in the design, it means you
11 are exiting in advance. If it's a B, you're going
12 beyond the overhead structure and then exiting
13 beyond the road.

14 503 Q. Got it, okay. So, we'll
15 talk about the interchanges. But just in terms of
16 the main line and the radius --

17 A. Yeah. You're at the --
18 the 420 is the minimum, so that's under the THB
19 structure, and then you're at the 450 through King
20 Street and it gets better as you proceed
21 northerly, but yeah, through that lower portion in
22 the valley, and that's because you're absolutely
23 correct, you're restrained. And...

24 504 Q. Thank you.

25 JUSTICE WILTON-SIEGEL:

1 Ms. Roberts, I want to make sure I understand.
2 So, when you say you're at the maximum at 420,
3 what you're saying is the design speed for a
4 radius of 420 metres is 100 kilometres per hour.
5 Is that correct?

6 THE WITNESS: Yes, that's
7 correct.

8 JUSTICE WILTON-SIEGEL: So
9 it's as tight as it can get?

10 THE WITNESS: Correct.

11 JUSTICE WILTON-SIEGEL: If I'm
12 being colloquial.

13 THE WITNESS: Correct. That's
14 the -- correct. That's the minimum radius you can
15 do at that design speed.

16 JUSTICE WILTON-SIEGEL: Okay.
17 Thank you.

18 BY MS. JENNIFER ROBERTS:

19 505 Q. Okay. And I want to go,
20 please, Registrar, if we could please turn up
21 Dufferin -- sorry. It's Dufferin 2534, image 2.
22 So, these are the Stantec drawings and we've gone
23 back to the part A, and this is the Mud Street
24 interchange, do I have that right, the alignment
25 around the Mud Street interchange?

1 A. Yes, that's correct.

2 506 Q. Okay. And, Registrar,
3 can you please pull up the chart that's the second
4 one in from the left, the longer one. Yes,
5 please. Thank you. See if you can read it.

6 So, as I understand this,
7 Mr. Oddi, and if you can please confirm, that this
8 shows the radius of the turns? So, this is the
9 design that shows the contractors what the radius
10 for that turn and the spirals have to be?

11 A. Correct. Yeah, this is
12 the horizontal alignment so they can lay it out
13 and build it. And those numbers, that 420
14 minimum, that's for the main line highway, not for
15 the ramps.

16 507 Q. No, I get that, but
17 that's in the Philips section. Right now we're
18 looking at the Stantec section.

19 A. Correct, correct.

20 508 Q. Okay. And then if we
21 can --

22 A. You can see they show the
23 700 radius, which is consistent with what you
24 showed before.

25 509 Q. Right. So, the main line

1 of the Mud Street interchange, the turn has a
2 700-metre radius?

3 A. Correct.

4 MR. CHEN: If I could just
5 highlight one thing. I was originally under the
6 impression this was a document that commission
7 counsel provided notice of, but I'm not sure that
8 this document was -- there was notice given for
9 this particular document.

10 MS. JENNIFER ROBERTS: It's in
11 the overview document 3.1.

12 MR. CHEN: Sure, but not a
13 document identified specifically previously
14 outside of that. Correct? Perhaps I have the
15 rules a bit off, but commission counsel is on
16 screen and can clarify.

17 MR. LEWIS: So, if I
18 understand it correctly, this is a question about
19 whether notice was given about the witness, to the
20 witness, that this was going to be a document that
21 was put to him?

22 MR. CHEN: Correct.

23 MR. LEWIS: So, I can say that
24 commission counsel did provide notice that the
25 overview document and then as a whole -- overview

1 document 3.1 and then a list of some of the
2 underlying documents would be put to him.

3 MR. CHEN: Okay. So, just to
4 clarify, commission counsel, would that include
5 every document, then, in 3.1 or is it the separate
6 list that was provided?

7 MR. LEWIS: This document was
8 not on our specific list of documents that we
9 provided.

10 MR. CHEN: Okay. And that was
11 what I wanted to clarify. And so, this witness
12 has not seen this document and was not provided
13 notice that this document would be put to him.

14 MS. JENNIFER ROBERTS: I see.
15 Okay. So, that's my misunderstanding of the scope
16 of the extent to which we can rely on documents in
17 the overview documents within the overview
18 document. I will specifically refer in future,
19 Commissioner. Sorry, I take it, Mr. Chen, that
20 the issue then is that you don't believe Mr. Oddi
21 is prepared to answer questions on the basis of
22 this document?

23 MR. CHEN: That's correct. He
24 hasn't had the opportunity to review it, I don't
25 know how many pages it is and it's obviously a

1 technical drawing.

2 MS. JENNIFER ROBERTS: That's
3 fine. Okay. That's fine.

4 BY MS. JENNIFER ROBERTS:

5 510 Q. Can we please go back to
6 the overview document 3.1. I want to go to
7 image 13 again, please. Can you please blow up or
8 enlarge the part B drawing. Okay. This is what
9 we were looking at before. Okay.

10 So, one of the things that's
11 you've done has been really fairly extensive
12 evidence on, Mr. Oddi, is the extent to which in
13 the paving process that Hamilton required that the
14 different elements for the paving were verified
15 through testing, and I take it, sir, that the same
16 was true for the geometry? In other words, at the
17 end of construction, you would have ensured that
18 surveyors surveyed the elevations and the
19 superelevations. Is that the case?

20 A. No, we didn't do, like, a
21 scan or a survey of the road, but all the
22 off-ramps were ball banked, which is a test. You
23 put a device on your car and you drive it and it
24 basically confirms that the posted speeds are
25 accurate. And I don't think we did ball bank for

1 the main line curves, but I know we did that when
2 we resurfaced the road in 2019.

3 511 Q. Okay.

4 A. So, again, they're just
5 showing that, yes, you know, everything -- the
6 posted speeds are accurate for the ramps in the
7 main line.

8 512 Q. So, let me just
9 understand this. At the conclusion of the paving,
10 you did not have surveyors confirm that the
11 elevations that were in the drawings were actually
12 met by the construction? Is that what you're
13 telling me?

14 A. Well, I mean, there would
15 have been checks during the design to make sure
16 you have your clearances under your bridges, you
17 know, and you're meeting elevations of existing
18 roads at the top, so it's -- you know, I'm not
19 aware of anyone who would go out and go do a
20 detailed survey of the road.

21 513 Q. How did you confirm that
22 what was designed was constructed?

23 A. I believe, as I told
24 before, we had grading templates, so you have
25 grading templates. Now, as they're building those

1 sections, they are doing checks to confirm that
2 those grades were all built, but I don't believe
3 we did a survey to check -- the asphalt depths
4 would have been checked as they were placing it,
5 but I don't believe there was a survey of the
6 final road product to make sure that everything
7 was built exactly to the millimetre. You know,
8 how many decimals would we like to go to for the
9 road? So, I don't believe that was done. But as
10 they were building the subgrade and placing
11 granulars, there would have been checks by the
12 consultant staff to make sure that, yeah, it's
13 good, yeah, you're right there, just confirming
14 quantities and things like that because it's all
15 based on the elevations. Right?

16 514 Q. Well, exactly. And if
17 the design drawings show precisely what the
18 elevations are supposed to be?

19 A. Correct. So, there are
20 checks -- sorry. My answer was that I don't
21 believe we did a formal survey top to bottom
22 before the road opened of the actual elevations.
23 Again, they were spot checking, so there wasn't
24 one complete survey of the entire thing post,
25 like, run a surveyor through.

1 515 Q. And what about the
2 superelevations? Is it Hamilton's practice to
3 ensure that the superelevations as designed are
4 actually constructed?

5 A. No. Again, except
6 through the ball bank testing that we did and
7 when -- I know the ramps were done in 2007 when we
8 resurfaced the Red Hill Valley Parkway in 2019, we
9 did the ramps as well as the main line ball
10 banking. And because basically when we resurfaced
11 it, we just -- you take out and you put back in
12 the same superelevation. And it's kinda -- if
13 you're checking your elevations when you're
14 building it, you get the superelevation. It's
15 sort of -- I guess to us it's intuitive as you see
16 it and, you know, as you're driving it and where
17 the superelevations should be and those things.
18 So...

19 516 Q. But how do you know
20 unless you verify?

21 A. I don't recall any
22 specific test done, but again, as the consultants
23 are out there, they would be checking the
24 elevations to make sure that, okay, it's built
25 right. And, again, you can see it. If the super

1 is off, you can see it. If something is too high,
2 it doesn't look right. You know, but those things
3 would have been addressed while the granular was
4 there. Then you place the asphalt, you know, and
5 as each layer is going in, you can see it build
6 up. So...

7 517 Q. Right. So, just to sort
8 of complete that thought, the superelevations for
9 the roads are actually determined through the
10 construction of the granular and assuming that
11 the --

12 A. No. The superelevations
13 are determined through the placement of the
14 asphalt.

15 518 Q. But my understanding
16 is -- and I defer, sir. My understanding is that
17 the elevations and ultimately the superelevation
18 for a road is determined by the granular and then
19 the asphalt is just the layers on top and you have
20 the specific specified layers?

21 A. If you look, there are --
22 we don't have a standard typical section because
23 of the geometry of the road, so if you look
24 through the contract drawings, it shows you the
25 geometry and the cross section of the station in

1 different areas. It will tell you from here to
2 here, this is how it is, here is the super.

3 So, your comment is correct
4 that, yes, if the granular would be placed and
5 depending the subgrade, you might not place it all
6 on the same super. You might be draining it
7 differently. But once the granular is placed, the
8 asphalt is following it. You're correct.

9 519 Q. Thank you. And the
10 Philips section has been a bit of a challenge for
11 us because, as you can see here, we've got
12 superelevations for left turns but not for right?

13 A. Again, I would have to
14 look at, you know, the sections, all the layout
15 information. So, to the best of my knowledge,
16 that was all laid out in the contracts, plus they
17 provided grading templates to the successful
18 bidder, something that was generated using the MTO
19 software for it.

20 520 Q. So, that might be the
21 missing documents, then, for us, because we don't
22 have the grading templates or at least I don't
23 think I've ever seen them?

24 A. Yeah, yeah. They're
25 probably non-existent at this point.

1 521 Q. Okay. And I just want to
2 go through -- you said earlier that if there are
3 changes during the construction, that they would
4 need to be recorded on as-constructed drawings.
5 Do you recall saying that?

6 A. That would be a good
7 practice, yes.

8 522 Q. And if everything is
9 built in accordance with the drawings, you don't
10 need to prepare as-constructed drawings. I think
11 you said that earlier?

12 A. Yes, and, to the best of
13 my recollection, except I know the guide rail, we
14 added guide rail, but that was documented in an
15 e-mail, so we always had that. Plus, for future,
16 that could be, you know, picked up and surveyed
17 quite easily once you get to the point of totally
18 reconstructing. And that's why the City says,
19 well, I'm resurfacing and when I go out -- so, I
20 don't need to go out and survey the road once I
21 build it, but when I need to reconstruct it, I'm
22 going to go survey it. So, that's why -- that's,
23 sort of, our reason for not doing the as built
24 for, you know, resurfacing or if it's just road
25 construction. If you're aware of a change, you

1 know, it would be good process to document it.

2 523 Q. Okay. But here if
3 there's not a complete depiction in the Philips
4 drawings of the geometry, of the turns and the
5 superelevations, you've got no template for
6 whatever --

7 A. You're only bringing
8 up -- this is the removal layout drawing and
9 someone has dropped in these radiuses. Those
10 radius boxes that are shown there and all those
11 things in red were added after the fact.

12 524 Q. Yes. This is a
13 compilation drawing that we've taken -- that's
14 been taken from Philips. And my point, sir, is
15 that there is no depiction for superelevations
16 where it is said on these two turns?

17 A. It would be shown in the
18 typical sections within the contract drawings, so
19 you give them the alignment data and then it would
20 be shown on the typical sections within, you know,
21 this portion of the contract.

22 525 Q. Mr. Chen, the witness
23 appears to be fluent with the contract drawings.
24 Can we please go to that cross section for
25 Philips?

1 Commissioner, I think the
2 witness is familiar with these drawings. I can't
3 see why we wouldn't look at them and establish
4 whether the superelevations are shown or not.

5 JUSTICE WILTON-SIEGEL: Sorry,
6 I didn't get Mr. Chen's reaction.

7 MR. CHEN: I was about to say
8 that we still have concerns, but we're fine for
9 this particular portion.

10 JUSTICE WILTON-SIEGEL: Thank
11 you.

12 BY MS. JENNIFER ROBERTS:

13 526 Q. So, could we please go to
14 Dufferin 2534. Sorry, I need 2535. Forgive me.
15 Image 71, please.

16 So, image 71 shows the
17 superelevation. If you can please -- there's a
18 tangent section at the top but the bottom is the
19 superelevation?

20 A. Right.

21 527 Q. And is it possible,
22 Registrar, to make that a little larger for all of
23 our old and tired eyes. Thank you. Okay.

24 And, as I understand this
25 drawing, this is a left turn superelevation. Is

1 that what that appears to be for you?

2 A. Yeah. Given where this
3 is and the way the stations are laid out, they go
4 from south to north, so if you're driving
5 northbound, you're turning to the left. If you're
6 driving southbound, you're turning to the right.

7 528 Q. Right. Okay. And as I
8 read the drawing, that it establishes a maximum
9 superelevation of 6 percent?

10 A. Correct. That's a
11 standard, yes.

12 529 Q. Okay. And that would be
13 appropriate for a tight radius turn. Correct?

14 A. I believe so, but I would
15 have to check, you know, those geometric design
16 manuals, but I believe that's correct.

17 530 Q. Okay. And, Registrar,
18 can you please turn to the next image, 72. Right.
19 These are different cross sections for ramps and
20 such. So, as I read these drawings, the only
21 cross section for a superelevation is the one on
22 71 -- Registrar, if you could please go back --
23 which is that one turn one way?

24 A. Right. If you go to the
25 next drawing, please.

1 531 Q. 72?

2 A. Yeah. I was going to say
3 drawing 128. If you see the ramps, see where --
4 if you look at the one to the top left where it
5 says typical section two lane ramp, if you zoom in
6 I'm pretty sure that just says "S percent." That
7 means super. Okay? So, then you refer to the
8 table at the right-hand side at the top. That
9 tells you super. So, the information is there.
10 See where it says see table, S percent, see table.
11 The table is at the top right of the document.

12 532 Q. So, let's go to the top
13 right.

14 A. That's the superelevation
15 table. Right?

16 533 Q. Okay. These are for the
17 ramps?

18 A. Correct. That would be
19 for the section shown on this page, yes. And then
20 those distances, okay, are the distances off from
21 where everything is measured, so it's telling me,
22 here is the super as you go one way, here is the
23 super as you go another way.

24 534 Q. So, can I describe that
25 as transitioning superelevation from one turn to

1 another?

2 A. No, because this is on
3 the ramp. Right?

4 535 Q. Right.

5 A. So, yeah. So, I guess
6 technically you could say that. You pull off,
7 negotiate an off-ramp, so yes you are, I guess
8 technically you're correct.

9 536 Q. Okay. And, if I may go
10 back to my point, we've got superelevations here
11 for ramps, single-lane ramp?

12 A. Yeah.

13 537 Q. Two-lane ramp, Mount
14 Albion Road, Greenhill Avenue. This is not a
15 superelevation for a right turn on the main line?

16 A. I'm not 100 percent sure
17 what you mean by that, because this is your
18 typical section telling you the information and
19 then the grading templates would give you the
20 details to build that ramp.

21 538 Q. Okay, but the ramps, we
22 were talking about the main line. Can we please
23 go back to --

24 A. So, you mentioned the
25 ramps here when we were talking. You said there's

1 nothing for the ramps. So, sorry. If you go back
2 to that other drawing, I thought there was a
3 superelevation table for the main line.

4 539 Q. There is. Let's go back
5 to 71. There, that's the table?

6 A. Correct.

7 540 Q. It's specifically
8 depicted on the bottom for that left turn and
9 you're saying the way you would know how to do a
10 right turn is by applying the table. Is that what
11 you're saying?

12 A. No. Sorry. Can you
13 shrink that back. This would apply to wherever it
14 says on the drawing "see table." Right? So, I
15 don't know if it says that anywhere here, but that
16 would be the superelevation table that's going up
17 to the maximum 6 percent, so it's -- right? So,
18 it's giving you that information to build that.
19 Here is the S percentage or 6 percent max.

20 541 Q. So, even though the right
21 turn is not specifically depicted by Stantec as
22 they had a left, your evidence is that you would
23 refer to the superelevation table. Do I have it
24 right?

25 A. Yeah, because when we're

1 on a tangent section --

2 542 Q. No, we're talking about
3 supers --

4 A. No, I know. But I'm
5 saying our standard, the standard for when you're
6 building a road is that you would have -- see,
7 Philips only showed one side of the road. Some of
8 the consultants were showing both sides of the
9 roads. Basically we have 2 percent cross fall for
10 drainage. And this one, because you're through a
11 curb, you have to superelevate it. So, again,
12 your question was what? The right turn?

13 543 Q. Yes.

14 A. When you say right turn
15 are you talking the exit to the off-ramp --

16 544 Q. No, main line, sir. Main
17 line.

18 A. Okay. So, I guess that's
19 where I'm getting confused, because you shouldn't
20 be turning on a highway. You drive into a curve.
21 Right? So, the curve --

22 545 Q. The turns on the highway.
23 These are turns on the main line.

24 A. So, as you're negotiating
25 the curve, it's superelevated and then the data is

1 up there for the superelevation table. It gives
2 you S percentage, which is the superelevation
3 table, or 6 percent max, and I believe that meets
4 that standard at that time.

5 546 Q. Okay. And just to go
6 back to the point I made, so you've got a specific
7 depiction here in the Stantec drawing for a
8 superelevation for a left leaning curve and there
9 isn't one for a right, but you're saying you have
10 to refer to the table?

11 A. Sorry, is this a Stantec
12 drawing? I can't see the bottom there.

13 547 Q. Sorry, Philips drawing.

14 A. Okay. Yeah. So, again,
15 sorry, you're saying there's no -- so, again,
16 like, it's the same -- I guess, basically when you
17 lay out drawings, you lay it out, you know,
18 according to your stations and the information --
19 like I said, as you're driving to the north,
20 you're turning left, is what you would call it.
21 If I'm driving southbound, I'm turning right. So,
22 the information for the right turn or I would just
23 call it negotiating that curves, it's the same
24 table that you're using to do that, to get that
25 information.

1 548 Q. Okay. So, you'll agree
2 with me, although it's not specifically depicted,
3 the guidance for it is the table on the top.
4 That's what you're saying?

5 A. No, but it is depicted.
6 It's right there in black and white.

7 549 Q. So, you just have to --

8 A. You just have to read and
9 understand the drawings. Right? Do you know what
10 I mean?

11 550 Q. No, I do. I mean, if
12 your counsel had gone to it in the Stantec
13 drawings --

14 A. If Dufferin couldn't read
15 these drawings, they shouldn't be in business.
16 Anyway, that's just another comment.

17 551 Q. Okay. And so, how is it
18 that you know -- and let's go back to 3.1,
19 image 13. Absent a specific depiction, how is it
20 that Hamilton knows what the superelevations are
21 for the Philips section of the Red Hill Valley
22 Parkway?

23 A. Sorry, who prepared this
24 drawing?

25 552 Q. Well, it's a compilation

1 of the drawings from Philips that Golder and
2 commission counsel put together from what was
3 there.

4 A. Sorry, who prepared it?
5 I think your question is whoever prepared this
6 drawing didn't know -- didn't read all the details
7 or they maybe only read the horizontal alignment
8 and put it in and didn't go read the cross
9 sections to get the superelevation. Otherwise,
10 the data is available, but whoever prepared this
11 didn't put it in there.

12 This wasn't -- I don't believe
13 this was prepared by the City of Hamilton, but I
14 could be mistaken because this drawing is -- I've
15 seen the base drawing before and I've seen the
16 contract drawings, you know, quite a bit, but this
17 drawing you're showing me here with the labels,
18 this is really -- I believe this is the first time
19 I'm seeing it.

20 553 Q. Okay. So, let me ask you
21 the question a different way. How is it that the
22 City of Hamilton knows what the superelevations
23 are in the Philips section, the middle section, of
24 the Red Hill Valley Parkway?

25 A. Again, you would have to

1 ask whoever prepared this --

2 554 Q. No, no.

3 JUSTICE WILTON-SIEGEL: Hang

4 on.

5 THE WITNESS: I didn't prepare
6 the drawing.

7 JUSTICE WILTON-SIEGEL:

8 Mr. Oddi, just hang on for a second.

9 MS. JENNIFER ROBERTS: It's an
10 open question, sir.

11 JUSTICE WILTON-SIEGEL: Would
12 it not be useful if we simply took this drawing
13 off the screen?

14 MS. JENNIFER ROBERTS: Sure.

15 JUSTICE WILTON-SIEGEL: It
16 seems to be distracting.

17 MS. JENNIFER ROBERTS: Thank
18 you.

19 JUSTICE WILTON-SIEGEL: So,
20 Mr. Oddi, I'm simply going to ask you to erase
21 from your memory that previous document.

22 THE WITNESS: Well, that's
23 easy. As I get older, it becomes really easy,
24 sir. No problem. Thank you, Commissioner.

25 JUSTICE WILTON-SIEGEL: That's

1 certainly helpful at the end of a long day. And
2 I'm going to then ask Ms. Roberts to put the
3 question that she wants to put to you again.

4 BY MS. JENNIFER ROBERTS:

5 555 Q. The question is: How is
6 it that Hamilton knows what the superelevations
7 are for the middle section that was designed by
8 Philips on the Red Hill Valley Parkway?

9 A. I guess I'm just
10 struggling when you say the City of Hamilton. I
11 guess depending who at the City, if they know how
12 to read drawings, would have put, you know, the
13 pertinent information there. So, I don't know who
14 prepared those drawings, so it's hard for me to
15 answer that.

16 JUSTICE WILTON-SIEGEL: I've
17 asked you to forget that drawing.

18 THE WITNESS: Sorry. Correct.
19 Can you repeat the question?

20 JUSTICE WILTON-SIEGEL: If I
21 may interject for just a second, if you were asked
22 today to come up with the superelevations for that
23 section of the highway, could you do it and, if
24 so, how? Would that be a correct way of putting
25 your question, Ms. Roberts?

1 MS. JENNIFER ROBERTS: Thank
2 you, Commissioner.

3 THE WITNESS: Yeah, okay.
4 Based on that, I would say you can come up with it
5 by looking at the horizontal alignment drawings as
6 well as your typical cross sections then you can
7 come up with all the data that's required to show
8 that information.

9 BY MS. JENNIFER ROBERTS:

10 556 Q. So, you have to interpret
11 it from the existing drawings. You do not have a
12 drawing that actually shows you what the
13 superelevations are at the specific curve
14 locations?

15 A. No. Do I have a typical
16 drawing of each metre of the road? No, no. Like
17 even your grading templates are done -- I can't
18 remember the distance between them, but they're
19 not done every metre on the road.

20 557 Q. But you don't even have
21 those anymore?

22 A. But they were given to
23 the contractor when the road was being built.

24 558 Q. The question is what do
25 you know now of the superelevations on the Philips

1 section?

2 A. I could tell you -- I
3 could provide the information if you ask myself
4 based on the contract drawings.

5 559 Q. You do not have as
6 constructed drawings verifying what the
7 superelevations actually are, do you, sir?

8 A. No, we don't.

9 560 Q. Thank you, Mr. Oddi.
10 Commissioner, those are my questions.

11 JUSTICE WILTON-SIEGEL: Thank
12 you.

13 MR. LEWIS: Commissioner, so
14 it is almost 4:30. The estimates from other
15 counsel were: From Ms. McIvor for the MTO,
16 approximately 30 minutes; from Ms. Laurion for
17 Dufferin, around 10 minutes; and from Mr. Chen,
18 approximately 10 to 15 minutes. So, you know, in
19 total, that would probably, unless there's some
20 attrition to that...

21 JUSTICE WILTON-SIEGEL: Okay.
22 Well, it's 4:30 now. I'm going to suggest that we
23 adjourn and start again tomorrow. And, Mr. Oddi,
24 if you don't mind to return at 9:30 tomorrow
25 morning, it sounds like we will need you for no

1 more than an hour.

2 THE WITNESS: And if I stop
3 talking so much, we can even get out quicker.
4 I'll see you tomorrow morning, everyone.

5 JUSTICE WILTON-SIEGEL: We'll
6 verify that, Mr. Oddi. So, with that, unless
7 there's anything further we have to address this
8 evening, Mr. Lewis, and I think the answer is no
9 from --

10 MR. LEWIS: No.

11 JUSTICE WILTON-SIEGEL: -- your
12 response, then we'll stand adjourned until 9:30
13 tomorrow morning. Thank you very much.

14 --- Whereupon the proceedings adjourned at
15 4:27 p.m. until Thursday, May 5, 2022
16 at 9:30 a.m.

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