Ottawa Light Rail Commission

Lorne Gray on Thursday, May 12, 2022



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5	OTTAWA LIGHT RAIL COMMISSION
6	CITY OF OTTAWA - LORNE GRAY
7	MAY 12, 2022
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13	Held via Zoom Videoconferencing, with all
14	participants attending remotely, on the 12th day
15	of May, 2022, 2:01 p.m. to 5:05 p.m.
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    COMMISSION COUNSEL:
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    Christine Mainville, Co-Lead Counsel Member
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    Anthony Imbesi, Litigation Counsel Member
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    PARTICIPANTS:
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10
    Lorne Gray, City of Ottawa
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12
    Jesse Gardner and Catherine Gleason-Mercier,
13
    Singleton, Urquhart, Reynolds, Vogel LLP
14
15
16
17
18
    ALSO PRESENT:
19
20
    Judith Caputo, Stenographer/Transcriptionist
21
    Chandani Joshi, Virtual Technician
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23
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1	INDEX OF EXHIBITS
2	
3	NUMBER/DESCRIPTION PAGE NO.
4	1: Curriculum Vitae of Lorne Gray, 12
5	B.Eng. PMP.
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10	
11	* * The following is a list of documents undertaken
12	to be produced or other items to be followed up \ast \ast
13	
14	INDEX OF UNDERTAKINGS
15	
16	The documents to be produced are noted by U/T and
17	appear on the following pages: (None).
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1	Upon commencing at 2:01 p.m.
2	
3	LORNE GRAY: AFFIRMED.
4	ANTHONY IMBESI: Good afternoon,
5	Mr. Gray. My name is Anthony Imbesi. I'll start
6	just by reading into the transcript the parameters
7	of today's interview and then we can begin.
8	The purpose of today's interview is to
9	obtain your evidence under oath or solemn
10	declaration for use at the Commission's Public
11	Hearings.
12	This will be a collaborative interview,
13	such that my co-counsel, Ms. Mainville, may
14	intervene to ask certain questions. If time
15	permits, your counsel may also ask follow-up
16	questions at the end of this interview.
17	This interview is being transcribed,
18	and the Commission intends to enter this transcript
19	into evidence at the Commission's Public Hearings,
20	either at the hearings or by way of procedural
21	order before the hearings commence.
22	The transcript will be posted to the
23	Commission's public website, along with any
24	corrections made to it after it is entered into
25	evidence.

25

The transcript, along with any corrections later made to it, will be shared with the Commission's participants and their counsel on a confidential basis before being entered into evidence.

You will be given the opportunity to
review your transcript and correct any typos or
other errors before the transcript is shared with
the participants or entered into evidence. Any
non-typographical corrections made will be appended
to the transcript.

12 Pursuant to Section 33 (6) of the 13 Public Inquiries Act 2009: A witness at an inquiry 14 shall be deemed to have objected to answer any 15 question asked of him or her upon the ground that 16 his or her answer may tend to incriminate the 17 witness, or may tend to establish his or her 18 liability to civil proceedings at the instance of 19 the Crown or of any person, and no answer given by 20 a witness at an inquiry shall be used or be 21 receivable in evidence against him or her in any 22 trial or other proceedings against him or her 23 thereafter taking place, other than a prosecution 24 for perjury, in giving such evidence.

As required by Section 33 (7) of that

1 Act, you are hereby advised that you have the right 2 to object to answer any question under Section 5 of 3 the Canada Evidence Act. 4 So, with that now in the record, we can 5 begin. Perhaps if I can just get you to briefly 6 describe your involvement in Stage 1 of Ottawa's 7 LRT Project. 8 LORNE GRAY: My involvement began in 9 around about spring of 2012, where I was initially 10 brought on to support the work that was going into 11 the bid fees, and help through with selecting the 12 preferred proponent. 13 During that time, I realized that the 14 team itself was lacking some contract management 15 and commercial management skills, which is 16 something that I have. So I put together a draft 17 proposal for the project director at that time on 18 the -- how essential it was to have that position 19 in place, what it would do, what benefits it would 20 bring to the project; and how it would keep the 21 City of Ottawa straight, in terms of its 22 obligations under the Project Agreement. 23 And he liked what he saw, and from the 24 point of project execution, PA execution, we agreed 25 that I would be the contract manager for Stage 1.

1 From then on, I performed the functions 2 of contract manager, which had various functions. 3 The basic functions were really to look after the 4 commercial aspects, like change control, you know, 5 variations as described in the project agreement, 6 correspondence, any things in disputes. 7 But the main role I found myself in was 8 being able to help with disagreements between the 9 City of Ottawa and the Rideau Transit Group and 10 OLRT Constructor. I managed to develop very strong 11 working relationships with RTG and to OLRT-C and I 12 found I was able to get to the right people to try 13 and dissolve arguments and disagreements before it 14 became bigger problems. 15 I did practically all the letter 16 writing. Most of the letters were from my own, you 17 know, initiative; and other letters was where I was 18 asked to write letters on various subjects. 19 ANTHONY IMBESI: And I will share my 20 screen with you here in a moment. Can you see what 21 I have up on the screen? 22 LORNE GRAY: Yes. 23 ANTHONY IMBESI: Do you recognize this? Is this a copy of your CV that was provided to us? 24 25 LORNE GRAY: It is, yes.

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1	ANTHONY IMBESI: So as you've
2	indicated, you became involved with the City in
3	2012. You're not an employee of the City; is that
4	correct?
5	LORNE GRAY: I'm not. No, I'm a
6	consultant.
7	ANTHONY IMBESI: And that's through
8	NDL Consulting Inc.?
9	LORNE GRAY: It's through a company
10	called Tiree Facilities Solutions. When I first
11	came to Canada they were my employer, I was a
12	senior project manager for Tiree. But just under
13	two years ago, I started my own company called
14	NDL Consulting, but I'm still contracted as an
15	independent contractor to Tiree, so that they still
16	have the contract with the City of Ottawa.
17	I just wanted to go, start my own
18	company so that I could build a bigger portfolio of
19	clients to take advantage of other opportunities.
20	ANTHONY IMBESI: And you had mentioned
21	you started, I believe, in the spring of 2012. Do
22	you recall what month that would have been?
23	LORNE GRAY: I think it was, it was
24	either March or April, it could be late March,
25	early April.

1 ANTHONY IMBESI: And do I also 2 understand you've had involvement in both Stage 1 3 and Stage 2? 4 LORNE GRAY: Yes, I continue to be the 5 contract manager for both Stage 1 and Stage 2; 6 there's still remnants of Stage 1 that aren't 7 closed out yet. So I still have a kind of 8 oversight role in those, and I do help out from 9 time to time on the maintenance contract. 10 But largely, my role is focused on the 11 Stage 2 contracts, the east-west expansions for the 12 Confederation Line, and the Trillium Line 13 extension. 14 ANTHONY IMBESI: Before we move on from 15 that point, what would be the few items then that 16 you're still involved in Stage 1? 17 LORNE GRAY: It's less and less. No. 18 to begin with, when the maintenance period started, 19 OC Transpo, the operator, weren't as familiar with 20 the Project Agreement as I was. So I kind of, you 21 know, held their hand to begin with at the start of 22 the maintenance period. And I helped them with any 23 disagreements they were having with RTG and RTM, 24 the maintenance contractor over interpretation of 25 the performance, maintenance performance metrics.

1	Of course, we also had the some
2	issues with performance that required us exercising
3	these rights and remedies under the Project
4	Agreement.
5	ANTHONY IMBESI: So you would have been
6	involved in that to the extent dealing with
7	failure points or anything of that nature during
8	operations, did you have involvement in that?
9	LORNE GRAY: Not direct involvement. I
10	was more like on an advisory capacity with the
11	operator. Just to help them through the terms of
12	the Project Agreement and where we could exercise
13	various rights around this.
14	ANTHONY IMBESI: Turning back to your
15	CV then. Can you give us a high level summary of
16	your background as it relates to transit and rail
17	in particular?
18	LORNE GRAY: Yes. The company I used
19	to work for, I think it was Tarmac Construction at
20	that time in the UK. It became Carillion in 1999.
21	But before then, Tarmac Construction, we wanted to
22	get into the rail industry, just to broaden our
23	portfolio of construction projects.
24	And it was at the same time as the UK
25	government decided to privatize British Rail. So

1	they, in advance of privatization, had packaged up
2	the entire British Rail organization into packages
3	that could be bought or bid for by private
4	contractors.
5	So we decided to buy a track renewal
6	company called Centrac, Central Track Renewals.
7	And we also bought into a maintenance company. So
8	when we had done that, the company kind of
9	handpicked, kind of key individuals within the
10	organization that they felt could go into this
11	brand new venture and make a success, make money.
12	So that was my introduction into
13	railway projects, so that would be back in, I think
14	1997. Yeah, 1997. And from that point, with this
15	railway company, we felt confident in bidding for
16	large, complex railway projects. So that's where I
17	helped.
18	I helped prepare bids for, and then
19	ultimately deliver major rail projects. So that
20	was my first introduction into transit. But
21	really, it was by no accident, because from a small
22	child I've been interested in railways. I'm a
23	railway enthusiast, I like the real thing and I
24	like models. So this was like a dream for me to
25	get into this part of the industry. Because it's

1	something I was very passionate about anyway. And
2	I believe I was reasonably successful in helping
3	the company achieve its objectives.
4	ANTHONY IMBESI: I'll stop sharing my
5	screen, if we can enter the CV as Exhibit No. 1.
6	CATHERINE GLEASON-MERCIER: No objections.
7	EXHIBIT NO. 1: Curriculum Vitae of
8	Lorne Gray, B.Eng. PMP.
9	ANTHONY IMBESI: Just turning to then
10	your involvement in this project.
11	As I understand it, this is a P3
12	agreement, correct.
13	LORNE GRAY: Yes.
14	ANTHONY IMBESI: And some of the
15	projects that you have listed in your CV, those
16	were under an alliance project model?
17	LORNE GRAY: Yeah.
18	ANTHONY IMBESI: So could you just
19	explain for us the key differences, in your view,
20	between the P3 delivery model and the alliance
21	delivery model?
22	LORNE GRAY: I think the biggest
23	difference really is the alliance model, by its
24	name, it's a true alliance between the owner and
25	the contractor. To the extent that it is a single
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1 team whereby if it's successful, you wouldn't know 2 who worked for which part. 3 The organizational structure is filled 4 with the best person for the job, rather than the 5 organization they represent. It was that kind of 6 arrangement. So for example, I would be like the 7 project manager, and below me, I would have a 8 management team that was made up of both my own 9 company's employees, and the owner's employees. 10 And that kind of filtered its way throughout the 11 entire organization. 12 And what an absolute treat. Those are 13 probably some of the best contracts I've ever 14 The basis is to jointly develop a worked on. 15 solution. You have the -- like the project 16 charter, if you'd like; you have the mandate. But 17 what is it that you're trying to do? 18 And from there, both parties in a 19 seamless organization, jointly develop the 20 solution. We price it, and the -- what my company 21 gets out of it is, is a fixed fee, it is a fixed 22 profit. So there's no incentive really to try and 23 screw the owner at all, it's really about trying to 24 get best value for the owner. To get the best 25 final outcome at the end of the project, and you

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1 get your fee for doing that. So you're guaranteed 2 to get a healthy profit. So it takes away some of 3 the bad behaviors, if you'd like, in construction. 4 And if it works, it really works. 5 But I think what killed it for the UK 6 is, some owners started to believe that they 7 probably weren't getting best value. And why would 8 we not just take this to the market and get a fixed 9 price lump sum? 10 Yeah, okay, you might think you're 11 going to save a few dollars that way, but 12 ultimately the final outcome, I would say 13 alliancing is the way to go. But anyway, that's 14 just my personal opinion. 15 ANTHONY IMBESI: And so if you could 16 just then take us briefly through your first 17 your first involvement in the project was in the 18 procurement phase as you've mentioned. 19 LORNE GRAY: Yeah. 20 ANTHONY IMBESI: What were your roles and responsibilities during that time? 10 22 LORNE GRAY: Well, the part of the		
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 organization I first worked with was project controls. And they were kind of like 	21	and responsibilities during that time?
²⁴ controls. And they were kind of like	22	LORNE GRAY: Well, the part of the
	23	organization I first worked with was project
25 quarterbacking the processes involved, and the bid	24	controls. And they were kind of like
	25	quarterbacking the processes involved, and the bid

1	fees. I also had the the skill and experience
2	to look at the construction management, project
3	management parts of the bids. So I was able to be
4	someone who could review those bids and provide an
5	opinion on them, so it was kind of a dual role. It
6	was partly looking at process to get us through the
7	bid phase, but also a practical role and doing bid
8	evaluation.
9	ANTHONY IMBESI: And then when that
10	transitioned into your role as the contract
11	manager, did you start that in February of 2013?
12	LORNE GRAY: Yes.
13	ANTHONY IMBESI: And that was following
14	financial close?
15	LORNE GRAY: Financial close, yeah.
16	ANTHONY IMBESI: Okay. And could you
17	just explain then what your roles and
18	responsibilities became in your role as contract
19	manager?
20	LORNE GRAY: Yeah. There was no
21	like a fixed part of my role which was looking
22	after the change control variations as I've
23	described in the Project Agreement. I was
24	responsible for all contractual correspondence,
25	making sure that when they were received, the

1	people who really needed to review those letters,
2	got those letters and we got responses.
3	I was mostly the person who did the
4	letter writing in response to those letters, but
5	sometimes people would ask me to write a letter on
6	a subject that they felt we needed to write on.
7	I also was heavily involved in the risk
8	management, schedule management, what else now?
9	Yeah, I think I've covered the base functions. But
10	where I was most used was in Project Agreement
11	interpretation, and enforcing the Project
12	Agreement. Because every day you would have small
13	or large disagreements between the owner and the
14	contractor, and I helped out a lot in trying to
15	take the heat out a lot of those things, look for
16	areas where we could compromise. Or look for areas
17	where we have to, you know, stick to our principles
18	and enforce the Project Agreement.
19	I think it was largely successful for
20	the first few years of the project, yeah.
21	ANTHONY IMBESI: In your CV that we had
22	just looked at, it references that you've developed
23	the mandate for the contract manager.
24	LORNE GRAY: Yes, that's correct.
25	ANTHONY IMBESI: And could you just

1 explain what you mean by that? 2 LORNE GRAY: Well, it seemed to me that 3 that's the -- I think, I recall that there was an 4 organization structure that was drafted. I don't 5 know who it was by, but I got a look at it and I 6 thought, they're not seeing the role of a 7 commercial manager or contract manager, and perhaps 8 they don't understand the value that that person 9 could bring. 10 So I took it upon myself to draft a 11 short memo to the project director, just to outline 12 what a contract manager, commercial manager could 13 do, what benefits it would bring. And also 14 provided some other advice on how the project 15 structure should be organized, so that we are not 16 strictly hands-off. 17 I know it's a P3 and we're one of the 18 partners, but really the contractors got all the 19 But we can't be truly hands-off, we still risk. 20 need to have people in the field with eyes and ears 21 that can help us on the contract and commercial 22 side. Because as things happen, if we're not there 23 and witnessing it, they would give us difficulties 24 if we were trying to defend claims or disputes. 25 ANTHONY IMBESI: Right. So all of the

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1	areas that you felt would be covered off by someone
2	in this role, those are along the lines of what
3	you've mentioned to us previously in terms of what
4	role you actually fulfilled on the project?
5	LORNE GRAY: Yes.
6	ANTHONY IMBESI: So once the City
7	agreed to implement that position, were you
8	involved were there any contract management
9	plans, or any other high-level plans prepared that
10	would govern the role that you'd be fulfilling?
11	LORNE GRAY: No, I don't believe there
12	was. What I did do with a colleague, Craig Killin,
13	was to start preparing the essential processes and
14	procedures that we would need for the contract
15	management and scheduling management to function
16	properly.
17	A good example of that was, how do we
18	manage change control? So it was myself and Craig
19	Killin that dreamt up the change control boards.
20	And we set about drafting terms of reference for
21	that, and how we would work it.
22	So basically we set out the process
23	for, if we want to make a change to the contract,
24	how do we go about making that change? And how is
25	it governed?

1 So that's an example of the kinds of 2 things that the contract manager does, but it's not 3 in a manual as such, it's there in the previous 4 different procedures that we created. 5 ANTHONY IMBESI: Are there any other --6 so you've mentioned change control, change 7 management. 8 Are there any other, what you see as 9 sort of the key processes and procedures that you 10 were involved in preparing or assisting with at the 11 outset? 12 LORNE GRAY: The risk management is 13 another big one, where I think we were very well 14 disciplined on Stage 1. The same as is happening 15 on Stage 2. 16 It was to be absolutely clear that the 17 owner has captured every single risk that it could 18 And it was getting the potentially face. 19 discipline for all the different departments within 20 the organization to create the new risks, and not 21 to be scared of coming up with something dumb. 22 It was a completely safe space where 23 you can create anything that you think is going to 24 be a risk, and there will be a review board that 25 would look at all these new risks that were coming

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1	in. And we would decide, is this is a real risk?
2	Is this something we should be recording in our
3	risk log? Is it something that needs a response
4	plan? Should we put money aside to, you know, if
5	that risk is realized. So that was another big
6	one.
7	I think of all the procedures that we
8	created, I think the Change Control Board and the
9	Risk Review Board were probably the two biggest
10	that we did.
11	ANTHONY IMBESI: So you've mentioned, I
12	believe you called it a "risk log"; I think people
13	also refer to it as a "risk register".
14	Is that the location where you would
15	record all the material risks that the City has
16	identified as being
17	LORNE GRAY: That is correct.
18	ANTHONY IMBESI: And so once risks are
19	recorded in the risk log or the risk register, are
20	there plans that are developed in order to deal
21	with any of the risks as they arise?
22	What is the purpose from the City's
23	perspective of the risk log?
24	LORNE GRAY: Yes, there are. I mean,
25	the department that some organizations deal with
1	

1	is, what do you do once you've got that risk
2	identified? You know, you've done the hard work in
3	identifying the risk, and you've given a
4	probability, you've got some money against it, but
5	how are you managing it? What are you doing to
6	make sure that that risk is either mitigated or is
7	avoided? And that's the plan. But the individuals
8	who raised the risks, or it could be that the risk
9	has been given to another owner of that risk, it
10	was their responsibility to present to the Risk
11	Review Board, their plan for how they were going to
12	mitigate or eliminate that risk.
13	ANTHONY IMBESI: And so is that done at
14	the outset then for every risk that's identified
15	and added to the risk log?
16	LORNE GRAY: Yes, yes. And we were
17	hugely disciplined in doing that. It takes time,
18	you know, I'm sure people don't treat it as their
19	number one priority, but you've got to keep at it.
20	It's a great discipline to have.
21	ANTHONY IMBESI: Since we're talking
22	about risk then, I may as well ask you about the
23	geotechnical risk and the sinkhole in particular.
24	LORNE GRAY: Yup.
25	ANTHONY IMBESI: So in terms of

1 geotechnical risk then, what was set out in the 2 risk log in respect of any geotechnical risk? 3 Well, the City, they had LORNE GRAY: 4 the risk up until the point during the bid phase 5 where we all vote to transfer the risk over to the 6 proponents. And it was either the full risk or it 7 was partial risk. 8 The successful proponent RTG, they 9 decided to assume the full risk for the 10 geotechnical. And it was the GBR, the Geotechnical 11 Baseline Report, and I think it might have been 12 Schedule 40 to the Project Agreement originally. 13 As soon as RTG, who were successful, 14 confirmed that they were going to take the 15 additional -- this risk on, that schedule was 16 removed from the Project Agreement. 17 So, therefore, all geotechnical risk 18 was transferred over to the proponents and the City 19 didn't have any risk. For pure geotechnical. 20 There was still a risk for other environmental 21 conditions like, you know, contamination and 22 finding bones in the ground and things like that. 23 But for geotechnical, everything was transferred 24 over to RTG. 25 So in terms of ANTHONY IMBESI:

1 geotechnical risk specifically then, that's 2 something that was recognized and recorded by the 3 City early on as you've indicated. Were any steps taken at the outset to 4 5 try to quantify that risk? Or how was that 6 approached form the City's end? 7 LORNE GRAY: I wasn't really involved 8 in that, if there was indeed any quantification 9 done. And I don't know how the City ultimately 10 measured the value of the RTG's price to cover off 11 the risk. I wasn't involved in that at all. So I 12 couldn't really say if the City did any kind of 13 real number crunching on the value of that risk 14 transfer. 15 ANTHONY IMBESI: And then once, as you 16 say, the geotechnical risk was transferred over to 17 RTG, is there still any monitoring or oversight 18 that the City does in respect of that risk, once 19 the risk has been transferred? 20 LORNE GRAY: Yeah, I wouldn't just now 21 limit it to, you know, the oversight on managing a 22 geotechnical risk. I think there was oversight on 23 management of the entire project. 24 So it's not -- we didn't specifically 25 put people in the field just to monitor what was

1 happening. And, for example, the tunnel 2 construction, we had monitoring on almost every 3 aspect of the project delivery. 4 ANTHONY IMBESI: When you speak about 5 monitoring the project delivery then, can you give 6 us a high-level explanation of the City's approach 7 to monitoring of the construction for the project? 8 LORNE GRAY: Yeah. I think you can 9 probably summarize it as just having eyes and ears 10 on the ground and taking notes on what they see and 11 what they hear. 12 And they do -- and it's human nature, 13 they will engage with the workforce. And there is 14 always that risk that people will go native as 15 well, and they get too close to the contractor. 16 But I think generally people from the City were in 17 the field, feeling that they could help. You know, and it became a conduit, if you'd like, from the 18 19 If the contractor was having contractor. 20 difficulties, they would use our person in the 21 field as a conduit back to the owner to try and 22 resolve small issues. But generally, the function was to be 23

there, take notes of what they see, and what they
hear, and if there's anything that is, you know,

1	raising a concern, escalate it and we'll see if we
2	can resolve these things before they become big
3	issues.
4	ANTHONY IMBESI: Was that approach
5	consistent throughout the construction for Phase 1?
6	LORNE GRAY: Absolutely, yeah, yeah.
7	Always from day one, we were out there. And I
8	you know, it was different for RTG and the
9	constructor, they didn't think that the owner on a
10	P3 would have that much visibility out in the
11	field. But to be honest, you could do it no other
12	way. We are still the stewards of the contract,
13	we're spending the taxpayer's money, we need to be
14	there. You know, we need to be our finger needs
15	to be on the pulse of exactly everything that's
16	happening out in the field.
17	ANTHONY IMBESI: And so you've spoken
18	that the field monitoring if I can call it
19	that that the City was doing. In terms of the
20	review of information or documentation on a regular
21	basis, was the City receiving anything from RTG
22	that it was reviewing to monitor the overall
23	construction of the project? Was there another
24	component in addition to the field monitoring?
25	LORNE GRAY: Yes, there was. I mean,

1 you're probably aware of the monthly watch report, 2 which was like the overall big document that the 3 City used to measure RTG's performance in design 4 and construction. 5 But there was also the, like working 6 groups that we created, and they were intended to 7 be collaborative between the City and RTG and the 8 constructor. And one in particular was the 9 designing construction working group, where they 10 would use that forum to discuss any issues, any 11 concerns that were hampering progress. And 12 obviously minutes would be produced, actions would 13 be taken, and then all of a sudden you've drawn 14 this little industry of documents going back and 15 forth, purely just to try and keep design and 16 construction on the straight and level, and, you 17 know, resolve issues. 18 ANTHONY IMBESI: So was there any

19 formalized process on the City's side of things for 20 tracking the project, you know, in terms of using 21 key performance indicators or different indexes to 22 track various different components of the 23 construction, was there anything in that nature? 24 LORNE GRAY: Yeah. I mentioned Craig 25 Killin. Craig Killin was -- he was the head of

1 project controls, and he would be in the seat of 2 principally the schedule update. And he would, 3 with that schedule update, using the native files, 4 he would be able to create performance metrics that 5 were separate from what was being delivered in the 6 watch report. 7 And it was, okay, RTG is saying this in 8 the watch report. We have the native files, we've 9 created other metrics that may present an opposing 10 position on where things were going in the field. 11 So it would give us some information to 12 challenge RTG or the constructor where we thought 13 performance was lacking. 14 ANTHONY IMBESI: Did you feel, or did 15 the City feel that they were able to do that 16 throughout the project? Did they feel they had the 17 sufficient information to undertake the analysis as 18 you've just mentioned? 19 LORNE GRAY: Yes 20 ANTHONY IMBESI: And in terms of 21 quality oversight, did the City exercise any 22 functions with respect to quality oversight in 23 particular, during the project? 24 Yes, we did. We conducted LORNE GRAY: 25 audits. I think we were -- we approached the

1 audits in a very, like, collaborative way. Ιt 2 wasn't a case of, we're going to audit you on this, 3 and you need to be right here. 4 It was more of a joint thing, where the 5 City and RTG agreed to a -- I think it might have 6 been an annual audit schedule, or it could have 7 been more frequent than that. Anyway, let's call it an annual audit schedule. 8 9 So it was done through almost like a 10 little working group on quality. Where the focus 11 would be on critical aspects of the project, 12 depending on where we were in the project 13 lifecycle. 14 You know, it could be that we are 15 particularly interested in vehicles, for example, 16 where the vehicle production was advancing quite 17 quickly. Or it could be concrete quality, where 18 the station construction was commencing. So we 19 would audit before they got too far down the line, 20 we'd go and audit their processes for ensuring that 21 the concrete was the right strength, that it was 22 the right slump. The rebar was in accordance with 23 the drawings; the formwork was stable, it was clean 24 and all of that. 25 So that's something that we would do,

1 which we thought would be helpful, so that you are 2 kind of preventing any ongoing issues. So 3 strategic in a way, the auditing. 4 And then also, NCRs, which you're 5 probably aware of, "Nonconformance Reports". 6 We were -- let me get my words right. 7 The quality was self-policing. So that's one of 8 the things about P3s, and also alliancing as well. 9 Where you put the responsibility on quality on the 10 constructor. And they should be mature enough to 11 have their own quality procedures, quality 12 management class, ISO 9001 Accreditation, all that. 13 And these should be mature enough to 14 identify where they've done something wrong 15 themselves, and they tell us about it, say, look, 16 we did this wrong. But guess what? This is what 17 we're doing to fix it. 18 So that I think worked okay. But there 19 were instances where it was us that identified the 20 problems, which I don't really like. I felt that 21 it shouldn't be us to identify the problems, they 22 should be picking that up themselves. 23 I think it was probably more the 24 exception than the rule, that we were raising all 25 the nonconformance reports. I think a lot of them

1 came from the contractor side, which was okay. 2 ANTHONY IMBESI: Was there anything 3 that stood out to you as being more so out of the 4 ordinary than you would expect? 5 LORNE GRAY: In terms of quality? 6 Well, in terms of ANTHONY IMBESI: 7 issues that you were raising that you would have 8 expected the contractor to be dealing with on their 9 own. 10 LORNE GRAY: Well, I think the quality 11 side is probably the best example of that, where 12 they are trusted to be self-policing, self-certifying. 13 And I would say they were largely 14 compliant in that regard. There was just the odd 15 times where we felt that there was a problem, that 16 they should have been able to identify themselves 17 without us telling them. 18 And then you start to think, you know, 19 are they deliberately hiding things? And to be 20 honest, I don't believe that for one second. Т 21 think everybody in that organization still had 22 pride in their work. So I don't think it was an 23 issue but -- yeah, so I didn't have many occasions 24 where I would be concerned. But for every NCR that 25 the City raises, that's something that they missed.

1	And I would like to think that they learned from
2	that, rather than complained about the City issuing
3	NCRs.
4	ANTHONY IMBESI: Is that something that
5	occurred, that they were complaining about the City
6	issuing NCRs?
7	LORNE GRAY: They didn't agree with
8	every single NCR that we raised. I recall, I think
9	one dispute on an NCR. I can't remember what it
10	was about now, it's such a long time ago. But
11	those again were exceptions rather than the rules.
12	I mean, when you've got two people who
13	are both quality managers, one is a quality manager
14	for the constructor, and one is a quality manager
15	for the owner, you know, there will be tensions,
16	there will be clashes, there will be disagreements.
17	And that was kind of normal, you know.
18	So not everything that the City raises in NCR was
19	automatically accepted by the quality manager on
20	the constructor side, so there would be, you know,
21	debates. But I think issues like that got resolved
22	very, very quickly.
23	I don't think I could have a single
24	real complaint about the overall quality of the
25	Stage 1 LRT, I think the quality is exceptional.
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1 ANTHONY IMBESI: In terms of the audits 2 that you had mentioned. Who was performing those 3 Was it someone from the City, or a team audits? 4 from the City, or was it a third party? 5 LORNE GRAY: It was from the City. It 6 was mostly run by the respective quality managers. 7 But depending on the subject of the audit, we would 8 draft in various subject matter experts who were 9 part of the City's team. 10 We had Capital Transit Partners who 11 were like our technical advisors, or the owner's 12 engineer, if you want to use that term. And they 13 had various experts in certain disciplines within 14 the project. So they would be drafted in to help 15 out in some of those audits. And RTG and the 16 constructor did the same thing, they would bring in 17 their experts depending on what they were auditing. 18 ANTHONY IMBESI: Sorry go ahead. 19 No, I was just going to LORNE GRAY: 20 say, I don't recall us ever using a third party to 21 do a routine audit. 22 ANTHONY IMBESI: Okay. In terms of 23 Capital Transit Partners, what was their role? Ι 24 know you had just mentioned a function that they 25 did perform, but what was their role during the

1 construction of Stage 1? 2 Well, they were largely LORNE GRAY: 3 the owner's engineer, the technical advisors. 4 So one of the large parts of the 5 owner's obligations was to review the design. So 6 that was a big part of Capital Transit Partners 7 involvement. 8 ANTHONY IMBESI: And so who would they 9 report to then, in what format? If they're dealing 10 with design, would they be dealing with the City's 11 engineers? 12 LORNE GRAY: The Yes, yes. 13 organization was split into different disciplines. 14 There will be a discipline for, like, civil 15 engineering, and that would be bridges, and track, 16 and drainage. 17 You would have a department that looked 18 after vehicles; you'd have one that looked after 19 the overhead catenary system; you would have one 20 that looked after the signalling system, like the 21 CBTC. So it was split into kind of manageable 22 chunks, if you'd like, you know, of the various 23 engineering disciplines. And we would have like a 24 City lead on each of those, and under that City 25 lead would be the SMEs, or subject matter experts

1 from Capital Transit Partners. 2 ANTHONY IMBESI: Were they fairly 3 involved throughout the entire duration of Stage 1? 4 LORNE GRAY: Yes, yes. And they still 5 They were involved well in advance of the bid are. 6 They were doing the -- what would you call phase. 7 it? The concept design. 8 When you go to bid, you need something 9 for the bidders to bid on. And that's generally 10 like the owner's idea of what the system would look 11 So that would compliment the Project like. 12 Agreement and the PSOS within the Project 13 Agreement. They would have what the owner 14 visualized as what the system would look like. For 15 the likes of the station, and the alignment, the --16 yeah, so that was Capital Transit Partners. They 17 did a lot of that work to prepare the concept 18 And I think they were also involved and design. 19 doing the ground investigations, and quarterbacking 20 the compilation of all these various environmental 21 reports, and such like, that were part of the 22 background information that went with the Project 23 Agreement at bid phase. 24 I'll ask you more ANTHONY IMBESI: 25 about the concept design in a few moments. But in

1	terms of other consultants or advisors that the
2	City had during construction, did Deloitte and
3	Boxfish have an active role during the construction
4	phase of the project?
5	LORNE GRAY: Not really during the
6	construction phase, no. I think they were more
7	involved I mean, especially Deloitte. I think
8	Deloitte was helping Infrastructure Ontario a lot,
9	and the City, for the bid evaluation on the finance
10	side. To be honest, I didn't really have any
11	involvement with Deloitte during that time.
12	Boxfish, I think Boxfish were around.
13	They did help during the bid phase, I think they
14	may have been advising at the General Manager, City
15	Manager level. Not really a lot of direct, you
16	know they didn't really have they weren't in
17	the project organization chart, in other words.
18	You would see Boxfish around on the
19	day-to-day and playing a part on the team. They
20	were just, you know, floating around at a high
21	level, providing high-level advice.
22	But that was more to do, in the
23	beginning or during the bid. Rarely did we see
24	Deloitte or Boxfish during construction until
25	perhaps towards the end, or in or about 2018 when
1 we received all the Notices of Dispute. We kind of 2 qot together a small team to look at the strategy 3 for how to respond to all those disputes. 4 So Boxfish helped out with that, and to 5 an extent, I think Deloitte did as well. 6 In terms of your role ANTHONY IMBESI: 7 with the City, who did you report to? 8 LORNE GRAY: Right. I had a couple of 9 bosses, actually. Dan was my first boss there, and 10 I'm going to shoot myself now, I'm trying to 11 remember Dan's second name. That's terrible. 12 Anyway, if it comes back to me, I'll let you know. 13 And then after Dan left, it was Claudio 14 Colaiacovo. 15 Dan Farrell, there you go. Got it. 16 ANTHONY IMBESI: Dan, what? Sorry. 17 LORNE GRAY: Farrell. 18 ANTHONY IMBESI: In terms of governance 19 and oversight of the project generally, so I'm 20 talking about FEDCO. What was the level of 21 oversight and direction of FEDCO over your role in 22 particular? 23 LORNE GRAY: I didn't really have any 24 involvement with FEDCO at all. My only kind of 25 exposure to FEDCO would be to review some of the

1 slide decks that we would be preparing to present 2 to FEDCO. 3 In my role, I don't believe I had any 4 influence from FEDCO. Unless the direction I was 5 getting from the project director or Claudio was 6 coming through FEDCO. 7 ANTHONY IMBESI: What about the 8 Executive Steering Committee? 9 LORNE GRAY: I would sav similar. Т 10 never attended an Executive Steering Committee 11 meeting. 12 My involvement would be, again, looking 13 at what we were presenting to the Executive 14 Steering Committee, and what decisions we needed 15 them to make. But there was no kind of direct 16 relationship between me and the Executive Steering 17 Committee. 18 So turning back to --ANTHONY IMBESI: 19 you had talked about the initial concept design 20 that was prepared by Capital Transit Partners. 21 Did the City initially plan to design 22 the system before a transition to a P3 approach? 23 LORNE GRAY: I wasn't involved in any 24 of that. I mean, I do have some knowledge that 25 the -- it was intended to be a P3 for, I don't

1 know, maybe 12 months before I even joined the 2 project. And I'm not sure how much of the design 3 would have been done by that time. 4 So I don't know if the City ever 5 intended to prepare a design and do it, just as a 6 design-build or design-bid-build, I don't think 7 they were considering any other option seriously 8 than using the P3 model. 9 ANTHONY IMBESI: And so when you talk 10 about the concept design, what is it that you're 11 referring to? I mean, what was prepared, what 12 comprises a concept design in your view? 13 LORNE GRAY: The concept design would 14 show the proposed alignment from end to end, so 15 Tunney's Pasture to Blair, and what route it's 16 going to follow, and roughly where the tunnel would 17 be. 18 I do recall that there was a section 19 that came out of the tunnel and went underneath the 20 War Memorial, and where we wanted a station under 21 the Rideau -- you know, the Rideau Mall. We called 22 it the "innovation zone". It was like a big patch 23 that said, "you can design it somewhere in between 24 here" kind of thing. So that kind of covered the 25 alignment.

1 I think there was stuff done the 2 stations which generally showed what we wanted the 3 stations to look like. Those designs weren't, you 4 know, developed any more than about 30 percent. Ι 5 think what the biggest thing was, was the 6 renderings that kind of showed what these stations 7 could look like. And I'm pretty sure they used 8 those for public, you know, getting people excited 9 about the LRT, and what it could look like, you 10 know, world class system, futuristic, blah, blah, 11 blah.

12 You know, I think that was probably as 13 far advanced as we got with station design. But 14 generally, that's what it is. It's just -- it only 15 goes to about 30 percent, which is nowhere close to 16 full development. It's just a fancy sketch, if 17 you'd like, it's just, this is roughly what we 18 And then we hand it over to the experts who want. 19 will produce a full design and following our 20 initial template on our PSOS to give us what we 21 want.

ANTHONY IMBESI: When you say "the
expert", you're referring to the concessionaire?
LORNE GRAY: Yes.
ANTHONY IMBESI: And coming at it from

1 the concept design stage, I mean, how was it that 2 the output specifications for the project were 3 developed? Were they developed during the concept 4 design phase? 5 How did it evolve from the concept 6 design through to the requirements and output 7 specifications that go into the bid documents? 8 I'm not really qualified LORNE GRAY: 9 to even comment on that. I had no involvement in 10 the creation of the PSOS at all. I mean, by the 11 time I started, we had already gone through the 12 pre-qual stage. So the PSOS in the Project 13 Agreement itself was pretty well advanced at that 14 time. 15 So, you know, I wasn't involved in the 16 PSOS. And then what process was followed to get 17 from the concept to the PSOS, indeed did the PSOS 18 become the fuller concept, which I think probably 19 logically it would. But, no, I'm not the right 20 person to ask about that. 21 ANTHONY IMBESI: Did you view any 22 components of the concept design, or the PSOS, as 23 being fairly prescriptive when you compare it with 24 your prior experience in rail? 25 I think -- I LORNE GRAY: No, no.

1	mean, what you could say was prescriptive was the
2	rail links. We liked the concepts that we did, so
3	we wanted the stations to look something like this.
4	That's about as strict as we got.
5	Other than that and we weren't
6	strict on alignment, either, you know, but there
7	was going to be limitations on where the alignment
8	could go, because we had already set about getting
9	the lands to do the work. But there was still, had
10	to move things around within the land boundary.
11	No, I don't think we were overly
12	prescriptive in the concept design.
13	ANTHONY IMBESI: So there would be
14	nothing overly prescriptive, in your view, in terms
15	of the rolling stock requirements, the signalling
16	system?
17	LORNE GRAY: Well, we definitely wanted
18	a CBTC. So some of it really is just
19	state-of-the-art, communication-based train
20	control, that was something that was like
21	nonnegotiable. I wouldn't say that would be part
22	of the concept design, that's more of a requirement
23	of the PSOS.
24	The rolling stock, the vehicles, we
25	created a PSOS for vehicles, but bearing in mind,

1	we did that before we knew what the bidders were
2	going to offer in terms of vehicles. And every
3	vehicle is slightly different between Bombardier
4	and Alstom, you know, Stadler or other train
5	manufacturers.
6	So you kind of I suppose not I
7	was going to say, "taking a bit of a chance" but
8	you're not.
9	You create a PSOS which broadly
10	describes the vehicle that you want, but on the
11	understanding that when you select the vehicle,
12	there's probably going to have to be some changes
13	to that, because you know I'll give you a good
14	example.
15	If we were to build the Alstom Citadis
16	Spirit trains using our PSOS from the very
17	beginning, it would look like an Alstom Citadis
18	train when it was finished. So you have to make
19	sure that when you selected your vehicle, and it
20	does all the things that you want it to do, then
21	you need to make sure that the Project Agreement
22	mirrors that in all respects as well. So there was
23	a number of things that we had to change in the
24	PSOS to make that work.
25	ANTHONY IMBESI: Does anything come to

1 mind in terms of the changes that you had to make? 2 Yeah, there's some LORNE GRAY: 3 examples like the Alstom Citadis Spirit is 4 100 percent low floor. For good reasons, for 5 disability, AODA compliance, we wanted low-level 6 platforms, and low-floor boarding -- level 7 boarding. 8 But if you read our PSOS, it was only 9 like low floor at the platform, but when you got into the train itself, or the body of the train, 10 11 you would go up a step. Which is like, hang on, 12 that's not really what we wanted. But that's a 13 good example of, that was the idea back when we 14 were creating the PSOS, but then when we saw the 15 Alstom Citadis Spirit vehicle, with 100 percent low 16 floor, we said, okay, that's what we want. So we 17 have to amend the Project Agreement to suit that. 18 There was other things in there as 19 well, like our PSOS required a certain type of 20 steel for the train body. Its industry name is 21 "COR-TEN steel", but we gave it its proper code in 22 the PSOS, but everybody knows it as COR-TEN steel. 23 If you've ever been to the U.S. and 24 down a highway, you see the barriers at the side, 25 or the bridges, they all look rusty. Well, they're

1	COR-TEN steel. And what it is, when those things
2	are new, they immediately form a light film of
3	rust, and that's it, they don't rust anymore.
4	For some reason we specified this for
5	our trains. It was going to give you difficulties
6	applying a paint to those, because if the steel
7	starts to up its chemical reaction with the
8	elements, you're going to have paint blistering and
9	peeling off. In fact, we did some experiments on
10	it just to see if our own suspicions were correct.
11	And indeed, it was a problem with this type of
12	steel and applying a paint to it.
13	So we allowed Alstom to use their own
14	alloys that they have used for many years, that
15	developed them themselves, and that was an easy
16	change to make.
17	I think those kind of things jump out.
18	There was small things like, because
19	they are light rail, and people were just to hop on
20	and hop off, you wouldn't expect for a person in a
21	wheelchair to come on and be tied down with straps
22	into the train. It's not a commuter train, it's
23	like you're on and you're off. And the trains were
24	going to be designed to be AODA compliant, so you
25	can get a chair on, not a problem, and there were

1 special wheelchair areas. So that was an easy 2 change to make as well. We took out all the 3 requirements for strapping down wheelchairs. 4 I'm sure there's lots of other smaller 5 examples, but in general, we allowed quite a number 6 of changes to the PSOS related to vehicles to 7 ensure that the PSOS matched the vehicle that we 8 chose. 9 ANTHONY IMBESI: Is it fair to say that 10 one of the City's requirements, or their underlying 11 motivation, I suppose, would be that they were 12 looking to obtain a proven vehicle for the system? 13 LORNE GRAY: Yeah, it would have to be 14 service proven, yeah, and I believe the Alstom 15 Citadis Spirit fits that bill. It's been used in 16 many other jurisdictions, and not so much in North 17 America, but certainly in Europe and Asia. 18 ANTHONY IMBESI: Right, that's the 19 Citadis model, right? 20 LORNE GRAY: Yes. 21 ANTHONY IMBESI: The Citadis Spirit was 22 a new model for the North American market? 23 LORNE GRAY: No, I believe the Citadis 24 Spirit had been used in other jurisdictions as well 25 before North America.

1 ANTHONY IMBESI: In terms of the 2 Citadis Spirit then being the vehicle that was 3 ultimately selected to be used in Ottawa, as I 4 understand it, there were a number of adaptations 5 that needed to be made to the existing Citadis 6 vehicle in order to meet the City's PSOS 7 requirements? LORNE GRAY: Yeah, that's a fair point. 8 9 I mean, it's just like you ordering a car, but you 10 want it customized to fit your own specific 11 requirements. So you would have a base model and 12 you can have optional extras, things that slightly 13 vary from the base model. 14 I'm probably oversimplifying that, but 15 that's basically what we did with the Alstom 16 Citadis. The base model is what we wanted but we 17 made certain adjustments and adaptions to fit with 18 our own CBTC system. 19 Not every Alstom Citadis Spirit 20 operates under a communication-based train control. 21 It may be a different control system, but it 22 required a different wiring or different console 23 or, you know, it could be any number of small 24 changes that you would have to make depending on 25 the environment and the operational conditions it

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1	was working under.
2	ANTHONY IMBESI: Did it also require a
3	new bogie system as well?
4	LORNE GRAY: New bogie system? I don't
5	recall requiring a new bogie system. I do recall
6	there had to be an adjustment to the bogies to make
7	sure that we're getting 100 percent low floor.
8	I think there might have been a problem
9	with the gearbox; the height of the gearbox was
10	making the floor be higher. But we managed to get
11	it to push the floor down as much as possible and
12	then we had a very slight ramp up from there. But
13	that's the only thing I can recall about the
14	bogies.
15	ANTHONY IMBESI: You mentioned the
16	gearbox in terms of a change that was made? That
17	was due to it being a low-floor vehicle.
18	LORNE GRAY: Correct.
19	ANTHONY IMBESI: You mentioned some
20	modifications that needed to be made to accommodate
21	the CBTC system?
22	LORNE GRAY: Yeah, well, I imagine that
23	some of the changes would be because we're using a
24	CBTC system. What those changes are would be
25	beyond my technical abilities. But, I mean, I

1 would imagine that every vehicle would have to be 2 adapted in one way or another to put it to work 3 under the signalling system it was working under. 4 ANTHONY IMBESI: Are you aware whether 5 this was the first, whether the Citadis Spirit that 6 was used in Ottawa was the first low-floor LRV to 7 be integrated with a CBTC system? 8 LORNE GRAY: Oh, I don't know the 9 answer to that question. 10 ANTHONY IMBESI: Were there any 11 modifications that needed to be made to the vehicle 12 to your knowledge to deal with North American train 13 specifications? 14 No, I'm sure there must LORNE GRAY: 15 have been, because those trains were principally 16 designed and built in Europe under what would be 17 the European normal standards. 18 I don't know if there's a huge 19 difference between there and North America. Т 20 think a lot of things are the same. But you got to 21 think that there would have been some changes that 22 would have been made to fit a North American 23 standard. 24 In some cases, we kind of applied a 25 North American standard and European standard and

1	we'd say, if there was a conflict between them, the
2	more stringent would apply. There were many
3	instances like that.
4	I couldn't really tell you the details
5	of anything that had to be changed because of
6	complying with the new standard, or a North
7	American standard.
8	ANTHONY IMBESI: So in light of some of
9	these modifications that we just spoke about, was
10	there ever any discussion within the City about
11	these adaptions, and in particular, whether this
12	vehicle would still be considered to be service
13	proven in light of the adaptions that had been
14	made?
15	LORNE GRAY: I don't know if there was
16	discussions or not. I was not aware of any
17	concerns that we were making so many adaptions to
18	our vehicle you wouldn't recognize it as the Alstom
19	Citadis Spirit that's been service proven. I don't
20	think that was a concern at all.
21	I think largely it was the same vehicle
22	that had been used in other jurisdictions
23	successfully.
24	ANTHONY IMBESI: In terms of the
25	Canadian content requirements for the train

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1 vehicles, was there any concern or discussion 2 within the City about the Canadian content 3 requirements and any potential implications on the 4 production or the assembly? 5 LORNE GRAY: Yeah, we did try to 6 persuade the province to relax the Canadian 7 requirements because everybody knew that these 8 vehicles were coming from Europe. 9 They were designed in France, they were 10 largely built in France and maybe other countries. 11 And I think we were just looking for a break, you 12 know, to help us out. 13 But the province rejected our request 14 to relax Canadian content, which, you know what, it 15 did present issues that I think you probably -- at 16 the time it was considered like oh, well, we need 17 to comply with Canadian content. How do we get 18 around that? 19 Okay, this is what we need to do. 20 Let's train the Canadians to build these trains. 21 So that takes a large chunk of the requirements for 22 Canadian content out and those are things as well 23 we would have parts manufactured in Canada from 24 Canadian suppliers.

I think at the time we knew we had to

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1	comply with the Canadian content, there wasn't
2	going to be any relaxation on that.
3	It wasn't seen as such a huge deal to
4	the schedule, but in hindsight, we would have loved
5	to have that extra time back, you know because
6	it did cause a lot of where you had to hire people
7	to build the trains, and you had to go through a
8	huge learning curve and how to build a complex
9	piece of machinery.
10	And then once it learned that, it was
11	then about doing it to a schedule. So it was quite
12	tough for Alstom and the constructor; I did have
13	some sympathy with them.
14	Again, the contract never changed in
15	that regard. It was always us who had to comply
16	with the Canadian content. I think maybe Alstom
17	the constructor thought they would try and persuade
18	the City to relax some of those requirements. And
19	we did have some sympathy, and we did try and get
20	those requirements relaxed, but it didn't work out.
21	So you know, at that time, it just
22	seemed as a blip when, you know, train fabrication
23	actually started.
24	ANTHONY IMBESI: So in terms of some of
25	those, you know, initial concerns or I suppose the

1	basis for City trying to have the province relax
2	those requirements, I mean, were those logistical
3	or scheduling concerns, or were there any quality
4	concerns associated with that?
5	LORNE GRAY: I don't think there was
6	strictly quality concerns. I think we were looking
7	to preserve the schedule more than anything else.
8	You know, we had Alstom and the constructor
9	lobbying us, and, you know, describing that, to
10	relax the Canadian content requirements would help
11	ease any schedule pressures that we'd have.
12	This was at a time where the vehicles
13	were not delayed. But it was seen as a measure
14	that we could take to build more schedule
15	insurance.
16	So it was a good idea, we thought at
17	the time and we thought maybe the province would,
18	you know, be sympathetic and help us out. But no,
19	they decided that no they wanted full compliance
20	with Canadian content so we, you know, accepted
21	that challenge and got on with it.
22	Just like I say, in hindsight when you
23	look at how the vehicle schedule went, you wish you
24	had that extra time back at the beginning where you
25	would have to train a brand new workforce to build
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1	a train.
2	But certainly there was no quality
3	concerns. They were very well managed on the
4	production side.
5	I've done some work with Alstom in a
6	previous, back in the UK and they are very strong
7	in their management. So there were no concerns.
8	And we used to visit the production plant, the MSF
9	in Ottawa, and it was always well run, well
10	managed. And, you know, no complaints.
11	ANTHONY IMBESI: And so if the City
12	would have been able to get the province to relax
13	the Canadian content requirements, is it the
14	City would have been looking to relax those in
15	order to have the assembly or have the production
16	take place in a preexisting plant; is that what
17	you're saying?
18	LORNE GRAY: Yes, the other plant in
19	New York State, which was well established, and
20	that's where the work assembling the prototype, I
21	mean, I can't say this for sure, but I believe that
22	had we not enforced the Canadian content, then
23	perhaps all assembly would have been done at the
24	plant in New York.
25	I believe that the converting the MSF

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	1	into the maintenance and storage facility, if
	2	you're not familiar with that in Ottawa
	3	converting that into a vehicle assembly plant, I
	4	don't think that was ever contemplated at the
	5	beginning. It was something that was very quickly
	6	decided upon, I think, when Canadian content was
	7	going to be enforced.
	8	ANTHONY IMBESI: When you're saying it
	9	was not contemplated at the beginning, you're
	10	talking about pre-contract award?
	11	LORNE GRAY: Correct, yes.
	12	ANTHONY IMBESI: The plant, that's the
	13	plant in Hornell, New York?
	14	LORNE GRAY: Hornell, that's correct,
	15	yeah.
	16	ANTHONY IMBESI: Are you aware of the
	17	City, alone or in conjunction with Infrastructure
	18	Ontario, rejecting RTG's first choice of vehicle
	19	supplier, CAF?
	20	LORNE GRAY: No, that's news to me. I
	21	didn't know that at all. I always thought it was
	22	Alstom from the beginning, but anyway.
	23	CHRISTINE MAINVILLE: Before you follow
	24	up on that, Anthony, I just wanted to clarify.
	25	When you said when you knew Canadian content was
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1 going to be enforced was precontract award. 2 Were the discussions with the province, 3 what timeframe would that have been about 4 potentially alleviating them? 5 LORNE GRAY: Well, we requested a 6 relaxation after contract award. We were well into 7 the contract by then, maybe a year into it. So it 8 would be pre-bid, or sorry, pre-award. 9 The contract agreement required full 10 compliance with Canadian content. There's no 11 argument that's what the contract intended. It's 12 just when we got into the contract, Alstom and the 13 constructor were lobbying us to see if there was 14 anything we could do to relax the Canadian content 15 requirements. 16 We were trying to be helpful. We asked 17 the province not expecting them to say yes, to be honest, and they said "no". At that time we just 18 19 had to adapt. 20 I say "we". It was the constructor 21 Alstom that had to adapt and figure out a way of 22 still complying with Canadian content and not 23 affecting the schedule. 24 CHRISTINE MAINVILLE: Who at the 25 province would those discussions have been with?

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1	LORNE GRAY: I don't know. I don't
2	know the answer to that question. I wasn't
3	involved.
4	CHRISTINE MAINVILLE: Okay. Thank you.
5	Sorry, Anthony, you can continue.
6	ANTHONY IMBESI: Thank you.
7	So just as you indicated, so you have
8	no knowledge as to any other vehicle suppliers that
9	were put forward, the reasons that the City
10	ultimately decided not to go with any other
11	supplier?
12	LORNE GRAY: No I'm not aware of any
13	other vehicle suppliers. One other bidder was
14	proposing Bombardier; I'm pretty sure of that. And
15	there was the Alstom Citadis Spirit from RTG.
16	ANTHONY IMBESI: And in terms of the
17	signalling system, was Thales the City's preferred
18	choice for signalling system?
19	LORNE GRAY: It was RTG's preferred
20	choice for it was RTG that chose Thales to do
21	the CBTC.
22	ANTHONY IMBESI: The City didn't have
23	any preference in terms of what supplier it was
24	looking for for the signalling system?
25	LORNE GRAY: No, the PSOS did not say

1	"Thou shalt provide the Thales CBTC system". It
2	was just, we want the CBTC system. I'm sure there
3	was other suppliers that could provide it, and RTG,
4	I could say, partnered with Thales to do that work.
5	ANTHONY IMBESI: You believe there are
6	other suppliers that are able to supply a
7	signalling system based on the PSOS that the City
8	issued?
9	LORNE GRAY: Yeah. I would say so,
10	yeah.
11	ANTHONY IMBESI: In terms of the
12	rolling stock, we had spoken about Hornell and
13	you'd mentioned the prototype vehicles, so I'm
14	talking about LRVs 1 and 2.
15	Was the City aware of the change in the
16	location of the manufacturing and assembly of those
17	first two LRVs from Hornell to the MSF?
18	LORNE GRAY: Yes, yes. We were aware
19	of Alstom's plans at all times. To be honest, I
20	think I might be wrong here, my memory might be
21	failing me but I thought the prototype was going
22	to be built in France. Part of it may have been
23	assembled in France and it was shipped across to
24	Hornell and then assembled in New York.
25	But, yeah, we always knew that at least

1 the first two vehicles were going to be assembled 2 in Hornell. I believe there was some test track 3 issues as well, where they didn't really know they 4 were going to test those vehicles. 5 At one point they thought they were 6 going out to Colorado, I think there may have been 7 a problem with the size of the cage, and the trains 8 wouldn't fit. 9 But, yeah, we always knew that the 10 vehicles 1 and 2 would be in Hornell. And when the 11 Canadian content was enforced, the assembly for the 12 remaining vehicles was going to be the MSF in 13 Ottawa. 14 ANTHONY IMBESI: Did you understand 15 then that the first two vehicles were actually 16 assembled in Hornell, New York? 17 LORNE GRAY: Yeah. 18 So you wouldn't have ANTHONY IMBESI: 19 had any knowledge of the transfer then of the 20 manufacturing of those to Ottawa? It was the 21 vehicles that would have followed those first two 22 prototypes is your understanding? 23 LORNE GRAY: Yeah, that's my 24 understanding, yeah. 25 And in terms of the ANTHONY IMBESI:

1 design and some changes that were made to the 2 rolling stock, was the City ever late in making any 3 design selections in respect of the rolling stock? 4 LORNE GRAY: Just let me think. Well, 5 I could make a reference to Alstom's claim or their 6 dispute with the City, where they claimed that the 7 City was late in signing off the design book, I 8 think it's referred to, the design book. 9 Which largely covers vehicle aesthetics 10 and fabric for seats, seat colours, livery colours, 11 things like that, which really had no direct link 12 to production. They were just purely aesthetics. 13 So if we were going to be accused of being late on 14 anything, that would be it. 15 But at that time it wasn't seen as a 16 critical delay. We had some problems getting 17 various stakeholders within the City to review and 18 then make up their minds on what colour schemes 19 they wanted, such like that while we were doing 20 that nobody was aware that this could be a 21 potential delay. 22 Other than that, no, I don't believe 23 the City was the cause of any delays to making any 24 decisions on the design of the vehicles. 25 ANTHONY IMBESI: I see. So what you're

1 saying then is, you know, if it was delayed, any 2 delays to decisions made to finalize the design 3 book didn't have any implications in terms of the 4 LRV production and assembly? 5 LORNE GRAY: It did not. That's how we б defended that claim, and we maintain our position. 7 We do not believe -- and, in fact, the constructor 8 agreed with us, that this was not a claim that had 9 anv merit. 10 It did not prevent any production of 11 the trains, and it was 2014 when we were first made 12 aware of this potential claim. And I think at that 13 time, asked for a \$35 million price tag on it. 14 But we were assured by the constructor 15 RTG that that claim would be fully mitigated and 16 the City would not be -- at that time they were 17 taking it away from the City and we would not be 18 liable for that claim. In fact, we shook hands on 19 I remember I was in the meeting when it it. 20 happened; they told us not to worry. That claim is 21 going away. 22 Who told you that? ANTHONY IMBESI: 23 There was -- am I allowed LORNE GRAY: 24 to name names, Jesse and Catherine, I'm okay? 25 Paul Tetreault, who was the chief

1	financial officer of the OLRT Constructor. He was
2	in a meeting with me, I think Antonio Estrada, was
3	there, I think Nancy Schepers, who was like acting
4	director for the City at the time was in the room.
5	And we were talking about one of the
6	milestone payments for I think it was milestone
7	two. And we were helping them get that milestone
8	and Paul was like, by the way, that claim from
9	Alstom is gone, consider it gone.
10	And I don't think we quite shook hands
11	but we, in that room, understood that the City
12	would no longer have to defend that claim. It
13	would be taken away by the constructor and settled.
14	ANTHONY IMBESI: I'm sorry.
15	LORNE GRAY: And we left it at that.
16	It wasn't until four years later that that same
17	claim resurrected itself as a dispute.
18	ANTHONY IMBESI: Right. And just so I
19	understand then. Was it your understanding that
20	any late decision making to finalize the design
21	book didn't have any implications in terms of
22	schedule, or that any implications that it did
23	have, had or would be mitigated?
24	LORNE GRAY: If it had any effect I
25	believe it would be mitigated quite easily. These
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1	were nontechnical decisions that were being made.
2	It didn't affect the design of the structure of the
3	train or any of the components that went with it.
4	We're talking about generally
5	aesthetics. What the train would look like when
6	it's built and it's finished off, you know. I
7	think Alstom tried to make that connection, and I
8	don't think they were successful. And that
9	particular dispute was before the independent
10	certifier, who agreed with the City.
11	ANTHONY IMBESI: Was the City aware of
12	the timelines that were in Alstom's subcontract
13	with OLRT-C in terms of various design decisions
14	that needed to be made?
15	LORNE GRAY: No, no. In fact the
16	design book is not even in the Project Agreement.
17	There is no reference to design book anywhere in
18	the Project Agreement, and I don't know if anybody
19	could actually pinpoint an item in RTG's schedule
20	that said, "Design Book Approvals". You just can't
21	find it.
22	It's just something that gets done for
23	vehicles where the constructor and the owner need
24	to agree on what the trains look like in terms of
25	colour schemes and that.

1	So Alstom called it the design book,
2	and we just went along with that. The owner has to
3	make some decisions on what colour they wanted and
4	that was one of them.
5	It was not seen as a big deal until
6	Alstom tried to make a claim of it. I'm sure they
7	were using that to cover up challenges they would
8	have in the schedule themselves.
9	ANTHONY IMBESI: What about the
10	selection of the radio supplier, P25? Did you feel
11	that the City was delayed in selecting the radio
12	supplier that was ultimately used?
13	LORNE GRAY: We were late on appointing
14	the supplier it was always going to be Bell that
15	were doing the P25 radios. But the specific radio
16	that would be installed within the trains took
17	longer than expected to agree on. I don't know the
18	technical details behind the challenges to agree on
19	what the, like a cross-section of that radio would
20	look like and what size it was.
21	And to ensure that the train
22	fabrication was not really going to be delayed, we
23	gave the constructor a size of a hole to leave in
24	the console. So you can go ahead and design your
25	console, just leave a hole of this size.

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1	And then the P25 radios can be
2	retrofitted, if you'd like. Rather than fitting
3	them as you go, we were leaving the hole for it to
4	be fitted later, when we knew the exact size of the
5	radio, and what the various connections were,
6	electrical connections and data connections and
7	such like.
8	ANTHONY IMBESI: And so those could be
9	retrofitted
10	LORNE GRAY: Yeah.
11	ANTHONY IMBESI: down the line once
12	the decision was made?
13	LORNE GRAY: Yes.
14	ANTHONY IMBESI: Are you aware of
15	whether a later retrofit with respect to the radio
16	itself led to any issues or delays in the
17	production
18	LORNE GRAY: No.
19	ANTHONY IMBESI: of the LRVs?
20	LORNE GRAY: No, no. It did feature in
21	part of Alstom's claim for delay and disruption.
22	But I believe they were just stubbornly holding
23	onto that, even though we had issued a variation to
24	compensate them for any additional work they would
25	have to do to retrofit those vehicles.

1 So because they weren't fitting as they 2 went they were having to come back, so it's a 3 revisit a vehicle to do something that should have 4 been done earlier, so there's a cost there. 5 And we recognized immediately that, 6 yeah, we are late in providing you with the size of 7 that radio. We will pay you for any additional 8 cost in having to go back to that train to retrofit 9 the radio. 10 So there was never any issue about 11 There was just a cost for somebody to go delavs. 12 back and revisit a piece of work that should have 13 been done earlier. 14 Right. ANTHONY IMBESI: So I mean 15 obviously there is a time component associated with 16 doing any work. But you didn't feel it was of any 17 sufficiency that it would impact the project 18 schedule. 19 No, it wasn't one of those LORNE GRAY: 20 activities that you would say would be on the 21 longest path of a vehicle assembly schedule. Τt 22 was something that could be done while other parts 23 were being done at the same time, if you'd like. 24 So it wasn't, everything stopped to 25 wait for the radio and nothing else could happen

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1	until that radio was fitted. That wasn't the case
2	here. It was something you can go back to and fit
3	but it doesn't stop the on board schedule for the
4	vehicles that way.
5	ANTHONY IMBESI: And the variation that
6	you had mentioned for the retrofit, was that
7	dealing solely with the radio retrofit, or did that
8	compass any other retrofits that needed to be done?
9	LORNE GRAY: No, it was just the radio,
10	the P25 radio. All the other retrofits were the
11	outcome of the various testing that Alstom would do
12	with their trains after they came off the
13	production line. They would run them through
14	various static and dynamic testing. In some cases,
15	things didn't work, so it would be a program of
16	retrofits.
17	ANTHONY IMBESI: So in terms of the
18	selections that needed to be made by the City for
19	the design book, the radio or really for any
20	component, do you have any knowledge as to the
21	City's process in going about those selections?
22	Who needs to be consulted? Who needs to approve
23	those types of decisions?
24	LORNE GRAY: Yeah, I'm sure we did. I
25	wasn't personally involved in any of those

1 decision-making processes. 2 But if you talk to somebody like Gareth 3 Jones or Richard Holder, they would talk you 4 through the process that they followed to get 5 stakeholder approvals of the colour scheme or the 6 seat fabric, whatever. They knew who to go to get 7 those decisions, but that's the kind of thing I 8 would not be involved in. 9 Did you have any ANTHONY IMBESI: 10 feeling as to whether that procedure, whatever it 11 was that needed to be followed, was that, you know, 12 overly burdensome and potentially contributed to 13 any delays? 14 Like I said, I don't LORNE GRAY: 15 believe -- while that decision-making process may 16 have been slower than anticipated, I don't believe 17 it had any impact on the overall schedule at all. 18 It may have been frustrating to Alstom 19 and it may have frustrated the constructor that 20 some of these decisions were not made. To be 21 honest, when you look into the lateness of these 22 decisions some of it was due to Alstom, and the 23 constructor, their influence in the process, which 24 was preventing the City making decisions. 25 So it wasn't -- there was no single

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1	party that was squeaky clean on that subject. But
2	at all times the understanding was that this was
3	not something that was going to delay overall
4	design and fabrication of the trains.
5	ANTHONY IMBESI: In terms of the Stage
6	2 work, and I'm speaking primarily about the
7	rolling stock that's being produced and assembled
8	for Stage 2, but also with respect to any component
9	of the Stage 2 work.
10	Did the commencement of the Stage 2
11	works impact the Stage 1 works in any way in terms
12	of, you know, were any resources or anything
13	diverted to the Stage 2 works from the Stage 1
14	project?
15	LORNE GRAY: No, no. The only kind of
16	link between Stage 1 and the Trillium Line
17	extension is SNC-Lavalin, but SNC-Lavalin didn't
18	steal people from Stage 1 to go to do that project
19	on the Trillium Line.
20	The Confederation Line expansion is
21	like a brand new team from Kiewit, Vinci, Eurovia.
22	ANTHONY IMBESI: Is Alstom not involved
23	in Stage 2 as well in producing the LRV?
24	LORNE GRAY: Well, that's a step
25	well, it still comes under the Stage 1 Project
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1	Agreement. The trains for Stage 2 was done as a
2	new schedule to the original Project Agreement
3	Schedule 44, yeah.
4	And the reason we did it was to try and
5	get a good deal out of Alstom because it had
6	already gone through the pain of assembly in
7	Ottawa, the plant was already fully developed and
8	working well and there was some opportunity for the
9	City there to get a significant discount on any
10	further trains.
11	We could have went to other suppliers.
12	I don't know to what extent we took those options
13	seriously. But I think the opportunity to get
14	Alstom and their discount was too good to miss.
15	ANTHONY IMBESI: You didn't perceive
16	any reduction in Alstom's performance on Stage 1 in
17	producing those additional vehicles that you had
18	mentioned that the Project Agreement was amended to
19	incorporate?
20	LORNE GRAY: I would say that the deal
21	was done on the Stage 2 vehicles before we really
22	hit the kind of major scheduling issues with the
23	Stage 1 vehicles.
24	So we had already made the decision to
25	expand the fleet of the Alstom Citadis Spirit

1 vehicles before we got into the real delays that 2 ultimately caused a delay to revenue service on 3 Stage 1. 4 ANTHONY IMBESI: And in terms of the 5 interfacing front, I'm talking primarily between 6 the interface between the vehicles and the 7 signalling system. 8 Is there any planning that goes on the 9 City side of things, or does the City have any 10 discussions with respect to systems integration? 11 Or is that left entirely to RTG? 12 LORNE GRAY: It's left to RTG and the 13 constructor; they're the experts. We do have our 14 own experts through the Capital Transit Partners, 15 our technical advisors, who can provide oversight 16 of that work. Really, the experts were within 17 Alstom and Thales and others working for the 18 constructor. 19 ANTHONY IMBESI: What oversight would 20 Capital Transit Partners have exercised on that 21 component? 22 LORNE GRAY: There would be working 23 groups where the parties would work together on any 24 potential issues. There would be presence on site 25 when necessary. There would be presence when

1 testing was being performed. 2 And, again, the City person would be 3 used as a conduit as well, where, you know, Alstom 4 and Thales or the constructor were looking for the 5 City's help for something, you know. 6 ANTHONY IMBESI: And over the course of 7 the project, did either the City or Capital Transit 8 Partners perceive any issues with the progression 9 of the interfacing over the course of the project? 10 The integration is LORNE GRAY: 11 probably the largest risk that the project would 12 So the concerns would be on that from have. 13 practically day one. It was always going to be a 14 tough challenge to integrate a very, very complex 15 system with a vehicle and a CBTC system. 16 So I don't think the City 17 underestimated the challenge they were going to be 18 facing to get this thing to work. And I'm pretty 19 sure RTG didn't underestimate that either. 20 So, yeah, we put a lot of focus into 21 the -- of the project to make sure that it was 22 getting done properly and it was meeting the PSOS 23 requirements. 24 ANTHONY IMBESI: I'm just trying to 25 understand how the City exercised that. Would that
1	have been primarily through the working groups?
2	LORNE GRAY: Yeah. And if need be,
3	issues that would be, were not getting resolved
4	could be escalated out of the working group, into,
5	say, the works committee.
6	You know, sometimes I got involved in
7	any disagreements we would have. I'd try and get
8	those resolved without entering into to any formal
9	disagreement letters.
10	We always did our best to try and
11	ensure that, you know, disagreements were quickly
12	resolved and didn't impact the schedule.
13	ANTHONY IMBESI: Okay. Did anything
14	critical stand out to you at any point in the
15	project in terms of issues that arose on the
16	integration or interfacing aspect?
17	LORNE GRAY: No, not that I was aware
18	of. I mean it's not something that I would have
19	been tracking very, very closely. I really only
20	get involved, you know, when things are going wrong
21	and I need to get involved in enforcing the Project
22	Agreement or the PSOS. But no, I didn't really
23	have any kind of direct or day-to-day interest in
24	the integration piece.
25	And to be frank, I don't know if there

1 was a lot of real problems with the systems 2 integration. 3 ANTHONY IMBESI: So there were no real 4 problems then that certainly you observed at your 5 level? 6 LORNE GRAY: No. 7 ANTHONY IMBESI: Okay. We've gone 8 about halfway through our time. Perhaps we can 9 take a short break now and come back, take 10 15 minutes if that works for you. 11 LORNE GRAY: Yup. 12 ANTHONY IMBESI: Mr. Gray, and so if we 13 can come back at 12 minutes to 4, we can get going 14 and get this done quickly. 15 LORNE GRAY: Okay. 16 -- RECESS TAKEN AT 3:33 --17 -- UPON RESUMING AT 3:47 --18 Mr. Gray, I'd like ANTHONY IMBESI: 19 just to speak to you now about the City's dealings 20 with RTG. 21 So just generally, could you just 22 explain for me, from the outset of the project, how 23 did the City approach the P3 in terms of how it was 24 going to deal with RTG? 25 I don't know if the City LORNE GRAY:

1 actually approached it much differently from how 2 they would approach any other design-build project. 3 And to be honest, that's exactly what I 4 would have expected. I mean, P3, you know, you do 5 transfer a lot of risk over to the proponents. You know, they -- what I used to say was, we're paying 6 7 \$175 million cost of finance to make all of our 8 problems qo away. 9 And you get the influence from the 10 lenders, you get the oversight from the lenders 11 that should take away most of your problems. 12 But, as I've referenced before, we're 13 still the stewards of the project. There is an 14 expectation, I believe, from the residents of 15 Ottawa for the City to be in control. And be aware 16 of what's happening. And be able to answer 17 difficult questions on what's happening. 18 So I believe we approached it in the 19 right way, to provide proper oversight in all 20 aspects of the project. I think we set ourselves 21 up to do it in that way from the beginning. 22 I know that RTG, maybe with their 23 experience on other P3 projects, may have had the impression that the City was, you know, maybe 24 25 stepping beyond what you would -- a normal owner

1 would do in such a contractual relationship. 2 But I think they understood, again, 3 that the City needed to do it this way because they 4 would still be held accountable for the performance 5 of the project from the public, the taxpayers. 6 ANTHONY IMBESI: In terms of the 7 potentially the perceived overstepping of the role, 8 was that communicated to the City by RTG? 9 LORNE GRAY: Not in any formal way, I 10 I don't know of any formal don't believe. 11 There might have been the odd word complaints. 12 said at the works committee, or privately between 13 individuals. No, there was nothing formal about 14 it. 15 To be honest, I don't believe it became 16 an issue, an ongoing issue. It was what it was. 17 We provided people in every part of the 18 organization, almost like man-marking, as we used 19 to call it in the UK, but they accepted that. 20 I'm pretty sure they found it useful as 21 well, especially as I referenced before about 22 having our people in the field, they could be used 23 as conduits as well to get, you know, help from the 24 owner's organization, rather than them being out on 25 their own and not seeing the owner anywhere.

1 I think it was more of a help than a 2 hindrance to the constructor. 3 ANTHONY IMBESI: Did the City's 4 relationship with RTG change at all over the course 5 of the project? 6 It did, to an extent. LORNE GRAY: Ι 7 think the change came around perhaps in 2017, where 8 I think if anything it probably dropped within 9 RTG's organization that revenue service 10 availability, achieving that on time was going to 11 be a significant challenge. 12 And they started behaving in a 13 different way. They gave us an obscure notice, the 14 180-day notice for -- the contract required them to 15 deliver a notice 180 days in advance of revenue 16 service availability to confirm that they were 17 going to achieve revenue service availability in 18 180 days. 19 The notice was less than clear. It was 20 like, yes, we're doing it, but only if we get the 21 extension of time that we are owed through delays 22 caused by you. 23 They didn't use that many words but 24 that's what you could imply from the way they 25 structured the notice, which caused a bit of a

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1 problem. 2 And really from that point onwards, it 3 became, you know, quite a tense relationship 4 because we were looking for certainty on the 5 revenue service availability date. And you know 6 If you're going to be late, you're going to what? 7 be late. Just tell us. 8 Don't tell us you're going to finish on 9 May 2nd of 2018 and not do that. Tell us when 10 you're actually going to make it. And it got, you 11 know a little bit silly at times. 12 We were generally wanting to get a 13 schedule out of them that showed the best they 14 could do to meet revenue service availability. We 15 didn't set them any specific targets, or you must 16 do it by that date. We just wanted a schedule that 17 we could rely on, that was achievable. 18 So they started playing some games with 19 They would give us a schedule that the contract. 20 quite obviously wasn't going to be achieved. 21 And they would also give us a schedule 22 that they called an unmitigated schedule, which 23 they believed as if they didn't mitigate any of the 24 delays that they believed the City caused them we 25 would finish by this date, which was like a year

1	after the date that they updated in the work
2	schedule.
3	So it was a little bit of a tense time,
4	but I think eventually we started to be a little
5	bit more reasonable with each other.
б	And I think genuinely the schedule
7	updates that we got, after that point, when we were
8	heading into 2018 and beyond, they were genuinely
9	what RTG believed they could achieve.
10	But I think they might have been let
11	down by their own suppliers and subcontractors and
12	the information they were getting about how
13	possible it was to achieve certain aspects of the
14	schedule.
15	So I don't think they were deliberately
16	giving us schedule updates, I mean you are setting
17	dates deliberately to fail. They genuinely thought
18	they could achieve those dates, but they were
19	basing it on the information that they were being
20	provided by their own suppliers, which I think was
21	prone to be bad information, or over-optimistic, if
22	you like.
23	I wouldn't say that the change in the
24	relationship at that time is how the relationship

²⁵ carried on until the end of the job. I think it

1	was just about that particular time, roundabout
2	late 2017, early 2018 it got a little bit tense
3	between us.
4	And we understood that it was huge
5	things at stake here and the dollars that were at
6	stake as well were phenomenal. And it's human
7	nature, when it comes to the face of perhaps
8	staggering losses, then people do change naturally.
9	You know, they behave slightly differently.
10	But I don't believe that that was the
11	way the parties conducted themselves for the
12	remainder of the project. It was just that kind
13	of, that particular period.
14	Then when we got towards the end of
15	2018, we got the full kind of understanding of
16	where they were going with trying to resolve the
17	commercial problems when they just bombarded us
18	with numerous disputes that I pride myself on
19	the fact that up until that point, I had avoided
20	disputes for best part of five years, by just
21	working through the issues and coming up with
22	solutions and, you know, compromises from either
23	side where necessary, and generally reach
24	agreements on various claims and disagreements.
25	But then it was just bam, August of

1	2018 I think it was, we got a whole lot of disputes
2	dumped on our desk over issues we barely had any
3	knowledge of. And some issues which we thought
4	were resolved four years earlier. That was a bit
5	of a tense time when that happened. But again, the
6	parties still behaved professionally with each
7	other throughout.
8	I don't think you can say that the
9	relationship between the City and RTG could be in
10	some way a cause of the whole project being
11	delivered late, I don't think that's the case at
12	all. I think we just had some tense times when,
13	you know, there was big things at stake.
14	ANTHONY IMBESI: Right. Speaking about
15	the RSA dates then. So following the sinkhole,
16	what was the City communicating to RTG in terms of
17	RSA dates?
18	Was the City communicating that the
19	May 2018 date had to be met and RTG was to
20	undertake all the mitigation measures that it
21	could? Or was it taking an approach of tell us
22	where you're at and we can go from there?
23	LORNE GRAY: It was more the latter. I
24	don't think we, at any time said "You will make
25	May 24, 2018 ".
1	

1	It was catastrophic, the sinkhole. And
2	we weren't in the game of pointing fingers or
3	blame. We genuinely wanted to help RTG fix this
4	problem and get back on track.
5	And we asked them, how this was going
6	to impact the schedule? And they genuinely told us
7	that given it was only June 2016, they still
8	believed there was sufficient time left to recover
9	from this.
10	And we took them to their word and at
11	that point in time, they made no forecast that
12	May 24, 2018 was not going to be achievable. I
13	mean, at that time as well I believe they
14	understood this wasn't a legitimate delay event.
15	They had the risk of the geotechnical
16	conditions. They did subsequently try another
17	approach to the cause of, potential cause of the
18	sinkhole, which that's all gone away now. We've
19	done with that claim.
20	But at the time I figure it was a
21	general understanding that this was not a matter
22	that we would be seeking a delay event. They may
23	very well have issued a notice, an initial notice
24	but we felt it was more it was more important
25	that the parties not chuck rocks at each other and

1	fight over this.
2	We had a schedule to meet and the focus
3	really had to be solutions, what were we going to
4	do.
5	We deliberately entered into a tolling
6	agreement, so the focus went away from the
7	commercial aspects and more about what we're going
8	to do technically to get this problem resolved
9	technically and get back on track.
10	I think that was a great decision. So
11	the focus was in the right area. And we circled
12	back to the commercial aspects some time down the
13	line. I think probably August 2018 would be the
14	time where we had to go back to the original claim
15	for potentially the City being the cause of the
16	sinkhole.
17	But up until that point, the focus was
18	just on getting the work done.
19	ANTHONY IMBESI: It wasn't until the
20	summer of 2018 then that the City made any kind of
21	formal decision as to whether the sinkhole
22	constituted a relief event?
23	LORNE GRAY: Yeah, that would be
24	correct. The tolling agreement was enforced all
25	the way through until that time. So the City, for

1	the first time since the sinkhole happened,
2	formally set out its position on what we believed
3	was the cause of the sinkhole, and then what we
4	believed was RTG's entitlement under the contract.
5	They knew what our position was anyway,
6	but this was the first time that we had actually
7	put it down in black and white.
8	ANTHONY IMBESI: Right. And were you
9	involved in that process?
10	LORNE GRAY: I was, yes.
11	ANTHONY IMBESI: Okay. And so what was
12	then your reasoning as to why this didn't
13	constitute a relief event?
14	LORNE GRAY: Because
15	CATHERINE GLEASON-MERCIER: Sorry,
16	Counsel. I'm just going to interject. I think
17	this goes into the City's legal strategy with
18	regards to the claim which was formalized in
19	litigation.
20	So I want to be careful and give the
21	witness some caution that he can't give an answer
22	that discloses the City's legal strategy with
23	regards to the assessment of this claim.
24	ANTHONY IMBESI: Right. And I don't
25	know what's gone back and forth with the witness.

1	Presumably if he put something in writing outlining
2	the position, he would be free to communicate that
3	here today. Simply I was looking for his basis as
4	to what was communicated to RTG in terms of the
5	decision that was made, and I'll leave it at that.
6	CATHERINE GLEASON-MERCIER: Right. Why
7	don't I direct you to I believe there were
8	IC submissions on this and there's the formal
9	pleadings for the claim. And Mr. Gray can speak to
10	those documents and what was in those documents. I
11	just want to caution the witness about the
12	privileged communications in developing the City's
13	legal strategy.
14	ANTHONY IMBESI: Well we'll take a look
15	at those as his answer then to the question. I
16	don't want to spend too much time on this. There's
17	some other items I'd like to cover.
18	CATHERINE GLEASON-MERCIER: Okay, thank
19	you.
20	ANTHONY IMBESI: So turning back then,
21	so we were talking about the RSA date and I believe
22	you've indicated to me that, you know, the City was
23	open to taking more of a collaborative approach in
24	terms of what that end date would be, in the sense
25	that you provide us with what you are saying is

1 realistic in terms of scheduling and then we can 2 have a discussion. 3 What was the City's view then as to how 4 it intended to exercise its rights under the 5 Project Agreement in the sense of, did the City 6 have to consider an extension to the time for other 7 substantial completion or the RSA date in light of 8 what you're telling me? 9 LORNE GRAY: We never intended it on 10 providing an extension of time up to that point. 11 We believed there was no valid claims for a delay 12 And no point did we consider awarding an event. 13 extension of time. 14 So RTG knew that we intended to apply 15 the liquidated damages that we were allowed to 16 apply if the revenue service availability date was 17 missed. But really that wasn't our focus. The 18 liquidated damages were very small. 19 What was really at stake for RTG was 20 the loss of maintenance period. So they were 21 already getting penalized guite heavily. Really, 22 it was in both of our interest to come up with a 23 date that could be achieved. 24 There was no intent on the City to 25 contractually provide them extra time, but we just

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1 wanted them to provide us with a date that they 2 could achieve, and then we could have some 3 certainty to make our plans for the system opening. 4 ANTHONY IMBESI: It was more from a 5 scheduling perspective on the part of the City 6 making sure all the logistics were in place to turn 7 to revenue service? 8 Yeah, yeah. I mean there LORNE GRAY: 9 was notices to issue, because people were going to 10 be swapping from buses to trains, so, you know, the 11 public had to appreciate how that was going to work 12 and when that was going to happen and, you know, 13 you got to give these people a lot of advance 14 notice for that. 15 You don't want to be doing it more than 16 You don't want to be telling people it's once. 17 happening on that date and then changing your mind. 18 So it was important for the City to 19 have certainty on a date rather than, you know, 20 somebody's guess on when it was going to happen. 21 Or being too optimistic, you know. We were looking 22 for realism rather than optimism. 23 ANTHONY IMBESI: You spoke about what 24 was communicated by RTG. When would it have been 25 that the City first understood that the May 2018

1	RSA date would not be met?
2	LORNE GRAY: When they issued the
3	180-day notice. That's when we felt something was
4	wrong there. Because the way they worded the
5	notice, I think they used the definition in the
6	Project Agreement for the definition of the revenue
7	service availability date.
8	And in that definition it makes
9	reference to Section 40 of the Project Agreement,
10	which deals with delay events.
11	And it was like, why are you
12	referencing that?
13	So, reading between the lines, you can
14	tell they weren't saying for certain it was going
15	to be May 24th, it was going to be May 24th,
16	subject to schedule 40, or Section 40 and an award
17	for extension of time.
18	So they were saying to us, we can make
19	it as long as you give us the time that we think
20	we're entitled to. They didn't say that in so many
21	words, but that's what you read. That's what the
22	notice implied.
23	So we knew then, something is up. That
24	May 24th is not likely to happen unless something
25	changes.

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1	ANTHONY IMBESI: I appreciate you've
2	been calling it the 180-day notice. Was that
3	actually delivered 180 days or thereabouts prior to
4	the May 24th RSA date?
5	LORNE GRAY: Yes.
6	ANTHONY IMBESI: so it would have
7	been in and around November 2017 approximately.
8	LORNE GRAY: I think it may have been
9	exactly 180 days, or a day before, but it was very
10	close to 180 days.
11	ANTHONY IMBESI: I believe, did you
12	also indicate that following this period of these
13	communications from RTG that you described, that
14	the situation ultimately became, clear, and more
15	realistic timelines were being provided and
16	discussed?
17	LORNE GRAY: Not initially, no. There
18	was lots of I mean I did say that it started to
19	get a little bit silly.
20	We were asking them to provide us with
21	the recovery schedule.
22	So that's, okay, you're not going to
23	make revenue service availability on time, so we
24	are allowed to exercise our right under the Project
25	Agreement. I think it comes under "failure to

1 maintain schedule".

Where we believe they're not going to Make it on time, we can cause them to come up with a plan and how they intend to recover schedule, and bring the project back on track.

Now, that doesn't mean they have to
make the May 24, 2018. I think ultimately you've
to make a long stop date, which is 12 months after
that. But they've got to show us that they have a
reasonable recovery plan, to minimize the delay to
revenue service availability.

¹² So in other words, what's the best you ¹³ can do, and what date do you think you can achieve? ¹⁴ So we exercised those rights. And the responses ¹⁵ were not what we'd hoped for, not what we expected.

16 That's when they started to play some 17 contractual games with us and gave us two versions 18 of a schedule, one which showed a date for RSA, 19 which I think it may have been actually May 24, 20 2018, and another one that they called the 21 "unmitigated schedule" which was a date almost a 22 year later. Come on? What do you want us to do 23 with this?

That was kind of a blip in time where things got a little bit tense and a little bit

1 But after that, we generally started silly. 2 working together to come up with an achievable 3 schedule. 4 It's just unfortunate that that former 5 RSA dates were missed. And I think that was more 6 down to information that RTG was getting from its 7 suppliers, rather than any kind of failure to 8 perform. 9 ANTHONY IMBESI: And so I understand 10 there was a circumstance in which the City took on 11 RTG's debt? And I understand this was pursuant to 12 a debt swap. Are you familiar with this? 13 LORNE GRAY: No, that's not my thing at 14 all. 15 ANTHONY IMBESI: So do you have any 16 knowledge then of the City becoming involved in the 17 project in a lender capacity in addition to it 18 being an owner under the P3? 19 LORNE GRAY: Oh, yes, yes. 20 Now what was the reasoning behind that? 21 I think it had something to do with Stage 2, didn't 22 it? 23 ANTHONY IMBESI: That was going to be 24 one of my questions for you. 25 Firstly, if you recall when that first

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1	arose? And second, if you have an understanding as
2	to why that was done?
3	LORNE GRAY: Yeah, to be honest, I'm a
4	little more than just like in fact it would be
5	wrong for me to say that I was involved in it. I
6	was not. I was not involved in that at all.
7	But I think at the time I understood
8	the reasoning behind it; it made sense. But in the
9	moment, I can't quite recall.
10	I'm pretty sure it had something to do
11	with Stage 2, where the City wanted to do something
12	on Stage 2, which would not have been something
13	that the lenders in Stage 1 would have been
14	interested in, and it seemed like the best thing
15	for the City to do would to become the lender, if
16	you'd like.
17	It's difficult for me to try and
18	remember what that was. But it wasn't something I
19	was involved in at all in the decision-making
20	process. But I do recall at the time I thought
21	that was a sensible thing to do.
22	ANTHONY IMBESI: Do you recall any
23	discussion or consideration at the City level as to
24	any effect that that decision would have on
25	information sharing between RTG and the City?
1	

1 LORNE GRAY: Well I think when you 2 become the lender, if you'd like, you get access to 3 other reports, like the lender's technical advisor 4 would do a report for the lenders. So now we would 5 have access to all of those reports, and it was a 6 good way for us to make sure that that reporting is 7 being consistent. 8 So we would be getting the works 9 report, which the contractor is obliged to provide 10 us on a monthly basis, and we would be looking to 11 see if the lender's technical agent was finding 12 something different from what we were learning from 13 either the works report or from our own 14 observations out in the field. 15 It was good intelligence, if you'd 16 like, to have access to those other reports. 17 ANTHONY IMBESI: Do you know whether 18 the ability to obtain those other reports was one 19 of the factors that led the City to take the 20 decision to take on the debt in the way that it 21 did? 22 LORNE GRAY: No, no. You know. Ι 23 don't know what the -- no, it would be wrong for me 24 to comment on that, because I wasn't involved in 25 the decision-making process.

1 But from what I understood, the reasons 2 for becoming the lender, if you'd like, they were 3 for sound sensible reasons and I think it was 4 related to the bringing in Stage 2 rather than to 5 try and get some other intelligence, if you'd like. 6 Do you recall whether ANTHONY IMBESI: 7 once the City took on that role, whether that had 8 any impact on the relationship as between the City 9 and RTG? 10 No, I didn't see any LORNE GRAY: 11 measurable difference between the relationship. 12 Certainly not at my working level. 13 ANTHONY IMBESI: Were you privy to any 14 concerns that were raised by RTG or anyone else as 15 to any concerns they had with the relationship in 16 that new light? 17 LORNE GRAY: No, I used to spend a lot 18 of time with the CEO of RTG, it was Antonio 19 Estrada, and it became Peter Lauch; we had a very 20 strong working relationship. And I never heard 21 them talk about concerns. And I think they 22 understood the reasons why the City did what it 23 did. 24 I don't believe there was anything 25 sinister -- or they believed there was anything

1	sinister in the City's intentions for doing that.
2	ANTHONY IMBESI: Are you aware of a
3	proposal on the part of RTG to reduce the
4	liquidated damages that were payable to it from
5	OLRT-C?
6	LORNE GRAY: Yes, yes. RTG waived
7	their part of the liquidated damages, I understand.
8	I think from memory the damages were \$125,000 a
9	day. And part of that was an RTG portion which
10	amounted to something like 18 or \$20,000 a day.
11	So RTG waived that part, so the
12	constructor only paid through RTG to the lenders,
13	or whatever. But to be honest, that was none of
14	our concern. This was something that RTG chose to
15	do through the terms of their contract with the
16	constructor.
17	ANTHONY IMBESI: Do you have any
18	knowledge as to whether RTG and/or OLRT-C
19	approached the City to request consent for a
20	reduction in the liquidated damages which was
21	refused on the part of the City?
22	LORNE GRAY: No, I don't recall that.
23	I don't know if RTG would require the City's
24	consent to waive their part of the liquidated
25	damages because the damages weren't coming to the

1 City. 2 ANTHONY IMBESI: What about in the 3 City's context as a lender, if we can call it that? 4 LORNE GRAY: That's information I'm not 5 really a party to, you know. I'm not -- finances 6 and financial mechanisms are not my strongest suit. 7 So I don't know. 8 ANTHONY IMBESI: And so changing gears 9 here, I'd like to speak to you about trial running. 10 Did you have any involvement in either 11 the planning or execution of trial running? 12 LORNE GRAY: I had some involvement 13 pretty early on in the project. And deliberately 14 early, because I felt it was -- I mean, I had gone 15 through that kind of testing and commissioning in 16 my previous experience, but from the contractor 17 So it's important and these kind of things side. 18 tend to get forgotten about as something that 19 doesn't happen until much later on. 20 When I read through the provisions and 21 I think it's schedule 14 of Project Agreement for 22 test and commissioning. The trial running part, it 23 wasn't like a great big heading, "Trial Running" 24 and here is a step by step set of instructions on 25 what to do. It was a mixed bag of stuff and not

1	really coherent, to be honest.
2	So I got together with Richard Holder
3	and we thought, you know what? It's probably best
4	that we get together with RTG and the constructor
5	just to measure everybody's understanding of what
6	the requirements are for trial running.
7	And if there's anything that's unclear,
8	or if there's anything that we think we can do
9	differently or better, let's do that.
10	So we set up a small working group with
11	myself, and Richard and a chap called Joel North, I
12	think he was with Capital Transit Partners at the
13	time. I think we had Antonio Estrada was involved,
14	Peter Lauch and Roger Schmidt. Roger Schmidt was
15	the technical director for the constructor.
16	So we started to throw around some
17	ideas on how trial running would go. And then I
18	think we evolved that into drafts of trial running
19	procedures, and I think we had a go at preparing
20	like a pass-fail criteria for trial running.
21	I think we recognized very early on
22	that, to have a mixed bag, it's kind of full-time
23	table running, but introducing failure modes was
24	not it was going to be disruptive.
25	I think we felt that to introduce the

1	failure modes when you're really trying to see if
2	you can run a proper timetable wasn't going to
3	help.
4	So we thought about trying to get the
5	failure modes testing out of the way before trial
6	running and when you get to trial running, why
7	don't we run a full-time table for trial phase?
8	And I think largely the group was in
9	agreement with that. And then I felt like I've
10	done my piece, it was one of the things that I was
11	generally concerned about, and it was off and
12	running. And I just kind of stepped back from
13	that.
14	And I think maybe a year or so later
15	there was a chap that came across from Calgary who
16	did trial running from the Calgary LRT and he
17	further developed what we started and created a
18	proper procedure, and pass-fail criteria, which I
19	reviewed and I thought it was okay. But the intent
20	that we had when we first looked at this maybe a
21	year or so earlier, I believe that RTG and the
22	constructor were also involved in that, too.
23	And, yeah, I think that's what we went
24	into trial running ultimately with. But I know
25	there was issues with the number of failures that

1 were occurring during trial running, but me, 2 personally, I think that perhaps both parties --3 because both parties went into this in full 4 agreement of what the targets were, and what the 5 pass-fail criteria was. 6 But I think perhaps the parties were in 7 the pursuit of, like, perfection or excellence. Ιt 8 was never going to be a perfect system on day one, 9 it's almost impossible. These things take time to 10 properly bed in until you fine tune and you solve 11 the little bugs that will jump up everywhere. 12 So I think we were probably aiming too 13 high for trial running, and I think the decision to 14 relax some of the requirements in trial running and 15 reduce the pass mark to a lower level was 16 absolutely the right thing to do. 17 Because we'd still be at trial running 18 -- well, no, I over exaggerate. But it would have 19 went on for a lot longer than necessary. 20 Because where we dropped it down to, it 21 was still a perfectly serviceable system. You 22 would maybe lose a couple of minutes on a journey 23 time, or you know your pick up time at a station 24 would be 40 seconds later than planned. But it's a 25 brand new system, you know. And there's always

1 going to be bugs and teething issues. So yeah, 2 well, we had the best of intentions, I think we did 3 the right thing. 4 So I was involved in the very beginning 5 of trial running and then I kind of stepped back. 6 I did do a review of the proposals that we took 7 into trial running. 8 I wasn't involved in any of the 9 decision making when we decide to change the 10 targets in trial running, but I understand why we 11 did was definitely the right thing to have done at 12 that time, and it wasn't a case that we were trying 13 to make it easy. No, we were not. 14 What we ended up having at trial running was still a higher standard than what the 15 16 original project even had. The original Project 17 Agreement didn't require full-time daily running 18 for trial dates. They only required it for a few 19 days and with a bunch of failure mode tests, which 20 really wouldn't have given you the confidence that 21 you're ready to open up the system. 22 That was really my involvement with 23 trial running from start to finish. 24 Okay. ANTHONY IMBESI: So I'd just 25 like to unpack that a little bit and ask you a few

1 more questions. 2 You had indicated you were involved 3 from the outset of the planning side. Were you 4 involved in the planning of what ultimately came to 5 be the trial running plan that was issued in 2017? 6 Well, my involvement would LORNE GRAY: 7 have been the cut off -- precursor to that. What 8 was developed in 2017 was probably built on what we 9 had started, I think maybe in 2016. I forget the 10 dates when we started that little working group. 11 But it certainly built on what we 12 started, and it met the intent of what we started 13 out with back in the working group. 14 So I reviewed what the chap from 15 Calgary -- whose my name escapes me -- I had 16 reviewed what he had done, and I thought, yeah, 17 that's fine, that's really where we wanted to go 18 with this. 19 ANTHONY IMBESI: How did the City and 20 the working group satisfy themselves of the 21 sufficiency of what ultimately became the trial 22 running plan? 23 I appreciate what you said in terms of 24 the Project Agreement doesn't require too many 25 How were these criteria devised and how standards.

1	was the City satisfied as to their contents?
2	LORNE GRAY: I believe the safety was
3	the number one concern there. So anything that was
4	going to cause, or have the potential to cause a
5	safety issue on opening, so if there was an event
6	that we thought, had we been in revenue service
7	this would have been a significant safety event,
8	those kind of things were an instance fail for
9	trial running; it was an instance repeat or reset.
10	Which was absolutely right thing, and everybody
11	agreed to that.
12	And then there was about coming up with
13	percentages for vehicle availability of journey
14	time and we looked at what level would we consider
15	to be acceptable? And the levels that we chose
16	were ambitiously too high.
17	We were at like 90-plus percent, which
18	I know, and in the Project Agreement that's the
19	kind of performance target we should be aiming for.
20	But in, you know, of a fully bedded-in working
21	system. But when you're introducing a brand new
22	system to set your target so high, it's very
23	ambitious but not that practical in reality.
24	So we started off with the intent of
25	making the targets tough, but in hindsight we were

1	seeking perfection where perfection wasn't
2	required.
3	You know, there was obviously going to
4	be some acceptance that it's a brand new system and
5	there's going to be issues. When you come to terms
6	with that, then you can start to look at, okay,
7	what would be good enough, if you'd like. And I
8	think we still did better than "good enough" to
9	open.
10	And even the good enough position that
11	we took was better than what the Project Agreement
12	required. So all times we were always striving for
13	something higher than and we did this completely
14	jointly with RTG. It's not something like the City
15	said, "We're going to do this and enforce it." No.
16	We did this together, you know, and there's
17	certainly no objections from, you know, either
18	party on what we decided to do.
19	ANTHONY IMBESI: I'd like to show you a
20	document. I'll put it on my screen here. Do you
21	see what I have here on my screen?
22	LORNE GRAY: Yup.
23	ANTHONY IMBESI: Do you recognize this
24	e-mail?
25	LORNE GRAY: October 23, 2018, this is

1 definitely my e-mail, yes. 2 ANTHONY IMBESI: For the record, this 3 is identified as document COW0437194. And so I can 4 give you a second to take a look at, take a read 5 through the e-mail, but you're talking about a 6 softer approach to the rules for a full restart. 7 Do you see that? 8 LORNE GRAY: Yup. 9 ANTHONY IMBESI: And so, what was your 10 concern then at the time when you wrote this 11 e-mail? 12 Counsel, CATHERINE GLEASON-MERCIER: 13 maybe we can let Mr. Gray read the entire e-mail. 14 This looks like it's the top of the chain. 15 ANTHONY IMBESI: This is the entire 16 chain. 17 LORNE GRAY: Yes, I've read that. 18 ANTHONY IMBESI: So did you have any 19 concerns about the compression of testing and 20 commissioning to the ultimate reliability of the 21 system? 22 Yes, I did. LORNE GRAY: Yes, I did. 23 I'm not sure what more I can say on that. Testing 24 commissioning is not one of those parts of the 25 schedule that you can afford to compress or

1	accelerate. It's probably the most important part
2	of a system type project.
3	So, yes, anybody who had the experience
4	would be concerned if you were compressing testing
5	and commissioning.
6	ANTHONY IMBESI: Was it your
7	understanding that that was in fact the case on
8	this project, that that had been ongoing that the
9	testing and commissioning was being compressed?
10	LORNE GRAY: I wasn't really close to
11	the schedule on a day-to-day basis. I probably
12	wouldn't have made that statement with having
13	reviewed the schedule myself. I think I would have
14	used that based on what I had learned from
15	discussion with others who were involved in testing
16	and commissioning.
17	So testing and commissioning schedule
18	would not be an area of the project that I would
19	have any responsibility for. But given that I'm
20	very passionate about these projects I would have
21	had an interest in how that was going.
22	ANTHONY IMBESI: Do you recall then
23	what you're referring to in the second sentence
24	where you're saying: "I'm wondering if we're doing
25	ourselves and RTG a disservice by applying a softer

1	approach to the rules for a full restart of trial
2	running"?
3	LORNE GRAY: Yeah, because I mean I
4	have safety about the pass-fail. But what I wasn't
5	very keen on and never, never was, was not having
6	the 12 consecutive days.
7	If the performance was so poor, then we
8	would be doing a disservice by having a good day,
9	bad day, good day, bad day. That's not how the
10	system is going to operate. It would be a diaster.
11	So the 12 consecutive days for me was
12	one of the most important aspects of the trial
13	running. And the 12 consecutive days of full-time
14	table running was the enhancement that we had made
15	to the trial running procedures and targets. And I
16	don't think that to relax that part would have done
17	us any good whatsoever.
18	But it depends on the nature of the
19	failure. But me personally, I would expect to see
20	good performance for 12 days in a row, and then you
21	know that the next day that should continue.
22	Because you've proven it for 12 days uninterrupted,
23	if you'd like.
24	So I wasn't a fan of any sort of
25	approaches for allowing repeat days, but you can

1	still count that towards the 12.
2	ANTHONY IMBESI: Just so I understand
3	then. Did you still hold this view in the summer
4	of 2019 with the plan that trial running commenced
5	with? Or had this been addressed in the ultimate
6	plan that the parties had agreed to in 2019 to
7	start trial running?
8	LORNE GRAY: I didn't have any
9	involvement in what was agreed to take into trial,
10	the process to take into trial running in 2012
11	[sic]. But I didn't believe that at that time we
12	were being soft, or too soft.
13	ANTHONY IMBESI: Sorry, at the time
14	trial running actually occurred in the summer of
15	2019 you no longer shared this concern; is that
16	what you're saying?
17	LORNE GRAY: That's correct. Because,
18	I mean, I'd be giving an opinion in this e-mail
19	here, but when I fully understood how the process
20	was going to work, my opinion changed. I felt less
21	concerned about being too soft. I believe that the
22	City and RTG got the right balance for reasons for
23	why things could be repeated or when there ought to
24	be a reset.
25	ANTHONY IMBESI: We had spoken about

1 the trial running requirements and I had mentioned 2 the trial running plan in 2017. 3 Were you aware then that another tria 4 subsequent trial running plan was developed in 5 2019 prior to trial running commencing that had at 6 elevated level of requirements over the 2017 tria 7 running plan? 8 LORNE GRAY: My awareness was only of
Were you aware then that another tria Were you aware then that another tria subsequent trial running plan was developed in 2019 prior to trial running commencing that had a elevated level of requirements over the 2017 tria running plan?
4 subsequent trial running plan was developed in 5 2019 prior to trial running commencing that had as 6 elevated level of requirements over the 2017 tria 7 running plan?
5 2019 prior to trial running commencing that had as 6 elevated level of requirements over the 2017 tria 7 running plan?
<pre>6 elevated level of requirements over the 2017 tria 7 running plan?</pre>
7 running plan?
8 LODNE CONV. My swaropood was only of
⁸ LORNE GRAY: My awareness was only of
⁹ the existence of an alternative trial running pla
10 I had no involvement inputting that plan together
¹¹ or what the details were.
12ANTHONY IMBESI: Okay. So you didn't
13 have a high level familiarity then with the level
14 of detail or the requirements that the parties we
¹⁵ using going into trial running in the summer of
16 2019?
17 LORNE GRAY: I just know that the
18 targets were stronger or more difficult, if you'd
¹⁹ like, from the 2017 version.
20 ANTHONY IMBESI: Okay. I see.
21 And you had mentioned well I
²² suppose, just to clarify then. Are you aware the
²³ changes were made during the course of trial
²⁴ running to reduce the criteria in certain respect
LORNE GRAY: I was aware, yeah, yeah.
1 And I had no concerns about the City and RTG 2 agreeing to that. 3 Like I said, I think the original 4 intentions were good. But I think they were 5 seeking perfection, rather than something that was 6 through that 12-day trial running period was proven 7 to be a serviceable system that is ready for public 8 use. 9 ANTHONY IMBESI: And I understand that 10 as part of these changes that were made during 11 trial running, the parties agreed on a term sheet; 12 do you have any familiarity with that? 13 LORNE GRAY: A term sheet around trial 14 running? 15 At the time these ANTHONY IMBESI: 16 changes were made in trial running, had the parties 17 entered into a term sheet setting out the changes 18 that were to be implemented in the criteria for 19 trial running and also incorporating a minor 20 deficiency list in respect of the vehicles? 21 LORNE GRAY: Yes I'm aware of a term 22 sheet but it might help -- I thought we had 23 executed that term sheet after revenue service 24 availability. 25 It just recorded decisions that had

1 been made on certain aspects and it recorded 2 decisions on how many vehicles would be operating 3 on day one of service. 4 And it had terms in there about monies 5 that would be withheld until certain deficiencies 6 were corrected related to software, I think, PACIS 7 software. 8 I can't remember every single term in 9 there, but, yeah, I remember the term sheet. Т 10 don't remember the exact date when it was executed. 11 ANTHONY IMBESI: In terms of the term 12 sheet, you've mentioned some setoffs in terms of 13 the withholding of monies? 14 In essence, did this term sheet, or at 15 least a component of it, set out certain 16 deficiencies or retrofits with respect to the light 17 rail vehicles that were being deferred until post 18 revenue service to be dealt with at a later point 19 in time? 20 Yeah, the PACIS software LORNE GRAY: 21 was one of those. I'm trying to recall one --22 there might be one related to train door function. 23 CATHERINE GLEASON-MERCIER: It may be 24 helpful, Counsel, if you're going to ask detailed 25 questions about the contents of the term sheet to

·						
1	let Mr. Gray review it if you have it so he can					
2	look at the contents and the terms.					
3	ANTHONY IMBESI: I don't have it handy.					
4	I won't ask him specifics about the content of it,					
5	but were you involved at all in this term sheet?					
6	LORNE GRAY: Yes, I did have an					
7	involvement in it. I really didn't have any					
8	involvement in the decision making on what the					
9	terms were. But I did have more of like					
10	administrative involvement in the creation of this					
11	term sheet. And I was involved in some meetings					
12	and discussions on it.					
13	But there may very well have been terms					
14	in that term sheet that related to minor					
15	deficiencies. But we need to be clear that they					
16	are minor deficiencies, which by definition did not					
17	affect the safe use and enjoyment of whatever it is					
18	that you're dealing with.					
19	ANTHONY IMBESI: Right. And so that					
20	was going to be my next question then.					
21	Did you have any knowledge at the time					
22	as to what the threshold was for something that					
23	could be included on that list? I think you just					
24	mentioned safety and enjoyment of the system?					
25	LORNE GRAY: Yeah, yeah, and that was					

1	like the Parliament. Like by not having this thing					
2	fixed it was going to affect the safe operation,					
3	principally the safe operation of the system, then					
4	it was a hard no.					
5	I know the contract uses the term "use					
6	and enjoyment" but we did consider passenger					
7	experience as some of those decisions as well.					
8	Where some things that RTG wanted to defer until					
9	after revenue service availability, which on the					
10	face of it looked fairly minor, but we thought					
11	that, you know what?					
12	This is going to confuse passengers.					
13	They're not going to enjoy this new system. No,					
14	we're rejecting that.					
15	So that was the kind of things that we					
16	used to in any decision, make on what was termed					
17	a minor deficiency or a material deficiency. And					
18	certainly safety was the first concern.					
19	ANTHONY IMBESI: And so stepping beyond					
20	safety, I guess to a certain extent. Were there					
21	any concerns that any of the items that made their					
22	way on to the minor deficiency list might impact					
23	the reliability of the system in any way?					
24	LORNE GRAY: No, no. I mean the					
25	reliability of the system would also be a key					

1 factor. And to be honest, I don't recall any 2 requests for deficiencies if they were going to 3 have an impact on reliability. 4 Because the maintainer had a vested 5 interest in this process as well. And they were 6 the people who were going to have to take the 7 system on and keep it running. 8 So, you know, I don't recall a single 9 deficiency that we would have let go if it was 10 going to have an impact on reliability. 11 ANTHONY IMBESI: So the maintainer, are 12 you referring to Rideau Transit maintenance? 13 LORNE GRAY: Yes. 14 ANTHONY IMBESI: Are you saying they 15 were involved in the decision making about what 16 would find its way on to this term sheet? 17 LORNE GRAY: They would have been 18 involved at the RTG constructor level, where when 19 they were putting their punch lists together and 20 going through what was going to be getting done and 21 not going to be getting done. 22 And without knowing for sure they did 23 that, I would imagine they would have a vested 24 interest on what was not going to be finished 25 properly, when the work to commence mean to the

1 services. And that would be kind of a bone of 2 contention between RTM to RTG, and RTG to the 3 constructor. Because RTM would not want to be 4 taking on something that would cost them more to 5 maintain that's been left behind by the 6 constructor. 7 So we knew that dynamic was happening in the background. We didn't witness it ourselves, 8 9 but we knew it was going on. 10 ANTHONY IMBESI: Were any concerns 11 expressed either by RTM, the maintainer, or Alstom 12 in terms of the ability to deal with these deferred 13 items in retrofits to the LRVs during the course of 14 service operations? 15 LORNE GRAY: No. No. There was no 16 concerns from them that they couldn't -- you know, 17 when we did the term sheet there was, I think there 18 was some commitments on time for getting these 19 items completed. 20 So I don't believe when we set out, 21 there was any concerns the deficiency was not going 22 to get corrected in a reasonable time. 23 ANTHONY IMBESI: And in terms of system 24 readiness, was it your view that the system was 25 ready for revenue service at the time that it went

Τ

1	into revenue service?						
2	LORNE GRAY: Yes, I believe it was,						
3	yeah.						
4	ANTHONY IMBESI: Were there any						
5	concerns expressed at the City level as to whether						
6	it was ready for revenue service?						
7	LORNE GRAY: No, I don't believe there						
8	was. Bearing in mind that we have another party						
9	who is a signatory on the sign off, the independent						
10	certifier was satisfied.						
11	We had an independent safety auditor,						
12	who did an audit function for us. It just wasn't						
13	one audit. It was a continuous involvement for						
14	more than a year on the project to make sure that						
15	all the safety assurance and safety cases and						
16	systems engineering were all done right.						
17	But, you know, all the hazards had been						
18	identified and properly mitigated through the						
19	design or through procedures. So that was a big						
20	comfort to us, that this experienced independent						
21	safety auditor was able to verify that this system						
22	is ready.						
23	So that was just one of the parts of						
24	the puzzle of revenue service availability: The						
25	safety auditor to sign off, the independent						

1 certifier to be satisfied, trial running had to be 2 successful so we had no doubts that when it came to 3 certify filing revenue service availability, we 4 could do so with confidence that it was going to be 5 okay. 6 I think maybe a concern we could have 7 had is how quickly we were going to enter service. 8 It's not just the system itself that comes live. 9 You've got all the people who are working on the 10 system, the new staff. So they need a little bit 11 of time to get used to the new environment and the 12 their new jobs. 13 And we agreed to do a soft opening, if 14 you'd like, so we got revenue service availability, 15 I think, the 31st of August, 2019. And for the 16 first two weeks, I think maybe up to 17 September 14th, we ran the system through its paces 18 and got the staff, you know, to build their 19 confidence that they were ready to start bringing 20 passengers on. 21 So you know what, there's an argument 22 that says that we could have gone longer than that. 23 Maybe we should have done. Two weeks at that time 24 felt reasonable. But in hindsight maybe a little

²⁵ bit more time would have helped more, another

1 couple of weeks, but I don't think that opening 2 after two weeks as really that detrimental. Ι 3 think we were still ready. 4 ANTHONY IMBESI: So you've just 5 referred to that as a soft opening. So what was 6 the City doing during those first two weeks? 7 LORNE GRAY: Just basically running the 8 system through its paces. Running trains empty, 9 running a timetable with no passengers on board. 10 But crucially having all the staff who 11 would be, you know, going to stations and cleaning 12 stations, and attending to faults, and just 13 everybody who's part of the maintenance and 14 operations organization, just to be match ready, if 15 you'd like, at the time when we would allow 16 passengers on to the trains. 17 ANTHONY IMBESI: Was it running at full 18 schedule during those two weeks? 19 LORNE GRAY: Yeah, we run a full-time 20 table through those weeks, yeah, yeah. It was as 21 if we were carrying passengers. 22 ANTHONY IMBESI: Was there ever any 23 discussion -- so you've referred to those two weeks 24 as a soft opening. Was there ever any discussion 25 to having a reduced start so when revenue service

1 became live, you know, reduced passenger loads, 2 reduced travel times, that type of thing? Was 3 there any discussion of that on the City's part? 4 LORNE GRAY: Not that I recall, I 5 certainly wasn't involved in any discussions in 6 that. 7 I know in the term sheet you referred 8 to earlier we had an agreement to start with less 9 vehicles, or less trains. I think we originally 10 wanted to run 15 trains at peak time but we allowed 11 them to start with 13 trains at peak time. 12 And that was -- did not make any kind 13 of significant difference to being able to cope 14 with the number of passengers that wanted to use 15 the system or the demand. 16 So we felt that running with 13 was 17 probably sensible. And then we build on that 18 further down the line. 19 ANTHONY IMBESI: Was there ever any 20 discussion or consideration on the City's end about 21 bringing in a shadow operator, a more experienced 22 operator to run the system for a period of time 23 until everything was up to speed on OC Transpo and 24 the operator's end? 25 I don't recall that. LORNE GRAY: Т

1 certainly wasn't involved if those discussions did 2 happen. 3 ANTHONY IMBESI: And going back to 4 revenue service. You mentioned the role of the 5 independent certifier in that process. 6 What was your understanding of the 7 parameters of the role of the independent certifier 8 in that context? 9 LORNE GRAY: Their role was to observe, 10 review all documentation, attend testing and 11 commissioning. Yeah I don't know if there's a lot 12 But they certainly had to have the more than that. 13 confidence that that, through their witnessing and 14 through the documentation that they received and 15 procured, that in their opinion the system was fit 16 for certification and ready for revenue service. 17 It met all the criteria. 18 ANTHONY IMBESI: Was the independent 19 certifier just stating whether the criteria that 20 were established between RTG and the City were 21 complied with? 22 LORNE GRAY: Yes. 23 ANTHONY IMBESI: And with that, are you 24 referring to the trial management plan or what 25 specifically are you referring to?

1 LORNE GRAY: The trial running was one 2 aspect, one kind of building block to achieve 3 revenue service availability. There were a number 4 of other requirements that had to be met in 5 addition to trial running. 6 One of which was substantial 7 completion, so the independent certifier had 8 already certified substantial completion, I believe 9 two months earlier. I think there was maybe July, 10 July 2019. So that was one major building block. 11 So we knew that the system was, you 12 know, save and except for trial running, if you 13 didn't have trial running, it was if you achieve 14 substantial completion, you're ready to go. 15 Because anything that is not complete 16 is deemed to be minor in nature and will not affect 17 the safe use and enjoyment. 18 That was one of the main building 19 blocks In addition to substantial completion, 20 there was about, you, know maintenance readiness. 21 Trial running, has everybody been trained? Has the 22 number of drivers been trained, and operators and 23 all that. And has the safety auditor confirmed all 24 the, through audit, all the safety requirements 25 have been met?

1	So with all those different pieces the					
2	independent certifier would be able to confidently					
3	certify the system.					
4	ANTHONY IMBESI: Is the independent					
5	certifier then going through the contractual					
6	requirements and saying, yay or nay whether those					
7	have been met?					
8	LORNE GRAY: Correct.					
9	ANTHONY IMBESI: Right. So they're not					
10	evaluating the contractual requirements and					
11	determining what's set out in the contract is					
12	sufficient, right?					
13	LORNE GRAY: No. No.					
14	ANTHONY IMBESI: It's just stating					
15	whether the terms have been complied with?					
16	LORNE GRAY: Correct, yeah. I mean, a					
17	good example of that is design. They don't review					
18	design. They just get copies of a design and they					
19	are free to look at those designs, but they never					
20	have any influence over the design as comment on					
21	the design. They just understand when the City has					
22	deemed their design to be complete.					
23	ANTHONY IMBESI: Christine, I can turn					
24	it over to you. I know you wanted to follow up on					
25	a few points while we still have time.					

1	CHRISTINE MAINVILLE: Just on the two						
2	weeks where the trains were run right before						
3	operations began.						
4	First of all your understanding was						
5	that there were some issues with the performance of						
6	the trains during trial running, fair to say?						
7	LORNE GRAY: Yeah, I believe there was						
8	some failures during trial running. I think mostly						
9	that was due to the targets that were set in the						
10	plan.						
11	I think they reverted to the 2017 plan						
12	which had slightly, I hate using the term, easier						
13	targets because even the easy target was still more						
14	than what the contract required. But yeah, there						
15	would have been some problems during trial running.						
16	I don't think there was any safety						
17	concerns at all during trial running. I think they						
18	were more of a mechanical nature with the vehicles.						
19	But nothing really major just things that, yup,						
20	okay, that's happened. We'll fix that and we'll						
21	get going the next day kind of thing.						
22	I don't think they developed any kind						
23	of major faults during trial running. It was more						
24	just your minor tweaks that the guys in the watch						
25	shop could fix in the next day. That's my						

1 understanding. 2 I didn't attend trial running, and I 3 know it was an expected ingredient of the project. 4 I just kind of got word of mouth and hearsay of 5 what was going on there. 6 CHRISTINE MAINVILLE: When you say the 7 failures were mostly due to the targets that were 8 set -- not the failures to the vehicle, but the 9 failed days? 10 LORNE GRAY: Yeah, yeah, they had 11 managed to achieve the pass criteria set for the 12 particular measure, if you like, the performance 13 measure. 14 CHRISTINE MAINVILLE: How did that 15 compare to how the trains were running in the 16 subsequent two weeks before entering service? Are 17 you aware of whether there were performance issues 18 then? 19 There was performance LORNE GRAY: 20 issues. You know, they started to monitor 21 performance as if it was in full passenger carrying 22 mode. 23 So the maintenance schedule, Schedule 24 15-3, there is a payment mechanism as well that 25 sets out performance criteria that has to be met.

1 And they have to issue daily operating 2 reports, and in those daily operating reports, 3 they're supposed to record their failures during 4 that day on vehicle availability and the likes. 5 So yeah, I don't think it was smooth б performance during those two weeks. I think there 7 were some failures there, but not to any extent 8 where we didn't think it was wise to open it to the 9 public. I think performance was still good enough 10 to open up properly. 11 CHRISTINE MAINVILLE: Were you involved 12 in some later disputes about the work orders and 13 the performance measures being applied and how many 14 work orders were going in? 15 LORNE GRAY: Yeah. I got the 16 information both from our people at OC Transpo, I 17 think as I referenced before, I have a good working relationship with RTG, so I knew some of the guys 18 19 who were working with RTM and RTG just to get, you 20 know, an understanding from their perspective what 21 was going on. 22 I believe there was some issues on both 23 sides, you know. It was like we had this new toy 24 and not everybody knew how to play with it 25 properly.

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1	And I think some of the decisions on					
2	the City's side perhaps weren't the right decisions					
3	at that time, and you know to capture to raise a					
4						
5	and there must have been hundreds. And that's					
6	normal for something as complex as this in these					
7	early stages of service. There's going to be bugs					
8	that need to be fixed.					
9	But there was like this strict					
10	application of the Project Agreement and raising					
11	work orders to the point where it became					
12	unmanageable. There were just so many work orders					
13	out there.					
14	But it was almost taking people's focus					
15	on what really matters. Because of at the end of					
16	the day, it's all about trains carrying passengers					
17	safely and that was still happening. You know					
18	there was still a service there, they were still					
19	achieving reasonable journey times. Yet there were					
20	hundreds of thousands of work orders, which would					
21	give the impression that it was a diaster and it					
22	was far from it.					
23	So I think we managed to get through					
~ 1						

that. A lot of that was just being familiar with
how this process should work properly and sensibly.

Τ

1	And the other parts I got involved in were just						
2	interpretation of the performance measures.						
3	Some of the drafting for those wasn't,						
4	it wasn't a particularly easy read and could be						
5	interpreted in different ways so it's really about						
6	reaching like a sensible agreement on what the						
7	intent of this performance measure is.						
8	So it's lots of things like that in the						
9	beginning of the maintenance term, which I helped						
10	out with.						
11	CHRISTINE MAINVILLE: Were these two						
12	issues resolved, as you say, at the beginning of						
13	the term? How far into service?						
14	LORNE GRAY: We had the bids on the						
15	application of payment deductions. That went on						
16	for a number of months. But I mean, that's not to						
17	say that I was involved in it for all those months.						
18	I was just aware of the reasons why we were having						
19	disagreements and a lot of that was about the						
20	interpretation of some of these performance						
21	measures.						
22	And there was an interpretation of the						
23	cap on how much you were allowed to deduct and						
24	deduct carryover and such like. So I had like an						
25	in and out involvement and that it was really a						

1	process involving OC Transpo and RTM largely.					
2	I was asked for advice every now and					
3	then and got involved to help with some letters and					
4	such like.					
5	CHRISTINE MAINVILLE: Okay. Did you					
6	understand, though, that the discussions about the					
7	work orders and their volume that those discussions					
8	got sidetracked at some point or didn't conclude?					
9	CATHERINE GLEASON-MERCIER: Sorry,					
10	Ms. Mainville, I'm going to jump in.					
11	My understanding these discussions were					
12	without prejudice between the parties. So I just					
13	want to caution the witness that this might be					
14	entering into a realm of privilege between RTG, RTM					
15	and the City with regards to settlement privilege					
16	and without prejudice discussions.					
17	CHRISTINE MAINVILLE: Let's leave that					
18	issue for now.					
19	CATHERINE GLEASON-MERCIER: Thank you.					
20	CHRISTINE MAINVILLE: Were you aware of					
21	a concept of operations document to or do you					
22	know what that is?					
23	LORNE GRAY: Concept of operations?					
24	CHRISTINE MAINVILLE: About basically					
25	what the operator's concept of how operations will					

1 work and how operations are intended to be 2 performed to inform the design? 3 LORNE GRAY: Yeah, I'm not aware of that document. It's certainly nothing that anybody 4 5 has sought my advice on. 6 CHRISTINE MAINVILLE: I just want to be 7 clear on, you spoke about the Citadis here being 8 service proven and meeting that requirement in the 9 Project Agreement. 10 Let me first ask you. Do you have any 11 knowledge of the Citadis Dualis being what was put 12 forward as a vehicle --13 LORNE GRAY: No. 14 CHRISTINE MAINVILLE: -- and a 15 subsequent change being made? 16 LORNE GRAY: No, no, not something I 17 would have been involved in. 18 CHRISTINE MAINVILLE: Are you confident 19 that there was no change -- was there any kind of 20 variation made to the Project Agreement or some 21 change made to allow for that Project Agreement 22 being -- that specification being met the service 23 proven specification? 24 Sorry. I think that question was 25 jumbled. It's late in the day.

1 Are you aware of any change --2 LORNE GRAY: Any changes we made to the 3 specification for the vehicles? 4 CHRISTINE MAINVILLE: To allow, or 5 qualifications made to the service proven 6 requirement, to allow for this vehicle to either 7 meet that requirement, or a waiver? 8 LORNE GRAY: There was a number of 9 minor changes made to the PSOS. Almost like a 10 clean-up exercise. 11 So when Alstom would go through the 12 PSOS and they would do like a, you know, they 13 shall, they will, and pick out certain requirements 14 that they felt were not applicable to the Alstom 15 Citadis vehicle, it would be more applicable to 16 another type of train, commuter train or something 17 like that. 18 So it was like a one-off clean-up. It 19 started at Alstom. They went through all the 20 requirements they felt were not necessary to be met 21 for their Citadis Spirit. They would present that 22 to the City, the City would go through that and 23 decide if they wanted to uphold the PSOS or relax 24 the PSOS, depending on the nature of what the 25 change was.

1 So that was probably the bulk of the 2 changes that were made in respect to the PSOS. 3 In terms of changing the vehicle 4 itself, I would say minor. We introduced tri-poles 5 for people to hold onto in the carriages. We 6 introduced more straps that come down for people to 7 hold onto. 8 We introduced a dead man's function 9 that -- I'm sure there's a more elegant way of 10 describing that. But it's called the dead man's 11 wheel, where the driver holds a handle, and they 12 take the open position, and as long as that handle 13 is in the open position, we know that the driver is 14 alive and is still in control of the train. 15 If all of a sudden his hand comes off 16 it, then there's -- that's why they call it the 17 dead man's -- anyway. 18 We introduced an enhancement to that, 19 where we wanted to make sure drivers were remaining 20 alert. So we came up with like a button that would 21 be pressed every, I don't know, 30 seconds or a 22 minute, just to make sure that the driver was 23 staying alert. So he would hold his hand on the 24 dead man's handle and then press this button to 25 make sure he was still awake and alert. That was

1	probably out of all the changes					
2	CHRISTINE MAINVILLE: So you don't					
3	recall any change to the service proven					
4	requirement?					
5	LORNE GRAY: No, no.					
6	CHRISTINE MAINVILLE: Or any waiver?					
7	LORNE GRAY: No, no. It was just small					
8	concessions that were necessary because the PSOS					
9	didn't apply in all respects to the Alstom Citadis					
10	Spirit. But none of these things were material in					
11	any way.					
12	CHRISTINE MAINVILLE: You would have					
13	been aware, you would have been involved if there					
14	had been					
15	LORNE GRAY: For sure, I would have					
16	been involved if there was yeah.					
17	CHRISTINE MAINVILLE: And this clean-up					
18	exercise that you described, would that happen very					
19	early on then before the assembly or manufacturing,					
20	or would that					
21	LORNE GRAY: I'm trying to think of the					
22	timing. I've got to think of somewhere around 2016					
23	where we went through that exercise. So that would					
24	have been just in the wake of early stages of full					
25	production in 2016.					

Τ

1	CHRISTINE MAINVILLE: Okay. Those are					
2	my questions.					
3	Is there anything, Catherine or Jesse,					
4	on your end?					
5	CATHERINE GLEASON-MERCIER: No					
6	questions from us.					
7	CHRISTINE MAINVILLE: Okay, we can go					
8	off record.					
9						
10	Concluded at 5:05 p.m.					
11						
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1	REPORTER'S CERTIFICATE					
2						
3	I, JUDITH M. CAPUTO, RPR, CSR, CRR,					
4	Certified Shorthand Reporter, certify;					
5	That the foregoing proceedings were					
6	taken before me at the time and place therein set					
7	forth; at which time the interviewee was put under					
8	oath by me;					
9	That the statements of the presenters					
10	and all comments made at the time of the meeting					
11	were recorded stenographically by me and					
12	transcribed at my direction;					
13	That the foregoing is a Certified					
14	Transcript of my shorthand notes so taken.					
15						
16	Dated this 13th day of May, 2022.					
17	fudite of Capito, CSR, CAR					
18	fleddell of equito, con, can					
19	NEESONS, A VERITEXT COMPANY					
20	PER: JUDITH M. CAPUTO, RPR, CSR, CRR					
21						
22						
23						
24						
25						

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