

**OVERVIEW DOCUMENT #9:
EVENTS LEADING TO THE DISCOVERY AND DISCLOSURE
OF THE TRADEWIND REPORT**

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A. Introduction

1. Overview Document #9 will address the events in 2018 and 2019 that lead to the discovery and disclosure of the Tradewind Report, which was prepared in January 2014. Overview Document #9 will largely be organized in chronological order, but some events will be grouped together, slightly out of chronological order, where doing so promotes clarity and ease of understanding.

2. Commission Counsel has endeavoured to confirm the names, organization, and position(s) held by the individuals referenced in this Overview Document. This information is provided in the body text where each individual is first referenced.¹ A complete list of the individuals and their respective information can be found at Appendix A of Overview Document #9.

3. The facts contained in Overview Document #9 have not been tested for their truth. Commission Counsel and the participants may call evidence from witnesses at the Inquiry that casts doubt on the truthfulness or accuracy of the content of the documents underlying this Overview Document. The participants will also be able to make submissions regarding what, if any, weight should be given to any of these documents.

B. May 2018**1. Golder Continues Discussions Regarding HIR Suitability Study**

4. On May 2, 2018, Vimy Henderson (Pavement and Materials Engineer, Golder) emailed Ludomir Uzarowski (Principal, Pavement and Materials Engineering, Golder)

¹ Where more than one position is held by an individual within the time frame covered in this Overview Document, the information in the body text will reflect the position held at the time of first reference. For a complete list of all positions held by all individuals referenced in Overview Document #9, see Appendix A.

under the subject line “PPT for Thursday.”² Dr. Henderson attached presentation slides titled “Project Risk Committee Pursuit Team Presentation.”³

5. Dr. Uzarowski replied later the same day with updated presentation slides.⁴

6. The slides described hot in-place recycling (“HIR”) as a process used regularly in British Columbia. They also indicated that there was “no experience with using HIR for SMA” and that the “application should be considered as [a] trial.”⁵ The slides also provided an overview of potential benefits and risks to Golder related to its involvement with the rehabilitation of the RHVP, specifically related to the use of HIR. The slides stated :

City of Hamilton is intending to rehabilitate the pavement on the Red Hill Valley Parkway using Hot In Place Recycling (HIR)

- The asphalt that will be recycled is Stone Mastic Asphalt (SMA)
- HIR has never been carried out with SMA before in Canada
- Golder’s involvement will have several benefits
 - Recognition as a leader in HIR throughout Canada
 - Strengthened relationship with anticipated contractor
 - Continued strong support for long time client – the City⁶

7. The following was identified under the heading “Project Risk Triggers Mitigation”:

- Innovation
 - The project will start with extensive laboratory testing, samples will be provided by the City.
 - The results of the testing will indicate the anticipated performance in the field if HIR is carried out.
 - Following the laboratory testing the results and analysis will be shared with the City.
 - Golder will provide their professional opinion regarding the suitability of carrying out HIR on SMA.
 - If there are any additional step required Golder will include them in the report.
 - The City will decide the next step.⁷

² [GOL0006066](#)

³ [GOL0006068](#)

⁴ [GOL0006286](#) attaching [GOL0006288](#)

⁵ [GOL0006288](#) at image 3

⁶ [GOL0006288](#) at image 2

⁷ [GOL0006288](#) at image 4

- Poor performance of HIR
 - May result in additional treatments being required.
 - Golder will discuss with the City that this risk remains. It will be agreed in writing that even with adequate laboratory results, the use of HIR with SMA is still not supported by previous experience. Assuming that all project specifications are met, the City will be responsible for future work that maybe required on the RHVP and this will be confirmed in writing.
 - All results, recommendations and concerns will be provided to the City following the laboratory investigation. At this point the decision to proceed will be the responsibility of the City.⁸

8. Additional contractual terms for the project was identified as a possible risk mitigation solution.⁹

9. A Golder document dated May 3, 2018, which was related to the Project Risk Committee review of conducting HIR for the resurfacing of the RHVP included, at Item 1.2, a table of past projects conducted for Hamilton. It included “Skid Review, Spec Review, Pavement and Materials Technology Review and Pavement Instrumentation Monitoring and Data Collection”. The status of the latter three project is listed as completed. The Skid Review project was listed as “95% completed”.¹⁰

10. The document identified that a risk associated with the project included the risk that HIR was recommended, implemented, then performed poorly. A mitigation strategy listed in the document was to discuss the risk with the City (including in writing) and to adjust contractual terms accordingly. Further, “All results, recommendations and concerns will be provided to the City following the laboratory investigation. At this point the decision to proceed will be the responsibility of the City.”¹¹

⁸ [GOL0006288](#) at image 5

⁹ [GOL0006288](#) at image 8

¹⁰ [GOL0007424](#) at image 2

¹¹ [GOL0007424](#) at image 6

(a) Discussions and Meetings with Hamilton

11. On May 14, 2018, Dr. Uzarowski attended a meeting with Michael Becke (Senior Project Manager, Design, Engineering Services, Public Works, Hamilton) regarding the possibility of conducting HIR on the RHVP.¹²

12. Mr. Becke sent a calendar invitation for this meeting to Richard Andoga (Senior Project Manager, Infrastructure Programming, Asset Management, Engineering Services, Public Works, Hamilton), Dennis Perusin (Senior Project Manager, Construction, Engineering Services, Public Works, Hamilton), Marco Oddi (Manager, Construction, Engineering Services, Public Works, Hamilton), Tyler Renaud (Project Manager, Construction Quality Assurance, Construction, Engineering Services, Public Works, Hamilton) and Dr. Uzarowski. The subject line of the meeting was “Red Hill Valley Repaving - HIP –“. Mr. Becke noted the following in the body of the email:

I was wondering if we could have a meeting have a meeting to get the sampling going for the RHVP HIP resurfacing. Ludomir is available. Dennis / Marco, I see you have conflicts in your calendar, but if you are ok with Tyler coming I would like to still have the meeting.

Let me know if you have any questions.¹³

13. Dr. Uzarowski’s notebooks contained an entry for a meeting with the City on May 14, 2018. The following was noted:

Monday, May 14/18

1/ Meeting with the City of Hamilton

- HIR on RHVP

- sampling
- Rick – funding
- expectations

¹² [GOL0006444](#)

¹³ [GOL0002860](#)

- sampling – soon
- decide ASAP
- Pamela & Heather Bell for MTO (& fiber in the mix)
 - 2 projects for HIR in 2019
- not SMA but SP12.5 FC2
- proposal
 - sampling method
 - hybrid mix, VMA & other asphalts
- this fall – get on the roster
 - Whitby lab
 - Sampling – core through cracks

Mike is back on the 22nd

- Gary – what is outstanding
 - breakdown for Mike
 - PSV report – inconclusive
 - MSCR
 - HIR
 - pav. condition – blasting no¹⁴

14. Mr. Becke's notes also contain an entry dated May 14, 2018:

RHVP – HIR Meeting

- Current SMA – Get a Hybrid Mat'l or 12.5 FC2
Once completed

→ SLAB – Broken into chunks

- Ludomir to provide a proposal – ASAP ←

Gary work - MSCR Spec.
 - PSV
 - Pavement Review

Ward 4 – Airport Road – Homestead to Airport¹⁵

¹⁴ [GOL0003874](#) at image 2

¹⁵ [HAM0061788_0001](#) at image 88

2. Shillingtons Contacts the City Regarding the Tradewind Report and RHVP Collisions

15. On May 4, 2018, Colleen Crawford (Senior Law Clerk, Shillingtons LLP) forwarded an email she received from Gary Moore (Director, Engineering Services, Public Works, Hamilton) on August 15, 2017, to Mr. Moore, copying Diana Swaby (formerly Diana Sabados, Supervisor, Claims Administration, Risk Management, Legal & Risk Management Services, Corporate Services, Hamilton). A copy of the Tradewind Report was attached to the email. Ms. Crawford wrote:

Good afternoon Gary,

You may recall speaking with Mr. Terry Shillington and myself last August regarding the friction testing that was done on the LINC and RHVP.

We are in the process of preparing the City's affidavit of documents with respect to a litigation matter involving a median crossover on the LINC. Plaintiffs' counsel has specifically asked us about friction testing. We will likely need to produce a copy of this report in the City's affidavit of documents. We wanted to confirm, if any time, has this report been presented to council. If so, would you provide us with a copy of any reports prepared for City Council and a copy of the meeting minutes.

Should you have any questions in this regard, please do not hesitate to contact me.¹⁶

16. Mr. Moore replied 15 minutes later, writing: "No this report was never reported to Council."¹⁷

17. On May 11, 2018, Ms. Crawford emailed Kim Wyskiel (Superintendent, Traffic Services, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton) regarding a collision that occurred on the LINC:

Good afternoon Kim,

I am still trying to finalize the City's affidavit of documents, and have a couple of follow up questions.

¹⁶ [HAM0053107_0001](#) attaching [HAM0053108_0001](#)

¹⁷ [HAM0061989_0001](#); and [HAM0062249_0001](#)

Can I get a copy of the Master Transportation Plan for the City, referred to in the December 7, 2015 report, attached for your reference. Can you tell me whether the City installed rumble strips as recommended in this report.

Finally, can you tell me if the new speed fine signs were installed on the RHVP/LINC, and if so which format was used? I am trying to determine whether we need to produce the SafePace product sheets. If those signs were not used, we will not need to produce those product sheets (hopefully this makes sense, if not give me a call).¹⁸

18. On May 25, 2018 and June 6, 2018, Ms. Crawford followed up with Ms. Wyskiel, replying to the message she sent on May 11, 2018.¹⁹

3. Administrative Matters at the City

19. On May 8, 2018 Kathy Albers (Administrative Assistant to the Director of Environmental Services, Environmental Services, Public Works, Hamilton) and Raffaella Morello (Senior Project Manager, General Manager's Office, Public Works, Hamilton) corresponded regarding the impact of the October 2018 municipal election on reports brought to Council. Ms. Albers confirmed to Ms. Morello that "[n]o reports of a sensitive nature are to be brought forward past July 27th as there is a possibility of a lame duck council due to elections."²⁰

(a) Moore's Retirement from Director of Engineering Services

20. On May 8, 2018, Diana Cameron (Administrative Assistant to the Director of Engineering, Engineering Services, Public Works, Hamilton) emailed Mr. Oddi and several others, including both internal and external recipients, regarding ticket sales for Mr. Moore's retirement event. Mr. Oddi responded the following day regarding the tickets he had sold for the event, writing:

¹⁸ [HAM0047125_0001](#)

¹⁹ [HAM0047125_0001](#)

²⁰ [HAM0027008_0001](#)

I have sold 37 tickets to date to the following:

- Dufferin Construction
- McNally Construction
- Associated Paving & Materials
- DeFaveri Construction
- Peto MacCallum
- Soil-Mat
- Scott Llewellyn & Associates
- Jan Hudoba
- Jerry Parisotto
- internal staff

I am still waiting to hear back from the following:

- Deso Construction
- Coco Paving
- Wesroc Construction
- Cona Construction
- King Paving
- Oakridge
- Amec
- CIMA
- Dillon
- Stantec
- Landtek
- Terraprobe
- Golder
- Urbex

Please note that some of the above noted firms may purchase tickets at the door.²¹

21. The City of Hamilton has provided the Inquiry with evidence indicating that it has determined that on May 15, 2018, the “[f]ile containing the Tradewind Scientific report was uploaded to the Public Works document management system by Gary Moore”.²²

22. On May 16, 2018, Mr. Moore sent Gord McGuire (Manager, Geomatics & Corridor Management, Engineering Services, Public Works, Hamilton) an email under the subject line “stuff”, noting “FYI” in the body of the email. Mr. Moore attached two emails, which themselves attached a City of Toronto report title “City Benchmarking Review of Practices

²¹ [HAM0053110_0001](#)

²² [HAM0055560_0001](#) at image 4; and [HAM0061613_0001](#)

for Utility Cuts, Road and Sidewalk Resurfacing and Reconstruction,” and one appendix from that report.²³

23. On May 25, 2018, Nicole O’Reilly (Reporter, Hamilton Spectator) emailed Mr. Moore regarding an updated contact for RHVP inquiries:

I was looking for an update on the asphalt testing on the RHVP and what's happening with plans to "shave and pave"

Hoping you can connect me with the right person to answer questions around this.

Thanks and good luck in the new position.²⁴

24. Mr. Moore forwarded the email to Jasmine Graham (Communications Office, Strategic Partnerships & Communications, City Manager’s Office, Hamilton) the same day, writing:

Nicole is following up on the pavement condition investigation. And what we are going to do. I’ll let you run with this. :)”²⁵

25. Ms. Graham responded to Mr. Moore, asking “[d]o you know who has this intel now?”²⁶

26. Ms. Graham also emailed Mr. McGuire to inquire about the status of the rehabilitation and the Spectator’s request. He replied, writing that he was

not sure where that landed. We were waiting for a new technology called Hot in Place. Marco Oddi may have some insights. Will be in soon.²⁷

27. Ms. Graham forwarded Mr. McGuire’s response to Mr. Oddi, who responded:

²³ [HAM0001220_0001](#) attaching [HAM0001221_0001](#) attaching [HAM0001222_0001](#); and [HAM0001220_0001](#) attaching [HAM0001223_0001](#) attaching [HAM0001224_0001](#)

²⁴ [HAM0005817_0001](#)

²⁵ [HAM0005817_0001](#)

²⁶ [HAM0005817_0001](#)

²⁷ [HAM0053156_0001](#)

We (Asset management, Design, Construction and a geotechnical consultant) are reviewing the hot-in-place asphalt recycling technology to see if it is an option for the RHVP mainline resurfacing. The ramps will be resurfaced using the traditional mill and pave option.

The Ministry of Transportation is undertaking a trial hot-in-place resurfacing project this summer in northern Ontario. We should know by late summer/early fall how we will move forward with our project.²⁸

28. Ms. Graham asked if that information could be provided to the Spectator. Mr. Oddi replied:²⁹

We should probably respond that the RHVP resurfacing is planned for 2019 and that more information should be available later this fall. This would avoid questions regarding the hot-in-place technology and its use/not use

29. Ms. Graham replied, noting that Ms. O'Reilly was still looking for the results of asphalt testing.³⁰

30. Ms. Cameron replied to the email chain, removing Ms. Graham and replying only to Mr. Oddi and Mr. McGuire, writing:

Gary uploaded a lot of Red Hill files in ProjectWise under the Directors Office (Engineering Services). Not sure if the pavement testing is there but I know it was Golder who did it.³¹

31. Approximately 10 minutes later, Ms. Cameron replied to Mr. Oddi and Mr. McGuire, writing that she “happened to be looking for something else and came across these from Golder”. She included a hyperlink to a folder “S:\Public Works\Engineering Services Division\PMTR Report – Golder”.³²

²⁸ [HAM0053161_0001](#)

²⁹ [HAM0053161_0001](#)

³⁰ [HAM0053161_0001](#)

³¹ [HAM0053162_0001](#)

³² [HAM0053162_0001](#)

(b) Mr. McGuire Named as Mr. Moore's Successor as Director of Engineering

32. On June 13, 2018, Dan McKinnon (General Manager, Public Works, Hamilton) sent Mr. McGuire a letter offering him the position of Director, Engineering Services, along with an employment agreement. The agreement outlined that Mr. McGuire would begin as Director, Engineering Services on June 18, 2018.³³

33. On June 14, 2018, Mr. McKinnon emailed the Public Works department regarding Mr. Moore's retirement, writing:

As you know, Gary Moore our former Director of Engineering Services retired earlier this spring. In preparation for Gary's departure, we have been actively recruiting to fill the role, and today I am announcing the successful candidate for this position.

I am pleased to congratulate Gord McGuire, who will officially take on his duties as Director of Engineering Services as of June 18, 2018.

Gord began his career in the municipal world 24 years ago as a Project Surveyor with the Region of Hamilton-Wentworth. Over the years, Gord has held progressively more senior leadership roles within the organization, including his most recent position as the Manager, Geomatics and Corridor Management, which he held for 10 years.

During his career with the City of Hamilton, Gord has delivered many large-scale capital projects in support of the City's overall infrastructure program. His strong fiscal oversight, innovation and focus on continuous improvement and efficiency have allowed Gord and his section to deliver on numerous programs, projects and initiatives, including road restoration programs, the LED street lighting program and the accelerated resurfacing program.

Gord's work ethic, embrace of technology, dedication to measurement and data-driven decisions, and attention to process improvement are strongly aligned with the goals in Public Works and will suit him well in his new role.

I'd also like to thank Dave Lamont, who will be acting as Manager, Geomatics and Corridor Management while we undertake a formal recruitment process to fill the position.

To all of those who competed for this position, once again I would like to thank you for your interest. I am reminded of how lucky we are that our organization and our department is so deep with talent.

Please join me in congratulating Gord McGuire, our new Director, Engineering Services.³⁴

³³ [HAM0058795_0001](#)

³⁴ [HAM0058799_0001](#)

34. This was forwarded to Chris Pirsias (Senior Financial Analyst, Asset Management, Engineering Services, Public Works, Hamilton) the same day by Mr. Andoga. Mr Pirsias replied: “So he delivered an accelerated resurfacing program?”³⁵

35. Mr. Andoga replied:

I know

Lol c u monday³⁶

36. Mr. McKinnon’s email was also sent to Mayor Fred Eisenberger (Mayor of Hamilton) and Council the same day.³⁷

4. Ongoing CIMA Projects

(a) RHVP Lighting Study

37. On May 2, 2018, Mike Field (Senior Project Manager, Street Lighting & Electrical, Geomatics & Corridor Management, Engineering Services, Public Works, Hamilton) sent CIMA the RHVP and LINC collision data it had previously requested for the RHVP Lighting Study on April 26, 2018.³⁸

38. On May 11, 2018, Jennifer Haslett (Senior Project Manager, Environment, Infrastructure, CIMA) emailed Reza Omrani (Associate Partner, Project Manager, Transportation, CIMA), Brian Malone (Partner, Vice-President, Transportation, CIMA) and Lauren Cymbaly (Environmental Professional, CIMA) regarding the RHVP Lighting Study.³⁹ She advised that she had completed a preliminary review of the environmental

³⁵ [HAM0058799_0001](#)

³⁶ [HAM0058799_0001](#)

³⁷ [HAM0058798_0001](#)

³⁸ [HAM0058771_0001](#) attaching [HAM0058772_0001](#)

³⁹ [CIM0017016](#)

assessment documents and she could not find “any evidence that lighting was considered in the impact assessment of the original EA or the subsequent impact assessment documents (my initial review is attached).” She added:

This is not a problem in terms of the EA process moving forward, but it contradicts the findings of the City as noted below from Public Works Committee Report PW16077:

The original Environmental Assessments (EA) completed for the LINC and RHVP included a review of lighting. It was identified that through the Red Hill Creek Valley, that lighting would have a detrimental environmental impact and lighting restrictions were imposed. Decisions regarding adding lighting on the LINC and/or RHVP would require renewing and updating the original EAs so that the impacts of lighting could be re-examined. It would be prudent to delay any such EA review so that it may be coupled with other proposed changes such as the widening of the LINC/RHVP to six lanes.

From my review, the decision on partial illumination had nothing to do with the environment; it was a decision based on MTO and municipal standards at the time.

Do we have any additional insight on where the assertion in the Public Works came from?⁴⁰

39. On May 17, 2018, Ms. Haslett emailed a memorandum summarizing regarding her review to Mr. Omrani, Mr. Malone and Ms. Cymbaly.⁴¹ She requested comments before finalizing for it to be sent to the client for review.

40. Mr. Malone replied the same day, adding a question into the memorandum:⁴²

1990	Mountain East-West and North-South Transportation Corridor Project Preliminary Design Investigation	<ul style="list-style-type: none"> 2 Preliminary design recommendations for illumination were to provide conventional roadway lighting at interchange ramp terminals and cross roads; limiting lighting to these locations was intended to reduce impact to residential areas, not the natural environment 2 Full illumination of the RHVP section was recommended with high mast lighting located within the median 	<div style="border: 1px solid gray; padding: 5px; width: fit-content;"> <p>Comment [BM1]: Where does this get dropped? Do we know?</p> </div>
1990	Construction Phase	<ul style="list-style-type: none"> 2 Construction of the LINC and RHVP began 	

41. On May 22, 2018, Ms. Haslett and Mr. Malone exchanged emails regarding the memorandum:

⁴⁰ [CIM0017016](#)

⁴¹ [CIM0017004](#) attaching [CIM0017004.0001](#)

⁴² [CIM0017000](#) attaching [CIM0017000.0001](#) at image 2

[JH]: I don't have an answer to your question. That 1990 document was the only one I found that had a recommendation for continuous lighting.

Illumination:

Within the East-West section of the project, conventional roadway lighting will be provided at the interchange ramp terminals and cross roads. Limiting the roadway lighting to these locations will reduce the impact on the adjacent residential development. Full illumination of the North-South section is recommended between Dartnall Road and Brampton Street. For reasons of economy, high mast lighting will be utilized and located within the median.

I finalized the memo (attached).

[BM]: Interesting. So, high mast median lighting was recommended for the Red Hill portion in the 1990 E-W-N-W Preliminary Design report. But in the end no lighting, other than the interchanges, was the final installation.

And the Crombie report never touched on it?

[JH]: We don't actually have the Crombie report. Other reports referenced it, and summarized findings, but I was not able to review that original report.

[BM]: Hmm... that is likely a point to raise.⁴³

42. On May 22, 2018, Mr. Omrani emailed a summary memorandum to Mr. Field.⁴⁴ He wrote:

Thanks Mike. The attached memo summarizes the findings of the EA study review. We'll be discussing the content of this document in our meeting tomorrow morning.

43. On May 22, 2018, Mr. Omrani emailed Mr. Field, copying Dipankar Sharma (Senior Project Manager, Continuous Improvement, Engineering Services, Public Works, Hamilton), Mr. Malone, and Ms. Haslett, attaching an agenda for the project progress meeting scheduled for the following day.⁴⁵

⁴³ [CIM0016990](#)

⁴⁴ [CIM0016988](#) attaching [CIM0016988.0001](#)

⁴⁵ [CIM0016997](#) attaching [CIM0016997.0001](#)

(b) Speed Limit Study

44. On May 3, 2018, Mr. Omrani received an email from Rich Shebib (Project Manager, Corridor Management, Geomatics & Corridor Management, Engineering Services, Public Works, Hamilton) regarding logistical arrangements for traffic and speed data to be collected by Pyramid Traffic Ltd. Mr. Shebib advised that CIMA or Pyramid should apply for a permit from Corridor Management to add the work to the system and ensure that there would not be any conflicts with other permit holders. Mr. Omrani replied advising that Pyramid would be requesting the permit. He indicated they would like to collect data from May 8 or 9, 2018, to May 17, 2018 and were awaiting confirmation from the City's traffic control department.⁴⁶

45. On July 6, 2018, Pyramid sent the data it had collected from May 24 to 31, 2018, to Mr. Omrani.⁴⁷

C. June 2018

1. Updated RHVP Collision Data

46. On June 6, 2018, David Ferguson (Superintendent, Traffic Engineering, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton) emailed Bryan Purins (Traffic Safety Technologist, Traffic Roadway Safety, Traffic Operations, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton) requesting RHVP and LINC collision statistics. He wrote:

Can you send me those collision stats you showed at the meeting we had last month. I meet with Dan on Monday.⁴⁸

⁴⁶ [CIM0015968](#)

⁴⁷ [CIM0015796](#)

⁴⁸ [HAM0005822_0001](#)

47. That same day, Mr. Purins provided Mr. Ferguson the data for the RHVP and LINC from 2013-2018, broken down by month. Certain other details regarding the collisions were included, including any fatalities or crossover collisions.⁴⁹

2. RHVP Lighting Study

48. On June 6, 2018, Ms. Haslett emailed Mr. Field regarding the EA conducted during the construction of the Upper Red Hill Valley Parkway:

Could you please see if you can dig up a copy of the EA that was done for the Upper Red Hill parkway section? We had discussed in the meeting that it would be good to review that document to see if there was any discussion about the impact of lighting.

49. Mr. Field forwarded the request to Mr. Becke and Susan Jacob (Manager, Design, Engineering Services, Public Works, Hamilton) the same day:

[MF]: CIMA is working on a lighting study for the Linc/RHVP for me. They want to examine the URHVP as part of their assignment.

Was there an EA done for the URHVP or any other similar study that we can provide to them?

[SJ]: Is this just a study you have CIMA doing or is this a project you are planning on doing?

I will look in and see if there is an EA that addresses the lighting.

[MF]: This is an on-going assignment that is being done at the request of council. It is a full-on review of the safety performance of the Linc/RHVP with a focus on lighting. They've done a complete EA review of the Linc/RHVP and want to examine what the EA looks like in context for the URHVP – they examine it not just for lighting and want to get their hands on the full document.⁵⁰

50. Mr. McGuire and Mr. McKinnon met on June 11, 2018. The subject line of the calendar invitation was “Linc/Red Hill Lighting”⁵¹

⁴⁹ [HAM0005822_0001](#) attaching [HAM0005823_0001](#)

⁵⁰ [HAM0005824_0001](#)

⁵¹ [HAM0005832_0001](#)

3. HIR Suitability Study

51. Also on June 6, 2018, Dr. Uzarowski emailed Mr. Becke, with a copy to Dr. Henderson, attaching a proposal for a study regarding HIR on the RHVP (“HIR Suitability Study”):

Please find attached a proposal for the Hot In-Place Recycling (HIR) on the Red Hill Valley Parkway. We have split it into two phases: Phase 1 for the Preliminary Investigation and Specification Development; and Phase 2 for Construction Consultations and QA Field and Laboratory Testing and Acceptance.

Sorry that it took me so long. I was travelling quite a bit.⁵²

52. The proposal, signed by both Dr. Henderson and Dr. Uzarowski, divided the scope of work into two phases:

Phase 1 – Preliminary Investigation and Specification Development; and

Phase 2 – Construction Consultations and Quality Assurance (QA) testing.⁵³

53. The cost estimate provided in the proposal was \$130,270.00, excluding taxes.⁵⁴

54. Mr. Becke replied the same day, advising Dr. Uzarowski that he would be in touch regarding the proposal shortly.⁵⁵

55. On June 13, 2018, Dr. Uzarowski responded in the same email chain, asking Mr. Becke to call him.⁵⁶

56. The following day, Dr. Uzarowski emailed Mr. Becke, writing:

My recommendations for the sampling for HIR on RHVP are as follows:

⁵² [HAM0053447_0001](#)

⁵³ [HAM0053448_0001](#) at image 1

⁵⁴ [HAM0053448_0001](#) at image 3

⁵⁵ [HAM0053459_0001](#)

⁵⁶ [HAM0053459_0001](#)

1. Take asphalt surface course SMA samples from three locations in each direction, i.e. three from NBL and three from SBL.
2. At each location obtain minimum 12 samples of say 350 mm x 350 mm or 450 mm x 450 mm. Basically it can be one large area with then smaller samples sawcut for easier handling.

Providing we can get the samples soon, we should be able to complete the work for Phase 1 in mid August.⁵⁷

57. Also on June 14, 2018, Dr. Uzarowski emailed Mr. Becke, copying Dr. Henderson, attaching the proposal from June 4, 2018. In the email, he wrote:

I am not allowed to do any technical work on HIR on RHVP until I get OK from you. This should include the contract exceptions shown on Pages 5 and 6.

If you have any concerns or questions, please do not hesitate to contact me.⁵⁸

58. On June 15, 2018, Dr. Uzarowski emailed Mr. Becke asking him to call his cell phone.⁵⁹

59. On June 14, 2018, Richard Andoga emailed Mr. McGuire and Sam Sidawi (Manager, Asset Management, Engineering Services, Public Works, Hamilton) regarding funding options for various upcoming Public Works projects, including “Redhill paving (\$6.75M)”. His email included the following:

Upon review of the accounts (see link below), we can identify potential funding sources. From the project listing below we can use the surplus finding from Brock Road and Bridge 163, in addition to the unallocated pavement degradation to account for \$3.6M. The remaining \$2.65M could be funded from the Redhill resurfacing.

Redhill paving (\$6.75M)

Brock Road variance (\$1.2M)

Pavement Degradation (\$1.0M)

Bridge 163 Centennial Surplus (\$1.4M)

⁵⁷ [HAM0053461_0001](#)

⁵⁸ [HAM0053462_0001](#)

⁵⁹ [GOL0006666](#)

This would leave able funding to complete ramp repairs in 2018, if needed. With the revised scope of work for the Redhill, if hot in place is determined the preferred option additional funding will not be needed, therefore no additional funding pressures.⁶⁰

60. Mr. McGuire replied the same day:

If we take funds out of the Linc resurfacing it just ends up in the 2019 budget correct?

Having traffic still look for this level of funding is interesting..... we will have to review that in more detail.⁶¹

61. Mr. Andoga responded:

If we can go with hot in place resurfacing the existing funds in 19 and say 2 million from 18 should be enough. So say 8.5M opposed to 13M⁶²

62. On June 27, 2018, Mr. McGuire emailed Mr. Sidawi and Mr. Andoga, asking “[w]here are we on this review? Is this technology in Ontario yet and if so do we have plans to check the work?”⁶³

63. Mr. Sidawi replied “[t]he Design section is currently completing the review. By copy of this email I will ask Mike to provide an update.”⁶⁴

64. Mr. Becke responded to Mr. McGuire’s email later the same day:

Regarding the current status on the Hot-In-Place (HIP), I have the following information:

Design has retained Golder Associates to complete lab testing and provide guidance on the design for the HIP recycling of the RHVP. A PO request is out for signatures (you may have already seen it). The intent is for Golder to determine if the mix design of the existing SMA asphalt on the RHVP can be rejuvenated into an acceptable surface course design that would meet or exceed the parameters of a super pave 12.5FC2 mix (highway mix). To complete this review, Golders has requested we obtain asphalt samples in 3 locations north bound and 3 locations south bound for the testing.

I have requested the help from our Roads Dept. to obtain the samples through their existing maintenance contract. Their contractor has the equipment to remove the samples needed

⁶⁰ [HAM0005834_0001](#)

⁶¹ [HAM0005835_0001](#)

⁶² [HAM0005835_0001](#)

⁶³ [HAM0001264_0001](#)

⁶⁴ [HAM0001264_0001](#)

as well as complete the traffic control required on the RHVP. We are currently selecting the locations for the samples to be taken to ensure they are representative of the asphalt on the RHVP. Maintenance has indicated that this work will take place over 2 Sunday night closures, when traffic volumes are at their lowest and will minimize impact to the driving public. As soon as we know the dates, I can provide that information too you.

Once the samples have been provided to Golders, they will complete the testing and analysis to provide us with a report and mix design. This process will be iterative and will require quite a few trial batches to make sure we can achieve what we are looking for. If we are able to get the samples relatively soon, Golders anticipates a report by the end of August. At this point we will be able to make the decision of moving forward with a tender for HIP for both the north bound and south bound direction of the RHVP or if we will have to move forward with a "Shave n Pave" of the north bound and south bound to occur over 2 years.

My understanding of the benefits of the HIP is that we can complete both directions of the RHVP in one year for about the same cost as doing one direction of a shave-n-pave at a dramatically reduced impact to the driving public.

With respect to the Technology:

This summer the MTO has a contract for HIP resurfacing of 40 km of the Trans Canada Hwy north west of Thunder Bay. I spoke with Pamela Marks (head of the Bituminous section at the MTO) and she said that if the contract is successful they will be tendering for HIP resurfacing on 400 series highways (Central Region) in 2019. Further, I have spoken to the PM at the MTO that is running this project (Heather Bell) she has indicated that they are also looking to complete the first HIP resurfacing of an already HIP resurfaced road in 2019/2020.... The Kenora By-pass was HIP resurfaced 13 years ago, and the MTO is looking to see if it can be done again... (truly a perpetual pavement). Heather is supposed to contact me once the contract begins in Thunder Bay for what they call a "Pave-in". This is an invitation to see the process at work and speak to the contractor and the MTO to ask questions while seeing the final product. I think it would be very beneficial for someone(s) from the City to go up to see this work and the logistics that are involved with construction.

This specific technology that we are looking at has been used in BC as a form of asset preservation/resurfacing for the past 25years. The technology has changed since it was first used (everyone remembers Garth St.) and is now a multi-stage process that BC uses on major highways and airport runways. BC has HIP 9000 LN/km of highways and airport runways in the province.

My understanding from discussions with the MTO and with Golder, is that the BC Contractor that has this technology, is looking to establish a residence here in Ontario. There is no other Contractor with this technology that I am aware of here in Ontario, or in any of the states nearby.

Here is the link to the contractor in BC that was awarded the MTO contract.
<http://www.ecopavesystems.com/>

Its late, I better head home, if you have any other questions, please come see me and I can discuss this further.⁶⁵

⁶⁵ [HAM0001264_0001](#)

65. On June 28, 2018, Mr. Becke forwarded Dr. Uzarowski's June 14, 2018 email regarding recommendations for the sampling for HIR to Sarath Vala (Project Manager, Design, Engineering Services, Public Works, Hamilton). Mr. Vala replied the same day, writing:

I think the following locations with severe dips (20mm to 35mm) would be ideal for taking samples along the RHVP,

NB or Down bound direction:

1. STA 1+510 or 10m south of the Escarpment Bridge (located between Mud Street & Greenhill Ave) south abutment .
2. STA 2+970 or 10m north of the overhead signboard located at the Greenhill Ave. exit ramp (a concrete box culvert crosses the RHVP here); or at STA 3+310 which is approx. 30m south of the Greenhill Ave. bridge (a 300mm watermain crosses here)
3. STA 6+465 or approx. 10m north of the overhead signboard located at the Barton St. exit ramp (a 2400mm concrete box culvert crossing)

The above referenced stationing for NB direction starts approx. 50m west of the pedestrian bridge located between Dartnall Rd and Pritchard Rd.

SB or Up bound direction:

1. STA 1+275 or 325m south of the Barton St. bridge (this falls in the same vicinity as #3 in the NB direction where the 2400mm concrete box culvert crosses)
2. STA 4+90 or 50m south of the overhead signboard located at the Greenhill Ave. exit ramp
3. STA 6+013 or 5m north of the Escarpment Bridge north abutment; or STA 7+286 which is approx. 15m north of Pritchard Rd.⁶⁶

66. Mr. Becke forwarded Mr. Vala's email to Robert Marques (Project Manager, Capital Rehabilitation & Technical Operations, Roads & Traffic, Public Works, Hamilton) later the same day:

Sorry for the delay. I didn't get a chance to get to this like I had hoped, and thankfully Sarath was able to help me.

In the email below, Sarath has identified 3 locations to use in the up bound and down bound lanes for the asphalt samples; all locations selected are south of Barton St. (as you

⁶⁶ [HAM0047165_0001](#)

requested). As discussed, we are looking to obtain samples of the 40mm surface course asphalt by removing about +/-75mm of asphalt depth. We are looking to obtain from each location about an asphalt sample size minimum 3ft x 4ft or larger to give us the equivalent of 12 - 350x350mm samples at each location. The sample locations can be saw cut, but removal of the samples need to be done so that we can achieve samples that the aggregate is kept intact (i.e. the samples cannot be milled out).

We have selected areas that are located within “dip” locations of the driving lanes of the RHVP. The hope being that the sample area could be removed first, then pave the area of the cut and eliminating the “dip” at the same time. As indicated below, the dip location are around 20 – 35mm in depth.

We still have to work out the logistics of getting the samples to Golders. I am not sure if Golders will be onsite when taking the samples or if we will need to have the contractor deliver them to Golders Lab. I have cc'd Ludomir from Golders on this email so we can have that dialogue.

As for the costs, If it is possible to get an estimate beforehand? The work will be charged to the RHVP rehab account 4031811015.

Starting tomorrow I am away for a week. I will be checking my emails. While I am gone, you can also contact Sarath Vala who will be the Design PM once we know what we are doing with the resurfacing treatments.⁶⁷

4. Shillingtons Contacts Public Works Staff Regarding Collision Claim

67. On June 19, 2018, Ms. Crawford forwarded the email exchanges with Ms. Wyskiel to Mr. Ferguson, writing “David, I have been emailing Kim and following up with her for records regarding the Linc median cross over accident and have not heard from her. Can you please assist?”. She attached a copy of the December 7, 2015 staff report to the PWC.⁶⁸

68. On June 21, 2018, Ms. Crawford emailed Stephen Cooper (Project Manager, Traffic Engineering, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton) regarding the same collision.⁶⁹

⁶⁷ [HAM0047165_0001](#)

⁶⁸ [HAM0047125_0001](#) attaching [HAM0047126_0001](#)

⁶⁹ [HAM0061973_0001](#) attaching [HAM0061974_0001](#)

D. July 2018

1. Discussions Regarding RHVP Resurfacing

69. On July 3, 2018, Mr. McKinnon sent a calendar invite to several staff members in Public Works under the subject line “Red Hill/Linc Discussion.” He wrote “This will be a bi-monthly meeting, I will adjust the dates according to conflicts in calendars.” The invites appear to be a continuation of the meeting invitations first sent on March 15, 2018. A document prepared in February 2019 identified these meetings as having been held on April 9, 2018, August 30, 2018, October 9, 2018 and December 10, 2019, with attendees varying from meeting to meeting.⁷⁰

(a) HIR Suitability Study

70. On July 6, 2018, Patricia Vasquez (Senior Procurement Specialist, Financial Services, Corporate Services, Hamilton) emailed the purchase order for the HIR Suitability Study to Dr. Uzarowski, with a copy to Mr. Becke.⁷¹

71. On July 10, 2018, Mr. Marques emailed Mr. Becke regarding sampling on the RHVP, writing:

The approximate cost based on 25m long grind and paves on the Redhill along with the sample taking works out to about \$130,000-\$150,000.

This includes everything except transportation of the samples.⁷²

72. Mr. Becke replied the same day, copying Mr. Andoga, Mr. Sidawi, and Ms. Jacob.⁷³

This will work. If you can ask what the cost of transportation of the samples to the lab, that would be great. I believe Ludomir is looking for them to go to their Cambridge Lab.

⁷⁰ [HAM0011214_0001](#); [HAM0011213_0001](#); [HAM0005896_0001](#); and [HAM0035991_0001](#)

⁷¹ [GOL0002971](#) attaching [GOL0002972](#)

⁷² [HAM0001307_0001](#)

⁷³ [HAM0001307_0001](#)

Once you know the dates, please keep me in the loop and I will arrange for Golder to be on site (and I would like to attend as well).

73. On July 12, 2018, Mr. Marques emailed Mr. Becke, writing:

Just an update, we are good to go for Sunday July 22nd to collect samples in the southbound direction of the Red hill.

Mike, As discussed please provide me with a new location to replace the one closest to Pritchard. I would like to keep access open from Mud St on to the Linc.⁷⁴

74. On July 16, 2018, Mr. Becke forwarded the email to Dr. Uzarowski. He wrote:

My apologies for not forwarding this sooner. Bob had originally booked the weekends into August, but after some discussion I was able for him to move it to next Sunday night (5pm to 6am).

We are going to be collecting the samples in the north bound direction this night and also repairing some of the dips at the same time. I was wondering if you would be able to have staff present or if you are ok with having the city there (I will be there for the first 2 samples) ? Also, how would you like to deal with the samples? If you want us to deliver them, I will need the location.

I'm currently in testing this morning for new hires, but will be back in the office this afternoon if you would like to talk.⁷⁵

75. Dr. Uzarowski forwarded the email to Dr. Henderson the following day, relaying that Mr. Becke advised him that the City would be taking “samples from the south bound direction this Sunday not north bound.”⁷⁶

76. Dr. Henderson then forwarded the email to Rabiah Rizvi (Pavement and Materials Engineer, Golder) and Amelia Jewison (Geotechnical Analyst, Golder) writing:

See below. This is not all organized yet from a contractual position. But *IF* we do get that organized, are you able to work Sunday night?⁷⁷

⁷⁴ [HAM0001309_0001](#)

⁷⁵ [HAM0001309_0001](#)

⁷⁶ [GOL0005929](#)

⁷⁷ [GOL0005929](#)

77. On July 16, 2018, Chris Philip (Associate Partner, Director, Transportation, CIMA) emailed Manny Grewal (Project Engineer, Traffic Engineering, CIMA) under the subject line “Notes from meeting with Hamilton today”, writing “as requested”.⁷⁸ The following was included in the attached notes:

Rob

Nelson

Steve

ITS Strat Plan then Travel Time review

Red Hill will be re-paved next year. The over-representation of collisions (slippery) may go away.

Want to do VMS

Timeframe – 3, 5, 10 year timeframes

Expand to 10 year time horizon

Use priority scoring index that matches other City reports

RTTI – highest priority “that’s what they are looking to see”

Kimley Horn – Traction – travel time data based on Google

RTTI – 2 tier – continue with Bluetooth and then role in TRACTION

Hybrid Static/VMS signs are viable option for travel time information

Temporary QWS – City is out to tender – for 6 months

KH – develop a blueprint on how City can operate all the sensors currently available. City will use to trigger automatic signal timing changes on EDRs

City has money in capital budget to install some fibre for traffic control

Traffic Operations and Management could be a high priority – org charts for other agencies

Change Ramp Metering to Ramp Management – Jameson as an example?

Take approach of the timeframes rather than priorities

Taking to council will be mid-to late spring

⁷⁸ [CIM0015789](#)

Send the Ottawa speed limit policy report to Hamilton⁷⁹

78. On July 17, 2018, Mr. Becke sent an email regarding the work to be conducted on the RHVP on July 22, 2018. Chris Olszewski (Project Manager, Capital Projects, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton), Bob Butrym (Construction Coordination, Traffic Operations, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton) Traffic Detour Investigator, Hamilton) Mr. Marques, Martin White (Manager, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton), Ms. Jacob, Mr. McGuire, Ms. Graham, Mr. Ferguson, Brian Hughes (Manager, Capital Rehabilitation & Technical Operations, Roads & Traffic, Public Works, Hamilton). Mr. Vala, Mr. Oddi and Dr. Uzarowski were included as recipients. Mr. Becke wrote:

I wanted to send out a quick email to make sure everyone is in the loop and on the same page as to what is going on this weekend (and an additional future weekend) with the RHVP.

Traffic Engineering will be replacing/installing missing “cat eyes” reflectors into the pavement of the RHVP from Greenhill south to the LINC (Chris please jump in if I have anything wrong). The works will take place this week and into next week, where the contractor will be starting in the southbound lanes and then eventually moving over to the northbound lanes. Their work will be completed at night with a rolling closure to minimize impact to traffic. I have spoken to traffic regarding the upcoming resurfacing of the RHVP in 2019 and they are aware that the reflectors will be impacted during that project. My understanding is this is a Council priority and only reflectors that are missing or need to be replaced will be done at this time.

On Sunday July 22, starting at 5pm, the City’s Capital Rehab and Tech Services dept. will have a contractor on site to remove samples of asphalt for Engineering Services to help aid us in the development of an asphalt mix design for a Hot In Place (HIP) resurfacing technology. Three large samples spaced out along the length of the RHVP, are going to be removed from the southbound lanes and sent to Golder Associates Lab for the mix design review. The samples have been selected in settlement areas of the mainline so that when the repairs are done, the settlements can also be addressed. The work will be completed with a full closure of the RHVP between 5pm and 6am Monday morning. During that time, my understanding is that maintenance will also utilize the closure to do some catch basin cleaning and sweeping etc. On a weekend still yet to be determined, 3 more samples will be taken from the northbound lanes in a similar fashion. Again, the sample locations have been selected in settlement areas so that repair to those settlements can also take place.

⁷⁹ [CIM0015789.0001](#)

Through discussion with Traffic Engineering and Capital Rehab, the overlap of the 2 jobs should be kept to a minimum. The Traffic Engineering contractor will complete their work in the southbound direction first to ensure there is no “constructor issues” this Sunday. They will then flip to the northbound lanes, which will be completed before our next round of sampling is done. The location of the “Cats eyes” impacted from our samples locations will be kept to 1 location (in both directions) on the south end of the RHVP. Loss of the cats eyes will be kept to an absolute minimum with only a few reflectors that may need to be removed and salvaged if possible.

All groups have been working closely with myself and Traffic Operations regarding the upcoming closure and works. I understand that the MTO has also been contacted as the closure of the southbound direction may have traffic impacts to the QEW.⁸⁰

79. The Roads & Maintenance Group of the Roads & Traffic Division had a teleconference on July 17, 2018, at 8:00 a.m. Under a section titled “Hiring”, the minutes from the teleconference included the following:

New Director - Edward Soldo starts on July 31st and Betty's last day is Aug 1st. The new Director would like to be referred to as Edward.⁸¹

(b) Discussions Regarding Asphalt Testing

80. On July 17, 2018, Mr. McGuire sent a calendar invitation to Mr. Moore and Ms. Graham under the subject line “Discuss: RHVP Asphalt Testing”. The meeting was scheduled for the following day at 11:00 a.m. “Gary may be a little late” was included in the body of the invitation.⁸²

81. Ms. Cameron sent an email to Mr. Moore, replying to the calendar invitation she sent on behalf of Mr. McGuire, writing: “Jasmine needs this meeting to take place tomorrow morning and this seems to be the only time you are all available.”⁸³

⁸⁰ [HAM0001312_0001](#)

⁸¹ [HAM0047283_0001](#) at image 2

⁸² [HAM0005881_0001](#)

⁸³ [HAM0053529_0001](#)

82. On July 19, 2018, The Spectator published an article written by Ms. O'Reilly regarding asphalt testing and upcoming resurfacing works on the RHVP:

The City of Hamilton is gathering more samples from the Red Hill Valley Parkway to test the quality of its asphalt and see what would be needed to recycle the material during planned repaving.

The eight-kilometre-long parkway has been fraught with speculation that it's too slippery since opening in 2007, but two other times the city has tried to test the road, the results have been "inconclusive."

The southbound Red Hill Valley Parkway will be closed Sunday night into Monday morning to collect samples ahead of repaving slated to begin next year.

With this latest testing, the hope is to get the green light to recycle the top layer of asphalt using a technique called "hot in place" that involves scraping, mixing and then repaving in one continuous chain, said Gord McGuire, Hamilton's new director of engineering services.

"We're taking three good-sized samples on the southbound lane," he said. "We will be doing the northbound lanes in the next month, as well."

If the recycling technique can't be used, the repaving work is expected to cost around \$6.75 million a side, he said. "Hot in place" would save time and money.

Last December, the city took smaller samples of the asphalt to test the viability of recycling. At the time, the city's former engineering director said they were aware some people felt the RHVP was slippery; that was part of the motivation for testing the asphalt.

McGuire said those test results came back "inconclusive," but the city believes "hot in place" is possible.

In December 2015, friction testing on the Red Hill also came back as "inconclusive," with the consultant recommending further testing. Instead, the city opted to move ahead with repaving ahead of schedule.

An award-winning investigation by The Spectator published last year found that the Red Hill had more than twice as many crashes than the connecting Linc. Most of the RHVP crashes happened on curvy stretches between King Street East and Greenhill Avenue, and between Dartnall Road and Mud Street. Crashes were most common when it was dark and the ground wet, with speeding the most frequent factor in fatal crashes.

There has been a vocal chorus from the loved ones of those who have died on the Red Hill and Linc in recent years. In particular, the families who lost people in "crossover" crashes, where a vehicle travels through the grassy median into oncoming traffic, have been calling for centre median barriers. The city has said these will only be considered if the parkway is widened.

There have been other safety upgrades on the parkway, including better signage and more speeding enforcement.

The city is spending more than \$100,000 to replace "cat's eyes" on the Red Hill Valley Parkway this month. Earlier reflective lane markers were installed in 2015, but became ineffective.

An update on the repaving plan for the Red Hill is expected to go to city council this fall.⁸⁴

83. Mr. McGuire was interviewed by Ms. O'Reilly for the article earlier that day.⁸⁵

(c) Discussions Regarding HIR Suitability Study Contractual Provisions

84. Also on July 19, 2018, Dr. Henderson emailed Mr. Becke, reattaching the proposal and purchase order for the HIR Suitability Study. Dr. Uzarowski, Juan Bracho (In-House Legal Counsel, Golder) and Jeff Dortmans (In-House Legal Counsel, Golder) were copied on this email. She wrote:

As I noted in my voicemail, thank you, we have received the attached PO for the City's HIR project. I have also attached the proposal we provided. Our understanding is that for this particular scope, the order of priority of documents setting out our agreement is as follows:

1. Roster Terms and Conditions, as amended by the City and Golder in Golder's attached proposal P18100695 June 4th proposal exceptions (the "Exceptions") (PDF 5/6);
2. Golder's Roster Assignment Proposal;
3. Category Specific Form of Submittal; and
4. PO (attached).

We will have someone available for Sunday night. Please include me on all communication coordinating Sunday night and moving forward as Ludomir will be off for two weeks and have limited email access.

Please let me know if there are any outstanding forms/documents in regards to initiating this roster assignment.

Thank you, we look forward to starting this project.⁸⁶

85. Mr. Becke replied to Dr. Henderson's email later that day, writing:

⁸⁴ [HAM0001320_0001](#)

⁸⁵ [HAM0005889_0001](#)

⁸⁶ [HAM0001321_0001](#)

Sunday update.

The access to the south bound lanes of the RHVP will be from the Barton St. ramp. There will be traffic control personnel there with barrels allowing access in and out of the closure. The intent is that our Maintenance dept. will have the closure begin at 5pm on Sunday evening and they can start work right away. Please provide me with the name and contact numbers of who will be coming to the site for Golder. Please note that the City will have various crews working on the entire southbound lanes of the Parkway doing maintenance (Street sweeping and catch basin cleaning etc.), so anyone coming to site should ensure they have the PPE with them and they should be aware of the other work going on.

Further, I need the address for the lab at which the samples are to be delivered. We will have a trailer on site to load the samples onto. If there is any kind of identification you want for the samples please let me know as soon as you can.⁸⁷

86. Mr. Dortmans replied to Mr. Becke's email:

I just left you a voice message. I'm hoping to confirm our understanding of the various terms associated to this project prior to start on Sunday. Could you or the city's counsel please give me a call to discuss? Feel free to try my cell phone.⁸⁸

87. Mr. Becke emailed Dr. Uzarowski roughly 30 minutes later, requesting a call. Dr.

Uzarowski replied approximately an hour later, also requesting a call.⁸⁹

88. The same afternoon, Mr. Becke forwarded Dr. Henderson's email to Mr. Moore, attaching the HIR Suitability Study proposal:

Gary, Since you have dealt with Ludomir so much and you have I am looking for some guidance.

I have attached the proposal from Ludomir regarding the sampling and testing for the HIP work on the RHVP. The last 2 pages (5 and 6) have this Exceptions to the roster assignment.

When I did the PO Req I meant to talk to you, but because I was worried about getting this started it slipped my mind. I received a call from Golder's Lawyers today saying they want make sure that the City is ok with this Exceptions they have provided.

Have you had this situation come up with Golder's in the past? If so how did you deal with this?

⁸⁷ [HAM0001326_0001](#)

⁸⁸ [HAM0001326_0001](#)

⁸⁹ [HAM0001334_0001](#)

Any help would be appreciated.⁹⁰

89. Mr. Moore replied, “[t]alk to Tina and Debbie Edwards. But If it was me I would tell Ludomir he signed a contract when he submitted the roster. Either follow the roster terms or we’ll be forced to hire someone else!”⁹¹

90. Mr. Becke replied that he would contact Tina [Iacoe (Manager, Procurement, Financial Services, Corporate Services, Hamilton)].⁹²

91. That evening, Mr. Becke emailed Dr. Uzarowski at 6:50 p.m., copying Ms. Jacob and Dr. Henderson:

Further to our discussion, I am perplexed as to the reasoning behind the exceptions being requested. Basically we are looking for you to provide the City with a verification as to whether the existing asphalt would be appropriate or not to move forward with investigating Hot in place recycling. This is basically no different than a mix design verification at this time. Final mix design will be the sole responsibility of the contractor should we determine to move forward with this project and should that be the case, another assignment would be requested at that time.

As discussed, we are only moving forward at this time with the first phase of the proposal which is the Preliminary Investigation of the existing asphalt. Phase 2 is not part of this assignment.

I have forwarded the contract exceptions to our Procurement group for comment.

I am currently left in a situation where I may have to cancel the proposed works this Sunday and cancel this roster assignment if we cannot come to an agreement.⁹³

92. Dr. Henderson replied on July 20, 2018, writing:

As discussed in our phone call, Golder will proceed with the scope of work as per our proposal and the City’s Purchase Order, and be on site with the City Sunday night for the sampling. We look forward to supporting the City on this innovative project.⁹⁴

⁹⁰ [HAM0035458_0001](#) attaching [HAM0035459_0001](#)

⁹¹ [HAM0035460_0001](#)

⁹² [HAM0035460_0001](#)

⁹³ [HAM0001338_0001](#)

⁹⁴ [HAM0001338_0001](#)

93. On July 19, 2018, Mr. McGuire emailed Alan Jazvac (Project Manager (Surface Infrastructure), Infrastructure Programming, Asset Management, Engineering Services, Public Works, Hamilton) regarding the budget programming of the RHVP and LINC resurfacing. Mr. Jazvac replied the same day, provide comments in Mr. McGuire's email in red:

Did we program the red hill as follows

2019 southbound-\$6.75M - originally budgeted \$6.75M in 2018 for 2018 NORTHBOUND resurfacing

2020 northbound -\$6.75M - originally budgeted \$6.75M in 2019 for 2019 SOUTHBOUND resurfacing

Different strategy if we use HIP maybe do it all on one year? Dependant on opportunity - the last direction was that we're now looking at Hot-in-Place resurfacing in 2019, in BOTH directions

Linc

2020 east end -\$15M - budgeted \$15.25M in 2020 for 2020 resurfacing in BOTH directions from Pritchard to Upper James (east end)

2021 west end -\$15M - budgeted \$15.25M in 2021 for 2021 resurfacing in BOTH directions from Upper James to HWY 403 (west end)

Is that correct⁹⁵

94. Mr. McGuire replied asking Mr. Jazvac why the southbound lanes were being sampled first, and whether both sides would be sampled soon. Mr. Jazvac replied, writing "I just got a chance to speak with Mike. He said that we will be sampling the northbound side soon too."⁹⁶

⁹⁵ [HAM0001325_0001](#)

⁹⁶ [HAM0001325_0001](#)

95. On July 22, 2018, Golder collected multiple asphalt samples that were removed by a contractor from the southbound lanes of the RHVP. Golder produced Dr. Henderson's handwritten notes from the day of the sampling, which included the following:

Vimy – email Mike – w PMS data can show performance w preventative maintenance⁹⁷

2. City Legal Contacts Public Works Staff Regarding Collision Claim

96. On July 17, 2018, Maria Orgera (Law Clerk, Legal Services, Legal & Risk Management Services, Corporate Services, Hamilton) emailed Mr. McGuire, copying Daniell Bartley (Solicitor, Legal Services, Legal & Risk Management Services, Corporate Services, Hamilton) and Pam Delry (Legal Assistant, Legal Services, Legal & Risk Management Services, Corporate Services, Hamilton) regarding a collision that occurred on the RHVP in February 2017. She wrote:

Please be advised that I am assisting Daniell Bartley with regard to the above noted matter. This action arises as a result of a motor vehicle accident that occurred on February 21, 2017 on the Redhill Valley Parkway near Greenhill Avenue. The plaintiff is alleging negligence against the City for:

- Failure to render the road safe
- Failure to warn of defective condition of road
- Implementing challenging characteristics which caused diversions
- Unexpected or atypical traffic control devices or right of way assignments
- Unusual configuration of roadway
- Ambiguous and/or verbose signing – creating driver distraction
- Failure to identify higher risk road section.

Attached is a copy of the Police Reconstruction Report. I will have to send you this in two separate emails as it is a large file.

We need to complete our Affidavit of Documents and ensure that we have the appropriate documentation to support the City's position with regard to the above allegations. As well we need to determine who will be the appropriate City representative to attend at

⁹⁷ [GOL0001509](#)

Examinations for Discovery. We have met with John Searles supervisor of District East to deal with the issues of road winter maintenance and received the appropriate documentation from that department. We have also spoken to David Ferguson who is in the process of obtaining information relating to road volume, summary of collisions, speed data, safety reports and traffic count.

David suggested that we contact you with regard to the issues of road design. We will have our assistant, Pam Delry contact you shortly in order to schedule a meeting to discuss this matter in greater detail and perhaps you can assist us with obtaining the appropriate documentation as it relates to the issues of road design (characteristics/configuration/signs).⁹⁸

97. Mr. McGuire replied to Ms. Orgera on July 17, 2018, referring her to Ms. Jacob and Chris McCafferty (Senior Project Manager, Engineering & Design Services (LRT), Design, Engineering Services, Public Works, Hamilton) for matters related to RHVP design elements.⁹⁹ Ms. Delry contacted Ms. Jacob the following week to arrange a meeting to discuss issues related to road design.¹⁰⁰

3. RHVP and LINC Update Memorandum

98. On July 20, 2018, Mr. White forwarded an email conversation and attachments from earlier in 2018 to Mr. Ferguson. On April 3, 2018, Mr. White had emailed Mr. McKinnon and Betty Matthews-Malone (Director, Roads & Traffic, Public Works, Hamilton) an updated summary of RHVP and LINC traffic issues. On June 26, 2018, Mr. White forwarded that email to Mr. Ferguson, writing:

David please provide an update to our previous memo (PW report and memo attached) include CIMA studies, queue end, etc. Please update the list of completed items and include a section on upcoming reports we owe to PW as we owe a few. Also put paving and Rich Shebib traffic counts (promise to PW) on Gord's to do list. Di is going to reschedule the next meeting date as I am on vac for the next scheduled meeting.. Please have the update completed for August 24 or sooner . Thanks.¹⁰¹

⁹⁸ [HAM0061979_0001](#)

⁹⁹ [HAM0061979_0001](#)

¹⁰⁰ [HAM0061980_0001](#)

¹⁰¹ [HAM0001339_0001](#)

99. Mr. White wrote to Mr. Ferguson:

Reminder!!

Meeting with Dan is on Sept 4th. We should bring Edward up to speed on this one. Lets keep the due date to me at Aug 24. Ok?¹⁰²

100. On July 23, 2018, Mr. Purins provided Mr. Ferguson with updated collision data for the RHVP and LINC.¹⁰³

4. Continued Discussions Regarding HIR Suitability Study Contractual Provisions

101. Also on July 23, 2018, Ms. Iacoe emailed Joe Tavares (Principal, Cambridge Office, Golder), copying Mr. Becke, Dr. Henderson and Ms. Vasquez, regarding the HIR Suitability Study contractual terms:

There is an issue that has been brought to my attention regarding Golder Associates Ltd.'s (Golder) Proposal No. P18100695, a roster proposal submission under Category #12 of C12-07-16, the City of Hamilton's Professional and Consultant Roster, for a Hot In-Place Recycling Suitability Study for the Red Hill Valley Parkway. I have attached the Proposal for you in this email.

It seems that in addition to the roster proposal that was submitted to complete the consultancy work, Golder also included two pages of "contract exceptions", attempting to change the terms and conditions of the Request for Rostered Candidates document and to which Golder's Form of Submittal was submitted under. Please know that this is unacceptable.

It has also come to my knowledge that Golder's legal counsel contacted and spoke with City staff regarding these exceptions and attempted to explain and support the exclusions. Please know that this practice is also unacceptable.

In speaking with Mr. Becke today, I understand that Mr. Becke and Golder representatives spoke late last week regarding the exclusions and Golder were inquiring about removing wording from the Purchase Order in order to resolve the matter. I can confirm to you that the Purchase Order wording may be changed however, before any amendments are made, I will need written confirmation from you to remove the 2 pages of "contract exceptions" in their entirety from Proposal No. P180100695. Please know that in the event that these exclusions are not formally withdrawn from Golder's Proposal, the City may cancel the Purchase Order and submit a formal Vendor Performance Incident Report for inclusion in Golder's file.

¹⁰² [HAM0001339_0001](#)

¹⁰³ [HAM0005893_0001](#) attaching [HAM0005894_0001](#)

I understand that the City and Golder has had a relatively successful relationship in the past. I would hope that we could resolve this matter as easily as possible in order to continue that relationship.¹⁰⁴

102. Mr. Becke forwarded the email to Ms. Jacob.¹⁰⁵

103. On July 24, 2018, Graeme Skinner (Principal, Senior Geotechnical Engineer, Ground Engineer West Group Leader, Golder) emailed Ms. Iacoe:

First off, thank you for taking the time today to discuss the project specific details with Joe and I. Much appreciated.

As discussed, given the innovative nature of the asphalt suitability study for a Hot-In-Place Recycle of a Superpave pavement (SMA I believe) that Golder has been asked to undertake, we have some suggested contract edits we would like to discuss with the City if possible. We understand that the City is currently not in a position at this time to entertain or address the list of proposed contract edits that are included in our proposal. However, we also understand that the City is willing to discuss the main items that are causing us concern – primarily tying the standard of care and indemnification to a negligent basis (I still need to confirm this with our team, but these are two of the main issues to us). In this regard, I have asked our legal team to look into providing a simplified version of our proposed contract edits for your review.

If we are able to come to mutual agreement in this regard and account for this in the agreement and / or PO, then Golder would be happy to remove / withdraw the list of contract exceptions from our proposal. In this regard we can provide a revised or red-lined version of the proposal if needed, as the innovative nature of the work should also be noted in the documents.

Please let us know if we have captured this correctly or if there is anything outstanding.

As you have stated below, Golder has a long successful and trusted relationship with the City and we look forward to continuing this relationship on this current assignment and in the future.¹⁰⁶

104. On July 26, 2018, Dr. Skinner replied to Ms. Iacoe and proposed some contractual modifications related to the HIR Suitability Study.¹⁰⁷

¹⁰⁴ [HAM0035464_0001](#)

¹⁰⁵ [HAM0035464_0001](#)

¹⁰⁶ [GOL0006711](#)

¹⁰⁷ [HAM0035467_0001](#)

105. Also on July 26, 2018, Dr. Henderson emailed Mr. Becke regarding the samples removed from the southbound lane on July 22, 2018:

In regards to the samples from the southbound lane on Sunday, I would like to send someone to the Associated yard to work with them. We can wait until the contract is entirely complete, however I wanted to bring this to your attention.

Do you know where they are currently being stored? I hope they are not being damaged due to the warm weather.

When we do go to work with them we would cut them into smaller pieces and ideally pop the surface material off and leave the rest at the yard. We may need Associated to operate a concrete hand saw if this is a feasible option. We would then restack the samples on to the skids (much less material) in pieces that can be lifted by humans.¹⁰⁸

5. Progress Meeting for Speed Limit Study

106. On July 30, 2018, Mr. Omrani sent meeting minutes to Mr. Cooper, Robert Declair (Project Manager, Traffic Signals & Systems, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton) and Nelson Melendez (Project Manager, Advanced Traffic Management System, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton) regarding the progress meeting they attended on July 16, 2018 for the Speed Limit Study.¹⁰⁹ The minutes included the following:

The over representation of the wet-pavement related collisions may be alleviated by an upcoming pavement rehabilitation project. It is anticipated to focus on one direction per highway per year over a 4-year period commencing in possibly 2019.

A lower priority should be given to the weather warning system

System implementation plan will be re-assessed.¹¹⁰

¹⁰⁸ [GOL0005642](#)

¹⁰⁹ [HAM0047325_0001](#)

¹¹⁰ [HAM0047326_0001](#) at image 1

E. August 2018

1. Staff Collision Data Report

107. In August 2018, Mr. Purins and Mr. White prepared a staff report to the PWC for a meeting scheduled to be held on September 6, 2018.¹¹¹ The report was titled “2017 Annual Traffic Safety Status Report”, and provide various statistics related to collisions in the City. The report included the following outlining 2017 collision data for the LINC and RHVP:

The issue of Safety and Motor Vehicle Collisions on the Lincoln Alexander Parkway (LINC) and the Red Hill Valley Parkway (RHVP) has been a contentious issue both facilities were opened. The following is a summary of the 2017 collision statistics for both the LINC and RHVP.

2017 Statistics	LINC	RHVP
Number of Collisions	159	193
Number of Police Reported Collisions	63	109
Number of Fatal Collisions	1	2
Number of Collisions Involving Pedestrians	1	0
Number of Crossover Collisions	1	3
Day with Highest Number of Total Collisions	Friday	Sunday
Month with Highest Number of Total Collisions	June & October	November
Hour with Highest Number of Total Collisions	8AM – 9AM	6AM – 7AM 8AM – 9AM 12PM – 1PM 6PM – 7PM
Most Common Collision Type	Rear end	Single Motor vehicle
Most Frequent Driver Action Resulting in Collision (Other than Driving Properly)	Following too close	Lost control

For both Parkways, they identify Collisions by Driver Action to be Driving Properly, however for the LINC it identifies Following Too Close at 19% and Lost Control at 8%. For the RHVP it identifies Lost Control at 21% and Speed too Fast at 14%. In most instances, the Action of losing control of the vehicle is a result of vehicle speed or aggressive driving behavior.

¹¹¹ [HAM0001401_0001](#)

When you review Driver Actions for 2017, 33% of collisions on the LINC are a result of this type of behavior and 46% on the RHVP.

In addition, the weather conditions and road conditions of both parkways during collisions, further align and support the findings of the previous consultant safety reports. For the LINC the majority of collisions occurred under Clear (84%) weather conditions and Dry (81%) roadway conditions. The RHVP collision occurred under Rain (53%) weather conditions and Wet (70%) roadway conditions.

Since 2013, there have been 5 collisions on the LINC where a vehicle has crossed over the center median and collided head on with another vehicle. 60% of the time a non-fatal injury was the result and 1 collision resulted in a fatality. On the RHVP, there have been 11 crossover collisions in the past 5 years where 73% of the time they resulted in a non-fatal injury and 2 crossover collisions resulted in fatalities.¹¹²

108. On August 15, 2018, Mr. Ferguson emailed Diana Aquila (Administrative Secretary to the Associate General Manager, Public Works, Hamilton) and Mr. White, attaching a document titled “2017 Annual Collision Report”, writing “Attached is the final report/attachment to the report. I will hopefully finalize the written report today or tonight.”¹¹³

109. Mr. White forwarded the email and attachment to Edward Soldo (Director, Roads & Traffic, Public Works, Hamilton) shortly thereafter, writing:

Edward we are working on finalizing the PW safety report and presentation to PW committee however attached is the actual Collision Report. The PW report and the Bill 65 PW report will be sent to you this week.¹¹⁴

110. Section 6 and 7 of the attachment relate specifically to the RHVP and LINC. Section 6 outlines collision trends based on various factors, including collision type, the month of the collision, collision severity, lighting condition, road surface condition, driver

¹¹² [HAM0047316_0001](#) at images 4-5

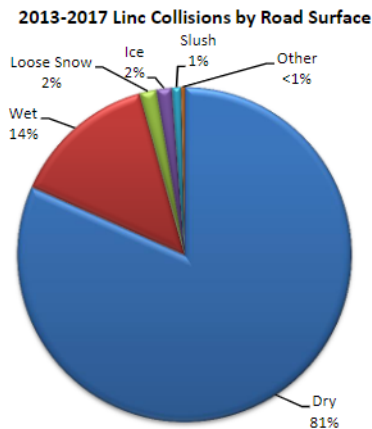
¹¹³ [HAM0001401_0001](#)

¹¹⁴ [HAM0001401_0001](#) attaching [HAM0001402_0001](#)

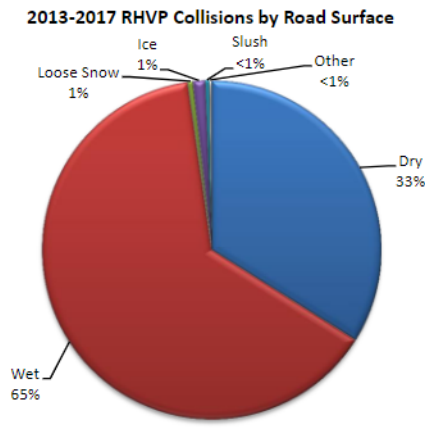
action, impact type and severity of crossover collisions specifically. The following was noted regarding road surface condition collision trends:¹¹⁵

City of Hamilton Annual Collision Report - 2017

SECTION 6 2013-2017 LINCOLN ALEXANDER PARKWAY & RED HILL VALLEY PARKWAY 5 YEAR COLLISION TRENDS



Over 80% of collisions on the Lincoln Alexander Parkway occurred when the road surface was dry. 14% occurred when the road surface was wet, 2% during loose snow and ice and 1% during slushy conditions.



65% of collisions on the Red Hill Valley Parkway occurred when the road surface was wet. 33% of collisions occurred during dry road conditions and ice, loose snow, slush and others each accounted for 1% or less.

45

111. The 2017 collision statistics for the RHVP and LINC are outlined in Section 7, including the following tables, which related to initial impact type, weather and road surface condition respectively:¹¹⁶

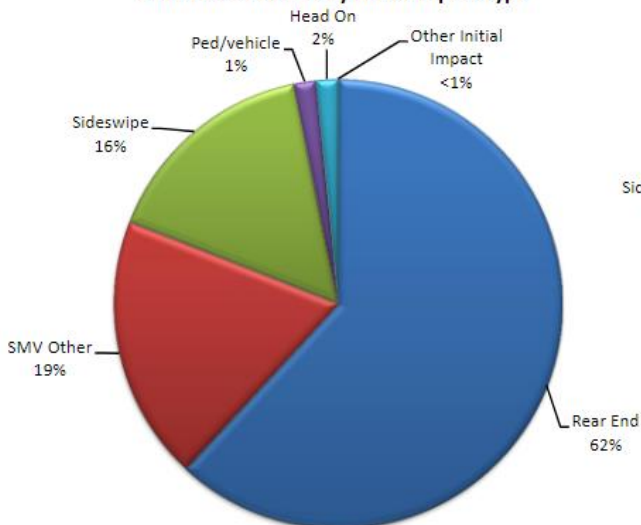
¹¹⁵ [HAM0001402_0001](#) at image 45

¹¹⁶ [HAM0001402_0001](#) at images 54, 56 and 57

SECTION 7

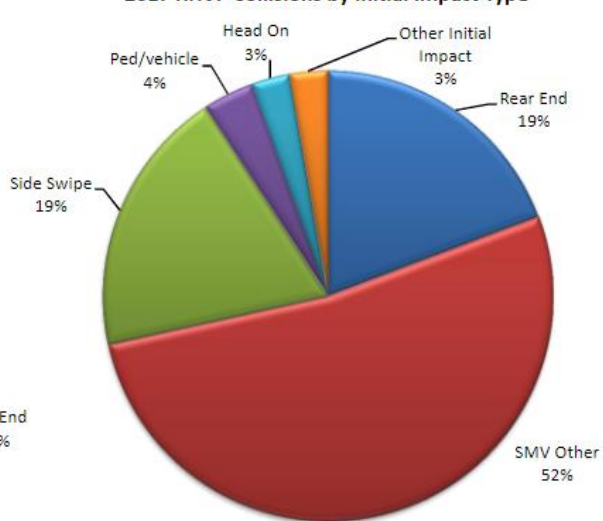
2017 LINCOLN ALEXANDER PARKWAY & RED HILL VALLEY PARKWAY COLLISION STATISTICS

2017 Linc Collisions by Initial Impact Type



The most common Impact Type on the Lincoln Alexander Parkway was a "Rear End" collision which occurred 62% of the time. There was 1 Crossover collision in 2017.

2017 RHVP Collisions by Initial Impact Type

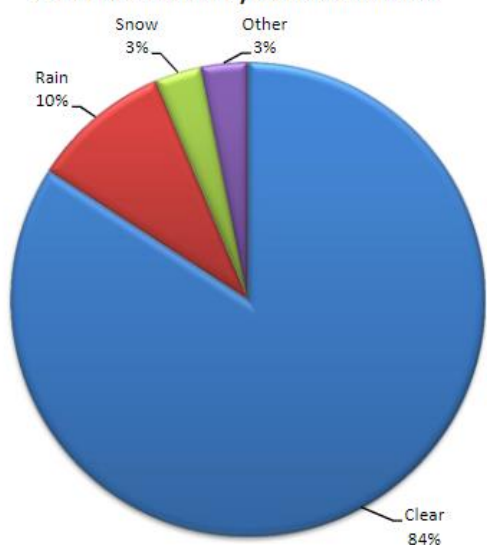


The most common Impact Type on the Red Hill Valley Parkway were "Single Motor Vehicle" collisions which occurred 52% of the time. There were 3 Crossover collisions in 2017.

SECTION 7

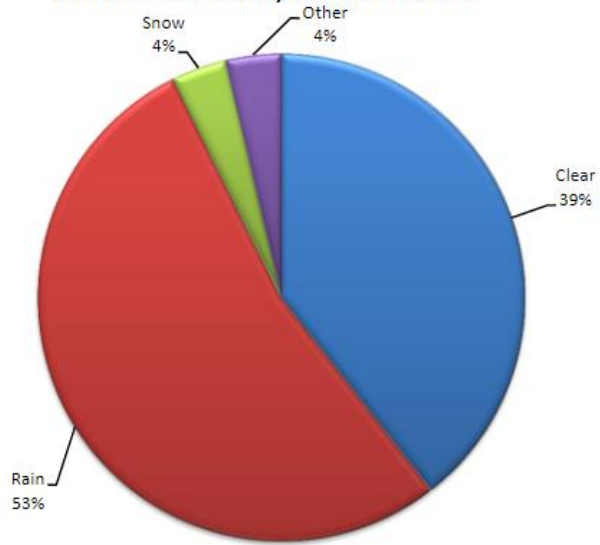
2017 LINCOLN ALEXANDER PARKWAY & RED HILL VALLEY PARKWAY COLLISION STATISTICS

2017 Linc Collisions by Weather Condition



84% of all collisions on the Lincoln Alexander Parkway occurred when the weather was clear

2017 RHVP Collisions by Weather Condition



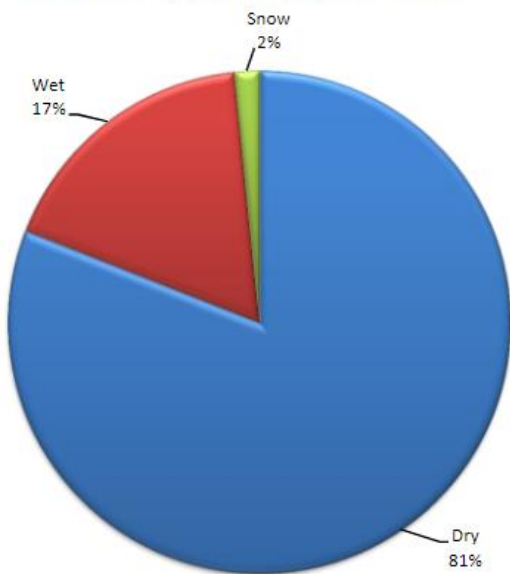
53% of all 2017 collisions on the Red Hill Valley Parkway occurred when it was raining.



SECTION 7

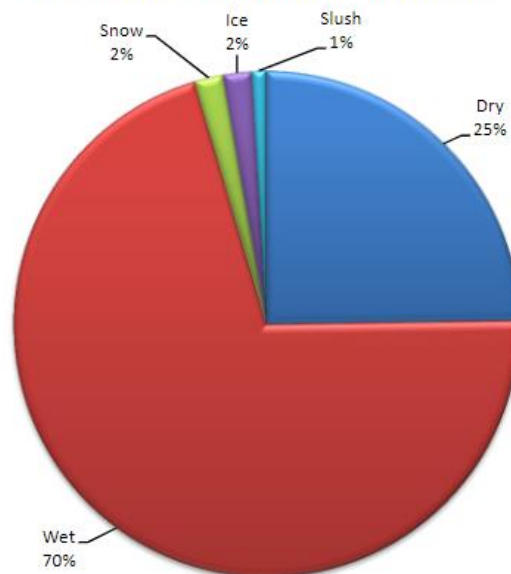
2017 LINCOLN ALEXANDER PARKWAY & RED HILL VALLEY PARKWAY COLLISION STATISTICS

2017 Linc Collisions by Road Surface Condition



81% of all collisions on the Lincoln Alexander Parkway occurred when the road surface was dry.

2017 RHVP Collisions by Road Surface Condition



70% of all 2017 collisions on the Red Hill Valley Parkway occurred when the road surface was wet.

112. A document prepared by the City on May 22, 2019, reflected this exchange, noting:¹¹⁷

<p>15-Aug-18</p>	<p>Martin White emails Edward Soldo the draft of the 2017 Annual Collision Report - shows wet weather issues on the RHVP - Soldo requests meeting with key players (held on August 30)</p>
------------------	--

113. On August 21, 2018, Mr. Ferguson requested that Mr. Purins update the collision data tables he previously provided to include data from 2018. Mr. Purins replied the same day, writing “Updated below! Intersection magic is updated until August 16/18. Looks like it could be one of the safest years so far.”¹¹⁸

¹¹⁷ [HAM0055560_0001](#) at image 5

¹¹⁸ [HAM0047385_0001](#)

2. Updated RHVP and LINC Memorandum

114. Mr. Ferguson prepared a draft of an updated memorandum on the LINC and RHVP to Mr. McKinnon dated August 2, 2018. The purpose of the memorandum was to “provide an update on the action items that were identified in the memorandum of March 29, 2018.” The memorandum included the following, along with two charts of collision data, under “Additional Information”:

Traffic Engineering are beginning to receive notices of impending Legal Action as a result of collisions on either LINC or RHVP. It should be noted that some of the claims are a result of poor design and poor pavement conditions. These items will require response or attendance by Engineering staff at Legal Discoveries.

Traffic Engineering is updating Collision reports on a monthly basis for both Parkways. The following chart provides an update to July 23rd.¹¹⁹

115. On August 21, 2018, Mr. Ferguson emailed an updated memorandum on the RHVP and LINC (“August 21 Memo”) to Mr. McKinnon and Mr. Soldo (copying Mr. White, Mr. McGuire, Rebeka Eisbrenner (Administrative Assistant to the Director of Roads & Traffic, Roads & Traffic, Public Works, Hamilton) and Nancy Wunderlich (Administrative Coordinator to the General Manager, Public Works, Hamilton)). The email also attached the memorandum prepared by Mr. Ferguson and Mr. White, dated March 29, 2018, (“March 29, 2018 Memo”), Report PW18008 and its Appendix A, correspondence between Mayor Eisenberger and Steven Del Duca (Minister of Transportation, MTO) . Appendix A to Report PW18008 identified friction testing as having been completed. Mr. Ferguson wrote:

In preparation of our August 30, 2018 meeting on the Red Hill Valley Parkway and Lincoln Alexander Parkway discussions, we have prepared an updated summary (Aug 21st memo attached).

¹¹⁹ [HAM0047334_0001](#); and [HAM0047354_0001](#) attaching [HAM0047355_0001](#)

I have also included the previous memo and corresponding documents for Edward's information.¹²⁰

116. The memorandum was a revised version of the document dated August 2, 2018. It included the status of three additional items: traffic counts, the scheduling of RHVP and LINC rehabilitation and HPS maintenance requests, along with additional data and graphs related to collisions. The memorandum noted the following about the scheduling of rehabilitation:

LINC/RHVP - Status: Ongoing
Tentatively scheduled as follows RHVP-SB and NB-2019LINC Phase I - Pritchard to Upper James - 2020 Phase II - Upper James to 403 Limits, 2021¹²¹

117. A meeting between Mr. McKinnon, Mr. Soldo and Mr. McGuire was arranged for August 30, 2018 to discuss the August 21 Memo.¹²²

3. Continued Discussions Regarding HIR Suitability Study

118. On August 1, 2018, Dr. Henderson emailed Mr. Becke requesting a phone call to discuss the status of the HIR Suitability Study.¹²³ Mr. Becke replied on August 2, 2018, writing:

Sorry I didn't get a chance to call you yesterday or today. I was out of the office yesterday and because I am currently acting manager while Susan is off, I haven't had much of a chance to call.

I am still working with Legal and our Procurement group on the proposed changes from Golder. I hope to have this sorted out soon. How did the asphalt samples go today?

I am in meeting all day tomorrow but I will try to give you a call.¹²⁴

¹²⁰ [HAM0001384_0001](#) attaching [HAM0001385_0001](#), [HAM0001386_0001](#), [HAM0001387_0001](#), [HAM0001388_0001](#) and [HAM0001389_0001](#)

¹²¹ [HAM0001388_0001](#) at image 2

¹²² [HAM0001383_0001](#)

¹²³ [HAM0001380_0001](#)

¹²⁴ [HAM0001380_0001](#)

(a) Contact with MTO Regarding Hot-in-Place Recycling

119. Between July 30, 2018, and August 7, 2018, Mr. Becke exchanged emails with Heather Bell (Senior Bituminous Engineer, Bituminous Section, Materials Engineering & Research Office, Highway Standards Branch, Provincial Highways Management Division, MTO) related to HIR. Mr. Becke contacted Ms. Bell following a prior conversation on a HIR project the MTO was conducting in Thunder Bay. In his email from July 30, 2018, Mr. Becke advised that the City had begun its investigation with Golder into recycling the RHVP SMA pavement using HIR.¹²⁵

120. Ms. Bell provided some information regarding HIR, including that she understood that Hamilton had used the process in resurfacing projects in the past. She also attached OPSS 332, the MTO's specification on HIR.¹²⁶ They also discussed the possibility of City employees attending Thunder Bay for a site visit.¹²⁷

121. Ms. Bell's notebook contains an entry dated August 1, 2018 with references to Hamilton.¹²⁸

122. On August 7, 2018, Ms. Bell's notes include a reference to Mr. Becke and HIR:¹²⁹

- | | |
|-----|---|
| HIR | <ul style="list-style-type: none"> • Sent e-mail response to Mike Becke
City of Hamilton |
|-----|---|

¹²⁵ [HAM0001390_0001](#)

¹²⁶ [HAM0001391_0001](#)

¹²⁷ [HAM0001390_0001](#)

¹²⁸ [MTO0038687](#) at image 8

¹²⁹ [MTO0038687](#) at image 9

123. Another entry, dated August 21, 2018, also includes references to Mr. Becke and

HIR:

HIR -~~Scott Bla~~
 -Mike Becke – City of Hamilton – planning
 visit in September maybe 1st week
 905-546-2424 ext. 4278

HIR [redacted by MTO]
 Mike Becke – Golder Ludomir
 12.5 FC2 from mix
 -solid pieces
 Sept 2007 opened Nov 2007
 20m patches x3 new patches needed
 Should 12.5 lanes SMA
 -Hazardous material RAC?¹³⁰

4. Continued Discussions Surrounding HIR

(a) Continued Discussions Regarding Contractual Provisions

124. On August 10, 2018, Mr. Becke emailed Ms. Iacoe regarding the contractual provisions related to the HIR Suitability Study. He wrote:

Sorry for the delay in following up on this issue with Golders. I wanted to make sure I was educated in what was being proposed as well as what risks we would be taking on and if we could live with that.

As discussed, the assignment for Golders is to investigate if the existing asphalt mix used on the RHVP can be recycled into a new asphalt that meets the parameters for placement. This is basically a mix design investigation to give us a “yes” or “no” answer to moving ahead to engage a contractor. Ultimately, the Contractor will confirm if their equipment can achieve the same results to the laboratory mix design with their equipment. Any final responsibility will be bore by the contractor at that time.

Since our last discussion, I have spoken to my Manager (and Roster Captain) Susan Jacob about what Golders is proposing and we feel that we can live with the risk at this time for this Roster assignment only. However, with one suggestion to what they have below in bullet 3:

- 1 & 2 is just legal semantics that we feel the Lawyers are creating just to feel better, but with the type of work we are asking them to complete, it will have little bearing once the assignment is completed.
- 3. Rather than change the wording of the title under section 8 of Part I, I will suggest to Golder to provided us with a letter explaining that their insurance only allows to

¹³⁰ [MTO0038687](#) at image 11

provide a waiver of subrogation under CGL and we can include that in the roster assignment for this contract only

I understand that Golders has no further issues with the remaining 3 bullets, so we no longer have to address them.

To move forward, I assume I will send an email out to everyone involved so that we can continue with this roster assignment? Or is this something that you would prefer to put out through your office?

Please let me know if you have any thoughts or comments on the above.¹³¹

(b) Sampling of Northbound Lanes

125. On August 13 and 14, 2018, Dr. Henderson exchanged emails with Mr. Becke, copying Dr. Uzarowski, regarding sampling from the northbound lanes of the RHVP:

[VH]: Are you still planning sampling from the northbound RHVP this weekend?

Should the southbound samples go to our lab?¹³²

[MB]: We are still planning for the work this coming Sunday. I will be on site just like last time.

With respect to the samples, I spoke to Ludomir on Friday and sent an email to my Procurement Manager regarding the legal language.... A formal reply will be coming from Procurement, but basically we are ok with what was proposed... So please start with the samples going to the lab.

Let me know if you have any other questions.¹³³

[VH]: This is good news. Do you want me to coordinate with Associated for delivery or will you? Our lab is at 100 Scotia Ct, Whitby, ON L1N 8Y6. I will send a separate email that you can forward to Associated.

What time do you plan to start on Sunday?¹³⁴

(c) Dr. Uzarowski Sends Tradewind Report to Mr. Becke

126. On August 27, 2018, Dr. Uzarowski emailed Mr. Becke, with a copy to Dr. Henderson, attaching the Tradewind Report. He wrote:

¹³¹ [HAM0001394_0001](#)

¹³² [GOL0006038](#)

¹³³ [GOL0006281](#)

¹³⁴ [HAM0035469_0001](#)

As requested, please find attached the 2014 report on friction on RHVP and the Linc prepared by Tradewind Scientific.¹³⁵

127. To date, the Inquiry has not received any documents in which Mr. Becke appears to have made a request that led to Dr. Uzarowski's message.

(d) Mr. McGuire Requests Status Update on HIR

128. On August 30, 2018, Mr. McGuire exchanged emails with Ms. Jacob and Mr. Becke related to the status of HIR and RHVP resurfacing:

[GM]: Given the work to date on the HIP and mix design review can we estimate the next phase.

Is there a plan to pave next year with this technique?

Should we meet on this as it's a high priority project for the Department

[SJ]: There has been some glitches and delays with the MTO contract. Local suppliers were not providing asphalt to the British Columbia based contractor. So he had brought in a mobile temporary plant which was shut down by MOECP as it was non-compliant with some regulations. They will be starting the work in September at which time Mike and Taylor plan to visit Thunderbay.

Golder still has to work through the samples taken to see how feasible and applicable it is for use with the SMA mix on RHVP. Still at an experimental stage. If successful we will have to do a report to Council and obviously should expect some opposition from local contractors as it will be sole sourcing at this stage.

If everything goes well, possible tender towards April 2019 for implementation in July/August 2019

[GM]: Should we consider just going with a conventional paving method.¹³⁶

129. Later that afternoon, Mr. McGuire emailed Ms. Jacob, Mr. Oddi, Mr. Andoga and Erika Waite (Senior Project Manager, Infrastructure Programming, Asset Management, Engineering Services, Public Works, Hamilton), with a copy to Ms. Cameron, under the subject line "RHVP road material testing and reports". He wrote:

¹³⁵ [GOL0006338](#) attaching [GOL0006340](#)

¹³⁶ [HAM0001421_0001](#)

Prior to asking Gary are there copies of the asphalt testing reports that reviewed the material on the RHVP.

I believe there were samples sent over seas for testing.

Please advise if you have copies that we can use in the assessment of the Hot in Place review and RHVP / Linc works underway.

Let me know one way or the other if you have these please.¹³⁷

5. August 27, 2018: LINC/RHVP Illumination Review Progress Meeting #2

130. On August 27, 2018, CIMA and the City met for a second progress meeting regarding the RHVP Lighting Study. Mr. McGuire, Mr. Field, David Lamont (Acting Manager, Geomatics & Corridor Management & Asset Management, Engineering Services, Public Works, Hamilton), Brian Parma (Specialist, Electrical Street Lighting, Lighting & Electrical, Geomatics & Corridor Management, Engineering Services, Public Works, Hamilton), Mr. Malone, Mr. Omrani and Patrice Brouillette (Project Manager, Traffic Engineering, Transportation, CIMA) were listed as attendees in the meeting minutes.¹³⁸

131. The minutes, prepared by CIMA, included the following:

Item	Action To
1. Introduction and Approval of Agenda	
<ul style="list-style-type: none"> The agenda was approved with no changes. 	
2. Review of Completed Tasks	
2.1. EA Study Review	
<ul style="list-style-type: none"> The original IEA and subsequent environmental impact studies were reviewed. There was no documentation that continuous illumination would be precluded. The next step of the EA study is to confirm the scope of work and costs associated with updating the impact assessment to support the lighting design. This item will be discussed in the next meeting. 	CIMA+
2.2. Operational Safety Analysis Update	

¹³⁷ [HAM0005971_0001](#)

¹³⁸ [HAM0053652_0001](#)

Item	Action To
<ul style="list-style-type: none"> ● The last safety analysis reviews were completed in 2015 with the collision data extended to the end of 2014. The current operational safety review was completed with the historical collision data from 2008 to 2018. The update did not reveal any major changes in the predominant collision types. ● The results of the LINC and RHVP Speed Study revealed that speed differential on the LINC was an area of concern, but not a contributing factor to the collisions. ● On the RHVP, wet surface collisions continue to be major factor. Speed differential between the travel lanes was less concerning comparing to the LINC. However, some extreme speed of 140 km/h was observed during off-peak periods. ● Illumination was not identified as a contributing factor. 	
<p>2.3. Illumination Review (Warrants)</p>	
<ul style="list-style-type: none"> ● For this assessment, the warrants were run for each section, as opposed to limited number of sections done in the 2015 study. ● The TAC warrant is known as the industry standard. As opposed to the LINC, the majority of the RHVP sections were warranted for full illumination. Having said that, the warrant points on the LINC sections were close to the threshold points. ● The illumination criteria in the MTO warrant are the same as the TAC criteria, with slight variation in values and weight for each criterion. Except for one section on the LINC, both the LINC and RHVP were warranted for full illumination. 	
<p>2.4. Illumination Review (Peer Review)</p>	
<ul style="list-style-type: none"> ● A comprehensive review of peer facilities revealed that the urban freeways in Ontario are fully lid. Examples include DVP, Hwy 406 in St Catharines, and Hwy 8 in Waterloo. Having said that, CIMA+ neither had access to the collision and volume data for the subject corridors, nor was aware of the results of the warrant analysis. We were only able to compare with the LINC and RHVP with the existing lighting conditions of the selected freeways. ● The outputs of the peer review will be utilized in the human factors assessment. For instance, drivers will expect the same level of comfort and lighting conditions while driving along similar facilities in Ontario. 	CIMA+
<p>2.5. Illumination Review (Alternative Technologies)</p>	
<ul style="list-style-type: none"> ● LED is the new technology and the City of Hamilton is now specifying LEDs for streetlighting. ● The solar off-grid lighting is a fully autonomous solar powered street light, with a successful implementation along the Mountain Brow Blvd in the City of Hamilton. ● Hybrid lighting systems have the same benefits as solar but on top of that, they rely on a second power source to supplement the first. ● For the alternative technologies and due to the conditions in Canada (especially in winter), more research should be completed to evaluate the solar and wind potential for a given site or the installation could suffer from weak/unstable performance of battery during cold weather or during no wind or sun condition. ● The alternative technologies are still relatively new to the lighting industry. It was recommended to test smaller scale pilot projects before investing in a large-scale deployment. ● Hamilton understands that they would be early adopters if they pursue alternate technologies. The City is interested in LED and off-grid technologies (solar). ● City is planning to run a pilot of a high-power output for roadways. ● Question: what is the premium to go off-grid? There may be more costs in the RHVP due to rock trenching. Costs for installation for trenching for wiring can be significantly higher. CIMA+ to include it in the B/C analysis. 	CIMA+
<p>2.6. Next Steps</p>	
<ul style="list-style-type: none"> ● Ecological impacts from road lighting ● EA approval process ● B/C analysis ● Human factor assessment 	

Item	Action To
2.7. Next Meeting	
<ul style="list-style-type: none"> <li>Tentatively scheduled for September 21, 2018. 	

6. Friction Data sent to Mr. Malone

132. On August 30, 2018, at 7:11 p.m., Mr. McGuire emailed Mr. Malone under the subject line “FW: Friction numbers on RHVP”. He wrote to Mr. Malone:

This is a study of the RHVP prior to opening.

FN of around mid 30s¹³⁹

133. Mr. McGuire’s email forwarded an email from Dr. Uzarowski to Mr. Moore on January 24, 2014, which attached 3 documents: two spreadsheets of MTO friction testing data from 2007 and a 2009 paper titled “Addressing the Early Age Low Friction Problem of Stone Mastic Asphalt Pavement in Ontario”. Dr. Uzarowski wrote to Mr. Moore:

The surface asphalt on the RHVP is Stone Mastic Asphalt (SMA). Immediately following construction of the RHVP in 2007, the Ontario Ministry of Transportation performed friction testing in both southbound lanes. The following table summarizes the results of this testing. The complete testing results are attached.

Lane	Average Friction Number	Friction Number Range
Southbound Lane 1	33.9	28.1 to 36.5
Southbound Lane 2	33.8	28.4 to 37.4

In 2013, the Friction Numbers were measured on the RHVP in both directions by Tradewind Scientific using a Grip Tester. The average FN numbers were as follows:

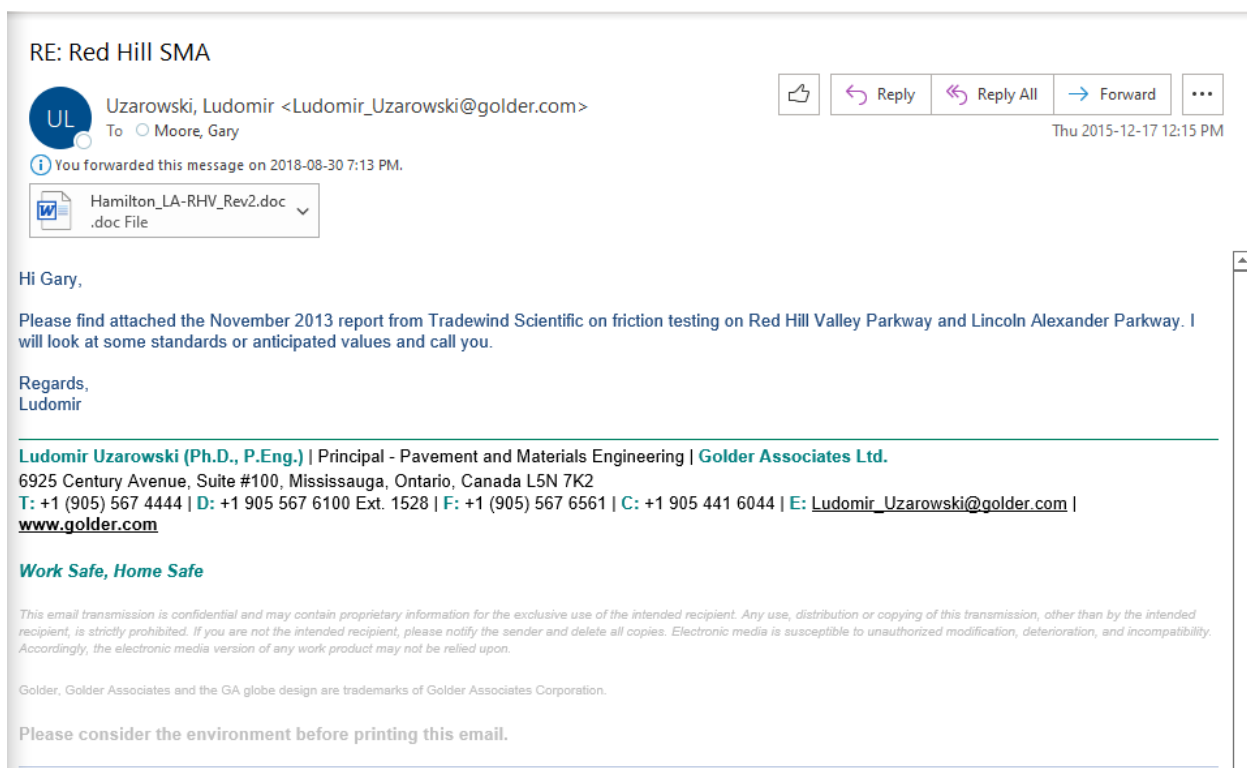
SB Right Lane 35
 SB Left Lane 34
 NB Right Lane 36
 NB Left Lane 39

In 2009 the Ontario Ministry of Transportation published a paper at the Canadian Technical Asphalt Association Annual Conference titled “Early Age Low Friction Problem of SMA in Ontario”. The paper presented results of SMA that had been placed on Highway 401. The Friction Number results

¹³⁹ [CIM0016163](#)

following construction were below anticipated value of 30 and ranged from 24.9 to 28.8. The paper is attached.¹⁴⁰

134. The City has provided the Inquiry with a copy of Dr. Uzarowski's December 17, 2015 email to Mr. Moore attaching the Tradewind Report, in native format. Above the content of the email, there is a banner that states "[y]ou forwarded this message on August 30, 2018, at 7:13 p.m."¹⁴¹



135. Dr. Uzarowski's email was saved in a ProjectWise folder, the file path being "Director's Office (Engineering Services)\1) RHVP background and Audit 2018\Red Hill Correspondance former Director\Pavements\RE Red Hill SMA.msg".¹⁴²

¹⁴⁰ [CIM0016163](#) attaching [CIM0016163.0001](#), [CIM0016163.0002](#) and [CIM0016163.0003](#)

¹⁴¹ [HAM0061794_0001](#) attaching [HAM0061795_0001](#). This information is only visible when the document is viewed in native form.

¹⁴² [HAM0061794_0001](#)

7. Audit Services Value for Money Audit

136. On August 24, 2018, Domenic Pellegrini (Senior Internal Auditor, Audit Services, Office of the City Auditor, City Manager's Office, Hamilton) emailed Mr. McGuire and Mr. Andoga under the subject line "Value for Money Questions on Roads":

In the past couple of weeks I've had a couple of meetings with your staff. The objective of these meetings was to look at how pavement performance is tracked and managed, both holistically and for each segment. A literature review indicates that MTO and the municipalities have reported problems with underperforming pavements, so Audit Services is interested in knowing whether the City has such a problem either on specific roads or systemically. More importantly, Audit Services would like to determine whether the City has a performance management system in place that would reveal such problems. Audit Services realizes that Asset Management has a system of tracking pavement conditions at different points in time and reporting these, and this is very good. However, we're wanting to also determine whether the performance of the existing pavement infrastructure is being tracked against how it is **expected** to perform. The life cycle methodology presumes a cycle of treatments that occur at predicated intervals at predicted costs. How is Asset Management determining whether the pavement segments in the City's inventory are tracking (or not) to those predicted cycles of treatments (and associated costs)?

An example of the above would be the Lincoln Alexander (Linc) and Red Hill Valley (RHVP) Parkways. Stantec, the professional services company, prepared a report in June 2007 entitled the Pavement Sustainability Plan for the Lincoln Alexander and Red Hill Valley Parkways.

The introduction to this report states that the City planned on using perpetual pavement for the construction of the RHVP and construction methods to provide equivalent life had been used on the Linc. Perpetual pavement is defined as asphalt pavement designed and built to last for 50 years, or more, without the need for major structural rehabilitation or reconstruction.

The pavement life cycle costs reflect no major rehabilitation/reconstruction activities would be needed for at least 50 years, only minor rehabilitation such as sealing and shave and pave. This can be seen in the tables in the report noted below:

Updated Table 3.2 – LINC-B M&R Scenario

Year	Analysis Year	Age	Activity	Expected Cost
1997		0	Construction	N/A
2008	1	11	Surface Treatment	780,000
2013	6	16	Minor Rehabilitation	3,900,000
2020	13	23	Surface Treatment	780,000
2025	18	28	Surface Treatment	780,000
2030	23	33	Minor Rehabilitation	3,900,000
2037	30	40	Surface Treatment	780,000
2042	35	45	Surface Treatment	780,000
2047	40	50	Major Rehabilitation	15,600,000
2054	47	57	Surface Treatment	780,000
2059	52	62	Surface Treatment	780,000
2064	57	67	Minor Rehabilitation	3,900,000
2071	64	74	Surface Treatment	780,000
2076	69	79	Surface Treatment	780,000
2081	74	84	Minor Rehabilitation	3,900,000
2088	81	91	Surface Treatment	780,000
2093	86	96	Surface Treatment	780,000
2098	91	101	Major Rehabilitation	New Cycle

Updated Table 3.5 – RHVP-B M&R Scenario

Year	Analysis Year	Age	Activity	Expected Cost
2007		0	Construction	N/A
2012	5	5	Surface Treatment	513,000
2017	10	10	Surface Treatment	513,000
2024	17	17	Minor Rehabilitation	2,565,000
2029	22	22	Surface Treatment	513,000
2034	27	27	Surface Treatment	513,000
2041	34	34	Minor Rehabilitation	2,565,000
2046	39	39	Surface Treatment	513,000
2051	44	44	Surface Treatment	513,000
2058	51	51	Major Rehabilitation	10,260,000
2063	56	56	Surface Treatment	513,000
2068	61	61	Surface Treatment	513,000
2075	68	68	Minor Rehabilitation	2,565,000
2080	73	73	Surface Treatment	513,000
2085	78	78	Surface Treatment	513,000
2092	85	85	Minor Rehabilitation	2,565,000
2097	90	90	Surface Treatment	513,000
2102	95	95	Surface Treatment	513,000
2109	102	102	Major Rehabilitation	New Cycle

The Linc and RHVP have now been in use 21 and 11 years respectively. Therefore, a number of questions need to be addressed:

1. How does the actual expenditure and the treatment cycle to date on these roads compare to the budgeted assumptions made in the life cycle cost analysis above?
2. What does that say about the performance of the pavement?
3. What implications does that have the value proposition behind the chosen methods (i.e. the type of pavement)?
4. Has any evaluative study been performed to validate that the 50 year life of these assets is still attainable at the above noted costs? If so, can you provide evidence of such a report?

5. How are these concepts used and applied in the overall system of asset management?
6. If the study in question 4 above has not been performed, how do we know that these roads will last for 50 or 100 years as noted above without incurring additional costs not reflected in the above assumptions?¹⁴³

137. Mr. Andoga forwarded the email to Mr. Perusin and Mr. Oddi 20 minutes later, and then to Ms. Jacob and Mr. Becke 30 minutes after that. Mr. Becke replied to Mr. Andoga and Ms. Jacob:

Perpetual Pavement was not used on the LINC. Rick I can provide some comments for you to help with your reply. Give me a little bit to pull stuff together.¹⁴⁴

138. Mr. Becke sent a second email 15 minutes later, attaching a document titled “Life-Cycle Costing: Asphalt Pavements in Ontario” prepared by OHMPA.¹⁴⁵ He wrote in his email:

FYI... page 3 has an excellent chart showing typical maintenance levels, based upon the road type. This PDF is put out by OHMPA.¹⁴⁶

139. Approximately one hour after receiving the email from Mr. Pellegrini, Mr. McGuire forwarded the email to Ms. Waite, Mr. Oddi, Ms. Jacob, Mr. Lamont and Gavin Norman (Manager, Waterfront Development, Engineering Services, Public Works, Hamilton) (with a copy to Ms. Cameron), writing:

Please read the below, confirm that you have read it by replying to myself and Diana. We will address this at the next managers meeting.

As well somehow the original message got to Gary Moore. Do not forward this message beyond this circulation list.

My main concern is that the auditor was on this floor, and talking with staff about our programs without my office having any knowledge of this inquiry.

¹⁴³ [HAM0005961_0001](#)

¹⁴⁴ [HAM0005961_0001](#)

¹⁴⁵ [HAM0011230_0001](#)

¹⁴⁶ [HAM0011229_0001](#)

I have had a conversation with some managers and this is meant to send the same message to all teams.

When anyone approaches staff regarding compliance, risk, regulatory or audit functions then staff need to be aware they must escalate the inquiry to the Mgr. level at a minimum. We will comply with all request but we need to be aware of the message that we are sending. The Mgr. will decide if this requires higher level attention and engage me as required.

In this instance we have numerous activities underway that address the questions asked by the auditor, and I'm working with him to ensure he understand the impacts of Bill 6, O Reg 588/17, and our upcoming assignment to GM Blue Plan to develop a comprehensive policy that addresses all our lifecycle impacts along with an updated financial model. That said we may be reacting to this line of inquiry in parallel while we develop our other strategy and that may be a drain on our resources.

Please review, comment as required, and reply that you have received and read this message.¹⁴⁷

140. Later that day, Mr. Andoga forwarded Mr. Pellegrini's email to a variety of City staff members, including Mr. Jazvac, writing:

Everyone

Please refrain from dealing with and/or talking to anyone from Audit Services. If you are contacted please refer them to upper management.¹⁴⁸

8. Further Updates to RHVP and LINC Memorandum

141. On August 30, 2018, Mr. Ferguson emailed Mr. McKinnon, Mr. Soldo, Mr. White and Mr. McGuire regarding the August 21 Memo, writing: "Please find attached the status Update Memo for the RHVP/LINC, as per discussion."¹⁴⁹

142. The attached document appeared to be largely the same as the version sent on August 21, 2018, including its date. The paragraph related to claims received regarding the RHVP was revised. The revisions are outlined below:

Traffic Engineering ~~are beginning to receive notices~~ has received notice of impending Legal Action Actions as a result of collisions on either ~~LINC or RHVP. It should be noted that~~

¹⁴⁷ [HAM0027208_0001](#)

¹⁴⁸ [HAM0047396_0001](#)

¹⁴⁹ [HAM0005973_0001](#) attaching [HAM0005974_0001](#)

~~some of the claims are a result of poor design and poor pavement conditions. These items will require LINC or RHVP. Some questions may require comments,~~ response or attendance by Engineering staff at Legal Discoveries.¹⁵⁰

143. Mr. McGuire responded to this email, asking Mr. Ferguson:

Do you have the 2015 Cima report on the RHVP available?

Id like to review it if possible.¹⁵¹

144. Mr. Ferguson replied:

Yes I do, I am going to work with my staff next week and setup a common file folder that everyone can access and we will save all the documentation there. I will send out the link once we have it completed, give me a week or two.¹⁵²

145. Mr. McGuire replied thanking Mr. Ferguson, writing “[w]e will put all the results of our studies in there once its set up.”¹⁵³

146. On September 5, 2018, Mr. Ferguson emailed Mr. McGuire, Mr. Soldo and Mr. White in reply to the exchange with Mr. McGuire on August 30, 2018. He wrote:

The following folder has been created to save documents to as they relate to the RHVP/LINC. I have asked staff to review reports they may have and we will add them as we go.

S:\Public Works\RHVP LINC Monitoring Documents¹⁵⁴

147. On September 5, 2018, Mr. Olszewski emailed Mr. Ferguson, Mr. Declair, Steve Molloy (Manager, Transportation Planning Services, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton), Joanne Starr (Project Manager, Traffic Safety,

¹⁵⁰ [HAM0001388_0001](#) (original) compared to [HAM0005974_0001](#) (modified)

¹⁵¹ [HAM0027227_0001](#)

¹⁵² [HAM0027227_0001](#)

¹⁵³ [HAM0027227_0001](#)

¹⁵⁴ [HAM0027227_0001](#)

Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton) and Mr. Cooper, writing:

Based on a recent discussion with Dan McKinnon regarding having a centralized location for any safety / evaluations documents related to the RHVP or LINC where these documents can be easily found, I've created the following.

S:\Public Works\RHVP LINC Monitoring Documents

If there are any master/living documents that are constantly updated by staff, please just post the shortcut of that file to the folder, that way the living document can continue to be updated (without affecting staff/data in it's current location) and the S:\ Drive location can simply have the shortcut that will consist of the most up-to-date file.

I'll create sub-folders if required.¹⁵⁵

148. Mr. Ferguson replied to Mr. Cooper the same day, writing:

Stephen,

Can you please save the old CIMA reports to this folder, I have added the most recent ones that were done. We will need to add the ones CIMA is working on now once they are completed.

Any documents you are unsure of, let me know first before they are copied into this drive. Example, we are not saving the Bluetooth speed reports in this folder.¹⁵⁶

149. Mr. Cooper replied the following day: "Thanks, I added a CIMA report for the RHVP from 2013, once the current ones are final I will add them as well."¹⁵⁷

150. Later the same day, Mr. Ferguson emailed Ms. Wyskiel with a copy to Mr. White, regarding RHVP and LINC collision statistics:

At our RHVP/LINC management meeting today, Edward asked for an update on detailed location collision statistics.

Can you please have Rodney arrange for a 5 year collision broken down by locations and directions. I believe Linda did some of this work previously so I believe it might just need to be updated.

¹⁵⁵ [HAM0047742_0001](#)

¹⁵⁶ [HAM0047742_0001](#)

¹⁵⁷ [HAM0047742_0001](#)

Also, I think Jeff had worked on a collision heat map, could he also update.¹⁵⁸

151. Mr. Ferguson emailed Mr. Olszewski the same evening, copying Mr. White, writing:

Can you setup a meeting for you and I next week to talk about some actions we need to implement. This comes from our RHVP/LINC management meeting and I think you would be good to manage the assignment.¹⁵⁹

152. A meeting between Mr. Olszewski and Mr. Ferguson was scheduled for September 5, 2018, at 9:00 a.m.¹⁶⁰

153. On August 31, 2018, Mr. McGuire emailed Mr. McKinnon under the subject line "Spec article". He wrote:

Hers he link and some quotes....

<https://www.thespec.com/news-story/7424349-highway-traffic-tragedies-why-are-there-so-many-crashes-on-the-red-hill/>

There is no official report, Moore said, only an informal chart sent in an email in December 2015. The friction testing was not fulsome and the results were "inconclusive," he said.

He wouldn't say whether concerns over friction also played a role in deciding what pavement to use.¹⁶¹

154. The article referenced by Mr. McGuire was the July 17, 2017, article from The Hamilton Spectator titled "Highway traffic tragedies: Why are there so many crashes on the Red Hill?"¹⁶²

¹⁵⁸ [HAM0047704_0001](#)

¹⁵⁹ [HAM0011232_0001](#)

¹⁶⁰ [HAM0011232_0001](#)

¹⁶¹ [HAM0053626_0001](#)

¹⁶² [RHV0000548](#)

9. City Receives Draft Speed Limit Study Report from CIMA

155. On August 31, 2018, Mr. Omrani emailed Mr. Cooper, copying Mr. Declair, Mr. Melendez, Mr. Philip and Mr. Grewal, to provide a draft of the Speed Limit Study report. He provided the report via OneDrive, and wrote:

Hope all is well on your end. We've finalized the draft report for the LINC & RHVP speed study. Given the size of the documents, I've uploaded them in our [OneDrive](#) folder. Please let me know if you have any difficulties with accessing the files.

Looking forward to your comments on the report.¹⁶³

156. A draft was produced by CIMA with the same date, and appears likely to be the version sent to Mr. Cooper. That draft recommended that the speed limit for the RHVP remain at 90km/h.¹⁶⁴

F. September 2018

1. Continued Contact with Audit Services Regarding VFM Audit

157. On September 4, 2018, Mr. Pellegrini emailed Mr. McKinnon regarding the value for money audit ("VFM Audit") being conducted by Audit Services. He forwarded his email to Mr. McGuire and Mr. Andoga on August 24, 2018, and wrote:

As per our telephone discussion this morning below is the scope of the Roads Review started by Audit Services.

Thanks in advance for your assistance.¹⁶⁵

2. Continued Discussions with CIMA Regarding Friction Data

158. On September 4, 2018, Mr. Malone exchanged emails with Alireza Hedayeghi (Partner, Vice-President, Transportation, CIMA), Chantal Dagenais (Partner, Project

¹⁶³ [CIM0015772](#)

¹⁶⁴ [CIM0015095](#) at image 39

¹⁶⁵ [HAM0027223_0001](#)

Director, Traffic Engineering, CIMA), Patrick Lalach (Partner, Senior Director, Transportation, Western Canada, CIMA) and Kelly Yuzdepski (Partner, Vice President, Transportation, Western Canada, CIMA), under the subject line “Pavement Friction Testing and Pavement Design”:

[BM]: The City of Hamilton is asking us for assistance in interpreting pavement friction testing results they have received.

The issue may expand into discussion of pavement design as well.

Does CIMA have anyone with expertise in this subject area?

[PL]: Justen and Dan should be able to help, they have some decent experience with these parameters. If it's too advanced we would usually get a sub, but interpretation of data and pavement designs we can definitely do.

[BM]: Thanks. We may need to have a quick discussion of the scope of the issue. I'll send a meeting invite¹⁶⁶

159. Mr. Lalach replied to Mr. Malone and Justen McArthur (Associate Partner, Senior Project Manager, CIMA) after receiving an out of office reply from Dan Dmytryshyn (Project Manager, Transportation, CIMA):

[PL at 7:20 a.m.]: I see Dan is away until next week, but would set up the call with Justen and have that initial discussion.

[PL at 10:00 a.m.]: And you can include Geoff Petzold from Edmonton, he has payment background as well.¹⁶⁷

160. Mr. Malone replied to Mr. McGuire's email from August 30, 2018, on September 4, 2018, copying Mr. Omrani, writing:

These appear to be the test results from 2007 that were done by MTO at the time the RHVP was being finished, pre-opening. Gary Moore had provided these to me in August of 2015, before we completed the 2 safety reports in 2015. Unfortunately, they failed to offer an ability to quantify any friction problem that may be a source of the collision performance.

¹⁶⁶ [CIM0016873](#)

¹⁶⁷ [CIM0016871](#)

The ASTM E274 testing provides a friction performance number value, but the number is a relative one. The ASTM testing protocol states:

“These values are intended for use in evaluating the skid resistance of a pavement relative to that of other pavements or for evaluating changes in the skid resistance of a pavement with the passage of time. ... They are also insufficient for determining the speed at which control of a vehicle would be lost, because peak and side force friction are also required for these determinations. <https://www.astm.org/Standards/E274.htm>”

Additionally, FHWA guidance states:

Results obtained with any friction test equipment represent the frictional properties obtained when using the specific equipment and procedures and do not necessarily agree or correlate with other friction measurement methods. The values obtained are intended for use in evaluating friction characteristics of a pavement relative to other pavements or to evaluate changes of one pavement over time. <https://www.fhwa.dot.gov/pavement/t504038.cfm#p12>”

What was missing when we viewed these figures back in 2015 was an identification of a threshold or relative comparison. The paper does make brief mention (top of Page 146) of ‘expected’ FN values of 30. Gary may have had the view that because the RHVP values were higher than that they were acceptable. However, when I asked what values MTO used as the ‘acceptable’ friction levels he said he did not know. He also he stated that the City did not have a number. It was also not clear if the ‘expected’ value was for SMA pavements in their early, slippery, stages. As can be seen in the graph in the paper, friction values are much higher later in the SMA life. We don’t know if this typical improvement with time occurred on the RHVP.

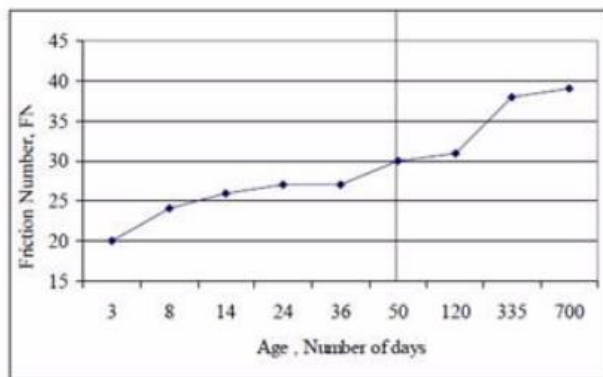


Figure 1. Highway 401 Westbound - Surface Friction of Stone Mastic Asphalt Mix vs. Age

Perhaps I misunderstood you last Thursday when we talked, but I thought you said that additional testing had been done, either in 2014, or subsequent to the Nov 2015 CIMA report which recommended friction testing. If those exist, then a comparison of the two can be done. Additionally, if LINC testing data is available, from 2007 or more recently, then there is also a possible means for comparison.¹⁶⁸

¹⁶⁸ [CIM0016870](#)

161. The same day Ms. Dagenais forwarded Mr. Malone's September 4, 2018 email to Claude Vézina (Directeur de projet, Partner, CIMA). They exchanged the following emails:

[CD]: Avons-nous quelqu'un chez CIMA+ qui peut interpréter des résultats de tests d'adhérence de pavage. Brian Malone cherche cette expertise pour des cas légaux en Ontario.

[CV]: Nous n'avons pas d'expert reconnu pour passer le test de la cour¹⁶⁹

162. On September 10, 2018, Geoff Petzold (Project Manager, Transportation, CIMA) emailed Mr. Malone, having been forwarded Mr. Malone's email with a request regarding friction expertise on September 4, 2018. Mr. Petzold wrote:

I received this email from Kelly and would like to reach out to you to see if there's any opportunity for me to offer my services to your project.

I am just finishing up a master's degree program at the UofA, specializing in Asphalt Pavements.

I have experience in pavement design and am also familiar with the friction testing you are likely looking at. Typically, this is performed by a materials' engineer, but I can certainly lend an eye if you require.¹⁷⁰

3. City of Hamilton Annual Collision Report 2017

163. On September 6, 2018, Mr. Purins emailed Mr. Ferguson, attaching presentation slides titled "City of Hamilton Annual Collision Report 2017". He wrote:

Updated report with new Crossover collision values attached. LINC had 21 in 5 years, 2 in 2017. RHVP had 26 in 5 years and 7 in 2017. I updated all the charts that coincide with these new values. I wasn't sure if the most up-to-date Council Report was in the same folder so I didn't make any changes to it.¹⁷¹

¹⁶⁹ [CIM0016866](#)

¹⁷⁰ [CIM0016861](#)

¹⁷¹ [HAM0001445_0001](#) attaching [HAM0001446_0001](#)

164. On September 10, 2018, Mr. Ferguson emailed Mr. White (copying Mr. Purins and Ms. Aquila) a draft of a report to PWC titled “City of Hamilton Annual Collision Report – 2017”. Mr. Ferguson wrote:

Martin,

Attached are the modified reports as per our discussions. These should be set to go now.

I will work on the Presentation to Council now based on our discussions.¹⁷²

165. The report included the following references to the RHVP:

Lincoln Alexander and Red Hill Valley Parkways

Road safety on the Lincoln Alexander Parkway and Red Hill Valley Parkway has been an ongoing contentious issue over the past several years. Several traffic safety reports have been compiled by consultants and various remedial initiatives have been implemented to reduce collisions on these parkways.

Analysis of collisions between 2013 and 2017 identifies that driver behaviour is the prevailing cause of collisions on the Red Hill Valley and Lincoln Alexander Parkway. In most instances, the action of losing control of a vehicle is a result of vehicle speed or aggressive driving behaviour.

Most of the collisions on the Lincoln Alexander Parkway occurred under Clear weather and Dry roadway conditions. Collisions on the Red Hill Valley Parkway occurred under Rain weather and Wet roadway conditions. The most common collision type on the Lincoln Alexander Parkway continues to be rear end collisions and single motor vehicle collisions on the Red Hill Valley Parkway.

2013-2017 Lincoln Alexander Parkway Collisions

Collision Type	2013	2014	2015	2016	2017	Total
Total Collisions	135	138	135	144	159	711
Police Reported	74	65	72	59	62	332
Crossovers	2	6	7	4	2	21
Property Damage	32	27	22	21	31	133
Injury	42	37	50	38	30	197
Fatal	0	1	0	0	1	2

2013-2017 Red Hill Valley Parkway Collisions

¹⁷² [HAM0001447_0001](#) attaching [HAM0001448_0001](#) and [HAM0001449_0001](#)

Collision Type	2013	2014	2015	2016	2017	Total
Total Collisions	128	117	238	186	193	862
Police Reported	79	71	138	102	102	492
Crossovers	1	4	10	4	7	26
Property Damage	44	45	80	58	59	286
Injury	35	26	56	44	41	202
Fatal	0	0	2	0	2	4

Hamilton Police Services began an aggressive enforcement campaign in December 2014 which continues to date. Since the inception of this enforcement program, over 10,000 infractions have been issued with over 90% being for speeding violations.¹⁷³

4. Continued Work on Speed Limit Study and RHVP Lighting Study

166. The same day, Mr. Ferguson emailed Mr. Cooper regarding the Speed Limit Study, writing:

Report looks good and I support the recommendations. Only comment was I saw some grammatical errors, suggest they review and correct.

Can you also send a digital copy of the report to Martin to review and comment. Might as well get his comments now rather than having to deal with it later.

Let me know if you need this copy of the report back¹⁷⁴

167. Also on September 10, 2018, Mr. Field emailed Ms. Cameron under the subject line “FW: Hamilton Illumination Progress Meeting #3”, and attaching minutes from the August 27, 2018, meeting with CIMA. He wrote:

Like last time, can you facilitate a meeting date as per the below? Gord needs to come to this meeting as well as Dave Lamont, myself and Brian Parma.¹⁷⁵

168. On September 17, 2018, Mr. Cooper forwarded Mr. Ferguson’s email regarding the Speed Limit Study to Mr. Omrani, writing:

¹⁷³ [HAM0001449_0001](#) at images 5-6

¹⁷⁴ [CIM0015694](#)

¹⁷⁵ [HAM0053651_0001](#) attaching [HAM0053652_0001](#)

Good Morning Reza- please see comments below from Dave and review/correct as required. Other than the minor errors, all looks good.

I am reading it in more detail to find the errors Dave is referring to as well. If I find them (I missed them first time through), I will advise.¹⁷⁶

169. Mr. Omrani replied the same day, writing “Thanks for the email. I’ll wait for you (and maybe Martin) to finish the review and then finalize the report accordingly.”¹⁷⁷

170. On September 24, 2018, Mr. Omrani provided Mr. Cooper, copying Mr. Declair and Mr. Melendez, an updated Speed Limit Study draft through a OneDrive link.¹⁷⁸

171. On September 25, 2018, CIMA and the City met for a third progress meeting for the RHVP Lighting Study. Notes from the meeting indicate that CIMA advised that full illumination could likely be warranted, but that install and EA costs would be significant. Mr. McGuire, Mr. Field, Mr. Parma, Mr. Lamont, Mr. Malone, Ms. Haslett, Mr. Omrani and Mr. Brouillette were listed as having been present.¹⁷⁹

172. On October 22, 2018, Mr. Cooper replied to Mr. Omrani’s September 17, 2018, email regarding the Speed Limit Study. He wrote “Reza- Can please provide me with the final report. We have no further comments.”¹⁸⁰

173. Mr. Omrani replied the same day, providing the final report via OneDrive.¹⁸¹ The report recommended that the RHVP speed limit remain at 90km/h.¹⁸²

¹⁷⁶ [CIM0015694](#)

¹⁷⁷ [CIM0015694](#)

¹⁷⁸ [HAM0047823_0001](#)

¹⁷⁹ [CIM0016276](#); and [CIM0016848](#)

¹⁸⁰ [CIM0015694](#)

¹⁸¹ [CIM0015693](#)

¹⁸² [CIM0015106](#) at image 42

5. Asphalt Audit

174. On September 10, 2018, Ms. Cameron sent a calendar invitation to Mr. McGuire, Mr. Becke and Mr. Oddi titled “Discuss Asphalt Audit”. The meeting was scheduled for 30 minutes on September 11, 2018.¹⁸³

175. On September 11, 2018, Mr. McGuire emailed Mr. Becke and Mr. Oddi, replying to the calendar invitation sent on his behalf by Ms. Cameron the day prior under the subject line “RE: Discuss Asphalt Audit”. Mr. McGuire wrote:

Have you seen these Golder reports on our Asphalt? Did we ever report to PWC

S:\Public Works\Engineering Services Division\PMTR Report – Golder¹⁸⁴

176. Mr. Becke replied the same day, writing:

I was speaking to Ludomir last week and he sent it to me then. This is the first I have seen this report. I have read it and I have questions for him but I have not had a chance to talk to him since.

I am not sure what was done with that report. We should talk about it first.¹⁸⁵

177. Mr. McGuire replied later that morning:

We seem to have done a full asphalt QA review through these reports.

I wonder if there was a report developed for this.¹⁸⁶

178. Mr. McGuire later forwarded Mr. Becke’s email to Ms. Jacob.¹⁸⁷

¹⁸³ [HAM0011238_0001](#)

¹⁸⁴ [HAM0011238_0001](#)

¹⁸⁵ [HAM0011238_0001](#)

¹⁸⁶ [HAM0011238_0001](#)

¹⁸⁷ [HAM0035480_0001](#)

179. On September 20, 2018, Mr. Pellegrini provided Mr. Sharma with the draft scope for the VFM Audit and requested a meeting in October. Mr. Sharma forwarded the email to Mr. McGuire the same day, who then forwarded it to Mr. Becke.¹⁸⁸

180. The document provided by Mr. Pellegrini noted the following with respect to the RHVP and LINC:

- a) Compare the actual expenditure and treatment cycle to date on these roads to the budgeted assumptions made in the life cycle cost analysis;
- b) Asses the performance of the Perpetual Pavement used on these roads;
- c) Verify whether an evaluative study has been performed validating that the 50 year life of these assets is still attainable at the cost initially budgeted.¹⁸⁹

181. The following day, Mr. McGuire sent a calendar appointment to Ms. Jacob, Mr. Becke, Mr. Andoga and Mr. Renaud attaching Mr. Pellegrini's email with the draft VFM Audit scope. The calendar invitation was for a meeting on September 21, 2018, at 10:00 a.m. Mr. McGuire wrote "Please see the attached the attached email. Lets meet to start a framework discussion about setting up the reply".¹⁹⁰

6. Public Complaints Regarding Road Safety

182. On September 11, 2018, Mr. McKinnon forwarded an email he received from Councillor Sam Merulla (Ward 4, Hamilton) regarding a public complaint the Councillor had received on September 10, 2018, to Mr. Soldo and Mr. McGuire. The email from the member of the public on September 10, 2018, included the following:

¹⁸⁸ [HAM0011266_0001](#)

¹⁸⁹ [HAM0011268_0001](#)

¹⁹⁰ [HAM0011270_0001](#)

I had a very scary moment today. Making my way along the on ramp for Red Hill, northbound at King St., my car slid out of control, spun 180 and went up and over the curb onto the grass. I was only going 40km and obviously no ice. How could this happen?

A tow driver appeared within seconds and assured me it wasn't my fault, but that the road is paved with some material that is notoriously slippery when wet. He said there had already been numerous incidents this morning, and in the 20 mins or so I spent at the side of the road, I witnessed two more!!

Thankfully, I am fine, but I had a good cry when I got home from work thinking about how different things might have been if my car had slid in the other direction, into fast-moving traffic. And having now discovered that the road is under investigation, I realize I would not have been the first to encounter such misfortune. I have two young children and I can tell you, their faces flashed before my eyes as I lost control, not knowing where I was going to land.

The city knows about this troublesome paving - WHY AREN'T THEY INFORMING US? Why are there no warning signs? Why isn't the road closed when it rains? What kind of tragedy needs to unfold before the city is held accountable? I feel incredibly lucky to be home safe with my family tonight and will not drive the Red Hill Pkwy again.

I will also be contacting local media, as I believe action needs to be taken on this ASAP. Despite "inconclusive" asphalt testing, the reality is staring us in the face: This road is unsafe.

I look forward to your response.¹⁹¹

183. Councillor Merulla replied to the member of the public the same day, writing: "There is absolutely no truth to that statement. By copy of this email I will have our professional staff provide input on the asphalt quality."¹⁹²

184. In the email forwarding the exchange between the Councillor and the member of the public to Mr. Soldo and Mr. McGuire, on September 11, 2018, Mr. McKinnon wrote "Gents how do we want to review?"¹⁹³

¹⁹¹ [HAM0011239_0001](#)

¹⁹² [HAM0011239_0001](#)

¹⁹³ [HAM0011239_0001](#); and [HAM0035481_0001](#)

185. On September 18, 2018, Ms. Eisbrenner emailed Mr. Soldo regarding the status of the response to Councillor Merulla’s inquiry. Mr. Soldo replied the same day, writing “Gord is dealing with it.”¹⁹⁴

186. Ms. Wunderlich emailed Ms. Eisbrenner and Ms. Cameron the same day to ask if a response was available. Ms. Eisbrenner relayed to Ms. Wunderlich that Mr. McGuire was looking into the inquiry.¹⁹⁵

187. Ms. Cameron forwarded Ms. Wunderlich’s follow up email to Mr. McGuire, asking if there was an update she could provide. Mr. McGuire replied, writing:

Yes:

I’m going to draft this reply shortly. Can you add the Red Hill resurfacing as a H priority sheet....

I will say, Thanks for the inquiry and that we have had a series of reports that indicate there is inconclusive results from the previous testing.

*This office is focussing on developing a rehabilitation strategy for 2019 and will either resurface the facility. The newly resurfaced road will be installed to our current asphalt design standards and remove the previous material. This work is in the planning stages currently as we create the asphalt mix requirements.*¹⁹⁶

188. On September 24, 2018, Ms. Wunderlich emailed Ms. Cameron regarding Councillor Merulla’s inquiry, writing “Still not seen a reply on this?”¹⁹⁷

189. Ms. Wunderlich also emailed Diane Piedmonte (Assistant to Councillor Sam Merulla, Ward 4, Hamilton), advising her that she “followed up a few times with Engineering and still not have received a response. Email was sent to Gord McGuire,

¹⁹⁴ [HAM0035485_0001](#)

¹⁹⁵ [HAM0035486_0001](#)

¹⁹⁶ [HAM0053661_0001](#)

¹⁹⁷ [HAM0053667_0001](#)

copying Diana Cameron.” Ms. Piedmonte replied that they would continue to await their response.¹⁹⁸

190. On September 24, 2018, a member of the public sent an email to Municipal Law Enforcement (mle@hamilton.ca), copying Councillor Tom Jackson (Ward 6, Hamilton) under the subject line road concern:

I am writing you in regards to a concern that I have with the ramp connecting the Linc with the Upper Red Hill Valley Parkway. I have attached a map highlighting the area in concern. This section of road is dangerous when wet. When raining there is usually a vehicle that has left the roadway. It is so bad that there are hardly any markers or shoulder left because they have been taken out by vehicles leaving the ramp at the curve. I am not an engineer, so I can't say that it's the pavement or driver error, but I think that either the pavement needs to be looked by a materials engineer or the signage along this stretch should be improved to emphasize the risk posed by not slowing down. I honestly don't drive this stretch when it's raining because it feels like you're driving on oil - even when doing the posted limit.

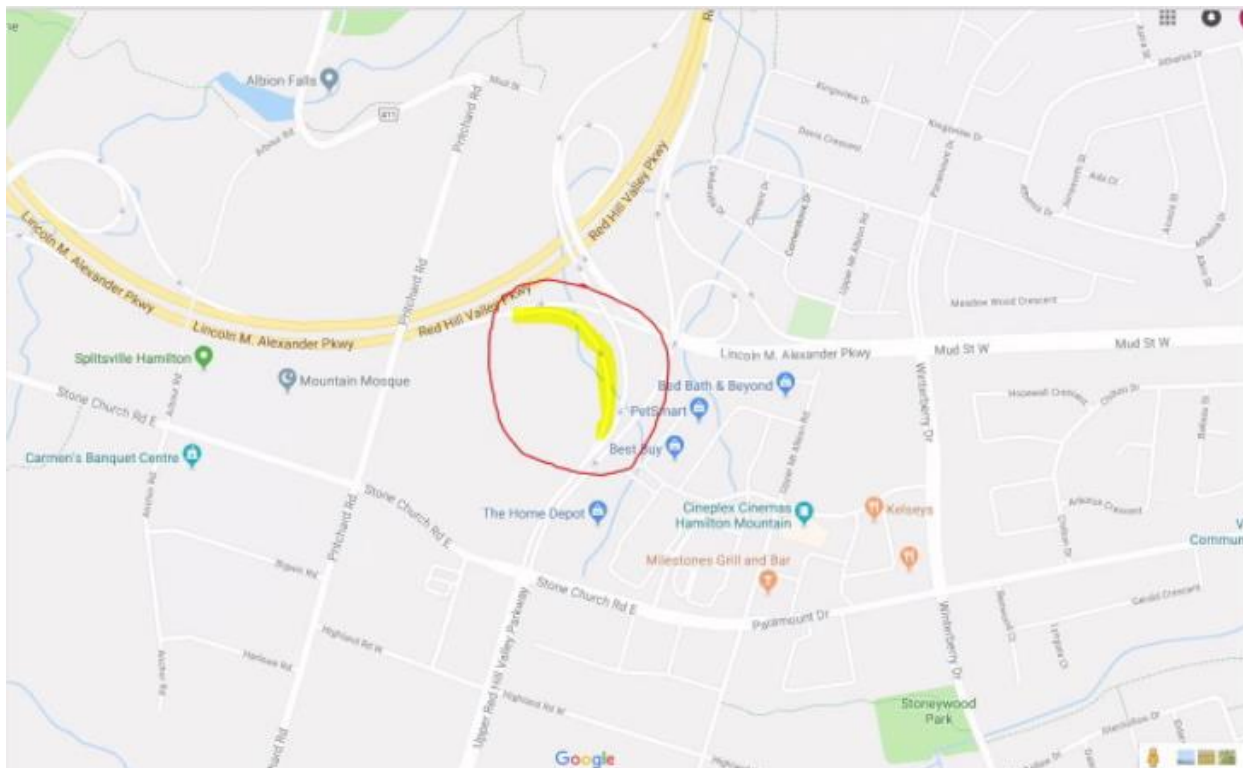
Thank you so much for taking my concern into consideration. I know this account is very busy and would not submit a complaint unless I thought it was critical. Please contact me if you have any questions.¹⁹⁹

191. A map highlighting the ramp in question was attached to the email, and is reproduced below:²⁰⁰

¹⁹⁸ [HAM0011280_0001](#)

¹⁹⁹ [HAM0059983_0001](#)

²⁰⁰ [HAM0059976_0001](#)



192. The email was forwarded to Public Works staff by Christine DiGiantomasso (Acting Assistant to Councillor Tom Jackson, Ward 6, Hamilton) on September 26, 2018.²⁰¹ Mr. Ferguson and Mr. Olzewski, copying Mr. White, exchanged emails the same day related to the email:

[DF]: Did we identify the need to install any guiderail on some of the off ramps through the Scoping? In looking at the Network Screening document, we should investigate these a little more.

[CO]: Nothing scoped out, I will write up an email with our concerns and send it over to Asset Management and Design to identify the Network Screening results, and focus on that one and other off ramp locations associated to RHVP/LINC.²⁰²

193. On September 27, 2018, Mr. Ferguson replied to the email, adding Rodney Aitchison (Project Manager, Traffic Services, Traffic Operations & Engineering, Roads &

²⁰¹ [HAM0059983_0001](#)

²⁰² [HAM0059983_0001](#)

Traffic, Public Works, Hamilton), Rob Galloway (Traffic Technologist (Traffic Signals), Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton) and Pedram Izadapanah (Vice President, Partner, TES) to the email chain, writing:

Rod,

I talked to Pedram this morning and he has agreed to assist us in running the collision data for the RHVP/LINC ramps through the TES safety module and the collision counter measure program.

Can you please provide Pedram with the detailed collision data for the following location 2013-2017

- Mud SB-EB off ramp – RHVP
- King to RHVP NB loop on ramp
- RHVP SB to King off ramp
- SCRP EB ramp: Mud NB-SB off ramp – SCRP
- SCRP: Stone Church to RHVP off ramps
- Queenston to RHVP SB loop on ramp
- RHVP NB to King off ramp
- Mud SB-EB off ramp: RHVP to Mud
- RHVP: Queenston NB off ramp – Greenhill NB on ramp

This information is urgent, can you provide a timeline of how long it will take to pull this data.²⁰³

194. On September 27, 2018, Mr. Olszewski replied to Mr. Ferguson, removing the others from the email, writing:

I quickly spoke to Mike Becke regarding the general topic and issues, and the RHVP/LINC projects are essentially shave and paves, but he's also in agreement now is the time to do any improvements related to these ramps, or at least look into it.

Whether that be different asphalt surfaces, or improved guard-rails, likely a few options but budgetary constraints will be the biggest hurdle if there are significant improvements recommended.

²⁰³ [HAM0059983_0001](#)

Once TES comes back with some countermeasures, we can touch base with a quick meeting and revise the CPMS scope.²⁰⁴

195. Mr. Ferguson replied the same day: “Yes, but this is also one of our GM’s top priorities, we will let management handle to the budget.”²⁰⁵

196. Mr. Aitchison replied to Mr. Ferguson later that day, writing: “See attached email. Jeff has provided the 10 year database to TES. Pedram said this is suitable for them to use for your RHVP/Linc ramp collision request.”²⁰⁶ He attached an email exchange between Jeff Sherriff (Senior Engineering Systems Applications Developer, Traffic Operations, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton) and Mr. Izadpanah, indicating that Mr. Sherriff has sent collision data to Mr. Izadpanah.²⁰⁷

7. Updated Collision Data

197. On September 17, 2018, Mr. Aitchison emailed Mr. Ferguson in reply to his email on August 30, 2018, to Ms. Wyskiel regarding collision data. He provided Mr. Ferguson with the requested data, writing:

Attached is the data requested. There are separate sheets for the Linc and RHVP. Each is summarized by location for 2013-2017 inclusive. At the bottom of each sheet is a summary of collisions for 2018 up to June 30.

Regarding the heat map, Jeff will be working with Rob to provide an updated version.²⁰⁸

²⁰⁴ [HAM0059983_0001](#)

²⁰⁵ [HAM0059986_0001](#)

²⁰⁶ [HAM0059987_0001](#)

²⁰⁷ [HAM0059988_0001](#)

²⁰⁸ [HAM0005991_0001](#) attaching [HAM0005992_0001](#)

198. Mr. Aitchison provided Mr. Ferguson with the collision heat map on September 27, 2018.²⁰⁹

8. Discussions on Scope of RHVP Resurfacing

199. On September 17, 2018, Mr. McGuire, through Ms. Cameron, sent a calendar invitation to Ms. Jacob, Mr. White and Mr. Soldo for a meeting to review the scope of the 2019 RHVP resurfacing.²¹⁰

200. On September 20, 2018, Mr. Olszewski emailed Mr. Ferguson (copying Mr. White) an outline of the scope for the various phases of the resurfacing of the RHVP and LINC. He wrote in his email:

As requested, please find the attached for all four project. I spoke to Mike Becke and they still don't have testing results that would dictate which asphalt method of placement they would select, the years remain currently up to date for construction.

RHVP – 2019 both phases

LINC – Upper James to 403 – 2021

LINC – Pritchard to Upper James – 2020

A lot of the scope is duplication for all projects as they are closely related, but see below:²¹¹

201. Mr. White forwarded this email to Mr. Soldo on September 21, 2018, writing:

Edward, I see that Gord has called a meeting respecting the scope of works for the Linc and RHVP repaving project. Below is the Traffic input to project scope in CPMS for your info in advance of the meeting.²¹²

202. On September 20, 2018, Ms. Rizvi emailed Dr. Uzarowski, Dr. Henderson and Ms. Jewison regarding the HIR laboratory testing, writing:

²⁰⁹ [HAM0005994_0001](#) attaching [HAM0005995_0001](#)

²¹⁰ [HAM0011253_0001](#)

²¹¹ [HAM0005993_0001](#)

²¹² [HAM0011269_0001](#)

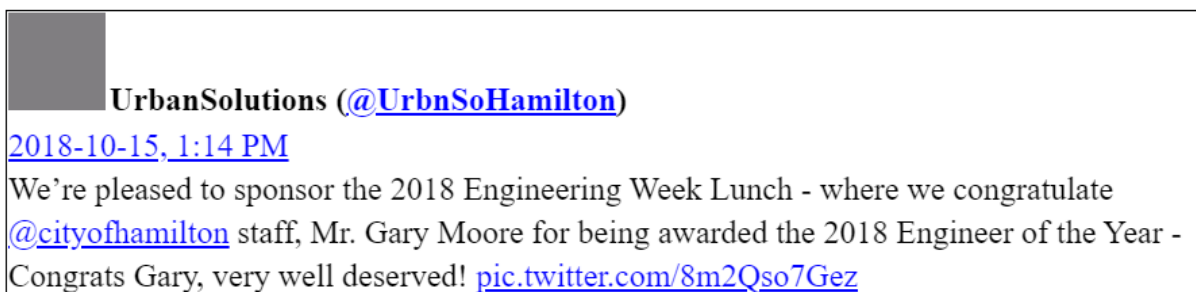
I will be taking over this project once Vimy leaves. In that regard, could you please let me know when you expect to have a list of testing that needs to be carried out. I understand that Mike Becke needs an answer before the first week of October, regarding whether HIR will be feasible. This means that any testing will have to be carried out next week. In order for that to happen, we need to give the list of testing required to the lab, tomorrow at the latest. Will this be possible?²¹³

9. Engineering Week and Mr. Moore Awarded Engineer of the Year

203. On September 25, 2018, Ms. Cameron emailed Mr. Andoga, Mr. Lamont, Mr. Norman, Mr. Oddi and Ms. Jacob regarding the 2018 Engineering Week luncheon. Ms. Jacob forwarded Ms. Cameron's email to Mr. Becke.²¹⁴

204. Mr. Becke replied to Ms. Cameron, writing: "I would like to go. I understand they will be giving Gary an award? I will see who else is available."²¹⁵

205. In an email on October 15, 2018, Mr. McKinnon shared a tweet related to the award:²¹⁶



10. HIR Asphalt Testing

206. On September 26, 2018, Dr. Uzarowski emailed Jeremy Rose (Asphalt Laboratory Supervisor/Manager, Whitby Office, Golder) regarding the testing to be conducted on

²¹³ [GOL0006129](#)

²¹⁴ [HAM0047837_0001](#)

²¹⁵ [HAM0047837_0001](#)

²¹⁶ [HAM0027302_0001](#)

asphalt samples removed on July 22, 2018, and August 19 2018, from the southbound and northbound lanes respectively.²¹⁷ He wrote:

Below are my recommendations for the testing of the samples from the Red Hill Valley Parkway (RHVP) in Hamilton.

1. The samples were taken at six locations as shown below. I will get the exact stations of each location.
 - a. At three locations in NBL; and
 - b. At three locations in SBL.
2. There are at least 10 boxes or slabs 10" x 10" from each location.
3. The samples typically include the SMA surface course and some Superpave 19 binder course.
4. If feasible, measure the depth of the SMA lift of each sample – minimum two reading for each sample where the interface between the layers is clearly visible. As we observed yesterday, the thickness of the SMA is about 45 mm to 50 mm.
5. Separate SMA from the remainder of the sample without damaging the SMA lift.
6. Determine BRD of the existing SMA course – two BRDs per location, i.e. a total of 12.
7. Determine MRD and laboratory voids of the SMA mix – two per location, i.e. a total of 12.
8. Calculate in-situ (field) air voids – two per location.
9. Run extraction/gradation and determine the gradation and asphalt cement content of the SMA mix – two per location, i.e. a total of 12.
10. Recovered Asphalt Cement (RAC) – determine full characteristics including PG grade, M320 parameters, ash content, DENT and ext. BBR, MSCR, and penetration – two per direction, i.e. a total of 2 sets of testing.

Please do not dispose off the remaining samples, aggregates from the extraction and recovered AC.

I will look for a quarry or quarries with rock that has very good frictional characteristics and we will determine what kind of beneficiating mix we will need.

Also, please let me know when the testing could be done and the cost of the testing. The testing is very urgent. Please let me know the cost ASAP so that I can compare it with the budget.

By the way, the new Bending Beam Rheometer is vey impressive and I see you guys are excited to have it. Congrats.²¹⁸

207. Mr. Rose replied the same day:

Quick question...

For your points 6, 7 and 8 do you want us to break down the sma and reheat it to compact in the gyratory to determine the BRD (point 6) and then compare to the MRD to get voids

²¹⁷ [GOL0005736](#)

²¹⁸ [GOL0005736](#)

(point 7) in addition to determining the in-situ BRD, MRD and voids (point 8)? Or, do you just want us to determine the in-situ BRD, MRD and calculate the in-situ voids and % compaction from those numbers?²¹⁹

208. On October 4, 2018, Dr. Uzarowski replied to Mr. Rose's September 26, 2018, email regarding the asphalt tests for the HIR Suitability Study. He attached the RHVP mix design from 2007.²²⁰

11. Discovery and Review of Tradewind Report

209. The City has produced a OneNote file titled "September 21st", dated September 6, 2018.²²¹ The note indicates that Mr. McGuire and a "Guest User" modified the note on September 6, 2018, and September 20, 2018, respectively. The note includes the following, in addition to an embedded document titled "Gord McGuire Agenda – September 21.doc":

Digital billboards

RHVP friction testing

Road program data

AM Mgr²²²

210. The City has provided the Inquiry with evidence in the form of a spreadsheet indicating that it has determined that on September 26, 2018, Mr. McGuire opened the "file containing the Tradewind Scientific report ... from the Public Works document management system".²²³

²¹⁹ [GOL0005736](#)

²²⁰ [GOL0005736](#) attaching [GOL0005739](#)

²²¹ [HAM0053331_0001](#) and [HAM0053347_0001](#)

²²² [HAM0053331_0001](#) and [HAM0053347_0001](#)

²²³ [HAM0055560_0001](#) at image 5; [HAM0062030_0001](#) at image 5; and [HAM0061794_0001](#) attaching [HAM0061795_0001](#)

211. The City has also provided evidence that Mr. McGuire opened a copy of Mr. Moore's January 24, 2014 email to Mr. Dzieziejko the same day. The audit trail for this document indicates it was also uploaded by Mr. Moore on May 15, 2018.²²⁴

212. On September 27, 2018, Ms. Jacob emailed Mr. McGuire under the subject line "RHVP-Brief".²²⁵ She wrote:

Please find attached.

Cathy is making copies of the documents for me. We will return all docs we borrowed from you today.

213. The attached document noted the following:

Three reports were analysed:

1. January 2014 Report from Golder on Performance Review after six years in service (DRAFT)
2. Friction Testing Survey Summary Report (Appendix of the above report)
3. Memo fro Dave Ferguson to Dan McKinnon (August 2018)

Summary of findings

- RHVP was opened in 2007
- Slight to moderate distortion
- Slight to moderate longitudinal cracking top down nature
- Two Significant flooding upto 2014
- Crack on the 39mm top asphalt, not affected second lift, first lift debonded from second lift, in some cores the layers debonded from the bottom layers.
- Approximately 3 times more Traffic per year than anticipated and designed for
- Full resurfacing was recommended for Year 21.
- New Surface Course should incorporate aggregates that have good Polished Stone Value. The samples that were taken from RHVP in July and August of 2018 will be assessed for the PSV and its suitability to be reused in the new surface course.
- Condition of Paved shoulder should also be addressed and routing and sealing may be required to stop ingress of water into the road structure.
- An analysis of the existing Traffic Safety measures including Guide rails etc. should be assessed and any upgrades required should also be implemented. (Who will be responsible lead on this?)²²⁶

²²⁴ [HAM0061613_0001](#); and [HAM0052049_0001](#)

²²⁵ [HAM0035496_0001](#)

²²⁶ [HAM0035497_0001](#)

12. Response to Councillor Merulla and Member of Public

214. On September 28, 2018, Mr. McGuire responded to the member of the public who had contacted Councillor Merulla on September 10, 2018, regarding the safety of the RHVP. Councillor Merulla, Ms. Piedimonte, Ms. Wunderlich and Ms. Cameron were copied. He wrote:

Please accept my apology for the delayed reply, I wanted to make sure that I was supplying you with the most current and accurate information possible.

We have received some feedback like yours and, as you already know, we have conducted some testing on the Red Hill Valley Parkway. As you mentioned, this testing has come back with inconclusive results. As a result we are expediting the resurfacing of the roadway to occur in 2019.

At this time, we are determining the criteria for the final scope of the project including the limits of the work and what specifications we will use. In general, you can expect to see the top layer of asphalt removed and a new mix placed on top.

Thank you for sharing your experience with us. Please contact me with any questions.²²⁷

G. October 2018

1. RHVP Roadside Safety Assessment

215. On October 2, 2018, Mr. Ferguson emailed Mr. Malone and Mr. Hadayeghi, requesting a quote for a safety assessment of the RHVP (“RHVP Roadside Safety Assessment”):

Can you please provide me with a quote to undertake the work outlined below, please note the timelines for completion. The RHVP is being paved next year, so Edward would like to include any works that might come from this review into the Budget.²²⁸

216. Mr. Ferguson’s email forwarded an email he sent to Mr. Soldo and Mr. White the same day, outlining the purpose of the study.²²⁹

Purpose: To investigate the current roadside design on the mainline of the Lincoln Alexander and Red Hill Valley Parkways as well as the on and off ramps for both facilities.

²²⁷ [HAM0053680_0001](#)

²²⁸ [CIM0019826](#)

²²⁹ [CIM0019826](#)

The consultant shall identify collision patterns and current roadside hazards on the mainline and geometric design issues, signing review and roadside hazard review on all ramps. The assignment includes the development of solutions to hazards identified in the report. The purpose of the assignment is to identify hazards and provide corrective measures to reduce collisions, injuries and fatalities.

Scope: To evaluate the current roadside design and conditions to ensure it provides a clear, recoverable area where feasible, and where roadsides are not designed free of fixed objects, crashworthy roadside safety hardware is used to reduce risk. This study shall also review the current geometrics of the on and off ramps for both facilities and provide recommendations for improvements.

The report shall consist of the following items:

- An installation and maintenance checklist- create an installation and maintenance spreadsheet related to construction, new installations, and maintenance of the facility based on identified issues.
- Inventory- existing hardware on the roadside of both facilities, identifying condition of existing safety devices, signs, etc. including areas with foliage.
- Crash monitoring-examine the reported collisions involving roadside facilities.
- In-depth investigation-investigate high collision trend locations that resulted in serious injury or a fatality and provide recommendations for collision counter measures.

This study is to follow the industry standards for roadside safety as identified by AASHTO Roadside Design Guide, TAC Geometric Design Guide and the MTO Roadside Safety Manual.

Timelines: This assignment is to be completed in 2 Phases

- Red Hill Valley Parkway review to be completed by December 15, 2018
- Lincoln Alexander Parkway review to be completed by August 15, 2019

217. On October 3, 2018, Lorissa Skrypniak (Senior Project Manager, Neighbourhood Traffic Management and EA's, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton) provided Mr. Ferguson and Mr. Cooper with the necessary roster documentation for CIMA to proceed with the RHVP Roadside Safety Assessment in response to a request by Mr. Ferguson the day prior. Mr. Ferguson noted in his email "I have already sent to CIMA to get a quote, as this is urgent, we are required to move quickly on this assignment."²³⁰

²³⁰ [HAM0011304_0001](#)

218. On October 5, 2018, Mr. Hadayeghi emailed Mr. Ferguson, attaching the proposal for the RHVP Roadside Safety Assessment. The proposed fee was \$90,960.00, and the tasks outlined in the proposal were:

- Identification of collision patterns associated with roadside hazards;
- Review of roadside hazards and geometric design issues;
- Inventory and condition assessment of existing roadside safety devices;
- Recommendations for maintenance, upgrades or new installations of roadside safety devices; and
- Recommendation of additional safety countermeasures to reduce serious injuries and fatalities.²³¹

219. An updated proposal was provided by Mr. Hadayeghi on October 16, 2018. The attached proposal included a request from the HPS for the potential design of HPS access points on the RHVP and LINC. Mr. Hadayeghi wrote to Mr. Ferguson:

Please find attached an updated version of our proposal. I think we addressed all the comments in this version.

I hope this is satisfactory now. Looking forward to starting working on this assignment soon.²³²

2. Spectator Inquiry Regarding Resurfacing and Asphalt Test Results

220. On October 3, 2018, Ms. O'Reilly emailed Ms. Graham, writing:

I was looking for an update on the asphalt testing done on the Red Hill Valley Parkway. Is there someone I can talk to about the status of those tests? Results back yet? Does the city have a re-paving plan set yet?²³³

221. Ms. Graham then forwarded the email to Mr. McGuire, writing:²³⁴

See below - this is the same reporter you spoke to a while back. Do you have any additional info you are prepared to provide?

²³¹ [CIM0019807](#) attaching [CIM0019807.0001](#)

²³² [CIM0019777](#) attaching [CIM0019777.0001](#)

²³³ [HAM0011303_0001](#)

²³⁴ [HAM0011303_0001](#)

222. Mr. McGuire forwarded the email to Ms. Jacob, and Mr. Becke:

[GM]: Lets review this today....

[SJ]: We should buy some more time before responding to this email.”

[GM]: Agreed, that’s why I want to talk today.

Between the RHVP and the Linc we have over \$55M scheduled in the next 3 years.....

Replying piecemeal will just cause us to scramble for answers. Lets sit down this week if today doesn’t work to review our messaging.

Test results
Need
AADT impact
Schedules
Upgrades?
Etc.....
I wont reply²³⁵

223. On October 9, 2018, Mr. Becke emailed Mr. McGuire related to investigatory works on the RHVP related to the HIR Suitability Study:

As part of the upcoming RHVP resurfacing project, Engineering Services needed to collect large asphalt samples (1m x 9m) of the RHVP Surface Asphalt for testing and mix design purposes. This work required a Contractor that could handle the traffic control and restoration works required for highway type paving. Maintenance already had a contractor that was capable to complete this work of which had completed repairs to the LINC earlier this year. In order to expedite the sampling process we approached maintenance to help us with the removal of the samples, the final restoration and the delivery of the samples to the laboratory for testing. Going to tender for this work would have pushed the sample removals to the fall which would delay the laboratory testing and mix design as well as placed the closure of the RHVP during heavier traffic volumes that are found after the summer break (after Labour Day).

Please let me know if you have any other questions or need any further information.²³⁶

224. Mr. Becke’s notebooks contain an entry for the same date, which state:

Asphalt – Audit working group

- Dominic – Value for Money on Ashalt

↳ Stakeholder

²³⁵ [HAM0011303_0001](#)

²³⁶ [HAM0047880_0001](#)

Questions → Dipankar or Gord ← Answers
 ← →

2010 → 2015

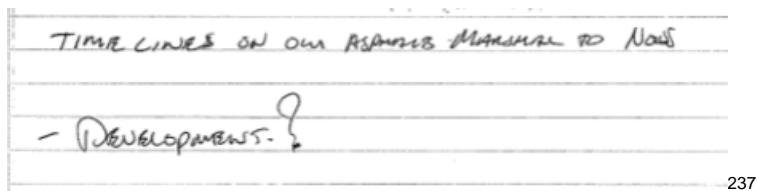
- 2012 – 2015 projects
- Roads deteriorating sooner than expected
- technical – specs, changes ongoing. Mashal/SP

↳ Deep dive into RHVP/LINC

- Report regard Gary low temp cracking report

2014

- Specific Roads
- Ludomir – Golder Records



225. On October 23, 2018, Ms. Graham forwarded an email inquiry from Ms. O'Reilly to Mr. McGuire:

A couple follow ups from Spec reporter – I told her we would try to get back to her tomorrow AM.

There were a couple of things Gord said he'd have to get back to me with – I wanted more details about the samples that were taken (size) and where they went for testing. I had also asked whether there was a report that I could read.

I was talking with my editors and couple follow up questions popped up. I don't know if it would be easier to have Gord give me a call back or answer by email.

1. To clarify the mix that will be used to resurface the parkway next summer is a superpave mix?
2. What is the expected lifespan is for the RHVP after resurfacing? How many years before resurfacing or a full repaving?
3. Are there expected increases to traffic volumes on the RHVP and were those considered in this plan?

²³⁷ [HAM0061788_0001](#) at image 129.

4. When I did a story last year I was told the Linc was last repaved in 2011 and is scheduled to be repaved again in 2020 . . . is that timeline still correct?²³⁸

226. Mr. McGuire forwarded the email to Mr. Becke, who provided responses to the email in red:

There were a couple of things Gord said he'd have to get back to me with – I wanted more details about the samples that were taken (size) and where they went for testing. I had also asked whether there was a report that I could read. **Size (1m x 6-9m) @ 3 locations NB and 3 locations SB sent to a consultant for mix verification and design. Report is not completed and will take some time now.**

I was talking with my editors and couple follow up questions popped up. I don't know if it would be easier to have Gord give me a call back or answer by email.

1. To clarify the mix that will be used to resurface the parkway next summer is a superpave mix? **Yes**

2. What is the expected lifespan is for the RHVP after resurfacing? How many years before resurfacing or a full repaving? **This is a complex answer... Not sure on how in depth to go... Resurfacing is part of the maintenance of the road. The RHVP is designed as a perpetual pavement with a RBM... the design is to prevent bottom up cracking so only maintenance / resurfacing is "theoretically" only required.**

3. Are there expected increases to traffic volumes on the RHVP and were those considered in this plan? **Tough question. Not sure when the last traffic analysis was done on this. As Ludomir explained, the original traffic volumes were exceeded within the first year. Traffic volumes are used in the design of our asphalt pavements to determine our Equivalent Single Axle Load (ESAL) this includes the % of trucks... this is how we come up with the pavement design (SP12.5 FC2 Category E)**

4. When I did a story last year I was told the Linc was last repaved in 2011 and is scheduled to be repaved again in 2020 . . . is that timeline still correct? **On track for 2020 assuming funding is in place for the rehabilitation needed.**²³⁹

227. The same day, Ms. O'Reilly sent an inquiry to the MTO relating to the RHVP. A draft response to the inquiry was approved at 5:24 p.m. that evening. The questions and proposed responses are outlined below:

I'm working on a story today about plans to resurface the Red Hill Valley Parkway here in Hamilton. The city had been considering the hot in place technology, but said that it doesn't have enough information that it will work here so it's moving ahead with regular resurfacing.

Q) I know there was a pilot using hot in place happening I believe on a stretch of the 401. Wondering if I could get an update on the status of that pilot project?

²³⁸ [HAM0011419_0001](#)

²³⁹ [HAM0053716_0001](#)

- The ministry's first hot in-place recycling project since 2003, started this year. It is a sixty km project located on Highway 11, outside Thunder Bay from Shabaqua westerly. Approximately, one third of the highway has been successfully hot in-place recycled to date.
- In 1999, the ministry completed a trial on the 401 west of Sweaburg Road outside the city of Woodstock. The trial determined that the hot in-place recycling process can perform to the same level as an equivalent mix with or without reclaimed asphalt pavement. The performance of this trial is reported on in the Canadian Technical Asphalt Association's 2007 publication. (www.ctaa.ca)

Q) Also, I'm wondering if you could also share average/expected lifespans for MTO roads . . . as in how often you expect to repave/ resurface?

- Hot in-place recycling is expected to last about 10 years.
- Conventional repaving and resurfacing is expected to last about 12 years.
- Expected lifespans vary depending on the existing conditions, pavement design, climate and traffic.²⁴⁰

228. A follow-up question was received the following morning. A proposed response was approved at 9:43 a.m.:

Morning..

One follow up.

Okay to provide?

Thanks...b

Q) The City of Hamilton said that the main reason they're not using hot in place is because there isn't enough information that it works here because the MTO project outside Thunder Bay is behind. Can you clarify?

Suggested: Work is progressing well on this project. Due to poor weather (rain, cold temps, some snow) this month, we've had to shut down early for the season. We expect to finish the project early next season.²⁴¹

229. Ms. Bell's notebook includes an entry dated October 23, 2018 referencing SMA and HIR:²⁴²

- | | |
|-------------------|---|
| Media
Response | <ul style="list-style-type: none"> • Current project bullet • 401 summary |
|-------------------|---|

²⁴⁰ [MTO0038704](#)

²⁴¹ [MTO0038704](#)

²⁴² [MTO0038687](#) at image 13

HIR

- MTO no SMA HIR limited to HIR marshall, Superpave mixes excluding SMA

It's our belief Hamilton project would have involved recycling SMA mix which MTO has to date no experience HIR thin mix.

HIR

- Samples came back friction #s Concerns

60/40 70/30 mix give 12.5FC2 15mm increase
 ↑ beneficiating
 50/50 to get PSV – polished?

Talked to Crupi

230. In the evening of October 23, 2018, Mr. Becke emailed Mr. McGuire and Ms. Jacob regarding a call he received from the MTO:

I got a call from the MTO today, The Spectator contacted them about HIP. The MTO provided them with information regarding HIP but also included the fact that they do not allow it on SMA. They did not go through my contact and the information was provided by their Communications Dept. Not sure how the Spec will use that information.

Below I have provided some comments. We should talk before we send a response.²⁴³

231. Ms. Jacob replied to this email later the same day, writing: “You want to keep your answers simple and eliminate some of the technical details in here.”²⁴⁴

232. Mr. McGuire replied “Thanks Susan. I will develop an answer and send it to Jas for her review. We will keep it simple and i will copy you both.”²⁴⁵

233. The following day, Ms. Graham emailed Mr. McGuire and Mr. Becke under the subject line “I was right! Consultant name”, writing:²⁴⁶

Reporter does want the name of the consultant – Golder & Associates?

²⁴³ [HAM0053716_0001](#)

²⁴⁴ [HAM0053716_0001](#)

²⁴⁵ [HAM0035526_0001](#)

²⁴⁶ [HAM0011435_0001](#)

Mike, can you please give them a heads up and let them know they can speak in general about the work they complete, but not specifically on behalf of the City or particulars about the project.

234. Mr. McGuire added Ms. Jacob to the email exchange.

[GM]: Hi Susan.

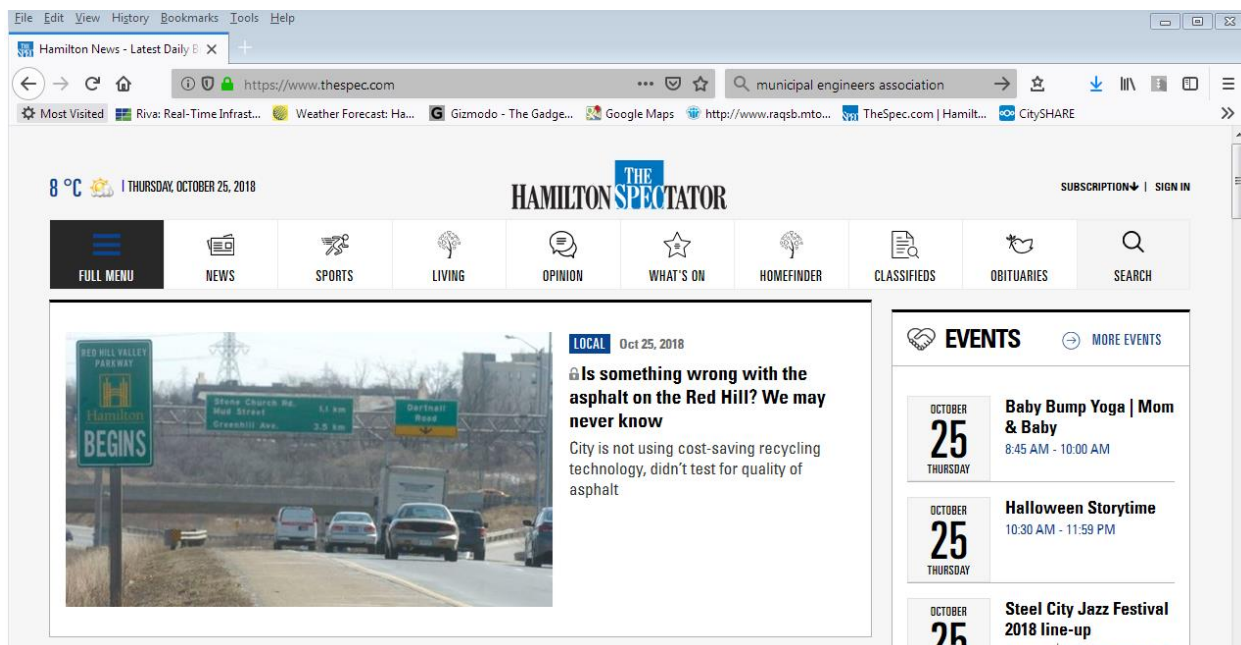
FYI

[SJ]: Consultant is not tactful

[JG]: LOL what does this mean?

[GM]: I believe he is fairly "direct".²⁴⁷

235. On October 25, 2018, Mr. Becke emailed Ms. Graham under the subject line "I knew I wasn't crazy!". He wrote "Just checking The Spec before I leave for the day... this is the title now." He attached the following image:²⁴⁸



²⁴⁷ [HAM0011435_0001](#)

²⁴⁸ [HAM0011452_0001](#) attaching [HAM0011453_0001](#)

3. Contact with TES Regarding Review of RHVP Ramp Collision Data

236. Between October 5 and October 11, 2018, Mr. Ferguson exchanged emails with Mr. Izadpanah. On October 5, 2018, Mr. Ferguson forwarded Mr. Izadpanah Mr. Aitchison's email with details regarding the collision heat map. He wrote to Mr. Izadpanah:

Pedram, are you able to access the GIS link below? I think it will help out.

- Mud SB-EB off ramp - RHVP (RHVP SB and the off ramp that goes to Mud and the Upper RHVP)
- King to RHVP NB loop on ramp (on ramp at King St to the NB RHVP)
- RHVP SB to King off ramp
- SCRIP EB ramp: Mud NB-SB off ramp -SCRIP (these items are essentially all the on and off ramps at this interchange that either go to or come from the Stone Church, this is going to or from the Upper RHVP)
- SCRIP: Stone Church to RHVP off ramps (same as a above)
- Queenston to RHVP SB loop on ramp
- RHVP NB to King off ramp
- Mud SB-EB off ramp: RHVP to Mud (looks to be the same as point 1)
- RHVP: Queenston NB off ramp - Greenhill NB on ramp (mainline)

[PI]: Thanks a lot for this. Your clarification on the ramp descriptions help for sure. The GIS map is good but does not include GEOIDs. We will get done as much as we can with your clarifications. I will reach out to Jeff on Tuesday to get the latest GIS map. We will get it done by Wednesday for sure.²⁴⁹

237. Mr. Izadpanah replied on October 11, 2018, writing:

We reviewed the subject ramps. You can download a summary of our observations and recommendations from the following location:

<https://testtechnologies.sharepoint.com/:f:/s/Project/EgwRTHClqT9Bv3FozzYgJxsBeOg417sRGIF50Xlmt-PRqA?e=ZcsOqK>

We provided the collision history, collision patterns, and recommendations.

Some locations had few collisions to identify any patterns.

Our analysis period was 2013-2017.

A few points:

- Please note that wet condition and SMV collisions are the predominant patterns. I hope that resurfacing will address most issues.
- We suggested ball bank studies for a few ramps to properly determine the warning speed. If you need more information please let me know.
- Speed is also a contributing factors for some of the ramps. It is a difficult issue to address. We suggested deployment of feedback signs but do not know your policy on them.

²⁴⁹ [HAM0047901_0001](#)

- Guidance signs should be reviewed for the following two ramps from human factor perspectives to address some of the rear-end and sideswipe collisions:
 - RHVP NB & SB to Mud Street OFF Ramp
 - RHVP NB Mainline Between Queenston NB off ramp & Greenhill NB on ramp
 - Stone Church to RHVP NB & SB on ramp

I hope this is helpful.

If you would like us to do any site visit for the above noted guide signs, please let me know.²⁵⁰

238. Mr. Ferguson replied, thanking Mr. Izadpanah for the work conducted. Mr. White was copied to the email, and replied to Mr. Ferguson, writing “[p]lease share this info with Sue. Also we should ball bank all the ramps to confirm advisory speed. Should prob share it with CIMA for their recent assignment too. Thx.”²⁵¹

239. Mr. Ferguson forwarded Mr. Izadpanah’s email on October 12, 2018, to Mr. Hadayeghi.²⁵² He also forwarded the email to Ms. Jacob and Mr. Olszewski on October 14, 2018, copying Mr. White, Mr. Soldo and Mr. McGuire:

This is an FYI, I had Pedram from TES run our collisions through the Safety Module for us. I have also provided this information to CIMA to utilize in their assignment.

Chris,

Can you save a copy of this email to the Shared Folder.²⁵³

4. Contact with Golder Regarding HIR Suitability Study

240. On October 9, 2018, Mr. Becke sent an email to Dr. Uzarowski with the subject “red hill crash October 1” enclosing a link to an article in The Hamilton Spectator from October 1, 2018, regarding a collision on the RHVP.²⁵⁴

²⁵⁰ [HAM0047901_0001](#)

²⁵¹ [HAM0047902_0001](#)

²⁵² [CIM0019797](#)

²⁵³ [HAM0011374_0001](#)

²⁵⁴ [GOL0002917](#); and [RHV0000893](#)

241. On October 11, 2018, Mr. Becke sent a calendar invitation to Dr. Uzarowski for a meeting on October 18, 2018. The subject of the meeting was “Review of RHVP Sampling - Additional discussion regarding asphalt reports”, and Mr. Becke noted the following in the body of the email:

Further to our discussion, This meeting is to discuss the HIP sampling for the RHVP. If you are available at 1:00 we also have room for a presentation from Envirotech regarding their HIP process. If you can come to our office shortly before 1:00 I can bring you to the presentation.²⁵⁵

242. On October 16, 2018, Mr. Becke emailed Dr. Uzarowski (copying Mr. Renaud) regarding an upcoming HIR meeting:

After the HIP presentation on Thursday, I would like to talk about a few things:

1. Status of the current asphalt testing for HIP on the RHVP
2. The existing asphalt structure of the RHVP and construction implications if we go with a shave-n-pave (including mix design).
3. Ex. BBR and testing for low grade of the Asphalt with respect to our form 800.
4. Air voids (various parameters) and how it comes into play with our paving projects

Finally, we are currently going through an audit process here in Engineering services with respect to our road contracts. As part of this process we are looking back at our asphalt samples and results. We have noted that we have quite a few of the results missing and I am wondering if they were provided to Golder as part of the 3 part asphalt report that you had completed? If they were, we need to have those results back for the audit as of right now there is quite a big hole of missing documentation.²⁵⁶

243. Dr. Uzarowski emailed Ryan Hobson (Lead Laboratory Technician - Asphalt, Whitby Office, Golder), copying Mr. Rose, on October 18, 2018, writing “Do you have any gradation results for Hamilton HIR? I am meeting with the client today at 1:00 p.m.”²⁵⁷

244. Mr. Becke’s notebooks contain the following entry dated October 18, 2018:²⁵⁸

²⁵⁵ [HAM0011355_0001](#)

²⁵⁶ [HAM0011382_0001](#)

²⁵⁷ [GOL0003672](#)

²⁵⁸ [HAM0061788_0001](#) at images 138-139

Date OCT 18/2018

- HIP MEETING. DE CAMP & Sons - PAPER
- FRANK / ROB. BOWMAN.
- HOT IN PLACE - ENVIROTECH HIPP.

* SLAG IN ROAD ROADS - 5.3 to 5.4% AS

- PRE HEAT AV - 2 to 4% AARAME
- ALUMINUM (GIBBERN ALUMINA) 1.5 - 4% LOOSE (2-3) GIBBERN
- 3 PH MECHAN STABILITY OF AS ALL HIGH.

- REGENERATOR ADDED BY USMA
- ↳ OILS COMPATIBLE WITH AC
- ↳ 3L/TON

TRAIN speed ~ 4 to 5 m / min.
 LOW 2.5 km / DAY HIGHWAY

- NO SEGREGATION
- 20% OUT OF THE EQ (150-170°F) TRAM LENGTH ~ 300m
- TREATING AS NORMAL PAVING.

55-65 PER 13 HOURS
 THEY ARE TRYING FOR

- CLAIM THAT THE TOP SURFACE IS ALREADY DAMAGED.
- SURFACE CAN WITH UP TO 900%
- 2nd QFT SMOKE 350° OF FLAME IS 650°.

FOR EVERY % OF AC YOU GET 3 YRS!
 SO 5% = 15 YEARS?

THEY CLAIM CAN HEAVY ... ON STAGED HOT MILL & 15 MIN.

- 1000/2000 N OUT OF THE BACK.
- OILS ADD AS REGENERATORS.
- ↳ BING UP THE ACTIVENS.
- PRE TEST.
- SOUNDS LIKE AVOID ANY
- REPAIRS TO

- 100% TRANSPARENCY ON THE PROCESS

1.2 / SM COMPLETE @ 50 MIN

	Date
Luscombe (Asphalt paving)	
Limitations - 4/100 70-30 max work but for SVA & P&L	
60/40 Also work but 70/30 best.	

5. Continued Discussions with Audit Services Regarding VFM Audit

245. On October 18, 2018, Mr. Pellegrini emailed Mr. Andoga under the subject line “RE: Background Information on City Roads”, writing:

I've used the information provided to get an idea of the total spent on roads and compare it to the amount of work done, both in lane kilometers and as a percentage of the outstanding inventory.

Please see the attachment. Do you agree with my logic?²⁵⁹

246. The Inquiry has not received a copy of Mr. Pellegrini's email attaching the document he referenced.

247. Mr. Andoga replied the same day:

It looks fine but, I would not call it “total road investment”, I would think you would want to reference the total approved capital budget.

I would advise referencing 1. Being the road or pavement investment, and the other being right of way investment. That being the expenditure on outside the pavement assets such as guiderail etc.

The % Road Inventory Reconstructed & Rehabilitated

You may wish to consider reporting the infrastructure investment rate as used by the provincial infrastructure report card, see attached²⁶⁰

²⁵⁹ [HAM0027321_0001](#)

²⁶⁰ [HAM0027321_0001](#) attaching [HAM0027322_0001](#), [HAM0027323_0001](#) and [HAM0027324_0001](#)

6. Internal Discussions Regarding Repaving

248. On October 10, 2018, Ms. Cameron emailed Mr. McGuire, attaching a document titled “Red Hill Valley Working Group – October 10”.²⁶¹ The attached document was an agenda and minutes for a meeting that day at 3:00 p.m. The agenda included “Proposed Resurfacing” and “Public Works Committee Reports” as items. The minutes noted:²⁶²

Attendees:	Dan McKinnon, Edward Soldo, David Ferguson, Martin, White, Gord McGuire	
Absent:		
Agenda		
1	Proposed Resurfacing	<ul style="list-style-type: none"> • M? • R? • CIMA Safety Audit / Ramp Geometric / Inventory / durables
2	Public Works Committee Reports	<ul style="list-style-type: none"> • ACTION: Martin White to add the Street Lighting OBL item to his safety report – will need to get clerks to advise process • ACTION: Gord McGuire / Edward Soldo to co-write a safety audit report
3		King Street abutment wall
4		
5		
Other Business		
6		

Next Meeting:

Monday, December 10th @ 2pm – 320B

249. Between October 15 and October 19, 2018, Mr. McGuire, Mr. White, and Mr. Soldo corresponded with David Oak (Business Administrator, Roads & Traffic, Public Works, Hamilton) regarding the sources of funding required for the RHVP. Mr. McGuire advised on October 19, 2018 that they budgeted for the full amount of available funding for the

²⁶¹ [HAM0053696_0001](#)

²⁶² [HAM0053697_0001](#)

RHVP rehabilitation, and expected to use all the funds (being the capital budget and red light camera “RLC” reserve).²⁶³

250. Ms. Graham prepared a document titled “RHVP Re-paving Project Key Messages – October 22, 2018”. The document included the following:

1. We are expediting the repaving plan and will use conventional technology that we already use and know – the project will be out for tender soon, and the repaving will happen next summer.
2. Our initial assessment of hot-in-place technology is showing that it does not look to be the best option for the RHVP given the timeframe and current condition/age of the road – however we are looking at this technology in a pilot environment somewhere else
3. We are still testing hot-in-place technology, but will not use it on the RHVP in order to ensure that we can repave the road ASAP and avoid further decline of the infrastructure
4. We are working with the Ministry of Transportation to examine the hot-in-place technology – not just under review in Hamilton, also under a pilot project in Thunder Bay

If required:

- We have heard reports of poor performance in wet weather, one of the reasons we are working to expedite the repaving of the roadway to happen next summer
- We will have a comprehensive communications strategy to notify residents and motorists driving through Hamilton about the repaving project, because it will require closures of the RHVP, likely on weekends during the summer months²⁶⁴

251. On October 26, 2018, Mr. Andoga emailed Mr. Renaud, Mr. Perusin and Mr. Becke, attaching Phase III of Golder’s Pavement and Materials Technology Review, writing:

Hey Tyler

I found this report, note sure if you've seen this one by may be of interest

12-1184-0088 GOLDER DRAFT RPT PMTR Phase III December'2013.pdf²⁶⁵

252. On October 29, 2018, Amy Groleau (Construction Technician, Construction, Engineering Services, Public Works, Hamilton) sent a calendar invite for a meeting the

²⁶³ [HAM0011391_0001](#); [HAM0011392_0001](#); [HAM0011393_0001](#); and [HAM0011406_0001](#)

²⁶⁴ [HAM0011413_0001](#)

²⁶⁵ [HAM0011483_0001](#) attaching [HAM0011484_0001](#)

following day to Mr. McGuire, Mr. Oddi and Wayne Potocic (President, Global By Product Solutions) following an email exchange with Mr. Potocic:

[AG]: Good afternoon. The purpose of this conference call is to discuss the possibility of using the same (or similar) product on the above-mentioned roadways.

Mr. Potocic, it was a pleasure to speak with you this afternoon. As you discussed at length, I was told (would have been a reminder to you - Marco - of course) that you paved the LINC from Garth to 1km east and the road as stood up well due to the use of the HL1 and HL8. Marco, Mr. Potocic has provided a brief description of the value added to utilizing the steel slag with the frictional properties for skid resistance, as well as the advantages of no pop-outs or cracking in the roads where this product is used, some examples being the various raceways - Indianapolis and Cayuga speedways.

Thank you for your call and information, Mr. Potocic.

Marco, I suggested to Mr. Potocic that perhaps a conversation with yourself and Claudio Leon, Contracts' Co-ordinator and Approved Products' Committee Chair as well as Tyler Renaud, QA/QC Project Manager may be of benefit, but I will leave this to you to decide. Thank you.

[WP]: Thank you for the kind words. It was a pleasure talking with you as well. Maybe I mis understood ,but I thought the meeting was at your office and not a conference call.

I spoke with Gord McGuire after our conversation and he was fine with the meeting you set up. He did mention the speciation that must be meant. Maybe if the meeting was at your place at 2PM I could get the speciation. If Marco is not available we can re schedule. Can you call me tomorrow at 905 5151250²⁶⁶

7. Updated Collision Data and Ongoing Contact with CIMA

253. Mr. Ferguson emailed Ms. Wyskiel on October 24, 2018, requesting that she ask Mr. Aitchison to provide collision data for the RHVP Roadside Safety Assessment.²⁶⁷ Mr. Aitchison exchanged emails with CIMA regarding the data, and provided a spreadsheet with 2013-2017 collision data to determine its sufficiency.²⁶⁸

²⁶⁶ [HAM0027371_0001](#)

²⁶⁷ [HAM0011424_0001](#)

²⁶⁸ [HAM0027346_0001](#) attaching [HAM0027347_0001](#)

254. The same day, Mr. Aitchison provided RHVP and LINC volume data to Mr. White, who forwarded the data to Ms. Graham.²⁶⁹

255. Also on October 25, 2018, Mr. Field emailed Mr. Omrani regarding a change in the schedule relating to the RHVP Lighting Study. He wrote:

We've pushed our report date from December 10th to February of 2019. The pressure is off!

We have tentatively scheduled a meeting for next Tuesday, I would like to reschedule it as there is not the immediate need for us to meet.

As we discussed, perhaps the best path is that you forward us a draft copy of the final report and then we can review, scheduling a meeting afterwards.

Please let me know if this works for you, and what the schedule may look like from your side going forward to finalize the report.²⁷⁰

256. Mr. Omrani replied that evening:

Thanks for letting me know. Nevertheless, the draft report is now finalized and can be found in OneDrive with all the appendices.

I am fine with the proposed approach. Once you've reviewed the report, we can schedule a meeting down the line to discuss and finalize the project. Just FYI, I'm off vacation for the two weeks of January and I think Brian will take some time off in February. Maybe we can meet in about a month or early December? Either way, we can definitely make it work.²⁷¹

257. Mr. Field sent the draft RHVP Lighting Study report to Mr. McGuire and Mr. Lamont on November 5, 2018, writing:

Attached is the draft report from CIMA for the LINC/RHVP.

CIMA would like to set up a meeting within the first two weeks of December, after we have reviewed the draft in order to finalize the documents and close the project with them.

I will coordinate a meeting via Diana.²⁷²

²⁶⁹ [HAM0011436_0001](#) attaching [HAM0011437_0001](#) and [HAM0011438_0001](#)

²⁷⁰ [CIM0016836](#)

²⁷¹ [CIM0016834](#)

²⁷² [HAM0011580_0001](#) attaching [HAM0011581_0001](#)

258. The draft included a section related to RHVP collision analysis. CIMA summarized this analysis as follows:

3.2.3. Summary of Collision Analysis (RHVP)

The results of collision analysis identified the following collision patterns:

- 38% of total collisions occurred during non-daylight conditions, which include dark/dark artificial, dusk/dusk artificial, and dawn/dawn artificial. The proportion of collisions under non-daylight condition was found to be consistent with the Provincial averages;
- Wet surface collisions were found to represent approximately 57% of all collisions in the study area, which is significantly high compared to typical proportions.
- Single Motor Vehicle (SMV) collisions amount to 46.9% of all collisions in the study area, followed by rear ends (25%) and sideswipes (20.9%).
 - 65.4% of SMV, 43.7% of rear end, and 59% of sideswipe collisions occurred under wet surface conditions.
- The most frequent apparent driver action reported was "lost control" (34.6%), followed by "driving properly" (21.3%) and "speed too fast" (15.5%). Both "lost control" and "speed too fast" are significantly high compared to typical proportions.
 - Approximately four out of every five collisions where "speed too fast" was reported occurred under wet surface condition.
- Many of the collisions on the RHVP occurred within, on approach to, or leaving a horizontal curve.²⁷³

259. Also on October 30, 2018, Mr. Hadayeghi emailed Mr. Ferguson, copying Soroush Salek (Associate Partner, Project Manager, Traffic Engineering, Transportation, CIMA):

Please find attached the Agenda for the RHVP & LINC Safety Reviews kick-off meeting.

Please let me know if you would like to add/delete or change anything.²⁷⁴

260. Invitees to the meeting included Mr. White, Mr. Ferguson, Ms. Jacob, Mr. Hadayeghi, Mr. Malone and Mr. Salek. The discussion items were listed as follows:

²⁷³ [HAM0011581_0001](#) at images 27-28

²⁷⁴ [CIM0019665](#)

1. Introduction
2. Scope of Work and Proposed Work Plan
3. Project Status Update (Field Visit)
4. Client Expectations
5. Project Schedule
6. Points of Contact
7. Invoicing
8. Next Meeting
9. Other Business²⁷⁵

261. Minutes for the meeting were provided by Mr. Hadayeghi to Mr. Malone, Mr. Salek, Giovanni Bottesini (Project Engineer, Transportation, CIMA), Mr. White, Mr. Ferguson, Ms. Jacob, Michael Murray (Associate Partner, Project Manager, CIMA) and Mr. Vala on November 7, 2018.²⁷⁶

8. Other Media Inquiries

262. Ms. Graham emailed Mr. Ferguson and Mr. White on October 30, 2018, advising that a reporter from the Daily Commercial News was looking for collision statistics for the RHVP, specifically regarding whether there were any collision hot spots. She noted that this was a “part of a longer inquiry re: resurfacing that Gord is responding to.”²⁷⁷

263. Mr. McGuire was asked to respond to three questions. He provided his draft responses in red to Ms. Graham the same day:

We have an inquiry from the Daily Commercial News regarding resurfacing on the RHVP. I have drafted a few responses below, can you have a look and let me know what you think?

Thanks!

What the crash "hot spots are" - numbers and severity if possible?

TRAFFIC TO RESPOND HERE

Was the quality of the asphalt originally compromised?

The asphalt is at the end of its expected lifecycle, originally from 2007 – this resurfacing project is falls under regular maintenance work.

²⁷⁵ [CIM0019665.0001](#)

²⁷⁶ [HAM0006018_0001](#) attaching [HAM0006019_0001](#)

²⁷⁷ [HAM0011492_0001](#)

Age, size and price tag of the stretch that will be paved?

The entire length of the RHVP between the QEW and Dartnall Road will be resurfaced, in both directions. The budget for the project is approximately \$15 million. The RHVP was opened in 2007.

Dates of project?

Summer 2019, specific dates aren't yet known.²⁷⁸

9. Legal Services and Risk Management Discussion RHVP Surface Reports

264. On October 11, 2018, Mr. Sabo emailed Ms. Edwards and Mr. McLennan under the subject line "Pavement". He wrote:

FYI and in relation to a recent discussion Debbie and I had over consultants or drafts of reports studying the surface of the red hill expressway. I wonder where numbers for the RHE would put it in comparison to the international standards in the link below.

Also John, is your recollection the same as mine, that plaintiffs counsel in recent years had been aware of or requesting information on the RHE studies as a result of some discussions at City Committees or in the press?

<http://las.on.ca/InteractWithUs/Blog/The-LAS-Blog/October-2018/Pavement-Assessment-PCI,-IRI,-EIEIO.aspx>²⁷⁹

265. Mr. Sabo's email included a link to what appears to be a blog post published in October 2018 by the Local Authority Services ("LAS"), a not-for-profit organization created by the Association of Municipalities of Ontario ("AMO"). The post is no longer accessible on the LAS blog. The AMO provided Commission Counsel with a copy of the post.²⁸⁰

H. November 1-7, 2018

1. Continued Media Contact and Updated Collision Data

266. On November 1, 2018, Mr. Ferguson requested updated collision statistics from Mr. Purins, who provided them approximately one hour later, writing "Attached. Updated

²⁷⁸ [HAM0011496_0001](#)

²⁷⁹ [HAM0062475_0001](#)

²⁸⁰ [RHV0000897](#)

crossover collisions as well after we went thru all collision reports for the annual safety report.”²⁸¹

267. On November 5, 2018, Ms. Graham emailed Mr. McGuire regarding possible media contact from the Daily Commercial News, writing:

FYI – a bit of a bully reporter coming your way re: RHVP interview, just punt her back to me with a “please work with Jasmine to set this up” or something. Dena Fehir with Daily Commercial News.²⁸²

268. Mr. McGuire responded, writing “Thanks. Ok off site today and tomorrow. If she gets to VM I will send over.”²⁸³

269. Later that day, Mr. McGuire emailed Ms. Graham with questions he received in an email from Dena Fehir (News Correspondent, Daily Commercial News) and his draft replies marked in red:

As you mentioned I got an email from this source. She asked a series of questions.

See the below and some draft replies:

Are you able to tell me about the sampling on the asphalt to date?

The sampling took place to determine a: the extent of the asphalt fatigue and b: to understand the applicability of the Hot in Place method for this material.

If the material was perhaps sub-par?

The asphalt exhibits typical wear patterns for the age and volume of traffic it receives annually.

Details on slippery and crash hot spots? Frequencies due to weather/traffic conditions?

Traffic safety data not handled by this Division. (Thoughts on this Jasmine?)

Grade or type of asphalt that was originally used and what will be used this time around and in what process?

The City previously used a Stone Mastic Asphalt (SMA) and will use a Superpave mix design this time around. Our asphalt requirements are being finalized and will a part of our tender process. Our standards can be found on line here and in particular the Form 800 outlines the City's specifications.

²⁸¹ [HAM0011558_0001](#) attaching [HAM0011559_0001](#)

²⁸² [HAM0011579_0001](#)

²⁸³ [HAM0011579_0001](#)

The cost-saving technique called "hot in place" - this has been discounted? If yes, why?
 Hot in Place is not a current practice in Ontario. Our testing together with the MTO will continue on this technology, we simply couldn't address the needs of this project in a timely manner.

A breakdown of the \$15 million cost (what budgets it will come from.)
 This is programmed capital work via our capital budget process. We have been approved for approx. \$6.75M in 2018 and are asking council to approve the remainder in the 2019 cycle.

Quotes on the necessity and reasons for the project.
 The RHVP is an important asset in our transportation portfolio. It has served the City well to date and by replacing the top 50mm of the surface course this will keep the asset in good working order by strategically investing at this time. If we delay the repairs will extend into the base and become significantly more expensive and time consuming.²⁸⁴

270. Mr. McGuire responded to Ms. Fehir on November 7, 2018, provided responses in green (underlining added):

Thanks for reaching out and see my responses in green below.

Are you able to tell me about the sampling on the asphalt to date?
In summer 2018, we sampled the asphalt on the RHVP to determine if it would be appropriate to re-use in a newer technology called hot-in-place when we resurface it next year. The samples were 1m x 6-9m in three locations in the northbound lanes, and three locations in the southbound lanes. The City is still considering using hot-in-place in a different location

If the material was perhaps sub-par?
The asphalt exhibits typical wear patterns for the age and volume of traffic it receives annually.

Details on slippery and crash hot spots? Frequencies due to weather/traffic conditions?
Jasmine will provide you with this information.

Grade or type of asphalt that was originally used and what will be used this time around and in what process?
The City previously used a Stone Mastic Asphalt (SMA) and will use a Superpave mix design this time around. Our asphalt requirements are being finalized and will a part of our tender process. Our standards can be found on line here and in particular the Form 800 outlines the City's specifications.

The cost-saving technique called "hot in place" - this has been discounted? If yes, why?
Hot in Place is not a current practice in Ontario. Our testing together with the MTO will continue on this technology. We have not selected this technique for the RHVP simply due to timing.

A breakdown of the \$15 million cost (what budgets it will come from.)

²⁸⁴ [HAM0011582_0001](#)

This is programmed capital work via our capital budget process. We have been approved for approx. \$6.75M in 2018 and are asking Council to approve the remainder in the 2019 cycle.

Quotes on the necessity and reasons for the project.

The RHVP is an important asset in our transportation portfolio. It has served the City well to date and replacing the top 50mm of the surface course will keep the asset in good working order by strategically investing at this time. If we delay the repairs will extend into the base and become significantly more expensive and time consuming.²⁸⁵

271. Ms. Graham emailed Ms. Fehir in response to the email from Mr. McGuire and attached an image of the RHVP collision heat map, writing:

Dena – I'm attaching a "heat map" of the Linc and RHVP from staff in our Traffic section. The red dots indicate a collision that resulted in a fatality. The darker the purple is, the more collisions in that area.

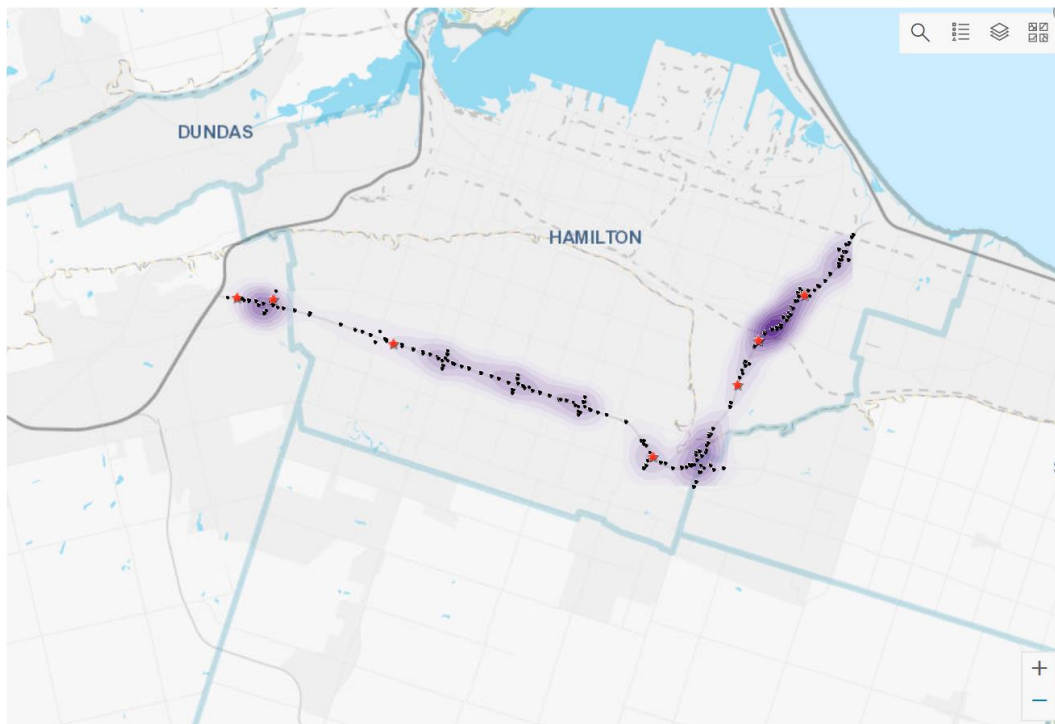
We do not have this information mapped with weather or traffic volumes. You could try Hamilton Police Services, I'm not sure if they would capture that.²⁸⁶

272. The following image was attached:²⁸⁷

²⁸⁵ [HAM0006017_0001](#)

²⁸⁶ [HAM0053786_0001](#) attaching [HAM0053787_0001](#)

²⁸⁷ [HAM0053787_0001](#)



273. On November 8, 2018, Ms. Graham emailed Mr. Ferguson and Mr. White regarding a subsequent request from a reporter, writing:

Same reporter from last week is looking for the following:

A compilation of accidents on the RHVP that indicates the number per year, number of fatalities by year and particular areas that accidents tend to occur?

I have already provided the heat map, so I think that her last question may already be answered. But could we provide the answers to the first two? I think I have seen this information before.²⁸⁸

274. Mr. Ferguson replied on November 9, 2018, attaching a document containing RHVP and LINC collision data.²⁸⁹

275. Ms. Fehir emailed Ms. Graham on November 9, 2018, writing:

One more question - was something done to the RHVP in the second half of 2015 and/or first half of 2016?

²⁸⁸ [HAM0048074_0001](#)

²⁸⁹ [HAM0048078_0001](#) attaching [HAM0048079_0001](#)

I ask because it looks like there were two multiple injury/one fatality each accidents in May and July of 2015, then

the total number of accidents drops from the 2015 high of 138 to a significantly lower 102 in both 2016 or 2017.

Was something done to address a dangerous spot that might account for this latest project to keep up the improved accident numbers?

If you can't let me know today, that's ok - I'm not going to file this story until next week now, but please let me know

if you can ask around for an answer/explanation.²⁹⁰

276. Ms. Graham responded on November 12, 2018:

You caught me just as I was putting this together for you! Let me know if this would work. If yes, you can quote David Ferguson on this – he is our Superintendent, Traffic Safety

The City has made a number of improvements to the Red Hill Valley Parkway over the years. Including the installation of cat eyes (reflective recessed pavement markers), signage improvements, pavement marking modifications, directional signage, and the installation of variable message boards. We have also been working closely with Hamilton Police Services to increase enforcement.

Thanks!²⁹¹

2. Discussions on HIR of RHVP Pavement

277. Dr. Uzarowski's notebook contained an entry dated November 1, 2018 with references to HIR. The following was noted:

10/ Robert Bowerman EnviroTech HIPR

Exactly the same as in 1994-98

Hamilton

RHVP

April, May, June – Peel – Bob Neuhenser

Meet air voids, volumetrics,

pugmill

²⁹⁰ [HAM0012006_0001](#)

²⁹¹ [HAM0012006_0001](#)

equipment made in their own shop

interlayer ? –

Matec, Taisei – Rob set up a meeting with Rob Burlie, John, Frank & Rob Bowerman

100% hydrolin oil – with Engtech

ex BBR, Finch Av – Dufferin & Bathurst

7% & 10% pen 42 @ 7

85-100 original AC 62 @ 10

- Pam Marks & Heather Bell yesterday

- if you can do 100% recycling

Ray Bonaquist – did work for them

88-10, after added oil 72-22

- now tested for ex BBR and other properties

- refineries cheated, failures, 30% recycled oil

- no direct flame

- Ecopave has direct flame in number one
- Enviro has some direct flame
- Infrared 1500-2000

- about 2t pugmill

+ 50 cm in one lift vs. in 3 lifts²⁹²

3. Contact with CIMA Regarding RHVP Roadside Safety Assessment, RHVP Lighting Study and Possible Functional Study

278. On November 7, 2018, Mr. Malone emailed Mr. Hadayeghi, Scott Roberts (Partner, Director, Transportation, CIMA) and Mr. Salek regarding a voicemail he received from Mr. McGuire:

Attached is a VM from Gord McGuire of the City of Hamilton. Gord has received our report for the lighting assessment on the Red Hill and LINC. He is asking for assistance on their strategy as they bring this item and the other safety issues that Edward Soldo will be

²⁹² [GOL0003874](#) at images 6-7

reporting on to their Committee. One interesting comment he makes is with respect to getting 'funding for a functional study', presumably for the various things that are being identified in the lighting study, and will be identified in the roadside safety report that is being worked on. That could be a significant assignment involving design and construction CA etc...

I'll return his call this morning and provide a follow-up after I have more details.²⁹³

279. Mr. Malone followed up the next day, writing:

I spoke with Gord McGuire yesterday, Nov 07.

He said he is very happy with the RHVP/LINC Lighting report, describing it as 'well done' and 'comprehensive'. Excellent job managing the assignment Reza!

In summary Gord concludes several things from our report.

- 1) Nothing from previous approvals prohibits lighting installation.
- 2) Warrants for lighting are achieved, or nearly met, for most of the areas of the roads.
- 3) Similar roads in Ontario all have continuous lighting and that the RHVP/LINC are outliers compared to peers.
- 4) Lastly, we noted that an EA would be required prior to undertaking lighting and that process would be extensive and carry significant cost.

Gord has concluded that it make no sense to proceed with recommending an EA for only lighting because Hamilton is also examining a number of other major improvements on the roads. Some things, such as re-paving, are in the works and will proceed in 2019/20 and others such as roadside safety (and possibly continuous median guiderail) and ITS improvements are yet to be concluded. If lighting approvals were to proceed there would quickly be a conflict with other actions. For example, because high-mast lighting is an option that would be examined in an EA, the impacts/conflicts with medial barriers and drainage issues would need to be assessed.

So, the direction they are taking will be a joint report to council that will discuss the lighting review, but will also be coordinated with input from Edward Soldo on issues including roadside safety and talk about overall improvements for the roads.

Gord has asked that CIIMA provide a 2-page summary of the lighting report, recognizing the context of overall improvements that are to be examined. We would cover the key points mentioned above but also provide a component that identifies the need to do a comprehensive assessment of the overall improvement plans that are needed for the road, and that lighting is one component.

Gord and Edward will complete the report. Gord said the intent is that they will conclude the report with a recommendation for funding to undertake a comprehensive review of the RHVP/LINC asset and compete a "functional evaluation" for action going forward. The recommendation will recognize that they need to do close monitoring of changes being made, so that future actions are adjusted to optimize the original infrastructure, the improvements that are bring completed and the improvements already planned. Bluntly, this is code for seeing if the collision issues on RHVP are resolved with the new pavement.

²⁹³ [CIM0016831](#)

Gord says that he will propose the functional evaluation assignment as an RFP or possibly a roster assignment that will come in 2019. He mentioned that CIMA would be well positioned for that effort. He also sees that evaluation leading to design work for the improvements identified such as lighting, barriers, and even geometric improvements such as adding lanes in some areas, if called for.

Their report deadline is mid-December. The Public Works Committee is on January 14th, 2019. Gord is away the weeks of Nov 19 and Nov 26. He would like our input by Dec 01.

Gord asked me to be available for the PWC meeting on January 14th to respond to questions about the various works CIMA has done and is doing. I have blocked the day.²⁹⁴

280. On November 7, 2018, Mr. Bottesini emailed Mr. Hadayeghi, Mr. Malone, Mr. Salek and Mr. Murray regarding recommendations for the RHVP Roadside Safety Assessment. He wrote:

Do we know if we should provide detailed recommendations for the median guide rails given our previous recommendation for high-tension cable guide rail?²⁹⁵

281. Mr. Salek replied the same day, writing:

“As discussed in the meeting, we have to review our previous findings and adopt the short-term to medium-term recommendations for areas with serious safety issues.”²⁹⁶

I. November 8-30, 2018

1. November 8, 2018: Receipt of FOI 18-189 and Initial Review by Public Works staff

282. On November 8, 2018, Anne Watson (Access & Privacy Officer, Office of the City Clerk, Corporate Services, Hamilton) emailed Ms. Wunderlich regarding the receipt of an FOI request (“FOI 18-189”). She attached an information sheet pertaining to FOI 18-189, writing:

Our office is in receipt of an application to access records pursuant to the provisions of MFIPPA; the details of the request are contained in the attached Information Sheet.

²⁹⁴ [CIM0016830](#)

²⁹⁵ [CIM0019607](#)

²⁹⁶ [CIM0019607](#)

Nancy, please review the request details and forward to the appropriate dept. contact(s), confirming same with our office. Also Nancy, would you pls. ensure that page 2 of the Information Sheet is completed and returned to our office with the department's complete response by the due date **November 15, 2018**?

Many thx Nancy and pls. contact me if you or staff have any questions.²⁹⁷

283. The request, as outlined in the information sheet, was for:

Access to any reports, memos, drafts, correspondence about friction testing on the Red Hill Valley Parkway in the last five years AND any reports, memos (including drafts), or correspondence about asphalt and/or pavement testing, assessments, plans on the Red Hill Valley Parkway in the last two years²⁹⁸

284. Five minutes later, Ms. Wunderlich forwarded Ms. Watson's email to Ms. Cameron, writing "[p]lease refer to the attached inquiry for investigation and response. Please copy me on the feedback to Clerk's by the deadline noted."²⁹⁹

285. Ms. Cameron forwarded the request to Mr. Moore, copying Mr. McGuire, later that morning, asking him if he would be able to point her in the right direction. Mr. McGuire forwarded this email to Mr. McKinnon.³⁰⁰

286. Mr. McGuire also forwarded the email to Debbie Edwards (Deputy City Solicitor; Commercial, Development and Policy (CDP); Legal & Risk Management Services, Corporate Services, Hamilton) and Ms. Graham, writing:

Hi Ladies:

See the attached for testing results on the RHVP. I have the last 2 years data. Can we discuss this today if possible.

Access to any reports, memos, drafts, correspondence about **friction testing** on the Red Hill Valley Parkway in the **last five years** AND any reports, memos (including drafts), or

²⁹⁷ [HAM0035535_0001](#)

²⁹⁸ [HAM0035536_0001](#)

²⁹⁹ [HAM0035535_0001](#)

³⁰⁰ [HAM0035535_0001](#)

correspondence about [asphalt and/or pavement testing, assessments, plans on the Red Hill Valley Parkway in the last two years](#)³⁰¹

287. On November 8, 2018, Mr. Becke emailed Ms. Jacob, forwarding an email he received from Mr. Moore on November 24, 2017. He wrote to Ms. Jacob “I just found this going through everything”.³⁰² The email he forwarded attached Golder’s proposal for the 2017 Golder Pavement Evaluation, dated November 23, 2017.³⁰³

288. Approximately 10 minutes later, Mr. Becke emailed Ms. Jacob under the subject line “RFI - RHVP”, writing:

I have updated all that I can find that’s correspondence (without duplication) to the Correspondence folder in Projectwise. I have also included folders that says Media and Consultant for emails that I had found regarding our response to the Specs questions and specific to Golders involvement.

We can discuss further regarding anything else tomorrow.³⁰⁴

2. November 9, 2018

(a) Continued Discussions Regarding Receipt of FOI 18-189

289. On November 9, 2018, Byrdena MacNeil (Solicitor, Legal Services, Legal & Risk Management Services, Corporate Services, Hamilton) exchanged emails with Mr. McGuire under the subject line “Re: FOI #18-189 - RHVP Friction testing request”:

[Ms. MacNeil]: Ron Sabo has asked me to assist you with the matter below. Do you have time to chat on Monday, November 12th? I am free any time after 10:30 a.m.

[Mr. McGuire]: Hi Brydena: are you available on the 13 th at all. This weekend I will prepare a summary of events and forward to you on this matter.

On the 12th I’m currently fairly busy.³⁰⁵

³⁰¹ [HAM0053793_0001](#)

³⁰² [HAM0011622_0001](#)

³⁰³ [HAM0011623_0001](#)

³⁰⁴ [HAM0011624_0001](#)

³⁰⁵ [HAM0053793_0001](#)

(b) Discussions with Audit Services

290. On November 9, 2018, Mr. Sharma emailed Mr. Pellegrini, writing:

Further to our conversation this morning, attached are state of the infrastructure reports for Roads date ranging from 2010 to 2016.

The latest report from 2016, objectifies historical spending vs performance of our road network. It also provides historic trend on our OCI rating from 2001, 2006, 2011 and 2015. Evaluation tools like Decision tree are used in order to determine when the rehabilitation strategies (Major, Minor or Reconstruction) should be applied. A trigger value of OCI 60 is considered as benchmark for all functional classes.

The 2011 talk about report card and discussions related to the triple bottom line concept and provides recommendation for the best practices for the road network.

I have also attached section for state of infrastructure plan and a 2009 state of infrastructure report.

The attached reports will provide you a great overview of infrastructure planning that has taken place over a decade. I have most of them printed, if you require I can also provide paper copies.

Early next week, I will also be circulating the performance graphs for the list of project that you have earlier provided.

I would like to arrange a meeting during the week of the 19th in order to have further our discussion about performance aspect of our road network.

Should you have any questions, please feel free to give me a call.³⁰⁶

291. Mr. Sharma attached multiple State of the Infrastructure reports previously prepared for the City, including reports from 2009, 2010, 2011 and 2016.³⁰⁷ Mr. Sharma forwarded his email to Ms. Cameron on December 5, 2018.

292. On November 9, 2018, Mr. Pellegrini emailed Mr. Sharma, responding to an email sent by Mr. Sharma on October 15, 2018. Mr. Pellegrini wrote “Would it be possible to meet with you today to discuss the progress on the items below?”³⁰⁸

³⁰⁶ [HAM0027678_0001](#)

³⁰⁷ [HAM0027678_0001](#) attaching [HAM0027679_0001](#), [HAM0027680_0001](#), [HAM0027681_0001](#), [HAM0027682_0001](#) and [HAM0027683_0001](#)

³⁰⁸ [HAM0027500_0001](#)

293. Mr. Sharma replied on November 12, 2018, writing:

Sorry about the late reply, I was thinking about setting up a meeting next week.

We are in the process of finalizing the performance graphs for all 13 projects. In addition to individual project graphs, we are trying to plot a overall performance graph. This information will be supplied to you by the end of day Friday.³⁰⁹

3. November 11-13, 2018: Preparation of Chronology and Continued Discussions Regarding FOI 18-189

294. The City produced a document, dated November 11, 2018, which appears to be a text message exchange between Mr. McGuire and an individual referred to only as Gary.³¹⁰ A document prepared in January 2019 by Mr. McGuire identifies the person with whom he was texting as Mr. Moore, and provides additional information regarding the date and time of the messages:³¹¹

[July 19, 2018]

[Mr. McGuire]: I talked to the spec about the Red Hill sampling. She said you told her the December samples were to test for applicability for the HIP treatment?

[Mr. Moore]: They were the first step. The results did not preclude the hip process.

[Mr. McGuire]Ok. No more details in this sampling cycle?

Now we get more details. That is the answer.

[Mr. Moore]: The first set of tests was to confirm material properties this set of sampling is to prepare pavement mix recommendations for tendering!

[November 11, 2018]

[Mr. McGuire]: Gary. Have you seen the FOI request on friction testing. It's due next week.

[Mr. Moore]: Nope

[Mr. McGuire]: Diana sent it to you.
I just resent it. Asking for the friction testing back 5 years.

³⁰⁹ [HAM0027500_0001](#)

³¹⁰ [HAM0035537_0001](#)

³¹¹ [HAM0062030_0001](#) at image 5

[Mr. Moore]: I have been off since Wednesday afternoon and for some reason I'm not get any email to my phone. Anything I had I have to Rick or Tyler and I put everything in the files. I have nothing.

[Mr. McGuire]: There's a 2014 draft by Golders with an appendix from tradewind scientific that is in project wise. Rick and Tyler haven't seen those? The FOI asks for these kind of records.

Are you in tomorrow as we should review this.³¹²

295. On November 11, 2018. Mr. McGuire sent another reply to Ms. MacNeil's November 9, 2018 email, attaching several documents.³¹³ He wrote:

Please see a series of attachments re: this file.

I have summarized the events as best as I can in the attachment labelled Red Hill Review GMc.

Please contact me about times to review.³¹⁴

296. Ms. MacNeil forwarded this email to Mr. Sabo on November 14, 2018, writing "[a]s discussed, here is what I have received to date."³¹⁵

297. The documents that were attached to the email are described below in chronological order.

298. The first attachment was an email sent by Dr. Uzarowski to Mr. Moore and Mr. Oddi on October 18, 2007. Dr. Uzarowski had emailed Mr. Moore and Mr. Oddi regarding friction testing conducted by the MTO prior to the RHVP's opening. Dr. Uzarowski attached two spreadsheets containing friction data from this testing, and wrote:

Gary and Marco,

³¹² [HAM0035537_0001](#)

³¹³ [HAM0027442_0001](#) attaching [HAM0027443_0001](#), [HAM0027444_0001](#), [HAM0027445_0001](#), [HAM0027446_0001](#), [HAM0027447_0001](#), [HAM0027448_0001](#), [HAM0027449_0001](#), [HAM0027450_0001](#), [HAM0027451_0001](#), [HAM0027452_0001](#), [HAM0027453_0001](#), [HAM0027454_0001](#), [HAM0027455_0001](#), [HAM0027456_0001](#) and [HAM0027457_0001](#)

³¹⁴ [HAM0027442_0001](#)

³¹⁵ [HAM0061835_0001](#)

Please find attached the results of the friction testing on the Red Hill Valley Parkway completed for us by MTO. I will call you to discuss the results.³¹⁶

299. The second attachment was an email sent by Mr. Moore to Tom Dziedziejko (General Manager, AME, Aecon Materials Engineering Corp.) on January 24, 2014. The email was under the subject line “Red Hill SMA”, attached four images of the RHVP, and contained text from an email message that Dr. Uzarowski sent to Mr. Moore earlier that day. Mr. Moore wrote:

Here are a few pictures of the Red Hill, unfortunately I can't put my hands on any photos of the SMA going down (but it just looks like any other paving job). I have attached a few general Red Hill photos you can use.

In general the SMA surface course was used as part of the Red Hill perpetual pavement system. Given we have no utilities or municipal appurtances (manholes, catchbasins, vaults, etc..) in the road we felt the extra cost of the SMA and the benefits of the higher skid resistance, reduced water spray, lower noise generation, etc, was warranted and would perform to it intended service life. On most urban roads that would have a high enough traffic volume to warrant a premium asphalt, I would have to consider the condition of any underlying municipal services (watermains and sewers), the potential for utility cuts and the potential service life of the pavement before considering SMA for urban road application.

Here's a summary of the skid resistance tests.

Immediately following construction of the RHVP in 2007, the Ontario Ministry of Transportation performed friction testing in both southbound lanes. The following table summarizes the results of this testing.

Lane	Average Friction Number	Friction Number Range
Southbound Lane 1	33.9	28.1 to 36.5
Southbound Lane 2	33.8	28.4 to 37.4

In 2013, the Friction Numbers were measured on the RHVP in both directions by Tradewind Scientific using a Grip Tester. The average FN numbers were as follows:

SB Right Lane 35

SB Left Lane 34

NB Right Lane 36

NB Left Lane 39

³¹⁶ [HAM0027443_0001](#) attaching [HAM0027444_0001](#) and [HAM0027445_0001](#)

Hope this helps³¹⁷

300. The third attachment was a standalone copy of the Tradewind Report.³¹⁸

301. The fourth attachment was an email sent by Dr. Uzarowski to Mr. Moore, on December 17, 2015, under the subject line “RE: Red Hill SMA”. Dr. Uzarowski attached a copy of the Tradewind Report to his email in response to an email he received that morning from Mr. Moore. The email exchange is outlined below:

[GM at 8:47 a.m.]: Here’s a summary of the skid resistance tests.

Immediately following construction of the RHVP in 2007, the Ontario Ministry of Transportation performed friction testing in both southbound lanes. The following table summarizes the results of this testing.

Lane	Average Friction Number	Friction Number Range
Southbound Lane 1	33.9	28.1 to 36.5
Southbound Lane 2	33.8	28.4 to 37.4

In 2013, the Friction Numbers were measured on the RHVP in both directions by Tradewind Scientific using a Grip Tester. The average FN numbers were as follows:

SB Right Lane 35

SB Left Lane 34

NB Right Lane 36

NB Left Lane 39

Hope this helps

[LU at 12:14 p.m.]: Please find attached the November 2013 report from Tradewind Scientific on friction testing on Red Hill Valley Parkway and Lincoln Alexander Parkway. I will look at some standards or anticipated values and call you.³¹⁹

302. The fifth attachment was an email sent by Mr. Shebib on October 24, 2018, under the subject line “Red Hill Counts”. Mr. Shebib emailed Mr. McGuire, attaching two

³¹⁷ [HAM0027453_0001](#) attaching [HAM0027454_0001](#), [HAM0027455_0001](#), [HAM0027456_0001](#) and [HAM0027457_0001](#)

³¹⁸ [HAM0027446_0001](#)

³¹⁹ [HAM0027447_0001](#) attaching [HAM0027448_0001](#)

spreadsheets with volume data for the LINC and RHVP from February 27, 2018.³²⁰ He wrote:

Hi Gord,

See attached (I've included the LINC in case you need it as well)³²¹

303. The sixth attachment was a document titled "Red hill review GMC Summary.doc". The document appears to be a summary of the events leading to the discovery of the Tradewind Report prepared by Gord McGuire, dated November 11, 2018. Mr. McGuire's summary, which included hyperlinks to several news articles, has been reproduced below.

DRAFT REVIEW

Note to File:

In summary re: the Red Hill Valley Parkway (RHVP) I have reviewed our internal documents and reports and I provide this summary of activity. This is my understanding of the process around the 2019 resurfacing of this asset.

This is the timeline of my role on this matter:

In June 2018 I became the Director of the Engineering Services division.

In July 2018 I was interviewed by [the Spectator](#)³²² about the upcoming resurfacing and was unaware of the testing that had taken place previously. The testing is outlined below and in particular the 2014 Golders report.

In late September I uncovered the 2013 Tradewind Friction Test report done for Golders in one of our document management systems. That document was attached to an email in our document management system (ProjectWise). The email was loaded into the system May 15th, 2018 by the former Director, Gary Moore.

³²⁰ [HAM0027449_0001](#) attaching [HAM0027450_0001](#) and [HAM0027451_0001](#)

³²¹ [HAM0027449_0001](#)

³²² The native document produced by the City includes a hyperlink to the following article: <https://www.thespec.com/news-story/8751852-city-testing-asphalt-on-red-hill-valley-parkway/>

Records from anytime				
Action Name	Date/Time	User Name	Additional Data	Comments
Checked in	9/26/18 11:23:06 AM	gmcguire		
Checked out	9/26/18 8:12:14 AM	gmcguire		
Created	5/15/18 10:01:10 AM	gmoore	In folder 'Pavements'	

During a search in the system I found this email and opened it September 26th, 2018. The attached audit trail snapshot indicates these times and are system generated on a server.

After this discovery either myself or Diana Cameron found the 2014 Golders report that outlined the rest of the condition assessment for the RHVP. The Golders report attached the Tradewind scientific report as an appendix. The Friction Test was done by Tradewind on the RHVP for Golders as part of an overall assessment on the RHVP.

A historical summary of the RHVP is laid out below.

The RHVP was built in 2007 using the following attributes and assumptions:

It used a Perpetual Pavement which is a deeper rich bottom layer asphalt overlaid with a base and wearing course.

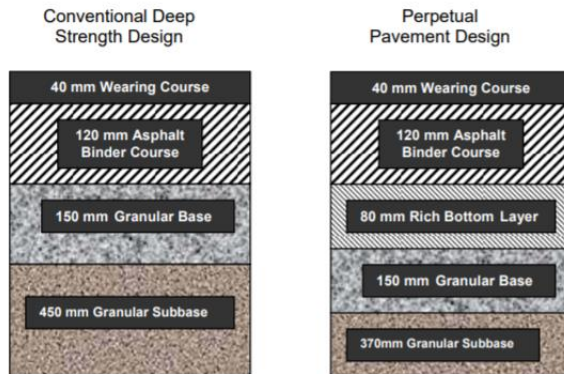


Figure 1. Comparison of conventional deep strength and perpetual pavement structures designed for the Red Hill Valley Parkway.

This process is meant to maintain the strength of the asphalt(s) from top to bottom. * 2008 report on Red Hill pavements

The top course used was a Stone Mastic Asphalt (SMA) that was friction tested in 2007 prior to opening.

*friction test email from 2007 prior to opening the MTO tested the SMA product.

This test noted lower scores but was expected as the SMA was to increase in friction over the years of use.

The RHVP assumed an Annual Average Daily Traffic (AADT) of 30,000 vehicles in year 1 with a projected peak of around 90,000 AADT in year 50.

The actual traffic AADTs met or exceeded the 75,000 volume by year 6 which accelerated the need for rehabilitation work earlier than originally projected.

The 2014 Golder's created a (DRAFT) Report of Year 6 performance for Gary Moore.

This report noted the following issue with the pavements:

- Slight to moderate distortion
- Slight to moderate longitudinal cracking top down nature
- Two Significant flooding events up to 2014
- Crack on the 39mm top asphalt, not affected second lift, first lift debonded from second lift, in some cores the layers debonded from the bottom layers.
- Approximately 3 times more Traffic per year than anticipated and designed for
- Full resurfacing was originally recommended for Year 21. Now accelerated to other treatments to address

Appendix E to the Golder Report is the 2013 friction study (Tradewind Scientific for Golder's) of the LINC and RHVP at that time that indicates the LINC is performing well

regarding friction readings, however the RHVP was performing “below or well below” the acceptable levels of a facility of this nature based on a UK model. (Pg. 4, para 2)

Golders recommends in their 2014 report (pg 8) to apply micro surfacing over the entire facility to address the relatively low FN coefficient and remove the frictional component as an element. This is a procedure that only address the pavement friction and would not be considered a resurfacing program.

In 2015 CIMA provided a RHVP detailed safety analysis.

This report noted on pg 19 that the wet weather collision statistics were much higher than the Provincial average. CIMA suggested testing skid resistance (friction) on this facility. They also noted that speed and maneuvers may be an element.

CIMA did not refer to the 2013 Friction Test or the 2014 Golders Report.

[In 2017 there was a Spectator article](#)³²³ that discussed the impacts of the RHVP and the collision history. This article identified the issues with SMA and friction in early years, then noted that crashes were increasing, not decreasing as the SMA aged.

The article notes that the 2015 safety study indicated poor wet weather performance but that the friction testing results were not available from the City. The Cities response was there is no official report, only an informal chart sent via email and that the testing results were not fulsome and deemed inconclusive.

I assume the testing results drove the desire to resurface, as that is the Cities stated position. Part of that process was a materials review of how to make the SMA into a mix that could be used in a Hot In Place (HIP) paving process. That included sampling the RHVP materials.

In January 2018 [the Spec reported on the first set](#)³²⁴ of material tests. In that article the City sates that “ We don’t know why they feel that it’s slippery” and that’s why the City is doing the testing.

Some materials were reportedly shipped in 2017 or 2018 to Ireland to check the Polished Stone Value (PSV) but there are no results to be found in our network records.

[In July 2018 the Spectator](#)³²⁵ wrote another article about the RHVP that asked more questions about the surface and its performance. At that time I was unaware of the 2013 Tradewind results and my comments reflect that position.

[In August of 2018 Traffic](#) undertook a more comprehensive review of accidents and determined that the wet weather performance was significantly different and not within statistical limits. This further verifies the work done by CIMA on their safety audits.

³²³ The native document produced by the City includes a hyperlink to the following article: <https://www.thespec.com/news-story/7424349-highway-traffic-tragedies-why-are-there-so-many-crashes-on-the-red-hill/>

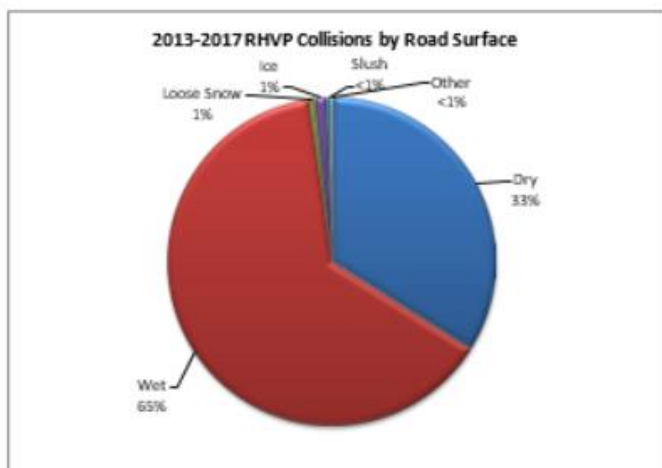
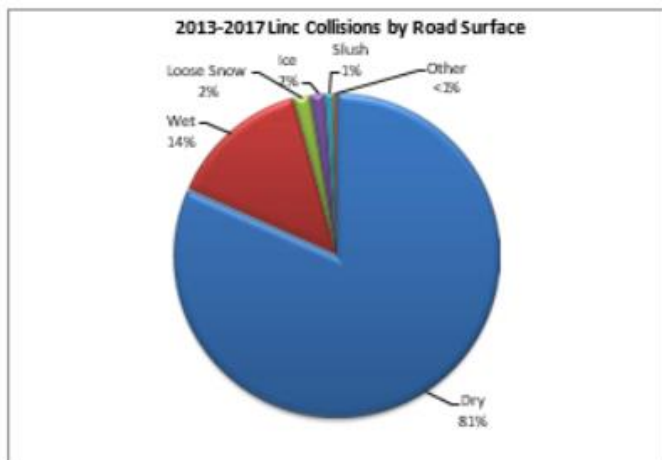
³²⁴ The native document produced by the City includes a hyperlink to the following article: <https://www.thespec.com/news-story/8072227-scratching-the-surface-for-answers-on-red-hill-paving/>

³²⁵ The native document produced by the City includes a hyperlink to the following article: <https://www.thespec.com/news-story/8751852-city-testing-asphalt-on-red-hill-valley-parkway/>

The RHVP has a noticeably different wet weather performance than the Lincoln Alexander Parkway. The graphs indicate the wet weather collisions on the RHVP are 65%, whereas the Linc has 14% wet weather collisions.

The Tradewind report indicated that the results for the Linc suggested a high level of uniformity and consistency in the asphalt materials however note the opposite conditions for the RHVP.

RHVP/LINC Road Surface Conditions



In October 2018 I was again interviewed by the [Spec about this project](#)³²⁶. My statements surrounding the testing results are that this facility needs a resurfacing and we have budget for this in 2019 up to \$15.5M. That will address the need to rehabilitate this facility and we will select an asphalt mix that has a suitable friction attribute to ensure we are meeting or exceeding current guidelines.

³²⁶The native document produced by the City includes a hyperlink to the following article: <https://www.thespec.com/news-story/8986977--15-million-resurfacing-of-red-hill-valley-parkway-planned-for-summer/>

It is interesting to note the reporter stated I wouldn't comment on the testing to determine the asphalt re: conditions leading to accidents. I stated we weren't testing for that element, however she indicated otherwise.

This is the conclusion of the summary to date.

Gord McGuire

November 11, 2018³²⁷

304. On November 12, 2018, Ms. Jacob emailed Mr. McGuire, copying Mr. Becke and Mr. Vala, attaching a document with a chart titled "Chronology of Events":³²⁸

CHRONOLOGY OF EVENTS		
Date	Content	Remarks/Milestones
Oct 2013	Splatter Paint in place of Cat eyes	Investigations by Traffic, Asset Management etc
April 2016	Investigate improvement of skid resistance by Asset Management	
April 2017	Dips and Bumps analysis from Ludomir. Drawings and spreadsheet	
June, July, Aug 2017	Discussion on Scope formation (Traffic, Asset Management, Design, Road Ops)	
27 July 2017	Approval to move forward with the scope	Approval for Shave and Pave of RHVP
18 Aug 2017	Questions on Monitoring loops	
28 Aug 2017	Martin to Rick on who will pay for pavement markings	
22 Sept 2017	Co-ordination with MTO for upcoming resurfacing project	
3 Oct 2017	Signing methodology for road closures etc for upcoming North Bound RHVP project	

³²⁷ [HAM0027452_0001](#)

³²⁸ [HAM0035539_0001](#) attaching [HAM0035540_0001](#)

13 Oct 2017	Discussion on limits and budget	
Oct 2017	Cores on Linc (request from Sarath)	
24 Nov 2017	Proposal from Golder to Gary to test RHVP pavement surface and aggregates	Investigation to introduce HIP on RHVP
2 Jan 2018	Nick request pavement marking drawings for North Bound RHVP project	
31 Jan 2018	MTO provided contract documents for their HIP project	
28 Feb 2018	Request to discuss mix	
2 March 2018	Decision to move forward with reflectors in 2018	
8 March 2018	Mike to Gary on Ludomir's opinion on HIP	
13 March 2018	Ludomir request BC contractor if SMA can be used for HIP	
13 March 2018	HIR vs foamed asphalt Ludomir to Mike	
6 June 2018	Proposal from Ludomir (Phase 1- Investigation, Ph2- Construction Assistance)	
14 June 2018	Ludomir to Mike on sample locations and no. of samples	
16 June 2018	Request to finalize Golder's proposal for RHVP testing	
16 July 2018	Update on sampling (Mike to Ludomir)	
27 June 2018	Mike To Gord, HIP next steps	
17 July 2018	Conversations on upcoming RHVP closure for sampling	
17 July 2018	Mike to Gord on what is being done for HIP investigation for RHVP	

21 July 2018	Recessed Markers on RHVP by Traffic (Chris. O)	
30 July 2018	Conversation on samples	
17 Aug 2018	Request from Sarath to take samples from severe dip locations	
21 Aug 2018	Heather Bell from MTO forwarded HIP Spec to Mike	
27 Aug 2018	Vimy forward Mike Friction Analysis by Tradewind Scientific	
30 Aug 2018	Update to Gord on MTO project delays in Thunderbay	
30 Aug 2018	How about regular shave and pave (Gord to Susan)	Decision to revert to Shave and Pave rather than HIP
17 Sept 2019	Delivery of Samples to Golder	
17 Sept 2018	Request for Traffic count loops by Rodney	
16 Oct 2018	Discussion with Ludomir on progress of HIP analysis for RHVP	
19 Oct 2018	Enviro Recycle on HIPR method and their operations	
23 Oct 2018	Spectator enquiry	
24 Oct 2018	Hamilton Spectator article	
24 Oct 2018	Request for information for consultant working on Road Side Safety Assessment on the RHVP	Road side Safety Assessment by Traffic
1 Nov 2018	Quantification of asphalt required for RHVP North and South resurfacing	
7 Nov 2018	Drawings to CIMA +	

305. The same morning, Mr. McGuire and Ms. Jacob exchanged emails under the subject line “Chronology of Events-RHVP”:

[GM]: When did we decide absolutely to eliminate HIP? October?

[SJ]: End of August I would say.³²⁹

306. On November 12, 2018, Ms. Edwards emailed Ms. MacNeil under the subject line “Followup to our discussion this afternoon”, forwarding an email she and Mr. McLennan received from Mr. Sabo on October 11, 2018, under the subject line “Pavement”.³³⁰ Ms. Edwards wrote:

Byrdena, just to close the loop on our discussion this afternoon, I can’t find an email with any of the reports, draft or otherwise, so Gord will have to provide the draft Golder report to you.

However, I did see the email below from Ron to John McLennan, which I thought I would share with you. Note that I can’t find a response from John.

Good luck in your discussion with Gord this afternoon and many thanks for your assistance with this issue. Debbie³³¹

307. Ms. MacNeil replied to Ms. Edwards the same day, writing “[t]hanks for checking”.

308. Ms. MacNeil replied, writing “Yes, I can chat tomorrow, November 13th about this. Any time after 10:00 a.m.. Is there a time you prefer?” Mr. McGuire replied to her message later that afternoon, writing “My schedule has changed. Are you available this afternoon after 3?”³³²

309. On November 12, 2018, at 4:55 p.m., Mike Zegarac (Interim City Manager, City Manager’s Office, Hamilton) emailed Darlene Barber (Executive Assistant to the City

³²⁹ [HAM0035541_0001](#)

³³⁰ [HAM0062475_0001](#)

³³¹ [HAM0062475_0001](#)

³³² [HAM0053812_0001](#)

Manager, City Manager's Office, Hamilton) under the subject line "urgent meeting". He wrote:

Darlene can you arrange a meeting with the following:

Myself

Dan McKinnon

Ron Sabo

Subject: MFIPPA - expressway

Preferably tomorrow or Wednesday.

thanks³³³

310. Ms. Barber replied to Mr. Zegarac's email by circulating a calendar invite with the subject "URGENT - Mike Zegarac / Dan McKinnon / Ron Sabo / Byrdena MacNeil re MFIPPA re Expressway". The meeting was scheduled for November 13, 2018, from 7:00 p.m.-7:30 p.m. Mr. Zegarac was listed as the organizer, with Mr. McKinnon and Ron Sabo (Deputy City Solicitor, Dispute Resolution, Legal & Risk Management Services, Corporate Services, Hamilton) listed as required attendees. Ms. MacNeil was included as an optional attendee.³³⁴

311. On November 13, 2018, Ms. Wunderlich sent an email to Mr. McGuire, with a copy to Ms. Cameron, which attached a scanned copy of the Golder Report.³³⁵

312. Within one minute of receiving this message, Ms. Cameron forwarded the document to Cathy Bojeski (Administrative Secretary, Design, Engineering Services, Public Works, Hamilton). The document properties indicate that Ms. Cameron's email

³³³ [HAM0061981_0001](#)

³³⁴ [HAM0061981_0001](#)

³³⁵ [HAM0053816_0001](#) attaching [HAM0053817_0001](#)

was automatically forwarded to Ms. Bojeski.³³⁶ On November 13, 2018, Ms. MacNeil emailed Mr. McGuire regarding a discussion she had with Ms. Watson pertaining to FOI-189 and the need for an extension of time:

I just spoke with Anne Watson (City's Access & Privacy Officer) about this matter and our need for an extension of time. She understands our request but needs us to complete page 2 of the attached document and send it to her (she has asked if this form can be completed by the end of this week?).

Can you please give your best estimate in terms of how long you believe it will take your office to search for and locate all relevant documents?

As well, can you please give your best estimate in terms of how long you believe you will need in order to review those documents to identify all records that are responsive to the access request and formulate any position (along with Legal Services) in terms of the application of any possible MFIPPA exemptions? Be sure to account for your upcoming vacation time away from the office.

Anne advises that the best way to estimate the search time and the reviewing time is to figure out how much you get done in 1 hour and then extrapolate from there.³³⁷

313. Mr. McGuire replied later the same day, attaching a draft response for Ms. MacNeil's review.³³⁸

314. Mr. McGuire emailed Ms. Watson and Ms. MacNeil that evening, writing:

Please see the attached response. Byrdena and I have had conversations on this file.

I'll be out of the country from the 15th to the 26th. Please contact me if you have any questions in the interim.³³⁹

315. Also on November 13, 2018, Ms. MacNeil emailed John McLennan (Manager, Risk Management, Legal & Risk Management Services, Corporate Services, Hamilton), attaching a copy of the Tradewind Report. She wrote:

Hi John,

³³⁶ [HAM0053818_0001](#) attaching [HAM0053819_0001](#)

³³⁷ [HAM0053821_0001](#) attaching [HAM0053822_0001](#)

³³⁸ [HAM0061982_0001](#) attaching [HAM0061983_0001](#)

³³⁹ [HAM0061851_0001](#)

I dropped by your office this morning to speak to you about the attached report. There is currently an FOI request that the City is having to respond to and this looks to be a responsive document. Can you please let me know when you have a moment to chat?³⁴⁰

4. November 14-16, 2018

316. On November 14, 2018, Ms. McNeil forwarded to Mr. McGuire's email from the day prior to Mr. Sabo, writing "We have asked for an extension of time to respond to the FOI access request. We haven't heard back yet on whether it will be granted."³⁴¹

317. Ms. MacNeil also emailed Mr. McGuire the same day, under the subject line "RHVP". She wrote "I received the package, thanks. I will quickly review it. I have two meetings this afternoon until probably 4:15 p.m. Are you able to chat after that?"³⁴²

318. Ms. Cameron replied to Ms. Cameron the same day at 4:49 p.m, writing that Mr. McGuire had been unavailable at 4:15 p.m., but was now available for a call.³⁴³

319. On November 14, 2018, Mr. Ferguson emailed Mr. Soldo and Mr. White regarding the City's Vision Zero action plan, attaching a draft report and two tables with performance measures. He wrote:

Please see attached, it still needs to be formatted. I also talked to Comms about a VZ logo, they told me no, so I have left it as originally submitted by the Consultant.

I will work on the HSRSP report and embed the VZ Action plan as an initiative.³⁴⁴

³⁴⁰ [HAM0053823_0001](#), [HAM0053824_0001](#)

³⁴¹ [HAM0061851_0001](#)

³⁴² [HAM0062476_0001](#)

³⁴³ [HAM0062476_0001](#)

³⁴⁴ [HAM0048118_0001](#) attaching [HAM0048119_0001](#), [HAM0048120_0001](#) and [HAM0048121_0001](#)

320. On November 15, 2018, Ms. Cameron emailed herself under the subject line “combine files”, attaching three documents titled “golder4.pdf”, “golder3.pdf” and “golder2.pdf”.³⁴⁵

321. On November 16, 2018, Ms. Cameron emailed Mr. Moore, copying Mr. McGuire and Mr. Sharma, regarding the VFM Audit. She wrote:

I’ve been tasked with summarizing Golder’s Category 12 work for the audit from 2013 to present. I have the value of assignments from ProjectWise for the 2015-2016 and 2017-2018 roster years. However, the only information in 2013-2014 roster folder is the scoring. Can you please provide me with the value of assignments excel file.³⁴⁶

322. Ms. Cameron also sent herself an email the same day under the subject line “Link to Golder Roster Review”, with a link to documents. The link was titled “Golder Roster Review – 2013-2018”.³⁴⁷

5. November 19, 2018

(a) *Email Exchanges with Audit Services*

323. Mr. Sharma emailed Mr. Pellegrini on November 19, 2018:

Please find the link below showing performance graphs for the project list that was provided earlier.

<https://www.arcgis.com/apps/opsdashboard/index.html#/e771d53467a24c1b83fd04d7ddc2dcb4>

The graphs are currently projected with the following:

- Orange trend line - Actual OCI, that was discovered as a part of
- Blue trend line - Projected OCI, an output of IRISS (Integrated Right-of-Way Infrastructure Support System).
- Grey trend line – The intervention (Major/minor rehab or reconstruction)

In addition, I have also attached a spread sheet showing graphs for all street segments that have a OCI greater then 60, has an inspection record from 2002 and has no capital

³⁴⁵ [HAM0053828_0001](#) attaching [HAM0053829_0001](#), [HAM0053830_0001](#) and [HAM0053831_0001](#)

³⁴⁶ [HAM0027497_0001](#)

³⁴⁷ [HAM0053835_0001](#)

work performed on it. These segments are plotted against the engineering curves produced by IRISS.

The comparison between the two models should help us understand performance of a road in a scenario where no capital work was performed compared to capital work being performed.

Should you have any questions, please feel free to give me a call.³⁴⁸

(b) Meeting Scheduled to Discuss RHVP Rehabilitation on November 26, 2018

324. On November 19, 2018, Mr. Vala sent a calendar invite for a meeting on November 26, 2018, under the subject line “Redhill Valley Parkway (RHVP) Rehabilitation”. He sent the invitation to Mr. Becke, Mr. Perusin, Mr. Butrym, Mr. Olszewski, Mr. Jazvac, Mr. Oddi, Ms. Jacob, Ms. Graham, Mr. Andoga, Mr. Ferguson, Mr. Renaud, Mr. Aitchison, and a design student. He wrote in the body of the email:

Meeting Location and Agenda included

Hello All,

I'd appreciate it greatly, if you could attend this meeting to discuss the upcoming RHVP Resurfacing contract for 2019 construction. I have tried my best to find a date and time that suits all the invitees, but this is the best I could find (keeping in mind the tight time frames for the tendering of this project).

The intent for the meeting is to identify a core team that'd be closely involved and impacted by the resurfacing, and for me to get an understanding of all the things that need to be considered for tendering this job.

I'll have an agenda and meeting location for the meeting, but first wanted to reserve a spot in your calendars.³⁴⁹

325. The following agenda was attached to the invitation:³⁵⁰

³⁴⁸ [HAM0027500_0001](#) attaching [HAM0027501_0001](#)

³⁴⁹ [HAM0027503_0001](#)

³⁵⁰ [HAM0027503_0001](#) attaching [HAM0027504_0001](#)

**CITY OF HAMILTON
PUBLIC WORKS – DESIGN SECTION
REDHILL VALLEY PARKWAY (RHVP) RESURFACING
MEETING AGENDA**

Date and Time:	November 26, 2018 from 2:30 – 3:30 am
Location:	City Centre – 77 James Street N. – Meeting Room 320A
Invitees:	Richard Andoga, Mike Becke, Bob Butrym, David Ferguson, Jasmine Graham, Susan Jacob, Alan Jazvac, Marco Oddi, Chris Olszewski, Dennis Perusin, & Sarath Vala

Meeting Objective: Identify Project Team and project constraints/special considerations

Agenda Items:

1. **Introductions**
2. **Project Scope**
 - a. **Road:** Direction, Paving Limits (Ramps/Shoulders), Dips, Paving Depth, etc
 - b. **Traffic:** Rumble Strips, Cats eyes, Durable marking, Guide rail (Estimate), etc
 - c. **Budget:**
 - d. **Others:** Hamilton Police and any update from ongoing Roadside safety study
3. **MTO Coordination**
 - a. **Permits:** Encroachment Permit, Contacted MTO regarding SB paving
 - b. **Highway 403 construction:** Linc to Hwy 6 closure
4. **Construction**
 - a. **Maintenance of Traffic/Detours**
 - b. **Construction Sequencing/Closures**
5. **Specifications:** Special language/requirements to confirm contractor competence
6. **Communication**
 - a. **Information needed from Design**
 - b. **Public Notices**
7. **Project Schedule**

Scope	Design/Specs.	Contracts Group	Bid Period	Award	Mix Design	Construction
30 Nov 2018	Dec-Jan 2019	Feb 2019	Feb-Mar 2019*	Apr 2019	May 2019	Jun-Aug 2019

* New rules require Project to be posted for 35 days

6. November 20, 2018

(a) *Risk Management and Legal Services Discuss the Tradewind Report*

326. On November 20, 2018, Mr. McLennan forwarded Ms. MacNeil's November 13, 2018, email attaching the Tradewind Report to Ms. Swaby, writing:

FYI – the preliminary thought is that this report will have to be released to the requestor. Obviously not a good turn of events for any of our RHVE files.

You will see an e-mail where I advised Nicole / Ron of four files that I could find. I said you could provide more information on those files upon your return and advise on any that I might have missed.³⁵¹

327. On November 20, 2018, Kim Goral (Legal Assistant, Legal Services, Legal & Risk Management Services, Corporate Services, Hamilton) sent a calendar invite to Ms. Auty, Mr. Sabo, Mr. McLennan, Mr. McKinnon and a recipient named “MR - City Hall - 1st Floor - 171 (seats 8)”. The meeting, titled “Next Steps on RHV”, was scheduled for November 26, 2018.³⁵²

328. On November 20, 2018, Mr. McLennan emailed Ms. Auty and Mr. Sabo, copying Ms. MacNeil and Ms. Swaby under the subject line “RHVE Expressway Claims”. He wrote:

Good Afternoon Nicole / Ron,

My review indicates we have four significant claims which could theoretically be impacted by the FOI request. None of them specifically cite a “friction factor” as far as I can tell but it stands to reason that plaintiff counsel would attempt to use any associated media story to support their allegations of negligence.

[redacted for solicitor-client privilege]

As stated, this is just my quick search in advance of Diana returning. She is back Thursday and will be able comment on these files and any others that I may have missed. I have cc'd her for this purpose.³⁵³

329. Also on November 20, 2018, Ms. Auty emailed Mr. Sabo and Mr. McLennan under the subject line “PW Red Hill matter”, writing:

Hi, further to our discussion last week, do we have any concerns with Dan McKinnon speaking to Gary Moore on the issue of the report regarding the friction to get more of his perspective and determine if there are any other documents we need to be aware of?

³⁵¹ [HAM0053840_0001](#) attaching [HAM0053841_0001](#)

³⁵² [HAM0061985_0001](#); [HAM0061988_0001](#); and [HAM0062479_0001](#)

³⁵³ [HAM0061984_0001](#)

[redacted for solicitor-client privilege] Should we set up a meeting to review with Byrdena the MFIPPA issue?³⁵⁴

(b) Preparation of Staff Report for February 4, 2019 PWC Meeting

330. On November 20, 2018, Mr. Cooper emailed Mr. White, with a copy to Mr. Ferguson, attaching a draft report for the February 4, 2019 PWC meeting. The report, stemming from an outstanding business list item, was titled “Speed Limit Reduction Feasibility Study on the RHVP/LINC (Wards 4, 5, 6, 7, 8 and 14). The report summarized the Speed Limit Study report prepared by CIMA, and recommended that the existing 90km/h speed limit be retained.³⁵⁵

331. Also on November 20, 2018, Mr. Soldo sent Mr. Malone a calendar invitation for a call to discuss “RHVP Reports”. The call was scheduled for November 30, 2018.³⁵⁶

(c) Contact with Dr. Uzarowski Regarding Asphalt Sample Test Reports

332. On November 20, 2018, Mr. Becke exchanged emails with Dr. Uzarowski, copying Mr. Renaud, relating to asphalt sample test reports:

[MB]: I hope all is well? I am following up with regards to the boxes of the old asphalt sample reports you have. I was wondering at what office they are located? We are going to need to send someone to pick them up, probably this week. Can you please let me know what the address is of the office they are at? I will try and figure out with Tyler who can go get them and at what time and I will get back to you.

Let me know if you have any questions or comments.

[LU]: I have them here in the Mississauga office. I was planning to bring them to Hamilton sooner but, unfortunately, I got sick while at the CTAA conference in Regina. I still managed to deliver the presentation on behalf of MTO on Wednesday. Today is my first day in the office after almost a week of recovering at home.

³⁵⁴ [HAM0062477_0001](#)

³⁵⁵ [HAM0011648_0001](#) attaching [HAM0011649_0001](#)

³⁵⁶ [HAM0011647_0001](#)

I am planning to come to Hamilton at the end of this week to meet with you, Gary and Tyler. If you can wait till the end of the week I will bring the reports with me. Please let me know.

[MB]: That sounds like you had something nasty to be off that long. Hope you're feeling better.

Gary and I are away the rest of the week, we are both at the MEA conference, I'm presenting and he sits on the Board. I'm not sure on Tyler's availability, but I'll let him know. If worse comes to worse, we can send someone up to pick it up. I'll have to talk to Tyler.

Thanks for letting me know. Ill talk to you soon.

[LU]: How about Monday next week? I am flying for a few days to Seattle on Wednesday next week and will not be in the office from Nov 29th to Dec 2nd.

You are right, the virus was nasty. It was brought to Canada to the CTAA conference by our colleagues from the US, most of them were sick and they passed the virus to the good Canadian guys.³⁵⁷

7. November 21-27, 2018

(a) *Ongoing Discussions Regarding RHVP Related Claims*

333. On November 21, 2018, Mr. Sabo exchanged emails with Mr. McLennan in response to Mr. McLennan's email from the day prior:

[Mr. Sabo]: I'll check with Dan on the issues raised in his matters.

The fact that Baghosian is not involved in these claims means if we really wanted to involve him we could.

[Mr. McLennan]: I think we should let the insurer chime in on this too. If they disagree with a City decision to release the report it might adversely impact coverage.

Ron – I just spoke with Dan briefly on his two claims and let him know you will be speaking with him.

Diana – can you please put a call into Terry Shillington as soon as possible tomorrow. Thanks.³⁵⁸

334. On November 23, 2018, Ms. Swaby also replied to Mr. McLennan's email from November 20, 2018, writing:

³⁵⁷ [HAM0035546_0001](#)

³⁵⁸ [HAM0061984_0001](#)

This report concerns the RHVE and the LINC. As far as I can tell, it is a red herring. Most accidents happened due to driver error, speed, tire blowing or dangerous driving.

All of our serious files on the RHVE and the LINC are for the most part, being defended by Shillingtons, save and except Sherk/O'Hare (Dana Lezau's) and one being handled right now by Dan Bartley (Kanagaratnarajan).

Shillingtons recently asked about the report, citing that it will have to be produced in the City's affidavit of documents in at least one of the claims. An inquiry did come in from Shillington's office concerning this report. The inquiry was referred to Gary Moore who indicated the report was not presented to Council.

If there is a specific question I need to ask Shillingtons, please advise. Perhaps Dana Lezau can also assist.³⁵⁹

335. On November 26, 2018, Ms. Swaby emailed Terry Shillington (Partner, Shillingtons LLP) and Ms. Crawford under the subject line "FW: Red Hill Friction report", marking the email as high importance. Ms. Swaby's email forwarded the email she and Ms. Crawford received from Mr. Moore on May 4, 2018, in which he indicated that the Tradewind Report had never been reported to Council. Ms. Swaby wrote:

Hi Terry, this afternoon, I am meeting with the GM of Public Works as well as the Director of Legal Services and John McLennan of our office concerning an FOI request to release this report. I take it that they do not want to release this report. Do you have a moment to discuss the implications of its release and how this report affects the litigation we have ongoing on the LINC and the RHVP?³⁶⁰

336. Mr. Shillington replied, indicating he was available to call her in approximately ten minutes.³⁶¹

(b) Continued Discussions Regarding VFM Audit

337. On November 21, 2018, Ms. Cameron emailed Ms. Jacob, copying Mr. McGuire and Mr. Sharma. She included a hyperlink to an internal folder, and wrote:

Afternoon Susan,

³⁵⁹ [HAM0061987_0001](#)

³⁶⁰ [HAM0061989_0001](#)

³⁶¹ [HAM0061989_0001](#)

I've summarized the Golder requisitions I have on file from 2013 to 2018. Gord is requesting that you review the link provided for each proposal/requisition and populate columns L to P. As we are being audited the information to be populated is urgent and imperative.

Link to summary:

[Golder Roster Review - 2013-2018](#)

Please advise once this has been completed and where we are missing reports, I will follow up with Golder on behalf of Gord.

Much appreciation and please let me know if you have issues with the ProjectWise link.³⁶²

(c) November 22, 2018 Collision on RHVP

338. On November 22, 2018, a tractor-trailer carrying liquid asphalt struck a bridge and rolled over on the RHVP, spilling a substantial volume of liquid asphalt onto the road and median. A press release was circulated that day to advise motorists of the resulting road closure.³⁶³ The section of the RHVP that was covered in liquid asphalt was milled and repaved.³⁶⁴

339. On November 23, 2018, Dr. Uzarowski emailed Mr. Rose and Mr. Hobson regarding the HIR Suitability Study laboratory testing, writing:

I will be coming to Whitby on Monday to meet with Michael. But this would be an opportunity to talk with you about the Hamilton HIR testing. Could we talk about it on Monday? by the way, I still haven't received the cost and the timeline. I should let the client know when and see if I have enough budget.³⁶⁵

340. On November 23, 2018, Mr. Salek emailed a draft of the RHVP Roadside Safety Assessment report to Mr. Ferguson, copying Mr. White, Ms. Jacob, Mr. Vala, Mr. Hadayeghi, Mr. Malone and Mr. Bottesini.³⁶⁶ He wrote in his covering email:

³⁶² [HAM0027526_0001](#)

³⁶³ [HAM0035548_0001](#)

³⁶⁴ [HAM0027556_0001](#)

³⁶⁵ [GOL0003701](#)

³⁶⁶ [HAM0035555_0001](#) attaching [HAM0035556_0001](#)

Please find attached the draft report as well as the GIS file with the detailed recommendations for Hamilton RHVP Roadside Safety Review.

The GIS file with the recommendations includes the following information:

- **Existing_Guide_Rails** (line features): contains locations of existing guide rails
- **Guide_Rail_Recommendations** (line features): contains locations of recommended guide rails
- **B1014_GR_Rec** (data table): contains details from guide rail inventory and recommendations. This should be already joined with Existing_Guide_Rails layer so that when the attribute table is opened all details are associated with the guide rail location. However, if this is not the case, both can be joined through the "ID" field (NOT OBJECT_ID).
- **Additional_Recommendations_Pts**: contains locations of additional recommendations (e.g. fill ground around IP concrete base, etc.)
- **Additional_Recommendations_Lines**: contains locations of additional recommendations (e.g. clear vegetation on slope)

As discussed during the kick-off meeting, we tentatively scheduled the progress meeting for November 30 to review the study findings and discuss the City's comments on the draft report. Please let me know if you are still available on that date or alternatively recommend new dates and times.

During the progress meeting, we would like to have your feedback on the following discussion items:

- Section 1.1: confirmation of which recommendations from the 2013 and 2015 studies were implemented (Section 1.1).
- Section 3.1.1: CIMA+ could not determine the reason for the abrupt increase in collisions from 2013-2014 to 2015-2017. Both self-reported and other collisions have similar increase in 2015. Would the City have an explanation?
- Section 4.2: CIMA+ assumed sign installation unit cost as \$250. If the City has a different cost, please provide (note that it is expected to be lower than a stand-alone sign installation since it would be in conjunction with guide rail installation).
- Section 4.2: Cost summary provided is for "ultimate" recommendations. City may want to confirm allocated budget to select locations; or CIMA+ can rank all locations based on EPDO collisions.
- Section 5.1: In 2009 the ball bank thresholds increased to reflect improvements in vehicle technology. Using those thresholds would result in higher advisory speeds for various ramps. While there is value in increasing the advisory speeds to improve credibility from drivers perspective, many ramps have existing advisory speeds equal to the compatible design speed. Considering this, it is advisable to maintain the current speeds (also for consistency throughout the City and with the MTO connecting highways, if the new thresholds have not yet been adopted)
- Section 9: Summary of Findings and Recommendations will be completed for the final version of the report.

341. Section 3.3 of the draft provided a summary of the collision history review:

- Wet surface collisions were found to represent 64% of mainline collisions and 73% of ramp collisions. The proportion of wet surface collisions on the mainline presented an increase compared with the 2015 study (50%);

- “Lost control” and “speed too fast for conditions” apparent driver actions were reported in 33% of mainline collisions (44% for wet surface collisions) and 56% of ramp collisions 68% for wet surface collisions); and
- These findings suggest that inadequate skid resistance (surface polishing, bleeding, contamination) and excessive speeds may be contributing factors to collisions;³⁶⁷

342. On November 26, 2018, Bob Paul (Manager, Roads & Maintenance, Roads & Traffic, Public Works, Hamilton) exchanged emails with Roads & Maintenance staff regarding the occurrence of collisions on the RHVP on November 24, 2018. He advised his staff to advise Mr. Soldo:

Ok, going forward, please let Edward know when there is an accident/incident on the any escarpment crossings, RHVP or Linc for any lane or road closures no matter what the duration. A policy/procedure will be following shortly.

We will discuss at the next Superintendents meeting.³⁶⁸

343. Ms. Cameron emailed Mr. McGuire on November 26, 2018, copying Mr. Sharma and Ms. Jacob, writing:

I've update the file based on the information from Susan. Note PO's 84798 and 85772 have been forwarded to Marco under separate cover to provide comment.³⁶⁹

344. Ms. Cameron wrote to Mr. Oddi, including links to two documents in ProjectWise:

Hi Marco,

Do either of these have anything to do with Red Hill? If so, do you know if either of them had a report?

[Golder PO84798.pdf](#)

[Golder PO85772.pdf](#)³⁷⁰

³⁶⁷ [HAM0035556_0001](#) at image 23

³⁶⁸ [HAM0011729_0001](#)

³⁶⁹ [HAM0027601_0001](#)

³⁷⁰ [HAM0027603_0001](#)

345. Mr. Oddi replied the same day, advising that neither purchase order was related to the RHVP.³⁷¹

346. On November 26, 2018, Mr. McGuire sent Ms. MacNeil a calendar invitation for a meeting on December 3, 2018 with the subject "RHVP review". The meeting was scheduled for 9:00 a.m.³⁷² Ms. MacNeil accepted the calendar invite.³⁷³

(d) November 27, 2018: Follow-up from November 26, 2018 Meeting

347. On November 27, 2018, Mr. Aitchison sent an email regarding a meeting held the day prior to Mr. White, copying Mr. Butrym, Mr. Ferguson and Mr. Olszewski, writing:

Just an FYI from yesterday's meeting; one of the discussion items was the sequencing of the work and potential road closures. They're considering a few options:

Full directional closures where each direction would be successively closed from end to end for two weeks

Full directional closures as described above but only on about 4 weekends (Friday evening to Monday morning)

Full directional closures as described in option 1 but dividing each direction into two sections

Option 1 has a significant cost saving on contractor mobilization costs, etc.... Added into the mix is the MTO's planned closure of Hwy 403 in August for bridge deck work which would require the Linc/RHVP as an alternate route.

Susan Jacob is going to send out an email outlining these scenarios and ask for comments from Roads & Traffic. This will probably require separate stakeholder meetings which Eng Services would convene.³⁷⁴

³⁷¹ [HAM0027603_0001](#)

³⁷² [HAM0061990_0001](#)

³⁷³ [HAM0062480_0001](#)

³⁷⁴ [HAM0011734_0001](#)

(e) November 27, 2018: Public Works Staff Discuss Scheduling of the Presentation of RHVP Reports to Council

348. Ms. Cameron exchanged emails with Mr. Soldo and Mr. McGuire, copying Ms. Eisbrenner, Mr. Field, Mr. White and Ms. Wunderlich, on November 27, 2018:

[DC]: I am looking to make sure that this OBL item will be addressed

Jan. 14	Public Works	Lighting on the RHVP <i>Outstanding Business List</i>	Mike Field Public Works
----------------	---------------------	--	----------------------------

.... in this report?

Feb. 4	Public Works	Strategic Road Safety Program Update <i>(Outstanding Business List)</i>	Martin White – PW in conjunction with PED @ TMP (combining 2 OBL items into 1 report: Vision Zero & Speed Limited Reduction Feasibility Study on the LINC & RHVP)
---------------	---------------------	--	--

If so, I will move this item to the Feb 4th report.

[MW]: From what I recollect of our discussions.... Gord's Lighting on the RHVP should be going to PW as a stand alone report on Jan 14. Roads and Traffic are also submitting the ASE Bill 65 report (photo radar) on LINC RHVP on Jan 14 as well as the RHVP/LINC reduced speed limit report (OBL item k) on Jan 14 and the Annual Collision Report on Jan 14.

The report Hamilton strategic road safety program (including vision zero) report is going on Feb 4 but doesn't have anything to do with Lighting on the RHVP

Hope that helps!

[DC]: Please see attached

[ES]: That is not correct.

We were going to do one report that dealt with speeding issues on the Linc, combined with the lighting and next steps for the Linc/RHVP.

I will come see you Diane.³⁷⁵

³⁷⁵ [HAM0027609_0001](#)

(f) November 27, 2018: Mr. McGuire Contacts CIMA for “Updated on RHVP”

349. On November 27, 2018, Mr. McGuire emailed Mr. Malone under the subject line

“Update on RHVP”. He wrote:

I’m checking in on next steps for the RHVP file. Recall I was creating a report that would ask for permission to start a functional plan on that asset.

Can you remind me the steps CIMA was taking next. The roadside safety audit should be done soon I thought which will inform the upcoming resurfacing project. As well we were to address the OBL item on the lighting review. Were you providing a synopsis of the full report for inclusion into my overall report?

That is what my notes suggest, and hopefully I’m not off base on that.

Can you update me on the fuel please.³⁷⁶

350. Mr. Malone replied the same day, copying Mr. Hadayeghi, Mr. Salek and Mr.

Omrani, writing:

You are correct Gord. CIMA is completing a 2-page synopsis based in the lighting report. We had agreed to that when we spoke on November 07. We will be delivering that to you by December 03 so that you can incorporate it into your report to PWC.

You are also correct that the roadside safety report for the RHVP is close to being completed. A draft has already been provided to Dave Ferguson. There were just a few questions that need to be answered by the City and then it will be finalized. The LINC portion of that effort will be completed early in 2019.

It is also my understanding that your and Edward’s joint PWC report will bring together the lighting and roadside safety reports as well as the planned paving actions. You mentioned that you will seek confirmation for the next step which you described as the undertaking a functional plan review for the LINC/RHVP, with a goal of mapping out the long term plan for the continued management of this critical capital asset.³⁷⁷

351. On November 27, 2018, Ms. Cameron sent Mr. Field, Mr. Omrani, Mr. McGuire and Mr. Malone a calendar invite to discuss a “draft LINC/RHVP report” on December 12,

2018.³⁷⁸

³⁷⁶ [HAM0027604_0001](#)

³⁷⁷ [HAM0053876_0001](#)

³⁷⁸ [HAM0053879_0001](#)

(g) November 27, 2018: Meeting Between Mr. McKinnon, Mr. McGuire and Mr. Moore

352. Mr. McKinnon, Mr. McGuire and Mr. Moore met on November 27, 2018. Handwritten notes dated November 27, 2018 were later sent by Ms. Wunderlich to Mr. McKinnon on January 31, 2019.³⁷⁹ The handwritten notes have been reproduced below:

RHVP F.O.I. Gary Moore/McGuire Nov 27.18

2013/14 Golders – subconsultant Tradewind only received in draft.

- Golders was indeed paid for it.

- Golders report also analysed cracking

this was undertaken in response to anecdotal stories that it was slippery.

- Ultimately Gary felt it was inconclusive but recommended we should do more testing.

2017 – CTAA in Halifax. Nov. 2017 came home & then programmed RHVP resurfacing in 2018. Met with HIP contractors in Halifax

2007 – When we opened the RHVP – built with SM stone mastic asphalt. Gary indicated MTO was having problems with their mixes but didn't tell anyone. SMS = gap graded mix.

Feb 2018 – Gary indicated we sat on it for a while and ultimately decided to do so polished stone value analysis – Ireland. Undertaken thru Golders.

Gary suggested having legal reach out to MTO about their protocol around F.O.I for such request.

Dan McKinnon³⁸⁰

353. A binder of Mr. McGuire's also includes a handwritten note dated November 27, 2018, which lists the following:³⁸¹

³⁷⁹ [HAM0054353_0001](#)

³⁸⁰ [HAM0054355_0001](#)

³⁸¹ [HAM0061728_0001](#)

Report to Council? Nov 27/18
 2013/14 = Gordon's Diet Review
 Dina
 Gold
 Gary
 2017 CPA H.I.P in MAINTENANCE
 Check 10 yr Forecast BUT when added
 MTD was using GMA in 2007
 - MIGNON SKIDS APPARENTLY
 - Bottom Spring
 - GAP GRASS MIX. / PIZAINS LEAF
 2007 RESULTS
 2012-13
 ANECDOTAL = PROACTIVELY LEFT OUT
 DIFFERENT MOTHER THAN THE MTD MOTHERS
 USED A UK STUDY.
 REPORT TOLD HIM TO DO MORE TESTING
 New
 i.e. DO PSV = FROM IZOLAND
 Tylon or Rick
 * STUB
 MATERIAL CAME FROM DUFFRONS (LEPPA FARM)
 SOLD MATERIAL AS SPARE BY GORDON
 MTD Regional Director =

(h) November 27, 2018: Ms. Jacob forwards Dr. Uzarowski's Contact Information to Mr. McGuire

354. Also on November 27, 2018, Ms. Jacob forwarded an email originally sent by Dr. Uzarowski to Mr. Moore on November 22, 2017, and which attached the proposal for the

2017 Golder Pavement Evaluation. She changed the subject line to “Ludomir’s contact”.³⁸²

8. Discussion of Tradewind Report with Audit Services

355. On November 27, 2018, Mr. Sharma emailed Mr. Pellegrini under the subject line “RE: Redhill Valley Report”. The email Mr. Sharma appeared to have been responding to was not included in his response. He wrote:

The Redhill report that redacted as advised by legal. Engineering service received a FOI on Redhill; the complete report and other related documents are currently being reviewed by Legal. Once this review is complete, we will provide the complete/non-redacted package for your review.

Should you have any questions, please feel free to give me a call.³⁸³

9. November 28-29, 2018

356. Mr. McGuire forwarded Ms. Jacob’s email to Mr. Becke on November 28, 2018, writing:

[GM]: I talked to Ludomir last night and he is bringing that PSV report along today as he is meeting with you apparently?

Please bring it to me and I will review.

[MB]: I did not know that he was coming in? I will bring you the report once I get it.

[GM]: Ok. He told me that last night?

Let me know if he comes by. Thanks³⁸⁴

³⁸² [HAM0035627_0001](#)

³⁸³ [HAM0061997_0001](#)

³⁸⁴ [HAM0035627_0001](#)

357. Mr. Becke sent Dr. Uzarowski an email to confirm whether he would be attending at the City. Mr Uzarowski replied: "I will leave the office soon. I will bring the boxes with the results."³⁸⁵

358. The same day, Dr. Uzarowski emailed Mr. McGuire, attaching MTD and PSV results from the 2017 Golder Pavement Evaluation. He wrote:

As discussed yesterday, please find attached the results of the pavement testing on the Red Hill Valley Parkway carried out in January 2018. A hard copy of the results was presented at the meeting with the City representatives in March 2018.

We have the following comments:

1. The coring and testing operation on the RHVP was carried out at night of December 6/7 2017. Please note that there was light snow and negative temperatures during the testing.
2. The results of the PSV testing - the obtained core samples were delivered to the Golder's laboratory in Whitby where the aggregates were extracted. The samples of the aggregates were then sent to James Fisher Testing Services in Ireland for Polished Stone Value (PSV) testing. The reported corrected PSV value is 45. This value is considered to be an average or medium for traprock aggregates.
3. The measured texture depth (MTD) was determined on the site using the Sand Patch Method. The average MTD is 1.25 mm. A pavement with good macrotexture should have the MTD of about 1.0 mm.
4. Please note that we attempted to run the British Pendulum Test; however, due to light snow and negative temperatures the test was considered meaningless.

If you have any questions please do not hesitate to contact me.³⁸⁶

359. Mr. McGuire forwarded the email to Ms. Cameron and Mr. Sharma, writing "Diana can you print this please and load it into our FOI folder as well. Thanks."³⁸⁷

360. Ms. Cameron replied "Saved to your Red Hill sub folder under your inbox."³⁸⁸

³⁸⁵ [HAM0035696_0001](#)

³⁸⁶ [HAM0035697_0001](#) attaching [HAM0035698_0001](#) and [HAM0035699_0001](#)

³⁸⁷ [HAM0027619_0001](#)

³⁸⁸ [HAM0053892_0001](#)

361. On November 28, 2018, Mr. Ferguson forwarded Mr. Salek's email attaching the draft RHVP Roadside Safety Assessment report to Mr. Soldo.³⁸⁹

362. On November 29, 2018, Mr. McGuire sent Mr. Soldo a calendar invite for a meeting that day with the subject line "Edward Soldo - RHVP Schedule".³⁹⁰

363. Mr. McGuire emailed Dr. Uzarowski on November 29, 2018, writing:

Thanks for the files on this project.

I have a copy of the original proposal, your ID P1791724.

That proposal suggests you will provide recommendations after the testing. Can you supply the final report on this testing when you can.

I'm meeting with our Legal team early next week as they are looking for all our files on this project.³⁹¹

364. On November 29, 2018, Ms. Wunderlich emailed Mr. McKinnon under the subject line "RHVP Notes", writing "[h]ere is your scan as requested."³⁹²

10. November 30, 2018

365. On November 30, 2018, Mr. McKinnon forwarded Ms. Wunderlich's email attaching his notes from the day prior to Ms. Auty, writing "[m]y writing is brutal so happy to translate".³⁹³

366. Ms. Auty forwarded his email to Ms. Goral, asking if she was available to transcribe the notes for her.³⁹⁴ Ms. Goral emailed Ms. Auty later that morning, writing "Here you go.

³⁸⁹ [HAM0035628_0001](#) attaching [HAM0035629_0001](#)

³⁹⁰ [HAM0027642_0001](#)

³⁹¹ [GOL0003026](#)

³⁹² [HAM0062481_0001](#)

³⁹³ [HAM0062481_0001](#)

³⁹⁴ [HAM0062481_0001](#)

Some of it was hard to know what the word. Let me know if you would like me to change anything.”³⁹⁵ To date, the Inquiry has not received the document Ms. Goral attached to this email.

367. On November 30, 2018, Ms. Cameron emailed Ms. MacNeil attaching a copy of Golder’s November 23, 2017 proposal for the 2017 Golder Pavement Evaluation. The copy was a scan with handwritten notations.³⁹⁶

368. On November 30, 2018, Ms. Auty emailed Mr. McKinnon and Mr. Sabo under the subject line “Meeitng with GM re RHVP”. She wrote:

Dan, these are the typed version of your notes.

Any corrections? Ron, when you’re back, we can discuss.³⁹⁷

369. The attachment referred to by Ms. Auty was not attached to the version of the email exchange produced by the City to date.

370. Mr. Sabo replied the same day, writing “If you can forward the attachment that would be great and I will give a copy to Byrdena if she hasn’t already seen this (I dropped a package of documents from Gord in her office this morning).”³⁹⁸

³⁹⁵ [HAM0062481_0001](#)

³⁹⁶ [HAM0053898_0001](#) attaching [HAM0053899_0001](#)

³⁹⁷ [HAM0061991_0001](#)

³⁹⁸ [HAM0061991_0001](#)

J. December 2018

1. December 2-3, 2018: Contact with CIMA

371. On December 2, 2018, Mr. Ferguson responded to Mr. Salek's November 23, 2018, email attaching the draft RHVP Roadside Safety Assessment to arrange a meeting to discuss the draft.³⁹⁹ A meeting was scheduled for December 7, 2018.⁴⁰⁰

372. On December 3, 2018, Mr. Malone emailed Mr. McGuire, attaching an executive summary of the RHVP Lighting Study report:

Attached is our summary content from the lighting study.

Let me know if you'd like the Word version, if it facilitates transferring content to your City report.⁴⁰¹

373. The executive summary included the following:

1. Background and Introduction

The primary objective of illumination is to increase safety by providing drivers with improved nighttime visibility of roadway conditions and potential hazards. The Lincoln M. Alexander Parkway (LINC) and Red Hill Valley Parkway (RHVP) were designed and constructed without installation, or provision for installation, of continuous lighting of the parkway corridors. Both facilities have partial illumination at the exit/entrance ramps of interchanges. Now that the roads have been in operation for some time the City of Hamilton initiated a study to identify the benefits, risks, costs, and challenges of adding continuous lighting along the LINC and RHVP.

2. Findings of the Study

A comprehensive review and analysis were conducted to identify all relevant factors relating to the possible provision of continuous lighting on the facilities. Elements reviewed included; a review of Environmental Assessment (EA) studies from when the roads were originally approved; the operations and collision history since the roads have opened; the illumination warrants, considering current operating conditions; a review of the human factors impacts of existing and possible continuous lighting; a review of the lighting design on other similar 'peer' facilities in Ontario; an overview of the impact of continuous lighting on the natural environment, were it to be undertaken. The study also completed a formal Benefit-Cost (B/C) analyses of providing continuous lighting. In addition, an overview of the

³⁹⁹ [CIM0019405](#)

⁴⁰⁰ [HAM0011764_0001](#)

⁴⁰¹ [CIM0016819](#)

level of effort that would be required to complete an Environmental Assessment examining the potential for continuous lighting was completed.

The followings summarize the observations and conclusions derived from different aspects of illumination evaluated. The results of this study can assist the City in making an informed decision regarding the overall benefits and drawbacks relating to the provision of continuous illumination of the two facilities.

Environmental Studies Review: No documentation from any previously completed environmental studies identified a specific prohibition or listed defined parameters that would preclude the implementation of continuous illumination on either the LINC or the RHVP. The review of the full range of past environmental assessment studies completed as well as associated relevant documents revealed that consideration of continuous roadway illumination was only given cursory examination during the original design of both facilities.

Collision Analysis: Neither the LINC nor the RHVP were found to have a disproportionate number of collisions occurring during hours of darkness. The proportions of collisions occurring along both Parkways during hours of darkness was found to be consistent with the Provincial averages on similar facilities with partial illumination. The collision analysis confirmed previous findings, that the proportion of collisions occurring on the RHVP on wet roads is significantly higher than Provincial averages.

Illumination Warrants: For the RHVP, the results of both the TAC and MTO illumination warrant analyses, completed using current operational conditions and considering collision data, indicated that continuous lighting is warranted. For the LINC, the results of MTO illumination warrant analysis indicated that continuous lighting is warranted. The TAC illumination warrants were not met, but TAC warrant thresholds are close to being achieved. It was concluded that conventional lighting, as opposed to high-mast lighting, could be considered as an option for the LINC.

Review of Peer Facilities: A range of roadways were identified as being 'peer' facilities to the LINC and RHVP, based on geometric configuration, design and operating speeds and proximity to urban areas. It was identified that the current lighting configuration, consisting of partial illumination at interchanges, along both the LINC and RHVP is not consistent with most other peer facilities in Ontario. Most other facilities are provided with continuous lighting.

Lighting System Options: A range of lighting system options were evaluated for the potential provision of continuous lighting along the LINC and RHVP. These included electric-grid powered conventional and high-mast systems and alternative 'off-grid' powered emerging technologies such as solar and wind powered. It was found that, despite recent advancements, emerging technologies have not developed to a point that they can reliably provide continuous lighting service the LINC and RHVP. Continuation of on-going smaller scale pilot project evaluations should be completed before considering a large-scale deployment on the Parkways. Established lighting technologies of conventional or high-mast systems remain the two viable options for continuous illumination of the Parkways.

B/C Analysis: A Benefit-Cost analysis that considers the potential societal safety benefit of reductions in collisions occurring during hours of darkness that may be achieved by the provision of continuous lighting, as compared to the life-cycle cost for the provision of continuous lighting was completed. Results of the B/C analysis revealed that the benefits of continuous illumination along the RHVP was greater than the LINC. Conventional style illumination was found to be more cost-effective than high-mast lighting. High-mast lighting did not achieve a B/C above 1.0 for the LINC.

Hwy	Ave. Monetary Benefits	Lighting Options	Construction Cost	B/C
RHVP	\$11,709,977	High-Mast	\$8,233,057	1.42
		Conventional	\$5,672,458	2.06
LINC	\$9,327,873	High-Mast	\$10,062,625	0.93
		Conventional	\$6,933,004	1.35

Human Factors Assessment: A human factors assessment of the existing non-continuous illumination was completed. The current partial illumination configuration along the LINC and RHVP is not consistent with drivers' experience on most other peer facilities in Ontario. Overall, the partial illumination design in place has the potential to increase the required adaptation time for drivers entering the Parkways, particularly at connections from the QEW and Highway 403. The human factors assessment also identified potential benefits from continuous illumination for an ageing demographic and benefits for all drivers by reduction in adaptation time from headlight glare.

Environmental Impact of Lighting: The study reviewed the range of environmental impacts that will be required to be reviewed in conjunction with any decision to install continuous lighting. Current environmental science more clearly recognizes that the presence of artificial illumination at night can have effects on wildlife and natural habitat areas. If continuous lighting were to be installed, particularly along the Red Hill Valley, there would be a range of effects on species previously identified as being present in the valley. Effects include; nocturnal wildlife movement disorientation, changes to predator-prey relationships, altered reproductive success, and other wildlife physical effects. It was noted that not all effects are negative for all species. Issues would be identified as part of required environmental studies if continuous lighting was to be considered along the corridor. The current body of scientific understanding of these issues has advanced since the original environmental studies were completed for both parkways. Although the literature suggests strategies to reduce the magnitude of natural environment impacts, it would be difficult to identify successful mitigation techniques for every species as the type of effects and their magnitude varies among wildlife groups.

Next Steps: Environmental Assessment Requirements

As the City contemplates the provision of continuous illumination on the LINC and RHVP, there will be range of significant factors to be assessed so that a comprehensive understanding of the balance between overall benefits and potential drawbacks can be achieved. There is a complex interaction between societal and natural environmental factors. Any consideration for the provision of continuous lighting on the LINC and/or the RHVP will require comprehensive study of the specific benefits and costs, in the framework of, at minimum, the Municipal Class Environmental Assessment process.

The project classifications in the 2015 update to the Municipal Engineers Association Class Environmental Assessment (MCEA) indicate that safety projects, under which provision of continuous lighting would trigger the need for, at minimum, a Schedule 'B' MCEA since the overall project cost can be expected to exceed \$2.4M. If the City contemplates proceeding with an MCEA for continuous illumination, evaluation of alternatives will be the most sensitive and challenging aspect of the process due to the opposing interests of safety and the environment. The following considerations should be expected in conjunction with any action to undertake the project:

- Extensive public consultation will be required– the level of public interest and prior engagement with this infrastructure is considerable;
- It is likely that stakeholders remain highly interested in this location, would actively participate in the study process, and are well versed in the approval process itself;
- The original IEA and subsequent studies noted the importance of natural heritage along the Red Hill Valley, but did not assess the potential impact of continuous roadway illumination– consequently, an in-depth environmental study and scientific literature review using current scientific knowledge would be required; and
- The cost and time to undertake and complete an MCEA seeking to recommend continuous lighting on the LINC and/or RHVO will likely be significant.⁴⁰²

374. Mr. McGuire replied to Mr. Malone the following day, writing:

That's a good summary and I will use the majority of it for our report.

Can you please forward the Word version so I can re-use the content.⁴⁰³

2. City Solicitors Discuss FOI 18-189 on December 3, 2018

375. On December 3, 2018, Ms. MacNeil replied to an email from Ms. Auty on November 30, 2018, in which Ms. Auty requested a discussion regarding “the RHVP MFIPPA file”. Ms. MacNeil asked Ms. Auty if she was available that afternoon to discuss.⁴⁰⁴

376. Ms. Auty replied, asking Ms. MacNeil if she could “come by around 130?” Ms. MacNeil agreed to do so.⁴⁰⁵

3. December 3, 2018 Meeting

377. The City has produced notes dated December 3, 2018, which appear to have been made following a meeting attended by Mr. McGuire, Ms. MacNeil and Ms. Cameron. The

⁴⁰² [CIM0016819.0001](#) at images 3-5

⁴⁰³ [HAM0027656_0001](#)

⁴⁰⁴ [HAM0062484_0001](#)

⁴⁰⁵ [HAM0062484_0001](#)

subject of the meeting was identified as “Review of RHVP FOI materials”. The notes included the following:

Notes for Monday Dec 3, 2018

Review of RHVP FOI materials.

Present – Gord McGuire, Byrdena MacNeil, Diana Cameron

- 1 What is the status of the request for an extension?
 - Extension currently on hold with FOI office
 - Legal gets involved when its not a run of the mill
- 2 What is the date we need to reply?
 - Have not heard anything more to date
Action: Gord / Diana to contact Ann – provide us a new date – ask status of extension – date to reply by
- 3 What materials are within the scope of the request -

There are 4 reports to review; 2013 Tradewind, Golders 2014, CIMA 2015, Golder 2017
- 4 Are any elements to be redacted, removed, or not shared
 - Scope of request: broad request – keep it restricted to what it is – client dept access request – context to back story – talk today with view to documents – not identified – index of records
 - Byrdina – what exemption applies to which – what will be disclosed – report wise / not all e-mails – 4 major documents

1st report - Tradewind scientific report (almost 100% responsive – nothing in report – done for us). The summary and conclusions may be considered non-responsive.

Action – Review with Legal as non-responsive or excluded in MFIPPA – recommendations only but remainder of report appears responsive.

2nd report - 2014 Golder report that included Tradewind report as an appendix which is an assessment – falls within 5 year window. The entire report doesn’t necessarily relate to friction testing.

Section 5.0 (pg 7.) responsive to friction testing – not a recommendation is an observation –

Section 6 moves into recommendations and analysis phase – page 8 discusses routing and sealing short term fix for friction – recommends micro surfacing : 10 to 15mm of another surface material

Action – Review with Legal as non-responsive or excluded in MFIPPA – recommendations only but remainder of report appears responsive

***ACTION Diana: PO for this assignment, did we close and pay in full / PO 69812**

- i. Keep out as long as it hasn't been – section 7 advise and recommendations is exempt under section 7.1

3rd document – CIMA Safety Audit– not performed by Engineering Services, done for Traffic Engineering. Potential conflict of interest between Betty Matthews Malone (City Director) and Brian Malone (CIMA principle)

****ACTION**** - report says we should friction test / second opinion / why we didn't have conversation – Gord has no insight / performance differentials / recommends should be follow up testing on the asset but they don't have data to work from (section 5.3 of report identifies recommends slippery when wet – is this part of FOI?) – 2015 in absence of all – not sure if this is responsive – ***ACTION: who procured – what roster and what happened**

Action – Review with Legal as non-responsive or excluded in MFIPPA – Entire report.

- 4th document – 2017 assignment to Golder – Friction testing on RHVP – e-mail only from Golder – PO87498 – work assigned – performed 2 out of 3 elements – what do we release?
- What does this fall under - document – is the work completed? Three things back from Golder – friction testing / pavement texture analysis / coring . What we got back is incomplete: 2nd page of e-mail – could not do pendulum test due to weather. Pavement texture: measured texture depth– did test – 1.25 mm – noted as better than a 1mm benchmark. Reasonable results / cored:
- element C in proposal – bring cores to Whitby to break out stone that makes asphalt- testing from Ireland shows MSV is 45 which means average or medium. These appear to be preliminary findings - other tests / March 2018 results presented to staff (Gary??) / where are we at with this - – Nov 2017 proposal is responsive to FOI

ACTION Diana: need to find out where this assignment sits. **report from Golder – purchase order?? Closed?

Action – Review with Legal as Entire assignment appears responsive.

- 5 Who is providing direction on this reply
 - Gord will lead and Byrdena will provide client support
- 6 If there is a need to inform council of this matter
 - Legal (Nicole), City Manager (Mike) and GM PW (Dan) will decide on the strategic direction with Gord's input
- 7 I have a report addressing an OBL for lighting, should we defer until the matter of the FOI is understood
 - Need to determine if all RHVP OBL reports will come after the FOI info is released

- 8 What is my role going forward
- TBD
- 9 Next steps
- Need documents from Mike Becke on Asphalt Testing
 - Gord would like a meeting next week with Nicole / Dan / Edward / Byrdena about the message we want to convey to FOI staff⁴⁰⁶

378. The City has also produced what appears to be a partial recording of this meeting. The recording was stored in a Microsoft OneNote file prepared by Ms. Cameron on December 3, 2018, at 11:26 a.m. The OneNote document indicates that the recording was started the same day at 9:44 a.m. The title of the page with the embedded recording is “Some Audio from Value for Money Audit Meeting with Byrdena”.⁴⁰⁷

379. The recording, which is one hour and 23 minutes in length, appears to capture a conversation with Mr. McGuire, Ms. Cameron and unidentified legal counsel regarding the events leading to the discovery of the Tradewind Report, and the City’s response to FOI Request 18-189. Certain portions of the recording have been excerpted and transcribed by Commission Counsel and are included below. Mr. McGuire has not yet confirmed the accuracy of this transcription. The unidentified speaker is referred to as “Speaker 2”.⁴⁰⁸

[Mr. McGuire]: I'm not not an engineer by trade, I think actually that's giving me an advantage in the cycle and I'm here to manage the business and direct the teams to develop all of the things that need to happen. Gary was an engineer and spent a lot of time on asphalt. In his opinion his knowledge of asphalt was superior to everyone else's. And that what he said went. And we need to talk about his role in this at some point. And we also need to talk about his current employment status at the City

[Speaker 2]: He's on a contract or something

⁴⁰⁶ [HAM0061996_0001](#); [HAM0061992_0001](#); and [HAM0061993_0001](#)

⁴⁰⁷ [HAM0054051_0001](#) attaching [HAM0054052_0001](#)

⁴⁰⁸ [HAM0054063_0001](#) at image 73 attaching [HAM0054128_0001](#)

[Mr. McGuire]: He's on a contract to the LRT. So I don't know how that works, [indiscernible] that's an interesting wrinkle.⁴⁰⁹

...

[Speaker 2]: Yeah and so you and Dan spoke to him, right?

[Mr. McGuire]: We did. Did you ever see An Officer and a Gentleman? You can't handle the truth? Was close.

[Speaker 2]: Really?

[Mr. McGuire]: Yeah. So we have a conversation - his basic position is, there is no standard in Ontario, or in Canada. But we did this test. Didn't tell me anything because there's no standard. [Indiscernible]. [Indiscernible] difference between the two facilities that are side-by-side. So that's what I know.⁴¹⁰

...

[Mr. McGuire]: The Golder assignment proposal asks for, on the second page, second paragraph to be presented in the draft report - upon receiving a draft report, may be included in finalized. So we seem to have gotten a response from him up to that phase,

[Ms. Cameron]: Minus the report

[Mr. McGuire]: But you haven't seen a report. All I have is

[Mr. McGuire]: All I have is a preliminary, I have some documents around the findings, but I don't have a report. And he also tells me that he considered those other tests to be meaningless. And I guess my question here is, what were the results?

[Speaker 2]: It says a hard copy of the results were presented at the meeting with the City representative in March 2018, in his email. Is that, I'm assuming that was with Gary, right?⁴¹¹

...

[Mr. McGuire]: The strange offering that happened here, is that we've known about this friction issue for a while. Our consultants recommended whether [indiscernible] or not. To microsurface this thing, basically, put a tack coat on and up the friction. CIMA went out and said, you guys should do friction testing. We hadn't had the Red Hill programmed for resurfacing in, through any of that cycle. Normally we program work like that, it's like 10 years ago. So we would say 'this street from A to B, we've got it in our ten year capital plan and it looks like it's going to be \$100,000.' We didn't have the Red Hill in our 10 year capital. In 2017, we dumped 15 million bucks into the Red Hill, unbeknownst to anybody. In 2018

-

⁴⁰⁹ [HAM0054128_0001](#) from approximately 00:04:34 - 00:05:31

⁴¹⁰ [HAM0054128_0001](#) from approximately 00:06:23 – 00:07:13

⁴¹¹ [HAM0054128_0001](#) from approximately 00:16:11 – 00:17:15

[Speaker 2]: That's what Ron was asking, he said is there not in some sort of report because that's a pretty big chunk of change to go to the Council and get approval, is it not? Like how did somebody just get 15 million without a report to Committee or Council?

[Mr. McGuire]: There was an action item is in 2017 are - somebody injected resurfacing capital for the RHVP and Linc. That's an action item for me - have to go back to Rick and Al and find out how that happened. Normally, if we're going to program work, [indiscernible] at the end of the day, we need some time to react to it, we can't just turn our minds to hey, here's 15 million bucks. There's a lot of planning, normally we need a couple of years run into it.

...

[Speaker 2]: That is odd

[Mr. McGuire]: an odd manoeuvre. If you're trying to pull all internal together, not a. So we knew in 2014 for Golder Report that the Red Hill was subject to higher the number of volumes, had some cracking issues based on a construction technique out of that asset, it had a slightly different base construction and a very deep, what they call a rich bottom layer of asphalt which was supposed to protect it from cracking from the top of the base layer that was called the rich bottom layer, [indiscernible] more of a more plasticky kind of material [indiscernible] which is called binder, which is kind of a rougher course asphalt and on top of that the [indiscernible], so it was a three layer cake as opposed to conventional asphalt which is generally base, binder, riding surface. So put this rich bottom layer, so what they did was [indiscernible] cracking, [indiscernible]. So get on your riding surface before you start getting top down cracking into the other layers, which means you'll have to do a full restoration and it'll be a lot more expensive. But we knew that in 2014. We didn't program any work until 2017. So there's some gap in there. So a three years gap, I don't know why that happens. Seems odd, to me. So that's, yeah, so here's your here's your different material make up for, this is the conventional road. So this is this is what you call hot course asphalt, you're 40 or 50 mils, around two inches. This is 120. So about four inches of what they call a binder, then granular, which is a granular A, which is a nicer material than granular B, which is kind of a coarser material. So 450 is like [indiscernible] so a foot and a half and then half a foot, so there's two feet, and then there's another six inches on top of it. That's your real construction. [Indiscernible] lesser subgrade, about the same amount of granular A, 80mm of this rich bottom layer, which is this kind of plasticky, thicker asphalt mix [indiscernible] and then the 40mm riding course, it got into the riding course and said, wearing forces then getting some cracking, but nothing's happening down here. So get at this. That was 2014.

...

[Mr. McGuire]: that was Golders' 2014 report-

[Speaker 2]: The draft report?

[Mr. McGuire]: Draft report stating you've got some challenges, you've got some issues and you need to deal with it. And one of the things we recommend is that routing and sealing. And in order to address your friction issue, put that microsurfacing.

[Speaker 2]: Right.

[Mr. McGuire]: So that was 2014, and in 2015 CIMA went out and did their study, apparently, with no knowledge of the friction tests.

[Speaker 2]: In 2015...

[Mr. McGuire]: Right and then in 2017, we've retained the Golder again to say hey, is there a friction issue?

[Speaker 2]: Yeah

...

[Mr. McGuire]: gets us to where are we getting to who and why? That is a two year window. So now that's gotten us to this concept of hot-in-place.

[Speaker 2]: so start, that conversation been around for a couple years

[Mr. McGuire]: That, it's a bizarre conversation, given the knowledge of the performance of these materials.

[Speaker 2]: Right

[Mr. McGuire]: It's like, it's like you've got a really crappy car. And you know, it's not running well, but you're gonna take it to the paint shop and get the paint redone. But you're still gonna have this crappy car.⁴¹²

...

[Mr. McGuire]: Well, I didn't know at the time that we were going through some of these things, at the beginning, I knew in September

[Speaker 2]: September 2018?

[Mr. McGuire]: 2018, that there was a friction test out there that was negative. At the same time I was trying to understand what Mike and Susan were doing with this whole hot-in-place thing [indiscernible] I went to Susan shortly after with the test and said, I don't know what we're doing here, but we're stopping any concept that we'll be using this Stone mastic asphalt back in the Red Hill. And her view was after she read the test, she agreed, I said we need to continue on with the hot-in-place investigation - it's a great parallel stream for us on other asphalt that we've laid down and can potentially expand and extend our program and our funding across more lane kilometres so that's a good news story for the City if we can get there but when we get there but not on this asphalt. I didn't put that in writing anywhere but at the same time we stopped the concept that we were ever using hot-in-place on the Red Hill.⁴¹³

...

[Speaker 2]: So that's you and I, now we have no control over the Access and Privacy officers right. You and I can paper and put down the reason why we don't think, or just by the way

[Mr. McGuire]: Do they get full access to all this information?

[Speaker 2]: They do, yes.

⁴¹² [HAM0054128_0001](#) from approximately 00:24:12 – 00:30:46

⁴¹³ [HAM0054128_0001](#) from approximately 00:37:35 – 00:38:47

[Mr. McGuire]: When do we supply them that

[Speaker 2]: So, well as soon as possible. Because then she needs to go through everything and there's quite, if we send everything there's quite a bit for her to go through and then Anne needs to make a decision based on our comments and submissions of what needs to not be released and what shouldn't be released, but she needs [indiscernible] so once it's in their hands, [indiscernible] legal.

[Mr. McGuire]: I get it

[Speaker 2]: [indiscernible] letting you know that once, because even they override us.

[Mr. McGuire]: their prerogative, they're like the auditor, they'll make a decision I mean, they're bound by legislation and regulations, we can't ask them to not comply with them so [indiscernible].

[Speaker 2]: Yeah, I just want you to yeah, we will do what we can so whatever doesn't get released, but at the end of the day, it's going to be their call. Again, that helps you and I because, right, they made the call if they felt it had to be released it had to be released it's not you and I voluntarily sending it out or not right?⁴¹⁴

...

[Speaker 2]: Yeah, so so I'm just, and so I'm assisting with the FOI thing when you were talking about is there a need to inform Council. So just so you know, Nicole and Ron, and John, and Mike [indiscernible] are all on that too. And they've met with Dan and so. So I would be looking to Ron and Nicole - now Ron's away this week. But Nicole's around, and she's aware. So they're first waiting to hear from me on what it looks like is gonna end up needing to be released, knowing that there's this process, and we still have some time, because we need to finalize it, we need to get it to Anne. Anne is going to need some time to go through it, right and get her decision out. So when is the actual letter going out? I think myself, probably unlikely to be before Christmas -⁴¹⁵

...

[Ms. Cameron]: January 14 has like three Red Hill Valley reports going that are OBL items.

...

[Mr. McGuire]: So why don't we follow up with the agenda for the 14th? Here's my concern, okay, we're going to have a collision of us coming back, let me just,

[Ms. Cameron]: So we're doing the FOI at the same time all these OBL items are going about, about safety.

[Speaker 2]: Oh

[Ms. Cameron]: On the Red Hill

[Speaker 2]: And how do you stay quiet? Is this where we're going with it? How do you stay quiet about this FOI thing without putting them on notice about all these

⁴¹⁴ [HAM0054128_0001](#) from approximately 00:43:36 – 00:45:07

⁴¹⁵ [HAM0054128_0001](#) from approximately 00:48:14 – 00:49:06

[Mr. McGuire]: Well that's my message, here, there's a collision of a series of things coming into Council about the Red Hill. Okay, we've had nothing but conversation with them about the Red Hill over time. I have a draft report, shockingly by CIMA

[Speaker 2]: Okay.

[Mr. McGuire]: On the Red Hill on illumination

[Speaker 2]: Right.

[Mr. McGuire]: So we keep getting asked. There's there's a high level of accidents on the Red Hill. And look at those reports [indiscernible]. The question is, would it be beneficial to light the Red Hill? Is the relationship between accidents in the dark and accident propensity? And so the answer is no. The answer is, you have a high propensity for accidents in the wet, dark or light, there's no significant difference between the accident occurrences in daytime versus nighttime. That said, there's enough accidents to warrant lighting. So lighting is warranted. But it's not going, it's not the driver [indiscernible]. The major issue on the Red Hill is wet weather performance, which comes back to the [indiscernible] conversation. Gary's response has always been, has been an Environmental Assessment done in the original Red Hill, that barred lighting 100%, because of the influence on the natural environment. We retained CIMA, we went through every document out there, there is no there is no exclusion for lighting on those facilities.⁴¹⁶

...

[Mr. McGuire]: here's my view, and it may be subject to a lot of insight from you. Probably they're going to release a story around our friction testing that is inconsistent with our previous message and have been telling the public that there is no conclusive testing from [indiscernible]...You can call it inconclusive, you can call it informal, whatever you want to select [indiscernible] and we knew it was [indiscernible] . The story I want to tell is, we're new here, we have a different process. We understand that the [indiscernible] exists, our number one project in 2019 is resurfacing this facility. It's a full new mix. And we're also working with Roads & Ops to review any and all safety guidelines out there, including are guiderails at the current standard, what can we do while the road is down to bring it up to the highest possible safety standards? That's the discussion I want to bring forward. And understand we were aware of it now, were aware of it in mid to late September.⁴¹⁷

...

[Mr. McGuire]: So the message I would like to bring forward is, yes, we're aware of it. We know it's not a great response, but here's what we're doing right now. And then all the other stuff, about the OBL and the lighting and the functional study, once this thing, sort of, once we get it out, and we have a plan of action, then we can come back with okay, so we're going to talk to you about the lighting, we're talking about the functional study, we'll talk to you about the current safety status on it, framed by that conversation. That's my first feeling. Not sure how Dan or Mike or Nicole or Communications feels about it. Given the mid-January release, I'm hesitant to bring all this other stuff forward without informing Council that this is coming.

...

⁴¹⁶ [HAM0054128_0001](#) from approximately 00:49:32 – 00:52:07

⁴¹⁷ [HAM0054128_0001](#) from approximately 00:56:05-00:57:36

[Mr. McGuire]: And Hamilton is advanced in its asphalt and it's a lot of it's due to Gary. He is well known in the industry for those reasons, and we do have a strong mix and quality control process and things like that. That said there's a friction issue with that facility that we haven't dealt with. And I don't know why.

[Speaker 2]: How quickly could it have been dealt with? So let's say

[Mr. McGuire]: Microsurface it

[Speaker 2]: Within two years?

[Mr. McGuire]: Probably a year

[Speaker 2]: January 2014, they knew

[Mr. McGuire]: could have gone to Council and said we have an issue here. And we need to put some emergency funding on it to address this thing, and I apologize, but I don't know what happened.

[Speaker 2]: That could have happened relatively -

[Mr. McGuire]: Microsurfacing, it is a protective coat, it's an emulsion bonding crushed stone for traction. So it's like a slurry seal, it's like a driveway sealer, you put it on and wait 10 hours, like a tack coat with a different granular and the high friction characteristic in it, and then just basically pour it on the existing so that

[Speaker 2]: That would have bought us time?

[Mr. McGuire]: Yeah, absolutely.⁴¹⁸

...

[Ms. Cameron]: Are you saying we didn't react on anything in the original Golder Report?

[Speaker 2]: That's what I'm wondering. But the microsurfacing anyway, that would have been a temporary fix? Maybe, such that in a couple of years, we would have had to rip it all up and redo what we're doing proposing see now anyway?

[Mr. McGuire]: Correct

[Mr. McGuire]: be arguably throwing away money, but it would increase the frictional characteristics of that asset.⁴¹⁹

...

[Speaker 2]: So certainly, any earlier litigation that settled, depending on what if this came out, remember, there was just one comment that Oh, Ron, thinks maybe one of these reports came out in the course of litigation, we weren't sure. Okay. So it may be that the Tradewind or the Golder Report was known to Risk and Ron. Because, as part of litigation, it kind of came out - because you have to produce everything that's relevant, right, all relevant documents. So they weren't, they knew of this, but it was a draft report. So I'm thinking it might have been the Golder Report that they were aware of. So if there was a

⁴¹⁸ [HAM0054128_0001](#) from approximately 1:04:54 – 1:06:12

⁴¹⁹ [HAM0054128_0001](#) from approximately 1:10:52 – 1:11:52

settlement and the City, maybe because it was draft, maybe they didn't produce to the other side, who knows there's all these unknowns, but if you come to any kind of settlement, and it's based on certain information, you find out fundamentally –

...

[Mr. McGuire]: Then that will fundamentally release friction testing, and will undermine a lot of stuff we've had to say over the last several years because [indiscernible] that is what it is. Then we need a strategy around, what's our approach to Council?

[Mr. McGuire]: If I'm going to report to them, you know, the lighting report is

[Speaker 2]: The lighting report?

[Mr. McGuire]: Not a really compelling story.

[Speaker 2]: Is there any other OBL that could be brought

[Mr. McGuire]: OBL on

[Speaker 2]: Like a more generic one

[Mr. McGuire]: On accident stats, the speeding, and some other stuff like that.

[Ms. Cameron]: They've combined two of them

[Mr. McGuire]: Yeah. So people have a tendency to speed, like we know up the average traveling speed on the Linc in the off peak times, like 140 kilometers an hour and it's supposed to be 90. I mean some crazy numbers up there but, [indiscernible] accidents. All of those variables coming together. People seem to be travelling at a very high rate of speed and posted is 90, and it was designed at 90. You know, so what's going on? Right?⁴²⁰

...

[Mr. McGuire]: Yeah. Before you go I wanted to ask you another couple of quick questions. Oh, yeah, Diana want to just give me a second?

[Ms. Cameron]: Yeah⁴²¹

[*End of recording.*]

380. Mr. McGuire's calendar contained an entry for a meeting titled "RHVP review" on December 3, 2018, at 9:00 a.m.⁴²²

⁴²⁰ [HAM0054128_0001](#) from approximately 1:16:07 – 1:17:41

⁴²¹ [HAM0054128_0001](#) from approximately 1:23:37-1:23:45

⁴²² [HAM0061562_0001](#)

381. Mr. McGuire sent a copy of these notes to Ms. MacNeil on December 4, 2018, writing:

Please see that attached rough notes on this file.

We are working on our action items here, pursuing the purchasing side and reports to fill out our records.

Can you review this and comment please.⁴²³

4. Mr. McGuire Discusses the Tradewind Report with Audit Services' Staff Related to the VFM Audit

382. On December 3, 2018, Mr. Pellegrini emailed Mr. Sharma and Mr. McGuire, copying Charles Brown (Director and Auditor General, Audit Services, Office of the City Auditor, City Manager's Office, Hamilton) and Brigitte Minard (Manager, Performance & Internal Control & Deputy City Auditor, Audit Services, Office of the City Auditor, City Manager's Office, Hamilton), responding to Mr. Sharma's email from November 27, 2018.

Mr. Pellegrini wrote:

In order to properly understand the analysis and recommendations made by the Consultant (Golder Associates) on the state of the Redhill Valley Expressway, Audit Services needs to see the un-redacted version of the report. We cannot wait until Legal Services has completed their review. This process may take months and will have an impact on Audit Services completing its review!

If this presents a problem, please provide the name of the Solicitor in Legal Services that advised you of this so that Audit Services may discuss this matter directly with the Solicitor. As it is two whole paragraphs have been redacted impacting the analysis and recommendation made by the Consultant.

Thank you in advance for your assistance on this matter.⁴²⁴

383. Mr. McGuire replied the same day, writing:

Possibly there is some miscommunication here and we are happy to have you review the file . We have a copy here and you can arrange with Diana to come and see the copy. The Solicitor on the file is cc'd as well, and she is Byrdena MacNeil.

⁴²³ [HAM0061995_0001](#) attaching [HAM0061996_0001](#)

⁴²⁴ [HAM0061997_0001](#)

The data we have withheld, at Legal Services advise, is related to friction testing and subject to an FOI / MFIPPA request on that subject. There is ongoing and pending litigation on this matter and we're following their advice. The MFIPPA process will be shorter than months from my understanding.

We have redacted the paragraphs and there is one appendix of 13 pages related to the friction characteristics that we discussed and as noted are available here for your review.

Please contact Diana for access to this file.⁴²⁵

384. Ms. MacNeil forwarded this email to Mr. Sabo on December 3, 2018.⁴²⁶

385. Mr. McGuire forwarded his email separately to Ms. Auty and to Ms. MacNeil on December 4, 2018. To Ms. MacNeil, he wrote:

As per our conversation today re: the copying of our MFIPPA related documents by the auditor.

We had discussed the concerns about the sensitivity of our materials responsive to the RHVP friction testing MFIPPA request (external) and the overlap with the auditors current value for money audit on our asphalts (City Wide and internal). The value for money audit has been underway for a few months and we had not yet fully assembled the performance, QA and technical documentation to respond.

The position you had advised was to provide the auditor our 2014 Golder RHVP report records on the RHVP inclusive of the condition assessment. But we would redact the friction testing related materials until such time as the MFIPPA response had been fully analyzed.

Our position was to offer the auditor reading access to the file at my office. That is laid out below in my email to Domenic. Once the MFIPPA access had been determined then we would release the document in its entirety.

However today the auditor visited my office while I was in a meeting and made copies of the report. He mentioned that staff allowed it but I had previously discussed access to these files with him and thought that our approach was understood.

I'm concerned that the audit now has records that may be released prior to our MFIPPA response. This may influence our position on this file, I may be over reacting but feel this is an element that requires some higher level understanding. As such I've copied Dan McKinnon.

Can you advise of our possible next steps.⁴²⁷

⁴²⁵ [HAM0061997_0001](#)

⁴²⁶ [HAM0062485_0001](#)

⁴²⁷ [HAM0061997_0001](#)

386. Ms. MacNeil forwarded this email to Ms. Auty and Mr. Sabo the same day, writing:

FYI

In my discussion with Gord today, I asked whether there was a possibility that the Audit department could inadvertently release information about the friction testing reports that could end up being discovered by any councillors before there has been a chance by PW and/or Legal Services to report on the issue to Council. We had no answer between us so I am raising it with you.⁴²⁸

5. December 4, 2018

(a) Copy of Tradewind Report with Document Properties December 4, 2018

387. On December 4, 2018, Ms. MacNeil emailed Ms. Auty, copying Mr. Sabo, under the subject line “RHVP Reports”, attaching the Tradewind Report and the 2015 CIMA Report. She wrote:

Further to our discussion of this afternoon, here are two of the four key reports. The third one (Golder) is very large and still hasn’t appeared in my inbox yet although scanned. I will send it and the fourth (smaller one) along to you tomorrow.⁴²⁹

388. The City has produced a copy of the Tradewind Report which was located within the documents of Mr. Moore, Ms. Graham, Mr. Soldo and a City shared file.⁴³⁰ The document properties identify its date as December 4, 2018. The document does not have any attached documents or emails. To date, the Inquiry has not received documents providing context for the December 4, 2018 metadata date.

⁴²⁸ [HAM0062486_0001](#)

⁴²⁹ [HAM0061855_0001](#) attaching [HAM0061856_0001](#) and [HAM0061857_0001](#)

⁴³⁰ [HAM0001463_0001](#)

(b) Discussions Regarding the Tradewind Report with City Legal, Audit Services

389. On December 4, 2018, Ms. Cameron forwarded an August 27, 2018, email from Mr. Norman to Mr. McGuire regarding the VFM Audit to Mr. McGuire and Mr. Sharma. Mr. Norman's email was in response to Mr. McGuire's August 24, 2018 email regarding the VFM audit and advising the managers that Audit Services had contacted staff without his knowledge. Mr. Norman wrote:

Seems a bit sneaky that they didn't advise you first they wanted to investigate this. They have done it before with me; ie not talking to my director. I would think at this point they should be satisfied that you are proceeding with work to address Bill 6.⁴³¹

390. Mr. McGuire responded, asking Ms. Cameron to put the email in the communication folder. Ms. Cameron advised that she had done so, and added that she "moved all your e-mails under internal correspondence."⁴³²

391. Also on December 4, 2018, Mr. McGuire emailed Mr. Andoga (with Ms. Cameron and Mr. Sharma copied) regarding data Mr. Andoga had sent to Audit Services in October 2018. On October 18, 2018, Mr. Andoga emailed Mr. Pellegrini, writing:

Further to our discussion please find the revised table attached identifying the financial re-investment in roads or pavement infrastructure from 2013 to 2017. We have defined the pavement investment through the road replacement, urban rehabilitation & local Road Program, as well as the rural rehabilitation programs as 100% of the funding noted is considered improvement or investment into the asset.

For consideration a number of programs managed through Road Operations such as the Major Road Maintenance Program, Sidewalk Rehabilitation Program and Council Priority - Minor Rehabilitation programs may impact the pavement asset however any such impact would be considered minimal. The category of "Council Priority" would also

A number of programs currently managed by Road Operations also can be considered as Right of Way Investment, such as Retaining Wall Rehabilitation Program, Escarpment Slope and Appurtenance Stabilization Program, and Guide Rail Replacement Program

⁴³¹ [HAM0027666_0001](#)

⁴³² [HAM0027667_0001](#); and [HAM0027669_0001](#)

being those programs to maintain and/or provide a level of safety for the road corridor. Similar projects Traffic Engineering and Street lighting may also fall under this category.

Similarly, consideration can be given to Right of Way Enhancement programs such as the Semi Barrier Rehabilitation Program, that increase service level but not extend the life of the roadway.

If you should have any questions in this regard, please feel free to contact this office.⁴³³

392. On December 4, 2018, Mr. McGuire exchanged emails with Mr. Andoga in response to his email from October 18, 2018:

[GM]: Rick: as below we wanted dipankar included in all comms for this file. Sending data to the auditor without our knowledge leaves the file we retain on this with gaps.

As noted all data must flow through our process to ensure the integrity of our response.

We will be replying to the audit and I need full sight on the data.

[RA]: Thanks for sending
I truly forgot I sent the file originally
Apologies I'm done with Auditors
I have meeting with Dipankar in the morning, I will discuss the response with him
Do you want me to retract my response to Dominec?

[GM]: The data is now out there and can't be retracted.
Financial data is outside the scope of the current project charter and we would have asked for an update to the requested information
As it stands now he has a spreadsheet of historic fiscal reviews that should have come from corporate as you pointed out below. Our data may not agree with corporate and was not an element of the current data collection.
It will lead to misinterpretation of some input assuredly and we were trying to stay on course via dipankar
Please review the files with dipankar and let's put this on track by having everyone work through my office.
Please tell your staff that all data for the audit, all queries, meetings etc are arranged through Diana⁴³⁴

393. On December 4, 2018, Nicole Auty (City Solicitor, Legal & Risk Management Services, Corporate Services, Hamilton) emailed Mr. Zegarac and Mr. McKinnon under the subject line "Meeting on the RHVE". She wrote:

Based on my conversations with Gord and Byrdena today, I think we need to get everyone together at the same time to discuss the totality of the reports and information on this issue

⁴³³ [HAM0027671_0001](#)

⁴³⁴ [HAM0027671_0001](#)

and review options for next steps. I would propose Thursday afternoon if possible. I would want John McLennan, Gord, Byrdena, and myself plus anyone else you think should be there.⁴³⁵

394. Mr. Zegarac replied to Ms. Auty and Mr. McKinnon the same day, writing “Make it happen.”⁴³⁶

395. Ms. Auty forwarded this message the same day to Ms. Goral, Ms. Wunderlich, Ms. Barber and Rosanna Melatti (Interim Executive Assistant to the City Manager, City Manager’s Office, Hamilton), writing:

Can we please find a time Thursday afternoon if possible to discuss this.

Invitees: Dan McKinnon, Mike Z, Gord McGuire, Byrdena MacNeil, John McLennan and anyone else Dan/Gord think should be included.⁴³⁷

396. On December 4, 2018, Mr. Zegarac sent a calendar invite to Mr. McKinnon, Mr. McGuire, Ms. MacNeil, Mr. McLennan and Ms. Auty for a meeting regarding the RHVP scheduled for December 6, 2018.⁴³⁸

397. On December 4, 2018, Mr. McKinnon forwarded the message he received earlier that day from Mr. McGuire to Mr. Zegarac and Ms. Auty. He wrote:

Hello, Gord was in my office not long ago and was very frustrated about this. He felt he was clear with Domenic and felt a little betrayed with what happened. This is new water for me and I’m not sure if anything needs to be said to Charles but if so not sure it should be me, any advice?⁴³⁹

⁴³⁵ [HAM0062001_0001](#)

⁴³⁶ [HAM0062001_0001](#)

⁴³⁷ [HAM0062487_0001](#)

⁴³⁸ [HAM0062002_0001](#)

⁴³⁹ [HAM0062000_0001](#)

398. On December 5, 2018, Ms. MacNeil created a one hour calendar entry for the day prior, beginning at 4:30 p.m. The subject of the entry was “Met with N Auty re RHVP”, and it was categorized as a meeting.⁴⁴⁰

(c) Mr. Soldo Requests Conversation with Mr. McGuire Regarding RHVP Repaving

399. On December 4, 2018, Mr. Soldo emailed Mr. McGuire under the subject line “RHVP”:

[ES]: I need to talk to you about the repaving.

You around Wednesday?

[GM]: Not supposed to be here now, tomorrow or Thursday.

Call my cell and we can review.⁴⁴¹

(d) City Receives Claim Relating to November 22, 2018 Collision

400. On December 4, 2018, Mr. Soldo emailed Mr. McGuire and Mr. McKinnon, forwarding an email regarding a claim made against the City resulting from the asphalt spill collision on November 22, 2018.⁴⁴² The email attached a letter from Adamson Claims Services Inc., which included:

We understand that the City of Hamilton completed several engineering assessments with respect to the perpetual pavement used in the construction of the Redhill Valley Parkway. There are numerous articles written about the slippery conditions on the Redhill Valley Parkway. We understand that a resurfacing project for the Redhill is planned for the summer of 2019. The perpetual pavement was to last 50 years, however, is now being replaced after only 11 years.

Can you please provide us with the engineering reports with respect to the friction tests, and the City of Hamilton’s justification for resurfacing the Redhill. We assume these

⁴⁴⁰ [HAM0062488_0001](#)

⁴⁴¹ [HAM0027665_0001](#)

⁴⁴² [HAM0035716_0001](#) attaching [HAM0035717_0001](#)

engineering reports are readily available. Thanks, and if you have any questions, please advise.⁴⁴³

401. Mr. McGuire forwarded this email to Ms. MacNeil, writing: “More interest in the RHVP files.”⁴⁴⁴

(e) Mr. McGuire's Discussions with Dr. Uzarowski

402. On December 4, 2018, Mr. McGuire emailed Dr. Uzarowski regarding the 2017 Golder Pavement Evaluation, replying to the email he sent on November 29, 2018. He wrote:

Can you review the attached proposal and advise if there was a final report created as per my request below.

As well why did the Pendulum testing not get performed during more favourable conditions at another time?

Please advise as soon as possible as this is the topic of an Freedom of Information request.

Thanks in advance⁴⁴⁵

403. Dr. Uzarowski replied the same day, writing:

Sorry for being quiet. I have just returned from a business trip.

I am travelling tomorrow and will contact you on Thursday to discuss.⁴⁴⁶

404. On December 4 and 6, 2018, Dr. Uzarowski forwarded himself email exchanges he had in the past related to the RHVP, including:

⁴⁴³ [HAM0035717_0001](#)

⁴⁴⁴ [HAM0053903_0001](#) attaching [HAM0053904_0001](#); and [HAM0061853_0001](#) attaching [HAM0061854_0001](#)

⁴⁴⁵ [HAM0053900_0001](#) attaching [HAM0053901_0001](#) attaching [HAM0053902_0001](#)

⁴⁴⁶ [HAM0053917_0001](#)

- An email from March 10, 2016, which he sent to “jon@skidabrader.com attaching a picture of the RHVP surface after construction⁴⁴⁷
- An email from Paul Janicas (Plant Superintendent, Dufferin) dated June 22, 2007, which attached the RHVP SMA mix design specifications.⁴⁴⁸
- An email attaching the purchase order for the 2017 Golder Pavement Evaluation⁴⁴⁹

6. December 5, 2018

(a) *Continued Discussions Regarding Audit Services and VFM Audit*

405. On December 5, 2018, Mr. McGuire emailed Mr. Andoga, Ms. Jacob, Mr. Oddi, Mr. Norman, and Mr. Lamont, copying Mr. Sharma, Ms. Cameron, Mr. Perusin and Mr. Becke, replying to his August 24, 2018 email regarding Audit Services:

This email is to go no further than this distribution list.

As this project moves into the delivery phase I am asking that all communications to the auditor are through my office, via Dipankar.

My expectations are that Eng. Services will need to respond to an audit report. In order to do so we need a complete record of all interactions, data, deliverables and communication on this file. Talk to your staff and inform them of this requirement.

Please inform staff that any request, meeting, update, clarification or inquiry from the auditors office will need to be directed to Dipankar.

Dipankar will lead to response and work with the sections to develop the reply.

To date we have assembled a significant amount of material on the performance and technical sides.

The plan is to began submissions to the auditor this week, which I expect will generate questions.

As noted the auditor will be generating a report, and we are assembling all the records in one location.

⁴⁴⁷ [GOL0002921](#) attaching [GOL0002922](#)

⁴⁴⁸ [GOL0001611](#) attaching [GOL0001612](#)

⁴⁴⁹ [GOL0003857](#) attaching [GOL0003858](#) attaching [GOL0003859](#)

This is a high priority request, and needs immediate attention.⁴⁵⁰

406. Mr. Sharma emailed Mr. Oddi on December 5, 2018, asking for an electronic copy of the report, proposal and requisition for phase 1 of the PMTR conducted by Golder. Mr. Oddi replied the same day, writing:

Sorry, I did not initiate this review/study and do not know where the information is stored. Please check with Gary Moore to see if he has the information.⁴⁵¹

407. Ms. Cameron forwarded Mr. Oddi's response to Mr. Moore, asking "[c]an you advise if there was a phase I report?"⁴⁵²

408. Approximately 10 minutes later, Ms. Cameron emailed Mr. Oddi, writing:

Marco I spoke to Gary and he advised that even though Phase 1 was not initiated by you it is pavement measurement and should be with Tyler. Can you please check and advise.⁴⁵³

409. On December 5, 2018, Mr. Sharma emailed Mr. McGuire regarding a catalogue he and Ms. Cameron had assembled for the VFM Audit. He advised that they were still missing the following:

- Final tender cost and schedule breakdown for the all the 13 projects.
- QA/QC testing summary for those projects.
- Couple of report from Golder.⁴⁵⁴

410. The attached spreadsheet did not reference the Golder or Tradewind Reports.⁴⁵⁵

⁴⁵⁰ [HAM0027672_0001](#)

⁴⁵¹ [HAM0027684_0001](#)

⁴⁵² [HAM0027687_0001](#)

⁴⁵³ [HAM0027688_0001](#)

⁴⁵⁴ [HAM0035731_0001](#)

⁴⁵⁵ [HAM0035732_0001](#)

411. Also on December 5, 2018, Ms. Cameron emailed Mr. Sharma and Mr. McGuire regarding the audit catalogue, writing:

Red Hill (hyperlink)

Gary stopped by and under the Directors office he had created “Correspondence” – above is the link to the folder. It has folders related to Bridge 452 / Centennial Sewer / Go Niagara Expansion / MTO / Red Hill and Waterdown By-Pass Road.⁴⁵⁶

(b) Discussion of RHVP Related Reports for Upcoming PWC Meeting

412. On December 5, 2018, Mr. Soldo forwarded an email to Mr. McGuire from Mr. Ferguson, attaching a draft of the staff report regarding the Speed Limit Study. Mr. Soldo advised that he would be “holding off on this report until February as it should be incorporated into the overall RH report”.⁴⁵⁷ The report recommended that the existing speed limit be retained on the RHVP.⁴⁵⁸

413. Approximately twenty minutes later, Mr. McGuire responded to Mr. Soldo’s email, writing: “[t]here is a meeting tomorrow with the City Manager. Legal and risk will advise of next steps. I will let you know ASAP.”⁴⁵⁹

414. Ms. Cameron emailed Mr. McGuire, copying Mr. Soldo and Ms. Eisbrenner the same day under the subject line “RHVP January Reports”. She advised:

I’ve moved the street lighting OBL to the February 22nd date. I believe there is still a RHVP Report from Edwards group that has already been submitted to the GM’s office. Did you decide if any reports are going in January on this subject?⁴⁶⁰

⁴⁵⁶ [HAM0027689_0001](#)

⁴⁵⁷ [HAM0027674_0001](#)

⁴⁵⁸ [HAM0027675_0001](#) at image 1

⁴⁵⁹ [HAM0053923_0001](#)

⁴⁶⁰ [HAM0035733_0001](#)

7. December 6, 2018

(a) *RHVP-Related Meetings*

415. Mr. McGuire's binder contains an entry dated December 6, 2018, which appears to relate to a meeting with Anne and Debbie-Anne, presumably Ms. Watson and Debbie-Ann Rashford (Access & Privacy Officer, Office of the City Clerk, Corporate Services, Hamilton), respectively. Mr. McGuire noted the following:

Meet w Anne & Debbie Ann

→ Check time frame –

→ Check Proposals & Final Payments

Gary's Evidence

Get Details on why it got added

To capital detail

Part of operating

Is this Roadway unsafe? ①

Talk to Edward

Did we action any items out of 2015 CIMA

Cross Divisional Team

No Friction Issue --> CIMA ①

MTQ

Interim Measures:⁴⁶¹

416. Mr. McGuire's calendar contained an entry dated December 6, 2018, at 3:00 p.m. titled "Meeting on the RHVE". Mr. Zegarac was noted as the organizer of the meeting.⁴⁶²

⁴⁶¹ [HAM0061735_0001](#)

⁴⁶² [HAM0061563_0001](#)

417. Also on December 6, 2018, Ms. Auty emailed Ms. Melatti under the subject line “RHVE meeting”. She wrote “Rosanna, could you please let me know when the GIC meeting is over so I can come over for this meeting.”⁴⁶³

418. At 12:51 p.m. the same day, Ms. Auty emailed Mr. Zegarac writing “Mike, should I make my way over now?”⁴⁶⁴

419. Ms. Melatti replied to Ms. Auty, advising her that the meeting had been rescheduled to 3:00 p.m. that day.⁴⁶⁵

(b) Continuation and Expansion of VFM Audit

420. On December 6, 2018, Mr. Oddi replied to Ms. Cameron’s email from the day prior, writing: “We have the phase 2 and 3 reports and were not able to find the phase 1 information on the server or in hard copy.”⁴⁶⁶

421. Mr. McGuire replied that he would ask Dr. Uzarowski for the information.⁴⁶⁷

422. On December 6, 2018, Mr. Sharma emailed Mr. McGuire on December 6, 2018, attaching an updated audit project charter relating to the Audit Information Assurance project, an extension of the VFM Audit. Its purpose was described in the audit charter as to:

- Create a streamline process to deliver prompt information to audit services.
- Evaluating the current performance management systems that are in question from the Auditor office
- Create a process to achieve audit results in a given period of time.

⁴⁶³ [HAM0061808_0001](#)

⁴⁶⁴ [HAM0062489_0001](#)

⁴⁶⁵ [HAM0062490_0001](#)

⁴⁶⁶ [HAM0027696_0001](#)

⁴⁶⁷ [HAM0027696_0001](#)

- Process map the current audit process and do a fit gap analysis with our current projects.⁴⁶⁸

423. The same day, Mr. Sharma also sent Mr. McGuire the updated VFM Audit scope statement he received from Pellegrini. Mr. Sharma wrote in his email:

Attached is the updated scope statement from Dominic which is still is Draft Stage. He has not yet completed his scope statement.

By the looks of it, he is digging for more scope.⁴⁶⁹

424. Mr. Pellegrini emailed Mr. White and Mr. Ferguson on December 6, 2018, requesting a copy of the 2015 CIMA Report

Audit Services has come across a report that appears to have been approved by Traffic Operations regarding the safety of the Red Hill Valley Parkway. The Report is entitled "Red Hill Valley Parkway Detailed Safety Analysis", completed in November 2015. Can we have a copy of this report? Have the recommendations made by this report been implemented?

Also, could you please provide information on any other reports that were completed regarding the safety of the Red Hill Valley Parkway especially if they relate to the slipperiness of the pavement?⁴⁷⁰

425. Mr. White forwarded the email to Mr. Soldo and Mr. McGuire, writing "Gents please be aware of below! Not sure what internal audit has to do with this!"⁴⁷¹

426. Mr. Pellegrini sent the same email to Mr. McGuire separately, copying Ms. Minard and Mr. Brown.⁴⁷²

427. Mr. McGuire forwarded the email to Ms. MacNeil, copying Ms. Auty and Mr. Soldo. He wrote:

⁴⁶⁸ [HAM0027693_0001](#) attaching [HAM0027694_0001](#) at images 4-5

⁴⁶⁹ [HAM0027698_0001](#) attaching [HAM0027699_0001](#)

⁴⁷⁰ [HAM0027697_0001](#)

⁴⁷¹ [HAM0027697_0001](#)

⁴⁷² [HAM0035735_0001](#)

FYI. The audit section is asking traffic for the 2015 CIMA safety audit.

It's not my report and was generated for Ops. We have a meeting today and can add this to the agenda.⁴⁷³

428. Mr. Soldo responded the same day, writing “Dave is providing it.”⁴⁷⁴

429. Mr. Pellegrini also sent Mr. McGuire a calendar invite with the subject “Friction Testing on the Red Hill Valley Expressway” on December 6, 2018. The meeting was scheduled for December 10, 2018. Mr. Pellegrini wrote “I think we should meet on this” in the body of the invite.⁴⁷⁵ Ms. Cameron tentatively accepted the invite on behalf of Mr. McGuire.⁴⁷⁶

430. Later the same day, Mr. Pellegrini emailed Mr. McGuire, writing:

Further to my meeting request from earlier today, please refer to the attached document for the questions and concerns that I would like to touch on for our upcoming meeting.⁴⁷⁷

431. His email attached a document titled “Lines of Enquiry”, which included the items outlined below:

CITY OF HAMILTON
PUBLIC WORKS
ROADS CONSTRUCTION

RED HILL PARKWAY PERFORMANCE

Context: Consultant report (Golder Report, number 13-1184-0026, issued January 2014) cites friction tests that are well below standards – implication being there are significant issues with the performance of the pavement.

1.0 Has there been an ongoing issue with the adequacy of friction resistance on RHVP?

⁴⁷³ [HAM0053933_0001](#)

⁴⁷⁴ [HAM0053933_0001](#)

⁴⁷⁵ [HAM0027707_0001](#)

⁴⁷⁶ [HAM0011845_0001](#); and [HAM0027708_0001](#)

⁴⁷⁷ [HAM0035735_0001](#)

1.1 What actions were taken and did the extra work done confirm, modify or refute the findings? (If any, please provide sample documents to show the actions taken, and whether the work confirms/refutes or modifies the findings.)

Extra Work Done			
What were the Actions taken	Work Confirms Findings	Work Modifies Findings	Work Refutes Findings

1.2 Was Council notified about the low friction numbers, and if so, when? (If Council was notified, please provide committee report(s) dates, names/numbers showing this.)

Committee Name	Report #	Date

1.3 The report (Golder Report, page 7, paragraph 2) cites that friction was an issue in 2007 (friction numbers were between 30 and 34 when they should be at least 40 or higher to be considered adequate). What action was taken then? (If any action was taken, please provide documentation, e.g. meeting minutes.) Why did low friction numbers persist in the 2014 report? (Provide any sample reports explaining the reason for the persistence of low friction numbers.)

1.4 Have we done anything to elevate monitoring of the issue including crash rates? (If any, please provide samples of studies showing that the crash rates are being monitored.)

2.0 Is there a systematic set of processes, managerial systems and procedures in place to appropriately manage pavement performance regarding surface friction? (If so, please provide the documentation requested in 2.1 to 2.7 below.)

2.1 Is there a formal program for friction management, with policies, processes and procedures? (If so, provide documentation.)

2.2 Does the program referred to in 2.1 above have measures? (If so, provide examples.)

2.3 Are the methodologies generally accepted?

2.4 Are there “thresholds for action” as part of the Friction Management approach?

2.5 Is there a reporting mechanism?

2.6 How is Friction Management (FM) incorporated into design?

2.7 Is there a documented process to follow for when we find an issue that is quite likely significant to the public, that needs to be dealt with quickly, or has material implications for how we manage assets and/or services? If so, please provide a copy of the process.

2.8 Do we have policies or principles to guide action and decision making through these situations?⁴⁷⁸

432. Mr. McGuire then forwarded the email to Mr. McKinnon, writing “FYI re: the audit and my ability to respond. I will need to be engaged in the MFIPPA reposne in the short term.”⁴⁷⁹

433. Mr. McGuire also forwarded Mr. Pellegrini’s email to Ms. MacNeil.⁴⁸⁰

(c) Contact with Dr. Uzarowski

434. On December 6, 2018, Mr. McGuire emailed Ms. Cameron, and requested that she arrange a meeting with Dr. Uzarowski the following week.⁴⁸¹

435. Ms. Cameron contacted Dr. Uzarowski the same day, requesting a meeting on behalf of Mr. McGuire. The meeting was scheduled for December 18, 2018.⁴⁸²

436. Mr. Becke emailed Dr. Uzarowski on the evening of December 6, 2018, regarding the HIR Suitability Study report:

Further to our conversation last week, I wanted to follow up with you regarding the report of the RHVP Hot In Place Asphalt investigation. As discussed, the resurfacing of the RHVP is a priority to our council and I will need to start answering questions regarding the resurfacing soon. The report regarding the resurfacing will be important to have for these discussions. As per our conversation I am writing to let you know that we will need the report before the Christmas shutdown. The report can be in draft format, but I will need information soon to move forward with questions.

In the interim, I have a meeting coming up next week that some of the preliminary information would be useful to have for that meeting. Is it possible to get a PDF copy of the graphs you showed me in our HIP meeting back in October? It will show that we are

⁴⁷⁸ [HAM0035736_0001](#)

⁴⁷⁹ [HAM0035735_0001](#)

⁴⁸⁰ [HAM0053934_0001](#) attaching [HAM0053935_0001](#)

⁴⁸¹ [HAM0048302_0001](#)

⁴⁸² [HAM0027805_0001](#)

working on the asphalt mix and I can explain the current status of the gradations and what we would get with a proposed change via HIP.⁴⁸³

8. December 7, 2018

437. On December 7, 2018, Ms. Auty emailed Mr. McLennan and Ms. MacNeil, under the subject line “RHVE”. She wrote “I’m in the office today. Let me know when you are available to follow up on yesterday’s discussion.” A meeting was arranged for 9:30 a.m. the same day.⁴⁸⁴

(a) RHVP Roadside Safety Assessment Progress Meeting

438. On December 7, 2018, CIMA and the City held a progress meeting on the RHVP Roadside Safety Assessment.⁴⁸⁵ Presentation slides for the meeting identified the main contributing factor for collisions as wet surface conditions:⁴⁸⁶

Collision Analysis

- Main Contributing Factor: Wet Surface



Figure 10: RHVP Collisions by Road Surface Condition (Mainline)

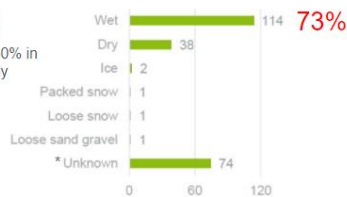


Figure 11: RHVP Collisions by Road Surface Condition (Ramps)

* "Unknown" corresponds to self-reported collisions. % calculated for records with available information.

⁴⁸³ [HAM0035737_0001](#)

⁴⁸⁴ [HAM0062491_0001](#)

⁴⁸⁵ [HAM0011841_0001](#)

⁴⁸⁶ [CIM0017524](#) at images 9-10

Collision Analysis

- Lost Control + Speed Too Fast

- Combined, 33% on mainline and 56% on ramps
- On wet surface, increased to 44% and 68%, respectively



Figure 12: Apparent Driver Action (RHVP Mainline)



Figure 13: Apparent Driver Action (RHVP Ramps)

439. Under the heading “Key Findings”, the following was noted in the presentation slides:

- Key Findings
 - Wet surface involved in 64% of mainline and 73% of ramp collisions (increased—compared to 2015 study)
 - Lost Control and Speed Too Fast for Conditions were reported in 33% of mainline—collisions and 56% of ramp collisions (44% and 56%, respectively, when on wet surface)
 - Extremely high proportions of wet surface collisions (up to 88%) between Greenhill—and King, and between King and Queenston
 - Mud E-W On Ramp and Upper RHVP W-S Off Ramp present the highest collision—frequencies. Wet surface collisions represent 78% and 100%, respectively

Findings suggest that inadequate skid resistance (surface polishing, bleeding, contamination) and excessive speeds may be contributing factors to collisions⁴⁸⁷

(b) City Legal Drafts Retainer Letter for CIMA

440. On December 7, 2018, Ms. Auty emailed Mr. Boghosian under the subject line “Assistance”, asking if he was available that day to speak that day “about a matter I may

⁴⁸⁷ [CIM0017524](#) at image 16

require your assistance on?” Mr. Boghosian replied, writing that he was available that day until 2:30 p.m.⁴⁸⁸

441. Ms. Auty exchanged emails with Ms. MacNeil the same day to coordinate a time they were available to speak with Mr. Boghosian. At 1:39 p.m., Ms. Auty emailed Ms. MacNeil, advising her that Mr. Boghosian had “just called back”. Ms. MacNeil replied, advising she was on her way.⁴⁸⁹

442. On December 7, 2018, Ms. MacNeil emailed Mr. McGuire regarding CIMA’s work on the RHVP, writing:

I just tried calling you but no answer.

Can you please send to me something that explains the current scope of work that CIMA is undertaking for which we are going to be adding/updating them on the Tradewind Friction Testing Results? I will need to reference it in the retainer letter that I am drafting.⁴⁹⁰

443. Mr. McGuire forwarded Ms. MacNeil’s email to Mr. Soldo, then replied later that evening, writing “I’m reaching out to Edward Soldo if Roads and Traffic as they have retained CIMA. Hopefully back to you ASAP.”⁴⁹¹

444. On December 7, 2018, Ms. Auty exchanged emails with Mr. Bartley under the subject line “Are you in today?”:

[Ms. Auty]: Has Ron spoken to you about the RHVE issue/reports? Can you stop by my office when you have a moment or let’s find a time Monday.

[Mr. Bartley]: I’m off this afternoon at home. I’m back in on Monday. he did mention the report and asked about 2 MVAs that I am defending but that’s all I know at this stage.

⁴⁸⁸ [HAM0062495_0001](#)

⁴⁸⁹ [HAM0062495_0001](#)

⁴⁹⁰ [HAM0062007_0001](#)

⁴⁹¹ [HAM0062006_0001](#); and [HAM0062007_0001](#)

[Ms. Auty]: Ok, we'll connect on Monday.⁴⁹²

445. On December 7, 2018, Ms. Auty emailed Ms. MacNeil under the subject line "Retainer Letter", asking Ms. MacNeil if she had any additions or comments to the attached document.⁴⁹³ The City has not produced the attachment as it has asserted privilege over that document.

446. A few minutes later, Ms. Auty emailed Mr. Sabo, writing "Ron when you're in Monday, can we meet so I can update you on this and where we are. I think we need to bring Dana and Dan in to the loop on their matters."⁴⁹⁴

447. Also on December 7, 2018, Ms. MacNeil emailed Mr. McLennan under the subject line "RHVP", writing "Can you please let me know when you are back in your office? I have your copy of the documents. Thanks."⁴⁹⁵

448. On December 7, 2018, Ms. MacNeil emailed Ms. Auty under the subject line "RHVP Reports for Outside Counsel's Review", attaching the Tradewind Report, the 2015 CIMA Report and an email chain from November 28, 2018, which included an email from Dr. Uzarowski to Mr. McGuire attaching "the results of the pavement testing on the Red Hill Valley Parkway carried out in January 2018."⁴⁹⁶ She wrote:

Further to our discussion of this morning, here are three of the four main reports (as identified by Gord McGuire) in electronic version:

⁴⁹² [HAM0062501_0001](#)

⁴⁹³ [HAM0062496_0001](#) attaching [HAM0062497_0001](#)

⁴⁹⁴ [HAM0062498_0001](#)

⁴⁹⁵ [HAM0062009_0001](#)

⁴⁹⁶ [HAM0061863_0001](#) attaching [HAM0061864_0001](#), [HAM0061865_0001](#) and [HAM0061866_0001](#)

1. Tradewind Scientific Report (January 2014)
2. CIMA Report (November 2015)
3. RHVP Pavement Testing Results Nov 28, 2018

I have to send the fourth report – Golder Report (Draft) on Performance Review - in parts because it is too large as a whole. So I will send that by way of separate emails.⁴⁹⁷

449. CIMA produced several documents, comprising the Golder Report broken into multiple files. The documents' properties identify their date as December 7, 2018 and that they were saved in a subfolder titled "Recd Jan 31 2019".⁴⁹⁸

(c) Recurring RHVP/LINC Meetings

450. On December 7, 2018, Ms. Wunderlich and Patricia Leishman (Manager, Strategy, Continuous Improvement & Quality, Public Works, Hamilton) exchanged emails regarding recurring meetings related to the RHVP:

[PL]: Hey - quick question for you. I have the Red Hill/Linc meeting in my calendar for early next week and this is the first one I will be attending. Do you happen to know how many meetings have happened and if any minutes were taken?

[NW]: Occurs the second Monday of every 2 months effective 09/04/2018 from 2:00 PM to 3:00 PM.

Honestly I have never seen an agenda or minutes. I will check with Rebeka to see if Edward has anything.⁴⁹⁹

451. Ms. Wunderlich exchanged emails with Ms. Eisbrenner the same day under the subject line "Red Hill/Linc Meetings":

[NW]: Does Eddie have any agendas, minutes or notes on this. Not sure if they just talk or have anything formal. I have not seen anything.

[RE]: I would say nothing formal yet.⁵⁰⁰

⁴⁹⁷ [HAM0061863_0001](#)

⁴⁹⁸ [CIM0016169](#); [CIM0016170](#); [CIM0016171](#); [CIM0016172](#); [CIM0016173](#); and [CIM0016174](#)

⁴⁹⁹ [HAM0060420_0001](#)

⁵⁰⁰ [HAM0060421_0001](#)

452. Ms. Wunderlich forwarded this email to Ms. Leishman, writing “Sorry sounds like no formal notes.”⁵⁰¹

(d) Contact with Audit Services Regarding Lines of Enquiry

453. On December 7, 2018, at 7:14 a.m., Mr. McKinnon emailed Mr. Pellegrini, writing:

Hi Domenic, what deadline are you working toward as it is an extraordinarily busy time at the moment? Budgets, this large FOI request and the fact that Gord does not currently have a manager of asset management is creating significant pressures.⁵⁰²

454. Mr. Pellegrini responded the same day at 9:38 a.m., adding Mr. McGuire, Ms. Minard and Mr. Brown to the email. He wrote:

I was hoping to meet with Gord on Monday December 10th. Present the Lines of Enquiry document attached to the email sent yesterday and from there determine how much work is required so as to assess a realistic project deadline.

Thus far I've only received a tentative acceptance to my meeting request.⁵⁰³

455. Ms. Wunderlich emailed Ms. Cameron in response to this email a few minutes later, asking if there was a reason Mr. McGuire had only tentatively accepted.⁵⁰⁴ Ms. Cameron replied, writing:

He wants to discuss the redacted information that he took. Spoke to Gord this morning who does not want this meeting on Monday. Dan was supposed to reach out to Charles Brown on this very subject. Plus I already had a meeting set on Wednesday.⁵⁰⁵

456. Mr. McGuire responded to Pellegrini at 10:03 a.m.:

Thanks Domenic.

Given that I'm in tax capital budget today where GIC just deferred approval until mid January and I will be reacting to the expected requests from council my schedule will be

⁵⁰¹ [HAM0060421_0001](#)

⁵⁰² [HAM0027714_0001](#)

⁵⁰³ [HAM0027719_0001](#)

⁵⁰⁴ [HAM0027719_0001](#)

⁵⁰⁵ [HAM0027719_0001](#)

occupied by this until council approval. I won't be able to turn my attention to your requests in the immediate term.

As well there is significant effort being undertaken to respond to the ongoing MFIPPA request as previously detailed.

My remaining vacation schedule is also crowding out working days in 2018.

After I get through the budget and MFIPPA I will be able to turn my attention to this request. I suggest we defer until January 2019 and reconnect.⁵⁰⁶

457. Mr. Pellegrini replied at 10:57 a.m.:

I know that you are very busy at this time, but I'm only requesting half an hour of your time to clarify some concerns. A brief meeting now will mean less work in the future.⁵⁰⁷

458. Mr. McGuire forwarded Mr. Pellegrini's email to Ms. MacNeil, writing:

I think your proposed response to Dominic below is fine.

I was speaking with Nicole and mentioned to her about Dominic asking again (insisting?) on meeting with you on Monday. She is of the same mind as me, you should bump the request up to Dan McKinnon and/or Mike Zegarac for them to respond as they feel appropriate. After this last go-around, you will clearly just be/are repeating yourself with Dominic. You were given clear direction at yesterday's meeting as to the priorities you are being asked to focus on.⁵⁰⁸

459. Mr. McGuire replied to Mr. Pellegrini at 12:07 p.m., writing "We can meet however

I wont have any additional data to address your questions. I will see you on Monday."⁵⁰⁹

(e) Dr. Uzarowski Inquires Regarding the Status of HIR Suitability Study Results

460. On December 7, 2018, Dr. Uzarowski emailed Mr. Rose and Mr. Hobson asking for a status update regarding the HIR laboratory testing:

I have to submit a draft report to the City of Hamilton on the results of materials testing for Hot In-Place Recycling before Christmas. Where are we with the testing? I will come to Whitby on Monday to meet with Michael and would like to see what can be done. Please

⁵⁰⁶ [HAM0027731_0001](#)

⁵⁰⁷ [HAM0053940_0001](#)

⁵⁰⁸ [HAM0061879_0001](#)

⁵⁰⁹ [HAM0027744_0001](#)

keep in mind that I have to provide recommendations for the HIR and will need a few days to analyse the results and decide what can be done, basically if it is suitable to HIR.⁵¹⁰

461. Mr. Hobson replied the same day:

Once I completed the Extractions/gradations and PGAC completed their portion, no further testing was scheduled. That was awhile back that all of that was completed. At this point, there is no time to conduct further testing before Christmas as I already have 2 designs that I will be working on, on top of daily production samples. I have a referee test on Monday, but am sure at some point we can sit down and discuss this project. What further testing are you referring to that you wanted completed? When you are here on Monday I would like to show you the slabs that have been dropped off also as they are pretty much unusable due to the fact they have all crumbled and all lifts have combined.⁵¹¹

9. December 8, 2018: Mr. McGuire Emails Mr. Malone Regarding Contact with City Legal Counsel

462. On December 8, 2018, Mr. McGuire emailed Mr. Malone under the subject line "RHVP". He wrote: "Hi Brian. Did our legal group get in touch with you on the safety report?" Mr. Malone replied the same day, advising that he had not been contacted.⁵¹²

463. Mr. McGuire forwarded Mr. Malone's response to Ms. MacNeil, writing:

Did you get a hold of the CIMA contact via Edward?

I was wondering and if so could I talk to CIMA confidentially.⁵¹³

464. Ms. MacNeil replied on December 10, 2018, writing:

Thanks for your email. No, we have not contacted CIMA yet because we are still working on how we are going to put the request to them in order to best move forward from a legal perspective.

I would strongly advise that you not speak with CIMA about this matter until you have heard back from us/Nicole. We should be able to update you this week (I hope by mid-week).⁵¹⁴

⁵¹⁰ [GOL0006213](#)

⁵¹¹ [GOL0006213](#)

⁵¹² [CIM0016811](#)

⁵¹³ [HAM0053949_0001](#)

⁵¹⁴ [HAM0053949_0001](#)

10. December 9-11, 2018

(a) *Mr. McGuire Inquires as to the Original Date of the Request Regarding RHVP Rehabilitation*

465. On December 9, 2018, Mr. McGuire emailed Pat McNab (Co-Ordinator Infrastructure Programming, Asset Management, Engineering Services, Public Works, Hamilton) under the subject line “History of Capital request RHVP”. He wrote: “[c]an you tell me when the RHVP request was first entered into Questica...it looks like 2017?”⁵¹⁵

466. Ms. McNab replied the following day, writing:

Correct. “Year Initiated” in Questica indicates the year the detail sheet was entered in the system. Attached are the three detail sheets by year as they appeared in the budget.⁵¹⁶

467. The three Capital Detail Sheets attached by Ms. McNab were listed for 2017-2041, 2018-2042 and 2019-2043 respectively, and identified the project as “RHVP Rehabilitation”. The same description was provided under the heading “Objectives” for each document:

The roadway has become surface deficient and is in need of resurfacing and base repairs. This will extend the life of the roadway, improve the level-of-service, increase safety and reduce maintenance costs. Works will include the mainline expressway and associated on/off ramps. Condition assessment of subsurface appurtenances completed and cleared.⁵¹⁷

(b) *Discussions Between City Manager and Audit Services Regarding VFM Audit*

468. On December 10, 2018, Ms. MacNeil exchanged emails Ms. Auty, Mr. Sabo and Mr. McLennan regarding Mr. McGuire’s upcoming meeting with Audit Services, and attaching the Lines of Enquiry:

⁵¹⁵ [HAM0061736_0001](#)

⁵¹⁶ [HAM0053945_0001](#) attaching [HAM0053946_0001](#), [HAM0053947_0001](#) and [HAM0053948_0001](#)

⁵¹⁷ [HAM0053946_0001](#), [HAM0053947_0001](#) and [HAM0053948_0001](#)

[Ms. MacNeil]: Gord McGuire telephoned me this morning. He has a meeting today with Dominic Pellegrini from Audit at 1:30 p.m. He is concerned about answering any of Dominic's questions (attached) but also doesn't want to be criticized for obstructing the Audit Office in their job. I advised him that it was far better for Dominic to be upset about not getting any answers today than it would be for Gord to try and provide even limited information. I advised Gord that he should cancel the meeting but if he doesn't cancel the meeting, he should simply listen to Dominic's concerns and questions but his answer to all of the pertinent questions needs to be "I am not in a position today to provide you with any answers to those questions."

Of note, Gord mentioned that, over the weekend, he reviewed a Draft 2018 CIMA report dealing with a safety analysis/review of the RHVP. It appears that the report indicates that wet weather performance of the RHVP has worsened since CIMA's 2015 report.

Gord mentioned that Roads and Traffic have put a number of safety reports to Council over the years dealing with the RHVP. I advised him that I became aware of (some of) these Council reports after I spoke with Dana Lezau this past Friday about litigation that she is handling on behalf of the City – Hansen v. Bernat and City of Hamilton (Court File No.: 17-61728), and I reviewed the affidavit of documents served by the City in that litigation. I note that there are a number of paragraphs in those reports devoted to improving "safety and reducing collisions" on the RHVP, primarily focussing on reducing speeding and increasing aggressive driving enforcement and improving signage (which are all good things) but nowhere is it mentioned about any issue or concern with the friction of the road. (I did not tell Dana any details about the FOI access request or the documents discovered therein as I think that is best coming from Ron and/or Nicole.)

Finally, please note that Marco Oddi, Manager, Constructions Services (Roads) was examined for discovery on Friday, December 7th, in the Hansen v. Bernat matter and gave answers as to the state of the RHVP. I do not know what his answers were but they would bind the City.

[Mr. Sabo]: Sorry to be doing this by email and I am a bit fuzzy headed today so take comments with a grain of salt; I don't like the optics if Gord goes away saying Legal said to cancel but I agree he should postpone if he's not actually able to answer and give that as his reason. Audit here is internal and just doing their work. If he hasnt already he should bump this up within PW as the questions posed are ones the City may have to answer internally in short term and possibly transparently in near term. It would be much better for PW to get on top of full background and decisions on any reporting that needs to be done.

There will certainly be legal issues raised in potential and existing, possibly even concluded, litigation of multiple sorts but the road engineers etc need to weigh in on circumstances and appropriate responses.

[Ms. MacNeil]: Agreed, Ron. I did tell Gord that this really should be bumped up to Dan McKinnon (and/or Mike Zegarac) to put the brakes on the Audit meeting at this point in time. However, it did not appear that that was going to happen before the 1:30 p.m. meeting. Hence, why I gave him the advice I did.

Also, I forgot to say in my previous email that Gord mentioned that Edward Soldo, Director of Roads and Traffic, is now perhaps questioning using CIMA for future matters relating to the RHVP given the relationship between Brian Malone of CIMA and the fact that his wife, Betty Matthews-Malone, was the (former?) Director-Operations at the City of Hamilton during the years we are now reviewing as it relates to friction testing on the RHVP. It may be raised what information was shared or not shared between CIMA and the City as a result of this relationship. As well, even if everything was done perfectly, the City is still left

with the optics of the relationship. Obviously, Edward would have to speak for himself on this though.

[Mr. Sabo]: K good and thanks. I was thinking of mentioning Mike or maybe SLT in my earlier response.

Whatever the concern with CIMA connections PW will need a good reason to ignore findings in reports especially if these are consistent with other reports from different sources.⁵¹⁸

469. On December 10, 2018, Mr. Brown emailed Mr. Zegarac regarding the VFM Audit:

Domenic had a meeting set up with Gord McGuire, Director of Engineering Services to go over our request for information related to the consulting and follow-up actions taken with respect to friction measurements on Red Hill Creek. He was originally reticent to meet with us stating time pressures and demands as a result of the budget. We put together lines of enquiry and the purpose of the half-hour meeting was to try to get an idea of how we could do our work and meet our responsibilities with the minimum impact on their other demands.

I was advised by Domenic that Gord at the meeting refused to provide any information or discuss the matter, so we have not received any information further to our request.

This is a rather unexpected turn of events and I'm discussing with my team what our next steps are in the circumstances. Our Charter approved by Council and supporting sections of the Municipal Act is clear:

[Excerpts from Audit Charter and Municipal Act omitted]⁵¹⁹

470. Mr. Zegarac replied the same day:

Charles, as Dan is Gord's direct supervisor, have you raised this with him.

I have asked Dan, Gord and Edward to undertake an immediate external independent assessment of traffic operations on RHP, and possible next steps to secure public safety, prior to briefing the Mayor and Council.⁵²⁰

471. Later in the evening of December 10, 2018, Mr. McKinnon emailed Ms. Melatti, Ms. Auty, Mr. McGuire, Mr. Soldo, Mr. Zegarac and Ms. Wunderlich under the subject line Expressway. He wrote:

⁵¹⁸ [HAM0062010_0001](#)

⁵¹⁹ [HAM0027768_0001](#)

⁵²⁰ [HAM0027768_0001](#)

Rosanna Mike asked that I connect with you to arrange a meeting this week with the above staff to develop a note relative to the red hill to guide a conversation with the mayor. Please avoid thurs afternoon as PW is scheduled elsewhere.⁵²¹

472. Mr. Zegarac forwarded the message, responding only to Ms. Melatti, writing: "In addition to the meeting Dan is referring to, can you also request a meeting with Mayor, Dan, Gord, Nicole and Myself to discuss Red Hill Expressway."⁵²²

473. Mr. Brown emailed Mr. McGuire, copying Mr. McKinnon, on December 11, 2018, attaching a document titled "Audit memo".⁵²³ The memorandum was addressed to Mr. McGuire, with copies to Mr. Zegarac and Mr. McKinnon.

Some preliminary findings in the ongoing Roads Construction Audit have led me to open an investigation specific to Friction Management and the Red Hill Valley Parkway (RHVP).

As part of this examination and under the authorities of the Audit Services Charter approved by Council, and the Municipal Act Sec. 223.19 to 223.23, I am requesting that any and all records pertaining to or relevant concerning RHVP, in particular those related to friction testing and friction management be provided without delay. This includes:

- Correspondence
- Reports (Council, Committee, Consultant's, Staff Memos to file)
- Data collection, testing results, and project files
- Any other relevant documents
- For all of the above, as far back as 2007

Our expectation is that all records related to this matter will be preserved, notwithstanding any plans for disposal, and my staff will be provided information as it becomes available. To that end my team stands ready to assist in the retrieval process. I am hoping, with your assistance we can resolve this matter in the most efficient way possible.⁵²⁴

474. Mr. McKinnon emailed Mr. Zegarac and Mr. McGuire in response to the email received from Mr. Brown:

⁵²¹ [HAM0062012_0001](#)

⁵²² [HAM0062012_0001](#)

⁵²³ [HAM0027784_0001](#)

⁵²⁴ [HAM0027786_0001](#)

Mike we are going to need some direction, if I had five Gord's right now this would be a challenge. With the capital budget at a critical time, the FOI request and the work stemming from that and the shenanigans from ward 1 its getting crazy. Happy to discuss tomorrow. Btw Gord has just had his fifth month anniversary and is still without a manager of asset management. You picking up what I'm laying down here. We just need some breathing room⁵²⁵

475. Ms. Cameron emailed Mr. McGuire the same day, attaching a draft response to Mr. Brown, writing "Here you go. Thought I would get it on paper while it was fresh in my mind." The attachment included the following:

In reply to the memo of December 12th regarding information surrounding the RHVP Friction Testing, Engineering Services has been working with Audit Services on a Value for Money Audit since May of 2018. This audit commenced as a response to industry papers in Toronto regarding Asphalt Quality.

Staff have engaged with Audit Services and created a project charter to correctly capture the scope and deliverable from Engineering Services. Over the course of the last 6 months the audit has expanded beyond the original question surrounding "Does our asphalt perform as expected" to a more wide reaching process audit that has required the creation of a project team to answer;

1. Performance
2. Technology
3. Project related queries

Part of the audit expanded scope asked a series of questions around the Linc and RHVP asphalts. In parallel to that a MFIPPA request was underway surround the access to friction related data. Given the audit was not pursuing friction related elements and on the advice of Legal Services, Engineering Services provided a 2014 report from Golder and Associates the addresses the Red Hill's performance characteristics. Audit received a redacted version upon the advice from Legal sometime in mid-November. Both the auditor and director had vacation in mid-November and early December. However, it was agreed between both parties that the auditor could come to the director's office and view the document until such time as MFIPPA data was released.

With the agreement in place between the auditor and director to only view the document the auditor arrived on December 4th and proceeded to take a copy of the redacted information, while the Director was in a PW Department Leadership meeting. The auditor then proceeded to insist on a December 10th meeting and was advised that the Director was unable to provide information on such a short turnaround. Even though the auditor was advised there would be no information available the meeting took place where he was advised this face to face.⁵²⁶

⁵²⁵ [HAM0027784_0001](#)

⁵²⁶ [HAM0035739_0001](#) attaching [HAM0035740_0001](#)

476. Mr. Brown emailed Mr. McKinnon at 2:59 p.m. under the subject line “Audit Issue”:

I am contacting you about the situation we have in our audit of Road Construction/Capital. We have reached an impasse on the issue of fulsome access to information respecting certain testing of pavement friction on Red Hill Cr Pkwy.

When we first asked for relevant consulting reports, we were given a report with redacted sections. When that got resolved, and we asked to meet with Gord McGuire to discuss further enquiries related to its content, we were advised this wasn't possible until January. We had provided a list of questions, presuming that at least a discussion of the situation with each question and the evidence we needed would facilitate better understanding, and help minimize the information burden. A half hour meeting was set up.

When my staff member came to the meeting however, Gord McGuire refused to answer any questions pertaining to this matter, or discuss it. Discussion about this issue having been shut down, the meeting ended.

This puts us in an untenable position which needs to be resolved. To that end I will be sending Gord an official notice of my request for the information. In the meantime I was hoping that you could intervene to effect a timely resolution. I've been keeping Mike Zegarac apprised of my thoughts and intentions on this matter, which is that we need to go deeper into the facts and circumstances surrounding the issue, insofar as what the situation was and is, and the processes that have been followed.

I am hopeful this can be resolved quickly and we can resume our work.⁵²⁷

477. Mr. McKinnon replied at 4:23 p.m., writing:

Hi Charles I'm happy to discuss but I have to tell you we need some appreciation for our work load at the moment. We are in the middle of capital budgets, Gord is in his position all of five months and has a key position vacant that being the manager of asset management which is critical to getting the budget approved. We are also currently responding to an FOI for the RHVP and organizing effort to respond to that. We will happily comply with your request but we need some time. Would you like me to organize a phone call?⁵²⁸

478. Mr. Brown responded at 5:46 p.m.:

That would be fine. Can Domenic and I come speak to you – just yourself before we have such a meeting. I need to speak with some candour about what has occurred among other things.⁵²⁹

⁵²⁷ [HAM0027787_0001](#)

⁵²⁸ [HAM0027787_0001](#)

⁵²⁹ [HAM0027793_0001](#)

(c) Access & Privacy Officers Provided Updated Status of Collection of Documents Pertaining to FOI 18-189

479. Ms. Cameron emailed Ms. Watson on December 11, 2018, advising that they expected to have gathered the information in response to FOI 18-189 by the first week of January 2019.⁵³⁰

(d) Daily Commercial News Publishes Article Regarding RHVP Rehabilitation

480. The same day, Ms. Graham emailed Mr. McGuire, under the subject line “Sorry...”

I only just saw this now, if you've already seen it just disregard, but you may want to whip through if you haven't!

<https://canada.constructconnect.com/dcn/news/labour/2018/11/hamiltons-red-hill-valley-parkway-undergo-15-million-resurfacing>⁵³¹

481. The article, written by Ms. Fehir for the Daily Commercial News, quoted Mr. McGuire and Mr. Ferguson:

As part of an ongoing effort to achieve safety and efficiency on Hamilton's Red Hill Valley Parkway (RHVP), a substantial paving project for the route is on the city's to-do list.

The seven-kilometre stretch that runs between the QEW and Dartnall Road has been contentious even before opening in 2007. In its 11-year life, there has been ongoing issues with accidents, noise, cost and pollution. In addressing safety, to keep the well-travelled roadway in good working order, it will undergo a \$15-million resurfacing this summer.

“The asphalt is at the end of its expected life cycle. Originally from 2007, this resurfacing project falls under regular maintenance work,” said Gord McGuire, the City of Hamilton's director of engineering services.

Quality of the original asphalt has come into question repeatedly over the life of the parkway, more so after it was concluded that twice as many vehicular accidents happened on the RHVP than on the connecting Lincoln Alexander Parkway.

In exploring different material possibilities for the project, the city conducted sampling of the existing RHVP asphalt this past summer to see if a newer technology — a “hot-in-place” method — could be used now, rather than the stone mastic asphalt that what was originally used for the project.

⁵³⁰ [HAM0053973_0001](#)

⁵³¹ [HAM0027780_0001](#)

The cost-saving, hot-in-place technology is the process of recycling asphalt during resurfacing by scraping up the top layers of asphalt, mixing and then repaving in one continuous chain.

“The samples were one-metre-by-six-to-nine-metres in three locations in the northbound lanes and three locations in the southbound lanes. The city is still considering using hot-in-place in a different location,” said McGuire, further explaining that “hot-in-place is not a current practice in Ontario. Our testing, together with MTO, will continue on this technology. We have not selected this technique for the RHVP simply due to timing.”

To adhere to the schedule and the city’s standards specifications, the asphalt requirements for this project are now being finalized and will be part of the tender process.

The price tag falls under the city’s programmed capital work through the capital budget process. Approximately \$6.75 million has been approved in 2018 and the remaining will go to council for approval in the 2019 cycle.

In regard to the excessive amount of accidents on the RHVP, reasons such as material of the pavement among them, are inconclusive.

However, the crashes have not gone unnoticed or unaddressed by Hamilton Traffic Safety.

In records provided by the city from 2013 to present, 2015 was an all-time high for accidents on the RHVP with a total of 138. That number dropped significantly in the following two years, with 102 in both 2016 and 2017.

“The city has made a number of improvements to the Red Hill Valley Parkway over the years. (This includes) the installation of cat eyes (reflective recessed pavement markers), signage improvements, pavement marking modifications, directional signage and the installation of variable message boards.

“We have also been working closely with Hamilton Police Services to increase enforcement,” said City of Hamilton Traffic Safety superintendent David Ferguson.⁵³²

11. December 12, 2018

(a) Meeting with Audit Services

482. Mr. Brown arrived to meet Mr. McKinnon just before 10:30 a.m. the following day.⁵³³

483. On December 12, 2018, Mr. Ferguson emailed Mr. Pellegrini in response to his email from December 6, 2018, regarding the 2015 CIMA Report. Mr. Ferguson attached the report, as well as a copy of Appendix A to PW 18-008 with handwritten markups. The

⁵³² [RHV0000677](#)

⁵³³ [HAM0027793_0001](#)

appendix outlined the status of completion of various initiatives recommended by CIMA.⁵³⁴

484. Mr. McGuire, Mr. Sharma, Mr. Becke, and Ms. Jacob met with Mr. Pellegrini on December 12, 2018, at 11:14 a.m. Ms. Cameron took notes of this meeting. Her notes, which form part of a Microsoft OneNote file with various embedded documents related to the RHVP, indicate that an audio recording was started at 11:11 a.m.⁵³⁵ The City has advised that this document cannot be produced due to a technical issue.⁵³⁶ The notes primarily relate to the conditions of City roadways generally, as well as the City's asphalt and maintenance protocol. The notes include "Slippery when wet signs should be added before the repave".⁵³⁷

485. The same day at 3:42 p.m., Mr. McGuire emailed Mr. McKinnon, summarizing his interactions with Audit Services:

As discussed and for your review:

In May of this year the auditor reached out to our staff about the number of lane km's we have repaired since 2013-2017. He asked for a 30 minute meeting at the same time. It was as simple request and was addressed via Asset Management through a spreadsheet.

Since May we have had numerous interactions with Domenic that precipitated establishment of an internal audit response team and a project charter. We have asked Domenic to define the areas of interest in the audit through the attached scope document so we can focus our efforts. Our Engineering Services team has been tasked to prepare responses to the works as outlined in the attached draft scope of work:

They are:

1. Performance — How are the roads we have rehabilitated performed, as expected, better or worse?

⁵³⁴ [HAM0027798_0001](#) attaching [HAM0027799_0001](#) and [HAM0027800_0001](#)

⁵³⁵ [HAM0053987_0001](#) attaching [HAM0053992_0001](#) and [HAM0053993_0001](#)

⁵³⁶ [HAM0054059_0001](#) and [HAM0053993_0001](#)

⁵³⁷ [HAM0053987_0001](#) at image 2

2. Technical — What mixes, methods, etc are we performing our asphalts

3. Project related queries — Specific to a number of projects, what were the tests, QA processes etc.

To date we have delivered numerous documents that include our roads reviews, Asset Management Plans, SOTI documents and performance data.

Today, we met with Domenic and had an overview with the technical team. The technical responses included all our proposal and documents that relate to the iterations of our Form 800, which is our asphalt spec. This is a detailed review of all our specs and standards since 2009 and the development of today's current spec along with industry documentation and studies that review asphalt procedures.

Previously and as part of the Performance and Project elements we assemble a completely custom web site for Domenic. This site tracks the historic performance data of our asphalt surveys and when we intervened with a rehab. It shows the calculated and actual data points in a graph, and a chart per site and segment.

This has been underway over the summer and fall to address this audit scope (still in draft — awaiting Domenic's final wording).

Part of the audit expanded scope asked a series of questions around the Linc and RHVP asphalts. In parallel to that a MFIPPA request was underway surround the access to friction related data. [2 lines redacted by the City on the basis of solicitor-client privilege]

Audit received a redacted version sometime in mid-November. Both Domenic and myself had vacation in mid November and early December. However, it was agreed between both parties that the auditor could come to my office and view the document until such time as MFIPPA data was released.

With the agreement in place between the auditor and director to only view the document the auditor arrived on December 4th and proceeded to take a copy of the redacted information, while I was in a PW Department Leadership meeting.

The auditor then proceeded to book a December 10th meeting with myself, although he was advised that I would be unable to provide information on such a short turnaround given capital budget presentations and my schedule. In advance of the meeting Domenic prepared a spreadsheet with 14 additional questions, and many sub components to these questions. Many of these questions were new lines of enquiry which had not been explored by myself or staff yet in this process.

The December 10 meeting proceeded and my words to Domenic were that “I was not refusing to answer, however I had no information at this time” given the schedule compressions and lack of time to react. I did not at any time suggest we couldn't or wouldn't provide information, however I told Domenic that my priorities were aligned to delivering our capital budget and the MFIPPA request.

In summary we have been open, transparent and accommodating to this still undefined audit inquiry. Staff are diligent in their reviews and we have been balancing their workloads to make sure we are responsive. Any suggestions that'll in any way hindering access to information are incorrect, given the span of time this process has been underway and the changes in direction I have managed work loads and priorities to ensure all our work program is correctly addressed.

I hope this provides clarity and insight on my role in this process.⁵³⁸

(b) City Seeks HIR Suitability Study Report

486. On December 12, 2018, Ms. MacNeil emailed Mr. McGuire, copying Mr. Sabo, regarding records responsive to FOI 18-189. She wrote:

Ron and I were speaking about the RHVP FOI request after you and I had spoken yesterday. I advised him that we have the records relevant to the first part of the request (friction testing) from your office already but that the documents from the second part of the request (asphalt/pavement testing) are coming from Mike Becke's office.

If at all possible, we believe that completing the document search for the access request needs to be the top priority for Mike Becke's office at this point in time given:

- (i) that the request was submitted by Access & Privacy back in October; and
- (ii) it is important and best for us to have located all of the relevant documents before any report to Council goes ahead (which could be soon).

Is this something I should contact Mike Becke directly about or is there someone else who I should go through first?⁵³⁹

487. On December 12, 2018, Mr. McGuire emailed Mr. Becke, regarding the HIR Suitability Study report. He advised that the FOI response would need to include documents from that process. Mr. Becke replied, writing: "I have asked Ludomir to make this report (even if it's a draft) a priority for before the Christmas Break. I will follow up with Ludomir this afternoon on its status and will let you know."⁵⁴⁰

(c) Mr. McGuire and Ms. MacNeil Discuss Contacting CIMA

488. On December 12, 2018, Mr. McGuire exchanged emails with Ms. MacNeil regarding arranging a call with Mr. Malone:

[Mr. McGuire]: Should we get a call going with Brian? He's in office.

⁵³⁸ [HAM0054138_0001](#)

⁵³⁹ [HAM0062013_0001](#)

⁵⁴⁰ [HAM0054135_0001](#); and [HAM0061886_0001](#)

[Ms. MacNeil]: I haven't received any direction on this yet. So we won't be in a position to speak with Brian today. Thanks for the head's up though.⁵⁴¹

(d) Discussions with CIMA Regarding RHVP Design Speed

489. On December 12, 2018, Mr. Vala emailed a document titled "MTO-Functional Classification" to Mr. Salek and advised that:

Based on the information I found in the Design Report, the RHVP was designed as "RFD 100" Highway Classification per MTO Geometric Design Manual . This means a design speed of 100 km/hr was used for the facility.⁵⁴²

(e) Mr. Zegarac Schedules Meetings Related to RHVP

490. On December 12, 2018, Mr. Zegarac sent a calendar invite to Ms. Auty, Mr. McGuire, Mr. Soldo and Mr. McKinnon for a meeting scheduled December 14, 2018. Mr. Sabo was listed as an optional attendee. The subject of the meeting was "RED HILL EXPRESSWAY".⁵⁴³

491. Ms. Auty later forwarded the calendar invitation to Mr. Sabo, indicating him as a required attendee.⁵⁴⁴

492. Also on December 12, 2018, Mr. Zegarac sent a calendar invite to Mayor Eisenberger, Mr. McKinnon, Mr. McGuire, Ms. Auty, Drina Omazic (Chief of Staff to Mayor Eisenberger, Mayor's Office, Hamilton) and Mr. Soldo for a meeting on December 18, 2018, at 2:00 p.m. The subject of the meeting was "Red Hill Expressway Discussion".⁵⁴⁵

⁵⁴¹ [HAM0062510_0001](#)

⁵⁴² [HAM0011882_0001](#)

⁵⁴³ [HAM0062014_0001](#); and [HAM0062518_0001](#)

⁵⁴⁴ [HAM0062517_0001](#)

⁵⁴⁵ [HAM0062016_0001](#)

(f) Mr. McLennan Receives Report from National Walkway Safety Auditing in Review of Tradewind Report

493. On December 12, 2018, Ryan Ellis (Area Manager, National Walkway Safety Auditing) emailed Mr. McLennan under the subject line “NWSA Friction Report Review” attaching a document titled “NWSA – Updated RHVE FRICTION REPORT Review”. He wrote “Attached is the review of the RHVE friction report. If you have any questions please feel free to contact me.”⁵⁴⁶

494. The attached report includes the following in its introductory paragraphs:

NWSA does not claim to have an expertise in or complete friction testing of roadways. We do believe a third-party governing standard should be followed by anyone completing a friction testing program in order to determine scientifically what a surfaces real friction reading are, again no room for interpretation.

After reading the RHVE report a few questions come to mind about what type of Friction testing program this is and the three components of our friction testing programs. What organization is it governed by and who certifies or approves persons to complete testing? What are their test methods and standards? What calibrated equipment are they using and who is approved to calibrate testing equipment?⁵⁴⁷

12. December 13, 2018

(a) Legal Services Receives Draft Legal Opinion from Mr. Boghosian

495. On December 13, 2018, Mr. Boghosian emailed Ms. Auty under the subject line “Draft Hamilton re: Red Hill Valley Parkway Opinion letter”, writing:

I am attaching my draft, unsigned opinion letter. I wanted you to review it before I finalized it to ensure it was what you were looking for and whether there was anything you feel should be added or removed.

I look forward to you feedback.⁵⁴⁸

⁵⁴⁶ [HAM0062334_0001](#) attaching [HAM0062335_0001](#)

⁵⁴⁷ [HAM0062335_0001](#) at image 1

⁵⁴⁸ [HAM0062511_0001](#)

496. Ms. Auty replied, writing that she would respond to him the following morning.⁵⁴⁹

497. The same day at 4:02 p.m., Ms. Auty forwarded Mr. Boghosian's email to Mr. Sabo, writing "[p]lease let me know if you have any comments and I will get back to David tomorrow morning."⁵⁵⁰ The City has not produced the attachment as it has asserted privilege over that document.⁵⁵¹

498. Mr. Sabo replied, asking "[c]an I share with John?"⁵⁵²

499. Ms. Auty replied "Do you think he would have comments on the draft? Or just the final version?"⁵⁵³

500. In a separate email chain, Mr. Sabo replied to Ms. Auty's 4:02 p.m. email, writing "I haven't cracked the attachment open but am about to. I know John would like David to help with the approach to giving notice to the City's current and former insurers for one."⁵⁵⁴

501. Ms. Auty replied "[l]et's you and I speak about it tomorrow once you've had a chance to read it and then see where it needs to go."⁵⁵⁵

(b) CIMA Contacted by City's External Legal Counsel

502. Ms. Eisbrenner emailed Mr. Soldo on December 13, 2018, transcribing a voicemail he received from Mr. Malone:

Message:

⁵⁴⁹ [HAM0062513_0001](#)

⁵⁵⁰ [HAM0062511_0001](#)

⁵⁵¹ [HAM0062511_0001](#) attaching [HAM0062512_0001](#)

⁵⁵² [HAM0062514_0001](#)

⁵⁵³ [HAM0062514_0001](#)

⁵⁵⁴ [HAM0062515_0001](#)

⁵⁵⁵ [HAM0062515_0001](#)

Has spoken to lawyer regarding the Red Hill Project. The lawyer is requesting a copy of the Roadside Safety Report which they are completing. The draft report was sent to the City and they are just putting on the finishing touches. Just wants to confirm if you are OK with the report going over to the lawyer (note: technically not Brian's client) Also spoke with Gord he has confirmed that he can provide the lighting report.⁵⁵⁶

503. David Boghosian (Managing Partner, Boghosian & Allen LLP) emailed Mr. Malone the same day under the subject line "Hamilton re: RHVP Opinion". He wrote:

Further to our telephone conversation on Tuesday, I would be grateful if you could send me the draft update report on the median barrier issue that contains the updated collisions statistics up to the end of 2017.⁵⁵⁷

(c) *Golder Prepares Draft Report for 2017 Golder Pavement Evaluation*

504. On December 13, 2018, Dr. Uzarowski emailed Ms. Rizvi, attaching a draft letter report and test results relating to the 2017 Golder Pavement Evaluation. He wrote: "Could you please review the report, format it and include the PSV, texture and BPN results? I would need to send it to Michael and Tony for review ASAP."⁵⁵⁸

(d) *Mr. McLennan Receives Invoice for Consultation on Tradewind Report*

505. On December 13, 2018, Mr. McLennan received an email from Mr. Ellis under the subject line "RHVE Friction Report Review Invoice".⁵⁵⁹ He wrote: "Attached is the invoice for the consulting on the discussed Friction Report. If you have any questions please feel free to contact me."

506. The attached invoice was dated December 12, 2018, and was for the pre-tax amount of \$3,485.96. The following description of the invoice was provided "Invoice for

⁵⁵⁶ [HAM0054151_0001](#)

⁵⁵⁷ [CIM0019379](#)

⁵⁵⁸ [GOL0006699](#) attaching [GOL0006700](#), [GOL0006701](#), [GOL0006702](#) and [GOL0006703](#)

⁵⁵⁹ [HAM0062017_0001](#) attaching [HAM0062018_0001](#)

the consultation and review of the RHVE Friction Report submitted by Tradewind Scientific.”⁵⁶⁰

13. December 14, 2018

(a) *City Receives Advanced Draft of RHVP Roadside Safety Assessment*

507. On December 14, 2018, Mr. Salek provided Mr. Ferguson with an advanced draft report of the RHVP Roadside Safety Assessment.⁵⁶¹ The advanced draft identified that the percentage of collisions occurring under wet surface conditions was significantly higher than both the City and Provincial averages:

Out of the 545 mainline collisions that include road surface condition information, 347 (64%) occurred on wet surface and 180 (33%) on dry surface; out of the 157 ramp collisions that include this information, 114 (73%) occurred on wet surface and 38 (24%) on dry surface. The proportion of wet surface condition is noticeably higher than what was found in the 2015 review (50%), which, on that study, had already been found to be significantly higher than the Provincial and City averages of 17.6% and 22%, respectively.⁵⁶²

508. The report also identified:

Out of 852 drivers with known apparent driver action for mainline collisions, 398 (47%) were reported to be driving properly; 197 (23%) were reported to have lost control; 87 (10%) were reported to be driving at a speed too fast for conditions; and 86 (10%) were reported to be following too close; only 17 drivers (2%) were reported to be exceeding the speed limit.⁵⁶³

509. The collision history review was summarized as follows:

The findings from the collision history review for the period between 2013 and 2017 were consistent with the two previous studies completed by CIMA+ for the Red Hill Valley Parkway, as summarized below.

Overall Findings

⁵⁶⁰ [HAM0062018_0001](#)

⁵⁶¹ [CIM0019285](#)

⁵⁶² [CIM0019285.0001](#) at image 15

⁵⁶³ [CIM0019285.0001](#) at images 15-16

Wet surface collisions were found to represent 64% of mainline collisions and 73% of ramp collisions. The proportion of wet surface collisions on the mainline presented an increase compared with the 2015 study (50%);

“Lost control” and “speed too fast for conditions” apparent driver actions were reported in 33% of mainline collisions (44% for wet surface collisions) and 56% of ramp collisions (68% for wet surface collisions); and

These findings suggest that inadequate skid resistance (surface polishing, bleeding, contamination) and excessive speeds may be contributing factors to collisions;

Critical Locations

The mainline sections with the highest collision frequencies in the study area are Mud Street to Greenhill Avenue, and Greenhill Avenue to King Street, particularly in the northbound direction;

Mainline collisions involving wet surface condition present extremely high proportions between Greenhill Avenue and King Street, and between King Street and Queenston Road (up to 88%). In combination with potential skid resistance and excessive speed issues, curve radii compatible with a design speed of 100 km/h around the King Street interchange may explain this concentration of collisions (operational speed may exceed the design speed); and

The Mud Street E-W On Ramp experienced the highest collision frequency among RHVP ramps, followed by the Upper RHVP W-S Off Ramp; the proportion of wet surface collisions on these two ramps are 78% and 100%, respectively, while the combined proportions of “lost control” and “speed too fast for conditions” apparent driver actions are 67% and 80%, respectively. The Mud Street E-W On Ramp presents a curve radius compatible with design speed of 30 km/h, the same as the existing posted advisory speed; the Upper RHVP W-S Off Ramp has a curve radius compatible with a design speed of 50 km/h and posted advisory speed of 40 km/h. It is possible that drivers are exceeding the design speed of these ramps.⁵⁶⁴

(b) December 14, 2018 Meetings

510. Anita Guest (Legal Assistant, Legal Services, Legal & Risk Management Services, Corporate Services, Hamilton) sent a calendar invitation dated December 14, 2018, at 11:30 a.m., to Dana Lezau (Solicitor, Legal Services, Legal & Risk Management Services, Corporate Services, Hamilton), Mr. Bartley, Mr. McLennan and Ms. Auty. The calendar invitation’s subject was “Red Hill”. Another version of the calendar invitation lists Mr. Sabo as a required attendee.⁵⁶⁵

⁵⁶⁴ [CIM0019285.0001](#) at images 23-24

⁵⁶⁵ [HAM0062506_0001](#); and [HAM0062508_0001](#)

511. Mr. McGuire's binders contained an entry dated December 14, 2018:⁵⁶⁶

Look at PW 18-008

- Notes Friction Testing
- Available
-

Dan Mike
Fr. Dec
14/18

Connect w
- Byrdena
- Ludimor?

Check P.O on Golders Nov 18
Assignment.

- Genesis of Proposal

Make this a PW-18-008b

INFO REPORT: PW Report Jan²⁸(14)/18

- Staff are performing tasks
- MFIPPA] Access to Info
- Resurfacing/Functional

Priority Dates

INFO UPDATE 18-008 will be updated

IDENTIFICATION Issues in 18-008
Instead of Report
to ensure public safety

512. On December 14, 2018, Mr. Zegarac attended a meeting titled "RED HILL EXPRESSWAY" at 2:00 p.m. Other attendees were not identified.⁵⁶⁷

(c) City Provides Authorization for Mr. Malone to Provide Mr. Boghosian the Draft RHVP Roadside Safety Report

513. On December 14, 2018, Mr. Soldo emailed Mr. Malone and authorized him to release the report.⁵⁶⁸

⁵⁶⁶ [HAM0061738_0001](#)

⁵⁶⁷ [HAM0058806_0001](#)

⁵⁶⁸ [CIM0019291](#)

514. Mr. Malone then provided Mr. Boghosian with the draft RHVP Roadside Safety Assessment report delivered to the City on November 23, 2018. He wrote:

This is the draft report for the RHVP that was delivered to the City on November 23, 2018. We met with them to receive comments and confirm a few issues on Dec 07. We are currently working on completing the final report and should have that done by Dec 21.

There is a CAD file that goes with the report which I have also attached. It shows the details of the locations for recommended improvements to roadside safety devices. It requires GIS software to be viewed, so you probably won't be able to open it, but it provides the complete package.

A similar, separate report is to be prepared for the LINC, and a draft is scheduled to be delivered in February 2019.⁵⁶⁹

14. December 16, 2018: Mr. McGuire and Ms. MacNeil Exchange RHVP-Related Emails

515. On December 16, 2018, Mr. McGuire emailed Ms. MacNeil, forwarding Mr. Moore's January 24, 2014 email to Mr. Dzieziejko outlining summary numbers for the MTO and Tradewind friction testing.⁵⁷⁰

516. Mr. McGuire also forwarded the email sent by Dr. Uzarowski to Mr. Moore on December 17, 2015, attaching the Tradewind Report to Ms. MacNeil on December 16, 2018. Mr. McGuire wrote:

More information that I think you already have.

The study attached on pg 4 indicates that after 700 days the FN is at the high 30's similar to the results of the RHVP.⁵⁷¹

517. The same day, Ms. MacNeil emailed Mr. McGuire, Ms. Auty, Mr. Sabo and Mr. McLennan, writing:

⁵⁶⁹ [CIM0019311](#), [CIM0019311.0001](#)

⁵⁷⁰ [HAM0054161_0001](#) attaching [HAM0054162_0001](#), [HAM0054163_0001](#), [HAM0054164_0001](#) and [HAM0054165_0001](#)

⁵⁷¹ [HAM0054171_0001](#) attaching [HAM0054172_0001](#)

Attached, for your information and file, please find a copy of the “Red Hill Valley Parkway Safety Review” prepared by CIMA in October 2013 (am sending in 4 parts).

This has been produced to plaintiff’s counsel as part of the City’s AOD in the Hansen litigation being handled by Dana Lezau (Court File No.: 17-61728). Note that the report recommends that the City should perform friction testing.

Gord, it appears to me that this record is responsive to the FOI 18-189 access request, in the same way that the 2015 CIMA report is responsive. The 2013 report is also mentioned in the 2015 report at page 2 (para. 1) wherein it states:

“...In 2013, CIMA Canada Inc. (CIMA) conducted a safety review of the section of the RHVP between the Dartnall Road and Greenhill Avenue interchanges, providing a series of recommendations to improve safety.”

I would recommend that this 2013 CIMA report be included in the volume of documents that are provided to Anne Watson in response to FOI 18-189.⁵⁷²

518. In response, Mr. McGuire replied, attaching two staff reports to PWC: PW15-091 dated December 7, 2015 and PW18-008 dated January 15, 2018. He wrote:

Thanks Byrdena:

I’ve attached 2 reports on the Linc / RHVP.

In 2015 we identify a series of issues and countermeasures. In 2018 there is a comprehensive report that has a detailed discussion on most element along this facility.

Appendix A notes that Friction Testing as a medium term measure has been performed, and is marked complete.

These reports are responsive to the internal audit questions, and may be as well to the MFIPPA process.

We can discuss this next week if you’re available.⁵⁷³

519. Ms. MacNeil replied that evening, writing:

Further to my earlier email of this evening, I write with respect to the following matters:

Committee and Council Reports

Thanks for sending along the reports PW18-008 and PW15091. Would these be the only Committee or Council reports dealing with (i) friction of RHVP (2013-2018) and (ii) asphalt and/or pavement of RHVP (2016-2018)?

⁵⁷² [HAM0053999_0001](#)

⁵⁷³ [HAM0054175_0001](#) attaching [HAM0054176_0001](#) and [HAM0054177_0001](#)

If not, your office should collect all of the relevant Committee and Council reports in order to deliver them to Anne Watson as part of your response to FOI 18-189. If they are public reports, then there are no MFIPPA exemptions to be claimed and they would be disclosed.

If, however, any of the reports are confidential or in camera, then s. 6 of MFIPPA should be claimed for them. Section 6 reads:

Draft by-laws, etc.

6 (1) A head may refuse to disclose a record,

(a) that contains a draft of a by-law or a draft of a private bill; or

(b) that reveals the substance of deliberations of a meeting of a council, board, commission or other body or a committee of one of them if a statute authorizes holding that meeting in the absence of the public.

Exception

(2) Despite subsection (1), a head shall not refuse under subsection (1) to disclose a record if,

(a) in the case of a record under clause (1) (a), the draft has been considered in a meeting open to the public;

(b) in the case of a record under clause (1) (b), the subject-matter of the deliberations has been considered in a meeting open to the public; or

(c) the record is more than twenty years old. R.S.O. 1990, c. M.56, s. 6.

Review of Responsiveness of Documents You Have Already Provided

I attach a chart setting out my thoughts on which exemptions may apply to the documents which you have provided us to date with respect to FOI 18-189. My office will send you a hard copy of the documents corresponding to the Index that have been highlighted, so that you will be able to review and consider same. If you agree with the suggested exemptions, then your office should send a copy of the documents (as highlighted), along with the Index, to Anne Watson for her review and consideration.

There may very well be additional exemptions that Anne identifies and applies so as to exempt some of the records so she should be asked to advise you if there are any additional MFIPPA exemptions that apply.

I note that Mike Becke's office is still working on locating/obtaining relevant documents that will need to also be forwarded to Anne Watson. Obviously I have not reviewed same.

Contact will be Ron Sabo

Finally, unfortunately, I am going to be away from work after tonight for some time due to a personal situation. In my absence, please be sure to contact Ron Sabo on a going forward basis. (And I am sorry to leave you in the lurch.)⁵⁷⁴

⁵⁷⁴ [HAM0062020_0001](#) attaching [HAM0062021_0001](#)

520. Mr. McGuire forwarded Ms. MacNeil's email on December 18, 2018, to Ms. Graham, writing "As discussed. Can we add a timeline to this file?"⁵⁷⁵

521. This email was also later forwarded to Ms. Cameron by Carla Bentley (Hamilton) on January 2, 2019.⁵⁷⁶

15. December 17-18, 2018

(a) Meeting Scheduled with Mayor Eisenberger

522. On December 17, 2018, Mr. Zegarac sent a revised calendar invite to Mayor Eisenberger, Mr. McKinnon, Mr. McGuire, Ms. Auty, Ms. Omazic and Mr. Soldo, changing the scheduled time of the meeting to December 18, 2018, 9:00 a.m.⁵⁷⁷

523. Mr. Zegarac's calendar appointments indicate that he attended a meeting on December 18, 2018 titled "Red Hill Expressway Discussion" in the Mayor's Boardroom at 9:00 a.m. The appointment does not identify other attendees.⁵⁷⁸

(b) Mr. McGuire sends Ms. Cameron Document Titled "Red hill review GMC Summary"

524. Mr. McGuire sent Ms. Cameron an email on December 17, 2018, under the subject line "lets review.... thanks". The email included a link to a document titled "Red hill review GMC Summary". The document itself is not attached to the email.⁵⁷⁹

⁵⁷⁵ [HAM0062025_0001](#) attaching [HAM0062028_0001](#)

⁵⁷⁶ [HAM0053999_0001](#) attaching [HAM0054000_0001](#)

⁵⁷⁷ [HAM0027834_0001](#); and [HAM0062016_0001](#)

⁵⁷⁸ [HAM0058807_0001](#)

⁵⁷⁹ [HAM0035743_0001](#)

(c) Ms. MacNeil Circulates 2013 CIMA Report

525. On December 17, 2018, Ms. MacNeil emailed Mr. McGuire, Ms. Auty, Mr. Sabo and Mr. McLennan an email under the subject line “CIMA Report 2013 and FOI 18-189 – RHVP”, attaching the 2013 CIMA Report in four parts. She wrote:

Attached, for your information and file, please find a copy of the “Red Hill Valley Parkway Safety Review” prepared by CIMA in October 2013 (am sending in 4 parts).

This has been produced to plaintiff’s counsel as part of the City’s AOD in the Hansen litigation being handled by Dana Lezau (Court File No.: 17-61728). Note that the report recommends that the City should perform friction testing.

Gord, it appears to me that this record is responsive to the FOI 18-189 access request, in the same way that the 2015 CIMA report is responsive. The 2013 report is also mentioned in the 2015 report at page 2 (para. 1) wherein it states:

“...In 2013, CIMA Canada Inc. (CIMA) conducted a safety review of the section of the RHVP between the Dartnall Road and Greenhill Avenue interchanges, providing a series of recommendations to improve safety.”

I would recommend that this 2013 CIMA report be included in the volume of documents that are provided to Anne Watson in response to FOI 18-189.⁵⁸⁰

16. December 18, 2018: Mr. McGuire and Dr. Uzarowski Meet to Discuss RHVP and 2017 Golder Pavement Evaluation

526. Dr. Uzarowski’s notebook contains an entry from a meeting with Mr. McGuire on December 18, 2018. The notes include:

Tuesday, Dec 18/18

- 1/ Meeting with Gord McGuire from City of Hamilton about RHVP 10:00 am to 11:00 am
 - a/ hand out the draft report
 - b/ present the history of SMA on RHVP – do not use names just say the City
 - c/ construction in 2007, SMA surface course, Dufferin Construction
 - d/ Used technologies for skid improv.
 - microsurfacing – good but expensive
 - shot blasting/skid abrading/blasting/blast tracking – low cost but doesn’t fix other issues
 - other – v. expensive
 - e/ 2007 SN measurements by MTO – (average good, a few lows under structures) – will improve
 - f/ 2013 hired TradeWind Scientific for skid testing – report early 2014
 - no email with report requested by the City
 - hard copy delivered, discussed,
- The skid hazard is still there! -->

⁵⁸⁰ [HAM0061888_0001](#) attaching [HAM0061889_0001](#), [HAM0061890_0001](#), [HAM0061891_0001](#) and [HAM0061892_0001](#)

- micro, blasting, no PSV
 Gord – Report on performance after 6 years
 g/ 2015/2016 – bumps & dips, skid improvements recommendations,
 LU contacting contractors, final decision – no
 - report on dips – send to Gord, emails – ask Tony
 h/ some discussions about friction on RHVP after – blasting – no
 i/ 2017 proposal and investigation PSV, texture, BPN – light snow and temp. < 0 – not
 reliable, PSV 45 medium, texture good.
 Meeting on March 9/2018 and discussed HIR, results presented.
 Considered inconclusive, no report.
 Explained by the City people that they cannot do shot blasting because this would show
 the public there was a problem with RHVP pavement – admitting guilt and getting the
 blame.
 j/ excessive speed – exponential skid hazard
 traffic loading much higher than designed – accelerated pav. deterioration – numerous
 times – Police control
 -->

I was informed that the City is working with CIMA – safety aspects on RHVP including
 speed, geometry, loading. I don't know if friction is included.⁵⁸¹

527. Mr. McGuire also produced notes relating to this meeting, including both
 handwritten and typed notes, which appear largely identical. The typed notes have been
 reproduced below:

Meeting w/ Ludomir (Golder Associates)
 December-19-18
 11:36 AM
 Subject
 Meeting w/ Ludomir (Golder Associates)
 Date and Location
 December-18-18 10:00 AM - 11:00 AM, 77 James Street North - Suite 320 - Gord
 McGuire's Office
 Attendees
 McGuire, Gord; McGuire, Gord; Uzarowski, Ludomir (Ludomir_Uzarowski@golder.com)
 Message

Link to Outlook item

Notes
 **worried about court
 Facts about the city
 Has met with senior staff / legal
 2007
 CIMA " Dufferin
 MTO " unofficial skid testing = thinks it was grip tester = results were ok at the time
 Improve over time
 2013

⁵⁸¹ [GOL0003874_00004](#)

Approved by City to do friction on RHVP " Golder hires Tradewind
 Delivered in 2014 - hard copy to City
 Brought Tradewind first = offered PSV testing
 Noted dips " proposed micro surface = deemed inconclusive, no national standard
 2015-2016
 Looked at dips in RHVP / result of flooding
 Contacted 2 US firms on treatments for skid abrasion
 Cost estimate is at \$300K for whole road
 Another more localized option was proposed "Shot blasting
 ** doesn't know about CIMA reports
 2018 (March)
 Met about H.I.P / talked about BRIN results " deemed inconclusive
 Notes:
 Speed in an issue
 AADT is higher than design
 ESAL is higher than design
 = accelerates deterioration
 Forced to say this;
 Was told the City wouldn't want to admit there is an issue to address
 **Issue still exists " discussion about mitigating priorities
 Pat Wilcox / Eco Pave
 OPSS muni " says not HIP using SMA
 Big change in aggregate gradation⁵⁸²

528. At 12:38 p.m. on December 18, 2018, Mr. McGuire forwarded a scan (taken at 12:23 p.m.) of the draft 2017 Golder Pavement Evaluation report to Mr. Sabo and Ms. Auty.⁵⁸³ The draft is reproduced below:

December 17, 2018 Project No. 1791724

Mr. Gord McGuire, O.L.S., B.Sc.

Director, Engineering Services
 Public Works Department, Engineering Services Division
 City of Hamilton
 77 James Street North, Suite 320
 Hamilton, Ontario
 L8R 2K3

**EVALUATION OF PAVEMENT SURFACE AND AGGREGATES
 RED HILL VALLEY PARKWAY, CITY OF HAMILTON**

Dear Sir,

Golder Associates Ltd. (Golder) is pleased to present this letter report to the City of Hamilton (City) with the results of the investigation of the condition of the existing pavement surface on the Red Hill Valley Parkway (RHVP), located in the City of Hamilton. Our work

⁵⁸² [HAM0054061_0001](#); and [HAM0054060_0001](#)

⁵⁸³ [HAM0054181_0001](#) attaching [HAM0054182_0001](#)

for this assignment was completed in accordance with Golder's Proposal No. P1791724 to the City, dated November 23, 2017.

Field Investigation

Golder's work for this assignment commenced with carrying out a limited field investigation program which comprised the following:

- Testing of the surface frictional properties using the British Pendulum Tester in accordance with Test Method ASTM E303;
- Pavement texture measurements at the surface friction test locations, using a volumetric technique (Sand Patch) in accordance with Test Method ASTM E965; and
- Coring of the surface course asphalt layers.

All the field investigations for this assignment were carried out at night on December 6/7, 2017. Golder retained a qualified subcontractor to provide the required traffic control for the field investigations program. The friction and texture measurements were made at 15 locations in each direction of the RHVP, with both tests (i.e. friction and surface texture) being carried out at each location. A total of 30 of each test were performed. The testing was performed by a member of Golder's engineering staff.

At each location that was tested for surface friction and texture, Golder also obtained a core of the surface course asphalt layer. A 150 mm diameter core barrel was used to obtain the asphalt core by a Golder representative. After the core was extracted at each location, the core hole was patched with Hot Mix Asphalt (HMA).

Laboratory Testing

The asphalt cores were brought to Golder's CCIL certified laboratory to Whitby, Ontario. The cores were broken down and the aggregates from the surface course asphalt layers were extracted from each core. The extracted aggregates were sent to James Fisher Testing Services in Ireland for testing of Polished Stone Value (PSV) in accordance with European Test Method EN 1097-8: 2009. The laboratory performing the test was accredited for this test by the United Kingdom Accreditation Service (UKAS). The PSV is not a standard test in Canada and thus the sample was sent to Europe for testing. The Polished Stone Value of aggregate is intended to give a measure of resistance to the polishing action of vehicle tires under conditions similar to those occurring on the surface of a road.

Analysis and Interpretation

The detailed results of the field investigations and laboratory testing are attached to this letter report. A summary of the test results was presented to the City in a meeting on March 9, 2018.

The corrected PSV of the tested aggregates was 45. This value is considered to be average/medium. As discussed during the meeting, there is a concern that an aggregate with a PSV of 45 will not provide sufficient long-term frictional characteristics if the surface course asphalt mix is subjected to hot-in place (HIR) recycling. At the time HIR was one of the rehabilitation strategies being considered by the City for the RHVP. One of the solutions to this particular concern with HIR could be the addition of a high percentage of a beneficiating mix during the HIR process. The beneficiating mix in this case would have to incorporate aggregate(s) with high PSV values to improve the average characteristics of the blend. Golder is currently evaluating the feasibility of carrying out HIR of the SMA surface course HMA mix on the RHVP.

The average texture depth was 1.25 mm and it ranged from 0.57 mm to 1.98 mm. Overall, the texture of the surface is generally considered to be good. A pavement with good macro-texture should have a texture depth of about 1.0 mm. The British pendulum tester is a dynamic pendulum impact-type tester used to measure the energy loss when a rubber slider edge is propelled over a test surface. The values measured, BPN = British pendulum (tester) number for flat surfaces, represents the frictional properties obtained with the apparatus at the time of the test. The higher the BPN, the better the frictional properties of the test surface.

The average BPN value was 39 and the results ranged from 21 to 62. While the average can be considered as good, the test results were very variable. The values below 30 would be considered as low. Six of the readings were below 30, i.e. 20% of the locations tested. However, as stated during the meeting with the City, the BPN testing was carried out while the temperature was below 0°C and there was a light snow fall; therefore, the BPN numbers would not be considered to be reliable.

It was also brought to the City's attention that:

- 1) The traffic on the RHVP significantly exceeds the level it was designed for in terms of axial load and number of vehicles. This accelerates pavement deterioration.
- 2) The monitoring station showed that the speed on the RHVP is being significantly exceeded and only relatively low percentage of drivers follows the speed limit of 90 km/h. This increases the risk of skid exponentially.

As discussed with the City, if there is a concern with frictional characteristics of the SMA surface course on the RHVP, an immediate, effective solution would be to carry out shot blasting/skid abrading of areas of concern on the existing pavement surface. This treatment is quick and relatively low cost. It restores the skid resistance and improves frictional characteristics immediately. However, it does not address pavement cracking or bumps and dips in the pavement. Other solutions could be the application of microsurfacing; however, although this improves frictional characteristics, seals the cracks and can correct minor dips in a pavement, it is significantly more expensive than shot blasting. It also requires good weather conditions for successful application.

Closure

We trust that this report meets your present requirements. If you have any questions about this report or require further clarification, please do not hesitate to contact the undersigned.⁵⁸⁴

529. Mr. McGuire's binders contain a copy of this draft report with handwritten notations.⁵⁸⁵

⁵⁸⁴ [HAM0054182_0001](#)

⁵⁸⁵ [HAM0061739_0001](#) attaching [HAM0061740_0001](#), [HAM0061741_0001](#) and [HAM0061742_0001](#)

17. December 19, 2018

530. On December 19, 2018, Mr. Sabo created a calendar entry for January 28, 2019, from 8:00 a.m. to 5:00 p.m., titled "Poss PW meeting re red hill".⁵⁸⁶

531. Ms. Cameron, on behalf of Mr. McGuire, emailed Dr. Uzarowski on December 19, 2018, writing:

Thanks for the meeting yesterday. I have a few follow-up items.

(1) In reference to the original Tradewind testing you identified that the UK testing standard was not applicable in Canada. However, the difference between the Linc and the RHVP was discussed. What standard would be considered in Ontario?

(2) The draft report you submitted included test results from a British Pendulum test however, I have no scale to measure these results against. Can you supply your reference as you indicate our testing results were reasonable given the weather conditions, etc.

(3) Lastly, you suggest a shot blasting method to address the skid resistance of the facility. Can you supply Ontario references the use of this method as I can find none in my search. I do note that both the Tradewind and BPT results were considered inconclusive and ask for further understanding of the proposal to shot blast.

I look forward to your response.⁵⁸⁷

532. Also on December 19, 2018, Mr. Ferguson forwarded six motor vehicle accident reports to Mr. Soldo in a response to a request made the day prior. Mr. Soldo had requested "a copy of all the fatal accident reports on the RHVP since 2007 when it opened". The reports provided to Mr. Soldo related to fatal collisions on the RHVP that occurred between its opening and December 1, 2018.⁵⁸⁸

⁵⁸⁶ [HAM0062520_0001](#)

⁵⁸⁷ [HAM0035745_0001](#)

⁵⁸⁸ [HAM0011926_0001](#) attaching [HAM0011927_0001](#), [HAM0011928_0001](#), [HAM0011929_0001](#), [HAM0011930_0001](#), [HAM0011931_0001](#) and [HAM0011932_0001](#)

18. December 21, 2018

(a) *Dr. Uzarowski Provides Mr. Becke with Draft HIR Suitability Study Report*

533. On December 21, 2018, Dr. Uzarowski emailed Mr. Becke, attaching a draft copy of the HIR Suitability Study report, including laboratory results.⁵⁸⁹ Mr. Becke forwarded the email to Mr. McGuire, copying Ms. Jacob and Mr. Renaud on December 24, 2018, writing:

Please find attached a draft report from Golder, regarding the HIP for the Red Hill Valley Parkway. It is a draft report and the results from the Extracted AC are still not available yet.

I have read the report, it is factual based and does make reference to the PSV. I have highlighted some of the key areas and left a copy on your chair. I'm in all day if you have any questions.⁵⁹⁰

(b) *Continued Discussions Between Dr. Uzarowski and Mr. McGuire Regarding Meeting on December 18, 2018*

534. On December 21, 2018, Dr. Uzarowski emailed Mr. McGuire regarding the December 18, 2018 meeting:

Thank you for the meeting on Tuesday, I thought it was productive but I must raise one concern.

Towards the end of the conversation, you reduced the volume on the stationary phone. This surprised me as I thought we were the only people participating in the meeting. Could you please clarify if our conversation was recorded or if others were listening through the speaker phone?⁵⁹¹

535. Mr. McGuire responded the same day, writing:

No there was no recording or anyone else listening. During the meeting there was a call in and I reached over to reduce the ringer volume. My office is secure and there was no intent to capture anything but the overall discussion via notes.

⁵⁸⁹ [GOL0005768](#) attaching [GOL0005769](#)

⁵⁹⁰ [HAM0054194_0001](#) attaching [HAM0054195_0001](#)

⁵⁹¹ [GOL0006615](#)

I did ask for some follow up and also ask if you have a map or sketch of the locations you attended to take the PSV values. I assume the same locations were used for the surface texture and pendulum tests.

Could you please supply that data as well.

Thanks for the meeting and have a great holiday.⁵⁹²

536. Approximately 25 minutes later, Mr. McGuire forwarded his email to Ms. Auty and Mr. Sabo, indicating that he would advise them of any follow up.⁵⁹³

537. Dr. Uzarowski forwarded this email the same day to Tony Linardi (Principal, General Counsel (Canada), Golder), Michael Maher (Principal, Pavement and Materials Engineering, Golder) and Dr. Skinner.⁵⁹⁴

538. Dr. Uzarowski responded to Mr. McGuire's December 18, 2018 email on December 21, 2018, attaching images identifying the core locations and the BPT results. He also responded to McGuire's in red (underlining added):⁵⁹⁵

1. In reference to the original Tradewind testing you identified that the UK testing standard was not applicable in Canada. However, the difference between the Linc and the RHVP was discussed. What standard would be considered in Ontario? There is no recent, clear standard for SN requirements on highways in Ontario. Golder will be pleased to discuss with the City how we can assist with this aspect.

2. The draft report you submitted included test results from a British Pendulum test however, I have no scale to measure these results against. Can you supply your reference as you indicate our testing results were reasonable given the weather conditions, etc. We would like to clarify that in our opinion and as stated in the report, the BPN numbers were not reliable since the testing was carried out when the temperature was below 0°C and there was light snow fall. Although the average of 39.4 can be considered as good there were number of low values. But again, the numbers are not reliable. As above, Golder will be pleased to discuss with the City how we can assist with this aspect.

3. Lastly, you suggest a shot blasting method to address the skid resistance of the facility. Can you supply Ontario references the use of this method as I can find none in my search. I do note that both the Tradewind and BPT results were considered inconclusive and ask

⁵⁹² [GOL0006615](#)

⁵⁹³ [HAM0061744_0001](#)

⁵⁹⁴ [GOL0006615](#)

⁵⁹⁵ [HAM0035749_0001](#) attaching [HAM0035750_0001](#), [HAM0035751_0001](#), [HAM0035752_0001](#), [HAM0035753_0001](#), [HAM0035754_0001](#), [HAM0035755_0001](#) and [HAM0035756_0001](#)

for further understanding of the proposal to shot blast. As discussed during our meeting on Tuesday, and previously with City, the concern about skid potential on the RHVP is still valid and the City should consider how to address this. In this regard, I have included below the contact information for the two companies I contacted in the past while investigating the possibility of shot blasting/skid abrading on the RHVP. In addition, I have also included a contact information of the company in Mississauga that we understand can do shot blasting. I have also attached two brochures that explain the use of skidabrader and shot blasting to improve skid resistance.

In Louisiana – Skidabrader

Humble Equipment Co., Inc.

Jon Swain
 Skidabrader
 318-251-1935 - Office
 318-251-1973 - Fax
jon@skidabrader.com
www.skidabrader.com

In Quebec – Blastrac equipment for shot blasting



In Mississauga – Blastrac equipment for shot blasting



K. January 2019

1. Mr. McGuire Prepares Summary of his Understanding of Events Leading to Discovery of Tradewind Report and RHVP Resurfacing

539. The City has produced several draft copies of a document titled “Red Hill Valley Parkway Review” dated in January 2019.⁵⁹⁶ The documents do not identify when in January 2019 they were prepared. Based on the content described in the document, the

⁵⁹⁶ [HAM0062030_0001](#)

drafts produced by the City were prepared on or after January 21, 2019, and modified on or after February 2019. The document is a 26-page summary prepared by Mr. McGuire, which includes the following table of contents:

1	TABLE OF CONTENTS	
2	1.0 Executive Summary:	2
3	2.0 History:	2
4	3.0 FOI Request 18-189	6
5	4.0 Golder Assignments	7
6	5.0 Tradewind report and findings	11
7	6.0 Spectator and other Articles:	13
8	7.0 MTO Studies and Specs	15
9	8.0 Other Safety Studies:	18
10	9.0 Capital Budgeting:	21
11	10.0 Audit processes – Value For money	22
12	11.0 Audit processes – RHVP Specific inquiry	23

540. The document appears to include some content similar to that contained in the document prepared by Mr. McGuire in November 2018 titled “Red hill review GMC Summary.doc”.⁵⁹⁷

541. The document includes embedded hyperlinks to various news articles, as well as footnotes to a document titled “RHVP Timeline”. Mr. McGuire noted the following in Section 1.0 Executive Summary:

This file reviews the Red Hill Valley Parkway (RHVP) project and the friction testing aspects. This is my understanding of the process that has led to the 2019 resurfacing of this asset.

This document has been assembled over the course of 2018 and 2019 and remains under revision as more details arise.⁵⁹⁸

⁵⁹⁷ [HAM0027452_0001](#)

⁵⁹⁸ [HAM0062030_0001](#) at image 2

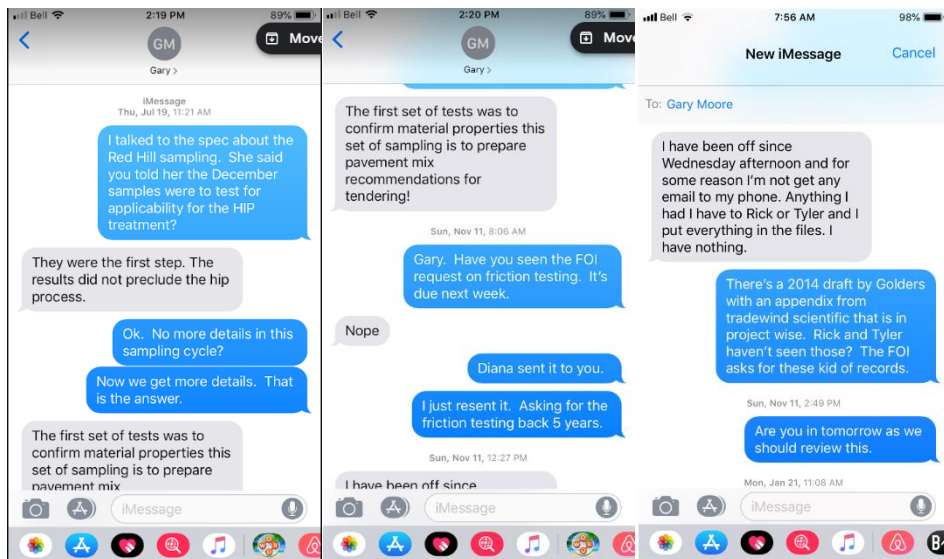
542. This paragraph was revised in another version of the document:

This document has been assembled over the course of November 2018 until the time of the February council report (PW18008a).⁵⁹⁹

543. At Section 2.0, Mr. McGuire provided a history of the RHVP. An excerpt of this section is included below:

In June 2018 I became the Director of the Engineering Services division.

In July 2018 I was interviewed by the Spectator about the upcoming resurfacing and was unaware of the friction testing that had taken place previously. I texted Gary Moore about this interview and his replies are as below.



The friction testing is outlined below and in particular the 2014 Golders report.

In late September during a search in our document management system I found an email and opened it September 26th, 2018. The attached audit trail snapshot indicates these times and are system generated on a server.

What I had discovered was the 2013 Tradewind Friction Test report done for Golders and associates for Engineering Services. The email was loaded into the system May 15th, 2018 by the former Director.

⁵⁹⁹ [HAM0062031_0001](#)

Action Name	Date/Time	User Name	Additional Data	Comments
Checked in	9/26/18 11:23:06 AM	gmcquire		
Checked out	9/26/18 8:12:14 AM	gmcquire		
Created	5/15/18 10:01:10 AM	gmoore	In folder 'Pavements'	

After this discovery either myself or Diana Cameron found (or were given via Mike Becke) the full 2014 Golders report that outlined the rest of the condition assessment for the RHVP. The Golders report attached the Tradewind Scientific report as an appendix. The Friction Test was done by Tradewind on the RHVP for Golders as part of an overall assessment on the RHVP.

I alerted Dan McKinnon shortly after I uncovered this report, also inquired with Engineering Services management staff if they had seen this report previously.

Engineering Services management staff all replied that they had not seen the Tradewind report prior to Q3 2018 however they had all understood that a test had been performed. There is no record that I have been made aware of that the report had been accessed by internal staff within my division or across Public Works.⁶⁰⁰

544. Section 4.0 “Golder Assignments” outlined various projects Golder conducted for the City over time, including those related to the City’s asphalt program generally, as well as RHVP and LINC specific projects. Certain paragraphs within this section have been excerpted below:

Appendix E to the Golder Report is the 2013 friction study. This assignment was a follow-on assignment and added in November of 2013 to the existing pavement review assignment. In a parallel process the Traffic Operations team had retained CIMA+ to perform safety review of the southern portion of the RHVP from the end of the Linc to the King street ramps. The CIMA assignment identified a higher than anticipated number of collisions along that stretch and is detailed in the report, however it is important to note that

⁶⁰⁰ [HAM0062030_0001](#) at images 4-6

a primary recommendation of the study was friction testing. Pg 38 of their findings identify the friction test as part of a countermeasures protocol to be undertaken.

The 2013 CIMA report is dated September 2013, and in November 2013 the Golders RHVP pavement assignment is extended to include friction testing. Golders retains a subcontractor (Tradewind Scientific for Golders) for "Grip Tester" friction assessment of the LINC and RHVP. The study is completed in November 2013 and at that time that indicates the LINC is performing well regarding friction readings, however the RHVP was performing "below or well below" the acceptable levels of a facility of this nature based on a UK model. (Pg. 4, para 2).

Golders recommends in their 2014 report (pg. 8) to apply micro surfacing over the entire facility to address the relatively low FN coefficient and remove the frictional component as an element. This is a procedure that only address the pavement friction and would not be considered a resurfacing program.

Golders November 2017 friction assignment

*Update Dec 1, 2018. Recently and because of the FOI activity we have uncovered a 2017 assignment to Golders and Associates that was to determine "investigate the skid resistance of the existing pavement surface of the RHVP...and provide recommendations to improve the skid resistance, if such improvement is required". This statement seems at odds with the statement made by Golders in 2014 that there was relatively low friction, and that the City should address it through a micro surfacing program.

This assignment commenced in November of 2017 however was left unfinished until it was uncovered in December of 2018. Golders supplied the preliminary measurement data to Engineering Services but did not complete the entire report. I reached out to Golders to have them finish the report and provide me with the final details to complete the assignment.

There were 3 elements to the 2017 Golders assignment and below is Golders summary:

1. Perform a Polished Stone Value test – This was completed, and the results were an average value of 45 +/- that were summarized as "an average or medium for traprock aggregates".
2. The measured texture depth (MTD) was determined on the site using the Sand Patch Method. The average MTD is 1.25 mm. A pavement with good macrotexture should have the MTD of about 1.0 mm.
3. Golders attempted to run the British Pendulum Test; however, due to light snow and negative temperatures the test was considered meaningless.

*There were challenges with Golders through January and February 2019 ensuring that they complete the assignment. I had asked repeatedly for a framework around the interpretation of the results. Golders had refused to give me these framework references. Golders did end up connecting the measurement data to an industry standard test.

Golders Hot in Place (HIR) assignment (2018): (See FOI 18-189 items 28-57)

During the early part of the resurfacing discussions the idea of using HIR was raised by the former Director. The concept is sound as it allows a re-use of the materials and will save both time and money. Golders had been retained to assess this option in 2017 I

understand. This is referred to in the Jan. 2018 Spectator article as a method under review by Gary Moore.

My challenge once learning of the frictional issues was the idea of re-using material that had been identified as poorly performing in its current form. I began asking a lot of questions in the summer of 2018 about the process for two reasons. First it appeared we were making no headway with the project, staff were supposed to meet the MTO on a site in northern Ontario and that kept being pushed back, and second the budgets were due, and we needed to decide on a method to lock in funding. This is tracked in our FOI responses and by August there was pressure being applied to resolve our go forward plans. (Items 52-57 of the FOI 18-189 response)⁶⁰¹

545. Under Section 5.0 “Tradewind Report and Findings”, Mr. McGuire noted:

***There is no record of this report being shared with staff or external contracts after it was received by the City’s Engineering Services Division. I have canvassed staff and none of the Management nor the technical staff have ever seen the report prior to the last half of 2018.**⁶⁰²

546. Section 6.0 “Spectator and Other Articles” included the excerpt below:

It is interesting to note the reporter stated I wouldn’t comment on the testing to determine the asphalt re: conditions leading to accidents. I stated we weren’t testing for that element, however she indicated otherwise.⁶⁰³

547. Section 8.0 “Other Safety Studies” included that:

In August of 2018 Traffic undertook a more comprehensive review of accidents and determined that the wet weather performance was significantly different and not within statistical limits. This further verifies the 2015 work done by CIMA on their safety audits⁶⁰⁴

548. Section 11.0 “Audit Processes – RHVP Specific Inquiry” included the following excerpts:

Audit received a redacted version sometime in mid-November (November 19th - confirm). Both Domenic and myself had vacation in mid-November and early December. However, it was agreed between both parties (upon advise of Legal Services – see December 4th email) that the auditor could come to my office and view the document until such time as MFIPPA data was released.

⁶⁰¹ [HAM0062030_0001](#) at images 8-11

⁶⁰² [HAM0062030_0001](#) at image 14

⁶⁰³ [HAM0062030_0001](#) at image 16

⁶⁰⁴ [HAM0062030_0001](#) at image 20

With the agreement in place between the auditor and director to only view the document the auditor arrived on December 4th and proceeded to take a copy of the redacted information, while I was in a PW Department Leadership meeting.

The auditor then submitted to my office set of questions called “lines of enquiry” (that were 2 pages long, had over 14 detailed program level enquiries that had not been in any scope we had discussed prior to this message. My response was that data would require significant effort to assemble, and my schedule was very crowded. (Dec 6 email – Safety Analysis of the Red hill Valley Parkway).

Audit services proceeded to book a December 10th meeting with myself, although advised that I would be unable to provide information on such a short turnaround given capital budget presentations and my schedule. In advance of the meeting Domenic prepared a spreadhseet with 14 additional questions, and many sub components to these questions. Many of these questions were new lines of enquiry which had not been explored by myself or staff yet in this process.

The December 10 meeting proceeded and my words to Domenic were that “I was not refusing to answer, however I had no information at this time” given the schedule compressions and lack of time to react. I did not at any time suggest we couldn’t, or wouldn’t provide information, however I told Domenic that my priorities were aligned to delivering our capital budget and the MFIPPA request.⁶⁰⁵

549. Various versions of this document have been produced, including scanned copies with handwritten comments.⁶⁰⁶

2. January 2-8, 2019

(a) Follow-up with Mr. Malone Regarding January 14, 2019 PWC Meeting

550. On January 2, 2019, Mr. Malone emailed Mr. McGuire, regarding a PWC meeting scheduled for January 14, 2019:

Hi Gord. Hope you had (or are still having) and great holiday. I’m just checking in about the PWC meeting on January 14th. You had mentioned that you would like to me to attend that meeting to be available to respond to questions. I just wanted to check if your report will still be presented then, and if you are still seeking my attendance? I have it in my calendar, but I’m just confirming.⁶⁰⁷

⁶⁰⁵ [HAM0062030_0001](#) at images 25-26

⁶⁰⁶ [HAM0062329_0001](#); and [HAM0062333_0001](#)

⁶⁰⁷ [HAM0027875_0001](#)

551. Ms. Cameron responded to Mr. Malone the same day, advising that they were finalizing the date to present the report to PWC, so he would not be required to attend on January 14, 2019.⁶⁰⁸

552. On January 3, 2019, Mr. McGuire emailed Ms. Auty and Mr. Sabo, asking if either had connected with Mr. Malone regarding the RHVP. He wrote:

Did either of you connect with Brian Malone on this matter?

I'm meeting today on this and wanted to understand next steps.⁶⁰⁹

553. Mr. Sabo replied later the same morning, advising that he was in the office if Mr. McGuire wished to discuss.⁶¹⁰

(b) *Strategic Communications Planning Surrounding the Disclosure of the Tradewind Report, Collection of Documents and Preparation of Chronology*

554. On January 3, 2019, Mr. McGuire forwarded his email exchange with Dr. Uzarowski regarding the December 18, 2018 meeting, in which Dr. Uzarowski inquired as to whether the meeting was recorded, or if anyone had been listening in to the meeting to Mr. McKinnon, writing "As requested...."⁶¹¹

555. On January 3, 2019, Mr. McKinnon forwarded this email exchange to Ms. Auty, copying Mr. Zegarac, writing: "Hi Nicole, are you available for a call today? I'd like to

⁶⁰⁸ [HAM0048429_0001](#)

⁶⁰⁹ [HAM0062035_0001](#)

⁶¹⁰ [HAM0062035_0001](#)

⁶¹¹ [HAM0054197_0001](#)

discuss the below and what our plan is for updating council. I've kind of lost the thread on this".⁶¹²

556. On January 4, 2019, John Hertel (Director, Strategic Partnerships & Communications, City Manager's Office, Hamilton) sent a calendar invite for a meeting scheduled for January 7, 2019, at 2:00 p.m. The subject of the meeting was "Confidential Agenda", and the location was the CMO boardroom. The invite identifies Jen Recine (Manager, Communications, Strategic Partnerships & Communications, City Manager's Office, Hamilton), Ms. Graham, Mr. Zegarac, Mr. McKinnon, Mr. McGuire, Karen Gordon (Principal, Gordon Strategy) and Ms. Auty as required attendees. The body of the invite includes a reference to "Redhill".⁶¹³

557. A meeting was held at the City on January 7, 2019. Ms. Graham prepared minutes of the meeting, which did not list the persons in attendance. The minutes included the following description of the meeting:

RHVP Introduction & Summary

- Significantly higher volume of traffic than anticipated
- Issue identified on facility during wet weather
- Previous head of engineering oversaw construction and commissioning in 2006 and then became head of engineering services
- 2013/2014 studies indicated performance issues in wet weather related to friction
- A number of parameters that indicate performance of facility - geometry, elevation on curves, roadside safety, and friction - we don't have other concerns except during friction
- Friction 2013/2014 - used methodology not widely recognized in North America and head of engineering felt it was engineering
- Did other studies and eventually programmed facility in 2018
- October/November 2018 - freedom of information request looking for
- Friction tests
- Feels like the information developed
- Friction

⁶¹² [HAM0054197_0001](#)

⁶¹³ [HAM0062037_0001](#)

- 2013 - Golder retained TradeWind who did a grip test on our facilities, indicated RHVP was significantly below performance of the Linc - relatively speaking, two facilities had different performance
- 2015 - CIMA went through road side safety audit collision analysis and said it would be a good idea to do a friction test (they didn't know we had one already)
- 2018 –
- FOI request is outstanding now
- Timing – internal timing
- Same person who organized and
- We don't think he shared the results with anyone internally on staff

Mitigations to date;

- Digital feedback/variable
- Recessed pavement markers
- Upgraded signage
- Rumble strips
- Traffic counting

Stone Mastic Asphalt – MTO discontinued 2007 because of friction issues – later reintroduced after tact coating the top

- It's not a product we use elsewhere
- Supposed to eliminate rutting from trucks and be quieter
- MTO was using it at the time
- Low friction characteristics to

Crisis Comms Plan

- Council Information Sharing
 - Mayor knows today
 - Don't like verbal updates
 - The reason we're here, why we want you to be aware, ready to answer their questions
- Subject to litigation
- We are being queried deeply on FOI
- Negative reputational harm to the city and more litigation
- Opportunity to tell them the number 1 project in ES is the RHVP – whatever we can do asap to
- Part of the bigger story – make part of bigger picture

Gary's key point: he thought the results were inconclusive because the standard is not used in North America

- Understanding that a bit better, and who answers those questions
-

Karen

- Come at it and confess it
 - Difficult to explain
 - More problematic for new Council
 - Greatest concern – explaining a few first time councillors, you can't know who the FOI came from
- Cleaner part of the story about – improvements to the road

Options for updating:

GIC – Jan 16 (goal)
Council – Jan 23 (plan b)

Infographic - street view

- **Curve**
- **Radius**
- **Grade**
- **Drainage**
- **Speed**
- **Illumination**
- **Following too close**
- **Intoxication**
- **Material performance**
- **(15-20)**

-check, check, check - we've tackled 95% of them, attention grabbing, we are fixing these things, etc.

- Expensive

CIMA's report does this - check all of this stuff

What did you know, what did you know when, what did you do about it⁶¹⁴

558. On January 7, 2019, Ms. Auty exchanged emails with Mr. Boghosian under the subject line "RHVE":

[Ms. Auty]: Do you have time Thursday or Friday to go over some questions/discuss your draft opinion on this matter?"

[Mr. Boghosian]: How does this Friday at 10 am sound?

[Ms. Auty]: I will send a meeting invite.

[Mr. Boghosian]: Thanks, got it!

[Ms. Auty]: Any chance you're free tomorrow morning?

[Mr. Boghosian]: I have conference calls at 10 and 11 am. So I could do a call at 9:30 or 11:30 if one of those works for you.

[Ms. Auty]: Let's speak at 930 tomorrow.⁶¹⁵

559. The City produced several calendar invitations sent by Ms. Auty to Mr. Sabo and Mr. Boghosian on January 7, 2019, including invitations for a call on January 11, 2019

⁶¹⁴ [HAM0012007_0001](#)

⁶¹⁵ [HAM0062530_0001](#)

with “Meeting to review opinion” in the body of the invitation.⁶¹⁶ Certain copies of this calendar appointment indicate that the meeting was cancelled.⁶¹⁷

560. The same day, Ms. Auty sent another calendar invitation to Mr. Sabo and Mr. Boghosian for a meeting on January 8, 2019, at 9:30 a.m. The subject of the meeting was “RHVE”.⁶¹⁸

561. Ms. Auty sent a separate calendar invitation to Mr. Sabo for a meeting on January 8, 2019, at 9:00 a.m. In the body of the invitation, Ms. Auty wrote “If we can speak first before speaking to David.”⁶¹⁹ Mr. Sabo accepted this invitation.⁶²⁰

562. On January 7, 2019, Ms. Auty emailed Mr. Sabo under the subject line “FOI release”, writing:

Do we have a sense from Clerks how long/when they will release the FOI to the requester.

I am in a meeting on the communication plan for the RHVE issue (I got pulled from another meeting) I will update you in the morning.⁶²¹

(c) Contact with CIMA Regarding RHVP Roadside Safety Assessment

563. On January 7, 2019, Mr. Ferguson emailed Mr. Becke, Ms. Jacob and Mr. Olszewski, copying Mr. Soldo, Mr. White and Mr. McGuire, regarding the RHVP Roadside Safety Assessment, writing “I’m just following up with CIMA on finalizing this report, do

⁶¹⁶ [HAM0062521_0001](#); [HAM0062522_0001](#); and [HAM0062524_0001](#)

⁶¹⁷ [HAM0062523_0001](#); and

⁶¹⁸ [HAM0062526_0001](#)

⁶¹⁹ [HAM0062531_0001](#)

⁶²⁰ [HAM0062533_0001](#)

⁶²¹ [HAM0062525_0001](#)

you have any further comments?”⁶²² Ms. Jacob replied later that day with the following comments:

Please see my comments below

- Page 1, last line stated “exceeding the design of the road (110 km/h) in the north bound and southbound direction.” As we know from the report the design speed per new standards is only 90 km/h.”
- Page 2 indicates “ The present study takes into account the findings and recommendations of the previous studies, in order to confirm or expand the recommendations to reduce the roadside related collision...” I do not recall seeing a section where you were validating or expanding the recommendations from the past.
- Page 18, Section 3.4. second bullet is calling for conducting regular speed enforcement, Ensure that Police Services are informed on this.
- Page 18, Section 3.4, third bullet states” Immediately after the resurfacing is complete, and provided that adequate wet weather skid resistance is achieved, remove all “Slippery When Wet signs and monitor collisions”. This seems to be rather vague. How do we determine what is **adequate** skid resistance and how long should this be monitored? Who will be doing this monitoring? Also when and who is installing the Slippery when Wet sign?
- It was not possible to open the GIS Shape file mentioned in the report and as such not all locations where improvements were recommended could be reviewed. Traffic Section to help identify the priority locations where changes have to be incorporated into the upcoming tender.
- Page 28, paragraph 3, states that “However these requirements are based on Provincial highway projects...Given that RHVP is not a Provincial....City may consider adopting a different criteria...” The request was for CIMA to analyse the performance and standards of RHVP against MTO and TAC standards. May be this statement is not required that City has the option of adopting a different criteria.
- Page 30, Section 8 regarding access to wastewater facilities. The analysis could not be completed as it requires survey and design and also involves considerable fill. It is important to inform Hamilton Water that their request for access cannot be accommodated at this time so that the expectations are clear. Grading changes and changes to access points will require thorough analysis. Given the timeframe for tender by February 2019, this additional work will not be possible. Also grading requires permit from Conservation Authority

Not all the comments above are for changes to the report, some are just observations.

It would be good if we can complete the scope document based on the report so that Design can ensure that all relevant actions can be accommodated in the tender.⁶²³

564. Mr. McGuire replied:

Thanks Susan:

⁶²² [HAM0027905_0001](#)

⁶²³ [HAM0027905_0001](#)

Do we have enough details to tender and if so when?⁶²⁴

(d) *Internal Circulation of Tradewind Report and Scheduling of January 14, 2019 Meeting*

565. On January 8, 2019, Ms. Graham emailed Mr. McGuire, requesting an electronic copy of the Tradewind Report. Mr. McGuire provided the report approximately 25 minutes later.⁶²⁵

566. On January 8, 2019, Mr. McKinnon sent a calendar invite to Ms. Graham, Mr. McGuire and Mr. Soldo, with the subject “Red Hill Valley”. The meeting was scheduled for January 14, 2019.⁶²⁶

567. On January 8, 2019, Mr. Sabo forwarded an email under the subject line “FW: Draft Hamilton re: Red Hill Valley Parkway Opinion letter” to Mr. McLennan.⁶²⁷ Mr. McLennan forwarded the email approximately 15 minutes later to Ms. Swaby:, writing “[h]ere is Boghosian’s opinion. Read it today if you can and give me any thoughts.”

568. Ms. Swaby replied that afternoon, writing:

[redacted for privilege] David’s opinion is consistent with mine as to the friction testing completed, as there is no industry standard in Ontario, there isn’t much cause for concern.

[redacted for privilege] Time and time again we see in large scale losses, what was recommended to be completed was fairly easy to do an yet the City didn’t do it..... unless the City can show a compelling reason not to implement these recommendations, the City will be caught on its heels, having to explain itself. Ex. Saumur – as Robert Hooper said “all the City had to do was install a \$3k pedestrian assistance traffic light and the accident wouldn’t have happened.....or in Safranyos/Chiocchio – it only costs about \$140 to paint a stop line.

Makes sense; it’s a good opinion.⁶²⁸

⁶²⁴ [HAM0027905_0001](#)

⁶²⁵ [HAM0027911_0001](#) attaching [HAM0027912_0001](#)

⁶²⁶ [HAM0027908_0001](#)

⁶²⁷ [HAM0062040_0001](#)

⁶²⁸ [HAM0062040_0001](#)

569. Mr. McLennan appears to have forwarded Ms. Swaby's response to Mr. Sabo later the same day, writing:

Hi Ron,

Below are Diana's thoughts which are consistent with mine.

[redacted for privilege]

At this point I think it is incumbent on us to bring in JLT. They will be extremely concerned, understandably, about David's findings, and I believe we would face allegations of bad faith if we don't bring them in. The timing is not ideal, as we are presently awaiting renewal figures; however, I don't think we can let that influence our decision.⁶²⁹

570. Mr. Sabo replied later that evening:

Thanks for the quick review. This is a draft and we are getting comments back to David this week to get a final version late this week or Monday. If we need to call JLT now we can as we would want to tell council we have insurance on notice. We can send them the letter when it's finalized or give them the gist and a supply later a more complete chronology we will all need to go forward.⁶³⁰

3. January 9, 2019

(a) *Note Regarding Discovery of Tradewind Report*

571. Ms. Graham appears to have written a note regarding the discovery of the Tradewind Report on January 9, 2019. The note includes the following:

Gord knew about this in late September -

- As part of researching HIP technique
- Saw folder "correspondence" in folder, link called Red Hill and Pavements - caught eye
-

In interim between finding friction and FOI coming, that's when we made the decision to not use HIP

- Discussed with internal staff
- Studies with Golder HIP studies not done yet - not getting positive feedback on HIP study was going
- Because of friction analysis and in convo with experts internally and Dan, made the decision (Gord) decided to abandon HIP methods for RHVP but continue on with studying HIP for somewhere else maybe, but not for this pavement design

Joint with Edward

⁶²⁹ [HAM0062040_0001](#)

⁶³⁰ [HAM0062040_0001](#)

Need to show Engineering and Operations used to be

Improving process - joint work on the project to ensure gaps are closed and addressed, work more appropriately together so we don't get into position where information is not shared with each other going forward

Very important process issue we have found, siligently over next years to make sure all info we gather is shared, open and transparent - ops should not have issued contract to CIMA in 2015 without full knowledge of what Eng had done

- Reactions:

- o Increased funding
- o Roadside safety

FOI in Nov 2018⁶³¹

(b) Mr. White Sends Historical Emails Regarding RHVP and LINC

572. On January 9, 2019, Mr. White sent Mr. Soldo a series of emails relating to the RHVP. This included an email from October 30, 2014, originally sent by Mr. Ferguson, regarding a fatal collision that occurred on the LINC.⁶³²

573. Mr. White forwarded himself an email titled "FW: Red Hill/Linc Safety review" on January 9, 2019. The forwarded email was a chain from November 26, 2014, relating to John Mater's request for a safety review on the RHVP and LINC.⁶³³

574. The same day, in a separate email to Mr. Soldo, he attached 12 emails, which to be appear related to the RHVP and Linc. He wrote:

Here are some of the relevant emails on this subject. Traffic requested a safety audit of both facilities. It was delivery Nov 15, 2015 by CIMA. Attached are a sampling of emails I have. We had at least two meeting with directors (Betty John Gary) and Dan was present at minimum 1 meeting with directors Dave and I. We met with stiff resistance from Gary. We ended up reporting to PW comm. around dec 2015⁶³⁴

⁶³¹ [HAM0035769_0001](#)

⁶³² [HAM0012033_0001](#)

⁶³³ [HAM0012034_0001](#)

⁶³⁴ [HAM0012042_0001](#)

(c) Discussions Regarding RHVP Resurfacing Budget Programming

575. On January 9, 2019, Mr. Jazvac, Mr. Andoga and Mr. McGuire exchanged emails regarding the budget programming of the RHVP and LINC resurfacing:

[AJ]: Rick,

Based on what I could find, there was discussion about performing some resurfacing on RHVP and LINC expressway ramps (proposed as part of 2017 program), and about widening from 4 to 6 lanes (proposed as Unaffordable as part of 2017 program), but it wasn't until March of 2017, when the projects for the full resurfacing of the RHVP and LINC truly became active projects, being proposed as part of the 2018 budget as upcoming short-term projects.

Funding was proposed as part of the 2018 budget, as follows, and has remained the same for the 2019 budget.

RHVP resurfacing - funding in 2018 and 2019

LINC resurfacing - funding in 2020 and 2021

See attached item and note the dates in the email.

[RA]: Sorry Gord, didn't find much.

Again as discussed, if I recall correctly it was a compilation of a number of issues such as:

- The condition of the roadway, and the need to protect the perpetual pavement structure

- The programming the needs of the Mountain Accesses

- LRT timing

- Opportunity to coordinate / address safety needs

The above would also be key factors to address the needs of the LINC.

[GM]: Can you tell me if this was programmed in 2016

[AJ]: Technically, yes, as part of the 2016 capital budget program, we submitted a project for "LINC rehabilitation". That project was recommended for year 2024 at \$10,000K.

However, as part of the 2017 capital budget submission, that same project was deferred to year 2030. It currently exists in the future program with funding now spread over two years, \$16,000K in 2029 and \$16,000K in 2030. The project is being maintained for the future, as a placeholder for when we have to return to resurface the LINC again.

As part of the 2018 capital budget submission, we created two new detail sheets (projects) for the LINC and RHVP projects that are currently in years 2018 thru 2021, so those two can be considered to be “new” projects that were added and proposed as part of the 2018 capital budget program.⁶³⁵

(d) Mr. Soldo Requests Information Relating to Safety Initiatives Implemented on the RHVP

576. On January 9, 2019, Mr. Soldo emailed Mr. White and Mr. Ferguson, advising that he required some information on an urgent basis:

Working on something urgent and need some info.

The chart that was in the report that outlined all of the initiatives that we have undertaken as a result of the CIMA report, need it updated and sent to me in an electronic form (Word). I thought you had done this already David, can't seem to find it. Please resent the email with the pictures also.

Also need a cost for all those items.

Putting together this report today so please make it a priority.

Also need an update on how the guiderail markers are coming. Have we started, when are we finishing and cost.⁶³⁶

4. January 10, 2019

(a) Preparation for In-Camera Meeting

577. Ms. Graham appears to have prepared a note dated January 10, 2019, titled “AM’s Feedback”. The note includes the following:

AM’s Feedback:

Pavement Concerns on RHVP

- Report discovered in 2018
- Asked tech staff to review
- My tech team is here can't speak to all components
- Road safety – many aspects
- That being said, a report has come to my attention that contains info about friction testing on the RHVP
- I acknowledge that previous director indicated there isn't a standard and that the results were inconclusive, however, I am concerned about the findings of the report and I asked my tech team to review the doc and give me their feedback

⁶³⁵ [HAM0048492_0001](#)

⁶³⁶ [HAM0012046_0001](#)

- After reviewing and additional information from other reports and results from HIP testing, monitoring accidents – we are already in the process of continuing to build out enhancements to the road that we have made to continue to improve safety such as: and we are going to completely replace the pavement on the road
- Additionally, continue to work with HPS because #1 issue they have identified with this road is speed and driver behaviour

More conversational

Less hot

Everything that can be done to improve this road is being done – have been doing this for several years – list of all the stuff

- Whole bunch of things that happened
- Like a puzzle – all the different pieces, looking at all of them individually and together
- Will continue to do this with our roads

Edward and Gord: - experts

- Public safety #1 priority
- As such, constantly looking at how to improve the safety of our road network
- After reviewing report and all other available info, the
- We are constantly improving our road network
- Road safety audit
- Acting on the recommendations

- Regularly taking action to improve the safety of the road

Media Version:

- Call up the Spec and say we know you asked us, we've been digitizing old reports, you asked us for this, we realize you might need some context to review and just wanted to share proactively

Lost people

- So sorry for your loss⁶³⁷

578. Mr. McKinnon emailed Ms. Graham on January 10, 2019 under the subject line

“Answers”. He wrote:

Hi Jas as we prepare answers for in camera and the follow up I think being able to illustrate context will be important. What i mean is I'll need to answer the question if it's safe. Maybe work with Edward and so the accident data vs the roadway volumes can be expressed in comparison to other highways. Not sure if there is other ways to characterize the highways performance, let me know if I've left you confused⁶³⁸

⁶³⁷ [HAM0012124_0001](#)

⁶³⁸ [HAM0035770_0001](#)

579. On January 10, 2019, Mr. McKinnon forwarded a calendar invite to Ms. Gordon and Deanna Mason (Communications Associate, Gordon Strategy) for a meeting to discuss the RHVP. The original calendar invite was sent by Mr. McKinnon on January 8, 2019, to Mr. McGuire, Mr. Soldo and Ms. Graham for a meeting at 3:30 p.m. In the body of the email to Ms. Gordon and Ms. Mason, Mr. McKinnon wrote “Karen, I will just call you in once we are settled in the room again if that works.”⁶³⁹

(b) Preparation of Report on RHVP and LINC for PWC: Drafting of Staff Report

580. On January 10, 2019, Mr. McKinnon emailed Mr. Soldo and Mr. McGuire, under the subject line “Rhvp”. He wrote:

Gents regarding the (a) version to the previous report is coming forward, once you have all of your material, can you talk and see how much we could accelerate it? Legal is struggling with the reason for going in camera in the absence of some other report. I need to get a sense of what’s the absolute soonest we could bring it.⁶⁴⁰

581. On January 10, 2019, Mr. McGuire emailed Ms. Cameron and Mr. Malone, copying Mr. Omrani, regarding the upcoming report to PWC. Mr. McGuire wrote “It looks like were headed to the Feb 4th PW meeting. Brian are you available?”⁶⁴¹

582. On January 10, 2019, Ms. Auty exchanged emails with Mr. McKinnon and Mr. Zegarac, under the subject line “Report timing on RHVE”:

[Ms. Auty]: Can we please speak about this ASAP.

[Mr. McKinnon]: Mike and I are together and will try to call you just after one o’clock?

[Ms. Auty]: Thanks, I will be in my office.⁶⁴²

⁶³⁹ [HAM0028017_0001](#)

⁶⁴⁰ [HAM0054210_0001](#)

⁶⁴¹ [HAM0048503_0001](#)

⁶⁴² [HAM0062044_0001](#)

5. January 11, 2019

583. On January 11, 2019, Ms. Graham sent a calendar invite for a meeting scheduled for January 17, 2019, with the subject “Confidential Discussion: RHVP”. The invitation was sent to Mr. McKinnon, Ms. Recine, Mr. Hertel, Mr. McGuire, Mr. Soldo, Ms. Auty and Mr. Sabo.⁶⁴³

(a) 2019 CIMA Collision Memorandum

584. On January 11, 2019, Mr. Ferguson emailed Mr. Malone and Mr. Hadayeghi regarding an update to the 2018 Collision Memorandum, writing “Edward has asked if the attached memo could be updated to include Hwy 403 from the LINC to Hwy 6.” The email attached the 2018 CIMA Collision Memo, dated January 12, 2018.⁶⁴⁴

585. Mr. Malone sent an email to Mr. Ferguson, copying Khaled Hawash (Traffic Engineering, Transportation, CIMA), Mr. Bottesini, Mr. Hadayeghi and Mr. Salek, providing a status update:

Here is a status update for you Dave;

- We have initiated work on your request to update the CIMA January 12, 2018 memo: Lincoln Alexander Parkway / Red Hill Valley Parkway Collision Rates (CIMA+ File: B000558A) to include more current collision data
 - That memo included crash data from 2009 to 2013 from the LINC and RHVP as well as 3 MTO comparison sites on Hwy 406, Hwy 7/8 and Hwy 8.
- We have access to the Hamilton LINC and RHVP data up to Dec 31, 2017 and will utilize 5 years for the development of the rates, 2013-2017
 - I have spoken with Rodney. We should not need anything more from him, but he'll assist if required.
- We have access to the MTO data up to Dec 31 2016 and will utilize 5 years for the development of the rates, 2012-2016.
 - We will add in the additional MTO comparison side on Hwy 403 from LINC to Hwy 6 North (towards Guelph) for the 2012-2016 time period

⁶⁴³ [HAM0062045_0001](#)

⁶⁴⁴ [HAM0012172_0001](#); [HAM0012143_0001](#) attaching [HAM0012144_0001](#)

- The other 3 MTO comparison sites will remain and be updated for the 2012-2016 time period
- While the two data sets will not align exactly, year-for-year, they will allow for the comparison of collision rates, which are 5 year averages
- The Hamilton data ending Dec 31 2017 is the most current 'full-year' data available.
- We will provide the report in exactly the same format at the January 12, 2018 memo.
- We are seeking to complete the update by Tuesday January 15th, 2019.
 - Meeting the deadline will be tight. Is there a time of day on Tuesday you can target for our required delivery?
 - We will be working on this over the weekend.
 - We do not have an estimate of cost yet, but it should be less than the work done last year. I will be in touch.⁶⁴⁵

586. Mr. Ferguson replied to Mr. Malone, advising him that Mr. Soldo required it by end of day the following Tuesday, ahead of a meeting on Wednesday morning (January 16, 2019).⁶⁴⁶

587. Mr. Malone sent an email internally to Mr. Hadayeghi and Mr. Salek advising that Soldo "also wants to update the whole report, using the current data to Dec 31 2017".⁶⁴⁷

6. January 12, 2019

(a) *FOI and Audit Services*

588. On January 12, 2019, Mr. McGuire emailed Mr. McKinnon, Ms. Auty, and Mr. Zegarac, to advise that material requested relating to the RHVP (FOI and Audit Services) would be released on January 14, 2019. He wrote the material included "an overview of the documents created by Legal Services and a set of 72 separate items". He added that Audit Services requested material that fell outside the period of time covered by the FOI, and his office would be working on that in the coming weeks.⁶⁴⁸

⁶⁴⁵ [HAM0012172_0001](#)

⁶⁴⁶ [HAM0012172_0001](#)

⁶⁴⁷ [CIM0010368](#)

⁶⁴⁸ [HAM0054220_0001](#)

589. On January 12, 2019, Mr. McGuire emailed Mr. Brown, Mr. Pellegrini and Ms. Minard (with copies to Mr. McKinnon, Ms. Cameron and Ms. Auty) regarding the status of submission to the FOI office:

In reply to the conversations we were having about the RHVP testing processes and materials. I am informing you that the submission to the FOI office is complete. We will be sending both the FOI team, and your office a copy of that material Monday.

Thanks for your patience in this matter and please contact me with any further questions.⁶⁴⁹

7. January 13, 2019

(a) Follow-up from December 18, 2018 Meeting Between Mr. McGuire and Dr. Uzarowski

590. On January 13, 2019, Mr. McGuire responded to Dr. Uzarowski's email from December 21, 2018, regarding the follow-up items from their December 18, 2018 meeting:

Thanks for the updates on this file and I have a few more questions and updates for you.

Regarding point 2 below: I appreciate the field conditions however you have not provided a definitive reference to an industry or accepted standard for the BPT numbers. Can you please send that link and update the final report with that information. Can you also supply industry references for the measured texture depth and polished stone value standards in the report for the same reasons as above.

Both of the MTD and PSV elements are identified as adequate and the City will require a framework to measure them against. Public works is submitting a report to PW committee early in February and will require this information.

In your draft report on page 2 you identify that there are traffic volumes and speed considerations. Both these elements are being considered by other studies and are out of scope for your assignment. I appreciate the extra data however please remove the references in your draft report.

In your response below in point 3 you indicate that "**the concern about skid potential on the RHVP is still valid and the City should consider how to address this**", however in the draft report on the bottom of page 2 you wrote that "As discussed with the City, if there is a concern with the frictional characteristics of the SMA surface course on the RHVP...." Can you please provide clarity on these statements.

Given the responses from the December 2017 work the City has some questions about the proposed solution(s) in the draft report being shot abrading. I can find no Ontario

⁶⁴⁹ [HAM0054227_0001](#)

documentation on the shot abrading application of this method and ask again for non – supplier details on this process.

Lastly and as you are aware the City in undergoing an FOI on the RHVP performance and we had discussed that you were to supply all correspondence on the reports and studies you had performed back to 2013. I'm aware there was a Christmas break and ask for a date of submission for this material. Can you please advise as soon as possible.

I appreciate your work on this file.⁶⁵⁰

8. January 14, 2019

591. Ms. Graham prepared a document titled “Crisis Communications Plan Draft 1.0” on January 14, 2019. The document provided a summary of events and identified the following overarching issues:

1. Media have asked for the results of friction testing that was completed on the RHVP in 2013. A former City spokesperson previously stated that the results of the testing were inconclusive and there was no related report. In late 2018, a report summarizing the friction testing was discovered. This report will be released as part of the FOI.

2. Also to be released with the FOI request will be documentation identifying wet-weather performance issues on the RHVP. This documentation states that the RHVP has wet surface collision rates that are "significantly higher than provincial averages on similar roadways during wet weather."

3. Due to the high number of collisions, some high-profile fatalities and media attention over the past few years, community sentiment around the safety and performance of the Red Hill Valley Parkway is negative.⁶⁵¹

592. The document also identified potential impacts, key stakeholders, and strategy surrounding communications. The document includes draft questions and answers for various City staff, including Mr. McKinnon and Mr. McGuire. Several versions of the Crisis Communication Plan were prepared by the City in January and February 2019.⁶⁵²

⁶⁵⁰ [GOL0003045](#)

⁶⁵¹ [HAM0054237_0001](#) at images 1-2;

⁶⁵² [HAM0054250_0001](#); [HAM0062091_0001](#); [HAM0062123_0001](#); [HAM0062136_0001](#); [HAM0035956_0001](#); [HAM0058812_0001](#); [HAM0062159_0001](#); [HAM0048689_0001](#); [HAM0061753_0001](#); [HAM0048710_0001](#); [HAM0054383_0001](#); [HAM0061598_0001](#); and [HAM0061607_0001](#)

593. A section titled “Questions & Answers” includes a note related to the discovery of the Tradewind Report:

When did you find out that the results of the friction testing were not necessarily inconclusive?

The 2013 report was discovered in fall of 2018 in a document management system by the new director of engineering services. It was added to the system in May 2018, it is dated 2013.

...

How is it possible that these were not shared previously, especially when asked repeatedly by the Spectator?

The short answer is, we did not do a good job of sharing the report internally, and it doesn't appear that staff knew about it. (...) ⁶⁵³

594. Beginning in January 2019, the City began assembling chronologies of events relevant to the discovery of the Tradewind Report. A draft timeline from January 14, 2019, identified the purpose of the timeline as to “capture what we knew when, and what we have said publicly to date as it relates to friction testing on the Red Hill Valley Parkway”.⁶⁵⁴

595. On January 14, 2019, Mr. Soldo emailed Mr. White and Mr. Ferguson under the subject line “Report”:

As you know, there are some issues related to the RHVP reporting. I need written confirmation from both of you on the following:

That the 2013 Tradewinds consulting report was never shared with you or any of your staff regarding the friction testing.

The table in staff report PW18008 dated January 15, 2018 states that the friction testing was completed. How did you know it was completed?⁶⁵⁵

596. Mr. Ferguson responded the same day, writing:

⁶⁵³ [HAM0054237_0001](#) at image 11

⁶⁵⁴ [HAM0035790_0001](#). See also [HAM0036032_0001](#); [HAM0054397_0001](#); [HAM0061623_0001](#); and [HAM0061625_0001](#)

⁶⁵⁵ [HAM0035784_0001](#)

I have never seen the report, I had asked Gary previously but never received a response.

It is listed as completed as Gary has verbally stated it was completed on numerous occasions.⁶⁵⁶

597. Mr. White also responded the same day:

Edward I can confirm that I have never seen the report. I did ask for it several times. I can also state that Gary did admit it was done at one point but he discounted the results and minimized the value of the tests. At a meeting with Mater and Dan Dave and myself, I recollect him saying something about it being an English test or standard or something similar, and then he declined to share the results with Dan and John Mater. He had also stated that the asphalt was filled with rubber from tires. I never saw the test results or any reports from anybody.⁶⁵⁷

598. On January 14, 2019, Mr. Soldo forwarded Mr. White and Mr. Ferguson's responses to Mr. McGuire in an email under the subject line "Statements".⁶⁵⁸

599. Later the same day, Mr. McGuire sent an email to Mr. Andoga, Mr. Oddi, Ms. Jacob and Mr. Becke under the subject line "Golder report of 2013-14". He asked:

Can you please respond to this email and reply Yes or No to the following question:

Prior to this year, have you received a copy, or seen a copy, of the 2013 Golder / Tradewind report on the RHVP asphalt testing.

If yes please arrange a time with Diana to assemble materials.⁶⁵⁹

600. Mr. Andoga, Ms. Jacob and Mr. Oddi replied, confirming that they had not:

[RA]: No, never seen any report of this nature⁶⁶⁰

[SJ]: No⁶⁶¹

[MO]: I did not receive and have not seen a copy of the 2013 Golder/Tradewind report on the RHVP asphalt testing⁶⁶²

⁶⁵⁶ [HAM0035784_0001](#)

⁶⁵⁷ [HAM0035785_0001](#)

⁶⁵⁸ [HAM0035786_0001](#) attaching [HAM0035787_0001](#) and [HAM0035788_0001](#)

⁶⁵⁹ [HAM0054236_0001](#)

⁶⁶⁰ [HAM0035791_0001](#)

⁶⁶¹ [HAM0035805_0001](#)

⁶⁶² [HAM0035802_0001](#)

601. Mr. McGuire replied to Mr. Andoga's response, writing:

Thanks Rick:

Do we have any other SMA roads out there? The RHVP is the only one I know of.....⁶⁶³

602. Mr. Andoga replied:

Gord,

There are sections of SMA throughout the City. I'll confirm with design and construction for locations.

I do recall a section of Garth being SMA⁶⁶⁴

603. On January 14, 2019, Ms. Gordon replied to Mr. McKinnon's meeting invitation for a meeting on January 14, 2019 writing "Hi – 416-699-1624 please."⁶⁶⁵

604. Also on January 14, 2019, Mr. Brown responded to Mr. McGuire's email of January 12, 2019, writing:

Gord thanks very much. I'm not sure why we are lumped in with the FOI office. Our requests for information are not FOI requests – they are audit requests and the information we get is actually protected from outside FOI request. Be that as it may, we need to get on with the other pieces of our information needs. I suggest my team sit down with you and Dan and discuss an efficient way forward. Specifically we had a framework of questions to address in documenting this issue for our audit – Domenic has provided this to you. I suggest we go through the items together to see what information is likely there or not there to answer those questions and we can proceed accordingly. We may want to interview staff with knowledge of this issue though my understanding is that may be very few people.⁶⁶⁶

605. Mr. Brown forwarded his email to Mr. Zegarac the same day, writing: "Mike – to keep you in the loop. There is still work to do to find out what actually happened. I agreed with Dan to hold off til January because they were so deluged with the budget."⁶⁶⁷

⁶⁶³ [HAM0035791_0001](#)

⁶⁶⁴ [HAM0035791_0001](#)

⁶⁶⁵ [HAM0028017_0001](#)

⁶⁶⁶ [HAM0054227_0001](#)

⁶⁶⁷ [HAM0054229_0001](#)

606. Mr. McGuire responded to Mr. Brown's email, writing:

Today you will receive a set of 72 documents accompanied by an index that is responsive to an FOI on the RHVP. Staff have been working almost non stop on this file since November, in parallel with the VFM that audit services is running on our overall asphalt program.

You weren't lumped in with FOI, however as discussed I had no staff or time available to meet the additional request from Audit. Our reply to the FOI office took over 8 weeks, and your lines of inquiry are more complex. That said it's a good opportunity for us to jointly review this material and once Domenic has had a chance to review this I agree a meeting is in order.

There are further materials that we have developed and will provide once finalized on this matter that will be informative. We can cover that during our meeting.⁶⁶⁸

607. On January 14, 2019, Mr. McGuire sent a letter to Mr. Pellegrini, with copies to Mr. Brown, Ms. Auty, Ms. Minard, and Mr. McKinnon, enclosing a USB drive with documents responsive to FOI 189-189 and "Audit Services December 12, 2018 request".⁶⁶⁹ The letter attached an index of documents responsive to FOI 18-189. The index, titled "FOI #18-189 Index Identifying Possible MFIPPA Exemptions", includes the following columns "Tab", "Date", "Description", "Responsiveness to Request #1 re Friction Testing (2013-2018)" and "Responsiveness to Request #2 re Asphalt/Pavement Testing (2016-2018)".⁶⁷⁰

608. The same day, Mr. Pellegrini emailed Ms. Wunderlich to arrange a meeting between Mr. McKinnon, Mr. McGuire, Mr. Brown and Ms. Minard. The meeting was scheduled for January 15, 2019.⁶⁷¹

⁶⁶⁸ [HAM0054231_0001](#)

⁶⁶⁹ [HAM0054222_0001](#)

⁶⁷⁰ [HAM0054223_0001](#)

⁶⁷¹ [HAM0054228_0001](#)

609. Dr. Uzarowski emailed Ms. Rizvi on January 14, 2019, asking her to review a draft email he intended to send to her, Dr. Skinner, Mr. Linardi, and Dr. Maher for their records. The email attached the December 17 draft letter report for the 2017 Golder Pavement Evaluation, the Tradewind Report, and the Golder Report:

As I mentioned, I met with Gord McGuire, O.L.S., B.Sc., Director of Engineering, Public Works Department, Engineering Services Division, City of Hamilton on Tuesday, December 18, 2018. The purpose of the meeting was to talk about the pavement on the Red Hill Valley Parkway (RHVP) in Hamilton. The meeting was from 10:00 am to 11:00 am. There were only two participants, Gord and I. The meeting was in Gord's office and the door was closed during the meeting.

I sent you my handwritten notes on December 19, 2018. Below is the summary of our discussion.

At the start of the meeting I handed out the draft report titled "Evaluation of Pavement Surface and Aggregates, Red Hill Valley Parkway, City of Hamilton". I have attached the report to this email. We agreed that in our conversation we will not use individual names but just say "the City". I briefly presented the history of the asphalt pavement on the RHVP. The pavement was constructed in 2007, the surface is a Stone Mastic Asphalt (SMA) mix. Dufferin Construction was the contractor.

We then talked about the methods how to improve pavement skid resistance. The most popular are microsurfacing and shot blasting (called also skid abrading, blasting and blast tracking). Microsurfacing is very effective and it also addresses minor surface deficiencies and irregularities, but it is more expensive than shot blasting. Shot blasting is effective and of low cost but does not address any other surface issues. There are also other methods but they are much more expensive and not as popular as the first two.

Shortly after construction, in 2007, the Skid Number (SN) values were tested at some locations on the RHVP by MTO. The average SN values were considered to be good but there were a few low values under the structures. The SN values typically increase for some time, typically for two years, after the pavement is opened to traffic as the film of asphalt cement wears off.

Golder was requested by the City to investigate the skid resistance on the RHVP in 2013. Golder hired Tradewind Scientific, a company from Ottawa for skid testing. Tradewind Scientific submitted a report in early 2014. A copy of the report is attached to this email. There was a significant difference between the SN numbers on the Lincoln Alexander Parkway (the SN numbers of the Linc were very good) and the RHVP. In 2013 Golder investigated the presence of some cracking in the pavement and some dips. At the end of January 2014, Golder submitted a report to the City on the performance of the pavement on the RHVP 6 years after construction. The Tradewind Scientific report was also attached to this report and it was mentioned in the Golder's report that the SN numbers should be addressed.

The subject of friction results was also briefly discussed in a telephone conversation. Golder was requested not to send the report separately by email. A hard copy of the report was delivered on February 7, 2014 and the results were discussed. The possible solution

of microsurfacing and shot blasting was also mentioned in this meeting with the City. The City did not want Golder to test the PSV.

In March 2016, Golder contacted contractors who can do shot blasting, one who can use a Skidabrader (large, high capacity machine) and another who uses Blastrac machine. The Skidabrader can do 3,000 square yards per hour. The total area of the SMA pavement on the RHVP is about 120,000 m². Blastrac is smaller and slower but the price can be lower. Golder also stated that there is a company in Kitchener that can test the frictional characteristics on the RHVP and the poor location can be identified. The shot blasting does not address any cracking or dips and bumps. Golder received an email on March 15, 2016 that the City is not interested in this.

There were a few discussions between 2016 and 2017 including friction on the RHVP when Golder mentioned the microsurfacing and shot blasting as the way of pavement frictional characteristics improvement. The answer from the City was no.

In 2017, Golder was requested to carry out the investigation of PSV, surface texture and to do British Pendulum Testing on the RHVP. The testing was done at night on December 6/7 with temperatures below 0C and light snow fall. The draft report is attached to this email. The PSV of the aggregate from the SMA was 45 which is considered average/medium. The surface texture was good. BPN numbers – the average was medium; however, there were locations where the numbers were low. Because the testing was done while the temperature was below 0°C and there was light snow fall, the BPN numbers are considered not to be reliable. The results of the investigation were presented at the meeting with the City on March 9, 2018 where the possibility of doing Hot In-Place Recycling (HIR) on the RHVP was the main subject. The results of the testing were considered by the City to be inconclusive. Golder again mention in this meeting that the frictional characteristics can be improved by doing a low cost shot blasting. The City explained that they cannot do shot blasting because this would show the public that there was a problem with the pavement on the RHVP and by doing the blasting the City would admit the guilt and justify blame.

At the end of the meeting with Gord McGuire on December 18, 2018, I mentioned that it is important to recognize that the frictional characteristics have not improved and the skid hazard in the RHVP may still be there. One of the main factors is the excessive speed on the RHVP. There is a traffic monitoring station on the RHVP. The data shows that a large percentage of the drivers does not follow the speed limit and the speed can be very high. Also, the traffic on the RHVP is much higher and heavier than it was designed for. This accelerates pavement deterioration including potential polishing. It is up to the City to decide what they want to do and if they want to do shot blasting before pavement rehabilitation likely in early 2019.

I was also informed that the City is working with CIMA on safety aspects on the RHVP including speed, geometry, loading. I don't know if friction is also included.⁶⁷²

610. Ms. Rizvi responded, suggesting minor edits to Dr. Uzarowski's draft email.⁶⁷³

⁶⁷² [GOL0006440](#)

⁶⁷³ [GOL0003830](#)

611. On January 14, 2019, Mr. McGuire emailed Dr. Uzarowski, replying to his own email from the day prior:

Internal audit is also asking for material on this project, and we are submitting to the FOI office today.

Your replies are somewhat urgent can you advise of timing.⁶⁷⁴

612. Dr. Uzarowski responded that day, advising that he had tried unsuccessfully to reach and asked Mr. McGuire to call him.⁶⁷⁵

(a) Ongoing Discussions Regarding Resurfacing and Safety Improvements

613. On January 14, 2019, Ms. Jacob emailed a draft of an information report regarding the status and plans of resurfacing to Mr. Becke, Mr. Perusin, Mr. Vala, Mr Olszewski, and Mr. Andoga. Ms. Jacob's covering email stated:

Please find attached. This is the first draft. Will need your input into this. The sooner the better as we need the report in front of Council before we go out for tender.

Also please note that the scope document has to be refined further. Has got materials that needs to be moved to LINC project and also Hamilton Police Services request for cross over that is not being implemented.

We may also want to mention that the project limits are truncated north of Mud Street Interchange to allow effective detour.

The bridge on Mud at Paramount will be in the detour which is not also mentioned in this report.

Please discuss⁶⁷⁶

614. The attached draft report, stated the following regarding the proposed approach to resurfacing:

Red Hill Valley Parkway was opened to traffic in 2007. The pavement analysis undertaken indicates that the Parkway has top down cracking as can be expected for the asphalt that

⁶⁷⁴ [HAM0035792_0001](#)

⁶⁷⁵ [HAM0035792_0001](#)

⁶⁷⁶ [HAM0028014_0001](#)

has received 3 times more traffic per year than anticipated. Full resurfacing was recommended for year 21, however due to the increased amount of traffic received, the resurfacing is now being proposed at year 12. The core samples taken indicate that the bottom base layers are in good condition and as such the 50mm top layer is proposed to be milled and overlaid with 50mm of high friction asphalt such as 12.5 FC2.⁶⁷⁷

9. January 15, 2019

615. On January 15, 2019, Mr. Field emailed Mr. McGuire, providing him with an outline of Committee interactions pertaining to RHVP lighting, attaching the proposal for the RHVP Lighting Study and a staff report to PWC from September 16, 2016, titled “Lincoln M. Alexander Parkway and Red Hill Valley Parkway Lighting (PW16-077)”:

Below is the timing and direction for the Linc/RHVP lighting subject:

1. There were several requests previous to 2015 but were coupled with the reporting requirements with traffic. The very first CIMA traffic safety report in 2014 was a product of this.
2. On December 7, 2015 the Public Works Committee directed staff to “report to the Public Works Committee with information on the costs and process of investigating an improved lighting system on the Red Hill Valley Parkway and the Line.
3. Information report to PW committee sent on Sept 19, 2016 in reaction to Dec 7/15 request: PW16077 Lincoln M. Alexander Parkway and Red Hill Valley Parkway Lighting. Report attached. This report established the capital budget and eventually the CIMA lighting study. Study is \$120k + \$5k contingency (proposal attached).
4. December 4th, 2017 PW meeting as an inadvertent output of a traffic information report lighting was discussed which resulted in this direction and the most recent OBL item:

(ii) Lighting on the Red Hill Valley Parkway (Added Item 11.2)

(Conley /Collins)

That staff be directed to report back to the Public Works Committee on the cost of installing brighter lights on the southern portion of the Red Hill Valley Parkway (RHVP) and that the report also address what, if any, impact the brighter lighting may have on the Environmental Assessment currently in place for the RHVP.

If you need the back-up prior to 2015, let me know I can dig it up.⁶⁷⁸

⁶⁷⁷ [HAM0028015_0001](#) at image 1

⁶⁷⁸ [HAM0035808_0001](#) attaching [HAM0035809_0001](#) and [HAM0035810_0001](#)

616. At Mr. McGuire's request, on January 15, 2019, Ms. Cameron emailed Joanna Pyziak (Financial Assistant, Engineering Services, Public Works, Hamilton) regarding the status of various Golder project requisitions.⁶⁷⁹ Ms. Pyziak responded the same day, and provided the following information:⁶⁸⁰

Golder	Amount	Date Issued	PO #	Status "Open" / "Closed"	If "Open" amount remaining
	\$40,000	April 9, 2013	69811	Closed	
	\$18,000	April 22, 2013	70152	Closed	
	\$ 8,000	Jan. 2, 2014	73087	Open	\$2,000.00
	\$28,000	March 21, 2013	69812	Closed	
Golder	Amount	Date Issued	PO #	Status "Open" / "Closed"	If "Open" amount remaining
	\$25,000	Mar. 21, 2016	81744	Closed	
Golder	Amount	Date Issued	PO #	Status "Open" / "Closed"	If "Open" amount remaining
	\$18,100	Dec. 5, 2017	87460	Open	\$709.79

617. On January 15, 2019, Mr. Andoga replied to Ms. Jacob's email from the day prior, copying Mr. Becke, Mr. Perusin, Mr. Vala and Mr. Olszewski, and attaching a document titled "RA comments_Information Report (2)" writing:

I took a shot at it, take a look.

Please keep in mind, this is an information report so we need to tell Council not ask, as we are not looking for approval.

My I advise, you may want to touch base with a Councillor (I suggest Collins) and see if there would be any support for a full closure. If you need help with that let me know.⁶⁸¹

⁶⁷⁹ [HAM0028029_0001](#); and [HAM0028020_0001](#)

⁶⁸⁰ [HAM0028032_0001](#)

⁶⁸¹ [HAM0028033_0001](#) attaching [HAM0028034_0001](#)

618. The attached draft report included information relating to the construction and opening of the RHVP, an assessment of its performance following traffic volumes which exceeded expectations, anticipated upgrades to be implemented during rehabilitation and proposed rehabilitation schedules.⁶⁸²

619. On January 15, 2019, Mr. Salek emailed Mr. Ferguson the updated collision comparison memorandum (“2019 CIMA Collision Memorandum”).⁶⁸³ Regarding the collision data used, the 2019 CIMA Collision Memorandum noted:

A comparison of collision rates on the LINC and RHVP with the following Provincial highways:

Highway 403 between the LINC and Highway 6 North(towards Guelph), in the City of Hamilton;

Highway 406 between Highway 58 and Queen Elizabeth Way (QEW), in the City of St.Catharines;

Highway 7/8 between Conestoga Parkway/Victoria Street N and Trussler Road, in the City of Kitchener; and

Highway 8 between Sports world Drive and Highway 7, in the City of Kitchener.

The collision rate of a road section normalizes the frequency of collisions with the exposure, measured by traffic volume and distance travelled. The collision rate per million of kilometres travelled is calculated as follows:

$$CR = 1,000,000 \times \frac{\text{Number of Observed Collisions}}{AADT \times 365 \times \text{Length of Section}}$$

For this review data was averaged over a 5-year period. The five-year average collision rate is calculated as follows:

$$CR_{5 \text{ years}} = \frac{1,000,000}{365 \times \text{Length of Section}} \times \frac{\sum_{\text{Year } 1}^{\text{Year } 5} \text{Number of Observed Collisions}}{\sum_{\text{Year } 1}^{\text{Year } 5} AADT}$$

Data for the Provincial highways was obtained from the Ontario Provincial Highways Traffic Volumes On Demand and from the MTO Safety Analyst software.

⁶⁸² [HAM0028034_0001](#)

⁶⁸³ [CIM0010338](#)

Collision data for the LINC and RHVP from 2013 to 2016 had been previously received.

Additional data for the period ending Dec 31 2017 was received for this update.⁶⁸⁴

620. The 2019 CIMA Collision Memorandum outlined that as MTO collision data was only available to 2016, the Provincial collision averages were comprised of data from 2012-2016, and the LINC and RHVP averages were from 2013-2017.⁶⁸⁵

621. It noted the following with respect to the comparison of collision rates for the LINC and RHVP respectively:

Rates for the LINC are lower than the MTO weighted rates. The range of rates for segments of the LINC are, generally, below the range of rates for segments of the comparison MTO sites.

Rates for the RHVP are higher than the MTO weighted rates. The range of rates for segments of the RHVP are, generally, higher than the range of rates for segments of the comparison MTO sites.⁶⁸⁶

622. The following difference was noted between the 2018 CIMA Collision Memorandum and the 2019 CIMA Collision Memorandum:

We note that the collision rates reported in the 2018 memo were considerably lower (0.20 for the LINC and 0.36 for the RHVP). Our understanding is that the data provided for the previous analysis did not include self-reported collisions, while the data provided for the current analysis include these collisions. When self-reported collisions are excluded, the resulting collision rates are 0.20 for the LINC and 0.69 for the RHVP, which are consistent with the rates in the previous memo. The MTO collision data includes all types of collisions, including "non-reportable" and "other".⁶⁸⁷

623. Mr. Ferguson forwarded the updated memorandum to Mr. Soldo the same day. Mr. Soldo forwarded it to Mr. McGuire.⁶⁸⁸

⁶⁸⁴ [CIM0010338.0001](#) at images 1-2

⁶⁸⁵ [CIM0010338.0001](#) at image 1

⁶⁸⁶ [CIM0010338.0001](#) at image 5

⁶⁸⁷ [CIM0010338.0001](#) at images 4-5

⁶⁸⁸ [HAM0028078_0001](#)

10. January 16, 2019

(a) *GIC Receives Report PW19007 Regarding Changes to Public Works Structure*

624. On January 16, 2019, the General Issues Committee received in-camera a report titled “Public Works Divisional Realignments” (“Report PW19007”). Report PW19007 was prepared by Mr. Soldo and Lora Fontana (Executive Director, Human Resources and Organizational Development, Human Resources, Hamilton) and submitted by Mr. McKinnon. The report outlined organizational restructuring of the Public Works Department, “with the goal of better aligning the work to achieve strategic priorities and having the right staff, in the right roles, working at the right level.”⁶⁸⁹

(b) *Drafting of Joint Report for February 4, 2019 PWC Meeting*

625. On January 16, 2019, Mr. McGuire sent Mr. Soldo a draft of the RHVP and LINC joint report for the February 4, 2019 PWC meeting.⁶⁹⁰

626. On January 16, 2019, Mr. Ferguson broadly distributed the 2017 Annual Collision report scheduled to go to PWC in February 2019, writing:

Please find attached the Collision Report that will be going to PWC in February. Credit goes to Bryan and Rob G for putting the information together.

Rod, I have copied you as the plan will be that this to fall under you in 2019 and the preparation of the report.⁶⁹¹

⁶⁸⁹ [HAM0061813_0001](#) at image 2; [HAM0061806_0001](#); and [HAM0061807_0001](#). This organizational change, along with other organizational changes to the Public Works Department, is discussed in further detail in Overview Document #2.

⁶⁹⁰ [HAM0028085_0001](#) attaching [HAM0028086_0001](#)

⁶⁹¹ [HAM0012234_0001](#)

627. On January 16, 2019, Mr. Soldo advised Mr. White, Mr. Ferguson and Ed Switenky (Superintendent, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton) that slippery when wet signs were installed on the RHVP, writing:

The Slippery When Wet signs have been installed on the RHVP. The report indicated that we should install them as well as the flashing lights that would be activated when it is wet.

Did we investigate that option? What would it take to implement them? Costs and time.⁶⁹²

(c) Drafting of Legal Services Report for Council

628. On January 16, 2019, Ms. Auty emailed Mr. McGuire, copying Mr. Sabo, under the subject line "Chronology - RHVE", writing "Do you have/could someone put together a chronology of events for this file that I can include in my report?"⁶⁹³

629. Mr. McGuire replied the same day, attaching the summary document he prepared dated December 1, 2018, writing that he was available to call Ms. Auty.⁶⁹⁴

11. January 17, 2019

630. Ms. Graham sent a calendar invite for a meeting scheduled on January 17, 2019, at 1:00 p.m., titled "Confidential Discussion: RHVP". Mr. McKinnon, Ms. Recine, Mr. Hertel, Mr. McGuire, Mr. Soldo, Ms. Auty and Mr. Sabo were listed as attendees.⁶⁹⁵

631. On January 17, 2019, Ms. Graham emailed Ms. Auty under the subject line "Confidential Road Issue Preparation Document for your advice". She wrote:

Please see attached the confidential internal document for your review for the 1 p.m. meeting.

⁶⁹² [HAM0012209_0001](#)

⁶⁹³ [HAM0062046_0001](#)

⁶⁹⁴ [HAM0062046_0001](#) attaching [HAM0062047_0001](#)

⁶⁹⁵ [HAM0062048_0001](#); [HAM0061581_0001](#); and [HAM0062536_0001](#)

FYI Karen is not phoning in to this meeting.

Thanks!⁶⁹⁶

632. On January 17, 2019, Mr. Soldo forwarded an email to Mr. McGuire with a link to an article titled "Skid Resistance" on a webpage titled "Pavement Interactive".⁶⁹⁷

(a) Finalizing the RHVP Roadside Safety Assessment

633. On January 17, 2019, Mr. Salek emailed Mr. Ferguson, attaching the final version of the RHVP Roadside Safety Assessment report.⁶⁹⁸ The report summarized the collision history review as follows:⁶⁹⁹

⁶⁹⁶ [HAM0062090_0001](#)

⁶⁹⁷ [HAM0062348_0001](#)

⁶⁹⁸ [HAM0012271_0001](#)

⁶⁹⁹ [HAM0012273_0001](#) at images 23-24

3.3. Summary of Collision History Review

The findings from the collision history review for the period between 2013 and 2017 were consistent with the two previous studies completed by CIMA+ for the Red Hill Valley Parkway, as summarized below.

Overall Findings

- * Wet surface collisions were found to represent 64% of mainline collisions and 73% of ramp collisions. The proportion of wet surface collisions on the mainline presented an increase compared with the 2015 study (50%);
- * “Lost control” and “speed too fast for conditions” apparent driver actions were reported in 33% of mainline collisions (44% for wet surface collisions) and 56% of ramp collisions 68% for wet surface collisions); and
- * These findings suggest that inadequate skid resistance (surface polishing, bleeding, contamination) and excessive speeds may be contributing factors to collisions;

Critical Locations

- * The mainline sections with the highest collision frequencies in the study area are Mud Street to Greenhill Avenue, and Greenhill Avenue to King Street, particularly in the northbound direction;
- * Mainline collisions involving wet surface condition present extremely high proportions between Greenhill Avenue and King Street, and between King Street and Queenston Road (up to 88%). In combination with potential skid resistance and excessive speed issues, curve radii compatible with a design speed of 100 km/h around the King Street interchange may explain this concentration of collisions (operational speed may exceed the design speed); and
- * The Mud Street E-W On Ramp experienced the highest collision frequency among RHVP ramps, followed by the Upper RHVP W-S Off Ramp; the proportion of wet surface collisions on these two ramps are 78% and 100%, respectively, while the combined proportions of “lost control” and “speed too fast for conditions” apparent driver actions are 67% and 80%, respectively. The Mud Street E-W On Ramp presents a curve radius compatible with a design speed of 30 km/h, the same as the existing posted advisory speed; the Upper RHVP W-S Off Ramp has a curve radius compatible with a design speed of 50 km/h and posted advisory speed of 40 km/h. It is possible that drivers are exceeding the design speed of these ramps.

634. Mr. Salek also attached a log of comments received from the City regarding the advanced draft, dated January 16, 2019.⁷⁰⁰ The log included the following comments and responses:

City Comment	CIMA+ Response
<i>Page 1, last line stated “exceeding the design of the road (110 km/h) in the north bound and southbound direction.” As we know from the report the design speed per new standards is only 90 km/h.”</i>	The wording in this section comes from the 2015 report. At that time we did not have the design speed information and assumed it based on operational speed. We modified the wording and added a footnote to provide context.
<i>Page 2 indicates “ The present study takes into account the findings and recommendations of the previous studies,</i>	We considered the previous recommendations as part of our review, but worded the recommendations in the report

⁷⁰⁰ [CIM0017564](#); and [HAM0012273_0001](#)

City Comment	CIMA+ Response
<p><i>inorder to confirm or expand the recommendations to reduce the roadside related collision..." I do not recall seeing a section where you were validating or expanding the recommendations from the past.</i></p>	<p>(Section 3.4) independently from the previous study. We note that the collision patterns remain similar to the previous study, therefore those recommendations remain valid. We note that, throughout Section 3 – Collision History Review we make reference to collision patterns being consistent the with previous studies. No modifications were made to the report.</p>
<p><i>Page 18, Section 3.4. second bullet is calling for conducting regular speed enforcement, Ensure that Police Services are informed on this.</i></p>	<p>No action required by CIMA+.</p>
<p><i>Page 18, Section 3.4, third bullet states" Immediately after the resurfacing is complete, and provided that adequate wet weather skid resistance is achieved, remove all "Slippery When Wet signs and monitor collisions". This seems to be rather vague. How do we determine what is adequate skid resistance and how long should this be monitored? Who will be doing this monitoring? Also when and who is installing the Slippery when Wet sign?</i></p>	<p>Adequate skid resistance should be determined based on technical standards. We assume that the contract for the resurfacing work stipulates that the contractor is responsible for delivering pavement surface that complies with all applicable standards. Monitoring of collisions should be done yearly on an ongoing basis and Slippery When Wet signs should be installed if/when the OTM Book 6 conditions are present.</p>
<p><i>It was not possible to open the GIS Shape file mentioned in the report and as such not all locations where improvements were recommended could be reviewed. Traffic Section to help identify the priority locations where changes have to be incorporated into the upcoming tender.</i></p>	<p>We note that the file is not a single shape file, but a geodatabase with multiple layers and should be loaded as a geodatabase. If necessary, we can provide assistance via a phone call to help City staff open the file. If this still does not work, we can send an Excel and a KMZ file (can be opened with Google Earth).</p>
<p><i>Page 28, paragraph 3, states that "However these requirements are based on Provincial highway projects...Given that RHVP is not a Provincial....City may consider adopting a different criteria..." The request was for CIMA to analyse the performance and standards of RHVP against MTO and TAC standards. May be</i></p>	<p>It is our understanding that the City will not be moving forward with the crossover locations. As such, we modified the wording in this section to a more definitive recommendation not to build the median crossovers.</p>

City Comment	CIMA+ Response
<i>this statement is not required that City has the option of adopting a different criteria.</i>	
<i>Page 30, Section 8 regarding access to wastewater facilities. The analysis could not be completed as it requires survey and design and also involves considerable fill. It is important to inform Hamilton Water that their request for access cannot be accommodated at this time so that the expectations are clear. Grading changes and changes to access points will require thorough analysis. Given the timeframe for tender by February 2019, this additional work will not be possible. Also grading requires permit from Conservation Authority.</i>	No action required by CIMA+.
<i>The only additional comment I had was the review of considering installation of side mounted reflectors rather than the use of in-road reflectors. Our preference at this point is to use the side mounted reflectors so as to insure the integrity of the pavement once it is resurfaced. If you zoom in on this link, you should be able to see what I am referring to on the sides.</i>	We added wording to the report with respect to maintaining pavement integrity. We note that the link provided refers to a U.S. highway and the reflectors have a different shape (vertical rectangle) from the standard delineators used in Ontario (diamond). We recommend that the reflectors be installed in accordance with OTM Book 11 and OPSS.PROV 721 (Construction Specification for Steel Beam Guide Rail and Cable Guide Rail).

635. On January 17, 2019, Mr. Brown emailed Dr. Uzarowski, writing:

Audit Services at the City of Hamilton is in the process of conducting an audit of Road Operations and Capital Construction. In the course of that work we obtained a copy of your report entitled RHVP Performance Review after Six Years in Service - dated January 2014 (Report No. 13-1184-0026). I read the report and discussed its contents with the senior leadership team in Public Works seeking more information about some aspects. Further to my questions I was given your name as a contact for possible follow-up. There are a few areas I wanted to understand better with respect to this report, and any insights you could provide would be most helpful.

In general, I wanted to touch on the presentation of the results to the City, how that occurred and any additional work you may have discussed or done as follow-up. I would also like to know about the methodology. For example, the report gives reference to the fact it is widely used in the UK and at the time was being used in some other jurisdictions. Has its use

grown in North America since then, how generally accepted is it, and what advantages does it offer over other approaches. Also, the report has a reference to friction numbers in 2007 from which one might infer there was similar testing done at that time. I was seeking clarification on that aspect as well.

If you would like further explanation of our information needs feel free to contact me (905-546-242 ext. 4469) or in reply to this email.⁷⁰¹

636. Mr. McGuire, Mr. Soldo and Mr. Ferguson met to discuss Report PW18008a on January 17, 2019.⁷⁰²

(b) Legal Services Discusses Draft Report for January 23, 2019 Council Meeting

637. On January 17, 2019, Ms. Auty emailed Mr. Sabo under the subject line “RHVE report draft”. She wrote:

Ron, this is my first draft of this preliminary report to council. I would appreciate any edits you feel necessary and would ask that you circulate to David Boghosian and Gord McGuire for their review and comment no later than Monday morning with a circulation to Dan McKinnon and Mike Z on Monday.

Thanks for your assistance, please feel free to email or call my cell (personal if after 10am Friday) if you have any questions.⁷⁰³

638. On January 17, 2019, Mr. Sabo created a calendar appointment for the following morning at 7:30 a.m. The subject of the appointment was “Review of Red Hill report with others for submission mModay asafer wider review Nicoles draft report with others, for wider review Monday and submission to Clerks”.⁷⁰⁴

⁷⁰¹ [GOL0006710](#)

⁷⁰² [HAM0048591_0001](#)

⁷⁰³ [HAM0062052_0001](#); attaching [HAM0062053_0001](#)

⁷⁰⁴ [HAM0062537_0001](#)

12. January 18, 2019

(a) *Preparation of Legal Services Report for January 23, 2019 Council Meeting*

639. On January 18, 2018, Ms. Auty emailed Ms. Graham requesting a media history of the “RHVE issue”. Ms. Graham replied the same day, writing “For sure - how broad do you want me to go? Specific to pavement, broader to safety or just everything?” Ms. Auty replied: “Pavement and safety but really looking for the comments by staff that you have mentioned.”⁷⁰⁵

640. On January 18, 2019, Mr. Sabo forwarded Ms. Auty’s email from the day prior to Mr. McGuire and Mr. Boghosian flagging the email as confidential and of high importance. He wrote:

Gord, David, the reason for high importance is a request on timing: I am hoping to have comments and edits from you by early Monday at the latest as I need to circulate a draft to General manager of PW Dan McKinnon and Acting CAO Mike Zegarac Monday morning. The report needs to be finalized for Council’s Feb. 23rd meeting on Monday.

Could you the a look at the attached report and provide me with comments in the above timeframe. Gord, please pay particular attention to accuracy of the factual background.

I haven’t made any edits to the draft, but will share that under Policy Implications it might be useful to say that provincial Minimum Maintenance Standards do not legislate any minimum standard for pavement friction. I invite your comments on that change as well.

Please also feel free to call and discuss changes with me, thanks⁷⁰⁶

641. Mr. Boghosian replied later on January 18, 2019, attaching an updated draft of the Legal Services report for the January 23, 2019 Council Meeting (“Report LS19007”). He

⁷⁰⁵ [HAM0062049_0001](#)

⁷⁰⁶ [HAM0062052_0001](#); [HAM0062050_0001](#) attaching [HAM0062051_0001](#)

noted in his covering email that he did not have comments other than the correction of a few typographical errors.⁷⁰⁷

642. The draft of Report LS19007 has been excerpted below:

EXECUTIVE SUMMARY

The purpose of Report LS19007 is to advise Council of the potential of litigation arising from the release of City records relating to friction testing on the Red Hill Valley Expressway (RHVE) as a result of a Freedom of Information Request. It is unknown at the writing of this report whether that information will be released to the requestor in advance of City staff bringing a scheduled report to Public Works Committee on February 4th with an update on the status of the RHVE and an assessment of the potential liability associated with the release of the records regarding friction testing.

It is important that Council be aware of the potential litigation resulting from this release and that City staff are bringing a full report to Committee and Council in early February to give Committee and Council a complete status update on this asset.

Alternatives for Consideration – See Page X or Not Applicable

FINANCIAL – STAFFING – LEGAL IMPLICATIONS (for recommendation(s) only)

Financial: There are financial impacts associated with potential increase in the City's liability and potentially an increase in insurance claim related costs. The exact amount is not known at this time.

Staffing: There are no staffing implications associated with this report.

Legal: The release of this information through the FOI process will have an impact on the City's liability associated with accidents on the RHVE. [redacted for solicitor-client privilege]

HISTORICAL BACKGROUND (Chronology of events)

The RHVE was constructed in 2007 using a process called perpetual pavement and a top course of Stone Mastic Asphalt (SMA). The SMA was friction tested upon opening and was found to have a lower score that was expected to increase with time.

The construction design of the RHVP assumed an Annual Average Daily Traffic (AADT) of 30,000 vehicles in year 1 with a projected peak of around 90,000 AADT in year 50. The actual traffic AADTs met or exceeded the 75,000 volume by year 6 which accelerated the need for rehabilitation work earlier than originally projected.

It has been reported to Council and in the media that there are a significant number of accidents on the RHVE, particularly in wet weather. There have been FOI requests in the past that have requested information regarding friction testing and no records were located. In an appendix to Report PW18006 in January of 2018 it was identified that friction testing had been conducted.

⁷⁰⁷ [HAM0062052_0001](#) attaching [HAM0062053_0001](#)

In June 2018 of 2018 Gord McGuire was appointed Director of Engineering Services. As part of his orientation into that role, he reviewed the status of the work being proposed on the RHVE and became aware of a draft report (the Tradewind report) that included friction testing done in 2013.

In November, 2018 a subsequent FOI request was submitted for friction testing done in the last 5 years. Staff reviewed the request and have provided the 2013 Tradewind report and several others as a potentially responsive records and the Tradewind report will likely be released.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

RELEVANT CONSULTATION

Public Works staff
Interim City Manager
Corporate communications staff
External legal counsel

ANALYSIS AND RATIONALE FOR RECOMMENDATION

(Include Performance Measurement/Benchmarking Data if applicable)

The 2013 Tradewind report indicates that the standard in the UK for skid resistance was 0.48 (48 friction number). RHVP had friction numbers in the range of 30-40 which was below or well below the relevant UK standard for comparable highways. In contrast, the Lincoln Alexander Parkway had friction values in the range of 50-60, all comfortably above the UK standard.

The concern is that the Tradewind report was not shared with other City staff at the time and was not released during earlier FOI requests. As a result subsequent reports and analysis of the condition of the RHVPE did not reference this report [redacted for solicitor-client privilege]

[redacted for solicitor-client privilege]

In addition, the Tradewind report has not been consistently addressed in the media and now that staff are aware of the report and have identified it as a responsive record to the FOI request, its release may also have some reputational impact on the City.

Next Steps

Corporate communications staff are preparing a communications plan in the event the FOI request is released in advance of the PW report scheduled to come before council on February 4, 2019. The public report will update council on status of the various projects associated with the RHVE. There will also be an In Camera report to further identify the risks associated with the RHVE and the release of the Tradewind report.

[redacted for solicitor-client privilege].⁷⁰⁸

⁷⁰⁸ [HAM0062053_0001](#)

643. Also on January 18, 2019, Dr. Uzarowski responded to McGuire's January 13, 2019, email with follow up requests from their meeting on December 18, 2018, writing:

First, we should correct one of the statements in the email below. We should clarify that in our report dated December 17, 2018, we did not state that the PSV was identified as "adequate", which you state below. We stated that: "The corrected PSV of the tested aggregates was 45. This value is considered to be average/medium. As discussed during the meeting, there is a concern that an aggregate with a PSV of 45 will not provide sufficient long-term frictional characteristics if the surface course asphalt mix is subjected to hot-in place (HIR) recycling."

Updating Reports: We understand you have requested an updated report to include a standard for BPT numbers, together with references for the measured texture depth and polished stone value standards. This would be a new scope of work. Also, please note that as stated in our report, because of weather condition during the testing we consider the BPT numbers as not reliable.

Removal of Observations: You have asked for us to remove observations regarding traffic volumes and speed considerations from our current report. These are significant factors that contribute to our evaluation of the pavement on the RHVP and form an important part of the report, as brought to the City's attention in the meeting. Thus, given their significance, it would be inappropriate to remove these observations from the report.

Frictional Characteristics: The City requests additional information regarding the frictional characteristics of the SMA surface course on the RHVP. These have been previously described to the City, and recommendations made by Golder which the City chose not to follow.

Shot Abrading: Golder has already provided the name of 3 potential contractors that may be suitable, for the City's consideration. The City can contact the contractors directly for any additional information regarding their services. If you prefer Golder to complete this task, this would be additional scope.

FOI Request: Golder has confirmed that FOI requests do not operate in the manner which you described. Typically, the public body that receives a FOI request will advise a private party if any documents that are to be disclosed may affect their interests. The party would then have a short timeline to object to disclosure. There are very limited circumstances where a party would be able to object to any disclosure, which is governed by legislation. Golder has not been forwarded a FOI request from any agency regarding information in your possession that is to be disclosed that may affect Golder's interests, so there is no action on Golder's part.

We want to be clear that Golder would be pleased to help the City with addressing the issue with the RHVP. If further information, technical recommendations or support effort is required, then Golder would be pleased to provide a scope of work to undertake this work. Please advise if you would like Golder to prepare a proposal.⁷⁰⁹

⁷⁰⁹ [HAM0054251_0001](#)

644. On January 18, 2019, Mr. McGuire emailed Ms. Auty, copying Mr. Sabo, regarding the 2017 Golder Pavement Evaluation and FOI Request 18-189. He attached Golder's proposal for the 2017 Golder Pavement Evaluation, as well as an email exchange he had with Dr. Uzarowski between December 19, 2018 and January 18, 2019. He wrote:

In response to the 2017 friction testing update.

I asked Golders to provide some clarity on the framework for their characterization of the results produced. IE: the PSV value of 45 is average / medium, but in reference to what scale? That element is not included in the report.

Golders reply is that this is out of scope? The attached letter of proposal indicates they will provide data in accordance with specific standards, with the determination being "...whether the pavement surface of the RHVP has sufficient frictional resistance..."

We had a call this week and Ludomir advised me that he would provide these frameworks of reference, otherwise his work is meaningless, as are his recommendations.

I would like to talk this over, do you have my cell number?⁷¹⁰

(b) Speed Limit Study

645. On January 18, 2019, Ms. Eisbrenner sent Mr. Soldo the staff and CIMA reports related to the Speed Limit Study. The staff report recommended to PWC that the speed limit be reduced to 80km/h on certain portions of the RHVP.⁷¹¹

646. Mr. Soldo forwarded the email and attachments to Mr. McKinnon and Mr. McGuire the same day, writing:

Updated report as per our conversation. I may wordsmith over the weekend. Should we inform legal as well?

Gord, FYI as we refer to it in the RHVP report.

Let me know if you have any comments.⁷¹²

⁷¹⁰ [HAM0054252_0001](#) attaching [HAM0054253_0001](#) and [HAM0054254_0001](#)

⁷¹¹ [HAM0012307_0001](#) attaching [HAM0012309_0001](#) and [HAM0012308_0001](#)

⁷¹² [HAM0035815_0001](#)

647. Mr. Soldo replied the same day, providing an updated report and appendix.⁷¹³

648. On January 18, 2019, CIMA provided an updated version of the 2018 CIMA Collision Memorandum.⁷¹⁴

13. January 19, 2019

(a) *Preparation for In-Camera Committee Meeting*

649. On January 19, 2019, Mr. McGuire emailed Mr. Boghosian and Mr. Sabo, copying Ms. Auty under the subject line “RE: RHVE report DRAFT”. He wrote “My comments:” in the body of the email, and attached a draft of Report LS19007.⁷¹⁵

650. Later the same day, Mr. McGuire forwarded his email to Mr. McKinnon, writing “Not sure if all my comments will get included.”⁷¹⁶

651. On January 19, 2019, at 2:41 p.m., Mr. McGuire sent Mr. McKinnon an email under the subject line “report”. He attached a draft of Report LS19007, titled “Report LS19007 – Potential Litigation Update (draft – Jan 17 2019) (DGB and GMc reviewed).doc”.⁷¹⁷

652. Mr. McGuire replied to Mr. Boghosian’s email from 2:58 p.m. the day prior on January 19, 2019, writing:

My comments:

My cell [personal information redacted]⁷¹⁸

⁷¹³ [HAM0028104_0001](#), [HAM0028105_0001](#), [HAM0028106_0001](#)

⁷¹⁴ [HAM0028107_0001](#) attaching [HAM0028108_0001](#)

⁷¹⁵ [HAM0062056_0001](#) attaching [HAM0062057_0001](#)

⁷¹⁶ [HAM0062058_0001](#) attaching [HAM0062068_0001](#)

⁷¹⁷ [HAM0062069_0001](#) attaching [HAM0062070_0001](#)

⁷¹⁸ [HAM0062071_0001](#)

653. Mr. Boghosian replied the same day. The content of this email has been redacted by the City on the basis of a solicitor-client privilege claim.⁷¹⁹

654. Mr. Sabo replied, indicating that he was finalizing the draft and was to circulate it to Mr. McKinnon and Mr. Zegarac for review.⁷²⁰

655. On January 19, 2019, Mr. Zegarac sent a calendar invitation to Ms. Auty, Mr. McGuire, Mr. Soldo and Mr. McKinnon with the subject “RHVP Discussion”. The meeting was scheduled for January 21, 2019.⁷²¹

656. Ms. Graham prepared a note which appears to be from this meeting:

Meeting with Mike – Council in-camera on Wednesday

Speed limit report:

- Edward’s report – one of the recommendations is to reduce the speed limit to 80km/hr from Greenhill to the -QEW, effective immediately
- Second recommendation – request HPS to continue to undertake regular and targeted speed enforcement
- Consultants did not recommend to change the speed limit
- Could be pulled into safe school zones – but nothing imminent in automated speed enforcement right now

PW 18008A

- End to end illumination
- Friction testing – 2017 assignment, we have a consultant, answers are vague, not much action in that – but we did report previously that there was friction testing⁷²²

(b) RHVP Lighting Study

657. On January 19, 2019, Mr. McKinnon sent certain RHVP-related staff reports to Joanne McKinnon (Member of the Public).⁷²³

⁷¹⁹ [HAM0062071_0001](#)

⁷²⁰ [HAM0062071_0001](#)

⁷²¹ [HAM0054258_0001](#)

⁷²² [HAM0012356_0001](#)

⁷²³ [HAM0035819_0001](#) attaching [HAM0035820_0001](#); and [HAM0028118_0001](#) attaching [HAM0028120_0001](#)

14. January 20, 2019

658. On January 20, 2019, Mr. McGuire responded to Dr. Uzarowski's January 18, 2019 email, writing:

I'm surprised by your reply after our conversation last week. In that conversation we agreed that providing a reference framework to your draft report was required to provide context to your findings.

Providing the City with a response that the PSV is 45 that is considered by Golders to be "average /medium" with referring to what scale "average/medium" is measured against makes the report incomplete. The recommendations have no weight or meaning as they have no supporting framework.

The assignment as attached outlines that Golders will "determine whether the pavement surface on the RHVP has sufficient frictional resistance" (top of page 2). In 2013 the Tradewind report referred to a specific standard, used an approved methodology and then provided details on the performance of the material in context to that standard.

What Golders has provided in this assignment is a series of measurements, and your review of those results, with recommendations based upon unknown standards. As the client this does not meet our requirements of the assignment. We would have to retain other consultants to interpret these measurements.

Your inclusion of speed and traffic volume data is outdated, and does not refer to the most current studies done via another consultant. I will also point out in the assignment as attached there is no mention of reporting requirements for contributing factors such as speed, volumes or any other influences. Why you selected these 2 elements and not others is interesting however out of scope for the assignment. Whether you feel they influence the pavement conditions is out scope as the assignment was to test the existing material. What traffic volumes the material has been subject to is understood by the City, and being studied elsewhere.

There are a series of reports being generated for committee and council on this matter. I have included a section on the 2017 Golders assignment and hope that I can have sufficient details to be able to provide complete context on the results. My report is due Monday to the GM and I had expected your results with a framework to address the lack of reference standards. My report will include this element and discussion around the meaning of the results.

If you choose to leave this assignment in this form the City will of course review its options. I would advise you reconsider your position related to above noted concerns regarding your report to the City of Hamilton on the frictional sufficiency of the RHVP.

In our conversation you were to supply an additional report from 2016 that related to dips in the RHVP as per our PO number 81744 attached. Can you advise of timing please.

Relating to the FOI request, and in particular records related to our pavement management processes since 2007. The City is asking for all related emails, reports and documents that would form part of our records in due course related to the management of our projects and contracts with Golders. We are asking Golders to submit these normal documents, and if there are administrative charges for copying, scanning, assembly and transmittal the

City will pay Golders those reasonable costs. The City is bound to ensure we have all available records to be correctly responsive to a Provincially mandated process. Please advise of the turn around on these documents.

Lastly your comments surround frictional characteristics are not helpful. The City asked for clarity as Golders stated that “the friction concerns were still valid”, yet on the other hand Golders states “if there is a concern with the frictional characteristics”. These statements don’t fully align as the first implies there is a concern, the second suggests there may be a concern.

Similar to the questions above the City is looking for Golders insight into this matter to ensure we’re acting in the correct manner, and have the complete records.

Please contact me with any further questions, and advise of the time I can expect answers to the above questions.⁷²⁴

659. On January 20, 2019, Mr. Soldo emailed Mr. McKinnon, attaching an updated draft of the staff report to the Speed Limit Study. He wrote:

I tried to provide some clarity as per our discussion. I have to be careful that what is being reported is as per the CIMA report and hence I did not want to introduce the speed vs design concept here. Lots of the paragraphs are cut and paste. In terms of the speed differential, I went back to their report and am using their wording and explanation.⁷²⁵

660. Ms. McKinnon emailed Mr. McKinnon on January 20, 2019, under the subject line “dan”, writing:

(a) The analysis concludes, using both the MTO and TAC methods which considers current operational and collision data, the following; both methods agree that the RHVP warrants illumination for its entire length. For the LINC the MTO method concludes the warrant is met for continuous illumination for its entire length, while the TAC method did not achieve a warrant, the thresholds were close.⁷²⁶

661. On January 20, 2019, Mr. Sabo emailed Mr. Zegarac and Mr. McKinnon, writing:

Mike, Dan, here is a draft of Nicole’s report for the Jan. 23rd Council meeting that needs your review/approval Monday so it can be sent to Clerks for the meeting.

It has been circulated to Gord and outside counsel David Boghosian for edits and comments. There may be two further edits (1) the 6-year mark traffic volume is being checked by Gord at 75,000 (this is in the second paragraph under the heading Historical Background), and (2) in the third paragraph of the same part I will try to confirm with FOI staff that a prior FOI request was for friction testing or otherwise that the Tradewind report

⁷²⁴ [GOL0003050](#)

⁷²⁵ [HAM0012331_0001](#)

⁷²⁶ [HAM0012333_0001](#)

would have been a responsive record to a different FOI request, if the report had been located earlier.⁷²⁷

662. At 8:28pm, Mr. McKinnon replied to Mr. Sabo's email from the day prior regarding the draft of Report LS19007, writing: "Ronni think we reference the wrong report number, I think it's supposed to be 18008 not 18006. Perpetual pavement is a pavement design not really a process, otherwise I'm good".⁷²⁸

663. The same evening, Mr. McKinnon forwarded Mr. Sabo's email to Ms. McKinnon.⁷²⁹

15. January 21, 2019

664. On January 21, 2019, at 10:54 a.m., Mr. Sabo replied to his email from the day prior to Mr. Zegarac and Mr. McKinnon attaching a draft of Report LS19007. He wrote:

I have a call in to Gord, but just confirmed with the City's FOI Office there have been no prior FOI requests related to the Red Hill Valley Expressway that would have required the production of a report on friction testing, prior to the current 2018 FOI request. I asked generally for a search of requests for friction, collisions and safety of the Red Hill. As a result I plan to edit the draft report in a number of places, to delete wording where there is mention of FOI requests. The draft will still say the effect that the release now of the Tradewind report obtained a few years ago may lead to some reputation harm and media coverage.

I am hoping to check with Gord about the accuracy of the 75,000 traffic count, but also given the above whether he has other knowledge of an FOI request, or if alternatively the report and staff discussion may have just been confusing media questioning of staff with a formal FOI request.

I'll try to supply a revised report with both a tracked version to show the changes made re FOI matters, plus a clean copy that hopefully will be the final version for approval and forwarding to Clerks, which I need to do this morning.⁷³⁰

665. On January 21, 2019, Mr. Soldo emailed Ms. Auty and Mr. Sabo, copying Ms. Graham and Mr. McKinnon, under the subject line "Speed Limit Report", asking for any

⁷²⁷ [HAM0062072_0001](#) attaching [HAM0062073_0001](#)

⁷²⁸ [HAM0054263_0001](#)

⁷²⁹ [HAM0062076_0001](#) attaching [HAM0062080_0001](#)

⁷³⁰ [HAM0062083_0001](#) attaching [HAM0062084_0001](#) and [HAM0062085_0001](#)

comments to be provided that morning as it was due to the City clerks that day. He attached CIMA's Speed Limit Study Report and a draft of the corresponding staff report to the PWC.⁷³¹

666. Mr. Sabo replied, writing:

Hi Edward, I am looking at the report as Nicole is off today. I'm still reading the lengthy CIMA report.

In your report, you could have included alternatives such as Council considering a lower speed limit, or setting a limit for the whole of the RHVE or even the length of both the Linc and RHVE. I am just guessing at this point that the consultants recommendations, which are stated generally to support the current or even a higher speed, are contrary to the idea of lowering the speed limit or to looking beyond the segment where speed is proposed to be reduced.

You could also give added support for the reduction recommended. There might be various factors but one possible statement is that the reduction here could lead to longer term consideration of its benefit, and as Council could decide at any time later if a further speed change, either increase or reduction, along the RHVE or both the LINC and RHVE are justified based on experience with the reduced speed limit recommended here.⁷³²

667. Mr. Soldo forwarded Mr. Sabo's response to Mr. McKinnon, writing "Will make changes based on first paragraph. Second is implied and I don't want to highlight."⁷³³

668. At 10:08 a.m., Mr. Sabo replied to Mr. Soldo's email regarding the Speed Limit Study report, writing:

Edward, I have finished reading the CIMA report. I took it that only one of the three methods recommended by them for use suggested a speed limit lower than 90kmh and I believe only for a portion of the RHVE which portion is within but shorter than the staff recommended segment to have a speed reduction to 80.

The alternatives mentioned below were just options, and I usually suggest staff list reasonable options and to give some basis for staff recommendations and issues considered in the choice of options as this can allow committee more insight and room for debate. I leave it to you to consider if any further options than doing nothing need to be

⁷³¹ [HAM0054267_0001](#) attaching [HAM0054268_0001](#) and [HAM0054269_0001](#)

⁷³² [HAM0062082_0001](#)

⁷³³ [HAM0062082_0001](#)

identified and addressed as the staff recommendation seems to be consistent with the consultants recommendations but with an extension of the length of roadway involved.⁷³⁴

669. Mr. Soldo forwarded the email to Mr. McKinnon, writing “I would be more comfortable to leave the report as is. Thoughts?”⁷³⁵

670. The screen capture of a text message exchange between Mr. McGuire and a contact listed as Mr. Moore, which was included in the summary document prepared by Mr. McGuire, indicates that another message was received or sent on January 21, 2019, at 11:08 a.m. The content of this message was not included in the screen capture prepared by Mr. McGuire.⁷³⁶

671. Later the same day, Mr. Sabo replied to his email from 10:54 a.m., attaching two drafts of Report LS19007, including a clean version and a version indicating revisions made. He wrote:

Subject to any discussion with Gord on the below, here is the revised draft report in both tracked and clean versions. Aside from minor corrections also, the report uses the word “design” in referring to perpetual pavement (per Dan’s comment) and deletes various references to a prior FOI request, but retains a discussion of the denial/conflicting info given to media.

Again I need to forward the final report to Clerks as soon as I can today. Thanks⁷³⁷

672. Ms. Melatti, on behalf of Mr. Zegarac, sent a calendar invitation for a meeting scheduled for January 21, 2019 at 4:00 p.m. to Ms. Auty, Mr. McGuire, Mr. Soldo and Mr. McKinnon. The subject of the meeting was “RHVP Discussion”, and Ms. Melatti noted in the body of the invitation that the “meeting may be adjusted with the timing of GIC.”⁷³⁸

⁷³⁴ [HAM0062088_0001](#)

⁷³⁵ [HAM0062088_0001](#)

⁷³⁶ [HAM0062030_0001](#) at image 5

⁷³⁷ [HAM0062083_0001](#) attaching [HAM0062084_0001](#) and [HAM0062085_0001](#)

⁷³⁸ [HAM0062081_0001](#); and [HAM0061583_0001](#)

673. On January 21, 2019, Mr. McGuire emailed Mr. Sabo and Ms. Auty, copying Mr. McKinnon, Ms. Graham, Ms. Cameron and Mr. Soldo, under the subject line “Emailing: PW18008a.Appendix A, PW18008(a) final”. He wrote:

Attached is the report on the RHVP. Its lengthy and address numerous issues which build on the previous report PW18008. My apologies for the delays its been a work in progress. Comments are required as its unfortunately late for our submission to clerks.

I'm now preparing a presentation in support of this to committee and that will align with the content in this report.⁷³⁹

16. January 22, 2019

674. On January 22, 2019, Mr. McKinnon replied to Mr. Soldo’s email regarding Mr. Sabo’s comments on the Speed Limit Study report, writing “I’m good as well, I appreciate Rons advice but it is advice only”.⁷⁴⁰

675. The same day, Ms. Auty replied to Ms. Graham’s email from January 17, 2019, under the subject line “RE: Confidential Road Issue Preparation Document for your advice”. She attached a document titled “Confidential RHVP Communications Plan DRAFT ONLY FOR ADVICE LEGAL edits”, and wrote:

Jasmine, this is a first draft with my comments/changes for your consideration, once you have had a chance to review we can discuss and I will circulate our next draft to outside legal.⁷⁴¹

(a) Final Staff Report for PW 18-008(a) Approved

676. On January 22, 2019, Mr. Sabo replied to Mr. McGuire’s email from the day prior, writing:

Gord, I spoke to Nicole briefly on the report and I have reviewed it, and you are good to proceed with just a couple of comments here on the Golder report attachment:

⁷³⁹ [HAM0054285_0001](#)

⁷⁴⁰ [HAM0062088_0001](#)

⁷⁴¹ [HAM0062090_0001](#) attaching [HAM0062091_0001](#)

The Golder letter/attachment includes blank pages between each page of the document, and there are two pages that have personal handwritten notes on the letter. A clean copy of the Golder correspondence/report should be used for the report to Committee, and re-copied so it doesn't contain blank pages.

Also the Golder report indicates Golder is still studying the hot in place recycling aspect of resurfacing. You may want to address that in a presentation or add to your written report that the HIR is no longer being considered and so isn't being pursued for the resurfacing work (its possible your report addresses this but I wanted to make sure you considered the content of the Golder report on this).⁷⁴²

677. Ms. Cameron replied to Mr. Sabo later the same day, writing "On behalf of Gord I want to confirm that the Golder letter was for your information only and will not be part of the report to Committee."⁷⁴³

678. At 12:13 p.m., Ms. Cameron emailed Mr. Soldo and Mr. McKinnon, copying Mr. McGuire, Ms. Wunderlich and Ms. Eisbrenner, under the subject line "***URGENT** - Final Draft Report – RHVP". She wrote:

Hi Dan / Edward,

The final draft has been approved electronically by Legal and signed off by Linda Mooradian and Ashley Bono. Can you confirm you approve the final draft as submitted by Gord yesterday afternoon so that I can proceed with getting the final signatures. Edward I will need you to stop by to sign before end of day today.⁷⁴⁴

679. On January 22, 2019, Mr. McKinnon approved the final draft of the joint PW 18-008(a) report to PWC, requesting that Ms. Cameron provide it to the clerks as soon as possible.⁷⁴⁵ Ms. Wunderlich replied to Mr. McKinnon writing "Too late already did...lol"⁷⁴⁶

⁷⁴² [HAM0054285_0001](#)

⁷⁴³ [HAM0054285_0001](#)

⁷⁴⁴ [HAM0054286_0001](#)

⁷⁴⁵ [HAM0054292_0001](#); and [HAM0054288_0001](#)

⁷⁴⁶ [HAM0054296_0001](#)

17. January 23, 2019

(a) Audit Services Request Search of Mr. Moore's Emails

680. On January 23, 2019, Ms. Minard emailed Peter MacNeil (Chief Technology Architect, Information Technology, Corporate Services, Hamilton), copying Mr. Brown, requesting all email correspondence between Mr. Moore and Dr. Uzarowski from October 1, 2013 to January 31, 2014.⁷⁴⁷ Mr. MacNeil replied the following day:

I have been searching for old email logs this evening. 2013/2014 logs are beyond any timeframe that we had imagined for storing logs. The oldest email log that I could find dated back to September of 2016. I believe 2014 was before our current centralized logging system was installed. The earliest logs of any sort that I can find anywhere are some mid-2014 vpn firewall logs that came from devices that have been replaced twice since then.

The only possible source I can think of for email information that is 5+ years old is Gary Moore's archived M: drive (where there may have been a PST archive file).

I'll continue the search in the morning, but, at this point I suspect that I won't be able to provide you with any information.⁷⁴⁸

681. Later the same day, Mr. MacNeil replied further, writing:

For this type of investigation, we typically have four sources of information:

1. Logs from the Internet email gateway. The oldest of these logs is Sep 2016.
2. The user's mailbox. This was archived Jun 1, 2018. A search of that archive turned up no email records from the Oct 1, 2013 to Jan 31, 2014 timeframe.
3. The user's M: drive. PST archive files created by the user are often stored there. The M: drive was archived May 25, 2018 and a PST file from that archive was searched as well. A search of that archive turned up email records from the Oct 1, 2013 to Jan 31, 2014 timeframe. However, none of them involved the Ludomir_Uzarowski@golder.com address
4. The user's C: drive. PST archive files are occasionally stored there. Since we do not have the computer that he used, I looked in hi M: drive archive and found a copy of his desktop profile. It had no PST archive files.⁷⁴⁹

⁷⁴⁷ [HAM0035843_0001](#)

⁷⁴⁸ [HAM0035843_0001](#)

⁷⁴⁹ [HAM0035843_0001](#)

682. On January 23, 2019, Mr. Malone emailed Mr. McGuire regarding his attendance at the PWC meeting on February 4, 2019. He wrote:

I'm confirming my availability for the PWC meeting at 09:00 on Feb 4th. Edward Soldo has also been in touch with me and requested that I be there as a resource to him also, as may be required.

May I ask if you will approve my invoice, as an additional amount under the Illumination Review project, for the attendance at the meeting? It is my understanding that this effort is beyond the scope of work for the assignment.⁷⁵⁰

683. Mr. McGuire replied the same day, writing:

Yes we will pay for that time either through the PO or a direct payment under our policies.

I appreciate the time on the file, thanks.⁷⁵¹

(b) January 23, 2019, Council Meeting

684. On January 23, 2019, Report LS19007 was presented to Council.⁷⁵² A closed session discussion took place from 9:43 p.m. until 10:45 p.m., and the minutes record that Mayor Eisenberger, Councillors Jason Farr (Ward 2, Hamilton), Maureen Wilson (Ward 1, Hamilton), Nrinder Nann (Ward 3, Hamilton), Chad Collins (Ward 5, Hamilton), Jackson, John-Paul Danko (Ward 8, Hamilton), Terry Whitehead (Ward 14, Hamilton), Brenda Johnson (Ward 11, Hamilton), Maria Pearson (Ward 10, Hamilton), Brad Clark (Ward 9, Hamilton), along with Mr. Zegarac, Ms. Auty, Mr. McKinnon, Mr. Hertel, Mr. Sabo, Janet Pilon (Manager Legislative Services/Deputy Clerk, Office of the City Clerk, Corporate Services, Hamilton), Alicia Davenport (Legislative Coordinator, Office of the City Clerk, City Manager's Office, Hamilton) and Lisa Chamberlain (Legislative

⁷⁵⁰ [CIM0016801](#)

⁷⁵¹ [CIM0016801](#)

⁷⁵² [HAM0062085_0001](#); [RHV0000884](#) at images 10, and 60 -61; and [RHV0000885](#) at images 12 and 62-63

Coordinator, Office of the City Clerk, City Manager's Office, Hamilton) were in attendance.⁷⁵³

18. January 24, 2019

685. On January 24, 2019, Mr. Pellegrini contacted Mr. McGuire, asking for assistance in setting up a meeting with Dr. Uzarowski. Mr. McGuire responded, attaching his email to Dr. Uzarowski from January 20, 2019:

Lately I've been challenged getting connected with Golders. They view their assignment as complete and I do not. They have not replied to the attached email.

I will call them tomorrow and let you know the outcome.⁷⁵⁴

(a) Reorganization of Public Works Department

686. On January 24, 2019, Mr. McKinnon sent an email to Public Works staff regarding an upcoming departmental reorganization. He wrote:

Good afternoon Public Works,

As you all know, I am truly passionate about creating a culture of continuous improvement here in Public Works. It's important for us to be open to new ideas and ways of thinking. We should always be on the lookout for opportunities to make things more efficient, streamline the delivery of our services, and to support collaboration among our divisions. I believe that bringing this approach to our work is essential for success in the long-term.

Today, we are announcing a new organizational structure in Public Works that will help bring better alignment to the work that we all do every day. In deciding on these changes, our leadership team consulted with staff to discuss their thoughts on how to make things better from a structure perspective. Many of the changes that we are announcing today were actually ideas that came directly from staff. I'd like to personally thank you all for your thoughtful contributions to this process.

Our goals with these changes will be to help reduce coordination costs, to resolve issues around redundant work, to centralize specialized tasks that don't require a lot of crossover with other parts of the organization, and to ultimately establish clear accountability for work.

Earlier today, we informed a number of staff that they would be moving divisions, getting new managers or supervisors, gaining new direct reports. I'm providing a high level summary of the changes here and attaching a new organizational chart. Not every change

⁷⁵³ [HAM0062634_0001](#)

⁷⁵⁴ [HAM0035844_0001](#) attaching [HAM0035845_0001](#)

we made today is reflected in this list, but those directly affected have already been informed about changes in their immediate area.

- Our division formerly known as Roads & Traffic now has a new name – Transportation Operations & Maintenance. This division will remain under the leadership of Director, Edward Soldo. Under this new division will be three new sections: Roadway Maintenance, Transportation Operations and Business Initiatives. The division will be focused on operation and maintenance operations in the right-of-way, with a vision to provide a safe, convenient, accessible and efficient transportation system in Hamilton.
 - Roadway Maintenance will be similar to our previous Roads and Maintenance section, under the leadership of Manager, Bob Paul. It will include:
 - District Superintendents: As usual, four superintendents will oversee the roadway maintenance operations in each of our districts: Sarah Poole, Mike Christian, Terry McCleary, and John Searles.
 - Programs & Contracts – This new group will be under the leadership of Tammy Blackburn and will oversee the administration of programs, contracts and materials for our winter roads and other operations in Roadway Maintenance.
 - Transportation Operations will be similar to our previous Traffic Operations & Engineering section, under the leadership of Manager, Martin White. There are several changes in this group, including two new sub-sections.
 - Street Lighting, which will be moving over from Engineering Services, under the leadership of Senior Project Manager, Mike Field.
 - Traffic Operations, under the leadership of Superintendent, Ed Switenky.
 - Traffic Engineering, under the leadership of Senior Project Manager, Rob Declair.
 - Traffic Safety, under the leadership of Superintendent, David Ferguson.
 - Transportation Systems, under the leadership of a new Senior Project Manager, who will be recruited over the coming weeks.
 - Business Initiatives is a new section that will provide divisional support related to operational compliance, training, data management, capital and operating budget management and more. At this time, the Manager position in this section is vacant and recruitment will commence soon. It will include three sub-sections:
 - Business Services, under the leadership of Superintendent, Kim Wyskiel.

- Business Systems, under the leadership of Senior Project Manager, Richard Jakubowski.
 - Strategic Initiatives, The Senior Project Manager for this new subsection will be announced at a later date
- A few other notable changes:
 - The former Capital Rehabilitation & Technical Operations group has been divided among the other sections in the new Transportation Operations & Maintenance group. However:
 - Staff working on storm water management will be moving into **Hamilton Water**. They will be working with existing water staff on an integrated storm water management program.
 - Staff working on capital rehabilitation will be moving into Engineering Services.
 - Staff working on environmental assessments will also be joining **Engineering Services**, with the goal of grouping similar work under the same portfolio.
 - The former Policy & Programs section in Roads & Traffic will be mostly absorbed into the Business Initiatives section. Work on the Clean & Green programs will be moving into Environmental Services, with the goal of grouping similar work together.

Thanks so much for your attention and your continued dedication to Public Works and the City of Hamilton.⁷⁵⁵

687. Mr. McKinnon's announcement was forwarded by Ms. Leishman on February 8, 2019, who noted that it "a small, internal re-org to better align capital projects within Engineering Services and corridor management within Roads and Traffic (now Transportation Operations & Maintenance - TOM)".⁷⁵⁶

19. January 25, 2019

(a) Questions Regarding Location of Files in City's System

688. On January 25, 2019, Ms. Jacob emailed Mr. Vala, responding to an email relating to the RHVP Roadside Safety Assessment. She asked: "[d]o you have the link to the

⁷⁵⁵ [HAM0060685_0001](#) attaching [HAM0060686_0001](#) attaching [HAM0060687_0001](#)

⁷⁵⁶ [HAM0060685_0001](#)

Design report mentioned in your email? Edward was asking for it.”⁷⁵⁷ Mr. Vala responded the same day, writing:

Susan,

The Design report (along with multiple versions of it) were located on the server at the following location until recent past,

P:\Red Hill Valley Project

Unfortunately, none of them are to be found there now ☹⁷⁵⁸

689. Ms. Jacob forwarded Mr. Vala’s email to Mr. McGuire. Later the same day, Ms. Cameron emailed Ms. Jacob regarding the files, writing “Which folder(s) do you need to remain and I can put back – majority of these files should be archived as they are from the office.”⁷⁵⁹

690. The relocation of files was referenced in documents throughout late January and early February. It appears the relocation may have been related to a backup to a document management system.⁷⁶⁰

(b) Discussions Regarding Schedule of Meeting to Disclose Report to Council

691. On January 25, 2019, Ms. Auty emailed Mr. Zegarac, copying Ms. Fontana, attaching a document named “Confidential RHVE action plan.doc”. She wrote:

Mike, further to our conversation here is the action plan.

I would like to review and develop based on conversations with yourself, council and external legal.⁷⁶¹

⁷⁵⁷ [HAM0028224_0001](#)

⁷⁵⁸ [HAM0028224_0001](#)

⁷⁵⁹ [HAM0028224_0001](#)

⁷⁶⁰ [HAM0012744_0001](#); [HAM0028438_0001](#); [HAM0028224_0001](#); [HAM0028430_0001](#); [HAM0028439_0001](#); and [HAM0028444_0001](#)

⁷⁶¹ [HAM0062093_0001](#) attaching [HAM0062094_0001](#)

692. The attached document, titled “Overall Action Plan”, has been excerpted below:

- 1) Employee considerations: Council relationship with Director/public/media
 - Action plan to assess and review: adherence to policies, reporting, delegation
 - Decision regarding status – legal advice, labour relations; employee status and/or relocation
 - Meet with employee;
 - Consideration for current employment agreement
- 2) Technical/engineering safety
 - Action plan to assess technical review with third party
 - Further engage external legal to engage third party for overall assessment;
 - Litigation and liability review finalization
 - Internal staff process review (Audit – external (?))
- 3) Communication plan (with external support)
 - Public confidence
 - Technical assessment
 - Council confidence
 - Employee – status, review caution on making allegations⁷⁶²

693. On January 25, 2019, Ms. Davenport sent a calendar invitation for the February 4, 2019 Public Works Committee Meeting to various City staff members, including Mr. McGuire, Mr. McKinnon, Mr. Soldo and Ms. Auty, as well as Councillors Merulla, Nann , Collins, Jackson, Esther Pauls (Ward 7, Hamilton), Farr, Danko, Arlene VanderBeek (Ward 13, Hamilton), Lloyd Ferguson (Ward 12, Hamilton), Whitehead and Pearson. Mr. Field and Mr. Malone were included amongst the optional attendees.⁷⁶³

⁷⁶² [HAM0062094_0001](#)

⁷⁶³ [HAM0061816_0001](#)

694. The same day, Ms. Davenport also exchanged emails with Mr. McKinnon, copying Mr. Zegarac and Ms. Auty, regarding the reports that were scheduled for the February 4, 2019 PWC meeting:

[AD]: As per your instructions, please accept this email as confirmation that the following reports have been removed from the February 4, 2019 Public Works Committee meeting agenda:

- Lincoln M. Alexander Parkway (LINC) and Red Hill Valley Parkway (RHVP) Transportation and Safety Update (PW18008a) (City Wide) (Outstanding Business List Item)
- Speed Limit Reduction Feasibility Study on the Lincoln M. Alexander and the Red Hill Valley Parkways (PW19014) (City Wide) (Outstanding Business List Item)

[DM]: Can you include the collision report?

[AD]: As discussed, please accept this email as confirmation that the Report titled 'City of Hamilton Annual Collision Report — 2017 (PW19012) (City Wide)' has been removed from the February 4, 2019 Public Works Committee meeting agenda as well.

All three Reports have been provided to Stephanie Paparella for inclusion in the GIC agenda.⁷⁶⁴

695. Stephanie Paparella (Legislative Coordinator, Office of the City Clerk, Corporate Services, Hamilton) replied the same day, writing “Thanks Alicia! I have all three and they will be included in the Feb. 6th GIC agenda.”⁷⁶⁵

696. Ms. Paparella replied to her email five minutes later:

Ok – just spoke with Nicole and I am NOT going to put those three reports on the February 6th GIC agenda. I am just going to hold them in my cabinet until it is determined if when they are going.

Keep me posted! Have a great weekend everyone.⁷⁶⁶

⁷⁶⁴ [HAM0054306_0001](#)

⁷⁶⁵ [HAM0054306_0001](#)

⁷⁶⁶ [HAM0054306_0001](#)

697. Mr. McKinnon replied to her email, writing “Ok sounds like I’m in the passenger seat and will await the new plan.”⁷⁶⁷

698. Ms. Wunderlich forwarded Ms. Paparella’s email to Mr. Soldo and Ms. Eisbrenner, writing “I am not sure what is going on but please read below.”⁷⁶⁸ Ms. Cameron responded to Ms. Wunderlich, writing “I wonder if it has to do with the FOI”.⁷⁶⁹

(c) CIMA Reengaged to Assist with RHVP Tender Process

699. On January 25, 2019, Mr. Olszewski emailed Mr. Ferguson and Mr. White, copying Mr. Declair, Mr. Becke and Mr. Vala, under the subject line “RHVP CIMA Engagement”.

He wrote:

In discussions with Mike Becke and his Design team for the RHVP yesterday, there is an extremely accelerated delivery and tender schedule of this project that needs immediate attention.

There is direction to get this RHVP project issued and tendered in late February; given that, I am requesting it is in our best interest to reengage CIMA to provide drawings for the guiderail portion of this project. This will assist Design in properly identifying sections of replacement and end treatments that need to be slightly catered to how Design intends on identifying the guiderail scope on separate drawings.

Also, given CIMA’s experience with this project, this minor drawing work could be tied into Sarath’s email (attached) to have them also complete the MTO encroachment permit that will also be required as part of this resurfacing project.

The Design team has also requested confirmation regarding the guiderails that CIMA has recommend no action short term; only replacement when impacts necessitate, or when major reconstruction happens. Does this remain the direction (as CIMA also recommended it’s not feasible as part of this resurfacing – Page 21 of the final report), or is the expectation that every section of guiderail be replaced along the entire project limits?

Please let us know if you wish to proceed with this approach and engage CIMA for the MTO assistance.⁷⁷⁰

⁷⁶⁷ [HAM0054311_0001](#)

⁷⁶⁸ [HAM0054306_0001](#)

⁷⁶⁹ [HAM0054307_0001](#)

⁷⁷⁰ [HAM0060602_0001](#)

700. Mr. Olszewski attached an email from Mr. Vala to Ms. Skrypniak dated December 14, 2018 regarding the retention of CIMA in relation to RHVP resurfacing.⁷⁷¹

701. On January 25, 2019, Ms. Jacob sent a calendar invite for a meeting on January 29, 2019 to Mr. Ferguson, Mr. Vala, Mr. Olszewski, Mr. Becke, Ms. Bojeski and Mr. Declair. The subject of the meeting was “RHVP meeting with CIMA+”. Ms. Jacob wrote in the body of the email:

Dave/Chris

Please forward to anyone else required at the meeting

This is to discuss scope and timing for RHVP⁷⁷²

702. Mr. Olszewski forwarded the calendar invite the same day to Mr. Hadayeghi and Mr. Salek, writing:

Please find the attached meeting invite to discuss further potential assistance regarding the Red Hill Valley Parkway design and specifications.

The Design team is on an accelerated tender schedule with this work, and we feel that meeting to briefly discuss would be the best way to capture a potential assignment requested of CIMA+.

If I have missed anyone from CIMA+ you feel is critical to join, please forward the invite, but the intent is to be high level with this initial meeting.⁷⁷³

703. The meeting was scheduled for January 29, 2019, at 11:00 a.m.⁷⁷⁴

20. January 26, 2019

704. On January 26, 2019, an email account under the name Joanne Taylor-McKinnon sent Mr. McKinnon an email under the subject line “Questions”:

⁷⁷¹ [HAM0060603_0001](#)

⁷⁷² [HAM0060607_0001](#)

⁷⁷³ [HAM0060607_0001](#)

⁷⁷⁴ [HAM0060607_0001](#)

Did MTO test the friction of the asphalt on the RHVP in 2007? If so why?

What were the results?

What actions did you take in response to the MTO results and conclusions?

What precipitated undertaking the 2013 Golders/Tradewind study?

How was the decision made to use the standard (the UK standard) that was used?

Are their north american standards available for such analysis?

What was it about the result that you felt made them inconclusive?

Was Golders paid in full for the 2013 assignment?

Why the was the report not finalized?

Who were the result share with within the City of Hamilton? If so who? If not why not?

What actions flowed out of the recommendations from Tradewind?

What precipitated the 2017 Golders assignment?

What question were you endeavoring to answer with the polished stone value analysis? What was your conclusion?

It appears a UK standard was again used for the 2017 assignment, what was the rationale for using this standard again?

Was this assignment in collaboration with other city staff? If so who? If not why not?

Was the information gleaned for the 2013 and 2017 Golders reports ever used or shared to inform assignments undertaken by CIMA?

Why was the 2013 Golders report only placed on the City's network in the late spring of 2018?

Are you aware that the MTO issued a tech memo in 2015 discouraging the use of SMA recycling through Hot In-place Technology resurfacing? If so why was the plan to continue to do this?

What precipitated the insertion of the RHVP resurfacing into the capital budget in the fall of 2017? Considering the late addition of this project to the budget why was it scheduled in 2018 and not scheduled further out in the multi year forecast?⁷⁷⁵

⁷⁷⁵ [HAM0028235_0001](#)

705. Mr. McKinnon sent the list to Mr. McGuire the same day under the subject line “Give me a shout when you h e time?”⁷⁷⁶ Mr. McGuire replied “Sure. Thats quite a list.”⁷⁷⁷

706. On January 26, 2019, Mr. Zegarac replied to Mr. McKinnon’s email from the day prior regarding the scheduling of a GIC meeting, writing “I believe the Mayor will be requesting a special GIC. I’ll confirm with the Mayor Monday.”⁷⁷⁸

21. January 28, 2019

707. Mr. McGuire prepared a draft RHVP timeline, dated January 28, 2019.⁷⁷⁹

708. On January 28, 2019, Mr. McGuire emailed Ms. Iacoe, asking her to confirm the award date of PW-06-243. She replied on January 29, 2019:

Sorry – this one wasn’t ours. It was issued by engineering. There’s no electronic file for it. The only thing Procurement did for Eng on that RFT was issue a Post Tender addendum for it. All three bidders made a mistake so we let them bid on it again. I remember it like it was yesterday.⁷⁸⁰

709. On January 28, 2019, Mr. Ferguson emailed Mr. Aitchison regarding the City’s network screening document:

Do we have any speed data for the collision locations that identify Aggressive Driving as an issue? Can you please review and provide any studies we have asap. We need this for ASE.⁷⁸¹

710. Ms. Paparella emailed Mayor Eisenberger on January 28, 2019, in response to Mr. Zegarac’s email from January 26, 2019. She wrote:

⁷⁷⁶ [HAM0028235_0001](#)

⁷⁷⁷ [HAM0028235_0001](#)

⁷⁷⁸ [HAM0054311_0001](#)

⁷⁷⁹ [HAM0035858_0001](#)

⁷⁸⁰ [HAM0029026_0001](#)

⁷⁸¹ [HAM0012411_0001](#)

If you would like a special GIC regarding this matter, I can try for this Friday at 1:30 p.m. Please let me know as soon as possible so that I may confirm quorum.⁷⁸²

711. Mayor Eisenberger forwarded Ms. Paparella's email to Ms. Omazic, writing "Can you follow up on this and find out what and why?" Ms. Omazic replied to Ms. Paparella the same day:

The Mayor is at the BCMC – they were cautioned to stay off their devices when meeting with the PM and Ministers.

Why a special GIC – is it a timing matter?⁷⁸³

712. Ms. Paparella replied "Mike will advise of the details." Mr. Zegarac replied approximately 30 minutes later, writing "Drina, at a meeting on Friday, Councillors are asking for a special GIC. Happy to discuss further with the Mayor or yourself."⁷⁸⁴

713. Ms. Omazic forwarded Mr. Zegarac's email to Mayor Eisenberger, writing "Mike says it was requested by Councillors....."⁷⁸⁵

714. Ms. Omazic also forwarded Mr. Zegarac's email to Greg Crone (Strategic Initiatives and Policy Advisor, Mayor's Office, Hamilton), writing "FYI – do you recall the request for a sp GIC?"⁷⁸⁶

715. He replied "I do not recall but the request was likely made in camera given the topic which is the Linc and Red Valley asphalt issue. I tried to call Mike Z. but he did not pick up."⁷⁸⁷

⁷⁸² [HAM0054311_0001](#)

⁷⁸³ [HAM0054311_0001](#)

⁷⁸⁴ [HAM0054311_0001](#)

⁷⁸⁵ [HAM0054311_0001](#)

⁷⁸⁶ [HAM0054312_0001](#)

⁷⁸⁷ [HAM0054312_0001](#)

716. Mr. Zegarac replied approximately 15 minutes later, writing “There has not been a request, Councillors, at a meeting on Friday on suggesting one.”⁷⁸⁸

717. On January 28, 2019, Mr. Pellegrini emailed Ms. Melatti asking her to provide Mr. Zegarac with the updated Lines of Enquiry document, which he attached to his email.⁷⁸⁹

718. On January 28, 2019, Councillor Danko emailed Mr. Zegarac several questions relating to the RHVP under the subject line “Technical Questions re Redhill PRIVATE”:

A few questions that come to mind regarding the technical aspects of the Redhill asphalt discussion:

1. What requirements were used for the original design of the road?

I suspect the 1999 edition of the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads – which also references American Association of State Highway and Transportation Officials (AASHTO) requirements from time to time. No UK standards would have been used.

2. What is the difference between a “code” (ie the Building Code or the Bridge Code) a “standard” (ie Ontario Provincial Standards for Roads & Public Works OPS which are construction and material specs related to construction) and a “guideline” (ie TAC Geometric Design Guide)?

There is a very useful discussion on standards, guidelines roadway design and safety in section 1.1.4 Design Techniques of the 1999 TAC design guide that might be helpful.

3. What is the “design domain concept” and how does it apply to the geometric design of a roadway and overall safety performance?

Again a really useful description in section 1.1.5 The Design Domain Concept in the 1999 TAC design guide.

4. A number of friction tests were done on the Redhill asphalt (MTO, City at different times) – were these tests referenced back to the original design values?

If the original design values are conservative as they should be lower than the field testing results, if that’s true, the roadway would be considered to be performing as designed.

5. Comment on the relevance of friction tests on Redhill vs. Linc when these use two different asphalt mix designs. Comment on variation expected when field testing asphalt

⁷⁸⁸ [HAM0054312_0001](#)

⁷⁸⁹ [HAM0012418_0001](#) attaching [HAM0012419_0001](#) attaching [HAM0012420_0001](#) ; and [HAM0012421_0001](#) attaching [HAM0012422_0001](#)

ie time of day, location on the road, test procedure, variability in original construction, representative sample size, consistency between test results etc.

6. What geometric roadway design elements use coefficient of pavement friction as part of the design?

I think it's just sight distances used for vertical curve design, passing distances etc. and for horizontal curve design – these are hard geometric design elements – I don't think any roadside safety guidelines go back to asphalt friction as a design factor – but I could be wrong.

7. How would a designer choose a coefficient of pavement friction to use for their design based on the design guidelines?

Usually from a published table in the guideline for a specific design speed ie. Table 1.2.5.2 in the 1999 TAC design guide. This published value is generally accepted to apply to all asphalt as a physical property of the material. However in this case the designer may have also used a specific value based on the proposed mix design which was a special mix where friction performance was a key feature. The same would be done for concrete pavement such as the 407 where concrete roads are often described as "slippery". People do entire PhDs on these kinds of factors but the designer would typically choose the most conservative value unless there was a specific reason not to.

8. Comment on the assumptions built into published values for coefficient of friction.

ie. the published values are considered to be conservative and based on wet pavement, worn tires – but not icy conditions. Discussed in section 1.2.5.1 of 1999 TAC design guide – although if you look at the footnote I'm surprised how old the referenced studies are!

9. Comment on the relative importance of vehicle speed versus coefficient of friction in terms of the actual equations for braking distance or lateral friction.

Both have the design speed squared as the numerator and the coefficient of friction with a multiplying factor as the denominator. I'm not sure how to explain the importance of this mathematically – speed is exponentially more significant than friction – although the design value used for friction is still important.

10. Tie back relevance of coefficient of asphalt friction to the design domain concept.

Friction is an important factor that directly affects the safety of the road – but is one of many factors where even a small to medium change wouldn't necessarily mean that the entire design falls outside of the design domain. However, this becomes more critical at locations where we know that the design is already constrained, such as at horizontal curves where the design speed has been reduced to justify a tighter radius curve. If an increase in collisions that relate to friction (ie. rear end collisions or vehicles leaving the roadway while navigating the turn) were observed at these locations – there would be a much higher concern that the roadway may fall outside of the design domain at these locations.

11. Comment on safety in terms of collision data and danger of correlating asphalt friction to an increase in collisions.

Discussion on collision frequency (safety of the road) and collision rate (risk to road user) are highly influenced by AADT. May also be worth discussion on design choices that lead to a roadway design that is considered to be reasonably safe (typically designed for the

85th percentile) where it is impossible to design a roadway that will be safe under all conditions and for all drivers.

Finally, as discussed, I think that the legal and political considerations are quite different than the technical facts and should be discussed separately (if possible).⁷⁹⁰

719. On January 28, 2019, Mr. Olszewski and Mr. Ferguson exchanged emails regarding the meeting with CIMA to discuss further assistance with the RHVP tender design and specifications:

[CO]: Just got off the phone with Mike Becke, and the RHVP Design team was really hoping you were able to make the meeting with CIMA+ tomorrow strictly for the previous experience and discussions we've had previously with CIMA.

Hopefully you are able to make the meeting at Room 400G for 11:00am, that being said, I will be present, and if there are any questions I am unable to answer or have the authority, I will make sure yourself and Martin and made aware for quick comment tomorrow pending the outcome of that meeting.

[DF]: Under the procurement policy, the meeting really shouldn't be happening as the appropriate documents haven't been signed.

As I am the Roster Captain for this category it's not appropriate that I attend especially if the policy isn't being followed.

As I discussed with Chris, your meeting should only be to clarify outcomes of the road side safety audit.⁷⁹¹

720. This meeting occurred on January 29, 2019.⁷⁹²

721. On January 28, 2019, Ms. Auty emailed Mr. Boghosian under the subject line "call on the RHVE", writing "[a]re you free tomorrow morning to speak. I have some follow up and further advice." A call was tentatively arranged for 2:00 p.m. that day.⁷⁹³

⁷⁹⁰ [HAM0054317_0001](#)

⁷⁹¹ [HAM0012437_0001](#)

⁷⁹² [HAM0012438_0001](#)

⁷⁹³ [HAM0062538_0001](#)

22. January 29, 2019

722. On January 29, 2019, Ms. Auty emailed Mr. Boghosian, replying to his email from the day prior, asking for his availability that morning. Ms. Auty indicated she would try to contact Mr. Boghosian around 10:30 a.m.⁷⁹⁴

723. On January 29, 2019, Mr. Omrani emailed Mr. Field a OneDrive link to the final RHVP Lighting Study.⁷⁹⁵

724. Also on January 29, 2019, Mr. Malone requested access to the relevant reports to be presented at the PWC meeting. McGuire responded the following day: “[a]s discussed with Edward there will be an assignment”.⁷⁹⁶

725. On January 29, 2019, Mr. Hertel emailed Ms. Recine, writing: “There have been new developments and directions from Councillors on the path forward on the RH situation. I’ll review with you in person.” Mr. Hertel arranged a meeting with Ms. Recine and Ms. Graham to discuss the following day.⁷⁹⁷

726. On January 29, 2019, Mr. Zegarac sent a calendar invite to Mr. Moore, Mr. McGuire and Mr. McKinnon with the subject “RHVP Discussion”. The meeting was scheduled for January 31, 2019.⁷⁹⁸ Mr. Moore responded, accepting the invite, writing:

⁷⁹⁴ [HAM0062539_0001](#)

⁷⁹⁵ [CIM0016796](#)

⁷⁹⁶ [HAM0028292_0001](#)

⁷⁹⁷ [HAM0048662_0001](#)

⁷⁹⁸ [HAM0028280_0001](#)

“Sure but what’s the subject of the discussions?”⁷⁹⁹ Ms. Melatti replied “Gary, the meeting invite is: RHVP Discussion.”⁸⁰⁰

727. Ms. Fontana was subsequently added as an attendee to the meeting.⁸⁰¹

728. On January 29, 2019, Mr. Zegarac also sent another calendar invite to Mr. Moore, Mr. McKinnon and Gord Muise (Director, Employee and Labour Relations, Human Resources, Hamilton). The meeting, titled “RHVP Discussion” was to occur on January 30, 2019 at 3:00 p.m.⁸⁰²

23. January 30, 2019

729. Mayor Eisenberger and Ms. Paparella exchanged emails on January 30, 2019, regarding the GIC meeting on February 6, 2019:

[MFE]: Mike, I have not heard where we are with the GIC meeting regarding the Redhill surface report. I know there is a desire to not refer this report from Public Works to the GIC which would obviously tip off the media to a significant issue. I believe it is an in Camera report on PW. Can it be removed/withdrawn from the agenda and put on the GIC report without fanfare.

[SP]: As it is a potential litigation matter, it would automatically go to GIC on Feb. 6th and would not have to be referred. The 3 open reports could still go to PW on Feb. 22nd.

[MFE]: There is concern that the open reports will trigger the media interest and questions . I think it would be helpfull to have them all done at one time and then have a media strategy prepared for a public release which I sense councillors would like to make to get ahead of this contentious issue.

[SP]: Is the matter at a litigation or potential litigation point or is it before that stage?

[MFE]: Stephanie, can we please put all of the public works documents regarding the Redhill road surface, construction etc on the February 6 th GIC and schedule an in Camera for the legal issues and report. Can we do this please. I hear they are not on the public works agenda hopefully. I do not want to be in a position to refer from Public works. Let me know Janet /Stephanie.

⁷⁹⁹ [HAM0012443_0001](#)

⁸⁰⁰ [HAM0012455_0001](#)

⁸⁰¹ [HAM0012435_0001](#)

⁸⁰² [HAM0012431_0001](#)

[SP]: Yes.⁸⁰³

730. Mr. Zegarac responded to Mayor Eisenberger's original email:

[MZ]: Mr Mayor, yesterday, Dan and I had a follow-up discussion with the Councillors we met with yesterday, proposing a reporting process. The Councillors were not in alignment with what we proposed. These Councillors suggest a Special - GIC followed by a Special Council, followed by a communications release. I've asked Rosanna if she can find time with you to discuss today. Also, we are engaging outside legal support to ensure however information is shared publicly, does not further expose to City to liability.

[MFE]: Thanks. What did you propose?

[MZ]: Proposed, going in camera February 6 GIC to further previous in-camera discussion. This would be comprised of a series of in-camera presentations:

1. Technical summary/ chronological summary of consultants reports and decisions (Dan/Gord/Edward)
2. Internal Audit Review of asphalt and RHVP (Charles)
3. Legal recommendations (Nicole/outside legal counsel)
4. Communications Strategy (John)

This would be followed by including the 3 PW on the February 22 PW agenda.⁸⁰⁴

731. On January 30, 2019, Mr. Zegarac emailed Ms. Pilon and Ms. Paparella, writing:

Janet/Stephanie, I need to know if the Mayor's request to bring the PW reports directly to GIC is supported, as we're still trying to coordinate the in-camera material.⁸⁰⁵

732. Ms. Paparella responded: "I can discuss it further with you off line. I am not willing to put it into an e-mail."⁸⁰⁶

733. On January 30, 2019, Ms. Auty exchanged emails with Mr. Boghosian under the subject line "Call":

[Ms. Auty]: David, please let me know when you are free to speak. My cell is [personal information redacted]

[Mr. Boghosian]: I am back in the office now. Do you want me to call your cell or will you call me?

⁸⁰³ [HAM0054330_0001](#)

⁸⁰⁴ [HAM0054319_0001](#)

⁸⁰⁵ [HAM0028297_0001](#)

⁸⁰⁶ [HAM0028297_0001](#)

[Ms. Auty]: I would like to get yourself and Brian Malone on a call with staff this evening.

I will call you .

[Mr. Boghosian]: Can you call my cell – [personal information redacted]

Do you have a ballpark of when you might be calling (before 5; after 5 etc.)?

[Ms. Auty]: Hopefully within the next 20-30 minutes⁸⁰⁷

(a) Friction Reports Sent to CIMA

734. On January 30, 2019, Ms. Auty replied to an email Mr. McGuire sent on December 18, 2018, attaching the draft 2017 Golder Pavement Evaluation letter report. She asked Mr. McGuire to confirm that it was “the 2017 friction testing to go to CIMA”.⁸⁰⁸

735. On January 30, 2019, Mr. Boghosian emailed Mr. Malone under the subject line “Hamilton re RHVP Council Issues”. He attached a copy of the Tradewind Report and the draft 2017 Golder Pavement Evaluation letter report. The content of this email has been redacted for solicitor-client privilege.⁸⁰⁹

736. Ms. Auty forwarded the email to Mr. Zegarac and Mr. McKinnon, copying Mr. Soldo and Mr. McGuire.⁸¹⁰

737. The City produced undated handwritten notes, which appear to have been authored by Ms. Graham, related to a discussion related to friction testing, with multiple references to an individual referred to as “Brian”. The notes have been reproduced below:

Mitigating Measures

- Later ~~future~~ friction testing
- Responding & reacting to safety studies
- Speeding up resurfacing

⁸⁰⁷ [HAM0062540_0001](#)

⁸⁰⁸ [HAM0054335_0001](#)

⁸⁰⁹ [HAM0054347_0001](#)

⁸¹⁰ [HAM0054347_0001](#)



- Brian concerned w/ speed limit reduction b/c under speed of motorists on the road
 - frustrating
 - interaction of motorists
 - more passing
 - wider space btwn vehicle
- ↳ Better: more compliance/extreme enforcement

Brian working on something --> done soon...

Dan --> Report to Dave -->

Dave try to be here on 6th

Brian's report to go in technical presentation

- We are close to the line/standard
- Difference becomes very important

Brian – not recommending closure of this facility

- Actions underway to address issues ~~facility~~
- prof engineer thinks we can leave it open
- taking traffic off RHVP goes elsewhere – much more negative consequences
 - intersections/neighbourhoods, etc.

Industry does not use absolute #s, after which

You have a problem

↳ approach is not if you're @X, you do __.

➔ Friction is monitored b/c

Dan – needs to understand in a way Council will

① difference btwn LINC/RHVP

- Not evident --> to motorists BUT it's the
- Behaviours need to change in case
some circumstances in
some
circumstances

② levels in Tradewind – did not breach intervenin levels – we have long history of investigating and taking actions.

③ Results in Tradewind report do not suggest we do not meet standards

* there are areas/portions of roadway –
critique of sections that are below –
could be asterisk on the
comment

* 3rd party consultant -->

--> ALL places & locations
That dip below standard

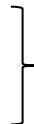
➔ big difference between Linc & RHVP
↳ motorists braking on Linc vs RHVP will
Experience a very different sensation/outcome

- motorist cannot see – doesn't come into play until the road is wet.
- If road is dry, likely close to Linc
- Under wet conditions

*driver expectations →

- Industry does not public a # of what is Acceptable
 - Different levels

① Brian has the Golder and Tradewind reports
↳ has comments & level of detail whatever David wants



- David
- Gord
- Jasmine
- Brian
- Dan

→Should RHVP be closed until resurfacing
→Changes to Recs by CIMA
→ Additional safety measures we Should put in place now



Will be in a response

➔ Tradewind made ref to UK investigatory level – use this table & Brian suggests they have not interpreted it correctly
↳ 30-40 on RHVP – Below investigatory level
→ This table is a variation – tweaked +
Risk rating is not the same as the frictin



- Threshold a lot closer to measure values



Commonly reference table → it doesn't use risk ratings, it uses friction levels – don't know what it is [text to be confirmed]



Friction # is the same but its characterized different
→ "Risk rating" vs. friction table

Yes, friction levels are lower than often found and when compared to RHVP – but still above levels we would use in a design fr this type of road.

- Friction values are lower – relative friction values are important for motorists
- RHVP/QEW, RHVP/LINC – is a problem
-

Brian Maintains recommendations	- 30-40 - summarized date --> Threshold
---------------------------------	---

Golder [text to be confirmed] reduced friction values in comparison to surrounding roadways – our actions have tried to address this
* warning signs, slippery when wet, etc.

Additional – no.

Urge to improve compliance to posted speed limit. b/c we are closer to design parameters used – potential to [text to be confirmed]

No to closure – still within design domain – Lower – Variance from neighbour Linc by improving friction is important but ~~not~~ doesn't have characteristics
Below design standards in Brian's opinion.⁸¹¹

(b) Documents Circulated in Preparation for January 30, 2019 Meeting

738. On January 30, 2019, Cheryl Lafferty (Administrative Coordinator, Human Resources, Hamilton) emailed Ms. Fontana under the subject line “Questions and Gord’s notes for meeting at 8:30 tomorrow”. She attached a document titled “20190130162434.pdf”.⁸¹²

739. The attached document was a scanned copy of a three page document titled “Lines of Enquiry”. The first page has been reproduced below:⁸¹³

⁸¹¹ [HAM0062328_0001](#)

⁸¹² [HAM0058889_0001](#) attaching [HAM0058890_0001](#)

⁸¹³ [HAM0058890_0001](#) at image 1

Lord
Pave
Spald
ic
Pave
mp
Pave

Lines of Enquiry

The larger questions that need to be answered:

- 1) Has there been an ongoing issue with the adequacy of friction resistance on RH Creek

Context: Consultant report cites friction tests that are well below standards – implication being there are significant issues with the performance of the pavement.

- What action was taken?
- What was Council told and when?
- Was any work done to confirm, modify or refute the findings?
- Was a definitive conclusion and decision ever made on what to do about this. If so, where is that documented?
- The report cites that this was an issue in 2007 (low friction numbers) – what action was taken then and why did it persist in the 2014 report?
- Have we done anything to elevate monitoring of the issue including crash rates

- 2) Is there a systematic set of processes, managerial systems and procedures in place to appropriately manage pavement performance with respect to surface friction

Context: We would expect there to be a systematic approach to controlling pavement friction, and the FHWA in the US has guidance advocating formal friction management by highway authorities with the objective of reducing the occurrence of and potential for fatalities and serious injuries resulting from crashes on all public roads

- Is there a formal program for friction management, with policies, processes and procedures
- Does it have measures
- Are the methodologies generally accepted
- Are there "thresholds for action" as part of the FM approach
- Is there a reporting mechanism
- How is friction management incorporated into design
- Is there a documented process to follow for when we find an issue that is quite likely significant to the public, that needs to be dealt with expeditiously, or has material implications for how we manage assets and/or services
- Do we have policies or principles to guide action and decision making through these situations

740. The second and third pages of the document were handwritten notes from a meeting dated January 28, 2019.⁸¹⁴ The notes have been excerpted below:

Nicole	Jan 28/19	Jan 28/19
Mike Z		
Dan M		
Lora		
Jackson	} Mike had mtg w/	
Collins		
Merulla		

Pulled Feb 6 reports to Council

- Special
- 201 follow-up RHV (friction)

Actions had been addressed
Annual Collision report
Council wants a special GIC [text to be confirmed] go to
Feb 6 GIC {small agenda}

Series of presentations on the the 6th to keep structure

① [text to be confirmed] re: safety + why staff didn't [text to be confirmed]
What add'l steps were taken

② Dan kick off – Council thinks FOI set this off
Got info from Gord McGuire in Sept. handed over to Dan about 6 wks later FOI came in
→ Gord to dig deeper

③ Charles looking @ FHV

④ Comms
2 independent assessment

① Internal audit around policies/practices
procurement how company got contract

2007 first assessment
2013 next assessment

Action Talk to Gary Wednesday/Thursday
Dan: Gord is build a timeline

741. Also on January 30, 2019, Mr. Malone emailed Mr. Hadayeghi, Mr. Salek, Mr. Omrani and Kevin Decoste (Project Manager, Transportation, Traffic Engineering, CIMA) under the subject line “RHVP Stuff for Hamilton – CONFIDENTIAL”. He wrote:

⁸¹⁴ [HAM0058890_0001](#) at images 2-3

CONFIDENTIAL

This is FYI:

I had a call from Edward Soldo late in the day Wed Jan 30 2019 asking me to participate in a teleconference with their management team in regards to the RHVP safety issues. The entire Public Works Management team (Dan McKinnon and under), the City Solicitor, Acting City Manager, Communications Director were all on line as was their external lawyer, David Boghosian. The call took place from 4:30 to after 6, with follow-on calls from Edward S ad Gord M directly.

I had been scheduled to attend the PW committee on Monday Feb 04 which I understood was to discuss the Lighting report and aspects of the safety studies. It turns out that they will be going in-camera to discuss details of the studies, their recommendations and also the results of pavement friction studies that have been undertaken. These studies have been held in confidence until now, but apparently the City is being required to disclose them under FOI.

That data will be sent to me later tonight and they City is asking if the content of those reports 'changes any of our recommendations in out studies'. They will send the data and a series of questions for CIMA to answer.

For the pavement friction expertise I have contacted Geoff Petzhold in Edmonton. He will assist in reviewing the content. Hamilton is seeking a written response by early next week that will confirm our position. I should be able to complete the written response on Friday.

Also, the Hamilton PW meeting is also now delayed until Feb 06. I will be away (Feb 06 to 22) and I told them that I would not be able to attend. They indicated that the letter should be OK.

The lawyer from the City and the external lawyer indicated that this is 'moving to a legal issue', so this will likely be considered a legal task going forward. I'll know more when they send the request for review.

I'm at the OPWA ski day tomorrow, but will contact if I need assistance⁸¹⁵

742. Mr. Malone also replied to Mr. Boghosian's email from the day prior, writing that CIMA would be "reviewing immediately and preparing a succinct response." He also advised that he would be unable to attend a Council meeting on February 13, 2019, as he would be out of the country.⁸¹⁶

743. The same evening, Mr. Malone emailed Mr. Petzold, copying Mr. Hadayehi and Mr. Salek, forwarding the email he received from Mr. Boghosian the day prior, which

⁸¹⁵ [CIM0017215](#)

⁸¹⁶ [CIM0017208](#)

attached the Tradewind Report and the draft 2017 Golder Pavement Evaluation letter report. He wrote (highlights in original):

SUBJECT TO CLIENT SOLICITOR PRIVILEGE

CONFIDENTIAL – NOT FOR REDISTRIBUTION

Geoff, the email below and the attachments are the data that has been sent to me by the City regarding pavement friction testing.

I've had a very brief read through. Results for the RHVP look to show poor friction results, and the report puts findings in some context, stating:

In Canada...there are currently no guidelines with which to compare data collected by CFME (Continuous Friction Measurement Equipment) for roads and highways, although these are well established for airport runways. The U.K. transportation authorities have, however, developed a reference 'Investigatory Level' table for GripTester measurements onWhile not explicitly recognized by the Ontario MTO or other provincial transportation authorities as being applicable to Canadian roads, the listed reference values provide an established and reasonable guideline with regard to interpreting the recorded data....

Do any jurisdictions in Canada have thresholds they use? How is friction data assessed if there is no threshold?

Is the interpretation of the data an accurate reflection of it being as bad as it sounds?

... the overall friction averages...on....the Red Hill Valley Parkway were below or well below the same UK Investigatory Level 2.in additionthere are some localized sections with quite low friction values, reaching 27-30 in several areas.

[redacted for privilege]

Anything you can offer would be appreciated.

Thanks in advance.⁸¹⁷

744. Mr. Boghosian replied to Mr. Malone's email later on January 30, 2019, writing:

Nice, enjoy. I will pass that on to Nicole. I may have to pinch hit for you at the Council meeting unless there is someone else at CIMA you feel could take your place (I could coach them on addressing Council (everything needs to be dumbed down as if they are children!). Please advise.⁸¹⁸

745. Mr. Malone replied, writing:

⁸¹⁷ [CIM0017209](#) attaching [CIM0017209.0001](#) and [CIM0017209.0002](#)

⁸¹⁸ [CIM0017206](#)

Edward called and asked about availability, and he is already aware that I'm away.

Let me think about surrogate from here and I'll be in touch.⁸¹⁹

746. The same day, Mr. Malone forwarded himself email exchanges with Mr. McGuire from August and September 2018.⁸²⁰

747. Ms. Auty emailed Mr. Boghosian in the evening of January 30, 2019, under the subject line "Meeting with GM tomorrow morning", attaching a document titled "Questions conversation with GM".⁸²¹ She wrote:

Mike Zegarac is meeting with Garry Moore tomorrow to follow up on some discussions and council questions. I have drafted a series of questions, do you have any concerns with the meeting taking place, and if not, do you have any comments or addition to the questions?

748. The attached document included the following:

Questions

Looking to try and understand the overall facility timeline construction to today with a particular focus on the friction issue.

Themes:

Original Design/testing

Walk us through the design and construction of the RHVE, how was SMA selected, was friction standard considered?

What specifications or testing of the friction of the roadway was done when the RHVE was constructed in 2007?

Were the friction values within specification?

Friction Test Results

You commissioned friction testing in 2013, why? Was there a rationale for having the RHVE compared to the LINC?

⁸¹⁹ [CIM0017206](#)

⁸²⁰ [CIM0017205](#); and [CIM0017201](#) attaching [CIM0017201.0001](#), [CIM0017201.0002](#) and [CIM0017201.0003](#),

⁸²¹ [HAM0062541_0001](#) attaching [HAM0062542_0001](#)

Why was the 2014 report from Golders with the Tradewind report attached never finalized?
Why were the payments made?

Did you share the 2013 report information with other City staff? Why or why not?

Further friction testing was commissioned in 2017, what precipitated the work being doing?
They used same UK test (methodology), why?

What question were you endeavoring to answer with the polished stone value analysis? What was your conclusion?

Was the information gleaned for the 2013 and 2017 Golders reports ever used or shared to inform assignments undertaken by CIMA?

A number of friction tests were subsequently done on the Redhill asphalt (MTO, City at different times) – were those tests referenced back to the original design values?

Why was the 2013 Golders/Tradewind report placed on the City's network in the late spring of 2018?

What precipitated the inclusion of the RHVP resurfacing into the capital budget in the fall of 2017?⁸²²

749. A few minutes later, Ms. Auty sent the document to Mr. Zegarac, writing:

I have drafted some questions for you as a guideline for tomorrow's meeting with Gary. I have also sent them to David Boghosian for review and comment based on questions from Dan and Edward. I intentionally didn't get into leading or potentially accusatory questions. I have also asked David if he has any concerns.

I would not get into the technical questions that Clr Danko suggests at this point, but those may be good to put to CIMA/Brian Malone.

I will be at City Hall in the morning if you have any questions or want to speak more.⁸²³

750. Mr. Zegarac replied, writing "[t]hanks Nicole. Is it OK to share with Dan and Lora?"⁸²⁴

751. Ms. Auty replied "Yes, but I have a few to add a few from David. You'll have them first thing."⁸²⁵

⁸²² [HAM0062542_0001](#)

⁸²³ [HAM0062543_0001](#) attaching [HAM0062544_0001](#)

⁸²⁴ [HAM0062545_0001](#)

⁸²⁵ [HAM0062545_0001](#)

752. At 10:08pm, Mr. Petzold replied to Mr. Malone's email from earlier that evening.

He wrote:

This information is quite interesting.

The report does seem to indicate that at station 10,000 there is a marked drop in road friction. It would be interesting to see if there are any photos from the site.

Doing a quick search for that piece of equipment yields very little in terms of results' analysis. (<http://www.sagaengineering.com/GripTester>) the information on that site is about as much as one can find on the GripTester machine.

I do know that my old professor from university has branched out on his own and performs friction measurement using one of these devices. (SAGA Engineering. <http://www.sagaengineering.com/>). I know that you need an answer fairly quickly, but he might be a valuable resource (for the lawyers anyway?).

I'm afraid that I don't know of any municipalities that have standards for friction characteristics. Most that I know of would just take measurements as a baseline and then perform regular checks to see when it drops and how quickly.

For airports, friction is extremely important as you want to make sure that when you hit the pavement at 300kph, your aircraft is able to stop itself and remain in control. Even still, the notion of friction monitoring is relatively new (like, within the last 5-10 years have they been looking at it).

As an aside, Susan Tighe out of Waterloo is doing a lot of research in this field as well.

Having said all of this, without knowing more about what the road used to be like (from a friction perspective) versus what it is doing now, and how rapidly it has deteriorated, we/ cannot say much that hasn't been already said in the report.

It's a little strange that they had to send the samples to UK for testing. There are numerous other tests that can be done on the aggregates within the samples that will give an indication of their durability that are readily done in Canada. This could be a case of the aggregate in the mix becoming polished, or bleeding of the asphalt cement, or too many fines in the mix. But I don't know that you are asking me to suggest causes, rather than interpret the results of the friction testing.

I'm sure it's also pretty obvious that if the traffic volumes are significantly higher than what the road was designed to accommodate, it's also a safe bet to say that the pavement design was performed for a lower volume of traffic as well and may not be as robust. The original mix design would have been done for a given number of ESALS and if they are exceeding that, it shouldn't be shocking that the road is aging prematurely.

The question around whether the road should be closed might be a bit overkill. But I'd say that rehabilitation needs to be expedited. Can't do much in the winter other than sand/salt, but if they could do an interim chip seal or something, maybe even mill the pavement so it has a texture to it?

I digress.

Back to the friction values ... it would seem that with the significant drop in values around that 10,000 station, that there is definitely something happening.

From a risk perspective, something should likely be done sooner rather than later. They likely have to mill the road surface anyway, so maybe they do that work now and then pave it in the spring?

Does this help? Or do you need me to look into this a bit deeper?⁸²⁶

24. January 31, 2019

(a) *Continued Review of Friction Reports and Standards*

753. On January 31, 2019, Mr. Malone replied to Mr. Petzold's email from the day prior:

Thanks very much. You are definitely helping.

First, you should know that the values have been relatively stable since the road has been opened. The RHVP section was built separately and is a different pavement mix.

I am interested to know how the values noted can be compared to the TAC friction values used in stopping distance calculations. Are the the same numbers? If so then that are still above the TAC numbers, but below the UK thresholds. Is that right?⁸²⁷

754. 10 minutes later, Mr. Malone sent a second reply, writing:

To expand on the friction question with TAC, the difference between lateral side friction used in curve design and longitudinal friction used in stopping distance needs to be considered.

On TAC page 2.1.2.3 it notes that f is lateral friction, not the same as f used in stopping distance.

But what is the relationship and how can the friction testing be used to interpret what is acceptable?⁸²⁸

755. At 10:15 p.m., Mr. Malone replied to Mr. Petzold, writing:

Geoff, can you answer one key question? Would it be correct to interpret that the friction values listed in the report that City, and which are expressed in whole numbers '34, 35 etc...' are effectively the same as 'f' values from TAC and geometric design – which would be expressed as decimals '0.34, 0.35'. The Trinity report values are just multiplied by 100. The foundation is that same, being friction values ranging from 0-100 or 0 to 1.0 – but meaning the same thing?⁸²⁹

⁸²⁶ [CIM0017199](#)

⁸²⁷ [CIM0017198](#)

⁸²⁸ [CIM0017197](#)

⁸²⁹ [CIM0017194](#)

756. Mr. Petzold replied approximately 30 minutes later, writing:

That would probably be a safe bet... however, I don't know if we can assume that the numbers in the City's report range from 1-100. If they did, however, that would be a reasonable assumption.

The friction values, from what I understand anyway, used by TAC are just a range from 0-1 and are used only as a gauge of the friction rating.

I can look into this further if you want. I, sadly, don't have much more than that off the top of my head.

I'm sorry.⁸³⁰

757. On January 31, 2019, Mr. McKinnon emailed Ms. Auty, copying Mr. Zegarac, Mr. Soldo and Mr. McGuire, forwarding Mr. Boghosian's January 30, 2019 email to Mr. Malone. He wrote "Edward and Gord please make yourselves available at 130 to either meet me at city hall or a phone meeting"⁸³¹

758. Mr. McGuire replied later the same day, indicating that he was available to attend.⁸³²

759. On January 31, 2019, Mr. McGuire emailed Ms. Auty, copying Mr. Soldo, asking "[a]re you having a call with CIMA tomorrow. Should we join in." Ms. Auty replied, writing "I haven't set one up, but can."⁸³³

760. Mr. McGuire's binders contain a printed copy of the ASTM webpage for E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester. The document was date stamped January 31, 2019.⁸³⁴

⁸³⁰ [CIM0017193](#)

⁸³¹ [HAM0062120_0001](#)

⁸³² [HAM0062120_0001](#)

⁸³³ [HAM0062126_0001](#)

⁸³⁴ [HAM0061752_0001](#)

761. On January 31, 2019, at 4:01 p.m., Mr. Boghosian emailed Mr. Malone, attaching the Golder report in multiple parts, writing:

Nicole thought you should have Golder's 2014 report if you don't already have it. This is only part 1. If you do not already have it, let me know and I will send you the remaining 5 parts (broken up due to the size of the document).⁸³⁵

762. The remaining sections were sent on February 1, 2019.⁸³⁶

763. On January 31, 2019, Ms. Auty and Mr. Boghosian exchanged emails under the subject line "CIMA - Malone":

[Ms. Auty]: David, any response from Brian? I think we also need to send him the 2014 Golder report, that the Tradewind report was appended to – do you have this that you can send to him today?

[Mr. Boghosian]: I haven't heard back from him since last night when he said he would get right on it and that he wasn't available Feb 13th. I will send him the 2014 Golder report.

[Ms. Auty]: Thanks. I was also wondering if a call later in the day tomorrow with Gord and Edward might be of assistance, particularly to go over the response and what we can present to council. Could we also see if there is anyone else in his office who could come and speak to council?

[Mr. Boghosian]: I could do a call later tomorrow afternoon.

I asked Brian last night if there was anyone else he felt comfortable with sending in his place and he said he would think about it and get back to me. I haven't heard back yet. My view from working with CIMA a lot is that there is really no-one else there with the experience and presence to come close to matching Brian in terms of making a good impression on Council. I think we would be better off with a report from him that you or I or Gord can present/explain.⁸³⁷

(b) City Management Prepare for Meeting with Mr. Moore

764. On January 31, 2019, Ms. Auty emailed Mr. Zegarac, Ms. Fontana and Mr. McKinnon, attaching the document titled "Questions conversation with GM.doc" which

⁸³⁵ [CIM0017195](#) attaching [CIM0017195.0001](#)

⁸³⁶ [CIM0017179](#) attaching [CIM0017179.0001](#); [CIM0017185](#) attaching [CIM0017185.0001](#); [CIM0017188](#) attaching [CIM0017188.0001](#); [CIM0017181](#) attaching [CIM0017181.0001](#); and [CIM0017183](#) attaching [CIM0017183.0001](#)

⁸³⁷ [CIM0017177](#)

she sent to Mr. Boghosian the day prior, writing that the attachment was for their “conversation with Gary.”⁸³⁸

765. The questions in the attachment document appear to be a revised version of the document sent by Ms. Auty to Mr. Sabo and Mr. Boghosian the day prior. The following additional question was included, along with some minor grammatical revisions:

What consultants were involved in the design? Who recommended using SMA?⁸³⁹

766. Ms. Graham prepared a document, dated January 31, 2019, titled “Info with Mike/Nicole from this morning”. The document has been excerpted below:

Info with Mike/Nicole from this morning

- Notwithstanding
- Gary’s actions over last five years
- Martin white’s as two different swim lanes

Gary 2014 – does nothing until 2017

Martin – different channel, 2013 recommendations implemented, 2015, 2017 same –

Corporately, we are doing things we should have been doing in response to

Presentation together for MONDAY

Mike wants to walk through the presentation

Mike

- Gord person to present the chronology – what is relevant
 - o Highway opens 2006
 - o Ministry tests 2007
 - o 2013 study
 - o Receives in 2014

How can we get through this efficiently and elegantly.

Edward can talk specifically about measures from traffic safety perspective

⁸³⁸ [HAM0062113_0001](#) attaching [HAM0062114_0001](#)

⁸³⁹ [HAM0062114_0001](#) at image 1

Then introduce letter Nicole is working with on Brian Malone – say that bc you’ve done all this stud, no concerns with highway being open

Brian’s letter

Presentation from Charles Brown

- Audit
- Value for money

Nicole

- Legal ramifications
- Exposure

Hertel

- Comms strategy

2013 September CIMA audit – Dartnall to Greenhill recommends pavement friction tests

November 2013 – Tradewind was a reaction

SMA used by MTO

MTO initiated test broader provincial test and whether or not -- 2007

Gary indicates

Impetus 2013 – anecdotal stories about road being slippery so he undertook test with Golder

- Make it really clear about who does what when after September 2018
- 1. When did gord find out
- 2. Tells dan
- 3. Tells Edward
- 4. Tells cima
- 5. Orders collision analysis
- 6.
-
- Why did he hide the results
- Into the timeline – everything in yellow was reported to Council (with report number) – description of what it was.
- Measures - when they were done
- Appendix with short/med/long term objectives
- We have made a lot of good improvements
- Corporately we did the right things, reviewing, mitigating, assessing

- Weakness in story – by virtue of fact comms wasn't happening, even though transportation side didn't know about friction they were still taking measures to improve safety
- Should have been resurfaced or treated sooner (shot abraid/treated surface/grit coat)

Dan – from Comms Perspective:

- An easier chore to deal with comms now
- Corporately there was things that were
- Performance deficient topcoat

Happening simultaneously without coordination⁸⁴⁰

(c) Mr. Ferguson Prepares Timeline of RHVP Related Initiatives

767. On January 31, 2019, Mr. Ferguson emailed Mr. Soldo and Mr. White a timeline outlining interactions with Council and initiatives conducted on the RHVP:

Here you go Gents, I think I got everything, might be a little more detail then you wanted, but I figured more was better and you could just cut out what you didn't want.

I've also attached the pictures and some other information.

Yellow are Motions

Green are Consultant Reports

Non-Highlights are Committee reports or actions

2013

January 23, 2013 Motion

Investigate upgrading lighting on RHVP in vicinity of Mud/Stone Church

Investigate better signs and lane markings or other initiatives to assist motorists in the same area

Provide costing and alternatives be presented to committee for their consideration

October 2013 – CIMA+ completes RHVP Safety Review

November 18, 2013 – Info Report Submitted (PW13081)

In-service Safety Review completed on RHVP between Dartnall and Greenhill

⁸⁴⁰ [HAM0062129_0001](#)

Recommended minor changes to various signs and pavement markings (estimated cost \$133,000)

Raised Permanent Pavement Markings (cats-eyes)

Review of roadway lighting, not recommended for full road segment, recommended lighting on westbound Mud St on-ramp

2014

August 15, 2014 Hamilton Re-establishes Hamilton Strategic Road Safety Program (PW14090)

December 2014, through discussions at Hamilton Strategic Road Safety Committee, Hamilton Police Services launches targeted enforcement on both Parkways.

2015

January 2015 - Installation of Recessed Reflective Markers "cats eyes"

May 21, 2015 RHVP Improvements Info Report (PW13081a)

Report provided Status update from the November 18 report and recommendations

May 21, 2015 Motion

Investigate additional safety measures on LINC/RHVP, features like guiderails, lighting, lane markings to help prevent fatalities/serious injuries

Report back to PWC with recommendations

November 11, 2015 Motion

Report on total costs and feasibility to expand LINC/RHVP to 6 lanes

Include in TMP & cost share with Province and Federal Governments

November 2015 – RHVP/LINC Safety reports completed by CIMA+

November 2015 – HPS submit Expressway Enforcement Safety Plan (CONFIDENTIAL) to HSRSC

Recommend 6 new officer to be assigned to HPS with direct enforcement of Parkways

City of Hamilton Fund officers and equipment

Estimated cost \$1 million.

December 7, 2015 – LINC/RHVP Safety Review Recommendation Report (PW15091)

Recommendation to implement short term safety options and funded from RLC Reserve

Medium and Long term items be deferred pending outcome of TMP

Request for Enhanced Enforcement from HPS

December 7, 2015 Motions

Seek out provincial approval from MTO to allow phot radar on LINC/RHVP

Investigate lighting on LINC/RHVP

Investigate rumble strips on LINC/RHVP

December 2015 upgraded deficient reflective markers prior to 1 year warranty

2016

April 4, 2016 Hamilton Strategic Road Safety Program Update (PW16027)

Completion of EDR for RHVP

RHVP/LINC speed monitoring system in partnership with HPS recommended, implemented in 2017, monthly reports provided to HPS

May 20, 2016 LINC/RHVP Info Update (CASP1615)

Update to PW15091

September 19, 2016 LINC/RHVP Lighting (PW16077) Info Update – Eng Report

More study required at cost of \$100,000

September 19, 2016 Motion

Undertake lighting study on RHVP

Matter referred to 2017 Capital Budget

October 3, 2016 Expansion of RHVP/LINC (PW16084) Info Update

Report references need for EAs and connection issues with 403 and QEW

Should consider other options before expanding facilities

October 3, 2016 Motion

Report back on feasibility of conducting traffic study to determine amount of cars and truck on LINC/RHVP

Measure on/off ramps

Expansion remain on OBL and referred to TMP

Mayor request update from MTO to widen 403

Mayor request MTO examine congestion on QEW and RHVP

2017

January 16, 2017 – Traffic Count Feasibility Study (PW16084a) – Eng Services

Can be completed in Spring of 2017

January 16, 2017 Motion

Investigate the feasibility, costs and benefits of conducting a study to identify out-of-town truck traffic on LINC/RHVP and report back

February 27, 2017 Motion

Staff to consult with HPS to bring forward plan to report on yearly Fatal incidents on LINC/RHVP

Update PWC respecting status of installing median barriers with costs

Report how many changes to RHVP/LINC are tied to TMP

March 20, 2017 – Rumble Strips on LINC (PW15091a) Info Report – Eng Services

Pavement work forthcoming, any work in advance redundant

Implement rumble strip installation at time remediation

March 21, 2017 – Letters from Ministry of Transportation on widening issue of 403

March 24, 2017 LINC/RHVP Info Update

Update to short term improvements

Trim Vegetation – Completed

Oversized Speed Limit Signs – 70% complete remaining works spring/summer 2017

Slippery When Wet Signs – complete Spring/Summer 2017

Merge and Bridge Ices Signs – complete Spring/Summer 2017

Upgrade guiderail end treatments – completed

Install, replace or trim vegetation obscuring sign on guiderail end treatments – completed

Digital Feedback Signs – Tender release 2017

Recessed Markers to QEW – resurfacing project

Install object Marker signs on Guiderail End Treatments – completed

Diagrammatic Sign and Advance signs Rousseaux, Mohawk, 403 – Spring/Summer 2017

Speed Study and Consideration of Variable Speed limit system – Consultant assignment 2017

MTO Speed Fine Signs – Spring/Summer 2017

Study Q-End Warning System – Consultant 2017.

May 2017 Discussion group created for RHVP/LINC

June 19, 2017 Feasibility of determining out of town truck traffic using RHVP and LINC (PW16084b) – Info Report – Eng Services

Estimated cost \$16,000 to complete study

August 17, 2017 Motion – Speed Limit Reduction Feasibility Study on the LINC and RHVP

2018

January 15, 2018 LINC/RHVP Update (PW18008)

Update to 2015 Safety Reports

Recommendations

Staff continue to implement short and medium term measures

Undertake detailed collision analysis of LINC and RHVP, report annually

HPS continue speed and aggressive driving enforcement, report annually

Median barriers installed with any future widening

PW report back in 2020 on 403 and QEW widening, truck activity, safety and information on the need for widening

Update to short term improvements

Oversized Speed Limit Signs – Complete

Slippery When Wet Signs – Complete

Merge and Bridge Ices Signs – Complete

Digital Feedback Signs – Installation of Digital Message Signs was completed through December 2017 and January 2018

Diagrammatic Sign and Advance signs Rousseaux, Mohawk, 403 – To be completed 2018

Speed Study and Consideration of Variable Speed limit system – To be completed 2018

MTO Speed Fine Signs – Completed

Study Q-End Warning System – To be completed 2018

January 2018 – Retain CIMA+ to undertake Comparison Collision Review with similar type roadways

Additional 2018 Works

Replaced all recessed reflective markers – completed Spring

Quarterly review of Collisions on RHVP/LINC - ongoing

Annual Collision Report – completed PWC 2019

Completion of Speed Limit Study – completed PWC 2019

Continued Monthly Speed Data reporting to HPS - ongoing

Q-End Study completed, Tender issued, installation early 2019

New Tender for Digital Feedback Signs – new signs to be installed Q1 2019

Upgrade of Guiderail End Treatments to current standards - completed

Installation of Reflective barrier and guiderail markers – 50% complete

Work orders generated for installation of Flashing Beacons on Slippery When Wet Warning signs – to be completed Q1 2019

Road Side Safety Audit in conjunction with repaving for RHVP/LINC – RHVP completed, LINC completed 2019

Development of Interactive Collision Heat Mapping (attached)

2019 Works

Updated Comparison Collision Review - completed

Speed Limit Reduction RHVP

Side mounted roadway reflectors

Durable pavement markings

Upgraded guiderail and extended guiderails

RHVP repaving

Enhanced Enforcement practices

Monthly monitoring of collisions

Heavy Truck O/D Study

Speed Feedback Signage⁸⁴¹

768. On January 31, 2019, Mr. Zegarac, Mr. McKinnon, Ms. Fontana and Mr. Moore met to discuss the RHVP. Both Ms. Fontana and Mr. McKinnon produced notes from this meeting.⁸⁴²

769. Ms. Fontana's notes are reproduced below:

January 31, 2019

8:30 a.m.

Red Hill Valley Parkway (RHVP) Meeting

M. Zegarac

D. McKinnon

G. Moore

L. Fontana

Opening comments from Mike – regarding FOI request as well as need to understand circumstances, timing, etc.

⁸⁴¹ [HAM0035875_0001](#)

⁸⁴² [HAM0035869_0001](#); [HAM0035864_0001](#); and [HAM0035944_0001](#)

Lora in attendance as part of due diligence, ensure proper process, representing both employer and employee.

MZ – address issue of friction testing; value for money audit on RHVP; FOI submitted related to asphalt

GM – Material (SMA) for RHVP and Linc are different

MTO Results:

2007 tests and results

2013 tests and results

Decisions made and actions taken

Our numbers far exceeded the MTO numbers

In 2007, they were good numbers; no concerns. There was antidotal stuff; it's slippery, etc. Not the same test as done for MTO

There is no standard test for asphalt friction. Gary relied on the consultant for test results

Inspections for test in 2013 was in response to some complaints regarding road was slippery

In Canada, there are no standards for asphalt friction. Overall Report in 2013 reported that there was a need for further examination.

Linc – paved and re-surfaced in 2011 (opened in 1997). Good aggregate and used approximately 20% reclaimed material

Extremely high results for Linc – “65” range; RHVP – “45” range

The 65 number is good based on Britain's standards

RHVP – perpetual pavement used; don't have to rebuild – just resurface. A \$20M upgrade

RHVP – 11 years old; 70,000 cars daily

2013 Report said to further investigate (premium aggregate vs. rubber building up on road)

Took samples and sent to Ireland in 2017 (only place that does this type of testing – “polish stone value test”)

Results – met specifications; some polishing. Question was if we wanted to re-use the stone

“It's not bad; it's not slippery”

Can do same tests on Claremont and Kenilworth as an example

2017 test arising from recommendations from 2014 to do more testing

Nobody from Traffic or Operations said that you should do something

DM – question is that between 2014 – 2017, nothing was done (no testing done)

GM – other things done such as bigger signs, cats-eyes, tec.

Golder's Report – subcontracted to Tradewind – Never finalized report

Didn't finalize report – "it was what it was"; staff initiated. No need to report further. Council never asked for Report.

Council never requested report on the structure or performance of the road

FOI Request – any testing on asphalt friction done in last 5 years?

Traffic – did safety audit; bigger signs, cats-eyes, consideration to reduce speed.

Tests:

2007 – all good; more than good

2013/14 – should review more (inconclusive – based on Britain's standards. Should do more tests)

2017 – Golder re-hired; recommendation to re-surface based on a number of factors: micro-cracking; friction, etc.

It took 19 years to build the RHVP; 3 years to do more testing is not unusual especially when other things happen through traffic (ie. Signs, cats-eyes, speed monitoring, etc.)

Hamilton's the leader in asphalt technology.

DM - Put project in the 2018 – a bid rushed. Optics – looks like quick reaction

GM – Got money from lost development money. Easy to use money for RHVP.

Shave and pave – usually every 14 years. Have perpetual pavement. Better to be proactive. Volume of traffic and 2 floods.

Not much experience with perpetual pavement. Don't want the cracks to go too low. If go down too deep, lost value of perpetual pavement.

Got report from Tradewind; email received from Tradewind. Couldn't have released report that was not prepared for City

What does Golder say? Can't remember. Received report/email from Tradewind.

The Tradewind/Golder report never finalized

Golder provided email and table plus the Tradewind report? Yes.

2014 Report from Tradewind focused on friction

2017 Report from Golder focused on 3 tests⁸⁴³

770. Mr. Ferguson provided Mr. Vala and Ms. Jacob with signed roster documents regarding the CIMA assignment on January 31, 2019.⁸⁴⁴

771. On January 31, 2019, Mr. Zegarac sent a calendar invite to Ms. Auty, Mr. McKinnon, Mr. Sabo, Mr. Soldo, Mr. McGuire, Mr. Hertel, Ms. Graham, Ms. Recine and Mr. Brown for a meeting titled “RHVP – GIC DEBRIEF” scheduled for February 4, 2019.⁸⁴⁵

772. On January 31, 2019, Mr. McGuire emailed Ms. Cameron asking “[d]o you know where we found that 2014 Golders report. Can we review the Golders POs when I get back.”⁸⁴⁶

773. On January 31, 2019, Mr. Ferguson exchanged emails with Mr. Cooper. Certain personal information has been redacted by the City, and not been reproduced in the excerpt below:

[DF]: Sorry, I have a work question for you, did you guys complete a RHVP review in 2012 or 2013? I came to Hamilton in late 2013 and I don't recall initiating a review but I remember I think, you had initiated some sign changes.

[SC]: Np Dave. The first time I can recall making changes or reviewing the rhvp was when CIMA did the initial review.i don't believe we did one in house and i do not recall the year but the report should be in the folder where Chris keeps all the rhvp/linc stuff.

In the past we did look at ramps or problematic locations via the CCM program but they were one offs

[DF]: The sht has hit the fan around here on this stuff. Crazy

[SC]: Figured it must be if you're emailing me. What's the fuss about?

[DF]: Not anything I can put in writing lol.

⁸⁴³ [HAM0035869_0001](#)

⁸⁴⁴ [HAM0028329_0001](#) attaching [HAM0028330_0001](#) and [HAM0028331_0001](#)

⁸⁴⁵ [HAM0054361_0001](#); and [HAM0062121_0001](#)

⁸⁴⁶ [HAM0035871_0001](#)

[SC]: Lol..gotcha

[DF]: Things are changing rapidly with the new Director but I think it's all good.

[SC]: I figured it would come when he settled in, glad you think it's good.⁸⁴⁷

774. On January 31, 2019, Mr. McGuire forwarded Dr. Uzarowski's December 17, 2015, email to Mr. Moore attaching the Tradewind report to Mr. McKinnon, noting "As requested".⁸⁴⁸

(d) Meetings with Audit Services

775. Mayor Eisenberger sent a calendar invite to Mr. Brown, Ms. Minard, Allison Hornby (Administrative Assistant to the Director and Auditor General, Audit Services, Office of the City Auditor, City Manager's Office, Hamilton) and Mr. Crone on January 31, 2019, with the subject line "Meeting with Director of Audit Services to discuss term of Council Work Plan". The meeting was scheduled for February 11, 2019.⁸⁴⁹ The attached briefing note described the purpose of the meeting as follows:

The purpose of this meeting is to discuss audit topics to be considered for inclusion in the 2019-2022 Audit Services Work Plan.⁸⁵⁰

776. On January 31, 2019, Ms. Hornby sent Mr. Pellegrini and Mr. Moore a calendar invite titled "RHVP". The meeting was scheduled for February 4, 2019.⁸⁵¹

⁸⁴⁷ [HAM0028319_0001](#)

⁸⁴⁸ [HAM0035865_0001](#)

⁸⁴⁹ [HAM0012477_0001](#)

⁸⁵⁰ [HAM0012479_0001](#)

⁸⁵¹ [HAM0012480_0001](#)

L. February 1 – 6, 2019

1. February 1, 2019

(a) Discussions Continue at CIMA Regarding Friction Review

777. On February 1, 2019, Mr. Malone replied to Mr. Petzold's email from the day prior, writing:

Thanks Geoff. I have a good handle on the TAC friction numbers. Your though is the same as mine. I can make an assumption but we don't know for sure.⁸⁵²

778. On February 1, 2019, Mr. Hadayeghi emailed Mr. Malone, writing: "Is this a new project FROM Hamilton or is it an expert opinion project?"⁸⁵³

779. Mr. Malone replied the same day, writing:

At this moment it is being done as an emergency task and I have set up a phase of the Lighting project (B920). The City (Gord McGuire) has indicated that they will likely issue a separate PO and we'll either transfer all the time to a new CIMA 'B' number as a Legal job or just invoice under the B920. I am treating the effort as 'legal' in order to ensure that the content is protected by client solicitor privilege.⁸⁵⁴

780. On February 1, 2019, Mr. Boghosian emailed Mr. Malone, attaching a document titled "RHVP_borehole_summarys.pdf".⁸⁵⁵

781. Mr. Boghosian and Ms. Auty continued to exchange emails under the subject line "CIMA - Malone" on February 1, 2019:

[Ms. Auty]: David, can we target a call at 3? Have you heard from Brian? Can he join us on the call this afternoon?

[Mr. Boghosian]: I haven't heard back from Brian ... could we do the call at 3:45 pm or 3:30 at the earliest? I can ask Brian if he can join us on the call.

⁸⁵² [CIM0017192](#)

⁸⁵³ [CIM0017178](#)

⁸⁵⁴ [CIM0017178](#)

⁸⁵⁵ [CIM0017190](#) attaching [CIM0017190.0001](#)

[Ms. Auty]: Absolutely, 345 is ok ...

[Mr. Boghosian]: Thanks so much for the accommodation! I will let Brian know. How should we do this. is there a conference call # the City has we can call into? If not, we can use our firm's. I'll hold off advising Brian until we sort out the # to call into.⁸⁵⁶

782. Ms. Auty provided the call in details to Mr. Boghosian later that day.⁸⁵⁷

783. Mr. Boghosian forwarded Ms. Auty's reply to Mr. Malone, asking if he was available for a call at 3:45 p.m. that day.⁸⁵⁸ Mr. Malone replied, advising that he was available to speak at 3:45 p.m. that day.⁸⁵⁹

784. Mr. Boghosian forwarded Mr. Malone's response to Ms. Auty, who replied "Thanks Gord, Dan McKinnon and Edward Soldo will also join the call."⁸⁶⁰

(b) Preparation for In-Camera Presentation to GIC

785. Throughout early February, City staff prepared multiple drafts of timelines, presentation slides and documents in preparation for the in-camera GIC meeting on February 6, 2019. The materials often contain an overview of the chronology of relevant events and meetings, as well as proposed strategies for how to address certain topics.⁸⁶¹

786. On February 1, 2019, Mr. McGuire emailed Ms. Auty and Mr. Sabo, copying Mr. Soldo, forwarding an email he received from Charlie Lauricella (Senior Project Manager, Technical Services, Geomatics Office, Geomatics & Corridor Management, Engineering

⁸⁵⁶ [CIM0017177](#); and [HAM0062546_0001](#)

⁸⁵⁷ [HAM0062546_0001](#)

⁸⁵⁸ [CIM0017177](#)

⁸⁵⁹ [HAM0062547_0001](#)

⁸⁶⁰ [HAM0062547_0001](#)

⁸⁶¹ [HAM0035958_0001](#); [HAM0048689_0001](#); [HAM0035991_0001](#); [HAM0048690_0001](#); and [HAM0058811_0001](#)

Services, Public Works, Hamilton). Mr. McGuire's email attached a document titled "RHVP_borehole_summarys". He wrote:

Supplementary to the 2017 Golders work on the RHVP we have plotted the borehole locations, and in a table associated the friction values.

Could you please forward this to Brian Malone and it will inform his work on the materials side.⁸⁶²

787. Ms. Auty replied the same day, advising that she had sent the document.⁸⁶³

788. On February 1, 2019, Ms. Graham emailed Ms. Recine, forwarding an email she sent to Ms. Gordon on January 28, 2019. She wrote to Ms. Gordon, copying Ms. Auty:

As discussed, I am sharing with you the confidential draft of the Communications Plan for your advice. Nicole has also reviewed this file and has provided some comments, I'm copying her here as well.

The Questions & Answers section is right now just a place to track all of the questions we have and need to find answers to. I'm planning to try to put the questions into categories through the day today and can share an updated copy with you later today for your advice/review.⁸⁶⁴

789. Ms. Graham attached a draft of a document titled "Crisis Communications Plan Draft 1.0 (Jan 28, 2019)" to her email to Ms. Recine, and wrote "[a]s discussed - feedback from legal is included in this document."⁸⁶⁵

790. Also on February 1, 2019, Ms. Auty emailed Mr. McLennan, copying Mr. Sabo, under the subject line "Rhve". She wrote:

John and Ron, are you able to get me a summary of the current litigation matters regarding the Rhve? Do we have claim data for the last few years in terms of claims made/paid out and any indication of the causes of liability?

⁸⁶² [HAM0054369_0001](#) attaching [HAM0054370_0001](#)

⁸⁶³ [HAM0062138_0001](#)

⁸⁶⁴ [HAM0062134_0001](#)

⁸⁶⁵ [HAM0062134_0001](#) attaching [HAM0062136_0001](#)

Can we pull at much as possible by Monday?⁸⁶⁶

791. Mr. McLennan sent two replies approximately 20 minutes later, first writing that he would have a response by the end of that day, then asking “Is this for PW Committee?”⁸⁶⁷

792. Ms. Auty replied “This was moved to GIC, but yes.”⁸⁶⁸

(c) Mr. Sabo Contacts Mr. Bartley and Ms. Lezau Regarding RHVP Claims

793. On February 1, 2019, Mr. Sabo emailed Mr. Bartley and Ms. Lezau, writing that he wanted their views “on an issue related to your red hill valley expressway claims”.⁸⁶⁹

794. Later that day, Mr. Sabo sent another email, advising that he had spoken to Ms. Lezau, and asked to speak with Mr. Bartley on February 4, 2019.⁸⁷⁰

(d) Mr. Soldo Contacts Kevin Bentley of the MTO

795. On February 1, 2019, Mr. Soldo contacted Kevin Bentley (Executive Director & Chief Engineer, Highway Standards Branch, Provincial Highways Management Division, MTO):

Kevin,

Hope all is well. Interesting roadway safety article in PEO Dimensions, I had no idea they were writing it from that perspective.

Do you have a person the city can contact regarding pavement friction testing and anticipated values for SMA pavements?

Would like to see what data MTO has in this area.⁸⁷¹

⁸⁶⁶ [HAM0062153_0001](#)

⁸⁶⁷ [HAM0062153_0001](#)

⁸⁶⁸ [HAM0062153_0001](#)

⁸⁶⁹ [HAM0062548_0001](#)

⁸⁷⁰ [HAM0062548_0001](#)

⁸⁷¹ [HAM0028338_0001](#)

(e) Continued Contact with Audit Services

796. On February 1, 2019, Ms. Minard emailed Ms. Recine and Mr. Hertel a copy of Audit Services' Lines of Enquiry document, writing:

Hi Jen & John,

I did a phone call with Jen earlier this afternoon and said that I would share Charles' lines of enquiry for the one specific component of our Roads Construction Audit.

Please see the attached document, internal use only. It has previously been shared with Mike Zegarac, Dan McKinnon and Gord McGuire.⁸⁷²

797. After meeting on January 31, 2019, Mr. Sharma emailed Mr. Pellegrini on February 1, 2019, writing:

Diana will be setting up a meeting between three of us and Gord will be delivering all material related to FOI in person.

I will get back to you on the password.⁸⁷³

798. Mr. Sharma had previously uploaded materials to a S:/ drive folder for Mr. Pellegrini.⁸⁷⁴

2. February 2, 2019

799. On February 2, 2019, Ms. Graham emailed Mr. Soldo, copying Mr. McKinnon, under the subject line "For the timeline...", asking him to provide "a clearer timeline of the safety upgrades for the RHVP". Mr. Soldo forwarded the email on February 3, 2019 to Mr. Ferguson, copying Mr. White.⁸⁷⁵

⁸⁷² [HAM0028364_0001](#)

⁸⁷³ [HAM0028357_0001](#)

⁸⁷⁴ [HAM0028357_0001](#)

⁸⁷⁵ [HAM0060642_0001](#)

800. On February 2, 2019, Ms. Auty emailed Mr. Zegarac, copying Mr. McKinnon and Mr. Hertel, writing:

To confirm, on the 6th I am anticipating that we will go in camera as the first order of business.

Based on our discussions, as the in camera session is to obtain legal advice and review potential litigation, will be structured as follows:

- Opening/overview by Legal Services (myself)
- Technical presentation by Public Works (GM Dan McKinnon; Background - Gord McGuire; Safety work to date – Edward Soldo, including opinion by Brian Malone)
- Legal Analysis of liability and risk (David Boghosian and I)
- Audit (TBD)
- Communications Plan (John/Jasmine)
- Next steps – in camera and public motions; release of FOI material more broadly?

Dan and John, can you please provide me with drafts of your sections of the presentations asap so I can finalize the covering report.⁸⁷⁶

3. February 3, 2019

801. On February 3, 2019, Ms. Graham emailed Ms. Auty, copying Mr. McKinnon, Mr. Hertel, Ms. Recine and Mr. Sabo attaching three draft documents, a communications plan, a timeline and presentation slides.⁸⁷⁷ She wrote:

Sending along a number of draft confidential documents here for legal review and advice.

1. **Timeline of events** – this will form the content for the technical in-camera presentation by Dan (please note Edward and Gord will just be there for questions and are not going to participate in the actual presentation.) Once we have added in a bit more of the missing content (you will see) I will format this timeline by themes into a powerpoint presentation (before 5 p.m. tomorrow for sure). Themes will be:
 1. Gary's involvement (including General, MTO contact, SMA info, Golders assignments, etc.)

⁸⁷⁶ [HAM0062549_0001](#)

⁸⁷⁷ [HAM0062158_0001](#) attaching [HAM0062159_0001](#), [HAM0062160_0001](#) and [HAM0062161_0001](#)

2. Directions of Council
3. Upgrades to the RHVP
4. Media coverage
5. Staff actions after August 2018
6. Recommendations from CIMA today – question here: we are wondering if this should also be reinforced in your legal presentation as well?

Dan would like to provide Council with a paper copy of the timeline (first four columns only) in date order, but walk through the story theme-by-theme.

2. **Communications Plan** – outlines our recommended strategy and has a copy of the first draft of the media release. This also includes some preparation of the different scenarios that could play out, key messages, and a start of question prep for spokespeople.

3. **Communications Strategy In-Camera Presentation**

Finally, just wondering your thoughts on whether or not we need to share with Council about the relationship of Brian and Betty?⁸⁷⁸

802. This email was later added to the calendar invitation for the RHVP – GIC DEBRIEF scheduled for February 4, 2019.⁸⁷⁹

803. Draft 1.1 of a Crisis Communication Plan dated February 3, 2019, outlined three overarching issues relating to the FOI request and pavement performance:

1. Media have asked for the results of friction testing that was completed on the RHVP in 2013. A former City spokesperson previously stated that the results of the testing were inconclusive and there was no related report. In late 2018, new leadership became aware of a report summarizing the friction testing. This report will be released as part of the FOI.
2. Also to be released with the FOI request will be documentation identifying wet-weather performance issues on the RHVP. This documentation states that the RHVP has wet surface collision rates that are “significantly higher than provincial averages on similar roadways during wet weather.”
3. Due to the high number of collisions, some high-profile fatalities and media attention over the past few years, community sentiment around the safety and performance on the Red Hill Valley Parkway is negative.⁸⁸⁰

⁸⁷⁸ [HAM0062158_0001](#)

⁸⁷⁹ [HAM0062121_0001](#) attaching [HAM0062122_0001](#) attaching [HAM0062123_0001](#), [HAM0062124_0001](#) and [HAM0062125_0001](#)

⁸⁸⁰ [HAM0058812_0001](#) at image 1

804. Ms. Auty forwarded Ms. Graham's email to Mr. Boghosian and Mr. Sabo at 4:52 p.m., requesting their request and comment.⁸⁸¹

805. Ms. Auty replied to Ms. Graham's email on February 3, 2019, at 5:57 p.m., writing:

Thanks Jasmine. On a quick first read, this is very good. We will give it a more detailed review and I have asked David for his feedback on the liability side.

My two comments for now are: 1) I don't think timeline is at a place (i.e. all data confirmed) where we should be giving it to council, even if only the first 4 columns; and 2) in particular, I am not sure aside from our own information, what benefit the column with Gary's involvement or otherwise has.

I will need to better understand Betty's involvement in this issue before being able to answer the last question.⁸⁸²

806. On February 3, 2019, Mr. Malone emailed Mr. Boghosian, attaching a memorandum he authored, addressed to Mr. Boghosian. He wrote:

Please find attached my draft of the memo explaining our review and response to the questions posed.

I'm available tonight to discuss if needed, or throughout tomorrow, Monday Feb 05⁸⁸³

807. On February 3, 2019, emails between Mr. Moore and Dr. Uzarowski were added to a log, which appears to have been generated using OSForensics software.⁸⁸⁴

808. At 10:14 p.m., Mr. Boghosian replied to Ms. Auty's email from 4:52 p.m., writing "Please see your draft report to Council with my revisions/comments."⁸⁸⁵ The City has not produced the attachment to Mr. Boghosian's email, as it has asserted privilege over that document.

⁸⁸¹ [HAM0062551_0001](#)

⁸⁸² [HAM0062162_0001](#)

⁸⁸³ [CIM0017173](#) attaching [CIM0017173.0001](#)

⁸⁸⁴ [HAM0012645_0001](#)

⁸⁸⁵ [HAM0062551_0001](#)

4. February 4, 2019

(a) *Continued Preparation of Timeline*

809. Mr. Ferguson replied to Mr. Soldo, Ms. Graham, Mr. White and Mr. Declair on February 4, 2019, noting that he provided his responses below in Ms. Graham's original email. This email has been reproduced below with Mr. Ferguson's comments in red.

There are a few holes I'm hoping we can fill in for the timeline. Questions below – can you see if it's possible to get back to me on these before mid-day on Monday? (if that's doable?)

Do you think it's possible to do a clearer timeline of safety upgrades for RHVP? Some of what is listed is repeated in David's original summary looking to be clear about what actual work we did when. Also, he has some upgrades from the Linc mixed in. Can we just have RHVP?

Looking for something like the following.

- a. Jan 2015 – Cat eye reflectors installed
- b. **XX** 2017 – Slippery when wet signs installed

Some other questions:

2. Can you confirm where the cat eye reflectors were originally installed in January 2015? Full length? Just south end? **Between Dartnall and Greenhill, both northbound and southbound**

3. Can you confirm where the cat eye reflectors were installed for July 2018 (DF's document said spring, when this was actually July.) **The same location as #2, it was to replace those that were existing and locations which had disappeared.**

4. Are the digital feedback signs on the RHVP also? If yes, what is their purpose, how many are there? **There were signs on both the LINC and RHVP, installed in December 2017 and January 2018, The existing contract ran out in November 2018 so we had them removed. A new Tender was issued and we are ready to proceed with new signs and installations. Rob D, can you confirm the number of signs and locations**

5. Can I have a summary and copy of PW13081a (May 2015) <https://pub-hamilton.escribemeetings.com/filestream.ashx?DocumentId=116045>

6. Can I have a summary and copy of CASP1615 (update to PW15091) Was this a report/info update? Why is labelled with CASP? **All I have is a hard copy of this report, it was submitted by Geoff Lupton, dated May 20, 2016 and the report was to advise Council of the anticipated implementation schedule for the short-term improvements.**

7. Can you confirm motions from October 2016? These are worded a bit strangely and don't make much sense to me. **Sorry, I was just point forming the information to keep it simple, here is the link, starts on page 4** <https://pub-hamilton.escribemeetings.com/FileStream.ashx?DocumentId=138654>

8. Can you please confirm that the January 2019 CIMA Collision review was an update to the review they did in January 2018? **That is correct, it is an update and the inclusion of 403 as a comparison**

9. What is the one or two line summary of the January 2018 CIMA collision report? Did this report go to Council and if so, when? **I would suggest Edward reviews, but I believe the main point is that overall collision rates are similar to the comparison roadways, however there are clear locations on the RHVP that are much higher then the comparison roadways.**⁸⁸⁶

810. Mr. White replied, writing “Staff are looking up the work orders to determine when the Slippery When Wet signs were installed..... I will advise. thx.”⁸⁸⁷

811. Mr. Soldo replied to Mr. White, asking:⁸⁸⁸

How many of them is there?

Can we review their location and size. They need to be more prominent and larger. Please send me a map with their locations.

812. Mr. White replied approximately an hour later, writing:⁸⁸⁹

Hi Edward there are 4 signs in total. Two Northbound and two southbound. They are 36 x 36 and the tabs are 18x 36. They were installed Aug 15, 2017.

See attached map for approximate locations.

813. Mr. Soldo replied, writing:

I think we need one location mid length. Can you review and recommend an additional location based on geometry and exposure.⁸⁹⁰

⁸⁸⁶ [HAM0060642_0001](#)

⁸⁸⁷ [HAM0060642_0001](#)

⁸⁸⁸ [HAM0060642_0001](#)

⁸⁸⁹ [HAM0060642_0001](#)

⁸⁹⁰ [HAM0035983_0001](#); and [HAM0035984_0001](#)

(b) February 4, 2019 Memorandum and Continued Preparation for February 6, 2019 GIC Meeting

814. On February 4, 2019, at 5:08 a.m., Mr. Hadayeghi sent Mr. Malone and Mr. Salek a revised draft of the February 4 Memorandum, writing that he included “some minor edits and comments”.⁸⁹¹

815. On February 4, 2019, at 8:16 a.m., Mr. Malone emailed Mr. Boghosian, attaching a revised draft of the February 4 Memorandum.⁸⁹² Mr. Boghosian replied one hour later, writing “I am fine with this draft. Please issue in final form.”⁸⁹³

816. Ms. Auty emailed Mr. Boghosian at 9:50 a.m., writing:

Thanks for your comments on the report from Brian. I agree there needs to be reference to the 2017 Golder/friction testing to complete the timeline.

Can we consider whether his report can be provided to Council in Camera once final, and released publically or whether council should direct a further report from CIMA on this issue.

I will send you some draft motions for review.⁸⁹⁴

817. Ms. Auty emailed Mr. Boghosian at 11:51 a.m., replying to his email from 10:14 p.m. the night prior, writing:

Thanks David, so you would like to be an external spokesperson on this? We don't usually have legal on the list, but if you are comfortable, we can discuss further.

I will pass on your other comments in yellow.⁸⁹⁵

818. Mr. Boghosian replied, writing:

⁸⁹¹ [CIM0017169](#) and [CIM0017169.0001](#)

⁸⁹² [CIM0017167](#) attaching [CIM0017167.0001](#)

⁸⁹³ [CIM0017166](#)

⁸⁹⁴ [HAM0062550_0001](#)

⁸⁹⁵ [HAM0062551_0001](#)

Sorry Nicole, I am not sure what you mean? I thought from the agenda you set out in your email from Saturday that you were expecting me to speak on Legal Analysis of Liability.

Also, Brian got back to me with his revised report which I thought incorporated all of my suggested changes/additions so I told him to go ahead and do it in final.⁸⁹⁶

819. Ms. Auty replied, attaching four draft motions:

Hi David, yes, to council in camera.

I believe the section you added “what about me” to is the external media spokesperson section of the coms plan. I think we are on the same page. If you do want to be listed as a spokesperson for the media we should discuss further.

Thanks for the comments to Brian, I look forward to seeing his final. Can we turn our minds to whether this goes to council directly in camera and what our opinion is if they want to release it. going on the basis that we would not release it right away, I drafted a series of motions, attached. I would appreciate your comments. Also I suspect council will want to release Brian’s report asap or commission him to do a public version is this isn’t it.⁸⁹⁷

820. Later on February 4, 2019, at 1:10 p.m., Mr. Malone provided Mr. Boghosian with his “completed review of the documents provided and response to the three questions”.⁸⁹⁸

821. Twenty minutes later, Mr. Boghosian provided the revised draft to Ms. Auty.⁸⁹⁹

822. Ms. Auty replied, writing “[a]m I ok to share with staff?”⁹⁰⁰

823. Mr. Boghosian replied at 2:23 p.m.:

Yes, as long as they do not disseminate it and agree to keep it confidential!

What time do you want me there on Wednesday?⁹⁰¹

824. Approximately 25 minutes later, Mr. Malone emailed Mr. McGuire and Mr. Soldo under the subject line “RHVP Friction Review”. He wrote “FYI, my report on the review of

⁸⁹⁶ [HAM0062551_0001](#)

⁸⁹⁷ [HAM0062551_0001](#) attaching [HAM0062552_0001](#), [HAM0062553_0001](#), [HAM0062554_0001](#) and [HAM0062555_0001](#)

⁸⁹⁸ [CIM0017163](#) attaching [CIM0017163.0001](#)

⁸⁹⁹ [CIM0017157](#)

⁹⁰⁰ [HAM0062558_0001](#)

⁹⁰¹ [HAM0062558_0001](#); and [HAM0062559_0001](#)

additional materials and response to questions presented has been completed and is now in the hands of David Boghosian.”⁹⁰²

825. On February 4, 2019, at 2:52 p.m., Mr. Boghosian emailed Ms. Auty under the subject line “RE: Hamilton re RHVP Council Issues – Strictly Privileged and Confidential” attaching a document titled “SPEAKING POINTS RE LEGAL LIABILITY ANALYSIS.docx”.⁹⁰³ He wrote: “[a]ttached are draft speaking points as you requested. Let me know how much time you want me to speak for and whether these points are what you had in mind.” The City has not produced the attachment to Mr. Boghosian’s email, as it has asserted privilege over that document.

826. Ms. Auty replied at 4:19 p.m., writing “David, are you comfortable with me adding this to our slide deck as is?”⁹⁰⁴

827. On February 4, 2019, at 5:05 p.m., Ms. Auty replied to Mr. Boghosian’s email from 2:23 p.m., writing “Any thoughts on including this as an attachment to the council In Camera report?”⁹⁰⁵

828. On February 4, 2019, at 7:28 p.m., Ms. Auty emailed Mr. McKinnon, Mr. McGuire and Mr. Soldo, attaching the CIMA February 4 Memorandum, writing “Please see the attached, at this time, we are keeping this confidential and for In Camera purposes.”⁹⁰⁶

⁹⁰² [CIM0017158](#)

⁹⁰³ [HAM0062556_0001](#) attaching [HAM0062557_0001](#)

⁹⁰⁴ [HAM0062584_0001](#)

⁹⁰⁵ [HAM0062558_0001](#)

⁹⁰⁶ [HAM0054374_0001](#) attaching [HAM0054375_0001](#)

829. The introduction of the memorandum identified its purpose as follows:⁹⁰⁷

The purpose of this memorandum is to detail our review of a report on the performance of roadway pavement done for the RHVP that was completed by Golder Associates in January 2014¹. That report included friction testing of the pavement surfaces of the Lincoln Alexander Parkway (LINC) and the RHVP which were completed for Golder by their subcontractor, Tradewind Scientific Ltd.

CIMA has previously completed reports delivered to the City of Hamilton for the Red Hill Valley Parkway, including a report dated November 2015 entitled Red Hill Valley Parkway Detailed Safety Analysis², a memo that CIMA completed in 2019 for Lincoln Alexander Parkway / Red Hill Valley Parkway which updated the collision data and provided summaries of collision rates on the roads³, and a review of speed limits on the LINC and RHVP completed in 2018. The 2014 Golder report was not part of materials available to CIMA when completing the above- mentioned reports.

CIMA was asked to respond to three questions following our review of the Golder report.

830. Also in the evening of February 4, 2019, Mr. Sabo emailed Ms. Auty regarding the draft February 4 Memorandum sent by Mr. Boghosian at 1:30 p.m., writing “Can we get Brian Malone to answer why his Figure 1, the uk stds, lists a speed of 50 Kmh and if that’s the right one to consider for posted 90 and designed 100 Kmh speeds”.⁹⁰⁸

831. Approximately two hours later, Mr. Sabo emailed Mr. Boghosian, copying Ms. Auty, writing:

David could you see if you can resolve the question about Figure 1 of Brian Malone’s report below. Which is why that figure refers to a 50 kmh speed at the top when we have a 90 kmh highway. Thanks⁹⁰⁹

832. Mr. Boghosian forwarded Mr. Sabo’s email to Mr. Malone, asking him to provide a response.⁹¹⁰

⁹⁰⁷ [HAM0054375_0001](#) at image 1

⁹⁰⁸ [CIM0017157](#)

⁹⁰⁹ [CIM0017157](#)

⁹¹⁰ [CIM0017157](#)

833. On February 4, 2019, at 10:20 p.m., Ms. Auty emailed Mr. Boghosian under the subject line “RHVE”, writing:

David, we will need speak in the morning to review the presentation and next drafts of various documents, can you advise when you are available?

Subjects:

- 1) Concerns raised with speed/comment credibility in CIMA
- 2) Release of Tradewind/Golder release with CIMA report / FOI discussion
- 3) Review of presentation.⁹¹¹

834. Mr. Boghosian and Ms. Auty scheduled a call to discuss at 1:00 p.m. the following day.⁹¹²

835. At 10:28 p.m., Ms. Auty emailed Ms. Minard and Mr. Brown, attaching a document titled “RHVE PUBLIC MOTION – Audit.docx”, writing “A rough draft at this point. Your edits are appreciated.”⁹¹³

836. The document included the following:

WHEREAS speed enforcement is a critical factor in ensuring road safety on the RHVE;

AND WHEREAS the City requires additional enforcement measures be taken;

NOW THEREFORE BE IT RESOLVED that:

That the Auditor be directed to conduct an audit review of the City’s internal processes, 1.managerial systems regarding and report back with recommendations to AF&A;⁹¹⁴

⁹¹¹ [HAM0062560_0001](#)

⁹¹² [HAM0062560_0001](#)

⁹¹³ [HAM0062561_0001](#) attaching [HAM0062562_0001](#)

⁹¹⁴ [HAM0062562_0001](#)

837. Approximately one minute later, Ms. Auty emailed Mr. Sabo under the subject line “RHVE Possible motions”, attaching four draft motions, writing “For review and discussion tomorrow.”⁹¹⁵

(c) City Requests MTO Contact

838. On February 4, 2019, Mr. Malone emailed Mr. Hadayeghi asking whether he had any contacts at the MTO familiar with pavement:

Gord McGuire in Hamilton was asking if we have any contacts at the MTO regarding pavements? I know that the place to go is the MERO office.

The Manager there is Becca Lane. The name rings a bell, but I don't think I know her. Do you ?

The lead in the pavement section is Stephen Lee, Head Pavements and Foundations, but I don't know him either.

No worries if you don't, I'll relay the contacts to Gord.⁹¹⁶

839. Mr. Malone provided contact information for Becca Lane (Manager, Materials Engineering & Research Office, Highway Standards Branch, Provincial Highways Management Division, MTO) and Stephen Lee (Head, Pavements & Foundations Section, Materials Engineering & Research Office, Highway Standards Branch, Provincial Highways Management Division, MTO) to Mr. McGuire later the same day:

You asked me for some contacts at MTO relating to pavement questions. The right place at MTO is the MERO group – Materials Engineering and Research Office. I used to know the head there, but he's gone now.

The current contacts are:

Becca Lane, who is Manager for all of MERO, and;

Stephen Lee, who is Head for Pavements and Foundations, he reports to Becca.

⁹¹⁵ [HAM0062563_0001](#) attaching [HAM0062564_0001](#), [HAM0062565_0001](#), [HAM0062566_0001](#) and [HAM0062567_0001](#)

⁹¹⁶ [CIM0017165](#)

I'm afraid that I don't have any history with them. I'm sure that will assist, although anything 'on the record' might be a challenge.⁹¹⁷

(d) Discussions Regarding Resurfacing

840. On February 4, 2019, Mr. McGuire emailed Mr. Becke regarding the asphalt mix design for the resurfacing, writing:

What mix design are we spec'ing and how do we make sure it's highest friction?

SP12.5 Cat E?

How are we ensuring the aggregate is meeting our PSV....

Sorry, can I get this asap⁹¹⁸

841. Mr. McGuire also exchanged emails with Ms. McNab the same day regarding when the RHVP resurfacing was originally scheduled in the City's budget. Ms. McNab wrote:

The project was added to the system on August 17, 2016 under the name RHCE & LINC Ramps Rehabilitation with \$2m budgeted for 2018. During the 2018 Budget Process, the name was changed to RHVP Rehabilitation on July 4, 2017 and the budget was increased to \$6.75m in both 2018 and 2019. The 2018 budget amount was approved at \$6.75m. During the 2019 Budget Process, the 2019 Budget was increased by \$2m from \$6.75m to \$8.75m and \$2.14m in wip funding was applied.⁹¹⁹

842. On February 4, 2019, Ms. Wyskiel emailed Mr. White, forwarding an email chain she had with Ashley Bono (Manager, Finance & Administration; Financial Planning, Administration & Policy, Corporate Services, Hamilton). Ms. Bono had emailed Ms. Wyskiel regarding the funding for various projects, including the RHVP rehabilitation, inquiring as to why Red Light Camera reserve funding was being used. Mr. White replied to Ms. Wyskiel, writing:

Same answer as before. It is a safety initiative. Nowhere did it say we had to get permission for each safety project although from now on we will. This was included in the capital budget sheet as the source being the RLC. I tried to get it back to the block but that wasn't approved. Also the RHVP project is highly political and we are using the money to install

⁹¹⁷ [CIM0017159](#)

⁹¹⁸ [HAM0028415_0001](#)

⁹¹⁹ [HAM0028374_0001](#); and [HAM0028384_0001](#)

the cats eye markers within the Capital repaving project. Gord made the decision to use our money offered instead of fully capital funding.⁹²⁰

(e) Parkway Coordination Committee

843. On February 4, 2019, Mr. McKinnon sent a recurring calendar invite titled “Parkway (Red Hill/Linc) Coordination Committee” to Mr. Ferguson, Mr. White, Mr. McGuire, Ms. Leishman, Ms. Eisbrenner and Ms. Morello, indicating that the committee was to have bi-monthly meetings. The first meeting was scheduled for February 11, 2019.⁹²¹

(f) Mr. Soldo Provides Mr. McGuire with Links to Various Friction- or Road Safety Related Webpages

844. In the evening of February 4, 2019, Mr. Soldo sent Mr. McGuire four emails with links to webpages regarding friction or road safety more generally. The emails did not attach copies of the information visible by accessing the webpages. Commission Counsel has produced documents which capture the information displayed as of November 25, 2021, by accessing the webpages, described below:

- an article from November 2015 titled “This winter, don’t blame the weather – blame yourself”⁹²²;
- a ResearchGate webpage with a list of Gary Moore’s publications⁹²³;
- a U.S. Department of Transportation Federal Highway Administration webpage titled “High Friction Surface Treatments (HFST)”⁹²⁴; and

⁹²⁰ [HAM0012655_0001](#)

⁹²¹ [HAM0028408_0001](#)

⁹²² [HAM0062349_0001](#); and [RHV0000894](#)

⁹²³ [HAM0062350_0001](#); and [RHV0000891](#)

⁹²⁴ [HAM0062351_0001](#); and [RHV0000896](#)

- a document published by the Florida Department of Transportation titled “High Friction Surface Treatment Guidelines: Project selection, materials and construction”.⁹²⁵

(g) Continued Discussions with Audit Services

845. On February 4, 2019, Mr. Pellegrini emailed Mr. McGuire regarding report PW18-008(a), writing:

In your report PW18008a – Lincoln Alexander Parkway (LINC) and Red Hill Valley Parkway (RHVP) Transportation and Safety Update - you refer to Friction Testing on the Parkways being completed in November 2017, and name to three specific tests that were performed: the British Pendulum Test (BPN), the Measured Texture Depth (DPT) Test, and the Polished Stone Values (PSV) Test. This report only provides a brief summary of these tests on page 5 of 9.

I looked for the results of these tests on the USB stick that you provided me on January 12th, but I didn't find anything.

Could you please send the consultant's report showing the results of these test to me by later today?⁹²⁶

846. McGuire replied the same day:

Hi Domenic. We found this report and work after we submitted the data to you.

I'm still trying to get Golders to finalize but will send all the relevant data ASAP.⁹²⁷

5. February 5, 2019

(a) Timeline of Implementation of RHVP Improvements

847. On February 5, 2019, Mr. Olszewski emailed Mr. Ferguson, John Della Pietra (Supervisor, Signs and Markings, Transportation Operations, Transportation Operations & Maintenance, Public Works, Hamilton) and Mr. Switenky, copying Mr. White and

⁹²⁵ [HAM0062352_0001](#); and [RHV0000895](#)

⁹²⁶ [HAM0028400_0001](#)

⁹²⁷ [HAM0028400_0001](#)

Shelley Boylan (Coordinator, Transportation Operations & Maintenance, Public Works, Hamilton), writing:

Dave / John / Ed,

As requested, please find the attached work order with the following RHVP improvements as part of Wednesday's proposed speed change.

- Installation of the 6 locations of 48"x48" WC-105 and the WC-5t for 'Slippery When Wet' signs to replace 4 existing locations, and 2 new locations along the mainline. The exact locations have been provided visually and is attached to the work over. These are all upsized from the existing 36"x36" size.
- With each location of the WC-105, we will be installing 12" FL-1400 amber solar flashers, pole mounted on the 'Slippery When Wet' signs. These have been ordered, and pending shipment will be installed.
- Northbound 'Speed Fine' Board (in-between Greenhill and Mud) needs to be updated to reflect the incoming speed reduction to 80km/h with labels placed over top of the 110km/h reduced to 100km/h, 120 reduced to 110km/h, and 130 reduced to 120km/h. This should be done in conjunction with the 80km/h speed change.

I have left the 80km/h posted speed out of this Work Order as it requires confirmation from Edward and Council on Wednesday February 6th.

Let me know if you require anything else.⁹²⁸

848. On February 5, 2019, Mr. White and Mr. Declair exchanged emails in response to Ms. Graham's February 3, 2019, request for additional information regarding the timeline of safety upgrades to the RHVP:

[Mr. White]: When will these VMS and Q-End systems expected to be installed please Rob?

[Mr. Declair]: We have a Preconstruction meeting with Stinson on Feb 26 for the Queue Warning System. At that meeting we can determine when these systems will be deployed but it looks like about mid-March.

For the VMS the tender closed January 10 and on this date I advised Shelley to award to the low bidder. Yesterday I reminded Shelley that the paperwork had still not been issued to allow the award. This means we are probably also looking at mid-March before the new rental VMS signs get deployed.⁹²⁹

⁹²⁸ [HAM0060642_0001](#) attaching [HAM0060643_0001](#); and [HAM0036021_0001](#)

⁹²⁹ [HAM0036023_0001](#)

849. Mr. White forwarded this to Ms. Graham on February 5, 2019, writing “VMS and Q end both coming in March. Thanks”.⁹³⁰

(b) Mr. Oddi Sends Calendar Invites Referencing Friction Testing

850. Mr. Oddi sent three calendar invitations dated February 5, 2019. The invites, titled “Tyler – friction testing info” do not identify a recipient. The three appointments were scheduled for February 11, 2019, February 19, 2019, and March 19, 2019.⁹³¹

(c) Discussions Regarding Audit Services’ Receipt of the Golder Report

851. Ms. Minard exchanged emails with Mr. McGuire on February 4-5, 2019, regarding the circumstances surrounding Audit Services’ receipt of the Golder Report.⁹³²

[Ms. Minard, February 4, 2019]: Audit Services asked for the "RHVP Performance Review after Six Years of Service" Report and got a redacted version on November 9th 2018. Your email in December is referring to “Red Hill Valley Parkway Detailed Safety Analysis”. Un-redacted version was received in December for this report.

I believe that the timelines for "RHVP Performance Review after Six Years of Service" are accurate, I will double check tomorrow morning. This is the report being referred to in our slides.

[Ms. Minard, February 5, 2019]: I confirmed the timelines with Domenic this morning and reviewed emails relating to this.

Audit Services asked for the "RHVP Performance Review after Six Years of Service" Report and got a redacted version on November 9th 2018. Full version was received in December.⁹³³

(d) Materials for February 6, 2019 GIC Meeting Finalized

852. On February 5, 2019, at 7:49 a.m., Ms. Auty emailed Mr. Boghosian regarding the February 4 Memorandum, writing:

⁹³⁰ [HAM0036023_0001](#)

⁹³¹ [HAM0012737_0001](#); [HAM0012736_0001](#); and [HAM0012735_0001](#)

⁹³² [HAM0028419_0001](#)

⁹³³ [HAM0028419_0001](#)

David, recognizing that Brian is leaving, can you please ask him for a version of his report without reference to the speed limit differential under the first question that could be released to the public and is addressed to Mayor and Council.

We can discuss at 1 I just want to make sure we get Brian on this before he departs.⁹³⁴

853. On February 5, 2019, at 8:02 a.m., Mr. Malone replied to Mr. Boghosian's email from the day prior regarding the speed of friction testing raised by Mr. Sabo. He wrote:

50 km/h is the standard speed that the friction testing is done at with this equipment. That is the testing protocol so that the machine doing the testing gets consistent results on varying surfaces. The results from the standard testing at 50 km/h determine a friction number for the surface. Put another way, it is so that the friction number is not dependent on the speed of the test, but only on the surface texture itself.

The friction number of the measured surface is then able to be interpreted in relation to friction values used in the design of the road. The friction number allows confirmation that the theoretical friction values that were part of the geometric design are actually present on the road in question, providing real-world confirmation of the friction present and supporting the original design calculations.

Just let me know if that's not clear.⁹³⁵

854. Mr. Boghosian forwarded Ms. Auty's 7:49 a.m. message to Mr. Malone at 8:36 a.m., writing "[c]ould you please amend your report in accordance with Nicole's request below."⁹³⁶

855. In response, Mr. Malone sent Mr. Boghosian two replies:

[8:53 a.m., highlighting in original⁹³⁷]: To confirm, the request is for the removal of the last paragraph in the response to Q1, marked in **yellow** below and the second last would remain, marked **green**.

Correct?

CIMA did not recommend lowering the speed limit in our reports. We continue to not recommend lowering the limit after reviewing the Golder report. The Golder report confirms that the road friction meets the design requirements of the road. The design speed of 100

⁹³⁴ [CIM0017155](#)

⁹³⁵ [CIM0017156](#)

⁹³⁶ [CIM0017155](#)

⁹³⁷ Underlining added by Commission Counsel to text highlighted in yellow to ensure readability if printed in grayscale.

km/h used in the original design is capable of being provided by the road surface as measured by Golder. The posted speed limit of 90 km/h offers an additional safety factor.

I accept that lowering the speed limit could, theoretically, improve safety. However, that result is based on the premise that all drivers will adjust their speeds lower. Research has shown that drivers select an operating speed based on more than just the posted limit. If compliance with a lower limit is not achieved there can be negative consequences. The range of speeds may become wider, as some drivers comply with the new limit while others maintain their previous behaviour. Wider speed ranges can decrease safety. Negative outcomes from lowering the speed limit are possible. We would continue to recommend enforcement of the existing posted limit as the best option to improve safety.

[8:58 a.m.]: And is the other adjustment to revise the memo to be addressed to the City Mayor and Council?⁹³⁸

856. At 9:00 a.m., Mr. Boghosian forwarded this email to Ms. Auty, writing “Nicole, could you please clarify what you want taken out.”⁹³⁹

857. Mr. Boghosian replied to Mr. Malone’s email at 9:02 a.m., writing:

Yes, please address to the Mayor and Members of Council. I am seeking clarification of what they want taken out and left in re speed limit. They seem determined to have the speed limit reduced...⁹⁴⁰

858. Ms. Auty replied to Mr. Boghosian, exchanging the following emails between 9:13 a.m. and 9:41 a.m.:

[Ms. Auty]: I would ask, that if there are no changes to the recommendations in the CIMA reports, rather that bring the speed limit discussion into this report, that the answer be more simply, that that be the response. I am concerned that is may be a distraction to the issue.

[Mr. Boghosian]: So you want everything to do with the speed limit to be removed?

[Ms. Auty]: Yes, let’s keep it simple.⁹⁴¹

859. Mr. Boghosian emailed Mr. Malone at 9:51 a.m., writing, “They want both paragraphs removed.”⁹⁴²

⁹³⁸ [CIM0017152](#)

⁹³⁹ [HAM0062570_0001](#)

⁹⁴⁰ [CIM0017152](#)

⁹⁴¹ [HAM0062570_0001](#)

⁹⁴² [CIM0017150](#)

860. On February 5, 2019, at 10:16 a.m., Ms. Auty emailed Mr. Sabo and Mr. Boghosian under the subject line “CONFIDENTIAL” attaching a document titled “LS19010 – Road Infrastructure Litigation Review and Assessment.docx”.⁹⁴³ She wrote:

Attached is a draft report for your review and comment.

Ron, notably, I have not yet addressed the Audit, Comms or FOI/release of documents issue.

Please provide your comments asap as I need to get this into clerks by end of day.⁹⁴⁴

861. Ms. Auty’s email attached a draft of Report LS19010, titled “Road Infrastructure Litigation Review and Assessment”.⁹⁴⁵

862. On February 5, 2019, at 10:23 a.m., Ms. Minard emailed Ms. Graham and Ms. Recine a PowerPoint presentation titled “Roads Audit Update”, writing “Charles approved for me to send you our current slides. Please delete the old ones and insert these.”⁹⁴⁶

863. The attached presentation slides provide an overview and chronology of Audit Services’ involvement, including its plans for its ongoing investigation and reporting. Certain slides have been reproduced below:⁹⁴⁷

⁹⁴³ [HAM0062572_0001](#) attaching [HAM0062573_0001](#)

⁹⁴⁴ [HAM0062572_0001](#)

⁹⁴⁵ [HAM0062573_0001](#)

⁹⁴⁶ [HAM0012713_0001](#)

⁹⁴⁷ [HAM0012714_0001](#) at images 3, 4, 10 and 11

Timeline

- This audit began mid-2018 and is ongoing.
- As part of the audit, consulting reports were requested.
- A report referencing friction testing came to our attention in November 2018.
- This report was received in December 2018.

Timeline

- After reviewing the friction testing report, a demand letter was sent to management on Dec. 11, 2018
 - This requested any and all records pertaining to RHVP, in particular those relating to friction testing & friction management
- A list of questions requiring answers was sent to management
 - Known as “Lines of Enquiry”.

Current Status

- Audit Services is in the midst of this fieldwork.
- Information request was fulfilled on January 15, 2019
- Is there anything else that members of Council want considered in our work?
- Our work will continue, our goal is to finish this work in an expedited manner.

Reporting

- Audit Services plans to issue a "Special Report" pursuant to the Roads Construction Audit.
- This will occur as soon as the audit work has been completed for this issue.
- Recommendations from Audit Services and management responses will be included in this report.
- Audit Services provides independent, objective advice and reports directly to Council.
- Per the *Municipal Act*, the Auditor General section (223.19) "Duty of Confidentiality" prevails over MFIPPA (re: FOI requests).

864. On February 5, 2019, at 10:30 a.m., Ms. Minard sent Mr. Zegarac a confidential Audit Services report for the February 6, 2019 GIC meeting:

As a courtesy, Charles asked me to send you a copy of the confidential report from Audit Services that will be on the February 6th GIC agenda (AUD19002). Report was submitted to Clerk's earlier this morning.

Content is the same as our presentation that was shared yesterday.

If you have any questions, please get in touch with Charles.⁹⁴⁸

865. The attached report includes the following:

As part of the audit work, Audit Services requested all related consulting reports from the Engineering Services Division.

A report regarding friction testing (the Tradewind report referenced in LS19007) came to Audit Services attention in November 2018.⁹⁴⁹

866. Later the same morning, at 11:22 a.m., Mr. Malone replied to Mr. Boghosian's 9:02 a.m. email, writing:

I believe that one motivation for the speed reduction is that the proposed wording in the HTA legislation prohibits the use of automated speed enforcement (speed cameras) in places that are not 'community safety zones'. I understand that those can't be designated if the speed limit is above 80. So, I've been told that some believe that by changing the speed to 80 that they can then designate the RHVP as a CSZ and, theoretically, apply

⁹⁴⁸ [HAM0054379_0001](#) attaching [HAM0054380_0001](#)

⁹⁴⁹ [HAM0054380_0001](#) at image 2

speed cameras. Whether these machinations will fly legally is another story since the Automated Speed Enforcement parts (HTA 205.1) of the HTA are not yet proclaimed.

The issue is mentioned here <https://globalnews.ca/news/4846078/photo-radar-linc-red-hill-valley-hamilton/>

And here, <http://www.lightcastinternational.com/news-room-media/red-hill-lincoln-alexander-parkways-eligible-safety-zones-allow-photo-radar/>⁹⁵⁰

867. One minute later, Mr. Malone sent Mr. Boghosian the revised final February 4 Memorandum.⁹⁵¹

868. Mr. Boghosian forwarded this email to Ms. Auty at 11:36 a.m.⁹⁵²

869. The revised version was addressed to Mayor Eisenberger and Council, and remained dated February 4, 2019. The only change in the memorandum addressed to the Mayor and Council was that it did not include the following two paragraphs:

CIMA did not recommend lowering the speed limit in our reports. We continue to not recommend lowering the limit after reviewing the Golder report. The Golder report confirms that the road friction meets the design requirements of the road. The design speed of 100 km/h used in the original design is capable of being provided by the road surface as measured by Golder. The posted speed limit of 90 km/h offers an additional safety factor.

I accept that lowering the speed limit could, theoretically, improve safety. However, that result is based on the premise that all drivers will adjust their speeds lower. Research has shown that drivers select an operating speed based on more than just the posted limit. If compliance with a lower limit is not achieved there can be negative consequences. The range of speeds may become wider, as some drivers comply with the new limit while others maintain their previous behaviour. Wider speed ranges can decrease safety. Negative outcomes from lowering the speed limit are possible. We would continue to recommend enforcement of the existing posted limit as the best option to improve safety.⁹⁵³

870. At 11:36 a.m., Ms. Auty emailed Ms. Graham, Mr. Hertel and Ms. Recine, writing:

Please see the attached and this is not to be distributed beyond this group. I will send any follow up I get on this.

⁹⁵⁰ [CIM0017149](#)

⁹⁵¹ [CIM0017147](#) attaching [CIM0017147.0001](#)

⁹⁵² [HAM0062574_0001](#)

⁹⁵³ [HAM0054375_0001](#) at image 2; and [CIM0017147.0001](#) at image 2

Can I please have the draft presentation as soon as you can? I need to send them to David for his information/comment.⁹⁵⁴

871. As only subsequent messages in this email exchange have been produced, the attachment to Ms. Auty's email has not been produced to date.

872. At 11:41 a.m., Ms. Auty emailed Mr. McKinnon, Mr. McGuire, Mr. Soldo, Mr. Sabo, Mr. Hertel, Ms. Graham and Ms. Recine, copying Mr. Zegarac, attaching the finalized February 4 Memorandum, writing "Please see the attached memo from CIMA. This is Privileged and not to be distributed beyond this group."⁹⁵⁵

873. On February 5, 2019, at 12:26 p.m., Ms. Recine replied to the email Ms. Auty sent at 11:36 a.m. that morning. She attached presentation slides for the February 6, 2019 GIC meeting as well as a draft communications plan, and wrote:

Thank you Nicole. And whenever you have a chance to send along the draft motions would be great.

Attached is the presentation. Our recommended strategy and tactics remain the same as presented last night. We tweaked some of the key messages as discussed, and will go with the flow in terms of how the conversation tomorrow plays out.

We are working on preparing two versions of the media release. We are tweaking the current one, and creating a second version that speaks more broadly to tomorrow's public reports, improvements that have already been made (per PW18008a), etc.) Jasmine is working on those and will have them for sharing later this afternoon.

Two quick additional questions for you:

Can you confirm that you're coordinating with Clerks what Council will receive in camera tomorrow as far as print copies go and that you'll be the conduit for providing anything to Clerks for printing? We have a Comms Plan Summary doc, see attached. For Legal's review and consideration in terms of sharing with them tomorrow.

Also, I think you said you're going to connect with the FOI office to determine how that process is going, in particular if the Tradewind report has been/may be deemed a

⁹⁵⁴ [HAM0062575_0001](#)

⁹⁵⁵ [HAM0054381_0001](#) attaching [HAM0054382_0001](#)

responsive record and therefore shareable with the media/media release (either in redacted or unredacted form)?⁹⁵⁶

874. Ms. Auty forwarded Ms. Recine's email to Mr. Sabo and Mr. Boghosian at 1:05 p.m.⁹⁵⁷

875. Mr. Sabo replied to Ms. Auty at 1:42 p.m., writing:

Nicole, my edits to the legal report were based on the idea the communications would cover the two points below (set out in yesterday's email). I was hoping they would incorporate these into messaging, briefly;

- Excessive speeding (whether averaging 110/115 or other) is an identified concern contributing to accidents and unsafe conditions. Added police enforcement of speeding and other traffic safety has been requested and is ongoing by police.
- Highways including the RHVP are built with a margin of safety, but the posted speed is a maximum for only the best weather and traffic conditions. Wet weather, snowy conditions and heavy traffic require drivers to reduce their speed below the maximum to keep a margin of safety for braking, turns and emergencies.⁹⁵⁸

876. Mr. Boghosian replied to Ms. Auty at 1:43 p.m. His response has been redacted for solicitor-client privilege.⁹⁵⁹

877. Ms. Auty replied at 1:54 p.m., writing "[t]hanks, when are you free to speak this afternoon?"⁹⁶⁰

878. Mr. Boghosian replied, writing "I thought we were going to speak at 2 (5 mins)? I'm back in the office now."

879. Ms. Auty replied "Great, we will call you shortly".⁹⁶¹

⁹⁵⁶ [HAM0062193_0001](#) attaching [HAM0062194_0001](#) and [HAM0062195_0001](#)

⁹⁵⁷ [HAM0062578_0001](#)

⁹⁵⁸ [HAM0062578_0001](#)

⁹⁵⁹ [HAM0062202_0001](#)

⁹⁶⁰ [HAM0062579_0001](#)

⁹⁶¹ [HAM0062579_0001](#)

880. On February 5, 2019, at 2:04 p.m., Ms. Auty emailed Mr. Hertel, Ms. Recine and Ms. Graham a draft of a report titled “Road Infrastructure Litigation Review and Assessment” (“Report LS19010”), which was addressed to the GIC, and dated for its February 6, 2019, meeting. She wrote “Would you like to include any description of the draft coms plan or attachments to my report: I have attached for your review, pending final comments.”⁹⁶²

881. The executive summary of Report LS19010 has been excerpted below:

As Council was advised on January 23, 2019 staff have become aware of information regarding friction testing on the Red Hill Valley Parkway (RHVP). Staff subsequently supplied the report along with other information on friction testing to FOI staff as responsive records to a pending FOI and have been working towards informing Council on the report and general implications. The implications include [redacted for solicitor-client privilege].

This report and the In Camera presentations will provide Committee with the most up to date information regarding the status of the safety measures implemented on the RHVE, the audit and other staff work being undertaken as a result of discovery and pending release of the report, all of which background is necessary to consider the legal implications. Most importantly a recommended media messaging approach is being put forward to address safety concerns, limit motor vehicle accidents and the claims that may be generated from accidents arising before resurfacing occurs in early 2019, and address past responses to the media on this issue. The recommended approach to media messaging needs to address by subject friction report, rely on current and accurate expert analysis, and properly focus the public on safe driving behaviours that staff and experts believe are the source of motor vehicle collisions on the RHVP, and support ongoing police enforcement. The City can limit the number and consequences of roadway liability claims as well as the personal injury that often occurs, if it carries out proper and strategic messaging.⁹⁶³

882. The report further noted that the “chronology of consultants’ reports, reports to council, media statements, and safety measures implemented that are know to this point” would be provided in the in-camera portion of the February 6, 2019, GIC meeting.⁹⁶⁴

⁹⁶² [HAM0062196_0001](#) attaching [HAM0062197_0001](#)

⁹⁶³ [HAM0062197_0001](#) at images 1-2

⁹⁶⁴ [HAM0062197_0001](#) at image 2

883. The following was included under the heading “Analysis and Rationale for Recommendations”:

Staff are aware of friction testing results from 2013 which were not previously made known to Council or the public. This information is part of the subject matter of an FOI request. The friction testing report is expected to be released under FOI process, and the City can reasonably anticipate public release and commentary on safety of the RHVP. Expected media coverage would affect the City’s interest in road safety/injury prevention and [redacted for solicitor-client privilege]

Since 2013, safety measures on the RHVE have been reviewed and recommendations made by consultants, staff and council to improve overall road safety which have been implemented on an ongoing basis. In particular, CIMA, a road safety consulting engineering firm has undertaken road safety reviews of the RHVE which have been reported back to council in 2013, 2015 and 2018. The focus of recommendations has been on changing driver behaviour that is believed to be a major source of ongoing collision rates.

In CIMA’s 2015 and corresponding staff report, a number of collision counter measures were identified. Since that time, and as reported in PW18008 and in PW18008a a majority of the 18 safety and collision counter measures identified have been implemented. The measures that have not yet been completed will be included in the resurfacing project scheduled for spring 2019.

In order to advise council regarding the impact of these earlier friction testing results being considered inconclusive and not being shared more broadly, CIMA was provided 2013 and 2017 friction testing reports and was asked the following 3 questions:

- 1) Given your previous reports and the various components that contribute to road safety, can you please advise if any changes are needed to the recommendations in your recent (2018/19) reports to the City of Hamilton?
- 2) Are there any additional safety measures you would recommend the COH implement between now and when the road is resurfaced in spring 2019?
- 3) Should the RHVE be closed to vehicular traffic in whole or in part?;

The response was that no changes would be made to their existing recommendations and that there are no additional safety measures that are recommended beyond those already undertaken however, with a greater emphasis on speed enforcement. In addition it was not recommended that the road be closed in whole or in part pending the resurfacing in the spring.

The CIMA report outlining these will be provided in a CONFIDENTIAL attachment provided In Camera to committee.

[redacted for solicitor-client privilege].⁹⁶⁵

⁹⁶⁵ [HAM0062197_0001](#) at images 3-4

884. Ms. Auty also emailed Mr. McKinnon, Mr. McGuire and Mr. Soldo at 2:05 p.m., attaching a draft of LS19010, writing “Please review and provide any comments ASAP, I need to have into clerks by end of day.”⁹⁶⁶

885. At 2:11 p.m., Ms. Auty emailed Mr. Boghosian under the subject line “CONFIDENTIAL”, attaching a draft of LS19010, and writing “[h]ere it is”.⁹⁶⁷

886. Ms. Recine replied to Ms. Auty regarding Report LS19010 on February 5, 2019, at 3:38 p.m., attaching an updated draft. She wrote:

Nicole, Jas and I are good with what I’ve inserted. John is tied up in a meeting and won’t be able to review.

Also, I think it is technically called the RHVP (parkway vs. expressway). I have used RHVP.⁹⁶⁸

887. At 3:39 p.m., Mr. McGuire replied to Ms. Auty’s 2:05 p.m. email, attaching a revised draft of LS19010, writing that he and Mr. Soldo reviewed the report and made “a few minor suggestions”.⁹⁶⁹

888. Ms. Auty forwarded Mr. Boghosian’s response to Ms. Recine, Ms. Graham and Mr. Hertel. Ms. Recine replied at 3:51 p.m., writing “Thanks Nicole, we have captured it in the Comms Plan and Comms Strategy PPT.”⁹⁷⁰

⁹⁶⁶ [HAM0062198_0001](#) attaching [HAM0062199_0001](#)

⁹⁶⁷ [HAM0062580_0001](#) attaching [HAM0062581_0001](#)

⁹⁶⁸ [HAM0062206_0001](#) attaching [HAM0062207_0001](#)

⁹⁶⁹ [HAM0062208_0001](#) attaching [HAM0062209_0001](#)

⁹⁷⁰ [HAM0062210_0001](#)

889. On February 5, 2019, at 4:05 p.m., Mr. Malone exchanged emails with Mr. Hadayeghi under the subject line “RHVP Friction Testing Memo”. Mr. Malone’s final email in the chain attached the February 4 Memorandum:

[Mr. Malone]: Do you have some time today that I can brief you on this issue. It may hit the press when I’m gone and you should have a full understanding in case CIMA gets called.

[Mr. Hadayeghi]: Please call me any time after 3:00.

[Mr. Malone]: Thanks for the call.

Nothing should present a problem, but the RHVP might go political...

RHVP Friction Memo

- Memo attached that has been sent to the City. They present to City Council tomorrow, in camera. Hopefully nothing comes, but you might get a call. All the material are in the top of my desk if you need them⁹⁷¹

890. On February 5, 2019, at 5:04 p.m., Ms. Graham emailed Ms. Auty, copying Mr. McKinnon, Mr. McGuire, Mr. Soldo, Mr. Hertel, Ms. Recine, Mr. Brown, Ms. Minard, Mr. Sabo and Mr. Zegarac, attaching presentation slides, the timeline and the communications plan for the February 6, 2019 meeting. She wrote:

Please see attached what I believe to be the final presentation for the in-camera discussion tomorrow for your final eyes. This still needs final review from David, I believe? Once you give me the green light I will send to Stephanie (she needs before bed tonight)- she’s up to date on our current status.

Also attaching other items that will be distributed to Council:

1. Preliminary timeline
2. Summary of Comms Plan

I will take care of printing all of these documents (30 copies) for the morning.

Please let me know if there are any concerns with anything in here⁹⁷²

⁹⁷¹ [CIM0017145](#) attaching [CIM0017145.0001](#)

⁹⁷² [HAM0062213_0001](#) attaching [HAM0062214_0001](#), [HAM0062215_0001](#) and [HAM0062216_0001](#)

891. Ms. Auty replied later that evening, at 6:45 p.m. writing:

David's only comment was similar to mine, that is it would be a good idea to qualify the tradewind report with CIMA's findings more explicitly. Not sure if you can change it, or want Dan to speak to it, but those are our comments.⁹⁷³

892. Ms. Graham replied one hour later, writing "Thanks! Nicole, FYI we have moved the slide on the tradewind summary to directly before CIMA's findings to address this. Going to Clerks now, thank you!"⁹⁷⁴

893. That evening at 7:49 p.m., Ms. Graham emailed Ms. Paparella, attaching the finalized materials for the GIC meeting the following day. She wrote:

Thanks so much for your patience on this, Stephanie.

Attaching the final version of the presentation, timeline and comms plan summary for tomorrow. I will print 30 copies of each one first thing in the morning and label with names.

Thank you again for your kind guidance and support on this today – it's much appreciated.

See you in the morning! Safe travels!⁹⁷⁵

(e) *Circulation and Discussion of Historical Emails Relating to 2015 RHVP CIMA Report*

894. On February 5, 2019, Mr. White forwarded emails sent in 2015 regarding the 2015 RHVP CIMA Report, including Mr. Moore's comments from September 23, 2015. He wrote to Mr. Soldo "[t]hought you might find this interesting its from September 2015."⁹⁷⁶

⁹⁷³ [HAM0062217_0001](#)

⁹⁷⁴ [HAM0062217_0001](#)

⁹⁷⁵ [HAM0054396_0001](#) attaching [HAM0054397_0001](#), [HAM0054398_0001](#) and [HAM0054399_0001](#)

⁹⁷⁶ [HAM0036028_0001](#); [HAM0036013_0001](#); and [HAM0036014_0001](#)

895. Mr. Soldo forwarded the emails to Mr. McGuire and Mr. McKinnon (copying Ms. Auty) writing: "I will say it again, has anyone checked his emails for this sort of material?"⁹⁷⁷

(f) Update Regarding FOI 18-189

896. On February 5, 2019, Ms. Rashford emailed Ms. Auty, copying Ms. Watson, in response to an email she received from Ms. Auty the day prior:

[Ms. Auty, February 4, 2019, at 10:40 p.m.]: Are you free to speak about the RHVE file tomorrow (Tuesday) I have a few questions I need your assistance with.

[Ms. Rashford, February 5, 2019, 9:32 a.m.]: Good morning Nicole. Thank you for your email message...hat time are you available today?

[Ms. Auty, 9:33 a.m.]: My day is largely open, do you have 30 minutes and I can come over and speak with you both?

[Ms. Rashford, 9:45 a.m.]: Sounds good. How is 10:30 am in Room 140 (Finance division meeting room)?

[Ms. Auty, 9:45 a.m.]: Thanks I'll see you then.⁹⁷⁸

897. Ms. O'Reilly was contacted on February 5, 2019, and was advised by Ms. Rashford that an interim decision regarding FOI 18-189 was to be issued to her shortly:

Our office recently received a record package from the City's Public Works department and it is my understanding that Anne Watson, the Access and Privacy Officer who has carriage of this file, is reviewing the approximately 600+ records and will be preparing an interim decision, i.e. a fee estimate, to be issued to you shortly.

Thank you for your patience and please contact Anne if you have any further questions.⁹⁷⁹

⁹⁷⁷ [HAM0054386_0001](#)

⁹⁷⁸ [HAM0062571_0001](#)

⁹⁷⁹ [HAM0028422_0001](#)

6. February 6, 2019

(a) *Mr. Soldo Provides Audit Services With Publications Authored by Mr. Moore*

898. On February 6, 2019, Mr. Soldo emailed Mr. Brown, attaching three emails with links to various publications authored by Mr. Moore, writing “Not sure if you have seen these.”⁹⁸⁰ Mr. Soldo also forwarded Mr. Brown the emails from 2015 with Mr. Moore’s comments on the 2015 CIMA Report sent to him by Mr. White.⁹⁸¹

(b) *Discussions with Councillor Danko Prior to GIC Meeting*

899. On February 6, 2019, Councillor Danko emailed Mr. McKinnon regarding illumination ahead of the GIC meeting:

\$12-18M is a hell of a lot of money for lighting that only has the potential to influence a couple dozen nighttime collisions in a year.

The study that found lighting was warranted - was there a cost benefit analysis or simply technical warrants?

On a collision per kilometer basis is the RHVP/LINC significantly different than any other road un-lit rural road at night (looking at the collision data I'd say no - but hard to tell)?

Is it premature to talk about lighting when we're repaving and implementing full safety upgrades and a speed limit change this year?

Is lighting the primary driver of the proposed EA & engineering contract - or is it widening?⁹⁸²

900. Mr. McKinnon replied, writing “Hi Councillor I discussed this with Gord and he will do his best to assist with this request.”⁹⁸³

⁹⁸⁰ [HAM0048725_0001](#) attaching [HAM0048726_0001](#), [HAM0048727_0001](#), [HAM0048728_0001](#)

⁹⁸¹ [HAM0036033_0001](#) attaching [HAM0036036_0001](#) and [HAM0036034_0001](#) attaching [HAM0036035_0001](#)

⁹⁸² [HAM0028448_0001](#)

⁹⁸³ [HAM0028448_0001](#)

(c) City Staff Collects Social Media Coverage

901. On February 6, 2019, ahead of the in-camera session, Communications staff collected and forwarded relevant social media posts. One post, authored by Matthew Van Dongen (Reporter, Hamilton Spectator) stated:

So, #HamOnt is delaying public debate on collision report, Red Hill safety improvements until after a closed-door discussion of unspecified legal threats related to roads. HmMMMM.⁹⁸⁴

⁹⁸⁴ [HAM0028449_0001](#)

M. Appendix A: Individuals Referenced in Overview Document #9

Last Name	First Name	Organization	Position(s)⁹⁸⁵
Aitchison	Rodney	City of Hamilton	Project Manager , Traffic Services, Traffic Operations & Engineering, Roads & Traffic, Public Works (until February 2019) Project Manager , Traffic Engineering, Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Albers	Kathy	City of Hamilton	Administrative Assistant to the Director of Environmental Services , Environmental Services, Public Works
Andoga	Richard	City of Hamilton	Senior Project Manager , Infrastructure Programming, Asset Management, Engineering Services, Public Works
Aquila	Diana	City of Hamilton	Administrative Secretary to the Associate General Manager , Public Works (until January 2019) Administrative Secretary , Traffic Operations & Engineering, Roads & Traffic, Public Works (January 2019 until February 2019) Administrative Secretary , Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Auty	Nicole	City of Hamilton	City Solicitor , Legal & Risk Management Services, Corporate Services
Barber	Darlene	City of Hamilton	Executive Assistant to the City Manager , City Manager's Office
Bartley	Daniell	City of Hamilton	Solicitor , Legal Services, Legal & Risk Management Services, Corporate Services
Becke	Michael	City of Hamilton	Senior Project Manager , Design, Engineering Services, Public Works
Bell	Heather	MTO	Senior Bituminous Engineer , Bituminous Section, Materials Engineering & Research Office, Highway Standards Branch, Provincial Highways Management Division

⁹⁸⁵ Only positions held during the time covered by Overview Document #9 are included in Appendix A. Commission Counsel has created a separate document that includes the complete list of all positions held by all individuals referenced in Overview Documents #2 - #10, which is included in Overview Document #1 at Appendix A.

Bentley	Kevin	MTO	Executive Director & Chief Engineer , Highway Standards Branch, Provincial Highways Management Division
Bentley	Carla	City of Hamilton	No information available
Boghosian	David	Boghosian & Allen LLP	Managing Partner
Bojeski	Cathy	City of Hamilton	Administrative Secretary , Design, Engineering Services, Public Works
Bono	Ashley	City of Hamilton	Manager , Finance & Administration; Financial Planning, Administration & Policy, Corporate Services
Bottesini	Giovani	CIMA	Project Engineer, Transportation
Boylan	Shelley	City of Hamilton	Coordinator , Transportation Operations & Maintenance, Public Works
Bracho	Juan	Golder	In-House Legal Counsel
Brouillette	Patrice	CIMA	Project Manager, Traffic Engineering, Transportation
Brown	Charles	City of Hamilton	Director and Auditor General , Audit Services, Office of the City Auditor, City Manager's Office
Butrym	Bob	City of Hamilton	Construction Coordination , Traffic Operations, Traffic Operations & Engineering, Roads & Traffic, Public Works, Hamilton (until February 2019) Construction Coordination , Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Cameron	Diana	City of Hamilton	Administrative Assistant to the Director of Engineering , Engineering Services, Public Works
Chamberlain	Lisa	City of Hamilton	Legislative Coordinator , Office of the City Clerk, City Manager's Office
Clark	Brad	City of Hamilton	Councillor, Ward 9
Collins	Chad	City of Hamilton	Councillor, Ward 5
Cooper	Stephen	City of Hamilton	Project Manager , Traffic Engineering, Traffic Operations & Engineering, Roads & Traffic, Public Works (until February 2019) Project Manager , Traffic Engineering, Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Crawford	Colleen	Shillingtons LLP	Senior Law Clerk
Crone	Greg	City of Hamilton	Strategic Initiatives and Policy Advisor , Mayor's Office

Cymbaly	Lauren	CIMA	Environmental Professional
Dagenais	Chantal	CIMA	Partner, Project Director, Traffic Engineering
Danko	John-Paul	City of Hamilton	Councillor, Ward 8
Davenport	Alicia	City of Hamilton	Legislative Coordinator , Office of the City Clerk, City Manager's Office
Decleir	Robert	City of Hamilton	Project Manager , Traffic Signals & Systems, Traffic Operations & Engineering, Roads & Traffic, Public Works (until February 2019) Senior Project Manager , Traffic Engineering, Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Decoste	Kevin	CIMA	Project Manager, Transportation, Traffic Engineering
Del Duca	Stephen	Province of Ontario	Minister of Transportation, Ministry of Transportation of Ontario
Della Pietra	John	City of Hamilton	Supervisor , Signs and Markings, Transportation Operations, Transportation Operations & Maintenance, Public Works
Delry	Pam	City of Hamilton	Legal Assistant , Legal Services, Legal & Risk Management Services, Corporate Services
DiGiantomasso	Christine	City of Hamilton	Acting Assistant to Councillor Tom Jackson , Ward 6
Dmytryshyn	Dan	CIMA	Project Manager, Transportation
Dortmans	Jeff	Golder	In-House Legal Counsel
Dziedziejko	Thomas (Tom)	Aecon Materials Engineering Corp.	Director, Quality, Infrastructure, Aecon Group Inc., AME General Manager, AME (in 2014)
Edwards	Debbie	City of Hamilton	Deputy City Solicitor ; Commercial, Development and Policy (CDP); Legal & Risk Management Services, Corporate Services
Eisbrenner	Rebeka	City of Hamilton	Administrative Assistant to the Director of Roads & Traffic , Roads & Traffic, Public Works (until February 2019) Administrative Assistant to the Director of Transportation Operations & Maintenance , Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Eisenberger	Fred	City of Hamilton	Mayor of Hamilton
Ellis	Ryan	National Walkway Safety Auditing	Area Manager
Farr	Jason	City of Hamilton	Councillor, Ward 2

Fehir	Dena	Daily Commercial News	News Correspondent
Ferguson	David	City of Hamilton	Superintendent , Traffic Engineering, Traffic Operations & Engineering, Roads & Traffic, Public Works (until February 2019) Superintendent , Traffic Safety, Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Ferguson	Lloyd	City of Hamilton	Councillor, Ward 12
Field	Mike	City of Hamilton	Senior Project Manager , Lighting & Electrical, Geomatics & Corridor Management, Engineering Services, Public Works (until February 2019) Senior Project Manager , Street Lighting, Transportation Operations, Transportation Operations & Maintenance Division (February 2019 onwards)
Fontana	Lora	City of Hamilton	Executive Director , Human Resources and Organizational Development, Human Resources
Galloway	Rob	City of Hamilton	Traffic Technologist (Traffic Signals) , Traffic Operations & Engineering, Roads & Traffic, Public Works
Goral	Kim	City of Hamilton	Legal Assistant , Legal Services, Legal & Risk Management Services, Corporate Services
Gordon	Karen	Gordon Strategy	Principal
Graham	Jasmine	City of Hamilton	Communications Officer , Strategic Partnerships & Communications, City Manager's Office
Grewal	Manny	CIMA	Project Engineer, Traffic Engineering
Groleau	Amy	City of Hamilton	Construction Technician , Construction, Engineering Services, Public Works
Guest	Anita	City of Hamilton	Legal Assistant , Legal Services, Legal & Risk Management Services, Corporate Services
Hadayeghi	Alireza	CIMA	Partner, Vice-President, Transportation
Haslett	Jennifer	CIMA	Senior Project Manager, Environment, Infrastructure
Hawash	Khaled	CIMA	Traffic Engineering, Transportation
Henderson	Dr. Vimy	Golder	Pavement and Materials Engineer
Hertel	John	City of Hamilton	Director , Strategic Partnerships & Communications, City Manager's Office
Hobson	Ryan	Golder	Lead Laboratory Technician - Asphalt, Whitby Office

Hornby	Allison	City of Hamilton	Administrative Assistant to the Director and Auditor General , Audit Services, Office of the City Auditor, City Manager's Office
Hughes	Brian	City of Hamilton	Manager , Capital Rehabilitation & Technical Operations, Roads & Traffic, Public Works
Iacoe	Tina	City of Hamilton	Manager , Procurement, Financial Services, Corporate Services
Izadpanah	Pedram	TES	Partner, Vice President
Jacob	Susan	City of Hamilton	Manager , Design, Engineering Services, Public Works
Janicas	Paul	Dufferin	Plant Superintendent
Jazvac	Alan	City of Hamilton	Project Manager (Surface Infrastructure) , Infrastructure Programming, Asset Management, Engineering Services, Public Works
Jewison	Amelia	Golder	Geotechnical Analyst
Johnson	Brenda	City of Hamilton	Councillor, Ward 11
Lafferty	Cheryl	City of Hamilton	Administrative Coordinator , Human Resources
Lalach	Patrick	CIMA	Partner, Senior Director, Transportation, Western Canada
Lamont	David	City of Hamilton	Acting Manager , Geomatics & Corridor Management & Asset Management, Engineering Services, Public Works (as of July 2018)
Lane	Becca	MTO	Manager , Materials Engineering & Research Office, Highway Standards Branch, Provincial Highways Management Division
Lauricella	Charlie	City of Hamilton	Senior Project Manager , Technical Services, Geomatics Office, Geomatics & Corridor Management, Engineering Services, Public Works
Lee	Stephen	MTO	Head , Pavements & Foundations Section, Materials Engineering & Research Office, Highway Standards Branch, Provincial Highways Management Division
Leishman	Patricia	City of Hamilton	Manager , Strategy, Continuous Improvement & Quality, Public Works
Lezau	Dana	City of Hamilton	Solicitor , Legal Services, Legal & Risk Management Services, Corporate Services
Linardi	Tony	Golder	Principal, General Counsel (Canada)
MacNeil	Byrdena	City of Hamilton	Solicitor , Legal Services, Legal & Risk Management Services, Corporate Services
MacNeil	Peter	City of Hamilton	Chief Technology Architect , Information Technology, Corporate Services
Maher	Dr. Michael	Golder	Principal, Pavements and Materials Engineering
Malone	Brian	CIMA	Partner, Vice-President, Transportation

Marques	Robert	City of Hamilton	Project Manager , Capital Rehabilitation & Technical Operations, Roads & Traffic, Public Works
Mason	Deanna	Gordon Strategy	Communications Associate
Matthews-Malone	Betty	City of Hamilton	Director , Roads & Traffic, Public Works
McArthur	Justen	CIMA	Associate Partner, Senior Project Manager
McCafferty	Chris	City of Hamilton	Senior Project Manager , Engineering & Design Services (LRT), Design, Engineering Services, Public Works
McGuire	Gord	City of Hamilton	Manager , Geomatics & Corridor Management, Engineering Services, Public Works (until June 2018) Director , Engineering Services, Public Works (June 2018 onwards)
McKinnon	Dan	City of Hamilton	General Manager , Public Works
McKinnon (also Taylor-McKinnon)	Joanne	Member of the Public	
McLennan	John	City of Hamilton	Manager , Risk Management, Legal & Risk Management Services, Corporate Services
McNab	Pat	City of Hamilton	Co-Ordinator , Infrastructure Programming, Asset Management, Engineering Services, Public Works
Melatti	Rosanna	City of Hamilton	Interim Executive Assistant to the City Manager , City Manager's Office
Melendez	Nelson	City of Hamilton	Project Manager , Advanced Traffic Management System, Traffic Operations & Engineering, Roads & Traffic, Public Works (until February 2019) Project Manager , Advanced Traffic Management System, Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Merulla	Sam	City of Hamilton	Councillor, Ward 4
Minard	Brigitte	City of Hamilton	Manager , Performance & Internal Control & Deputy City Auditor , Audit Services, Office of the City Auditor, City Manager's Office
Molloy	Steve	City of Hamilton	Manager , Transportation Planning Services, Traffic Operations & Engineering, Roads & Traffic, Public Works

Moore	Gary	City of Hamilton	Director , Engineering Services, Public Works (until May 31, 2018) Senior Technical Lead , City of Hamilton LRT Project (June 2018 onwards)
Morello	Raffaella	City of Hamilton	Senior Project Manager , General Manager's Office, Public Works
Muise	Gord	City of Hamilton	Director , Employee and Labour Relations, Human Resources
Murray	Michael	CIMA	Associate Partner, Project Manager
Nann	Nrinder	City of Hamilton	Councillor, Ward 3
Norman	Gavin	City of Hamilton	Manager , Waterfront Development, Engineering Services, Public Works
O'Reilly	Nicole	Hamilton Spectator	Reporter
Oak	David	City of Hamilton	Business Administrator , Roads & Traffic, Public Works (until February 2019) Business Administrator , Business Initiatives, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Oddi	Marco	City of Hamilton	Manager , Construction, Engineering Services, Public Works
Olszewski	Chris	City of Hamilton	Project Manager , Capital Projects, Traffic Operations & Engineering, Roads & Traffic, Public Works (until February 2019) Project Manager , Capital Projects, Traffic Engineering, Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Omazic	Drina	City of Hamilton	Chief of Staff to Mayor Eisenberger , Mayor's Office
Omrani	Reza	CIMA	Associate Partner, Project Manager, Transportation
Orgera	Maria	City of Hamilton	Law Clerk , Legal Services, Legal & Risk Management Services, Corporate Services
Paparella	Stephanie	City of Hamilton	Legislative Coordinator , Office of the City Clerk, Corporate Services
Parma	Brian	City of Hamilton	Specialist , Electrical Street Lighting, Lighting & Electrical, Geomatics & Corridor Management, Engineering Services, Public Works

Paul	Bob	City of Hamilton	Manager , Roads & Maintenance, Roads & Traffic, Public Works (until February 2019) Manager , Roadway Maintenance, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Pauls	Esther	City of Hamilton	Councillor, Ward 7
Pearson	Maria	City of Hamilton	Councillor, Ward 10
Pellegrini	Domenic	City of Hamilton	Senior Internal Auditor , Audit Services, Office of the City Auditor, City Manager's Office
Perusin	Dennis	City of Hamilton	Senior Project Manager , Construction, Engineering Services, Public Works
Petzold	Geoff	CIMA	Project Manager, Transportation
Philip	Chris	CIMA	Associate Partner, Director, Transportation, Traffic Engineering
Piedimonte	Diane	City of Hamilton	Assistant to Councillor Sam Merulla , Ward 4
Pilon	Janet	City of Hamilton	Manager Legislative Services/Deputy Clerk , Office of the City Clerk, Corporate Services
Pirsias	Chris	City of Hamilton	Senior Financial Analyst , Asset Management, Engineering Services, Public Works
Potocic	Wayne	Global By Product Solutions	President
Purins	Bryan	City of Hamilton	Traffic Safety Technologist , Traffic Roadway Safety, Traffic Operations, Traffic Operations & Engineering, Roads & Traffic, Public Works (until February 2019) Project Manager , Traffic Safety, Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Pyziak	Joanna	City of Hamilton	Financial Assistant , Engineering Services, Public Works
Rashford	Debbie-Ann	City of Hamilton	Access & Privacy Officer , Office of the City Clerk, Corporate Services
Recine	Jen	City of Hamilton	Manager , Communications, Strategic Partnerships & Communications, City Manager's Office
Renaud	Tyler	City of Hamilton	Project Manager , Construction Quality Assurance, Construction, Engineering Services, Public Works
Rizvi	Rabiah	Golder	Pavement and Materials Engineer
Roberts	Scott	CIMA	Partner, Director, Transportation
Rose	Jeremy	Golder	Asphalt Laboratory Supervisor/Manager, Whitby Office

Sabo	Ron	City of Hamilton	Deputy City Solicitor , Dispute Resolution, Legal & Risk Management Services, Corporate Services
Salek	Soroush	CIMA	Associate Partner, Project Manager, Traffic Engineering, Transportation
Sharma	Dipankar	City of Hamilton	Senior Project Manager , Continuous Improvement, Engineering Services, Public Works
Shebib	Rich	City of Hamilton	Project Manager , Corridor Management, Geomatics & Corridor Management, Engineering Services, Public Works
Shillington	Terry	Shillingtons LLP	Partner
Sidawi	Sam	City of Hamilton	Manager , Asset Management, Engineering Services, Public Works
Skinner	Dr. Graeme	Golder	Principal, Senior Geotechnical Engineer, Ground Engineer West Group Leader
Skrypniak	Lorissa	City of Hamilton	Senior Project Manager , Neighbourhood Traffic Management and EA's, Traffic Operations & Engineering, Roads & Traffic, Public Works
Soldo	Edward	City of Hamilton	Director , Roads & Traffic, Public Works (until February 2019) Director , Transportation, Operations & Maintenance (February 2019 onwards)
Starr	Joanne	City of Hamilton	Project Manager , Traffic Safety, Traffic Operations & Engineering, Roads & Traffic, Public Works (until February 2019) Project Manager , Traffic Safety, Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Swaby	Diana	City of Hamilton	Supervisor , Claims Administration, Risk Management, Legal & Risk Management Services, Corporate Services
Switenky	Ed	City of Hamilton	Superintendent , Traffic Operations & Engineering, Roads & Traffic, Public Works (until February 2019) Superintendent , Traffic Operations, Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Tavares	Joe	Golder	Principal, Cambridge Office
Uzarowski	Dr. Ludomir	Golder	Principal, Pavement and Materials Engineering
Vala	Sarath	City of Hamilton	Project Manager , Design, Engineering Services, Public Works

Van Dongen	Matthew	Hamilton Spectator	Reporter
VanderBeek	Arelene	City of Hamilton	Councillor, Ward 13
Vasquez	Patricia	City of Hamilton	Senior Procurement Specialist , Financial Services, Corporate Services
Vézina	Claude	CIMA	Directeur de projet, Partner
Waite	Erika	City of Hamilton	Senior Project Manager , Infrastructure Programming, Asset Management, Engineering Services, Public Works
Watson	Anne	City of Hamilton	Access & Privacy Officer , Office of the City Clerk, Corporate Services
White	Martin	City of Hamilton	Manager , Traffic Operations & Engineering, Roads & Traffic, Public Works (until February 2019) Manager , Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Whitehead	Terry	City of Hamilton	Councillor, Ward 14
Wilson	Maureen	City of Hamilton	Councillor, Ward 1
Wunderlich	Nancy	City of Hamilton	Administrative Coordinator to the General Manager , Public Works
Wyskiel	Kim	City of Hamilton	Superintendent , Traffic Services, Traffic Operations & Engineering, Roads & Traffic, Public Works (until February 2019) Superintendent , Business Services, Transportation Operations, Transportation Operations & Maintenance, Public Works (February 2019 onwards)
Yuzdepski	Kelly	CIMA	Partner, Vice President, Transportation - Western Canada
Zegarac	Mike	City of Hamilton	Interim City Manager , City Manager's Office