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Our File No: 4574

January 31, 2018

SENT BY EMAIL TO: Diana.Swaby@Hamilton.ca

City of Hamilton 21 King Street West 12th Floor Hamilton ON L8P 4W7

Attention: Ms. Diana Swaby, Supervisor

Claims Administration

Dear Ms. Swaby:

Re: HAMILTON et al. ats MELO et al.

HAMILTON et al. ats LEE
HAMILTON et al. ats BARLOW

Solicitor-Client Privileged

Solicitor-Client Privileged

CITY OF HAMILTON RECORDS

We have received voluminous productions from the City in response to our requests for relevant documentation. A summary of the key productions is provided below.

It is difficult to separate the pre-accident and post-accident complaints and traffic tasks pertaining to the Linc, as many of the issues were studies over a lengthy period which overlaps with the collision. Traffic engineering reports received post-accident addressed several traffic issues that had arisen in the years leading up to the 2014 collision. To further complicate matters, certain engineering studies commissioned prior to the accident were never submitted to council, due to deficiencies with the calculations.

Overall, the results of the post-accident traffic engineering reports do not raise concerns regarding the design and operation of the Linc. Interoffice e-mails and buried reports, however, do raise issues that will have to be addressed in order to successfully defend these actions.

We have attempted to present the material in chronological order below.

Pre-Accident Concerns & Complaints re: Linc Median & Collisions

Our office has now been provided with City of Hamilton e-mails dating back to 2010, in which concerns about the grass median and collision rate on the Linc were raised. On December 8, 2010, Hamilton resident and Niagara Police Officer Rick Lukos wrote to the traffic department with the following complaint:

"I was driving the LINC today and there was yet another serious collision. There seems to be more and more collisions on the LINC where cars cross over the grass median and striking cars head on. Should the city be looking into erecting some sort of fence or the cement barriers for the grass median. Head on collisions cause death and serious injuries. Will someone at City Hall consider the fence/barrier options?"

The complaint was forwarded to Gary Kirchknopf and Chris Van Berkel. City staff was asked to look into whether collisions crossing the median on the Linc had been identified as an issue through the collision counter measures program or discussed at one of their meetings. Staff was

also asked to confirm whether improvements or changes to the existing medians on the Linc were planned in association with resurfacing that was planned for 2011.

A collision summary for the period between 1997 and 2010 was generated, which revealed many collisions involving median crossovers along the Linc.

On January 4, 2011, Hart Solomon wrote an e-mail to Michael Becke of the City of Hamilton, confirming that a consultant would be hired to review the data and advise as to whether the City should be installing some sort of system in the median. Mr. Solomon indicated that 2 fatal collisions and a number of collisions causing injury had been reported. He noted that he was aware of cable barrier systems, but that the City did not have the in-house expertise to assess the risks and benefits. If a barrier system was recommended, Mr. Solomon indicated that funding would be available from a source separate from the resurfacing budget.

Michael Becke responded the same day, advising that the resurfacing contract was to be tendered in late January. With regard to a barrier system, Mr. Becke confirmed that the cable barrier system appeared to be used in Alberta and BC. It was acknowledged that factors such as installation, access for EMS and the different products would need to be reviewed prior to implementing it into the tender contract. Ultimately, it was decided that Hart Solomon would keep the barrier issue separate, so as not to hold up the resurfacing project.

By e-mail dated January 5, 2011, Chris McCafferty wrote to Hart Solomon, advising that he should discuss the median barrier with Gary Kirchknopf, as the "whole reason we went the existing cross-section on the LINC was to eliminate the need for a median system". Mr. McCafferty suggested that if it was decided to proceed with some king of system, then they should just use approved OPS guardrails.

The e-mail chain terminates at that point, and it is unclear what, if any decisions were made with regard to the median between 2011 and 2013. It is clear that City staff were collecting research on High Tension Cable Systems, but we have not been provided with any documentation aside from articles collected by staff.

Post-Accident Investigation

It appears that safety reviews of the LINC were again prompted as a result of a double fatality which occurred in October of 2014, after a vehicle crossed the median into oncoming traffic (the double fatality occurred a few months after the collision at issue in these proceedings). An e-mail from Hamilton employee David Ferguson dated November 20, 2014, confirmed that several Councillors contacted senior management following the double fatality and requested a review of the LINC. Mr. Ferguson asked his staff to review the collision statistics and to provide recommendations as to what should be done. In his e-mail, Mr. Ferguson indicated that he was "leaning strongly towards the installation of High Tension Cables which have been used with considerable success in Alberta and are slowly starting to be used in Ontario through the MTO".

E-mails with Mark Ayton of the MTO confirmed that the City of Hamilton was provided with information regarding High Tension Cable systems installed by the MTO, as well as supplier information.

By late November of 2016, City of Hamilton staff indicated that the collision history raised enough of a concern that "a more in depth" safety review was warranted. It was recommended that a third-party expert should be retained to complete the work.

In December of 2014, Hamilton Public Works released a "Cross Median Collision Review" completed by the Public Works Division. The study examined cross median crashes between October 1, 1997 to October 1, 2014 (17 years). Based on collision statistics, the City of Hamilton concluded the following:

- Approximately 131 cross median collisions occurred over the course of 17 years (out of 624 collisions);
- Cross median collisions accounted for 1 out of every 5 collisions;
- April had the highest percentage of cross median collisions;
- The frequency of cross median collisions increased as traffic volumes increased during peak hours;
- 60% of cross median collisions resulted in injuries, including 3 fatal collisions;
- 70% of cross median collisions occurred during dry pavement conditions;
- The highest number of cross median collisions occurred between Golf Links Rd. and Garth Street (25%);
- 2/3 of all crossover type collisions occurred between Golf Links Road and Upper Wentworth Street, including 3 fatal;

As a result of the study, it was recommended that the City staff investigate the feasibility and costs associated with installation and maintenance of high tension cables along the centre median from Highway 403 to Dartnall Road.

In February of 2015, a formal Safety Review of the Linc was requested by City Staff. A draft timetable indicated that progress meetings were to be held in the spring of 2015, with a final report anticipated by June of 2015. At a May 21st, 2015 Public Works Committee meeting, staff were directed to review the LINC and RHVP for additional safety measures to help prevent further fatalities and serious injuries. On the same date, Mr. Ferguson, the Superintendent of Traffic Engineering, retained CIMA to conduct a full review of the LINC and RHVP and to identify opportunities to enhance the safety of both roadways. We previously reported on the CIMA study and conclusions.

Following the Release of the CIMA report, Minutes of a Public Works Committee Recommendation Meeting dated November 2, 2015 indicated that Engineering Services was to be directed to investigate the High-Tension Steel Cable Median Barrier installation on the LINC and RHVP and that installation was to be deferred until the City Wide Master Transportation Plan was finalized in 2016. It was also recommended that Hamilton City Council provide a funding source for the installation of the median barriers and shoulder rumble strips on the LINC and RHVP.

According to the Public Works Committee Recommendations minutes, the LINC averaged approximately 5 median collisions per year, between 1997 and 2007. Between 2008 and 2014, the number of median related collisions rose to 9.4 per year. In order to address the collisions, a number of countermeasures were recommended, in the amount of \$6,006,090. The expenses primarily related to the installation of a high-tension steel cable barrier system, in the amount of \$5,569,000.

Friction Testing Survey Summary Report

We have been provided with a copy of a Friction Testing Survey Summary Report for the Linc and Red Hill Valley Parkway, dated November 20th, 2013, prepared by C. Leonard Taylor of Tradewind Scientific. Gary Moore of the City of Hamilton has advised that the City commissioned the report as it was considering repaving options. Testing confirmed that the friction values for the Linc were superior to the RHVP.

The 18-page report details friction measurements undertaken on designated sections of the Linc and RHVP. The friction measurements were made using a GripTester instrument manufactured in Scotland, used by road authorities in the UK, Australia and New Zealand. According to the author of the study, there were no directly applicable reference standards or guidelines to compare date in Canada and the US. The approximate locations of the surveyed road sections were near the periphery of the City of Hamilton, adjacent to the western end of Lake Ontario.

In conclusion, all areas of the Linc measured had friction values comparable to or above the relevant UK Investigatory level 2. Consistent friction values across different lane positions indicated a generally uniform pavement surface texture and composition, with limited variation due to vehicular wear.

We are advised that the friction report did not go to counsel.

Speed & Traffic Counts

We have been provided with 24-hour traffic counts for the northbound and southbound lanes of the Linc taken at Upper Wellington every 2 days between December 9, 2013 and January 24, 2014. Peak traffic volumes generally occurred between 8 a.m. and 9 a.m. and 4 p.m. to 6 p.m. Northbound lanes reached volumes of just over 2000 vehicles per hour (in lane 2) and southbound lanes had traffic volumes of over 1890 per hour (in lane 4). During peak volumes, the total traffic count in all lanes was as high was 7450 vehicles.

Council Minutes

Minutes of a general issues committee held on January 29, 2014, recommend that a Capital Project Traffic Management System for the Linc in the amount of \$75,000 be deferred to the 2015 Capital Budget approval process. According to the minutes, the capital project originated several years ago at the request of Councillor Whitehead for the purpose of controlling the vehicle volumes exiting the Linc into Ward 8. The project was divided into 2 stages: the first being the feasibility/design stage for \$75,000; and the second being a construction phase (2017 to 2022) for \$2.75 million. In 2014, the requested \$75,000 was to be used to initiate the feasibility study. It was noted that there was insufficient "project management" staffing available to undertake the feasibility study in 2014. Accordingly, it was recommended that the project be deferred until 2015.

The same report also noted that a video detection and intelligent transportation (\$600,000) and traffic signal communication system (\$1,000,000) were to be recommended to be approved. It was acknowledged that the signal network was unsupervised, and no traffic flow performance data was being collected to help improve the system's operation. In addition, the report confirmed that the City's traffic signal communication system assets were 45 years old and starting to show systemic failure. It was predicted that there would be a traffic signal system network system failure in 5 to 8 years if the new systems were not implemented.

The minutes indicated that the implementation of the 2 projects would allow the City to remain in legal compliance with the Municipal Act and the Highway Traffic Act.

The above noted recommendations were approved in a General Issues Committee Budget Report, approved by Council on April 9, 2014.

Council Minutes dated July 11, 2014, refer to an "urgent meeting" to be scheduled with the General Manager of Planning, the City Manager, department heads, legal staff, traffic staff, growth management staff, public works staff, emergency management services and Ward 6, 11, and 9 Councillors to address traffic issues compounded by pending developments within the boundaries of Dartnall to Second Road West, Rymal to the RHVP/LINC.

As stated above, an independent consultant was retained in 2015 to address safety issues involving the LINC and the RHVP.

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Yours very truly,

SHILLINGTONS LLP

DST/jv

Encls.

Ian McLellan, Supervisor, Audit and Quality Control, ClaimsPro

(Email: ian.mclellan@scm.ca)

Colleen Crawford

Subject:The LINC - collision statsStart Date:December 09, 2010Due Date:September 23, 2011

Status: Completed Percent Complete: 100%

Date Completed: April 23, 2012

Total Work: 0 hours **Actual Work:** 0 hours

Owner: Former CTS Staff members

----Original Message----

From: McCafferty, Chris

Sent: Wednesday, January 05, 2011 9:01 AM

To: Solomon, Hart

Cc: Jacob, Susan; Kirchknopf, Gary; van Berkel, Chris; Becke, Michael; Andoga, Richard; Moore, Gary

Subject: LINC - Median Barrier

Hart, Mike is correct that our timelines do not match, especially if your funding is subject to approval. You should probably discuss the median barrier with Gary as I think the whole reason we went with the existing cross-section on the LINC was to eliminate the need for a median system. But if we do proceed at a later date with any type of implementation then we should just use approved OPS guardrails. The installations at this point seem to be only by DOT's or provincial governments and sole sourcing always comes with a heavy price tag. Thanks

----Original Message-----

From: Solomon, Hart

Sent: January 4, 2011 5:52 PM

To: Becke, Michael

Cc: Jacob, Susan; Kirchknopf, Gary; van Berkel, Chris; McCafferty, Chris

Subject: RE: Linc Construction

Mike, Okay - I'll keep my part separate, in order not to hold you up. Thanks for the info.

Hart Solomon, M. Eng., P. Eng.

-----Original Message----From: Becke, Michael
Sent: 4-Jan-11 5:07 PM
To: Solomon, Hart

Cc: Jacob, Susan; Kirchknopf, Gary; van Berkel, Chris; McCafferty, Chris

Subject: RE: Linc Construction

Hi Hart,

I am hoping to get this contract out to tender late January with the hope that this will help us with good pricing and with securing some of the better highway contractors for the summer.

I did some quick research into the cable barrier... Alberta and BC have implemented it in a few locations. A cost example for a 10.75 KM stretch in Alberta last year was \$950,000.00 capital cost (see Pg 43 of the PDF at this web site: http://www.c-tep.com/pdf/Flexible%20Barriers%20C%20-TEP%20Lunch.pdf).

Gibraltar (http://www.gibraltartx.com/cablebarriers.htm) based out of Texas was the supplier. There is no Canadian contact info on their website. I have not been able to find any information on a local supplier or installer.

From what I can see, the cable barrier system works well and installation is fairly simple along with the maintenance (repairs on a section can be completed in under an hour). I think that this is something that could be installed outside of the resurfacing contract with minimal disruption to the public. There are many factors (from what I can see) as to installation, location of the barrier, access for EMS and the different types out there that need to be reviewed prior to implementing it into this contract.

There is an excellent paper written by the Illinois DOT about this determination which can be found here: http://www.dot.state.mn.us/trafficeng/reports/scanningtour/Scanning%20Tour%20Report.pdf

Let me know if you have any questions.

Thanks, Mike.

Chris: This FHWA info on may be of some (or no) usage in the issue of the Linc expressway median safety issue.

Bob B.

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp rrd 349.pdf

----Original Message----

From: Solomon, Hart

Sent: Tuesday, January 04, 2011 2:14 PM

To: Becke, Michael

Cc: Jacob, Susan; Kirchknopf, Gary; van Berkel, Chris

Subject: Linc Construction

Mike,

In conjunction with your project, we have been considering the ongoing occurrence of crossover collisions on the Linc. We have had two fatals and a number of injury causing collisions over the history of the facility.

I am going to hire a consultant to review the data and advise as to whether we should be installing some sort of system in the median. There is apparently an excellent product which uses high tension cable: http://www.gsihighway.com/nucor.htm

which may be applicable.

I need someone to assess the benefits, risks, etc. This is not something we have in-house expertise in. As soon as the 2011-12 roster is approved, I'll get someone on it and get an answer back as soon as possible. How much time to I have ?

Hopefully, if a barrier system is the answer, we can get it into the tender. I can pay for it from a source separate from your capital budget for resurfacing, subject to approval, perhaps Council approval.

Thanks, Hart Solomon, M. Eng., P. Eng.

From: Juchniewicz, Linda

Sent: Monday, December 20, 2010 10:05 AM

To: van Berkel, Chris

Subject: RE: The LINC - collision stats

Done.

×

lincxoversnic.xls

----Original Message-----From: van Berkel, Chris

Sent: Wednesday, December 15, 2010 2:06 PM

To: Juchniewicz, Linda

Subject: The LINC - collision stats

Hi Linda: As discussed, can you put together a collision summary for all collisions on the Linc between the 403 and Dartnall whereby a vehicle crossed over the grass median and struck another vehicle in the opposite direction. The Linc will be resurfaced next year and we'd like to tie in any improvements with that contract tender.

As always, much appreciated....

----Original Message-----From: Kirchknopf, Gary

Sent: Thursday, December 09, 2010 10:29 AM

To: van Berkel, Chris Subject: RE: The LINC

Hi Chris,

This resident lives on your side of the world. Can you please advise him that we monitor all collision locations based on network screening program and use collision counter measures to correct identified patterns and serious conditions.

Please confirm if the LInk or Red Hill Valley Parkway was previously identified and / or studied by our staff. I seem to recall this issue regarding head on collisions crossing the median on the Link, being discussed at one of our collision counter measure meetings?

Can you please find out what the outcome of that issue was? Did one of our staff have this issue as a counter measure item? Can you also please confirm if we are planning on introducing some improvements or changes to the existing curbs and or medians on the Link in association with the upcoming reconstruction. Please advise this resident with an update upon receiving this information. Thanks.

----Original Message-----From: TOE, Temp Admin Ass't

Sent: Thursday, December 09, 2010 10:03 AM

To: Kirchknopf, Gary Subject: FW: The LINC

Gary, for your consideration.

Donna

----Original Message-----

From: Peryn & Rick [mailto:rplukos@mountaincable.net]

Sent: Wednesday, December 08, 2010 9:39 PM

To: TOE, Temp Admin Ass't

Subject: The LINC

I was driving the LINC today and there was yet another serious collision. There seems to be more and more collisions on the LINC where cars cross over the grass median and striking cars head on. Should the city be looking into erecting some sort of fence or the cement barriers for the grass median. Head on collisions cause death and serious injuries. Will someone at City Hall consider the fence/barrier options?

Rick Lukos 130 Broker Drive Hamilton

Jessica Vanderlee

From: Jessica Vanderlee

Sent: January 31, 2018 3:48 PM

To: 'Swaby, Diana'
Cc: 'Ian McLellan'

Subject: Hamilton ats Melo/Lee/Barlow; Hamilton Claim No.: 042575 / IPG Claim No.:

33922-533

Attachments: Report to Hamilton re: enclosing pleadings and Hamilton emails, City of Hamilton

records, liability, updated litigation budget dated January 31, 2018; Consolidated Statement of Defence and Crossclaim dated January 18, 2018.pdf; Statement of Defence and Crossclaim of the Defendant, Maria Lee dated August 23, 2017.pdf; Statement of Defence and Crossclaim of the Defendant, Security National Insurance Company dated September 29, 2017.pdf; Statement of Defence and Crossclaim of the

Defendant, Lucas Vanderburgh dated January 25, 2018.pdf; The LINC - collision

stats.pdf

Good Afternoon,

Enclosed please find the following documentation:

- 1. Report of Mr. Thompson dated January 31, 2018;
- 2. Our Consolidated Statement of Defence and Crossclaim (Lee action);
- 3. Statement of Defence and Crossclaim of Maria Lee (Barlow action);
- 4. Statement of Defence and Crossclaim of Security National Insurance (Barlow action);
- 5. Statement of Defence and Crossclaim of Lucas Vanderburgh (Lee action);
- 6. City of Hamilton emails from 2010-2011.

Regards,

Jessica Vanderlee

Legal Assistant to David S. Thompson and Jonathan de Vries

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