

Message

From: Brian Malone [Brian.Malone@cima.ca]
Sent: 2/25/2019 10:18:36 AM
To: Soldo, Edward [/o=GOVT/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=Soldo, Edward792]
CC: McGuire, Gord [/o=GOVT/ou=EMAIL/cn=Recipients/cn=gmcguire]; Soroush Salek [Soroush.salek@cima.ca]; Alireza Hadayeghi [ali.hadayeghi@cima.ca]
Subject: RE: CIMA Assignment

We are completing the analysis of the data and are aiming to have a letter provided to you later today. Are you in sometime after noon today to discuss, briefly?

Brian Malone, P.Eng.
CIMA+, Burlington, ON
Office: 289-288-0287 x 6802
Cell: 905-466-0421

From: Soldo, Edward <Edward.Soldo@hamilton.ca>
Sent: 22 February, 2019 18:55
To: Alireza Hadayeghi <ali.hadayeghi@cima.ca>
Cc: Brian Malone <Brian.Malone@cima.ca>; McGuire, Gord <Gord.McGuire@hamilton.ca>; Soroush Salek <Soroush.salek@cima.ca>
Subject: Re: CIMA Assignment

Thanks

Please proceed.

Edward Soldo, P.Eng.
Director of Transportation Operations and Maintenance
City of Hamilton

Sent from my iPhone

On Feb 22, 2019, at 6:29 PM, Alireza Hadayeghi <ali.hadayeghi@cima.ca> wrote:

Hi Edward,
Sorry for delaying in response. We looked into the MTO friction data and clearly identified a degrading trend in frictions moving from 2008 to 2014. Considering this trend, we can conduct a simple regression analysis and determine the degradation rate and from there come up with an estimate for the 2019 friction values. This will be an overestimation since in 2019 the pavement is closer to the end of its life cycle and also there might be some growth in the AADT resulting in faster than normal degradation of the pavement.

However, this upper level estimate can still provide us with valuable information being compared with the friction thresholds that Brian referred to in his short tech memo submitted to the City a couple of weeks ago.

Considering the above explanations, we can conduct the mentioned regression analysis Monday and provide you with a short letter format memo explaining if the new friction estimates can potentially impact any of the findings of the previous memo that Brian prepared you a couple of weeks ago. Please let me know if this is an acceptable approach.

Best Regards,
--Ali

ALI HADAYEGHI, P.Eng., Ph.D.
Partner / Vice-President / Transportation

T 289-288-0287 ext. 6803 C 905-466-6672 F 289-288-0285
3027 Harvester Road, Suite 400 Burlington Ontario L7N 3G7 CANADA

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<image002.jpg>

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CONFIDENTIALITY WARNING This e-mail is confidential. If you are not the intended recipient, please notify the sender immediately and delete it in its entirety.

From: Soldo, Edward <Edward.Soldo@hamilton.ca>
Sent: Friday, February 22, 2019 6:02 PM
To: Alireza Hadayeghi <ali.hadayeghi@cima.ca>
Cc: Brian Malone <Brian.Malone@cima.ca>; McGuire, Gord <Gord.McGuire@hamilton.ca>
Subject: Re: CIMA Assignment

Ali

Any update ?

Thanks

Edward Soldo, P.Eng.
Director of Transportation Operations and Maintenance
City of Hamilton

Sent from my iPhone

On Feb 19, 2019, at 3:55 PM, Alireza Hadayeghi <ali.hadayeghi@cima.ca> wrote:

Hi Edward/Gord,
Thank you for your e-mail. Brian is away on vacation, but we should be able to provide you with a quote and schedule for this analysis in the next few days.
What is the City's timeline for this analysis? If undertaking a friction test prior to the resurfacing is required, when is the latest time that the friction tests can be completed?
Finally, in our roadside safety review, we did not include any recommendation for the mainline pavement, so there would be no impact to our recommendations.
Thank you again and looking forward to working with you on this assignment.
Best Regards,

ALI HADAYEGHI, P.Eng., Ph.D.
Partner / Vice-President / Transportation

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T 289-288-0287 ext. 6803 C 905-466-6672 F 289-288-0285
3027 Harvester Road, Suite 400 Burlington Ontario L7N 3G7 CANADA

<image001.jpg>

<image1

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CONFIDENTIALITY WARNING This e-mail is confidential. If you are not the intended recipient, please notify the sender immediately and delete it in its entirety.

From: Soldo, Edward <Edward.Soldo@hamilton.ca>
Sent: Sunday, February 17, 2019 1:08 PM
To: Alireza Hadayeghi <ali.hadayeghi@cima.ca>; Brian Malone <Brian.Malone@cima.ca>
Cc: McGuire, Gord <Gord.McGuire@hamilton.ca>
Subject: CIMA Assignment

Brian,

Please find attached friction information from the MTO. They undertook testing over a number of years for a portion of the RHVP.

The City would like you to review the data, undertake an analysis if possible to develop a degradation curve based on the data point for each lane, and based on that work develop a min/max range that can extrapolate a 2019 value.

This work can be added as an add on to the Roadside Safety Assessment. Would CIMA recommend that we undertake a friction test prior to the resurfacing to validate the MTO data? Would any of your recommendations be impacted by this data.

I am around this week, give me a call to discuss if you like at 905-379-7851.

Thanks

Edward Soldo, P.Eng.
Director, Transportation Operations & Maintenance
Public Works Department
City of Hamilton

77 James St North., Suite 400., Hamilton, ON L8R 2K3
Phone: 905-546-2424 ext. 4622
Fax: 905-546-4473
Email: Edward.Soldo@hamilton.ca