

MTO-OAPC HOT MIX ASPHALT SUBCOMMITTEE MEETING NOTES

Date: December 7, 2023
Time: 10:00am to 12:30pm
Location: Microsoft Teams

ATTENDEE	ORG.	ATTENDEE	ORG.
Doubra Ambaiowei (DA)	OAPC/ORBA	Joel Magnan (JM)	MTO
Fernando Magisano (FM)	Canadian Asphalt Industries Inc.	Seyed Tabib (ST)	MTO
Mark Latyn (ML)	Capital Paving	Gelu Vasiliu (GV)	MTO
Selena Lavorato (SL)	GIP Inc.	Giselle Cotton (GC)	MTO
Kevin Martin (KM)	Fermar Paving Ltd.	Sonja Dambremont (SD)	MTO
Trevor Moore (TM)	COLAS Construction	Dariusz Wodala (DW)	MTO
Amma Agbedor (AA)	Asphalt Institute	Loan Le (LL)	MTO
Sina Varamini (SV)	CRM of Americas	Nolan McKeown (NM)	MTO
		Imran Bashir (IB)	MTO
REGRET	ORG.	REGRET	ORG.
Walid Abou-Hamde (WAH)	ORBA	Stephen Lee (SL)	MTO
Steve Manolis (SM)	GIP Inc.		
Vincent Gangaram (VG)	Dufferin Construction		

INTRODUCTION / ANNOUNCEMENTS

- Introductions
- Mark Latyn of Capital Paving is new to the committee from OAPC side.
- Sina Varamini will recuse himself from discussions specifically about crumb rubber, to avoid a perceived or actual conflict of interest based on his new employer, CRM of Americas.
- Fernando delivered a safety talk based on a recent Ministry of Labour news release, which highlighted the roles and responsibilities of the back up signal person and truck driver roles and safety responsibilities. This also highlighted the shared responsibility of all workplace parties, including supervisor, employer, general contractor and even project owner to ensure that safety protocols are followed.

OPEN ITEMS	ACTION BY
<p>Dec-19-8 MIX PERFORMANCE TESTING</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • MTO to develop specification for MPT that can be included on any project. • OAPC wondering if MTO has preferred method for balanced mix designs. • OAPC enquiring about IDEAL CT. Is it a consideration for Ontario? • MTO is conducting ongoing MPT Lab Correlations <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • MTO shared ISS correlation results “01_Item Dec-19-8_ISS Correlations Data Cumulative Nov 2023”. Average ISS was 223.1 kPa. The next round will be sent in December and 4 cores will be sent to each participant. The number of participants increased so the coefficient of variation is expected to increase. Further, the minimum recommended ISS from NCHRP is to be 278 kPa. • OAPC indicated that porosity may impact the ISS. It would be good to know the density of both pavement lifts. • MTO indicated that porosity should not impact ISS in this case because the application rate and residue is much higher than that required by the specification. • OAPC recommended to collect macrotexture ratio prior to tack coating. For milled surfaces, the groove depth would also compliment the data to capture the surface roughness condition. MTO replied that although these may be contributing factors to the shear strength, focussing on such specific pavement characteristics may result in the specification being too prescriptive. OAPC indicated that not looking at milled surface condition could result in contractors meeting ISS requirements using only aggressive milling but no tack coat. MTO will consider collecting more information related to the ISS dataset, subject to other operational constraints at the site – e.g., time delays and minimizing impact to construction operations, and then reporting this in conjunction with the dataset. MTO also noted that upcoming MTO correlations will use different initial surface conditions, including milled surfaces (as compared to paved surfaces) and this may provide additional comparative data for context, in addition to application rates. • OAPC requested the T Test to be applied against the Ministry result. MTO replied that the Ministry will consider applying T Test in the next round of correlation. • OAPC would like to provide further recommendations regarding future correlations in a written document to MTO. 	<p>MTO</p>

OPEN ITEMS	ACTION BY
<ul style="list-style-type: none"> MTO indicated that Alberta and New Brunswick are going to participate in MPT correlations moving forward. More laboratories are also buying equipment for DCT and Hamburg tests. <p>Action – MTO will indicate field conditions on future foot notes for ISS correlation results.</p>	
<p>May-22-10 ENVIRONMENTAL PRODUCT DECLARATIONS (EPD’S) FOR ASPHALT IN ONTARIO – MTO’S POSITION?</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> As part of the net zero emissions goal, OAPC is seeking to understand MTO perspectives on EPD’s for Ontario Asphalt Mixes and forging a collaborative approach to make it work. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> OAPC stated that the scope of work has been defined for the research project with Federal partner (NRC) and is being finalized. LCI and LCA work has been defined. OAPC and environment subcommittee will work on this initiative. The goal is to determine EPD averages for asphalt mixes in Ontario. The impact of asphalt binders and asphalt aggregates might not make it to the scope of work. Asphalt Institute is working on the EPD for asphalt binder. OSSGA is considering developing EPDs for Ontario aggregate. OAPC is going to be meeting with OSSGA regarding EPDs. OAPC requested MTO to contact MECP or other government ministry to determine the policy direction. MTO indicated that MTO is not always involved with the initial policy direction but does follow up when engaged. If a direction is given to expand the use of EPDs, it will also need to involve MTOs Contract Management Office and will take time to implement across all materials categories. MTO will continue to monitor developments in this area, including trends in other jurisdictions. <p>ACTION – <i>No Action.</i></p>	

OPEN ITEMS		ACTION BY
<p>May-22-13</p>	<p>SMA Applications – Grit Sand Specification Revisions <i>Description:</i></p> <ul style="list-style-type: none"> • OAPC suggests MTO can look at revising specification due to lack of grit sand sources available. • OAPC indicated that there is variability in how CA firms accept gritting material on MTO contracts. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • OAPC has discussed with OSSGA. OSSGA requested MTO look at 2017 QEW and 401 SMA grit data and evaluate any friction data available. • MTO is reviewing the weight factors and how to apply them to the SMA item. Further, MTO is still considering contractual consequences in case the SMA grit is beyond the payment adjustment limits or physical requirements and is rejectable. <p>ACTION – MTO continue updating the specification.</p>	<p>MTO</p>
<p>Sept-22-12</p>	<p>Smoothness specification – future changes <i>Description:</i></p> <ul style="list-style-type: none"> • MTO reviewing the current smoothness specification and the list of exemptions for existing pavements. Specifically, MTO would like to modify section 8.01.02 paragraph f: <ul style="list-style-type: none"> ○ <i>“The first adjacent lane consisting of one or more lifts of hot mix asphalt that shall match to an existing surface that is not being resurfaced as part of this Work.”</i> • MTO noted that currently projects have excluded entire lanes from smoothness measurements due to the tie-in exemption. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • MTO is still doing internal consultation via the consultation process. <p>Action – MTO will continue to follow its internal review process.</p>	<p>MTO</p>

OPEN ITEMS		ACTION BY
Dec-22-13	<p>ADDITIONAL OAPC 2023 RESEARCH PROGRAM OUTLINE</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • OAPC initiated a new Study in collaboration with Carleton University. The expected timeline to complete Study is 3 years. • The study objective is to quantify the GHG emissions at asphalt plants. This study supports the move to net zero emissions. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • OAPC is going to focus on Balanced Mix Design. • OAPC is also going to look at characterizing RAP stockpiles in associated PGAC zones and also partnering with Good Roads. • OAPC will investigate design considerations with higher use of RAP. OAPC will investigate design considerations with higher use of RAP. • OAPC will also look at EPDs and Greenhouse gas emissions. <p>ACTION – No Action.</p>	

OPEN ITEMS	ACTION BY
<p>June-23-1 HMA OPTIMIZATION</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • Crumb rubber and WMA coupled with higher RAP combinations to reduce environmental impacts. • OAPC wants to promote using recycled material. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • MTO has reviewed past trials on Highway 35, 115, and Highway 7. The terminal blend section reviewed is not performing well relative to the control. Field blend gap graded crumb rubber sections have much higher AC than the control sections and MTO is conducting further review. Further, the crumb rubber sections in question had a higher price than the control between 2% and 30% relative to the control. This price difference existed even with Ontario Tire Stewardship (OTS) provided substantial financial subsidies to the contractors. • OAPC acknowledged that supply challenges exist and will investigate further. • OAPC asked about combining WMA (low temperature) and RAP. MTO indicated that in Japan, RAP needed to reach sufficient temperature to activate the AC. So, the combination of RAP and WMA should be investigated, possibly via literature review, prior to any trials. • OAPC asked if there is a timeline to move to only WMA for asphalt paving. MTO replied that there are challenges with Contractor’s not wanting to collect data on GHG emission reduction and temperature reduction between WMA and HMA production. MTO needs this data to proceed further with this initiative. • OAPC indicated that data will be coming from a recently completed report based on a MTO project performed by one of its members. There was no reduction in emissions. OAPC also indicated that plants are currently optimized for HMA and if the plants are tuned for WMA, emissions will be reduced. <p>ACTION – <i>MTO will continue to process the collected data and provide results on crumb rubber performance in 2024.</i></p>	

OPEN ITEMS	ACTION BY
<p>Sept-23-1 BALANCED MIX DESIGN <i>Description:</i></p> <ul style="list-style-type: none"> • OAPC wants to understand ministry's understanding regarding costs and focus on BMD. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • OAPC requested a meeting of all stakeholders (contractors, producers, laboratories, etc.) to better understand where Ontario stands in the BMD implementation process. • MTO believes that enough data has been collected on IFIT SCB, DCT, and Hamburg to use them in the BMD process. MTO will not discard surrogate tests at this point, however, will focus on IFIT SCB, DCT, and Hamburg for final mix design process. • OAPC indicated that focus of ATS next year will be balanced mix design. • MTO indicated that municipalities are starting BMD, so either contractors are equipped with equipment, or are leveraging consultant laboratories. <p>ACTION: OAPC to share document on lessons learned by early adopters of BMD.</p>	<p>OAPC</p>
<p>Sept-23-2 PH-CC-866: BINDER REPLACEMENT ADJUSTMENTS <i>Description:</i></p> <ul style="list-style-type: none"> • OAPC stated that the PH-CC-866 indicates +0.2% in AC Content and a Binder Replacement of -5.0%. The negative may be a mistake. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • MTO reviewed the PH-CC-866. The form reflects the requirements of the specification. The intent is that AC cannot be replaced by the addition of RAP using the "Percent Binder Replacement" field. Previous versions of the form indicated %RAP. • OAPC indicated that a decrease in AC%, the binder replacement automatically increases, so the form does not allow a decrease in AC. <p>ACTION – MTO and OAPC to revisit the form and look at examples in which a decrease in AC would not be allowed.</p>	<p>MTO/ OAPC</p>
<p>Sept-23-3 OPSS 313 – REVISITING QUALITY EVALUATION <i>Description:</i></p> <ul style="list-style-type: none"> • How can OAPC increase or strive for better quality in asphalt pavement? <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • OAPC to propose a pay factor that will increase quality. <p>ACTION – OAPC to provide changes to pay factors at the next meeting.</p>	<p>OAPC</p>

OPEN ITEMS		ACTION BY
Sept-23-4	<p>TCP REVIEW PROCESS</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> OAPC requested that the TCP review timeline is extended as it is not enough time. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> MTO will provide 28-day review timeline for Engineering Materials Office specifications moving forward. Notwithstanding this, MTO typically receives comments from appropriate subcommittees prior to publication on TCP. <p>ACTION – <i>Close item.</i></p>	

NEW ITEMS		ACTION BY
2023-12-1	<p>CTAA 2025 & MTO'S COLLABORATION</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> OAPC requested MTO to collaborate for CTAA 2025 since the conference is coming to Ontario. OAPC feels that MTO should not be declining given their leadership role. OAPC requested MTO to showcase their facility during CTAA 2025. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> MTO has tried to attend various events. MTO staff at various levels requested to attend CTAA and other technical symposium events and management goes through many challenges to obtain approvals. Travel outside the province needs to go to the highest levels. Travel and events within the province still need high level executive permission to attend. MTO cannot commit to collaboration if they may be declined permission to attend such conferences. Granted proper prior approval, MTO could probably provide tours and possibly some presentations. MTO likely won't receive approval in organizing actual events, workshops etc. <p>ACTION – <i>OAPC will bring the issues forward to MTO-ORBA Executive Committee.</i></p>	OAPC

NEW ITEMS		ACTION BY
2023-12-2	<p>ADDITIONAL OAPC 2024 RESEARCH PROGRAM OUTLINE</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> OAPC updates on the 2024 research program <p><i>Discussion:</i></p> <ul style="list-style-type: none"> OAPC is participating in TACC RAP study. OAPC is looking at characterizing and reducing RAP stockpiles in Ontario. OAPC is looking at creating high rap mixes. OAPC is also looking at working with NRC on EPDs. OAPC wants MTO to work in collaboration on a HIIFP project. MTO put out proposals for HIIFP projects recently. Anyone can submit an open topic and the HIIFP steering committee will review the merits of any open topics received. The deadline to submit a proposal is Jan 31. Project leads should be research institutions. <p>ACTION – MTO to respond regarding OAETG participation.</p>	MTO

	<p>ROUND TABLE</p> <ul style="list-style-type: none"> OAPC indicated PIQ has been cancelled indefinitely. The intention is to get more industry staff to the spring operations event. The locations are going to be east and west of GTA. March 21 and April 4 are the tentative dates. The next Fall Asphalt Seminar will be Nov 29, 2024. 	
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INFORMATION SHARED FOR THIS MEETING		
Document Title	Shared By	Format
01_Item Dec-19-8_ISS Correlations Data Cumulative Nov 2023	MTO	Text and tables (pdf)

NEXT MEETING
<ul style="list-style-type: none"> 2024 Meeting Dates: <ul style="list-style-type: none"> March 28 (OAPC Host) May 23 (MTO Host) September 19 (OAPC Host) December 5 (MTO Host) <p>All meeting scheduled from 10 am - 1 pm</p> <p>Meeting adjourned: 12:24 pm</p>