

# Meeting Notes

## MTO-OAPC Hot Mix Asphalt Subcommittee

<b>Date</b>	June 23, 2025
<b>Time</b>	10:00 am to 1:00 pm
<b>Meeting Hosted By</b>	Ontario Ministry of Transportation (MTO)
<b>Location</b>	Microsoft Teams

### Attendance:

Attendee	Organization
Fernando Magisano	Canadian Asphalt Industries Inc.
Donn Bernal	Ontario Asphalt Pavement Council (OAPC)
Mark Latyn	Capital Paving
Selena Lavorato	GIP Inc.
Kevin Martin	Fermar Paving Ltd.
Trevor Moore	COLAS Construction
Amma Agbedor	Asphalt Institute (AI)
Sina Varamini	CRM of Americas
Hashim Anwar	CRH
Kourtney Adamson	Yellowline
Joel Magnan	MTO, Engineering Materials Office (EMO)
Jenn Meleschuk	MTO, Construction Management Office (CMO)
Gelu Vasiliu	MTO, EMO
Stephen Lee	MTO, EMO
Warren Lee	MTO, EMO
Imran Bashir	MTO, EMO
Sayed Tabib	MTO, CMO
Sonja Dambremont	MTO, Construction Northeast
Gizelle Cotton	MTO, Construction East
Heather Bell	MTO, Construction Central

### Introduction / Announcements:

- Sayed Tabib is leaving the committee and MTO.
- Kourtney Adamson has joined the committee.
- OAPC delivered a safety talk on safe work on the road.

## Open Items

### 2019-12-8, Mix Performance Testing

#### Description:

- MTO to develop specification for Mix Performance Testing (MPT) that can be included on any project.
- OAPC wondering if MTO has preferred method for Balanced Mix Designs (BMD).
- MTO is conducting ongoing MPT lab correlations.

#### Discussion:

- MTO explained the exclusion criteria for the 2024 FIT Round 1. The laboratories that were excluded from the FIT-SCB analysis were not in compliance with the LS-334/AASHTO T393 testing procedure or did not participate in MTO annual HMA correlation program. One or more of the following conditions were not met by the participating labs: test specimen geometry and air voids not as per requirements; minimum data acquisition frequency not met; applied loading rate out of tolerance; contact load not applied or exceeding the specified range; or test terminated earlier than prescribed.
- MTO has communicated the findings to the respective laboratories that were excluded from the FIT-SCB analysis. A total of four laboratories were excluded (two contractor labs and 2 QA/referee/consultant labs).
- One of the contractor's laboratories has addressed the issues and is a new participant in the MPT correlation. The second contractor's laboratory previously participated in the correlations; however, they were excluded in 2024 Round 1 FIT correlation. The laboratory did not address issues and did not follow the testing requirements even in 2025 Round 1 FIT correlation; hence they were once again excluded from the analysis.
- One of the QA/referee/consultant laboratories had participated in the previous rounds of FIT-SCB correlation, however the issues encountered are attributed to a recent change of their FIT testing equipment. They are now in the process of addressing the issues. The second QA/referee/consultant laboratory was also participating in previous correlations; however, they were excluded in 2024 Round 1 FIT correlation. They are now in the process of addressing the issues.
- OAPC asked if we have enough confidence in the participating labs and if there is training available.
- MTO suggested OAPC members should get training through Asphalt Institute.
- MTO is working with participating laboratories, providing guidance to improve their results, and aiming to add more clarity to the instructions. These correlations are part of the learning curve to perform these tests. MTO is currently working on validating the data reported by laboratories. In the short term, the reporting sheet will have conditional formatting to prevent data out of tolerance to be populated. In the long term, this process will be done by Python scripts that are currently being verified in conjunction with excel VBA solution and possible excel Python solution.

- MTO said that OAETG's O-MAP study confirmed the participating laboratories improved over time and outlined that sample preparation is essential and BMD can be achieved.
- MTO is working with CCIL towards implementing a MPT laboratory Type G certification starting in 2026.
- MTO is currently analyzing Round 1 of 2025 MPT correlation and aims to have two rounds per year of this correlation. Laboratories must still participate in the HMA correlation which is held four times a year.
- OAPC inquired if a PGAC with low temperature of -34 Celsius can be integrated into the MPT correlation.
- MTO has vendor that works with industry to source the mixes that are used in the HMA correlation. Two of the four rounds have additional boxes used for the MPT correlation. OAPC can suggest such a mix for MTO to coordinate with the vendor in the future.
- OAPC asked if there was anything new on the ISS requirements in the tack coat specification.
- MTO responded that there are no current changes in the tack coat specification and ISS correlations are completed two times per year and continue to collect data from contracts. Cores are taken the day after paving.
- MTO said ISS cores are required for each contract with OPSS 308 with 1 core per application rate (for milled or smooth surfaces).
- OAPC said last time looked at ISS data, didn't look like there was a connection between all the data.
- MTO is of the opinion that application rates are too low compared to NCHRP reported values. Higher rates may delay construction. MTO is considering a trial with different application rates on a contract to collect additional information.
- OAPC is concerned that higher application rates may require additional curing time for night paving.
- MTO is considering other solutions besides different dilution rates. As mentioned in OPSS 308, proposals can be submitted to use alternative tack coats. One product considered by MTO is CRS-2P which is used in Quebec. Quebec has a pull test; however, MTO is focusing on the shear test. Shear test is more representative of tack coat related distresses.
- MTO stated contamination or tracking can affect ISS results.
- OAPC noted that ISS results may improve over time.
- MTO is open to the idea of coring one day and one week following paving, including both types of surfaces (smooth and milled).

#### Action Items:

- OAPC to suggest a PGAC XX-34 mix on a MTO contract to be used in MTO's HMA and MPT correlation.

### **2022-03-10, Environmental Product Declarations (EPD's) for Asphalt in Ontario**

#### Description:

- As part of the net zero emissions goal, OAPC is seeking to understand MTO's perspectives on EPD's for Ontario asphalt mixes and forging a collaborative approach to make it work.

#### Discussion:

- OAPC informed the subcommittee they are still working on this. They have acquired a company to accept all the data securely from all the asphalt plants across Ontario. The data will be used to model an average HMA EPD. Aiming for the end of July-August to collect all the data and start the analysis. By the end of year, hope have average EPDs for different mixes.
- MTO is interested in how to modify the GreenPave rating system for alternative bids using EPDs. MTO has received EPDs from the concrete industry. Once MTO receives OAPC's EPDs then there can be a discussion on how to incorporate generic EPDs into GreenPave.
- OAPC said this data could be used to develop plant specific EPDs down the road.
- MTO can inform the Concrete industry that the asphalt EPDs won't be ready until the end of this year to have the GreenPave EPD discussion.

#### Action Items:

- OAPC to set up separate meeting after OAPC has all EPD information with MTO regarding GreenPave.

### **2022-05-13, SMA Applications – SMA Grit Specification Revisions**

#### Description:

- OAPC suggests MTO can look at revising specification due to lack of grit sand sources available.
- OAPC indicated that there is variability in how Contract Administration (CA) firms accept gritting material on MTO contracts.

#### Discussion:

- MTO shared Round 1 of the SMA grit correlation for 2025. Two rounds were conducted including only QA/referee/consultant labs. MTO has expanded the correlation to include all the HMA correlation participants to continue this correlation twice per year.
- MTO used the correlation data to determine the variability of the AC content and gradation for SMA coated grit. This new round of the correlation increased the sample size from 500 g to 1000 g. The standard deviation has improved by increasing the sample size.
- MTO is still working on acceptance criteria for AC content by determining acceptance and borderline limits, and how to administer rejectable material.
- OAPC asked if AC content impacts the skid resistance.
- Based on previous trials, MTO set the AC content acceptance limits at 0.8 to 1%. This level was chosen in such a way that the coated grit adheres to the surface but does not add more AC to the already rich SMA. However, interlaboratory variability

was not well defined at the time. Now, MTO is aiming to provide clarity and consistency in administration of SMA coated grit in contracts.

- OAPC inquired if absorption would affect the AC content of the SMA coated grit.
- MTO stated the specification already has petrographic limits. There are still limits for aggregate absorption. MTO is of the opinion that at these low levels of AC, absorption will have a minimal impact on the variability of the test.
- OAPC agreed with this statement.
- OAPC acknowledged the 1000 g has helped the AC variability and inquired about sieve size used for gradation determination after sample splitting. Overloading the sieve should be avoided.
- MTO considered this, and ran gradations on sample sizes: 500 g, 1000 g, 1500 g, and 2000 g. MTO found the gradation was not sensitive to sample size. The 1000 g sample was selected to reduce the variability in the AC content.
- MTO is revising LS-282 R39 will integrate the SMA coated grit sample size to a minimum of 1000 g.

Action Items:

- No Action.

**2022-12-13, Additional OAPC 2025 Research Program Outline**

Description:

- OAPC initiated a study in collaboration with Carleton University. The expected timeline to complete the study is 3 years.
- The study objective is to quantify the Green House Gas (GHG) emissions at asphalt plants. This study supports the move to net zero emissions.
- OAPC is also conducting an Ontario-Mix Asphalt Program (O-MAP) study on MPT.

Discussion:

- OAPC stated there was no action on this item since they need to have a discussion before beginning the next step.

Action Items:

- No Action.

**2023-06-1, HMA Optimization**

Description:

- Warm Mix Asphalt (WMA) coupled with higher Reclaimed Asphalt Pavement (RAP) combinations to reduce environmental impacts.
- OAPC wants to promote using recycled material.

Discussion:

- OAPC provided an update on the high RAP trial with York Region. The logistics of night work make a pave-in for this project difficult. OAPC is considering a live webinar to explain the project instead. The project is on Leslie Street between

Highway 7 and Major MacKenzie Dr. It includes multiple trial sections with 40, 30, and 20% RAP. It also will include a control section.

- OAPC is working toward a possible live webcast that will still be recorded and follow it up with another webinar to summarize the project and the MPT results on the mixes. Rejuvenating agents and softer ACs will also be incorporated. OAPC may write a paper on this trial.
- OAPC stated they are using BMD and have completed the BMD mix designs meeting both the volumetrics and MPT requirements. Paving will start at the end of July. OAPC is also collaborating with NRC to install instrumentation to monitor temperature, strain, etc. All test section mixes are WMA and base grade 64-28 passing extended BBR and DENT.
- MTO suggested they could collaborate by using the ARAN to collect data on these test sections. MTO inquired if ISS testing was included in this project.

#### Action Items:

- OAPC to invite MTO to attend the webinars.
- OAPC to confirm that ISS samples are taken.
- MTO to coordinate ARAN of the trial.

### **2023-09-1, Balanced Mix Design**

#### Description:

- OAPC wants to understand MTO's process on BMD.

#### Discussion:

- OAPC provided update on training. AI working with OAPC to include course in their Road Academy. Just need to find a date. Probably January/February 2026. It's going to be in-person to provide hands-on testing since not as effective virtually. Also still need to find a lab.
- MTO emphasized the importance of sample preparation. CCIL certification coming to help with little details. Type G certification has been selected for MPT laboratory certification. Type A is the minimum requirement to apply for Type G. Individuals technicians may eventually require a separate certification.

#### Action Items:

- OAPC to work with Canadian Asphalt Institute engineer to organize Ontario BMD/MPT training.

### **2023-09-3, OPSS 313 – Revisiting Quality Evaluation**

#### Description:

- How can OAPC increase or strive for better quality in asphalt pavement?

#### Discussion:

- MTO has drafted the response letter and it is being reviewed before it can be sent. The letter just outlines the approach. Hopefully will be sent to OAPC soon.

- OAPC inquired if by the next meeting they will receive the framework to work towards.
- MTO already has technical work starting on this, which may take some time.

Action Items:

- MTO to provide an official response to the OAPC letter.

**2023-12-1, CTAA 2025 & MTO's Collaboration**

Description:

- OAPC requested MTO to collaborate for the Canadian Technical Asphalt Association (CTAA) 2025 conference since the conference is coming to Ontario. OAPC feels that MTO should be attending given their leadership role.
- OAPC requested MTO to showcase their facility during CTAA 2025.

Discussion:

- MTO has confirmed that they can host the workshop at CETI and the lab tours can be conducted. There is ventilation work planned, however should not have a major impact on the tours.
- OAPC stated they are communicating at a higher level with MTO to get funding.
- MTO has submitted about 6 papers, so will have representation at the conference.

Action Items:

- OAPC to request financial support from MTO-ORBA executive committee.

**2024-09-2, PGAC Sampling Requirements**

Description:

- OAPC inquired if it is possible to change the Ontario Provincial Standard Specification (OPSS) 1101 requirement to have a sampling spigot and whether in-line samples should be acceptable.

Discussion:

- MTO stated that based on the findings of MTO's review, the specification may be revised to allow both in-line and tank sampling. There are concerns that tank sizes are smaller than lots and so not representative. Have not received in-line vs tank sampling info so will make own list during inspections.
- OAPC had a discussion about it and stated that in-line sampling would allow for auto-sampler which is much safer way to get sample.
- MTO stated that Contractors are still responsible to taking the sample.
- MTO gathering each plant's tank capacity to determine if samples are representative when empty tank and not take a new sample.
- OAPC said there are electronics that can tell you exactly what tank AC is coming from and difficult to manipulate software. Allowing both is the best option.

Action Items:

- Close Item for now.

## **2024-12-2, Revisit Cross Slope Specification**

### Description:

- OAPC has concerns with implementation and enforcement of the cross-slope specification.

### Discussion:

- MTO stated the specification was on TCP and OAPC was to provide comments.
- OAPC did submit a few comments. Not aware of too many comments. General feeling was that the spec was an improvement. Very minor comment about how to deal with lots and sublots for curves vs tangent.

### Action Items:

- Close item.

## **2025-04-1 LS-605 Relative Density and Absorption of Fine Aggregate – for SMA Aggregates**

### Description:

- OAPC has concerns labs are not following LS-605 when testing fine aggregates with a lot of chip, especially for SMA mixtures.
- OAPC has concerns that some QA/Referee labs are not aware of this provision or are not taking this into account when doing the testing.

### Discussion:

- MTO took concerns to Soils and Aggregates section and if any consideration for modifications or awareness communication it will be done by Soils and Aggregates section.

### Action Items:

- Close Item.

## **2025-04-2 Restriction on US Bidders**

### Description:

- In response to US tariffs that were initiated on March 3, 2025, procurements restrictions on US bidding came into effect for the Province of Ontario Public Service on March 4, 2025.

### Discussion:

- In response to tariffs, a Procurement Restriction Policy that defines and restricts United States businesses from accessing public sector procurements in Ontario became effective on March 4th. As part of each procurement process Bidders, Service Providers, and Proponents will be provided with a declaration form to confirm their eligibility to bid under the policy. Additional policy background information is available at [Procurement Restriction Policy](#).

### Action Items:



- No Action.

## **New Items**

### **2025-06-1 Change Proposals for RAP in Surface Mixes**

#### Description:

- MTO is still interested in receiving change proposals for RAP in surface mixes but haven't been receiving these. Are asked about it internally. So, MTO has developed some guidelines for what the MTO would expect.

#### Discussion:

- OAPC asked how well this was advertised.
- MTO has communicated with this subcommittee and mentioned at the Spring Updates with CAs. Pre-Start Meetings would provide the best opportunity to discuss RAP change proposals.
- OAPC was not made aware if the project is for resurfacing, rehabilitation, etc. Asked if this should be part of the tender.
- MTO has drafted guidance for internal use by MTO staff to evaluate change proposals. However, we can consider tendering on a few pilot projects.
- MTO asked if they could use OAPC's Trillium Award program to determine which plants have RAP management plans in place.
- OAPC stated the risk is the BMD during mix design. Difficult to get a BMD on single year contracts as more time is needed to get a working RAP mix design with BMD. Maybe multiple year contracts would be better.
- MTO may have to re-evaluate this change proposal approach, maybe consider making this into a NSSP with BMD for either virgin mix or RAP mix. There are concerns about the aggregates going into a surface mix. Start with BMD that requires both volumetrics and MPT.
- OAPC stated to meet BMD may need to increase AC% and can impact air voids.
- MTO said OAPC's York Region trial already includes BMD meeting volumetrics and MPT requirements. Also, the OAETG report showed that a BMD with Superpave 12.5 FC2 Traffic Category E with PGAC 70-28 was possible when gradation is adjusted and proper sample preparation is followed.
- OAPC estimated the cost of all the extra testing and found there would be no cost savings for the small size of the projects outlined in the draft change proposal guidance. An NSSP would provide a level field for bidding.
- OAPC cautioned MTO that no one has done a BMD in the north and believes that it is not necessary to meet the BMD, just do for information.
- MTO has had only 1 change proposal, and we are looking for more. MTO is taking a conservative approach to BMD (meeting volumetrics and MPT requirements) realizing it is a learning curve for the ministry and industry as well. MTO is striving to develop evidence-based specifications. While MTO is looking at BMD and MPT in the longer term, there is consideration for a RAC specification due to concerns with tank AC not capturing enough aging or contamination that can be incurred at the

asphalt plant. Additional concerns include additional additives added at the asphalt plants such as rejuvenating agents encapsulated in hard ACs, etc.

- OAPC stated we need to take some risk to try some trials. OAPC questioned what if there is no savings? Then industry won't do it.
- MTO has direction to entertain change proposals for RAP in surface mixes, hence this guidance was shared.
- MTO stated plants need to start RAP management now to be able to participate in this in a few years.
- OAPC used to separate premium RAP now don't and hard to find space. Need to start again. Premium aggregate piles are not happening.
- MTO is encouraged by our correlation results and OAPC's O-MAP results and wants to move forward.
- OAPC asked if HWT 70-YY are 12.5 or 6 mm?
- MTO stated 6 mm for 70-YY HWT. Document is only draft, still need to clarify tables. MTO clarified only 1 design point not 3 points for BMD. The MPT during production is for information only.
- OAPC asked if BMD be done by multiple labs, contractor's lab, or only QA lab?
- MTO clarified that BMD should be done by contractor's lab or mix design lab as long as participate in MTO's correlation and Type A certified.
- MTO has publicly available qualified labs list of those that can perform MPT which is available on the MTO Technical Publications Website at: [MTO Technical Documents](#) under the Materials Tab.

#### Action Items:

- OAPC to provide comments on this draft in a couple weeks.
- OAPC to publicize and share with other committees.
- MTO to send the NSSPs for RAC and MPT to OAPC that are in the draft change proposal.
- MTO to clarify in draft change proposal how BMD can be done with limited capacity, add laboratory certification requirements, and update BMD/MPT tables.

#### **Roundtable Discussion**

- OAPC brought up closed item on new DSM process. OAPC mentioned that some suppliers have completed their initial submissions and maybe would be good time to have a sampling discussion.
- MTO mentioned that the DSM related communications are between the ministry and those suppliers and not for this subcommittee. MTO will work with individual suppliers and will not remove any ACs at this time. MTO lab will do the testing and it will not be cookie cutter approach. MTO stated there would be no cost for the reassessment.
- OAPC noted that in the Niagara QEW area this year there seems to have been a change in the anti-strip requirements. Used to be standard based on testing, noticed the Eastern and Northern Region wording irrespective of the TSR there is a requirement to use a minimum. Not usually seen in Central Region. Two to three contracts seem to have this language.

- MTO heard there is a shortage of metal cans for PGAC testing.
- OAPC has not heard about it.

Action Items:

- OAPC to send contracts with irrespective of TSR wording to MTO. **Post Meeting Note:** OAPC sent these contracts to MTO.

## **Information Shared for this Meeting**

### **Documents Share by MTO**

1. Guidelines for Evaluating RAP Change Proposal for Surface Course – June 20 2025 Final-JM (PDF)
2. 2025 R1 SMA Grit Summary for OAPC (June 12 2025) (PDF)

### **Documents Shared by OAPC**

1. Safe\_work\_on\_the\_road (PDF)

## **Next Meeting**

- 2025 Meeting Dates (10 am to 1 pm):
  - September 18 – OAPC to host.
  - December 11 – MTO to host.
- Meeting Adjourned 1:00 pm