

## Meeting Notes

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### MTO/ORBA Structures Technical Subcommittee

<b>Date</b>	September 11, 2025
<b>Time</b>	10:00 am to 1:45 pm
<b>Meeting Hosted By</b>	ORBA
<b>Location</b>	Microsoft Teams

#### Attendance:

Attendee	Organization
Alfredo Maggio	Graham Bros. Construction Ltd.
Kwame Burgher	Decast Ltd.
Luigi Chiodo	Alliance Verdi Civil Inc.
Steven Crombie	ORBA
Mike Doupe	McLean Taylor Construction Ltd.
Kris Gangaram	CRH Canada Group Inc.
Jesse Hopkins	Powell (Richmond Hill) Contracting Limited
Bart Kanters	Concrete Ontario
Tim Smith	Cement Association of Canada
Cole Zanchetta	R.W. Tomlinson Limited
Jenn Meleschuk	MTO, Contract Management Office
Mohammad Aqel	MTO, Engineering Materials Office
James Combe	MTO, Structures Office
Laura Donaldson	MTO, Structures Office
Jeffrey Giroux	MTO, Quality Assurance
Mireya Hidalgo	MTO, Contract Management Office
Joel Magnan	MTO, Engineering Materials Office
Erum Mohsin	MTO, Structures Office
Bo Ni	MTO, Engineering Materials Office
Ahmed Ouda	MTO, Contract Management Office
Melissa Titherington	MTO, Engineering Materials Office

#### Introduction / Announcements:

- Joey Chirico has left the committee.
- Laura Donaldson has joined the committee.
- Kwame Burgher is representing Decast Ltd. today.

## Open Items

### May 25-1, Ontario Procurement Restriction Policy

#### Description:

- Ontario Management Board of Cabinet issued a procurement restriction policy, effective March 4, 2025, that is designed to restrict United States (U.S.) businesses from accessing public sector procurements in Ontario.

#### Discussion:

##### *May 2025:*

- In March 2025, the United States of America introduced tariffs on Canadian products. In response, Ontario's Treasury Board implemented U.S. bid restrictions. In April 2025, the Procurement Restriction Policy was issued to OPS staff and posted to Ontario.ca.
- Since April 2025, the OPS has been working on operationalizing this policy. The MTO must exclude U.S. businesses from procurements.
- A NSSP or Addendum will be issued on a go-forward basis with a bidder declaration to declare whether or not the bidder meets the definition of a U.S. company provided. Subcontractors are not currently part of the policy.

##### *September 2025:*

- The policy has been operationalized since mid-May.
- Canadian Institute of Steel Construction (CISC) has requested that MTO enact a policy that all fabrication of structural steel take place in Canada. This request is currently under review but does not appear to deviate from the current fabrication process.

#### Action Items:

- None.

### Nov 24-1, MTO Proprietary Materials Lists

#### Description:

- Not all proprietary materials lists are readily available online for viewing by the public like the Designated Sources for Materials Lists (DSM) are.
- An ORBA member recently ran into an issue on a project where a product that had been used for years was no longer accepted by the MTO. ORBA requests transparency for these lists, or communication when changes are made.

#### Discussion:

##### *November 2024:*

- ORBA expressed concerns about the MTO VOC compliant concrete sealers list and concrete patching materials lists not being publicly available, and a previously listed product being removed from the concrete patching materials list. Contractors require transparency in what products are acceptable at the time of bidding.
- MTO stated that multiple concrete patching materials were removed from the list because of the type of cement being used. During research, MTO identified products

with calcium aluminate and removed products with this material from the list. MTO is reluctant to publish lists because it has concerns with product suitability for any given application and would like to review use on a case-by-case basis; there are 60-70 products on lists with various application requirements and restrictions.

- ORBA reiterates that members require transparency for bidding purposes. Some members also bulk stock products and require transparency when the lists are being changed. It was suggested that MTO may be in the best position to know what products should be used for regularly encountered categories of patching, such as core holes, bug holes, small patches and could publish lists for routine work.
- MTO will have one updated list for all regions when it is completed and will discuss possible publication internally.

*May 2025:*

- MTO highlights that it does not view the proprietary products as equivalent to normal concrete, so they are only approved by proposal and may only be considered when the patch size is less than 400 mm x 400 mm.
- MTO will be publishing the core hole patching and form and pump lists.
- ORBA notes that one of the issues raised was materials being removed from lists and contractors not being made aware. MTO will provide advanced notice of list changes.

*September 2025:*

- MTO will be publishing a form and pump materials list and a core hole repair materials list to the Technical Publications website after accessibility review.
- Trials are being conducted while engaging directly with suppliers. If future lists will be changed, ORBA will be provided advanced notice that the list will be changing.

Action Items:

- Item closed.

### **May 24-3, Compensation for Mobilization Costs for Rapid Concrete Base Repairs**

Description:

- ORBA put forward this item at the end of the meeting because members have encountered an issue where a contract specifies Type A concrete removal and rapid set concrete replacement for concrete pavement patching but after asphalt removal, no concrete repair is required and the quantity for the payment item is 0.
- ORBA notes the small closure times permitted requires mobilization of all equipment and materials expecting the quantity of work identified in the contract documents. When the quantity is not accurate, there is no contractual mechanism for payment.

Discussion:

*May 2024:*

- ORBA notes that rapid hardening concrete and proprietary materials need to be purchased and on-site ahead of removal of asphalt or it will not be available for the repair within traffic closure time. A method of payment for these materials and mobilization costs for labour/equipment is requested.

*September 2024:*

- ORBA received contract information the morning of the meeting and provided four contract number examples for the MTO to review.

*November 2024:*

- ORBA suggests that paying some fixed percentage of the quantity sheet repair unit tender price, regardless of the quantity of work performed is another option that could alleviate contractor concern of 0-quantity rapid concrete base repairs. For example, a 2m<sup>3</sup> patch is listed in the contract that is found to not require repair and 20% of that patches' tender price is paid.
- MTO review of contract number examples previously provided suggests that compensation was addressed at the field level, but MTO is still reviewing how the issue might otherwise be addressed. There was discussion with ORBA about what types of fixed costs are associated with the work.

*May 2025:*

- MTO review suggests that 0-quantity issues have been addressed by change order at the field level. MTO will not be making a change to the item payment clauses and will address each contract specific issue on a case-by-case basis via change order.
- ORBA disagrees with this approach. There is no contract language that says a change order will be issued for a 0-quantity repair, it is difficult to price the risk into the item at the time of bidding without knowing whether or not a particular contract administrator will issue a change order. Pile driving pays for equipment mobilization and a separate item pays for length of driven pile. ORBA also has examples of this issue where a change order was not issued.

*September 2025:*

- MTO and ORBA reiterate points from the previous meeting. MTO re-iterated previous meeting action for ORBA to provide requested examples of projects that have not received additional compensation by change order to review if a policy change or clarification is required. ORBA will provide contract examples.

Action Items:

- ORBA will provide additional contract examples and MTO will review additional information.

## **Nov 23-1, Supply Chain Delays and Impacts on Schedules (RCP Acceptance)**

Description:

- This item was put forward by ORBA at the Contracts and Documents Subcommittee. MTO proposed that technical discussions about concrete acceptance requirements take place in the MTO-ORBA Structures Technical Subcommittee.

Discussion:

*November 2023:*

- Concrete supply challenges include fewer numbers of suppliers outside of the Greater Toronto Area as well as suppliers choosing to not supply concrete for MTO projects. Of 88 Concrete Ontario members, only 11 will supply MTO contracts.

- ORBA suggests the concrete specification requirements could be changed to attract more suppliers or permitting contractors to use mobile mix plants.
- MTO has not substantially changed concrete requirements from when more suppliers provided concrete and intends for specification requirements to be related to increased material durability. Volumetric mix trucks are being actively investigated and MTO will be meeting with industry soon to discuss research.
- Concrete Ontario has GPS located all 270 concrete plants and a map is available on the website. Location of supply should now be easier.

*May 2024:*

- Concrete Ontario does not anticipate any raw material shortages for 2024. Supply issues to MTO will be from member evaluation of risk involved with bidding on MTO contracts.
- ORBA suggests the concrete specification requirements could be changed to attract more suppliers or permitting contractors to use volumetric mixing trucks because MTO contracts are paying far above the market rate per m<sup>3</sup> of concrete and there are few available suppliers.
- MTO is currently conducting some trials with volumetric mix trucks for non-structural concrete and has concerns with uniformity of concrete being produced that's discharged from the truck. A second trial is being conducted with a second supplier.

*September 2024:*

- Concrete supply in general is down about 8%. Concrete Ontario doesn't see a foreseeable issue with the concrete supply. Steel plate for bridge girders seems to consistently have a 2–3-month delay between placing an order to getting a rolling date. Girder fabrication is generally 5-6 months and can be an issue for some new bridges.
- Volumetric mix trucks have previously been discussed but the OPSS 1350 draft provided to ORBA does not include volumetric mix trucks; ORBA would like to know if MTO is still considering trials and possibly accepting volumetric mix trucks in the future. ORBA reiterates concerns about concrete waste related to patch work, supplier reluctance to supply MTO contracts, and greenhouse gas emissions.
- MTO would still like to conduct volumetric mix truck trials for non-structural components and is looking for suitable contracts to conduct trials. Requirements for volumetric mix trucks would be by NSSP modifying OPSS 1350. MTO stresses that consideration is only for non-structural applications because MTO still has technology concerns including uniformity of mixes, challenges with cementing materials because volumetric mix trucks can't have 2 types of cementing materials, and some trucks can't mix 19mm aggregate mixes.
- Trials will ideally include exposed conditions for extended performance monitoring, so trials may take 2-3 years.

*November 2024:*

- Ready-mix concrete volume was down last year and is expected to be down again this year. There are not expected to be concrete shortage issues.

- Potential USA tariff implementation in January 2025 could severely impact the admixture industry and other specialty materials that are processed in the USA and other cross-border critical materials.

*May 2025:*

- MTO is still open to proposals to use volumetric mix trucks for specific non-structural applications such as noise wall footings. There are ongoing discussions with MTO and Concrete Ontario and equipment suppliers.

*September 2025:*

- Concrete Ontario would like to add some ORBA members to the liaison committee discussing volumetric mix trucks with MTO to ensure all perspectives are considered. The next meeting is next Wednesday.
- MTO remains open to proposals to use volumetric mix trucks for non-structural applications. Change proposals should already be flagged to Quality Assurance (QA) to ensure it reaches the correct MTO staff, but ORBA members may also request the Contract Administrator to contact QA/Concrete when submitting trial proposals.

Action Items:

- Item remains open.

## **Sept 23-2, Concrete Spalling Issues and Acceptance Specifications**

Description:

- ORBA's position is that there is no contractual requirement to resist chemical attacks nor is there any specific durability specification pertaining to salt or any other chemical. ORBA believes it is unreasonable for MTO to suggest that it is the contractor's and supplier's responsibility to make sure the concrete mix design is durable to a chemical that is not specifically identified.
- OPSS 1350.04.01.01 "The concrete mix shall be designed to provide adequate strength and durability for the intended use and to meet the requirements as specified in the Contract Documents."
- 904.08.01 also refers OPSS 1350, "Acceptance shall be according to OPSS 1350 and this specification..."

Discussion:

*September 2023*

- ORBA noted the issue seems to be particular to concrete barrier, sidewalk, and curb, and would like to mitigate the issue (sealers) until MTO determines the specific cause. ORBA noted the following concerns:
  - The barrier seems to only spall on the traffic face so de-icing chemicals are suspected.
  - The sole purpose of the barrier is to prevent errant vehicles from leaving the highway and MTO shouldn't refer to OPSS 904 and OPSS 1350 to extend the purpose of barrier to resist de-icing chemical attack.

- MTO contracts do not specify what chemical will be applied and how it will react with the concrete. Concretes exposed to severe chemical attack are typically epoxy coated.
- Concrete has passed RCP and AVS tests and many examples were built in staged construction so at least half the barrier has had sufficient time to cure.
- MTO commented that a purpose of concrete is to be durable in its environment, RCP and AVS are specified for durability, proper curing is an important factor, and sealers may not be an effective solution based on data to date.
- The specific failure mechanism needs to be determined first before any further discussion can occur.

*November 2023:*

- MTO and ORBA repeated their positions from the September 2023 meeting.

*May 2024:*

- MTO held an industry outreach meeting in February 2024. Scaling was identified in 23 cases over the past 5 years, so the issue is not as widespread as initially thought. MTO's experience is that concrete sealers do not solve the problem but just delay observation of the problem.
- MTO is continuing work on site investigations and winter maintenance practices, as well as lab testing to identify potential cause(s) and will follow up with ORBA when results of investigations are complete.
- MTO is also proceeding with a related HIIFP research project. ORBA would like to see the terms of the research proposals.
- Discussion about higher supplementary cementitious materials (SCM) content for concrete not exposed to chlorides that was also discussed at the industry outreach meeting. Any specifications changes related to SCMs will not be complete in 2024.
- ORBA suggests higher strength concrete for barriers/sidewalks and states MTQ specifies 50MPa for barriers, and that some DOT's specify sealers.

*September 2024:*

- MTO sent ORBA HIIFP topic 4 about research related to slag content between meetings. The topic was recently awarded to University of Toronto and should start later this month. Research will investigate different slag content and the impact of slag content on salt scaling and freeze/thaw performance.
- ORBA would have liked to see the research include higher slag percentages and investigate different de-icing chemicals. The scope of research appears to be less than discussed at the stakeholders meeting. This research proposal was issued prior to any discussion at stakeholder meetings and 2025 HIIFP proposals are due soon so future research may include additional scope.
- ORBA asks for specific de-icing chemical compositions being used and application rates from Area Maintenance Contracts (AMC).
- Draft OPSS 904 includes a clause about an approved list for concrete sealers. MTO position on sealers has not changed, they were already permitted for certain applications in the specification but did not say what sealers to use. The new clause is to notify contractors of the approved product list.

*November 2024:*

- MTO provided ORBA with the MTO highways maintenance program de-icing chemical information prior to the meeting.

- The awarded HIIIP project now includes some investigation of chlorides.
- Alternative approaches to barriers were discussed including 50 MPa concrete, sealers, and steel traffic barrier.
- MTO and ORBA do not agree on how to approach 2025 construction contracts. MTO's position is that each issue will be treated as a contractual issue and will be evaluated on an individual basis. The EMO Concrete section will get involved with each dispute for consistency and to collect additional data.

*May 2025:*

- MTO didn't identify any issues and there were no reported issues for the 2023/2024 winter season. The 2024/2025 season is under active investigation for any potential issues. MTO is also following up with site inspection and laboratory work.
- ORBA requests de-icing chemical information – each chemical, its application volume and frequency, the concentration over the last 10 years, and the proportion of each chemical being applied (e.g., is NaCl<sub>(s)</sub> being applied 70% of the time?). MTO will investigate volume and frequency; concentration was shared in the information for the last meeting for each region.

*September 2025:*

- MTO, Concrete Ontario, and ORBA reiterate previous discussion and positions.
- ORBA did not report new instances of scaling/spalling relating to disputes on MTO contracts.
- Concrete Ontario does not want to receive any information about de-icing chemicals used by MTO.
- A smaller group will be organized to discuss this particular issue elsewhere.

Action Items:

- ORBA will determine which members will discuss this issue at its own working group and approach MTO to start the group.

### **Sept 23-3, OPSS 914 Response to TCP Comments**

Description:

- Areas of disagreements to be discussed (72-hour air curing, 2-layer method, and empty kettle requirements).

Discussion:

*September 2023:*

- ORBA asked if it will be a unified 2-layer system on future contracts.
- It is a requirement of the July 2023 specification that is going on contracts advertised after specification implementation.
- ORBA asked for clarification about TCP comment number 3 "Also concern about the no rain or moisture on the deck for 72 hours prior to the start of the waterproofing but is that realistic given the shortened time frame to get work completed." The response was that this has always been a requirement. ORBA believes this was about air curing. Is the moisture requirement to air cure for 72 hours, or no precipitation for 72 hours?
- MTO will have to take this back for review.

- ORBA believes the requirement to empty the kettle and start with a clean one each time is wasteful. The owner may take QA samples at any time to determine if there is burned material or if it has exceeded the acceptable limits.
- MTO understands that this requirement can lead to waste, however it is known that a strong indicator of poor waterproof performance is exceeding the time and temperature requirements. MTO is currently experiencing significant issues with waterproofing and is not currently willing to take additional risk of excessively heated waterproofing material.
- ORBA noted that the double layer application method on older contracts that do not use the July 2023 specification requiring it are taking twice as long to apply the waterproofing as anticipated. How will contractors be compensated for that?
- MTO cannot discuss payment today at the structures technical subcommittee.

*November 2023:*

- MTO intended to clarify the OPSS 904 requirement for 72hrs air curing prior to application of waterproofing by moving it to OPSS 914 as it was a waterproofing requirement.
- As written was not clear to ORBA. ORBA's expectation was that a concrete deck be air cured for 72hrs and then make sure it is dry before waterproofing, not preventing precipitation for 72hrs.

*May 2024:*

- MTO internally reviewed concerns brought up at the last meeting and does not believe the 72hr requirement is an issue for contracts or contract administration as it has been a specification requirement for a long time. Where there is a contract specific issue, change proposals may be submitted.
- ORBA agrees that it has been a requirement for a long time that a concrete deck be dry before applying waterproofing membrane but disagrees with the MTO's position that the addition of "with no exposure to precipitation or water" to 914.07.03 of OPSS 914, July 2023 is not a substantial change.

*September 2024:*

- There is a discussion about water/moisture and the waterproofing pinhole/bubbling issue previously discussed. The pinhole/bubbling is still occurring but less frequently and industry is more aware of it. There is concern that moisture may contribute to the issue, but excessive moisture has other impacts, including on adhesion, so the 72hr requirement is not only about pinholing.
- If moisture is an MTO concern, is there an avenue of being more prescriptive about how to prepare the deck surface prior to waterproofing instead of the 72hr requirement?
- ORBA notes previously discussed concerns about the clean kettle requirement which results in more idle time and material waste.
- MTO issued HIIFP research topic 5 about waterproofing to investigate deck drying, moisture content and tools to measure moisture content.

*November 2024:*

- MTO included additional language to the specification stating contractors may submit a proposal for remedial action if precipitation occurs during the 72hr air-curing period. ORBA does not agree that this is a practical solution which leaves decisions too open to contract administrator interpretation, and questions how

widespread of an issue poor waterproofing bond is because of past application practices.

- MTO states that visual assessment of dryness of concrete is not an appropriate measure; saturated surface dry condition may have too much moisture for waterproof membrane application. Research is ongoing into several testing devices and field testing will be conducted. The specifications will be updated, as appropriate, when research work is completed.

*May 2025:*

- Various moisture testers have been purchased to be tested in the laboratory and the field this construction season. MTO is continuing to monitor HIIFP research for ways of assessing drying of the concrete deck and will follow-up when it is complete.
- ORBA and MTO do not agree on the need for the specification requirement that the kettle be empty when it arrives on site before adding and heating waterproofing material. MTO requests ORBA provide something in writing for review.

*September 2025:*

- MTO and ORBA reiterate previous meeting points.
- University research continues and MTO is supplementing that research with readings by various moisture meter instruments/technologies in the field this season.
- MTO is open to attend waterproofing projects to collect additional data where feasible, and to test various moisture meters.
- The use of the double layer waterproofing application method with membrane continues to be specified in all contracts to help mitigate the bubbling issue.

Action Items:

- MTO will continue waterproofing research.

### **May 23-3, Foundation Information Reports**

Description:

- ORBA would like MTO to provide the FIDR in contract documents.

Discussion:

*May 2023:*

- ORBA requested to include the recommendations section of the FIR with tender documents. Some other DOTs provide the description of the soils as well as the recommendations.
- MTO will review what subsoil investigation information is provided with tender documents.

*September 2023:*

- Inclusion of FIDR's in Contracts Sept 8 2023 PowerPoint slides (attached).
- MTO current state of practice is not to include the FIDR in Design Bid Build contracts. In Design Build contracts it is included with a letter of reliance. The information is available in the GEOCRES system, but it is not included in the contract documents.

- MTO's jurisdiction scan shows that most jurisdictions are also not supplying the FIDR. There are owner risks to supplying the FIDR and it is not produced to be a contract document.
- ORBA noted safety concerns of not being provided information, such as base heave.
- MTO has additional mechanisms in place to communicate safety information in a contract without supplying a FIDR.

*November 2023:*

- MTO work on this item has not started yet, there is no update for this meeting.

*May 2024:*

- MTO will try to have an update on this item for the next meeting.

*September 2024:*

- MTO has started a jurisdictional scan, but nothing has been finalized yet and an internal meeting is scheduled with the Contract Management Office to discuss the risks of releasing this information. There are no major updates.

*November 2024:*

- MTO has completed its jurisdictional scan of FIDR inclusion and is now proceeding with the process for new policy development.
- Engineering service providers are concerned that FIDR are produced at a certain point in time with certain assumptions and things can evolve and change over time between production of the FIDR and completion of a construction contract package. This may have the potential to identify inconsistencies for claims or liabilities and needs further discussion between MTO and engineering service providers.

*May 2025:*

- MTO is reviewing what and how FIDR information can be provided to contractors. There is currently no change, but updates will be provided when they're available.

*September 2025:*

- MTO has completed a second, more fulsome jurisdictional scan and is proceeding with discussions with internal and external design engineers to hear their potential feedback.

Action Items:

- MTO will provide an update at the next meeting.

**May 19-4, OPSS 903 – Update – A Review of Caisson Concrete Requirements**

Description:

- Proposal for a meeting to discuss workability issues with placing concrete for caissons.

Discussion:

*May 2019:*

- ORBA suggested organizing a meeting to discuss workability issues with pouring concrete for caissons. Caissons may go deep into the ground where no vibration of concrete is possible. Caissons may have congested reinforcement so larger

sized aggregate can get hung up which can pull the reinforcing cage down significantly.

- Meeting should include representatives from MTO Bridge Office, MERO Concrete Section and Foundations. Several members from the ORBA committee expressed interest in attending.
- ORBA to organize meeting.

*November 2019:*

- Representatives of MTO and ORBA met on November 18, 2019, to discuss caisson issues; Andrew Weltz provided a brief summary of the meeting. The group plans to meet again in the new year. MTO is planning to address some of the more straight forward concerns by developing a NSSP for short term use and work on updating OPSS 903 in the longer term.
- ORBA will send MTO the minutes from that meeting.
- Combined this item with May 19-4 and updated item name.

*June 2020:*

- A meeting was held on May 6<sup>th</sup>. OPSS 903 is being split into two different specifications, drilled and driven piles.

*November 2020:*

- An ORBA member noted that recently no further action has been taken to further this item since in-person meetings are on hold.
- ORBA will reach back out to MTO and restart the work on this item.
- ORBA also wanted to note that they have not lost interest in this.

*May 2021:*

- Andrew Weltz gave an overview of the work being completed. Generally, the work is considered to be a modernization of the specification. Previously, OPSS 903 focused on driven piles rather than caissons. The new specifications will be split into Driven Piles and Caissons.
- Conversations to date have been very productive, with engagement of Consultants, ORBA and other agencies.
- For Caissons, the following issues have been the focus of the updates:
  - *The ratio of concrete aggregate size and rebar spacing. The root cause of this issue was a design philosophy. The solution is to establish a designer guide for rebar spacing in the cage.*
  - *Traditionally, you use a higher slump mix so that the concrete can make it through the cage, but the dense cage stops the aggregate from passing through and leads to quality issues. Designer guide will provide a minimum spacing.*
  - *Improve the requirements and guidance for use of Tremie concrete.*
  - *Tony is bringing in a testing regime for caissons which involves sophisticated testing to gain a better understanding of what the load bearing capacity will be prior to loading.*
- The group will be focusing on the driven pile specification shortly.
- MTO asked how they plan to ensure the quality of the Tremie Concrete. A.W. noted that Cross Hole Sonic Logging will be used to verify the overall quality of the

concrete. The holes will be installed by the contractor, and testing will be completed by an independent testing lab.

- MTO asked how they plan to provide the notes to the designer regarding the spacing of rebar in the spiral. A.W. noted that the specification will have a Notes to Designer section where it will state the rebar spacing requirements (i.e., Rebar Spacing = 5\*Max Agg. Size)
- Working group will continue the development of the specification and report back to the group with progress.

*November 2021:*

- A NSSP was created to put into contracts. It will likely be another year before projects use the specification and lessons learned can be prepared.
- Item left on the agenda and will be addressed once another working group meeting occurs or there is more information from new projects.

*May 2022:*

- Draft caisson specification issued as an NSSP.
- Another meeting is scheduled for June for the working group to review the pile driving specification.

*November 2022:*

- The specification has been worked on for about three years now.
- ORBA members missed one meeting last year and were surprised to find the specification was finalized. Meetings have resumed and expect the specification won't be ready for the new year. Understand that in the meantime the NSSP is being issued with contracts, but ORBA considers this problematic because it hasn't been fully reviewed by the working group but does expect that MTO will not be willing to use the previously published specification now that the draft NSSP has been issued in contracts.

*May 2023:*

- The caisson NSSP has been used on several contracts now. It is a challenging specification with a number of changes, but it is now on par with other jurisdictions.
- Driven piles specification draft is currently under review.

*September 2023:*

- MTO is collating comments to update the specification and the completed draft will be distributed for review.
- The draft of OPSS 903 will be posted to TCP for comment before publication.

*November 2023:*

- Work is progressing on this item and is targeted for Spring 2024. The draft has not been posted on TCP yet.

*May 2024:*

- Work is progressing on this item and the draft has not been posted on TCP yet.

*September 2024:*

- MTO has a version issued as a NSSP for a couple of contracts, but it isn't final and MTO is still open to making changes. The specification is being trialed right now and makes more sense to use for drilled caissons being designed now than to go back to the older specification that did not consider them.

*November 2024:*

- The NSSP is being trialed in a number of contracts, but MTO is confident in the specification, and the specification has been set up to migrate directly to OPSS without an interim SSP step. How the specification works in contracts will still be evaluated. The driven pile specification is intended to be OPSS 903 and the drilled shaft specification is intended to be OPSS 901.

*May 2025:*

- MTO is continuing work on converting the NSSP to an OPSS and its associated documents.
- ORBA comments that tremie concrete in caissons tends to be a controversial topic for higher groundwater table areas.

*September 2025:*

- Item closed.

Action Items:

- Item closed.

#### **June 20-6, Implement “Electronic Ticketing” for Aggregate, Asphalt and Concrete - Status**

Description:

- Industry has broadly implemented electronic ticketing of trucks. MTO concrete specifications require paper tickets.
- MTO has e-ticketing concerns with integrity and access to data, and security.

Discussion:

*May 2025:*

- MTO reiterates that its approach to ticketing has not changed, electronic tickets will not be accepted for MTO construction contracts.
- ORBA notes that MTO is the only supplier not accepting electronic ticketing.
- MTO will consider proprietary e-ticket systems on an individual basis and welcomes the evaluation of any systems. The requirements of the system evaluation have been previously provided by MTO. However, there have been specific, identifiable examples of e-ticket modification. If a truck arrives on an MTO site without a paper ticket it will be rejected.
- MTO and Concrete Ontario will meet to discuss this item further.

*September 2025:*

- MTO reported that there have been issues with alteration of key material parameters in electronic ticketing platforms, confirming the need to have these systems and associated protocols assessed for security and integrity prior to MTO consideration for acceptance purposes.
- The concrete industry has agreed to provide paper records on MTO projects. Individual concrete industry members may approach MTO to validate use of their electronic system.

Action Items:

- Item closed.

## New Items

### Nov 22-1, Safety Talk

#### Description:

- It was agreed at the May 2022 meeting that this would be a recurring item to promote safety culture. MTO and ORBA are both free to propose their own safety talk items.
- ORBA and MTO will alternate who is responsible for the safety talk at each meeting.

#### Discussion:

- MTO presented today's safety talk on Fall seasonal change tasks and considerations.
- Fall seasonal safety should consider daylight savings time change affecting alertness. The season also has more low-light conditions, a return to school, and Halloween so drivers should slow down and watch for children.
- Winter tires should be installed prior to the first frost.
- Test smoke and carbon monoxide detectors and don't overload electrical circuits with seasonal lighting.

#### Action Items:

- None.

### Sept 25-1, MTO Precast Concrete Specifications

#### Description:

- New OPSS 1355 – Precast Concrete, Materials and Production has been posted to the Technical Consultation Portal (TCP). This material specification is for precast concrete like OPSS 1350 is for cast-in-place concrete.
- Various related precast concrete specifications have been updated, which moves material requirements in common to OPSS 1355.

#### Discussion:

- Related specifications may need to be read concurrently so the TCP posting is longer than typical (8 weeks).
- Specifications posted for comment are: OPSS 1355 Precast Concrete, Materials and Production; OPSS 363 Construction Specification for Repairing Concrete Pavement and Concrete Base with Precast Concrete Slabs; OPSS 740 Construction Specification for Concrete Barrier; OPSS 760 Construction Specification for Noise Barrier Systems; OPSS 909 Construction Specification for Prestressed Concrete – Precast Girders; OPSS 912 Construction Specification for Precast Concrete Culverts with Spans Greater than 3.0m; OPSS 916 Construction Specification for Precast Concrete Bridge Elements; and, OPSS 941 Construction Specification for Mechanically Stabilized Earth Retaining Walls.
- ORBA will make sure to send posting notice to its membership to be able to comment.

#### Action Items:

- Item Closed.

## **Sept 25-2, MTO RCP Acceptance Limit**

### Description:

- OPSS 1350 has an RCP acceptance limit of 2,500 Coulombs at 28-days. ORBA proposes the MTO consider providing an alternative 56-day acceptance criteria if the 28-day result does not pass.

### Discussion:

- ORBA asks MTO to consider testing RCP at 56-days following a failed 28-day test, with the understanding that as concrete continues to age and mature, the permeability performance improves.
- A 56-day RCP acceptance threshold would need to be significantly more stringent than a 28-day acceptance threshold to be considered equivalent material, taking into account the well-established improvements in RCP results with increased curing time. Based on this, delaying testing would not necessarily result in higher acceptance rates, but would result in more significant project impacts.
- MTO specifications include a referee process that can be invoked. The higher performance threshold of the referee test considers that RCP performance increases with time and is to account for the time difference between testing and referee testing.
- MTO's opinion is that it is better to test earlier than later to have fewer project impacts in the event of a failed test.

### Action Items:

- MTO will review ORBA's request.

## **Sept 25-3, MTO Slag Limit**

### Description:

- ORBA proposes MTO increase the slag replacement limit of concrete exposed to chlorides from 25% to 30%

### Discussion:

- ORBA notes MTO's concrete pavements limit is currently 30% slag replacement, and the industry is confident that current concrete technology can result in higher performing/less permeable concretes if slag content is increased.
- Previous concrete industry and MTO discussions were to identify locations where salt scaling is not an issue for trials. There is recurring interest with industry average EPD's being updated again. MTO requests updated EPD's when report is completed.
- MTO considers the effective slag content as the ratio of slag to clinker. With the change from GU to GUL cement, the effective content is already closer to 28-29% than 25%. There is an inherently lower water/cement ratio of pavement concrete than other concrete because of the typical construction process of MTO contracts and MTO does not consider pavement concrete and other concrete equivalent for comparison.

### Action Items:

- ORBA will take MTO comments back to industry.

## **Sept 25-4, MTO Concrete Discharge Time Limit**

### Description:

- ORBA proposes MTO increase the concrete discharge time allowance from 90 minutes to 120 minutes where supply and full discharge of a concrete delivery cannot be completed within 90 minutes from an MTO approved batch plant.

### Discussion:

- CSA A23.1:24 allows 120-minute discharge time with owner approval so ORBA members have, without success, requested MTO on specific contracts to allow the use of set-retarders to extend discharge time. Concrete producers believe they can demonstrate that concrete properties are not impacted by this discharge time extension through trials.
- MTO did many trials over the years with respect to workability retaining admixtures but the outcome was not successful. Hydration is slowed, but it is still happening and there will eventually be an impact on concrete properties and durability.
- MTO, Concrete Ontario, and admixture companies have recently discussed new technologies. MTO is open to reviewing new technologies impact on this requirement when Concrete Ontario is prepared to discuss.

### Action Items:

- None.

## **Sept 25-5, Construction Site Third-Party Concrete Testing**

### Description:

- Concerns with the quality of commercial field testing of concrete has prompted discussion of concrete field testing overall. ORBA proposes discussion of systems/processes to ensure quality field testing of concrete and accountability for non-conformance.

### Discussion:

- Improper testing can lead to poor, inaccurate, and misleading results. ORBA's concern is how testers that are not performing tests correctly are identified and remediated, and how to address an improper test without affecting a concrete load. MTO projects have more oversight, but commercial work has prompted this concern.
- MTO has strict specification requirements for the qualifications of concrete testers to do the work and this is an uncommon issue. The current tracking/remediation process is on a case-by-case basis.

### Action Items:

- None.

## **Information Shared for this Meeting**

### **Documents Share by ORBA**

None.

## **Documents Shared by MTO**

MTO-ORBA Structures Subcommittee – Safety Moment – SP CR\_R1.pptx

## **Next Meeting**

- Thursday, November 20, 2025 – MTO to host.