

# MTO/ORBA STRUCTURES TECHNICAL SUBCOMMITTEE MEETING NOTES

**Date:** May 9, 2024  
**Time:** 10:00 am to 1:00 pm  
**Location:** Microsoft Teams/ORBA Boardroom

<b>ATTENDEE</b>	<b>ORGANIZATION</b>	<b>ATTENDEE</b>	<b>ORGANIZATION</b>
Alfredo Maggio	Graham Bros. Construction Ltd.	Rebecca Li (co- chair)	MTO, Contract Management Office
Doubra Ambaiowei	ORBA	Mohammad Aqel	MTO, Engineering Materials Office
Luigi Chiodo	Alliance Verdi Civil Inc.	James Combe	MTO, Structures Office
Justin Chen	Morrison Hershfield	Jeffrey Giroux	MTO, Construction West
Steven Crombie	ORBA	Walter Kenedi	MTO, Structures Office
Mike Doupe	McLean Taylor		
Steve D'Orazio	Clearwater Structures Inc.	Joel Magnan	MTO, Engineering Materials Office
Dale Gaston	Algonquin Bridge Limited	Bo Ni	MTO, Engineering Materials Office
Nasib Gupta	The Miller Group	Melissa Titherington	MTO, Engineering Materials Office
Denton Hall	Dufferin Construction Company	Andrew Turnbull	MTO, Structural West
Jesse Hopkins	Powell		
Bart Kanters	Concrete Ontario		
Richard Mulder	Decast		
Tim Smith	Cement Association of Canada		
Jon Vallieres	Looby Construction Limited		
Cole Zanchetta	R.W. Tomlinson Limited		

<b>INTRODUCTION / ANNOUNCEMENTS</b>
<ul style="list-style-type: none"> <li>Nasib Gupta is sitting in for Chris Ryell to represent The Miller Group today.</li> <li>Kevin English has left the committee.</li> <li>Rebecca Li is now the co-chair from MTO.</li> </ul>

OPEN ITEMS	ACTION BY
<p><b>Nov 23-1</b>    <b>SUPPLY CHAIN DELAYS AND IMPACTS ON SCHEDULES (RCP ACCEPTANCE)</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p><i>Discussion:</i></p> <p><i>November 2023:</i></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• ORBA suggests the concrete specification requirements could be changed to attract more suppliers or permitting contractors to use mobile mix plants.</li> <li>• 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.</li> <li>• Concrete Ontario has GPS located all 270 concrete plants and a map is available on the website. Location of supply should now be easier.</li> </ul> <p><i>May 2024:</i></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> </ul> <p><i>Action:</i></p> <ul style="list-style-type: none"> <li>• MTO will continue trials of volumetric mix trucks.</li> <li>• ORBA will contact concrete suppliers for potential feedback on what provisions of MTO concrete standards are causing them to not supply concrete.</li> </ul>	<p><b>MTO</b> <b>ORBA</b></p>

OPEN ITEMS	ACTION BY
	ORBA
<p><b>Nov 23-2 SCREED RAIL SUPPORTS TO GIRDERS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>MTO presentation about screed rail supports to facilitate discussion about potential improvements to contract requirements.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>November 2023:</i></p> <ul style="list-style-type: none"> <li>• ORBA had the following comments after the presentation:                     <ul style="list-style-type: none"> <li>○ A standard requirement for sacrificial bars that can be welded is not as straightforward as it sounds, especially with skewed bridges. There are many conflicts, so the sacrificial bars are custom for each structure and girder stirrups may need to be angled.</li> <li>○ Coring and bars anchored to girders may both require drilling into the top flange of girder. This has the potential for more damage than welding rebar/stirrup projections. Which condition results in greater impact should be investigated.</li> <li>○ Welding could generally be permitted in contracts with additional acceptability limits/parameters.</li> <li>○ Running the screeds on cantilever overhangs wasn't presented as an option in the presentation. ORBA asked if MTO has considered this instead of requiring screeds over the flange of exterior girders.</li> <li>○ In general, ORBA does not believe there is an issue with the current practice.</li> </ul> </li> </ul> <p><i>May 2024:</i></p> <ul style="list-style-type: none"> <li>• MTO is reviewing ORBA comments from the last meeting. No changes are currently planned.</li> </ul> <p><i>Action – Close Item</i></p>	
<p><b>Nov 23-3 OPSS 919 – CERTIFICATE of CONFORMANCE (CoC) and REQUEST/NOTICE to PROCEED (RtoP/NtoP)</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>There is a new requirement for a RtoP/NtoP as well as the CoC for temporary supports and formwork/falsework in OPSS.PROV 919, November 2023. ORBA thought RtoP/NtoP would not be applied to temporary works when it was implemented.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>November 2023:</i></p> <ul style="list-style-type: none"> <li>• Timeliness is ORBA's biggest concern. NtoP will need to be issued by the Contract Administrator as soon as possible to not impact the</li> </ul>	

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	<p>construction schedule.</p> <ul style="list-style-type: none"> <li>MTO posted the specification to TCP for consultation and did not receive any comments, so it was published with this requirement. ORBA would like to discuss TCP in general; MTO suggests the Contracts and Documents Subcommittee is a better venue for a general discussion about TCP consultations.</li> </ul> <p><i>May 2024:</i></p> <ul style="list-style-type: none"> <li>SSP 109S60, February 2024 has been published and removes the RtoP/NtoP requirement. The requirement is now CoC only; warrant always with OPSS 919, November 2023.</li> </ul> <p><i>Action – Close Item</i></p>
<p>Sept 23-2</p>	<p><b>CONCRETE SPALLING ISSUES AND ACCEPTANCE SPECIFICATIONS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li><b>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.</b></li> <li><b>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."</b></li> <li><b>904.08.01 also refers OPSS 1350, "Acceptance shall be according to OPSS 1350 and this specification..."</b></li> </ul> <p><i>Discussion:</i></p> <p><i>September 2023:</i></p> <ul style="list-style-type: none"> <li>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:             <ul style="list-style-type: none"> <li>The barrier seems to only spall on the traffic face so de-icing chemicals are suspected.</li> <li>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.</li> <li>MTO contracts do not specify what chemical will be applied and how it will react with the concrete. Concretes exposed to severe</li> </ul> </li> </ul>

OPEN ITEMS	ACTION BY
<p>chemical attack are typically epoxy coated.</p> <ul style="list-style-type: none"> <li>○ 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.</li> <li>• 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.</li> <li>• The specific failure mechanism needs to be determined first before any further discussion can occur.</li> </ul> <p><i>November 2023:</i></p> <ul style="list-style-type: none"> <li>• MTO and ORBA repeated their positions from the September 2023 meeting.</li> </ul> <p><i>May 2024:</i></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• MTO is also proceeding with a related HIFP research project. ORBA would like to see the terms of the research proposals.</li> <li>• 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.</li> <li>• ORBA suggests higher strength concrete for barriers/sidewalks and states MTQ specifies 50MPa for barriers, as that some DOT’s specify sealers.</li> </ul> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>• <i>MTO will look into if HIFP research proposals may be released/discussed.</i></li> <li>• <i>MTO will continue research/investigations.</i></li> </ul>	<p>MTO</p>
<p><b>Sept 23-3 OPSS 914 RESPONSE TO TCP COMMENTS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>Areas of disagreements to be discussed.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA asked if it will be a unified 2-layer system on future contracts.</li> </ul>	

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<ul style="list-style-type: none"> <li>• It is a requirement of the July 2023 specification that is going on contracts advertised after specification implementation.</li> <li>• 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?</li> <li>• MTO will have to take this back for review.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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?</li> <li>• MTO cannot discuss payment today at the structures technical subcommittee.</li> </ul> <p><i>November 2023</i></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul> <p><i>May 2024</i></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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</li> </ul>	

OPEN ITEMS	ACTION BY
<p>2023 is not a substantial change.</p> <p><i>Action – MTO will review the 72hr requirement in OPSS 914.</i></p>	<p><b>MTO</b></p>

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<p><b>May 23-2 OPSS 904 UPDATE (INCLUDES NOV 19-2, 19-3, 19-4, 19-5, 19-6)</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>The following items are consolidated into one OPSS 904 item (May 23-2): Nov 19-2, Nov 19-3, Nov 19-4, Nov 19-5, Nov 19-6</b></li> </ul> <p><i>Discussion:</i></p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• OPSS 930 references OPSS 904 so there has been interpretation on site that form and pump concrete requires internal vibration. ORBA to provide examples. (Nov 19-2)</li> <li>• ORBA will provide bonding agent proprietary product information to MTO for review. (Nov 19-3)</li> <li>• MTO will review cold weather concrete requirements. (Nov 19-4)</li> <li>• MTO will review sandblasting and power washing requirements for new concrete. (Nov 19-5)</li> <li>• MTO will review fog misting systems requirements. (Nov 19-6)</li> <li>• ORBA asked if the OPSS 904 draft will be ready for review prior to the next meeting in September.</li> <li>• MTO is currently targeting November publication and TCP is now the forum for document review, but MTO will provide a copy of the draft when it is available.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• MTO is experiencing delays and is now anticipating April 2024 publication of the updated specification. Consultation will occur prior to publication.</li> </ul> <p><i>November 2023</i></p> <ul style="list-style-type: none"> <li>• OPSS 904 is an important specification for this committee, ORBA is concerned that MTO wants to publish it in April 2024, but has not seen a draft specification yet. ORBA has concerns that TCP is not providing ORBA enough time and input into specifications before they are implemented and would like to review the consultation process.</li> <li>• MTO suggests that the TCP process be discussed at the Contracts and Documents Subcommittee because the process affects all specifications. Work on OPSS 904 has not started yet and the target publication date is now July 2024.</li> </ul> <p><i>May 2024</i></p> <ul style="list-style-type: none"> <li>• MTO committed to providing a draft of OPSS 904 and OPSS 1350 to ORBA 30 calendar days prior to posting the draft on the TCP. Drafts are now targeted for November 2024, but the date could change depending on time required for consultation and review.</li> <li>• ORBA requests a tracked changes document for the draft.</li> </ul> <p><b>Action – MTO will provide a tracked change copy of the OPSS 904 draft to ORBA 30 calendar days prior to posting the draft on the TCP.</b></p>	<p><b>MTO</b></p>

OPEN ITEMS	ACTION BY
<p><b>May 23-3</b></p> <p><b>FOUNDATION INFORMATION REPORTS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>ORBA would like MTO to provide the FIDR in contract documents.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• MTO will review what subsoil investigation information is provided with tender documents.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• <i>Inclusion of FIDR's in ContractsSept82023</i> PowerPoint slides (attached).</li> <li>• 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 GEOCRE system, but it is not included in the contract documents.</li> <li>• 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.</li> <li>• ORBA noted safety concerns of not being provided information, such as base heave.</li> <li>• MTO has additional mechanisms in place to communicate safety information in a contract without supplying a FIDR.</li> </ul> <p><i>November 2023</i></p> <ul style="list-style-type: none"> <li>• MTO work on this item has not started yet, there is no update for this meeting.</li> </ul> <p><i>May 2024</i></p> <ul style="list-style-type: none"> <li>• MTO will try to have an update on this item for the next meeting.</li> </ul> <p><b>Action – MTO will try to provide an update on this item at the next meeting.</b></p>	<p><b>MTO</b></p>

OPEN ITEMS	ACTION BY
<p><b>May 23-4    TESTING GU AND GUL CEMENT TO LS METHODS</b></p> <p><i>Description:</i></p> <ul style="list-style-type: none"> <li>• <b>ORBA asks when all LS test methods will permit GUL cement instead of GU cement.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA noted LS-423 has verbal acceptance to test with GUL cement. There are other LS test methods that still require GU cement, but it is not available for the tests.</li> <li>• MTO is still investigating the other test methods. Studies are still in progress, but some information was published about the correlation between the two types. Prism testing takes a long time to complete and is ongoing.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• ORBA asked for an update on testing and stated many suppliers do not have GU cement anymore for testing.</li> <li>• Published test results suggest that using GUL cement for performing AMB testing will have the same result as when using GU cement. The variation between results when comparing using either cement is smaller than the normal variation in the AMB test. There are ongoing concrete prism tests with the same comparative methodology between using GU or GUL cement, which take a year to complete. MTO will complete testing and publish the results before updating lab standards. Results are expected by the end of 2023 and updates to test methods will come after if the data supports those updates.</li> <li>• MTO has looked for GU supply and it can still be obtained in enough quantity for a lab so testing can still be done according to the test method.</li> </ul> <p><i>November 2023</i></p> <ul style="list-style-type: none"> <li>• 1-year prism tests have not been completed yet.</li> </ul> <p><i>May 2024</i></p> <ul style="list-style-type: none"> <li>• MTO has updated the LS test methods to include GU and GUL cement and they will be published with the upcoming manual update.</li> <li>• Results of concrete prism and accelerated mortar bar testing will be published to the technical publications website when the reports are complete.</li> </ul> <p><b>Action – Close Item.</b></p>	
<p><b>May 19-4    OPSS 903 – UPDATE – A REVIEW OF CAISSON CONCRETE REQUIREMENTS</b></p> <p><i>Description:</i></p>	

OPEN ITEMS	ACTION BY
<ul style="list-style-type: none"> <li>• <b>Proposal for a meeting to discuss workability issues with placing concrete for caissons.</b></li> </ul> <p><i>Discussion:</i></p> <p><i>May 2019</i></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Meeting should include representatives from MTO Bridge Office, MERO Concrete Section and Foundations. Several members from the ORBA committee expressed interest in attending.</li> <li>• ORBA to organize meeting.</li> </ul> <p><i>November 2019</i></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• ORBA will send MTO the minutes from that meeting.</li> <li>• Combined this item with May 19-4 and updated item name.</li> </ul> <p><i>June 2020</i></p> <ul style="list-style-type: none"> <li>• A meeting was held on May 6<sup>th</sup>. OPSS 903 is being split into two different specifications, drilled and driven piles.</li> </ul> <p><i>November 2020</i></p> <ul style="list-style-type: none"> <li>• An ORBA member noted that recently no further action has been taken to further this item since in-person meetings are on hold.</li> <li>• ORBA will reach back out to MTO and restart the work on this item.</li> <li>• ORBA also wanted to note that they have not lost interest in this.</li> </ul> <p><i>May 2021</i></p> <ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Conversations to date have been very productive, with engagement of Consultants, ORBA and other agencies.</i></li> <li>• <i>For Caissons, the following issues have been the focus of the updates:</i> <ul style="list-style-type: none"> <li>○ <i>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.</i></li> </ul> </li> </ul>	

OPEN ITEMS	ACTION BY
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>▪ <i>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.</i> <ul style="list-style-type: none"> <li>○ <i>Improve the requirements and guidance for use of Tremie concrete.</i></li> <li>○ <i>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.</i></li> </ul> </li> </ul> </li> </ul> </li> <li>• The group will be focusing on the driven pile specification shortly.</li> <li>• 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.</li> <li>• 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)</li> <li>• Working group will continue the development of the specification and report back to the group with progress.</li> </ul> <p><i>November 2021</i></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Item left on the agenda and will be addressed once another working group meeting occurs or there is more information from new projects.</li> </ul> <p><i>May 2022</i></p> <ul style="list-style-type: none"> <li>• Draft caisson specification issued as an NSSP.</li> <li>• Another meeting is scheduled for June for the working group to review the pile driving specification.</li> </ul> <p><i>November 2022</i></p> <ul style="list-style-type: none"> <li>• The specification has been worked on for about three years now.</li> <li>• 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</li> </ul>	

OPEN ITEMS	ACTION BY
	<p>use the previously published specification now that the draft NSSP has been issued in contracts.</p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Driven piles specification draft is currently under review.</li> </ul> <p><i>September 2023</i></p> <ul style="list-style-type: none"> <li>• MTO is collating comments to update the specification and the completed draft will be distributed for review.</li> <li>• The draft of OPSS 903 will be posted to TCP for comment before publication.</li> </ul> <p><i>November 2023</i></p> <ul style="list-style-type: none"> <li>• Work is progressing on this item and is targeted for Spring 2024. The draft has not been posted on TCP yet.</li> </ul> <p><i>May 2024</i></p> <ul style="list-style-type: none"> <li>• Work is progressing on this item and the draft has not been posted on TCP yet.</li> </ul> <p><b>Action – Item remains open.</b></p>

NEW ITEMS	ACTION BY
<p><b>Nov 22-1 SAFETY TALK</b></p> <p>Description:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• ORBA and MTO will alternate who is responsible for the safety talk at each meeting.</li> </ul> <p>Discussion:</p> <ul style="list-style-type: none"> <li>• This meeting the safety talk was led by MTO.</li> <li>• MTO presents working at heights training as an old, but still important topic as slips, trips and falls are still a leading cause of workplace injury. After additional training requirements were implemented in 2015, there has been a corresponding 19% loss time injury reduction from working at heights. Training is only valid for three years and must be from a Ministry of Labour (MOL) approved training program. Additional references are mentioned and will be provided following the meeting.</li> <li>• The MOL 2024-2025 strategic plan is expected to include an inspection enforcement compliance focus including construction and falls.</li> </ul> <p><b>Action – N/A.</b></p>	

NEW ITEMS	ACTION BY
<p><b>May 24-1</b>    <b>OPSS 366 – CONCRETE PAVEMENT AND BASE FWD TESTING</b></p> <p>Description:</p> <ul style="list-style-type: none"> <li>• <b>OPSS 366 identifies the need for pre-construction concrete base repairs identification using a Falling Weight Deflectometer (FWD). ORBA put this item forward to propose changing or eliminating the FWD testing requirement from this specification for highway rehabilitation projects over concerns about the current condition of Ontario highways typically requiring concrete base repairs, evaluation and testing procedures not being followed, and delays to construction projects caused by testing.</b></li> </ul> <p>Discussion:</p> <ul style="list-style-type: none"> <li>• ORBA’s position is that the new OPSS is not fair with a rigid pass/fail standard when work includes factors outside their control (e.g., existing base and concrete). Amendment proposals include lower acceptance limits (less than the 70% currently specified), possibly a graduated acceptance criterion, sampling on the new slab side only, and a temperature correlation factor.</li> <li>• MTO has already taken some specific action with respect to testing concrete pavement and base where testing was not being performed according to the standard. Steps have been taken to ensure compliant and certified testers and equipment are used according to the test procedures. Test locations are to be marked so referee testing is taken in the same place.</li> <li>• Discussion about what the load transfer test is testing for and why the limit is 70%. Less than 70% cannot be accepted by MTO and the value may be impacted by existing concrete, base, dowel placement, slab thickness, etc. All parameters have to be correct to achieve load transfer.</li> <li>• MTO and ORBA agree that contract scope creep is an issue. MTO is investigating alternative data collection methods that may improve design estimates of repair work to be performed.</li> </ul> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>• <i>MTO will investigate if a temperature factor can be applied to calibrate testing to the on-site temperature at the time testing is conducted.</i></li> <li>• <i>ORBA will provide a list of proposed amendments to the OPSS.</i></li> </ul>	<p><b>MTO</b></p> <p><b>ORBA</b></p>

NEW ITEMS	ACTION BY
<p><b>May 24-2</b>    <b>OPSS 517 – FLOW RATES FOR IN-WATER WORK</b></p> <p>Description:</p> <ul style="list-style-type: none"> <li>• <b>ORBA put this item forward to express concern that MTO is directing contractors to determine the flow rates in order to estimate the requirements for water diversions during tender estimating.</b></li> </ul> <p>Discussion:</p> <ul style="list-style-type: none"> <li>• ORBA's experience is that how a flow is to be managed is the contractor's responsibility, but historically the MTO has provided some information about what flow rate may need to be managed in the contract documents. A recent contract after the new publication of OPSS 517 did not provide flow rates and the bid enquiry response was that flow rates would not be provided. ORBA is concerned that flow rates may not be provided going forward.</li> <li>• MTO will investigate the specific contract in question. However, noted it may be isolated and to bring further concerns to MTO's attention as applicable.</li> </ul> <p><i><b>Action – MTO will follow up on this item and provide a response to ORBA before the next meeting.</b></i></p>	<p><b>MTO</b></p>
<p><b>May 24-3</b>    <b>Compensation for Mobilization Costs for Rapid Concrete Base Repairs</b></p> <p>Description:</p> <ul style="list-style-type: none"> <li>• <b>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.</b></li> <li>• <b>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.</b></li> </ul> <p>Discussion:</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p><i><b>Action – ORBA will provide MTO with examples of contract numbers where this issue has occurred.</b></i></p>	<p><b>ORBA</b></p>

<b>INFORMATION SHARED FOR THIS MEETING</b>		
<b>Document Title</b>	<b>Shared By</b>	<b>Format</b>
Court Bulletin – Belleville Roofer Forced Out of Construction Due to Repeated Safety Violations	MTO	PDF
IHSA Working at Heights Quick Reference Guide	MTO	PDF
Ontario’s working-at-heights training led to safer practices, reduced injury claims rates	MTO	PDF

<b>NEXT MEETING</b>
<ul style="list-style-type: none"><li>• Thursday, September 12, 2024 – MTO to host</li><li>• Thursday, November 21, 2024 – ORBA to host</li></ul>