

MTO/ORBA STRUCTURES TECHNICAL SUBCOMMITTEE MEETING NOTES

Date: November 24, 2023
Time: 10:00 am to 1:00 pm
Location: Microsoft Teams/ORBA Boardroom

ATTENDEE	ORGANIZATION	ATTENDEE	ORGANIZATION
Alfredo Maggio	Graham Bros. Construction Ltd.	Kevin English (co- chair)	MTO, Contract Management Office
Doubra Ambaiowei	ORBA	James Combe	MTO, Structures Office
Walid Abou-Hamde	ORBA	Aicha Ghezal	MTO, Engineering Materials Office
Luigi Chiodo	Alliance Verdi Civil Inc.	Jeffrey Giroux	MTO, Construction West
Mike Doupe	McLean Taylor	Walter Kenedi	MTO, Structures Office
Steve D'Orazio	Clearwater Structures Inc.	Rebecca Li	MTO, Contract Management Office
Dale Gaston	Algonquin Bridge Limited	Joel Magnan	MTO, Engineering Materials Office
Denton Hall	Dufferin Construction Company	Bo Ni	MTO, Engineering Materials Office
Bart Kanters	Concrete Ontario	Melissa Titherington	MTO, Engineering Materials Office
Matt Mayer	GIP Inc.	Andrew Turnbull	MTO, Structural West
Richard Mulder	Decast		
Mark Podhorski	Bot Construction Limited		
Chris Ryell	The Miller Group – Miller Paving Limited		
Tim Smith	Cement Association of Canada		
Jon Vallieres	Looby Construction Limited		
Cole Zanchetta	R.W. Tomlinson Limited		

INTRODUCTION / ANNOUNCEMENTS
<ul style="list-style-type: none"> • Cole Zanchetta has joined the subcommittee.

OPEN ITEMS	ACTION BY
<p>Sept 23-2 CONCRETE SPALLING ISSUES AND ACCEPTANCE SPECIFICATIONS</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • 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. • <i>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."</i> • 904.08.01 also refers OPSS 1350, “Acceptance shall be according to OPSS 1350 and this specification...” <p><i>September 2023 Discussion:</i></p> <ul style="list-style-type: none"> • 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"> ○ 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. <p><i>November 2023 Discussion:</i></p> <ul style="list-style-type: none"> • MTO and ORBA repeated their positions from the September 2023 meeting. <p>Action – MTO will set up a separate meeting to discuss this item.</p>	<p style="text-align: center;">MTO</p>

OPEN ITEMS	ACTION BY
<p>Sept 23-3 OPSS 914 RESPONSE TO TCP COMMENTS</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • Areas of disagreements to be discussed. <p><i>Discussion:</i></p> <p><i>September 2023</i></p> <ul style="list-style-type: none"> • 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. <p><i>November 2023</i></p> <ul style="list-style-type: none"> • 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. <p>Action – MTO will review the 72hr requirement in OPSS 914.</p>	<p>MTO</p>

OPEN ITEMS	ACTION BY
<p>May 23-2 OPSS 904 UPDATE (INCLUDES NOV 19-2, 19-3, 19-4, 19-5, 19-6)</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • 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 <p><i>Discussion:</i></p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> • 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) • ORBA will provide bonding agent proprietary product information to MTO for review. (Nov 19-3) • MTO will review cold weather concrete requirements. (Nov 19-4) • MTO will review sandblasting and power washing requirements for new concrete. (Nov 19-5) • MTO will review fog misting systems requirements. (Nov 19-6) • ORBA asked if the OPSS 904 draft will be ready for review prior to the next meeting in September. • 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. <p><i>September 2023</i></p> <ul style="list-style-type: none"> • MTO is experiencing delays and is now anticipating April 2024 publication of the updated specification. Consultation will occur prior to publication. <p><i>November 2023</i></p> <ul style="list-style-type: none"> • 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. • 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. <p>Action – MTO will provide an update on OPSS 904 work.</p>	<p>MTO</p>

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<p>May 23-3</p>	<p>FOUNDATION INFORMATION REPORTS</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • ORBA would like MTO to provide the FIDR in contract documents. <p><i>Discussion:</i></p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> • 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. <p><i>September 2023</i></p> <ul style="list-style-type: none"> • <i>Inclusion of FIDR's in Contracts Sept 8 2023</i> 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 GEOCRE 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. <p><i>November 2023</i></p> <ul style="list-style-type: none"> • MTO work on this item has not started yet, there is no update for this meeting.

OPEN ITEMS	ACTION BY
<p>May 23-4 TESTING GU AND GUL CEMENT TO LS METHODS</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • ORBA asks when all LS test methods will permit GUL cement instead of GU cement. <p><i>Discussion:</i></p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> • 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. • 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. <p><i>September 2023</i></p> <ul style="list-style-type: none"> • ORBA asked for an update on testing and stated many suppliers do not have GU cement anymore for testing. • 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. • 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. <p><i>November 2023</i></p> <ul style="list-style-type: none"> • 1-year prism tests have not been completed yet. <p>Action – MTO will provide an update on test results when they are available.</p>	<p>MTO</p>

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<p>Nov 22-4 WATERPROOFING MEMBRANE BUBBLING</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • Pin holes are being observed in the hot membrane, compromising the integrity of the waterproofing. MTO is taking a different approach between regions and is asking contractors to place the hot membrane in two lifts (same total thickness) versus one lift. • Will MTO be revising OPSS 914? <p><i>Discussion:</i></p> <p><i>November 2022</i></p> <ul style="list-style-type: none"> • There has been a quality issue with waterproofing membrane this year (2022) on some contracts, but not all of them. Some contractors have been successfully mitigating the bubbling issue. Best practices are encouraged to mitigate the issue. • MTO will be reviewing OPSS 914 this winter with the intent that 2024 contracts will have consistent requirements and will be administered consistently. Work has been ongoing with suppliers, but more testing and research is required on the materials side. The intent is a version of the specification where it may be decided up front whether to add reinforcement to the waterproofing membrane or not. The issue for MTO is that these contracts were already tendered and ongoing, so an NSSP was put together after the fact to try and assist administration of currently tendered contracts. • ORBA is aware of the MTO position that bubbling/voids in the waterproofing membrane is a rejection criterion but is not sure how that is clear in OPSS 914. MTO is aware and will be working on this on a couple of fronts. <p><i>May 2023</i></p> <ul style="list-style-type: none"> • There has not been any new waterproofing experience yet to evaluate and investigations are ongoing. There may be a progress update when waterproofing operations begin again this construction season. <p><i>September 2023</i></p> <ul style="list-style-type: none"> • Discussion took place in the Sept 23-3 item. <p><i>November 2023</i></p> <ul style="list-style-type: none"> • Waterproofing discussed in the Sept 23-3 item. This item involved the 2-layer method so the item may be closed, and waterproofing generally may be discussed in Sept 23-3 instead of 2 items. <p>Action – Item closed.</p>	
<p>May 19-4 OPSS 903 – UPDATE – A REVIEW OF CAISSON CONCRETE REQUIREMENTS</p> <p><i>Description:</i></p>	

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<ul style="list-style-type: none"> • Proposal for a meeting to discuss workability issues with placing concrete for caissons. <p><i>Discussion:</i></p> <p><i>May 2019</i></p> <ul style="list-style-type: none"> • 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. <p><i>November 2019</i></p> <ul style="list-style-type: none"> • Representatives of MTO and ORBA met on November 18, 2019, to discuss caisson issues; Andrew Wertz 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. <p><i>June 2020</i></p> <ul style="list-style-type: none"> • A meeting was held on May 6th. OPSS 903 is being split into two different specifications, drilled and driven piles. <p><i>November 2020</i></p> <ul style="list-style-type: none"> • 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. <p><i>May 2021</i></p> <ul style="list-style-type: none"> • <i>Andrew Wertz 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> • <i>Conversations to date have been very productive, with engagement of Consultants, ORBA and other agencies.</i> • <i>For Caissons, the following issues have been the focus of the updates:</i> <ul style="list-style-type: none"> ○ <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</i> 	

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<p><i>guide for rebar spacing in the cage.</i></p> <ul style="list-style-type: none"> ▪ <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> ○ <i>Improve the requirements and guidance for use of Tremie concrete.</i> ○ <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> <ul style="list-style-type: none"> • 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. <p><i>November 2021</i></p> <ul style="list-style-type: none"> • 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. <p><i>May 2022</i></p> <ul style="list-style-type: none"> • Draft caisson specification issued as an NSSP. • Another meeting is scheduled for June for the working group to review the pile driving specification. <p><i>November 2022</i></p> <ul style="list-style-type: none"> • 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 	

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	<p>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.</p> <p><i>May 2023</i></p> <ul style="list-style-type: none"> • 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. <p><i>September 2023</i></p> <ul style="list-style-type: none"> • 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. <p><i>November 2023</i></p> <ul style="list-style-type: none"> • Work is progressing on this item and is targeted for Spring 2024. The draft has not been posted on TCP yet. <p>Action – Item remains open.</p>
<p>June 20-2 (Nov 19-1)</p>	<p>CONCRETE AGGREGATES – SP 110S17 AND OPSS 1002</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • Updates to OPSS 1002. <p><i>Discussion:</i></p> <p><i>November 2019</i></p> <ul style="list-style-type: none"> • MTO met with OSSGA (Ontario Stone, Sand and Gravel Association) on June 24, 2019, to discuss the changes to the specification and industry concerns. • MTO has made some changes in response to the OSSGA concerns but the changes would not affect contracts already tendered. MTO is open to consider change proposals on active contracts on a case by case basis. • ORBA reiterated concerns with the requirements for separate stockpiles for each contract from one supplier. This can be problematic as a large number of stockpiles requiring a lot of space would be necessary. • ORBA noted there are concrete aggregate suppliers who will not supply aggregate for MTO concrete as a result of the new requirements. The main issue is the risk taken on by the aggregate supplier if samples are taken from the concrete plant where they are out of the supplier’s control. Suppliers are also concerned that financial penalties are too harsh. • ORBA will provide follow up comments on this item.

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<p><i>June 2020</i></p> <ul style="list-style-type: none"> • OSSGA sent a letter to the Minister. There are several aggregate suppliers that will not supply to MTO projects for concrete supply. The reasoning is due to the potential penalties, which can be up to 5% of the contractors tendered price. ORBA indicated this exceeds the margins of what some suppliers are making and therefore the risk is not worth it. • MTO will be responding to OSSGA’s letter. • Item to remain open. <p><i>November 2020</i></p> <ul style="list-style-type: none"> • MTO noted that they responded to the OSSGA’s letter. • ORBA noted that OSSGA’s has a response ready to be sent back to MTO. • Item closed unless more discussion is required following response to OSSGA. <p><i>May 2021</i></p> <ul style="list-style-type: none"> • MTO recently heard from OSSGA, and similar concerns were raised. • MTO is working on a new framework for how to deal with gradation where there is a non-conformance. • MTO wants to look at providing a prescriptive requirement for dealing with non-conformances by providing a sliding scale. • MTO is in the process of checking the sliding scale in various situations to ensure a proper outcome. • CO noted that there are three critical issues: gradation, sample location, and size of penalty. • CO noted that smaller aggregate suppliers for concrete will not except the penalty. For concrete, this is a supply chain issue. • MTO again noted that sampling must be at the concrete facility and not at the suppliers. • MTO plans to circulate the new framework with the sliding point scale shortly. <p><i>November 2021</i></p> <ul style="list-style-type: none"> • ORBA has made its position known: concerns with the location of aggregate testing, cost associated with penalties, the addition of gradation to penalties, that remove and replace was in the specification but was not applied so adding penalties now is a significant concern. There are issues with getting suppliers to provide aggregates for MTO contracts only. • MTO shared proposals with OSSGA to address the issues brought up. It is important for MTO to sample the latest point in the supply chain to check material is in conformance, this has been communicated to OSSGA. Positive feedback was received on the sliding scale payment 	

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<p>adjustment and it is the same as what is in all other MTO aggregate specifications. The sliding scale adjustment is to replace the remove and replace provision, it is not an addition. Payment adjustments were applied to real examples that were determined to be reasonable. The only benefit to MTO with this change is application consistency.</p> <ul style="list-style-type: none"> • ORBA stresses this is a general supply chain change and it is making a dramatic change to the aggregate supply industry. This does not apply to municipal or industrial/commercial contracts, only MTO. This is a political/financial issue and there are suppliers that don't want to do MTO contracts anymore at a time when demand is high. Technical comments will be provided again when the specification is published in the portal. • MTO will report back on the response from the portal. <i>May 2022</i> • OSSGA met recently to review the changes made to the specification. The general view is that the changes will not encourage more engagement from aggregate producers and does not address industry concerns. • MTO plans to get this specification consulted on soon and it is in the queue, but there is currently a backlog of specifications under review. <i>November 2022</i> • Both specifications have been consulted on through TCP. A decision has been posted and the specifications will be published to CPS shortly. <i>May 2023</i> • ORBA stated that the specification was not sent to ORBA for comment before it was published. Also, that discussions were going on alongside OSSGA and that there is an issue with the 60% requirement for fine aggregates. The fine aggregates requirement will be challenging for industry and will result in supply issues. Members continue to express concerns with specific regions on specifications. • MTO pre-consulted on the specification and posted it to TCP for comment. The TCP decision was also posted before publication. Comments were received about insoluble residue, but that requirement has been in place since 2016 for riding surface concrete so it already covers the majority of concrete placed. The change being discussed is for concrete base and MTO's safety concern about extended periods that base may be exposed to traffic. • ORBA does not believe that base courses are exposed long enough to have reduced friction concerns. • MTO has experienced issues with new concrete surfaces having dramatic reductions in friction properties over short time periods; this led to the insoluble residue requirement in surface courses and the 	

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<p>requirement has worked well. Any exposed concrete, based on internal review (phasing requirements, etc.) will implement this requirement.</p> <ul style="list-style-type: none"> • ORBA notes another challenge is how to administer sublots as a result of testing. • MTO will need specific wording for the testing question to take it back to the technical team for review of exactly how specification language is applied. • ORBA will provide specific questions about materials acceptance testing for MTO review. MTO will review those concerns. <p><i>September 2023</i></p> <ul style="list-style-type: none"> • ORBA wanted to revisit the requirement for 60% insoluble residue value for all Portland cement base and pavements. Not all pits can supply the higher quality aggregate and the requirement applies to composite pavements and temporary repairs. Is there any data for skid resistance that it's deteriorating so fast that this needs to be a requirement? • MTO's primary concern is safety but it is not the only concern. When the IR requirement was introduced, it was in response to recent contracts that experienced fast polishing or had rapid decreases in roughness. The change was effective and pavements meeting the requirement are performing well; pavements not meeting the requirement are experiencing problems. • MTO evaluates the IR requirement for temporary driving surfaces on a case-by-case basis and considers many factors. The approach is similar for upper base courses of asphalt requiring premium aggregates. MTO is not willing to expose itself to additional risk with potential for low-friction road surfaces. • ORBA's question about materials acceptance testing is, if a subplot fails, what happens to the subplot next to it within the lot? <p>Action – MTO will review ORBA's materials acceptance test question and provide a response to ORBA and OSSGA.</p> <ul style="list-style-type: none"> • Note –Post meeting: MTO response is that Insoluble Residue (IR) testing is a physical property requirement, not a gradation requirement, so there are no sublots as part of physical property testing in SSP110S17 / OPSS 1002. The physical property requirement is a single test for the lot. If the IR test fails, the material would be rejectable. As always, the contractor can elect to go to Referee and/or follow the protocol in SP199S66. <p><i>November 2023</i></p> <ul style="list-style-type: none"> • ORBA question was responded to between meetings. <p>Action – Item closed.</p>	

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<p>May 22-5</p>	<p>CONCRETE PAVEMENT 7-YEAR WARRANTY NSSP (DB AND DBB), NSSP BITU0010 AND NSSP BITU0011 - STATUS</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • Comments on specifications were sent to MTO before the switch to the Technical Consultation Portal. ORBA would like replies to those comments. <p><i>Discussion:</i></p> <p><i>May 2022</i></p> <ul style="list-style-type: none"> • ORBA is waiting on some replies to comments. • MTO asks if ORBA can please re-send the comments. <p><i>November 2022</i></p> <ul style="list-style-type: none"> • ORBA provided comments, MTO replied and ORBA provided a second set of comments. The reply being waited on is for the second comments. • MTO will follow up. <p><i>May 2023</i></p> <ul style="list-style-type: none"> • MTO reviewed and provided a response, but ORBA was confused by the response. There have been multiple comments and responses to comments. ORBA was asking about the second set of comments that were sent to MTO in 2021, not the 2022 consultation. • ORBA will re-send the 2nd comments and MTO will review them and respond. <p><i>September 2023</i></p> <ul style="list-style-type: none"> • MTO did not recall receiving the comments. The comments submitted prior to posting to TCP will be looked for and reviewed. <p>Action – Comments will be reviewed and responded to.</p> <p><i>November 2023</i></p> <ul style="list-style-type: none"> • Comments were sent from ORBA and responded to by MTO between meetings. <p>Action – Item closed.</p>

NEW ITEMS		ACTION BY
Nov 22-1	<p>SAFETY TALK</p> <p>Description:</p> <ul style="list-style-type: none"> • 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. <p>Discussion:</p> <ul style="list-style-type: none"> • This meeting the safety talk was led by ORBA. • ORBA presents slips, trips, and falls as very preventable hazards. Make employees aware of what hazards may be encountered, what issues there may be, to not rush, and what they need to do to stay safe. Highlights included the importance of railings, and 3-point contact is at heights; covering openings; utilizing proper use, angle, tie-off and maintenance of ladders; avoiding trip hazards or obstructions in walkways; and, promptly cleaning up spills. <p>Action – N/A.</p>	

NEW ITEMS		ACTION BY
Nov 23-1	<p>SUPPLY CHAIN DELAYS AND IMPACTS ON SCHEDULES (RCP ACCEPTANCE)</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • 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. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • 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. <p>Action – MTO will conduct internal review. Concrete Ontario will also consider this item.</p>	<p>MTO/ ORBA</p>

NEW ITEMS		ACTION BY
Nov 23-2	<p>SCREED RAIL SUPPORTS TO GIRDERS</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • MTO presentation about screed rail supports to facilitate discussion about potential improvements to contract requirements. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • ORBA had the following comments after the presentation: <ul style="list-style-type: none"> ○ 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. ○ 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. ○ Welding could generally be permitted in contracts with additional acceptability limits/parameters. ○ 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. ○ In general, ORBA does not believe there is an issue with the current practice. <p>Action – MTO will take back feedback and review options.</p>	MTO
Nov 23-3	<p>OPSS 919 – CERTIFICATE of CONFORMANCE (CoC) and REQUEST/NOTICE to PROCEED (RtoP/NtoP)</p> <p><i>Description:</i></p> <ul style="list-style-type: none"> • 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. <p><i>Discussion:</i></p> <ul style="list-style-type: none"> • Timeliness is ORBA's biggest concern. NtoP will need to be issued by the Contract Administrator as soon as possible to not impact the construction schedule. • 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. <p>Action – MTO will review the concerns noted on <i>RtoP/NtoP</i> in the current version of OPSS 919.</p>	MTO

INFORMATION SHARED FOR THIS MEETING		
Document Title	Shared By	Format
20231124 Screed Supports	MTO	PowerPoint

NEXT MEETING
<ul style="list-style-type: none">• Thursday, May 9, 2024 – ORBA to host• Thursday, September 12, 2024 – MTO to host• Thursday, November 21, 2024 – ORBA to host