

The following changes to the tender documents are effective immediately and will form part of the contract documents:

Specification 01 45 00

Add: 1.2.8.1 If not currently registered in Manitoba, they must become registered within 60 days from Project Award.

Specification 01 55 26

Add: 1.4.1.1 The Work Zone can be defined as the area of the highway with construction, maintenance, or utility work activities. A work zone is typically marked by signs, channelizing devices, barriers, pavement markings, and/or work vehicles. It extends from the first warning sign or flashing lights on a vehicle to the "Construction Ends" sign or the last temporary traffic control device.

Specification 31 05 16

Delete: 1.4.2 Product Data:
1. The Contractor shall submit a complete sieve analysis of a minimum of two samples of each granular material to the Departmental Representative for review, prior to delivery to site.
2. The sieve analysis shall be performed by a qualified materials testing laboratory.

Replace With:

1.4.2 Product Data:
1. The Contractor shall submit a complete set of testing results including, but necessarily limited to sieve analysis, fractured faces, plasticity index, lightweight particles, clay lump and friable particles, Los Angeles abrasion, and proctor results for a minimum of two samples of each granular material to the Departmental Representative for review, prior to delivery to site.
2. All testing shall be performed by a qualified CCIL certified materials testing laboratory.

Specification 32 11 23

Add: 3.2.4.7 For all aggregate materials placed, a minimum of three density test per lift shall be conducted.

Specification 32 32 34

Delete: 2.1.1.2 AASHTO LFRD Standard Specifications for Highway Bridges – 17th Edition, 2002.
2.1.1.3 National Concrete Masonry Association (NCMA) Design Manual for Segmental Retaining Walls

Replace With:

2.1.1.2 AASHTO LFRD Standard Specifications for Highway Bridges – Current Edition

Add:

2.1.2 The following publication is a recommended design reference:
.1 National Concrete Masonry Association (NCMA) Design Manual for Segmental Retaining Walls, particularly Section 5.9.2 for Tiered Walls.

Drawing C03

Delete: Section 1, 2 and 3 – Remove “100mm TOPSOIL AND SEED” callouts

Replace With:

Section 1, 2 and 3 – Remove “150mm TOPSOIL AND SEED” callouts

Enquiries received during the Solicitation Period:

1. Specification Division 01 - Section 01 55 26 Item 1.14 and 01 52 00 Item 1.11: Please confirm that the contractor will not be responsible for removal or management of snow and ice in the active traffic lane/detour lane of the bridge nor the temporary pedestrian walkway.
 - Response: The Contractor shall be responsible for snow and ice removal in the active traffic lane and the active pedestrian walkway for all stages.
2. Pinchin Revised Hazardous Building Materials Assessment – With reference to page 4 of 8 Item 3.2.1 Paints and Surface Coatings it notes Lead based paint on walkway. Please confirm that this does not form part of our scope of works for Lead abatement. If it does, please provide the extent of the works as it is not clear from the report, and also that a site visit to determine this is also not available to the contractors, due to Covid19 pandemic restrictions as set out in the contract documents.
 - Response: In Section 3.2.1 of the Report, Sample L001 indicates lead based yellow paint on the walkway under the bridge. This does not form part of the scope of work for the Contract.
3. Specification Division 32 - Section 32 32 34 – Reinforced Soil Walls – The project specs indicate that the wall design is to follow the following: The design shall be completed in accordance with the most stringent requirements of the following standards:
 - Canadian Highway Bridge Design Code (CSA Standard CAN/CSA S6-19)
 - AASHTO LFRD Standard Specifications for Highway Bridges – 17th Edition, 2002
 - National Concrete Masonry Association (NCMA) Design Manual for Segmental Retaining Walls.

The project plans indicate the wall design is to follow the following:

C.1 DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 2017, CAN/CSA-S6-19, CANADIAN HIGHWAY BRIDGE DESIGN (CHBDC) CODE, NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA) DESIGN MANUAL FOR SEGMENTAL RETAINING WALLS AND

NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA) DESIGN MANUAL FOR SEGMENTAL RETAINING WALLS. THE BLOCK RETAINING WALLS SHOWN ARE GUIDELINES ONLY. THE DESIGNER MUST CONFIRM THE GEOGRID REINFORCEMENT STRENGTH AND SPACING. THE DESIGN SHALL BE SIGNED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA.

There are 4 distinctly different methodologies that could be followed for the design between 2 separate years of the AASHTO, Canadian Code, and then NCMA. Each design method is completely different and stringent in different aspects, and therefore difficult to determine which code would qualify as most stringent.

As a point of clarification, we would respectfully request 1 design methodology (either AASHTO 200, AASHTO LFRD, CAN, or NCMA) be chosen to direct the wall designer on the appropriate design code.

- Response: The reference to AASHTO 2002 has been removed, and the NCMA has been changed from a design requirement to a recommended design reference (see above). The NCMA provides additional guidance on tiered walls. The block retaining wall will be required to be designed to the more stringent of the AASHTO and CSA design codes.
4. Section 02 81 00 Item 1.4.5, and Section 02 83 12 Item 1.3.3 identify removal by means of abrasive blasting. Section 02 83 12 item 3.4 identify minimizing dust generation, using wetting agents, and abrasive blasting with dustless methods preferred. Is the preferred method of lead paint removal to be determined the contractor or must it be by abrasive blasting?
 - Response: Abrasive blast cleaning or alternative method (i.e chemical stripping) as approved by the Departmental Representative may be used.
 5. Section 02 83 12 Item 3.2.3 identifies the enclosure impermeable sheeting as Hipp Wrap heat shrink polyethylene sheeting. There are other materials that meet requirements of SSPC Technology Guide 6 – Guide for Containing Surface Preparation Debris Generated during Paint Removal Operations. We have typically always used impermeable air-bag tarping materials with sufficient negative air filtration capacity. Are alternate types of impermeable membrane (sheeting) adequate as long as the containment performance of the enclosure is met? Or is shrink wrap the only method allowed?
 - Response: Hipp wrap or alternative method as approved by the Departmental Representative may be used.
 6. A few requests for electrical equal has been received:
 - Response: As per Note 2 on drawing E02 indicates “THE LUMINAIRES SHOWN IN THE TABLE INDICATE THE STANDARD TO WHICH THE LIGHTING WAS DESIGNED. PROPOSED ALTERNATE LUMINAIRES MUST ACHIEVE THESE DESIGN STANDARDS. CALCULATIONS USING AGI32 SOFTWARE WITH 0.8

LED MAINTENANCE FACTOR MUST BE SUBMITTED IN ORDER TO BE APPROVED FOR SUPPLY.”

- Please provide the IES files and the Departmental Representative will confirm if the products are equivalent, or alternatively electronic CAD files can be provided following signing of an electronic release waiver. Calculations must be provided in AGI32 software for review as stated in the note above.
7. What are the QC expectations for the supply and placement of aggregate materials? Is the contractor to follow the QC testing specifications outlined in MI's standard spec.? Or will test data from suppliers be sufficient to verify/approve the aggregate?
 - Response: A minimum of one (1) test per product is required, with 1 test required for every 400 t of product.
 8. Is the contractor responsible for on site density testing of aggregates, road granular and embankment fill? If so, is there a frequency of testing for the contractor to consider? Is there a # of tests required per lift?
 - Response: The Contractor is responsible for all density testing. The minimum testing requirements for aggregates shall 3 tests per lift. See addition to specification above.
 9. Are there any further details for the subdrain chimneys? Is the specification for the horizontal subdrain pipe sufficient for the vertical chimneys?
 - Response: The 33 46 16 Specifications are sufficient for the vertical subdrain chimneys.
 10. Please specify the type of heavy duty landscape fabric around the retaining wall backfill. Is woven geotextile sufficient?
 - Response: A woven geotextile is considered a sufficient heavy duty landscape fabric.
 11. Are there any restrictions to completing both the East and West embankment work in one season (summer 2021)?
 - Response: There is a requirement to complete the pedestrian access ramps on both the East and West embankment during Stage 1 of the construction, to provide continued access for pedestrians throughout construction. The remaining civil works may be completed during the same time frame.
 12. Can you clarify that the geogrid is only to extend ~1.2m from the outside face of the retaining wall and not the entire width of the backfill area?
 - Response: The wall is to be designed as per Section 32 32 34 – Reinforcing Soil Retaining Walls. The length of the geogrid required is to be determined based on the design criteria is the specifications, with minimum lengths provided on Drawing 003-C 5.4.
 13. Refer to drawing C03. Please clarify that topsoil is to be spread at 150mm thick and not 100mm thick (double labelled on drawings).
 - Response: The topsoil is to be 150mm mm thick in all locations (see above).

14. Are there any truck load weight restrictions on the bridge during staged construction?
This is a consideration for hauling aggregate and fill across the bridge.
- Response: The current load restriction of the St. Andrew's Lock and Dam Bridge is 36 tonnes. This load restriction is to remain in place throughout all stages of construction.
15. Section 01 55 16 Item 1.14 frequently uses the term "Work Zone". The limits of this "Work Zone" are not defined anywhere in the documents. Please clarify if a definition for this term can be provided.
- Response: A definition of the Work Zone as been added to the specification (see above).
16. With reference to page 28 of 45 section 1.4 Training and Skills Development Financial Commitment, it is noted that bidders will be evaluated on the total dollar value commitment to train and develop skills for Indigenous people of Canada, but the basis of identifying the value (T2) is shown as hours, which is not in line with Table 3 that is shown on page 31 of 45. Please clarify if the text that is noted on page 28 to determine (T2) should be noted differently.
- Response: T2 should read Total Indigenous Training and Skill Development expenditure: _____ (T2) to align with the Financial Commitment evaluation and Table 3.
17. With reference to page 26/27 of 45 section 1.2 Subcontractors/suppliers - Indigenous opportunity considerations criteria, it is noted that bidders should provide their commitment of Indigenous contractor/subcontractor or supplier in accordance with a determined value of contract, but the basis of evaluating the points is shown as hours. Please clarify how the hours will be determined based on the value of contract.
- Response: See paragraph 3 of Amendment 9.
18. With reference to page 32/45 Indigenous opportunity considerations — it is written within the body of the text on bullet point 5, 6 and 7 that "may be paid to the contractor at the end of the project." Please clarify if these points noted, will or will not be, applied to the contractor at the end of the project.
- Response: Should a contractor exceed their certified Indigenous Opportunity Consideration commitments by the end of the contract, an incentive will be assessed in accordance with the applicable Table 2 (A, B, C and/or D) and an incentive value calculated. Likewise, should the contractor not achieve their certified Indigenous Opportunity Consideration commitments by the end of the contract, a deduction will be assessed in accordance with the applicable Table 1 (A, B, C and/or D) and deduction value calculated. Incentives and deductions will then be reconciled and the contract adjusted accordingly. As per Page 32 of 45 the maximum incentive is set at \$1,000,000.
19. With reference to page 34 of 45 Table 1A - Assessment of On-Site Indigenous Labour deduction: it is written within Item 1 a note saying that (c) is derived as a % and if (c) is less or equal to 50%, the Contractor will receive 0 points. As an example, for illustration purposes only, our understanding of this equation is currently as follows.

- i. If Achieved % (a) is 100% and
 - ii. Proposed % (b) is 50%
 - iii. Then $(a) / (b)$ which equals $(c) = 2\%$ (which is less than 50% so the contractor will receive 0 points)
 - iv. Please clarify how this formula is intended to be calculated.
- Response: The numbers used in the enquiry would not apply. If the contractor certified they would deliver 50% on-site indigenous labour, but achieved 100% on-site indigenous labour they would have delivered double or 200% $(100\%/50\%)$ of their certified amount and would qualify for an incentive as per Table 2A. Table 1A applies when the contractor achieves less than their certified percentage of on-site indigenous labour. If the contractor achieves less than or equal to 50% of their certified percentage they would receive a 0 score. For example if they certified 20% but delivered 2% the calculation would be $2\%/20\% = 0.1$ which is less than 50% of the original certified value.
20. We are requesting a potential relaxation of the requirements of the Quality Manager. In section 01 45 00 1.2.8, we are requesting for this project to remove the requirement for the Quality Manager's certifications to be held in the Province of Manitoba, but to be registered in at least one province in Canada. There does not appear to be an instance on this project where certification in Manitoba is specifically required. This would provide flexibility on our part to name an individual that has several decades of experience on high profile infrastructure projects on our team.
- Response: If the individual is not currently registered in Manitoba, they must become registered within 60 days from Project Award.
21. •We are requesting confirmation that some of the requirements shown in 01 45 00 1.7.4 & 1.7.5 can be delegated to others in the Contractor's organization as appropriate with the condition that quality activities are overseen by the Quality Manager.
- Response: The Quality Manager oversees and is responsible for the entire quality process but does not carry out every task.

END OF ADDENDUM NO. 5