Winnipeg

Corporate Finance Department
Purchasing Division

295-2025 ADDENDUM 4

LAGIMODIERE TWIN OVERPASSES OVER CPKC KEEWATIN REHABILITATION AND RELATED WORKS: CONTRACT 2 – BRIDGE STRUCTURES, ROADWORKS, AND LAND DRAINAGE

ISSUED: September 17, 2025
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URGENT

PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE BID/PROPOSAL

THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID/PROPOSAL AND SHALL FORM A PART OF THE CONTRACT DOCUMENTS

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Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid/Proposal, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid/Proposal may render your Bid/Proposal non-responsive.

QUESTIONS AND ANSWERS

Q1: Will high load multirotational disc bearings be allowed as an alternative to pot bearings?

A1: Alternatives to the bearing type stated on the Drawings and in the Specification will not be accepted

Q2: In accordance with B2, are we allowed to access the CPKC right-of-way to investigate the site? Are there certain restrictions that the City/CPKC can specify that would allow Bidders access?

A2: No, access on CPKC property requires their permission and this has not been specifically arranged for during the tender period

Q3: Would the City consider allowing a more typical modular expansion joint as a substitute to the specified expansion joint?

A3: Alternate expansion joints to that stated on the Drawings and in the Specification will not be accepted.

Q4: E3.9.1.iv suggests that the last 10% of the Mobilization of Part 1 (Northbound Structure only) will not be paid out until the Total Performance for the entire project. This is not a reasonable payment schedule if Part 2 is awarded. Please consider revising the last 10% for item B.1 only to be paid upon mobilization of Part 2 mobilization or, if Part 2 is not awarded, Total Performance.

A4: To be adjusted to payout Part 1 upon completion of Part 1.

Q5: Please confirm that with respect to E23.6.10.e, the Contractor's scope is limited to the design of the members and connections only and not the global stability of the girders. In other words, confirm that the Contractor is only responsible for designing transverse restraints capable of withstanding 100 KN at 2 m spacing as per the drawings, assuming the construction loading as per the drawings.

A5: The girder stability and capacity have been assessed based on the construction loads noted on the drawings. The Contractor is responsible to confirm that actual construction loads are within the loads provided. If the construction loads or assumed geometry exceeds what is shown on the drawings, then the Contractor shall be responsible for checking the capacity and stability of the girders. Where the Contractor's construction loads meet what is shown on the drawings, then the Contractor shall only be responsible for designing the temporary construction braces for the provided 100kN load, including all connections.

Q6: With respect to drawing 2121 and 2221:

- Please confirm the loading required to be designed to for note 6 in the drawing and E23.6.10.b.
- Please confirm if note 4 is correct. At first glace, the loading seems high.
- Please confirm if the factored tension load in note 4 is for braces transverse to the girders or at the 35 degree skew. Braces will likely need to be installed at the skew to be parallel with the bottom mat of reinforcing.
- Please confirm how far the girder construction bracing extends across the deck. The typical cross section cuts off the full cross section and we aren't sure if the tension bracing must be connected to all 5 girder lines.
- Please confirm if this bracing is to be stainless steel, galvanized steel, or black steel? Black steel is the most logical in our view because of the black reinforcing in the bottom mat and the relative cost.
- Is transverse bracing required at the bottom flange? Or is the line shown on the drawing intending show a temporary platform?
- Where does the City envision the specified work bridges to run to float finish and apply wet curing blanket as per the specifications given the location of the screed rail specified by the City?

A6: Bullet 1 – Load is dependent on Contractor's means and methods (staging, bearing friction values) so we are not able to provide a load to include in the drawings or specifications.

Bullet 2 – Design load is based on Contractor's designer's assumptions for the loading and formwork geometry. Loading stated is provided to assist the Contractor during bidding as temporary construction loading requirements. The Contractor's may submit the design to the Contract Administrator for review and acceptance to the Contractor's design values. This note will be adjusted on the Drawing in a separate addendum.

Bullet 3 – The factored tension load was calculated at the 35 degree skew.

Bullet 4 – Bracing should extend through all 5 girder lines. This will be adjusted on the Drawing in a separate addendum.

Bullet 5 – Bracing material that is to remain in the deck permanently shall be in accordance with E23.6.10 (d) and E13.7 (c).

Bullet 6 – Compression bracing between the bottom flanges is required to prevent rotation of the girders and is to be included in the Contractor's bracing design. This will be adjusted on the Drawing in a separate addendum.

Bullet 7 – Location of screed has been adjusted to sit outside the deck width on a bulkhead. This will be adjusted on the Drawing in a separate addendum. If required, deck screed supports could either be removed or left in place if the support materials meet the requirements of E23.6.10 (d) and E13.7 (c).

Q7: Are the requirements for the screed being supported directly off the exterior girders (Specification E23.42.b.iii and drawings 2121 and 2221) based solely on the assumed construction loading? Or are there other constraints that preclude the screed and work bridge being supported off the deck overhang formwork.

A7: The location of the screed has been adjusted to sit on the deck formwork bulkhead. This will be adjusted on the Drawing in a separate addendum.

Q8: With respect to the girder jacking and bearing replacement, can you confirm the intent is to jack the girders sufficiently to replace the bearings assembly (including concrete pedestals) with a new assembly that is the same height? We can't seem to find any information that indicates if the proposed elevations of the girders change from existing other than when they are temporarily jacked.

A8: The new bearing assembly is not the same as the existing. New pedestals are proposed at the abutments and reuse of the existing pier tops are proposed at the piers. The thickness of the existing bearings can be found in the existing drawings in Appendix G included with the tender. Overall, the new pier bearings are thicker than the existing and the soffit of the repaired bridge will be higher than the existing.

Q9: Can you confirm that the FRP strengthening on the underside of the girders is designed for the jacking loads as described in the drawings?

A9: FRP design is to be completed by the Contractor.

Q10: Is it acceptable to install temporary bearings at the proposed pier modification locations?

A10: Yes. Temporary bearings at the pier locations are acceptable, provided that they are designed by the Contractor for the construction loads stated on the Drawings, and the construction staging is considered as shown on the Drawings. Deviations from that shown on the Drawings shall be submitted to the Contract Administrator for review.

Q11: Can you confirm a track block is only required for girder raising/lowering and girder FRP strengthening at Pier 1 and Pier 2 and not the other substructures?

A11: Track block specific clauses have been modified in a separate addendum.

Q12: Can you confirm all fees associated with the CPKC forms required in E41 will be paid by the City?

A12: A Utility Crossing Application has already been submitted, and associated fees will not be borne by the Contractor.

E41.7 (g) indicates that construction of a temporary construction crossing is anticipated and the application fee will be borne by the City.

Any fees associated with Flagging Application will be borne by the City.

Track Block Application shall be borne by the Contractor.

The Contractor shall prepare and submit and revised as required the Construction Plan, which is incidental to the Work. There is no fee associated with the submission of the Construction Plan.

Q13: Has CPKC had the opportunity to review Appendix E? If yes, have they commented on if they generally accept the proposed construction methodology or if any of the proposed construction methodologies and the mitigations are unacceptable or will be more onerous than what is described in the plan?

A13: Yes, CPKC has reviewed and provided comments on the example Construction Plan. An addendum will be issued that includes updates to the example plan based on CPKC comments.

Q14: Does the City or CPKC have any information regarding the amount of train traffic bidders can expect at the site? This will be very important to understand the delays in work associated with any Track Protection in place and any work which may foul the track (cranes, lifting equipment, roadwork equipment, gravel trucks, concrete pumps).

A14: CPKC states that on average 18-20 trains pass through each day over both tracks. The two tracks are CPKC's mainlines. Typical railway operation at this location is through traffic.

Q15: Will Rule 842 be the primary type of track protection on the project?

A15: CPKC will be providing flagging track protection and the CPKC Flagging Guidelines are included with the Tender documents.

Q16: Can you confirm that Bidders can assume if work on the new deck (forming, rebar placing, placing/finishing concrete, other minor tasks with hand tools) can proceed while trains are passing through the work site or if all construction activity on the structure must be totally suspended regardless of the construction activity and all personnel vacate the areas within 20' of all tracks as per page 20 in Appendix D.

A16: It is acceptable for work to continue on the new deck as identified above. Work on bearings and substructures shall be suspended and workers shall exit the CPKC ROW under Flagperson direction when a train passes through.

Q17: Can you confirm that if an instance as per E41.5.f and E41.5.h arises on the project due to factors beyond the control of the contractor (ie: weather preventing work from proceeding on that day) that the contractor will not be charged the cost of the flagger. If not, Bidders will need to allow $3,000 per day plus tax in their pricing for any weather days.

A17: Flagging requirements and costs have been estimated based on the anticipated needs. They will be monitored and reviewed as the project progresses. In cases where flagging was requested by the Contractor and could not be utilized due to forces beyond the Contractor's control, the Contract Administrator will review and adjust the number of flagging days available if appropriate.

Q18: The construction clearances and clearance envelope in the drawings don't appear to correspond with the clearance requirements in E41 and Appendix D. Can clarity be provided what the construction clearances and clearance envelope in the drawings are intending to show?

A18: The clearance envelope shown in Appendix D is generic. The example drawings include various clearance envelopes for all scenarios at this location.

Q19: Below is with reference to Appendix D, 5.1:

- Does the Contractor need to provide eRailSafe training to all workers and/or supervisors working on the demolition catch platforms/work platforms overtop of the CPKC RoW?
- Does the Contractor need to provide eRailSafe training to all workers and/or supervisors working on the new bridge deck work (forming, reinforcing placing, concrete works, waterproofing, paving) when working above a demolition catch platform/work platform when overtop of the CPKC RoW?
- Does the Contractor need to provide eRailSafe training to all workers and/or supervisors working on superstructure demolition overtop of the CPKC RoW?
- Does the Contractor need to provide eRailSafe training to all workers and/or supervisors working on girder FRP strengthening near pier 1 & 2?
- Does the Contractor need to provide eRailSafe training to all workers and/or supervisors working on pier 1 & 2 repairs?
- Does the Contractor need to provide eRailSafe training to all workers and/or supervisors working on girder jacking and bearings on pier 1 & 2?

A19: No for all bullets as all work on CPKC property will be completed under the supervision of Flaggers.

Q20: Should Bidders assume that all site personnel performing work on or above the CPKC RoW require criminal background checks as suggested Appendix D 11.2? Should Bidders assume security training is required?

A20: Yes. CPKC, at their discretion, could make exceptions, however the criminal background checks should be assumed. Security training is not required, however CPKC will complete a tailgate meeting each day with the team prior to workers entering CPKC ROW to complete work. Tailgate meeting is typically less than 10 minutes.

Q21: Can you confirm the limits of any required temporary security fencing required for the CPKC RoW?

A21: The limits are shown on the example Construction Plan drawings. Fencing limits also depend on the Contractor's access point location to the area, equipment and material storage location, etc.

Q22: Is there any upper limit that Bidder's can assume for the duration of approved track blocks?

A22: Track Blocks have not been currently approved by CPKC. Available gaps in natural traffic could be as long as four hours. The Contractor may apply for Track Blocks, subject to CPKC approval.

Q23: Regarding Specification Section E7. Office Facilities

- The specification states that the field office for use by the Contract Administrator must have a minimum floor area of 80 square meters. The largest individual site trailer available is 12'x60' which contains 67 square meters (720SF) of floor area. Please confirm if a single 12'x60' trailer is acceptable or if the contractor is required to carry an additional trailer to meet the minimum floor area of 80 square meters.

A23 Requirement will be revised in an addendum.

Q24: Is there potential for Part 1 and Part 2 of the contract to be awarded to separate bidders, or is the intent to award both Parts to a single bidder?

A24: In accordance with B17.1 and B18.6, where an award is made by the City for either Part 1 or Part 2, it will be made to the qualified bidder submitting the lowest evaluated responsive Bid in part as determined by the Total Bid Price. Total Bid Price will be determined as the total amount for Part 1 and Part 2 in accordance with Form B Prices.

Q25: Traffic Management Plan sheets 1025 to 1031 are listed on sheet 1002 but have not been provided on MERX. Please provide these drawings.

A25: Drawings are included. For example P-123-25-1024 is actually drawing number 1031.

Q26: Can CPKC provide an approximate number of daily train passings and an average duration for each passing?

A26: CPKC stated 18-20 trains per day total over two tracks. These tracks are CPKC mainlines, rail operation are typically through traffic.

Q27: Referring to Appendix D, under CPKC Geotechnical Protocol for Pipeline and Utility Crossing(s) under railway tracks.

- It states under section 12.0 that CPKC may at their discretion, assign a full time geotech monitor to be on site at the Applicant's expense. Will this expense be paid for by the City?

A27: The applicant is the City of Winnipeg. In the event this request is executed by CPKC, costs associated with the geotechnical engineer will be covered by the City of Winnipeg.

Q28: Referring to sheet 2121, under Exterior Girder Bracing Note 4. "THE TOP FLANGES BRACING SHALL BE DESIGNED FOR A FACTORED TENSION LOAD OF 100 kN BASED ON THE EVALUATED CONSTRUCTION LOADING AND SPACING"

- Is it the intent that the factored tension load of 100kN is to be resisted by the top flange at existing diaphragm locations and every 2.0m between existing diaphragm locations?

A28: Based on the assumed construction loads and formwork geometry stated on the Drawings, yes. Additionally, the bottom flange shall be braced in compression at sll stated locations and shall be designed for a similar load in compression. Bracing is required at all existing diaphragm locations and intermediate spacings of not more than 2m. Each location shall be required to resist the 100kN load as described.

Q29: What distance from the nearest rail of the nearest track necessitate a track block? Is this the 3.66 metres distance noted in 41.7 (b)?

A29: 3235mm from centreline of track to scaffolding clear distance (Sheet 5 – Railway Drawings Appendix D) is permitted under flagging protection. Track Block, which may be provided upon CPKC approval, have different requirements and not necessarily related to a distance from the track, noting Q22 and A22 in regard to track blocks not being permitted.

Q30: Can temporary systems, i.e. formwork/falsework, remain in place without a track block so long as all components of the system are outside of the 3.66 metres noted in 41.7 (b)?

A30: Yes

Q31: Regarding installation of the permanent bearings; What concrete strength must the abutment end diaphragms and pier end diaphragms achieve before jacking of the bridge girders is permitted?

A31: The abutment and pier diaphragms must attain at least 75% of the 28-day compressive strength prior to jacking of the bridge.

Q32: Will the CPKC communications line running just north of the rail line be removed before the contractor mobilizes to site?

A32: Anticipated date for burial of the existing CPKC overhead line is December 1, 2205.

Q33: With respect to the design responsibility of the FRP Girder Strengthening, it's not clear which party will hold responsibility for the performance of the newly rehabilitated girders after completion. This type of strengthening is a very specialized design/construction methodology that general Contractors do not typically carry insurance for. This item of work holds a significant amount of risk for such an integral structural component of the bridges that should be the responsibility of the rehabilitation Designers/Owners and not the Contractor. We propose the following:

- The City takes on the design of this element considering that they have specified the products/materials and construction methodology.

or

- The City indemnifies the Contractor of any claims related to the performance of the FRP strengthening from a design perspective and that the City requires the designer of the FRP to provide proof of appropriate insurance that extends beyond the general construction warranty for the installations of the product/system.

A33: Design responsibility for the FRP Girder Strengthening is the Contractor's, for the load stated on the Drawings. Some modifications to the Specification is provided in an Addendum to clarify requirements.

Q34: The scope of work table on sheet 2101 lists the FRP before the girder jacking and temporary bearing installation but there is a note at the bottom of the table stating "Scope of work item not necessarily presented in sequence of work". Does the Girder Strengthening need to be installed and cured prior to jacking of the girders?

A34: No, FRP strengthening does not need to be completed prior to jacking of the girders. As noted, FRP strengthening shall be completed prior to construction of the bridge deck.

Q35: Regarding Electric Post Pedestals as shown on detail 2/2122; will the anchorage system for the bridge street lights be supplied by others for installation by the contractor?

A35: Street light anchorage systems (Acrow-Richmond DGRS-2FS or equivalent) shall be supplied and installed by the Contractor and shall be incidental to Supply and Place Structural Concrete.

Q36: As per the reinforcing details on sheet No. 2105 and 2108 the A1501 and A1502 dowels require a 400mm embedment into the existing abutment seat. The jacking notes indicate that the girder jacking is to be limited to the height required to install the bearings which would be approximately 275mm. In order to install these dowels in the vicinity of the girders, jacking will need to extend a minimum of 450mm from the existing elevation and may still not be enough clearance to drill the dowel holes required. Is the intent to jack the girders at the abutments in excess of 450mm or can the pedestal reinforcing design be modified to accommodate the height restrictions?

A36: The intent is only to jack the bridge the required height to replace the bearings and cast pedestals where required. Revised drawings will be provided in an amendment to revise the abutment pedestal reinforcing details to satisfy the jacking requirements and include notes for field verification of anchor bolts and pedestal reinforcing.

Q37: As indicated in Section E41, the Contractor is to coordinate and obtain approval from CPKC for the necessary track blocks to complete the demolition of span 2 and adjacent spans, bearing replacement, girder jacking and FRP strengthening etc. Can a general schedule or parameters indicating expected duration and frequency of track blocks and/or train movements be identified in the tender documents so the Contractor can adequately plan the work for the bid submission? Without a general knowledge of the expected working time in these critical areas, it becomes extremely difficult to schedule/plan this work.

A37: E41 has been modified. Track blocks are not permitted (unless otherwise approved by CPKC). CPKC stated 18-20 trains per day total over two tracks. These tracks are CPKC mainlines, rail operations are typically through traffic.

Q38: Are the dowels Mk H1502 sufficient if all the existing girder dowels/stirrups are severed?

A38: The existing dowels from the girders into the deck must be maintained. The detail for Mk H1502 is intended to be for low quantity of stirrups that may be damaged during the construction process. The Dowels are a continuation of the shear stirrup reinforcing of the girders and as such shall not be cut at the deck and girder interface. Intermediate diaphragm bars can be cut at the deck soffit level and replaced one for one with the rebar to replace the portion cut and drilled 200mm into the diaphragm and epoxied in place using Hilti HI-RE-500-V3

Q39: As per drawing 2118, rehabilitation jacking note 3, can you confirm “jacking plate” is intending to refer to a metal plate between the jacking device and the girder?

A39: Yes this is a steel plate between the jacking device and the girder as a part of the jacking system.

Q40: What is the minimum overhead clearance required to maintain over Concordia Ave?

A40: 5.6m

Q41: Is it acceptable in principle to reduce the overhead clearance on the CPKC RoW for a hanging temporary platform on the south side of Pier 1 and the north side of Pier 2?

A41: Yes

Q42: Define a coating product that is acceptable as per E30.5.4 (b).

A42: UV protective coating to be developed and proposed by the FRP design and/or supplier to be compatible with the FRP materials and system to be utilized.

Q43: Confirm whether the coating system for the FRP Wrap is incidental to the FRP Strengthening or Girder Coating?

A43: Coating system on the FRP areas is incidental to the FRP Strengthening and the coating on the exterior girders are incidental to the Girder Coating pay item.

Q44: Confirm if the holes left after the existing conduits are removed are to grouted?

A44: No, holes do not need to be grouted

Q45: Confirm if the vertical edge of the top flanges of the girders are required to have FRP strengthening?

A45: The FRP strengthening design is the responsibility of the Contractor. The FRP may not be required on the vertical edge of the top flange of the girders as the 400kN prescribed shear strengthening is required for the web area of the girders.

Q46: Can you confirm if the FRP wrap is intending to only be in locations where the zinc arc activated spray is not currently located and that the zine arc activated spray is to remain? The ends of the FRP strengthening appear to line up with the locations where the zinc arc activated spray is terminated.

A46: As shown on Sheet 2118/2218, the FRP is required within the last 5m of the girders starting from the edge of the proposed pier concrete diaphragms. Based on existing information, the zinc-spray is not expected to extend into the zone of the FRP. Preparation of concrete substrate is incidental to the FRP

strengthening. If some zinc paint does extend into the FRP zone, cleaning and preparing the concrete substrate would be required for proper bonding as required by the FRP supplier.

Q47: Is it acceptable in principle to jack the girders off of an unmodified pier if the contractor designs and installs temporary supports off of the face of the existing piers?

A47: Yes