

**INVITATION TO TENDER "ITT" NO. PS20190021  
CONSTRUCTION SERVICES FOR THE GRANVILLE BRIDGE REHABILITATION**

**QUESTIONS AND ANSWERS NO. 4**

ISSUED ON APRIL 24, 2019

Q1	Typically on other major projects, the owner wants the contractor is to provide traffic message boards to provide the public with notice of construction. Can the City confirm how many message boards and where they want them located?
A1	For general notice of construction CMS boards that are to be installed prior to and maintained throughout the duration of the project. The City of Vancouver will retain responsibility for the placement, maintenance and messaging content. There may be additional CMS boards required per the specific traffic management plans based on the level of impact to the travelling public. These TMP specific message boards will be the responsibility of the contractor to provide, install, maintained and update messaging content as per the specific approved TMP.
Q2	Is the contractor able to shut down the bridge; ie. Full road closure?
A2	Full closures would be permitted on weekday night only and CMBC must approve. Closures should be done at a time to minimize any impact on CMBC bus schedule.
Q3	Will the Owner accept that the Contractor permanently closes two adjacent lanes at a time on the main span of the bridge to complete the Works associated with expansion joints replacement?
A3	Closure of two adjacent lanes at a time on the main span are acceptable. 2 lanes NB/SB on the main span must be retained at all times.
Q4	The locations of the rivets and tabs to be replaced are not specified in the Tender Documents. Please clarify which specific area(s) of the main span shall be accessible for inspection by the Contract Administrator.
A4	See answer to Q17 and Q18.
Q5	Please clarify at which location(s) work shall be completed under item 5.2. "Shielding of Bus Feeder Cables".
A5	The bus feeder cables shall be shielded in all areas where work is being performed by the Contractor within 3 m of the cables.


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Q6	Under item 8.8. "Main span drainpipe replacement", please confirm whether the entire drainpipe system shall be replaced between M1 and M8 or only selected sections shall be replaced. In such case, please clarify which sections shall be replaced.
A6	All main span drainpipe shall be replaced. Reference Drawing 2125-202 " <u>Drain Pipe Replacement</u> " Note 1.
Q7	What material is the finger joint trough? Neoprene or Natural Rubber? (each material was mentioned in the design drawings).
A7	Polychloroprene.
Q8	What is the final coat of exposed steel on the isolation bearings? Is it galvanized or painted? - if it's painted what is the specs and final color?
A8	Coating shall be performed as per the project Specifications. Reference Supplemental Specification 09 91 99S.
Q9	Which design codes to be used for the isolator bearings? Is it CAN-CSA or AASHTO? (each code was mentioned in the design drawings).
A9	The 2014 AASHTO Guide Specifications for Seismic Isolation Design shall govern the design of the isolation bearings.
Q10	Are the piers able to have temporary anchorage in them for access purposes? All of the minor holes created from the access will be filled with grout.
A10	This is acceptable, though the Contractor shall provide temporary works shop drawings that are signed and sealed by a Professional Engineer for review by the Contractor Administrator.
Q11	Schedule A - Schedule of Quantities and Prices; for "GST" column, do you want just the GST amount which would be the "Amount Bid (including PST) x 5%" or the GST including the "Amount Bid (including PST)" which would be the Amount Bid x 1.05? I'm asking because the summary item, "total tender price (including all costs, fees, and PST and GST) don't match up. What do you want us to do?
A11	See the revised Schedule of Quantities and Prices provided with Addendum 2.
Q12	For Item 1.17 Coating of Concrete, does this apply to all rebar and concrete surfaces from the expansion joints, piers, barriers, overhead and vertical patch repair works? If not, can you confirm where this coating will apply?
A12	Work for Coating of Concrete shall be completed as detailed on Drawing 2125-202 under " <u>Coating of Concrete</u> ". An example of locations that require this work can be seen in the below photo.

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Q13	For the Seismic Instrumentation drawing 2125-501, can you provide details on the underground scope of work along the Island Park Walk?
A13	Two of the 53 RPVC ducts that come out of DDC-1 on Pier S23, travel down the concrete of the pier and immediately transition underground. There are existing utilities in the vicinity of Island Park Walk that are to be located prior to installing the underground ducts. The underground ducts cross Island Park Walk, continue alongside Island Park Walk, and cross Island Park Walk again near the pump station. One underground duct continues to the location of the free-field accelerometer (ACC-2) where it is terminated in a tier 22 box and the second underground duct continues to the pump station where it is terminated at an existing panel, the location of which is to be confirmed by the City.
Q14	Would you be able to confirm that the awarded contractor is to allow for 100% containment for all the work within this contract?
A14	Any containment needed to satisfy the safety and environmental requirements outlined in the Specifications as well as meet all Environmental Regulations shall be installed or followed.
Q15	Regarding Drawing 314. Detail 1 and Detail 2, Are these plates field welded directly to the existing steel? Or shall we need to provide new bearing plates top and bottom, then have the new bearing plates field welded to the existing steel? Please see attached sketch for reference.
A15	The new bearing plates (shown in Section C) are welded directly to the existing steel.

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<b>Q16</b>	Regarding Pier M6 concrete ring beam, drawing 2125-304 shows pier M6 concrete ring beam on Main Span M6 & M7 drawings. Shall the concrete ring beam be installed only for M6? Or shall the concrete ring beam be installed for both M6 & M7? Which pay item shall this item be included in?
<b>A16</b>	The new ring beam is only for Pier M6. Pier M7 has an existing ring beam (see Drawing 2125-303). This work shall be included under Pay Item 1.20 Pier M6 Supply and Install Post Tensioned Concrete Band (the terms Concrete Band and Concrete Ring beam are interchangeable).
<b>Q17</b>	Regarding pay item 1.42 replacement of rivets. Are there specified locations for the rivet replacement? Or are we to assume they may be located throughout the entire 540m long main span between M1 and M8?  Per 01 52 01 - Temporary structures on Add #1, it notes "Gantry may only be used for inspections or for light works such as rivet replacement or localized paint touch ups", are we to assume access for inspection and for performing rivet replacement will be provided by the gantry?
<b>A17</b>	The location and extent of rivet replacement will be determined during the detailed inspection performed by the Contract Administrator, under the presence of the Contractor. The location of replacements can be anywhere along the main span truss. The gantry may be used for inspection/rivet replacement, as long as the Contractor has satisfied the conditions as detailed in the project specifications.
<b>Q18</b>	Regarding pay item 1.43-tab repair. Are there specified locations for the tab replacement? Or are we to assume they may be located throughout the entire 540m long main span between M1 and M8?  Per 01 52 01 - Temporary structures on Add #1, it notes "Gantry may only be used for inspections or for light works such as rivet replacement or localized paint touch ups", can the gantry system be used for the tab repair as well?
<b>A18</b>	The location and extent of tab replacement will be determined during the detailed inspection performed by the Contract Administrator, under the presence of the Contractor. The location of replacements can be anywhere along the main span truss. The gantry may be used for inspection/tab replacement, as long as the Contractor has satisfied the conditions as detailed in the project specifications.
<b>Q19</b>	On addendum #1, Item 1.44 changed the naming from M1 diaphragm concrete repair to S26 diaphragm repair. Please confirm if this is intentional and if it shall be reflected on the tender form. Item M1 diaphragm concrete repair is shown as m2 on the tender form but is specified as unit bid price metre on Measurement and Payment. Please advise.
<b>A19</b>	S26 Diaphragm Repair is correct and shall be paid at the unit price bid per

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	lineal metre of diaphragm repair completed across the width of the bridge.
Q20	The following items are shown as lump sum items on the tender form but is specified as unit price bid per metre or unit price bid on Measurement and Payment. Items: 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9. Please advise.
A20	See the revised Schedule of Quantities and Prices provided with Addendum 2.
Q21	Item 1.32 Pier M7 Clean Masonry and Bearing Plates is shown as each on the tender form but is specified as lump sum on Measurement and Payment. Please advise.
A21	Price this item as a single (1) Lump Sum, as specified in 01 27 00S Clause 1.32.1.
Q22	Pay item 8.10 to 8.16   Will City of Vancouver provide the specification of these works? Also, can City of Vancouver provide the timeline for Canoe Bridge repairs?
A22	Specifications for the Canoe Bridge are as detailed on Drawing 2125-601. The timeline will be finalized if the provisional item is awarded.
Q23	Pay Item 3.1   Traveler access will be blocked if the contractor set up scaffold access from top of pier to the underside of the bridge deck. This will also be the case if scaffold access is provided between the deck and Pier M6. Please advise if temporary blocking traveler access can be allowed.
A23	It is understood that the scaffold access would block off the ability for the traveler to pass M6. Prior to scaffold installation the Contractor shall notify the City and the City will advise the Contractor as to the side of the pier to position the traveler. In addition, only one exterior traveler can be blocked at that time.
Q24	Pay Item 2.10 & 2.11   Contractors are required to access the vehicular lanes and work area currently is fenced off by another contractor in order to complete the overhead and vertical concrete repair. Does the City of Vancouver have a timeline when the contractor will have the full access for overhead and vertical CIP concrete or shotcrete repair?
A24	Refer to response to Q9 in QA3
Q25	The boat is in close proximity to Pier M6. The contractor may have to disassemble the masts of the boat in order to build a temporary access platform. Please advise if this is acceptable.
A25	Refer to Drawing 2125-202 " <u>Access and Work Area</u> " Note 3. The Contractor will have to consult with the boat owner with regards to any request to temporarily alter their property. As the boat does not belong to the City of Vancouver, we are not in a position to give permission to alter or access the boat in any manner. To clarify, identifying the boat owner, consulting, and any

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	<b>agreements that may be required will be the responsibility of the Contractor.</b>
<b>Q26</b>	The elevation detail on dwg 317 identifies strengthening of bracing connections adjacent to pier M7 only however the sections appear to indicate that the strengthening work is at both pier M6 and M7. Please advise which detail is correct.
<b>A26</b>	The bracing strengthening is at both pier M6 and M7.
<b>Q27</b>	Please advise if COV will be providing information boards to notify the public of the upcoming works prior to the commencement of construction. If not is there a requirement for the contractor to provide these?
<b>A27</b>	See A1.