REQUEST FOR PROPOSAL “RFP” No. PS20151189
TITLE: BRIDGE INSPECTION SERVICES
AMENDMENT No. 2

RE: REVISED SCOPE OF WORK

1.0 REPLACE CURRENT SCOPE WITH:

Revised Scope of Work

The successful proponent shall be a team consisting of a marine structural engineer, and a Registered Professional Biologist. The contract will include, but not be limited, to the following work:

Task 1 - Site Investigation
- Attend a project initiation meeting with Park Board staff;
- Review all available background information;
- Provide Park Board Representative 48 hours’ notice prior to any site inspection;
- Conduct a detailed condition assessment for all structures (exclude Jericho Pier and Vanier Park Launch Ramp):

Bridge Structures
- Visual condition assessment to identify areas of deterioration and damage including underwater inspection where necessary;
- Sounding and probing of timber structures at select locations;
- Visual review and sounding to identify concrete delamination;
- Half-cell potential measurements may be required for the following structures:
  - Park Drive at Lumbermen’s Arch - deck soffit
  - Park Drive at Ceperley Meadows - deck soffit
  - North Lagoon Drive - deck soffit
  - Pipeline Road - piers
  - Bear Grotto - deck soffit and longitudinal beams
- Chloride ion testing may be required for the following structures:
  - Park Drive at Lumbermen’s Arch
  - Park Drive at Ceperley Meadows
  - North Lagoon Drive
  - Renfrew Park - Main pedestrian bridge

Marine Structures
- Perform a visual condition assessment of the marine structures. Underwater inspections are only necessary for structures that cannot be accessed at low tide;
- Determine fungal decay by hand drilling pilings where necessary;

Task 2 - Analysis
• A screening level review to determine load capability of the structures. Vehicular bridges shall be able to support fully loaded buses, pedestrian bridges shall be able to support a Park Board gator, and piers and boardwalks shall be able to support a Park Board maintenance vehicle.
• Provide a screening level seismic risk assessment for all vehicular bridges and #7 Park Drive Overpass. A recognized FHWA based screening method is acceptable. The purpose of this task is to prioritize bridges that need to be further evaluated for seismic retrofitting.
• Provide a screening level review to identify sites with potential environmental and archaeological issues;
• Provide a screening level review to identify sites that will be impacted by the effects of climate change. Refer to City of Vancouver map of projected sea level rise from the City’s Climate Change Adaption Strategy webpage;
• Identify issues that are critical to long term repair and maintenance;
• Provide residual life estimates for all structures;
• Prioritize repairs for structural defects using the City of Vancouver’s Degree Relevancy Urgency (DRU) rating system;

Task 3 - Concept design and cost estimates
• Develop conceptual rehabilitation options for vehicular bridges and #7 Park Drive Overpass only. The options shall consider repair, reconstruction of a section of structure or replacement. Provide high level capital cost estimates for the repairs or reconstruction option. For sites where the entire structure will need to be replaced, provide high level cost estimates for prefabricated options;
• Provide high level annual maintenance cost estimates for each structure;
• Public safety, park visitor’s experience and aesthetics shall be considered when developing the rehabilitation options;

Task 4 - Review & Reporting
• Prepare a draft final report and final report; and
• Review the detailed condition assessment, concept designs and cost estimates with Park Board staff. Assume four (4) review meetings.

Deliverables

1. An initial report containing detailed condition assessment and residual service life estimates of the structures. The report shall include maps, section drawings, photographs and applicable test results.
2. Concept design and cost estimates for repair and reconstruction options.
3. A draft of the final report. The report shall include residual life estimates, recommendations, concept design drawings, high level cost estimates (capital and maintenance costs), proposed repair and reconstruction priorities, and proposed maintenance program. The draft report will include the environmental, archaeological and seismic screening level assessments.
4. A final report. The report shall include residual life estimates, recommendations, concept design drawings, high level cost estimates (capital and maintenance costs), proposed repair and reconstruction priorities, and proposed maintenance and the initial report. The final report will include the environmental, archaeological and seismic screening level assessments.
RE: REVISED PRICING TABLE

REPLACE TABLE 1 - COMMERCIAL TABLE - PROJECT FEES WITH:

<table>
<thead>
<tr>
<th>Description</th>
<th>Total for Bridge Structures</th>
<th>Total for Marine Structures</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Task 1: Site Investigation</td>
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<td></td>
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<tr>
<td>Detailed condition assessment and reporting</td>
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<td>Task 2: Analysis</td>
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<tr>
<td>Load capability screening level review</td>
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<tr>
<td>Seismic screening level risk assessment</td>
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<td>Not required</td>
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<tr>
<td>Archaeology screening level review</td>
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<tr>
<td>Environmental screening level review</td>
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<tr>
<td>Residual life estimates</td>
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<td>DRU assessment</td>
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<tr>
<td>Task 3: Conceptual design and cost estimates</td>
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<tr>
<td>Conceptual design development</td>
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<td>Not required</td>
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<tr>
<td>Cost estimates</td>
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<tr>
<td>Task 4: Review</td>
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<tr>
<td>Reporting</td>
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<td>Meetings with Park Board staff</td>
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<tr>
<td>Total (including PST but excluding GST):</td>
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</table>

NOTE: Where marked “not required” do not indicate pricing and mark as zero.

Cash Allowance

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Materials testing &amp; reporting</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

All other conditions and specifications remain unchanged.

This amendment must be completed, and attached to your Proposal form.

____________________________________
NAME OF VENDOR

____________________________________
SIGNATURE OF AUTHORIZED SIGNATORY

____________________________________
DATE

Contracting Specialist, Dino Goundouvas