

FORM A: REQUEST FOR QUALIFICATION APPLICATION

1. Document Title RFQ NO. 668-2016 - SYSTEMS INTEGRATOR FOR THE WINNIPEG SEWAGE TREATMENT PROGRAM

2. Proponent

Name of Proponent

Usual Business Name of Proponent as it appears on Invoice (if different from above)

Street

City Province Postal Code

Email Address of Proponent

Facsimile Number

(Mailing address if different)

Street or P.O. Box

City Province Postal Code

GST Registration Number (if applicable)

(Choose one)

The Proponent is:

a sole proprietor

a partnership

a corporation

carrying on business under the above name.

3. Contact Person The Proponent hereby authorizes the following contact person to represent the Proponent for purposes of the Qualification Submission.

Contact Person Title

Telephone Number Facsimile Number

4. Good Faith Declaration The Proponent declares that, in submitting its Request for Qualifications (RFQ), it does so in good faith and that to the best of its knowledge no Persons identified in B15 would have any pecuniary interest, direct or indirect, should the Proponent be awarded a contract for the Project.

5. Response The Proponent agrees that the RFQ in its entirety shall be deemed to be incorporated in and to form a part of this Qualification Submission notwithstanding that not all parts thereof are necessarily attached to or accompany this Qualification Submission.

6. Addenda The Proponent certifies that the following addenda have been received and agrees that they shall be deemed to form a part of the Submission:

No.	_____	Dated	_____
	_____		_____
	_____		_____

7. Signatures The Proponent or the Proponent's authorized official or officials have signed this

_____ day of _____, 20_____ .

Signature of Proponent or Proponent's Authorized Official or Officials

(Print here name and official capacity of individual whose signature appears above)

(Print here name and official capacity of individual whose signature appears above)

FORM B: TEAM MEMBERS

Proponent:

Notes:

1. The City reserves the right to clarify, investigate, and request additional information to confirm the Proponent's claim regarding any data provided.
2. This form is made available to Proponents in both PDF and Microsoft Word format. In the event of a discrepancy between the forms, the PDF version takes precedence.
3. Complete "Proponent Response" section in full. Failure to complete or submit required information may result in disqualification of the complete Qualification Application.
4. If insufficient space is provided, attach additional sheets with required information.

Item	Description	Proponent Response																												
1.0	List your Team Member's firms:	Proponent: _____ Subcontractor #1: _____ Subcontractor #2: _____																												
2.0	What percentage of the overall work category will be completed by the above listed Team Member's? Ensure each row adds up to 100%.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 16.6%;">Proponent</th> <th style="width: 16.6%;">Subcontractor #1</th> <th style="width: 16.6%;">Subcontractor #2</th> </tr> </thead> <tbody> <tr> <td>Project Management</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Systems Architecture Development</td> <td></td> <td></td> <td></td> </tr> <tr> <td>PLC Programming</td> <td></td> <td></td> <td></td> </tr> <tr> <td>HMI Programming</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Site Commissioning</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Networking</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Proponent	Subcontractor #1	Subcontractor #2	Project Management				Systems Architecture Development				PLC Programming				HMI Programming				Site Commissioning				Networking			
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Project Management																														
Systems Architecture Development																														
PLC Programming																														
HMI Programming																														
Site Commissioning																														
Networking																														

FORM C (R1): EXPERIENCE OF TEAM

Proponent:

Notes:

1. The City reserves the right to clarify, investigate, and request additional information to confirm the Proponent's claim regarding any data provided.
2. This form is made available to Proponents in both PDF and Microsoft Word format. In the event of a discrepancy between the forms, the PDF version takes precedence.
3. Complete "Proponent Response" section in full. Failure to complete or submit required information may result in disqualification of the complete Qualification Application.
4. If insufficient space is provided, attach additional sheets with required information.

Item	Description	Proponent Response
1.0	Engineering Registration Details	<p>Does your firm have a Certificate of Authorization for engineering?</p> <p><input type="checkbox"/> Yes (Proponent) <input type="checkbox"/> Yes (Subcontractor)</p> <p><input type="checkbox"/> No (Proponent) Explanation: _____ <input type="checkbox"/> No (Subcontractor) Explanation: _____</p> <p>Which province(s) is your firm registered with? _____</p>
2.0	CSA Certification Details	<p>Is one of your Team Members CSA Certified to produce CSA Approved Industrial Control Panels?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Details: _____</p>
3.0	Firm's Knowledge Areas	<p>Does one or more of your Team Members have automation experience in a wastewater and/or water treatment process?</p> <p><input type="checkbox"/> Yes (Proponent) Explanation: _____ <input type="checkbox"/> Yes (Subcontractor) Explanation: _____</p> <p><input type="checkbox"/> No (Proponent) <input type="checkbox"/> No (Subcontractor)</p>
4.0	Reference Project 1 – All data below shall be for the portion of work implemented by the Systems Integrator on the project.	
4.1	Project Description:	<p>Project Name: _____</p> <p>Client: _____</p> <p>Systems Integrator contract value: _____</p> <p>Brief Description: _____</p>

4.2	Number of PLCs installed or modified >50%:	<p># of Redundant PLC Pairs: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2-4 <input type="checkbox"/> 5-8 <input type="checkbox"/> 9-12 <input type="checkbox"/> >12</p> <p># of Non-Redundant PLCs: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2-4 <input type="checkbox"/> 5-8 <input type="checkbox"/> 9-12 <input type="checkbox"/> >12</p> <p># of Remote I/O Nodes: <input type="checkbox"/> 1-3 <input type="checkbox"/> 4-12 <input type="checkbox"/> 5-8 <input type="checkbox"/> 13-24 <input type="checkbox"/> 25-36 <input type="checkbox"/> >36</p>
4.3	Total I/O	<p># of Discrete Inputs: <input type="checkbox"/> <250 <input type="checkbox"/> 250-499 <input type="checkbox"/> 500-999 <input type="checkbox"/> 1000-1599 <input type="checkbox"/> 1600-3000 <input type="checkbox"/> >3000</p> <p># of Discrete Outputs: <input type="checkbox"/> <50 <input type="checkbox"/> 50-99 <input type="checkbox"/> 100-249 <input type="checkbox"/> 250-499 <input type="checkbox"/> 500-750 <input type="checkbox"/> >750</p> <p># of Analog Inputs: <input type="checkbox"/> <50 <input type="checkbox"/> 50-149 <input type="checkbox"/> 150-299 <input type="checkbox"/> 300-399 <input type="checkbox"/> 400-600 <input type="checkbox"/> >600</p> <p># of Analog Outputs: <input type="checkbox"/> <25 <input type="checkbox"/> 25-49 <input type="checkbox"/> 50-99 <input type="checkbox"/> 100-149 <input type="checkbox"/> 150-200 <input type="checkbox"/> >200</p>
4.4	Project Migration Components – Identify how many I/O were migrated from a DCS to a PLC, or from a PLC to a PLC, or from a PLC to a DCS, or from a DCS to a DCS for one project.	<p>For one project that was migrated from a (select only one):</p> <p><input type="checkbox"/> DCS to PLC <input type="checkbox"/> PLC to PLC <input type="checkbox"/> PLC to DCS <input type="checkbox"/> DCS to DCS</p> <p>For this project, the number of points migrated were:</p> <p># of Discrete Inputs: <input type="checkbox"/> <200 <input type="checkbox"/> 200-399 <input type="checkbox"/> 400-799 <input type="checkbox"/> 800-1500 <input type="checkbox"/> >1500</p> <p># of Discrete Outputs: <input type="checkbox"/> <30 <input type="checkbox"/> 30-74 <input type="checkbox"/> 75-149 <input type="checkbox"/> 150-300 <input type="checkbox"/> >300</p> <p># of Analog Inputs: <input type="checkbox"/> <30 <input type="checkbox"/> 30-74 <input type="checkbox"/> 75-149 <input type="checkbox"/> 150-300 <input type="checkbox"/> >300</p> <p># of Analog Outputs: <input type="checkbox"/> <15 <input type="checkbox"/> 15-29 <input type="checkbox"/> 30-49 <input type="checkbox"/> 50-99 <input type="checkbox"/> >100</p>
4.5	Networked Field Devices (instruments, valve actuators, and motor controllers) (i.e. Foundation Fieldbus, PROFIBUS, Modbus TCP, etc.)	<p># of Networked Field Devices: <input type="checkbox"/> <50 <input type="checkbox"/> 51-100 <input type="checkbox"/> 101-200 <input type="checkbox"/> 201-400 <input type="checkbox"/> 401-600 <input type="checkbox"/> >600</p>

4.6	Specific PLC utilized (check all that apply)	<input type="checkbox"/> Schneider Electric <input type="checkbox"/> Quantum <input type="checkbox"/> M580 <input type="checkbox"/> M340 <input type="checkbox"/> Premium <input type="checkbox"/> 984 <input type="checkbox"/> Other _____ <input type="checkbox"/> Rockwell Automation <input type="checkbox"/> Siemens <input type="checkbox"/> Other _____																		
4.7	Specific HMI utilized (check all that apply)	<input type="checkbox"/> Schneider Electric <input type="checkbox"/> Vijeo Citect <input type="checkbox"/> WonderWare <input type="checkbox"/> ClearSCADA <input type="checkbox"/> Vijeo Designer <input type="checkbox"/> Other _____ <input type="checkbox"/> Rockwell Automation <input type="checkbox"/> Siemens <input type="checkbox"/> Other _____																		
4.8	Process Simulation	Percentage of inputs that were automatically simulated in software based upon the control system outputs for testing and training purposes: <input type="checkbox"/> 0% <input type="checkbox"/> 1-20% <input type="checkbox"/> 21-40% <input type="checkbox"/> 41-60% <input type="checkbox"/> 61-80% <input type="checkbox"/> >80%																		
4.9	Dates	Award Date: _____ Scheduled Completion Date: _____ Project Completed? <input type="checkbox"/> Yes <div style="text-align: right;">Actual Completion Date: _____</div> <input type="checkbox"/> No <div style="text-align: right;">Forecasted Completion Date: _____ Explanation: _____</div>																		
4.10	Relation to Form D	Did any of your Key Personnel (proposed in Form D) work on this project? <input type="checkbox"/> Yes <input type="checkbox"/> No <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Who</u> _____</th> <th style="text-align: left;"><u>Role on This Project</u></th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>Project Manager</td> </tr> <tr> <td>_____</td> <td>Principal Programmer Lead</td> </tr> <tr> <td>_____</td> <td>Software Configuration Architect</td> </tr> <tr> <td>_____</td> <td>Principal HMI Developer</td> </tr> <tr> <td>_____</td> <td>Site Commissioning Lead</td> </tr> <tr> <td>_____</td> <td>Principal Networking Developer and Security Architect</td> </tr> <tr> <td>_____</td> <td>Professional Engineer</td> </tr> <tr> <td>_____</td> <td>Other: _____</td> </tr> </tbody> </table>	<u>Who</u> _____	<u>Role on This Project</u>	_____	Project Manager	_____	Principal Programmer Lead	_____	Software Configuration Architect	_____	Principal HMI Developer	_____	Site Commissioning Lead	_____	Principal Networking Developer and Security Architect	_____	Professional Engineer	_____	Other: _____
<u>Who</u> _____	<u>Role on This Project</u>																			
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_____	Professional Engineer																			
_____	Other: _____																			

4.11	Reference Information - References should have worked directly on the projects described, such as the Project Manager or Contract Administrator.	Contact Name: _____ Organization Name: _____ Position / Title: _____ E-mail address: _____ Telephone Number: _____
4.12	Number of Servers installed:	# of HMI Servers: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> ≥3 # of Terminal Servers: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> ≥3
5.0	Reference Project 2 – All data below shall be for the portion of work implemented by the Systems Integrator on the project.	
5.1	Project Description:	Project Name: _____ Client: _____ Systems Integrator contract value: _____ Brief Description: _____
5.2	Number of PLCs installed or modified >50%:	# of Redundant PLC Pairs: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2-4 <input type="checkbox"/> 5-8 <input type="checkbox"/> 9-12 <input type="checkbox"/> >12 # of Non-Redundant PLCs: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2-4 <input type="checkbox"/> 5-8 <input type="checkbox"/> 9-12 <input type="checkbox"/> >12 # of Remote I/O Nodes: <input type="checkbox"/> 1-3 <input type="checkbox"/> 4-12 <input type="checkbox"/> 5-8 <input type="checkbox"/> 13-24 <input type="checkbox"/> 25-36 <input type="checkbox"/> >36
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5.8	Process Simulation	<p>Percentage of inputs that were automatically simulated in software based upon the control system outputs for testing and training purposes: <input type="checkbox"/> 0% <input type="checkbox"/> 1-20% <input type="checkbox"/> 21-40% <input type="checkbox"/> 41-60% <input type="checkbox"/> 61-80% <input type="checkbox"/> >80%</p>

5.9	Dates	<p>Award Date: _____</p> <p>Scheduled Completion Date: _____</p> <p>Project Completed?</p> <p><input type="checkbox"/> Yes</p> <p style="padding-left: 100px;">Actual Completion Date: _____</p> <p><input type="checkbox"/> No</p> <p style="padding-left: 100px;">Forecasted Completion Date: _____</p> <p style="padding-left: 100px;">Explanation: _____</p>
5.10	Relation to Form D	<p>Did any of your Key Personnel (proposed in Form D) work on this project?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><u>Who</u> <u>Role on This Project</u></p> <p>_____ Project Manager</p> <p>_____ Principal Programmer Lead</p> <p>_____ Software Configuration Architect</p> <p>_____ Principal HMI Developer</p> <p>_____ Site Commissioning Lead</p> <p>_____ Principal Networking Developer and Security Architect</p> <p>_____ Professional Engineer</p> <p>_____ Other: _____</p>
5.11	Reference Information - References should have worked directly on the projects described, such as the Project Manager or Contract Administrator.	<p>Contact Name: _____</p> <p>Organization Name: _____</p> <p>Position / Title: _____</p> <p>E-mail address: _____</p> <p>Telephone Number: _____</p>
5.12	Number of Servers installed:	<p># of HMI Servers:</p> <p><input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> ≥3</p> <p># of Terminal Servers:</p> <p><input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> ≥3</p>

FORM D: EXPERIENCE OF TEAM'S KEY PERSONNEL ASSIGNED TO THE PROJECT

Proponent:

Notes:

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Item	Description	Proponent Response
1	Project Manager	<p>Who will be your Project Manager: _____</p> <p>What is their professional designations (select all that apply):</p> <p><input type="checkbox"/> P.Eng. <input type="checkbox"/> CET <input type="checkbox"/> PMP or equivalent <input type="checkbox"/> Other: _____</p> <p>How many years of experience do they have as a Project Manager, with ≥50% of their time performing Project Manager tasks?</p> <p><input type="checkbox"/> <1 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-5 <input type="checkbox"/> 6-9 <input type="checkbox"/> ≥10</p>
	Project Manager	<p><u>REFERENCE PROJECT</u></p> <p>Project name: _____</p> <p>Client: _____</p> <p>Systems Integrator contract value: _____</p> <p>Brief description: _____</p> <p>Were they the lead Project Manager: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Were they the assistant Project Manager: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Number of direct reports (employees): _____</p> <p>Reference Information:</p> <p>Organization name: _____</p> <p>Contact name: _____</p> <p>Position / Title: _____</p> <p>E-mail address: _____</p> <p>Telephone number: _____</p>
2	Software Configuration Architect	<p>Who will be your Software Configuration Architect: _____</p> <p>What is their educational background/professional designation (select all that apply):</p> <p><input type="checkbox"/> P.Eng.in Computer Engineering <input type="checkbox"/> P.Eng.in Electrical Engineering <input type="checkbox"/> CET <input type="checkbox"/> BSc. in Computer Science <input type="checkbox"/> CAP (ISA) <input type="checkbox"/> Other: _____</p> <p>How many years of experience do they have as a Software Configuration Architect, with ≥50% of their time performing Software Configuration Architect tasks?</p> <p><input type="checkbox"/> <1 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-5 <input type="checkbox"/> 6-9 <input type="checkbox"/> ≥10</p>

	<p>Software Configuration Architect</p>	<p><u>REFERENCE PROJECT</u></p> <p>Project name: _____</p> <p>Client: _____</p> <p>Systems Integrator contract value: _____</p> <p>Brief description: _____</p> <p>Were they the Software Configuration Architect on this project: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Number of PLCs: <input type="checkbox"/> 1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-10 <input type="checkbox"/> 11-19 <input type="checkbox"/> 20-29 <input type="checkbox"/> ≥30</p> <p>Number of networked instruments: <input type="checkbox"/> 0 <input type="checkbox"/> 1-20 <input type="checkbox"/> 21-50 <input type="checkbox"/> 51-75 <input type="checkbox"/> 76-100 <input type="checkbox"/> ≥100</p> <p>Number of control devices: <input type="checkbox"/> 0 <input type="checkbox"/> 1-20 <input type="checkbox"/> 21-50 <input type="checkbox"/> 51-75 <input type="checkbox"/> 76-100 <input type="checkbox"/> ≥100</p> <p>Number of standardized code templates (i.e. custom function blocks): <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> ≥50</p> <p>Reference Information:</p> <p>Organization name: _____</p> <p>Contact name: _____</p> <p>Position / Title: _____</p> <p>E-mail address: _____</p> <p>Telephone number: _____</p>
<p>3</p>	<p>Principal Programmer (Lead)</p>	<p>Who will be your Principal Programmer (Lead): _____</p> <p>Are they capable of the following programming languages:</p> <ul style="list-style-type: none"> • Function Block Diagram <input type="checkbox"/> Yes <input type="checkbox"/> No • Instruction List <input type="checkbox"/> Yes <input type="checkbox"/> No • Ladder Logic <input type="checkbox"/> Yes <input type="checkbox"/> No • Sequential Function Chart <input type="checkbox"/> Yes <input type="checkbox"/> No • Structured Text <input type="checkbox"/> Yes <input type="checkbox"/> No <p>What is their educational background/professional designation (select all that apply):</p> <p><input type="checkbox"/> P.Eng.in Computer Engineering</p> <p><input type="checkbox"/> P.Eng.in Electrical Engineering</p> <p><input type="checkbox"/> CET</p> <p><input type="checkbox"/> BSc. in Computer Science</p> <p><input type="checkbox"/> CAP (ISA)</p> <p><input type="checkbox"/> Other: _____</p> <p>How many years of experience do they have as a Principal Programmer (Lead), with ≥50% of their time performing Principal Programmer (Lead) tasks?</p> <p><input type="checkbox"/> <1 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-5 <input type="checkbox"/> 6-9 <input type="checkbox"/> ≥10</p>

	Principal Programmer (Lead)	<p><u>REFERENCE PROJECT</u></p> <p>Project name: _____</p> <p>Client: _____</p> <p>Systems Integrator contract value: _____</p> <p>Brief description: _____</p> <p>Were they the Principal Programmer (Lead) on this project: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Number of other programmers under their supervision: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> ≥5</p> <p>Number of I/O: <input type="checkbox"/> <200 <input type="checkbox"/> 201-500 <input type="checkbox"/> 501-1000 <input type="checkbox"/> 1001-2000 <input type="checkbox"/> ≥2000</p> <p>Number of control loops: <input type="checkbox"/> 0 <input type="checkbox"/> 1-10 <input type="checkbox"/> 11-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> ≥50</p> <p>Reference Information: Organization name: _____ Contact name: _____ Position / Title: _____ E-mail address: _____ Telephone number: _____</p>
4	Principal HMI Developer	<p>Who will be your principal HMI Developer: _____</p> <p>What is their educational background/professional designation (select all that apply):</p> <p><input type="checkbox"/> P.Eng.in Computer Engineering <input type="checkbox"/> P.Eng.in Electrical Engineering <input type="checkbox"/> CET <input type="checkbox"/> BSc. in Computer Science <input type="checkbox"/> CAP (ISA) <input type="checkbox"/> Other: _____</p> <p>How many years of experience do they have as a Principal HMI Developer, with ≥50% of their time performing Principal HMI Developer tasks? <input type="checkbox"/> <1 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-5 <input type="checkbox"/> 6-9 <input type="checkbox"/> ≥10</p>
	Principal HMI Developer	<p><u>REFERENCE PROJECT</u></p> <p>Project name: _____</p> <p>Client: _____</p> <p>Systems Integrator contract value: _____</p> <p>Brief description: _____</p> <p>Were they the Principal HMI Developer on this project: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Number of graphic screens (not including faceplates): <input type="checkbox"/> 1-5 <input type="checkbox"/> 6-25 <input type="checkbox"/> 26-100 <input type="checkbox"/> 101-300 <input type="checkbox"/> ≥300</p> <p>Number of HMI servers: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> >2</p> <p>Reference Information: Organization name: _____ Contact name: _____ Position / Title: _____ E-mail address: _____ Telephone number: _____</p>

5	Site Commissioning Lead	<p>Who will be your Site Commissioning Lead: _____</p> <p>What is their educational background/professional designation (select all that apply):</p> <p><input type="checkbox"/> P.Eng.in Computer Engineering</p> <p><input type="checkbox"/> P.Eng.in Electrical Engineering</p> <p><input type="checkbox"/> CET</p> <p><input type="checkbox"/> BSc. in Computer Science</p> <p><input type="checkbox"/> CAP (ISA)</p> <p><input type="checkbox"/> Other: _____</p> <p>How many years of experience do they have as a Site Commissioning Lead, with ≥50% of their time performing Site Commissioning Lead tasks?</p> <p><input type="checkbox"/> <1 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-5 <input type="checkbox"/> 6-9 <input type="checkbox"/> ≥10</p>
	Site Commissioning Lead	<p><u>REFERENCE PROJECT</u></p> <p>Project name: _____</p> <p>Client: _____</p> <p>Systems Integrator contract value: _____</p> <p>Brief description: _____</p> <p>Were they the Site Commissioning Lead on this project: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Number of technicians working under their supervision:</p> <p><input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> ≥5</p> <p>Number of total instruments (hardwired or networked):</p> <p><input type="checkbox"/> 1-5 <input type="checkbox"/> 6-25 <input type="checkbox"/> 26-100 <input type="checkbox"/> 101-300 <input type="checkbox"/> >300</p> <p>Number of control devices:</p> <p><input type="checkbox"/> 0 <input type="checkbox"/> 1-20 <input type="checkbox"/> 21-50 <input type="checkbox"/> 51-75 <input type="checkbox"/> 76-100 <input type="checkbox"/> >100</p> <p>Reference Information:</p> <p>Organization name: _____</p> <p>Contact name: _____</p> <p>Position / Title: _____</p> <p>E-mail address: _____</p> <p>Telephone number: _____</p>
6	Principal Networking Developer and Security Architect	<p>Who will be your Principal Networking Developer and Security Architect: _____</p> <p>What is their educational background/professional designation (select all that apply):</p> <p><input type="checkbox"/> P.Eng.in Computer Engineering</p> <p><input type="checkbox"/> P.Eng.in Electrical Engineering</p> <p><input type="checkbox"/> CET</p> <p><input type="checkbox"/> BSc. in Computer Science</p> <p><input type="checkbox"/> CAP (ISA)</p> <p><input type="checkbox"/> Other: _____</p> <p>How many years of experience do they have as a Principal Networking Developer and Security Architect, with ≥50% of their time performing Principal Networking Developer and Security Architect tasks?</p> <p><input type="checkbox"/> <1 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-5 <input type="checkbox"/> 6-9 <input type="checkbox"/> ≥10</p>

	<p>Principal Networking Developer and Security Architect</p>	<p><u>REFERENCE PROJECT</u></p> <p>Project name: _____</p> <p>Client: _____</p> <p>Systems Integrator contract value: _____</p> <p>Brief description: _____</p> <p>Were they the Principal Networking Developer and Security Architect on this project:</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Number of routers:</p> <p><input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> ≥5</p> <p>Number of Ethernet devices networked:</p> <p><input type="checkbox"/> 1-10 <input type="checkbox"/> 11-50 <input type="checkbox"/> 51-100 <input type="checkbox"/> 101-300 <input type="checkbox"/> ≥300</p> <p>Number of firewalls:</p> <p><input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> ≥3</p> <p>Number of computer servers:</p> <p><input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> ≥5</p> <p>Reference Information:</p> <p>Organization name: _____</p> <p>Contact name: _____</p> <p>Position / Title: _____</p> <p>E-mail address: _____</p> <p>Telephone number: _____</p>
<p>7</p>	<p>Professional Engineer</p>	<p>Who will be your Professional Engineer responsible for sealing the Systems Integration Work:</p> <p>_____</p> <p>What is their educational background/professional designation (select all that apply):</p> <p><input type="checkbox"/> P.Eng.in Computer Engineering</p> <p><input type="checkbox"/> P.Eng.in Electrical Engineering</p> <p><input type="checkbox"/> P.Eng.in other: _____</p> <p>How many years of experience do they have as a Professional Engineer, with ≥50% of their time performing Professional Engineer tasks?</p> <p><input type="checkbox"/> <1 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-5 <input type="checkbox"/> 6-9 <input type="checkbox"/> ≥10</p> <p>Number of software projects sealed in their career:</p> <p><input type="checkbox"/> 0-4 <input type="checkbox"/> 5-9 <input type="checkbox"/> 10-14 <input type="checkbox"/> 15-19 <input type="checkbox"/> ≥20</p>

<p>Professional Engineer</p>	<p><u>REFERENCE PROJECT</u></p> <p>Project name: _____</p> <p>Client: _____</p> <p>Systems Integrator contract value: _____</p> <p>Brief description: _____</p> <p>Were they the Professional Engineer on this project: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Number of I/O: <input type="checkbox"/> <200 <input type="checkbox"/> 201-500 <input type="checkbox"/> 501-1000 <input type="checkbox"/> 1001-2000 <input type="checkbox"/> >2000</p> <p>Number of networked field devices (instruments, valves and motor control): <input type="checkbox"/> <50 <input type="checkbox"/> 51-100 <input type="checkbox"/> 101-400 <input type="checkbox"/> 401-600 <input type="checkbox"/> >600</p> <p>What was sealed: Loop/wiring diagrams: <input type="checkbox"/> Yes <input type="checkbox"/> No PLC software: <input type="checkbox"/> Yes <input type="checkbox"/> No Control system architecture diagrams: <input type="checkbox"/> Yes <input type="checkbox"/> No Other: _____</p> <p>Reference Information: Organization name: _____ Contact name: _____ Position / Title: _____ E-mail address: _____ Telephone number: _____</p>
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FORM E (R1): KEY METRICS

Proponent:

Notes:

1. The City reserves the right to clarify, investigate, and request additional information to confirm the Proponent's claim regarding any data provided.
2. This form is made available to Proponents in both PDF and Microsoft Word format. In the event of a discrepancy between the forms, the PDF version takes precedence.
3. Complete "Proponent Response" section in full. Failure to complete or submit required information may result in disqualification of the complete Qualification Application.
4. If insufficient space is provided, attach additional sheets with required information.

Item	Description	Proponent Response
1	Proponent's office locations (cities) within North America:	_____
2	Current number of Systems Integrator employees within the Team, whose full time job is systems integration, available at any given time for Work:	<input type="checkbox"/> <10 <input type="checkbox"/> 11-15 <input type="checkbox"/> 16-25 <input type="checkbox"/> 26-50 <input type="checkbox"/> ≥50
3	Number of personnel currently allocated simultaneously for 24 hour support:	<input type="checkbox"/> 0-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> 6-7 <input type="checkbox"/> 8-9 <input type="checkbox"/> ≥10
4	Current estimated response time (hours) to send a service technician to a City sewage treatment facility on an emergency basis:	<input type="checkbox"/> ≤1 <input type="checkbox"/> 2-5 <input type="checkbox"/> 6-9 <input type="checkbox"/> 10-15 <input type="checkbox"/> 16-23 <input type="checkbox"/> ≥24
5	Number of employees whose position is at minimum 40% related to PLC programming and commissioning:	<input type="checkbox"/> 1 <input type="checkbox"/> 2-4 <input type="checkbox"/> 5-9 <input type="checkbox"/> 10-14 <input type="checkbox"/> 15-19 <input type="checkbox"/> ≥20
6	Number of employees whose position is at minimum 40% related to HMI programming and commissioning:	<input type="checkbox"/> 0-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> 6-7 <input type="checkbox"/> 8-9 <input type="checkbox"/> ≥10
7	Number of Professional Engineers with expertise in automation, registered by EGM or comparable registering body in another Canadian province, with expertise in the field of automation:	<input type="checkbox"/> 0 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-4 <input type="checkbox"/> ≥5
8	Number of engineers-in-training, registered by EGM or comparable registering body in another Canadian province:	<input type="checkbox"/> 0 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-4 <input type="checkbox"/> ≥5
9	Number of employees with CAP (ISA) designation:	<input type="checkbox"/> 0 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-4 <input type="checkbox"/> ≥5
10	Number of employees who have a Microsoft MCSE certification:	<input type="checkbox"/> 0 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-4 <input type="checkbox"/> ≥5

11	Number of employees who are certified as a Schneider PlantStruxure Certified Engineer:	<input type="checkbox"/> 0 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-4 <input type="checkbox"/> ≥5
12	Number of employees with Schneider Unity Pro Level 2 formal training:	<input type="checkbox"/> 1 <input type="checkbox"/> 2-4 <input type="checkbox"/> 5-9 <input type="checkbox"/> 10-14 <input type="checkbox"/> 15-19 <input type="checkbox"/> ≥20
13	Number of employees with Schneider Unity Pro experience on a project of over 1000 I/O:	<input type="checkbox"/> 1 <input type="checkbox"/> 2-4 <input type="checkbox"/> 5-9 <input type="checkbox"/> 10-14 <input type="checkbox"/> 15-19 <input type="checkbox"/> ≥20
14	Number of employees with Schneider Vijeo Citect formal training:	<input type="checkbox"/> 0-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> 6-7 <input type="checkbox"/> 8-9 <input type="checkbox"/> ≥10
15	Number of employees with Schneider Vijeo Citect experience on a project of over 1000 I/O:	<input type="checkbox"/> 0-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> 6-7 <input type="checkbox"/> 8-9 <input type="checkbox"/> ≥10
16	Number of employees with a minimum of one hundred (100) hours of Schneider Intelligent MCC integration experience:	<input type="checkbox"/> 0-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> 6-7 <input type="checkbox"/> 8-9 <input type="checkbox"/> ≥10
17	Number of completed projects with >10 networked field instruments (PROFIBUS or Foundation Field Bus):	<input type="checkbox"/> 0-5 <input type="checkbox"/> 6-11 <input type="checkbox"/> 12-17 <input type="checkbox"/> 18-23 <input type="checkbox"/> 24-29 <input type="checkbox"/> ≥30
18	Number of completed projects with >10 networked motor starters/VFDs (Ethernet, PROFIBUS, or Modbus):	<input type="checkbox"/> 0-5 <input type="checkbox"/> 6-11 <input type="checkbox"/> 12-17 <input type="checkbox"/> 18-23 <input type="checkbox"/> 24-29 <input type="checkbox"/> ≥30
19	Number of completed projects that integrated monitoring and control of medium voltage (i.e. 12,470 VAC) switchgear:	<input type="checkbox"/> 0-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> 6-7 <input type="checkbox"/> 8-9 <input type="checkbox"/> ≥10
20	Number of completed projects that integrated monitoring and control of HVAC with PLC-based controls:	<input type="checkbox"/> 0-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> 6-7 <input type="checkbox"/> 8-9 <input type="checkbox"/> ≥10
21	Number of completed projects that worked with ABB Bailey / NETWORK 90 systems:	<input type="checkbox"/> 0 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-4 <input type="checkbox"/> ≥5
22	Number of completed projects that migrated from DCS to PLC in last 10 years:	<input type="checkbox"/> 0 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-4 <input type="checkbox"/> ≥5
23	For the largest applicable completed project performed, the number HMI servers:	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> ≥5
24	For the largest applicable completed project performed, the number HMI clients:	<input type="checkbox"/> 0 <input type="checkbox"/> 1-4 <input type="checkbox"/> 5-9 <input type="checkbox"/> 10-14 <input type="checkbox"/> 15-19 <input type="checkbox"/> ≥20
25	Number of completed projects where Terminal Servers were installed:	<input type="checkbox"/> 0-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> 6-7 <input type="checkbox"/> 8-9 <input type="checkbox"/> ≥10

26	Number of completed projects where data generated by HMI systems was populated into Enterprise and Business level reporting systems:	<input type="checkbox"/> 0 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-4 <input type="checkbox"/> ≥5
27	Number of completed projects where process historians were installed:	<input type="checkbox"/> 0-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> 6-7 <input type="checkbox"/> 8-9 <input type="checkbox"/> ≥10
28	Number of completed projects where software simulators were developed for off-line testing:	<input type="checkbox"/> 0 <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-4 <input type="checkbox"/> ≥5
29	Number of completed projects consisting of a distributed network of PLCs (>10):	<input type="checkbox"/> 0-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> 6-7 <input type="checkbox"/> 8-9 <input type="checkbox"/> ≥10