



City of Richmond

REQUEST FOR QUOTATION 3955Q Supply and Delivery of Video Detection System

Quotations will be received at the Information Counter, Main Floor, Richmond City Hall, addressed to the Purchasing Section, 6911 No. 3 Road, Richmond, BC, V6Y 2C1, until

Wednesday, June 9, 2010 12:00 noon local time.

NOTES:

1. Quotations shall be in a sealed envelope or package marked with the bidder's Name, the RFQ Title and Number.
2. The Closing time will be conclusively deemed to be the time shown on the clock used by the City for this purpose.
3. Faxed quotations will not be received or considered.
4. Deadline for all questions: **Wednesday, June 2, 2010 12:00 pm**

All queries related to the RFQ shall be submitted
in writing to the attention of:

Daianna Panni

Buyer 1

purchasing@richmond.ca

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PART A – INSTRUCTIONS TO BIDDERS

REQUEST FOR QUOTATION 3955Q

Supply and Installation of Video Detection System

Name of Bidder: _____

Address: _____

City: _____

Province: _____

Postal Code _____

Telephone Number _____

Contact Person _____

Title: _____

Email Address _____

Fax Number _____

PART A – INSTRUCTIONS TO BIDDERS

PART A – INSTRUCTIONS TO BIDDERS

1.0 Description of Requirement

- 1.1 Quotations are invited for supply and delivery of Video Detection System as set out herein, for the City of Richmond.
- 1.2 Bidders are required to submit a quotation for the full requirement only. Partial responses will be put aside and given no further consideration.

2.0 Contract Term- Intentionally Omitted

3.0 Pricing

- 3.1 Prices quoted will be in Canadian currency and inclusive of all taxes, F.O.B. destination to the sites named herein, with all freight, unloading at destination, import duties, brokerage, royalties, handling, overhead, profit and all other costs included.

4.0 Inquiries and Clarifications

- 4.1 It is the responsibility of the Bidder to thoroughly examine these documents and satisfy itself as to the full requirements of this RFQ. Inquiries are to be in written form only, faxed or e-mailed to the contact person shown on the cover page. If required, an addendum will be issued to all Bidders.

5.0 Submission of Quotation

- 5.1 The response to this Request for Quotations (RFQ) with all accompanying schedules, appendices or addenda submitted by the Bidder will be received up to the closing time on the date and in the place shown on the title page of this RFQ (the “Closing Time”). The Quotation shall be submitted on the forms provided in a sealed envelope or package, marked with the Bidder’s name and the RFQ title and number.
- 5.2 Quotations received after the Closing Time or in locations other than the address indicated, will not be accepted and will be returned unopened.
- 5.3 The Bidder shall submit three (3) copies of its Quotation in accordance with the instructions stated herein.
- 5.4 The Bidder must enter its corporate or legal business name on the final page of the Quotation Form. The Quotation Form must be signed in the place provided by an officer or employee having authority to bind the Bidder to the terms and

PART A – INSTRUCTIONS TO BIDDERS

conditions of this RFQ. All other pages of the Quotation Form must be initialled by the authorized signatory in the spaces provided.

- 5.5 Amendments to a Quotation may be submitted if delivered in writing prior to the Closing Time in a sealed envelope or package, marked with the Bidder's name and the RFQ title and number.
- 5.6 Quotations may be withdrawn by written notice only, provided such notice is received at the Purchasing Services office prior to Closing Time.
- 5.7 All costs associated with the preparation and submission of the Quotation, including any costs incurred by the Bidder after the Closing Time, will be borne solely by the Bidder.
- 5.8 By submitting a Quotation, the Bidder acknowledges and agrees that the City will not be responsible for any costs, expenses, losses, damages (including damages for loss of anticipated profit) or liabilities incurred by the Bidder as a result of or arising out of submitting a Quotation for the proposed Contract, or due to the City's acceptance or non-acceptance of their Quotation or any breach by the City of the bid contract between the City and each of the Bidders or arising out of any contract award not made in accordance with the express or implied terms of the Quotation documents.

6.0 Conflict of Interest

- 6.1 By submitting a Quotation, the Bidder warrants that neither it nor any of its officers or directors, or any employee with authority to bind the Bidder, has any financial or personal relationship or affiliation with any elected official or employee of the City or their immediate families which might in any way be seen by the City to create a conflict.

7.0 Evaluation of Quotations

- 7.1 Quotations will be evaluated on the basis of the overall best value to City based on quality, service, price and any other criteria set out herein including, but not limited to:
 - a) the Bidder's ability to meet the Requirements, qualifications and competencies set out herein;
 - b) financial offer including but not limited to prices, operating and maintenance costs, warranty, and any life cycle considerations;
 - c) the Bidder's business and technical reputation and capabilities; experience and where applicable, the experience of its personnel; financial stability; track record; and references of current and former customers;
 - d) equipment quality, configuration, age and condition; and

PART A – INSTRUCTIONS TO BIDDERS

- e) any other criteria set out in the RFQ.
- 7.2 Prior to Contract award, the Bidder may be required to demonstrate financial stability. Should the City so request, the Bidder will be required to provide annual financial reports or a set of financial statements prepared by an accountant and covering the last two (2) fiscal years.
- 7.3 The City may, prior to Contract award, negotiate changes to the scope of the Work, the materials, the Specifications or any conditions with any one or more of the Bidders without having any duty or obligation to advise any other Bidders or to allow them to vary its prices as a result of changes to the scope of Work, the materials, the Specifications, or any conditions, and the City shall have no liability to any other Bidder as a result of such negotiations or modifications.
- 7.4 Preference may be given to Quotations offering environmentally beneficial products or services.

8.0 Acceptance and Rejection of Quotations

- 8.1 Notwithstanding any other provision in the Quotation documents, the City has in its sole discretion, the unfettered right to:
 - a) accept any Quotation;
 - b) reject any Quotation;
 - c) reject all Quotations;
 - d) accept a Quotation which is not the lowest Quotation;
 - e) accept a Quotation that deviates from the Requirements, Specifications or the conditions specified in this Quotation;
 - f) reject a Quotation even if it is the only Quotation received by the City;
 - g) accept all or any part of a Quotation; and
 - h) split the Requirements between one or more Bidders.
- 8.2 All Quotations shall be irrevocable and remain open for a minimum of sixty (60) days after the Closing Time, whether or not another Quotation has been accepted.
- 8.3 The City may waive any non-compliance with the RFQ, the Requirements, the Specifications, or any conditions, including the timing of delivery of anything required by this RFQ and may elect to retain for consideration Quotations which are non-conforming, which do not contain the content or form required by the RFQ or which have not complied with the process for submission set out herein.

PART A – INSTRUCTIONS TO BIDDERS

9.0 Award of Contract

- 9.1 Award of a Contract is contingent on funds being approved and the contract award being made by the appropriate City authority.
- 9.2 The purchase order, the Quotation, the RFQ and such other documents including all amendments or addenda, shall form the basis for the Contract between the Contractor and the City. In the event of a conflict between any of the Contract Documents, the following documents will take precedence and govern over each other in the following order of priority from highest to lowest:
- a) The City’s purchase order including the standard purchase order terms and conditions;
 - b) Or any mutually agreed to amendments between the Bidder and the City;
 - c) The Quotation; and
 - d) The RFQ and any subsequent addenda.
- 9.3 Where the head office of the successful Bidder is located within the City of Richmond and/or where the successful Bidder is required to perform the Service at a site located within the City of Richmond, the successful Bidder is required to have a valid City of Richmond business license prior to Contract execution.
- 9.4 The City is not under any obligation to award a Contract and may elect to terminate this RFQ at anytime.

10.0 Quantities

- 10.1 The quantities stated herein are the City’s best estimates of its requirements and should not be relied on. Actual quantities may vary.

11.0 Alternates and/or Variations to Specifications

- 11.1 Except where stated otherwise herein, the Specifications describe what is considered necessary to meet the performance requirements of the City and Bidders should bid in accordance with such Specifications, or if the Bidder cannot meet the Specifications, the Bidder may offer an alternative which it believes to be the equivalent.
- 11.2 If in addition to bidding on goods, materials, equipment and/or services that meet the Specifications, the Bidder wishes to offer an alternative, the alternative Quotation shall be submitted separately in the same format as the initial Quotation.
- 11.3 The City is not obligated to accept any alternatives.
- 11.4 The City will determine what constitutes allowable variations.

PART A – INSTRUCTIONS TO BIDDERS

12.0 Freedom of Information and Protection of Privacy Act

12.1 Bidders should note that the City of Richmond is subject to the Freedom of Information and Protection of Privacy Act (British Columbia), which imposes significant obligations on the City's contractors to protect all personal information acquired from the City in the course of providing any service to the City.

13.0 Confidentiality

13.1 Information about the City obtained by Bidders must not be disclosed unless prior written authorization is obtained from the City.

13.2 The Contractor agrees that this obligation of confidentiality will survive the termination of the Contract between the Contractor and the City.

1.0 Definitions

The following words and terms, unless the context otherwise requires, shall have the meanings set out below. Words including the singular number include the plural and vice versa.

“Act of God” means a cataclysmic phenomenon of nature, including earthquake, flood or cyclone. Rain, snow, wind, high water or any other natural phenomenon, which might reasonably have been anticipated from historical records of the general locality of the City, shall be deemed not to be acts of God;

“Bidder” means the individual, partnership, corporation or combination thereof, including joint venturers, who or which sign the Quotation form set out in Part D of this RFQ;

“City” means the municipal corporation, generally known as the City of Richmond.

“City’s Designated Representatives” means the City’s employees or representatives who are authorized in writing to deal with the Contractor on behalf of the City in connection with the goods, materials, equipment and services or to make decisions in connection with the Contract;

“Closing Time” means the closing date, time, and place as set out on the title page of this RFQ;

“Contract” means the agreement formed between the City and the Contractor as evidenced by the purchase order issued to the Contractor by the City;

“Contract Documents” means the purchase order, the Contractor’s Quotation, the RFQ and such other documents as listed in the purchase order, including all amendments or addenda agreed between the parties;

“Contractor” means the successful Bidder individual, partnership, corporation or combination thereof, including joint venturers, who or which is awarded the Contract;

“Delivery Date” means the date the City requires the Contractor to deliver the goods to the City’s Delivery Site;

“F.O.B.” means all costs of freight, insurance, brokerage, customs duties and all other costs of delivery to the site named as F.O.B. will be borne by the Contractor and that ownership and title to all goods, materials, and equipment are transferred to the City when same are delivered by the Contractor to the City and the risk of loss or damage to the goods, materials and equipment transfers to the City only at such time as same are received and accepted by the City at the site named as “F.O.B.”;

“GST” means the goods and services tax administered under the Excise Tax Act (Canada) and any successor tax or levy therefor in force from time-to-time;

“OHS Regulation” means the *Workers Compensation Act* (British Columbia), including without limitation, the Occupational Health & Safety Regulation (BC Regulation 296/97, as amended by BC Regulation 185/99) enacted pursuant to such Act, all as such Act or Regulations are amended or re-enacted from time to time.

“PST” means British Columbia provincial sales tax and any successor tax or levies therefor in force from time-to-time;

“Quotation” means the Bidder’s offer made on the Quotation form set out on Part E of this RFQ with all appendices or addenda submitted by the Bidder in response to the RFQ;

“RFQ” means this Invitation to Quotation including, but not limited to: Part A - Instructions to Bidders; Part B - General Conditions; Part C- Requirements; Part D – Quotation Form;

“Requirements” means all of the Specifications, requirements and services set out in the RFQ that describes the general requirements that the goods, materials, equipment and services must meet and the Contractor must provide;

“Work” means all the labour, materials, equipment, supplies, services and other items necessary for the execution, completion and fulfilment of the Requirements;

“Work Site” means the site where the Work is being performed, < > B.C., unless otherwise stated in this RFQ.

2.0 Independent Contractor

2.1 The Contractor, its sub-contractors, the officers, directors, shareholders, partners, personnel, affiliates and agents of the Contractor and its sub-contractors are not, nor are they to be deemed to be, partners, appointees, employees or agents of the City.

3.0 Assignment

3.1 Subject to Sections 2.4 and 4.2, the Contractor will not assign, sublet, subcontract, or let out as task work any part of the Work or any of the Contractor’s obligations of the Contract Documents to any third party, and will not assign or otherwise transfer any of the rights of payment under the Contract Documents to any third party, without in each case the prior written consent of the City which consent the City may arbitrarily withhold.

3.2 Despite Section 4.1, the Contractor may utilize those sub-contractors expressly named in Section 10.1 of Part E – Quotation Form but only for the Area of Responsibility set out beside their name, provided always that the Contractor may not substitute or replace those sub-contractors, or permit those sub-contractors to

further assign, sub-let, sub-contract, or let out as task work their obligations under the Contract documents, except in accordance with Section 4.1 above.

- 3.3 If the City should consent to any such assignment, subletting or letting out as task work of all or any part of the Work, the Contractor shall in no way be relieved from its responsibility for the fulfilment of the Work, but shall continue to be responsible for the same in the same manner as if all the Work had been performed by the Contractor.

4.0 Time of the Essence

- 4.1 For all requests made by the City pursuant to the Contract, time is of the essence. The acceptance of a late performance, with or without objections or reservations by the City, shall not waive the right to claim damages for such breach nor constitute a waiver of the requirement of timely performance of any obligation remaining to be performed.

5.0 Laws, Permits and Regulations

- 5.1 The laws of British Columbia shall govern the Contract.
- 5.2 In carrying out its obligations hereunder, the Contractor shall familiarize itself and comply with all applicable laws, bylaws, regulations, ordinances, codes, specifications and requirements of all regulatory authorities, and shall obtain all necessary licenses, permits and registrations as may be required by law.

6.0 Inspection

- 6.1 The services are subject to inspection and in case any of the services are not in conformity with the Requirements of the Contract or the Contractors' warranty (expressed or implied), the City shall have the right either to reject them or to require correction.
- 6.2 The City shall be the final judge of the services and materials in respect of both quality and quantity and its decisions of all questions in dispute with regard thereto will be final.
- 6.3 The City will not be deemed to have accepted the services by virtue of a partial or full payment for it.

7.0 Quality of Workmanship and Materials

- 7.1 The Contractor shall perform the services with the degree of care, skill and diligence normally applied in the performance of services of a similar nature and in accordance with sound current professional practices and conforming to the requirements set out in the RFQ.

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- 7.2 Materials, goods and equipment shall be the products of suppliers or manufacturers of established reputation engaged in the supply or manufacture of such materials of equipment.
 - 7.3 Materials are to be applied in accordance with the manufacturer's directions and shall use the techniques and applications best suited for the type of material being used.

8.0 Warranty

- 8.1 The Contractor warrants that the goods, materials, equipment and/or services supplied by the Contractor to the City will be in full conformity with the Specifications as well as samples, if any, then this is a sale by sample as well as by description within the meaning of the Sale of Goods Act (BC).
- 8.2 9.2 The Contractor further warrants that the goods, materials and/or equipment are of merchantable quality, and fit for the intended use and will perform according to the requirements set out in the RFQ.
- 8.3 Equipment and materials shall be new, free and clear of all liens, charges and encumbrances, the latest model, and shall be complete with all necessary accessories for operation. All equipment and materials shall be at the risk of the Contractor until delivered to and accepted by the City.
- 8.4 At a minimum, a one (1) year parts and labour warranty shall be provided on all goods, materials, equipment and/or services provided under the Contract.
- 8.5 The Contractor warrants that its employees have the qualifications, experience, knowledge, skills and abilities necessary for the fulfilment of the Contract.

9.0 Indemnification and Insurance

- 9.1 The Contractor shall indemnify, hold and save harmless the City from and against all claims, losses, damages, costs, actions and other proceedings made, sustained, brought or prosecuted in a manner based upon, occasioned by or attributable to any injury, including death, property damage, infringement or damage arising from any act or omission of the Contractor, its employees, officers, volunteers, servants, sub-contractors, or agents or persons from whom the Contractor has assumed responsibility in the performance or purported performance of the Requirements.
- 9.2 The Contractor shall indemnify the City from and against any and all liability or expenses by way of legal costs or otherwise in respect of any claim which may be made for a lien or charge at law or in equity or to any claim or liability under the Builders Lien Act, or to any attachment for debt, garnishee process or otherwise.

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- 9.3 The Contractor shall assume the defence of, and indemnify and hold harmless the City and its officers, employees and agents, from and against all claims relating to materials, goods or equipment furnished and to inventions, copyrights, trade marks, or patents and rights thereto used by the Contractor in the execution of the Contract and in subsequent use and/or operation by the City.
- 9.4 The Contractor will indemnify, hold, and save harmless the City from and against all claims, losses, damages, costs, actions, and other proceedings, made, sustained, brought or prosecuted in manner, based upon, occasioned by, attributable to any injury, including death, property damage, infringement, or damage arising from any act or omission of the Contractor, his employees, officers, volunteers, servants, or agents or persons from whom the Contractor has assumed responsibility in the performance or purported performance of this agreement

10.0 Termination

- 10.1 The City will advise the Contractor by written notice of its intent to terminate the whole or any part of the Contract in any one of the following circumstances:
- a) if the Contractor fails to make delivery of the goods, materials, equipment and/or services within the time specified, or fails to perform any other provisions, terms or conditions of the Contract within the time specified, or within a reasonable time if no time is specified;
 - b) in the event that the Contractor performs any act or does anything by which the City shall incur any liability whatsoever;
 - c) any failure of the Contractor to meet the safety requirements of the Contract;
 - d) in the event that any creditor of the Contractor causes a writ of execution or similar writ or court order to be served upon the City requiring the City to pay any portion due to the Contractor under the Contracts; or
 - e) in the event that the Contractor is adjudged bankrupt or if it makes a general assignment for the benefit of creditors or if it becomes insolvent or if it should take the benefit of any Act that may be in force for bankrupt or insolvent debtors.
- 10.2 Upon termination of the Contract, the City shall have no obligation to the Contractor except for such services and/or goods as have been supplied up to the date of the termination of the Contract(s).
- 10.3 Upon termination of the Contract(s) in whole or in part, the City may procure similar goods, materials, equipment and/or services and the Contractor shall be liable to the City for any excess costs for such similar goods, materials, equipment and/or services. The Contractor shall not be liable for any excess costs if failure to perform arises by reason of strikes, lockouts, Acts of God or acts of the City. The

City will not be liable where Delivery Sites are not available due to strikes, lockouts or Acts of God.

11.0 Payments

- 11.1 The Contractor shall be paid net thirty (30) days from receipt of invoice and acceptance of the goods, materials, equipment and/or services, whichever is the later.
- 11.2 The Contractor may be required to accept payment by purchasing card (MasterCard). Preference may be given to a Bidder who has or is willing to expand their system to provide Level III reporting detail.

12.0 Taxes

- 12.1 Unless otherwise provided herein, the Contractor shall pay all sales or excise taxes in force during the term of the Contract, provided that any increase or decrease in such taxes shall increase or decrease the amount due under the Contract(s).
- 12.2 Invoices shall show the appropriate amounts for GST and PST.
- 12.3 Non-resident Withholding Tax – Intentionally Omitted

13.0 Protection of Person and Property

- 13.1 The Contractor shall use due care that no persons are injured, no property damaged or lost, and no rights are infringed in the performance of the services, and the Contractor shall be solely responsible for all loss, damages, costs and expenses in respect of any injury to persons, damage of property, or infringement of the rights of others incurred in the performance of the services or caused in any other manner whatsoever by the Contractor, or its employees.
- 13.2 The Contractor shall effectively warn and protect the public and other personnel from any danger as a result of the services being done.

14.0 Conduct of the Contract

- 14.1 The City of Richmond's Manager, Purchasing shall have the conduct of the RFQ and the Contract.

15.0 Rectification of Damage and Defects

- 15.1 The Contractor shall rectify any loss or damage for which, in the opinion of the City the Contractor is responsible, at no charge to the City and to the satisfaction of the City. Alternatively, the City may repair the loss or damage and the Contractor shall pay to the City the costs of repairing the loss or damage forthwith

upon demand from the City. Where, in the opinion of the City, it is not practical or desirable to repair the loss or damage, the City may estimate the cost of the loss or damage and deduct such estimated amount from the amount owing to the Contractor hereunder..

16.0 Dispute Resolution

- 16.1 All claims, disputes or issues in dispute between the City and the Contractor shall be decided by mediation or arbitration, if the parties agree, or failing agreement, in a Court of competent jurisdiction with the Province of British Columbia and be governed by the laws of British Columbia.
- 16.2 In the event that the parties agree to arbitration pursuant to the above, the arbitration shall be governed by the rules of the British Columbia International Commercial Arbitration Centre, except that the arbitrator or arbitrators shall be agreed upon by the parties, and failing agreement by the parties, shall be appointed by a court of competent jurisdiction with the Province of British Columbia.
- 16.3 In the event that the parties agree to arbitration, the arbitration shall take place in the Lower Mainland, British Columbia and be governed by the laws of British Columbia.
- 16.4 The procedure set out in this section is not meant to preclude or discourage informal resolution of disagreements between the City and the Contractor.

17.0 Delivery

- 17.1 Deliveries shall be made to 5599 Lynas Lane, Richmond, BC, Stores Department, C/O Traffic Signal Shop between the hours of 8:00 am and 4:00 pm on any normal working day.

18.0 Changes in Requirements

- 18.1 The City, without invalidating the Contract, may make changes to the Contract by altering, adding or deducting from the Requirements. Subject to mutual agreement, the Contractor shall proceed with the amended Requirements and the amended Requirements shall be executed under the provisions of the Contract.
- 18.2 The Contractor must not make any changes to from the terms of the Contract unless it shall first have received the written consent of the City and no claims for additional compensation shall be valid unless the change is so ordered.

PART D – QUOTATION FORM

Quotation Form

Purchasing
City of Richmond
6911 No. 3 Road
Richmond, BC V6Y 2C1

The undersigned Bidder, having carefully read and examined the Instructions to Bidders, General Conditions, Requirements, Quotation Form, and having full knowledge of the work required, does hereby offer to provide all necessary materials in strict accordance with the Requirements and to do all therein called for on the terms and conditions and under the provisions therein set forth at the:

Table 1 Quoted Price \$ _____

Table 2 Quoted Price \$ _____

Table 3 Quoted Price \$ _____

GRAND TOTAL (Table 1, 2 & 3) QUOTED PRICE \$ _____

PAYMENT TERMS _____ **EARLY PAYMENT TERMS** _____

The above price includes and covers duties, PST, GST, handling and transportation charges, and all other charges incidental to and forming part of this Quotation.

The undersigned Bidder agrees to complete the whole of the works within _____ working days of acceptance.

Name of Bidder: _____

Address: _____

Telephone No: _____

Name, Signature, and
Title of Signing Officer: _____

Date: _____

E-mail: _____

PART D – QUOTATION FORM

VIDEO DETECTION EQUIPMENT PARTS LIST SUMMARY

Complete the table below. Indicate what parts are required to provide the City a Video Detection System as outlined in the specifications. The City may require parts on an as required basis.

TABLE 1

#	Item Description	TS1 Configuration	Qty	Unit Cost	Total Cost	Comments
1	Video Detection Camera		4			
2	Camera Mounting Hardware		4			
3a	Intersection Cabling – Camera Communications		300m			
3b	Intersection Cabling – Camera Power		300m			
3c	Intersection Cabling – Other - Define		300m			
4a	Cabinet Video Component 1 - Define					As needed
4b	Cabinet Video Component 2 - Define					As needed
4c	Cabinet Video Component 3 - Define					As needed
4d	Cabinet Video Component 4 - Define					As needed
5	Auxiliary Equipment – 1- Define					As needed
6	Auxiliary Equipment – 2- Define					As needed
7	Auxiliary Equipment – 3- Define					As needed
8	Auxiliary Equipment – 4- Define					As needed

Subtotal \$ _____

PST Tax \$ _____

GST Tax \$ _____

TOTAL QUOTED AMOUNT \$ _____
(carried forward to Quotation Form)

PART D – QUOTATION FORM

TABLE 2

#	Item Description	TS2 Configuration	Qty	Unit Cost	Total Cost	Comments
1	Video Detection Camera		4			
2	Camera Mounting Hardware		4			
3a	Intersection Cabling – Camera Communications		300m			
3b	Intersection Cabling – Camera Power		300m			
3c	Intersection Cabling – Other - Define		300m			
4a	Cabinet Video Component 1 - Define					As needed
4b	Cabinet Video Component 2 - Define					As needed
4c	Cabinet Video Component 3 - Define					As needed
4d	Cabinet Video Component 4 - Define					As needed
5	Auxiliary Equipment – 1- Define					As needed
6	Auxiliary Equipment – 2- Define					As needed
7	Auxiliary Equipment – 3- Define					As needed
8	Auxiliary Equipment – 4- Define					As needed

Subtotal \$ _____

PST Tax \$ _____

GST Tax \$ _____

TOTAL QUOTED AMOUNT \$ _____
(carried forward to Quotation Form)

PART D – QUOTATION FORM

TABLE 3

#	Item Description		Qty	Unit Cost	Total Cost	Comments
1	Camera Central Software		1			
2	<u>Aux Equipment</u> as per Section 4, Field Equipment ;Field of View Page GC3		2			

Subtotal \$ _____

PST Tax \$ _____

GST Tax \$ _____

TOTAL QUOTED AMOUNT \$ _____
(carried forward to Quotation Form)

TABLE 4

Purchase Quantity

The video detection equipment parts list is configured to list all primary components for a complete camera system for one intersection. At this time, the City is unable to state the number of camera systems to be purchased, as more than one purchase of multiple camera systems may occur in 2010. Suppliers are to **define pricing discounts** for various quantities of purchase, for example; one intersection camera system, 2-5 systems 6-9 systems, greater than 10 systems, etc. as applicable to each suppliers pricing structure.

#	Table 1 – Table 2 Items	Qty Range	Unit Cost Discount %	Comments
1				
2				
3				
4				
5				
6				
7				

PART D – QUOTATION FORM

Environmental Terms and Conditions of Contract

1.0 Environmental Policy Requirements

1.1 The City of Richmond’s Environmental Purchasing Policy

The City of Richmond’s Environmental Purchasing Policy states:

In order to increase the development and awareness of environmentally sound products and services, City of Richmond staff will review their contracts and tender specifications for goods and services, to ensure that wherever possible and economically feasible, specifications are amended to provide for consideration of environmental characteristics. Consideration may be given to those environmental products that are certified by an independent accredited organization.

The City of Richmond as a whole will endeavour to increase its use of products and services that are more responsible to the environment in the way they are made, used, transported, stored and packaged and disposed of. It is recognized that analysis is required in order to ensure that the products are made available at competitive prices, and that the environmental benefits provided by a product or service should not significantly affect the intended use of that product or service.

- 1.1.1 The City of Richmond reserves the right to request information from bidders that will demonstrate compliance to this environmental purchasing policy.
- 1.1.2 Bidders are asked to supply information on environmentally preferable products and services that meet all specifications and performance requirements.
- 1.1.3 Placing the City of Richmond in breach of its environmental policy or environmental laws will result in the termination or suspension of an agreement, at the sole discretion of the City.

1.2 Environmental impacts in the life cycle of a product or service

- 1.2.1 Environmental purchasing involves considering the costs and environmental consequences of a product or service in all stages of its life cycle, including raw materials acquisition, production, manufacturing, packaging, distribution, operation, maintenance, reuse and disposal.
- 1.2.2 Independent certification programs such as Environmental Choice as well as an increasing number of manufacturers conduct life cycle assessments to answer the question, “What is the environmental burden of a product or

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service through all stages of its life cycle?” The City of Richmond is interested in receiving, wherever available, life cycle information relevant to the products or services being considered.

1.3 Characteristics of environmentally preferable products

1.3.1 Environmentally preferable products and services have characteristics that include but are not limited to the following:

- Reduce waste and make efficient use of resources, including energy
- Are reusable or contain reusable parts
- Are recyclable
- Contain post-consumer recycled materials
- Produce fewer polluting by-products and/or safety hazards during manufacture, use or disposal, and
- Have a long service life and/or can be economically and effectively repaired or upgraded.
- Are certified by an independent accredited organization such as the Environmental Choice program

1.4 Packaging

1.4.1 As with products and services, the City of Richmond will endeavour to consider the environmental characteristics of a product’s packaging.

1.4.2 The City prefers that suppliers minimize the amount of packaging used on products or that durable, long-lasting forms of reusable packaging be used. While packaging containing post-consumer recycled material or recyclable packaging is considered better than wasteful packaging, reduced or reusable packaging is preferred.

1.5 Environmental attributes of company

1.5.1 It is desirable that suppliers to the City of Richmond have an environmental policy statement approved at the executive level and implemented across the company.

1.5.2 Suppliers who have pursued environmental certification such as ISO 14001 should include this information with their bid. The ISO 14000 Series is a set of international standards for voluntary environmental management for both private and public organizations. It is designed to promote environmental compliance, ensure a commitment to pollution prevention, and foster continual improvement of environmental performance through efficient environmental management.

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- 1.5.3 The City of Richmond strictly subscribes to an environmental policy that requires all suppliers to be in compliance with all environmental laws and regulations regarding the manufacture, processing, handling, provision, disposal and waste management of goods and services.

1.6 Environmental purchasing resources

- 1.6.1 The City of Richmond Environmental Purchasing Guide is available from the City of Richmond Web site at:

<http://www.richmond.ca/services/environment/policies/purchasing.htm>



City of Richmond

TRAFFIC SIGNAL VIDEO DETECTION SYSTEM SPECIFICATIONS

City of Richmond
May, 2010

Background

The City of Richmond is primarily using inductive loop detection technology and NEMA TS1 controllers and cabinets at most intersections. The communications system for the City of Richmond's Traffic Management System is gradually being upgraded to provide higher bandwidth Ethernet communications between the Traffic Control Centre and several traffic signals.

Additionally, the City of Richmond is in the process of upgrading controller and cabinet assembly specifications to accommodate the newer NEMA TS2 traffic signal equipment standards.

These recent changes provide an opportunity for the City of Richmond to use video detection technology at key intersections. These locations primarily use NEMA TS1 equipment, although some have NEMA TS2. Additionally, some of the controllers used in NEMA TS1 cabinets have the capability of using SDLC communications. The City would like to take advantage of the SDLC detector communications wherever possible.

Video Detection Requirements

1. Equipment Required

For the purpose of this specification and cost submission, a typical intersection set-up utilizing video detection cameras will be used. This will include all necessary equipment for the installation of four cameras (one for each approach direction), camera mounting hardware, communication and electrical cabling from each camera to the cabinet, required cabinet interface hardware, central and remote software and any auxiliary equipment necessary to make the entire system interface and function in a TS1 or TS2 cabinet as noted in these specifications. The supplier shall identify each required component within the bid document as categorically referenced in the attached list of parts.

2. Video Detection Network Specifications

Video camera equipment shall fully support Ethernet networking of system components through a variety of industry standard and commercially available infrastructures that are used in the traffic industry.

Both streaming video and data communications shall optionally be interconnected over long distances through copper, fiber optic, wireless, or other commonly used digital communications transport configurations.

Video camera equipment shall support multicast streaming video. It shall also be noted the type of protocol used in a multicast distribution (eg: PIM-SM-DM-SSM)

Maximum and minimum transfer rates, video resolution, and frames per second for a colour streaming video feed.

Supported network security protocols shall be noted (eg: 802.1X port security).

3. Video Detection Equipment Specifications

Video Detection Software

Video detection files shall be configurable using a mouse and video monitor, or via Ethernet using a laptop PC running Windows 2000, Windows XP, Vista or Windows 7. If application software is required, it shall be included.

The video detection system shall be capable of assigning colour to detectors when programming detection zones through the software.

It is desirable to view active detection zones in multiple colours when monitoring streaming video.

It is desirable to have the ability to download software and firmware updates to the field equipment remotely from the Traffic Control Centre.

4. Field Equipment

Video Detection Cameras

Both analog and digital cameras will be considered for video detection purposes and shall meet the following minimum specifications:

Streaming Video- the streaming video shall be capable of black and white or colour image selectable by the user.

Detection Zones - Placement of detection zones shall be done remotely by means of a PC a keyboard, and a mouse. The PC monitor shall be able to show the detection zones superimposed on images of traffic scenes.

The detection zones shall be created by using a mouse to draw detection zones on the PC monitor. Using the mouse and keyboard it shall be possible to place, size, and orient detection zones to provide optimal road coverage for vehicle detection. It shall be possible to download detector configurations from the PC to the camera and to retrieve the detector configuration that is currently running in the MVP sensor, and to back up detector configurations by saving them to the PC fixed disks or other removable storage media

Field of View – the camera field of view (zoom and focus) shall be remotely adjustable from the traffic controller cabinet. If any additional vendor specific equipment is required for this purpose, two lots of equipment shall be included as part of this project for this purpose and costed within the parts list.

Mounting Hardware

The cameras will typically be mast arm mounted. Camera mounting hardware shall be identified in the submission and included for each camera.

Camera Cable

A quantity of 300 metres of cable shall be supplied for each intersection. This shall include power, video communications and any other cables that may be required for a typical intersection installation. The bidder shall identify and cost each type of required cable.

5. Cabinet Equipment

Cabinet Equipment for NEMA TS1 Cabinets

Cabinet and Detector Rack Space – NEMA TS1

Many of the cabinets used within the City of Richmond have limited space for additional equipment. Space is also limited in the existing detector rack(s). A maximum quantity of 6 (six), two channel detector slots will be available in a detector rack for each TS1 cabinet assembly for the installation of video detection modules.

Should additional rack space be required, the supplier shall provide the necessary hardware and equipment to accommodate space for the detection equipment. This hardware shall be identified in the parts list.

Detector Rack Power – NEMA TS1

The power supplies used in the NEMA TS1 cabinets have 4 channels, with each channel capable of supplying 250 milliamps @ 24 VDC. A total of 125 ma @ 24 VDC will be available for each video detection module, to a maximum of three modules. If the video detection modules proposed exceed the available rack power, the supplier shall be responsible for providing the necessary power for the video detection modules as required.

Detector Outputs – NEMA TS1

In a NEMA TS1 environment, the video detection hardware shall provide a minimum of 4 (four) detector outputs per camera. SDLC detector communications is preferred over discrete logic level DC ground true outputs.

Cabinet Equipment for NEMA TS2 Type 1 Cabinets

Cabinet and Detector Rack Space – NEMA TS2

TS2 cabinets used within the City of Richmond have limited space for additional equipment. Space is also limited in the existing detector rack(s). A maximum quantity of 6 (six), two channel detector slots will be provided in one of the detector racks for each TS2 cabinet assembly.

Should additional rack space be required for video components, the supplier shall provide the necessary hardware and equipment to accommodate space for the detection equipment. This hardware shall be identified in the parts list.

Detector Rack Power – NEMA TS2

A total of 4500ma will be allotted to power up to three video detection modules in one of the TS2 detector racks. If the video detection modules proposed exceed the available rack power, the supplier shall be responsible for providing the necessary power for the video detection modules as required.

Detector Rack Outputs – NEMA TS2

In a NEMA TS2 Type 1 environment, the video detection system hardware shall provide up to 10 detector outputs per camera.

Traffic Control Centre Configuration and Monitoring

The City of Richmond requires each video detection system (per intersection) to communicate with the Richmond Traffic Control Centre for the purpose of configuration of detectors and monitoring of the live video. This shall be accomplished using Ethernet communications from the field.

All of the detectors from each camera for the video detection system shall have the ability to be able to be adjusted remotely using Ethernet communications.

The video feeds from all four cameras from each intersection location shall have the ability to be concurrently viewed on a single video display.

The video detection system provided shall be capable of remotely and automatically saving a snapshot image to a network drive. It is desirable to have the ability to program a time interval between saved snapshot images. The images may be used to allow the general public to access traffic conditions by viewing the images on the City of Richmond web site.

Video Detection System Warranty

The video detection system hardware and software shall be warranted for a period of two years. Software updates for all parts of the video detection system shall be available to the City of Richmond at no charge for a period of five (5) years.

List of Product Users

Bidders shall provide a list of Jurisdictions using the proposed camera system including approximate number of intersection systems purchased. A Contact Name and Phone Number which authorizes the City to inquire as to the users experience in the application of the proposed camera system shall also be included.

Purchase Quantity

The video detection equipment parts list is configured to list all primary components for a complete camera system for one intersection. At this time, the City is unable to state the number of camera systems to be purchased, as more than one purchase of multiple camera systems may occur in 2010. Suppliers are to define pricing discounts for various quantities of purchase, for example; one intersection camera system, 2-5 systems 6-9 systems, greater than 10 systems, etc. as applicable to each suppliers pricing structure.

Value Added Features

This specification outlines the minimum requirements for a video detection system. The supplier is encouraged to outline other features and capabilities with their quotation submission that are additional to or enhancements of those included in this specification.

Evaluation of Quotation Submissions

Quotation submissions will be evaluated using a variety of criteria. These include, but are not limited to hardware cost, panel size, typical installation requirements, set up time, additional features, enhancements, product support and warranty.

As part of the product evaluation, Bidders may be requested to demonstrate the camera's, components, software and system capabilities at the City of Richmond Traffic Control Centre.

List of Parts – Typical intersection TS1, and TS2 configuration included