



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 386-2007

**SUPPLY AND INSTALLATION OF AUTOMATIC LICENSE PLATE RECOGNITION
SYSTEM**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 SUPPLY AND INSTALLATION OF AUTOMATIC LICENSE PLATE RECOGNITION SYSTEM

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, June 8, 2007.

B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.

B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. ENQUIRIES

B3.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

B3.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall promptly notify the Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.

B3.3 If the Bidder is unsure of the meaning or intent of any provision therein, the Bidder should request clarification as to the meaning or intent prior to the Submission Deadline.

B3.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B3.5 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B3.6 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

B4. ADDENDA

B4.1 The Contract Administrator may, at any time prior to the Submission deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.

B4.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.

B4.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

B4.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B4.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B5. SUBSTITUTES

- B5.1 The Work is based on the materials, equipment, methods and products specified in the Bid Opportunity.
- B5.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B5.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least seven (7) Business Days prior to the Submission Deadline.
- B5.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the material, equipment, method or product as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Contract;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Contract.
- B5.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B5.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B5.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B5.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B5.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B14.
- B5.9 No later claim by the Contractor for an addition to the price(s) because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B6. BID SUBMISSION

- B6.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices; and

(c) Experience and References;

- B6.2 Further to B6.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B5.
- B6.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely in ink, to constitute a responsive Bid.
- B6.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B6.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Branch
185 King Street, Main Floor
Winnipeg MB R3B 1J1
- B6.5.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B6.6 Bidders are advised not to include any information/literature except as requested in accordance with B6.1.
- B6.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, may result in the Bid being determined to be non-responsive.
- B6.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to (204) 949-1178.
- B6.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B6.9 Bids submitted by internet electronic mail (e-mail) will not be accepted.
- B7. BID**
- B7.1 The Bidder shall complete Form A: Bid, making all required entries.
- B7.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B7.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B7.2.
- B7.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.

- B7.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;
 - (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B7.4.1 The name and official capacity of all individuals signing Form A: Bid shall be printed below such signatures.
- B7.4.2 All signatures should be witnessed, except where a corporate seal has been affixed.
- B7.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B8. PRICES

- B8.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B8.1.1 Prices on Form B: Prices shall include:
- (a) duty;
 - (b) freight and cartage;
 - (c) Provincial and Federal taxes [except the Goods and Services Tax (GST) and Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable] and all charges governmental or otherwise paid;
 - (d) profit and all compensation which shall be due to the Contractor for the Work and all risks and contingencies connected therewith.
- B8.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B8.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.

B9. EXPERIENCE AND REFERENCES

- B9.1 The Bidder shall submit;
- (a) a list of previously completed work similar in nature, scope and value;
 - (b) a list of references, preferably from Canadian sources.

B10. QUALIFICATION

- B10.1 The Bidder shall:
- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Bidder does not carry on business in Manitoba, in the jurisdiction where the Bidder does carry on business; and

- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B10.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) be responsible and not be suspended, debarred or in default of any obligations to the City a list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

B10.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) have successfully carried out work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and

B10.4 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B10.5 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B11. OPENING OF BIDS AND RELEASE OF INFORMATION

B11.1 Bids will not be opened publicly.

B11.2 Following the Submission Deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

B11.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

B11.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B12. IRREVOCABLE BID

B12.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B12.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

B13. WITHDRAWAL OF BIDS

B13.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.

- B13.1.1 Notwithstanding GC.7.05(2), the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B13.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B13.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Bid until after the Submission Deadline has elapsed;
 - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B13.1.3(b), declare the Bid withdrawn.
- B13.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B12.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law, including the right to retain the Bidder's bid security.

B14. EVALUATION OF BIDS

- B14.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Bid Opportunity (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B9 ;
 - (c) Experience and Qualifications (30%);
 - (d) Total Bid Price (70%);
 - (e) economic analysis of any approved alternative pursuant to B5.
- B14.2 Further to B14.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.
- B14.3 Further to B13.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified. Bidders shall be evaluated on their experience that will consist of undertaking reference checks, and subject to satisfactory reference check, a scoring by The City of Winnipeg of each qualified Proposal
- B14.4 Further to B14.1(c); experience and qualifications shall be evaluated based on the information supplied by the Bidder demonstrating a strong, viable, and experienced company in the application and implementation of similar projects;
- B14.5 Further to B14.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B14.5.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.
- B14.6 This Contract will be awarded as a whole.

B15. AWARD OF CONTRACT

- B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B15.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.
- B15.2.1 Without limiting the generality of B15.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Work;
 - (b) the prices are materially in excess of the prices received for similar work in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
 - (d) only one Bid is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B15.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid.
- B15.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

C1. GENERAL CONDITIONS

C1.1 The *General Conditions for the Supply and Delivery of Goods* (Form 21: 88 03) are applicable to the Work of the Contract.

C1.1.1 The *General Conditions for the Supply and Delivery of Goods* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

- D1.1 In addition to the *General Conditions for the Supply and Delivery of Goods*, these Supplemental Conditions are applicable to the Work of the Contract.
- D1.2 The General Conditions are amended by striking out "The City of Winnipeg Act" wherever it appears in the General Conditions and substituting "The City of Winnipeg Charter".
- D1.3 The General Conditions are amended by striking out "Board of Commissioners" or "Commissioner" wherever it appears in the General Conditions and substituting the "Chief Administrative Officer".
- D1.4 The General Conditions are amended by striking out "Tender Package" wherever it appears in the General Conditions and substituting "Bid Opportunity".
- D1.5 The General Conditions are amended by striking out "Tender Submission" wherever it appears in the General Conditions and substituting "Bid Submission".
- D1.6 The General Conditions are amended by striking out "Bidding Instructions" wherever it appears in the General Conditions and substituting "Bidding Procedures".

D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of the Supply Installation and delivery of an Automated Licence Plate Recognition System.

D3. DEFINITIONS

- D3.1 When used in this Bid Opportunity:
- (a) "**Business Day**" means any Calendar Day, other than a Saturday, Sunday, or a Statutory or Civic Holiday;
 - (b) "**Submission Deadline**" and "**Time and Date Set for the Final Receipt of Bids**" mean the time and date set out in the Bidding Procedures for final receipt of Bids;
 - (c) "**Award Authority**" means the authority having the jurisdiction to award the Contract according to the City's by-laws, policies or procedures;

D4. CONTRACT ADMINISTRATOR

- D4.1 The Contract Administrator is:

Craig Davill, C.P.P., C.I.M.
Winnipeg Police Service
472 Notre Dame Avenue
Winnipeg, MB R3B 1R5

Telephone No. (204) 986-6141
Facsimile No. (204) 986-6127

D5. NOTICES

- D5.1 GC.7.05 is hereby amended to delete reference to "registered mail" and to replace same with "ordinary mail".

- D5.2 GC.7.05 is further amended hereby to include delivery by facsimile transmission (fax) as an acceptable means of delivering notices, consents, approvals, statements, authorizations, documents or other communications required or permitted to be given under this Contract. Deliveries by fax will be deemed to have been received on the day of delivery, if a business day, or if not a business day, on the business day next following the day of delivery.
- D5.3 Further to GC.7.05, all notices, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.4, D5.5 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D4.1.
- D5.4 All notices of appeal to the Chief Administrative Officer shall be sent to the following address or facsimile number:
- The City of Winnipeg
Chief Administrative Officer Secretariat
Attn: Chief Administrative Officer
Administration Building, 3rd Floor
510 Main Street
Winnipeg MB R3B 1B9
Facsimile No.: (204) 949-1174
- D5.5 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:
- The City of Winnipeg
Corporate Services Department
Legal Services Division
Attn: City Solicitor
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1
Facsimile No.: (204) 947-9155

SUBMISSIONS

D6. AUTHORITY TO CARRY ON BUSINESS

- D6.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

MEASUREMENT AND PAYMENT

D7. PAYMENT

- D7.1 Further to GC.9.03, effective January 1, 2007 the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

D8. PAYMENT SCHEDULE

- D8.1 Further to GC.9.01 and GC.9.03, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.

WARRANTY

D9. WARRANTY

D9.1 Warranty is as stated in GC 10.1.

D9.2 Further to GC 10.1 the bidder shall

- (a) warranty that all software upgrade and installation support shall be under warranty for one year of award of contract
- (b) warranty that all hardware maintenance, upgrades, replacement and installations support shall be under warranty for one year of award of contract
- (c) allow The City flexibility to add components from other manufacturers if required without void of warranty

PART E - SPECIFICATIONS

GENERAL

E1. GOODS

- E1.1 The Contractor shall supply install and deliver a Three (3) Camera Automatic License Plate Recognition (ALPR) System in accordance with the requirements hereinafter specified.
- E1.2 System shall be mounted covertly.
- E1.3 The three (3) camera **Automatic License Plate Recognition (ALPR) System** will consist of the following components:
- (a) Three (3) ALPR "camera packages"
 - (b) One (1) Touch screen interface
 - (c) One (1) Wireless keyboard
 - (d) One (1) Trunk mounted "Number Plate Recognition Unit" (NRD) Computer System
 - (e) One (1) ALPR recognition software

E2. CAMERA PACKAGE

- E2.1 Further to specification E1.3(a), each "camera package" will be defined as a single unit and will consist of the following components.
- (a) 1 – Infra-Red camera with zoom lens able to be used in all light conditions day and night and adverse weather conditions
 - (b) 1 – Color camera with zoom lens for overview imaging
 - (c) 1 – Infra-Red illuminator capable of Illumination for use with Infra Red Cameras
- E2.2 The camera package and lens configuration shall meet the minimum specification listed below.
- (a) ¼ " HAD CCD Exview
 - (b) Min Active Pixels (H x V) 760x580
 - (c) Min 520 horizontal TV lines resolution
 - (d) Angle of view 45° Wide to 2.7° Narrow
 - (e) Signal to Noise Ratio: +50Db
 - (f) Minimum 0.01 LUX sensitivity at F1.4
 - (g) Electronic shutter 1/50 to 1/10000
 - (h) AGC
 - (i) Integrated Lens with fully motorised zoom, focus & aperture
 - (j) 12 * optical zoom
 - (k) Capable of operating between 5 and 40 meters, without the need to change lenses
 - (l) Capable of support 810nm, 850nm & 940nm IR wave lengths.
 - (m) Video level of 1V p-p, 75Ω
 - (n) Remotely programmable via RS232 interface
- E2.3 The camera should have a fully integrated SINGLE LED illuminator as its infrared light source for each Automated Number Plate Reader (ALPR) camera to ensure adequate illumination and capture of licence plate numbers.

E3. TOUCH SCREEN INTERFACE

E3.1 Further to specification E1.3(b), each Touch Screen Interface will of the following;

E3.2 Touch Screen shall:

- (a) Have a LCD display with integrated tough screen
- (b) Have a minimum of 800x600 resolution
- (c) Be powered by +12 volt DC

E4. WIRELESS KEYBOARD

E4.1 Further to specification E1.3(c), each Touch Screen Interface will of the following:

E4.2 Wireless Keyboard shall;

- (a) Use an I.R. wireless system

E5. TRUNK MOUNTED “NUMBER PLATE RECOGNITION UNIT” (NRD) COMPUTER SYSTEM

E5.1 Further to specification E1.3(d), each Trunk mounted “Number Plate Recognition Unit” (NRD) Computer System will consist of the following:

E5.2 The NRD must meet with the minimum specification below:

- (a) Minimum 2.0 GHz Dual-Core processor
- (b) Minimum 1Gb RAM
- (c) Minimum 80Gb HD
- (d) Support for up to 4 ALPR channels and 4 Colour overview channels.
- (e) Windows XP embedded Operating System
- (f) Frame Grabbers that support Direct X
- (g) In built GSM/GPRS/EDGE Modem
- (h) In built GPS receiver
- (i) Minimum 4 * USB2 I/O
- (j) Minimum 2 * RS232 I/O
- (k) Wireless 802.11g
- (l) Ethernet 100 Mb/s
- (m) Environmental Sealing – IP 67
- (n) Operating temperature range between -20°C & +50°C
- (o) Remote telemetry interface for pan & tilt control

E5.3 Rugged system capable of withstanding vehicle jostling when deployed in different types of terrain as well as hot and cold temperatures In anticipation of deployment where temperatures can fluctuate from 40 degrees Celsius in the summer months and -40 degrees Celsius in the winter months.

E5.4 Minimum two types of input/output devices from the following types

- (a) USB
- (b) CD ROM
- (c) Serial,
- (d) Parallel

E6. ALPR RECOGNITION SOFTWARE

- E6.1 Further to specification E1.3(e), each ALPR Recognition Software will consist of the following:
- E6.2 The recognition engine software must be based on Neural Network technology or equivalent. Any equivalent will be considered as a substitute and therefore subject to the terms and conditions specified in section B5.
- E6.3 The system must be capable of being trained by example and computer simulations. This is done by exposure to a large number of repetitions of 37 character sets, covering each number, letter and a 37th for "extraneous noise" on a plate to improve overall performance.
- E6.4 The system must have automatic in picture video trigger.
- E6.5 Type of license plate that must be recognised rectangular, square, normal polarity (dark on light) and inverse
- E6.6 The system must be able to auto correct plates with a minimum rotation angle of +/-30 degrees.
- E6.7 The system must be able to auto correct character skewing (italicisation) with a minimum of +/- 10 degrees
- E6.8 The system must be able to be optimised to increase performance within the software.
- E6.9 The system must be capable of recognising vehicles travelling up to a maximum speed of 200KPH.
- E6.10 Accuracy rate; minimum 90%
- E6.11 Speed of data download/upload must not exceed five minutes
- E6.12 Date format: Comma Delimited File or other common text file for data
- E6.13 Wireless Download capable
- E6.14 Manual data entry capability: the ability for the system operator to manually add full or partial licence plates into the on board after the system is deployed (ie Amber alerts, crime vehicles, etc)
- E6.15 Manual data search capable: the ability to search the system's stored data for specific criteria (ie date/time, location, full or partial license plates, etc)
- E6.16 The system must be capable of out putting confidence levels for each recognition event.
- E6.17 The system must be able to display the direction of traffic flow.
- E6.18 The system must be able to show national identification of the license plates.
- E6.19 All ALPR systems must output the following data for each capture:
- (a) Licence Plate Number
 - (b) Date of capture
 - (c) Time of capture
 - (d) Location
 - (e) Camera ID
 - (f) Confidence Level
 - (g) Plate Patch Image (JPEG)
 - (h) Overview Image (JPEG)
 - (i) Direction of travel (where appropriate)

- E6.20 Back Office Facility must be able to;
- (a) store at least 3 million vehicle reads INCLUDING full InfaRed and overview images
 - (b) handle databases a minimum of over 2 million vehicles
 - (c) handle a minimum of 100,000 reads PER DAY on 2.8Ghz Standard PC
 - (d) receive information from hundreds of ALPR clients in real-time
 - (e) have a maximum capacity of database capacity of 4Terabytes (4000Gb's!) .
 - (f) utilise standard network architecture
 - (g) provides a web based user interface (standard web browser)
 - (h) provides 128bit SSL encryption, user authentication and full auditing
 - (i) display live read and alert data to hundreds of browser terminals
 - (j) must be able to connect to external databases.
 - (k) provide the following minimum functionality
 - (i) Real-time matching of ALL ALPR captures against Local HotLists (as a minimum)
 - (ii) The system allows an unlimited number of users to access the system at anyone time.
 - (iii) capable of checking new database information (daily download) against archived data.
 - (iv) Alerts must be able to be received by an unlimited number of clients simultaneously.
 - (v) Store all non matched ALPR data and images for minimum period of 3 months
 - (vi) Store all non matched ALPR data for a minimum period of 12 months
 - (vii) Store all matched ALPR data and images and match data for a minimum period of 10 years
 - (viii) Facilitate the exchange of hotlist and capture ALPR data between other BOFs
 - (ix) Buffer data for a period of 1 week should the link to the external databases be unavailable
- E6.21 User access must be via individual user access logons.
- E6.22 Access to data and system functions will depend on the privileges assigned to the individual's user ID.
- E6.23 User access must be controlled by users with administrator access privileges.
- E6.24 The new user ID will initially be assigned with a default password, which must be changed when the user first logs on. The user must then change their password as and when required.
- E6.25 The total end-to-end system response time from a vehicle being captured to the hit notification response being delivered to a specific operator must not exceed:
- (a) 2 seconds for a fixed ALPR system
 - (b) 4 seconds for a mobile ALPR facility
- E6.26 All capture data must be delivered to the external databases within 10 seconds from the time of capture.
- E7. TRAINING**
- E7.1 Provide costs and confirm what flexibility can be build into these training for a minimum of six staff members.
- E7.2 For the purpose of evaluation assume training to mean:
- (a) Daily rate for one business day

- (b) Small group format six people
- (c) City provided facility available

E8. DELIVERY AND INSTALLATION

- E8.1 Goods shall be delivered within 60 (sixty) Business Days of receipt of the City's purchase order f.o.b. destination, freight prepaid :
- (a) 472 Notre Dame Avenue, Winnipeg, MB , R3B 1R5
- E8.2 The Bidder shall give 72 hour advance notice of delivery to the Contract Administrator.
- E8.3 Goods shall be delivered between 8:00 a.m. and 4:00 p.m. on Business Days.
- E8.4 The installation shall be coordinated with the Contract Administrator.