



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 234-2016

**REQUEST FOR PROPOSAL FOR PROFESSIONAL CONSULTING SERVICES FOR
2017/2018 REGIONAL STREET RECONSTRUCTION/REHABILITATION AND EMPRESS
OVERPASS BRIDGE REHABILITATION – EMPRESS ST, PORTAGE AV TO ST MATTHEWS
AV; WESTWAY AND EASTWAY**

Proposals shall be submitted to:

**The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg MB R3B 1J1**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

REQUEST FOR PROPOSAL FOR PROFESSIONAL CONSULTING SERVICES FOR 2017/2018 REGIONAL STREET RECONSTRUCTION/REHABILITATION AND EMPRESS OVERPASS BRIDGE REHABILITATION – EMPRESS ST, PORTAGE AV TO ST MATTHEWS AV; WESTWAY AND EASTWAY

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon. Winnipeg time, July 13, 2016.
- B2.2 Proposals 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 Project Manager 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 Project Manager identified in D2.
- B3.2 If the Proponent finds errors, discrepancies or omissions in the Request for Proposal (RFP), or is unsure of the meaning or intent of any provision therein, the Proponent shall promptly notify the Project Manager of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.
- B3.3 If the Proponent is unsure of the meaning or intent of any provision therein, the Proponent 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 Project Manager, require a correction to or a clarification of the RFP will be provided by the Project Manager to all Proponents by issuing an addendum.
- B3.5 Responses to enquiries which, in the sole judgment of the Project Manager, do not require a correction to or a clarification of the RFP will be provided by the Project Manager only to the Proponent who made the enquiry.
- B3.6 All correspondence or contact by Proponents with the City in respect of this RFP must be directly and only with the City's Project Manager. Failure to restrict correspondence and contact to the Project Manager may result in the rejection of the Proponents Proposal Submission.
- B3.7 The Proponent shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Project Manager in writing.

B4. CONFIDENTIALITY

- B4.1 Information provided to a Proponent by the City or acquired by a Proponent by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Project Manager. The use and disclosure of the confidential information shall not apply to information which:
- (a) was known to the Proponent before receipt hereof; or
 - (b) becomes publicly known other than through the Proponent; or
 - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B4.2 The Proponent shall not make any statement of fact or opinion regarding any aspect of the Request for Proposals to the media or any member of the public without the prior written authorization of the Project Manager.

B5. ADDENDA

B5.1 The Project Manager may, at any time prior to the Submission Deadline, issue Addenda correcting errors, discrepancies or omissions in the Request for Proposal, or clarifying the meaning or intent of any provision therein.

B5.2 The Project Manager 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.

B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>

B5.2.2 The Proponent is responsible for ensuring that it has received all Addenda and is advised to check the Materials Management Division website for Addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B5.3 The Proponent shall acknowledge receipt of each addendum in Paragraph 9 of Form A: Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.

B6. PROPOSAL SUBMISSION

B6.1 The Proposal shall consist of the following components:

- (a) Form A: Proposal (Section A) in accordance with B7;
- (b) Fees (Section B) in accordance with B8;

B6.2 The Proposal should also consist of the following components:

- (a) Management Proposal – Proponent and Subconsultants (Section C) in accordance with B9;
- (b) Management Proposal – Project Team (Section D), in accordance with B10;
- (c) Technical Proposal (Section E) in accordance with B11; and
- (d) Project Schedule (Section F) in accordance with B12.

B6.3 Further to B6.1, all components of the Proposal shall be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Proposal.

B6.4 Further to B6.2, all components of the Proposal should be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Proposal.

B6.5 Proponents should submit one (1) unbound 8.5" x 11" original (marked "original") including drawings and six (6) copies (copies can vary subject to B6.6) for sections identified in B6.1 and B6.2.

B6.5.1 Further to B6.5, the Proposal(s) shall be submitted on 8.5" x 11" paper, with a font of not less than 11 pt Arial; margins of not less than 0.75"; line spacing of not less than single; and shall be no more than twenty (20) pages in length, exclusive of the required form(s). Only the first twenty (20) pages of each Proposal will be evaluated.

B6.5.2 Further to B6.5.1, anything included as an appendix will not be evaluated.

- B6.6 Further to B6.5 and B6.5.1, a total of two (2) of the twenty (20) total pages may be presented on 11" x 17" paper, with the copies only.
- B6.7 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B19.1(a).
- B6.8 The Proposal shall be submitted enclosed and sealed in an envelope/package clearly marked with the RFP number and the Proponent's name and address.
- B6.9 Proposals submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B6.10 Proposals shall be submitted to:
The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg MB R3B 1J1
- B6.11 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

B7. PROPOSAL (SECTION A)

- B7.1 The Proponent shall complete Form A: Proposal, making all required entries.
- B7.2 Paragraph 2 of Form A: Proposal shall be completed in accordance with the following requirements:
- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
 - (b) if the Proponent is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Proponent is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Proponent is carrying on business under a name other than his/her 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 Proposal 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: Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.
- B7.4 Paragraph 11 of Form A: Proposal shall be signed in accordance with the following requirements:
- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, it shall be signed by the Proponent;
 - (b) if the Proponent is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Proponent 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 Proponent is carrying on business under a name other than its 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: Proposal should be printed below such signatures.

B7.5 If a Proposal is submitted jointly by two or more persons, the word "Proponent" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Proponents in the Proposal and the Contract, when awarded, shall be both joint and several.

B8. FEES (SECTION B)

B8.1 The Proposal shall include a Fixed Fee for D5 Project Planning and Preliminary Design.

B8.1.1 The Proposal shall show a breakdown of fees separately for each location of work identified in D3.2.

B8.1.2 Further to B8.1, the Proponent shall be prepared to provide a breakdown of costs associated with the Public Engagement process upon request of the Project Manager.

B8.2 Upon completion of the Project Planning and Preliminary Design, or at a key stage prior to completion of Project Planning and Preliminary Design phase, fees for D6 Detailed Design, D7 Contract Administration, and D8 Post-Construction Services may be negotiated with the successful proponent as identified in D15.

B8.3 Adjustments to Fees will only be considered based on increases to the Scope of Services.

B8.3.1 The City will not consider an adjustment to the Fees based on changes in the Project budget or the Final Total Construction Cost.

B8.4 Notwithstanding C1.1(b), Fees shall include costs for out of town travel, related meals and accommodations for the duration of the Project and shall not be considered an Allowable Disbursement.

B8.5 The Fee Proposal shall include an allowance of up to a maximum 8% for Allowable Disbursements as defined in C1.1(b), but shall exclude the costs included in B8.4. No other disbursements will be permitted.

B8.5.1 Further to D14.2(f), the Allowable Disbursements shall be identified separately on each invoice.

B8.6 The Fees Proposal shall include an allowance for other project costs for Subconsultants and/or services including but not limited to (as applicable): site investigation (geotechnical sampling and analysis); structural investigations and analysis; materials testing; Underground Structures acquisitions; pipeline loading assessments; closed circuit television (CCTV) sewer inspection; and/or hazardous materials investigation.

B8.6.1 Further to D14.2(c)(v), Fees may include an allowance of up to 5% for handling charges

B8.6.2 Further to B8.6, the Fees Proposal should include a breakdown and description of the assumed other project costs.

B8.6.3 Further to B8.6, the Fees submitted shall include all Consultant fees for supervision of any Subconsultants required to perform any services for other project costs identified and described in B8.6.2.

B8.7 Notwithstanding C10.1, Fees submitted shall not include the Goods and Services Tax (GST) or Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.

B8.8 Payments to Non-Resident Consultants are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B9. MANAGEMENT PROPOSAL – PROPONENT AND SUBCONSULTANTS (SECTION C)

B9.1 The Management Proposal should describe the experience of the Proponent and any Subconsultants, including:

- (a) General firm profile information, including years in business, average volume of work, number of employees, including local office information and other pertinent information for the Proponent and all Subconsultants;
- (b) Details demonstrating the history and experience of the Proponent and Subconsultants in providing planning and preliminary design, detailed design, management of construction and contract administration services on a minimum of three projects of similar size and complexity.

B9.2 For each project listed in B9.1(b), the Proponent should submit:

- (a) description of the project;
- (b) role of the consultant;
- (c) project's original contracted construction cost and final construction cost;
- (d) design and construction schedule (anticipated Project schedule and actual project delivery schedule, showing design and construction separately);
- (e) project owner;

B9.2.1 Where applicable, information should be separated into Proponent and Subconsultant project listings.

B9.2.2 Reference information (two current names with telephone numbers per project) must be made available upon request of the Project Manager.

B10. MANAGEMENT PROPOSAL – PROJECT TEAM (SECTION D)

B10.1 Describe your approach to overall team formation and coordination of team members.

B10.2 Proponent's project management approach proposal should include:

- (a) A methodology describing team's project management approach and organization during the performance of Services, so that the evaluation committee has a clear understanding of the methods the Proponent and Subconsultant(s) will use in the delivery of this Project.
- (b) Methodology should identify:
 - (i) Job function for each identified individual and group of individuals identified in B10.2(a);
 - (ii) For Project Planning and Preliminary Design, provide time estimates by work activity and in total, including hourly rates for each person identified in B10.2(a). For the other Services (Detailed Design, Contract Administration and Post Construction), provide hourly rates for each person identified in B10.2(a).
 - (iii) For the time estimates by work activity provided for the Project Planning and Preliminary Design phase identified in B10.2(b)(ii), time estimates shall also include all staff associated with the project, including survey, drafting, clerical, and any other support staff.

B10.2.1 Further to B10.2, an organizational chart for the Project should be included.

B10.3 Proposals should include, in tabular form:

- (a) Names of key personnel assigned to the Project, who shall not be substituted without written permission from the Project Manager;
- (b) The experience and qualifications of the key personnel assigned to the Project, including:
 - (i) Job title,
 - (ii) Educational background and degrees,
 - (iii) Professional affiliations,
 - (iv) Years of experience administering projects for the City of Winnipeg,
 - (v) Years of experience in current position,
 - (vi) Years of experience in design,

- (vii) Years of experience in construction administration;
 - (c) For each person identified, list the percentage of their overall and available time to be dedicated to this Project with respect to their workload on other projects internal and external to the City of Winnipeg. Provide this information for each of the phases identified in D4 Scope of Services.
 - (d) Roles of each of the key personnel should be identified in the organization chart presented in B10.2.1.
- B10.4 For each person identified in B10.2(a), list at least three (3) projects, comparable in scope and complexity, in which the person listed did comparable work and played a comparable role. Provide the following:
- (a) Description of project;
 - (b) Role of the person;
 - (c) Project Owner;
- B10.5 Further to B10.4, and upon request of the Project Manager, the Proponent must be able to provide, for each person identified in B10.2(a), two current references, including telephone numbers, for each project listed.
- B10.6 Where applicable, information should be separated into Proponent and Subconsultants project listings.
- B10.7 Proposals may also address any other information that conveys the Proponent's understanding of the Project requirements.

B11. TECHNICAL PROPOSAL (SECTION E)

- B11.1 Proposals should address the technical deliverables and associated task requirements required by the Scope of Services. It should clearly identify and explain work activities and identify all assumptions and interpretations.
- B11.2 Specifically, Proposals should describe:
- (a) The Proponent's practical understanding of the Project, specifically:
 - (i) the team's understanding of the broad functional and technical requirements;
 - (ii) the team's understanding of the urban design issues
 - (iii) the team's understanding of bicycle and pedestrian planning issues;
 - (iv) the team's understanding of how public engagement integrates into the planning and decision making process;
 - (b) The Proponent's technical approach and methodology to complete the services;
 - (c) The collaborative process/method to be used by the key design professionals of the team in the various design phases of the Project;
 - (d) Any innovation to be used to perform the Scope of Services identified;
 - (e) All activities and services to be provided by the City;
 - (f) The key deliverables of the Scope of Services for the Project;
 - (g) Any assumptions made with respect to the deliverables and the Scope of Services.
- B11.3 Methodology should be presented in accordance with the Scope of Service phases as identified in D4, as well at Part F – Specifications and Appendix A – Definition of Professional Consulting
- B11.4 Details of Scope of Services are provided in D3 to D8.

B12. PROJECT SCHEDULE (SECTION F)

- B12.1 Proponents should present a carefully considered Critical Path Method schedule using Microsoft Project or similar project management software, complete with **resource assignments** (key designers), durations (weekly timescale) and milestone dates or events. The schedule should address each requirement of the Scope of Services.
- B12.2 The Proponent's schedule should include critical dates for review and approval processes by the City and other organizations anticipated during the design and tendering phases of the Project. Reasonable times should be allowed for completion of these processes.

B13. QUALIFICATION

- B13.1 The Proponent 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 Proponent does not carry on business in Manitoba, in the jurisdiction where the Proponent does carry on business; and
 - (b) be financially capable of carrying out the terms of the Contract;
 - (c) have all the necessary experience, capital, organization, and equipment to perform the Services in strict accordance with the terms and provisions of the Contract;
 - (d) have or establish and staff an office in Winnipeg for the duration of the Project.
- B13.2 The Proponent and any proposed Subconsultant (for the portion of the Services 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 Division website at <http://www.winnipeg.ca/matmgt/debar.stm>
- B13.3 The Proponent and/or any proposed Subconsultant (for the portion of the Services proposed to be subcontracted to them) shall:
- (a) have successfully carried out services for the programming; design, management of construction and contract administration for architectural and/or engineering projects of similar complexity, scope and value; and to those required for this Project; and
 - (b) be fully capable of performing the Services required to be in strict accordance with the terms and provisions of the Contract; and
 - (c) have a written workplace safety and health program, if required, pursuant to The Workplace Safety and Health Act (Manitoba);
 - (d) have the knowledge and resources to administer the requirements of The Workplace Safety and Health Act (Manitoba) during the construction works associated with this Contract; and
 - (e) undertake to meet all licensing and regulatory requirements of the appropriate governing authorities and associations in the Province of Manitoba.
 - (f) upon request of the Project Manager, provide the Security Clearances as identified in PART E - SECURITY CLEARANCE.
- B13.4 The Proponent shall submit, within three (3) Business Days of a request by the Project Manager, further proof satisfactory to the Project Manager of the qualifications of the Proponent and of any proposed Subconsultant.
- B13.5 The Proponent shall provide, on the request of the Project Manager, full access to any of the Proponent's equipment and facilities to confirm, to the Project Manager's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Services.

B14. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

- B14.1 Proposals will not be opened publicly.
- B14.2 After award of Contract, the names of the Proponents and the Contract amount of the successful Proponent will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/> .
- B14.3 To the extent permitted, the City shall treat all Proposal Submissions as confidential. However, the Proponent is advised that any information contained in any Proposal 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.
- B14.4 Following the award of Contract, a Proponent will be provided with information related to the evaluation of its submission upon written request to the Project Manager.

B15. IRREVOCABLE OFFER

- B15.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 10 of Form A: Proposal.
- B15.2 The acceptance by the City of any Proposal shall not release the Proposals of the other responsive Proponents and these Proponents shall be bound by their offers on such Services until a Contract for the Services has been duly executed as herein provided, but any offer shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 10 of Form A: Proposal.

B16. WITHDRAWAL OF OFFERS

- B16.1 A Proponent may withdraw its Proposal without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B16.1.1 The time and date of receipt of any notice withdrawing a Proposal shall be the time and date of receipt as determined by the Manager of Materials.
- B16.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Proposal or the Proponent's authorized representatives named in Paragraph 11 of Form A: Proposal, and only such person, has authority to give notice of withdrawal.
- B16.1.3 If a Proponent gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Proposal until after the Submission Deadline has elapsed;
 - (b) open the Proposal to identify the contact person named in Paragraph 3 of Form A: Proposal and the Proponent's authorized representatives named in Paragraph 11 of Form A: Proposal; and
 - (c) if the notice has been given by any one of the persons specified in B16.1.3(b), declare the Proposal withdrawn.
- B16.2 A Proponent who withdraws its Proposal after the Submission Deadline but before its offer has been released or has lapsed as provided for in B15.2 shall be liable for such damages as are imposed upon the Proponent 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.

B17. INTERVIEWS

- B17.1 The Project Manager may, in his/her sole discretion, interview Proponents during the evaluation process.

B18. NEGOTIATIONS

- B18.1 The City reserves the right to negotiate details of the Contract with any Proponent. Proponents are advised to present their best offer, not a starting point for negotiations in their Proposal Submission.
- B18.2 The City may negotiate with the Proponents submitting, in the City's opinion, the most advantageous Proposals. The City may enter into negotiations with one or more Proponents without being obligated to offer the same opportunity to any other Proponents. Negotiations may be concurrent and will involve each Proponent individually. The City shall incur no liability to any Proponent as a result of such negotiations.
- B18.3 If, in the course of negotiations pursuant to B18.2 or otherwise, the Proponent amends or modifies a Proposal after the Submission Deadline, the City may consider the amended Proposal as an alternative to the Proposal already submitted without releasing the Proponent from the Proposal as originally submitted.

B19. EVALUATION OF PROPOSALS

- B19.1 Award of the Contract shall be based on the following evaluation criteria:
- | | |
|--|-------------|
| (a) compliance by the Proponent with the requirements of the Request for Proposal or acceptable deviation therefrom: | (pass/fail) |
| (b) qualifications of the Proponent and the Subconsultants, if any, pursuant to B13: | (pass/fail) |
| (c) Fees; (Section B) | 20% |
| (d) Management Proposal – Proponent and Subconsultant(s) (Section C) | 5% |
| (e) Management Proposal – Project Team (Section D) | 45% |
| (f) Technical Proposal (Section E) | 25% |
| (g) Project Schedule. (Section F) | 5% |
- B19.2 Further to B19.1(a), the Award Authority may reject a Proposal as being non-responsive if the Proposal 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 Proposal, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.
- B19.3 Further to B19.1(b), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in its Proposal or in other information required to be submitted, that it is responsible and qualified.
- B19.4 Further to B19.1(c), Fees will be evaluated based on Fees submitted in accordance with B8.
- B19.5 Further to B19.1(d), Management Proposal – Proponent and Subconsultant(s) will be evaluated considering the experience of the organization (firm or firms) on projects of similar size and complexity as well as other information requested.
- B19.6 Further to B19.1(e), Management Proposal – Project Team will be evaluated considering the experience and qualifications of the Key Personnel and Subconsultant personnel on projects of comparable size and complexity, as well as the team's project management approach and team organization.
- B19.7 Further to B19.1(f), the Technical Proposal will be evaluated considering the Proponent's demonstrated understanding of the Project's technical and functional requirements, and the proposed methodology.

- B19.8 Further to B19.1(g), Project Schedule will be evaluated considering the Proponent's ability to comply with the requirements of the Project, including but not limited to any Critical Stages identified.
- B19.9 Notwithstanding B19.1(d) to B19.1(g), where Proponents fail to provide a response to B6.2(a) to B6.2(d), the score of zero may be assigned to the incomplete part of the response.
- B19.10 Proposals will be evaluated considering the information in the Proposal Submission and any interviews held in accordance with B17.

B20. AWARD OF CONTRACT

- B20.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.
- B20.2 The City will have no obligation to award a Contract to a Proponent, even though one or all of the Proponents are determined to be responsible and qualified, and the Proposals are determined to be responsive.
- B20.2.1 Without limiting the generality of B20.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Services;
 - (b) the prices are materially in excess of the prices received for similar services in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Services, or a significant portion thereof, with its own forces;
 - (d) only one Proposal 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.
- B20.3 The Work of this Contract is contingent upon Council approval of sufficient funding in the 2017 and 2018 Capital Budgets. If the Capital Budget approved by Council does not include sufficient funding for the Work, the City will have no obligation to award a Contract.
- B20.4 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Proponent submitting the most advantageous offer.
- B20.5 The City may, at its discretion, award the Contract in phases.
- B20.6 Notwithstanding Paragraph 6 of Form A: Proposal and C4, the City will issue a Letter of Intent to the successful Proponent in lieu of execution of a Contract.
- B20.6.1 The Contract documents as defined in C1.1(n)(ii) in their entirety shall be deemed to be incorporated in and to form a part of the Letter of Intent notwithstanding that they are not necessarily attached to or accompany said Letter of Intent.
- B20.7 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(n).
- B20.5 Further to Paragraph 6 of Form A: Proposal and C4, the successful Proponent will be provided with Contract documents for execution following issuance of a Letter of Intent.
- B20.6 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(n).
- B20.7 Following the award of Contract, a Proponent will be provided with information related to the evaluation of its Proposal upon written request to the Project Manager.

B20.8 If, after the award of Contract, the Project is cancelled, the City reserves the right to terminate the Contract. The Successful Proponent will be paid for all Services rendered up to time of termination.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Consultant Services* (Revision 2010-10-01) are applicable to the Services of the Contract.
- C0.1.1 The *General Conditions for Consultant Services* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm.
- C0.2 A reference in the Request for Proposal to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Consultant Services*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

D1.1 In addition to the *General Conditions for Consultant Services*, these Supplemental Conditions are applicable to the Services of the Contract.

D2. PROJECT MANAGER

D2.1 The Project Manager is:

Michelle N. Stainton, P.Eng.

Email: mstainton@winnipeg.ca

Telephone No. 204 986-5164

(between June 22-24, 2016, the Project Manager for purposes of this Bid Opportunity is Blake Kibbins, P.Eng. 204-986-4734 bkibbins@winnipeg.ca)

D2.2 At the pre-commencement meeting, the Project Manager will identify additional personnel representing the Project Manager and their respective roles and responsibilities for the Services.

D2.3 Proposal Submissions must be submitted to the address in B6.10

D3. BACKGROUND

D3.1 The Regional and Local Streets Program is the annual Capital street renewal program of the City of Winnipeg Capital Budget as adopted by Council.

D3.2 The 2016 Capital Budget, which was adopted by Council on March 22, 2016, includes 2017 and 2018 forecasted capital budget amounts as follows:

	Project Budget for Year Forecast	
	2017	2018
Empress St – St Matthews to Jack Blick Av (including protected bicycle lanes)	\$4,400,000	
Empress St E SB – Westway to Jack Blick Av (including protected bicycle lanes)	\$400,000	
Empress St SB – Jack Blick Av to Portage	\$600,000	
Empress St NB – Portage to Jack Blick Av	\$600,000	
Empress St E – Portage to S limit of Empress Overpass (including protected bicycle lanes)		\$3,800,000
Empress St E – S limit of Empress Overpass to Westway (including protected bicycle lanes)		\$7,200,000
Westway – Empress St E to Empress St		\$200,000
Eastway – Empress St E to Empress St		\$200,000
<i>Annual Total</i>	\$6,000,000	\$11,400,000
Total Empress Budget	\$17,400,000	

D3.3 Empress St and Empress St East are Regional Streets that are part of the Cycling Network. They are minor arterial roads and truck routes. Northbound Empress St East and Empress St connect Route 85 East to Route 90 North.

D3.4 Bicycle lane upgrades to Empress St and Empress St East are considered moderate/high priority within the Winnipeg Pedestrian and Cycling Strategies. It is expected that future

modifications will include protected bicycle facilities, pedestrian upgrades, and intersection channelization extending from St Matthews Av to Saskatchewan Av as part of future projects.

- D3.5 Technical background, current conditions ,and possible improvement to Empress St, Empress St East and immediate area:
- (a) The current road configuration of Empress St and Empress St East was designed to accommodate large event traffic which required redundant lanes and points of egress. The large event venues are no longer in the area.
 - (b) Sections of pavement on Empress St and Empress St East require renewal; pavement renewal should be rationalized along with current needs.
 - (c) The current signalized intersection at Empress St, Empress St East and Jack Blick Av is undesirable. Modifying the lane configuration of Empress St and Empress St East could eliminate the traffic signals requirement. A pedestrian crossing control warrant would be required to determine the type of crossing control for pedestrians. Authority to add or remove traffic signals or pedestrian crossing control (corridors and half signals) resides with the City's Standing Policy Committee on Infrastructure Renewal and Public Works.
 - (d) The existing lane configuration of northbound Empress St approaching St Matthews Av is undesirable. Reconfiguration is required to enhance the safety and operation of the intersection.
 - (e) Current spiral configurations of the ramps to Portage Av are undesirable.
 - (f) Achieving design speeds of 10 km/hr over the posted speed is unlikely on some facilities given the existing constraints and the proposed addition of a protected bicycle facility. Engineering judgement will be required throughout the design process.
 - (g) Some existing Transit stops along Empress St and Empress St East do not meet accessibility requirements.
 - (h) St John Ambulance Way northbound onto Portage Av was improved in 2014 to reduce the right turn lane from two lanes to one lane.
 - (i) The Empress St and St Matthews Av intersection was reconstructed in 2015 as part of the Polo Park Traffic Improvements.
- D3.6 Omand's Creek is owned and maintained by the Province of Manitoba. Some localized slope stabilization remediation has been carried out by the City of Winnipeg under past roadway and bridge projects. There are currently slope stabilization issues along the Assiniboine River adjacent to the Empress St East ramp to Portage Av. Long term slope stabilization for both Omand's Creek and the Assiniboine River should be addressed in the areas of work
- D3.7 The City of Winnipeg has prepared a conceptual drawing (Appendix C) for one option – which was used to develop the Project budget – that would achieve the required improvements. The successful proponent will develop alternative concepts during Project Planning prior to proceeding to Preliminary Design.

D4. SCOPE OF SERVICES

- D4.1 The Services required under this Contract shall consist of Project Planning and Preliminary Design of Empress St and Empress St East between Portage Av and St Matthews Av, Eastway and Westway – as outlined in D5 – consisting of, but not limited to, the following:
- (a) reconstruction/rehabilitation of concrete pavements;
 - (b) rehabilitation of the Empress St Overpass;
 - (c) geometric improvements;
 - (d) protected bike lanes;
 - (e) slope stabilization.
- D4.2 Future services, as described in D15 may consist of the following:

- (a) Detailed Design as outlined in D6; and
- (b) Contract Administration as outlined in D7; and
- (c) Post Construction Services as outlined in D8.

D4.3 Unless otherwise specified below, Appendix A – Definition of Professional Consultant Services – Engineering shall be applicable to the provision of Professional Engineering Services for this Project.

D5. PROJECT PLANNING AND PRELIMINARY DESIGN

D5.1 Preliminary Design Services are defined in Appendix A – Definition of Professional Consultant Services – Engineering.

D5.2 Where applicable, road designs must reference and address:

- (a) Appropriate geometric standards set by the Transportation Association of Canada (TAC);
- (b) City of Winnipeg's 2012 Draft Updated *Transportation Standards Manual* (previous version February 1991);
- (c) City of Winnipeg's *Accessibility Design Standards* (May 2010);
- (d) City of Winnipeg's *Universal Design Policy* (October 16, 2001);
- (e) City of Winnipeg's *Tree Planting Details and Specifications Downtown Area and Regional Streets* (May 2009);
- (f) City of Winnipeg's *Tree Removal Guidelines*;
- (g) *City of Winnipeg Standard Construction Specifications* – current edition;
- (h) 2015 Winnipeg Pedestrian and Cycling Strategies;
- (i) City of Winnipeg Motor Vehicle Noise Policies and Guidelines (1982);
- (j) CAN/CSA-S6-1 Canadian Highway Bridge Design Code plus interims.

D5.3 Where applicable, other structures must address:

- (a) The Current edition of the Manitoba Building Code;
- (b) AASHTO Standards Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals;
- (c) AASHTO Roadside Design Guide – 4th edition or latest.

D5.4 The following documents are to be considered where applicable:

- (a) OurWinnipeg (adopted July 12, 2011);
- (b) OurWinnipeg Sustainable Transportation Strategy (adopted July 12, 2011);
- (c) Winnipeg Transportation Master Plan (adopted November 16, 2011).

Geometric Design

D5.5 The project concept, as shown on the conceptual drawings referenced in D3.7, and developed by the City of Winnipeg Transportation Division may be revised based on public engagement and consultant input.

D5.6 The geometric design process should be concurrent with the slope stabilization to optimize both designs.

D5.7 The Successful Proponent should adjust/refine and confirm the concept through the project planning process.

D5.8 The design must accommodate emergency vehicle access.

D5.9 If additional property is required, the Successful Proponent shall prepare Property Requirement drawings to facilitate the acquisition process.

Traffic Study

D5.10 The City has analyzed the concept road network at a high level and believes it can provide acceptable levels of service.

D5.11 The Successful Proponent should summarize existing traffic conditions and perform a Synchro and Simtraffic analysis to establish the baseline performance of the intersections during the weekday p.m. peak and Saturday peak within the study area. Once a plan has been refined by the Successful Proponent, they should estimate p.m. peak period and Saturday peak period traffic volumes and perform a traffic analysis using Synchro and Simtraffic to confirm anticipated opening day and 5-year horizon performance and support the public engagement process.

(a) Specific to public engagement, the traffic analysis will be used to aid the public in understanding how existing traffic operates compared to how future traffic will operate under the new configuration and following the former Stadium site development (5-year horizon).

D5.11.1 Further to D5.11, the City will provide updated traffic counting data as well as traffic projections for the former Stadium site. Previous traffic studies will not be considered relevant as new data will be obtained to get new baseline information due to the recent improvements in the area.

Pedestrian and Cycling Facilities Design

D5.12 Facilities are to be designed for people of all ages and abilities, using the best and most current practices in bicycle and pedestrian facilities design.

D5.12.1 Further to D5.12, recommendations for pedestrian and cycling facilities should be prepared in consultation with a bicycle facilities design expert with extensive experience in the successful design of complex bicycle facilities within North America.

D5.13 Recommendations are to be provided for pedestrian and cycling traffic control devices in reference to current TAC guidelines.

D5.14 Pavement marking plans should be prepared by the Successful Proponent.

Road Renewal

D5.15 The Successful Proponent shall review and confirm the following road renewal assessment:

(a) Mill and Fill:

- (i) Westway – Empress St to Empress St East
- (ii) Eastway – Empress St East to Empress St
- (iii) Empress St SB – Jack Blick Av to Portage Av
- (iv) Empress St NB – Portage Av to Jack Blick Av

(b) Major Rehabilitations:

- (i) Empress St East – Portage Av to South limit of Empress Overpass
- (ii) Empress St East – South limit of Empress Overpass to Westway

(c) Reconstruction:

- (i) Empress St East SB – Westway to Jack Blick Av
- (ii) Empress St – Jack Blick Av to St Matthews Av

Bridge Rehabilitation

D5.16 Bridge condition assessment, load rating and design of modifications shall include the following:

- (a) Carry out a bridge condition assessment including review of existing information, and a detailed visual inspection in accordance with the Ontario Structural Inspection Manual (OSIM).
- (b) Recommend and undertake additional investigations and testing of the bridge to determine conditions and to assist in recommending remedial measures.
- (c) The existing structure shall be load rated in accordance with the Canadian Highway Bridge Design Code, CAN/CSA-S6-14. The Successful Proponent shall gain acceptance from the City Project Manager for the assumptions used in the load rating.
- (d) Develop bridge rehabilitation concepts factoring in required modifications to add a cycle track to the east side of the bridge, and to widen the sidewalk on the west side of the bridge. The modifications are preferably to be undertaken within the existing bridge width. Non-vehicular access and accessibility to Portage Av should also be reviewed.
- (e) Design structure modifications in accordance with the Canadian Highway Bridge Design code, CAN/CSA-S6-14. The design live load vehicle shall be the CL-625. All structures shall be designed for a minimum 75 year design life.

Slope Stabilization

- D5.17 The Successful Proponent should propose a geotechnical drilling and testing program, including an estimated budget (fees and disbursements) and recommendations, for slope stabilization on the Assiniboine River and Omand's Creek as required within the area of Project works.
- D5.18 Slope stabilization on Empress St – Portage Av to South limit Empress Overpass (St John Ambulance Way):
- (a) The Successful Proponent should review and provide recommendations for slope stabilization requirements as a result of construction under the proposed works;
 - (b) The head-scarp of the instability is within 2 meters of the current lane with potential to retrogress and directly impact the lane;
 - (c) The City's proposed concept drawings locate the connection to the bicycle facility at the location where the scarp is closest to the present alignment. Additional fill at this location would tend to destabilize the slope. Realignment of the proposed bicycle path may reduce the amount of fill, or possibly result in an off-loading, which may reduce scale and cost of necessary slope stability improvements in this location;
 - (d) The Successful Proponent should review and confirm that any proposed realignment of the bicycle facility would meet the required safety factor;
- D5.19 Slope stabilization on Empress St and Empress St East from the South limit of Empress Overpass to St Matthews Av:
- (a) The Successful Proponent should review and provide recommendations for slope stabilization requirements as a result of construction under the proposed works.

Pavement Design

- D5.20 The Successful Proponent shall complete a road condition assessment, including geotechnical requirements as identified in F3.
- D5.21 The Successful Proponent shall prepare and submit a pavement design analysis and provide a pavement design brief for all new or reconstructed pavements as identified in D5.32(o).
- D5.22 The Successful Proponent shall include a drainage plan during preliminary design.

Safety Audit

- D5.23 The City of Winnipeg will retain an independent third party consultant to perform a Road Safety Audit of the Preliminary Design.

- D5.23.1 Further to D5.26, the roadway safety audit shall follow the Transportation Association of Canada's the Canadian Road Safety Audit Guide.
- D5.24 The Successful Proponent shall prepare a Response Report to any recommendations or suggestions arising from the Preliminary Design Safety Audit Report.

Overhead Sign Structure Renewal

- D5.25 A sign structure is currently located on northbound Empress, approaching St Matthews. The Successful Proponent shall review and recommend whether the sign should be salvaged.

Construction Traffic Management

- D5.26 In consultation with the City, the Successful Proponent shall develop a construction traffic management plan and construction staging drawings, considering vehicles, trucks, Winnipeg Transit operations, pedestrians, cyclists, emergency vehicles, access management, and signal timings to provide an acceptable level of service during construction as identified in D5.32(r)(iii).
- D5.26.1 Further to D5.26,
- (a) One lane of traffic is to be provided in each direction on the Empress overpass during construction. Under no circumstances can the northbound direction of the overpass be closed. The Successful Proponent will review if consideration can be given to a closing in the southbound direction of the overpass for a limited duration.
 - (b) Empress St must have one lane in each direction. Northbound left turns cannot be prohibited simultaneously at Jack Blick Av and Maroons Rd.
 - (c) Empress St East between Eastway and Jack Blick Av could be fully closed as required for construction. The Successful Proponent can consider temporary conversion of Eastway and/or Westway to two-way traffic as part of development of the construction traffic management plan.

Public Engagement

- D5.27 Public engagement is an integral part of the project, which will allow better decisions to be made, incorporating the interest and concerns of affected stakeholders, while meeting the needs of the City. This will provide greater transparency in the decision-making process and provide for a more sustainable solution. The public engagement process shall be based in IAP2 principles and best practices (see <http://iap2canada.ca/>).
- D5.28 The experience of the Public Engagement lead should also include: confirmation of IAP2 membership, and completion of IAP2 or related courses, specifying the year of completion of the IAP2 Foundations/Certificate courses.
- D5.29 The public engagement process should identify and prepare a profile of the project key stakeholders in the immediate area that may be impacted by the project and should:
- (a) Determine the needs and impact of each stakeholder or group of stakeholders (this will also include groups with a high interest in the outcome of the project);
 - (b) Build relationships with key stakeholders as necessary to ensure that wants and outstanding issues are addressed;
 - (c) Develop content, including a map of the project area, a project timeline, and project updates, for a project webpage that will be hosted on the City's Major Projects website. Develop content for communications with stakeholders. This may include, but may not be limited to direct letters and updates to residents, news releases, social media and advertisements.
 - (i) All relevant public engagement materials will need to be posted online 2 weeks prior to an in-person event.

- (ii) The anticipated review period for public engagement materials will be four (4) weeks. This includes but is not limited to, website content, storyboards, direct letters and updates to key stakeholders, press releases, social media and advertisements;
- (d) Develop and implement one (1) in person event, as determined by the stakeholder analysis to engage the public and present potential design options and construction logistics before preliminary design is completed;
- (e) Develop the content for the in person event, including but not limited to storyboards, handouts, and feedback forms.
 - (i) The feedback process shall be mirrored online with a survey.
- (f) Arrange meetings with the public and/or other stakeholders, as necessary, to ensure that outstanding issues are addressed;
- (g) Provide a summary public engagement report that may be posted on the project's website so that stakeholders can see how their input has been considered and used. Reports should include:
 - (i) Cataloguing public input and project response to it;
 - (ii) A detailed record of all promotions and communications;
 - (iii) Attendance numbers and dates of events;
 - (iv) A summary of findings and results;
- (h) Advise on any additional public engagement strategy as necessary.

D5.30 The proponent shall provide a public engagement strategy in their proposal with an estimated budget for costs for advertising, mailings, and the public open house venue, which shall not be included in the Fee Proposal. Fees for public engagement process shall be included in the fee proposal.

D5.30.1 Further to D5.30, estimated costs for advertising, mailings and the in person event venue shall not be included in the Fee proposal but should be provided in the written proposal. For contract award an allowance will be added to the evaluated Fee Proposal to cover these costs.

Other General Requirements

D5.31 The Successful Proponent shall hold meetings with the City Project manager and members of the appointed City of Winnipeg Project Technical Steering Committee at project start up, and at other key times, including presentation of the findings of investigations, presentation of potential options and to gain concurrence of recommendations for the alternatives to be developed, prior to finalization of the preliminary design report.

D5.32 The Successful Proponent will be responsible for:

- (a) Confirming the scope of work required using professional engineering judgement.
- (b) Preparation of a schedule of goals, objectives and activities (Project Schedule) for the entire project, broken down into an acceptable and measurable level and provide comprehensive management of the project. Monitor and maintain the same in a manner acceptable to the City. Monthly status reports provided to the Project Manager should include but not be limited to:
 - (i) Progress on tasks since previous reports;
 - (ii) Planned accomplishments for next period;
 - (iii) Project schedule update;
 - (iv) Project budget update;
 - (v) Identify potential problems, risks, concerns, etc for the project.
- (c) Developing a project Risk Management Plan, identifying risks and appropriate mitigation recommendations, as they relate to the successful completion of the project. Use the City of Winnipeg's Project Management templates at:
<http://winnipeg.ca/finance/infrastructureplanning/camp.stm#5>.

- (d) Review and incorporate regulatory requirements into the project plan and schedule. Obtain approvals from appropriate regulatory agencies as necessary.
- (e) In consultation with the Project Manager, determining the extent to which site investigation is required.
- (f) Field surveys.
- (g) Acquiring and review of the historical and as-built drawings within Project limits from Underground Structures.
- (h) Acquiring and review of historical information from all utilities within the Project limits.
- (i) Acquiring related reports and historical information, where available, within the Project limits (i.e. Omand's Creek, Bridge Maintenance, etc.) and review as related to this Project.
- (j) Referring to F2, the Sewer Televising Guidelines for Public Works Projects, determining the extent to which the sewer infrastructure (a) requires inspections, and (b) in consultations with the Water & Waste Department, and the approval of the Project Manager, requires repair or renewal.
- (k) Engaging the services of appropriate qualified Subconsultant personnel where additional services are required, including but not limited to:
 - (i) Site investigation (geotechnical services) as per F3;
 - (ii) Materials testing services;
 - (iii) Pipeline loading assessments;
 - (iv) Closed circuit television (CCTV) sewer inspection as per F2.
- (l) Detailed review of access and parking requirements for adjacent residents/businesses.
- (m) Construction staging plans that minimize disruption to the public. Assumptions should be stated in the proposal.
- (n) Providing project details and regular project updates to the Accela right-of-way coordination system.
- (o) Undertake pavement design analysis that recommends pavement structure and utilizes a life cycle cost analysis to determine the preferred option. Assumptions to the life cycle cost requirements will be reviewed by the City prior to analysis.
- (p) Identify and confirm property requirements and/or easements and provide necessary information to the City of Winnipeg to support the property acquisition or easement process including drawings if necessary. Under the City's conceptual plan, additional property acquisition is not anticipated.
- (q) Determine and assist the City in obtaining any regulatory requirements, including, but not limited to those with the City of Winnipeg Waterways, Manitoba conservation, Manitoba Water Resources, Navigable Waters, and Department of Fisheries and Oceans (DFO).
- (r) Conduct traffic operation studies:
 - (i) Establish existing conditions and baseline weekday afternoon and Saturday peak period performance;
 - (ii) Confirm/determine the appropriate lane requirements;
 - (iii) Develop a construction traffic management plan as identified in D5.26;
 - (iv) Develop an access management strategy for property access within and affected by the work in the project area;
 - (v) Analyses are to be conducted using Trafficware Ltd. Software (Synchro and Simtraffic) and the resulting files are to be provided to the City of Winnipeg for review;
 - (vi) Existing traffic volumes and traffic signals timings will be provided by the City of Winnipeg. The City of Winnipeg will provide traffic projections for the former stadium site and will assist with determination of a growth rate for the 5-year horizon.
- (s) Coordinate intersection designs with the City of Winnipeg Traffic Signals Branch.
- (t) Develop project aesthetics including streetscaping, and landscaping.

- (u) Coordinate with utilities, other City Branches, Divisions and Departments, and get cost estimates from all stakeholders.
- (v) Facilitate and participate in value engineering process and produce response reports. The value engineering process should:
 - (i) Identify methods of reducing life cycle costs without sacrificing reliability or efficiency;
 - (ii) Generate ideas that may be developed into feasible changes;
 - (iii) Use an interdisciplinary team of specialists
 - (iv) Be executed in phases, such as
 - Information phase – the team reviews the design
 - Creative phase – generate alternatives to providing the basic function
 - Evaluation phase – identify advantages and disadvantages of ideas
 - Development phase – best alternatives are further developed
 - Presentation phase – final decision is presented to the City, consultant and other decision makers
- (w) Project reporting and support to the city's Project Manager for project reporting in accordance with the City of Winnipeg's Project Management Manual <http://winnipeg.ca/finance/infrastructureplanning/camp.stm#3> and templates: <http://winnipeg.ca/finance/infrastructureplanning/camp.stm#5>

Preliminary Design Report

D5.33 The Successful Proponent shall prepare and submit a preliminary design report outlining the results of the investigations and assessments carried out, options investigated, and the recommended scope of work, complete with drawings and a class 3 cost estimate. Four (4) hard copies, along with an electronic PDF version, properly bookmarked, of the final preliminary design report shall be submitted.

D6. DETAILED DESIGN

- D6.1 Further to D15, Detailed Design Services are described in Appendix A – Definition of Professional Consultant Services – Engineering
- D6.2 The Successful Proponent will be responsible for project reporting and support to the city's Project Manager for project reporting in accordance with the City of Winnipeg's Project Management Manual <http://winnipeg.ca/finance/infrastructureplanning/camp.stm#3> and templates: <http://winnipeg.ca/finance/infrastructureplanning/camp.stm#5>
- D6.3 Designs submitted for review must:
- (a) Be sealed by a Professional Engineer, registered in the Province of Manitoba;
 - (b) Include a final copy of the pavement design brief identified in D5.21 for all reconstructed pavements;
 - (c) Include the pavement cross section (where applicable);
 - (d) Include the dimensioned jointing design (where applicable);
 - (e) Conform to the Manual for the Production of Construction Drawings for the City of Winnipeg Works and Operations Division (November 1984).
 - (f) Include construction staging drawings/figures;
 - (g) Include all relevant plan and profile information;
 - (h) Include landscaping and minor streetscaping aesthetics, detailed on separate drawings;
 - (i) Include overhead sign structure (if applicable) and roadside hazard protection details;
 - (j) Include all structural and bridge rehabilitation drawings and details where applicable;

- (k) Include all slope stabilization requirements, detailed on separate drawings;
- (l) Allow six (6) weeks for circulation to Underground Structures
 - (i) Ensure that separate copies are sent to affected utilities, with specific requests made for further estimates where required.

D6.4 Bid Opportunity documents must be prepared;

- (a) Using the current applicable template from the Materials Management Division;
- (b) Referencing the current edition of *The City of Winnipeg Standard Construction Specifications*.

D7. CONTRACT ADMINISTRATION

D7.1 Further to D15, Contract Administration Services are described in Appendix A – Definition of Professional Consultant Services – Engineering

D7.2 Contract Administration Services shall be conducted in accordance with the City of Winnipeg's *Manual of Project Administration Practice* (Draft March 1992 – see Appendix B).

D7.3 The Successful Proponent will be responsible for project reporting and support to the city's Project Manager for project reporting in accordance with the City of Winnipeg's Project Management Manual <http://winnipeg.ca/finance/infrastructureplanning/camp.stm#3> and templates: <http://winnipeg.ca/finance/infrastructureplanning/camp.stm#5>

D7.4 NON-RESIDENT Contract Administration Services shall include but not be limited to:

- (a) Ensuring persons with demonstrated experience are assigned to administer the Project for the duration of the Project, with personnel changes only upon approval of the Project Manager;
- (b) Timely submittal of accurate progress payments and invoices;
- (c) Conducting pre-award and pre-construction meetings with formal notes as described in the City of Winnipeg's *Manual of Project Administration Practice* identified in D7.2;
- (d) Provision to the City of a complete current report on the project status on a monthly basis advising of progress, schedule, project costs, Change in Service, and Changes in Work.

D7.5 RESIDENT Contract Administration Services shall include but not be limited to:

- (a) Co-ordination of day-to-day site activities;
- (b) Ensuring construction contractor conformance to the City of Winnipeg's *Manual of Temporary Traffic Control*;
- (c) Full time inspection;
- (d) Field and/or laboratory testing and verification of construction material quality;
- (e) Field measurement and verification of construction material quantities in a manner so as to minimize contract disputes;
- (f) Provision of periodic and timely updates to the Project Manager on progress and/or expenditures through:
 - (i) Regular Site meetings with formal minutes as described in the City of Winnipeg's *Manual of Project Administration Practice* identified in D7.2, including the date, location & attendees. Issues, updates and amendments must be itemized and dated.
 - (ii) Other formal and/or informal documented means.
- (g) Representation of the city to the local residents and businesses in a professional manner, with responsible and prompt reaction to reasonable requests (minimizing impact and/or disruption of the Project to the extent possible);
- (h) Coordinate traffic management and construction work;

- (i) On-going updates to the lane-closure information line as required;
- (j) Supervision of subconsultants required to perform any services under D5.32(k) or others;
- (k) Provision of project details and regular Project updates to the Accela right-of-way coordination system.

D8. POST CONSTRUCTION SERVICES

D8.1 Further to D15, Post Construction Services are described in Appendix A – Definition of Professional Consultant Services – Engineering

D8.2 Post Construction Services shall include but not be limited to:

- (a) Preparation of one of each of the following for each construction contract administered under the Project:
 - (i) Certificate of Substantial Performance;
 - (ii) Certificate of Total Performance;
 - (iii) Certificate of Acceptance.
- (b) Additional Contract Administration for maintenance (pay) items within the warranty period of the construction contract;
- (c) Resolution of deficiencies and/or outstanding warranty issues;
- (d) Submission of a final construction report within three months of Substantial Performance of the latest construction contract, including:
 - (i) Summary report – a description of:
 - Services accomplished, including initial and final scope of Project;
 - Final pavement design for new pavements;
 - Amount of concrete repairs, by percentage for pavement rehabilitations;
 - Average thickness of asphalt placement for pavement rehabilitations;
 - Issues encountered and resolutions achieved;
 - Any outstanding services or issue-resolutions required;
 - Final or projected final contract cost;
 - Daily field reports (as an appendix);
 - Field test reports (as an appendix);
 - (ii) Photographs – good quality digital photos using descriptive file names (including year), provided on CD or DVD (notwithstanding pre-construction Site and property condition assessment photos, as per Appendix A – Definition of Professional Consultant Services – Engineering)
 - Typical pre-construction photos
 - Typical post-construction photos
 - Typical construction operation photos (e.g. Concrete pour, paving operation, etc)
 - (iii) Provision of record drawings, where required, in accordance with the Public Works As-Build Drawing Requirements identified in F1, within three months of Substantial performance of the construction contract, unless waived or amended in writing by the Project Manager.

D8.3 The Successful Proponent will be responsible for project reporting and support to the city's Project Manager for project reporting in accordance with the City of Winnipeg's Project Management Manual <http://winnipeg.ca/finance/infrastructureplanning/camp.stm#3> and templates: <http://winnipeg.ca/finance/infrastructureplanning/camp.stm#5>

D9. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

- D9.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Consultant are the property of the City and shall not be appropriated for the Consultants own use, or for the use of any third party.
- D9.2 The Consultant shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Project Manager.
- D9.3 The following shall be confidential and shall not be disclosed by the Consultant to the media or any member of the public without the prior written authorization of the Project Manager;
- (a) information provided to the Consultant by the City or acquired by the Consultant during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D9.4 A Consultant who violates any provision of D9 may be determined to be in breach of Contract.

SUBMISSIONS PRIOR TO START OF SERVICES

D10. AUTHORITY TO CARRY ON BUSINESS

- D10.1 The Consultant 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 Consultant does not carry on business in Manitoba, in the jurisdiction where the Consultant does carry on business, throughout the term of the Contract, and shall provide the Project Manager with evidence thereof upon request.

D11. INSURANCE

- D11.1 The Consultant shall procure and maintain, at its own expense and cost, insurance policies with limits no less than those shown below.
- D11.2 As a minimum, the Consultant shall, without limiting its obligations or liabilities under any other contract with the City, procure and maintain, at its own expense and cost, the following insurance policies:
- (a) Comprehensive or Commercial General Liability Insurance including:
 - (i) an inclusive limit of not less than \$2,000,000 for each occurrence or accident with a minimum \$2,000,000 Products and Completed Operations aggregate and \$5,000,000 general aggregate;
 - (ii) all sums which the Consultant shall become legally obligated to pay for damages because of bodily injury (including death at any time resulting therefrom) sustained by any person or persons or because of damage to or destruction of property caused by an occurrence or accident arising out of or related to the Services or any operations carried on in connection with this Contract;
 - (iii) coverage for Products/Completed Operations, Blanket Contractual, Consultant's Protective, Personal Injury, Contingent Employer's Liability, Broad Form Property Damage, Employees as Additional Insureds, and Non-Owned Automobile Liability;
 - (iv) a Cross Liability clause and/or Severability of Interest Clause providing that the inclusion of more than one Insured shall not in any way affect the rights of any other Insured hereunder in respect to any claim, demand, suit or judgment made against any other Insured;
 - (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Consultant directly or indirectly in the performance of the Service. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or

damage including personal injuries and death resulting from any one accident or occurrence.

- (c) Professional Errors and Omissions Liability Insurance including:
 - (i) an amount not less than \$5,000,000.00 per claim and \$5,000,000.00 in the aggregate.

- D11.2.1 The Consultant's Professional Errors and Omissions Liability Insurance shall remain in force for the duration of the Project and for twelve (12) months after total performance.
- D11.3 The policies required in D11.2(a) shall provide that the City is named as an Additional Insured thereunder and that said policies are primary without any right of contribution from any insurance otherwise maintained by the City.
- D11.4 The Consultant shall require each of its Subconsultants to provide comparable insurance to that set forth under D11.2(a) and D11.2(c).
- D11.5 The Consultant shall provide the Project Manager with a certificate(s) of insurance for itself and for all of its Subconsultants, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Services, but in no event later than the date specified in C4.1 for the return of the executed Contract. Such Certificates shall state the exact description of the Services and provide for written notice in accordance with D11.8.
- D11.6 The Consultant may take out such additional insurance as it may consider necessary and desirable. All such additional insurance shall be at no expense to the City.
- D11.7 All insurance, which the Consultant is required to obtain with respect to this Contract, shall be with insurance companies registered in and licensed to underwrite such insurance in the Province of Manitoba.
- D11.8 The Consultant shall not cancel, materially alter, or cause any policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the City.

SCHEDULE OF SERVICES

D12. COMMENCEMENT

- D12.1 The Successful Proponent shall not commence any Services until it is in receipt of a notice of award from the City authorizing the commencement of the Services.
- D12.2 The Successful Proponent shall not commence any Services until:
 - (a) the Project Manager has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D10;
 - (ii) evidence of the insurance specified in D11;
 - (b) the Successful Proponent has attended a meeting with the Project Manager, or the Project Manager has waived the requirement for a meeting.
- D12.3 The City intends to award this Contract by August 22, 2016.

D13. CRITICAL STAGES

- D13.1 The Successful Proponent shall achieve critical stages of the Services for this Contract in accordance with the following requirements:
 - (a) Project Planning and Preliminary Design by January 15, 2017;
 - (b) Subject to proceeding with the Future Services as described in D15, Substantial Performance of associated construction contract(s) by the end of 2018.

D13.2 Further to C1.1(tt), and subject to proceeding with Future Services as described in D15, Total Performance for this Consulting Services Contract will be after the issuance of all Certificates of Acceptance for associated construction contract(s), which is expected to be two (2) years after Substantial Performance for construction contract(s) and 5 years for acceptance of bridge bearings.

D14. INVOICES

D14.1 Further to C10, the Consultant shall submit monthly invoices to the Project Manager.

D14.2 Invoices must clearly indicate:

- (a) the City's purchase order number;
- (b) project file number;
- (c) a breakdown of:
 - (i) Preliminary Design Fees;
 - (ii) Detailed Design Fees (if applicable);
 - (iii) Contract Administration Fees (if applicable) including hours and hourly rates for Services provided in the invoice period;
 - (iv) Post Construction Service Fees (if applicable) including hours and hourly rates for Services provided in the invoice period;
 - (v) Other Project costs and Subconsultant Fees in accordance with B8.6, D5.17 and D5.30.1, shall be shown separately on monthly reports including the invoiced amount plus an allowed 5% handling fee. Copies of invoices must be attached.
- (d) the amount payable with GST and MRST (as applicable) shown as separate amounts; and
- (e) the Consultant's GST registration number.
- (f) Allowable Disbursements, which shall be identified separately on each invoice.

D14.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

D14.4 Invoices must be submitted to the City of Winnipeg Public Works Department Finance and Administration Division at 102-1155 Pacific Av.

D15. POTENTIAL FUTURE CONTRACT FOR DETAILED DESIGN, CONTRACT ADMINISTRATION AND POST CONSTRUCTION SERVICES

D15.1 The City of Winnipeg, in its sole discretion, may negotiate and enter into a contract with the Consultant to undertake the work associated with the Detailed Design, Contract Administration and Post Construction Services for the Project without a public bid solicitation as identified in B8.2. No compensation will be provided to the proponent for participating in this negotiation. The City will be under no obligation to initiate or enter into a subsequent contract and may choose to issue a public bid solicitation for the Work with respect to the Detailed Design, Contract Administration and Post Construction Services.

PART E - SECURITY CLEARANCE

E1. SECURITY CLEARANCE

- E1.1 Each individual proposed to perform the following portions of the Work:
- (a) any Work on private property;
 - (b) any Work within City facilities other than:
 - (i) an underground structure such as a manhole;
 - (ii) in areas and at times normally open to the public;
 - (c) communicating with residents and homeowners in person or by telephone;
- E1.1.1 Each Individual shall be required to obtain a Criminal Record Search Certificate from the police service having jurisdiction at his/her place of residence. Or
- (a) BackCheck, forms to be completed can be found on the website at: <http://www.backcheck.net/>; or
 - (b) Commissionaires (Manitoba Division), forms to be completed can be found on the website at: <https://www.commissionaires.ca/en/manitoba/home> .
- E1.2 The following is a link to information for obtaining the Criminal Record Search certificate from the City of Winnipeg Police Service. http://winnipeg.ca/police/pr/info_request.stm
- E1.2.1 The original Criminal Record Search Certificate (Form P-253) will be provided by the Winnipeg Police Service to the individual applicant. The original has a validation sticker from the Winnipeg Police Service in the top right hand corner. The applicant shall:
- (a) Provide the original Criminal Record Search Certificate (Form P-253) to the Project Manager.
- E1.3 Prior to the award of Contract, and during the term of the Contract if additional or replacement individuals are proposed to perform Work, the Consultant shall supply the Project Manager with a Criminal Record Search Certificate obtained not earlier than one (1) year prior to the Submission Deadline, or a certified true copy thereof, for each individual proposed to perform such Work.
- E1.4 Any individual for whom a Criminal Record Search Certificate is not provided, or for whom a Criminal Record Search Certificate indicates any convictions or pending charges related to property offences or crimes against another person will not be permitted to perform any Work specified in E1.1.
- E1.5 Any Criminal Record Search Certificate obtained thereby will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.
- E1.6 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated criminal records search. Any individual who fails to provide a satisfactory Criminal Record Search Certificate as a result of a repeated criminal records search will not be permitted to continue to perform any Work specified in E1.1.

PART F - SPECIFICATIONS

F1. AS-BUILT DRAWING REQUIREMENTS FOR PUBLIC WORKS PROJECTS (MAY 2015)

F1.1 AS-BUILT drawings are required for all Public Works construction projects except for Regional Street Mill & Fill projects and TBO projects, unless specifically declined, in writing, by the Project Manager. AS-BUILT drawing submissions are required for ALL Regional Street renewals, Local Street reconstructions, and any addition to infrastructure inventory such as new streets, street widening's and/or realignments as well as new multi-use paths. Upon confirmation with the Streets Project Engineer, AS-BUILT drawings may not be required for Regional Street Mill & Fill works or Local Street rehabilitations.

F1.1.1 Though drawings may not be required, please note the location of any new sidewalks on existing streets or intersection improvements in your final project report.

F1.2 Initial submission of AS-BUILT drawings must be received no later than three months after Substantial Performance.

F1.2.1 If Substantial Performance will not be granted prior to year-end, contact Public Works to establish drawing submission requirements (i.e. for snow clearing updates).

F1.3 The drawings are to contain the following information, and be in the format specified below.

F1.4 Drawings are to:

- (a) Be in the AutoCAD format and indicate the version used
- (b) Be AS-BUILT with dimensions corrected in both TEXT and GRAPHICS
- (c) Show pavement dimensions to the "back of curb" (edge of pavement)
- (d) Be installed as to the method the data was collected by i.e. Total Station
- (e) Be produced in the NAD 83, UTM, ZONE 14, (Global co-ordinate system) Note: Public Works Engineering will provide the Legal Streets Base Layer for the required drawings
- (f) Indicate if a "scale factor" was or was not used, and if used the scale factor used is to be indicated
- (g) Show all bore holes and their UTM coordinates
- (h) Include, where applicable:
 - (i) Pavement cross-section(s)
 - (ii) Asphalt Supplier
 - (iii) Concrete Supplier
 - (iv) Geotextile used – type, manufacturer & supplier
 - (v) Sub-drains used – type, manufacturer & supplier

F1.5 In addition:

- (a) Drawing colour and line type are to be produce with the following (8) basic layers indicated on the AS-BUILTS(none of which are to include text), as well, with a list and description of additional layers used:

Layer Names:

- | | |
|-------------------|--|
| 1) Street Surface | 5) Ramp Curb |
| 2) Walk | 6) Dimensions (to include all dimensions in the drawing) |
| 3) Alley | 7) Drainage Inlets |
| 4) Approach | 8) Elevations (min. all hi & low points) |

F1.6 In addition, please include a PDF copy of all as-built drawings

F1.7 Two (2) copies of the AutoCAD Digital Drawings and PDF copies shall be written to a compact disk (CD) or DVD. Both copies shall be clearly labelled identifying the Project number.

F1.8 As-built hard copy must be on Mylar paper and must have a signed Engineer's seal.

F1.9 Original signed Mylar copy and the two (2) CD's shall be sent by mail or courier to:

Permits & Plan Approval – GIS Support Services
City of Winnipeg
Public Works Department
106-1155 Pacific Av
Winnipeg, MB R3E 3P1

F2. SEWER TELEVISION GUIDELINES FOR PUBLIC WORKS PROJECTS (2015)

F2.1 Closed Circuit Television (CCTV) inspection and assessment is required of all combined, wastewater, land drainage, storm relief sewers and manholes to confirm any sewer repairs required in the right-of-way within the limits of the street renewal.

F2.2 The criteria provided are general guidelines and are not intended to replace sound municipal engineering judgement specific to the individual Project scope and/or location.

F2.3 The available sewer televising information is contained within the City of Winnipeg's Sewer Management System (SMS) application.

F2.4 Confirm televising requirements with City Project Manager.

F2.5 CCTV inspection general guidelines:

- (a) CW 2140 Sewer and Manhole Cleaning and CW 2145 Sewer and Manhole Inspection shall apply;
- (b) Confirm CCTV requirements with Water & Waste Department for sewers 1050 mm and larger in diameter;
- (c) Televising sewers and manholes if no previous CCTV inspections have been completed;
- (d) Re-televising sewers with a Structural Performance Grade (SPG) of 3 or higher that have not been televised in the previous 5 years;
- (e) Sewers located more than two metres from the curb line (i.e. not located under pavement) do not need to be re-televised if previous CCTV inspection data exist. If a sewer repair or renewal requiring excavation is noted, contact the WWD;
- (f) Televising sewers on all street reconstructions, regardless of location of the sewer (within the right-of-way) with a Structural Performance Grade (SPG) of 3 or higher that have not been televised in the previous 5 years;
- (g) Televising sewers if the street exhibits obvious distress at/along the underground plant;
- (h) Televising all CB leads to be reused, as part of a street reconstruction, pavement rehabilitation and mill and fill rehabilitation.
- (i) CCTV inspection not required on Mill and Fill Pavement Rehabilitation Method and Thin Bituminous Overlay (TBO) projects unless the street exhibits obvious distress at/along the underground plant

F2.6 For any uncertain situations and/or locations, contact the Project Manager.

F2.7 The Consultant is required to coordinate the sewer-televising contract and communicate the results to the Water & Waste Department. Provide Water and Waste Department with the sewer inspections and corresponding defects data. Any repairs or other activities deemed necessary from these inspections must be coordinated with the Water & Waste Department.

F2.8 Provide post repair manhole to manhole inspection (CW 2145) to the Water and Waste Department

F3. GEOTECHNICAL INVESTIGATION REQUIREMENTS FOR PUBLIC WORKS PROJECTS (SEPTEMBER 2015)

F3.1 Fieldwork

- (a) Clear all underground services at each test-hole location.
- (b) On most projects, test-holes are required every 50 metres with a minimum of three (3) test holes per Project Location. For street projects greater than 500 metres, test holes may be taken every 100 m. More or fewer test-holes may be required depending upon known Site conditions – confirm with the Project Manager.
- (c) Record location of test-hole (offset from curb, distance from cross street and house number).
- (d) Drill 150 mm-diameter cores in pavement.
- (e) Drill 125 mm-diameter test-holes into fill materials and subgrade.
- (f) If a service trench backfilled with granular materials is encountered, another hole shall be drilled to define the existing sub-surface conditions.
- (g) Test-holes shall be drilled to depth of 2 m \pm 150 mm below surface of the pavement.
- (h) Recover pavement core sample and representative samples of soil (fill materials, pavement structure materials and subgrade).
- (i) Measure and record pavement section exposed in the test-hole (thickness of concrete or asphalt and different types of pavement structure materials).
- (j) Pavement structure materials to be identified as crushed limestone or granular fill and the maximum aggregate size of the material (20 mm, 50 mm or 150 mm).
- (k) Log soil profile for the subgrade.
- (l) Representative samples of soil must be obtained at the following depths below the bottom of the pavement structure materials – 0.1 m, 0.4 m, 0.7 m, 1.0 m, 1.3 m, 1.6 m, etc. Ensure a sample is obtained from each soil type encountered in the test-hole.
- (m) Make note of any water seepage into the test-hole.
- (n) Backfill test-hole with native materials and additional granular fill, if required. Patch pavement surface with hot mix asphalt or high strength durable concrete mix.
- (o) Return core sample from the pavement and soil samples to the laboratory.

F3.2 Lab Work

- (a) Test all soil samples for moisture content.
- (b) Photograph core samples recovered from the pavement surface.
- (c) Conduct tests for plasticity index and hydrometer analysis on selected soil samples which are between 0.5 m and 1 m below top of pavement (this is the sub-grade on which the pavement and sub-base will be built). The selection will be based upon visual classification and moisture content test results, with a minimum of one sample of each soil type per street to be tested.
- (d) Prepare test-hole logs and classify subgrade (based on hydrometer) as follows:
 - < 30% silt - classify as clay
 - 30% - 50% silt - classify as silty clay
 - 50% - 70% silt - classify as clayey silt
 - > 70% silt - classify as silt
- (e) For Pavement Rehabilitations and Mill and Fill Pavement Rehabilitation Method pavement cores may be required. Contact the City's Project Manager to confirm requirements.
- (f) For any uncertain situations and/or locations, or clarification of these requirements, contact the Project Manager.

F4. GUIDELINE FOR MILL AND FILL PAVEMENT REHABILITATION METHOD (2015)

F4.1 The Mill and Fill Pavement Rehabilitation Method Guidelines are not intended to replace sound engineering judgement.

F4.2 Purpose of Treatment

- (a) The Mill and Fill treatment is a preventative method to extend pavement life, improve ride and drainage and correct rutting.
- (b) Applicable to existing concrete streets with asphalt overlay in fair condition.

F4.3 Scope of Mill and Fill work includes planing, minimal curb, sidewalk and pavement repairs, minor adjustments and placement of asphalt overlay in the least possible time and inconvenience to the public

F4.4 Selection Criteria

- (a) Pavement condition. Can be a combination of all or part of the following:
 - (i) General Condition – Fair as defined by the Pavement Management Models (PMM).
 - (ii) Slight to moderate cracking.
 - (iii) Fair pavement joints as defined by PMM.
 - (iv) Fair to good drainage
 - (v) Rutting greater than 15mm
 - (vi) Defined by Public Works asset management system and confirmed by Site inspection

F4.5 Engineering and Planning Summary

- (a) Planning
 - (i) Develop traffic management plans for approval by the Traffic Studies Engineer and the City's Project Manager.
- (b) Underground works
 - (i) Coordinate the review of sewer and water by Water and Waste to identify problems that must be corrected and to coordinate underground rehabilitation projects if required
 - (ii) Inspection and general review of condition of existing catchbasins, manholes and any other structures in the pavement that may affect the mill and fill design life.
 - (iii) CCTV inspection of all CB leads to be reused.
 - (iv) CCTV inspection of sewers not required.
 - (v) Coordinate the operation and checking of mainline water valves by Water and Waste
 - (vi) Advising on requirement for coring of the pavement subject to the City's Project Manager's approval.
- (c) Utilities
 - (i) Renewal of street lighting, gas, MTS and signal plant not included
- (d) Design life
 - (i) 8 to 10 Years

F4.6 Construction Method Summary

- (a) Joint and slab repairs
 - (i) Type A repairs for catchbasins and manholes where adjustments are required
 - (ii) Final Concrete Restoration of any Temporary Utility Cuts.
 - (iii) Localized joint and slab replacement (areas to be repaired must be unstable and have extensive cracking). Total replacement area less than 5% of total pavement area

- (iv) All repairs shall be completed utilizing 24 hour Concrete for Early Opening
- (b) Joint sealing
 - (i) Not required prior to placement of asphalt overlay
 - (ii) Include Reflective Crack Sealing during Warranty Period
- (c) Planing
 - (i) Plane existing asphalt overlay 40mm to 60mm
 - (ii) Plane headers at tie-ins to existing asphalt overlays
 - (iii) Planing should be followed immediately with asphalt paving where possible. Normally traffic not to travel on the milled surface.
 - (iv) Planed pavement (normally intersections or other situations approved by the City's Project Manager) should not be open to traffic for extended periods (2 days without concrete repairs and 5 days with concrete repairs)
- (d) Adjustments
 - (i) Design should accommodate existing appurtenances to avoid adjustments
 - (ii) For existing curb and gutter inlets, only adjust if required to match design asphalt overlay elevation
 - (iii) Existing curb inlets with inlet boxes and existing gutter inlets shall be replaced with curb and gutter inlets where possible.
 - (iv) Adjust manholes and catch basins to match proposed grade and cross-fall
 - (v) Design asphalt overlay to match Hydro and MTS manholes
 - (vi) For manholes or catchbasins that require adjustment, remove and replace pavement and set 50mm below design asphalt overlay elevation
 - (vii) Replace damaged covers and lifter rings
 - (viii) Install lifter rings on manholes and catchbasins to accommodate design asphalt overlay elevation, use existing where possible
 - (ix) Adjust or Install Water Valve Extensions to accommodate design asphalt overlay elevation, use existing where possible
- (e) Curbs and sidewalk renewal
 - (i) Replace missing curbs and renew curbs that are severely deteriorated or dangerous
 - (ii) Finished curb height
 - ◆ Preferred – 100mm
 - ◆ Minimum – 75mm
 - (iii) Replace existing barrier curb at Intersections and approaches with modified barrier curb only when curb condition requires replacement.
 - (iv) Replace or install curb ramps where:
 - ◆ Missing curbs
 - ◆ Severely deteriorated condition
 - ◆ Correction of orientation
 - ◆ New ramps replacing barrier curb
 - ◆ Design asphalt overlay elevation
 - (v) Install Detectable Warning Surface Tiles
 - (vi) Localized sidewalk repairs, only when sunken or heaved locations and vertical faults or horizontal cracks or joints greater than 10mm. Locations must be approved by Public Works.
- (f) Approaches
 - (i) Place asphalt overlay as required to match design asphalt overlay elevation
- (g) Boulevard restoration
 - (i) Restore boulevard at replaced curb and sidewalk with topsoil and seed.

- (ii) Restoration to be accepted at final inspection without formal maintenance inspection.
- (iii) All boulevard restoration must be completed prior to placement of asphalt overlay.
- (h) Placement of asphalt overlay
 - (i) Preferably place in one lift, 50mm thickness (± 5 mm).
 - (ii) Scratch coat to be placed in localized areas to correct poor drainage. Where final curb height allows, place up to 75mm, in two lifts, with final lift being 50mm.
 - (iii) In general, match previous design
 - (iv) New curb must be in place for a minimum of 1 day prior to placement of asphalt overlay
 - (v) Longitudinal grade:
 - ◆ Minimum – 0.3%
 - ◆ Preferred – 0.4 to 0.5%
 - (vi) Pavement cross fall:
 - ◆ Minimum – 1.5%
 - ◆ Preferred – 2.0%