



**THE CITY OF WINNIPEG**

# **TENDER**

**TENDER NO. 317-2020**

**2020 LOCAL STREET RENEWAL PROGRAM – AIKINS STREET, ATLANTIC  
AVENUE AND VARIOUS OTHER LOCATIONS**

## TABLE OF CONTENTS

### PART A - BID SUBMISSION

- Form A: Bid/Proposal
- Form B: Prices
- Form G1: Bid Bond and Agreement to Bond

### PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Enquiries	1
B4. Confidentiality	1
B5. Addenda	1
B6. Substitutes	2
B7. Bid Components	3
B8. Bid/Proposal	3
B9. Prices	4
B10. Disclosure	4
B11. Conflict of Interest and Good Faith	4
B12. Qualification	6
B13. Bid Security	7
B14. Opening of Bids and Release of Information	7
B15. Irrevocable Bid	8
B16. Withdrawal of Bids	8
B17. Evaluation of Bids	8
B18. Award of Contract	8

### PART C - GENERAL CONDITIONS

C0. General Conditions	1
------------------------	---

### PART D - SUPPLEMENTAL CONDITIONS

#### General

D1. General Conditions	1
D2. Scope of Work	1
D3. Contract Administrator	1
D4. Contractor's Supervisor	2
D5. Notices	2
D6. Furnishing of Documents	2

#### Submissions

D7. Authority to Carry on Business	2
D8. Safe Work Plan	2
D9. Insurance	3
D10. Contract Security	3
D11. Subcontractor List	4
D12. Detailed Work Schedule	4

#### Schedule of Work

D13. Commencement	4
D14. Working Days	5
D15. Restricted Work Hours	5
D16. Work By Others	5
D17. Sequence of Work	5
D18. Substantial Performance	6
D19. Total Performance	6
D20. Liquidated Damages	6
D21. COVID-19 Schedule Delays	6
D22. Scheduled Maintenance	7

**Control of Work**

D23. Job Meetings	7
D24. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	8
D25. The Workplace Safety and Health Act (Manitoba) – Qualifications	8

**Measurement and Payment**

D26. Payment	8
--------------	---

**Warranty**

D27. Warranty	8
---------------	---

**Third Party Agreements**

D28. Funding and/or Contribution Agreement Obligations	8
Form H1: Performance Bond	11
Form H2: Labour and Material Payment Bond	13
Form J: Subcontractor List	15

**PART E - SPECIFICATIONS**

**General**

E1. Applicable Specifications and Drawings	1
E2. Mobilization and Demobilization Payment	1
E3. Geotechnical Report	3
E4. Protection of Existing Trees	3
E5. Traffic Control	3
E6. Traffic Management	4
E7. Refuse and Recycling Collection	4
E8. Water Obtained From the City	5
E9. Surface Restorations	5
E10. Supply and Installation of Pavement Repair Fabric	6

**Appendix 'A' - Geotechnical Report**

**Appendix 'B' – Minimum Safety Requirements for Contractors Working on CP Property in Canada**

## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 2020 LOCAL STREET RENEWAL PROGRAM – AIKINS STREET, ATLANTIC AVENUE AND VARIOUS OTHER LOCATIONS

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, May 12, 2020.

B2.2 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 D3.1.

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

B3.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Tender will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B3.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Tender will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B3.5 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.

B3.6 Any enquiries concerning submitting through MERX should be addressed to:  
MERX Customer Support  
Phone: 1-800-964-6379  
Email: merx@merx.com

### **B4. CONFIDENTIALITY**

B4.1 Information provided to a Bidder by the City or acquired by a Bidder 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 Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:

- (a) was known to the Bidder before receipt hereof; or
- (b) becomes publicly known other than through the Bidder; or
- (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B4.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Tender to the media or any member of the public without the prior written authorization of the Contract Administrator.

### **B5. ADDENDA**

B5.1 The Contract Administrator may, at any time prior to the Submission deadline, issue addenda correcting errors, discrepancies or omissions in the Tender, or clarifying the meaning or intent of any provision therein.

- B5.2 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.
- B5.3 Addenda will be available on the MERX website at [www.merx.com](http://www.merx.com).
- B5.4 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B5.5 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.
- B5.6 Notwithstanding B3, enquiries related to an Addendum may be directed to the Contract Administrator indicated in D3.

## **B6. SUBSTITUTES**

- B6.1 The Work is based on the Plant, Materials and methods specified in the Tender.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B6.4 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 Plant, Material or method 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 proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
  - (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 proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her 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.
- B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Bidder who requested approval of the substitute.
- B6.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.

- B6.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her 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 B17.
- B6.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

## **B7. BID COMPONENTS**

- B7.1 The Bid shall consist of the following components:
- (a) Form A: Bid/Proposal;
  - (b) Form B: Prices;
  - (c) Form G1: Bid Bond and Agreement to Bond.
- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 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.
- B7.4 The Bid shall be submitted electronically through MERX at [www.merx.com](http://www.merx.com).
- B7.4.1 Bids will **only** be accepted electronically through MERX.
- B7.5 Bidders are advised that inclusion of terms and conditions inconsistent with the Tender document, including the General Conditions, will be evaluated in accordance with B17.1(a).

## **B8. BID/PROPOSAL**

- B8.1 The Bidder shall complete Form A: Bid/Proposal, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid/Proposal shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her 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/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid/Proposal, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B8.4 Paragraph 13 of Form A: Bid/Proposal shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her 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;
- (d) if the Bidder is carrying on business under a name other than his/her 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.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid/Proposal should be entered below such signatures.

B8.5 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.

## **B9. PRICES**

B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B9.1.1 Prices stated on Form B: Prices shall not include any costs which may be incurred by the Contractor with respect to any applicable funding agreement obligations as outlined in D28. Any such costs shall be determined in accordance with D28.

B9.2 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.

B9.3 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.

B9.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B9.5 The Bidder shall enter the Total Bid Price from Form B: Prices into the Total Bid Price field in MERX.

B9.5.1 Bidders are advised that the calculation indicated in B17.4 will prevail over the Total Bid Price entered in MERX.

## **B10. DISCLOSURE**

B10.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.

B10.2 The Persons are:

- (a) N/A

## **B11. CONFLICT OF INTEREST AND GOOD FAITH**

B11.1 Further to C3.2, Bidders, by responding to this Tender, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.

B11.2 Conflict of Interest means any situation or circumstance where a Bidder or employee of the Bidder proposed for the Work has:

- (a) other commitments;
- (b) relationships;

- (c) financial interests; or
- (d) involvement in ongoing litigation;

that could or would be seen to:

- (i) exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Bids or award of the Contract; or
  - (ii) compromise, impair or be incompatible with the effective performance of a Bidder's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of its participation in the Tender process or the Work; or
  - (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the Tender process) of strategic and/or material relevance to the Tender process or to the Work that is not available to other bidders and that could or would be seen to give that Bidder an unfair competitive advantage.

B11.3 In connection with its Bid, each entity identified in B11.2 shall:

- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Work;
- (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the Tender process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Contract Administrator; and
- (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.

B11.4 Without limiting B11.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Bidder to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.

B11.5 Without limiting B11.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:

- (a) disqualify a Bidder that fails to disclose a perceived, potential or actual Conflict of Interest of the Bidder or any of its employees proposed for the Work;
- (b) require the removal or replacement of any employees proposed for the Work that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
- (c) disqualify a Bidder or employees proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B11.4 to avoid or mitigate a Conflict of Interest; and
- (d) disqualify a Bidder if the Bidder, or one of its employees proposed for the Work, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.



B11.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

## **B12. QUALIFICATION**

B12.1 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; 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.

B12.2 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 Division website at <https://www.winnipeg.ca/matmgt/Templates/files/debar.pdf>

B12.3 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
- (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);

B12.4 Further to B12.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:

- (a) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) in the form of:
  - (i) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
  - (ii) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
- (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>).

B12.5 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.

B12.6 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.

### **B13. BID SECURITY**

- B13.1 A sample Bid Bond and Agreement to Bond are available on The City of Winnipeg, Corporate Finance, Materials Management Division website at <https://www.winnipeg.ca/MatMgt/templates/files/eBidsecurity.pdf>.
- B13.2 The Bidder shall provide digital bid security in the form of a bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in the form included in the Bid Submission (Form G1: Bid Bond and Agreement to Bond).
- B13.3 Bid security shall be submitted in an electronic or digital format meeting the following criteria:
- (a) The version submitted by the Bidder must have valid digital signatures and seals;
  - (b) The version submitted by the Bidder must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures; all digital seals; with the surety company, or an approved verification service provider of the surety company.
  - (c) The version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.
  - (d) The verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
  - (e) The results of the verification must provide a clear, immediate and printable indication of pass or fail regarding B13.3(a).
- B13.4 Bonds failing the verification process will not be considered to be valid and the bid shall be determined to be non-responsive in accordance with B17.1(a).
- B13.5 Bonds passing the verification process will be treated as original and authentic.
- B13.5.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.
- B13.6 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly formed with the successful Bidder and the contract securities are furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.
- B13.7 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Tender.

### **B14. OPENING OF BIDS AND RELEASE OF INFORMATION**

- B14.1 Bids will not be opened publicly.
- B14.2 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 MERX website at [www.merx.com](http://www.merx.com).
- B14.3 After award of Contract, the name(s) of the successful Bidder(s) and their Contract amount(s) will be available on the MERX website at [www.merx.com](http://www.merx.com).
- B14.4 The Bidder is advised that any information contained in any Bid may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).
- B14.4.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Bid Submission identified by the Bidder as such in accordance with and by reference to

Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.

**B15. IRREVOCABLE BID**

- B15.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.
- B15.2 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 until a Contract for the Work has been duly formed and the contract securities have been furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid/Proposal.

**B16. WITHDRAWAL OF BIDS**

- B16.1 A Bidder may withdraw his/her Bid without penalty prior to the Submission Deadline.

**B17. EVALUATION OF BIDS**

- B17.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Tender, or acceptable deviation therefrom (pass/fail);
  - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B12 (pass/fail);
  - (c) Total Bid Price;
  - (d) economic analysis of any approved alternative pursuant to B6.
- B17.2 Further to B17.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid 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.
- B17.3 Further to B17.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is qualified.
- B17.4 Further to B17.1(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.
- B17.4.1 Bidders are advised that the calculation indicated in B17.4 will prevail over the Total Bid Price entered in MERX.

**B18. AWARD OF CONTRACT**

- B18.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B18.2 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 qualified, and the Bids are determined to be responsive.
- B18.2.1 Without limiting the generality of B18.2, 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.

- B18.3 If funding for the Work is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, Bidders are advised that the terms of D28 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.
- B18.4 Where an award of Contract is made by the City, the award shall be made to the qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B17.
- B18.4.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

## PART C - GENERAL CONDITIONS

### C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2020-01-31) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* 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](http://www.winnipeg.ca/matmgt/gen_cond.stm)
- C0.2 A reference in the Tender to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Construction*.

## **PART D - SUPPLEMENTAL CONDITIONS**

### **GENERAL**

#### **D1. GENERAL CONDITIONS**

D1.1 In addition to the General Conditions for Construction, these Supplemental Conditions are applicable to the Work of the Contract.

#### **D2. SCOPE OF WORK**

D2.1 The Work to be done under the Contract shall consist of:

- (a) Pavement Rehabilitation
  - (i) Aikins Street – McAdam Avenue to Enniskillen Avenue
  - (ii) Atlantic Street – Duke Street to McPhillips Street
  - (iii) Bannerman Avenue – Duke Street to McPhillips Street
  - (iv) Cathedral Avenue – Rail Crossing West of Sinclair Street to Arlington Street
  - (v) Duke Street – Bannerman Avenue to Polson Avenue
  - (vi) Tanner Street – End South of Templeton Avenue to Margaret Avenue

D2.2 The major components of the Work are as follows:

- (a) Pavement Rehabilitation
  - (i) Renewal of miscellaneous pavement slabs (150 mm reinforced concrete pavement)
  - (ii) Placement of pavement repair fabric at various locations
  - (iii) Renewal of existing curb
  - (iv) Renewal of existing sidewalk
  - (v) Construction of new sidewalk (Aikins Street both boulevards from McAdam Avenue to Alley to the North)
  - (vi) Adjustment of catch basins and manholes
  - (vii) Installation of new catch basins/catch pits and sewer service/drainage connection pipe
  - (viii) Placement of asphalt overlay (Average Thickness 85 mm)
  - (ix) Adjustment of paving stones at various locations
  - (x) Boulevard restoration

#### **D3. CONTRACT ADMINISTRATOR**

D3.1 The Contract Administrator is AECOM Canada Ltd., represented by:

Blair Cockrell  
Project Coordinator  
Telephone No. (204) 928-8431  
Email Address blair.cockrell@aecom.com

D3.2 At the pre-construction meeting, Blair Cockrell will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

#### **D4. CONTRACTOR'S SUPERVISOR**

- D4.1 At the pre-construction meeting, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.
- D4.2 At least two (2) Business Days prior to the commencement of any Work on the site, the Contractor shall provide the Contract Administrator with a phone number where the supervisor identified in D4.1 or an alternate can be contacted twenty-four (24) hours a day to respond to an emergency.

#### **D5. NOTICES**

- D5.1 Except as provided for in C22.4, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid/Proposal.
- D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator identified in D3.
- D5.3 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 facsimile number:

The City of Winnipeg  
Legal Services Department  
Attn: Director of Legal Services  
Facsimile No.: 204-947-9155

#### **D6. FURNISHING OF DOCUMENTS**

- D6.1 Upon award of the Contract, the Contractor will be provided with five (5) complete sets of the Tender. If the Contractor requires additional sets of the Tender, they will be supplied to him/her at cost.

#### **SUBMISSIONS**

#### **D7. AUTHORITY TO CARRY ON BUSINESS**

- D7.1 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.

#### **D8. SAFE WORK PLAN**

- D8.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.
- D8.2 The Safe Work Plan shall be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/safety/default.stm>

D8.3 Notwithstanding B12.4 at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated COR Certificate or Annual Letter of good Standing. A Contractor, who fails to provide a satisfactory COR Certificate or Annual Letter of good Standing, will not be permitted to continue to perform any Work.

## **D9. INSURANCE**

D9.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least five million dollars (\$5,000,000.00) per occurrence providing coverage for bodily injury, property damage, personal injury, advertising injury, with the City and Canadian Pacific Railway to be added as additional insureds, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability, broad form property damage coverage and products and completed operations, and sudden and accidental pollution liability coverage, to remain in place at all times during the performance of the Work and throughout the warranty period.
- (b) Automobile liability insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than two million dollars (\$2,000,000) inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
- (c) An all risks Installation Floater carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.
- (d) Environmental impairment insurance in the amount of at least two million dollars (\$2,000,000) per occurrence and five million dollars (\$5,000,000) in the aggregate insuring against claims covering personal injury, death or property damage, indemnifying and protecting Canadian Pacific Railway, their respective employees, servants, agents, contractors, invitees or licensees. Such policy shall include the City and Canadian Pacific Railway, their employees, servants, and agents as additional insureds and include a cross liability clause.

D9.2 The Contractor shall ensure that any and all sub-contractors hired in connection with the work provide and maintain comparable insurances to that outlined in Section D9.1(a) and D9.1(b). Insurances are to be maintained during the performance of the Work and throughout the warranty period.

D9.3 Deductibles shall be borne by the Contractor.

D9.4 The Contractor shall provide the City Solicitor with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than the date specified in the C4.1 for the return of the executed Contract Documents, as applicable.

D9.5 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D9.6 All policies shall be taken out with insurers duly licensed to carry on business in the Province of Manitoba.

## **D10. CONTRACT SECURITY**

D10.1 The Contractor shall provide and maintain the performance bond and the labour and material payment bond until the expiration of the warranty period in the form of:

- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; and



- (b) a labour and material payment bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H2: Labour and Material Payment Bond), in an amount equal to fifty percent (50%) of the Contract Price.

- D10.2 The Contractor shall provide the City Solicitor with the required performance and labour and material payment bonds within seven (7) Calendar Days of notification of the award of the Contract by way of an award letter and prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.
- D10.3 The Contractor shall, as soon as practicable after entering into a contract with a Subcontractor:
- (a) give the Subcontractor written notice of the existence of the labour and material payment bond in D10.1(b); and
  - (b) post a notice of the bond and/or a copy of that bond in a conspicuous location at the Site of the Work.

#### **D11. SUBCONTRACTOR LIST**

- D11.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at or prior to a pre-construction meeting, or at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the C4.1 for the return of the executed Contract Documents, if applicable.

#### **D12. DETAILED WORK SCHEDULE**

- D12.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the General Conditions for the return of the executed Contract Documents, as applicable.
- D12.2 The detailed work schedule shall consist of the following:
- (a) a Gantt chart for the Work;  
acceptable to the Contract Administrator.
- D12.3 Further to D12.2(a), the Gantt chart shall show the time on a weekly basis, required to carry out the Work of each trade, or specification division. The time shall be on the horizontal axis, and the type of trade shall be on the vertical axis.

### **SCHEDULE OF WORK**

#### **D13. COMMENCEMENT**

- D13.1 The Contractor shall not commence any Work until he/she is in receipt of an award letter from the Award Authority authorizing the commencement of the Work.
- D13.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
    - (i) evidence of authority to carry on business specified in D7;
    - (ii) evidence of the workers compensation coverage specified in C6.15;
    - (iii) the twenty-four (24) hour emergency response phone number specified in D4.2.
    - (iv) the Safe Work Plan specified in D8;
    - (v) evidence of the insurance specified in D9;
    - (vi) the contract security specified in D10;

- (vii) the subcontractor list specified in D11; and
  - (viii) the detailed work schedule specified in D12.
- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D13.3 The Contractor shall not commence the Work on the Site before July 27, 2020, and shall commence the Work on Site no later than August 4, 2020, as directed by the Contract Administrator and weather permitting.

D13.4 The City intends to award this Contract by June 12, 2020.

D13.4.1 If the actual date of award is later than the intended date, the dates specified for Substantial Performance and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

#### **D14. WORKING DAYS**

D14.1 Further to C1.1(tt);

D14.1.1 The Contract Administrator will determine daily if a Working Day has elapsed and will record his/her assessment. On a weekly basis the Contract Administrator will provide the Contractor with a record of the Working Days assessed for the preceding week. The Contractor shall sign each report signifying that he/she agrees with the Contract Administrator's determination of the Working Days assessed for the report period.

D14.1.2 Work done to restore the Site to a condition suitable for Work, shall not be considered "work" as defined in the definition of a Working Day.

D14.1.3 When the Work includes two or more major types of Work that can be performed under different atmospheric conditions, the Contract Administrator shall consider all major types of Work in determining whether the Contractor was able to work in assessing Working Days.

#### **D15. RESTRICTED WORK HOURS**

D15.1 Further to clause 3.10 of CW 1130, the Contractor shall require written permission forty-eight (48) hours in advance from the Contract Administrator for any work to be performed between 2000 hours and 0700 hours, or on Saturdays, Sundays, Statutory Holidays and or Civic Holidays.

#### **D16. WORK BY OTHERS**

D16.1 Work by others on or near the Site will include but not necessarily be limited to:

- (a) Canada Post – Adjusting/relocating community mailboxes on Aikins Street, Cathedral Avenue, Duke Street and Tanner Street;
- (b) Canadian Pacific Railway – Provision of flagging services at the railway crossing on Cathedral Avenue west of Sinclair Street when Contractor's operations are taking place within fifty (50) feet of the tracks.

#### **D17. SEQUENCE OF WORK**

D17.1 Further to C6.1, the sequence of work shall comply with the following:

D17.1.1 Providing that the Work on each street is completed in a similar order to the order that the Work was commenced in, the Contractor will be permitted to have a maximum of three (3) streets under construction at any one time. Completion of a street means that all of the necessary concrete, asphalt including approaches and landscaping Work is completed to the satisfaction of the Contract Administrator.

- D17.1.2 Where the Contractor utilizes two (2) or more crews that work independently on the same major component of the Work as identified in D2, the Contract Administrator may approve an increase to the maximum number of streets under construction at any time.
- D17.1.3 Placing the topsoil and finished grading of all boulevard and median areas shall be completed prior to commencing construction of asphaltic concrete overlays, including scratch courses.

#### **D18. SUBSTANTIAL PERFORMANCE**

- D18.1 The Contractor shall achieve Substantial Performance within forty (40) consecutive Working Days of the commencement of the Work as specified in D13.
- D18.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be re-inspected.
- D18.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

#### **D19. TOTAL PERFORMANCE**

- D19.1 The Contractor shall achieve Total Performance within forty-five (45) consecutive Working Days of the commencement of the Work as specified in D13.
- D19.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be re-inspected.
- D19.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

#### **D20. LIQUIDATED DAMAGES**

- D20.1 If the Contractor fails to achieve Substantial Performance or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:
- (a) Substantial Performance – Three Thousand dollars (\$3,000.00);
  - (b) Total Performance – One Thousand dollars (\$1,000.00).
- D20.2 The amounts specified for liquidated damages in D20.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve Substantial Performance or Total Performance by the days fixed herein for same.
- D20.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

#### **D21. COVID-19 SCHEDULE DELAYS**

- D21.1 The City acknowledges that the schedule for this Contract may be impacted by the COVID-19 pandemic. Commencement and progress of the Work shall be performed by the Contractor with due consideration to the health and safety of workers and the public and directives from

health authorities and various levels of government, and in close consultation with the Contract Administrator.

- D21.2 If the Contractor is delayed in the performance of the Work by reason of the COVID-19 pandemic, the Work schedule may be adjusted by a period of time equal to the time lost due to such delay and costs related to such delay will be determined as identified herein.
- D21.3 A minimum of seven (7) Calendar Days prior to the commencement of Work, the Contractor shall declare whether COVID-19 will affect the start date. If the Contractor declares that COVID-19 will affect the start date, the Contractor shall provide sufficient evidence that the delay is directly related to COVID-19, including but not limited to evidence related to availability of staff, availability of Material or work by others.
- D21.4 For any delay related to COVID-19 and identified after Work has commenced, the Contractor shall within seven (7) Calendar Days of becoming aware of the anticipated delay declare the additional delay and shall provide sufficient evidence as indicated in D21.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D21.5 The Work schedule, including the durations identified in D18 to D19 where applicable, will be adjusted to reflect delays accepted by the Contract Administrator. No additional payment will be made for adjustment of schedules except where seasonal work, not previously identified in the Contract, is carried over to the following construction season.
- D21.6 Where Work not previously identified is being carried over solely as a result of delays related to COVID-19, as confirmed by the Contract Administrator, the cost of temporary works to maintain the Work in a safe manner until Work recommences, will be considered by the Contract Administrator. Where the Work is carried over only partially due to COVID-19, a partial consideration of the cost of temporary works will be considered by the Contract Administrator.
- D21.7 Any time or cost implications as a result of COVID-19 and in accordance with the above, as confirmed by the Contract Administrator, shall be documented in accordance with C7.

## **D22. SCHEDULED MAINTENANCE**

- D22.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Reflective Crack Maintenance as specified in CW 3250-R7;
  - (b) Sod Maintenance as specified in CW 3510-R9.
- D22.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

## **CONTROL OF WORK**

### **D23. JOB MEETINGS**

- D23.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D23.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

**D24. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)**

D24.1 Further to C6.26, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

**D25. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS**

D25.1 Further to B12.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B12.4.

**MEASUREMENT AND PAYMENT**

**D26. PAYMENT**

D26.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

**WARRANTY**

**D27. WARRANTY**

D27.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) year thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

D27.2 Notwithstanding C13.2 or D27.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if:

- (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.

D27.2.1 In such case the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

**THIRD PARTY AGREEMENTS**

**D28. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS**

D28.1 In the event that funding for the Work of the Contract is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, the following terms and conditions shall apply, as required by the applicable funding agreements.

D28.2 Further to D28.1, in the event that the obligations in D28 apply, actual costs legitimately incurred by the Contractor as a direct result of these obligations ("Funding Costs") shall be determined by the actual cost to the Contractor and not by the valuation method(s) outlined in C7.4. In all other respects Funding Costs will be processed in accordance with Changes in Work under C7.

D28.3 For the purposes of D28:

- (a) **"Government of Canada"** includes the authorized officials, auditors, and representatives of the Government of Canada; and
- (b) **"Government of Manitoba"** includes the authorized officials, auditors, and representatives of the Government of Manitoba.

#### D28.4 Modified Insurance Requirements

- D28.4.1 If not already required under the insurance requirements identified in D9, the Contractor will be required to provide wrap-up liability insurance in an amount of no less than two million dollars (\$2,000,000) inclusive per occurrence. Such policy will be written in the joint names of the City, Contractor, Consultants and all sub-contractors and sub-consultants and include twelve (12) months completed operations. The Government of Manitoba and its Ministers, officers, employees, and agents shall be added as additional insureds.
- D28.4.2 If not already required under the insurance requirements identified in D9, the Contractor will be required to provide builders' risk insurance (including boiler and machinery insurance, as applicable) providing all risks coverage at full replacement cost, or such lower level of insurance that the City may identify on a case-by-case basis, such as an installation floater.
- D28.4.3 The Contractor shall obtain and maintain third party liability insurance with minimum coverage of two million dollars (\$2,000,000.00) per occurrence on all licensed vehicles operated at the Site. In the event that this requirement conflicts with another licensed vehicle insurance requirement in this Contract, then the requirement that provides the higher level of insurance shall apply.
- D28.4.4 Further to D9.4, insurers shall provide satisfactory Certificates of Insurance to the Government of Manitoba prior to commencement of Work as written evidence of the insurance required. The Certificates of Insurance must provide for a minimum of thirty (30) days' prior written notice to the Government of Manitoba in case of insurance cancellation.
- D28.4.5 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.

#### D28.5 Indemnification By Contractor

- D28.5.1 In addition to the indemnity obligations outlined in C17 of the General Conditions for Construction, the Contractor agrees to indemnify and save harmless the Government of Canada and the Government of Manitoba and each of their respective Ministers, officers, servants, employees, and agents from and against all claims and demands, losses, costs, damages, actions, suit or other proceedings brought or pursued in any manner in respect of any matter caused by the Contractor or arising from this Contract or the Work, or from the goods or services provided or required to be provided by the Contractor, except those resulting from the negligence of any of the Government of Canada's or the Government of Manitoba's Ministers, officers, servants, employees, or agents, as the case may be.

#### D28.6 Records Retention and Audits

- D28.6.1 The Contractor shall maintain and preserve accurate and complete records in respect of this Contract and the Work, including all accounting records, financial documents, copies of contracts with other parties and other records relating to this Contract and the Work during the term of the Contract and for at least six (6) years after Total Performance. Those records bearing original signatures or professional seals or stamps must be preserved in paper form; other records may be retained in electronic form.
- D28.6.2 In addition to the record keeping and inspection obligations outlined in C6 of the General Conditions for Construction, the Contractor shall keep available for inspection and audit at all reasonable times while this Contract is in effect and until at least six (6) years after Total Performance, all records, documents, and contracts referred to in D28.6.1 for inspection, copying and audit by the City of Winnipeg, the Government of Manitoba and/or the Government of Canada and their respective representatives and auditors, and to produce them on demand; to provide reasonable facilities for such inspections, copying and audits, to provide copies of and extracts from such records, documents, or contracts upon request by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada and their respective representatives and auditors, and to promptly provide such other information and explanations as may be reasonably requested by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada from time-to-time.

## D28.7 Other Obligations

- D28.7.1 The Contractor consents to the City providing a copy of the Contract Documents to the Government of Manitoba and/or the Government of Canada upon request from either entity.
- D28.7.2 If the Lobbyists Registration Act (Manitoba) applies to the Contractor, the Contractor represents and warrants that it has filed a return and is registered and in full compliance with the obligations of that Act, and covenants that it will continue to comply for the duration of this Contract.
- D28.7.3 The Contractor shall comply with all applicable legislation and standards, whether federal, provincial, or municipal, including (without limitation) labour, environmental, and human rights laws, in the course of providing the Work.
- D28.7.4 The Contractor shall properly account for the Work provided under this Contract and payment received in this respect, prepared in accordance with generally accepted accounting principles in effect in Canada, including those principles and standards approved or recommended from time-to-time by the Chartered Professional Accountants of Canada or the Public Sector Accounting Board, as applicable, applied on a consistent basis.

**FORM H1: PERFORMANCE BOND**  
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

\_\_\_\_\_ ,  
(hereinafter called the "Principal"), and

\_\_\_\_\_ ,  
(hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), in the sum of

\_\_\_\_\_ dollars (\$\_\_\_\_\_)

of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has entered into a written contract with the Obligee for

TENDER NO. 317-2020

2020 LOCAL STREET RENEWAL PROGRAM – AIKINS STREET, ATLANTIC AVENUE AND VARIOUS OTHER LOCATIONS

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall:

- (a) carry out and perform the Contract and every part thereof in the manner and within the times set forth in the Contract and in accordance with the terms and conditions specified in the Contract;
- (b) perform the Work in a good, proper, workmanlike manner;
- (c) make all the payments whether to the Obligee or to others as therein provided;
- (d) in every other respect comply with the conditions and perform the covenants contained in the Contract; and
- (e) indemnify and save harmless the Obligee against and from all loss, costs, damages, claims, and demands of every description as set forth in the Contract, and from all penalties, assessments, claims, actions for loss, damages or compensation whether arising under "The Workers Compensation Act", or any other Act or otherwise arising out of or in any way connected with the performance or non-performance of the Contract or any part thereof during the term of the Contract and the warranty period provided for therein;

THEN THIS OBLIGATION SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety shall not, however, be liable for a greater sum than the sum specified above.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and that nothing of any kind or matter whatsoever that will not discharge the Principal shall operate as a discharge or release of liability of the Surety, any law or usage relating to the liability of Sureties to the contrary notwithstanding.

IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ .



**SIGNED AND SEALED**  
in the presence of:

\_\_\_\_\_  
(Witness as to Principal if no seal)

\_\_\_\_\_  
(Name of Principal)

Per: \_\_\_\_\_ (Seal)

Per: \_\_\_\_\_

\_\_\_\_\_  
(Name of Surety)

By: \_\_\_\_\_ (Seal)  
(Attorney-in-Fact)

**FORM H2: LABOUR AND MATERIAL PAYMENT BOND**  
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

\_\_\_\_\_  
his/its heirs, executors, administrators, successors or assigns (hereinafter called the "Principal"), and

\_\_\_\_\_  
his/its heirs, executors, administrators, successors or assigns (hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), for the use and benefit of claimants as herein below defined, in the amount of

\_\_\_\_\_ dollars (\$\_\_\_\_\_)

of lawful money of Canada, for the payment whereof we, the Principal and the Surety jointly and severally bind ourselves firmly by these presents.

WHEREAS the Principal has entered into a written contract with the Obligee for

TENDER NO. 317-2020

2020 LOCAL STREET RENEWAL PROGRAM – AIKINS STREET, ATLANTIC AVENUE AND VARIOUS OTHER LOCATIONS

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall promptly make payment to all claimants as hereinafter defined, for all labour, service and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void, otherwise it shall remain in full force and effect subject, however, to the following conditions:

- (a) A claimant is defined as one having a direct contract with the Principal for labour, service and material, or any of them, used or reasonably required for use in the performance of the contract, labour, service and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment (but excluding rent of equipment where the rent pursuant to an agreement is to be applied towards the purchase price thereof) directly applicable to the Contract;
- (b) The above-named Principal and Surety hereby jointly and severally agree with the Obligee that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work, labour or service was done or performed, or materials were furnished by such claimant, may sue on this bond, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon;
- (c) No suit or action shall be commenced hereunder by any claimant
  - (i) unless claimant shall have given written notice to the Principal and the Surety above-named, within one hundred and twenty (120) days after such claimant did or performed the last of the work, labour or service, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work, labour or service was done or performed. Such notice shall be served by mailing the same by registered mail to the Principal, and Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the Province of Manitoba;

- (ii) after the expiration of one (1) year following the date on which Principal ceased work on said Contract; including work performed under the guarantees provided in the Contract;
  - (iii) other than in a court of competent jurisdiction in the Province of Manitoba.
- (d) The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.
- (e) The Surety shall not be liable for a greater sum than the specified penalty of this bond.

The Principal and Surety hereby agree that The Guarantors' Liability Act (Manitoba) shall apply to this Bond.

IN TESTIMONY WHEREOF, the Principal has hereunto set its hand affixed its seal, and the Surety has caused these presents to be sealed and with its corporate seal duly attested by the authorized signature of its signing authority this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_ .

SIGNED AND SEALED  
in the presence of:

\_\_\_\_\_  
(Witness as to Principal if no seal)

\_\_\_\_\_  
(Name of Principal)

Per: \_\_\_\_\_ (Seal)

Per: \_\_\_\_\_

\_\_\_\_\_  
(Name of Surety)

By: \_\_\_\_\_ (Seal)  
(Attorney-in-Fact)

**FORM J: SUBCONTRACTOR LIST**  
(See D11)

2020 LOCAL STREET RENEWAL PROGRAM – AIKINS STREET, ATLANTIC AVENUE AND VARIOUS  
OTHER LOCATIONS

<u>Portion of the Work</u>	<u>Name</u>	<u>Address</u>
SURFACE WORKS:		
Supply of Materials:		
Concrete		
Asphalt		
Base Course and Sub-base		
Pavement Repair Fabric		
Sod		
Installation/Placement:		
Concrete		
Asphalt		
Base Course and Sub-base		
Pavement Repair Fabric		
Sod		
Joint Sealant		
UNDERGROUND WORKS		
Supply of Materials:		
Sewer Service/Drainage Connection Pipe		
Subdrains		
Catch Basins/Catch Pits		
Frames and Covers		
Installation/Placement:		
Catch Basins/Catch Pits		

## PART E - SPECIFICATIONS

### GENERAL

#### E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Tender shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B6. In every instance where a brand name or design specification is used, the City will also consider approved equals and/or approved alternatives in accordance with B6.
- E1.4 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>	<u>Drawing (Original) Sheet Size</u>
CT-00	Cover Sheet and Location Plan	A1
CT-01	Tanner St – End South of Templeton Ave to Station 0+190	A1
CT-02	Tanner St – 0+190 to Margaret Ave	A1
CT-03	Bannerman Avenue – Duke St to Station 0+190	A1
CT-04	Bannerman Avenue – Station 0+190 to Station 0+300	A1
CT-05	Bannerman Avenue – Station 0+300 to McPhillips St	A1
CT-06	Duke Street – Bannerman Ave to Station 0+200	A1
CT-07	Duke Street – Station 0+200 to Polson Ave	A1
CT-08	Cathedral Avenue – Rail Crossing to Station 0+120	A1
CT-09	Cathedral Avenue – Station 0+120 to Station 0+220	A1
CT-10	Cathedral Avenue – Station 0+220 to Arlington St	A1
CT-11	Atlantic Street – Duke St to Station 0+190	A1
CT-12	Atlantic Street – Station 0+190 to Station 0+300	A1
CT-13	Atlantic Street – Station 0+300 to McPhillips St	A1
CT-14	Aikins Street – McAdam Ave to Station 0+200	A1
CT-15	Aikins Street – Station 0+200 to Station 0+320	A1
CT-16	Aikins Street – Station 0+320 to Enniskillen Ave	A1

#### E2. MOBILIZATION AND DEMOBILIZATION PAYMENT

##### DESCRIPTION

- E2.1 This Specification shall cover all operations relating to the mobilization and demobilization of the Contractor to the project location(s).
- E2.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies, and all things necessary for and incidental to the satisfactory performance and completion of all Works as hereinafter specified.

- E2.3 The inclusion of a payment item for the Work under this Specification shall not release or reduce the responsibilities of the Contractor under any other specification in this Contract.

#### SCOPE OF WORK

- E2.4 Further to C12 of the General Conditions, where Mobilization and Demobilization is included as a bid item, it shall consist of the following, as applicable:
- (a) Mobilization shall include, but not be limited to:
    - (i) All activities and associated costs for transportation of the Contractor's personnel, equipment, and operating supplies to the site, and/or sites, and/or between sites;
    - (ii) Establishment of offices, buildings, other necessary general facilities and equipment parking/staging areas for the Contractor's operations at the site or sites;
    - (iii) Premiums paid for performance and payment bonds including coinsurance and reinsurance agreements as applicable;
    - (iv) General cleanup and housekeeping needed maintain a neat and orderly project site and/or sites;
    - (v) Other job related items.
  - (b) Demobilization shall include, but not be limited to:
    - (i) All activities and costs for transportation of personnel, equipment, and supplies not used in the project from the site, and/or sites, and/or between sites;
    - (ii) Disassembly, removal, and site cleanup and restoration of offices, buildings, and other facilities assembled on the site and/or sites;
    - (iii) Repair of access roads, temporary haul roads, and equipment parking areas leaving the project site in the same or better condition than at the start of the project;
    - (iv) General cleanup and housekeeping needed to restore a neat and orderly project site.
- E2.5 Access to the site, equipment parking, and staging areas are limited to that shown on the drawings or as approved by the Contract Administrator.

#### MEASUREMENT AND PAYMENT

- E2.6 The lump-sum price for the Mobilization and Demobilization bid item shall not exceed five percent (5.00%) of the total bid price for the Contract.
- E2.6.1 Further to B9, B17, C12 and E2.6, should the lump sum price exceed 5% of the Total Bid Price the lump sum price will be reduced to 5% of the Total Bid Price, the Total Bid Price will be determined using the reduced lump sum price and payment will be based on the reduced lump sum price.
- E2.7 Payment for Mobilization:
- (a) 60% of the lump-sum price will be paid to the contractor for Mobilization on the first Progress Estimate for the Contract.
- E2.8 Payment for Demobilization:
- (a) The remaining 40% of the lump-sum price will be paid upon:
    - (i) Restoration of the site and/or sites to the satisfaction of the Contract Administrator;
    - (ii) Distribution of the Declaration of Total Performance.
- E2.9 Mobilization and Demobilization will be paid only once (to a maximum of 100%), regardless of the number of times the Contractor mobilizes to the site and/or sites.

### **E3. GEOTECHNICAL REPORT**

- E3.1 Further to C3.1, the geotechnical report is provided to aid the Contractor's evaluation of the pavement structure and/or existing soil conditions. The geotechnical report is contained in Appendix 'A'.

### **E4. PROTECTION OF EXISTING TREES**

- E4.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing boulevard trees within the limits of the construction area:
- (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment on boulevards within 2 metres of trees.
  - (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400mm wood planks, or suitably protected as approved by the Contract Administrator.
  - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
  - (d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
  - (e) Work on-site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.
- E4.2 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.
- E4.3 No separate measurement or payment will be made for the protection of trees.
- E4.4 Except as required in clause E4.1(c) and E4.1(e), Elm trees shall not be pruned at any time between April 1 and July 31.

### **E5. TRAFFIC CONTROL**

- E5.1 Further to clauses 3.6, 3.7 and 3.8 of CW 1130:
- (a) Where directed by the Contract Administrator, the Contractor shall construct and maintain temporary asphalt ramps to alleviate vertical pavement obstructions such as manholes and planing drop-offs to the satisfaction of the Contract Administrator. Payment shall be in accordance with CW 3410.
  - (b) In accordance with the Manual of Temporary Traffic Control on City Streets (MTTC), the Contractor ("Construction Agency" in the manual) shall be responsible for placing, maintaining and removing the appropriate temporary traffic control devices as specified by the MTTC or by the Traffic Management Branch of the City of Winnipeg Public Works Department. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by their own forces or subcontractor.
- E5.2 Notwithstanding E5.1, in accordance with the MTTC, the Contract Administrator shall make arrangements with the **Traffic Services Branch of the City of Winnipeg** to place, maintain, and remove all **regulatory signs** and traffic control devices authorized and/or required by the Traffic Management Branch in the following situations:
- (a) Parking restrictions,

- (b) Stopping restrictions,
- (c) Turn restrictions,
- (d) Diamond lane removal,
- (e) Full or directional closures on a Regional Street,
- (f) Traffic routed across a median,
- (g) Full or directional closure of a non-regional street where there is a requirement for regulatory signs (turn restrictions, bus stop relocations, etc.) to implement the closure.
- (h) Approved Designated Construction Zones with a temporary posted speed limit reduction. Traffic Services will be responsible for placing all of the advance signs and 'Construction Ends' (TC-4) signs. The Contractor is still responsible for all other temporary traffic control including but not limited to barricades, barrels and tall cones.

E5.2.1 An exception to E5.2 is the 'KEEP RIGHT/KEEP LEFT' sign (RB-25 / RB-25L) which shall be supplied, installed, and maintained by the Contractor at their own expense.

E5.2.2 Further to E5.2, where the Contract Administrator has determined that the services of the Traffic Services Branch are required, the City shall bear the costs associated with the placement of temporary traffic control devices by the Traffic Services Branch of the City of Winnipeg in connection with the works undertaken by the Contractor.

## **E6. TRAFFIC MANAGEMENT**

E6.1 Further to clause 3.7 of CW 1130:

E6.1.1 The Contractor shall schedule construction activities to meet the following:

- (a) At least one lane for local access traffic shall be maintained along each street during construction.
- (b) Winnipeg Transit bus service shall be maintained on Cathedral Avenue (westbound) at all times.

E6.1.2 Flag persons may be necessary to maintain the flow of traffic during certain work operations.

E6.1.3 Should the Contractor be unable to maintain an existing access to a residence or business, he/she shall review the planned disruption with the business or residence and the Contract Administrator, and take reasonable measures to minimize the impact. The Contractor shall provide a minimum of 24 hours notification to the affected residence or business and the Contract Administrator, prior to disruption of access.

E6.1.4 Pedestrian and ambulance/emergency vehicle access must be maintained at all times.

## **E7. REFUSE AND RECYCLING COLLECTION**

E7.1 If access to refuse and/or recycling collection vehicles is restricted, on collection day(s) the Contractor shall move all of the affected property owners refuse and/or recycling materials to a nearby common area, prior to an established time, in accordance with E7.2 to permit the normal collection vehicles to collect the materials. Immediately following refuse and recycling collection the Contractor shall return refuse and recycling receptacles to the addresses marked on the receptacles. At all other times, the Contractor shall allow access for refuse and recycling collection vehicles.

E7.2 Collection Schedule:

**Aikins Street from McAdam Avenue to Enniskillen Avenue**



*Collection Day(s):* **Thursday, intersecting rear alleys**

*Collection Time:* **7:00 a.m. to 6:00 p.m.**

*Common Collection Area:* **N/A**

**Atlantic Avenue from Duke Street to McPhillips Street**

*Collection Day(s):* **Wednesday, rear alleys**

*Collection Time:* **7:00 a.m. to 6:00 p.m.**

*Common Collection Area:* **N/A**

**Bannerman Avenue from Duke Street to McPhillips Street**

*Collection Day(s):* **Wednesday, rear alleys**

*Collection Time:* **7:00 a.m. to 6:00 p.m.**

*Common Collection Area:* **N/A**

**Cathedral Avenue from Rail Crossing West of Sinclair Street to Arlington Street**

*Collection Day(s):* **Thursday, rear alleys**

*Collection Time:* **7:00 a.m. to 6:00 p.m.**

*Common Collection Area:* **N/A**

**Duke Street from Bannerman Avenue to Polson Avenue**

*Collection Day(s):* **Wednesday, intersecting rear alleys**

*Collection Time:* **7:00 a.m. to 6:00 p.m.**

*Common Collection Area:* **N/A**

**Tanner Street from End South of Templeton Avenue to Margaret Avenue**

*Collection Day(s):* **Wednesday, west rear alley north of Templeton Avenue, east intersecting rear alleys, apartment complex west side south of Templeton Avenue (coordinate access for bin pickup)**

*Collection Time:* **7:00 a.m. to 6:00 p.m.**

*Common Collection Area:* **N/A**

E7.3 No measurement or payment will be made for the work associated with this specification.

**E8. WATER OBTAINED FROM THE CITY**

E8.1 Further to clause 3.7 of CW 1120, the Contractor shall pay for all costs, including sewer charges, associated with obtaining water from the City in accordance with the Waterworks and Sewer By-laws.

**E9. SURFACE RESTORATIONS**

E9.1 Further to clause 3.3 of CW 1130, when Total Performance is not achieved in the year the Contract is commenced, the Contractor shall temporarily repair any Work commenced and not completed to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until

permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

## **E10. SUPPLY AND INSTALLATION OF PAVEMENT REPAIR FABRIC**

### DESCRIPTION

#### E10.1 General

E10.1.1 This specification covers the supply and installation of pavement repair fabric.

E10.1.2 Referenced Standard Construction

(a) CW 3130 – Supply and Installation of Geotextile Fabrics.

### MATERIALS

#### E10.2 Storage and Handling

E10.2.1 Store and handle material in accordance with Section 2 of CW 3130.

#### E10.3 Pavement Repair Fabric

E10.3.1 Pavement repair fabric will be Glas Grid Road Reinforcement Mesh - Style 8501.

### CONSTRUCTION METHODS

#### E10.4 General

E10.4.1 Install pavement repair fabric at random locations as directed by the Contract Administrator.

E10.4.2 The extent of the placement limits and quantities required will be determined by the Contract Administrator and provided 48 hours prior to the placement of asphalt.

E10.4.3 Proceed with installation upon completion and acceptance of the asphalt levelling course.

E10.4.4 Install fabric in accordance with the manufacturer's specifications and recommendations.

E10.4.5 Only construction equipment required to place the final asphalt surface course will be allowed to travel on the exposed fabric.

E10.4.6 Replace damaged or improperly placed fabric.

E10.4.7 Ensure temperature of the asphalt material does not exceed the melting point of the fabric.

### MEASUREMENT AND PAYMENT

#### E10.5 Pavement Repair Fabric

E10.5.1 The supply and installation of the pavement repair fabric will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Pavement Repair Fabric". The area to be paid for will be the total number of square metres of pavement repair fabric supplied and installed in accordance with this specification, accepted and measured by the Contract Administrator.

# **APPENDIX 'A'**

# **GEOTECHNICAL REPORT**

## **APPENDIX 'A' - GEOTECHNICAL REPORT**

The geotechnical report is provided to aid in the Contractor's evaluation of the existing pavement structure and/or soil conditions. The information presented is considered accurate at the locations shown on the Drawings and at the time of drilling. However, variations in pavement structure and/or soil conditions may exist between test holes and fluctuations in groundwater levels can be expected seasonally and may occur as a result of construction activities. The nature and extent of variations may not become evident until construction commences.

# **AECOM Canada Ltd.**

## **GENERAL STATEMENT**

### **NORMAL VARIABILITY OF SUBSURFACE CONDITIONS**

The scope of the investigation presented herein is limited to an investigation of the subsurface conditions as to suitability for the proposed project. This report has been prepared to aid in the evaluation of the site and to assist the engineer in the design of the facilities. Our description of the project represents our understanding of the significant aspects of the project relevant to the design and construction of earth work, foundations and similar. In the event of any changes in the basic design or location of the structures as outlined in this report or plan, we should be given the opportunity to review the changes and to modify or reaffirm in writing the conclusions and recommendations of this report.

The analysis and recommendations presented in this report are based on the data obtained from the borings and test pit excavations made at the locations indicated on the site plans and from other information discussed herein. This report is based on the assumption that the subsurface conditions everywhere are not significantly different from those disclosed by the borings and excavations. However, variations in soil conditions may exist between the excavations and, also, general groundwater levels and conditions may fluctuate from time to time. The nature and extent of the variations may not become evident until construction. If subsurface conditions differ from those encountered in the exploratory borings and excavations, are observed or encountered during construction, or appear to be present beneath or beyond excavations, we should be advised at once so that we can observe and review these conditions and reconsider our recommendations where necessary.

Since it is possible for conditions to vary from those assumed in the analysis and upon which our conclusions and recommendations are based, a contingency fund should be included in the construction budget to allow for the possibility of variations which may result in modification of the design and construction procedures.

In order to observe compliance with the design concepts, specifications or recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated, we recommend that all construction operations dealing with earth work and the foundations be observed by an experienced soils engineer. We can be retained to provide these services for you during construction. In addition, we can be retained to review the plans and specifications that have been prepared to check for substantial conformance with the conclusions and recommendations contained in our report.

# EXPLANATION OF FIELD & LABORATORY TEST DATA

The field and laboratory test results, as shown for each hole, are described below.

## 1. NATURAL MOISTURE CONTENT

The relationship between the natural moisture content and depth is significant in determining the subsurface moisture conditions. The Atterberg Limits for a sample should be compared to its natural moisture content and plotted on the Plasticity Chart in order to determine the soil classification.

## 2. SOIL PROFILE AND DESCRIPTION

Each soil stratum is classified and described noting any special conditions. The Modified Unified Classification System (MUCS) is used. The soil profile refers to the existing ground level at the time the hole was done. Where available, the ground elevation is shown. The soil symbols used are shown in detail on the soil classification chart.

## 3. TESTS ON SOIL SAMPLES

Laboratory and field tests are identified by the following and are on the logs:

- N - Standard Penetration Test (SPT) Blow Count. The SPT is conducted in the field to assess the in-situ consistency of cohesive soils and the relative density of non-cohesive soils. The N value recorded is the number of blows from a 63.5 kg hammer dropped 760 mm which is required to drive a 51 mm split spoon sampler 300 mm into the soil.
  
- SO<sub>4</sub> - Water Soluble Sulphate Content. Expressed in percent. Conducted primarily to determine requirements for the use of sulphate resistant cement. Further details on the water-soluble sulphate content are given in Section 6.
  
- $\gamma_D$  - Dry Unit Weight. Usually expressed in kN/m<sup>3</sup>.
  
- $\gamma_T$  - Total Unit Weight. Usually expressed in kN/m<sup>3</sup>.
  
- Q<sub>u</sub> - Unconfined Compressive Strength. Usually expressed in kPa and may be used in determining allowable bearing capacity of the soil.

- C<sub>u</sub> - Undrained Shear Strength. Usually expressed in kPa. This value is determined by either a direct shear test or by an unconfined compression test and may also be used in determining the allowable bearing capacity of the soil.
  
- C<sub>PEN</sub> - Pocket Penetrometer Reading. Usually expressed in kPa. Estimate of the undrained shear strength as determined by a pocket penetrometer.

The following tests may also be performed on selected soil samples and the results are given on separate sheets enclosed with the logs:

- Grain Size Analysis
- Standard or Modified Proctor Compaction Test
- California Bearing Ratio Test
- Direct Shear Test
- Permeability Test
- Consolidation Test
- Triaxial Test

#### 4. SOIL DENSITY AND CONSISTENCY

The SPT test described above may be used to estimate the consistency of cohesive soils and the density of cohesionless soils. These approximate relationships are summarized in the following tables:

**Table 1 Cohesive Soils**

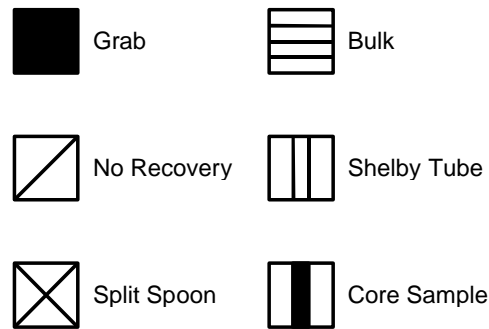
N	Consistency	C <sub>u</sub> (kPa) approx.
0 - 1	Very Soft	<10
1 - 4	Soft	10 - 25
4 - 8	Firm	25 - 50
8 - 15	Stiff	50 - 100
15 - 30	Very Stiff	100 - 200
30 - 60	Hard	200 - 300
>60	Very Hard	>300

**Table 2 Cohesionless Soils**

N	Density
0 - 5	Very Loose
5 - 10	Loose
10 - 30	Compact
30 - 50	Dense
>50	Very Dense

## 5. SAMPLE CONDITION AND TYPE

The depth, type, and condition of samples are indicated on the logs by the following symbols:



## 6. WATER SOLUBLE SULPHATE CONCENTRATION

The following table, from CSA Standard A23.1-14, indicates the requirements for concrete subjected to sulphate attack based upon the percentage of water-soluble sulphate as presented on the logs. CSA Standard A23.1-14 should be read in conjunction with the table.

**Table 3 Requirements for Concrete Subjected to Sulphate Attack\***

Class of exposure	Degree of exposure	Water-soluble sulphate (SO <sub>4</sub> ) <sup>†</sup> in soil sample, %	Sulphate (SO <sub>4</sub> ) <sup>‡</sup> in groundwater samples, mg/L <sup>‡</sup>	Water soluble sulphate (SO <sub>4</sub> ) in recycled aggregate sample, %	Cementing materials to be used <sup>§††</sup>	Performance requirements <sup>§,§§</sup>		
						Maximum expansion when tested using CSA A3004-C8 Procedure A at 23 °C, %		Maximum expansion when tested using CSA A3004-C8 Procedure B at 5 °C, % <sup>†††</sup>
						At 6 months	At 12 months <sup>††</sup>	At 18 months <sup>‡‡</sup>
S-1	Very severe	> 2.0	> 10 000	> 2.0	HS <sup>**</sup> , HSb, HSLb <sup>***</sup> or HSe	0.05	0.10	0.10
S-2	Severe	0.20–2.0	1500–10 000	0.60–2.0	HS <sup>**</sup> , HSb, HSLb <sup>***</sup> or HSe	0.05	0.10	0.10
S-3	Moderate (including seawater exposure*)	0.10–0.20	150–1500	0.20–0.60	MS, MSb, MSe, MSLb <sup>***</sup> , LH, LHb, HS <sup>**</sup> , HSb, HSLb <sup>***</sup> or HSe	0.10		0.10

\*For sea water exposure, also see Clause 4.1.1.5.

<sup>†</sup>In accordance with CSA A23.2-3B.

<sup>‡</sup>In accordance with CSA A23.2-2B.

<sup>§</sup>Where combinations of supplementary cementing materials and portland or blended hydraulic cements are to be used in the concrete mix design instead of the cementing materials listed, and provided they meet the performance requirements demonstrating equivalent performance against sulphate exposure, they shall be designated as MS equivalent (MSe) or HS equivalent (HSe) in the relevant sulphate exposures (see Clauses 4.1.1.6.2, 4.2.1.1, and 4.2.1.3, and 4.2.1.4).

<sup>\*\*</sup>Type HS cement shall not be used in reinforced concrete exposed to both chlorides and sulphates, including seawater. See Clause 4.1.1.6.3.



††The requirement for testing at 5 °C does not apply to MS, HS, MSb, HSb, and MSe and HSe combinations made without portland limestone cement.

‡‡ If the increase in expansion between 12 and 18 months exceeds 0.03%, the sulphate expansion at 24 months shall not exceed 0.10% in order for the cement to be deemed to have passed the sulphate resistance requirement.

§§For demonstrating equivalent performance, use the testing frequency in Table 1 of CSA A3004-A1 and see the applicable notes to Table A3 in A3001 with regard to re-establishing compliance if the composition of the cementing materials used to establish compliance changes.

\*\*\*Where MSLb or HSLb cements are proposed for use, or where MSe or HSe combinations include Portland-limestone cement, they must also contain a minimum of 25% Type F fly ash or 40% slag or 15% metakaolin (meeting Type N pozzolan requirements) or a combination of 5% Type SF silica fume with 25% slag or a combination of 5% Type SF silica fume with 20% Type F fly ash. For some proposed MSLb, HSLb, and MSe or HSe combinations that include Portland-limestone cement, higher SCM replacement levels may be required to meet the A3004-C8 Procedure B expansion limits. Due to the 18-month test period, SCM replacements higher than the identified minimum levels should also be tested. In addition, sulphate resistance testing shall be run on MSLb and HSLb cement and MSe or HSe combinations that include Portland-limestone cement at both 23 °C and 5 °C as specified in the table.

†††If the expansion is greater than 0.05% at 6 months but less than 0.10% at 1 year, the cementing materials combination under test shall be considered to have passed.

## 7. SOIL CORROSIVITY

The following table, from the Handbook of Corrosion Engineering (Roberge, 1999) indicates the corrosivity rating can be obtained from the soil resistivity, presented on the logs.

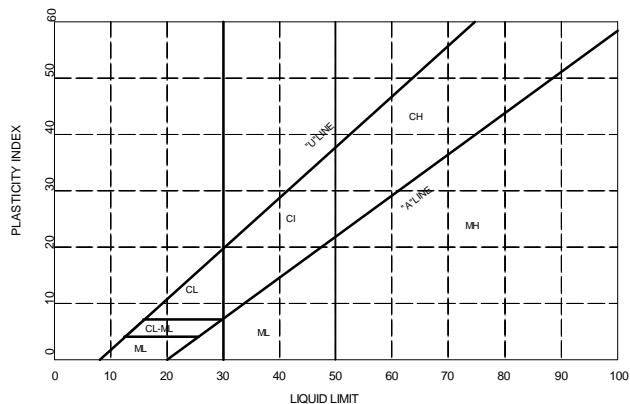
**Table 4 Corrosivity Ratings Based on Soil Resistivity**

Soil Resistivity (ohm-cm)	Corrosivity Rating
>20,000	Essentially non-corrosive
10,000 – 20,000	Mildly corrosive
5,000 – 10,000	Moderately corrosive
3,000 – 5,000	Corrosive
1,000 – 3,000	Highly corrosive
<1,000	Extremely corrosive

## 8. GROUNDWATER TABLE

The groundwater table is indicated by the equilibrium level of water in a standpipe installed in a testhole or test pit. This level is generally taken at least 24 hours after installation of the standpipe. The groundwater level is subject to seasonal variations and is usually highest in the spring. The symbol on the logs indicating the groundwater level is an inverted solid triangle (▼).

MAJOR DIVISION		LOG SYMBOLS	UCS	TYPICAL DESCRIPTION	LABORATORY CLASSIFICATION CRITERIA
COARSE GRAINED SOILS	GRAVELS (MORE THAN HALF COARSE GRAINS LARGER THAN 4.75 mm)	CLEAN GRAVELS (LITTLE OR NO FINES)	GW	WELL GRADED GRAVELS, LITTLE OR NO FINES	$C_u - \frac{D_{60}}{D_{10}} > 4$ $C_c - \frac{(D_{30})^2}{D_{10} \times D_{60}} = 1$ to 3
		GRAVELS WITH FINES	GP	POORLY GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	NOT MEETING ABOVE REQUIREMENTS
			GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES	CONTENT OF FINES EXCEEDS 12% ATTEBERG LIMITS BELOW 'A' LINE $W_p$ LESS THAN 4 ATTEBERG LIMITS ABOVE 'A' LINE $W_p$ MORE THAN 7
		GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES		
	SANDS (MORE THAN HALF COARSE GRAINS SMALLER THAN 4.75 mm)	CLEAN SANDS (LITTLE R NO FINES)	SW	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	$C_u - \frac{D_{60}}{D_{10}} > 6$ $C_c - \frac{(D_{30})^2}{D_{10} \times D_{60}} = 1$ to 3
			SP	POORLY GRADED SANDS, LITTLE OR NO FINES	NOT MEETING ABOVE REQUIREMENTS
		SANDS WITH FINES	SM	SILTY SANDS, SAND-SILT MIXTURES	CONTENT OF FINES EXCEEDS 12% ATTEBERG LIMITS BELOW 'A' LINE $W_p$ LESS THAN 4 ATTEBERG LIMITS ABOVE 'A' LINE $W_p$ MORE THAN 7
			SC	CLAYEY SANDS, SAND-CLAY MIXTURES	
FINE GRAINED SOILS	SILTS (BELOW 'A' LINE NEGLIGIBLE ORGANIC CONTENT)	$W_L < 50$	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY SANDS OF SLIGHT PLASTICITY	CLASSIFICATION IS BASED UPON PLASTICITY CHART (SEE BELOW)  WHENEVER THE NATURE OF THE FINE CONTENT HAS NOT BEEN DETERMINED, IT IS DESIGNATED BY THE LETTER 'F'. E.G. SF IS A MIXTURE OF SAND WITH SILT OR CLAY
		$W_L > 50$	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS	
	CLAYS (ABOVE 'A' LINE NEGLIGIBLE ORGANIC CONTENT)	$W_L < 30$	CL	INORGANIC CLAYS OF LOW PLASTICITY, GRAVELLY, SANDY, OR SILTY CLAYS, LEAN CLAYS	
		$30 < W_L < 50$	CI	INORGANIC CLAYS OF MEDIUM PLASTICITY, SILTY CLAYS	
		$W_L > 50$	CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS	
	ORGANIC SILTS & CLAYS (BELOW 'A' LINE)	$W_L < 50$	OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	
		$W_L > 50$	OH	ORGANIC CLAYS OF HIGH PLASTICITY	
	HIGHLY ORGANIC SOILS			Pt	
BEDROCK			BR	SEE REPORT DESCRIPTION	
FILL			FILL	SEE REPORT DESCRIPTION	



NOTE:  
1. BOUNDARY CLASSIFICATION POSSESSING CHARACTERISTICS OF TWO GROUPS ARE GIVEN GROUP SYMBOLS, E.G. GW-GC IS A WELL GRADED GRAVEL MIXTURE WITH CLAY BINDER BETWEEN 5% AND 12%

SOIL COMPONENTS					
FRACTION		SIEVE SIZE (mm)		DEFINING RANGES OF PERCENTAGE BY WEIGHT OF MINOR COMPONENTS	
		PASSING	RETAINED	PERCENT	IDENTIFIER
GRAVEL	COARSE	75	19	50 - 35	AND
	FINE	19	4.75		
SAND	COARSE	4.75	2.00	35 - 20	Y
	MEDIUM	2.00	0.425		
	FINE	0.425	0.080		
SILT (non-plastic) or CLAY (plastic)		0.080		20 - 10	SOME
				10 - 1	TRACE
OVERSIZE MATERIALS					
ROUNDED OR SUB-ROUNDED COBBLES 75 mm TO 200 mm BOULDERS >200 mm			ANGULAR ROCK FRAGMENTS ROCKS > 0.75 m3 IN VOLUME		

**MODIFIED UNIFIED SOIL CLASSIFICATION SYSTEM**  
August 2015

Not used to classify subgrade. Refer to City of Winnipeg Specifications for Geotechnical Investigation Requirements for Public Works Projects (September 2015)

## **F2. SEWER TELEVISION GUIDELINES FOR PUBLIC WORKS PROJECTS (JANUARY 2009)**

- F2.1 The Consultant is required to assess the extent of Closed Circuit Television (CCTV) inspection for all combined, wastewater, land drainage and storm relief sewers 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 Project Manager.
- F2.5 CCTV inspection general guidelines:
- (a) Confirm CCTV requirements with Water & Waste Department for sewers 1050 mm and larger in diameter;
  - (b) Televising if no previous CCTV inspections have been completed;
  - (c) Re-televising sewers in Categories A/B/C/X with a Structural Performance Grade (SPG) of 3 or higher that have not been televised in the previous 5 years;
  - (d) 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;
  - (e) On all street reconstructions, regardless of location of the sewer (within the right-of-way);
  - (f) If the street exhibits obvious distress at/along the underground plant;
  - (g) Of all CB leads to be reused, as part of a street reconstruction or major rehabilitation.
- 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. Any repairs or other activities deemed necessary from these inspections must be coordinated with the Water & Waste Department.

## **F3. GEOTECHNICAL INVESTIGATION REQUIREMENTS FOR PUBLIC WORKS PROJECTS (OCTOBER 2008)**

- F3.1 Fieldwork
- (a) Clear all underground services at each test-hole location.
  - (b) As this street project is greater than 500 metres, test holes may be taken every 100 m. More or fewer test-holes may be required depending upon 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 any uncertain situations and/or locations, or clarification of these requirements, contact the Project Manager.

Test Hole No.	Test Hole Location	Pavement Structure		Subgrade Description *	Sample Depth (m)	Moisture Content (%)	Hydrometer Analysis				Atterberg Limits		
		Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
CH20-30	Booth Drive - 2.0 m E of W curb, 40 m N of Portage Ave.	Asphalt	45										
		Concrete	190										
CH20-31 (NR)	Aikins Street - 1.0 m E of W curb, 25 m SW of Enniskillen Ave.	Asphalt	-										
		Concrete	-										
CH20-32	Aikins Street - 1.0 m W of E curb, 100 m SW of Enniskillen Ave.	Asphalt	25										
		Concrete	140										
CH20-33	Aikins Street - 1.0 m E of W curb, 175 m SW of Enniskillen Ave.	Asphalt	0										
		Concrete	150										
CH20-34	Aikins Street - 1.0 m W of E curb, 75 m NE of McAdam Ave.	Asphalt	0										
		Concrete	160										
CH20-35	Aikins Street - 1.0 m E of W curb, 15 m NE of McAdam Ave.	Asphalt	0										
		Concrete	160										

\* Note – Subgrade Description based on City of Winnipeg Specifications for Geotechnical Investigation Requirements for Public Works Projects (September 2015) ; NR = No Recovery

Test Hole No.	Test Hole Location	Pavement Structure		Subgrade Description *	Sample Depth (m)	Moisture Content (%)	Hydrometer Analysis				Atterberg Limits		
		Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
CH20-36	Cathedral Avenue - 1.5 m S of N curb, 20 m NW of Arlington St.	Asphalt	0										
		Concrete	210										
CH20-37	Cathedral Avenue - 2.0 m N of S curb, 55 m NW of Arlington St.	Asphalt	0										
		Concrete	200										
CH20-38	Cathedral Avenue - 1.5 m S of N curb, 65 m SE of Sinclair St.	Asphalt	0										
		Concrete	205										
CH20-39	Cathedral Avenue - 1.5 m N of S curb, 10 m SE of Sinclair St.	Asphalt	0										
		Concrete	190										
CH20-40 (NR)	Cathedral Avenue - 1.5 m S of N curb, 15 m SE of rail crossing west of Sinclair St.	Asphalt	0										
		Concrete	200										
CH20-41	Atlantic Avenue - 1.5 m S of N curb, 15 m SE of Duke St.	Asphalt	0										
		Concrete	150										

\* Note – Subgrade Description based on City of Winnipeg Specifications for Geotechnical Investigation Requirements for Public Works Projects (September 2015) ; NR = No Recovery

Test Hole No.	Test Hole Location	Pavement Structure		Subgrade Description *	Sample Depth (m)	Moisture Content (%)	Hydrometer Analysis				Atterberg Limits		
		Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
CH20-42	Atlantic Avenue - 1.5 m N of S curb, 80 m SE of Duke St.	Asphalt	0										
		Concrete	170										
CH20-43	Atlantic Avenue - 1.5 m S of N curb, 140 m SE of Duke St.	Asphalt	0										
		Concrete	190										
CH20-44	Atlantic Avenue - 1.5 m N of S curb, 120 m NW of McPhillips St.	Asphalt	0										
		Concrete	140										
CH20-45	Atlantic Avenue - 1.0 m S of N curb, 50 m NW of McPhillips St.	Asphalt	0										
		Concrete	170										
CH20-46	Bannerman Avenue - 1.5 m S of N curb, 45 m NW of McPhillips St.	Asphalt	0										
		Concrete	170										
CH20-47	Bannerman Avenue - 2.0 m N of S curb, 105 m NW of McPhillips St.	Asphalt	145										
		Concrete	0										

\* Note – Subgrade Description based on City of Winnipeg Specifications for Geotechnical Investigation Requirements for Public Works Projects (September 2015) ; NR = No Recovery

Test Hole No.	Test Hole Location	Pavement Structure		Subgrade Description *	Sample Depth (m)	Moisture Content (%)	Hydrometer Analysis				Atterberg Limits		
		Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
CH20-48	Bannerman Avenue - 1.5 m S of N curb, 155 m NW of McPhillips St.	Asphalt	0										
		Concrete	160										
CH20-49	Bannerman Avenue - 1.5 m N of S curb, 85 m SE of Duke St.	Asphalt	0										
		Concrete	150										
CH20-50	Bannerman Avenue - 1.5 m S of N curb, 15 m SE of Duke St.	Asphalt	0										
		Concrete	160										
CH20-51	Duke Street - 1.5 m E of W curb, 15 m SW of Polson Ave.	Asphalt	0										
		Concrete	160										
CH20-52	Duke Street - 1.5 m W of E curb, 95 m SW of Polson Ave.	Asphalt	0										
		Concrete	190										
CH20-53	Duke Street - 1.5 m E of W curb, 15 m SW of Polson Ave.	Asphalt	0										
		Concrete	155										

\* Note – Subgrade Description based on City of Winnipeg Specifications for Geotechnical Investigation Requirements for Public Works Projects (September 2015) ; NR = No Recovery

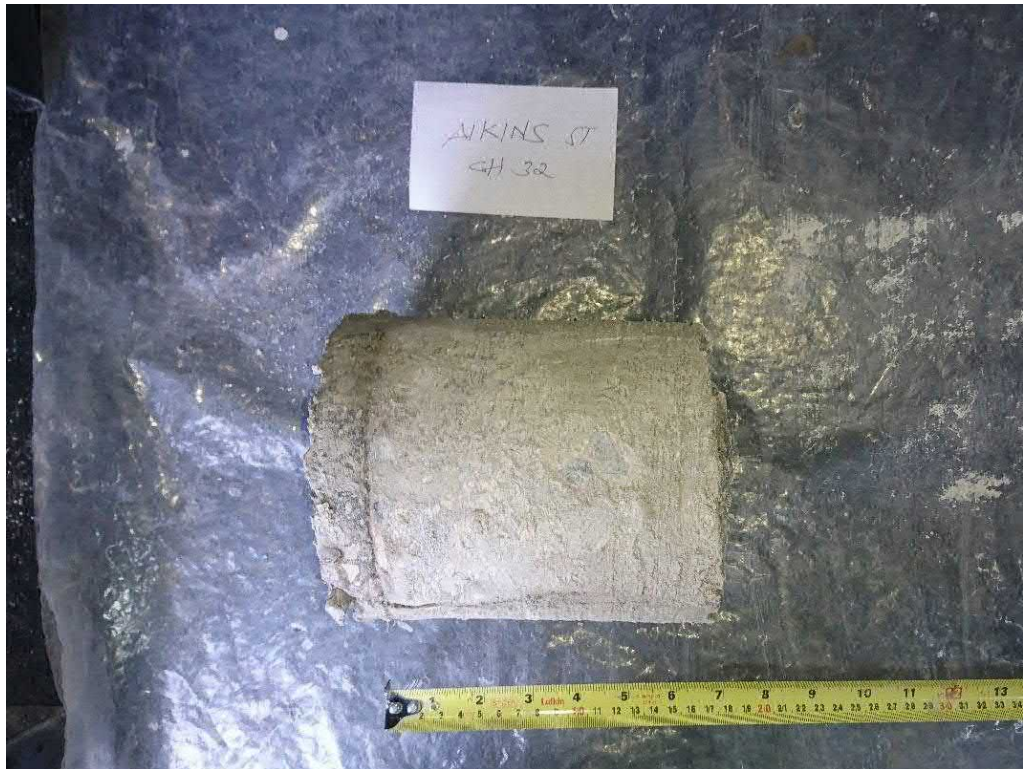


Test Hole No.	Test Hole Location	Pavement Structure		Subgrade Description *	Sample Depth (m)	Moisture Content (%)	Hydrometer Analysis				Atterberg Limits			
		Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index	
CH20-54	Tanner Street - 1.5 m S of N curb, 20 m SW of Margaret Ave.	Asphalt	0											
		Concrete	160											
CH20-55	Tanner Street - 1.5 m N of S curb, 65 m SW of Margaret Ave.	Asphalt	0											
		Concrete	130											
CH20-56 (NR)	Tanner Street - 1.5 m S of N curb, 120 m SW of Margaret Ave.	Asphalt	0											
		Concrete	140											
CH20-57	Tanner Street - 1.5 m N of S curb, 160 m SW of Margaret Ave.	Asphalt	0											
		Concrete	160											
TH20-01	Wolever Avenue - 2.0 m S of N curb, 15 m W of Minto St.	Asphalt	50	CLAY (FILL)	0.3	29.2								
				SAND (FILL)	0.6	15.8								
				SAND (FILL)	0.9	16.4	20.3	47.6	26.6	5.5				
		Concrete	150	SILT	1.2	22.9								
				SILT	1.5	20.9	0.0	7.7	79.7	12.6	33	18	15	
CLAY	2.1	48.4												
TH20-02	Wolever Avenue - 2.0 m N of S curb, 15 m E of Goulding St.	Asphalt	50	SILTY CLAY	0.3	26.0	1.5	20.8	33.1	44.6	57	17	40	
				SILTY CLAY	0.6	32.3								
				SILTY CLAY	0.9	34.1								
		Concrete	150	SILTY CLAY	1.2	33.5								
				CLAYEY SILT	1.5	24.1								
				SILTY CLAY	2.1	46.1								

\* Note – Subgrade Description based on City of Winnipeg Specifications for Geotechnical Investigation Requirements for Public Works Projects (September 2015) ; NR = No Recovery



Photograph 29: Core Hole CH20-30 – Booth Drive

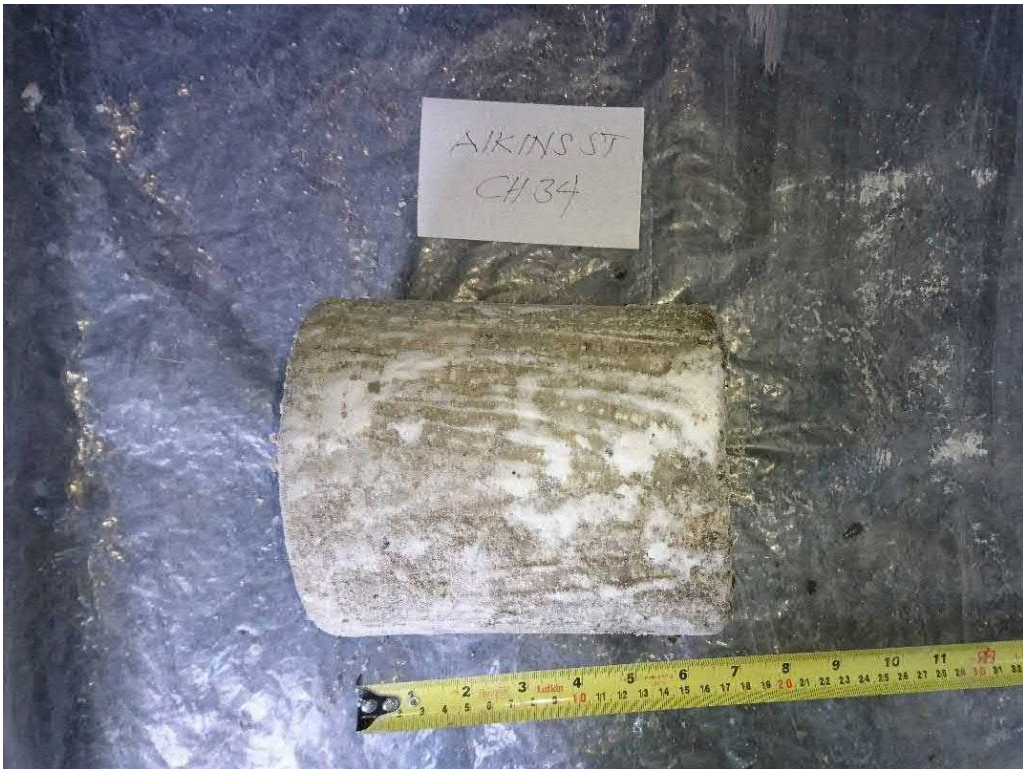


Photograph 30: Core Hole CH20-32 – Aikins Street



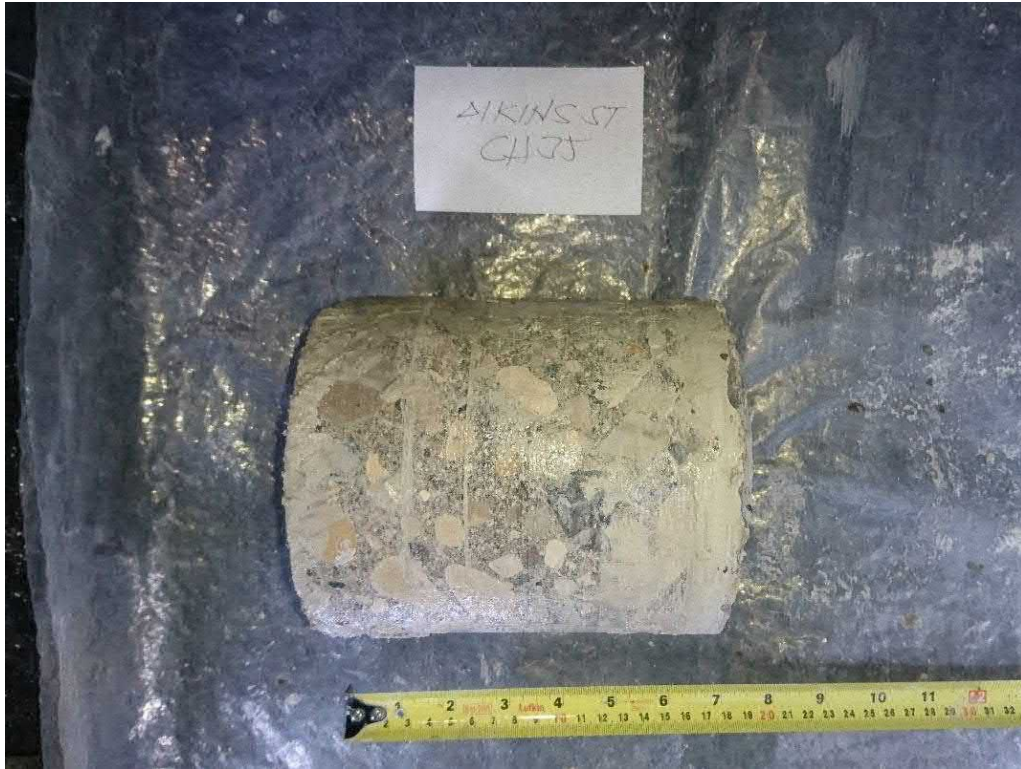


Photograph 31: Core Hole CH20-33 – Aikins Street

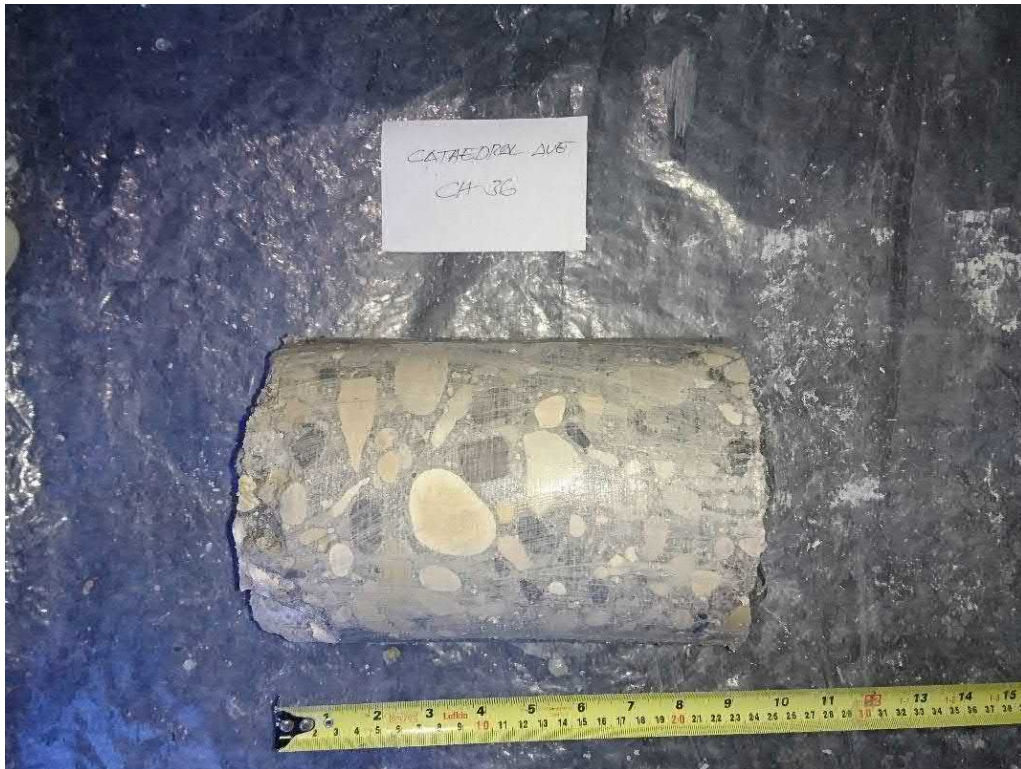


Photograph 32: Core Hole CH20-34 – Aikins Street





Photograph 33: Core Hole CH20-35 – Aikins Street

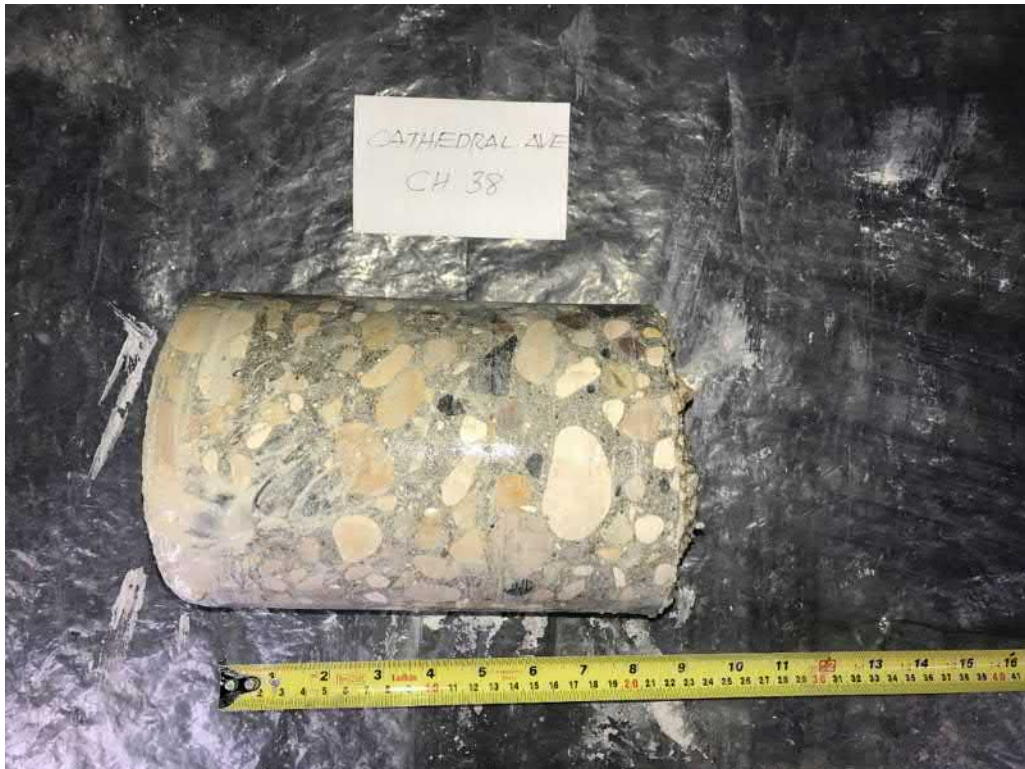


Photograph 34: Core Hole CH20-36 – Cathedral Avenue





Photograph 35: Core Hole CH20-37 – Cathedral Avenue



Photograph 36: Core Hole CH20-38 – Cathedral Avenue



Photograph 37: Core Hole CH20-39 – Cathedral Avenue

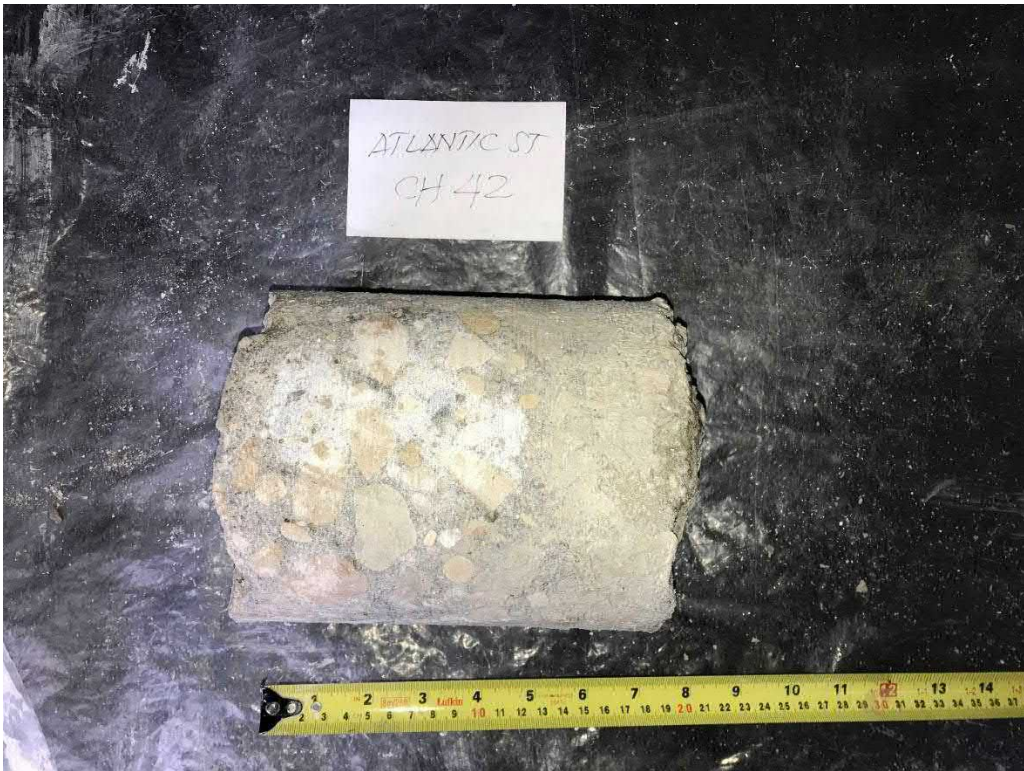


Photograph 38: Core Hole CH20-40 – Cathedral Avenue – Concrete not recovered



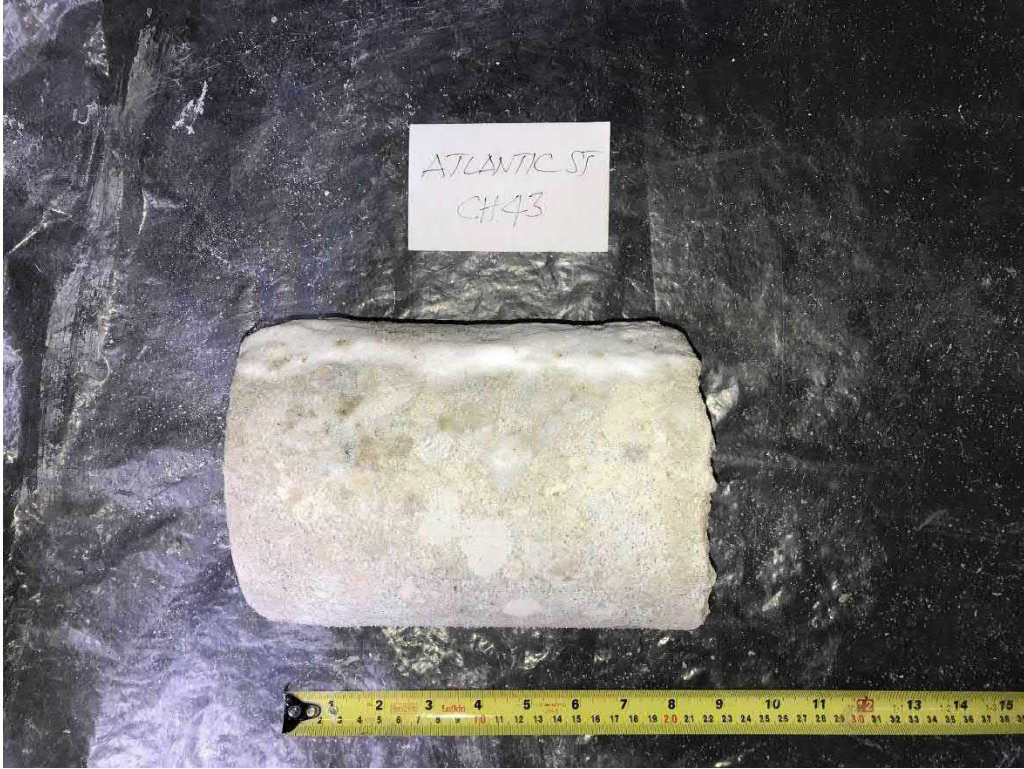


Photograph 39: Core Hole CH20-41 – Atlantic Avenue

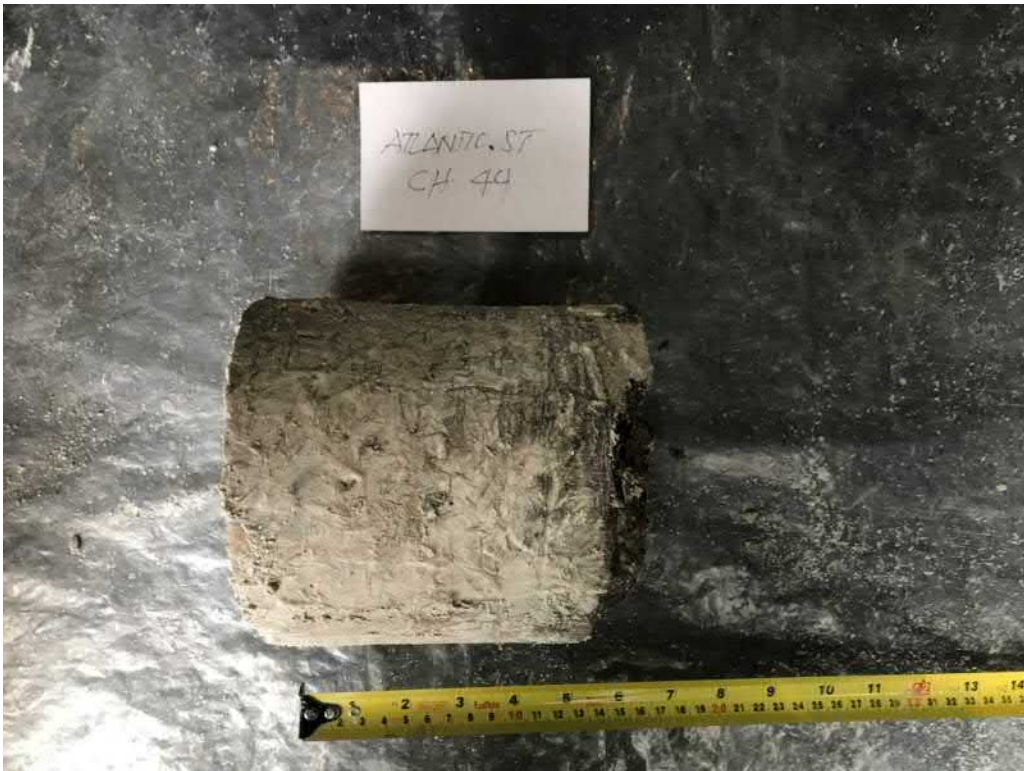


Photograph 40: Core Hole CH20-42 – Atlantic Avenue



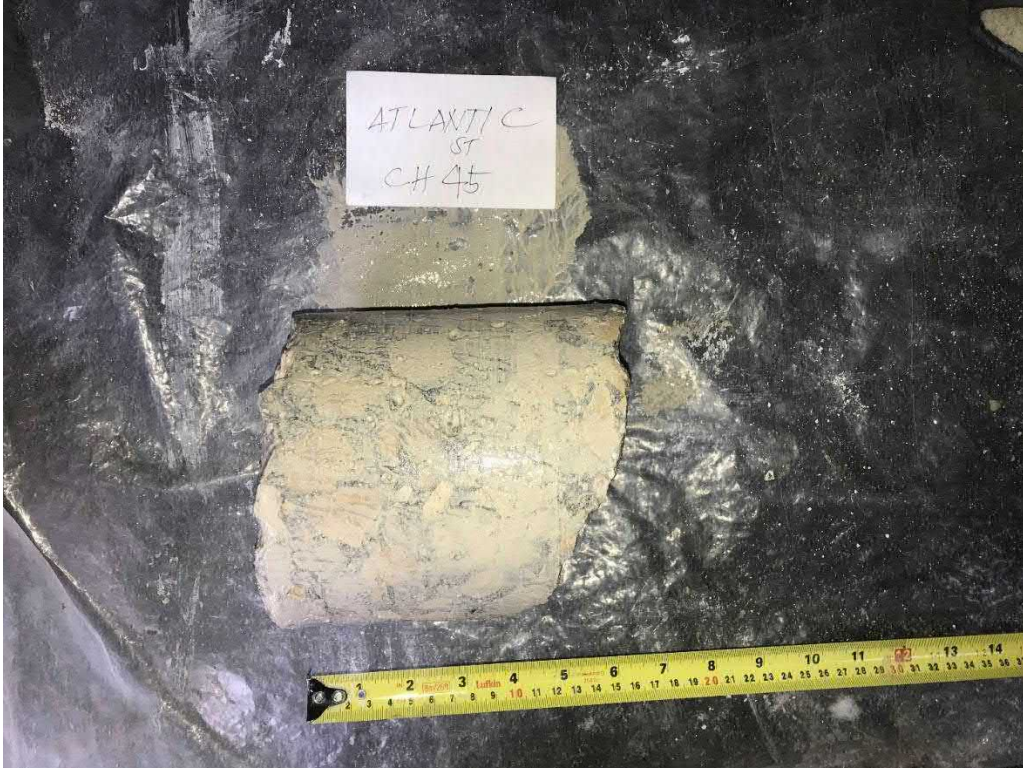


Photograph 41: Core Hole CH20-43 – Atlantic Avenue



Photograph 42: Core Hole CH20-44 – Atlantic Avenue





Photograph 43: Core Hole CH20-45 – Atlantic Avenue – Concrete partially recovered



Photograph 44: Core Hole CH20-46 – Bannerman Avenue





Photograph 45: Core Hole CH20-47 – Bannerman Avenue –Asphalt partially recovered



Photograph 46: Core Hole CH20-48 – Bannerman Avenue



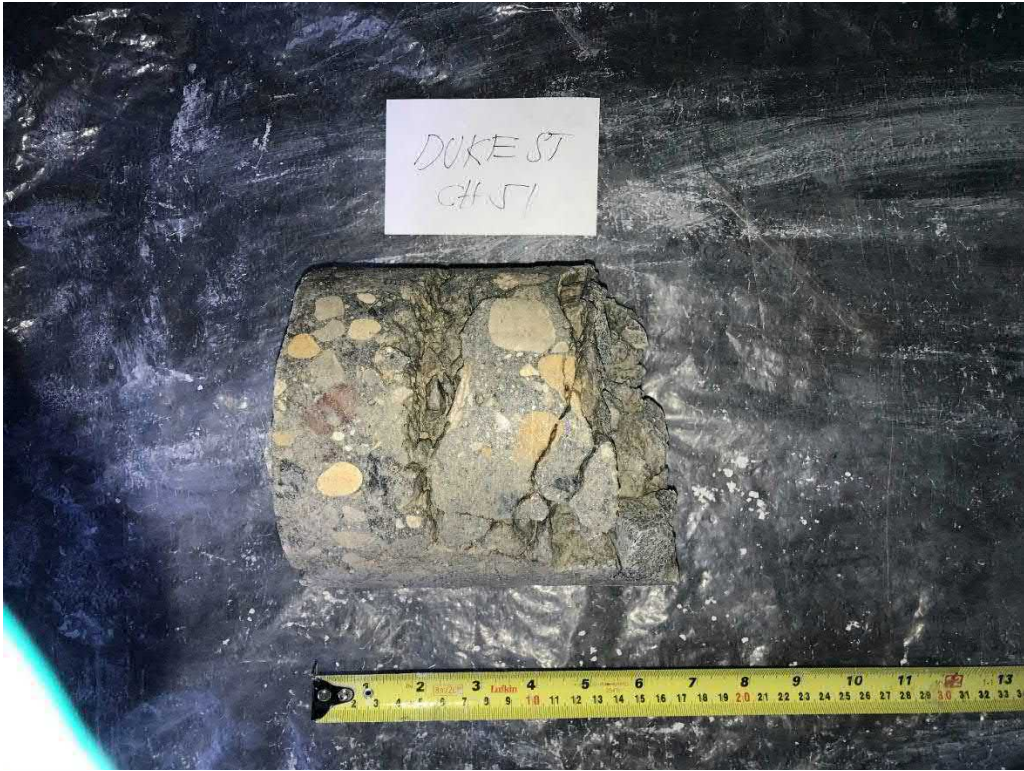


Photograph 47: Core Hole CH20-49 – Bannerman Avenue



Photograph 48: Core Hole CH20-50 – Bannerman Avenue





Photograph 49: Core Hole CH20-51 – Duke Street



Photograph 50: Core Hole CH20-52 – Duke Street





Photograph 51: Core Hole CH20-53 – Duke Street



Photograph 52: Core Hole CH20-54 – Tanner Street



Photograph 53: Core Hole CH20-55 – Tanner Street



Photograph 54: Core Hole CH20-56 – Tanner Street – Concrete not recovered





Photograph 55: Core Hole CH20-57 – Tanner Street

## **APPENDIX 'B'**

# **MINIMUM SAFETY REQUIREMENTS FOR CONTRACTORS WORKING ON CP PROPERTY IN CANADA**





## Minimum Safety Requirements for Contractors Working on CP Property in Canada



<b>Approval Authority:</b>	Corporate Risk	<b>Effective Date:</b>	October 1, 2018
<b>Version:</b>	3.0	<b>Review Date:</b>	October 1, 2021

## Table of Contents

Table of Contents .....	2
Introduction .....	3
1 Application .....	3
2 Definitions and Interpretation.....	3
3 Contractor Compliance & Responsibilities .....	5
4 Site Safety Plan.....	6
5 Safety Training.....	7
6 Safety Orientation.....	7
7 Job Safety Briefing .....	7
8 Applicable Legislation.....	8
9 Security Access to CP Property .....	9
10 Personal Conduct.....	10
11 Personal Protection.....	12
12 Railroad Track Protection.....	14
13 WHMIS .....	17
14 Operation of Highway Vehicles.....	18
15 Tools, Equipment and Machinery .....	20
16 Emergency Response .....	22
17 Confined Space .....	23
18 Reportable Accidents, Incidents and Injuries .....	24
19 Reporting .....	25
20 Contractor & Contractor Personnel Acknowledgement .....	26
21 Attachment A - Emergency Information Sheet .....	28

# Introduction

At Canadian Pacific (CP), safety is an integral part of the way we do business. We expect everyone working on Canadian Pacific's property to be unconditionally committed to safety. Safety must be given top priority and will take precedence over deadlines, production schedules, and all other considerations.

## 1 Application

### 1.1 Application

- 1.1.1 These Minimum Safety Requirements are applicable to all who work on CP property (except as noted in 1.13 and 1.14 below) including Contractors and other persons performing Work or otherwise providing services to Canadian Pacific on CP Property in Canada.
- 1.1.2 These Minimum Safety Requirements cannot be waived or altered, in whole or in part, without a prior Risk Assessment specific to the Work conducted and the Manager-In-Charge has provided written consent.
- 1.1.3 Notwithstanding the foregoing, these Minimum Safety Requirements do not apply to other railway companies who only operate trains on CP Property under various trackage or interchange agreements.
- 1.1.4 Further, notwithstanding the foregoing, these Minimum Safety Requirements may not apply to Work or services provided in CP Property in Canada that are Office Premises, in which case, CP's Minimum Safety Requirements for Contractors Working In CP's Office Premises may apply.

## 2 Definitions and Interpretation

### 2.1 Definitions

- 2.1.1 In these Minimum Safety Requirements, the following capitalized terms shall have the ascribed meaning below:
  - (a) **"Applicable Legislation"** means all applicable legislation, regulations, by-laws, codes, rules, standards, policies, procedures, promulgated by any federal, state, and municipal governmental body, including those of its agencies, having authority over CP and, or a Contractor in relation to the Work in the matter of health and safety of the person, property and, or the environment;
  - (b) **"Canadian Pacific"** or **"CP"** means Canadian Pacific Railway Company Ltd., and its subsidiaries and affiliates, and includes each of their respective directors, officers, employees, agent, and representatives;
  - (c) **"CP Personnel"** means CP's employees, agents, and representatives;
  - (d) **"CP Property"** means any building, facility, yard, track, right of way or other property owned or controlled by CP;
  - (e) **"Contractor"** means the company or person, and their respective employees and authorized agents, representative and subcontractors who are providing goods or services to CP; or on behalf of a third party working on CP property.
  - (f) **"Contractor Personnel"** means the Contractor's employees, and authorized agents, representative and subcontractors;
  - (g) **"Co-mingled Work"** means Work where Contractor Personnel works directly with or, in close proximity (time or space) to CP Personnel;

- (h) **“eTest”** an efficiency test. It is a planned procedure to evaluate compliance with rules, instructions and procedures, with or without the employee's knowledge.
- (i) **“Foul of Track”** means the placement of an individual or equipment within 4’ feet of the outside rail of a railway track that could be struck by a moving train or on- track work equipment (e.g. Hi-rail equipment).
- (j) **“Hazardous Materials”** means any substance, which is hazardous to persons or property and includes, without limiting the generality of the foregoing:
  - (i) radioactive, explosive, poisonous, or toxic substances;
  - (ii) any substance that if added to any water, would degrade or alter the quality of the water to the extent that it is detrimental to its use by man or by any animal, or plant;
  - (iii) any solid, liquid, gas or odour or combination of any of them that, if emitted into the air, would create or contribute to the creation of a condition of the air that endangers the health, safety, or welfare of persons, or the health of animal life, or causes damage to plant life or to property; and
  - (iv) substances declared to be hazardous, toxic or dangerous under any law or regulation now or hereafter enacted by any governmental authority having jurisdiction.
- (k) **“Manager-in-Charge”** means a CP manager as designated or otherwise identified by CP as being responsible for overseeing the Work to be performed, such Manager-in-Charge may include, but is not limited to Local CP Management, Regional Superintendents, Division Engineers, and Project Managers.
- (l) **“Mobile Equipment”** means any motorized and self-propelled equipment, excluding Railway equipment and highway vehicles, but including, for example, forklifts, tractors, cranes, ATVs, mules, motorized scissor lifts, and similar equipment that are not designed to operate or move on railway tracks;
- (m) **“Office Premises”** means any building, facility, or portion thereof, or other premises, whether owned or controlled by CP, which is used solely for clerical or administrative purposes and which does not contain heavy equipment or machinery, as designated by CP from time to time;
- (n) **“Qualified and Authorized”** means a status attained by a person who has successfully completed any required training and demonstrated proficiency in the duties of a particular position or function and who has been given the right to act.
- (o) **Railway equipment”** means trains, locomotives, railcars, track units, hi-rail vehicles and any other equipment designed to operate or move on railway tracks;
- (p) **“Site Safety Plan”** means a contractors’ documented plan which set out how Work is to be conducted in a safe manner, as required by Applicable Legislation see 3.16;
- (q) **“Third Party Project”** means any work being performed on CP property that CP is not managing (i.e, road authority, utility company, commuter agency, or other similar entity, are on CP property for their own purposes, and not a project sponsored or managed by CP.
- (r) **“Work”** means the provision of products and services and related activities;
- (s) **“Work Site”** means any CP Property where CP Personnel or Contractor Personnel are present, or permitted to be present, while engaged in any Work, including any railway equipment, Mobile Equipment and highway vehicles operated by or used to convey a person engaged in such Work. This applies also to work immediately adjacent to CP property, which can pose a risk to safe railway operations (i.e., blasting, excavation next to Right-of-Way (ROW), etc.).

## **2.2 Interpretation & Application**

- 2.2.1 Where legislation is referred to in these Minimum Safety Requirements, it shall include all amendments and replacements thereto as promulgated from time to time.
- 2.2.2 Where standards, such as those of the Canadian Standards Association (CSA), is referred to in these Minimum Safety Requirements, they shall include all amendments and replacements thereof from time to time.
- 2.2.3 Where there is any ambiguity, inconsistencies, or omissions between or among any agreements with CP, expressed or implied; any Applicable Legislations; any applicable CP policies and practices; and any applicable industrial standards and practices, Contractor and Contractor Personnel shall adhere to that which is most stringent and current.

# **3 Contractor Compliance & Responsibilities**

## **3.1 General Compliance**

- 3.1.1 Contractor shall be fully and solely responsible for ensuring the safety and health of Contractor Personnel and for ensuring that its Work and other activities do not compromise the health and safety of CP Personnel or any other party, the protection of the environment, the protection of CP's property and those of any other party, and do not interfere with the safety of CP's railway operations.
- 3.1.2 Contractor shall comply with and shall ensure all of Contractor Personnel are trained and qualified to safely perform the Work and that they comply with all Applicable Legislation pertaining to the protection against fire, safety, health, and environmental hazards, and with any license, permits, authorizations issued by the respective authority.
- 3.1.3 Contractor shall comply with and shall ensure all of Contractor Personnel comply with all terms and conditions of all agreements, expressed or implied, between Contractor and CP, and all applicable CP policies and practices.
- 3.1.4 Subject to the requirements of CP's Access Control Procedures, the contractor shall provide CP eRailsafe training for each employee engaged in work on CP property. Where there is no agreement between CP and the Contractor, the Contractor is responsible for meeting the additional requirements outlines within CP's Access Control Procedures.
- 3.1.5 Contractor shall provide Contractor Personnel, at its own expense, all safety equipment required to protect against injuries during the performance of the Work and shall ensure that Contractor Personnel are knowledgeable of and utilize safe practices in performing the Work.
- 3.1.6 The Contractor shall have a copy of the following documents at the Work Site at all times, and shall produce them as and when requested by CP:
  - (a) These Minimum Safety Requirements for Contractors Working on CP Property;
  - (b) Licenses, Certifications, permits, training records or other documents required by Applicable Legislation or these Minimum Safety Requirements;
  - (c) Contractor's Site Safety Plan;
  - (d) Contractor's Emergency Information Sheet (see Attachment A); and
  - (e) Any additional documents required by Contract or by agreement with Manager-in-Charge.
  - (f) Employee identification (eRailsafe badge – see 9.1.1).

### **3.2 Compliance Assurance**

- 3.2.1 CP reserves the right to observe, inspect, test and audit Contractor and Contractor Personnel for compliance with all requirements herein, and to demand and receive all relevant records, documentation, and materials evidencing compliance, at any time, and from time-to-time.
- 3.2.2 Failure of the Contractor or Contractor Personnel to comply with any applicable provisions herein may be considered a material breach, and in addition to all other remedies available, CP may without prejudice:
  - (a) take over control of that Work or activity;
  - (b) order the Work to stop; and/or
  - (c) order Contractor Personnel to leave CP Property.
- 3.2.3 Upon the earlier of the completion of the Work, the expiration of the applicable agreement, or the request of a Manager-in-Charge, Contractor and Contractor Personnel shall return all identification, badges, access cards, and decals, issued or provided by CP to the Manager-in-Charge.

## **4 Site Safety Plan**

### **4.1 General Requirements**

- 4.1.1 Prior to starting any Work on CP Property, the Contractor must have a written Site Safety Plan that identifies:
  - (a) All applicable legislation, rules, policies and work practices in relation to the Work being performed;
  - (b) Specific hazards that are associated with the Work being performed on CP property for CP, and Work being performed not for CP:  
For example:
    - (i) Construction, maintenance or inspections of buildings;
    - (ii) Working on or adjacent to railroad tracks;
    - (iii) Maintenance or inspection of railroad tracks, crossings or signal systems;
    - (iv) Maintenance, reconstruction or construction of railway crossings, crossing approaches, grade separations, passenger facilities, passenger platforms, utility crossings or any other work which may affect the safe movement of trains;
    - (v) Operating Railroad Equipment on CP tracks; or
    - (vi) When/where Contractor Personnel work directly with or in proximity (time or space) to CP Personnel; and
  - (c) Methods of verifying compliance.
- 4.1.2 The Contractor will provide Manager-in-Charge with a copy of this Safety Management Plan on reasonable request.
- 4.1.3 The Contractor must be able to demonstrate an awareness of applicable legislation, rules, policies and work practices in relation to the work being performed.

## **5 Safety Training**

### **5.1 Minimum Training & Qualifications**

- 5.1.1 At its sole cost and expense, Contractor shall ensure that all Contractor Personnel be fully trained and qualified for the Work they will be performing. Contractors and Contractor Personnel shall meet, or exceed, all applicable legislation requirements relating to training and qualification.
- 5.1.2 Additionally, Contractor Personnel training and qualification shall meet or exceed all applicable industry standards.

### **5.2 Proof of Training & Qualification**

- 5.2.1 Contractor Personnel shall at all times have proof of such training and qualifications and shall produce them as and when requested by the Manager-in-Charge.
- 5.2.2 CP reserves the right to inspect qualification certificates, licenses, training records and/or Work-history records for any Contractor Personnel, and, or to be provided with copies thereof, on reasonable request. In addition, CP reserves the right to perform eTests on contractor employees, and request discipline for non-conformance.

## **6 Safety Orientation**

### **6.1 General Requirements**

- 6.1.1 Prior to beginning Work, all Contractor Personnel shall participate in a CP authorized safety orientation, including on-site orientation presented by the Manager-in-charge or designate.
- 6.1.2 Any time the scope of Work, location, condition or supervision changes, Contractor Personnel may be required to attend additional safety orientation sessions.
- 6.1.3 After successful completion of such safety orientation, Contractors must be able to produce company identification or an eRailsafe photo identification badge authorizing access to CP property unescorted for the purposes of conducting work. Managers have the ability to enter the tracking code into CM (Compliance management). Third parties who hire subcontractors must ensure required compliance while on CP property. The eRailsafe identification card shall be worn or be made visible at all times, or produced upon request and cannot be transferred under any circumstances.

## **7 Job Safety Briefing**

- 7.1.1 Contractor Personnel shall attend all Job Safety Briefings as and when conducted. Contractor Personnel shall be solely and fully responsible for understanding the content of the Job Safety Briefing, and at a minimum shall:
  - (a) have an understanding of the scope of Work to be performed and an appreciation of the nature of the location, environment, and conditions where such Work is to be performed;
  - (b) be aware of specific or unusual hazardous condition, existing or potential and the control measures required to protect against, control, mitigate, or where possible, avoid said hazard; and
  - (c) Have emergency response plan/evacuation procedures.

- 7.1.2 Where Contractor Personnel are working directly with or in proximity (time or space) to CP Personnel, job briefings must include both CP Personnel and Contractor Personnel, and any other affected third parties. The Job Safety Briefing shall identify nature and extent of the interaction between the Work being performed by Contractor Personnel, and those performed by CP Personnel or other third parties. Contractor Personnel shall inform CP Personnel, and any other third parties of known or potential unsafe conditions and hazards that may be created by, resulting from, or inherent in their Work and the corresponding preventative, mitigation, and/or control measures at all job safety briefings prior to commencing Work, or as soon as Contractor Personnel becomes aware of such conditions.
- 7.1.3 In all situations, all Contractor Personnel are expected to:
- (a) continually identify hazards and assess risk of hazards and to continually and clearly communicate all hazards to the Manager-in-Charge and to all other parties that may be affected at job briefings, and at any other time as and when appropriate or necessary;
  - (b) take actions that are within their assigned responsibility to eliminate or control hazards and risks; and
  - (c) immediately notify their supervisor or the Manager-in-charge of hazards that pose unacceptable risk that they are unable to eliminate or control.
- 7.1.4. Where Contractor Personnel are unable to eliminate or control a hazard, Contractor Personnel shall take interim measures to protect people, property, equipment and the environment until the hazard can be properly assessed and appropriate corrective actions taken.

## **8 Applicable Legislation**

### **8.1 General Requirements**

- 8.1.1 Contractor and Contractor Personnel shall be solely responsible for identifying and complying with all Applicable Legislation. Contractors and Contractor Personnel providing Work to CP are likewise required to comply with all Applicable Provincial and Federal Legislations. At a minimum, Contractor and Contractor Personnel shall comply with the federal legislations set out below which list is intended solely for general guidance, and not as a comprehensive list of all applicable legislation.
- 8.1.2 Additionally, the Railway Association of Canada (RAC) is an industry association which can provide support and guidance on matters related to railway safety and the transportation of dangerous goods.

### **8.2 Transportation of Dangerous Goods**

- 8.2.1 When Work involves the handling or transportation of dangerous goods, that Work must comply with the federal *Transportation of Dangerous Goods Act*, (TDG). Contractor shall be solely responsible for ensuring that all Contractor Personnel who handles, offers for transport and/or transports dangerous goods by any transportation mode be trained and holds a valid training certificate or is working under the direct supervision of someone who is trained and holds a valid training certificate. The training must be based on the Work that the person is expected to perform and the DG that the person is expected to handle, offer for transport or transport.
- 8.2.2 Contractors shall be solely responsible for ensuring that Contractor Personnel who handles, offers for transport and/or transports dangerous goods by any transportation mode are trained and hold a valid training certificate or is working under the direct supervision of someone who is trained and holds a valid training certificate. That training must be based on the Work that the person is expected to perform and the dangerous goods that the person is expected to handle, offer for transport or transport.



- 8.2.3 Transport Canada enables the Transportation of Dangerous Goods Act to publish Transportation of Dangerous Goods Regulation. The TDG Regulations divide dangerous goods into 9 classes according to the type of hazard they present

### **8.3 Canada Labour Code**

- 8.3.1 Where Work is being performed that may create a risk to the health and safety of CP Personnel, Contractor Personnel must comply with Part II of the Canada Labour Code.
- 8.3.2 Additionally, Contractor and Contractor Personnel shall comply with all applicable provisions of the Occupational Health and Safety Regulations (COHS) which are intended to prevent accidents and injuries to employees working for federally regulated companies. Compliance with these regulations may extend to Contractors, depending on the type of Work being done and their proximity to CP Personnel (i.e. Co-mingled Work). Alternatively, provincial occupational health & safety regulations will govern Contractors.

### **8.4 Railway Safety Act**

The *Railway Safety Act* (RSA) governs all federally certified railways in Canada and some provincial railways through various agreements with Transport Canada. The RSA addresses all

- 8.4.1 matters relating to the construction, alteration, operation, inspection and maintenance of railway works and railway equipment, and contains training and qualification requirements for certain types of Work. When applicable, Contractor and Contractor Personnel shall perform Work in accordance with the RSA, as if directly bound by it.

### **8.5 Environmental Protection Act**

- 8.5.1 Where Work is being performed that may impact the environment, that Work must comply with all applicable federal and provincial environmental acts and regulations. Some examples of applicable legislations includes the Canadian Environmental Protection Act; Fisheries Act, Navigable Waters Protection Act; Species at Risk Act; Migratory Birds Convention Act; and all corresponding Regulations. Provincial requirements are normally set out in a general Environmental Protection Act which is complemented by numerous regulations addressing more specific areas of concern. Canadian Environmental Protection Act <http://laws-lois.justice.gc.ca/eng/acts/C-15.31/>

## **9 Security Access to CP Property**

### **9.1 Access to CP Property**

- 9.1.1 All Contractor Personnel must have the following identification in their possession at all times while on CP Property, and present them for review to any Manager-in-Charge, other CP managers and employees, Police Officer, security guard, or regulatory officer upon request:

- (a) photo identification (e.g. driver's license);
- (b) proof of employment document or card;
- (c) identification card, or other proof of safety orientation issued by CP;
- (d) access pass, issued and signed by a CP manager, where Work requires Contractor Personnel to ride in any locomotive or other non-passenger rolling stock;
- (e) security identification card, where required by CP; and
- (f) building access pass, where required by CP or by a third party having control of the premises.
- (g) Valid eRaisafe card

- 9.1.2 Where any Work requires Contractor Personnel to ride in locomotive or other non-passenger railroad equipment, the Contractor must also possess a CP ACCESS PASS for riding non-passenger railroad equipment, signed by the responsible operating manager.

Such a signed pass must be presented to the train crew or operator when boarding the equipment. Failure to possess such a pass will result in the equipment not moving, removal from the equipment, and/or the filing of trespasser charges.

## **9.2 Security Awareness**

- 9.2.1 The Contractor shall conduct such background check as is necessary to ensure that Contractor Personnel do not pose a security risk to CP, such security risk includes the risk of the commission of terrorist activities, sabotage, vandalism, theft, and violence. CP reserves the right, at all times, to require that Contractor undertake certain security training and/or perform background checks of Contractor Personnel, prior to allowing such Contractor Personnel to enter onto CP Property.
- 9.2.2 On request CP can make available a copy of CP's Railway Security Awareness program for use by Contractor Personnel.

## **9.3 Firearms & Explosives**

- 9.3.1 Firearms (loaded or empty) are not permitted on CP Property, except for Police officers and other designated government officials when authorized to do so.
- 9.3.2 No explosives will be permitted on CP Property without written approval by the Manager-in-Charge.

## **9.4 Reporting**

- 9.4.1 Contractor Personnel must report any security concern, security incident, criminal activity (known or suspected), suspicious happenings and/or suspicious persons on CP Property to the Manager-in-Charge or to CP Police Services in accordance with Section 18.

# **10 Personal Conduct**

## **10.1 Drug and Alcohol Standards**

- 10.1.1 The Contractor and Contractor Personnel shall comply with CP's Alcohol and Drug Policy and Procedure while under contract to perform services for CP. Any contravention of these requirements will be considered a breach of contract.
- 10.1.2 The Contractor and Contractor Personnel shall report fit to work and remain fit for work as scheduled and when on scheduled call and be able to perform their duties free from the negative effects, including the after effects of alcohol, legal recreational cannabis, illicit or illegal drugs, other mood altering substances or medications including medical marijuana, any of which can have the potential to adversely affect the way a person thinks, feels or acts.
- 10.1.3 It is prohibited to be in control of a CP vehicle or moving equipment (either on or off duty), while under the influence of alcohol and/or drugs, including the after effects of such use.
- 10.1.4 All Contractors must comply with these requirements when scheduled on call and/or subject to duty.
- 10.1.5 If there are grounds to believe a contract worker is unfit for work, the worker will be removed from CP property in a safe manner under the care of another adult person, to a safe place for example, to their local place of residence, or provided the opportunity to arrange the same or an escort is arranged to the nearest appropriate medical facility if there is a medical problem that requires immediate attention. The primary contractor is required to ensure appropriate investigation, follow up and a fitness for duty assessment is conducted to ensure the contractor

is fit to return to work prior to any return to CP property or work. CP reserves the right not to allow a contractor back on CP property or to CP work.

- 10.1.6 In the event a contract worker is directly involved in a significant work related incident as described by CP's Alcohol and Drug Policy and Procedure, the worker may be subject to Post Incident Testing under the CP Testing Program. They may be removed from CP premises pending the results of the investigation, including receipt of alcohol and drug testing results. Depending on the test results and the outcome of the investigation, a fitness for work medical assessment may also be required through the primary contractor before the Contractor can return to CP premises or work. CP reserves the right not to allow a contractor back on CP property or to CP work.
- 10.1.7 CP reserves the right to request drug and alcohol testing for Contractor Personnel performing Safety Critical and Safety Sensitive duties under CP's workplace testing program requirements as and where permitted by law.

## **10.2 Inappropriate Behavior**

- 10.2.1 CP is committed to maintaining a Work environment that supports the dignity of all individuals. No person working at CP may be subjected to any form of discrimination or harassment, including sexual harassment.
- 10.2.2 Acts or threats of violence are unacceptable at all times on CP Property. Uttering of threats or committing acts of violence will result in the removal of the responsible Contractor Personnel from CP Property, termination of the Contract, and/or criminal charges.
- 10.2.3 Horseplay, practical jokes, fighting or any other activity that may create a safety hazard will not be tolerated.
- 10.2.4 Inappropriate language directed at any CP employee or agent of CP, will not be tolerated.

## **10.3 Electronic Entertainment and Communication Devices**

- 10.3.1 The use of personal entertainment devices, including portable audio and video devices such as compact DVD, CD, video game players, tablets, SMART watches and MP3 players, is prohibited:
  - (a) while working on CP Property;
  - (b) while transporting CP personnel, whether on and off CP property; and
  - (c) while operating any CP highway vehicles, Railroad Equipment or Mobile Equipment, when on and off CP property
- 10.3.2 The use electronic communication devices, including cell phones, Smart Phones, Blackberries, walkie-talkies, PDAs, iPads, tablets, GPS navigation units, portable computers and similar devices, is prohibited:
  - (a) while operating a highway vehicle, unless it is stopped and parked in a safe location;
  - (b) while operating or assisting in the operation of any railroad equipment or mobile equipment;
  - (c) while operating power tools, equipment or machinery;
  - (d) when Foul of Track for any reason;
  - (e) whenever use of such a device creates an unsafe condition.

10.3.3 Notwithstanding the foregoing, company cell phones, radios, walkie-talkies, GPS units, iPads, tablets, and other communication devices may be used solely for the conduct of business when authorized by the CP Manager-in-Charge and where not prohibited by state or municipal legislation. Any electronic communication device may be used when it is necessary to communicate an emergency condition.

#### **10.4 Smoking**

10.4.1 Smoking, including the use of e-cigarettes is prohibited on all CP Property, and in or on all highway vehicles, Railroad Equipment, and Mobile Equipment, except for CP designated outdoor smoking areas.

## **11 Personal Protection**

### **11.1 Work Clothing**

11.1.1 The Contractor must ensure that Contractor Personnel wear clothing that meets Applicable Legislation and is suitable to perform the Work safely. This includes at minimum ankle length pants and waist length shirts with a minimum quarter-length sleeves at all times. Clothing must not interfere with vision, hearing or use of hands and feet.

### **11.2 Personal Protective Equipment (PPE)**

11.2.1 The Contractor shall ensure that Contractor Personnel wear personal protective equipment required by Applicable Legislation, regulations, codes and industry standards as necessary to protect against personal injuries while on Railway property. All personal protective equipment shall be approved by the Canadian Standards Associations (CSA) or by the American National Standards Institute (ANSI), and shall be in good condition and be properly fitted.

11.2.2 The following mandatory personal protective equipment (“PPE”) shall be supplied by the Contractor at its own expense, and shall be worn at all times by Contractor Personnel while on CP Property:

- (a) safety hard hat, meeting CSA standard Z94.1 or ANSI 89.1 standards;
- (b) safety boots with protective toe caps and soles, meeting CSA standard, Z195 (Green Triangle - Grade 1);
- (c) safety glasses with permanently attached side shields, meeting CSA standard Z94.3;
- (d) high visibility fluorescent outerwear with retro reflective striping (meeting CSA standard Z96, class 2 level 2), with such high visibility fluorescent outerwear not covered by other clothing or equipment, except where necessary for safety reasons such as where fall protection or pole climbing equipment is being used; and
- (e) any other PPE as required by Applicable Legislation, CSA standard, or otherwise required to protect Contractor Personnel from injuries.

11.2.3 In addition to the foregoing minimum requirements, the following table contains further recommendations in relation to specific types of PPE:

Type of Protection	Additional Recommendations
Hard Hats	Have hi-visibility characteristics which are not obscured by markings or decals
Safety Eye & Face Protection	<p>Tinted safety eyewear must meet Canadian standards for red signal recognition if operating railway equipment (safety eyewear meeting this requirement is available from Acklands-Grainger; ask for CP approved tinted safety eyewear)</p> <p>Transition lenses are discouraged and should be worn with caution when working in changing light conditions</p> <p>Personal sunglasses are discouraged and must not be worn when operating railway equipment</p> <p>Wear mesh face shields over top safety glasses when using any striking tool while performing on track maintenance work (e.g. spiking, snapping on/off anchors, etc.). If working alongside CP employees you will be required to comply with this practice.</p>
Safety Footwear	<p>Have defined heels</p> <p>Be laced and tied securely for ankle support</p> <p>When snow and ice conditions are present wear anti-slip winter footwear</p>
High-Visibility Apparel	Lime-green is recommended when working on, or near tracks, or when performing Co-mingled Work

11.2.3 Contractor and Contractor Personnel shall be solely and fully responsible for assessing the risks related to the Work and determining whether additional PPE may be required such as:

- (a) Nomex or Proban fire-retardant protective gear when performing certain TDG Work and or handling certain Hazardous Materials or performing specialized Work.
- (b) hearing protection when working in any area where noise exposure levels:
  - (i) are consistently greater than 84 dBA) ;
  - (ii) exceed 115 dBA at any time; and
  - (iii) any other Work areas where posted, or so notified by CP management.
- (c) respiratory protection where Contractor Personnel may be exposed to occupational dusts/particulates, fumes, mists, gases and vapors, in which case, in which case Contractors must have a written Respiratory Protection Program that meets or exceeds Applicable Legislation;
- (d) additional eye and face protection meeting CSA standard Z94.3 (i.e. face shields, impact/splash goggles, welding/cutting goggles and welding helmets); and
- (e) fall protection systems and equipment meeting appropriate CSA standards as required by Applicable Legislation and appropriate for the related fall hazards.
- (f) fall protection when working on an unguarded surface over water, where the water is deeper than 1.2 meters (4 feet), or where there is a hazard of drowning due to terrain, winter conditions, water velocity or current; contractors must use a fall protection system or a personal floatation device (PFD) meeting approved standards.

## 12 Railroad Track Protection

### Contractor's Responsibilities for the Protection of Railroad Traffic and Property

- 12.1.1 Where the Work Site is in close proximity to, or is located on, above, or below railroad tracks, special attention, care and precautions shall be taken to ensure the safety of all Contractor Personnel, CP Personnel, all other third parties and to protect CP's property and railroad operations.
- 12.1.2 Contractor shall ensure that Contractor Personnel is made aware of all unique and inherent hazards in working near, on, above or below railroad tracks and shall ensure that all Contractor Personnel are fully trained and equipped to work safely.
- 12.1.3 Contractor Personnel shall at all times remain alert to the movement of trains, rolling stock and other Railway equipment.
- 12.1.4 No temporary structure, materials, or equipment shall be permitted closer than 3.66 meters (12 feet) to the nearest rail of any track without prior approval in writing of the Manager-In-Charge.
- 12.1.5 Contractor Personnel shall be especially alert in yards and terminal areas as
  - (a) Railway equipment that appears to be stationary may be moving;
  - (b) the rate of movement of Railway equipment may be faster than it appears;
  - (c) Railway equipment change tracks often; and
  - (d) movements may be occurring simultaneously on adjacent tracks
- 12.1.6 The Contractor shall, at all times, conduct its operations in a wholly responsible manner to avoid damage to CP's tracks or property.

### 12.2 15 m (50 ft.) Clearance Requirement

- 12.2.1 All work shall be performed as far away from railway tracks as possible.
- 12.2.2 Unless authorized by CP, Contractor Personnel, equipment, and vehicles are not permitted within 15 m (50 ft.) of the closest track centerline.
- 12.2.3 In the event work must be carried out within 15 m (50 ft.) of the closet track centerline, written authorization must be obtained from the Manager-in-Charge, and Contractor Personnel must still remain at the maximum practicable distance from all railway tracks at all times.
- 12.2.4 When crossing tracks, Contractor Personnel shall ensure a minimum of 15 m (50 ft.) separation between standing Railway equipment, stay at least 15 feet away from the end of the nearest equipment, and look both ways before crossing tracks, and if clear, walk at a right angle to the tracks. The 15 meters (50 feet) distance must take in account the swing radius of work equipment, vertical grade differences, and overhead work distances.
- 12.2.5 No work activities or processes are allowed within 15 m (50 feet) of the track while trains are passing through the work site unless specifically authorized.

### 12.3 Flagging Protection

- 12.3.1 When the Work requires Contractor Personnel to be within 15 m (50 ft.) of any railway tracks, Contractor or Contractor Personnel shall notify and obtain the written approval of the Manager-in-Charge in advance of the intended start date, and when approved, shall only perform Work strictly in accordance with all terms and conditions of that approval.
- 12.3.2 Unless otherwise indicated by the Manager-in-Charge, proper protection against the movement of trains, rolling stock and other Railway equipment shall be deemed required at all times

- whenever Work or Contractor Personnel must be within 50 feet (approximately 15 metres) of the closet track centerline. Protection may be provided only by a qualified CP employee through use of a flag person, Canadian Railway Operating Rules (CROR) Track Occupancy Protection (TOP), mechanical blue flag protection or other protection methods designated by the Manager-in-Charge.
- 12.3.3 Where CP determines that flagging is required, then Work must be strictly conducted under the direction of a CP flag person or such other person designated by the Manager-in-Charge.
- 12.3.4 Contractor Personnel shall ensure that there is clear communication at all times between Contractor Personnel and any CP flag person. Contractor Personnel shall ensure that they are aware of:
- (a) flagging distance limits;
  - (b) time limits; and
  - (c) any adjacent tracks where movement of Railway equipment may still occur.
- 12.3.5 Contractor Personnel shall not assume that a train movement is being stopped or cleared unless clear communication is received directly from the CP flag person.
- 12.3.6 A job safety briefing between the CP flag person and all Contractor Personnel must occur before beginning any Work on or Foul of Track, or within CP's ROW depending on the nature of the site.
- 12.3.7 Blue flag protection is used to indicate that CP or Contractor Personnel are working on, under or between Railway equipment and movement of trains or other Railway equipment is prohibited. Blue flags must not be tampered with or obstructed. Blue flags can only be removed by the person or group of persons who originally applied it. Application, use, and removal of blue flags, when appropriate, may only be done under the authorization and guidance of the Manager-in-Charge.
- 12.3.8 Red flag protection is used to indicate that CP or Contractor Personnel are working on or Foul of Track, or the track is out of service and movement of trains or other Railway equipment is prohibited. Red flags must not be tampered with or obstructed. Application, use, and removal of red flags, when appropriate, may only be done under the authorization and guidance of the Manager-in-Charge. Similarly, as with all other flags; blue, yellow and green flags.

## **12.4 Working on or near Tracks**

- 12.4.1 When authorized to perform Work Foul of Track or otherwise be near railway tracks, Contractor Personnel shall ensure at Contractor Personnel, equipment, and vehicles are kept as far away from railway tracks as practicable, and shall at all times:
- (a) be alert to train movements and shall expect the movement of trains, engines, cars, or other mobile Railway equipment at any time, on any track, and in any direction, even if they appear to be stationary or in storage;
  - (b) not rely on others to protect them from train movement;
  - (c) stay at least 15 feet (approximately 5 meters) away from the ends of stationary railway equipment when crossing the track;
  - (d) ensure a minimum of 50 feet (approximately 15 meters) separation prior to crossing between railway equipment;
  - (e) look both ways before crossing tracks, and if clear, walk at a right angle to them.

- (f) never climb on, under or between railway equipment;
- (g) be aware of the location of structures or obstructions where track clearances are close;
- (h) not stand on the track in front of an approaching engine, car or other equipment;
- (i) when possible, stand at least 20 feet back from the track(s) when there is a passing movement of trains, engines, cars, or other mobile Railway equipment, to prevent injury from flying debris or loose rigging and shall observe the train as it passes and be prepared to take evasive action in the event of an emergency;
- (j) not stand on or between adjacent tracks in multiple track territory when a train is passing;
- (k) not walk, stand or sit on the rails, between rails or on the end of ties, unless absolutely necessary. As the rail surface can be extremely slippery, personnel must step over the rails when crossing tracks. Personnel shall also be aware railway ties can also be slippery and that railway ballast can shift while walking on top of it. Situational awareness and use of proper footwear is important;
- (l) not remain in a vehicle that is within 15.2 meters (50 feet) of a passing train unless specifically authorized, or where this is not possible, park the vehicle as far away from the tracks as possible and walk to as safe a distance whenever trains pass.
- (m) keep away from track switches as remotely operated switch points can move unexpectedly with enough force to crush ballast rock. Personnel shall stay away from any other railway devices they are unsure of. Personnel shall not disturb or foul the ballast at any time.
- (n) Third party work that has a potential to impact rail traffic must take into account machine swing radius, vertical grade differences, overhead work, etc to ensure it will not impact a passing train; work and equipment must maintain a distance of 15.2 meters (50 feet) of a passing train.
- (o) When exiting on track machinery as trains are passing; exit on the opposite side.
  - (a) use 3-point contact when getting on/off any vehicle, equipment or track unit;
  - (b) face the vehicle or equipment/track unit when getting on/off
  - (c) place handheld items onto equipment/track unit or seek help prior to getting on/off
  - (d) get on/off on the operators side when possible

## **12.5 Equipment on or near tracks**

- 12.5.1 Contractor Personnel shall not be Foul of Track with any piece of equipment without a CP flag person or other authorized track protection;
- 12.5.2 Contractor Personnel shall not move equipment across the tracks except at established road crossings, or unless under the protection and authorization of a CP flag person and only if the Work Site has been properly prepared for such a move. Tracked equipment will require a CP flag person any time railroad tracks are crossed.
- 12.5.3 Contractor Personnel shall not move equipment across railroad bridges or through tunnels, except as expressly authorized and only under such conditions as stipulated by the Manager-in-Charge.
- 12.5.4 Contractor Personnel shall move equipment away from the tracks at least 50 feet, or where not possible, park the equipment as far away from the tracks as possible, and walk to a safe distance whenever trains pass.
- 12.5.5 Buckets, shovels, and loads on cranes must be lowered to the ground to rest, and cranes without a load must have their load line tightened or retracted to prevent movement, whenever there are passing trains.



## 12.6 Railway Signs, Signals, Flags and other Communication Infrastructure

- 12.6.1 Signs, signals and flags shall not be obstructed, removed, relocated, disabled or altered in any way without proper authorization and qualification.
- 12.6.2 Only qualified Contractor Personnel who are authorized by CP are permitted to operate switches, derails, electric track mechanisms, signal and communication systems or other track control appliances.
- 12.6.3 Railway pole lines carry electric power and should be treated as any other power lines.
- 12.6.4 The Contractor shall keep all Contractor Personnel informed of current weather conditions. Personnel shall stay alert for possible high water conditions, or flash floods. During severe weather conditions:
  - a) Personnel shall be prepared to take cover in the event of a tornado;
  - b) Personnel shall not work while lightning is occurring;
  - c) If storm conditions arise unexpectedly, Contractor Personnel shall ensure that equipment is in the clear of the tracks and secured before seeking cover. Contractor Personnel shall stay away from railroad tracks when visibility is poor, such as during fog or blizzard conditions.

**Any Contractor personnel discovering a hazardous or potentially unsafe condition, which may affect the safe passage of railway traffic, must advise CP Police immediately by calling the CP Police Communications Centre – 1-800-716-9132**

## Excavation

- 12.7.1 Before starting excavation operations, the Contractor shall ascertain that there are no underground wires, fiber optic cables, pipelines or other utilities which could be damaged or, if present, that such installations are properly protected. Fiber optic cables are present on most segments of the right-of-way. Prior to commencing any excavation, the Contractor shall contact the proper authority to obtain the necessary permit and to locate and protect such cables or other underground utilities.
- 12.7.2 Excavations shall not be left unattended unless they are properly protected; and the Manager-in-Charge shall be notified.
- 12.7.3 Contractors MUST obtain and maintain utility locates in accordance with applicable law.

## 13 WHMIS

- 13.1.1 If at any time Contractor's Work involves the use, handling, storage, or disposal of Hazardous Materials ("Handling of Hazardous Materials"), Contractor Personnel must inform the Manager-in-Charge.
- 13.1.2 Contractors shall ensure that all Contractor Personnel are fully trained in the Handling of Hazardous Materials and that Contractor and Contractor Personnel are in full compliance with all Applicable Legislation, and as directed by the Manager-in-Charge.

13.1.3 Contractor Personnel shall have appropriate processes, systems and controls in place to prevent or otherwise mitigate potential environmental, health and safety risks associated with the Handling of Hazardous Materials.

### **13.2 Access to Safety Data Sheets (SDS)**

13.2.1 Prior to beginning any Work that may expose CP Personnel to Hazardous Materials, Contractor or Contractor Personnel shall:

- (a) provide a copy of the respective Safety Data Sheet (SDS) to the Manager-in-Charge; and
- (b) keep a copy of the SDS at the Work Site and shall such that it is readily available at all times.

### **13.3 Hazardous Material Incident or Spill**

13.3.1 In the event of a hazardous material incident or spill, the Contractor must:

- (a) ensure that no Contractor or CP Personnel have or will be exposed;
- (b) take all reasonable actions to contain the spill;
- (c) respond in accordance with its emergency response plan; and
- (d) notify CP immediately in accordance with Section 18.

## **14 Operation of Highway Vehicles**

### **14.1 Highway Vehicles**

14.1.1 The following requirements apply to all highway vehicles, when operated on CP Property; or used to transport CP Personnel.

### **14.2 Regulations and Inspection**

14.2.1 Before using a highway vehicle, Contractor Personnel shall:

- (a) complete a pre-trip inspection;
- (b) maintain an inspection log;
- (c) ensure periodic inspections are completed at official testing locations as required;
- (d) ensure the vehicle is maintained and in safe operating conditions at all times; and
- (e) ensure the vehicle is in compliance with applicable motor vehicle regulations and license requirements.

14.2.2 Vehicle maintenance, inspection records and logs must be made available to the Manager-in-Charge on request.

### **14.3 Vehicle Operator Requirements**

14.3.1 Operation of highway vehicles is restricted to those Contractor Personnel who are licensed, qualified and authorized to do so. Such Contractor Personnel shall be responsible for the safety of all passengers at all times. For greater certainty, such Contractor Personnel shall:

- (a) hold a valid license for the class of vehicle being operated, in accordance with applicable local, state and federal requirements, and
- (b) strictly comply with all posted traffic signs, signals, and all shall obey all Applicable Legislations; and
- (c) maintain the required driver log, and make the log available to the Manager-in-Charge on request, and
- (d) comply with the requirements on the use of electronic devices as set out in Section 10 above.

### **14.4 Driving on CP Property**

14.4.1 In addition to the requirements set out above, while on CP Property, Contractor Personnel shall:

- (a) travel only on designated roadways unless otherwise instructed;
- (b) keep daytime running lights on (if so equipped);
- (c) not exceed 15 mph unless otherwise posted;
- (d) come to a full stop at all blind corners, rail and roadway crossings;
- (e) yield the right of way to all Mobile Equipment and other non-highway equipment or service vehicles;
- (f) not operate vehicles (or any internal combustion equipment) inside buildings or enclosed structures unless adequate ventilation is provided;
- (g) not park Foul of Track unless on-track protection is provided;
- (h) not leave vehicles running unnecessarily;
- (i) park only in pre-determined or designated areas;
- (j) always use the parking brake (or wheel chocks) when leaving an unoccupied vehicle running;
- (k) prior to operation of a vehicle the driver must conduct a walk around of the vehicle to identify any obstacles, clearance restrictions, or adjacent vehicles that may interfere with executing a safe movement.
- (l) where safe and practicable, pull vehicles through or back into marked parking spaces to avoid reverse collisions when exiting.
- (m) If a passenger is present, he exit the vehicle prior to a reverse movement to provide guidance and direction to the driver during the reverse movement and applies to commercial vehicles and vehicles with restricted rear views

14.4.2 All Contractor Personnel who will be operating a highway vehicle or Mobile Equipment in any CP intermodal facilities must complete a Driver Safety Orientation program prior to first entry, and from time-to-time thereafter as directed by the Manager-in-Charge.

## **14.5 Seat Belts**

- 14.5.1 Seat belts must always be worn while operating or riding in any equipped vehicle unless Contractor Personnel is actively engaged in inspections requiring said Contractor Personnel to be free of such restraint, and then only when the vehicle is operating at less than 25 km/h.

## **14.6 Loads**

- 14.6.1 Contractor Personnel shall ensure vehicles are loaded according to weight and dimensional requirements as authorized by state regulations and permits, and properly load and secure tools, material, equipment and freight to avoid shifting, falling, leaking or otherwise escaping from vehicles during operation.

## **14.7 Riding in CP Vehicles**

- 14.7.1 Contractor Personnel are prohibited from operating or riding in any CP vehicles unless authorized to do so, or in case of emergency.

# **15 Tools, Equipment and Machinery**

## **15.1 General Safety Requirements Respecting All Tools, Equipment and Machinery**

- 15.1.1 Contractor Personnel shall ensure that all tools, equipment, and machinery used be:
- (a) in compliance with all applicable legislation;
  - (b) in good working order, properly serviced and maintained;
  - (c) safe for their proposed use and used only for purposes specified by the manufacturer;
  - (d) operated and maintained only by persons properly trained and qualified for that duty;
  - (e) seat belts (if present on equipment) must be worn while operating or riding any such equipped mobile equipment;
  - (f) if mobile, equipped with appropriate safety devices (e.g. lights, horns, back-up alarms, safety beacons), and prevented from moving through use of the hand brake, wheel blocking, wheel chocking and/or a derail where applicable.
- 15.1.2 The Contractor shall provide adequate lighting when performing work between sunset and sunrise.
- 15.1.3 Use of CP tools, equipment and machinery by Contractor Personnel is prohibited unless specifically authorized by local CP management.

## **15.2 Hazardous Energy Control- Lockout/Tagout**

- 15.2.1 Contractor Personnel shall employ such hazardous energy lockout/tagout procedures as required to eliminate the accidental or unexpected start-up, energizing, or release of stored (residual) energy during maintenance, repair and/or servicing activities.
- 15.2.2 All tools, equipment and machinery must be made safe and isolated from all energy sources rendering the machine, equipment, or process inoperative prior to performing maintenance, repair or servicing related tasks.
- 15.2.3 No Contractor Personnel can remove any CP applied lock or tag, including bad-order tag.
- 15.2.4 Notwithstanding the foregoing, if Contractor's Work may create an energy hazard to any CP Personnel, then all affected parties must follow the requirements set forth in CP's Lockout – Hazardous Energy Control Policy and Code of Practice.
- 15.2.5 If CP Personnel and Contractors are jointly performing maintenance, repair or servicing activities on the same machine, equipment or using the same energy source, then they must apply a multi-

lock hasp and individual locks and tags (as per CP's Lockout – Hazardous Energy Control Policy and Code of Practice).

### **15.3 Electrical Safety Requirements**

15.3.1 In addition to the hazardous energy control lockout requirements above, all electrical Work must comply with Applicable Legislation, CSA and National Fire Protection Association (NFPA) requirements.

15.3.2 Contractor Personnel Working on electrical systems must:

- (a) if in proximity to CP Personnel, inform them of:
  - (i) existing or potential electrical hazards;
  - (ii) any specific additional personal protective equipment that may be required;
  - (iii) applicable safe Work practices;
  - (iv) applicable emergency and evacuation procedures; and
  - (v) apply lock out procedures as per section above on Hazardous Energy Control-Lockout
- (b) have practices, procedures and training that comply with:
  - (i) applicable sections of CSA-Z462 Workplace Electrical Safety Standards;
  - (ii) Canadian Electrical Code Parts 1 and 2; and
  - (iii) any other Applicable Legislation
- (c) not operate or allow cranes or other mobile equipment to approach closer to any live electrical power line than is permitted by CSA Z150 Standards for mobile cranes.

### **15.4 Lifting Devices**

15.4.1 All lifting devices, including but not limited to jacks, cranes, cables, slings, chains and hooks shall:

- (a) meet Applicable Legislation governing design, inspection, maintenance and operation;
- (b) be safety certified and labeled or tagged with load capacity limits where required;
- (c) have sufficient capacity for the planned lift;
- (d) have sufficient footing or support area to properly distribute the load during a lift.

### **15.5 Welding and Torch Cutting**

15.5.1 When welding or torch cutting, Contractor Personnel shall:

- (a) be properly trained and qualified;
- (b) ensure that all closed containers have been properly purged;
- (c) direct flame or sparks away from other Workers, equipment and flammable material;
- (d) have a fire extinguisher readily available;
- (e) keep compressed gas and oxygen cylinders stored in a secure, vertical position, with regulators removed and caps applied, labeled properly and located in vented cabinets or other designated locations.

## **15.6 Explosive Actuated Tools**

15.6.1 Only Contractor Personnel who are qualified and licensed in accordance with Applicable Legislation, and authorized by CP, may use explosives or explosive actuated tools.

## **15.7 Unattended Equipment or Machinery**

15.7.1 Tools, Equipment and Machinery shall not be left unattended at any time and shall not be stored on CP Property, unless expressly permitted pursuant to a written agreement with CP or by the Manager-in-Charge in writing, and where so permitted, Contractor shall ensure that:

- (a) storage shall be restricted to the designated area, or as otherwise specified by CP.
- (b) all such tools, equipment and machinery shall be secured in a safe position well clear of all tracks to prevent accidental contact with trains and moving equipment and to not restrict train crew sightlines;
- (c) as much as possible, tools, equipment and machinery shall be stored in locations out of public view.
- (d) Machines must be secured in accordance with on-track machinery rules.

# **16 Emergency Response**

## **16.1 Emergency Response Plan**

16.1.1 The Contractor must maintain a current emergency response plan and make it available to CP on request. Emergency response plans must include at a minimum:

- (a) contractor reporting procedures in the event of an incident or spill;
- (b) emergency response contacts and phone numbers, including phone numbers for CP incident reporting and local CP managers (See Attachment A); and
- (c) containment measures to be taken in the event of an incident or spill.

## **16.2 Initial Response**

16.2.1 Initial response to any emergency condition must follow the following sequence:

- (a) Protect the safety and security of all individuals and communities
- (b) Provide environmental protection and mitigation
- (c) Conduct incident investigation and evidence preservation
- (d) Restore railroad operations

## **16.3 First Aid**

16.3.1 Contractor Personnel must have sufficient First Aid qualified personnel and the required First Aid kit and any other required First Aid equipment at the Work Site, suitable for the crew size, nature of Work being performed and location, all of which shall, at a minimum, comply with Part II of the Canada Labour Code.

## 16.4 Fire Protection

16.4.1 The Contractor must have appropriate fire extinguishers, suitable in type, size and quantity having regards to the nature of Work and Applicable Legislation, readily available at all times on:

- (a) the Work Site; and
- (b) all Contractor equipment, machinery and highway vehicles.

16.4.2 Contractor Personnel shall ensure that all necessary precautions are taken to prevent fires, including the following:

- (a) storing flammable material (e.g., paper, rubbish, sawdust, oily or greasy rags, etc.) in proper containers;
- (b) storing and transporting fuel, gasoline or other flammable liquids in approved containers. Use of unapproved containers is prohibited;
- (c) proper disposal of flammable material daily;
- (d) preventing static electricity when dispensing or transferring flammable liquids by using proper grounding and bonding techniques;
- (e) avoid using cutting or welding torches during the last one-half hour of shifts, if possible;
- (f) taking special precautions with fusees, including:
  - (i) store and transport in approved containers;
  - (ii) do not allow fusees to come in contact with any combustible material, including railroad ties or wooden timbers; and
  - (iii) fully extinguish fusees before leaving the location where used;
- (g) promptly advise CP management of any fire on CP Property; and
- (h) fully extinguish or provide protection for any fire prior to leaving the Work Site.

16.4.3 Contractors Working on the CP right-of-way where a high risk of fire exists (e.g., during rail grinding, rail welding) must have:

- (a) appropriate fire prevention and suppression plans (including emergency numbers for CP, local firefighters and fire control districts); and
- (b) additional firefighting equipment and trained Contractor Personnel on site, as required by Applicable Legislation or the Manage In Charge.

## 17 Confined Space

### 17.1 Confined Space

- (a) Qualified and authorized Contractor Personnel must follow all required confined space entry procedures in accordance with applicable legislation and standards prior to entering into a confined space.
- (b) Rescue procedures and equipment must readily available when required to enter a confined space.

## **18 Reportable Accidents, Incidents and Injuries**

### **18.1 Reportable Injuries**

18.1.1 Reportable injuries include any personal injury to:

- (a) Contractor Personnel;
- (b) any CP Personnel; or
- (c) to any third party on CP Property.

### **18.2 Reportable Accidents**

18.2.1 Reportable accidents include any occurrence that results in:

- (a) damage to railroad tracks, right of way, buildings or other CP Property;
- (b) damage to railroad equipment;
- (c) damage to CP highway vehicles;
- (d) release of hazardous material;
- (e) spill or loss of transported commodities; and
- (f) any threat to the environment.

### **18.3 Reportable Incidents**

18.3.1 Reportable incidents include:

- (a) unintended movement of railroad equipment;
- (b) failure to provide track protection for Workers when required;
- (c) movement of railroad equipment beyond authorized limits;
- (d) operation of railroad equipment by an unqualified person;
- (e) unauthorized handling of a track switch;
- (f) damage, vandalism or tampering with any railroad signals, structures or railroad safety device;
- (g) seepage, leakage, spills of, or other contamination from, Hazardous Materials;
- (h) actual, threaten or suspected security related incidents;
- (i) slides, washouts or other on-track obstructions; or
- (j) any occurrence that may disrupt the movement of trains or affect safe rail operations.



## 19 Reporting

### 19.1 Emergency Reporting

- 19.1.1 In the case of an emergency, Contractor Personnel must call:
- (a) 911, where this emergency response system exists, or
  - (b) the local police, fire or emergency department in all cases; and
  - (c) **CP Police Services Communication Center- 1-800-716-9132.**

### 19.2 Accident, Incident, Injury Reporting

- 19.2.1 When an accident, incident or injury occurs on CP Property, the Contractor must:
- (a) immediately report it to the
    - (i) **CP Police Services Communication Center 1-800-716-9132;** and
    - (ii) **CP Manager-in-Charge**
  - (b) follow all instructions given to protect the scene.
- 19.2.2 CP does not report Contractor Personal Injuries to WCB. Such WCB reporting remains the Contractor's responsibility.

### 19.3 Information to Report

- 19.3.1 Information required with the initial report includes:
- (a) type of incident;
  - (b) date and time of occurrence;
  - (c) location (mileage, subdivision, building, yard or other physical description);
  - (d) identity of person(s) involved or injured (company & name);
  - (e) description of any hazardous materials involved;
  - (f) type & unit number of any railroad equipment or vehicle involved;
  - (g) description of occurrence, damage and/or injury, and cause if known;
  - (h) description of any emergency response;
  - (i) name and contact information of person making the report; and
  - (j) any such other information that CP may require.

### 19.4 Environmental Incidents and Spills

- 19.4.1 In the event of an environmental incident or spill that could have a negative impact on the environment, the Contractor must immediately:
- (a) report the incident to the Operations Center, the Manager-in-Charge, and the designated CP contact as per the governing agreement relating to the Work;
  - (b) take all reasonable actions to contain the spill;
  - (c) respond in accordance with its emergency response plan; and
  - (d) provide CP with the following information;
    - (i) description of location and surrounding area, including any sensitive environmental areas nearby (e.g., rivers, parks, sewers);
    - (ii) type and quantity of substance released;

- (iii) cause of spill or deposit, if known; and
- (iv) details of any immediate action taken or action proposed to be taken to contain spill and recover substance.

## **19.5 Additional Contractor Requirements**

19.5.1 Contractor and Contractor Personnel must:

- (a) ensure an appropriate emergency response is initiated;
- (b) protect any evidence until released by the CP Manager-in-Charge;
- (c) cooperate fully with any CP investigation;
- (d) cooperate fully with any investigating government agency; and
- (e) notify CP if information is requested by any investigating government agency.

## **20 Contractor & Contractor Personnel Acknowledgement**

### **Acknowledgement**

- 20.1.1 Contractor and Contractor Personnel who Work on CP Property shall be deemed to have read and understood the content of these Minimum Safety Requirements for Contractors While Working on CP Property in Canada, as amended from time to time, and to agree to be bound by them.
- 20.1.2 These Minimum Safety Requirements for Contractors While Working on CP Property in Canada are subject to change without prior notice. The most current version of these Minimum Safety Requirements can be viewed at [www.cpr.ca](http://www.cpr.ca) or by contacting the Manager-in-Charge.



*Home Safe™ is a commitment to be vigilant about personal safety  
and the safety of co-workers.*

**NOTES:**

---

---

---

---

---

---

---

---

---

---

---

## 21 Attachment A - Emergency Information Sheet

EMERGENCY CONTACT INFORMATION		
EMERGENCY CONTACTS	PHONE	LOCATION
CP Calgary Operations Center	1-800-795-7851	.
CP Police Services	1-800-716-9132	
CP Railroad Traffic Controller Radio Channel		
Manager-in-Charge		
Local Police Services		
Local Fire Services:		
Local EMS		
Hospital		
Physician		
Aircraft Service, (if applicable):		
Watercraft Service, (if applicable):		
Other Emergency Services		
Emergency Evacuation Route (Describe nearest evacuation assembly location OR Provide sketch on back)		

<b>WORK SITE INFORMATION</b>		
	<b>PHONE</b>	<b>LOCATION</b>
Work Site Location Name		
Railroad Subdivision & Mileage		
Address, Number and Street		
Nearest Town		
CP Manager-in-Charge		
Emergency Site Access Route (Describe route from nearest emergency services location in detail including access roads & physical landmarks OR provide sketch on back.)		
Contractor Supervisor		
Site Telephone		
Certified First Aid Attendant		
Location of First Aid Supplies at Site		
Location of Fire Extinguishing Equipment:		
Location of WHIMS data sheets		
<b>UTILITY INFORMATION</b>		
<b>UTILITIES CONTACT</b>	<b>PHONE</b>	<b>LOCATION</b>
Natural Gas:	( )	
Electrical:	( )	
Fiber Optic Line:	( )	
Water & Sewer:	( )	
Telephone:	( )	
Cable System:	( )	
Qualified employee(s) in:	( )	
Confined Space Entry, (if applicable):	( )	
Equipment requirements for Confined Space Entry, (if applicable):	( )	
Other:		