



**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 864-2007**

**NORWOOD COMMUNITY CENTRE – ACCESS RAMP**

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## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 NORWOOD COMMUNITY CENTRE – ACCESS RAMP

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, December 12, 2007.

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

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

### **B3. SITE INVESTIGATION**

B3.1 Further to C3.1, the Bidder may view the Site without making an appointment.

### **B4. ENQUIRIES**

B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.

B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall 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.

B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

### **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 Bid Opportunity, 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.

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

B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B5.2.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

## **B6. SUBSTITUTES**

- B6.1 The Work is based on the Materials and Methods specified in the Bid Opportunity.
- 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 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 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, only to the Bidder who requested approval of the substitute.
- B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- 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 Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B14.
- 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;
  - (b) Form B: Prices;

- 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, to constitute a responsive Bid.
- B7.4 The Bid shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B7.4.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid.
- B7.5 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, may result in the Bid being determined to be non-responsive.
- B7.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.8 Bids shall be submitted to:  
The City of Winnipeg  
Corporate Finance Department  
Materials Management Branch  
185 King Street, Main Floor  
Winnipeg MB R3B 1J1

**B8. BID**

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
  - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
  - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
  - (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- 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, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B8.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
  - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;

- (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
- (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid shall be printed below such signatures.

B8.4.2 All signatures should be witnessed, except where a corporate seal has been affixed.

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.

B9.2 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.

## **B10. QUALIFICATION**

B10.1 The Bidder shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

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

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

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

- (a) have successfully carried out work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba).

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

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

### **B11. OPENING OF BIDS AND RELEASE OF INFORMATION**

B11.1 Bids will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Branch, or in such other office as may be designated by the Manager of Materials.

B11.1.1 Bidders or their representatives may attend.

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

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

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

### **B12. IRREVOCABLE BID**

B12.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 10 of Form A: Bid.

B12.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 10 of Form A: Bid.

### **B13. WITHDRAWAL OF BIDS**

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

B13.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.

B13.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.

B13.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:

- (a) retain the Bid until after the Submission Deadline has elapsed;
- (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
- (c) if the notice has been given by any one of the persons specified in B13.1.3(b), declare the Bid withdrawn.

B13.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in 864-2007 shall be liable for such damages as are



imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

#### **B14. EVALUATION OF BIDS**

B14.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the Bid Opportunity (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B10 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B6.

B14.2 Further to B14.1(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.

B14.3 Further to B14.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.

B14.4 Further to B14.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.

B14.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.

#### **B15. AWARD OF CONTRACT**

B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B15.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.

B15.2.1 Without limiting the generality of B15.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Bid is received; or
- (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B15.3 Subject to B15.2, where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid.

B15.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.

B15.4 Notwithstanding C4, the City will issue a Purchase Order to the successful Bidder in Lieu of the execution of a Contract.

**B15.5** The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

## **PART C - GENERAL CONDITIONS**

### **C0. GENERAL CONDITIONS**

- C0.1 The *General Conditions for Construction* (Revision 2006, 12, 15) 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 Branch internet site at <http://www.winnipeg.ca/matmgt>.
- C0.2 A reference in the Bid Opportunity 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 Access Ramp Development at the Norwood Community Centre.

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

- (a) Removal and excavation of existing slope sod, associated fill and curbs for curb-ramp
- (b) Site preparation grading and compaction of slopes
- (c) Supply and installation of access ramp timber framing, handrail posts and metal handrails
- (d) Supply and installation ramp asphalt and gravel path,
- (e) Supply and installation of new sod, curb for curb-ramp

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

D3.1 The Contract Administrator is Lombard North Group, represented by:

Ric Carreon  
Landscape Architect  
505 - 93 Lombard Ave.  
Winnipeg, Manitoba  
Telephone No. (204) 943-3896  
Facsimile No. (204) 947-5696  
Email: ric@lombardnorth.com

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

D3.3 At the pre-construction meeting, the Contract Administrator 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 designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

#### **D5. NOTICES**

D5.1 Except as provided for in C23.2.2, 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.

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, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.

- D5.3 All notices of appeal to the Chief Administrative Officer shall be sent to the following address or facsimile number:

The City of Winnipeg  
Chief Administrative Officer Secretariat  
Attn: Chief Administrative Officer  
Administration Building, 3rd Floor  
510 Main Street  
Winnipeg MB R3B 1B9  
Facsimile No.: (204) 949-1174

- D5.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

The City of Winnipeg  
Corporate Services Department  
Legal Services Division  
Attn: City Solicitor  
185 King Street, 3rd Floor  
Winnipeg MB R3B 1J1  
Facsimile No.: (204) 947-9155

## **SUBMISSIONS**

### **D6. AUTHORITY TO CARRY ON BUSINESS**

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

### **D7. SAFE WORK PLAN**

- D7.1 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.
- D7.2 The Safe Work Plan should 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 Branch internet site at <http://www.winnipeg.ca/matmgt>.

### **D8. INSURANCE**

- D8.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain a contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
  - (b) automobile liability insurance for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;
- D8.2 Deductibles shall be borne by the Contractor.

D8.3 The Contractor shall provide the Contract Administrator 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 for the return of the executed Contract.

D8.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least fifteen (15) Calendar Days prior written notice to the Contract Administrator.

#### **D9. PERFORMANCE SECURITY**

D9.1 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), the Contractor shall provide and maintain performance security 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; or
- (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
- (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.

D9.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D9.2 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of Purchase Order and prior to the commencement of any Work on the Site.

#### **D10. SUBCONTRACTOR LIST**

D10.1 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 least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.

#### **D11. DETAILED WORK SCHEDULE**

D11.1 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 C4.1 for the return of the executed Contract.

D11.2 The detailed work schedule shall consist of the following dates:

- (a) Start date;
- (b) Ramp layout and site excavation/removal of materials;
- (c) Installation of timber framing and handrail system;
- (d) Asphalt pouring and gravel path development;
- (e) Expected completion.

D11.3 Other milestone dates appropriate to this project should also be included.

## **SCHEDULE OF WORK**

### **D12. COMMENCEMENT**

- D12.1 The Contractor shall not commence any Work until he is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.
- D12.2 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 D6;
    - (ii) evidence of the workers compensation coverage specified in C6.15;
    - (iii) evidence of the Safe Work Plan specified in D7;
    - (iv) evidence of the Insurance specified in D8;
    - (v) the Performance Security specified in D9
    - (vi) the Subcontractor List specified in D10; and
    - (vii) the Detailed Work Schedule specified in D11.
  - (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.
- D12.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the Purchase Order.

### **D13. SUBSTANTIAL PERFORMANCE**

- D13.1 The Contractor shall achieve Substantial Performance within twenty (20) consecutive Working Days of the commencement of the Work as specified in D12.
- D13.2 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 reinspected.
- D13.3 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.

### **D14. TOTAL PERFORMANCE**

- D14.1 The Contractor shall achieve Total Performance within thirty (30) consecutive Working Days of the commencement of the Work as specified in D12.
- D14.2 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 reinspected.
- D14.3 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.

### **D15. LIQUIDATED DAMAGES**

- D15.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City seven hundred and

fifty dollars (\$750) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.

D15.2 The amount specified for liquidated damages in D15.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.

D15.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

#### **D16. SCHEDULED MAINTENANCE**

D16.1 The Contractor shall perform scheduled maintenance in the manner and within the time periods required by the Specifications.

D16.2 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**

##### **D17. JOB MEETINGS**

D17.1 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.

D17.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

##### **D18. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)**

D18.1 Further to C6.24, 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).

#### **MEASUREMENT AND PAYMENT**

##### **D19. PAYMENT**

D19.1 Further to C12, effective January 1, 2007 the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

#### **WARRANTY**

##### **D20. WARRANTY**

D20.1 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.



- D20.2 Notwithstanding C13.2 or D20.1, 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.
- D20.2.1 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.

**FORM H1: PERFORMANCE BOND**  
(See D9)

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 dated the

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, for:

BID OPPORTUNITY NO. 864-2007  
NORWOOD COMMUNITY CENTRE – ACCESS RAMP

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)

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

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

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

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

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

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT  
(PERFORMANCE SECURITY)  
(See D9)**

\_\_\_\_\_  
(Date)

The City of Winnipeg  
Corporate Services Department  
Legal Services Division  
185 King Street, 3rd Floor  
Winnipeg MB R3B 1J1

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 864-2007  
NORWOOD COMMUNITY CENTRE – ACCESS RAMP

Pursuant to the request of and for the account of our customer,

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding in the aggregate

\_\_\_\_\_ Canadian dollars.

This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.

The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.

Partial drawings are permitted.

We engage with you that all demands for payment made within the terms and currency of this Standby Letter of Credit will be duly honoured if presented to us at:

\_\_\_\_\_  
(Address)

and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

All demands for payment shall specifically state that they are drawn under this Standby Letter of Credit.

Subject to the condition hereinafter set forth, this Standby Letter of Credit will expire on

\_\_\_\_\_  
(Date)

It is a condition of this Standby Letter of Credit that it shall be deemed to be automatically extended from year to year without amendment from the present or any future expiry date, unless at least 30 days prior to the present or any future expiry date, we notify you in writing that we elect not to consider this Standby Letter of Credit to be renewable for any additional period.

This Standby Letter of Credit may not be revoked or amended without your prior written approval.

This credit is subject to the Uniform Customs and Practice for Documentary Credit (1993 Revision), International Chamber of Commerce Publication Number 500.

\_\_\_\_\_  
(Name of bank or financial institution)

Per: \_\_\_\_\_  
(Authorized Signing Officer)

Per: \_\_\_\_\_  
(Authorized Signing Officer)



## 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 Branch internet site at <http://www.winnipeg.ca/matmgt>.
- 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 Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
112/07-A1	Area Location Plan
113/07-S1	Site Plan
114/07-E1	Sub-Base Excavation Plan
115/07-L1	Layout Plan
116/07-L2	Layout Plan
117/07-L3	Layout Plan
118/07-L4	Layout Plan
119/07-L5	Layout Plan
120/07-L6	Layout Plan
121/07-D1	Details
122/07-D2	Details
123/07-D3	Details

### GENERAL REQUIREMENTS

#### E2. SITE ACCESS

- E2.1 Access to the Sites will be determined at the pre-construction meeting. These access areas shall be maintained and restored by the Contractor at his own expense and approved by the Contract Administrator.
- E2.2 The Contractor shall be restricted to the Site access locations and routes only so that there is a minimum of disturbance to the existing ground surface. Damage to areas beyond the marked routes shall be repaired by and at the expense of the Contractor to the satisfaction of the Contract Administrator.

#### E3. PERMITS, NOTICES, LICENCES, CERTIFICATES, LAWS AND RULES

- E3.1 Further to C6.12, the Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.
- E3.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.

- E3.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.
- E3.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Fall Protection guidelines.
- E3.5 The Contractor and Sub-contractors must be fully aware of all Work involving hazardous materials. All Work must be performed in compliance with the Manitoba Department of Labour Workplace Health and Safety Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator of his/her encountering of suspected hazardous material during their course of Work.

#### **E4. DAMAGE TO EXISTING STRUCTURES, PROPERTY, SERVICES AND UTILITIES**

- E4.1 Further to C17, all necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing trees, shrubs, sod, pavements, streets, roads, boulevards, poles, hydrants, water pipes, gas pipes, electrical wires, cables, conduits, sewers or other existing facilities and equipment at the Sites of the Work. For all damage incurred thereto in the performance of the Work, the Contractor shall upon instructions from and to the satisfaction of the Contract Administrator and the owners thereof, either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to, the Contract Administrator and the owners thereof. The cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City and Lombard North Group from all claims made directly or indirectly against it in respect to any such damage.
- E4.2 The Contractor's operations shall be limited to the minimum area necessary for undertaking the Work and he shall be responsible for all damage resulting from his Work on private property. The Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress is maintained to private properties while he is working near them. Any damage caused by the negligence of the Contractor or his Sub-contractors to the adjacent Works or properties, shall be promptly repaired by him at his own expense, to the satisfaction of the Contract administrator.
- E4.3 Existing Services and Utilities:
- No responsibility will be assumed by the City for correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.

#### **E5. PROTECTION OF EXISTING TREES**

- E5.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing trees within the limits of the construction area:
- (a) Trees greater than 100 mm diameter or trees identified to be at risk by the Contract Administrator are to be strapped with 25x100x2440 mm wood planks, or other suitable protection as approved by the Contract Administrator. Do not use nails or other fasteners that penetrate the tree trunk. The width and length of strapping may be reduced to suit the tree being protected as approved by the Contract Administrator.
  - (b) 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) where 1 inch diameter equals 1 foot measured from the outside edge of the trunk of the tree at 6 inches above grade. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.



- (c) Equipment shall not be operated within the drip line without written permission from the Contract Administrator. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the drip lines of trees. The drip line of a tree shall be considered to be the entire ground surface located directly beneath the tree and radiating out to 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.
- (d) Repair, replace and maintain tree protection materials during construction until the Project completion.
- (e) Carefully remove safety fencing and strapping material without harming the trees as soon as the construction and restoration Work is complete.

- E5.2 Obtain approval from the Contract Administrator to excavate within 2.0 M of a tree.
- E5.3 Excavate in a manner to minimize damage to the tree root systems. Keep exposed roots in excavations and trenches moist or shaded. If stockpiling of excavated soil material is required, stockpile in areas away from the tree roots if possible.
- E5.4 Prune exposed roots with equipment such as trencher, chain saws, root cutters or other methods acceptable to the Contract Administrator in a manner that will leave a neat, clean root end.
- E5.5 Take precautions to ensure tree limbs overhanging the Work area are not damaged by construction equipment. Contact the Forestry Branch for consultation or pruning of overhanging or damaged limbs and branches and other unanticipated problems with trees during the construction of the Works.
- E5.6 All damage or pruning required to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the Forestry Branch. Damages must be repaired by an Individual with a Manitoba Arborist Licence or by the Forestry Branch.
- E5.7 Protection of existing trees, repair of trees and pruning of damaged limbs will not be measured for payment and is to be included with the Underground or Surface Works. Removal and replacement of existing trees by the Forestry Branch deemed to have died or that are dying due to damage from carelessness during construction, will be at the Contractor's cost. The Contractor will be invoiced for the cost, or have the cost deducted from any payments owing.

## **E6. TEMPORARY UTILITIES**

- E6.1 Further to C6.12, the Contractor shall make his own arrangements in connection with the temporary use of lighting, power, gas, sewer, water or other utilities, and pay all costs in connection therewith.
- E6.2 All necessary permits, fees and other like expenses as well as the cost of temporary connections to existing facilities shall be arranged and paid for by the Contractor.

## **E7. SITE ENCLOSURES**

- E7.1 Temporary Site enclosures, as determined necessary at the pre-construction meeting, shall be erected and maintained as required for the duration of the construction period.
- E7.2 Site enclosures shall be considered incidental to the Contract Work.

## **E8. LAYOUT**

- E8.1 The Contractor is responsible for the layout of all Work. The Contractor is to coordinate the layout of the access ramp.
- E8.2 The Contract Administrator shall be advised of the staking of the layout at least twenty-four (24) hours in advance in order that the layout may be inspected and adjusted as required prior to construction.

## **WORKS**

### **E9. REMOVALS, EXCAVATION AND SITE PREPARATION**

- E9.1 General Description:
- (a) This specification shall cover the removal of items such as sod, clay material, and curbing at Norwood Community Centre as specified on the Existing Conditions and Removals Drawing.
- E9.2 Removals:
- (a) Existing slope sod and clay materials shall be removed and legally disposed of off Site. Enough native material should be left behind for backfilling and side slope compaction. It is the Contractor's responsibility to ensure that surrounding asphalt, concrete, curbs, sod, trees and any other existing site elements are not damaged during excavation and removals.
- E9.3 Excavation:
- (a) Excavate to the lines and slopes shown on the enclosed Station Points, according to the Drawings, with allowances for slope and horizontal alignments.
  - (b) Over excavation to be filled in with additional granular base materials.
  - (c) Excavate to native sub-grade with minimum bearing capacity of 120 kpa. Remove deleterious materials and fill with granular material.
  - (d) Embankment to be constructed with native material compacted to 95% Standard Proctor Density in 150mm min. layers.
  - (e) Upon completion of the excavation, the Contractor is to ensure that the ramp sub-grades comply with the grades specified in the Drawings. Confirmation of these correct grades shall be the responsibility of the Contractor. The Contractor is to also schedule a site meeting with the Contract Administrator for inspection.
- E9.4 Basis of Payment:
- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre and lump sum basis, for the Items of Work listed below, which price shall include all costs of removal, excavation and disposal.
  - (b) Items of Work
    - (i) Removals

### **E10. ASPHALT PAVING**

- E10.1 General Description:
- (a) Further to CW 3410-R7, CW 3110-R10 this specification shall cover the supply and installation of asphalt paving including sub-grade preparation.
- E10.2 Materials:
- (a) Sub-base: 150 mm depth of 50 mm down crushed limestone compacted in two layers over compacted sub-grade. Sub-base with maximum aggregate size of 50 mm uniformly graded

with minimum size of 7% passing the #200 sieve limestone or as approved. Supply Geotextile Fabric.

- (b) Base: 50 mm depth of 20 mm down crushed limestone, compacted. Base course with maximum aggregate size of 50 mm uniformly graded with minimum size of 7% passing the #200 sieve crushed limestone from 10 mm and greater, or as approved.
- (c) Top: 75 mm of asphalt.

**E10.3 Method:**

- (a) All Asphalt Work shall be in accordance with City of Winnipeg Standard Specifications for Asphalt Pavement Works and Sub-Grade, Sub-Base and Base Course Construction.

**E10.4 Basis of Payment:**

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square area basis, for the Items of Work listed below, which price shall include all costs of material supply for the asphalt paving, sub-grade preparation, proper material installation.
- (b) Items of Work:
  - (i) Asphalt Paving

**E11. TIMBER FRAMING**

**E11.1 General Description**

**E11.2** This specification shall cover the supply and installation of timber frame edging to contain the asphalt access ramp surface.

**E11.3 Materials:**

- (a) Two Tier Timber Framing.
- (b) Timber Framing shall be subject to inspection and approval by the Contract Administrator.
- (c) All wood shall be cedar, spruce, pine or fir, No. 2 or better, no wane, bark, checking or splitting permitted. Wood shall be smooth and free of rough areas. All timbers to be 150mm x 150mm with a minimum length of 1200mm. Top edges of all exposed timbers shall have a 8mm (45°) chamfer.
- (d) For timber edging that will be in contact with the ground soil, the wood shall be ACQ treated as approved for use by Environment Canada. All ends and cuts shall be treated with preservative before being secured.
- (e) 12mm dia. x 250mm galv. spikes placed 1200mm O.C.
- (f) 19mm dia. x 900mm rebar placed 1200mm O.C. All rebars to be threaded and have a 100 mm x 100 mm metal plate secured at the bottom end with 18mm nut, as shown in the Drawings.
- (g) Gravel base.

**E11.4 Method:**

- (a) Layout of Timber Framing edging shall be installed on gravel base, as shown on Drawings.
- (b) Timbers shall be pinned with a minimum of two (2) 19mm diameter by 900mm rebar at maximum 1200mm O.C. Rebars to be secured to the ground with 150 mm wide holes and backfilled with compacted gravel, as shown on the Drawings. All rows of timber above base course shall be securely spiked with a minimum of two (2) 12mm diameter by 250mm spikes predrilled at maximum 1200mm O.C.
- (c) All timbers shall be cut neatly for a proper fit with no spaces or gaps between. All cuts shall be stained before being secured. Finished elevations shall ensure that all timbers are smooth, level, set plumb and spaced uniformly.

- (d) All back slopes should be worked-in and sufficiently compacted along the ramp timber edging to provide smooth slopes around the ramp without any unevenness that may contribute to improper site drainage. Drainage holes (25 mm dia.) shall be drilled along the top tier timbers, as shown on the Drawings.
- (e) Turf shall be repaired as required around timber frame edging in accordance with City of Winnipeg Standard Specifications for Topsoil and Sodding. This shall be considered incidental to the timber framing Work.

**E11.5 Basis of Payment:**

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a linear metre basis, for the Items of Work listed below, which price shall include all costs of material supply, excavation, sub-grade preparation, proper material installation and any associated Site restoration.
- (b) Items of Work
  - (i) Timber Framing

**E12. HANDRAIL POSTS AND METAL HANDRAILS**

**E12.1 General Description**

**E12.2** This specification shall cover the supply and installation of Handrail Posts and Metal Handrails along timber framing. Please note that the Contractor is to provide the Contract Administrator with shop drawings of all metal handrails for approval prior to manufacturing, in accordance with General Conditions. Clearly indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners and accessories. Indicate welded connections using CISC standard welding symbols. Clearly indicate net weld lengths.

**E12.3 Materials:**

- (a) 100mm x 100mm x 2440mm long pressure treated wooden rail posts, 25mm dia. galv. lag bolts.
- (b) 35mm dia. steel railings (double) w/ rail attachments, welded onto 420mm x 150mm x 6mm thick plate, 75mm long galv. lag bolts. Railing system shall be fabricated in 4m sections for easier transfer and site application. Steel: conforming to CSA 4040.20 with yield of 350 MPa for steel pipe and tubes and G40.21 with minimum yield of 300 MPa for plates. Welding Materials: conforming to CSA W48.1 and W59.1.
- (c) Gravel Base: 50mm down for wooden rail posts.

**E12.4 Method:**

- (a) For Metal handrails, verify all dimensions on site prior to shop fabrication. Fabricate items of size and profiles detailed on drawings, with joints neatly fitted and properly secured. Fit and shop assemble in largest practical sections (4m lengths) for delivery to site. Fabricate anchorage and related components of same material and finish as metal fabrications, unless otherwise specified or shown. Weld connections where possible, otherwise bolt connections. Counter-sink all exposed fastenings. Cut off bolts flush with nuts. Accurately form all connections and joints with exposed faces flush, miters and joints tight. Grind or file exposed welds and metal sections smooth and flush. Provide for flush welded or hairline butt filed joints.
- (b) Before starting erection of handrails, examine work done under other Sections, which may affect this work. Install items plumb, square and level, fit accurately and maintain free from distortion or defects detrimental to appearance and performance. Make provision for erection stresses and temporary bracing. Keep work in alignment at all times. Replace items damaged in course of installation. Perform required field welding. Grind all visible field welds smooth. Perform necessary cutting and altering for the installation of work of other sections, as indicated on Drawings. No additional cutting is to be done without the approval of the Contract Administrator. After installation, sandblast in accordance with

SSPC SP-7 all bolts, nuts, welds and other surfaces damaged during installation as per the painting specification.

- (c) Position all wooden handrail posts according to their locations and distances, as shown in the Drawings. Ensure that all wooden posts are plumb with correct heights on both sides along the length of the ramp. Provide compacted gravel backfill to fix wooden posts on the ground and secure posts along 150mm x 150mm Timber Framing with galv. lag bolts as shown in the Drawings.
- (d) Layout all metal handrail sections on site according to the Drawings. Ensure that all metal handrail sections are positioned correctly prior to fastening onto wooden posts. Once sections lengths are in their correct position secure onto the 100mm x 100mm wooden posts using galv. lag screws, as shown in the Drawings.

**E12.5 Basis of Payment:**

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a per item and per linear metre basis, for the Items of Work listed below, which price shall include all costs of material supply for wooden rail posts, metal handrails, associated metal plates and fasteners, proper material installation, maintenance and all other items incidental to the Work.
- (b) Items of Work:
  - (i) Handrail Posts
  - (ii) Metal Handrails

**E13. SURFACE PREPARATION AND PAINTING OF HANDRAILS**

**E13.1 Description:**

- (a) This Special Provision shall cover surface preparation and painting of the Metal Handrails, supports and weld plates. The work to be done by the Contractor under this Special Provision shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all things necessary for an incidental to the satisfactory performance and completion of all work as hereinafter specified. For information on steel tubing and plating, refer to the Special Provision for Metal Handrails in E12.

**E13.2 Materials and Method:**

- (a) The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this Special Provision. All materials supplied under this Special Provision shall be subject to inspection and approval by the Contract Administrator. SSPC (Steel Structures Painting Council) SP6 Commercial Blast Standard or equivalent, capable of achieving a maximum profile of 1 ½ mils, shall be used for blast cleaning.
- (b) The paint system to be supplied shall consist of the following:
  - (i) Prime Coat: Interscal 385 HS applied to a dry film thickness of 5-6mm.
  - (ii) Finish Coat: 1 coat of Interthane 990 HS applied to a dry film thickness of 2mm in Blue. The colour shall be in accordance with the manufacturer's colour code and as chosen by the Contract Administrator.
- (c) All equipment shall be a type approved by the Contract Administrator and shall be kept in good working order.
- (d) All surface preparation and painting shall be undertaken in a shop approved by Contract Administrator. The steel tube supports shall be painted upon completion of all shop fabrication works; and similarly for each handrail tubes and weld plates.
- (e) The Contractor shall prepare all exposed surfaces of the steel handrails immediately prior to painting by blast cleaning to commercial standard in accordance with Steel Structures and Painting Council Specifications SSPC-SP.6, latest edition.
- (f) The areas to be painted shall receive an additional blast cleaning to remove any new rust, if necessary, to ensure a white metal blast exists at the time painting commences.

- (g) Following all sand blasting operations, all surfaces involved shall be blown off with compressed air or cleaned by vacuum, for the purpose of removing any traces of blast products from the surface and also for the removal of abrasive from pockets and corners.
- (h) In the event that any touch-up sandblasting operation is performed at the Site, the Contractor is hereby advised that he shall be required to provide adequate protection against materials falling or blowing into adjacent properties. The Contractor shall be wholly responsible and liable for any loss, injury or damage incurred to adjacent properties, structures, vehicles, pedestrians, animals caused by the Contractor or his employees during cleaning operations.
- (i) No surfaces shall be painted until the Contract Administrator has approved the surface preparation. Any surface, which is painted without approval shall be cleaned, inspected and repainted by the Contractor to the satisfaction of the Contract Administrator.
- (j) The painting work shall not commence if it will be affected by dust of any cleanup operations. All painting work shall be undertaken in the shop. The work will include two paint coats - one prime coat and one finish coat - of all components of the steel handrails unless otherwise shown on the drawings.
- (k) Paint Thickness: Dry film thickness of the coats of paint shall be as follows:
  - Prime Coat -5-6 mils minimum
  - Finish Coat -2.0 mils minimum
- (l) Application: Paint shall be applied by one of, or a combination of, air spraying or airless spraying, only. Brush on painting will not be approved, except as may be approved by the Contract Administrator on minor field touch-up areas. The methods of application used shall be governed by the paint manufacturer's recommendations for the paint being applied, with the exception that a minimum drying period of 24 hours shall occur between successive coats of paint. Under no circumstances shall undercoats or finishing coats be applied until the surface preparation or previous coat has been inspected and approved by the Contract Administrator.
- (m) No thinner shall be added to the paint unless necessary for proper application. The type of thinner shall comply with the manufacturer's instructions.
- (n) The paint shall not be applied when the relative humidity is above 85 percent, the ambient temperature is below 5° Celsius, when the surface to be painted is damp or, if in the opinion of the Contract Administrator, other weather conditions such as wind may affect the finished surface.
- (o) Inspection: Each section painted shall be inspected before subsequent coats of paint are applied. Surfaces, which have less than the specified thickness for that coat, shall be repainted to the specified thickness.
- (p) Field Touch-up: All painted areas damaged during delivery and erection of steel handrails shall be field touched-up with specified paint to the satisfaction of the Contract Administrator.

### E13.3 Quality Control:

- (a) All workmanship and all materials furnished and supplied under this Special Provision are subject to close and systematic inspection and testing by the Contract Administrator including all operations from the selection and production of materials through to final acceptance of the Work. The Contractor shall be wholly responsible for the control of all operations incidental thereto notwithstanding any inspection or approval that may have been previously given. The Contract Administrator reserves the right to reject any materials or works, which are not in accordance with the requirements of this Special Provision.

## **E14. GRAVEL PAVING**

### **E14.1 Description:**

- (a) Further to CW 3110-R10, this specification shall cover the supply and installation of granular paving including sub-grade preparation.

### **E14.2 Materials and Method:**

- (a) Base: 150 mm depth of 50 mm down crushed limestone, compacted in two lifts.
- (b) Top: 50 mm depth of 20 mm down crushed limestone, compacted.

### **E14.3 Basis of Payment:**

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis, for the Items of Work listed below, which price shall include all costs of material supply for gravel paving, sub-grade preparation, and proper material installation.
- (b) Items of Work:
  - (i) Gravel Paving

## **E15. TURF REMEDIATION**

### **E15.1 Description:**

- (a) This specification shall cover the supply and installation of topsoil and sod for the renovation of turf as shown on the Drawings.

### **E15.2 Materials and Method:**

- (a) Topsoil: As per CW 3540-R5.
- (b) Sodding:
  - (i) As per CW 3510-R9.
  - (ii) Sod shall be mineral base.
- (c) Areas to be renovated shall be excavated and surplus materials removed off-site in a legal manner.
- (d) Edges are to be cut neatly in straight lines and new sod is to be installed to match the existing grades of the surrounding turf. Positive drainage away from play areas is to be maintained.
- (e) Seams between new and old turf are to be top dressed and seeded.
- (f) Only those areas shown on the Drawings as Turf Remediation shall be paid for under this section. All other Site restoration shall be considered incidental to other works.

### **E15.3 Maintenance Period:**

- (a) The Contractor shall maintain the sod for thirty (30) Calendar Days after the completion of the installation or until such a time as the turf is established in accordance with CW 3510-R9.

### **E15.4 Basis of Payment:**

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis, for the Items of Work listed below, which price shall include all costs of material supply for turf remediation, proper material installation, maintenance and all other items incidental to the Work.
- (b) Items of Work:
  - (i) Turf Remediation

## **E16. CURB REPLACEMENT**

### **E16.1 Description:**

- (a) This specification shall cover the supply and installation of concrete curbs in accordance with the new curb ramp, as shown in the Drawings.

### **E16.2 Materials and Method:**

- (a) Works associated with curb replacement shall be in accordance with City of Winnipeg, Standard Construction Specifications for Surface Works and Concrete Curbs and Curb Ramps: SD 205, SD 229B and SD 229C.

### **E16.3 Basis of Payment:**

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a per linear metre basis, for the Items of Work listed below, which price shall include all costs of material supply for proper material installation and all other items incidental to the Work.
- (b) Items of Work:
  - (i) Curb Replacement