



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 68-2019

**INSTALLATION OF A 120 METER GUYED RADIO TOWER & DESIGN &
INSTALLATION OF ASSOCIATED SITE WORKS**

TABLE OF CONTENTS

PART A - BID SUBMISSION

Form A: Bid	1
Form B: Prices	4
Form G1: Bid Bond and Agreement to Bond	5

PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Site Investigation	1
B4. Enquiries	1
B5. Confidentiality	1
B6. Addenda	2
B7. Substitutes	2
B8. Bid Components	3
B9. Bid	4
B10. Prices	4
B11. Disclosure	5
B12. Conflict of Interest and Good Faith	5
B13. Qualification	6
B14. Bid Security	7
B15. Opening of Bids and Release of Information	7
B16. Irrevocable Bid	8
B17. Withdrawal of Bids	8
B18. Evaluation of Bids	8
B19. Award of Contract	9

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	2
D4. Contractor's Supervisor	2
D5. Ownership of Information, Confidentiality and Non Disclosure	2
D6. Notices	2
D7. Furnishing of Documents	3

Submissions

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

Schedule of Work

D13. Commencement	5
D14. Substantial Performance	5
D15. Total Performance	5

Control of Work

D16. Job Meetings	6
D17. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	6
D18. The Workplace Safety and Health Act (Manitoba) – Qualifications	6

Measurement and Payment

D19. Invoices	6
---------------	---

D20. Payment	7
Warranty	
D21. Warranty	7
Form H1: Performance Bond	8
Form H2: Labour and Material Payment Bond	10
Form J: Subcontractor List	12

PART E - SPECIFICATIONS

General

E1. Applicable Specifications and Drawings	1
E2. Soils Investigation Report	2
E3. Permits	2
E4. Assembly & installation of pre-fabricated tower including contractor design, supply, and installation of tower foundation and guy wire anchors and foundations	2
E5. Tower appurtenances	3
E6. Location	4
E7. Antenna and feedline installation	4
E8. Re-alignment of corresponding microwave link sites	5
E9. Tower lighting system	5
E10. Equipment shelter relocation	6
E11. Generator relocation	7
E12. Integrated grounding system	7
E13. Electrical utility	7
E14. Site restoration and roadworks to match existing	9
E15. As built Documentation and drawing package	9
E16. 2230 Main street tower removal and disposal	10
E17. Appendix A – Geotechnical report	12
E18. Appendix B – Parcel B Tower Loading And Contractor Installed Antennas And Feedlines	12

PART F - SECURITY CLEARANCE

F1. Security Clearance	1
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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 INSTALLATION OF A 120 METER GUYED RADIO TOWER & DESIGN & INSTALLATION OF ASSOCIATED SITE WORKS

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, March 4, 2019.

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, a Site meeting will be held at 10:00 a.m. on February 12, 2019 to provide Bidders access to the Site.

B3.2 The Bidder is advised that the Site meeting will be held at the existing radio site located at 2230 Main Street. This Site meeting will provide the Bidders the opportunity to view the existing tower, equipment shelter, generator and foundations. Parcel B land is also partially viewable from the existing 2230 Main Street site due to winter conditions. Bidders should meet in the main parking lot of 2230 Main Street for 10:00 a.m. The Contract Administrator will then provide access to the 2230 Main Street radio site grounds.

B3.3 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

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. CONFIDENTIALITY

B5.1 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.

B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

B6.1 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.

B6.2 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.

B6.3 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>

B6.4 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B6.5 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Contract Administrator indicated in D3.

B7. SUBSTITUTES

B7.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.

B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.

B7.3 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.

B7.4 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.

- B7.5 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.
- B7.6 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.
- B7.6.1 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.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B7.8 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 B18.
- B7.9 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.

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;
 - (c) Form G1: Bid Bond and Agreement to Bond.
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 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.
- B8.4 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.
- B8.4.1 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.
- B8.5 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B18.1(a).
- B8.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B8.8 Bids shall be submitted to:
- The City of Winnipeg

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

B9. BID

- B9.1 The Bidder shall complete Form A: Bid, making all required entries.
- B9.2 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/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.
- B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 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.
- B9.4 Paragraph 13 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/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 and the corporate seal, if the corporation has one, should be affixed;
 - (d) if the Bidder is carrying on business under a name other than his/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.
- B9.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B9.5 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.

B10. PRICES

- B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B10.1.1 Notwithstanding C12.2.3(c), prices on Form B: Prices shall not include the Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.
- B10.2 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.
- B10.3 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.

B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. DISCLOSURE

B11.1 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.

B11.2 The Persons are:

- (a) Westower Communications Ltd.
 - (i) Designed drawings for past work.

B12. CONFLICT OF INTEREST AND GOOD FAITH

B12.1 Bidders, by responding to this Bid Opportunity, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.

B12.2 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 Bid Opportunity 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 Bid Opportunity process) of strategic and/or material relevance to the Bid Opportunity 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.

B12.3 In connection with its Bid, each entity identified in B12.2 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 Bid Opportunity 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.

B12.4 Without limiting B12.3, 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.

- B12.5 Without limiting B12.3, 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 B12.4 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.
- B12.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B13. QUALIFICATION

- B13.1 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.
- B13.2 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 <http://www.winnipeg.ca/matmgt/debar.stm>
- B13.3 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);
 - (d) upon request of the Contract Administrator, provide the Security Clearances in accordance with PART F - .
- B13.4 Further to B13.3(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/>).

B13.5 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.

B13.6 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.

B14. BID SECURITY

B14.1 The Bidder shall provide 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).

B14.1.1 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.

B14.1.2 All signatures on bid securities shall be original.

B14.1.3 The Bidder shall sign the Bid Bond.

B14.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.

B14.2 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 executed by 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.

B14.3 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 Bid Opportunity.

B15. OPENING OF BIDS AND RELEASE OF INFORMATION

B15.1 Bids will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Division, or in such other office as may be designated by the Manager of Materials.

B15.1.1 Bidders or their representatives may attend.

B15.2 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 Division website at <http://www.winnipeg.ca/matmgt/default.stm>

- B15.3 After award of Contract, the name(s) of the successful Bidder(s), their address(es) 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 Division website at <http://www.winnipeg.ca/matmgt/default.stm>
- B15.4 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).
- B15.4.1 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.

B16. IRREVOCABLE BID

- B16.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B16.2 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 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.

B17. WITHDRAWAL OF BIDS

- B17.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B17.1.1 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.
- B17.1.2 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 13 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B17.1.3 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 13 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B17.1.3(b), declare the Bid withdrawn.
- B17.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B16.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law, including the right to retain the Bidder's bid security.

B18. EVALUATION OF BIDS

- B18.1 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, or acceptable deviation there from (pass/fail);

- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B13 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B7.

B18.2 Further to B18.1(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.

B18.3 Further to B18.1(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 responsible and qualified.

B18.4 Further to B18.1(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.

B18.4.1 Further to B18.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B19. AWARD OF CONTRACT

B19.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B19.2 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.

B19.2.1 Without limiting the generality of B19.2, 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.

B19.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B18.

B19.3.1 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 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 Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- 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 the assembly and installation of an already pre-fabricated new radio communication tower located on City of Winnipeg property. The Contractor shall be responsible for installing the already pre-fabricated tower on to newly Contractor designed, supplied and installed tower foundation and related guyed foundations and anchors. The Contractor shall install related and pre-fabricated tower appurtenances and install or relocate (from a nearby tower), City of Winnipeg provided antennas and microwave ice shields as further defined. The Contractor shall design, supply and install a tower lighting system. The Contractor shall be responsible for relocating an existing equipment shelter including designing new and all associated electrical and foundation works; relocating an existing diesel generator including designing new and all associated electrical and foundation works. The Contractor shall be responsible for coordinating the relocation of select antennas and existing tower appurtenances from an existing nearby tower; followed by removing and disposing of the existing said tower. The Contractor shall design, supply and install all necessary connecting gravel roadworks at the new tower location such that the new tower compound integrates with the existing road.

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

- (a) Install and assemble an already pre-fabricated new 120 meter tower.
- (b) Design, supply and install foundations for the pre-fabricated tower and guyed foundations/anchors.
- (c) Install associated and pre-fabricated new tower appurtenances and antennas on to the tower.
- (d) Coordinate and relocate specific tower appurtenances and antennas from an existing nearby tower.
- (e) Re-align as necessary corresponding microwave site links.
- (f) Design, supply and install an LED tower lighting system.
- (g) Relocate an existing equipment shelter and re-energize.
- (h) Relocate an existing diesel generator and re-energize.
- (i) Design, supply and install all foundation works and any necessary pads for relocated equipment shelter and relocated generator.
- (j) Design, supply and install an integrated grounding system.
- (k) Design, supply and install new electrical service for the tower lighting, relocated equipment shelter and relocated diesel generator.
- (l) Design, supply and install all necessary connecting/blending/integrating roadworks to match the existing Communication Tower Access Road at locations of new tower area, new tower turnaround area, relocated shelter foundation area, relocated generator foundation area.
- (m) New site cleanup and restoration.
- (n) Provide a complete engineer(s) sealed as-built documentation and drawing package for the project.
- (o) Remove and dispose of:

- (i) The existing nearby tower;
- (ii) The existing 600 volt splitter;
- (iii) The existing steel anchor head plates at all three anchor points;
- (iv) All existing above ground electrical and grounding cables and conduit at the existing tower base, the equipment shelter foundations, the guy anchor foundations, the generator foundations and the 600 volt splitter.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is:

Ed Richardson P.Eng
Communication Systems Engineer
Telephone No. 204 986-6002
Email Address erichardson@winnipeg.ca

D3.2 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/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

D5.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.

D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.

D5.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;

- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
- (b) the Contract, all deliverables produced or developed; and
- (c) any statement of fact or opinion regarding any aspect of the Contract.

D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D6. NOTICES

D6.1 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.

D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator identified in D3.

- D6.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following:

The City of Winnipeg
Attn: Chief Financial Officer
Office of the Chief Administrative Officer
Susan A. Thompson Building
2nd Floor, 510 Main Street
Winnipeg MB R3B 1B9

- D6.4 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 facsimile number:

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

- D6.5 Bids Submissions must not be submitted to the above facsimile number. Bids must be submitted in accordance with B8.**

D7. FURNISHING OF DOCUMENTS

- D7.1 Upon award of the Contract, the Contractor will be provided with two (2) complete sets of the Bid Opportunity. If the Contractor requires additional sets of the Bid Opportunity, they will be supplied to him/her at cost.

SUBMISSIONS

D8. AUTHORITY TO CARRY ON BUSINESS

- D8.1 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.

D9. SAFE WORK PLAN

- D9.1 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.
- D9.2 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 Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>
- D9.3 Notwithstanding B13.4 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.

D10. INSURANCE

- D10.1 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 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) if applicable, 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 \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
- (c) 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.

D10.2 Deductibles shall be borne by the Contractor.

D10.3 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 seven (7) Calendar Days from notification of the award of Contract by Purchase Order.

D10.4 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.

D11. CONTRACT SECURITY

D11.1 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.

D11.2 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 letter of intent 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.

D11.3 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 D11.1(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.

D12. SUBCONTRACTOR LIST

D12.1 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 the date specified in C4.1 for the return of the executed Contract.

SCHEDULE OF WORK

D13. COMMENCEMENT

D13.1 The Contractor shall not commence any Work until he/she is in receipt of a letter of intent 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 D8;
- (ii) evidence of the workers compensation coverage specified in C6.15;
- (iii) the Safe Work Plan specified in D9;
- (iv) evidence of the insurance specified in D10;
- (v) the contract security specified in D11; and
- (vi) the Subcontractor list 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 commence the Work on the Site within seven (7) Working Days of receipt of the letter of intent.

D13.4 The City intends to award this Contract by April 29, 2019.

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

D14. SUBSTANTIAL PERFORMANCE

D14.1 The Contractor shall achieve Substantial Performance by November 30, 2019.

D14.2 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.

D14.3 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.

D15. TOTAL PERFORMANCE

D15.1 The Contractor shall achieve Total Performance by December 31, 2019.

D15.2 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.

D15.3 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.

CONTROL OF WORK

D16. JOB MEETINGS

- D16.1 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.
- D16.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D17. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D17.1 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).

D18. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

- D18.1 Further to B13.4, 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 B13.4.

MEASUREMENT AND PAYMENT

D19. INVOICES

- D19.1 Further to C12, the Contractor shall submit an invoice for each portion of Work performed :
The City of Winnipeg
Corporate Finance - Accounts Payable
4th Floor, Administration Building, 510 Main Street
Winnipeg MB R3B 1B9
Facsimile No.: 204 949-0864
Email: CityWpgAP@winnipeg.ca
- D19.2 Invoices must clearly indicate, as a minimum:
- (a) the City's purchase order number;
 - (b) date of delivery;
 - (c) delivery address;
 - (d) type and quantity of work performed;
 - (e) the amount payable with GST and MRST shown as separate amounts; and
 - (f) the Contractor's GST registration number.
- D19.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.
- D19.4 Bid Submissions must not be submitted to the above facsimile number. Bids must be submitted in accordance with B8.

D20. PAYMENT

D20.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D21. WARRANTY

D21.1 Warranty is as stated in C13.

FORM H1: PERFORMANCE BOND
(See D11)

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

BID OPPORTUNITY NO. 68-2019

INSTALLATION OF A 120 METER GUYED RADIO TOWER & DESIGN & INSTALLATION OF ASSOCIATED SITE WORKS

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 D11)

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

BID OPPORTUNITY NO. 68-2019

INSTALLATION OF A 120 METER GUYED RADIO TOWER & DESIGN & INSTALLATION OF ASSOCIATED SITE WORKS

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)

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 Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

<u>Specification No.</u>	<u>Specification Title</u>
Appendix A	Geotechnical Report

Westtower - New Tower Design Drawings (Murray Site)

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
22-00233 D01	Design Profile
22-00233 E06	Grounding Layout
22-00233 E07	Torsion Resistor Erection
22-00233 E08	Ground Bar Installation
22-00233 E09	Waveguide Bridge Installation
22-00233 E10	"900G' Anti-Climb Assembly
22-00233 E11	Fixed Pinwheel Installation at 118.9m
22-00233 E12	LR2 Lightning Rod Installation
22-00233 E14	Lighting Mount Plate Installation
22-00233 PT-07	Guy Wire Grounding

AECOM - NEWPCC Upgrade Site Preparation Works Parcel B and Associated Work

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
1-0101-CAAA-Y000	Cover Sheet and Location Plan
1-0101-CGRD-YD01	Clearing and Grubbing
1-0101-CRSW-Y002	Parcel B Road – Station 1+014.109 to Station 1+250
1-0101-CRSW-Y003	Parcel B Road – Station 1+250 to Station 1+481
1-0101-CRSW-Y004	Communication Tower Access Road – Station 1+063.390 to Station 1+131.871
1-0101-CGRD-Y005	Site Grading Plan
1-0101-CRSW-Y006	Detail Sheet

Westtower - Existing 2230 Main Street Drawings

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
22-00243 D01	2230 Main Street Tower Design Profile
22-00243 E01A	2230 Main Street Site Plan
22-00243 E01B	2230 Main Street Compound Layout
22-00243 E02	2230 Main Street Shelter Foundation Location
22-00243 E03	2230 Main Street Shelter Foundation
22-00243 E04	2230 Main Street Generator Pad Foundation
22-00243 E05	2230 Main Street Generator Pad Foundation

22-00243 E06	2230 Main Street Rebar and Foundation Notes
22-00243 E07	2230 Main Street Site Upgrade Grounding Layout
22-00243 E10A	2230 Main Street Microwave Installation at EL: 45.0m
22-00243 E10B	2230 Main Street 4' Ice guard Installation at EL: 45.0m
22-00243 E11A	2230 Main Street Microwave Installation at EL: 39.6m
22-00243 E11B	2230 Main Street 6' Ice guard Installation at EL: 39.6m
22-00243 E12A	2230 Main Street Microwave Installation at EL: 10.0m
22-00243 E12B	2230 Main Street 4' Ice guard Installation at EL 10.0m
22-00233B E01	2230 Main Street Shelter Elevations
22-00233B E02.1	2230 Main Street Shelter Skid Layout
22-00233B E02.2	2230 Main Street Shelter Skid Layout
22-00233B E03.1	2230 Main Street Shelter Platform Details
22-00233B E03.2	2230 Main Street Shelter Grating Installation on Top Platform
22-00233B E04	2230 Main Street Shelter Floor Layout
22-00233B E05	2230 Main Street Shelter Roof Layout
22-00233B E06	2230 Main Street Shelter Foundation Location

Stantec/Acon – Existing 2230 Main Street Location Electrical

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
E-002	Electrical Single Line Diagram for existing North End Radio Site Power Service
Sketch – Dec 31, 2016	P25 WWD Cell Tower Site (existing sketch)

- E1.4 The Contractor is responsible for ensuring the newly erected tower, relocated shelter, relocated generator and all work meets or exceeds the design criteria contained in these specifications, or in national standards to which these specifications refer.

E2. SOILS INVESTIGATION REPORT

- E2.1 Further to C3.1, a Geotechnical report is provided to aid the Contractor's evaluation of the existing soil conditions at the Parcel B site. The geotechnical report is contained in Appendix A.
- E2.2 The Contractor is responsible for conducting any additional required soil sampling and analysis, (if necessary) to complete the design of the tower foundation, guy anchor foundations, equipment shelter foundation and generator pad foundation. Soil samples in the Geotechnical Report of Appendix A depict samples taken near the future tower foundation and anchor foundation locations.

E3. PERMITS

- E3.1 All required permits and their applications are to be acquired and provided to the proper authorities by the Contractor. The Contractor is to pay all associated permit fees.
- E3.2 All costs for any permit design, permit construction, permit installation are the responsibility of the Contractor.

E4. ASSEMBLY & INSTALLATION OF PRE-FABRICATED TOWER INCLUDING CONTRACTOR DESIGN, SUPPLY, AND INSTALLATION OF TOWER FOUNDATION AND GUY WIRE ANCHORS AND FOUNDATIONS

- E4.1 The Contractor shall assemble and install an already designed and pre-fabricated 120 meter guyed radio communication tower located on City of Winnipeg property. The City of Winnipeg shall supply the pre-fabricated tower (steel) to the site. The applicable pre-fabricated tower design drawings can be found in E1.3 under Westtower New Tower Design Drawings (Murray Site). The pre-fabricated tower is a Westtower designed and fabricated model 900G. The pre-fabricated tower was designed in accordance with all applicable CSA S37-13 standards. Please note that the Contractor should be aware that all drawings referencing the site as "Murray"

which terminology shall be disregarded for the purposes of this Bid Opportunity. Please see section E6 for the location of the new tower erection.

- E4.2 Pre-ship steel material lists, Fabrication Material Lists, and Pulse and Tension Charts will be provided by the City of Winnipeg to the Contractor.
- E4.3 The following pre-fabricated Westtower tower appurtenances will also be supplied by the City of Winnipeg and shall be installed by the Contractor as part of the 120 meter guyed radio communication tower. The tower was designed in accordance with all applicable CSA S37-13 standards.
- (i) Guy wires (including turnbuckles and screw pins).
 - (ii) Lightning rod.
 - (iii) Transmission Line / Waveguide ladder.
 - (iv) Transmission Line / Waveguide bridge.
 - (v) Climbing system including fall arrest system.
 - (vi) Offset style antenna mount at top of tower for 3 vertical omni antennas.
 - (vii) Anti-climb system.
 - (viii) Copper grounding bus bar at base of tower.
 - (ix) Lighting mount plate at top of tower.
- E4.4 The height of the tower is measured vertically from the base of the pre-fabricated tower to the highest point of the pre-fabricated tower structure not including any antennas or lightning rods. This is referred to as height above ground level (AGL).
- E4.5 The pre-fabricated tower shall be installed in accordance with all applicable CSA S37-18 standards.
- E4.6 The Contractor shall **also** be responsible for the additional design, supply and installation of the following items and appurtenances which attach to or form part of the new radio communication tower system:
- (i) Tower foundation designed, supplied, and installed in accordance with all applicable CSA S37-18 standards.
 - (ii) Guy wire anchors and associated foundations designed, supplied, and installed with all applicable CSA S37-18 standards.
 - (iii) Lighting system per E9.
 - (iv) Lighting ice shields protection per E9.
 - (v) A quantity of three (3) Microwave dish antenna Ice Shields relocated from an existing nearby tower at 2230 Main Street per E7.2.

E5. TOWER APPURTENANCES

- E5.1 The Contractor shall install the guy wires and associated hardware to interface to the Contractor designed and installed guy anchor foundations.
- E5.2 The Contractor shall install the lightning rod at the top of the tower structure.
- E5.3 The Contractor shall install the transmission line/waveguide ladders along two faces of the tower. The ladder should extend from the horizontal bridge to the top of the tower or as high a structurally practical. The ladder shall be predrilled to accept universal snap-in hanger kits. The cable ladder shall be of galvanized steel construction and shall use mounting hardware of stainless steel or galvanized steel construction.
- E5.4 The Contractor shall install the ice protected transmission line/waveguide bridge between the tower and the relocated equipment shelter. The height of this bridge shall be determined to provide the most direct cable entry into the shelter. The transmission line bridge shall be designed to be self-supporting without requiring support from either the tower or the shelter. The

length of the bridge will be the minimum necessary to protect and support all waveguides and transmissions lines between the tower base and the shelter entry ports. Vertical supports for the bridge shall be anchored in concrete bases.

- E5.5 The Contractor shall install a CSA and OSHA approved climbing system consisting of a ladder and fall arrest system. The system shall be sized to accommodate two workers minimum.
- E5.6 The Contractor shall install an “offset” style antenna mount near the top of the tower. This structure is intended to hold 3 vertical omnidirectional antennas away from the tower faces. The distance from vertical antenna to vertical antenna should nominally be 16 feet.
- E5.7 The Contractor shall install an anti-climb system at the base of the tower consisting of anti-climb restriction on all three faces of the tower. One of the faces shall have an anti-climb door and ensure the anti-climb door operates smoothly and is adjusted for proper door closure. The anti-climb door shall come complete with a locking hasp.
- E5.8 The Contractor shall install a copper grounding buss bar to the base of the tower to facilitate grounding of transmission lines.
- E5.9 The Contractor shall install a lighting mount plate at the top of the tower to accommodate the Contractor’s designed and installed tower lighting system.

E6. LOCATION

- E6.1 The tower shall be installed at the site location noted in drawing package “AECOM NEWPCC Upgrade Site Preparation Works Parcel B and Associated Work” per section E1.3 and specifically referenced in drawing 1-0101-CRSW-Y004 – Communication Tower Access Road – Station 1+063.390 to Station 1+131.871. This Site is currently or soon to be improved land owned by the City of Winnipeg known as “Parcel B”. The referenced drawing package depict the location of the land, the approximate location of the tower installation and the already completed or soon to be completed North End Water Pollution Control Centre (NEWPCC) site preparation works Parcel B Road and Associated Works Site Grading Plan.
- E6.2 The Contractor shall design an appropriate layout and site plan for the tower, guy anchors, equipment shelter and generator and associated foundations within the area(s) depicted on the AECOM drawing(s), noting the location of the Communication Tower Access Road.
- E6.3 Once the Contract Administrator approves the Contractor’s site plans the Contractor may begin installation of the proposed tower.

E7. ANTENNA AND FEEDLINE INSTALLATION

- E7.1 The tower shall accommodate the antennas and feedlines as detailed in Appendix B. The following **new** antennas shall be supplied by the City of Winnipeg and installed on the new tower by the Contractor:
 - (i) Quantity of 3 – SC488-HF6LDF(D00).
 - (ii) Quantity of 1 – SRL-310-C4.
 - (iii) Quantity of 1 – SRL-210-C4.
- E7.2 The following microwave dish antennas **and** corresponding protective ice-shields, shall be **relocated** by the Contractor from an existing City of Winnipeg nearby tower, located at 2230 Main Street and subsequently installed by the Contractor on to the newly erected tower at Parcel B land. Note that drawings of the ice shields and microwave dishes at 2230 Main Street site are provided per E1.3. The Contractor shall not relocate any antennas until permission is granted in writing by the Contract Administrator as timing and schedule coordination will be of the essence:
 - (i) Quantity of 1- VHLP6-11, 6 foot microwave dish.
 - (ii) Quantity of 1- VHLP4-11, 4 foot microwave dish.

(iii) Quantity of 1- VHLP4-11, 4 foot microwave dish.

- E7.3 Elevation refers to the centre of antennas.
- E7.4 The Contractor shall be responsible for installing all antennas and feedlines contained in Appendix B. Appendix B also depicts which antennas will be provided to the Contractor by the City and which antennas require relocation by the Contractor from the nearby existing 2230 Main street tower to the new tower on Parcel B land. The antennas that require relocation from the existing tower at 2230 Main Street to the new tower on Parcel B land shall be scheduled in advance with the Contract Administrator to minimize downtime. The existing 2230 Main Street tower design profile drawing is provided for reference per E1.3.
- E7.5 The tower shall accommodate the feedlines detailed in Appendix B. All feedlines for all antennas shall be supplied and installed **new** on the tower by the Contractor.
- E7.6 The Contractor shall provide and install all new transmission feedlines, clamps, and grounding kits. The feedlines to be installed shall be LDF5-50, AVA5, or as described in Appendix B, or an equivalent product approved in accordance with B7.
- E7.7 Transmission lines shall be one continuous length from antenna to termination within the shelter. The use of splices or joined cables is not allowed.
- E7.8 Transmission lines shall be secured to the transmission line ladders with universal hangers at the manufacturer recommended separation distances.
- E7.9 The position and quantity of transmission line grounding kits shall be in accordance with Motorola R56-2005. All connections shall be weatherproofed and documented with photographs.
- E7.10 Upon completion of installation, the Contractor will test each feedline from the shelter termination point to the end by measuring:
- (a) Return loss across the frequency band specified in Appendix B.
 - (b) Distance to fault measurement at the center frequency.
- E7.11 The tests will be witnessed by the Contract Administrator or his delegate.
- E7.12 The Contractor will provide the test results along with photo documentation of each antenna, mount, feedline connection, and grounding kit installation to the Contract Administrator as part of the as-built documentation package.

E8. RE-ALIGNMENT OF CORRESPONDING MICROWAVE LINK SITES

- E8.1 If required, the Contractor shall re-align the corresponding microwave dish antennas at the three (3) link sites associated with each of the dishes installed and listed per E7.2.
- E8.2 The three corresponding link sites are all located within the City of Winnipeg and access shall be granted to those sites by the Contract Administrator if the re-alignment is determined to be required.

E9. TOWER LIGHTING SYSTEM

- E9.1 It shall be the Contractors responsibility to design, supply and install onto the tower, a complete LED lighting system in accordance with all applicable Canadian Aviation Regulations and Standard 621 – Obstruction Marking and Lighting
- E9.2 The tower lighting and control system shall be of LED technology.
- E9.3 The tower lighting system shall have appropriate quantities of mid-level and tower top beacons for towers of this height per E9.1.

- E9.4 The newly erected tower is **not painted** and as such shall have an LED tower lighting system designed, supplied, and installed by the Contractor such that the system is in accordance with Standard 621. Furthermore, the lighting system shall be designed to operate 24 hours per day with appropriate medium intensity white flashing lighting for daytime and twilight use and appropriately designed red lighting for nighttime use.
- E9.5 The tower lighting shall be protected from falling ice where possible and as such the Contractor shall design and install all necessary ice-shields to protect the lighting beacons from ice damage.
- E9.6 Wiring for the tower lighting system should be enclosed in a rigid galvanized steel conduit. Alternatively an armored and jacketed cable such as Teck-90HL may be used. This conduit or cable shall be affixed to the transmission line ladder with appropriate hanger kits.
- E9.7 The tower lighting and control system shall provide an automatic alarm in the event of a failure. All alarms should be indicated by a Form-C dry contact closure. The City of Winnipeg will interface the lighting monitoring system into the City of Winnipeg provided site monitoring system.

E10. EQUIPMENT SHELTER RELOCATION

- E10.1 The Contractor shall coordinate a complete relocate and subsequent re-install of an existing Equipment (radio) Shelter, including all and any related electrical works, new structural foundation works, and associated moving works, in accordance with the following requirements.
- E10.2 The existing Equipment Shelter is a one story public utility building located at the base of an existing City of Winnipeg tower on City of Winnipeg land, located at 2230 Main Street on the property of the North End Water Pollution Control Center.
- E10.3 The Equipment Shelter relocation to Parcel B land shall not occur until the Contractor has received notification from the Contract Administrator in writing. Scheduling and timing of the move will be of the essence.
- E10.4 The Equipment Shelter exterior is of metal clad, maintenance free construction, with an approximate exterior dimension of 17 feet by 13 feet (approximately 221 square feet).
- E10.5 The floor loading capacity is approximately 225 pounds per square foot.
- E10.6 The Equipment Shelter also has a roof protection canopy guard/shield for roof impact resistance to protect the shelter. This roof protection canopy shall be part of the complete relocate and re-install of the equipment shelter by the Contractor.
- E10.7 The Equipment Shelter has dual unit wall mounted 6 ton BARD model W70A2/W70L2 HVAC heating and cooling system designed to maintain a nominal interior temperature inside the shelter within the range of 59 to 70 degrees F. (15 to 21 degrees C). All and any necessary electrical disconnect and subsequent re-install at the new location shall be done by the Contractor.
- E10.8 The Contractor shall design and install an appropriate new foundation and concrete pad for the Equipment Shelter re-location as recommended by the shelter manufacturer or Contractors engineer(s) and the Geotechnical Report per Soils Investigation Report in section E1.4. The existing shelter Foundation and Equipment Shelter currently residing at 2230 Main Street is depicted in the drawings: "Westtower – Existing 2230 Main Street Drawings" and referenced in section E1.3. These drawings should serve as a guide to the Contractor for Parcel B land related works.
- E10.9 If the underside of the relocated Equipment Shelter floor is not in full contact with a new concrete pad, the contractor shall install a rodent shield over the complete underside of the floor.

E10.10 The physical re-location of the Equipment Shelter by the Contractor shall be done with extreme care to prevent damage to the Equipment shelter and any equipment inside the shelter.

E11. GENERATOR RELOCATION

E11.1 The Contractor shall coordinate a complete relocate and subsequent re-install of an existing diesel generator genset, including all and any related electrical works, new structural foundation works, and associated moving works, including its existing 650 litre fuel tank and fuel, in accordance with the following requirements.

E11.2 The existing generator genset is a model T&T Power located at the base of an existing City of Winnipeg tower on City of Winnipeg land, located at 2230 Main Street on the property of the North End Water Pollution Control Centre.

E11.3 The generator genset relocation to Parcel B land shall not occur until the Contract Administrator has received notification from the Contract Administrator in writing. Scheduling and timing of the move will be of the essence.

E11.4 The generator genset and all and any necessary electrical disconnect and subsequent re-install, including new conduit provision at the new location shall be done by the Contractor.

E11.5 The specific model number and identifying information for the generator genset is as follows:

- (i) Manufacturer: T&T Power
- (ii) Model: IDO28P14NBCU
- (iii) Prod Model: IDO28P14NBCU
- (iv) Serial Number: X15K482029
- (v) Type: 28KW Diesel Genset

E11.6 The Contractor shall design and install an appropriate new foundation and concrete pad/base for the generator genset re-location as recommended by the generator manufacturer or Contractors engineer(s) and the Geotechnical Report per Soils Investigation Report in section E1.4. The existing generator foundation and generator pad/base are depicted in the drawings: "Westower – Existing 2230 Main Street Drawings" and referenced in section E1.3. These drawings should serve as a guide to the Contractor for Parcel B land related works.

E12. INTEGRATED GROUNDING SYSTEM

E12.1 The Contractor will design, install and test a new integrated grounding system incorporating the new tower and transmission line bridge, relocated equipment shelter, and new generator pad.

E12.2 The ground system should be designed and tested in accordance with local and applicable electrical codes and Motorola R56-2005.

E12.3 All bonding connections that will be buried shall use an approved exothermic welding process.

E12.4 Ground tests shall be performed in the presence of the Contract Administrator or his delegate. The Contractor shall supply all necessary test equipment. The test results will be recorded on a Contractor supplied form and will form part of the as-built documentation.

E13. ELECTRICAL UTILITY

E13.1 The Contractor shall design and install a new complete Manitoba Hydro electrical service into the Parcel B land property and to the Contractor relocated equipment shelter and relocated generator package and new tower lighting such that the Contractor shall provide all design, labour, material, equipment and services necessary (including all such reasonably implied or incidental), to complete the electrical un-installation at 2230 Main Street and subsequent re-installation (and re-design) of electrical utility as indicated in the following specifications.

E13.2 The Work is to include, but not necessarily be limited to the following:

- (i) Disconnect the power distribution system related to the existing “radio site” power service at 2230 Main Street. Note: The power distribution system at this location shall not be disconnected without prior written notice from the Contract Administrator as timing and scheduling of the move will be of the essence.
 - (ii) Design and install a new electrical service and power distribution system related to the relocated radio site (equipment shelter, generator package, tower lighting) at “Parcel B” land at the base of the Communication Tower Access Road.
 - (iii) Provide all required equipment and material.
 - (iv) Provide all required grounding and bonding.
 - (v) All costs for permits, design, construction and installation are the responsibility of the Contractor.
- E13.3 The entire Contractor electrical uninstallation at 2230 Main Street and subsequent Contractor re-installation and re-design of electrical utility at Parcel B land is to be in accordance with all current codes, rules and regulations, including (but not limited to) the current editions of the Canadian Electrical Code and National Building Code, with all applicable provincial and municipal amendments.
- E13.4 The Contractor shall install all equipment and devices in accordance with the manufacturer’s recommendations.
- E13.5 The Contractor shall reference (as a guide) the existing Electrical Single Line Diagram that currently depicts the 2230 Main Street radio site power service to aid in a new design and install of electrical service into the relocated Equipment Shelter and relocated Generator package and new tower lighting works at Parcel B lands. The existing electrical utility single line diagram and layout sketch for 2230 Main Street are referenced in section E1.3 and depict the Equipment Shelter’s underground cabling including main feed (via splitter), shelter disconnect switch, shelter transformer, shelter automatic transfer switch, shelter service panel and shelter generator package.
- E13.6 The Contractor shall design, supply and install a complete turn-key new Manitoba Hydro electrical service reconnect/re-energize for the relocated Equipment shelter, relocated Generator works and newly erected tower. The Contractor should note there is currently no power on Parcel B land whatsoever.
- E13.7 The Contractor designed, supplied and installed complete new Manitoba Hydro electrical service shall consist of overhead power provisioning with a route from Ferrier road, along the south property line of Parcel B land to the south of the Communication Tower Access Road. At said south property line the overhead power shall then route north (perpendicular to the south property line) via overhead power to the location of the electrical service entry point for the Equipment Shelter. The Contractor design route shall take into account all guy wire locations relative to the installation of overhead power poles.
- E13.8 The Contractor shall take special note to design and re-install the necessary quantity of electrical conduits between the external generator pad and terminating near the internal shelter breaker panel. These conduits facilitate the Contractor installation of power and control wiring to the generator.
- E13.9 The Contractor shall install electrical service to power the new tower lighting system. The Contractor shall ensure the tower is illuminated during the construction period. Temporary obstruction lights may be used.
- E13.10 The Contractor shall provide a buried telecommunication vault to facilitate future telecom wiring. The vault should be located a minimum of 2 feet away from the outside perimeter of the shelter. The Contractor shall install a conduit from inside the shelter to the buried vault.
- E13.11 All required permits and their applications are to be provided to the proper authorities by the Contractor. Contractor is to pay all associated fees.

- E13.12 Shop drawings are to be submitted to the responsible professional engineer prior to ordering equipment, and no equipment is to be ordered without the engineer's review.
- E13.13 A certificate of approval from the authority having jurisdiction for the complete electrical installation is to be submitted to the responsible professional engineer after all work is complete.
- E13.14 The Contractor is to visit the sites to confirm that all electrical work can be completed without any additional cost to the City of Winnipeg.
- E13.15 The Contractor is responsible for any damage done by performing the work improperly.
- E13.16 The Contractor is to coordinate with equipment suppliers as necessary to obtain shop drawings for all packaged equipment.
- E13.17 The Contractor is to adjust conductor routing and equipment location at no additional cost if requested prior to rough-in.
- E13.18 The Contractor is to test all supplied, re-installed, newly installed, connected, or modified electrical in the presence of the Contract Administrator or his delegate upon completion of the work.

E14. SITE RESTORATION AND ROADWORKS TO MATCH EXISTING

- E14.1 The Contractor shall be responsible for cleaning up the work Site on a daily basis at Parcel B land "radio site". This includes the removal of all rubbish and debris resulting from the work at the Site. The use of a Contractor supplied dumpster located on site would fulfill these requirements.
- E14.2 Upon completion of all Work, the entire job Site shall be left clean and free of trash, debris, mud, excavated fill, scrap materials or excess building materials.
- E14.3 Upon completion of foundations, and subsurface site preparations (grounding, utilities etc.), the Contractor shall;
 - (a) Remove any remaining vegetation and surface debris or rocks that could damage the installation of a weed suppressing filter cloth.
 - (b) Supply and install a weed suppressing filter cloth covering the entire tower pad area, the equipment shelter area, the generator area, and the turn-around area up to and including the immediate area such that the new tower compound integrates with the existing Communication tower access road. All filter cloth seams shall be overlapped a minimum of 6 inches or as instructed by filter cloth manufacturer.
 - (c) Design, supply and install all necessary compacted fill and limestone subbase and base gravel to connect and blend and integrate the entire tower pad area, the equipment shelter area, the generator area, and the turn-around area up to and including the immediate area such the new tower compound integrates with the existing Communication tower access road. A typical cross section of the existing Communication Tower Access Road can be found in drawings per section E1.3.
 - (d) Compact and grade the tower compound area to allow for drainage away from the shelter and tower base and generator and turn-around area. The gravel shall be installed to a minimum of 4 inches depth. A typical cross section of the existing Communication Tower Access Road can be found in drawings per section E1.3

E15. AS BUILT DOCUMENTATION AND DRAWING PACKAGE

- E15.1 The Contractor shall provide a complete hard copy set **and** a complete digital copy set of as built drawings including a complete structural analysis of the completed project components on Parcel B land, to the Contract Administrator within forty-five (45) days of final acceptance by the City. All documentation shall be sealed by a Professional Engineer registered in Manitoba and shall include but not be limited to:

- (i) The completed tower structure including tower loading, tower foundation, tower guy anchors and foundations, tower lighting system, tower lighting ice shields, antenna azimuths, antenna ice shields and tower appurtenances per E3 to E9.
- (ii) Equipment Shelter foundations and pad per E10.
- (iii) Generator foundations and pad per E11.
- (iv) Integrated Grounding System per E12.
- (v) Electrical Utility per E13.
- (vi) Connecting/Integrating roadworks of Communication Tower Access Road per E14.

E15.2 Documentation shall include all Contractor antenna installation test results along with photo documentation of each connected antenna, mount, feedline connection, and grounding kit installation per E7.12

E15.3 Documentation shall include all Contractor grounding/bonding test results per E12.4.

E16. 2230 MAIN STREET TOWER REMOVAL AND DISPOSAL

E16.1 Following the successful completion of radio site Works on Parcel B land, per sections E3 to E14 of this specification, the Contractor shall then subsequently remove and dispose of the following items at the **2230 Main Street location**, only once approval in writing has been given by the Contract Administrator:

- (a) Complete removal and disposal of the tower and any leftover tower appurtenances with the **exception** of the following which shall be salvaged and **returned** to the City of Winnipeg:
 - (i) The quantity of three (3), SC488-HF6LDF(D00), 700Mhz omni antennas located at the approximate height of 450 feet.
 - (ii) The quantity of one (1), tower top amplifier corresponding to the SC488-HF6LDF(D00), 700 Mhz "receive" omni antenna, located at the approximate height of 450 feet.
 - (iii) The quantity of four (4), SRL488, 800 Mhz antennas, inverted (438ft) and upright (420ft), located at the approximate height of 420 feet.
 - (iv) The quantity of one (1), tower top amplifier corresponding to the SRL488, 800 Mhz "receive" omni antenna, located at the approximate height of 420 feet.
 - (v) The quantity of one (1), Cisco 1300SE, 2.4 Ghz panel radio located at the approximate height of 240 feet and its corresponding external antenna (SSP2-23A) at the approximate height of 240 feet.
 - (vi) The quantity of one (1), Cisco 1300SE, 2.4 Ghz panel radio located at the approximate height of 100 feet and its corresponding external antenna (SSP2-23A) at the approximate height of 100 feet.
 - (vii) The quantity of one (1), 900 Mhz, fiberglass collinear omni antenna, complete with sidearm extension mount at the approximate height of 100 feet.
 - (viii) The quantity of two (2), SRL-210-C4, VHF antennas, located at the approximate height of 350 feet.
 - (ix) The quantity of one (1), SRL-310-C4, 400 Mhz antenna, located at the approximate height of 375 feet.
- (b) Complete removal and disposal of all leftover feedlines on the tower with the **exception** of the following feedlines which shall be salvaged and **returned** to the City of Winnipeg:
 - (i) The quantity of three (3) runs of LDF7-50A feedline formally used for the three SC488-HF6LDF(D00) omni antennas. Note that each run shall be salvaged as one continuous length from antenna to termination near the base of the tower. The cabling feedlines shall be coiled and handled for possible re-use by the City at a later date.

- (c) The Contractor will deliver the salvaged antennas, feedlines, tower top amplifiers and mounts per E16.1(a) and E16.1(b) to the City of Winnipeg Radio Shop at 421 Osborne Street.
 - (d) The existing tower base and tower base foundation shall be left in place on the land, however any associated above ground electrical and grounding cables and conduit at the existing tower base shall be removed and disposed of by the Contractor.
 - (e) The existing integrated grounding layout system between the generator pad, equipment shelter foundations and tower base shall have all associated above ground grounding cables and conduit removed and disposed of by the Contractor.
 - (f) Complete removal and disposal of all guy cabling, turnbuckles and screw pins.
 - (g) Complete removal and disposal of all steel anchor head plates at all three anchor foundations.
 - (h) The existing three (3) guy anchors and guy foundations shall be left in place on the land, however any associated above ground grounding cables and conduit at the guy anchor foundations shall be removed and disposed of by the Contractor.
 - (i) The existing Equipment Shelter foundations shall be left in place on the land, however any associated above ground electrical and grounding cables and conduit at the Equipment Shelter foundations shall be removed and disposed of by the Contractor.
 - (j) The existing Generator pad and Generator foundations shall be left in place on the land, however any associated above ground electrical and grounding cables and conduit at the Generator pad and Generator foundations shall be removed and disposed of by the Contractor.
 - (k) The existing and already Contractor de-energized buried electrical cabling and associated conduit from the Generator pad to the Equipment Shelter depicted in the Electrical Single Line Diagram for the existing North End Radio Site Power Service drawing E-002 per section E1.3 shall have all above ground cabling and conduit removed and disposed of by the Contractor.
 - (l) Complete removal and disposal of the Contractor de-energized 600 volt splitter and fiberglass pedestal.
 - (m) Complete removal and disposal of the Contractor de-energized above ground electrical and grounding cables and conduit at the location of the 600 volt splitter.
- E16.2 The disposal of demolition material is the responsibility of the Contractor.
- E16.3 The Contractor shall be responsible for cleaning up the work Site on a daily basis at 2230 Main Street "radio site". This includes the removal of all rubbish and debris resulting from the work at the Site. The use of a Contractor supplied dumpster located on site would fulfill these requirements.
- E16.4 Upon completion of all Work, the entire job Site shall be left clean and free of trash, debris, scrap materials or excess building materials.
- E16.5 All removal and disposal work **must be completed by December 31, 2019 or sooner** per direction of work commencement given by the Contract Administrator.
- E16.6 The Contractor may be permitted to allow the tower to fall in a controlled manner and direction, with complete details provided in advance to the Contract Administrator, rather than removing the tower in sections. The final method of tower removal shall be determined by:
- (i) Whether other non-related Water and Waste Department construction equipment is at or near the worksite, rendering a tower fall impractical and unsafe, AND
 - (ii) Whether the Contractor provided an optional, price reduction on Form B, to allow the tower to fall.

- E16.7 Further to C6, the Contractor shall be solely responsible for safety at the Site and for compliance with all laws, rules, regulations and practices required by the applicable safety legislation.
- E16.8 The Contractor shall be solely responsible for securing the Site, and any existing facility thereon, and for the proper care and protection of the Work already performed.
- E16.9 The Contractor shall do whatever is necessary to ensure that:
- (a) No person, property, right, easement or privilege is injured, damaged or infringed by reason of the Contractor's activities in performing the Work;
 - (b) The health and safety of all persons employed in the performance of the Work or otherwise is not endangered by the method or means of its performance;
 - (c) Adequate medical services are available to all persons employed on the Work and at all times during the performance of the Work;
 - (d) Pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted or endangered by the performance or existence of the Work;
 - (e) Fire hazards in or about the Work are eliminated;
 - (f) All laws, rules, regulations and practices are met for safe climbing requirements pertaining to antennas, towers, and antenna-supporting structures and the removing of them.

E17. APPENDIX A – GEOTECHNICAL REPORT

E17.1 A 55 page Geotechnical report is contained as Appendix A. The title of the Appendix A report is the North End Sewage Treatment Plant Upgrade (NEWPCC) and was prepared by Stantec Consulting Ltd. in association with AECOM Canada Ltd. (AECOM) for the City of Winnipeg from Bid Opportunity (586-2018 – NEWPCC – Upgrade Site Preparation Works – Parcel B Road and Associated Work). The Geotechnical report is provided to aid the Contractor's evaluation of the existing soil conditions at the Parcel B site per E1.4.

E18. APPENDIX B – PARCEL B TOWER LOADING AND CONTRACTOR INSTALLED ANTENNAS AND FEEDLINES

E18.1

ANTENNA DESCRIPTION	QTY	AZIMUTH	ELEVATION FT (METERS)	BANDWIDTH	CENTRE FREQ	FEEDLINE	RELOCATE FROM 2230 MAIN STREET
SC488-HF6LDF(D00)	3	OMNI	390 Ft (118.9 m)	770-802 Mhz	786 Mhz	(3) LDF7-50A	No
SRL-310-C4	1	180	375 Ft (114.3 m)	410-415 Mhz	412.5 Mhz	(1) LDF5-50A	No
SRL-210-C4	1	180	350 Ft (106.7 m)	148-156 Mhz	152 Mhz	(1) LDF5-50A	No
VHLP6-11 6' dish	1	229(*)	135 Ft (41.1 m)		6 Ghz	(1) EWP90-107	Yes
VHLP4-11 4' dish	1	192(*)	80 Ft (24.4 m)		11 Ghz	(1) EWP90-107	Yes
VHLP4-11 4' dish	1	197(*)	210 Ft (64 m)		11 Ghz	(1) EWP90-107	Yes

(*) – exact azimuths to be determined based on final tower orientation

PART F - SECURITY CLEARANCE

F1. SECURITY CLEARANCE

- F1.1 The City will conduct a Level Two Security Clearance Check, for any individual proposed to perform Work under the Contract at Winnipeg Police Service facilities.
- F1.2 The Contractor shall provide the Contract Administrator with a list of individuals proposed to perform Work under the Contract at Winnipeg Police Service facilities:
- (a) within five (5) Business Days of the Award of Contract; or
 - (b) in the case of additional or replacement individuals during the term of the Contract, at least thirty (30) Calendar Days before each individual is proposed to commence Work at Winnipeg Police Service facilities.
- F1.3 Each individual proposed to perform Work under the Contract at Winnipeg Police Service facilities shall provide:
- (a) A list of names (including maiden names), addresses, dates of birth, and telephone numbers and occupations of all immediate family members (including parents) and their spouses/common law. Include your spouse/common law boyfriends, girlfriends and their family members. This includes stepbrothers, stepsisters, half-brothers and half-sisters. This list should be typed in the following format:

John James SMITH	Dob: 45 Aug 24 (father)
123 Anywhere Street	555-555-5555
Winnipeg, Manitoba	
 - (b) A list of names, dates of birth, addresses and telephone numbers and occupations of at least four (4) of your closest friends. This list should be typed in the following format:

John James SMITH	Dob: 45 Aug 24 (father)
123 Anywhere Street	555-555-5555
Winnipeg, Manitoba	
 - (c) The name of the immediate supervisor title or position within their organization, and telephone number, mailing address and email address.
 - (d) A list of all past addresses and dates when resided.
 - (e) Identification - photocopies of two valid pieces of identification with at least one piece of photo identification:
 - (a) Photo Identification must be one of the following:
 - (i) Driver's License,
 - (ii) Passport,
 - (iii) Permanent Resident Card,
 - (iv) Aboriginal Status Card,
 - (v) Manitoba Public Insurance Identification Card.
 - (b) Second identification must be one of the following:
 - (i) Birth Certificate,
 - (ii) Social Insurance Card – (SIN confirmation letters effective April 2014),
 - (iii) Provincial Health Card,
 - (iv) Citizenship Card,
 - (v) Firearms License,
 - (vi) Immigration Papers,
 - (vii) National Defense Card,
 - (viii) Nexus Card,
 - (ix) FAST CARD from Canada Border Services Agency.

- (f) A completed Form P-608: Security Clearance Check authorization form. Form P-608 must be signed and dated.
 - (i) Signature of Witness shall be signed by the contact person stated on Paragraph 3 Form A: Bid.

- F1.4 Each individual shall submit the required information and form to the Winnipeg Police Service Division 30 Security Section Supervisor at Main Floor, 245 Smith Street:
 - (a) within five (5) Business Days of the Award of Contract; or
 - (b) in the case of an additional or replacement individual during the term of the Contract, at least thirty (30) Calendar Days before the individual is proposed to commence Work at Winnipeg Police Service facilities.

- F1.5 Any individual for whom a satisfactory Level Two Security Clearance is not obtained will not be permitted to perform any Work within Winnipeg Police Service facilities.

- F1.6 Any satisfactory Security Clearance obtained thereby will be deemed valid for one (1) year from the date of clearance, subject to a repeated Security Clearance Check as hereinafter specified.
 - (a) Each individual doing Work in a Winnipeg Police Service Facility shall provide photo identification upon entry, in order that their Level Two security clearance can be verified.

- F1.7 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require a further Security Clearance Check. Any individual who fails to obtain a satisfactory Security Clearance Check as a result of a repeated Security Clearance Check will not be permitted to continue to perform Work under the Contract at Winnipeg Police Service Facilities.

- F1.8 Any individual who fails to obtain a satisfactory Security Clearance Check may request reconsideration by writing to:
Winnipeg Police Service
Division 30 Services
Attn: Security Section Supervisor
245 Smith Street
Winnipeg MB R3C 0R6

