

# REQUEST FOR TENDER FOR THE PROVISION OF CONSTRUCTION SERVICES FOR

### **APEX SUPPLEMENTAL PUMPING 2025**

BID CALL: March 07, 2025

BIDS DUE: April 04, 2025 - 3:00 PM EST Local Iqaluit Time

2025-RFT-089

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#### SECTION A - TENDER CALL

#### 1. INTRODUCTION

1.1 The City of Iqaluit Department of Public Works and Engineering (the City) is issuing a Request for Tender (RFT) for qualified Proponents to provide construction services as further outlined in this RFT document.

The purpose and objective of this project is to maximize raw water levels in the Lake Geraldine water reservoir through pumping operations from Apex River. This objective will be achieved by pumping raw water from the Apex River starting during the 2025 freshet and ending in fall 2025. Pumping activities shall be constrained by minimum water levels in the Apex River.

Subject to future funding and acceptable performance at the City's sole discretion, the City may retain the services of the Contractor for optional pumping work in year 2026, and year 2027 respectively. The general milestones and project schedules for future years will be the same as in 2025.

#### 2. BACKGROUND

#### 2.1 Location:

Iqaluit is the capital of Nunavut and is located at the south end of Baffin Island, Frobisher Bay 64°31'N latitude and 68°31'W longitude. Access to Iqaluit is provided by regular scheduled commercial aircraft year-round, snowmobile trails from other Baffin Island communities in the winter, and sealift from the port of Montreal in the summer.

#### 2.2 Geology and Terrain:

Iqaluit's location is above the tree line and within the continuous permafrost zone of Canada. The region generally consists of glacially scoured igneous/metamorphic terrain. In some locations, a thin layer of organic material is found.

#### 2.3 Climate:

Iqaluit has an Arctic climate with January and July high and low mean temperatures of -21.5° C/-29.7°C (high/low) and 11.4° C/3.7° C (high/low) respectively. The annual precipitation is made up of 19.2 cm of rainfall and 255.0 cm of snowfall for a total of 43.0 cm precipitation. The prevailing winds are northwest at 16.7 km/hr.

#### 3. TENDER CALL

3.1 Proponents must submit their Tenders by electronic bid submission only, through MERX Canadian Public Tenders. MERX can be accessed via the following website link – <a href="https://www.merx.com/">https://www.merx.com/</a>. Tenders must address tenders to:





Kevin Kerr,
Director of Engineering and Capital Project
City of Iqaluit
1549 Federal Road
Iqaluit, Nunavut, X0A 3H0

- 3.2 Tenders are required to conform to the conditions below. For further instructions on how to submit an electronic bid through MERX, refer to the MERX Electronic Bid Supplier Guide, via the following link <a href="https://marketing.merx.com/Support/EBSGuide.pdf">https://marketing.merx.com/Support/EBSGuide.pdf</a>. Alternatively, you can contact MERX customer service at 1-800-964-6379.
- 3.3 Bidders must obtain a unique PIN number from MERX in order to upload electronic bid submission documents. It is important to keep this PIN number in a permanent location, as it will be required each time you wish to submit a bid response to a call to tender.
- 3.4 Electronic Tenders are to be received before, **April 04, 3:00 PM EST local Iqaluit time**.
- 3.5 The final decision on whether to accept late Bids is at the City's discretion.

#### **END OF SECTION**





#### **SECTION B – TENDER CONDITIONS**

#### 1. SUBMISSION REQUIREMENTS

- 1.1 The Tenderer shall complete all documents pertaining to this Contract in ink or in type.
- 1.2 If the Tenderer is a corporation, an authorized officer of the corporation shall sign and seal the Form of Tender.
- 1.3 If the Tenderer is a partnership, a minimum of two partners shall sign the Form of Tender and signatures shall be witnessed.
- 1.4 If the Tenderer is a sole proprietorship, the sole proprietor shall sign the Form of Tender and the signature shall be witnessed.
- 1.5 The Tenderer shall submit its Tender by the date and time specified in Part I of the Tender.
- 1.6 The Tenderer shall submit to the City:
  - i Completed Form of Tender Form, which includes:
    - .a Appendix A Consent of Surety.
    - .b Appendix B Cost Submission Form.
  - .ii Bid bond.

Failure to submit the required items identified in (ii) and (iii) may present a Major or Minor Irregularity on the bid. Refer to 1.7 and 1.8 on how Major and Minor Irregularities are to be addressed. The City shall be the sole judge of whether or not a Tender contains irregularities.

- 1.7 Bidders will be automatically disqualified for any Major Irregularities on their bid submission. Major Irregularities are defined as deviations from the competitive procurement process request that affects the price, quality, quantity or delivery, and is material to the award.
- 1.8 Tender irregularities that are Minor Irregularities will be handled in the first instance by conferring with the Tenderer to seek clarification. Minor Irregularities are defined as deviations from the competitive process request, which affects form, rather than substance. The effect on the price, quality, quantity or delivery is not material to the award. The bidder will be given the opportunity to adjust the





irregularity and continue in the process. However, if an unsatisfactory irregularity remains after consulting with the Tenderer, the Tenderer may be disqualified.

- 1.9 The Tenderer shall submit electronic files through MERX for both their Security Deposit and Consent of Surety, alongside the electronic tender submission.
- 1.10 The successful Tenderer shall submit to the City the following documents within five (5) business days of the day the City notifies the successful Tenderer that the documentation should be sent to the City.
  - i. Valid City of Iqaluit Business License.
  - .ii Form of Tender forms, which include
    - .a Appendix C Subcontractors List.
    - .b Appendix D Equipment List.
    - .c Appendix E Product Suppliers List.
    - .d Appendix F Labour & Equipment Rates.

#### 2. INQUIRIES AND AMENDMENTS

2.1 All inquiries concerning this RFT are to be directed by email only to:

Ayomide Oyefeso, Project Officer City of Iqaluit A.Oyefeso@igaluit.ca

- 2.2 The deadline for submitting inquiries is **April 04**, **3:00 PM EST**.
- 2.3 Written addendums issued as part of this RFT, in response to inquiries, will be posted publicly on the City's website and on MERX. Verbal explanations or instructions will not be binding.
- 2.4 Tenderers assume all risk of delivery of amendments. Without limiting the foregoing, the City shall not be held liable for any claim, demand or other action should a transmission be interrupted, not received in its entirety, received after the Closing Time, received by another electronic means other than specified through MERX, or for any other reason over which the City does not have control.

#### 3. SECURITY DEPOSIT

3.1 Every submission shall be accompanied by a security deposit payable to the City of Iqaluit, in an amount not less than 10% of the total Tender amount. The





security deposit shall be in the form of one of the two following security deposit options and shall be submitted with the tenderer's electronic tender submission:

- 3.2 OPTION #1: A Digital Bid Bond
  - i Tenderers shall submit a copy of the Digital Bid Bond and follow the submission instructions as stated above in Section 1.8.
  - ii If Tenderer's are using this option, the Tenderer and the Tenderer's Surety should refer to the digital bonding information on Surety Association of Canada's website. Information at this site includes:
    - .a A list of third parties that provide online surety digital bond services, such as Mobile Bonds or Xenex. The City does not endorse or promote any third-party digital bond service provider.
    - .b An Industry Checklist which digital bonds provided should meet.
  - .iii The Digital Bid Bond shall be digitally verifiable. The results of the digital verification process shall provide a clear and immediate indication that the document received is the true document executed and that the content has not been changed or altered.
  - .iv All instruction details for performing the digital verification of the bond should be included with the uploaded bond and be clear and concise.
- 3.3 OPTION #2: Scanned Paper Bid Bond / Certified Cheque, Bank Draft, Money Order (PDF Format)
  - .i Tenderer's shall scan and attach a copy of the paper Bid Bond, Certified Cheque, Bank Draft or Money Order and follow the submission instructions as stated above in 1.8. Tenderer's will be required to provide to the City the original Bid Bond, Certified Cheques, Bank Draft, and/or Money Order that were scanned and attached with the tender submission within 72 hours of tender close. Failure to provide the above original document(s) or to enter into a contract may result in the tenderer being barred from future tender opportunities for the City of Iqaluit for an indeterminate period of time.
  - ii If an alternative Bid Bond is used, it is recommended that tenderer's request either an ink seal from their Surety or that they trace over the





embossed seal prior to scanning to allow for the seal to be visible to the City.

- 3.4 Bid bonds shall be in the name of the City of Iqaluit as oblige and signed and sealed by the Tenderer and by a surety licensed to conduct business as a surety in Nunavut.
- 3.5 The City shall not pay interest on security deposits.
- 3.6 Bid bonds shall be Bid Bond Form CCDC Document No. 220, latest edition, effective until sixty (60) business days after the Closing Date.
- 3.7 Security deposits will be returned after delivery to the City of the required performance bond and labour and material payment bond by the successful Tenderer.
- 3.8 If the Contract is not awarded, all security deposits will be returned with reasonable promptness after such decision is made by the City.
- 3.9 After all executed contracts and bonds are received, and the contract award is made, the successful tenderer and the contract value will be posted on the MERX website. After contract award, the bid deposit of the successful tenderer and all tenderers shall be null and void.

#### 4. CONSENT OF SURETY

- 4.1 Tenderers must submit with the Bid and Bid Bond, a "Consent of Surety," stating that the surety is willing to supply the performance bond and labour and material payment bond as specified.
- 4.2 A "Consent of Surety" shall be in one of the two following options and shall be submitted with the Tenderer's submission and as instructed above in 1.8.
  - .i The City's "Consent of Surety" Form provided in Appendix A.
  - .ii Other "Consent of Surety" Form used by a Surety company and authorized by law to do business in the Territory of Nunavut, and acceptable to the City.

#### 5. PERFORMANCE ASSURANCE

- 5.1 The accepted Bid shall provide security (by way of bonds or a security deposit) as stated in the Contract Documents.
- 5.2 The cost of all security shall be included in the Tender prices.

#### 6. ORDER OF PRECEDENCE





6.1 The following order of precedence will apply:

Order of Precedence
Issued Addenda
PROCUREMENT AND CONTRACT REQUIREMENTS
SERVICE AGREEMENT
GENERAL CONDITIONS
SUPPLEMENTAL CONDITIONS
TERMS OF REFERENCE
GENERAL REQUIREMENTS

#### 7. TERMS AND CONDITIONS

- 7.1 Submission of a Bid constitutes acknowledgement that the Tenderer has read and agrees to be bound by all the terms and conditions of this RFT.
- 7.2 The City will not make any payments for the preparation of a response to this RFT. All costs incurred by a Tenderer will be borne by the Tenderer.
- 7.3 This is not an offer. The City does not, by virtue of this Tender call, commit to an award of a Bid, nor does it limit itself to accepting the lowest price or any Bid submitted, but reserves the right to award this Bid in any manner deemed to be in the City's best interest.
- 7.4 Tenderers may amend their Bid at any time prior to the closing date time.

  Tenderers may not amend their Bid after the closing date time.
- 7.5 The City has the right to cancel this RFT at any time and to reissue it for any reason whatsoever, without incurring any liability and no Tenderer will have any claim against the City as a result of the cancellation or reissuing of the RFT.
- 7.6 The City will not consider any Bid that is delivered to any address or in any manner other than that provided in Part I Tender Call of this RFT.
- 7.7 If a contract is to be awarded as a result of this RFT, it will be awarded to the Tenderer whose Bid for each service, in the City's opinion, provides the best potential value to the City and is capable in all respects to perform fully the contract requirements and has the integrity and reliability to assure performance of the contract obligations.
- 7.8 If the City decides to award a contract based on a submission received in response to this RFT, the Successful Tenderer(s) will be notified of the intent to award in writing, and the subsequent execution of a written agreement shall constitute the making of a Contract. Tenderers will not acquire any legal or equitable rights or privileges whatsoever until a Contract is signed by both parties.





- 7.9 Any resulting contract will be in the form of the City's standard "City of Iqaluit Services Agreement" and it will contain the relevant provisions of this Request for Tenders, the accepted bid as well as such other terms as may be mutually agreed upon, whether arising from the accepted bid or as a result of any negotiations prior or subsequent thereto. The City reserves the right to negotiate modifications with any Tenderer who has submitted a Bid.
- 7.10 A copy of the Services Agreement is included in RFT.
- 7.11 Any amendment made by the City to the Request for Tender will be issued in writing and posted onto the bidding platform in accordance with Section 2.
- 7.12 The Bid and accompanying documentation submitted by the Tenderers are the property of the City and will not be returned. Bid bonds will be returned to all unsuccessful Tenderers.
- 7.13 Tenderers must acknowledge receipt of any addenda issued by the City in their Bid on the Section C Form of Tender document.
- 7.14 Tenderers shall disclose in their Bid any actual or potential conflicts of interest and/or existing business relationships it may have with the City, its elected or appointed officials or employees. The City may rely on such disclosure.
- 7.15 Tenderers and their agents will not contact any member of the City Council, City Staff or City Consultants with respect to this RFT, other than the City Representative named in Part I Tender Call, at any time prior to the award of a contract or the cancellation of this RFT.
- 7.16 If an arithmetical error is identified in the submitted Bid between any individual price and the price extension (e.g. Unit Price x Quantity of Units), the individual price shall govern. The price extension and the total Bid amount will be corrected accordingly.
- 7.17 For contracts that include multi-phased work which spans more than the current fiscal year, authorization to proceed with work phases that are to be completed in future years is conditional upon approval of capital spending by the City of Iqaluit Council for each future year. Contracts will only be executed for work that has approved funding under the current fiscal budget.

#### 8. VALIDITY OF OFFER

8.1 Bids shall remain open for acceptance for a period of not less than sixty (60) business days from the closing date of this RFT.

#### 9. TENDER INELIGIBILITY





- 9.1 Bids that are unsigned, improperly executed, submitted to a location or in a manner other than specified in this RFT, incomplete, conditional, illegible, obscure or contain arithmetical errors, additions not called for, reservations, qualifications, erasures, alterations, or irregularities of any kind, or which are otherwise not completed or submitted in strict compliance with the Instructions to Tenderers, may be rejected by the City whether they constitute as a Major or Minor Irregularity.
- 9.2 Notwithstanding anything to the contrary herein, the City may in its sole discretion elect to retain any such Bid for consideration and may waive any or all of the foregoing, on such terms or conditions as the City may consider appropriate, even if any of the foregoing would otherwise render the Bid null and void and the Bid may be considered in the same manner as Bids that fully conform to the requirements of the Tender Documents without qualification.

#### 10. REVIEW AND ACCEPTANCE OF BID

- 10.1 Upon receipt of the Bids, the City in its discretion may elect to conduct a post tender meeting with one or more Tenderers to discuss in detail their respective bid submission and such other items as the City may consider appropriate or necessary without invalidating the procurement process.
- 10.2 Before award of the Contract, the Tenderer may be required to provide specific information with respect to its legal and or financial status.
- 10.3 THE LOWEST OR ANY TENDER WILL NOT NECESSARILY BE ACCEPTED.
- 10.4 Notwithstanding any custom of the trade to the contrary, the City reserves the right to reject the lowest Bid, even if the lowest Bid is a compliant Bid, accept any Bid or part thereof, negotiate any aspect of any Bid, advertise for new Bids, negotiate a contract as the City deems to be most advantageous to the City's interest without incurring any liability, and to award a contract to whomever the City in its sole and absolute discretion deems appropriate and solely in the best interest of the City and no Tenderer will have any claim against the City as a consequence. Unless required otherwise, the City shall not, at any time, be required to disclose any information to the Tenderers regarding the City's consideration and evaluation of Bids.
- Following acceptance by the City, a written Notice of Award will be issued to the successful Tenderer. If the Tenderer fails for any reason to execute and return the Articles of Agreement within seven (7) working days of receipt for signature of the Articles of Agreement from the City, or fails to provide the performance bond and labour and material bond or other security deposit stipulated in GC 11 or to satisfy such other terms and conditions specified hereunder within any period specified, or such extension of time as may be granted by the City, then the City reserves the right to terminate the Tenderer's right to complete the Contract and





to award the Contract to whomever the City considers appropriate. The bid bond shall forthwith become payable.

- 10.6 The City shall not be obligated in any manner to the successful Tenderer whatsoever until the Contract has been awarded and the Contract has been duly executed by the parties.
- 10.7 If the City receives no Bids satisfactory to the City in its sole discretion, the City reserves the right in its sole discretion to negotiate a contract for the whole or any part of the Work with any one or more persons whatsoever, including any one or more of the Tenderers, or to postpone or cancel this Bid and then issue a new tender, or to cancel or postpone some or all of the Work.
- 10.8 The City shall not, under any circumstances, be responsible for any costs, expenses, loss, damage or liabilities, whether direct, indirect, consequential or economic in nature, incurred by a Tenderer as a result of, in connection with or incidental to:
  - i The tendering of the work;
  - .ii Costs incurred for the preparation of this Bid;
  - .iii The acceptance or rejection of any Bid; or
  - .iv The exercise by the City of its rights under this RFT.
- 10.9 By participation in the tendering process, the Tenderer on its own behalf and on behalf of all firms, corporations and individuals comprising the Tenderer, agrees that none of the City or its directors, officers, employees, agents and other representatives shall by liable to any Tenderer, or any firm, corporation or individual comprising the Tenderer, including in contract, tort, statutory duty, duty of fairness, duty of care, law, equity or otherwise, for any claims, direct or indirect, whether for costs, expenses, losses or damages, or loss of anticipated profits, or for any matter whatsoever, incurred in preparing and submitting a Bid, or negotiations of a Contract, or in any way arising in connection with the Bid Documents. The Tenderer further agrees on its own behalf and on behalf of all firms, corporations and individuals comprising the Tenderer, that the award of the Contract is in the sole discretion of the City and in no event shall the Tenderer or any firms, corporations or individuals comprising the Tenderer seek injunctive or other relief to prevent or delay the award of the Contract or the performance of any Work or services in relation thereto.

#### 11. UNBALANCED TENDERS





- 11.1 The Tenderer shall not submit an unbalanced Tender.
  - i. The City shall have the right to:
  - .ii Deem a Tender to be unbalanced; and
  - .iii Reject a Tender which may be, in its opinion, unbalanced.

#### 12. COLLUSION

- 12.1 The Tenderer shall not engage in collusion of any sort and, in particular, shall:
  - i. Ensure that no person or other legal entity, other than the

Tenderer, has any undisclosed interest in the Tenderer's Tender; and

.ii Prepare its Tender without any knowledge of, comparison of figures with or arrangement with any other person or firm preparing a Tender for the same work.

#### 13. RIGHT TO ACCEPT OR REJECT TENDERS

- 13.1 Notwithstanding any other provision in this Contract, the City shall have the right to:
  - .i Accept any Tender;
  - .ii Reject any Tender; and
  - .iii Reject all Tenders.
- 13.2 Without limiting the generality of 15.1, the City shall have the right to:
  - i Accept an irregular Tender;
  - .ii Accept a Tender which is not the lowest Tender; and
  - .iii Reject a Tender even if it is the only Tender received by the City.
- 13.3 Acceptance of the Tender shall occur at the time the City awards the Tender and not necessarily at the time the award is communicated to the successful Tenderer.

#### 14. CONTRACT DOCUMENTS

The Tenderer shall obtain and review all Contract Documents as listed in the Form of Tender and all Addenda issued by the City pertaining to this Contract.





#### 15. COMMENCEMENT AND COMPLETION OF WORK

The Tenderer, in submitting the Bid, agrees that the Tenderer can complete the Work by the date for completion stated in the Tender Form.

#### 16. OMISSIONS, DISCREPANCIES AND INTERPRETATIONS

- 16.1 Tenderers finding discrepancies or omissions in the drawings or terms of reference or having doubt as to the meaning or intent thereof, shall at once notify the Purchasing Coordinator who will, if necessary, send written instructions or explanations to all Tenderers.
- 16.2 Oral interpretations made to any Tenderer shall not affect a modification of any provision of the Tender Documents. Only addenda written and issued by the City can be considered.
- 16.3 The City reserves the right in its sole discretion at any time, and for whatever reason to, by Addendum, modify, amend or otherwise change the Tender Documents. Any such Addendum shall be issued in writing and shall be expressly identified as an Addendum to these Tender Documents. All such changes shall become part of the Tender Documents and their effects shall be reflected in the Tender prices. The City also reserves the right in its sole discretion to cancel this Tender at any time.

#### 17. IRREVOCABILITY OF OFFER

- 17.1 The Tenderer shall not revoke its offer until after the expiration of sixty (60) business days after the opening of Tenders by the City.
- 17.2 If the Tenderer revokes its offer prior to the expiration of sixty (60) business days after the Tender opening, the Tenderer shall forfeit its Tender security deposit, but this shall not prohibit the City from pursuing and other legal remedy which it may have.

#### 18. ALTERNATIVES & EQUALS

- 18.1 Where requested in this RFT, Tenderers may propose alternatives or equals to the stated scope of work. In case alternate or equals are requested in this RFT, the following will apply:
  - .i Where the Tender Documents stipulate a particular product, alternatives or equals will be considered by the City up to ten (10) calendar days prior to the Closing Time.
  - .ii When a request to substitute an allegedly equal product is made to the City, the City may approve the substitution either as an equal or as an alternative and will issue an Addendum to all Tenderers. If a product is approved as equal, all Tenderers may use that product in place of the





specified product. If the product is approved as an alternative, Tenderers shall base their prices upon the specified product and shall indicate in the Bid the change in price which will apply if use of the alternative product is allowed.

- .iii In their submission of alternatives to products specified, Tenderers shall include and allow for any changes required in the Work to accommodate such alternative products. A later claim by the Contractor for an addition to the Contract Price because of changes in the Work necessitated by use of alternative products shall not be considered.
- .iv Where selected products are stipulated in the Tender Documents the Bidshall be based on the use of only these selected products.
- .v Bids with alternative products will not be considered, unless the alternative has been approved by the City and communicated to the Bidders through an Addendum as noted in 18.1(ii). Bids with alternatives that have not been approved by the City will be deemed non-compliant.
- .vi Submissions shall provide sufficient information to enable the City to determine the acceptability of such products.
- .vii Provide complete information on required revisions to other work and products to accommodate each alternative product, and the amount of addition or reduction from Tender prices, including required revisions, for each alternative product.
- .viii Unless a bid for an alternative product is submitted in this manner and later accepted, provide the product specified.

#### 19. TENDER SIGNING

- 19.1 The Bid must be executed under seal by the Tenderer.
- 19.2 If the Tenderer is an individual or a partnership, the Bid shall be executed by the individual or a partner in the presence of a witness and the signatory must show the capacity in which he or she signs (e.g. "Partner" or "Proprietor").
- 19.3 If the Tenderer is a corporation, the Bid shall be executed under the seal of the company, affixed in the presence of the authorized officers or two directors.
- 19.4 If the Tenderer is a joint venture, each party to the joint venture shall execute the Bid under seal in the manner appropriate to such party.

#### 20. APPENDICES TO FORM OF TENDER

20.1 Tenderers shall complete all Appendices attached to the Form of Tender and submit these with the Tender.





#### 21. PROVISIONAL ITEMS

Once a Tenderer has been chosen by the City for the Project, it shall be open to the City to accept, reject or negotiate the Tenderer's bid for any provisional item contained in the Bid. Should the City choose to reject the successful Tenderer's bid for such provisional work, it shall be open to the City to call for new Bids for this work and the successful Tenderer for the Project may submit a Bid if he so chooses.

#### 22. SUCCESSFUL TENDERER – BONDS

- 22.1 The successful Tenderer and its surety shall provide:
  - i A performance bond signed and sealed by the Tenderer's surety; and
  - .ii A labour and material payment bond signed and sealed by the Tenderer's surety; Each in the amount of at least fifty percent (50%) of the total Tender price. The cost of Bonds shall be included in the Tender price.
- 22.2 The surety of the successful Tenderer and the bonds referred to in 22.1 must be originals and shall be to the satisfaction of the City.

# 23. SUCCESSFUL TENDERER – WORKERS' SAFETY AND COMPENSATION COMMISSION CERTIFICATE OF CLEARANCE

The successful Tenderer shall provide the City with a valid Workers' Safety and Compensation Commission Certificate of Clearance to the satisfaction of the City.

#### 24. SUCCESSFUL TENDERER – EXECUTION OF ARTICLES OF AGREEMENT

- 24.1 The successful Tenderer shall execute in accordance with Section 1, in triplicate, the Articles of Agreement provided in the Contract Documents.
- 24.2 The successful Tenderer shall forward the executed Articles of Agreement to the City.

#### 25. SUCCESSFUL TENDERER – INSURANCE

- 25.1 The successful Tenderer shall provide the City with an original Certificate of Insurance for each type of insurance coverage required by GC12.3 and any additional coverage specified in the Supplementary Conditions.
- 25.2 The Contractor shall carry insurance in the amount of at least FIVE MILLION DOLLARS (\$5,000,000).
- 25.3 The Contractor shall carry insurance, which names the following as additional insureds:





1549 Federal Road Iqaluit, Nunavut, City of Iqaluit X0A 3H0

#### 26. SUCCESSFUL TENDERER – TIME FOR COMPLETION

- 26.1 The successful Tenderer shall Substantially Perform the work by Monday, the 13<sup>th</sup> day of October 2025 and this shall be the first date for the calculation of Liquidated Damages per Section 27.
- 26.2 The successful Tenderer shall Complete the Work by **Monday, the 15**<sup>th</sup> **day of December, 2025** and this shall be the second date used for the calculation of Liquidated Damages as per Section 27.
- 26.3 The successful Tenderer acknowledges that time shall be deemed to be of the essence of the Contract. For the Tenderer's purpose of establishing a scheduled for the Work, it is anticipated that the Contract Award will be complete 30 calendar days after the opening of Tenders by the City, and then the Commence Work Order will be issued 3 business days after the Contract Award is complete. Milestone dates associated with the Contract will be adjusted, when possible, due to any delays caused by the City during the Contract Award and/or issuance of the Commence Work Order.
- 26.4 The Contract general timelines have been identified below.

ACTION	DATE
Opening date for RFT	March 07, 2025
Deadline for submitting Inquiries	March 26, 2025
Closing date for RFT	April 04, 2025 @ 3:00 PM EST
Contract Award Date	April 14, 2025
Pumping Start Date	May 12, 2025
Substantial Performance	October 13, 2025
Completion	December 15, 2025

#### 27. SUCCESSFUL TENDERER – LIQUIDATED DAMAGES

Liquidated damages shall be in the amount of: **SIX HUNDRED AND FIVE DOLLARS** (\$605.00) per calendar day beyond the Substantial and Completion Dates, as determined in Section 27.

#### 28. SUCCESSFUL TENDERER – SUBMISSION OF DOCUMENTATION





- 28.1 The successful Tenderer shall submit the documentation required by Section 22, 23, 24 and 25 within seven (7) working days of the day the City notifies the successful Tenderer that the documentation should be sent to the City.
- 28.2 If the successful Tenderer fails to comply with 25.1 the City may, in its sole discretion, withdraw its acceptance of the Tender and the Tenderer shall have no recourse whatsoever against the City.

#### 29. SUCCESSFUL TENDERER – COMMENCEMENT OF THE WORK

The successful Tenderer shall not commence the Work until it has received a Commence Work Order issued by the City.

#### 30. COVID-19 MITIGATION MEASURES (CCM)

#### 30.1 Definitions:

- .i COVID-19 Mitigation Measures (CCM) means measures required to be in compliance with the CCM Guidelines.
- .ii "CCM Guidelines" means all guidelines and regulations published by the Government of Nunavut Department of Health and the Canadian Construction Association COVID-19 Standardized Protocols for All Canadian Construction Sites, Version 4, April 16, 2020 regarding measures to mitigate COVID-19.
- .iii "COVID-19 Change" means any change in the work caused by or attributable to changes in CMM or changes made to applicable laws, ordinances, rules, regulations, or codes of authorities having jurisdiction that pertain to the control of COVID-19 that come into force after the time of Bid Closing.

#### 30.2 Instructions to Bidders:

- .i If, in the Owner's sole opinion, substantial changes to the CMM Guidelines occur within five (5) Working Days of the Tender Closing, the Owner may adjust the Tender Closing as the Owner deems appropriate to allow for adjustment for these changes.
- .ii By submitting a Bid, the Contractor acknowledges its willingness and ability to execute the Work under the CMM in force as of the Bid Closing.
- .iii The Bidder shall ensure that all of its subcontractors are aware of the CMM and the CMM Guidelines.
- .iv The Bid is to assume that the CMM as of the date of Bid Closing are to be in effect up to and including the date of substantial completion, following which the additional scope of work required to meet the Canadian





Construction Association COVID-19, *Standardized Protocols for All Canadian Construction Sites, Version 4, April 16, 2020* should be assumed to be substantially eliminated.

- .v The incremental cost of any COVID-19 Change will be addressed as a Claim for Change to be substantially eliminated.
- .vi Notwithstanding the foregoing, the Bidder acknowledges its obligation to adhere to the CMM Guidelines and any subsequent revision as part of its responsibility for health and safety on the Work Site.

#### 30.3 Site-Specific Health and Safety Plan

.i The Site-Specific Health and Safety Plan, as defined in Section H of the General Requirements, is to specifically define CMM and is to comply with CMM Guidelines. The Site-Specific Health and Safety Plan is to be updated promptly after the CMM Guidelines are updated.

#### 30.4 Site Shutdown Plan

- i "Site Shutdown Plan" means a plan outlining the shutdown procedures for the project in the event of a shutdown directive from the City or governing authority relating to COVID-19.
- .ii The Site Shutdown Plan" shall address items such as how the site will be made safe, how any materials or equipment will be stored or removed, plans regarding any portion or work that requires ongoing monitoring and how the site will be kept secure. Associated timelines required for execution of the plan are to be identified. These procedures are to be updated as required as the project progresses.

#### 30.5 Schedule Impact

if the Contractor is delayed in completion of the Work by Force Majeure or by changes to the CMM, then the time of completion shall be extended by the Town for a period of time equal to the time lost due to such delays. Force Majeure is defined as labour disputes, strikes, lockouts, fire, unusual delay by common carriers or unavoidable casualties, or such other cause beyond the reasonable control of the Contractor. The Contractor's lack of funds is not a cause beyond the Contractor's control. For clarity, any issues or delays in any way arising from or related to COVID-19 (or any similar or related disease), except for delays as a result of changes to the CMM, are expressly excluded and do not fall under the definition of Force Majeure. The Contractor agrees that the scheduling requirements of the Contract are reasonable in light of any issues that may arise from COVID-19's impact on the Work and the





Project, and that the Contractor may not rely on COVID19 (or any similar or related disease) in any manner as a Reason or cause for delay except for delays as a result of changes to the CMM.

.ii Notwithstanding the foregoing, no extension shall be made for delay unless the Contractor provides to the City written notice within five (5) Working Days of the commencement of the Force Majeure or commencement of the changes to the CMM.

#### 30.6 Cost Impact

- i In the case of a shut-down or suspension of the Work resulting from changes to the CMM Guidelines, the Contractor shall provide the City the value of any change in the Contract Price and/or Contract Time.
- .ii In the case of a shut-down or suspension of the Work resulting from changes to the CMM Guidelines, the Contractor is to provide, not less than monthly, and more frequently if requested, an accounting of actual incremental costs incurred for any Work required to maintain the Work Site in a safe and secure state.
- .iii Any adjustments to the Contract Amount associated with re-starting the Work is to be quantified within thirty (30) calendar days of such time that authorization to re-commence the Work has been provided.
- .iv When the change to the Work is caused by changes to the CMM Guidelines the City will pay net actual costs only. No allowance for markup, contributions to overhead, profit, or stand-by charges will be considered. Labour rates shall include only the actual wage paid to the employee, plus the payroll burden. The Contractor will mitigate cost and time impact to the Contract Amount and the Work Schedule. The Contractor is to provide detailed supporting documentation to substantiate reasonable incurred impact to the Contract Amount and the Work Schedule.
- .v No consideration will be given to adjustment of the Contract Amount or Work Schedule where the impact to the Contract Amount or Work Schedule is as a result of the Contractor's failure to comply with the CMM Guidelines.

#### **END OF SECTION**





### **SECTION C – FORM OF TENDER**

Date:		-	
Subm	nitted By:	Name:	
Telep	hone:	Address:	
То:	Ci	ity of Iqaluit ity Hall aluit, Nunav	
Proje		roject Title: roject Numb	Apex Pumping Supplemental Pumping 2025 per: 089
having ful hereby ag	l knowled rees to p	ge of the Wo	ving carefully examined the Tender Documents and the Site, and ork and of the materials and products to be furnished and used, cessary materials, products, supervision, labour and equipment and and fulfill everything for the stipulated lump sum price of:
Total i	n Words		
Dollars	S	\$	
		•	includes all specified cash and contingency allowances and the date excluding GST.
We have Instruction			e security deposit and Consent of Surety as required by the
The unde	rsigned a	lso agrees:	
1.	provisio its sole mistake	ns that provi discretion to or insufficier	of the Instruction to Tenderers apply, including without limitation de that City is in no way obligated to accept this Bid, the City may at accept any Tender or part thereof or waive any defect, irregularity, ncy and accept any Tender or alternative bid, in whole or in part, which ty to be most favourable to its interest, and that limit the City's liability.
2.			quantities shown in Tender Documents serves only to provide a basis and that no representations have been made by either the City or their

Agent that the actual quantities correspond therewith, and further, that the City has the





right to increase or decrease the quantities in any or all items and to eliminate items entirely from the Work.

- 3. That this Bid is made without knowledge of the Bid prices to be submitted for the Work by any other company, firm or person.
- 4. That this Bid is made without connection or arrangement with any company, firm or person submitting a bid for the Work.
- 5. That this Bid is made without any undisclosed connection or arrangement with any other company, firm, or person having an interest in this Bid or in the proposed contract.
- 6. That this Bid is irrevocable for sixty (60) days after the Closing Time and that the City may at any time within such period accept this Bid whether any other contract has previously been awarded or not and whether acceptance of another Bid has been given or not.
- 7. If this Bid is accepted by the City, to execute the Articles of Agreement and to present to the City the required security (by way of bonds or a security deposit) as stated in the General Conditions within seven (7) days after the date of Notice of Award.
- 8. If this Bid is accepted within the time stated herein, and we fail to execute the Articles of Agreement and provide the required Bonds or security deposit, or we request to withdraw, the security deposit provided with the Bid shall be forfeited as damages to the City by reason of our failure, limited in amount to the lesser of the face value of the deposit or the difference between this Bid and the price the Contract is signed.
- 9. In the event our Bid is NOT accepted within the time stated herein the required security deposit shall be returned to the undersigned in accordance with the provisions in the Instructions to Bidders, unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.
- 10. That payment for the Work done will be made on the basis of the quantities measured by the City or its Agent and at the Bid prices shown in the Tender Form which shall be compensation in full for the Work done under the terms of the Contract.
- 11. That payment of the contingency allowance or portion thereof will only be made in the event that the City or its Agent authorizes work, in which case the amount of payment will be determined as specified in the General Conditions. Any unused portion thereof will be retained by the City.





- 12. To commence and proceed actively with the Work on Site within seven (7) business days of the date of the execution of the contract, and to substantially perform the Work by **October 13, 2025**, subject to the provisions of Section 6 of the General Conditions for extension of the Contract Time.
- 13. That should the undersigned fail to complete the Work in the time specified above, he shall compensate the City of Iqaluit in accordance with GC 6 of the General Conditions.
- 14. That the undersigned has carefully examined the Work described herein, has become familiar with local conditions and the character and extent of the Work, has carefully examined every part of the proposed contract and thoroughly understands its terms and conditions, has determined the source of supply and transport of the materials required, has investigated labour conditions and has arranged for the continuous performance of the Work described in the Tender Documents.

15. Appellulus	15.	Appendices
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Appendix A – Consent of Surety

Appendix B – Cost Submission Form

Appendix C – List of Subcontractors

Appendix D – List of Equipment

Appendix E – List of Product Suppliers

Appendix F – Labour and Equipment Rates

### 16. Addenda

The following Addenda have been received. The modifications to the Tender Documents noted therein have been considered and the effects are included in the Tender prices.

Addendum #:	Date:	
Addendum #:	Date:	

This Tender is executed under seal at	this	dav of
This Terider is excedited drider soul at		auy or





2025.
Name of Firm:
Address:
FOR INDIVIDUAL OR PARTNERSHIP:
TOR INDIVIDUAL OR FARTNERSHIII.
SIGNED, SEALED AND DELIVERED by:
(Seal)
(Tenderer – Please Print)
(Signature of Tenderer)
In the presence of:
(Witness – Signature)
Name:
Address:
Occupation:
FOR LIMITED COMPANY:
The Corporate Seal of:
(Seal)
(Tenderer – Please Print)
Was here unto affixed in the presence of:
Authorized Signing Officer and Title
Authorized Signing Officer and Title

Note: If the Tender is by a joint venture, add additional forms of execution for each member of the





joint venture in the appropriate form or forms as above.

**END OF SECTION** 





### **APPENDIX A - CONSENT OF SURETY**

Herewith is the Consent of Surety of the Tender submitted.

By:	<del></del>		
To:	The City of Iqaluit		
Dated:	ed:2025 and which is an integral part of the Tender		
CONSENT	OF SURETY COMPANY		
become be by the Ter	e required, the undersigned Surety Company hereby consents and agrees with the City to bund as Surety in all performance bonds and labour and material payment bonds required der Documents, all for the fulfillment of the Contract for the Work covered by the annexed nich may be awarded to:		
(Name	of Tenderer)		
(Addre	ss)		
At prices s	et forth in the attached Tender. The said Surety is legally entitled to do business in Nunavut.		
The Corpo	rate Seal of:		
(Surety	v – Please Print)		
Was here	unto affixed in the presence of:		
(Autho	rized Signing Officer) Title		
(Autho	rized Signing Officer) Title		

**END OF SECTION** 





#### **APPENDIX B1 – COST SUBMISSION FORM 2025**

Date:	
Project Name:	Apex Pumping Supplemental Pumping 2025
I/We,	
	(Company Name)
Of	
	(Business Address)
	(Business Address)

have fully inspected the Site and examined all the conditions affecting the Work. I/we have also carefully examined all documents prepared for this Contract including Addenda thereto; and hereby offer to furnish all labour, materials, plant, equipment and services for the proper execution and completion of the items listed below, in accordance with the Contract Documents, including all Addenda thereto which are acknowledged hereinafter for the above project for the sums separately indicated as follows:

Item	Description	Qty	Unit	Unit Price	Total
1	Preliminary Items				
1.1	Mobilization / Demobilization	1	LS		\$
	Site Access complete with all time, material, labor and equipment required to provide unhindered access to carry out the work throughout the entire 1208.7-meter work site. Note: access to site requires access through an existing shooting range. The contractor will be required to engage with the Iqaluit Shooting Club, and the RCMP to coordinate site access. Note: 11 Tonne load limit over one bridge on the Road to Nowhere en route to the site.	1	LS		\$





1.3	Site Office and amenities inclusive of all time, material, labor and equipment to provide a site office and all facilities required under the Occupational Health and Safety Act. Including but not limited to office space, lunch area, first aid treatment area, male and female washroom facilities, etc.	1	LS	\$
2	HDPE Force Main			
2.1	Conduct weekly (or as needed) visual inspections of the HDPE pipeline from Apex River to Lake Geraldine. Identify and address any deficiencies to ensure efficient pumping operations.	1	LS	\$
2.2	Visually inspect pumping components stored in City storage facility and identify any deficiencies to allow pumping activities to commence.	1	LS	\$
2.3	Maintain existing air valves and drain valves along HDPE force main to undertake pumping activities. Make good erosion and sediment control measures at the Apex Pumping force main discharge point.	1	LS	\$
3.	Submersible Pumps			
3.1	Deliver four (4) existing ABS J604 submersible pumps (Min. 35 kW) stored in City of Iqaluit storage facility to Site. Location is within 20 kilometers of Iqaluit.	3	LS	\$
3.2	Install, operate, and maintain four (4) City-supplied submersible pumps, complete with motors, for the duration of pumping.	3	LS	\$
3.3	Install and maintain all necessary piping/ hoses, fittings, hardware, and electrical for the submersible pumps (City- supplied)	1	LS	\$
3.4	Remove ABS J604 Submersible Pump and Structure and store in City of Iqaluit storage facility at project completion.	3	LS	\$
3.5	Remove all necessary piping/ hoses, fittings, hardware, and electrical for the submersible pumps and return to City of lqaluit storage facility.	1	LS	\$





4	Existing new Generator.				
4.1	Delivery, Installation, Operation, and Maintenance of this Existing Generator; with all required time, materials, connections, hardware, travel, labor and equipment to carry out the installation.	1	LS		\$
4.2	Operate and maintain generator for the duration of the 2025 pumping program.	60	Days	\$/Day	\$
4.3	Supply and Deliver diesel fuel to operate the generator for the duration of the 2025 pumping program. Includes refueling activities and spill control measures.	60	Days	\$Day	\$
4.4	Removal of Generator from site: decommissioning and return of this Existing Generator to the City of Iqaluit stores.	1	LS		\$
4.5	Standby rate for on-call pumping activities.	73	Days		\$
5	Installation and removal of intake structures complete with fish screens, along with all related materials and hardware.	3	EA	\$/EA	\$
6	Site Monitoring. Ongoing site monitoring of all equipment at the pumping site for the full duration of the project.	1800	HR	\$/HR	\$
7	Prepare, Coordinate and Manage Spill Contingency Plan as per Water License Agreement	1	LS		\$
8	Prepare, Coordinate and Manage Erosion and Sedimentation Control Plan as per Water License Agreement	1	LS		\$
9	Prepare, Coordinate and Manage Fish and Fish Habitat Monitoring Plan as per Water License Agreement	1	LS		\$
10	Road to Nowhere Bridge monitoring activities as specified in the Scope of Work	1	LS		\$
11	Supply and installation of water service saddles with 2" main stops at two low-points.	2	LS		\$





IIZ .	Cash allowance for general maintenance and repairs.	1	LS		\$ 150,000	
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Sub-Total: \$

GST: \_\$\_\_\_\_

TOTAL: \$





### **APPENDIX B2 – COST SUBMISSION FORM 2026 (Provisional Item)**

Date:	<u> </u>
Project Name:	Apex Pumping Supplemental Pumping 2026
I/We,	
	(Company Name)
Of	
	(Rusinges Address)

have fully inspected the Site and examined all the conditions affecting the Work. I/we have also carefully examined all documents prepared for this Contract including Addenda thereto; and hereby offer to furnish all labour, materials, plant, equipment and services for the proper execution and completion of the items listed below, in accordance with the Contract Documents, including all Addenda thereto which are acknowledged hereinafter for the above project for the sums separately indicated as follows:

Item	Description	Qty	Unit	Unit Price	Total
1	Preliminary Items				
1.1	Mobilization / Demobilization	1	LS		\$
1.2	Site Access complete with all time, material, labor and equipment required to provide unhindered access to carry out the work throughout the entire 1208.7 meter work site. Note: access to site requires access through an existing shooting range. The contractor will be required to engage with the Iqaluit Shooting Club, and the RCMP to coordinate site access.  Note: 11 Tonne load limit over one bridge on the Road to Nowhere en route to the site.	1	LS		\$
1.3	Site Office and amenities inclusive of all time, material, labor and equipment to provide a site office and all facilities required under the Occupational Health and Safety Act. Including but not limited to office space, lunch area, first aid treatment area, male and female washroom facilities, etc.	1	LS		\$





2	HDPE Force Main				
2.1	Conduct weekly (or as needed) visual inspections of the HDPE pipeline from Apex River to Lake Geraldine. Identify and address any deficiencies to ensure efficient pumping operations.	1	LS		<b>\$</b>
2.2	Visually inspect pumping components stored in City storage facility and identify any deficiencies to allow pumping activities to commence.	1	LS		\$
2.3	Maintain existing air valves and drain valves along HDPE force main to undertake pumping activities. Make good erosion and sediment control measures at the Apex Pumping force main discharge point.	1	LS		\$
3.	Submersible Pumps				
3.1	Deliver four (4) existing ABS J604 submersible pumps (Min. 35 kW) stored in City of Iqaluit storage facility to Site. Location is within 20 kilometers of Iqaluit.	3	LS		\$
3.2	Install, operate, and maintain four (4) City-supplied submersible pumps, complete with motors, for the duration of pumping.	3	LS		\$
3.3	Install and maintain all necessary piping/ hoses, fittings, hardware, and electrical for the submersible pumps (City- supplied)	1	LS		\$
3.4	Remove ABS J604 Submersible Pump and Structure and store in City of Iqaluit storage facility at project completion.	3	LS		\$
3.5	Remove all necessary piping/ hoses, fittings, hardware, and electrical for the submersible pumps and return to City of Iqaluit storage facility.	1	LS		\$
4	Existing new Generator.				
4.1	Delivery, Installation, Operation, and Maintenance of this Existing Generator; with all required time, materials, connections, hardware, travel, labor and equipment to carry out the installation.	1	LS		\$
4.2	Operate and maintain generator for the duration of the 2026 pumping program.	60	Days	\$/Day	\$





4.3	Supply and Deliver diesel fuel to operate the generator for the duration of the 2026 pumping program. Includes refueling activities and spill control measures.	60	Days	\$Day	<del>()</del>
4.4	Removal of Generator from site: decommissioning and return of this Existing Generator to the City of Iqaluit stores.	1	LS		\$
4.5	Standby rate for on-call pumping activities.	73	Days		\$
5	Installation and removal of intake structures complete with fish screens, along with all related materials and hardware.	3	EA	\$/EA	\$
6	Site Monitoring. Ongoing site monitoring of all equipment at the pumping site for the full duration of the project.	1800	HR	\$/HR	\$
7	Prepare, Coordinate and Manage Spill Contingency Plan as per Water License Agreement	1	LS		\$
8	Prepare, Coordinate and Manage Erosion and Sedimentation Control Plan as per Water License Agreement	1	LS		\$
9	Prepare, Coordinate and Manage Fish and Fish Habitat Monitoring Plan as per Water License Agreement	1	LS		\$
10	Road to Nowhere Bridge monitoring activities as specified in the Scope of Work	1	LS		\$
11	Cash allowance for general maintenance and repairs.	1	LS		\$ 150,000

Sub-Total:	<b>\$</b>
GST:	\$
TOTAL:	\$





### APPENDIX B3 - COST SUBMISSION FORM 2027 (Provisional Item)

Date:	
Project Name:	Apex Pumping Supplemental Pumping 2027
I/We,	
	(Company Name)
Of	
	(Business Address)

have fully inspected the Site and examined all the conditions affecting the Work. I/we have also carefully examined all documents prepared for this Contract including Addenda thereto; and hereby offer to furnish all labour, materials, plant, equipment and services for the proper execution and completion of the items listed below, in accordance with the Contract Documents, including all Addenda thereto which are acknowledged hereinafter for the above project for the sums separately indicated as follows:

Item	Description	Qty	Unit	Unit Price	Total
1	Preliminary Items				
1.1	Mobilization / Demobilization	1	LS		\$
1.2	Site Access complete with all time, material, labor and equipment required to provide unhindered access to carry out the work throughout the entire 1208.7 meter work site. Note: access to site requires access through an existing shooting range. The contractor will be required to engage with the Iqaluit Shooting Club, and the RCMP to coordinate site access. Note: 11 Tonne load limit over one bridge on the Road to Nowhere en route to the site.		LS		\$
1.3	Site Office and amenities inclusive of all time, material, labor and equipment to provide a site office and all facilities required under the Occupational Health and Safety Act. Including but not limited to office space, lunch area, first aid treatment area, male and female washroom facilities, etc.	1	LS		\$
2	HDPE Force Main				





2.1	Conduct weekly (or as needed) visual inspections of the HDPE pipeline from Apex River to Lake Geraldine. Identify and address any deficiencies to ensure efficient pumping operations.	1	LS		\$
2.2	Visually inspect pumping components stored in City storage facility and identify any deficiencies to allow pumping activities to commence.	1	LS		\$
2.3	Maintain existing air valves and drain valves along HDPE force main to undertake pumping activities. Make good erosion and sediment control measures at the Apex Pumping force main discharge point.	1	LS		↔
3.	Submersible Pumps				
3.1	Deliver four (4) existing ABS J604 submersible pumps (Min. 35 kW) stored in City of Iqaluit storage facility to Site. Location is within 20 kilometers of Iqaluit.	3	LS		\$
3.2	Install, operate, and maintain four (4) City-supplied submersible pumps, complete with motors, for the duration of pumping.	3	LS		\$
3.3	Install and maintain all necessary piping/ hoses, fittings, hardware, and electrical for the submersible pumps (City- supplied)	1	LS		\$
3.4	Remove ABS J604 Submersible Pump and Structure and store in City of Iqaluit storage facility at project completion.	3	LS		\$
3.5	Remove all necessary piping/ hoses, fittings, hardware, and electrical for the submersible pumps and return to City of Iqaluit storage facility.	1	LS		\$
4	Existing new Generator.				
4.1	Delivery, Installation, Operation, and Maintenance of this Existing Generator; with all required time, materials, connections, hardware, travel, labor and equipment to carry out the installation.	1	LS		\$
4.2	Operate and maintain generator for the duration of the 2027 pumping program.	60	Days	\$/Day	\$
4.3	Supply and Deliver diesel fuel to operate the generator for the duration of the 2027 pumping program. Includes refueling	60	Days	\$Day	\$





	activities and spill control measures.				
4.4	Removal of Generator from site: decommissioning and return of this Existing Generator to the City of Iqaluit stores.	1	LS		\$
4.5	Standby rate for on-call pumping activities.	73	Days		\$
5	Installation and removal of intake structures complete with fish screens, along with all related materials and hardware.	3	EA	\$/EA	\$
6	Site Monitoring. Ongoing site monitoring of all equipment at the pumping site for the full duration of the project.	1800	HR	\$/HR	\$
7	Prepare, Coordinate and Manage Spill Contingency Plan as per Water License Agreement	1	LS		\$
8	Prepare, Coordinate and Manage Erosion and Sedimentation Control Plan as per Water License Agreement	1	LS		\$
9	Prepare, Coordinate and Manage Fish and Fish Habitat Monitoring Plan as per Water License Agreement	1	LS		\$
10	Road to Nowhere Bridge monitoring activities as specified in the Scope of Work	1	LS		<b>6</b>
11	Cash allowance for general maintenance and repairs.	1	LS		\$ 150,000

Sub-Total:	\$
GST:	\$
TOTAL:	\$





### APPENDIX C - LIST OF SUBCONTRACTORS

Re: Bid for Apex Pumping Supplemental Pumping 2025

1. This List of Subcontractors Form is acknowledged and agreed to form an integral part of the Bid for:

Apex Pumping Supplemental Pumping 2025

- The Subcontractors listed below will remain unchanged and will be used to perform the
  work of the trade section indicated, unless the Owner gives written permission to change
  one or more of the Subcontractors. Where subcontractors are not intended to be used
  for the work of the trade section indicated, the term "By Own Forces" is inserted.
- 3. Each Subcontractor listed below has been consulted and is fully acquainted with the extent and nature of the Work, the contract conditions and requirements, the proposed construction schedule, and has agreed to execute the Work in accordance with the terms of the Contract and for the Bid Price amount shown.

TRADE SECTION	SUBCONTRACTOR COMPANY NAME
Process Mechanical/Piping:	
Electrical:	
Other:	





### **APPENDIX D - LIST OF EQUIPMENT**

Re: Bid for Apex Pumping Supplemental Pumping 2025

1. This List of Equipment Form is acknowledged and agreed to form an integral part of the Bid for:

Apex Pumping Supplemental Pumping 2025

EQUIPMENT	SIZE	MAKE	MODEL

Add rows if required.





### **APPENDIX E - PRODUCT SUPPLIERS**

Re: Bid for Apex Pumping Supplemental Pumping 2025

1. This List of Product Suppliers Form is acknowledged and agreed to form an integral part of the Bid for:

Bid for Apex Pumping Supplemental Pumping 2025

PRODUCT	PRODUCT SUPPLIER
Generator:	
Other:	

Add rows if required.





### **APPENDIX F - LABOUR AND EQUIPMENT RATES**

Re: Bid for Bid for Apex Pumping Supplemental Pumping 2025

1. This List of Product Suppliers Form is acknowledged and agreed to form an integral part of the Bid for:

Bid for Apex Pumping Supplemental Pumping 2025

2. The rates listed below will remain unchanged and will be used to measure payment for additional work, not include in the Contract Documents.

POSITION	RATE
Superintendant:	
Supervisor / Foreman:	
Specialist Labourer:	
General Labourer:	
Skilled Labourer:	
Hoisting – Mobile Crane Operator:	
Electrician:	
Plumber:	
Other:	
Add rows if required.	
EQUIPMENT	RATE
<b>EQUIPMENT</b> Heavy Equipment – Excavator:	RATE
	RATE
Heavy Equipment – Excavator:	RATE
Heavy Equipment – Excavator: Heavy Equipment – Loader/Backhoe:	RATE
Heavy Equipment – Excavator:  Heavy Equipment – Loader/Backhoe:  Hoisting – Mobile Crane:	RATE
Heavy Equipment – Excavator: Heavy Equipment – Loader/Backhoe: Hoisting – Mobile Crane: Haulage Truck:	RATE
Heavy Equipment – Excavator: Heavy Equipment – Loader/Backhoe: Hoisting – Mobile Crane: Haulage Truck:	RATE
Heavy Equipment – Excavator: Heavy Equipment – Loader/Backhoe: Hoisting – Mobile Crane: Haulage Truck:	RATE
Heavy Equipment – Excavator: Heavy Equipment – Loader/Backhoe: Hoisting – Mobile Crane: Haulage Truck:	RATE

**END OF SECTION** 

P7201-1389866295-29(1.0)





### **SECTION D - ARTICLES OF AGREEMENT**

THIS AGR	EEMENT MADE IN DUPLICAT I:	E THIS	_DAY OF	_2025
	THE	CITY OF IQALUIT		
		("the City")		
		-and-		
	("t	he Contractor")		
	ARTICL	ES OF AGREEMENT	-	
	DERATION of the mutual pass, the City and the Contractor a	~	ions contained in the	Contract
A1.	CONTRACT DOCUMENTS			
1.1	The documents forming the Coherein as the Contract Docume		City and the Contractor,	referred to
	a) these Articles of Agreemen	t;		
	b) the document attached her	eto entitled "General (	Conditions";	
	c) the document attached her	eto entitled "Supplem	entary General Condition	ons";
	d) the documents attached he	reto entitled "Plans ar	nd Specifications";	
	e) the documents attached he	reto entitled "Tender	Documents"; and	
	f) any amendment or variation accordance with the General		ocuments that is mad	e in
1.2	The City will designate a repres	sentative for the purpo	oses of the Contract.	
1.3	In the Contract:			
	a) "Fixed Price Arrangement"	means that part of the	Contract that prescribe	es a lump sum

as payment for performance of the Work to which it relates; and





- b) "Unit Price Arrangement" means that part of the Contract that prescribes the product of a price multiplied by a number of units of measurement of a class as payment for performance of the Work to which it relates.
- 1.4 Any of the provisions of the Contract that are expressly stipulated to be applicable only to a Unit Price Arrangement are not applicable to any part of the Work to which a Fixed Price Arrangement is applicable.
- 1.5 Any of the provisions of the Contract that are expressly stipulated to be applicable only to a Fixed Price Arrangement are not applicable to any part of the Work to which a Unit Price Arrangement is applicable.

#### A.2 DATE OF COMPLETION OF WORK AND DESCRIPTION OF WORK

2.1 The Contractor shall between the date of these Articles of Agreements and **December 15, 202**5 in a careful and workmanlike manner, diligently perform and complete the following Work:

Pumping activities from the Apex River to Lake Geraldine as described in the Request for Tender, for the purposes of meeting the project objective.

Subject to any increase, decrease, deduction or set-off that may be made under the Contract, the City shall pay the Contractor at the times and in the manner set out or

#### A.3 CONTRACT PRICE

3.1

3.5

	referred to in the General Conditions.		
	3.1.1	the sum of \$	ect to a Fixed Price Arrangement,
	3.1.2	a sum that is equal to the aggregate of the measurement of each class of labour, plar Engineer, multiplied in each case by the agunit Price Table in consideration for the pethereof that is subject to a Unit Price Arrantax (GST).	of and material, as certified by the oppropriate unit price that is set out in the erformance of the Work or the part
3.2	Contra underta the Cit	e information and guidance of the Contractor ct on behalf of the City, but not so as to contaking of any nature by either party, it is esting to the Contractor for the part of the Work able will not exceed	nstitute a warranty, representation or mated that the total amount payable by to which a Unit Price Arrangement is
3.3	A3.1.1	is applicable only to a Fixed Price Arranger	ment.
3.4	A3.1.2	and A3.2 are applicable only to a Unit Price	e Arrangement.

The Contract Price shall exclude Goods and Services Tax.





### A.4 ADDRESSES

4.1	For all purposes of the Contract, the	Contractor's address shall be deemed to be:
4.2	For all purposes of the Contract, the	City's address shall be deemed to be:
	City of Iqaluit	
P.O. Box Iqaluit, N	460 unavut, X0A 0H0	
SIGNED,	, SEALED AND DELIVERED in the pre	esences of:
CONTRA	ACTOR:	
	Per:	
	Signature	Witness
	Name	Date
	Position	_
	Per:	
	Signature	Witness
	Name	Date
	Position	_
MUNICIF	PAL CORPORATION OF THE CITY O	F IQALUIT
	Per:	
	Mayor	Date
	Per:	
	Chief Administrative Officer	Date









#### **CITY OF IQALUIT SERVICES AGREEMENT**

BETWEEN: THE MUNICIPAL CORPORATION OF THE CITY OF IQALUIT

(hereinafter referred to as the "CITY OF IQALUIT")

OF THE FIRST PART

AND: < CONTRACTOR NAME>

(hereinafter referred to as the "Contractor")

OF THE SECOND PART

WHEREAS the CITY OF IQALUIT has requested the Contractor to provide <description of services>;

AND WHEREAS the Contractor has agreed to provide such services to the CITY OF IQALUIT in its bid dated <Bid Submission Date>:

AND WHEREAS the CITY OF IQALUIT and the Contractor wish to set out the terms and conditions relating to the provision of such services;

THEREFORE the CITY OF IQALUIT and the Contractor agree as follows:

#### SERVICES AND PAYMENT

- 1.1 The Contractor agrees to provide to the CITY OF IQALUIT those services set out in the job description and scope of work provided on **<RFT Date>**. A copy of the bid is attached as Appendix "A".
- 1.2 The CITY OF IQALUIT agrees to pay for the services described above, a total amount not greater than <Bid Value>, for the provision of professional services based on the Bid dated <Bid Submission Date>.

#### 2. TERM

2.1. This Contract shall commence on the **<Contract Commence Date>** and terminates on the **<Contract Termination Date>** unless otherwise terminated in accordance with the provisions of this Contract.

#### NOTICE AND ADDRESS

3.1 Any notice required to be given herein or any other communication required by this contract shall be in writing and shall be personally delivered, sent by facsimile, or posted by prepaid registered mail and shall be addressed as follows:

i) If, to the CITY OF IQALUIT:

Steve England Chief Administrative Officer 100-1085 Mivvik Street City of Iqaluit Iqaluit, NU XOA 3H0

Reference:





- ii) If to the Contractor at:
- <Contractor Representative Name>
- <Contractor Organization Name>
- <Contractor Address>
- 3.2 Every such notice and communication, if delivered by hand, shall be deemed to have been received on the date of delivery or if sent by prepaid registered mail shall be deemed to have been received on the seventh day after posting, or if by facsimile, 48 hours after the time of transmission, excluding from the calculation weekends and statutory holidays.

#### 4. COMPLETE AGREEMENT

- 4.1 This Contract and its attachments constitute the complete Contract between the parties. Except as provided herein, it supersedes and shall take effect in substitution for all previous agreements. It is subject to change only by an instrument executed in writing by the City.
- 4.2 If this Contract arises from a request for proposals or tender call, the provisions of the request for proposals or tender call and the Contractor's bid or proposal submission are incorporated into this Contract and may be used to clarify, explain or supplement this Contract, but shall not be used to contradict any express terms of this Contract.
- 4.3 In the event of a conflict between this Contract, the Contractor's bid or proposal submission, and the City's original tender bid instructions or Request for Proposals, the more recently prepared document shall govern to the extent of such inconsistency.

#### 5. GENERAL TERMS

- 5.1 Any information obtained from or concerning any department of the CITY OF IQALUIT or clients of any department of the CITY OF IQALUIT, by the contractor, its agents or employees in the performance of any contract shall be confidential. The Contractor shall take such steps as are necessary to ensure that any such information is not disclosed to any other person and shall maintain confidential and secure all material and information that is the property of the CITY OF IQALUIT and in the possession of or under the control of the Contractor. This clause survives the termination of this contract.
- 5.2 Time shall in every respect be of the essence. The Contractor shall deliver the services specified in the contract and according to the project schedule on costs. The CITY OF IQALUIT may grant reasonable extensions to the Contractor for delays, if the Contractor can show those delays were caused by circumstances beyond the control of the Contractor.
- 5.3 The Contractor is an independent Contractor with the CITY OF IQALUIT and nothing in this contract shall be construed or deemed to create the relationship of employee and employer or of principal and agent between the CITY OF IQALUIT and the Contractor. The Contractor is solely responsible for payments of all statutory deductions or contributions including but not limited to pension plans, unemployment insurance, income tax, workers' compensation and the Nunavut Payroll Tax.
- 5.4 This contract shall be interpreted and governed in accordance with the laws of Nunavut and the laws of Canada as they apply in Nunavut.
- 5.5 No waiver by either party of any breach of any term, condition or covenant of this contract shall be effective unless the waiver is in writing and signed by both parties. A waiver, with respect to a specific breach, shall not affect any rights of the parties relating to other or future breaches.
- 5.6 The failure of either party at any time to require the performance of any provision or requirement of this contract shall not affect the right of that party to require the subsequent performance of that provision or requirement.





- 5.7 Title to any report, drawing, photograph, plan, specification, model, prototype, pattern, sample, design, logo, technical information, invention, method or process and all other property, work or materials which are produced by the Contractor in performing the contract or conceived, developed or first actually reduced to practice in performing the contract (herein called "the Property") shall vest in the CITY OF IQALUIT and the Contractor hereby absolutely assigns to the CITY OF IQALUIT the copyright in the property for the whole of the term of the copyright. The Contractor shall not be responsible for any loss or damage suffered by the City of Iqaluit or any third parties resulting from any unauthorized use or modification of the property, errors in transmission of the property, changes to the Property by others, the consequences of design defects due to the design of others, or defects in contract documents prepared by others, and the City of Iqaluit agrees to defend, indemnify, and hold the Contractor harmless from and against all claims, demands, losses, damages, liability and costs associated therewith. Subject to the foregoing, the Property may be relied by the City of Iqaluit for design and construction work undertaken by other parties with respect to the Services provided that such parties verify the accuracy and completeness of the Property to their satisfaction.
- 5.8 It is intended that all provisions of this agreement shall be fully binding and effective between the parties, but in the event that any particular provision or provisions or a part of one is found to be void, voidable or unenforceable for any reason whatever, then the remainder of the agreement shall be interpreted as if such provision, provisions, or part thereof, had not been included.
- 5.9 This contract may be extended by the written consent of the parties.
- 5.10 The CITY OF IQALUIT may delegate any of its authority and undertaking pursuant to this contract to any employee or contractor the CITY OF IQALUIT by notice in writing to the Contractor.
- 5.11 This contract shall enure to the benefit of and be binding on the respective administrators, successors and assignment of each of the parties hereto.

#### 6. CONTRACTOR RESPONSIBILITIES

- 6.1 The Contractor shall indemnify and hold harmless, the CITY OF IQALUIT, its officers, employees, servants and agents from and against all claims, actions, causes of action, demands, losses, costs, damages, expenses, suits or other proceedings by whomsoever made, brought or prosecuted in any manner based upon or related to the negligent acts, errors, or omissions of the Contractor under this contract.
- 6.2 The Contractor shall be liable to the CITY OF IQALUIT for any loss or damage to property or equipment that is supplied to or placed in the care, custody or control of the Contractor for use in connection with the contract if such loss or damage is attributable to the negligence or deliberate acts of the Contractor or its employees or agents.
- 6.3 If, in the opinion of the CITY OF IQALUIT acting reasonably, the Contractor is in default in respect of any obligation of the Contractor hereunder, the CITY OF IQALUIT may rectify such default and pursue a claim against the Contractor for any direct costs associated with any such remediation, including a reasonable allowance for the use of the CITY OF IQALUIT's own employees or equipment.
- 6.4 The Contractor may not assign or delegate work to be done under this contract, or any part thereof, to any other party without the written consent of the CITY OF IQALUIT. In the case of a proposed assignment of monies owing to the Contractor under this contract, the consent in writing of the CITY OF IQALUIT must be obtained.
- 6.5 The Contractor shall keep proper accounts and records of the services for a period of 3 years after the expiry or termination of this agreement. At any time during the term of this contract or during the three years following the completion or termination of this agreement, the Contractor shall produce copies of such accounts and records upon the written request of the CITY OF IQALUIT.
- 6.6 The Contractor shall notify the CITY OF IQALUIT immediately of any claim, action, or other proceeding made, brought, prosecuted or threatened in writing to be brought or prosecuted that is based upon,





occasioned by or in any way attributable to the performance or non-performance of the services under this contract.

- 6.7 If at any time the Contractor considers their estimates indicate costs will exceed the project budget they will immediately advise the City of Iqaluit. If in the opinion of the City of Iqaluit, acting reasonably, the excess is due to design, costs factors or matters under the control or reasonably foreseeable by the Contractor, the CITY OF IQALUIT may require the Contractor to do everything by way of revision of the design to bring the cost estimate within the project budget. Costs of completing such revisions shall be based upon a level of compensation reasonably appropriate to the circumstances, including the reason for the revisions.
- 6.8 Except as required in the performance of services set out in this agreement, the Contractor must maintain as confidential all data and information made available to the Contractor, the CITY OF IQALUIT, or any other parties which is generated by or results from the Contractor's performance of the Services described in this Contract. All such data and information is the property of the City of Iqaluit. This clause shall survive the termination of the Contract.

#### 7. TERMINATION

- 7.1 The CITY OF IQALUIT may terminate this contract at any time upon giving written notice to this effect to the Contractor if, in the opinion of the CITY OF IQALUIT, the Contractor is unable to deliver the service as required, the Contractor's performance of work is persistently faulty, in the event that the Contractor becomes insolvent or commits an act of bankruptcy, in the event that any actual or potential labor dispute delays or threatens to delay timely performance of the contract or the (Contractor's Sub-Contractor) defaults or fails to observe the terms and conditions of the contract in any material respect.
- 7.2 This contract shall terminate as of the day for termination set out in the written notice and the Contractor shall forthwith invoice the CITY OF IQALUIT for work performed to the date of termination.
- 7.3 Any invoice submitted by the Contractor pursuant to clause 7.2 shall be reviewed by the CITY OF IQALUIT to assess the amount which is properly due and owing for work done by the Contractor prior to termination.

#### 8. FINANCIAL

- 1.1 The CITY OF IQALUIT, having given written notice of a breach, may withhold or hold back in whole or in part any payment due the Contractor without penalty, expense or liability, if in the opinion of the Contracting Authority, the Contractor has failed to comply with or has in any way breached an obligation of the Contractor. Any such hold back shall continue until the breach has been rectified to the satisfaction of the CITY OF IQALUIT.
- 8.2 The CITY OF IQALUIT may set off any payment due the Contractor against any monies owed by the Contractor to the CITY OF IQALUIT.
- 8.3 The City of Iqaluit will pay the Goods and Services Tax (GST).
- 8.4 Provided all terms and conditions on the part of the Contractor have been complied with, each invoice will be paid thirty (30) calendar days after receipt of the invoice, or thirty (30) calendar days after delivery of the services, whichever is later. Invoices from Nunavut Contractors (as defined by the CITY OF IQALUIT NNI Policy) will be paid twenty (20) calendar days after receipt of the invoice, or twenty (20) calendar days after receipt of the services, whichever is later.
- 8.5 The CITY OF IQALUIT may, in order to discharge lawful obligations or to satisfy lawful claims against the Contractor or a Sub-Contractor arising out of the execution of work, pay any amount, which is due and payable to the Contractor under the contract, if any, directly to the obligee of and the claimants against the Contractor or Sub-Contractor.





#### 9. INSURANCE AND LIABILITY

- 9.1 The Contractor's liability to the City of Iqaluit for claims arising out of this Agreement, or in any way relating to the Services, will be limited to direct damages and to the re-performance, without additional compensation, of any Services not meeting a normal professional standard of care and such liability will, in the aggregate, not exceed the amount of \$1,000,000.00. The limitations of liability will apply, to the extent permitted by law, whether Contractor's liability arises under breach of contract or warranty; tort, including negligence; strict liability; statutory liability; or any other cause of action, and will extend to and include Contractor's directors, officers, employees, insurers, agents and sub-contractor.
- 9.2 In no event will either party be liable to the other party for indirect or consequential damages including without limitation loss of use or production, loss of profits or business interruption.
- 9.3 The Contractor shall, without limiting his obligations or liabilities hereto, obtain, maintain and pay for during the period of this agreement, the following insurance with limits not less than those shown:
  - a) Workers' Compensation insurance covering all employees engaged in the work in accordance with the statutory requirements of the Territory or Province having jurisdiction over such employees. If the Contractor is assessed any additional levy, extra assessment or super-assessment by a Workers' Compensation Board as a result of an accident causing injury or death to an employee of the Contractor or any sub-contractor, or due to unsafe working conditions, then such levy or assessment shall be paid by the Contractor at its sole cost and is not reimbursed by the CITY OF IQALUIT.
  - b) Employer's liability insurance with limits not less than \$500,000 for each accidental injury to or death of the Contractor's employees engaged in the work. If Workers' Compensation insurance exists, then in such event, the aforementioned Employer's Liability insurance shall not be required but the Comprehensive General Liability policy referred to in item (d) herein shall contain an endorsement providing for Contingent Employers' Liability insurance.
  - c) Motor Vehicle, water craft and snow craft standard liability insurance covering all vehicles and/or craft owned or non-owned, operated and/or licensed by the Contractor and used by the Contractor in the performance of this agreement in an amount not less than one million dollars (\$1,000,000.00) per occurrence for bodily injury, death and damage to property; and with respect to busses limits of not less than one million dollars (\$1,000,000.00) for vehicle hazards and not less than one million dollars (\$1,000,000.00) for Bodily Injury to or death of one or more passengers and loss of or damage to the passengers property in one accident.)
  - d) Comprehensive General Liability Insurance with limits of not less than five million dollars (\$5,000,000.00) (inclusive) per occurrence for bodily injury, death and damage to property including loss of use thereof. Such insurance shall include but not be limited to the following terms and conditions:
    - Products & Completed Operations Liability \*
    - Contractor's Protective Liability
    - Blanket Contractual Liability
    - Broad Form Property Damage
    - Personal Injury Liability
    - Cross Liability
    - Medical Payments





- Non-owned Automobile Liability \*
- Contingent Employers Liability \*
- Employees as Additional Insureds \*

#### \*WHERE APPLICABLE

e) Professional Liability Insurance with limits of not less than two hundred fifty thousand dollars (\$250,000.00) per claim and five hundred thousand dollars (\$500,000.00) in the annual aggregate, to cover claims arising out of the rendering of or failure to render any <u>professional service</u> under this contract or agreement.

All policies shall provide that thirty days written notice be given to the CITY OF IQALUIT prior to any cancellations of any such policies.

The Comprehensive General Liability Insurance policies shall name the CITY OF IQALUIT and any permitted sub-contractor's as additional insureds only with respect to the terms of this contract and shall extend to cover the employees of the insureds hereunder.

The Contractor shall be responsible for any deductibles, exclusions and/or insufficiency of coverage relating to such policies.

The Contractor shall deposit with the CITY OF IQALUIT prior to commencing with the work a certificate of insurance evidencing the insurance(s) required by this clause in a form satisfactory to the CITY OF IQALUIT and with insurance companies satisfactory to the CITY OF IQALUIT.

IN WITNESS WHEREOF the parties hereto have set their hand as of the date and year entered below.

FOR THE CITY OF IQALUIT:	FOR THE CONTRACTOR:
Name/Title	Name/Title
Signature	Signature
Date	Date
Witness	Witness





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# Iqaluit

# CONSTRUCTION SERVICES PART III – GENERAL CONDITIONS



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# CONSTRUCTION SERVICES PART III – GENERAL CONDITIONS



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#### 1. GENERAL PROVISIONS

#### 1.1 Definitions

The following terms, whenever used in the Contract Documents, shall mean:

- a) "Adjustment": a change in either the Contract Price or the Contract Time, or both, in accordance with the applicable provisions of the Contract Documents;
- b) "Applicable Laws": any and all applicable laws, rules, regulations, by-laws, codes and orders of any and all government bodies, agencies, authorities and courts;
- c) "**Arbitrator**": the person appointed under GC 9.3(a);
- d) "Articles of Agreement": the executed Articles of Agreement;
- e) "Change Order": a written instrument prepared by the City Representative and signed by the City and the Contractor stating their agreement upon:
  - i. a change in the Work, and
  - ii. the method and/or the amount of Adjustment, if any;
- f) "City": the party defined as such in the Articles of Agreement;
- g) "City Representative": the person designated as such in the Articles of Agreement, or such other person designated as such by the City from time to time;
- h) "Claim": any or all of:
  - a demand or assertion by the City or the Contractor seeking an interpretation of Contract terms, an Adjustment, or other relief with respect to the terms of this Contract;
  - ii. other disputes and matters in question between the City and the Contractor arising out of or relating to this Contract; and
  - iii. allegations by the City or the Contractor of errors or omissions on the part of the City Representative;
- i) "Completion Date": the date of Substantial Performance of the Work, as certified by the City Representative;





- "Construction Schedule": the Construction Schedule referred to in GC 3.6, including revisions thereto as provided in GC 3.6, GC 10.2(d) or otherwise required by the City Representative;
- k) "Contract": the undertaking by the parties to perform their respective duties and discharge their obligations as set out in the Contract Documents which represents the entire agreement between the parties;
- "Contract Documents": the documents referred to in the Articles of Agreement and amendments agreed on by the parties in writing;
- m) "Contract Price": the sum stated in the Articles of Agreement and as may be amended during the progress of the Work;
- "Contract Time": the time stated in the Articles of Agreement, and as may be amended during the progress of the Work, elapsing from the date of commencement of the Work until the date of Substantial Performance of the Work, as certified by the City Representative;
- o) "Contractor": the party defined as such in the Articles of Agreement;
- p) "**Day**": a calendar day;
- q) "Final Completion": when the Work has been performed in accordance with the Contract Documents, as certified by the City Representative;
- r) "GC": a reference to a clause in these general conditions of this Contract;
- s) "Holdback Payment Certificate": a certificate issued in accordance with GC 5.6;
- t) "Lien Holdback": has the meaning given in GC 5.2(a)(i);
- u) "**Project**": the total construction of which the Work to be performed under this Contract may be the whole or a part;
- v) "Referee": the person appointed under GC 9.2(a);
- w) "Site": the land or actual place designated in the Contract Documents for the performance of the Work;
- x) "Subcontractor": a party having a direct contract with the Contractor for the performance of any part of the Work, or to supply products worked to a special design for the Work;





- y) "Substantial Performance": when the Work has progressed to the point where, in the opinion of the City Representative as evidenced by the certificate of Substantial Performance, it is sufficiently complete, in accordance with the Contract Documents, so that the Work can be utilized for the intended purpose;
- z) "**Supplier**": a party having a direct contract with the contractor to supply products not worked to a special design for the Work;
- aa) "Work": all or any part of the construction and services required by the Contract Documents, including all labour, materials, equipment and services provided or to be provided by the Contractor to fulfill his obligations under this Contract.

### 1.2 Documents and Interpretation

- a) It is the intent of the Contract Documents to include all labour, materials, equipment and services necessary to perform the Work in accordance with the Contract Documents. Any labour, materials, equipment and services that may be reasonably inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result, will be furnished and performed by the Contractor, whether or not specifically called for.
- b) The Contract Documents are complementary, and what is required by one document shall be as binding as if required by all.
- c) This Contract represents the entire agreement between the City and the Contractor and supersedes all prior negotiations, representations and agreements, either written or oral.
- d) When words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents and are not otherwise defined, they shall be interpreted in accordance with that meaning.
- e) The Contract Documents shall not be construed to create a contractual relationship of any kind between:
  - the City Representative and the Contractor, a Subcontractor, a Supplier, a subcontractor or its or their agent or employee, or other person performing any of the Work;
  - ii. the City and a Subcontractor, a Supplier, a subcontractor or their agent, employee, or other person performing any of the Work, or
  - iii. between any persons or entities other than the City and the Contractor.





The City Representative shall however, be entitled to demand performance and enforce the obligations of the parties under this Contract, to facilitate performance of the City Representative's duties.

- f) Clarifications and interpretations of the Contract Documents shall be issued by the City Representative as provided in GC 4.1.
- g) In the event of any inconsistency or conflict between provisions of the Contract Documents, the following shall apply:
  - i. documents of later date shall govern over earlier documents of the same classification;
  - ii. figured dimensions shown on drawings shall govern over scaled dimensions;
  - iii. drawings of larger scale shall govern over those of smaller scale;
  - iv. specifications shall govern over drawings;
  - v. the general conditions shall govern over the specifications;
  - vi. supplementary general conditions shall govern over the general conditions, and
  - vii. the Articles of Agreement shall govern over all documents.
- h) The City shall provide the Contractor with as many sets of Contract Documents as are reasonably required for the performance of the Work.
- i) The Contractor shall maintain a set of drawings on the Site and record accurately and legibly all deviations caused by Site conditions and written instructions or change orders ordered by the City Representative. The Contractor shall keep one copy of all current Contract Documents and shop drawings on the Site, in good condition. These documents shall be available to the City Representative throughout the duration of the Work.
- j) All Contract Documents, including copies, and all models furnished by or to the Contractor are and shall remain the property of the City and are not to be used on other work. The Contract Documents are not to be copied or revised in any manner without the City's written consent.
- k) The division into sections, the table on contents, and the heading in the Contract Documents, other than in the drawings and specifications, form no part of this Contract but are inserted for convenience of reference only.





- I) Any reference to a statutory provision shall include any subordinate legislation made and from time-to-time amended, extended or re-enacted.
- m) Unless otherwise indicated, all dollar amounts referred to in this Contract are in lawful money of Canada.
- n) If any provision of this Contract is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision and everything else in this Contract shall continue in full force and effect, In the event any provision of this Contract, as amended from time to time, shall be deemed invalid or void, in whole or in part, by any court of competent jurisdiction, the remaining terms and provisions of this Contract shall remain in full force and effect.
- o) The schedules, appendices and attachments to this Contract are an internal part of this Contract and a reference to this Contract includes a reference to the schedules, appendices and attachments.
- p) The language of the specifications and other documents comprising this Contract is in many cases written in the imperative for brevity. Clauses containing instruction, directions or obligations are directed to the Contractor and shall be construed and interpreted as if the words "the Contractor shall" immediately preceded the instructions, directions or obligations.
- q) Unless the context otherwise requires, wherever used herein the plural includes the singular, the singular includes the plural, and each of the masculine, feminine and neuter genders include all other genders.
- r) Unless otherwise provided in this Contract, all accounting and financial terms used in this Contract shall be interpreted and applied in accordance with Canadian generally accepted accounting principles, consistently applied from one period to the next.
- s) References containing terms such as:
  - i. "hereof," "herein," "hereto," "hereinafter," and other terms of like import are not limited in applicability to the specific provision within which such references are set forth but instead refer to this Contract taken as a whole; and
  - ii. "includes" and "including", whether or not used with the words "without limitation" or "but not limited to", shall not be deemed limited by the specific enumeration of items but shall in all cases be deemed to be without limitation and construed and interpreted to mean "includes without limitation" and "including without limitation";





t) Whenever the terms "will" or "shall" are used in this Contract in relation to the Contractor they shall be construed and interpreted as synonymous and to read "the Contractor shall".

#### 1.3 Notices

- a) Where a notice is required by the Contract Documents to be given in writing to the Contractor, it may be delivered personally to the Contractor or his site superintendent, or delivered or sent by mail or facsimile transmission to the Contractor's address set out in the Articles of Agreement or to his office at or near the Site.
- b) Where a notice is required by the Contract Documents to be given in writing to the City Representative, it may be delivered personally, or delivered or sent by mail or facsimile transmission to the City Representative's address set out in the Articles of Agreement, or to the office of the City Representative at or near the Site.
- c) Notwithstanding the foregoing provisions of this GC 1.3, each party shall use the most expeditious method of giving the written notice or communication.
- d) A written notice or communication sent by mail shall be deemed to have been received ten days from the date of posting. Whenever a notice or communication is sent by facsimile transmission, acknowledgement from the receiving party must be given to the other party that the notice or communication has in fact been received, for it to be effective; this acknowledgement may be made verbally, in person or by telephone. If no such acknowledgement is given, it shall be deemed to have been received and be effective ten days from the date the original document was sent.

### 1.4 Rights and Renders

- a) No obligations or responsibilities of any kind by or on behalf of the City shall be implied into the Contract Documents if in the opinion of the City Representative, it is not reasonable under the circumstances to imply that such obligations or responsibilities form part of the Contract Documents.
- b) Any failure by the City or the City Representative to enforce or to require the strict performance of any of the provisions of this Contract shall not, in any way constitute a waiver of those provisions and affect or impair those provisions or any right the City has at any time to avail itself of any remedies the City may have for any breach of these provisions or to require the Work to be performed in accordance with the Contract Documents.
- c) Except as expressly provided in the Contract Documents, the duties and obligations imposed by the Contract Documents and the rights and remedies





available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

### 1.5 Assignment

This Contract, or any part of it, or any benefit or interest in it, shall not be assigned by either party without the prior written consent of the other party, which consent shall not be unreasonably withheld. Notwithstanding the foregoing, the City has the right, in the event of any default by the Contractor, to assign all its rights and remedies against the Contractor to the Government of Nunavut.

### 1.6 Applicable Law

This Contract shall be deemed to have been made in Nunavut and shall be governed by and interpreted in accordance with the laws of Nunavut and the laws of Canada applicable therein.

### 1.7 Successors and Assigns

This Contract shall ensure to the benefit of and be binding upon the parties hereto and their lawful heirs, executors, administrators, successors and assigns.

#### 2. CITY'S OBLIGATIONS

### 2.1 Payment

Subject to any other provision in the Contract Documents, the City shall make payments to the Contractor at the times and in the manner set out in GC 5.

### 2.2 Site Availability

- a) The City shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access to the Site and any other lands designated for the use of the Contractor. The Contractor shall provide and pay for any additional lands and access the Contractor may require, in accordance with GC 3.10(a).
- b) Except for permits and fees which are the responsibility of the Contractor under GC 3.13, the City shall obtain and pay for necessary approvals, easements and charges required for the development of the Site and for the use or occupancy of permanent structures or for permanent changes in existing facilities.

### 2.3 Consultant as City Representative





- a) Unless otherwise provided in the Contract Documents, the City shall communicate with the Contractor through the Consultant, and the Contractor shall communicate with the City through the Consultant.
- b) If the contract with the Consultant is terminated, the City shall promptly appoint a replacement.

#### 2.4 Reference Points

The City shall establish physical reference points for construction on the Site which are, in the opinion of the City Representative, necessary to enable the Contractor to proceed with the Work. The Contractor shall safeguard such reference points in accordance with GC3.11(b).

### 2.5 Materials Supplied by the City

Any materials, instructions, information or services required to be supplied by the City under this Contract shall be furnished with reasonable promptness to avoid delay in the orderly progress of the Work.

#### 2.6 Control of the Work

Neither the City nor the City Representative shall supervise or have control or authority over, nor be responsible for, the Contractor's means, methods, techniques or procedures of construction. Neither the City nor the City Representative will be responsible for the Contractor's failure to perform the Work in accordance with the Contract Documents, nor for its failure to comply with Applicable Laws.

### 2.7 Limitation of Liability

In no event, including without limitation if the City breaches its obligations under this Contract, shall the City be liable to the Contractor, its Subcontractors or any other parties engaged directly or indirectly by or acting on their behalf, for indirect loss, consequential loss, loss of business opportunity or loss of anticipated profit.

### 3. CONTRACTOR'S OBLIGATIONS

#### 3.1 General Obligations

Notwithstanding any omissions from the Contractor's tender, the Contractor is required to perform all of the Work required by the Contract Documents, including any Work which can be reasonably inferred from them as being necessary to produce the intended result. The Contractor is to perform the Work within the Contract Time, in accordance with the Construction Schedule referred to in GC 3.6.

#### 3.2 Independent Contractor





The Contractor is an independent contractor and shall have complete control of the Work. The Contractor shall effectively direct and supervise the Work to ensure conformance with the Contract Documents. The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all parts of the Work, except as may be otherwise specified in the Contract Documents.

Nothing in this Contract shall be construed to mean that the Contractor is an employee, agent or other representative of the City.

#### 3.3 Review of Contract Documents

- a) By executing this Contract, the Contractor represents that the Contractor has reviewed the Contract Documents and has verified the dimensions, quantities and details described in them. Failure to discover or correct errors, omissions, conflicts or discrepancies which ought to have been discovered by such a review shall not relieve the Contractor from full responsibility for unsatisfactory Work, faulty construction or improper operations resulting therefrom, nor from rectifying such conditions at the Contractor's expense.
- b) If the Contractor proceeds with the Work in the face of an error, inconsistency or omission that the Contractor discovered, or that a competent Contractor reasonably experienced in the Work would have discovered, without additional instructions from the City Representative, then the Contractor shall at the Contractor's cost remove or replace any incorrectly constructed Work.

#### 3.4 Site Conditions

- a) By executing this Contract, the Contractor represents that the Contractor is familiar with the conditions under which the Work is to be performed. The Contractor further represents that the Contractor understands the requirements of the Contract Documents and what effects the Site conditions will have on the Work. The Contractor's failure to visit the Site will not excuse the Contractor from the responsibility which otherwise would have been assumed, had the Contractor visited the Site.
- b) Following the start of the Work, if the subsurface conditions are substantially different from what could reasonably have been expected, based on a reasonable and proper examination of the Site by the Contractor and the information provided in the tender documents, if any, the Contractor must promptly notify the City Representative in writing prior to performing the Work. The Contractor may make a claim for changed site conditions in only accordance with GC 9.1.

#### 3.5 Temporary Structures

The Contractor shall have the sole responsibility for the design, erection, operation, maintenance and removal of temporary structures and other temporary facilities and the





design and execution of construction methods required in their use. The Contractor shall engage and pay for professional engineering personnel, registered to practice in Nunavut, skilled in the appropriate discipline, to perform these functions where required by law or by the Contract Documents and in all cases where such temporary facilities and their method of construction are of such a nature that professional engineering skill is required to produce safe and satisfactory results. The Contractor shall submit engineered documents to the City Representative, for review, before commencing temporary work.

#### 3.6 Schedule

- a) Within fourteen days of executing the Articles of Agreement and as a condition of the first progress payment, the Contractor shall submit to the City Representative for review, a proposed Construction Schedule showing the anticipated time of commencement and completion of each of the major activities of the Work to be performed. This Construction Schedule shall include the sequence and coordination of the various operations and the estimated time required for the Work and shall provide sufficient detail to permit the City Representative to monitor the progress of the Work. The Contractor shall revise the proposed Construction Schedule as requested by the City Representative, and the Contractor shall perform the Work in strict adherence to the Construction Schedule, including revisions thereto required by the City Representative, unless it is changed in accordance with the terms of this Contract.
- b) If at any time it should appear to the City Representative that the actual progress of the Work does not conform to the Construction Schedule, the Contractor shall produce at the City Representative's request, a revised Construction Schedule showing the modifications necessary to ensure completion of the Work in accordance with the previously approved Construction Schedule and shall promptly adopt acceptable additional means and methods of construction, at no cost to the City, which will make up for the time lost and will ensure completion in accordance with the revised Construction Schedule.
- c) If the Contractor fails or refuses to revise the Construction Schedule as required by this GC, this Contract may be terminated at the City's option, in accordance with GC 10.3.
- d) The City Representative's review, comments, consent, acceptance or approval to the Construction Schedule shall not relieve the Contractor of any of the Contractor's obligations under this Contract.

### 3.7 Superintendent

a) The Contractor shall assign a competent superintendent and necessary assistants, one or more of whom shall be in attendance at the Site at all times during the progress of the Work. The superintendent and necessary assistants, if any, shall be designated in writing to the City Representative and shall act as the Contractor's





authorized representative at the Site. All written or oral communications to the superintendent shall be deemed to have been given to the Contractor. The superintendent shall only be replaced after the Contractor has received written approval from the City.

b) The City may order the removal from the Work of any superintendent, supervisor, foreman or other employee who is in the opinion of the City, unfit for the Work, unskilled in the work assigned to him or otherwise unsuitable. Any person so removed shall not be re-employed on the Work by the Contractor or by a Subcontractor.

#### 3.8 Subcontractors

- a) The Contractor shall not employ any Subcontractor without the approval of the City. Once the names of the proposed Subcontractors have been submitted, the Contractor shall not change these Subcontractors without the advance written consent of the City. If any changes are made without consent, this Contract may be terminated at the City's option, in accordance with GC 10.3.
- b) The City, through the City Representative, may, at any time during the performance of the Work, object to the use of a Subcontractor and direct the Contractor in writing to employ a different Subcontractor satisfactory to the City Representative.
- c) The Contractor shall be fully responsible to the City for the acts and omissions of Subcontractors, their agents, employees, and all parties engaged by the Contractor or its Subcontractors for the provision of work or the supply of materials.
- d) The Contractor agrees to incorporate the terms of the Contract Documents into all the Contractor's subcontract agreements.
- e) The Contractor shall maintain good order and discipline among the Contractor's employees and the Subcontractors engaged in the Work. The Contractor shall not employ, or permit Subcontractors to employ, workers who are not skilled in the assigned task. The Contractor shall employ sufficient workers to perform the Work in compliance with the Construction Schedule.

#### 3.9 Other Contractors

a) The City reserves the right to let separate contracts with other contractors or workers, or to undertake work using the City's own forces to do other work. If other contractors, workers or the City's own forces are sent onto the Site, with or without plant and material, the Contractor shall, to the satisfaction of the City, grant access to and cooperate with such persons and, in accordance with usual construction practice, coordinate the Work with the other work and connect to other work as specified or shown in the Contract Documents.





- b) The Contractor shall at all times remain the Constructor, with regards to the Health and Safety Act requirements. The City and other contractors entering the Contractors site shall be responsible for adhering to the Contractor's Health and Safety policy.
- c) If the sending of other contractors, workers or the City's own forces onto the Site results in a delay in the performance of the Work, which could not have been reasonably foreseen or anticipated by the Contractor when executing the Articles of Agreement, the Contractor may make a claim therefor in accordance with GC 6.2 and 9.1.
- d) If the Contractor discovers any deficiencies in any other work which might affect the Work, the Contractor shall immediately report such deficiencies to the City Representative and then confirm such report in writing.

#### 3.10 Use of the Site

- a) The Contractor shall make every effort to confine the Contractor's equipment and plant, storage of materials and operations to limits indicated by the Contract Documents, by a specific direction of the City Representative or by Applicable Laws and shall not unreasonably occupy the Site. Where the Contractor requires additional land for the erection of temporary facilities and storage of materials, including access to them, the Contractor shall arrange for such and assume all costs and liabilities arising therefrom.
- b) The Contractor shall not load or permit to be loaded on any part of the Work, a weight or load or force that will endanger its safety or exceed the design loads.
- c) The Contractor shall not interfere in any way with the work or scheduling of any other contractor, worker or employee of the City. Subject to GC 3.9(b), in order to avoid or minimize such interference, the City may in its absolute discretion, establish schedules or methods and shall notify the Contractor accordingly.

#### 3.11 Survey

- a) The Contractor shall provide the City Representative with assistance, as required, to make any surveys and measurements, and to establish or check lines and grades.
- b) The Contractor shall safeguard all points, stakes, grade marks and benchmarks made or established on the Work. The Contractor shall bear the expense of reestablishing them and for rectifying Work improperly installed due to the Contractor's failure to safeguard such points, stakes and marks. Additional surveys and staking required by the Contractor to perform the Work, shall be provided by the Contractor at its expense.





#### 3.12 Protection of the Work, Property and the Public

- a) The Contractor shall be responsible for protecting the Work, the City's property at the Site including the Contract Documents and any plant and material, including plant and material supplied by the City to the Contractor, against loss or damage from any cause but subject to GC 3.15(c). In particular, the Contractor shall take necessary precautions, at the Contractor's expense, to ensure that:
  - i. no person, adjacent property, right, easement or privilege is injured, damaged or infringed by reason of the Contractor's activities in performing the Work;
  - ii. 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;
  - iii. fire hazards in or about the Work or the Site are minimized;
  - iv. adequate medical services are available to all persons employed on the Work at all times during the performance of the Work;
  - v. adequate sanitation measures are taken in respect of the Work; and
- b) The City Representative may order the Contractor to do such things and to perform such additional Work as the City Representative considers reasonable and necessary to ensure compliance with or to remedy a breach of GC 3.12(a) and the Contractor shall comply with the directions of the City Representative, at the Contractor's expense.

#### 3.13 Permits

- a) The Contractor shall procure and post at the Site all permits, certificates and licenses required for the construction of the Work and shall be responsible for all fees in respect thereof.
- a) The Contractor will be responsible for procuring and coordinating all permits issued by the City's Public Works and Engineering Department. Such permits include:
  - i. Water & Sewer Connection/ Disconnection Permit
  - ii. Utility Permit
  - iii. Road Closure Permit





Permit applications must be submitted to the City twenty-one days prior to the start of the works.

### 3.14 Applicable Laws

- a) The Contractor shall perform the Work and give any required notices in full compliance with all Applicable Laws, ordinances, rules, regulations, codes and orders of the municipal and other authorities having jurisdiction which are in or come into force during the performance of the Work.
- b) The Contractor shall have due regard for the protection of the environment in the performance of the Work and shall not place any materials, including without limitation, hazardous materials, or dispose of any such materials, or perform any Work in a manner contrary to applicable federal or territorial or municipal environmental laws and regulations, either at the Place of the Work, or at any other place or property.

### 3.15 Material and Plant Supplied by City

- a) The Contractor is liable for any loss or damage to material, plant or real property that is supplied or placed by the City in the care, custody and control of the Contractor for use in connection with the Work, whether or not that loss or damage is attributable to causes beyond the Contractor's control.
- b) The Contractor shall not use any material, plant or real property placed in the Contractor's care, custody and control by the City, except for the purpose of performing the Work.
- c) The Contractor is not liable to the City for any loss or damage to material, plant or real property if that loss or damage results from and is directly attributable to reasonable wear and tear.

#### 3.16 Equipment, Plant and Material Supplied by Contractor

- a) Unless otherwise specified in the Contract Documents, the Contractor shall furnish and assume full responsibility for all materials, equipment, labour, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the performance, testing, finishing, startup and completion of the Work. All materials, equipment, facilities, etc., furnished by the Contractor shall be maintained in a clean and sanitary manner.
- b) Materials provided shall be new unless otherwise specified in the Contract Documents. Products that are not specified shall be of a quality best suited to their purpose and use, as approved by the City Representative.





c) All equipment, plant and material owned by the Contractor and to be incorporated in the Work, from the time of initial delivery to the Site, shall be deemed to be the property of the City; provided always that the vesting of such property shall not prejudice the right of the Contractor to the sole use of the said equipment, plant and material for the purpose of performing the Work nor shall it affect the Contractor's responsibility to operate and maintain the same in accordance with the Contract Documents. The City shall not at any time be liable for the loss of, damage to or risk of loss of any of the Contractor's equipment, plant or materials.

### 3.17 Workers' Compensation Act

- a) The Contractor shall comply with and ensure compliance at time of tender by all Subcontractors, with the requirements of the Workers' Compensation Act, R.S.N.W.T. 1988, c. W-6, as duplicated for Nunavut by s. 29 of the Nunavut Act. The Contractor and its Subcontractors shall maintain accounts in good standing with the Workers' Compensation Board. The Contractor shall provide verification from the Workers' Compensation Board that the Contractor's account is in good standing prior to the release of holdbacks, at the end of the warranty period and as requested by the City Representative. The City may refuse to make a payment to the Contractor unless the Contractor furnishes evidence from the Workers' Compensation Board that the Contractor's account is in good standing.
- b) If the City receives a notice from the Workers' Compensation Board that the Contractor's accounts, or any Subcontractors' accounts are not in good standing, or if a demand for payment is received, the City may suspend payments due to the Contractor until a letter of clearance is obtained or the City has paid the amount on behalf of the Contractor.
- c) If the City is required to pay any amount to the Workers' Compensation Board on behalf of the Contractor, or any Subcontractor, the City may deduct the amount from any amount owing to the Contractor under this or any other contract, or may demand a reimbursement by the Contractor to the City for the amount paid by the City.
- d) If at any time the performance of the Work is stopped because the Contractor unreasonably fails or refuses to comply with a regulation or order issued pursuant to the Workers Compensation Act, then such failure or refusal shall be considered a default under this Contract, and this Contract may be terminated at the City's option, in accordance with GC 10.3.

#### 3.18 Occupational Health and Safety

a) The Contractor shall be solely responsible for construction safety at the Site as and to the extent required by the Safety Act, in effect at time of tender, and any other applicable construction safety legislation, regulations and codes, any City safety Policies, as amended from time to time, and by good construction practice.





b) In any case where, pursuant to the provisions of the Safety Act, R.S.N.W.T. 1988, c. S-1, as duplicated for Nunavut by s. 29 of the Nunavut Act, the Director of Inspections or a Safety Officer orders the Contractor or any Subcontractor performing the Work, to cease work because of failure to install or adopt safety devices directed by the regulations made under the said Act, or required by it, or because the Director of Inspections or a Safety Officer is of the opinion that conditions of immediate danger exist that would likely result in injury to any person, the City may exercise its right to terminate this Contract or suspend the Work immediately, in accordance with GC 10, until the default or failure is corrected.

#### 3.19 Cutting and Patching

- a) The Contractor shall do all cutting, fitting or patching of the Work that may be required to tie in properly with the work of other contractors shown in, or reasonably inferable from the Contract Documents.
- b) The Contractor shall not endanger any existing Work by cutting, patching or otherwise, and shall not cut or alter the work of any other contractor save with the consent of the City Representative and then only to the extent permitted by the City Representative.
- c) The Contractor shall not unreasonably withhold from the City or a separate contractor the Contractor's consent to cutting or otherwise altering the Work in accordance with any direction given by the City Representative.

#### 3.20 Defective Work

- a) Defective work, whether the result of poor workmanship, use of defective products or damage through carelessness or other act or omission of the Contractor or any Subcontractor, and whether incorporated in the Work or not, which has been rejected by the City Representative as failing to conform to the Contract Documents, shall be removed promptly from the Work and replaced or re- executed by the Contractor in accordance with the Contract Documents, at the Contractor's expense.
- b) Where any part of the Work is damaged by such removals, replacements or reexecution, it shall be made good, promptly, at the Contractor's expense.
- c) Where the Contractor fails to correct defective or rejected work within the time limits specified by the City Representative, the City may correct defective or rejected Work and deduct the cost of same from the Contract Price, or may terminate this Contract in accordance with GC 10.3.





- d) In cases of emergency, the City may take whatever action it deems necessary to correct defective or rejected Work and deduct the cost of same from the Contract Price.
- e) If, in the opinion of the City Representative, it is not expedient to correct defective work or work not done in accordance with the Contract Documents, the City may deduct from the Contract Price the difference in value between the Work as done and that required by this Contract, as determined and certified by the City Representative.

#### 3.21 Testing and Inspection

- a) Unless otherwise specified in the Contract Documents, the Contractor shall not rely on the City's testing program, for the Contractor's own quality control, but shall perform such testing as may be required to ensure that the Work complies in all respects with the Contract Documents.
- b) The Contractor shall promptly provide the City Representative with two copies of all certificates, inspection and testing reports required by the Contract Documents or ordered by the City Representative.
- c) The City Representative may conduct quality control testing regarding the acceptability of materials used in the Work and the Contractor shall furnish for the City Representative's approval such samples as the City Representative may reasonably require, at the Contractor's expense.
- d) The City Representative may order retesting of questioned Work. If such retesting shows the Work to comply with the provisions of this Contract, the City shall pay the cost of retesting. If the retesting shows that through the fault of the Contractor the Work does not so comply, the Contractor shall pay all associated costs. Testing which is paid for by the City shall not be subject to direction or control by the Contractor.
- e) The City Representative shall at all times have access to the Work and the Contractor shall provide proper facilities for such access and for inspection. If any Work should be covered without the approval or consent of the City Representative, it must, if required by the City Representative, be uncovered for examination and subsequently recovered, both at the Contractor's expense.
- f) Any inspection of the Work by the City Representative or the failure of the City Representative to make any inspection, or:
  - i. the thoroughness or lack of thoroughness of any inspection made by the City Representative;





- ii. the failure of the City Representative to observe defective workmanship or materials either by the Contractor or a Subcontractor;
- iii. the failure to direct the attention of the Contractor or Subcontractor, or of any other person, to the inadequacy of the manner in which this Contract is being performed, or
- iv. the inadequacy or insufficiency of any equipment or material used in the performance of or incorporated in the Work,

shall not relieve the Contractor from the responsibility for any failure to supply materials and complete the Work strictly in accordance with the Contract Documents.

#### 3.22 Site Cleanliness

- a) The Contractor shall maintain the Site in a tidy condition and free from the accumulation of waste material and debris, to the satisfaction of the City Representative.
- b) Before the issuance of a certificate of Substantial Performance, the Contractor shall remove all the Contractor's plant and material not required for the remaining Work, and all waste material and other debris, and shall ensure that the Work and the Site are clean and suitable for occupancy or use by the City, unless otherwise directed by the City Representative.
- c) Before the issuance of a certificate of Final Completion, the Contractor shall remove from the Site all the Contractor's plant and material and any waste material and other debris, to the satisfaction of the City Representative.
- d) If the Contractor fails or refuses to remove all such plant, materials, equipment and waste within a reasonable time after achieving Final Completion then, on written notice from the City Representative to the Contractor specifying a reasonable time to remedy such failure or refusal, the City may do or cause to be done the removal and all reasonable resulting costs incurred by the City may be deducted from any amounts owing by the City to the Contractor.
- e) The Contractor's obligations described above do not extend to waste material and other debris caused by the City's agents or other contractors.

#### 3.23 Claims Against and Obligations of the Contractor

a) The Contractor shall pay out and discharge all its lawful obligations and shall satisfy all lawful claims against it arising out of the performance of the Work at least as often as this Contract requires the City to pay the Contractor.





- b) The Contractor shall, in accordance with the Contract Documents and whenever requested to do so by the City Representative, make a statutory declaration regarding the existence and condition of any obligations of and claims against the Contractor, any Subcontractors, or Suppliers. Upon request by the City, the Contractor shall provide letters from its Subcontractors and Suppliers regarding the status of any accounts with the Contractor and the details of any claims, if any.
- c) The City may, in its absolute discretion, and at any time prior to the final release of holdbacks, in order to discharge lawful obligations of and satisfy lawful claims against the Contractor, any Subcontractors or Suppliers arising out of the performance of the Work, pay any amount that is due and payable to the Contractor pursuant to this Contract, directly to the obligees of and the claimants against, the Contractor, Subcontractor or Supplier. When the parties involved in the claim are in agreement on the validity and amount of the claim, the City may treat this as a lawful claim.
- d) Where no agreement is reached between the parties as referred to above, the City may withhold payment, without any obligation to pay interest, until the validity and amount of the Claim is established by legal proceeding. The City may, in its absolute discretion, bring the matter before the Nunavut Court of Justice by way of Interpleader, and shall dispose of the funds withheld in accordance with the direction of the Court.
- e) A payment made pursuant to this provision is, to the extent of the payment, a discharge of the City's liability to the Contractor under this Contract and may be deducted from an amount payable to the Contractor under this Contract.

### 3.24 Patent Rights

The Contractor shall indemnify the City from and against all claims, liabilities and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of the Contractor's equipment, materials or plant used for or in connection with, or for incorporation into the Work, and from and against all damages, costs, charges and expenses whatsoever relating thereto.

#### 3.25 Royalties

Except where otherwise stated, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for obtaining building materials required for the Work.

#### 3.26 Records to be Kept by Contractor

a) The Contractor shall maintain complete records of the Contractor's estimated and actual costs of the Work together with all tender calls, quotations, contracts, correspondence, invoices and receipts. In accordance with the terms of this





Contract, these documents shall be available for audit and inspection by the City or by persons acting on behalf of the City when requested. The Contractor shall furnish any such person with any information it may require from time to time in connection with these records.

- b) Records maintained by the Contractor shall be kept intact for six years following the end of the warranty period or such other period of time as directed by the City Representative.
- c) The Contractor shall ensure that all of its Subcontractors comply with the above requirements.

### 3.27 Public Ceremonies and Signs

- a) The Contractor shall not permit any public ceremony in connection with the Work without the prior written consent of the City.
- b) The Contractor shall not erect or permit the erection of any sign or advertising on the Site without the prior written consent of the City.

### 3.28 Non-Compliance by Contractor

- a) If the Contractor fails to comply, within a reasonable time, with any decision or direction given by the City Representative, the City may employ such methods as the City deems advisable to do that which the Contractor failed to do.
- b) The Contractor shall pay the City the total of all costs, expenses and damages incurred or sustained by the City by reason of the Contractor's failure to comply with any decision or direction referred to above, including the cost of any method employed by the City. Where the amounts owing to the Contractor under this Contract are insufficient to cover such costs, the Contractor shall pay the balance to the City immediately.

### 4. ADMINISTRATION BY CITY REPRESENTATIVE

### 4.1 City Representative's Duties and Authority

- a) The City Representative will administer this Contract on behalf of the City as provided in the Contract Documents.
- b) The City Representative will be the City's representative until the Work has been completed in accordance with the Contract Documents.
- c) Except as expressly stated in the Contract Documents, the City Representative shall have no authority to relieve the Contractor of any of the Contractor's obligations under this Contract.





- d) The City Representative will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work performed and shall deal with Claims as they arise, in accordance with GC 9.1.
- e) If any error, inconsistency, or omission in the Contract Documents is discovered, the City Representative shall provide directions or clarifications to the Contractor.
- f) During the progress of the Work, the City Representative shall have authority to reject Work that, in the City Representative's opinion, does not conform with the requirements of the Contract Documents, or to issue written additional instructions regarding the Work which may, in the opinion of the City Representative, be necessary to supplement or clarify the Contract Documents. Such additional instructions shall be consistent with the intent of the Contract Documents, shall not entitle the Contractor to an Adjustment and shall be binding upon and be carried out promptly by the Contractor.
- g) Wherever, under this Contract, the City Representative is required to exercise discretion by:
  - i. rendering a decision, opinion or consent;
  - ii. expressing satisfaction or approval;
  - iii. determining value; or
  - iv. otherwise taking action which may affect the rights and obligations of the City or the Contractor, the City Representative shall do so impartially, consistent with the terms of this Contract and having regard to all of the circumstances. Any such decision, opinion, consent, expression of satisfaction or approval, determination of value or action, may be opened up, reviewed or revised as provided in GC 9.

### 4.2 Observing the Work

The City Representative will visit the Site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract Documents. However, the City Representative will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of such on-site observations, the City Representative will keep the City informed of the progress of the Work and will endeavour to guard the City against defects and deficiencies in the Work.

### 4.3 City Representative's Decision





Except as provided in GC 4.1(g), neither the City Representative's authority or responsibilities under GC 4 or under any other provision of the Contract Documents nor any decision made by the City Representative in good faith either to exercise or not exercise such authority or responsibility, shall create, impose or give rise to any duty or responsibility owed by the City Representative to the Contractor, any Subcontractor, Supplier, or to any surety for or employee or agent of any of them.

### 5. PAYMENT AND COMPLETION

### **5.1** Progress Payments

- a) At the end of each calendar month, or such other period as is agreed to between the City Representative and the Contractor, the Contractor shall deliver to the City Representative a written progress claim that describes the Work that has been completed and any material that was delivered to the Site but not yet incorporated into the Work since the last progress claim. The Contractor's progress claim shall be submitted on the last day of the month, for the month which progress is being claimed. If the last day coincides on a weekend or holiday, it will be issued on the following business day.
- b) The City Representative shall, within fourteen days of receipt of the Contractor's approved progress claim, review the claim and prepare a certificate for payment which may take the form of an endorsement on the progress claim. If the City Representative amends the progress claim, he will promptly notify the Contractor in writing, giving reasons for the amendment.
- c) Where the Contractor does not submit a progress claim or where the City Representative does not endorse the Contractor's progress claim, the City Representative may calculate the progress payment and prepare a certificate for payment by the City. Where unit prices apply, payment will be calculated on the basis of the unit prices specified in the Contract Documents and the units of Work completed as determined by the City Representative. Where a lump sum price applies, payment will be calculated on the basis of the City Representative's estimate of the percentage of the Work completed.
- d) The progress certificate will show, to the end of the period covered by the progress claim, the estimated value of all labour and materials incorporated into the Work, GST monies paid, all materials stored at the Site and all Change Orders certified by the City Representative. The certificate shall also show the aggregate of previous payments and the amounts withheld. The gross amount shown on such certificate, less the aggregate of all payments to date and sums withheld, shall become due and be payable by the City to the Contractor within thirty days following receipt by the City of the progress certificate.





- e) The estimates referred to above shall not bind the City or the City Representative in any manner in the preparation of the final estimate of the Work done, but shall be held to be approximate only and shall in no case be taken as an acceptance of the Work or as a release of the Contractor from the Contractor's responsibilities under this Contract.
- f) If for any reason the City disputes the net amount shown for payment on a progress certificate the City shall, within the time specified in this GC, pay to the Contractor any amount not disputed and also deliver to the Contractor and the City Representative written reasons for any deductions.

#### 5.2 Contract Holdbacks

- a) The City will retain Contract holdbacks in accordance with the following:
  - i. ten percent from each progress payment made prior to the issuance of the first Holdback Payment Certificate by the City Representative (the "Lien Holdback"), and
  - ii. five percent Owners Offset from any payments made to the Contractor following the issuance of the first Holdback Payment Certificate, other than from holdback payments.

#### 5.3 Substantial Performance

- a) When the Contractor considers the Work ready to be utilized for its intended purpose, the Contractor may apply in writing to the City Representative to issue a Certificate of Substantial Performance. The Contractor shall prepare and submit with its application a comprehensive list of deficiencies and/or incomplete items to be completed or corrected, a statutory declaration as per GC 3.23(b) and particulars of, or a waiver of, all outstanding claims against the City, arising out of the Work. The Contractor shall proceed promptly to complete and correct the items on the list. Failure to include an item on this list does not alter the Contractor's responsibility to complete the Work in accordance with the Contract Documents.
- b) Following the receipt of an application from the Contractor for a certificate of Substantial Performance, the City Representative shall, with reasonable promptness, make an inspection and assessment of the Work. Within seven days of the inspection, the City Representative shall notify the Contractor of his approval, or reasons for, disapproval of the application. If the City Representative determines that the Work is substantially completed, he shall issue a certificate of Substantial Performance to the City and the Contractor. A list of items to be completed or rectified shall accompany the certificate. If the City Representative does not consider the Work to be substantially completed, he shall notify the Contractor in writing of





the reasons why and list the items to be completed or rectified, of which the City Representative is aware.

- c) The City may deduct from the Contract Price, or any amounts due to the Contractor, the costs associated with the City Representative being called upon to perform more than one inspection for the purpose of determining Substantial Performance, when in the opinion of the City Representative, the Work was clearly not yet substantially complete.
- d) The certificate of Substantial Performance shall establish the date of Substantial Performance and shall fix the time within which the Contractor shall complete or correct all items on the list accompanying the certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Performance, unless otherwise provided, in the certificate of Substantial Performance.
- e) Similarly, in accordance with the procedure set out above, the City Representative may in its absolute discretion, issue a Certificate of Substantial Performance in respect of any part of the Work which has been both completed to the satisfaction of the City Representative and which the City has elected to occupy or use prior to completion.
- f) In addition to other holdbacks as provided by the Contract Documents, when considering Substantial Performance, the City may hold back from payments otherwise due to the Contractor the amount that is two times of the amount of a reasonable estimate, as determined by the City Representative, on account of deficient or defective Work already paid for. This holdback may be held, without interest, until such deficiency or defect is remedied. The items of defect or deficiency and the amounts of related holdback shall be listed separately on the payment certificate.

### 5.4 Final Completion

- a) Following Final Completion of the Work, including any testing, the Contractor shall provide the City Representative with the following:
  - i. a statutory declaration as referred to in GC 3.23(b) that:
    - A. the Work has been completed in accordance with the Contract Documents; and
    - B. no claims exist or alternatively setting out the particulars of any claims relating to personal injury or death or property loss or damage arising out of the Work, and any alleged infringement by the Contractor of a patent or other property right in performing this Contract; and





- ii. particulars of, or a waiver of, all outstanding claims against the City, arising out of the Work.
- b) Following receipt of the documents referred to in GC 5.4(a), the City Representative shall, with reasonable promptness, conduct an inspection and assessment of the Work to verify that the Work has been completed in accordance with the Contract Documents. Within fourteen days of receipt of the above documents, the City Representative shall either issue a certificate of Final Completion to the City and the Contractor or a list of items to be completed or rectified, of which the City Representative is aware. The City may deduct from monies owed to the Contractor the costs associated with the City Representative being called upon to perform more than one inspection.
- c) Receipt by the Contractor of the certificate of Final Completion shall entitle the Contractor to payment in accordance with GC 5.5.

#### 5.5 Final Progress Payment

- a) The final progress payment certificate will be prepared following the issuance of the certificate of Final Completion. The final progress payment certificate will show the total amount payable to the Contractor, less any amounts retained.
- b) The final progress payment amount shall be paid by the City to the Contractor within thirty days following receipt by the City of the final progress payment certificate.

### 5.6 Holdback Release

- a) Forty-five days following the date of the issuance of the certificate of Substantial Performance by the City Representative, the Contractor may apply to the City for release of fifty percent of the Lien Holdback. The Contractor shall with such application provide the City Representative with a statutory declaration as referred to in GC 3.23(b), with the content referred to in GC 5.4(a)(i), and the particulars of a waiver of, all outstanding claims against the City, arising out of the Work. The City Representative shall, within fourteen days' receipt of the Contractor's application, issue a Holdback Payment Certificate or a list of items to be rectified prior to payment.
- b) Following the release of fifty percent of the Lien Holdback in accordance with GC 5.6(a), the Contractor may apply in writing for release of the remainder of all Contract lien holdback funds retained by the City, provided an irrevocable letter of credit, in a form acceptable to the City and from a bank and branch acceptable to the City, for the same amount is presented for the City's consideration. The City may, in its absolute discretion, accept or reject the Contractor's irrevocable letter of credit in place of the remainder of all Contract holdback funds.





- c) The irrevocable letter of credit referred to in this provision must be for the same amount as the remainder of all Contract lien holdback funds and must remain in place until expiry of the warranty period referred to in GC 11.4. Should the Contractor's irrevocable letter of credit be scheduled to expire prior to the end of such warranty period, the City may, at any time within the fourteen days prior to the expiry date, call upon and draw down the irrevocable letter of credit, unless the Contractor presents a renewal thereof with an expiry date be beyond the warranty period.
- d) One year following the date of the issuance of the Certificate of Substantial Performance by the City Representative, the Contractor may apply to the City for release of the remainder of all Contract holdbacks or the return of irrevocable letters of credit, if any. The City Representative shall, within fourteen days of receipt of the Contractor's application, issue a Holdback Payment Certificate or a list of items to be rectified prior to payment.
- e) The City may withhold from monies owing to the Contractor, an amount equal to the City Representative's estimate of the value of all outstanding deficiencies.
- f) Subject to any applicable lien legislation requirements, holdback payments shall become payable or irrevocable letters of credit shall be returned by the City to the Contractor, within thirty days following receipt by the City of the Holdback Payment Certificate.

### 5.7 Delay in Making Payment

- a) Delay by the City in making payments when they are due pursuant to this provision shall not be a breach of this Contract by the City.
- b) Unless otherwise stated in this Contract, when the City delays in making a payment that is due pursuant to this clause, the Contractor shall be entitled to receive simple interest on the amount that is overdue, at the prime lending rate of the main banker of the City.

### 5.8 Right of Set-off

Without limiting any right of set-off or deduction given or implied by law or elsewhere in the Contract Documents, the City may set-off any amount payable to the City by this Contractor against any amount payable to the Contractor under this Contract.

### 6. TIME AND DELAYS

#### 6.1 Time of the Essence





Time is of the essence of this Contract, including without limitation the dates and time limits stated in the Contract Documents. By executing this Contract, the Contractor confirms that this Contract Time is a reasonable period for performing the Work.

### 6.2 Delays

- a) Where a delay occurs in the progress of the Work and:
  - i. the delay is attributable to or within the control of the Contractor or its Subcontractors or was reasonably foreseeable by them at the time this Contract was entered into, the Completion Date will not be adjusted. The Contractor will be liable to the City for all costs and expenses incurred by the City, as well as for any losses resulting from the City's inability to utilize the Work for its intended purpose resulting from the delay, and the City may deduct such costs from payments owing to the Contractor under this Contract;
  - ii. the delay is due to an act or neglect by the City, the City Representative, or other contractor, or of an employee of any of them, then the Contractor may make a Claim therefor, in accordance with GC 9.1, or
  - iii. the cause for the delay does not fall within the circumstances described in (i) or (ii) above, the Contractor may make a Claim for an Adjustment in the Contract Time (but not for an Adjustments of the Contract Price), in accordance with GC 9.1. This shall be the Contractor's sole and exclusive remedy for such delays.
- b) In no event will adverse weather be considered to be a cause of delay beyond the Contractor's or its Subcontractors' control or not reasonably foreseeable by them at the time this Contract was entered into.

#### 7. ASSESSMENTS AND DAMAGES FOR LATE COMPLETION

### 7.1 Late Completion

a) For the purposes of this General Condition, "period of delay" means the number of days commencing on the Completion Date fixed by the Articles of Agreement and ending on the day immediately preceding the day on which the certificate of Substantial Performance is issued but does not include any day within a period of extension granted pursuant to GC 9.1 and 6.2, or any other day on which, in the opinion of the City Representative, completion of the Work was delayed for reasons beyond the control of the Contractor.

#### 8. CHANGE ORDERS

### 8.1 Changes in the Work





- a) Without invalidating this Contract, the City may, through the City Representative, direct in writing the Contractor to make changes in the Work by adding to, deleting from or revising the Work.
- b) When no Change Order has been issued by the City Representative, and the Contractor claims that any of the Work being performed or proposed constitutes a change in the Work entitling the Contractor to an Adjustment, the Contractor may make a Claim therefore in accordance with GC 9.1.
- c) Changes in the Work directed by the City shall not be initiated, and shall not be carried out by the Contractor, without the prior written authorization of the City through the City Representative.
- d) Upon receipt of a Change Order from the City Representative, the Contractor shall promptly proceed with the Work involved under the applicable provisions of the Contract Documents, except as specifically provided in the Change Order.
- e) The City Representative may in writing direct the Contractor to proceed with the Change notwithstanding that a Change Order has not been prepared or agreed at the time of such direction, and upon receipt of such direction the Contractor shall promptly proceed with the Work as aforesaid. If the parties fail to agree upon the price for such Change, the price therefor shall be as set out in GC 8.2(f) or (i), as applicable.
- f) If notice of any change in the Work is required by the provisions of any bond to be given to a surety, the Contractor will be responsible for giving such notice, and the amount of each applicable bond shall be adjusted accordingly. For the purposes of this provision, the Contractor will be considered to be the surety's agent.

### 8.2 Valuation of Changes

- a) When a change results in a decrease in the Work, the Contract Price shall be decreased by an amount to be determined by the City Representative, with such decrease valued in the same manner as if it were an increase.
- b) When a change causes an increase in the Work, the Contract Price shall be increased in accordance with this provision.
- c) If this Contract specifies unit prices for changes to the Work, and the City Representative concurs in their use on a particular change or portion thereof, then the Contractor shall be paid for such change or portion, a sum determined by applying the unit prices to the actual quantum, as measured by the City Representative, determined after completion of the Change.





- d) Where this Contract specifies force account rates for labour, equipment and materials, and the City Representative concurs in their use on a particular change or portion thereof, then the Contractor shall be paid for such change or portion, a sum determined by applying the force account rates to the number of hours of labour and equipment expended and quantities of materials utilized. The Contractor shall present records of the work done to the City Representative for approval, at the times and in the manner specified by the City Representative.
- e) If there are changes, or portions of changes, for which unit prices or force account rates are not applicable or specified, then the Contractor shall propose to the City Representative a fixed price for such changes or portions. Upon agreement by the City on the amount thereof, the proposed fixed price shall become the sum the Contractor shall be paid for such change or portion.
- f) If the Contractor and the City are unable to agree on a fixed price, then the Contractor shall be reimbursed its costs for performing the changes as directed by the City Representative, consistent with the following:
  - wages, salaries and travelling expenses of the Contractor's employees while actually engaged on the Work, excluding any and all expenses of head office personnel;
  - ii. workers' compensation assessments, unemployment insurance premiums, pension plan payments and paid holidays;
  - iii. rental cost of machinery and equipment that is used in the performance of the Work, or an allowance for depreciation if owned by the Contractor;
  - iv. operation and maintenance costs for machinery and equipment used in the performance of the Work, other than costs of repairs arising out of defects existing before it was brought on to the Site;
  - v. cost of materials necessary for and incorporated into the Work or consumed in the performance of the Work;
  - vi. cost of premiums for all bonds and insurance;
  - vii. other expenses incurred by the Contractor as approved in advance by the City Representative for the proper performance of the Work;
  - viii. Subcontractor costs calculated in accordance with GC 8.2(f) (i to vii) above; and
  - ix. an allowance for profit and all other expenditures or costs, including overhead, general administration costs, financing and interest charges, and every other





cost, charge and expense, in an aggregate amount that is equal to twenty percent of the expenses referred to in GC 8.2(f) (i to vii), and equal to ten percent of the expenses referred to in GC 8.2(f) (viii) above.

- g) Whenever the cost of any Work is to be determined in accordance with GC 8.2(f), the Contractor will establish and maintain records in accordance with GC 3.26.
- h) Pending final determination of cost, amounts not in dispute shall be included in progress payments.
- i) If the method of valuation of any increase cannot be promptly agreed upon, the City Representative shall determine the method of valuation and issue a written authorization for the change setting out the method of valuation.

### 8.3 Contingency Allowance

- a) The Contract Price includes the contingency allowance, if any, stated in the Contract Documents.
- b) Expenditures under the contingency allowance shall be authorized in the same manner as for a Change Order in accordance with GC 8, and the value shall be determined in accordance with GC 8.2.
- c) The unexpended portion of the contingency allowance shall be credited to, and paid to, the City as a condition of achieving Substantial Performance, unless otherwise agreed to by the City.

#### 9. DISPUTE RESOLUTION

#### 9.1 City Representative's Decision

- a) Where a Claim arises out of, or in connection with this Contract or the performance of the Work, whether during the performance of the Work or after its completion and whether before or after termination of this Contract, the Claim shall, in the first place, be referred in writing to the City Representative in accordance with this provision.
- b) A written notice stating the general nature of the Claim shall be delivered by the party making the Claim to the other party and to the City Representative promptly, and in no event later than seven days after the occurrence of the event giving rise to the Claim. Any Work for which a Claim has been made, shall be kept readily accessible and shall not be covered up without the express permission of the City Representative.
- c) Notice of the extent of the Claim with supporting data shall be delivered within fourteen days after such occurrence. The Contractor shall keep contemporaneous





records as may reasonably be necessary to support the Contractor's Claim, which may be inspected by the City Representative, as he deems necessary.

- d) The City Representative shall review the information submitted, consult with the parties and make reasonable efforts to obtain agreement between the City and the Contractor regarding the Claim. The parties agree that, both during and after the performance of the Work, each of them shall use their best efforts to resolve any disputes arising between them by amicable negotiations, and shall provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate those negotiations. The City Representative may request the parties to refer the matter to more senior levels of management within their organizations, in an effort to resolve the Claim.
- e) Where the City and the Contractor reach an agreement on the Claim, the City Representative will, where appropriate, prepare a Change Order for the City's approval, which shall be sufficient to effect a change in this Contract, in accordance with the terms of the Change Order and the Contract Documents.
- f) If the City and the Contractor cannot reach an agreement regarding the Claim, the City Representative shall decide the matter and notify the parties in writing of his decision, within fourteen days of the last submission, and in no event later than thirty days following the date of the occurrence giving rise to the Claim. Valuation of Adjustments in the Contract Price shall be determined by the City Representative in accordance with GC 8.2.
- g) Unless this Contract has already been terminated, the Contractor shall, in every case, proceed with the Work with all due diligence and the City and the Contractor shall give effect forthwith to every such decision of the City Representative unless and until the same shall be revised, as hereinafter provided.
- h) Where either party disputes the decision of the City Representative or where the City Representative fails to notify the parties of his decision in accordance with GC 9.1(f) then either party may, within fourteen days, notify the other party of its intention to refer the matter to the Referee in accordance with GC 9.2 or Arbitrator in accordance with GC 9.3, as application. No referral may be made unless such notice is given. Notices shall be copied to the City Representative for information.
- i) If the City Representative has given notice of his decision as to a matter in dispute to the parties and no notice of intention to refer the matter to the Referee has been given by either the City or the Contractor within thirty days, the City Representative's decision shall become final and binding upon the parties.
- j) No act by the claimant shall be construed as a renunciation or waiver of any of its rights or recourses provided the claimant has given the required notices and





carried out the instructions specified. The presentation of a Claim shall not be grounds for delay or interruption of the Work.

### 9.2 Appointment of Referee

- a) If the City and the Contractor agree to appoint a Referee, the City and the Contractor shall name, within thirty days of the parties signing this Contract, a Referee who may be called upon during the performance of, or after the completion of the Work, to settle any Claims or disputes arising under this Contract. Where the Referee appointed in accordance with this provision refuses to act, is incapable of acting or dies, the parties shall name a new Referee at the earliest opportunity. Should the parties be unable to agree on a Referee within the time specified, the City Representative whose decision shall be final, shall name a Referee.
- b) Where either party has disputed a decision of the City Representative in accordance with GC 9.1(h), the Referee shall review the decision of the City Representative and may, if he deems it appropriate, require the parties to supply him with further information or documentation, giving each party an opportunity to respond. The Referee may inspect the Work after giving reasonable notice to each party of the time he intends to do so.
- c) Not later than thirty days after receipt of the last documentary submission, where the matter has not been resolved in accordance with GC 9.2(b), the Referee shall issue his written decision with reasons to the parties.
- d) The costs of retaining the Referee shall be shared equally between the City and the Contractor, unless the Referee directs otherwise. The City may deduct such costs assessed against the Contractor by the Referee, from any amount due and payable by the City to the Contractor under this Contract.

### 9.3 Appointment of Arbitrator

- a) If the parties agree to appoint a Referee, then within fourteen days after the Referee has rendered his decision, either party may, by written notice to the other party and to the City Representative for information, refer the decision of the Referee to arbitration pursuant to this GC 9.3. If the parties have not agreed to appoint a Referee, then within the fourteen-day period referred to in GC 9.1(h), either party may refer to decision of the City Representative to arbitration pursuant to this 9.3. Upon any such referral, the parties shall appoint a single Arbitrator, for arbitration in accordance with the Arbitration Act, R.S.N.W.T. 1988, c. A-5, as duplicated for Nunavut by s. 29 of the Nunavut Act, subject to the following provisions:
  - the Arbitrator shall have the authority to call upon the Referee to give evidence during the arbitration proceedings, including all documentation prepared by the Referee or reviewed by him;





- ii. the decision of the Arbitrator shall be final and binding upon the parties who covenant that their disputes shall be so decided by arbitration alone and not by recourse to any court by way of action at law;
- iii. arbitration proceedings may be commenced prior to or after completion of the Work, provided that the obligations of the City, the City Representative and the Contractor shall not be altered by reason of the arbitration being conducted during the progress of the Work;
- iv. before the arbitration proceeds on the substantive issues, a budget for the proceedings shall be established by the Arbitrator and each party shall deposit, as security for costs, a sum equal to half of such budget with the Arbitrator, who shall thereupon deposit such funds in an interest bearing trust account with a chartered bank. Subject to the award and payment of costs as hereinafter provided, the balance of the security deposits and interests shall be properly returned to the respective parties; and
- v. the cost of arbitration may be awarded against the parties hereto or against any one of them as the Arbitrator may decide.
- b) If a Claim involves the Work of a Subcontractor, either the City or the Contractor may join such Subcontractor as a party to the arbitration between the City and the Contractor. The Contractor shall include in all its subcontracts specific provision whereby its Subcontractors consent to being joined in an arbitration between the City and the Contractor involving the Work of such Subcontractors. Nothing in this provision nor in the provision of such subcontracts consenting to joinder shall create any claim, right or cause of action in favour of the Subcontractors as against the City or the City Representative, that does not otherwise exist.
- c) If no notice is received within the time limits set out or referred to in GC 9.3(a), the decision of the Referee shall be final and binding on the parties.
- d) The Contractor agrees that it shall join other arbitration proceedings with respect to the Project, as requested in writing by the City.

#### 9.4 Adherence to Provisions

a) The provisions, including without limitation, procedure and sequences, outlined in GC 9.1 to 9.3 for the resolution of disputes shall be strictly adhered to by both parties.

### 10. WITHDRAWAL, SUSPENSION AND TERMINATION

#### 10.1 Withdrawal of the Work





- a) After giving the Contractor seven days written notice within which the Contractor may remedy any delay or default specified, the City may, through the City Representative, withdraw the Work from the Contractor where the Contractor is not diligently performing the Work to the satisfaction of the City Representative or has not completed the Work within the time specified in this Contract.
- b) On withdrawal of the Work, the City may:
  - i. take possession of all plant, equipment and materials on the Site and ordered by the Contractor for the Work but not yet delivered to the Site; and
  - ii. complete the Work withdrawn from the Contractor.
- c) Withdrawal of the Work by the City does not terminate this Contract and does not relieve the Contractor of its obligation to complete the remainder of the Work.
- d) The Contract Price will be reduced by the value of the Work withdrawn, as determined by the City Representative. The Contractor shall be liable to the City for all extra costs incurred by the City to complete the Work withdrawn from the Contractor, including all amounts set out in GC 10.3(d) notwithstanding that the Contractor may not be in default hereunder, and the City may deduct such costs from payments owing to the Contractor under this Contract.

### 10.2 Suspension of the Work

- a) The City may through the City Representative suspend the progress of the Work at any time by giving the Contractor a written notice, which shall include the reason for the suspension.
- b) Where such a suspension results in a delay in the progress of the Work, the rights of the parties shall be determined in accordance with GC 6.2(a)(i), (ii) or (iii) as applicable, and shall be based on the reason for the suspension.
- c) During the period of suspension, the Contractor shall protect, preserve and maintain the Work in a manner satisfactory to the City and shall not remove any part of the plant, equipment and materials from the Site without the prior written consent of the City.
- d) Following the suspension, the Construction Schedule shall be revised by the Contractor, for approval by the City, and the Work shall be completed as provided in the revised schedule.
- e) Where the Work or any part thereof is suspended on the written instructions of the City and if permission to resume Work is not given by the City within a period of thirty days from the date of suspension, the Contractor may request permission from the





City to proceed with the Work. If the City does not grant permission within fourteen days' receipt of the Contractor's written request, the Contractor may elect to treat the suspension, where it affects only part of the Work, as an omission of such Work by giving a further notice to the City to that effect or, where it affects the whole of the Work, treat this Contract as having been cancelled by the City, in accordance with GC 10.4.

### 10.3 Termination by City

- a) Without limitation, any or all of the following actions by or circumstances relating to the Contractor shall constitute default on the part of the Contractor:
  - i. committing or threatening to commit any act of insolvency or bankruptcy, voluntary or otherwise;
  - ii. having a receiver appointed on account of insolvency or in respect of any property;
  - iii. making a general assignment for the benefit of creditors;
  - iv. failing to comply with or persistently disregarding statutes, regulations, bylaws or directives of competent authorities relating to the Work;
  - v. failing to comply with any requests, instruction or direction of the City Representative;
  - vi. failing to pay accounts relating to the Work as they come due;
  - vii. failing to prosecute the Work with skill and diligence;
  - viii. assigning or subletting this Contract or any portion thereof without the required consent from the City;
  - ix. failing or refusing to correct defective or deficient Work; and
  - x. being otherwise in default in carrying out any of its obligations under this Contract, whether such default is similar or dissimilar in nature to the causes listed previously.
- b) The Contractor shall immediately advise the City in writing of any default listed in GC 10.3(a)
- c) If the Contractor is in default under this Contract, the City shall be entitled to any or all of the following:





- take possession of all Work in progress, materials and construction equipment at the Site, at no additional charge for the retention or use of the construction equipment;
- ii. eject and exclude from the Site all personnel of the Contractor and any Subcontractor;
- iii. terminate the City's utilization of the Contractor to perform the Work;
- iv. finish the Work by whatever means the City may deem appropriate under the circumstances; and
- v. withhold any further payments to the Contractor until the Contractor's liability to the City is ascertained.
- d) The Contractor shall be liable to the City for:
  - i. the extra expense of finishing the Work, including compensation to the City for additional engineering, managerial and administrative services;
  - ii. the cost of correcting deficiencies in that portion of the Work performed by the Contractor; and
  - iii. all other loss, damage and expense occasioned to the City by reason of the Contractor's default,
  - and the City may deduct such amounts from payments owing to the Contractor under this Contract.
- e) Any action by the City under this GC 10.3 shall be without prejudice to the City's other rights or remedies under any security held by the City for performance of this Contract by the Contractor.

### 10.4 Contract Cancellation

- a) The City shall have the right which may be exercised from time to time, with or without cause, and on fourteen days' written notice to the Contractor, to cancel any uncompleted or unperformed portion of the Work. In the event of such cancellation, the Contractor shall be entitled to the following:
  - i. reimbursement at this Contract rate for all items completed and delivered;
  - reimbursement for the costs to the Contractor for Work in progress and expenses incurred in the course of the Work, plus a reasonable return on such costs and expenses; and
  - iii. reimbursement for costs and expenses directly caused by the cancellation.





- b) Title to all Work for which reimbursement is made shall vest in the City.
- c) The City shall not be liable to the Contractor for indirect loss, consequential loss, loss of business opportunity or loss of anticipated profit on the cancelled portion or portions of the Work.
- d) This section shall not apply to situations in which the City is entitled to terminate this Contract by reason of default by the Contractor.

#### 10.5 Termination by Contractor

- a) If the City should be adjudged bankrupt, or makes a general assignment for the benefit of creditors because of the City's insolvency, or if a receiver is appointed because of the City's insolvency, the Contractor may, without prejudice to any other right or remedy the Contractor may have, by giving the City or receiver or trustee in bankruptcy notice in writing, terminate this Contract.
- b) If the Work should be stopped or otherwise delayed for a period of thirty days or more under an order of a court or other public authority and providing that such order was not issued as the result of an act or fault of the Contractor or of anyone directly or indirectly employed or engaged by the Contractor, the Contractor may, without prejudice to any other right or remedy the Contractor may have, by giving the City notice in writing, terminate this Contract.
- c) If the Contractor terminates this Contract under the conditions set out above, the Contractor shall be entitled to be paid for all work performed including reasonable profit, for loss sustained upon products and construction machinery and equipment, and such other damages as the Contractor may have sustained as a result of the termination of this Contract.

### 11. BONDS AND WARRANTY

### 11.1 Obligations to Provide Contract Security

- a) The Contractor shall promptly provide to the City the surety bonds called for in the Contract Documents, not later than ten days following receipt by the Contractor of the letter of acceptance.
- b) Such bonds shall be issued by a duly licensed surety company authorized to transact the business of suretyship in Nunavut and shall be maintained in good standing until the fulfillment of this Contract.
- c) Prior to or at the time of making a Claim under such bonds, the City shall send written notification to the Contractor, stating the nature of the default for which a Claim is being made.





### 11.2 Prescription of Acceptable Contract Security

- a) The Contractor shall deliver to the City:
  - a performance bond and a labour and material payment bond each in an amount that is equal to and not less than fifty percent of the Contract Price referred to in the Articles of Agreement; or
  - ii. a security deposit in an amount that is equal to ten percent of the Contract Price referred to in the Articles of Agreement.
- b) The performance bond and the labour and material payment bond referred to in GC 11.2(a)(i) shall be in a form as approved by the Federal Treasury Board (Federal Contracts).
- c) A security deposit referred to in GC 11.2(a)(ii) shall be in a form of:
  - i. an irrevocable letter of credit in a form acceptable to the City and from a bank and branch acceptable to the City; or
  - ii. a certified cheque or bank draft from a bank acceptable to the City and made payable to the City.
- d) Should the Contractor's irrevocable letter of credit be scheduled to expire prior to the Completion Date set out in the Articles of Agreement, the City may, at any time within the fourteen days prior to the expiry date, call upon and draw down the irrevocable letter of credit, unless the Contractor presents a renewal thereof with an expiry date beyond the anticipated date for Final Completion, as determined by the City Representative.

### 11.3 Return of Security Deposit

- a) Following issuance of the certificate of Substantial Performance, the City may, in its absolute discretion, release all or part of the security deposit referred to herein.
- b) Following issuance of the certificate of Final Completion, the Contractor shall, subject to the terms of this Contract, be entitled to the remainder of any security deposit.
- c) Interest shall not be paid on security deposits.

#### 11.4 Warranty





- a) The Contractor warrants and guarantees that the Work is and shall be free from all defects or deficiencies in, or arising from, materials or workmanship in any part of the Work for the period of one year from the date of Substantial Performance of the Work, as certified by the City Representative, or such longer period as may be specified in the Contract Documents for certain products or Work.
- b) The Contractor shall promptly correct, at its own expense, defects or deficiencies in the Work which appear prior to and during the warranty described in GC 11.4(a). The Contractor shall correct and pay for all damages resulting from corrections made under this provision.
- c) Work performed to correct defects or deficiencies shall be warranted and guaranteed to be free from defects or deficiencies, on the same basis as the original Work, for a period of one year from the day said work was completed.
- d) The City or the City Representative shall promptly give the Contractor written notice of observed defects and deficiencies.
- e) If any defects or deficiencies in the Work appear at any time prior to the end of the warranty period, the City Representative may instruct the Contractor to search for the cause thereof. If such defect or deficiency is one for which the Contractor is liable, the cost of the Work carried out in searching shall be at the Contractor's expense, and it shall in such case remedy such defect or deficiency at its own cost; otherwise it shall be at the City's expense.
- f) In an emergency or to prevent an emergency or if the Contractor neglects for any reason to correct defects or deficiencies within a reasonable time, the City may perform the Work or direct another party, on the City's behalf, to do the Work. All costs associated with the correction of such defects or deficiencies shall be paid for by the Contractor and the City may deduct such costs from amounts owing to the Contractor.

#### 12. INDEMNIFICATION AND INSURANCE

#### 12.1 Indemnification by Contractor

a) The Contractor shall defend, indemnify and save harmless the City and the City Representative, their agents and employees from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings arising out of or attributable to the Contractor's performance of the Work, or by reason of any matter or thing done, permitted or omitted to be done, by the Contractor, its Subcontractors, or their agents or employees, whether occasioned by negligence or otherwise. Such indemnity shall survive completion or termination of this Contract.





b) Nothing contained in the Contract Documents or any approval, express or implied, of the City Representative or City shall relieve the Contractor of any liability for latent defects or any liability which may be imposed by law.

### 12.2 Indemnification by City

The City shall, subject to any law that affects the City's rights, powers, privileges or obligations, indemnify and save the Contractor harmless from and against all claims, demands, losses, costs, damages, actions, suits or proceedings arising out of his activities under this Contract that are directly attributable to:

- a) lack of or a defect in the City's title to the Site whether real of alleged; or
- b) an infringement or an alleged infringement by the Contractor of any patent of invention or any other kind of intellectual property occurring while the Contractor was performing any act for the purposes of this Contract employing a model, plan or design or anything related to the Work that was supplied by the City to the Contractor.

#### 12.3 Policies of Insurance

Without restricting the generality of GC 12.1, the Contractor shall provide, maintain and the insurance coverages listed in this provision. Unless otherwise stipulated, the duration of each insurance policy shall be from the date of commencement of the Work until the date of issuance of the certificate of Final Completion. Prior to commencement of the Work, the Contractor shall provide the City with confirmation of coverage in the format attached as Appendix A to these General Conditions, and, if required, a certified true copy of the policies certified by an authorized representative of the Insurer. The Contractor shall ensure that any Subcontractors comply with the insurance requirements outlined in this GC 12. The insurance coverages required are as follows:

#### a) General Liability Insurance

Contractor's comprehensive general or commercial general liability insurance shall have limits of not less than five million dollars per occurrence with a property damage deductible not exceeding two thousand five hundred dollars. The insurance provided shall be no less broad than the insurance provided by IBC Form 2100 or its equivalent replacement and shall include a standard non-owned automobile policy including a blanket contractual liability endorsement. To achieve the required limit, umbrella or excess liability insurance may be used. All liability coverage shall be maintained for completed operations hazards from the date of Final Completion of the Work, as set out in the certificate of Final Completion, on an ongoing basis for a period of not less than six years from the date of such certificate. The City shall be added as an additional insured with respect to liability arising out of the operations of the named insured. The policy shall be endorsed to provide the City with not less than thirty days' written notice in advance of any cancellation, change or amendment restricting coverage.





#### b) Automobile Liability Insurance

Automobile liability insurance in respect of licensed vehicles shall have limits of not less than five million dollars inclusive per occurrence for bodily injury, death, and damage to property and covering all licensed vehicles owned or leased by the Contractor, endorsed to provide the City with not less than fifteen days' written notice in advance of any cancellation, change or amendment restricting coverage.

### c) Property and Boiler and Machinery Insurance

- i. "All risks" property insurance shall be in the joint names of the Contractor, the City and the City Representative, insuring not less than the sum of the amount of the Contract Price and the full value of all labour, plant, equipment and materials that are to be provided by the City for incorporation into the Work, with a deductible not exceeding two thousand five hundred dollars. The insurance provided shall be no less broad than the insurance provided by IBC Form 4042 or its equivalent replacement. The policy will contain a waiver of rights of subrogation against all those insured by the policy. Such coverage shall be maintained continuously until the date the certificate of Final Completion is issued or an earlier date specified by the City;
- ii. the policy will allow for partial or total use or occupancy of the Work. If because of such use or occupancy the Contractor is unable to provide coverage, the Contractor shall notify the City in writing prior to such use pay for property and, if necessary, boiler insurance insuring the full value of the Work as in (i) above, including coverage for such use or occupancy and shall provide the Contractor with proof of such insurance. The Contractor shall refund to the City the unearned premium applicable to the Contractor's policy upon termination of coverage;
- iii. where, due to the nature of the Work, the full insurable value of the Work is substantially less than the Contract Price, the City may, at its sole discretion, reduce the amount of insurance required or waive the course of construction insurance requirement;
- iv. where such risks exist, the Contractor shall provide boiler and machinery insurance insuring not less than the replacement value of boilers, pressure vessels and other objects insurable under a boiler & machinery policy and forming part of the Work;
- v. the policies shall provide that, in the event of a loss or damage, payment shall be made to the City and the Contractor as their respective interests may appear. The Contractor shall act on behalf of the City for the purpose of claiming the amount of loss or damage from the Insurers. When the extent of the loss or damage is determined, the Contractor shall proceed to restore the Work. Loss or damage shall not affect the rights and obligations of either party under this Contract except that the Contractor shall be entitled to such





reasonable extension of Contract Time relative to the extent of the loss or damage in accordance with the terms of this Contract; and

vi. the Contractor shall be responsible for deductible amounts under the policies except where such amounts may be excluded from the Contractor's responsibility in accordance with the Contract documents.

### d) Aircraft and Watercraft Liability Insurance

Where such risks exist, the Contractor shall obtain aircraft and watercraft liability insurance with respect to owned or non-owned aircraft and watercraft if used directly or indirectly in the performance of the Work, including use of additional premises, and shall have limits of not less than two million dollars inclusive per occurrence for bodily injury, death and damage to property including loss of use thereof, and limits of not less than two million dollars for aircraft passenger hazard. Such insurance shall be in a form acceptable to the City. The policies shall be endorsed to provide the City with not less than fifteen days' written notice in advance of any cancellation, change or amendment restricting coverage.

#### e) Contractor's Equipment Insurance

The Contractor shall give proof of insurance in a form acceptable to the City of "all risks" Contractor's equipment insurance coveting construction machinery and equipment used by the Contractor for the performance of the Work, including boiler insurance on temporary boilers and pressure vessels. The insurance shall be in a form acceptable to the City and shall not allow subrogation claims by the insurer against the City. The policies shall be endorsed to provide the City with not less than fifteen days' written notice in advance of cancellation, change or amendment restricting coverage.

#### f) Other Insurance

The Contractor shall provide, maintain and pay for any additional insurance required to be provided by law, or which the Contractor considers necessary to cover risks not otherwise covered by insurance specified in the Contract Documents.

#### 12.4 Insurance General

- a) All required insurance policies shall be with insurers licensed to underwrite insurance in Nunavut and signed by representatives licensed to do so for insurance in Nunavut.
- b) The Contractor shall require and ensure that its Subcontractors maintain liability insurance comparable to that required above.
- c) If the Contractor fails to provide or maintain insurance as required by this General Condition or elsewhere in the Contract Documents, then the City shall have the right to provide and maintain such insurance and give evidence to the Contractor and the City Representative. The Contractor shall pay the cost thereof to the City on demand





or the City may deduct the costs from monies which are due or may become due to the Contractor.

d) Where an insurer fails or refuses to pay any claims under an insurance policy covering the activities of the Contractor or a Subcontractor relating to or arising out of the Work, the Contractor shall not be released from any liability arising under this Contract.

#### 13. LOCAL AND INUIT INVOLVEMENT

### 13.1 Requirements for Inuit, Local and Nunavut Content

- a) The Contractor shall, in the performance of the Work, employ Inuit, Local and Nunavut workers and use Inuit, Local and Nunavut content to the greatest extent possible and at a minimum, no less than the amounts tendered by the Contractor in Appendix J-2 "Substantiation of Bid Adjustment" of the tender. Workers shall meet all levels of proficiency, qualification and expertise as dictated by Applicable Laws and/or as defined in the Contract Documents.
- b) The Contractor shall provide to the City Representative a schedule indicating the anticipated total monthly value of all Inuit, Local and Nunavut content and labour to be expended in the execution of the Work. This schedule shall provide the benchmark for ensuring compliance by the Contractor with the requirements for the use of Inuit, Local and Nunavut content during the performance of the Work.

### 13.2 Requirement for Community Meetings

- a) If required under this RFT (if the NNI Policy applies), The Contractor shall arrange meetings on a monthly basis, or other basis as may be mutually agreed by the parties to this contract, to monitor the use of Inuit, Local and Nunavut labour and Inuit, Local and Nunavut content. The Contractor shall give the City 5 days' notice of all meetings called under GC 13.2. The Contractor shall take reasonable steps to ensure that these meetings include the following representatives:
  - a community representative who has been designated to speak on behalf of the community (if available);
  - ii. a community manpower representative (if available);
  - iii. the Contractor; and
  - iv. the City Representative.
- b) In addition to the community meetings contemplated in GC 13.2(a), the Contractor shall arrange a community meeting prior to the start of the Work which





shall be arranged on the same terms as indicated in GC 13.2(a) and at that meeting shall:

- i. provide a schedule referred to in GC 13.1(b) above to the community representative;
- ii. request from the community manpower representative or from the City if no community manpower representative has been delegated, a list of workers available in the community; and
- iii. identify specific types of workers required during the project such as plumbers, painters or electricians and how many of those workers are required and when they are required and based on information received in accordance with GC 13.2(b)(ii) maintain a list of community manpower.
- c) At the community meetings contemplated in GC 13.2(a), the Contractor shall:
  - i. provide employment reports identifying workers used during the past month (to substantiate information provided on Appendix J-2 "Substantiation of Bid Adjustment");
  - ii. provide a schedule referred to in GC 13.2(b)(i), or such schedule as amended, if necessary; and
  - iii. provide a consolidated report at the time of Substantial Performance, which shall confirm the total amount of Inuit, Local and Nunavut content used. This report will identify Inuit, Local and Nunavut payroll separately. This consolidated report shall be a condition precedent to the release of payment.
- d) The City shall attend all community meetings organized by the Contractor in accordance with this GC 13.2 and when requested by the Contractor shall identify and contact potential community workers who may be available to be employed on the Work, identify alternate workers if those workers initially identified are not available to work, and assist in confirming the residency of local workers.

### 13.3 Monitoring the Level of Inuit, Local and Nunavut Labour

a) The Contractor is responsible to ensure that every worker identified as Local or Nunavut meets the qualifying requirements, which are, for Nunavut, being ordinarily resident in Nunavut for the past 12 months, and for Local being a Nunavut resident ordinarily resident in the subject community for the past 4 months. The Contractor may be required to provide proof of residency of workers at any time throughout the course of performing the Work.





- b) Reasonable proof of Nunavut and Local residency shall be any of the following:
  - i. being listed on the Nunavut Tunggavik Inc. (NTI) enrolment list and provision of a physical address where residing;
  - ii. if the last 12 months have been spent as ordinarily resident in Nunavut and a physical address of such residence has been provided, then
    - A. provides a valid Nunavut Health Care Card effective at least 9 months prior to start date of employment on the Work; and/or
    - B. provides another accepted proof of residency such as: a Nunavut General Hunting License, a Nunavut Driver's Licence, a lease or rental receipt, or a certified Schedule T222 Income Tax return from the previous year or proof that Income Tax was paid in the Nunavut during the previous tax year; or
  - iii. is included on a list of approved Local or Nunavut residents verified by the municipality of their residence.
- c) The Contractor is responsible to ensure that every worker identified as Inuit is on the NTI Inuit enrolment list or would qualify to be on the list.
- d) If requested by the City to do so, the Contractor shall obtain a signed consent form from workers which verifies their residency and permits the City to obtain any and all information required to support the worker's claim of residency and/or Inuit status. A worker does not need to comply with the requirements of this clause if the worker is on the NTI Inuit enrolment list.

### 13.4 Requirement for Using Hotels or Bed and Breakfast

- a) If performance of the Work is undertaken where a Commercial Room and Board Facility (as defined below) exists within a Community (as defined below), the Tenderer is required to use a Commercial Room and Board Facility to house and feed all workers directly employed by the Contractor, any Subcontractor or agent or any other business working on the Project. The Contractor, Subcontractor, agent or other business are not required to use Commercial Room and Board Facilities for workers who are Local Residents.
- b) In this Contract:
  - i. "Commercial Room and Board Facility" means a Hotel or a Bed and Breakfast (Tourist Home) that holds a Tourist Establishment Licence issued by the Government of Nunavut under the *Travel and Tourism Act*.





- ii. "Community" means a community in which the Work (as defined in the Contract) is being performed and includes the entire area within a 20- kilometer radius of that community.
- c) The Commercial Room and Board Facility must:
  - i. meet the applicable requirements under the *Public Health Act*, and of the *Eating or Drinking Place Regulations*; and
  - ii. meet all applicable requirements of the *Public Health Act* the *Fire Prevention Act* and applicable regulations thereunder, and any other applicable Government of Nunavut or federal legislation.

#### 14. TRANSPORTATION OF MATERIALS

#### 14.1 Marine Transport Resources

- a) Whenever marine (water) transport is to be utilized, the Contractor may use, and space may be booked directly with the following carrier:
  - i. Nunavut Sealink and Supply (NSSI),
     By ships loading at the Montreal area Port of Ste-Catherine
  - ii. Nunavut Eastern Arctic Shipping (NEAS)By ships loading at the Port of Valleyfield, Salaberry-de-Valleydfield
- b) The annual shipping rates offered by marine carriers are dependent upon anticipated cargo quantities including the materials for construction projects; therefore, Contractors may tender using the published sailing schedules and rates available from the above marine carriers.
- c) In exceptional or extraordinary circumstances, where the specified marine carrier's sailing schedule is in substantial conflict with the Construction Schedule, the City will review the circumstances, taking into account the adverse impact on the project and the specified marine carrier's interests, and the City may provide authorization to allow the relevant cargo to be shipped with a marine carrier other than the specified marine carrier, depending upon the circumstances; and such authorization must be writing.
- d) If a Contractor uses a marine carrier other than the City contracted marine carrier without the City's written authorization to do so, the Contractor shall be responsible for extra freight cost, administrative costs or any other costs, incurred by the City which result directly or indirectly from the Contractor's failure to use the City specified marine carrier as set out in this GC 14. The Contractor shall also be responsible to refund to the City any monies saved by the Contractor by using a marine carrier other than the specified marine carrier as set out in this GC 14.





### **END OF SECTION**



# CONSTRUCTION SERVICES PART IV – SUPPLEMENTARY CONDITIONS



Amend the General Conditions as follows:

Add the following Definitions:

.1





### **TERMS OF REFERENCE**

#### 1. INTRODUCTION

### 1.1 General Summary

The City of Iqaluit (the "City") obtains its potable water from Lake Geraldine. Lake Geraldine is an engineered reservoir designed to contain the volume of water necessary to satisfy the drinking water needs of the City. The reservoir is refilled annually during spring and summer by natural inflows from snowmelt and precipitation. In years when natural inflows or precipitation are low and the reservoir does not fill to full capacity, or, when seasonal demand has been high, there is a potential for a shortage of drinking water available to the City.

The Apex Pumping Supplemental Pumping (APSP) project is intended to supplement water in Lake Geraldine with water from the Apex River during the spring and summer months of 2025. The project will involve pumping water from the river to the reservoir, through the existing 300 mm HDPE pipe (~1,200 m).

In the 2019 pumping program, the City procured four (4) submersible pumps and associated components to undertake pumping operations. These submersible pumps were used in the 2024 pumping program. They are ready for inspection and re-use in the 2025 program.

The successful contractor will be required to install the four existing submersible pumps, and supply a suitable generator as specified. The temporary generator shall be sourced and supplied by the Contractor. Details pertaining to the equipment list can be found in the as built drawings prepared by Nunami Stantec in 2019. The attached Cost Submission Form (Appendix B) form outlines the anticipated quantities of each item, as well as unit prices for supply and install.

The Contractor shall mobilize to site in April 2025 to take advantage of the 2025 Spring freshet. The Contractor will then be required to operate the pumping system through the remainder of Spring and Summer 2025. The Contractor shall operate the pumping system following heavy rainfall and will work closely with City of Iqaluit representatives, in order to maintain high water levels in Lake Geraldine and comply with its Water Licence. At the end of the 2025 pumping program (anticipated to be September 2025), the Contractor will then be expected to demobilize from Site.

Pumping operations from Unnamed Lake to the Apex River are not presently included in the scope of work.

#### 1.2 Scope of Work

1.2.1 This section outlines in general the work to be done under the Contract in the general location of the City of Igaluit, as shown on the contract drawings and specified herein.





- 1.2.2 Recognize that the Work under the Contract is to be performed under the requirements of the City of Iqaluit's Amended Type A Water Licence 3AM-IQA1626 (dated 29 November 2019) included within this Request for Tender. Plan and schedule the Work consistent with specified constraints and with the objective of maintaining high water levels within Lake Geraldine.
- 1.2.3 Supervise, organize, coordinate and direct all construction, operations, and maintenance activities described in the contract documents, regardless of the section in which the works are specified. The Contractor shall resolve conflicts arising between trades, subcontractors, suppliers, and/or other contractors working in the adjacent area.
- 1.2.4 Install, calibrate, and commission all mechanical, electrical, process instrumentation and communication equipment shown on the contract drawings and specified herein.
- 1.2.5 In addition to constructing the works shown in the RFT; design, construct, and maintain, unless otherwise specified or shown on the drawings, all temporary works and facilities required for the construction of the works. Remove temporary works and facilities when construction is completed. Temporary works and facilities include, but are not limited to, the following:
  - i. All security fencing whether permanent or temporary.
  - Shoring and bracing systems for excavation whether part or all is left in place or not, shall be designed, approved and stamped by a Professional Engineer Licensed in Nunavut.
  - iii. Construction access roads and related items.
  - iv. Excavation and/or dewatering systems.
  - v. Protection for existing structures and facilities as necessary for the construction to proceed.
  - vi. Temporary barriers and enclosures.
  - vii. Temporary utilities (water, power, light, instrumentation, heating, ventilation services and sanitary facilities, etc.).
  - viii. Piping and equipment support.
  - ix. Snow removal around the job site.
  - x. Temporary vehicular access and parking development, maintenance, and restoration.





- xi. Work to install two low point drain valves in existing piping.
- xii. Work to break ice as required at the beginning of the spring freshet.

### 1.3 Work Requirements

1.3.1 The Work must be performed to the applicable City of Igaluit Municipal Design Guidelines.

### 1.4 Description of Work

- 1.4.1 The Work includes, but is not limited to, the following:
  - i. Preliminary and general activities; including insurance, security measures; project signage;
  - ii. Mobilizing to Site, to take advantage of the spring Freshet and higher water levels in the Apex River;
  - iii. Demobilizing from Site (including any partial operator demobilizations during pumping inactivity);
  - iv. Delivering, installing and operating existing submersible pumps (including installation of the fish screen);
  - v. Supply, installation, operation, and maintenance of temporary generator;
  - vi. Monitoring the Road to Nowhere Bridge during the construction works, while ensuring mobilization of equipment over the bridge as per Concentric report (Report No. 17-7519 dated 12 August 2018), included in this RFT;
  - vii. Monitoring pumping operations (record monitoring data) and compliance with all conditions included in the "Water Licence" (3AM-IQA1626 Amendment No. 4) included in this RFT;
  - viii. Provide a Spill Contigency Plan compliant with Water Licence included;
  - ix. Coordinate with RCMP for Site access through RCMP Shooting Range;
  - x. Provide an Erosion and Sedimentation Control Plan compliant with the Water Licence included;
  - xi. Provide a Fish and Fish Habitat Monitoring Plan compliant with the Water Licence included;
  - xii. Operation of pumping equipment shall not commence until written approval is granted by the City of Iqaluit;
  - xiii. Deliver and maintain a Site office and all amenities required as per the Occupational Health and Safety Act, including any mobilization and demobilization; and
  - xiv. Deliver, maintain and return the Operator shack purchased by the City of Iqaluit from the City's storage facility.

#### 2. CONTRACTOR'S USE OF PREMISES

#### 2.1 General





- 2.1.1 The City of Iqaluit will require 24 hours pumping support through week days, weekends and public holidays during the contract period. Pumping activities will be constrained by water levels in the Apex River and water levels in Lake Geraldine.
- 2.1.2 The Contractor shall arrange with the City for easement of construction, storage and access to all of the Works within the Owner's property line.
- 2.1.3 Do not enter upon or occupy with workers, tools or materials any land other than public streets, roadways, rights-of-way or easements described within the contract documents except after written consent has been received from the property owner.
  - i. For construction work that will be taking place within the City's right-of-way, the Contractor must submit to the City Representative a completed <u>City of Iqaluit Utility Permit Application</u>, along with all supplementary documents, for review and approval with the Department of Public Works and Engineering. Assume a maximum processing time of 20 business days. No work can proceed until approval has been provided in writing by the City Representative.
  - ii. For construction work that will require a closure of a road, the Contractor must submit to the City Representative a completed City of Iqaluit Road Closure Permit Application, along with all supplementary documents, for review and approval with the Department of Public Works and Engineering. Assume a maximum processing time of 20 business days. No work can proceed until approval has been provided in writing by the City Representative.
- 2.1.4 The Contractor must ensure all work is executed in accordance with the relevant City of Iqaluit By-Law's.
- 2.1.5 A temporary fence and access gate are to be erected to separate the work area from the plant operating area or public areas, whichever applies herein, in order to ensure the safety of City staff and the general public at all times throughout the execution of the works.

### 2.2 Staging Area

- 2.2.1 The Contractor shall clearly delineate their working area with appropriate signage identifying company name, site contact telephone number, emergency contact information, site hazards, and personal protective equipment requirements prior to commencement of any work. Do not impede emergency egress from any area.
- 2.2.2 Confine operations within easements for construction, storage and access.
- 2.2.3 Do not enter upon or occupy land with labour, tools or materials other than the easements for construction except after written consent has been received from the City Representative.





- 2.2.4 Do not encumber site with materials or equipment.
- 2.2.5 Contractor to maintain the grounds within their working limits and around any equipment or storage areas. This includes removal of waste material, snow plowing and shoveling snow.

### 2.3 Storage

- 2.3.1 The Contractor shall provide suitable storage areas for construction materials.
- 2.3.2 Contractor shall obtain permission from the City Representative before storing any materials in any new areas under construction.
- 2.3.3 Excess material resulting from any or all excavations are the property of the City. Its disposal by the Contractor as part of this contract shall be as directed by the City Representative unless the City Representative waives this requirement. Under this circumstance, the Contractor shall be responsible for the disposal of any or all of the excess materials.
- 2.3.4 The City will not be liable for lost, stolen, or damaged material, equipment and tools that are stored within the project site.

### 2.4 Entry of City Staff into Contractor's Working Limits

- 2.4.1 The City may require access to the site during the construction period for the purpose of maintaining normal operations of the equipment. Cooperate with the City in scheduling construction activities to facilitate the City's usage and to minimize conflict.
- 2.4.2 Maintain the entire works free of debris, snow and ice at all times, including access to all buildings and process equipment, which continues to be operated and/or be maintained by City staff.
- 2.4.3 Prepare a written procedure regarding the entry of City staff into the construction site and submit to the City Representative for review. The procedure must be communicated to all operating staff who may enter the construction site.

#### 3. COORDINATION

### 3.1 Construction Coordination with City of Igaluit

3.1.1 Coordinate activities on the site with the City Representative.





- 3.1.2 Do not close lines, open or close valves, or take other action which would affect the operation of existing systems, except as specifically required by the Contract Documents and only after the prior authorization of the City Representative has been obtained.
- 3.1.3 All temporary equipment, tools, materials, labour, and miscellaneous equipment must be scheduled and available at the Site in advance.

### 3.2 Coordination of Trades and Subcontractors

- 3.2.1 The Contractor shall ensure cooperation and coordination with and between the trades and Subcontractors to ensure that the Work is carried out expeditiously and in a satisfactory manner. The Contractor shall be responsible for all extra costs arising from failure to properly coordinate the Work with the work of others.
- 3.2.2 Coordinate mechanical and electrical work for equipment being installed.

### 3.3 Cooperation with Other Contractors

- 3.3.1 Other contracts may be awarded to construct adjacent work to which this contract work connects.
- 3.3.2 At the interference with other contracts, jointly plan and coordinate with other contractors the work so that the project:
  - i. Will not be delayed.
  - ii. Will not be endangered in any way.
  - iii. Will be correctly connected.
  - iv. Will not cause the City to be designated as the "Constructor" as set out in the Occupational Health and Safety Regulations.
- 3.3.3 Where any equipment or materials are supplied by the City, coordinate unloading, transfer, installation, testing and placing into operation.
- 3.3.4 Where other work is in progress within or adjacent to the limits of this Contract, co-operate and co-ordinate with other Contractor(s), Utility Companies, and the City and allow reasonable, free access to their work at all times.
- 3.3.5 Co-operate and make suitable working arrangements with other Contractor(s).
- 3.3.6 Notify the City Representative in advance and obtain approval in writing from the City Representative for all arrangements made with other Contractor(s).





### 4. SUBMITTALS

### 4.1 General

- 4.1.1 The Contractor will be required to provide and execute the following submittals as part of the Works:
  - i. Site-Specific Health and Safety Plan.
  - ii. Traffic Control Plan.
  - iii. Waste Disposal Plan.
  - iv. Inspection and Testing Plan.
  - v. Construction Schedule and monthly updates
  - vi. Cash Flow Expenditure Forecast with monthly updates
  - vii. Shop drawings for permanent and temporary works.
  - viii. Product data sheets.
  - ix. Equipment testing and facility commissioning plans.
  - x. Tests and reports.
  - xi. Maintenance data and operating instructions.
  - xii. Erosion and sediment control plan.
  - xiii. Fish Monitoring Plan.
  - xiv. Spill Contigency Plan.
- 4.1.2 For submittals facsimile transmissions will not be acceptable.
- 4.1.3 Do not proceed with work until the City Representative, or their designate, has reviewed relevant submissions.
- 4.1.4 All reports generated as part of the Inspection and Testing Plan, must be submitted to the City Representative within two (2) weeks of the completion of the inspection and/or test.

### 4.2 Administration





- 4.2.1 Submit to the City Representative a list of submittals for review within two (2) weeks of the Award of the Contract. Submit with reasonable promptness and in orderly sequence so as not to cause delay in Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed.
- 4.2.2 Work affected by submittals shall not proceed until review is complete.
- 4.2.3 Present shop drawings, product data sheets in SI Metric units and in English.
- 4.2.4 Where items or information is not produced in SI Metric units, converted values are acceptable.
- 4.2.5 Where items or information is not produced in English, translate into English.
- 4.2.6 Review submittals prior to submission to the City Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and coordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and shall be considered rejected.
- 4.2.7 Notify the City Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- 4.2.8 Verify that field measurements and affected adjacent Work are coordinated.
- 4.2.9 Contractor's responsibility for errors and omissions in submission is not relieved by City Representative's review of submittals.
- 4.2.10 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by the City Representative's review.

### 4.3 Procedures

- 4.3.1 Direct all submittals to the City Representative.
- 4.3.2 Unless indicated otherwise, submit one (1) electronic copy of all submittals.
- 4.3.3 Electronic Submittals:
  - i. Each electronic submission shall be produced in Adobe Acrobat Portable Document Format (PDF).
  - Include a copy of the Transmittal of Contractor's Submittal form with each electronic submittal.





- ii. Submit new electronic files for each submittal.
- iii. Detailed procedures for handling electronic submittals will be discussed at the project kick-off meeting.
- 4.3.4 Within seven (7) working days of contract award, submit a complete list of submittals that will be provided as part of the Contract.
- 4.3.5 Accompany each submittal with a transmittal letter, containing:
  - i. Project/ Contract Title.
  - ii. Date of Submittal.
  - iii. Names of Contractor, Subcontractor or Supplier, and manufacturer as appropriate.
  - iv. Numbering and Tracking System:
    - A. Sequentially number each submittal.
    - B. Resubmission of submittal shall have original number with sequential alphabetic suffix.
  - v. Name, tag no. and quantity of equipment/ material included in each submittal.
  - vi. Section of work to which submittal applies.
  - vii. Deviation or variation from Contract Documents.
  - viii. Contractor's stamp, signature and statement to certify that the submittal has been reviewed, checked, and approved for compliance with Contract Documents.
  - ix. Include the Contractor's written response to each of the City Representative's review comments with resubmission of submittals stamped "Revise and Resubmit."
  - x. Other pertinent data.

### 4.3.6 Processing Time:

- i. Time for review shall commence on City Representative's receipt of submittal.
- ii. The City Representative will act upon the Contractor's submittal and transmit response to Contractor no later than ten (10) working days after receipt, unless otherwise specified.





- iii. Resubmittals will be subject to same review time.
- iv. No claims will be allowed that arise because of delays in re-submissions and review of shop drawings.

### 4.3.7 Resubmittals:

- i. Clearly identify each correction or change made and include revision date.
- ii. Provide clear response to each itemized comment by the City Representative on the submittal, whether or not action has been taken, and description of action.
- iii. No adjustment of Contract Time or Price will be allowed due to delays in progress of Work caused by rejection and subsequent resubmittals.
- iv. The Contractor is noted that the first two submissions of each submittal (original submittal and subsequent resubmittal) will be reviewed at no charge to the Contractor. Any cost for processing/ reviewing submittals which have been reviewed more than two times will be deducted from the contract amount owed to the Contractor.

### 4.3.8 Incomplete Submittals:

- i. The City Representative will return entire submittal for the Contractor's revision if preliminary review deems it incomplete.
- ii. When any of the following are missing, submittal will be deemed incomplete:
  - A. Transmittal of Contractor's submittal completed and signed.
  - B. All requested information is not provided.
  - C. Submittals missing Professional Engineer's seal and signature, where it is required.

### 5. PROJECT MEETINGS

#### 5.1 General

- 5.1.1 The City Representative will schedule the project meetings throughout progress of the Work.
- 5.1.2 The City Representative will prepare meeting agenda with regular participant input and distribute the written notice of each meeting, preside at meetings, record minutes to





include significant proceedings and decisions, and reproduce and distribute copies of minutes within 5 days after each meeting to participants and parties affected by meeting decisions.

- 5.1.3 The meetings will be coordinated by teleconference by the City Representative. Instructions will be provided by the City Representative upon contract award.
- 5.1.4 Representatives of Contractor, Subcontractor and suppliers attending meetings shall be qualified and authorized to act on behalf of the party each represents.

### 5.2 Project Kick-Off Meeting

- 5.2.1 After award of Contract, the Project Authority will request a meeting of parties in contract to discuss and resolve administrative, health and safety procedures and responsibilities.
- 5.2.2 The Project Kick-Off meeting agenda may include the following, as a minimum:
  - i. Appointment of official representative of participants in the Work.
  - ii. Schedule of Work, progress scheduling, and holdpoints.
  - iii. Schedule of submission of Shop Drawings and Submittals.
  - iv. Major product delivery and priorities.
  - v. Permits.
  - vi. Status of Bonds and insurance.
  - vii. Sequencing of critical path work items.
  - viii. Progress payment procedures, administrative procedures, photographs, holdbacks.
  - ix. Use of site, access, office and storage areas, security and temporary facilities.
  - x. Contemplated Change Notices, Change Orders, procedures, approvals required, mark-up percentages permitted, time extensions, overtime, administrative requirements.
  - xi. Owner-provided equipment.
  - xii. Record drawings.
  - xiii. Take-over procedures, acceptance, warranties.





- xiv. Contractor's safety plan and representative.
- xv. Site security.

### 5.2.3 Attendees will include:

- i. Owner's Representative.
- ii. City's Representative.
- iii. Contractor's project manager.
- iv. Contractor's resident Site Superintendent.
- v. Engineer's representative.
- vi. Others as appropriate.

### 5.3 Progress Meetings

- 5.3.1 The City Representative will schedule regular progress meetings by teleconference, conducted bi-weekly to review the Work, progress schedule, shop drawings/ submittals, application of payment, contract modifications, and other matters needing discussion and resolution.
- 5.3.2 Project progress review meeting agenda may include the following, as a minimum:
  - i. Review and approval of minutes of previous meeting.
  - ii. Review of Work progress since previous meeting.
  - iii. Field observations, problems and conflicts.
  - iv. Problems which impede construction schedule.
  - v. Review of off-site fabrication or material procurement delivery schedules.
  - vi. Corrective measures and procedures to regain projected schedule.
  - vii. Revisions to construction schedule.
  - viii. Progress and schedule, during succeeding work period.
  - ix. Review shop drawing and submittal schedules: expedite as required.





- x. Maintenance of quality standards.
- xi. Pending changes and substitutions.
- xii. Review proposed changes for effect on construction schedule and on completion date.
- xiii. Review safe work procedures related to the construction work.
- xiv. Coordinate the Contractor's requests for shutdowns, tie-ins, and City permits.
- xv. Review of progress payment.

### 5.3.3 Attendees will include:

- i. City Representative.
- ii. Contractor project manager.
- iii. Contractor resident site superintendent.
- iv. Engineer's representative(s).
- v. Others as appropriate.

### **END OF SECTION**





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### A. SUMMARY OF WORK

### 1.1 **DEFINITION**

The City of Iqaluit is hereinafter and elsewhere in the Contract Documents referred to as the Owner. The contract documents may refer to "the Owner", "the City of Iqaluit", "the City" and "City". All these have the same meaning as "the Owner".

- 1.2 The contract documents may refer to "City Representative", "Engineer", "Consultant", "Owners Agent" and "Contract Administrator". All these have the same meaning as "City Representative".
- 1.3 Where the word "provide" is used in any General Requirements sections or the Terms of Reference, it shall mean furnishing and incorporating a specified item, product, or material in the Works, including all necessary labour, materials, and equipment to perform the Work required, ready for use by the Owner.

#### 2. GENERAL SUMMARY

- 2.1 Recognize that the Work under the Contract is to be performed in a facility, location, area that must be kept in continuous uninterrupted operation, or where municipal services must be maintained. Plan and schedule the Work consistent with specified operational constraints and with the objective of uninterrupted operation of the existing facility, structure, and/or service provided by the City.
- 2.2 Supervise, organize, coordinate and direct all construction operations described in the contract documents, regardless of the section in which the works are specified. The Contractor shall resolve conflicts arising between trades, sub-contractors, suppliers and/or other contractors working in the adjacent area.
- 2.3 Construct and test foundations, structures, pipelines, buildings, tanks, equipment and other facilities shown on the contract drawings and specified within the terms of reference.
- 2.4 Supply, install, calibrate and commission all mechanical, electrical, process, instrumentation and communication equipment shown on the contract drawings and specified within the terms of reference. Include operating assistance to the Owner as described.
- 2.5 In addition to constructing the works shown on the drawings and described within the terms of reference, design, construct, and maintain, unless otherwise specified on shown on the drawings or described in the terms of reference, all temporary works and facilities required for the construction of the works. Remove temporary works and facilities when construction is completed. Temporary works and facilities include, but are not limit to, the following:
  - .1 All security fencing whether permanent or temporary.
  - .2 Shoring and bracing systems for excavations whether part of all is left in place or not, shall be designed, approved and stamped by a Professional Engineer Licensed in Nunavut.
  - .3 Construction access roads and related items.





- .4 Excavation and/or dewatering systems.
- .5 Formwork for concrete.
- .6 Falsework and bracing for formwork or for other parts of the works while under construction.
- .7 Bracing and shoring for partially completed steelwork, precast concrete, existing structures and pipelines, or other assembly.
- .8 Scaffolding.
- .9 Temporary bypass pumping systems to divert flows away from the work area so that services are uninterrupted, while ensuring the work can be performed safely.
- .10 Protection for existing structures and facilities as necessary for the construction to proceed.
- .11 Temporary power and/or utilities necessary to existing City buildings and/or facilities, in order to ensure services are not interrupted as a result of the work.
- .12 Curtains to control the migration of dust during work inside existing buildings, structures, and rooms.
- .13 Temporary barriers and enclosures.
- .14 Temporary utilities (water, power, light, instrumentation, beating, ventilation services and sanitary facilities, etc.).
- .15 Piping and equipment support.
- .16 Snow removal around the job site.
- .17 Temporary vehicular access and parking development, maintenance, and restoration.
- .18 Regrading of gravel roads affected by construction works.
- 2.6 Contractor to be responsible for all means and methods required to execute the work, as described in the Terms of Reference.

#### 3. WORK BY OTHERS

3.1 Coordinate work of other Contractors. Report promptly to City Representative, in writing, any defects which may interfere with proper execution of the Work for this contract.

### 4. CODES AND PERFORMANCE REQUIREMENTS

- 4.1 Perform work in accordance with National Building Code of Canada (NBC) and any other code of territorial or local application provided that in any case of conflict or discrepancy, the more stringent requirements shall apply.
- 4.2 Meet or exceed the requirements of:





- .1 Contract documents.
- .2 General requirements and terms of reference.
- .3 Addenda.
- .4 Reviewed Shop Drawings.
- .5 Field Instructions and Change Orders.
- .6 Other modifications to Contract.
- .7 Field test reports.
- .8 Copy of approved work schedule.
- .9 Manufacturer's installation and application instructions.

### 5. WORK COMPLIANCE

- 5.1 Provide all work during its progress and at its completion to the lines, levels, and grades shown.
- 5.2 Build all work in a thoroughly substantial and workmanlike manner, in accordance with the Contract Drawings, General Requirements, and Terms of Reference, subject to such modifications and additions as may be deemed necessary during its execution. In no case will any work in excess of the requirements of the Drawings, General Requirements or Terms of Reference be paid for, unless approved in writing by the City Representative.

### 6. ENGINEER DESIGN

Where general requirements or terms of reference require work to be designed by an engineer, engage a professional engineer licensed in the Territory of Nunavut within demonstrated experience to design such work.

### 7. DOCUMENTS REQUIRED

- 7.1 Maintain at job site, one copy each document as follows:
  - .1 Contract Documents
  - .2 Contract Drawings
  - .3 Addenda
  - .4 Reviewed Shop Drawings
  - .5 List of Outstanding Shop Drawings
  - .6 Change Orders





- .7 Other Modifications to Contract
- .8 Field Test Reports
- .9 Copy of Approved Works Schedule
- .10 Site Specific Health and Safety Plan and Other Safety Related Documents
- .11 Current as-built document of construction work in progress
- .12 Other documents as specified

### 8. SUBSTANTIAL COMPLETION

- 6.1 In addition to the requirements in the General Conditions and Supplementary General Conditions, Substantial Completion shall only be issued once the following requirements have been addressed to the satisfaction of the City Representative:
  - .1 Successful testing, start-up and commissioning of all equipment and/or systems specified in the Contract Documents.

### **END OF SECTION**





### B. CONTRACTORS USE OF PREMISES

#### 1. DESCRIPTION

1.1 This Section specifies requirements for the Contractor's use of project site during the construction.

#### 2. GENERAL

- 2.1 Normal working hours shall be Monday to Friday, 7:00am to 5:00pm, excluding statutory holidays. No work shall be permitted outside of these hours within the Contractor first obtaining written approval from the City Representative and Owner, five (5) working days in advance of the planned work.
- 2.2 The Contractor shall arrange with the City for easements for construction, storage and access to all the Works within the Owner's property line.
- 2.3 Do not enter upon or occupy with workers, tools or materials any land other than public streets, roadways, rights-of-way's or easements shown on the Contract Drawings except after written consent has been received from the property owner.
- 2.4 The Contractor shall obtain written approval from the City Representative for shutdown and tie-in work to existing facilities and structures. The City's staff will be responsible for operations of the existing facilities and structures during the construction period.
- 2.5 The Contractor shall obtain written approval from the City Representative for work that will be executed within a municipal right-of-way, and for partial or full closure of municipal roadways.
- 2.6 Do not impede normal operation of existing facilities and structures.
- 2.7 A temporary fence and access gate are to be erected to separate the work area from the plant operating area as specified herein and as directed by the City Representative.

### 3. STAGING AREA

- The staging area will be identified on the contract drawings or provided by the City Representative at the pre-construction meeting.
- 3.2 Locate construction trailers, laydown areas, and temporary buildings under the direction of the City Representative.

### 4. WORK AREA

4.1 Contractor shall clearly delineate the entire perimeter of his working area with a sturdy metal fence of at least 1.8m height, with sufficient access gates, complete with signage identifying company name, site contact telephone number, and emergency contact information prior to commencement of any work.





- 4.2 All points of entry into the Contractor's working area, including stair and walkways, shall be similarly controlled by sturdy barriers and signage. Do not impede emergency egress from any area.
- 4.3 Confine operations within easements for construction, storage and access.
- 4.4 Install, secure and maintain fencing along working and storage areas, access routes and both sides of easements.
- 4.5 Do not enter upon or occupy any land with labour, tools or materials other than the easements for construction except after written consent has been received from property owner.
- 4.6 Do not encumber site with materials or equipment.
- 4.7 Where the work takes place in different areas of the facilities, structures, or work areas at different times of the contract, a 'rolling' definition of working area can be utilized.

### 5. STORAGE

- 5.1 Contractor shall provide suitable storage areas, as well as security if needed, for construction materials. Storage and security of construction materials will be the responsibility of the Contractor.
- 5.2 Contractor shall obtain permission from the City Representative before storing any materials in any new facility or work areas under construction.
- 5.3 Excess materials resulting from any or all excavations are the property of the Owner. Its disposal by the Contractor as part of the contract shall be as directed by the Owner unless the Owner waives this requirement. Under this circumstance, the contractor shall be responsible for the disposal of any or all of the excess materials.

### 6. ENTRY OF OWNER'S STAFF INTO CONTRACTOR'S WORKING LIMITS

- 6.1 The Owner may require access to the work site during the construction period for the purpose of maintaining normal operation of City infrastructure and services. Cooperate with the Owner in scheduling construction activities to facilitate the Owner's usage and to minimize conflict.
- 6.2 Maintain the entire works free of debris, snow and ice at all times, including access to all buildings, facilities and structures which continues to be operated and/or maintained by Owner's staff.
- 6.3 Prepare a written procedure regarding the entry of Owner's staff into the construction site and submit to the City Representative for review. The procedure must be communicated to all operating staff who may enter the construction site.
- The existing facilities and/or structures operate 24 hours per day, 7 days per week. In the event of conflict between construction activities and general operations, operations shall





have priority. Take every precaution to avoid interfering within routine operation and maintenance.

### **END OF SECTION**





### C. COORDINATION

#### 1. CONSTRUCTION COORDINATION WITH CITY OPERATIONS STAFF

- 1.1 The existing facilities, structures and systems operate 24 hours a day, 7 days per week. In the event of a conflict between construction operations and routine City operations, City operations have priority. Take every precaution to avoid interfering with routine operation and maintenance activities. Reschedule construction activities, if required, without change to the contract price.
- 1.2 Coordinate activities on the site and in the existing buildings/ facilities/ structures with the City Representative.
- 1.3 Perform work continuously during critical shutdowns, connections and changeover, and as required to prevent interruption of City operations.
- 1.4 The Contractor must identify work activities that may impact the operation and maintenance activities of the City operations staff, in advance of the scheduled work, at least 5 business days prior to the work. The Contractor shall submit to the City Representative a detailed work plan listing work activities for the next 14 calendar days, detailing the works that will affect City operations staff.
- 1.5 Do not close lines, open or close valves, or take other action which would affect the operation of the existing systems, except as specifically required by the Contract Documents and only after the prior authorization of the City Representative has been obtained.
- 1.6 Coordinate the proposed work with the City Representative prior to process shutdowns. Under no circumstances stop the work at the end of a normal working day if such action may cause a cessation of any facility or structure operating process. In such cases, remain on site until the necessary work is complete.
- 1.7 Coordinate activities on the site and in the existing buildings/ facilities with the City Representative.
- 1.8 Perform work continuously during critical shutdown, connection and changeover, and as required to prevent interruption of the facility operation or City services.
- 1.9 Shutdown of existing facilities/ structures and tie-ins:
  - .1 When the Contractor requires a part of an existing facility, structure or process system shutdown for execution of construction activities, a formal shutdown request must be made in writing at least 14 calendar days in advance of the requested shutdown date. The shutdown request shall describe in detail the proposed method, and the procedures proposed to accomplish each portion of the Work that requires an interruption to the operation of the existing facility, structure or system. The Contractor shall not begin any such Work until it has received written acceptance of the methodology and approach from the City Representative. The Contractor shall include in its plan the specific number of





work hours to complete each facility interruption, along with measures to mitigate risk to the City.

- .2 The Contractor participating in the planning and execution of the shutdown shall coordinate with the City staff on the planning of the shutdown activity. The Contractor and City staff shall work together to establish a shutdown specific energy and equipment lockout strategy that is required for each shutdown of existing facilities, structures, and systems for all work that includes the Contractor's work to connect new systems to the existing facilities and structures. The operator is not obliged to provide the shutdown within the 14-day period if the effectiveness of the plant operations could be compromised. The operator will not unreasonably delay or refuse to make the plant processes or systems available for the Contractor's construction activities. A delay or refusal shall be based on the operator's opinion that the performance of the plant will be compromised.
- .3 At each location where tie-in is required, the Contractor shall provide a complete system of temporary works including bulkheads, pumps, power, equipment, and labour as necessary to maintain facility/ structure/ system operations, and to allow for construction of the new structures/ systems.
- .2 All temporary equipment, tools, materials, labour, and miscellaneous equipment must be scheduled and available at the Site in advance of any shutdowns. The Owner will not be responsible for delays or claims as a result of the Contractors lack of coordination.
- .3 The City reserves the right to cancel any scheduled shutdown if system or weather conditions dictate, at no additional cost to the City.
- .4 Prior to making major tie-ins to existing process units and structures, demonstrate that the equipment installed in all new structures is fully functional. Connections to existing works will not be permitted until all equipment in the new adjacent works operates to the satisfaction of the City Representative. No claim for delay will be entertained due to unsatisfactory operation of any equipment.
- .10 Operations provided by City staff:
  - i Access to City facilities and structures.
  - .ii Opening and closing of existing valves and gates in existing buildings, structures, or systems.
  - .iii Isolation of existing process piping.
- .11 In the event any existing facility or structure is damaged, changes mode of operation or there is a risk of actual process upset due to the Contractor's work activity, the Contractor shall stop work immediately, contact the City Operations representative, report the incident to the City Representative, and make the Contractor's on-site resources available at the request and direction of the City Operations Representative at no extra cost to the project to mitigate any damage.





- .12 Contractor shall supply and maintain all appropriate and necessary equipment for confined space entry operations in accordance with applicable regulations.
- .13 The Contractor shall coordinate confined space entry operations where multiple parties are involved in accordance with the Nunavut Safety Act and Occupational Health and Safety Regulations.

### 2. COORDINATION OF TRADES AND SUBCONTRACTORS

- 2.1 The Contractor shall ensure cooperation with and between the trades and Subcontractors to ensure that the Work is carried out expeditiously and in a satisfactory manner. The Contractor shall be responsible for all extra costs arising from failure to properly coordinate the Work with the work of others
- 2.2 Coordinate civil, structural, architectural, mechanical, electrical, and instrumentation and work for the equipment and systems being constructed. Planning and coordinate the work in a timely manner so that the work proceeds expeditiously.
- 2.3 Extras will not be considered, based on differences of interpretation of the terms of references, as to which trade shall supply and install certain items or materials. Such coordination is entirely the responsibility of the Contractor.

#### 3. COOPERATION WITH OTHER CONTRACTORS

- 3.1 Other contracts may be awarded to construct adjacent work to which this contract work connects.
- 3.2 At the interference with other contracts, jointly plan and coordinate with other contractors the work so that the project:
  - .1 Will not be delayed.
  - .2 Will not be endangered in any way.
  - .3 Will be correctly connected.
  - .4 Will not cause the City to be designated as the "Prime Contractor" as set out in the Safety Act.
- 3.3 Where any equipment is supplied by the Owner, coordinate unloading, transfer, installation, testing and placing into operation.
- 3.4 Where other work is in progress within or adjacent to the limits of this Contract, cooperate and coordinate with other Contractor(s), Utility Companies and the City of Iqaluit, and allow reasonable, free access to their work at all times.
- 3.5 Cooperate and make suitable working arrangements with other Contractor(s).
- 3.6 Notify the City Representative in advance and obtain approval in writing from the City Representative for all arrangements made with other Contractor(s).





### 4. UTILITY NOTIFICATION AND COORDINATION

- 4.1 Coordinate the Work with various utilities within Project limits. The Contractor shall notify applicable utilities prior to commencing the Work. The Contractor shall also notify the applicable utilities if any damage occurs, or if conflicts or emergencies arise during the execution of the Work.
- 4.2 Should any piping, sewers, cables or similar services be encountered during performance of the work that are not known from the City or other utility companies records, the Contractor shall notify the City Representative and the appropriate utility agency and shall not proceed with their removal or cutting until direction has been provided.

### 5. WORKING WITIN THE A CITY EASEMENT AND/OR RIGHT-OF-WAY

- 5.1 For construction work that will be taking place within a City easement and/or right-of-way, the Contractor must submit to the City Representative a completed City of Iqaluit Utility Permit application, along with all supplementary documents, for review and approval with the Department of Public Works and Engineering.
- 5.2 Supplementary documents shall include:
  - .1 Brief work plan methodology describing the work that will be taking place within the easement and/or right-of-way, the means of construction, temporary structures that will be used, the equipment that will be used.
  - .2 Schedule outlining duration of work, along with all phases and activities that will comprise the work.
  - .3 Traffic control plan (if applicable).
- 5.3 Utility permits must be submitted 20 business days in advance of the planned Work. The Contractor will not be granted an extension of time to the Contract, should they fail to submit a permit application within the timelines stipulated.
- No work can proceed until approval has been provided in writing by the City Representative.
- 5.5 The Contractor must account for the time to review and approve permit applications within their construction schedule.
- 5.6 Pay relevant permit fees and charges.

#### 6. PARTIAL OR FULL CLOSURE OF A MUNICIPAL ROADWAY

- 6.1 For construction work that will require a partial or full closure of a municipal roadway, the Contractor must submit to the City Representative a completed City of Iqaluit Road Closure Permit Application, along with all supplementary documents, for review and approval with the Department of Public Works and Engineering.
- 6.2 Supplementary documents shall include:





- .1 Brief work plan methodology describing the work that will be taking place within the easement and/or right-of-way, the means of construction, temporary structures that will be used, the equipment that will be used.
- .2 Schedule outlining duration of work, along with all phases and activities that will comprise the work.
- .3 Traffic control plan. Refer to Section E Special Project Procedures regarding traffic control plan requirements.
- Road closure permits must be submitted 20 business days in advance of the planned Work. The Contractor will not be granted an extension of time to the Contract, should they fail to submit a permit application within the timelines stipulated.
- 6.4 No work can proceed until approval has been provided in writing by the City Representative.
- 6.5 The Contractor must account for the time to review and approve permit applications within their construction schedule.
- 6.6 Pay relevant permit fees and charges.

#### 7. WATER AND SEWER CONNECTIONS/ DISCONNECTIONS

- 7.1 For tie-in to City water and/or sewer infrastructure, the Contractor must submit to the City Representative a completed City of Iqaluit Water & Sewer Connection/ Disconnection Permit Application, along with all supplementary documents, for review and approval with the Department of Public Works and Engineering.
- 7.2 Supplementary documents shall include:
  - .1 Brief work plan methodology describing the work that will be taking place within the easement and/or right-of-way, the means of construction, temporary structures that will be used, the equipment that will be used.
  - .2 Schedule outlining duration of work, along with all phases and activities that will comprise the work, along with dates/ times when City operations support is required to shutdown/ isolation of City systems.
  - .3 Traffic control plan (if applicable). Refer to Section E Special Project Procedures regarding traffic control plan requirements.
  - .4 By-pass plan (if applicable). Refer to Section E Special Project Procedures regarding by-pass plan requirements.
- 7.3 Utility permits must be submitted 20 business days in advance of the planned Work. The Contractor will not be granted an extension of time to the Contract, should they fail to submit a permit application within the timelines stipulated.
- 7.4 No work can proceed until approval has been provided in writing by the City Representative.





- 7.5 The Contractor must account for the time to review and approve permit applications within their construction schedule.
- 7.6 Pay relevant permit fees and charges.

### 8. WORKING IN EXISTING BUILDINGS

- 8.1 Obtain permission in writing from the City Representative prior to commencing work within an existing City building and/or facility, at least 7 business day prior to the start of work. The Contractor is to notify the City Representative what work will be taking place within the existing building, along with the measures that will be taken in order to ensure separation of work from City operations. Refer to Section E Special Project Procedures work permits.
- 8.2 The Contractor shall be responsible for enforcement of fire protection methods and procedures and adherence to local fire regulations, including any applicable requirements of the Safety Act and Occupational Health and Safety Regulations during the execution of the Work.
- 8.3 The Contractor shall ensure that existing fire protection and alarm systems are not obstructed, shut-off or made inactive at any time for the duration of the Contract. The Contractor shall not use any fire hydrant, standpipe or hose system for other than fire protection purposes.

**END OF SECTION** 





### D. REGULATORY REQUIREMENTS

### 1. SUBMITTALS

1.1 Quality Control Submittals: Submit certificates from inspecting authorities for electrical work and pressure piping, etc.

#### 2. APPLICABLE CODES

- 2.1 Comply with the latest edition of the following statues and codes and all amendments thereto:
  - .1 The Nunavut Building Code Act and Regulations.
  - .2 National Building Code of Canada.
  - .3 Safety Act and Occupational Health and Safety Regulations.
  - .4 Nunavut Boilers and Pressure Vessel Act and Regulations.
  - .5 Canadian Electrical Code.
  - .6 Nunavut Electrical Protection Act.
  - .7 Nunavut Gas Protection Act.
  - .8 Codes and Standards of the National Fire Protection Association (NFPA).
  - .9 Nunavut Environmental Protection Act.
  - .10 Nunavut Waters and Nunavut Surface Rights Tribunal Act.
  - .11 City of Iqaluit Municipal Design Guidelines.
  - .12 City of Iqaluit By-Laws:
    - .i By-Law No. 200 Water & Sewer Services.
    - .ii By-Law No. 137 Highway Obstructions.
    - .iii By-Law No. 138 Highway Occupancy.
    - .iv By-Law No. 319 Highway Traffic.
- 2.2 The Contractor shall conform to and enforce strict compliance with the Safety Act and Occupational Health and Safety Regulations. For purposes of the Safety Act and Occupational Health and Safety Regulations, the Contractor will be designated the "Prime Contractor" and assumes the responsibilities of the "Prime Contractor" as set out in the Act and its regulations.





### 3. PERMITS, APPROVALS, AND LICENCES

- 3.1 Apply for, obtain, and pay for all permits, approvals, and licenses required for the project, including but not limited to:
  - .1 Canadian Standards Association (CSA).
  - .2 Field certification of equipment.
  - .3 Electrical supply and inspection authorities including Government of Nunavut Electrical Safety authority. Contractor shall apply for permit, and review of installations.
  - .4 City of Iqaluit utility permits.
  - .5 City of Iqaluit road closure permits.
  - .6 City of Igaluit water and sewer service connection/ disconnection permits.
  - .7 Government of Nunavut Building permits.
  - .8 Government of Nunavut Boiler and Pressure Vessel permits.
  - .9 Government of Nunavut Gas and Liquified Petroleum Gas permits.
  - .10 Other permits required for the work from governing federal, territorial and municipal authorities having jurisdiction.
- 3.2 Arrange for regular inspections and a final inspection with:
  - .1 The territorial electrical safety inspector.
  - .2 The territorial building inspector.
- 3.3 Arrange for all other regular inspections and final inspections.
- 3.4 The Contractor shall be solely responsible, without limitations, for any delays arising from the Contractor's failure to plan for the required inspections and to ascertain the availability of the Permit/Approval/Licensing Inspectors to complete the required inspections for the Works under this Contract. The related costs and expenses incurred by the Contractor shall be borne by the Contractor, with no change in the Contract Price and/or Contract Time.

### **END OF SECTION**





### E. SPECIAL PROJECT PROCEDURES

### 1. UTILITIES

The Contractor's attention is drawn to the presence of utilities on and around this site. The locations of utilities as shown on the Contract Drawings are approximate only and are not guaranteed. The Contractor shall be responsible for obtaining a stake-out of the utility from the company involved. The Contractor shall co-ordinate his work with the Utility Company and the Owner of concerned, should there be any bracing, removal or relocation of the pole lines or underground utility required. There will be no additional payment to the Contractor for any delays due to the relocation of utilities.

#### 2. LIMITS OF CONSTRUCTION

- 2.1 The Contractor shall note that all work is to be contained within the limits of construction as noted in the Contract Documents. Trespassing outside these limits is not allowed. These requirements will be strictly enforced.
- 2.2 The Contractor shall coordinate the use of premises for staging, construction, storage and access area under the direction of the City Representative.

### 3. WORK PERMITS

- 3.1 When working in existing City facilities, buildings, and structures, the Contractor is to abide by the Owner's Location Work Permit. Contractor's site representatives will be expected to attend an initial meeting to complete this Permit together with the Owner at minimum every 7 business days in advance or with every change in location or nature of the work, to review safe work procedures as it relates to work within the existing facility. No work will be allowed to take place in existing facilities until the Location Work Permit procedure is utilized.
- 3.2 Provide a detailed work plan and schedule outlining all proposed tasks and timing for the related work. Meet with the City Representative and Owner as may be required to clarify and coordinate activities and timing. The City will review the request and return with comments if any.

#### 4. TRAFFIC CONTROL

- 4.1 The Contractor shall develop a site-specific Traffic Control Plan (TCP) as per the site condition and submit to the City Representative for review and approval. TCP must be submitted 7 business days prior to start of construction work.
- 4.2 Contractor shall follow all standards traffic control procedures in accordance with the requirements of the Safety Act and Occupational Health and Safety Regulations.
- 4.3 Comply with requirements relevant City of Iqaluit By-Laws with respect to road obstructions and occupancy.
- 4.4 When working on travelled ways:





- .1 Place equipment in position which presents minimum interference and hazard to travelling public.
- .2 Keep equipment units as close together as working conditions permit and preferably on same side of travelled way.
- .3 Do not leave equipment on travelled way overnight.
- 4.5 Do not close any lanes or roads without approval of City Representative via a Road Closure permit. Before re-routing traffic erect suitable signs and devices approved by City Representative.
- 4.6 Keep travelled ways graded, free of pot-holes and of sufficient width for required number of lanes of traffic.
- 4.7 Keep travelled ways free of snow:
  - .1 Pile snow in designated location(s).
  - .2 Do not pile snow on construction site or on adjacent property.
- 4.8 As indicated, provide graveled detours or temporary roads to facilitate passage of traffic around restricted construction area:
  - .1 Do grading for detour in accordance with City Representative's written approval.
- 4.9 Provide and maintain road access and egress to property fronting along Work under Contract and in other areas as indicated, unless other means of road access exist that meet approval of City Representative.
- 4.10 Provide and maintain signs, flashing warning lights and other devices required to indicate construction activities or other temporary and unusual conditions resulting from Project Work which requires road user response.
- 4.11 Supply and erect signs, delineators, barricades (concrete jersey barriers) and miscellaneous warning devices as required by the City of Iqaluit.
- 4.12 Place signs and other devices in locations approved by City Representative.
- 4.13 Meet with City Representative prior to commencement of Work to prepare list of signs and other devices required for project. If situation on site changes, revise list to approval of City Representative.
- 4.14 Continually maintain traffic control devices in use by:
  - .1 Checking signs daily for legibility, damage, suitability and location. Clean, repair or replace to ensure clarity and reflectance.
  - .2 Removing or covering signs which do not apply to conditions existing from day to day.





- 4.15 Provide competent flag persons and properly equipped as Directed by City Representative.
  - .1 When public traffic is required to pass working vehicles or equipment that block all or part of travelled roadway.
  - .2 When it is necessary to institute one-way traffic system through construction area or other blockage where traffic volumes are heavy, and traffic signal system is not in use.
  - .3 When workmen or equipment are employed on travelled way over brow of hills, high snowbanks, around sharp curves or at other locations where oncoming traffic would not otherwise have adequate warning.
  - .4 Where temporary protection is required while other traffic control devices are being erected of taken down.
  - .5 For emergency protection when other traffic control devices are not readily available.
  - .6 In situations where complete protection for workers, working equipment and public traffic is not provided by other traffic control devices.
  - .7 At each end of restricted sections as directed by City Representative.
  - .8 Delays to public traffic due to contractor's operators: maximum 15 minutes.
- 4.16 Where roadway, carrying two-way traffic, is restricted to one lane, for 24 hours each day, provide portable traffic signal system. Adjust, as necessary, and regularly maintain system during period of restriction. Signal system to meet requirements of Part IV of Manual of Uniform Traffic Control Devices for Streets and Highways.
- 4.17 Maintain existing conditions for traffic throughout period of contract except that, when required for construction under contract and when measures have been taken as specified and approved by City Representative to protect and control public traffic.
- 4.18 Maintain existing conditions for traffic crossing right-of-way.
  - .1 Maintain existing conditions for traffic crossing right-of-way except when required for construction.
  - .2 Delays to public traffic: maximum 15 minutes.

### 5. WORK IN HAZARDOUS AREAS

5.1 Before commencing the day's work and while working in areas that may contain an explosive, toxic or oxygen deficient atmosphere, test for explosive, toxic gases, and oxygen deficiencies. If a hazardous condition is found, make the work area safe before commencing or continuing work.





- .1 Provide and maintain a suitable detection meter. Use this meter continuously. Calibrate the meter to sound an alarm at a preset warning level.
- .2 Recalibrate the meter at times recommended by the manufacturer.
- 5.2 Smoking is not permitted in the hazardous areas and other areas designated by the City. The Contractor shall post "No Smoking" signs as required.
- 5.3 Use non-sparking tools in areas where an explosive atmosphere may exist.
- 5.4 Perform work in hazardous locations in accordance with the requirements of the Safety Act and Occupational Health and Safety Regulations.
- 5.5 It is the Contractor's responsibility (as Prime Contractor) to establish the classification of the work areas for the purpose of this contract.
- 5.6 Work Procedures for Hazardous Locations:
  - .1 Contractor is a Prime Contractor on this project and is responsible for site safety.
  - .2 Construction activities that occur in hazardous locations require continuous combustible gas monitoring by the Contractor when the potential for a hazardous atmosphere exists.
- 5.7 Metering for Toxic, Combustible Gas, H<sub>2</sub>S and Oxygen Deficiency:
  - .1 Utilize a suitable portable gas detection meter to continuously monitor for toxic gases, combustible gases, hydrogen sulfide and oxygen deficiency in the surrounding atmosphere. Set meter to sound alarm at a preset warning level. The Contractor shall demonstrate to the City Representative that the meter has recently been calibrated by a certified technician and is adequately functional for the intended purpose.
- 5.8 Meter Operator:
  - .1 When the potential for a hazardous atmosphere exists have a competent worker operate and read the portable meter continuously while construction activities occur in the designated hazardous locations. This meter operator is not permitted to assist in the construction activity in any way. Locate meter operator in the immediate vicinity of construction activity. If work in two or more different hazardous locations is required at the same time, provide the additional meter operator and meter.
- 5.9 Logbook:
  - .1 Maintain a logbook with:
    - .i Date.
    - .ii Name of meter operator.





- .iii Explosive gas and oxygen deficiency readings every ½ hour.
- .2 Construction activity type:
  - i Location of construction activity.
  - Submit logbook to the City Representative when construction is complete.

### 5.10 Firefighting Equipment:

.1 Provide and maintain suitable firefighting equipment when working in the designated hazardous locations. Train personnel in the use of firefighting equipment.

#### 6. WORK IN CONFINED SPACES

- 6.1 For the purposes of this Contract, the following areas in existing operating process areas are identified as confined space locations:
  - .1 Access vaults (AV's).
  - .2 Manholes (MH's).
  - .3 Tanks, vessels, and sumps
- 6.2 All work and entry into the identified Confined Spaces is to be done in accordance with the Nunavut Safety Act, R.S.N.W.T. 1988,c.S-1 2016, and the Nunavut Occupational Health and Safety Regulations, R-003-2016 2016.
- 6.3 The Contractor is responsible for all duties to ensure the work performed in the confined spaces is carried out in accordance with the Nunavut Safety Act, R.S.N.W.T. 1988,c.S-1 2016, and the Nunavut Occupational Health and Safety Regulations, R-003-2016 2016. The Contractor is responsible for all actions to ensure the duties imposed on employers by the Nunavut Safety Act, R.S.N.W.T. 1988,c.S-1 2016, and the Nunavut Occupational Health and Safety Regulations, R-003-2016 2016 are performed to protect the health and safety of all workers working in the confined spaces. For all confined space entries, involving workers from any employer, the Contractor is responsible for all coordination for work activities, confined space assessment, development of entry plans, permitting, supply of equipment for atmospheric testing and monitoring, ventilation, access and egress, entry, monitoring, control, rescue planning, and the initiation and implementation of rescue procedures in accordance with the Regulations.
- The Contractor shall maintain all appropriate documentation required under the Regulation and provide daily copies to the City Representative.
- The Contractor shall supply all required safety, monitoring, control and personal protective equipment required for confined space entry operation, including, but not





limited to entry and rescue equipment, atmosphere monitors (see Section 5) and breathing apparatus/ respiratory protection.

6.6 The Contractor shall ensure that all workers entering or interacting with the identified confined spaces are appropriately trained and that proof of training is provided upon request.

#### 7. STORAGE AND PROTECTION OF MATERIALS AND EQUIPMENT

- 7.1 Protect materials and equipment after unloading, from weather, dust, dirt and moisture, both before and after erection and placing. Observe manufacturer's written instructions for temporary storage.
- 7.2 Maintain equipment in good condition, as per manufacturer's instructions.
- 7.3 Provide manufacturer's written instructions for the storing of equipment during the construction period, well in advance of equipment delivery.
- 7.4 Store specialty items to ensure protection from damage to materials or finish.
- 7.5 Store materials subject to water absorption off the ground. Protect materials from other damage due to environmental conditions using waterproof covers.
- 7.6 As work proceeds and upon completion, promptly clean up and remove from site surplus materials resulting from foregoing work.

### 8. DISPOSAL OF MATERIAL OFF-SITE

- 7.1 Material designated to be removed from the site must be promptly removed.
- 7.2 Make necessary arrangements for environmentally safe transportation and ultimate disposal in compliance with all applicable Regulations and Guidelines at no cost to the City, unless noted otherwise.
- 7.3 Carry out additional chemical analysis of site materials suspected to be contaminated and determine applicable Regulations and Guidelines as may be required to determine the environmental quality of materials encountered and to determine suitable means for transportation and ultimate disposal. Notify the City Representative of concerns and provide copy of test results. Payment for haulage and disposal fees for contaminated excavated material will be considered Extra Work to this Contract as required.
- 7.4 Removal all waste material to the City's West 40 Landfill. Contractor will be responsible for all costs associated with loading, transportation and haulage, and tipping fees from the project site to the landfill.

### 9. ENVIRONMENTAL CONSIDERATIONS DURING CONSTRUCTION

9.1 Equipment Fueling:





- .1 Designate an area within the working limits, a minimum of 30 meters away from open water courses, to be used exclusively for fueling construction equipment.
- .2 Submit for review a plan for the interception and rapid clean-up of fuel spills should they occur.
- .3 Maintain the apparatus for cleaning up fuel spills on site.

### 9.2 Cleaning Equipment:

- .1 Keep construction equipment clean so that no debris is deposited on the City roadways.
- .2 Contain construction debris in a designated area within the working limits.
- .3 Dispose of debris off-site.

#### 9.3 Noise Control:

- .1 Use only vehicles and equipment equipped with effective muffling devices. Provide noise barriers on stationary engines and compressors. Provide noise barriers on stationary engines and compressors.
- .2 Comply with City of Igaluit Noise By-Law.
- .3 Consider noise attenuation measures in the approach and submissions for noise generating activities.

### 9.4 Dust Control:

- .1 Use water, or other methods to control dust as directed by the City Representative. Do not use chemical means of dust control without prior written approval from the City Representative. The use of petroleum products will not be allowed at any time.
- .2 Submit dust control plan detailing proposed methods to control dust on site for the review and acceptance by the City Representative.

### 10. PROTECTION OF EXISTING STRUCTURES AND PROPERTY

- 10.1 The Contractor will be held fully responsible by the City for any damage to utilities, properties, buildings, homes or structures adjacent to or in the general area of the work, through settlement of ground, vibration or shock resulting from any cause relating to the work carried out under this Contract. Make good and repair such damage at own expense.
- 10.2 Refer to Section N Preservation and Protection.

### 11. EROSION AND SEDIMENT CONTROL





- 11.1 Prepare and implement a separate detailed erosion and sediment control plan for the duration of the work.
- 11.2 Correct all erosion control deficiencies noted by the City Representative. Maintain appropriate measures in place until the construction is fully completed.
- 11.3 Cooperate with the City Representative and the Owner for periodic inspections (during and after construction).

### 12. DAMANGE BY VEHICLES AND OTHER EQUIPMENT

12.1 If at any time, in the opinion of the City Representative, damage is being or is likely to be done to any road, highway, improvements or property therein, other than such portions as are part of the work, by the Contractor's vehicles or other equipment whether licensed or unlicensed, the Contractor shall, on the direction of the City Representative and at the Contractor's own expense, make changes in or substitutions for such vehicles or other equipment or shall alter loadings or shall in some manner remove the cause.

#### 13. PROPERTY OWNER'S LETTER OF RELEASE

- 13.1 The Contractor will be required, when instructed by the City Representative, to provide a letter from the Owner and/or Owners of property adjacent to the work or on which the work was constructed, clearly stating that the reinstatement work carried out by the Contractor has been completed satisfactorily.
- 13.2 This letter of release will only be required where damage has been caused to private property or where work takes place on private property or easement.

### 14. UTILITY OWNER'S LETTER OF RELEASE

14.1 The Contractor will be required, when instructed by the City Representative, to provide a letter from the owners of utilities stating that all services damaged during construction of the work have been satisfactorily repaired.

#### 15. INCLEMENT WEATHER

- 15.1 Make adequate protection and take all necessary precautions at times of inclement weather.
- 15.2 Inclement weather or extra work caused by such weather will not be accepted as reason for additional payment or an extension to the time of completion.

#### 16. SNOW PLOWING

16.1 The Contractor shall be responsible for snow and ice removal in the designated construction area and related access roads for each group of primary clarifiers as well as Contractor's staging and storage area at its own cost.





- 16.2 Snow plowing shall be under the direction of the City Representative and shall not block any municipal roadways, easements, access roads or driveways for the general public or City operating staff to access.
- 16.3 Snow is to be disposed of at the designated snow disposal area, as directed by the City Representative.

**END OF SECTION** 





### F. CONSTRUCTION SEQUENCING

### 1. GENERAL

- 1.1 The Work is to be completed in the time stated in the Form of Tender. In this regard, the Contractor is responsible for scheduling the sequencing of work.
- 1.2 This Section includes mandatory construction sequencing constraints and a suggested general sequence of construction that will satisfy the mandatory constraints required in the execution of the Work.
- 1.3 The Contractor shall plan to perform the work activities in such a sequence that does not necessitate the removal from service any essential part or component of the existing works without first having a temporary facility to enable continuous normal operation of the existing water pollution control plant and process or has fully commissioned new facilities that are capable of operating in place of the part or component of the existing works that the Contractor must demolish and/or modify.
- 1.4 The Contractor's sequencing of work shall consider the submission of technical submittals and shop drawings for review and approval, prior to the commencement of work in the field.
- 1.5 The Contractor's schedule shall incorporate a logical sequence of construction activities, such that the work be completed in a manner that is safe, efficient, and interruption free as per the time stated in the Form of Tender.

### 2. COORDINATION

- 2.1 It is noted that the proposed works must be constructed so as not to interfere with or cause any un-scheduled interruption of operation of existing City process systems and services.
- 2.2 Coordinate the requirements of this Section with the other requirements of the Contract Documents.
- 2.3 Refer to Section C for other coordination requirements.

### 3. SERVICES PROVIDED BY THE CONTRACTOR

- 3.1 The Contractor shall coordinate the construction activities with the City Representative in advance as per Section C.
- 3.2 The Contractor shall provide the required temporary construction, drainage, grading, sedimentation and erosion control measures for the construction area.
- 3.3 The Contractor shall provide the necessary temporary power, pumping facilities, ventilation equipment, pipes, valves, fittings, diversions, temporary bulkheads, or any other equipment and systems, as required during construction.





### 4. SERVICES PROVIDED BY THE CITY

- 4.1 The City will undertake all necessary isolations and shut-downs of operating equipment and systems.
- 4.2 The City will provide access to existing City buildings, facilities, and structures.

#### 5. SEQUENCE OF CONSTRUCTION

- 5.1 Prior to mobilization, the Contractor will be required to adhere to the following sequencing requirements:
  - .1 Submit technical submittals to the City Representative for review and approval. Technical submittals will consist of the following:
    - i Contractor Site-Specific Health and Safety Plan.
    - .ii Contractor trade certificates and training records.
    - .iii Construction schedule.
    - .iv Traffic Control Plan (if applicable).
    - .v Erosion and Sediment Control Plan (if applicable).
    - .vi Quality Assurance and Quality Control Plan.
  - .2 Obtain confirmation from the City Representative that the technical submittals presented above have been approved.
- 5.2 The City Representative may choose to delay mobilization activities, at no additional cost or impact to the project schedule, should the specified technical submittals not be submitted and approved prior to the start of mobilization activities.
- 5.3 Prior to initiating construction activities in the field, the Contractor will be required to adhere to the following sequencing requirements:
  - .1 Submit relevant shop drawings to the City Representative for review and approval prior to commencing the installations in the field.
  - .2 Obtain confirmation from the City Representative that the shop drawing(s) have been approved.
  - .3 Commence relevant installations related to approved shop drawings in the field.
- 5.4 The City Representative may choose to reject the installations in the field, at no additional cost or impact to the project schedule, if the relevant shop drawings are not approved prior to installation in the field.





- 5.5 The City Representative will be provided five (5) business days to review relevant technical submittals and shop drawings. The City assumes only one (1) round of reviews for technical submittals and shop drawings. The Contractor will not be granted an extension of time or a change to the contract price, should the Contractor not address all review comments from the first submission, and require a subsequent review of a second or further resubmission(s).
- Prior to backfilling an excavated trench where new civil installations or repairs have taken place, allow for the inspection of the works by the City Representative. Should the Contractor backfill the site, while failing to present the works and provide indication to the City Representative that the works are ready for an inspection, the Contractor will be required to re-excavate the site in order to allow for an inspection of the works to take place at no change to the contract price and no extension to the contract schedule.

**END OF SECTION** 





### G. PAYMENT PROCEDURES

#### 1. TERMS OF PAYMENT

- 1.1 Make applications for payment on account as provided in Agreement as Work progresses.
- 1.2 Applications for payment will be made monthly.
- 1.3 The date for Contractors submission of monthly application for payment shall be on the last business day of the month.
- 1.4 The Contractor shall be reimbursed on a monthly basis in accordance with the instructions provided in the Bid Form.
- 1.5 For administrative purposes, the monthly application for payment shall be in the form of a progress payment and must indicate:
  - .1 Contract/ Project Title.
  - .2 City of Igaluit Service Contract number.
  - .3 Progress payment number.
  - .4 Date progress payment issued.
  - .5 Period progress payment covers.
- 1.6 The Contractor is to provide all relevant back-up material to validate the work that is being claimed in the monthly progress payment. This includes, but is not limited to, daily timesheets for labour and equipment, material costs, back-up invoices, etc. For work completed on a time and materials basis where daily timesheets are produced, the Contractor must present timesheets to the City Representative at the end of each workday for review and approval.
- 1.7 The City shall reimburse Contractors for mark-ups from sub-contractors and/ or suppliers for parts, materials, and labour up to a maximum of 15%. Back-up invoices from sub-contractors and/ or suppliers/ vendors must be submitted as part of monthly application for payment. Monthly progress claims will be returned if back-up invoices are not provided.
- 1.8 No payment will be made for the cost of work incurred to remedy errors or omissions for which the Contractor is responsible.
- 1.9 Additional work that has been completed outside the scope of services identified in the contract, without written approval from the City Representative via the change order process, will not be paid. Contemplated changes must be presented to the City Representative for review. Should the contemplated change be endorsed, it will be presented to the City for approval via a change order. Once approved, the Contractor may proceed with the work in the field. Failure to comply with this requirement may result in no payment.





- 1.10 All progress payment claims are to be submitted to the City Representative; they are not to be submitted to the City's Finance Department.
- 1.11 The City will pay all invoices on a Net 30 basis, meaning payments will be made by the City within Thirty (30) calendar days of receipt and acceptance of the invoice, or the receipt and acceptance of the goods or services, whichever is later.

### 2. SCHEDULE OF VALUES

- 2.1 Make schedule of values out in such form and supported by such evidence as City Representative may reasonably direct and when accepted by City Representative, be used as basis for applications for payment.
- 2.2 Include statement based on schedule of values with each application for payment. Schedule of values to follow Terms of Reference sections outline.
- 2.3 Support claims for products delivered to Place of Work by not yet incorporated into Work by such evidence as City Representative may reasonably require establishing value and delivery of products.

#### 3. APPLICATION FOR PAYMENT

- 3.1 Each month prepare a draft application for payment in the form of a progress payment claim for review and acceptance by the City Representative before submitting the monthly application for signature and payment.
- 3.2 Application for payment must show a schedule of values, for each item of approved breakdown of Contract Price established in the Contract, the following:
  - .1 Percentage and value of Work completed to date.
  - .2 Percentage and value of Work previously approved for payment.
  - .3 Percentage and value claimed this payment period.
  - .4 Percentage and value of Work remaining to be completed.
  - .5 Include separate line items for each approved Change Order executed, along with the information requested in 3.2(1), 3.2(2), 3.2(3), and 3.2(4).
- 3.3 Application for payment must include timesheets, back-up invoices from sub-contractors and/ or suppliers/ vendors, whichever applies. Where mark-ups apply per the Contract, ensure they are clearly shown.
- 3.4 Include an updated cash flow expenditure forecast with the application for payment.
- 3.5 Submit application for payment to the City Representative on the last business day of each month.





- 3.6 To assist the Contractor with preparation of application for payment, the City Representative is available to meet with the Contractor on an agreed date each month, on or prior to last day of month, to review progress of Work.
- 3.7 The Contractor and City Representative shall agree on quantity of Work performed and due for payment. Once quantity has been agreed upon, Contractor shall submit the final application for payment along with a corresponding invoice for the amount being claimed.
- 3.8 The following shall be included for the first application for payment:
  - .1 Approved monthly progress claim.
  - .2 Coinciding invoice.
  - .3 A copy of Workers Safety Compensation Board Certificate of Clearance.
  - .4 Updated construction schedule.
  - .5 Updated cash flow projection.
- 3.9 The following shall be included for the second application for payment and onwards:
  - .1 Approved monthly progress claim.
  - .2 Coinciding invoice.
  - .3 A copy of Workers Safety Compensation Board Certificate of Clearance.
  - .4 Statutory Declaration certifying that payment has actually been made in full to all subcontractors, suppliers, workmen, and others for labour, materials, and services required by Contract up to and including latest progress payment.
  - .5 Updated construction schedule.
  - .6 Updated cash flow projection.
- 3.10 The City shall not release monies for Payment Certificates until the Contractor has provided all of the supporting documentation, as specified herein.
- 3.11 Deviations from the above specified requirements or incomplete submissions shall require resubmission of the application for payment.

#### 4. NONPAYMENT FOR REJECTED OR UNUSED PRODUCTS

- 4.1 Payment will not be made for the following:
  - .1 Loading, hauling, and disposing of rejected material.
  - .2 Quantities of material wasted or disposed of in a manner not called for under Contract Documents.





- .3 Rejected loads of material, including material rejected after it has been placed by reason of failure of Contractor to conform to provisions of Contract Documents.
- .4 Material not unloaded from transporting vehicle.
- .5 Defective Work not accepted by Owner.
- .6 Material remaining on hand after completion of Work.

### **END OF SECTION**





### H. PROJECT MEETINGS

### 1. GENERAL

- 1.1 The City Representative will schedule the project meetings throughout progress of the Work.
- 1.2 The City Representative will prepare meeting agenda with regular participant input and distribute the written notice of each meeting, preside at meetings, record minutes to include significant proceedings and decisions, and reproduce and distribute copies of minutes within five (5) business days after each meeting to participants and parties affected by meeting decisions.
- 1.3 Representatives of Contractor, Subcontractor and suppliers attending meetings shall be qualified and authorized to act on behalf of the party each represents.

### 2. PRECONSTRUCTION MEETING

- 2.1 After award of Contract, the City Representative will request a meeting of parties in contract to discuss and resolve administrative, health and safety procedures and responsibilities.
- 2.2 Preconstruction meeting will be held via teleconference. Teleconference instructions will be provided by the City Representative.
- 2.3 Preconstruction meeting agenda may include the following, as a minimum:
  - .1 Introductions.
  - .2 Project Initiation.
    - .i Service Contract Review.
    - .ii Securities/ Bonds.
    - .iii Insurance.
    - .iv WSCC Certificate of Clearance.
  - .3 Safety.
    - .i Site Safety Requirements.
    - .ii WSCC "New Operations & High Hazard Work" Notice.
    - .iii Joint Health and Safety Committee or Occupational Health and Safety Representative.
    - .iv Site Audits, Inspections and Incident Reporting.
    - v. Training, Qualifications and Trade Certificates.





- .4 Project Execution Requirements .
  - .i Summary of Work.
  - .ii Working Hours, Working Days
  - .iii Construction Sequencing/ Coordination.
  - .iv Contractor's Use of Premises.
  - .v Authorities Having Jurisdiction (GN/ Federal permits and inspections).
  - .vi Special Project Procedures (Work Permits, Traffic Control, etc.).
  - .vii Project Meetings.
  - .viii Submittals and Shop Drawings.
  - .ix Payment Procedures.
  - .x Change Orders.
  - .xi Quality Control.
  - .xii Closeout Requirements.
- .5 Project Schedule.
  - .i Schedule Submission.
  - .ii Key Milestone Dates.
  - .iii Substantial Completion Submission Requirements.
  - .iv Warranty (if applicable).
- .6 Communication Structure
  - i Stakeholder Representation.
  - .ii Communication Flow.
  - .iii Communication of Changes in Scope, Schedule or Cost.
  - .iv Site Communication Memos RFI's, SI's, CCN's.
- .7 Document Control
- .8 Other Business and Questions.
- 2.4 Attendees will include:





- .1 Owner's representatives.
- .2 City Representative.
- .3 Contractor's project manager.
- .4 Contractor's resident site superintendent.
- .5 Contractor's quality control representative.
- .6 Others as appropriate.

### 3. PROGRESS MEETINGS

- 3.1 City Representative will schedule regular progress meetings at site, conducted bi-weekly to review the Work progress, progress schedule, shop drawings and technical submittal schedule, application for payment, contract modifications, and other matters needing discussion and resolution.
- 3.2 Progress meetings will be held via teleconference. Teleconference instructions will be provided by the City Representative.
- 3.3 Project progress review meeting agenda may include the following, as a minimum:
  - .1 Introductions.
    - .i Confirm Acceptance of Previous Meeting Minutes.
  - .2 Safety.
    - .i Safety Share.
    - .ii Site Safety Audits, Inspections and Incident Reporting.
  - .3 Submittals and Shop Drawings.
    - i Status of Technical Submittal Submissions/ Reviews.
    - .ii Status of Shop Drawing Submissions/ Reviews.
  - .4 Site Communications.
    - i. Request for Information (RFI) Status Update/ Outstanding Items.
    - .ii Site Instructions (SI) Status Update/ Outstanding Items.
    - .iii Contemplated Change Notices (CCN) Status Update/ Outstanding Items.
  - .5 Financial.





- .i Progress Claims Status Update/ Outstanding Items.
- .ii Change Orders Status Update/ Outstanding Items.
- .iii Service Contract Financial Review.
- .6 Work Progress.
  - i Work Completed (Since Last Meeting).
  - .ii Work Planned (Three-Week Look-ahead/ Schedule) Review.
  - .iii Issues/ Concerns/ Risks and Mitigation Measures.
  - .iv City/ Engineer Coordination Requirements.
- .7 Quality Control.
  - .i Contractor Activities.
  - .ii Status of Permitting and Inspections.
- .8 Other Business and Questions.
- 3.4 Attendees will include:
  - .1 Owner's representative.
  - .2 City representative.
  - .3 Contractor's project manager.
  - .4 Contractor's site superintendent.
  - .5 Others as appropriate.

### 4. OTHER MEETINGS

- 4.1 In accordance with Contract Documents and as may be required by the Owner and/or City Representative.
- 4.2 Brief meetings attended by the Contractor's key personnel, the City Representative and as required, the Owner's representative, may be coordinated in order to help assist with other project related discussions such as isolation requirements, critical path tasks, schedule, quality, commissioning, claims, deficiencies, etc. in order to help with the progress of the work. The Contractor is to accommodate other meetings at no additional cost to the contract.
- 4.3 Meetings will be held via teleconference. Teleconference instructions will be provided by the City Representative.





### **END OF SECTION**





### I. CONSTRUCTION PROGRESS SCHEDULE

#### 1. CONTRACTOR'S RESPONSIBILITIES

- 1.1 Prepare and submit to the City Representative a Construction Progress Schedule including a comprehensive work breakdown schedule complete with sequencing or implementation of each work tasks and work packages within five (5) business days of award of Contract. The schedule must reflect working days/ hours as per the contract. The schedule must show the following as a minimum:
  - .1 Mobilization and other preliminary activities such as installation of site fencing, trailer, signage, traffic control measures, etc.
  - .2 Submission of shop drawings, technical submittals, product data, material lists and samples.
  - .3 Delivery of any critical equipment and/or materials that will be key to the Works.
  - .4 Submission of key requests to the City such as isolation requests and City permit applications.
  - .5 Isolation and/or shutdown of City processes or systems by City Operations personnel, implementation of temporary by-pass systems, etc.
  - .6 Commencement and completion of work of each section of the terms of reference for each of the contract components as required y and described in the plans and terms and reference.
  - .7 Critical hold points which require the inspection and/or witness of the works by the City Representative, as described in the contract documents.
  - .8 Testing activities, commissioning, start-up and operating of the new equipment and/or systems.
  - .9 Substantial performance and final completion dates within time period required by the Contract Documents.
  - .10 Demobilization
- 1.2 Schedule shall represent a practical plan to complete the work within the Contract period and shall convey the plan to execute the work. Schedules as developed shall show the sequence and interdependencies of activities required for complete performance of the work.
- 1.3 Use extra forces and equipment, or revise method of operation when progress of work is not sufficient to meet Project Schedule.
- 1.4 Reviews of work progress based on Construction Schedule, will be conducted by the City Representative and schedule updated by Contractor in conjunction with and subject to approval of the City Representative.





- 1.4 Construction schedule shall be updated monthly with the payment schedule for the duration of the Contract.
- 1.5 Failure to include any element of work required for performance of the Contract or failure to properly sequence the work shall not excuse the Contractor from completing all work within the Contract Time.
- All schedule submittals, excluding monthly progress reports, are subject to approval by the City Representative. The City Representative retains the right to withhold appropriate monies (up to the full value of the current progress payment) from progress payments until the Contractor submits an acceptable construction progress schedule. Update schedule updates acceptable to the City Representative.
- 1.7 Certify in writing and have signed by major subcontractors that the construction progress schedule have been discussed in detail with all major subcontractors and major suppliers as it relates to their respective work and submit a copy of the certificate to the City Representative.
- 1.8 All schedules shall be developed utilizing industry standard "best practices" including, but not limited to:
  - .1 No open-ended activities.
  - .2 No use of constraints other than those defined in the Contract Documents without the prior approval of the City Representative.
  - .3 No negative leads or lags.
  - .4 No excessive leads or lags without prior justification and approval from the City Representative.
  - .5 For individual schedule construction activities, do not exceed 14 calendar days in duration without prior approval of the City Representative. Subdivide activities exceeding 14 calendar days in duration to an appropriate level.
  - .6 Sufficiently describe schedule activities to include what is to be accomplished in each work area. Express activity durations in whole days. Clearly define work that is to be performed by subcontractors.
  - .7 Create the schedule in conformance with the work-hours, constraints, and Activity Code Structure, set forth in these Contract Documents.
  - .8 Activity Code Structure
    - i. Each activity shall be identified with codes including as a minimum:
      - .a The party responsible for performing the work.
      - .b Where work is to be subcontracted, the subcontractor to be responsible for performing the work.





#### 2. CONSTRUCTION SEQUENCING

- 2.1 Contractor is instructed to perform this work without disrupting current operating facilities, structures, and/or City services when applicable.
- 2.2 Contractor to prepare schedule and duration of all anticipated by-passes or shutdown of any existing facility. Schedule to be reviewed by the Owner for approval. Furthermore, the Contractor shall provide notice as described in Section C Coordination to the Owner for each and every scheduled by-pass, tie-in to and shutdown of existing facilities, structures, processes, or systems. Required notice plus the Owner's approval are required for all non-scheduled by-passes, tie-in to and shutdowns.
- 2.3 Any and all un-scheduled shutdown is the responsibility of the Contractor. Thus, all or any additional labour, testing, material and equipment required by the Owner to correct or assist in coordination and correction of deficiencies as a result of an un-scheduled shut down is at the Contractor's costs.

### 3. MONTHLY CONSTRUCTION SCHEDULE UPDATE

- 3.1 Submit once per month, a monthly construction progress schedule update showing the progress of the work to date. The updated progress schedule must be submitted with the monthly progress payment application.
- 3.2 Include with the update an electronic back-up of the native schedule file.
- 3.3 Payment will not be made without an approved construction progress schedule, and monthly construction progress schedule update.
- 3.4 The monthly construction progress schedule update shall have a data date as of the last day of the corresponding month (i.e. for schedules submitted at the beginning of February the data date shall be January 31).
- 3.5 Incorporate actual progress, start dates, completion dates, and progress up to the data date in the schedule update. All changes and revision made in the monthly construction progress schedule update shall be addressed in the narrative accompanying the submittal.
- 3.6 Change Orders will be addressed in accordance with the General Conditions and incorporated into the Contract construction progress schedule as individual schedule activities.
- 3.7 Payment will not be made without current approved monthly construction progress schedule update.
- 3.8 Any changes made to the schedule shall also include changes to the cost loading/ expenditure forecast. All the remaining activities to be completed shall equate to the remaining cost of the Work. Any addition or deletions to activities to the schedule will require subsequent revisions to ensure that the schedule continues to correlate to the current Schedule of Values.





3.9 If according to the current updated Contract construction progress schedule, the work is fourteen or more days behind the Contract completion date, or the schedule contains fourteen or more days of negative float, considering all granted time extensions, submit, prior to the next progress payment, a revised recovery schedule, showing a work plan to complete the work within the original schedule period. Include with the submittal a detailed narrative describing the means and methods proposed to achieve the work in the time period. The City Representative may withhold approximate progress payments until a revised schedule, acceptable to the City Representative, is submitted by the Contractor at no additional expense to the Owner.

#### 4. RE-BASELINE CONTRACT CONSTRUCTION PROGRESS SCHEDULE

- 4.1 If, in the opinion of and at the request of the City Representative, the work has significantly fallen behind and/or the nature or plan of the work has changed from that which was originally portrayed in the Contract construction progress schedule, a Re-Baselined construction progress schedule shall be submitted that portrays the plan to complete the remaining Contract Work.
- 4.2 The Re-Baselined construction progress Contract Schedule shall be cost-loaded and be the basis for all subsequent monthly construction progress schedule updates.

### 5. THREE-WEEK LOOK-AHEAD

- 5.1 Submit a Gantt chart format depicting the intended work activities for the upcoming three-week period plus one-week retrospective look on a weekly basis.
- 5.2 All activities in the Three-Week Look-Ahead Schedule must correlate to an activity in the current monthly construction progress schedule update either as a one-to-one match, or as a subset of activities whose cumulative duration correlate to an activity in the monthly construction progress schedule update.
- 5.3 Note and explain in writing all deviations, including but not limited to sequences of work, timing, and durations or activities, from the Contract construction progress schedule or monthly construction progress schedule updates. These deviations must be addressed in the following monthly construction progress schedule update.
- 5.4 Portray all activities clearly and legibly on the schedule and include logical activity numbers.
- 5.5 Submit the schedule at the bi-weekly construction progress meeting.

### 6. MONTHLY EXPENDITURE/ CASH FLOW FORECAST

- 6.1 Submit on a monthly basis, an update to the monthly expenditure/ cash flow forecast. The cash flow forecast is to be submitted as part of the Contractors monthly progress payment application.
- 6.2 The Monthly Expenditure/ Cash Flow Forecast shall be presented in a manner that best illustrates how the Contractor intends to invoice, on a monthly basis, based on the Contractor understanding of the Work, methodologies to be used, and the Contract construction progress schedule.





### 7. REVIEW, UPDATE AND REVISIONS

- 7.1 Allow for the City Representative review and comments according to the following schedule from the date of receipt.
  - .1 Draft Contract construction progress Schedule: 7 calendar days
  - .2 Contract construction progress Schedule: 4 calendar days
  - .3 Monthly construction progress schedule Updates: 4 calendar days
  - .4 Three-Week Look-Ahead Schedule: 2 calendar days
- 7.2 Make all corrections to the schedule requested by the City Representative and resubmit the schedule for approval if requested. If the Contractor does not agree with the City Representative's comments, provide written notice of disagreement within five (5) business days from the receipt of City Representative comments for the Preliminary 60-day, Contract Construction Progress Schedule, Monthly Construction Progress Schedule Updates, and Three-Week Look-ahead Schedules. City Representative's comments for which the Contractor disagrees shall be resolved in a meeting held for that purpose, if necessary.

### 8. REQUESTS FOR TIME EXTENSIONS

- 8.1 Be responsible for submitting a written request for all extensions of Contract Time in accordance with the General Conditions. Requests not submitted in writing, without the required documentation and not submitted in a time consistent with the General Conditions will not be considered.
- 8.2 Include in the request documentation and written justification for the extension of time, supporting evidence and specific references to the schedule.
- 8.3 Also include with request an analysis of a calendar time-scaled Construction Progress Schedule and reports depicting the time impact basis of the request with the affected areas prominently highlighted. Use only the most current accepted schedule at the time the impact occurred when determining time extension request.
- 8.4 If the City Representative finds that the Contractor is entitled to an extension of time of any completion date under the provisions of the Contract, the City Representative's determination of the total number of days extension will be based upon the current analysis of the Contract Construction Progress Schedule and upon data relevant to the extension. Extensions of time for performance under all of the provisions of the Contract will be granted only to the extent that equitable time adjustments for the activity or activities affected exceed the total float along the paths involved of the accepted and current Contract Construction Progress Schedule.

#### **END OF SECTION**





### J. SUBMITTAL PROCEDURES

#### 1. SUMMARY

- 1.1 This section defines the submittals to the Owner, or their designate, necessary before, during and after construction, which include as a minimum:
  - .1 Site-Specific Health and Safety Plan.
  - .2 Construction Progress Schedule.
  - .3 Shop Drawings for permanent and temporary works.
  - .4 Product data and samples.
  - .5 QA/QC tests and reports.
  - .6 Concrete mix design.
  - .7 Erosion and Sediment Control Plan.
  - .8 Selective Demolition Plan and Schedule.
  - .9 Guaranties and Warranties.
  - .10 Traffic Control Plan.
  - .11 Temporary works plans (i.e. By-Pass Plan, Servicing Plan, Water Management Plan, Shoring/ Bracing Plan, Critical Lift Plan, etc.).
- 1.2 For submittals facsimile transmissions will not be acceptable.
- 1.3 Do not proceed with work until the City Representative reviews relevant submissions.
- 1.4 Refer to individual sections for other submission requirements.

### 2. ADMINISTRATIVE

- 2.1 Submit to the City Representative a list of all submittals and shop drawings for review within seven (7) business days of the Award of the Contract. Submit within reasonable promptness and in orderly sequence so as not to cause delay in Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed.
- 2.2 Work affected by submittals shall not proceed until review is complete.
- 2.3 Present shop drawings, technical submittals, product data and reports in SI Metric units.
- 2.4 Present shop drawings, technical submittals, product data and reports in the English language.





- 2.5 Where items or information is not produced SI Metric units, converted values are acceptable.
- 2.6 Review submittals prior to submission to City Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and coordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and shall be considered rejected.
- 2.7 Notify the City Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- 2.8 Verify that field measurements and affected adjacent work are coordinated.
- 2.9 Contractor's responsibility for errors and omissions in submission is not relieved by City Representative's review of submittals.
- 2.10 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by the City Representative's review.
- 2.11 Keep one reviewed copy of each submission on site for reference during the construction.
- 2.12 Refer to other individual sections for specific requirements on shop drawings submission.

### 3. PROCEDURES

- 3.1 Direct all submittals to the City Representative.
- 3.2 Unless indicated otherwise, submit one (1) electronic copy of all submittals.
- 3.3 Electronic Submittals:
  - .1 Each electronic submittal shall be searchable in Adobe Acrobat Portable Document Format (PDF).
  - .2 Electronic submittal that contains more than 10 pages in PDF format shall contain internal book marking from an index page to major sections of the document.
  - .3 PDF files shall be set to open "Bookmarks and Page" view.
  - .4 Include a copy of the Transmittal of Contractor's Submittal form with each electronic submittal.
  - .5 Submit new electronic files for each resubmittal.
  - .6 Detailed procedures for handling electronic submittals will be discussed at the preconstruction meeting.
  - .7 Submittals without electronic copies will be rejected by the City Representative.





#### 3.4 List of Submittals:

- .1 Within seven (7) working days of Contract Award, submit a complete list of anticipated submittals and shop drawings, as per the requirements of the contract.
- .2 For each section of the general requirements and terms of reference, the Contractor shall provide a table listing all the submittals anticipated for that section of the Contract. The table shall include the following information:
  - i General Requirements or Terms of Reference Section.
  - .ii Total number of submittals for this Section.
  - .iii Shop drawings associated with each submittal.
  - .iv Revision and status for each submittal.

#### 3.5 Transmittal of Submittal:

- .1 Accompany each submittal with a transmittal letter, containing:
  - .i Project title and number.
  - .ii Date of submittal.
  - .iii Names of Contractor, Subcontractor or Supplier, and manufacturer as appropriate.
  - .iv Numbering and Tracking System:
    - .a Sequentially number each submittal.
    - .b Resubmission of submittal shall have original number with sequential alphabetic suffix.
  - Name, tag No. and quantity of equipment/ system included in each submittal.
  - .vi General Requirement and Terms of Reference Section and paragraph to which submittal applies.
  - .vii Deviation or variation from Contract Documents.
  - .viii Contractor's stamp, signature and statement to certify that the submittal has been reviewed, checked, and approved for compliance with Contract Documents.
  - .ix Include the Contractor's written response to each of the City Representative's review comments with resubmission of submittals stamped "Revise and Resubmit".





.x Other pertinent data.

### 3.6 Processing Time:

- .1 Time for review shall commence on City Representative's receipt of submittal.
- .2 The City Representative will act upon the Contractor's submittal and transmit response to Contractor not later than five (5) working days after receipt, unless otherwise specified.
- .3 Resubmittals will be same review time unless otherwise specified.
- .4 No claims will be allowed that arise because of delays in re-submissions and review of shop drawings.

#### 3.7 Resubmittals:

- .1 Clearly identify each correction or change made and include revision date.
- .2 Provide clear response to each itemized comment by the City Representative on the submittal, whether or not action has been taken, and description of action.
- .3 No adjustment of Contract Times or Price will be allowed due to delays in progress of Work caused by rejection and subsequent resubmittals.
- .4 The Contractor is noted that the first two submission of each submittal (original submittal and subsequent resubmittal) will be reviewed at no charge to the Contractor. Any cost for processing/ reviewing submittals which have been reviewed two times or more will be deducted from the contract amount owed to the Contractor.

### 3.8 Incomplete Submittals:

- .1 The City Representative will return entire submittal for the Contractor's revision if preliminary review deems it incomplete.
- .2 When any of the following are missing, submittal will be deemed incomplete:
  - i. Transmittal of Contractor's submittal, completed and signed.
  - .ii Insufficient number of copies.
  - .iii All requested information is not provided.
  - .iv Submittals missing Professional Engineer's seal and signature, where it is required.

### **END OF SECTION**





### K. HEALTH AND SAFETY REQUIREMENTS

#### 1. REFERENCES

- 1.1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations.
- 1.2 Nunavut Safety Act, R.S.N.W.T. 1988, c-S-1 most recently amended and in force June 19, 2016.
- 1.3 Nunavut Occupational Health and Safety Regulations, R-003-2016, most recently amended and in force June 19, 2016.

#### 2. GENERAL REQUIREMENTS

- 2.1 The Contractor shall hold the responsibility of *Prime Contractor*, as described in the Nunavut Safety Act, and shall be solely responsible for construction safety, ensuring compliance to the Safety Act and Regulations.
- 2.2 Perform site specific safety hazardous assessment related to project.
- 2.3 Develop written site-specific Health and Safety Plan based on hazard assessment prior to commencing any site Work and continue to implement, maintain, and enforce plan until final demobilization from site.
- 2.4 The Contractor shall file a *New Operations & High Hazard Work* notice for the Works with the Workers' Safety and Compensation Commission (WSCC) prior to commencement of Work. Submit relevant documents to City Representative, providing indication that notice has been submitted. The Contractor will not be allowed to commence construction activities until notice has been filed and acknowledged by WSCC. Failure to submit a notice and provide record of such communication to the City Representative prior to the start of Works will not be considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed. The *New Operations & High Hazard Work* notice must be posted at the construction site as per requirements of the Safety Act.
- 2.5 Meet or exceed the latest revision of all Local, Federal, Territorial laws, regulations, standards, and industry best practices relating to health and safety.
- 2.6 Be solely responsible for safety of the Work under this Contract and for complying with and ensuring that every person on the Site complies with the requirements contained within the Contract Documents and regulatory requirements.
- 2.7 Perform the Work, or ensure that it is performed, in a manner to avoid risk of injury, security or damage to persons or property, adjacent property, or environment.
- 2.8 Provide safe access, egress, and equipment in accordance with Occupational Health and Safety Regulations for entry into all areas by the employees, subcontractors, City, and Consultant. Where hazardous areas or confined space entry exists, implement procedures defined by the latest revision of the applicable Occupational Health and Safety Regulations or the Electrical Code.





- 2.9 Prior to the commencement of the Work, review and become fully familiarized with all Local, Territorial, and Federal regulatory requirements and the following documentation:
  - i. Nunavut's Safety Act and applicable regulations.
  - ii. Nunavut's Workers' Compensation Act and applicable regulations.
  - iii. Nunavut's Environmental Protection Act and application regulations.
  - iv. Canadian Electrical Code.
  - v. Contract Documents.
- 2.10 The Contractor shall be solely responsible for construction safety for this Contract and for complying with and ensuring that every person on the Site complies with the measures and requirements contained in:
  - i. Nunavut's Safety Act and applicable regulations.
  - ii. Nunavut's Workers' Compensation Act and applicable regulations.
  - iii. Nunavut's Environmental Protection Act and application regulations.
  - iv. Canadian Electrical Code.
  - v. Contract Documents.
- 2.11 In event of a conflict between any provisions of the above authorities, the most stringent provision shall govern.
- 2.12 Provide and maintain first aid, hygiene, washrooms, potable water, and fire protection equipment at the Site in accordance with the applicable regulatory requirements. The Contractor shall designate trained employees to be in charge of first aid on the Site.
- 2.13 Establish, maintain, and mark clear routes, paths and points for routine and emergency exit to, from and within the Site for personnel and vehicles.
- 2.14 The Contractor shall erect signs relating to safety on the Site, and signs or notices required by the applicable territorial and local regulations or by the Contract Documents.
- 2.15 Erect signage acceptable to the City at all entry points to the Site to advise personnel entering the Site of the requirements respecting the use and wearing of personal protective equipment. And the Contractor shall ensure compliance with these requirements.
- 2.16 Erect signage acceptable to the City at all entry points to the Site to advise the employees, Subcontractors and other individuals entering the Site that:
  - i. All personnel and employees on the Site are required to comply with safety policies, procedures and instructions of the Contractor.





- ii. That any personnel failing to adhere to the safety policies, procedures and instructions of the Contractor may be removed from the Site and denied further access.
- 2.17 The Contractor shall post warning signs at hazardous areas or where hazardous materials are stored and install protective barriers. The Contractor shall instruct personnel of proper safety procedures.
- 2.18 The Contractor shall identify all areas which are considered to be hazardous locations and comply withal requirements of the Government of Nunavut Labour Standards Office.
- 2.19 Smoking is not permitted in hazardous areas or other areas as designated by the City. The Contractor shall post "No Smoking" signs as required.
- 2.20 The Contractor shall inspect the physical condition of the workplace at least weekly, or as often as required by territorial health and safety regulatory requirements, in order to ensure that the Work is performed safely and that the Site is maintained in accordance with the territorial regulatory requirements and the Contract Documents. The Contractor shall prepare and maintain a documented record of each inspection describing the scope of inspection and findings. Copies of all safety inspections shall be kept on Site and available for review by the City Representative.
- 2.21 Safety equipment such as gas detection equipment for explosive or toxic gases or oxygen deficiency, fall protection devises, etc., shall be made available by the Contractor to the City Representative for the access to the site when required. The Contractor shall be responsible for the coordination of the multiple-party access to the hazardous and confined space on the Site.
- 2.22 Ensure adequate coordination and communication between all parties on site in regard to safety.
- 2.23 In addition to Occupation Health and Safety Act and applicable Regulations reporting requirements, report all incidents, near misses, spills, environmental damage, and property damage to the City Representative immediately within four (4) hours of the event. An incident investigation must be conducted, and a copy of the complete report provided to the City Representative within 24 hours.
- 2.24 Ensure that all employees and subcontractors are competent, as prescribed by the applicable legislation, in performing the Work and have been trained on the Contractor's Site-Specific Health and Safety Plan and COVID-19 Mitigation Plan prior to starting Work on the Contract. The Contractor shall make available all training records for the City Representative's review.
- 2.25 The Contractor shall ensure all workers that perform work be certified under the Trades and Qualifications and Apprenticeship Act for their specific work activity. No worker shall perform a type of work unless he/ she is certified to do so.
- 2.26 The Contractor shall appoint a competent person, as defined by the Safety Act, as a supervisor.





- 2.27 The Contractor shall appoint a Joint Health and Safety Committee or Occupational Health and Safety Representative, as defined by the Safety Act, for the project.
- 2.28 The supervisor shall supervise the work at all times either personally or by having an identified assistant do so personally. The assistant must comply with all the same requirements that the supervisor is held to.
- 2.29 The supervisor shall inspect the work site and equipment associated with the project at least once a week. A copy of the inspection report must be provided to the City Representative.
- 2.30 The Contractor shall remove waste material and debris from the work site(s) to a disposal area at least once a day or more frequently if necessary, to prevent the creation of a hazardous condition.
- 2.31 The Contractor shall ensure that a First Aid kit is provided and maintained on site at all times, in accordance with relevant health and safety regulations.
- 2.32 The Contractor shall ensure that fire-extinguishing equipment is provided and maintained on site at all times, in accordance with relevant health and safety regulations.
- 2.33 The Contractor shall ensure that all vehicles, machinery, tools and equipment used on the work site are operated and maintained in accordance with relevant health and safety regulations.
- 2.34 The Contractor will be required to conduct weekly safety audits, in order to ensure compliance to the Site-Specific Health and Safety Plan. Safety Audit reports are to be submitted to the City Representative on a weekly basis.
- 2.35 City Representative may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.
- 2.36 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of Territory having jurisdiction, and in consultation with City Representative.

### 3. SUBMITTALS

- 3.1 Make submittals in accordance with Section J Submittal Procedures.
- 3.2 The Contractor shall submit a Site-Specific Health and Safety Plan within seven (7) business days after the Award of the Contract, to address the requirements of the above referenced regulations and contract documents.
- 3.3 A Site-Specific Health and Safety Plan must be in place prior to the start of construction activities. If a Site-Specific Health and Safety Plan has not been submitted prior to the start of the Works, the City Representative may issue a stop work order, until one is presented which meets the requirements of the regulations and contract documents. Failure to submit a Site-Specific Health and Safety Plan within the required timelines, which meets the requirements of the contract, will not be sufficient reason for an





extension of Contract Time or additional compensation, and no claim for extension or additional costs by reason of such default will be allowed.

- 3.4 The Contractor shall provide a health and safety plan which as a minimum will include:
  - .1 A Site-Specific Health and Safety Management Plan, includes:
    - i Introduction, roles and responsibilities for:
      - .a Site Supervisor
      - .b Project Manager
      - .c Site Safety Coordinator
      - .d Site Workers
      - .e Occupational Health and Safety Representative
      - .f Joint Health and Safety Committee
    - .ii Contractor Project/ Contract Organizational Chart
    - .iii Training and certification of workers.
    - .iv Orientation for new works or visitors to site.
    - .v Project hazard assessment and safety procedures.
    - .vi Safety meetings format and schedule.
    - .vii Site safety audits, inspections, and incident reporting.
    - .viii Workplace hazardous materials information.
    - .ix Tagging and lock out procedures.
    - .x Confined space entry procedure.
    - .xi Work on or near live apparatus.
    - .xii Hot works procedures.
    - .xiii Posting of information.
    - .xiv Housekeeping.
  - .2 A Hazardous Identification Plan, includes primary environmental hazards, personal conduct and hygiene, potential hazards which include:
    - .i Survey work in traffic.





Physical
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- .iii Working at heights.
- .iv Fire and explosion.
- .v Confined space entry.
- .vi Cranes, hoists, and rigging.
- .vii Crane suspended personnel platforms.
- .viii Biological.
- .ix Stress and fatigue.
- .x Noise.
- .xi Cold Weather.
- .xi Wildlife
- .xii Personal security.
- .xiii Adverse weather conditions.
- .xiv Other site activities.
- .3 A Personal Protective Equipment Inventory, which includes:
  - i Requirements for all site personnel.
  - .ii Selection, maintenance and continual assessment.
- .4 An Emergency Preparedness and Response Plan, which addresses:
  - .i First aid.
  - .ii Fire protection.
  - .iii Critical injury.
  - .iv Accident or incident.
- .5 A COVID-19 Mitigation Plan, which addresses:
  - i Isolation and quarantine.
  - .ii Social distancing.
  - .iii Hand washing and hygiene.





.iv Masks.

- .6 The plan shall be reviewed by all works prior to the start of work. The Contractor must obtain sign-off from all workers providing acknowledgement that the plan has been reviewed.
- .7 The plan shall be posted in a visible location on the work site prior to the commencement of any work.

#### 4. CHEMICALS

- 4.1 The Contractor must provide a list of all chemicals to be used on site and a copy of the Material Safety Data Sheet (MSDS) for each chemical to the City Representative prior to being brought onto the job site.
- 4.2 The Contractor must ensure each chemical container brought on site is clearly labelled with the identity of the chemical, information for the safe handling of the chemical and the location of the MSDS.
- 4.3 The Contractor must ensure adequate measures are taken to control the distribution, within the application area or throughout the building, of fumes/ vapours before applying flammable, noxious or volatile materials.
- 4.4 The Contractor may be required to schedule the application of hazardous materials which might affect the well-being of any workers or disrupt work of other contractors and cannot be adequately controlled to prevent such occurrences to evening or weekend periods.
- 4.5 The Contractor must ensure workers wear the required personal protective equipment (respiratory protection, protective clothing, hand protection, eye/face protection, etc.) when working with chemicals.
- 4.6 The Contractor must ensure the safe use and disposal of all chemicals that they are using. No chemicals and/or chemical waste product shall be disposed of on site without prior approval of City Representative.
- 4.7 The Contractor may not store chemicals and compressed gas cylinders on site without approval of the City Representative. If approved, the contractor must ensure incompatible chemicals are stored separately.

### 5. DESIGNATED SUBSTANCES / HAZARDOUS WASTE

- 5.1 The Contractor shall provide a work plan for the removal of designated substances, in accordance with all applicable legislation, for review and approval to the City Representative.
- 5.2 The Contractor shall provide evidence of competency with regards to the Environmental Protection Act and its regulations, a copy of safe handling work plan prior to commencing with work in the area.





- 5.3 The Contractor shall register the project as a waste generator site, if not already registered, for the waste that will be generated as a result of the work activities related to the project.
- 5.4 The Contractor shall ensure and provide evidence that all hazardous wastes removed from the sites sent to a licensed waste disposal site by a licensed carrier and advise the responsible individual when necessary testing is to be carried out.
- 5.5 The Contractor shall retain copies of all hazardous waste manifests on file.
- 5.6 The Contractor shall inspect the project daily to monitor compliance with designated substances and hazardous waste regulations.
- 5.7 The Contractor shall provide access to the responsible individual for review of all inspection reports.

#### 6. FALL PROTECTION

- 6.1 The Contractor shall comply with the requirements of Sections 57 to 59 of R.R.N.W.T. 1990, c.S-1.
- The Contractor shall provide, upon request, proof of worker training in the use of their fall protection systems.
- 6.3 The Contractor shall be responsible for supplying and maintaining all equipment needed to perform this role.

### 7. CONFINED SPACE ENTRY

7.1 The Contractor shall comply with the requirements of Section 36 to 37 of R.R.N.W.T. 1990, c.S-1.

### 8. LADDERS

- 8.1 The Contractor shall comply with the requirements of Sections 246 to 259 of R.R.N.W.T. 1990, c.S-1.
- The Contractor shall be responsible for supplying and maintaining all equipment needed to perform this role.

### 9. WELDING/CUTTING

- 9.1 The Contractor shall comply with the requirements of Sections 154 to 167 of R.R.N.W.T. 1990, c.S-1.
- 9.2 The Contractor shall be responsible for supplying and maintaining all equipment needed to perform this role.

#### 10. SCAFFOLDING





- 10.1 The Contractor shall comply with the requirements of Sections 260 to 327 of R.R.N.W.T. 1990, c.S-1.
- 10.2 The Contractor shall design, erect, inspect, maintain and use scaffolding equipment materials, and components in accordance with CAN/CSA-S269.2-M87 (Access Scaffolding for Construction Purposes).
- 10.3 The Contractor shall be responsible for supply and maintaining all equipment needed to perform this role.

### 11. MOBILE EQUIPMENT

- 11.1 The Contractor shall comply with the requirements of Sections 200 to 242 of R.R.N.W.T. 1990, c.S-1.
- 11.2 The Contractor shall be responsible for supplying and maintaining all equipment needed to perform this role.

### 12. CONSTRUCTION TOWERS AND HOISTS

- 12.1 The Contractor shall comply with the requirements of Sections 433 to 464 of R.R.N.W.T. 1990, c.S-1.
- 12.2 The Contractor shall provide, upon request, proof of worker training in the safe operation of the crane or similar hoisting device.
- 12.3 The Contractor shall make available all logbooks, inspection records and tests for cranes of similar hoisting devices, upon request.
- 12.4 The Contractor shall be responsible for supplying and maintaining all equipment needed to perform this role.

### 13. EXCAVATING AND TRENCHING

- 13.1 The Contractor shall ensure no person enters and excavation unless another worker is working above ground close to the excavation of to the means of access to it.
- 13.2 The Contractor shall arrange the locating of buried services prior to commencing an excavation.
- 13.3 The Contractor shall comply with the requirements of Sections 396 to 432 of R.R.N.W.T. 1990, c.S-1.

#### 14. UNFORESEEN HAZARDS

14.1 Should any unforeseen or peculiar safety-related factor, hazard, or condition become evident during performance of Work, and follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Territory having jurisdiction. Advise City Representative verbally and in writing.

#### 15. CORRECTION OF NON-COMPLIANCE





- 15.1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by City Representative.
- 15.2 Provide City Representative with written report of action taken to correct non-compliance of health and safety issues identified.
- 15.3 City Representative may stop Work if non-compliance of health and safety regulations is not corrected. Delays due to a stop work caused by non-compliance of health and safety regulations will not be considered sufficient reason for an extension of Contract Time and/or Price, and no claim for extension by reason of such default will be allowed.

### **END OF SECTION**





### L. QUALITY CONTROL

#### 1. CONTRACTOR'S RESPONSIBILITY

- 1.1 The Contractor is to implement their own field quality control system that will include, but is not limited to, the following activities:
  - .1 Shop drawings, technical submittals, product data and sample reviews.
  - .2 Compaction of backfill and granular base courses.
  - .3 Concrete testing, aggregate testing and cement testing for both cast-in-place concrete, and precast concrete items.
  - .4 Concrete mix design.
  - .5 Welding of structural steel and pipe joints.
  - .6 Pressure testing of pipes.
  - .7 Torque of high-strength bolts.
  - .8 Load tests of structural items.
  - .9 Subgrade examination for load bearing capability if required.
  - .10 Instrumentation calibration and testing.
  - .11 Performance testing of equipment.
- 1.2 The Contractor is responsible to coordinate and execute the necessary quality control systems, as per the instructions stipulated in the contract documents, in order to validate that the work meets the requirements of the contract documents.
- 1.3 The Contractor is responsible for providing results obtains from the inspection of testing of works as per the relevant field quality control systems, in order to validate compliance with the instructions provide in the contract documents.
- 1.4 Failure to submit relevant inspection and testing results to validate work conformance to the contract documents may render the work non-conforming and may require the Contractor to reperform the work. Delays and additional costs due to rework and reperformance of tests will not be considered sufficient reason for an extension of Contract Time and/or Price, and no claim for extension by reason of such default will be allowed.

#### 2. SUBMITTALS

- 2.1 Make submittals in accordance with Section J Submittal Procedures.
- 2.2 The Contractor shall submit a Quality Assurance & Quality Control Plan within ten (10) business days after the Award of the Contract.





- 2.3 A Quality Assurance & Quality Control Plan must be in place prior to the start of construction activities in order to ensure that necessary quality control systems are in place for the works. The Quality Assurance & Quality Control Plan must be reviewed by all Contractor workers in the field.
- 2.4 The Quality Assurance & Quality Control Plan Inspection must include the following sections at a minimum:
  - .1 Introduction and project description.
  - .2 Contractor key personnel
  - .3 Roles and responsibilities of Contractor, City Representative, and Owner.
  - .4 Submittals (shop drawings, technical submittals, product data, etc.).
    - .i Submittal schedule.
    - .ii Process, review and acceptance.
  - .5 Quality control systems.
  - .6 Inspection and verification requirements.
  - .7 Acceptance criteria.
  - .8 Sample inspection and test forms.
  - .9 Construction deficiencies.
  - .10 Documentation process.
- 2.5 The Contractor shall include relevant inspection and testing milestones within the Construction Progress Schedule. Relevant milestones must also be captured in the Contractor's Three-Week Look-Ahead Schedule.

#### 3. INSPECTION

- 3.1 Allow City Representative access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress.
- 3.2. Give timely notice requesting inspection if Work is designated for special test, inspections or approvals by City Representative instructions, or law of Place of Work.
- 3.3 If Contractor covers or permits to be covered Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
- 3.4 City Representative may order any part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination such work is found not in accordance with Contract Documents, correct such Work and pay cost of





examination and Documents, correct such Work and pay cost of examination and correction. If such Work is found in accordance with Contract Documents, Owner shall pay cost of examination and replacement.

#### 4. INDEPENDENT INSPECTION AGENCIES

- 4.1 Unless indicated otherwise, independent Inspection/ Testing Agencies may be engaged by City Representative for purpose of inspecting and/or testing portions of Work. Cost of such services will be borne by Owner.
- 4.2 Employment of inspection/ testing agencies does not relax responsibility to perform Work in accordance with Contract Documents.
- 4.3 If defects are revealed during inspection and/or testing, appointed agency will request additional inspection and/or testing to ascertain full degree of defect. Correct defect and irregularities as advised by City Representative at no cost to Owner. Pay costs for retesting and reinspection.

#### 5. ACCESS TO WORK

- 5.1 Allow inspection/ testing agencies access to Work, off site manufacturing and fabrication plants.
- 5.2 Cooperate to provide reasonable facilities for such access.

#### 6. PROCEDURES

- 6.1 Notify appropriate agency and City Representative in advance of requirement for tests, in order that attendance arrangements can be made.
- 6.2 Submit samples and/or materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in an orderly sequence so as not to cause delay in Work.
- 6.3 Provide labour and facilities to obtain and handle samples and materials on site. Provide sufficient space to store and cure test samples.

### 7. REJECTED WORK

- 7.1 Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by City Representative as failing to conform to Contract Documents. Replace or re-execute in accordance with Contract Documents.
- 7.2 Make good other Contractor's work damaged by such removals or replacements promptly.
- 7.3 If in opinion of City Representative it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Owner may deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which shall be determined by City Representative.





### 8. REPORTS

- 8.1 Submit of inspection and test reports to City Representative.
- 8.2 Provide copies to Subcontractor of work being inspected or tested.

#### 9. SPECIAL INSTRUCTIONS

- 9.1 Compaction Testing:
  - .1 Complete compaction tests as per the requirement of the Contract Documents, when performing trenching, bedding and backfilling work.
  - .2 All material testing (backfill densities and concrete testing) shall be performed by an accredited agency and certified by a Professional Engineer. All test results shall be submitted to the City Representative with a report indicating any deficiencies and remediation.

### 9.2 Pressure Tests:

- .1 Complete pressure tests for new pipeline installations to verify installation meets required design and operating scenarios.
- .2 Visual inspections of all lines are required prior to Substantial Certificate of Completion. Any deflections, sags obstructions and other defects affecting the performance of the line shall be corrected and the line re-inspected prior to Substantial Certificate of Completion.

### **END OF SECTION**





### M. TEMPORARY UTILITIES

### 1. INSTALLATION AND REMOVAL

- 1.1 Provide temporary utilities controls in order to execute work expeditiously.
- 1.2 Remove from site all such work after use.

#### 2. DEWATERING

2.1 Provide temporary drainage and pumping facilities to keep excavations and site free from standing water.

### 3. WATER SUPPLY

- 3.1 Provide continuous supply of potable water for construction use.
- 3.2 Arrange for supply and appropriate utility company and pay all costs for installation, maintenance and removal.
- 3.3 Pay for utility charges at prevailing rates.

### 4. TEMPORARY HEATING AND VENTILATION

- 4.1 Provide temporary heating required during construction period, including attendance, maintenance and fuel.
- 4.2 Construction heaters used inside building must be vented to outside or be non-flameless type. Solid fuel salamanders are not permitted.
- 4.3 Provide temporary heat and ventilation in enclosed areas as required to:
  - .1 Facilitate progress of Work.
  - .2 Protect Work and products against dampness and cold.
  - .3 Prevent moisture condensation on surfaces.
  - .4 Provide ambient temperatures and humidity levels for storage, installation and curing of materials.
- 4.4 Provide adequate ventilation to meet health regulations for safe working environment.

### 4.5 Ventilating:

- .1 Provide local exhaust ventilation to prevent harmful accumulation of hazardous substances into atmosphere of occupied areas.
- .2 Dispose of exhaust materials in manner that will not result in harmful exposure to persons.





- .3 Prevent accumulations of dust, fumes, mists, vapours or gases in areas occupied during construction.
- .4 Ventilate storage spaces containing hazardous or volatile materials.
- .5 Ventilate temporary sanitary facilities.
- .6 Continue operation of ventilation and exhaust system for time after cessation of work process to assure removal of harmful contaminants.
- 4.7 Permanent heating system of building, may be used when available. Be responsible for damage to heating system if use is permitted.
- 4.8 On completion of Work for which permanent heating system is used, replace filters, seals, etc. to ensure system is 'like-new' at substantial completion.
- 4.9 Pay costs for maintaining temporary heat, when using permanent heating system.
- 4.10 Maintain strict supervision of operation of temporary heating and ventilating equipment and be responsible for damage to Work due to failure in providing adequate heat and protection during construction.

#### 5. TEMPORARY POWER AND LIGHT

- 5.1 Pay for temporary power during construction for temporary lighting and operating of power tools.
- 5.2 Arrange for connection with appropriate utility company. Pay all costs for installation, maintenance and removal.
- 5.3 Temporary power for electric cranes and other equipment requiring in excess of above is responsibility of Contractor.
- 5.4 Provide and maintain temporary lighting throughout project. Ensure level of illumination on all floors and stairs is not less than 162 lx.
- 5.5 Connect to power supply in accordance with Canadian Electrical Code and provide meters and switching.
- 5.6 Electrical power and lighting systems installed under this Contract may be used for construction requirements only with prior approval of City Representative provided that guarantees are not affected. Make good damage to electrical system caused by use under this Contract. Replace lamps which have been used for more than 3 months.

#### 6. TEMPORARY COMMUNCATION FACILITIES

6.1 Provide and pay for cell phone usage for own use. Provide and pay for connection to Internet for own use.

#### 7. FIRE PROTECTION





- 7.1 Provide and maintain temporary fire protection equipment during performance of Work required by governing codes, regulations and bylaws.
- 7.2 Burning rubbish and construction waste materials is not permitted on site.





#### N. PRESERVATION AND PROTECTION

#### 1. DESCRIPTION

1.1 This Section specifies requirements for preservation and protection of existing and new utilities, services, buildings and structures.

#### 2. GENERAL

2.1 Comply with all requirements and regulations of the City of Iqaluit and Utility Companies, especially those pertaining to protective work, inspection and safety.

## 3. MAINTENANCE AND PROTECTION OF EXISTING UTILITIES, SERVICE, STRUCTURES AND PROPERTIES

- 3.1 The Contractor will be held fully responsible by the Owner for any damage to utilities, services, properties, buildings, or structures adjacent to or in the general area of the work, through settlement of ground, vibration or shock resulting from any cause relating to the work carried out under this Contract. Make good and repair all such damage at own expense.
- 3.2 The Contractor shall supply and install the shoring, bracing and support system at his own judgment and at his own cost to protect the existing utilities, services, buildings and structures from damage for the duration of the construction. The cost for this item shall be included in the tender price and the contractor shall not make any claim against the Owner for extra work on this item.
- 3.3 Confirm all underground services to locate, stake and clearly mark in the field all services which are located on or near the line of the proposed work.
- 3.4 Sustain in their places and protect from direct or indirect injury, all water and gas mains, sewers and drains, conduits, cables, service pipes, poles, sidewalks, curbs, embankments, structures, equipment and other property in the vicinity of the work.
- 3.5 Sustain and support structures that are uncovered, weakened, endangered or threatened.
- 3.6 Notify the City Representative immediately (and follow up in writing) if and when any damage to such facilities occur during the planned execution of work. Provide all necessary written documentation such as incident reports, accident reports, investigative reports and preventative measures to be implemented within 48 hours of any incident taking place, in a format that clearly identifies details such as the report author, his/her role in the project, the company the author represents, date, signature, etc., all on Company letterhead.
- 3.7 Repair immediately all items that are damaged during construction, at no cost to the Owner.
- 3.8 Immediately report all damages occurred on the plant's property, existing services and structure during construction to the City Representative.





- 3.9 Prevent dust and dirt from entering existing buildings or areas where equipment is stored or is operating.
- 3.10 Prevent dust, water or other deleterious substances from entering areas with existing electrical, heating, ventilating, pumping and other equipment. The Contractor will be held responsible for any damage caused by work carried out under this Contract.
- 3.11 Where existing wall sections are removed or where pipes are installed through existing walls or where any dust-generating operation is necessary, provide a suitable temporary wall or enclosure suitably reinforced and sealed to prevent dust or water entering the area. When work is completed, remove temporary dust control device and thoroughly clean all areas affected by the work.
- 3.12 Control groundwater level to prevent damage to any pipe or structure due to water pressure during and after construction and until the completed works are accepted.
- 3.13 Control vibration levels to prevent damage to concrete work during construction, existing structures, equipment, and utilities. Control use of vibration producing construction techniques or equipment.

#### 4. PROTECTION, SOUNDNESS AND REPAIR OF NEW CONSTRUCTION

- 4.1 Protect all newly constructed work from damage. Prevent heavy loading of newly constructed work and repair all damage. Construct all works watertight and correct all imperfect work.
- 4.2 If, in the final inspection, any deficiencies are found, repair or replace the defective work. Be responsible for satisfactory maintenance and repair of all work undertaken for the specified guaranteed maintenance period. Protect and store all equipment supplied under this Contract.

#### 5. PROTECTION AGAINST FREEZING

5.1 Furnish all necessary temporary hoarding, heating equipment and fuel for heated workspaces where required, in order to ensure installation of equipment and materials are performed per the specifications and guidelines of manufacturer.

#### 6. SURVEY MONUMENTS

- 6.1 Maintain survey monuments, iron bars, round iron pipes and stakes for marking property boundaries and locations.
- Where monuments, pipes or stakes are located on the line of the trench or within the limits of the work, the Contractor shall report to the City Representative.
- 6.3 Do not remove survey monuments without receiving prior approval. Pay for or replace monuments which were removed without approval.





#### O. MATERIALS AND EQUIPMENT

#### 1. GENERAL

- 1.1 Provide all materials and equipment new. Reconditioned equipment is not acceptable.
- 1.2 Co-operate with other trades prior to installation of work under the contract. Should the Contractor fail to do so, such works, if required, shall be removed, relocated and/or modified as directed by the City Representative, without additional cost to the Owner.
- 1.3 Should the Contractor fail to correspond with requests, or should they misdirect other trades, such corrections and/or additional work, as directed by the City Representative shall be at the Contractor's expense.
- 1.4 Work shall be performed in accordance with the Safety Act and Regulations.

#### 2. SUBMITTALS

- 2.1 Make submittals in accordance with Section J Submittal Procedures.
- 2.2 Submit shop drawings and product data sheets, as described in the Contract Documents, for all civil, structural, architectural, building mechanical, process mechanical, electrical, instrumentation and communication installations.

#### 3. EQUIPMENT DELIVERY AND INSPECTION

- 3.1 Deliver products in accordance with accepted current progress schedule and coordinate to avoid conflict with the Work and conditions at site. Coordinate the delivery of materials and equipment in advance of the work in order to ensure there are no impacts to downstream installation activities.
- 3.2 Deliver products in undamaged condition, in manufacturer's original container or packaging, with identifying labels intact and legible. Include on label, date of manufacture and shelf life, where applicable.
- 3.3 Unload products in accordance with manufacturer's instructions for unloading or as specified. Record receipt of products delivered to the site. Inspect for completeness and evidence of damage during shipment.
- 3.4 Remove damaged products from site and expedite delivery of identical new undamaged products, and remedy incomplete or lost products to provide that specified, so as not to delay progress of the Work.

#### 4. HANDLING, STORAGE, AND PROTECTION

- 4.1 Handle and store products in accordance with manufacturer's written instructions and in a manner to prevent damage. Provide manufacturer's recommended maintenance during storage, installation, and until products are accepted for use by Owner.
- 4.2 Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to assure that products are maintained under specified





conditions, and free from damage or deterioration. Keep running account of products in storage to facilitate inspection and to estimate progress payments for products delivered, but not installed in the Work.

- 4.3 Store electrical, instrumentation, and control products, and equipment with bearings in weather-tight structures as per manufacturer's instructions. Protect electrical, instrumentation, and control products, and insulation against moisture, water, and dust damage. Connect and operate continuously all space heaters furnished in electrical equipment.
- 4.4 Store fabricated products above ground on blocking or skids and prevent soiling or staining. Store loose granular materials in well-drained area on solid surface to prevent mixing with foreign matter. Cover products that are subject to deterioration with impervious sheet coverings; provide adequate ventilation to avoid condensation.
- 4.5 Store finished products that are ready for installation in dry and well-ventilated areas. Do not subject to extreme changes in temperature or humidity.
- 4.6 Hazardous Materials: Prevent contamination of personnel, storage building, and site. Meet requirements of product specification, codes, and manufacturer's instructions.





#### P. CONSTRUCTION FACILITIES

#### 1. MOBILIZATION

- 1.1 Mobilization shall include, but not be limited to, the following items:
  - .1 Obtaining required permits.
  - .2 Filing necessary notices with WSCC.
  - .3 Moving in the Contractor's field offices and equipment required within the first month after issuance of the Commence Work Order.
  - .4 Providing temporary construction fencing to prevent unauthorized access to the work area before starting construction on site.
  - .5 Providing temporary construction roads and signage if required.
  - .6 Providing temporary construction power, wiring, and lighting facilities.
  - .7 Providing onsite communication facilities, including telephones and internet services.
  - .8 Providing onsite sanitary facilities and potable water facilities as specified and as required by Laws and Regulations, and governing agencies.
  - .9 Arranging for and erection of Contractor's work and storage yard including temporary fencing.
  - .10 Posting required notices and establishing safety programs and procedures.
  - .11 Coordinate safety programs and procedures with the Owner.
  - .12 Having Contractor's superintendent at site full time.
  - .13 Removing debris and trash, etc. as needed for Contractor to gain access to do his Work.
- 1.2 Use area designated for Contractor's temporary facilities as shown in the Contract Documents.

#### 2. INSTALLATION AND REMOVAL

- 2.1 Provide construction facilities in order to execute work expeditiously.
- 2.2 Remove from site all such work after use.

#### 3. SCAFFOLDING

3.1 Provide and maintain scaffolding, ramps, ladders, platforms and temporary stairs.





#### 4. HOISTING

- 4.1 Provide, operate and maintain hoists cranes required for moving of materials and equipment. Make financial arrangements with Subcontractors for use thereof.
- 4.2 Hoists cranes shall be operated by qualified operator.

#### 5. STAGING AREA

5.1 The staging area (the Contractor's laydown area) as shown within the contractor

#### 6. SITE STORAGE/ LOADING

- 6.1 Confine work and operations of employees by Contract Documents. Do not unreasonably encumber premises with products.
- 6.2 Do not load or permit to load any part of Work with a weight or force that will endanger the Work.
- 6.3 Ensure that any aerosol or gas products are stored according to manufacturer's written instructions in a securely locked facility.

#### 7. CONSTRUCTION PARKING

- 7.1 Parking will be permitted on site provided it does not disrupt performance of Work or interfere with access, egress and parking for neighboring sites, or local traffic.
- 7.2 Provide and maintain adequate access to project site.
- 7.3 Build and maintain temporary roads where indicated or required and provide snow removal during period of Work.

#### 8. SECURITY

8.1 Provide and pay for responsible security personnel to guard site and contents of site after working hours and during holidays.

#### 9. OFFICES

- 9.1 Provide office heated to 22°C, lighted 750 lx and ventilated, of sufficient size to accommodate site office, eating area for workers, and furnished with drawings laydown table. Furnish site trailer as required.
- 9.2 Provide a clearly marked and fully stocked first-aid case in a readily available location.
- 9.3 Subcontractors may provide their own offices as necessary. Direct location of these offices to be approved by the City Representative.

#### 10. EQUIPMENT, TOOL AND MATERIALS STORAGE





- 10.1 Provide and maintain, in a clean and orderly condition, lockable weatherproof sheds for storage of tools, equipment and materials.
- 10.2 Locate materials not required to be stored in weatherproof sheds on site in a manner to cause least interference with work activities.
- 10.3 Stored materials and debris on site must be secured and contained within the construction site, so not to disturb the general public.

#### 11. SANITARY FACILITIES

- 11.1 Provide lockable sanitary facilities for work force in accordance with governing regulations and ordinances.
- 11.2 Post notices and take such precautions as required by local health authorities. Keep area and premises in sanitary condition.

#### 12. CONSTRUCTION SIGNAGE

- 12.1 Provide and erect, within 5 working days prior to construction mobilization, a project sign in a location designated by the City Representative.
- 12.2 Provide a construction sign 1220 x 2440mm, of plywood construction painted with exhibit lettering produced by a professional sign painter. Details of sign message to be provided to City Representative for review/ approval prior to fabrication. Wording shall in in Inuktitut, English and French official languages.
- 12.3 Provide site sign temporary mounting comprising foundation, framing, and supports.
- 12.4 Direct requests for approval to erect a Contractor signboard to City Representative. For consideration general appearance of Contractor signboard must conform to project identification site sign. Wording shall in in Inuktitut, English and French official languages.
- 12.5 Signs and notices for safety and instruction shall be in all Nunavut official languages graphic symbols.
- 12.6 Maintain approved signs and notices in good condition for duration of project, and dispose of off-site on completion of project, or earlier if directed by City Representative.

#### 13. CLEAN-UP

- 13.1 Remove construction debris, waste materials, packaging material from work site daily.
- 13.2 Clean dirt or mud tracked onto paved or surfaced roadways.
- 13.3 Store materials resulting from demolition activities that are salvageable.
- 13.4 Stack stored new or salvaged material not in construction facilities.





#### Q. TEMPORARY BARRIERS AND ENCLOSURES

#### 1. INSTALLATION AND REMOVAL

- 1.1 Provide temporary controls in order to execute Work expeditiously.
- 1.2 Remove from site all such work after use.

#### 2. GUARD RAILS AND BARRICADES

- 2.1 Provide secure, rigid guard rails and barricades around deep excavations, open shafts, open stair wells, open edges of floors and roofs.
- 2.2 Provide concrete jersey barriers for use as barricades around deep excavation sites, and as a means to separate vehicular traffic.
- 2.2 Provide as required by governing authorities.

#### 3. WEATHER ENCLOSURES

- 3.1 Provide weather tight enclosures to unfinished door and window openings, tops of shafts and other openings in floors, walls, and roofs.
- 3.2 Close off floor areas where walls are not finished; seal off other openings; enclose building interior work for temporary heat.
- 3.3 Design enclosures to withstand wind pressure and snow loading.

#### 4. DUST TIGHT SCREENS

- 4.1 Provide dust tight screens or insulated partitions to localize dust generating activities, and for protection of workers, finished areas of Work and public.
- 4.2 Maintain and relocate protection until such work is complete.

#### 5. ACCESS TO SITE

- 5.1 Provide and maintain access roads, crossings, ramps and construction access routes as may be required for access to Work.
- 5.2 Provide temporary fencing around perimeter of Work site, in order to delineate construction site from the public.

#### 6. PUBLIC TRAFFIC FLOW

- 6.1 Provide and maintain competent signal flag operators, barricades and lights as required to perform Work and protect the public.
- 6.2 Refer to Section E Special Project Procedures (Traffic Control).

#### 7. FIRE ROUTES





7.1 Maintain access to property including overhead clearances for use by emergency response vehicles.

#### 8. PROTECTION FOR OFF-SITE AND PUBLIC PROPERTY

- 8.1 Protect surrounding private and public property from damage during performance of Work.
- 8.2 Be responsible for damage incurred.

#### 9. PROTECTION OF BUILDING FINISHES

- 9.1 Provide protection for finished and partially finished building finishes and equipment during performance of Work.
- 9.2 Provide necessary screens, covers, and hoardings.
- 9.3 Be responsible for damage incurred due to lack of or improper protection.





#### R. CLOSEOUT PROCEDURES

#### 1. SECTION INCLUDES

1.1 Administrative procedures preceding preliminary and final inspections of Work.

#### 2. INSPECTION AND DECLARATION

- 2.1 Contractor's Inspection: Contractor and all Subcontractors shall conduct an inspection of Work, identify deficiencies and defects, and repair as required to conform to Contract Documents.
  - i. Notify City Representative in writing of satisfactory completion of Contractor's Inspection and that corrections have been made.
  - ii. Request City Representative's Inspection.
- 2.2 City Representative's Inspection: City Representative and Contractor will perform inspection of work to identify obvious defects or deficiencies. Contractor shall correct Work accordingly.
- 2.3 Completion: submit written certificate that following have been performed:
  - Work has been completed and inspected for compliance with Contract Documents.
  - ii. Defects have been corrected and deficiencies have been completed.
  - iii. Equipment and systems have been tested, adjusted and are fully operational.
  - iv. Certificates required by other Regulatory Agencies have been submitted.
  - v. Operation of systems have been demonstrated to Owner's personnel.
  - vi. Work is complete and ready for final inspection.
- 2.4 Final Inspection: when items noted above are completed, request final inspection of Work by Owner, City Representative, and Contractor. If Work is deemed incomplete, complete outstanding items and request reinspection.
- 2.5 Declaration of Substantial Performance: when Owner and City Representative consider deficiencies and defects have been corrected and it appears requirements of Contract have been substantially performed, make application for certificate of Substantial Performance. No later than 21 calendar days after receipt of application, City Representative will review Work to verify validity of application, and no later than 7 calendar days after completing review, will notify Contractor if Work or designated portion of Work is substantially performed.
- 2.6 Commencement of Lien and Warranty Periods: date of Owner's acceptance of submitted declaration of Substantial Performance shall be date for commencement for warranty





period and commencement of lien period unless required otherwise by lien statute of Place of Work.

- 2.7 Final Payment: when Owner and City Representative consider final deficiencies and defects have been corrected and it appears requirements of Contract have been totally performed, make application for final payment. If Work is deemed incomplete by Owner and City Representative, complete outstanding items and request reinspection. City Representative will, no later than 21 calendar days after receipt of an application for final payment, review Work to verify validity of application. City Representative will give notification that application is valid or give reasons why it is not valid, no later than 7 calendar days after reviewing Work
- 2.8 Payment of Holdback: after issuance of certificate of Substantial Performance of Work, submit an application for payment of holdback amount in accordance with terms of payment.





#### S. CLOSEOUT SUBMITTALS

#### 1. SECTION INCLUDES

- 1.1 As-built, samples, and terms of reference.
- 1.2 Equipment and systems.
- 1.3 Product data, materials and finishes, and related information.
- 1.4 Operations and maintenance data.
- 1.5 Spare parts, special tools and maintenance materials.
- 1.6 Warranties and bonds.
- 1.7 Final site survey.

#### 2. SUBMISSION

- 2.1 Make submittals in accordance with Section J Submittal Procedures.
- 2.2 Prepare inspections and data using personnel experience in maintenance and operation of described products.
- 2.3 Copy will be returned after final inspection, with City Representative's comments.
- 2.4 Revise content of documents as required prior to final submittal.
- 2.5 Provide evidence as to type, source and quality of products provided as part of the Work.
- 2.6 Defective products will be rejected, regardless of previous inspections. Replace products at own expense.
- 2.7 Pay costs of transportation.

#### 3. AS-BUILTS AND SAMPLES

- 3.1 In addition to requirements in General Conditions, maintain at the site on record copy of:
  - i. Contract Drawings.
  - ii. Terms of Reference.
  - iii. Addenda.
  - iv. Change Orders and other modifications to Contract.
  - v. Reviewed shop drawings, product data, and samples.
  - vi. Field test reports.





- vii. Inspection certificates.
- viii. Manufacturer's certificates.
- 3.2 Store record documents and samples in field office apart from documents used for construction. Provide files, racks, and secure storage.
- 3.3 Label record documents and file in accordance with Section number listings in List of Contents of this Project Manual.
- 3.4 Maintain record documents in clean, dry and legible condition. Do not use record documents for construction purposes.
- 3.5 Keep record documents and samples available for inspection by City Representative.

#### 4. RECORDING ACTUAL SITE CONDITIONS

- 4.1 Record information on set of blue line opaque drawings.
- 4.2 Provide felt tip marking pens, maintaining separate colours for each major system, for recording information.
- 4.3 Record information concurrently with construction progress. Do not conceal Work until required information is recorded.
- 4.4 Contract Drawings and shop drawings: legibly mark each item to record actual construction.

#### 5. EQUIPMENT AND SYSTEMS

- 5.1 Each Item of Equipment and Each System: include description of unit or system, and component parts. Give function, normal operation characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and commercial number of replaceable parts.
- 5.2 Panel board circuit directories: provide electrical service characteristics, controls, and communications.
- 5.3 Include installed colour coded wiring diagrams.
- Operating Procedures: include start-up, break-in, and routine normal operating instructions and sequences. Include stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- 5.5 Maintenance Requirements: include routine procedures and guide for troubleshooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- 5.6 Providing servicing and lubrication schedule, and list of lubricants required.





- 5.7 Include manufacturer's printed operation and maintenance instructions.
- 5.8 Include sequence of operation by controls manufacturer.
- 5.9 Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- 5.10 Provide installed control diagrams by controls manufacturer.
- 5.11 Provide Contractor's coordination drawings, with installed colour coded piping drawings.
- 5.12 Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagram.
- 5.13 Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- 5.14 Include test and balancing reports as specified in Section J Quality Control.
- 5.15 Additional requirements: as specified in individual terms of reference sections.

#### 6. MATERIALS AND FINISHES

- 6.1 Building Products, Applied Materials, and Finishes: include product data, with catalogue number, size, composition, and colour and texture designations. Provide information for re-ordering products.
- 6.2 Instructions for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- 6.3 Moisture-protection and Weather-exposed products: include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- 6.4 Additional Requirements: as specified in individual terms of reference sections.

#### 7. SPARE PARTS

- 7.1 Provide spare parts, in quantities specified in individual terms of reference sections.
- 7.2 Provide items of same manufacturer and quality as items in Work.
- 7.3 Deliver to site; place and store in location designated by City Representative.
- 7.4 Receive and catalogue all items. Submit inventory listing to City Representative. Include approved listings in Maintenance Manual.
- 7.5 Obtain receipt for delivered products and submit prior to final payment.

#### 8. MAINTENANCE MATERIALS





- 8.1 Provide maintenance and extra materials, in quantities specified in individual terms of reference sections.
- 8.2 Provide items of same manufacturer and quality as items in Work.
- 8.3 Deliver to site; place and store in location designated by City Representative.
- 8.4 Receive and catalogue all items. Submit inventory listing to City Representative. Include approved listings in Maintenance Manual.
- 8.5 Obtain receipt for delivered products and submit prior to final payment.

#### 9. STORAGE, HANDLING AND PROTECTION

- 9.1 Store spare parts, maintenance materials, and special tools in manger to prevent damage or deterioration.
- 9.2 Store in original and undamaged condition with manufacturer's seal and labels intact.
- 9.3 Store components subject to damage from weather in weatherproof enclosures.
- 9.4 Store paints and freezable materials in a heated and ventilated room.
- 9.5 Remove and replace damaged products at own expense and to satisfaction of City Representative.

#### 10. PRE-WARRANTY CONFERENCE

- 10.1 Meet with City Representative, to develop understanding of requirements of this section. Schedule meeting prior to contract completion, and at time designated by City Representative.
- 10.2 City Representative will establish communication procedures for:
  - i. Notification of construction warranty defects.
  - ii. Determine priorities for type of defect.
  - iii. Determine reasonable time for response.
- 10.3 Provide name, telephone number and address of licensed and bonded company that is authorized to initiate and pursue construction warranty work action.
- 10.4 Ensure contact is located within local service area and warranted construction, is continuously available, and is responsive to inquiries for warranty work action.

#### 11. WARRANTIES AND BONDS

11.1 Separate each warranty or bond with index tab sheets keyed to Table of Contents listing.



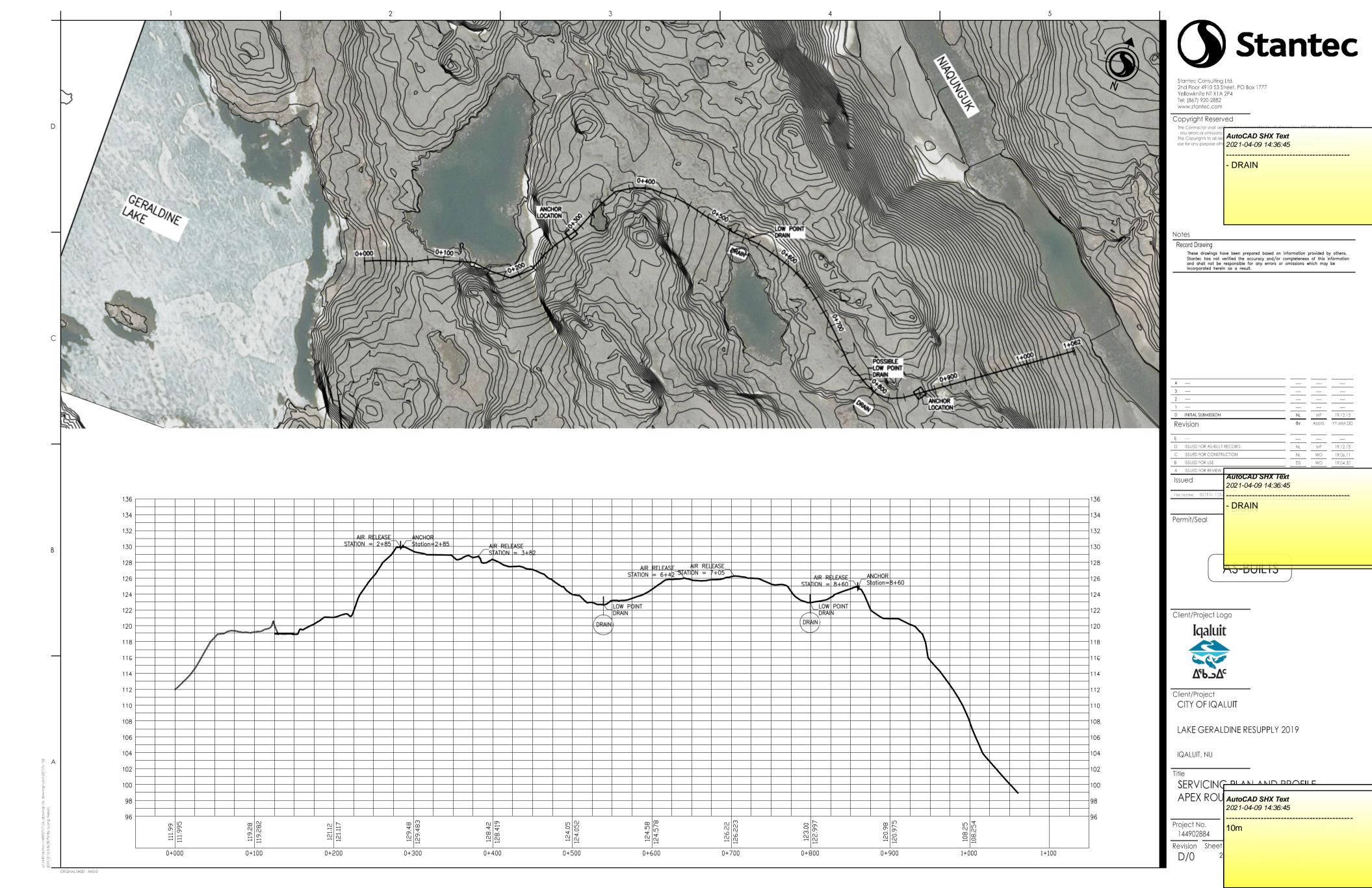


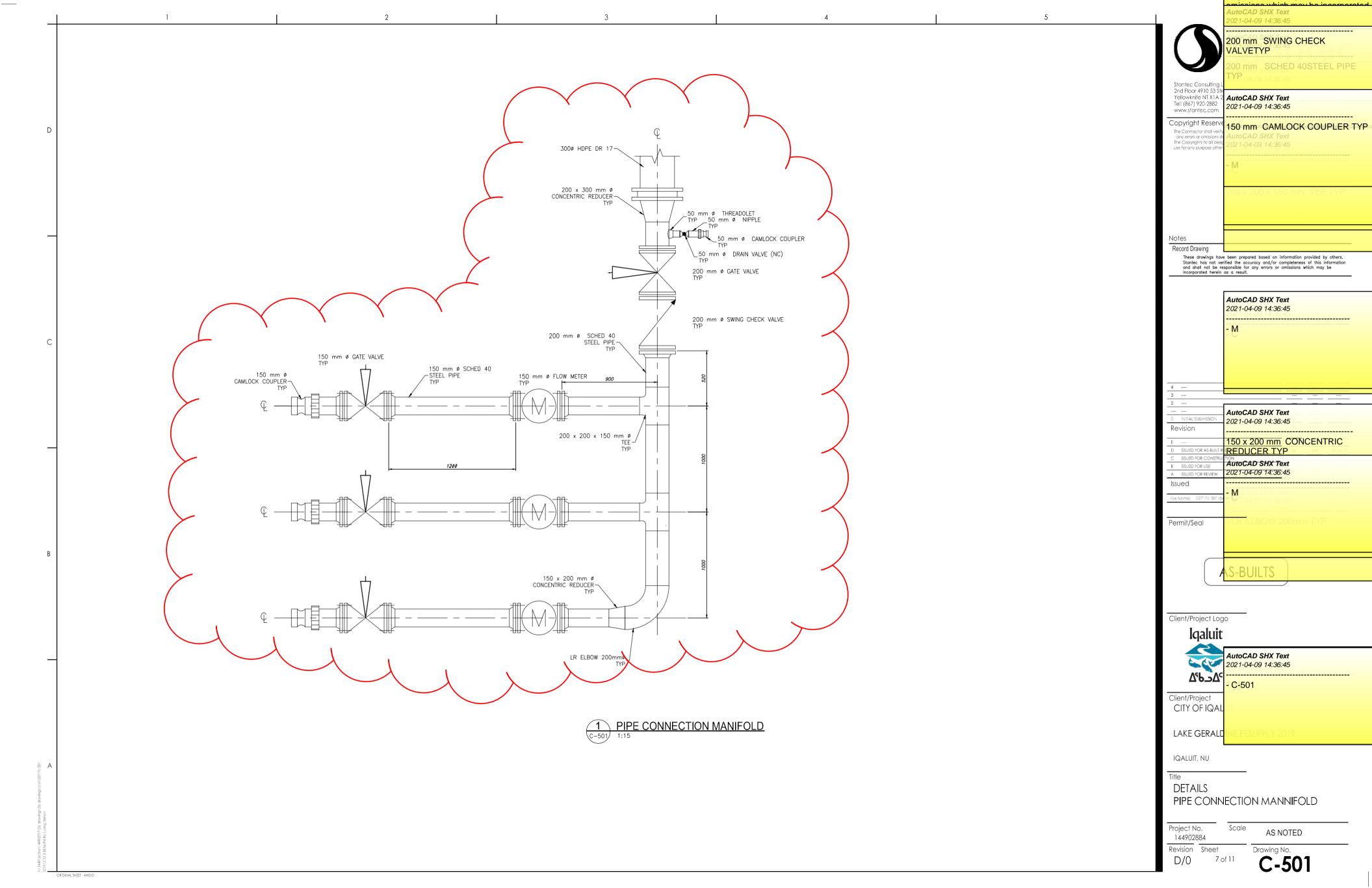
- 11.2 List subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
- 11.3 Obtain warranties and bonds, executed in duplicate by subcontractors, suppliers, and manufacturers, within ten (10) working days after completion of the applicable item of work.
- 11.4 Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of Substantial Performance is determined.
- 11.5 Verify that documents are in proper form, contain full information, and are notarized.
- 11.6 Co-execute submittals when required.
- 11.7 Retain warranties and bonds until time specified for submittal.

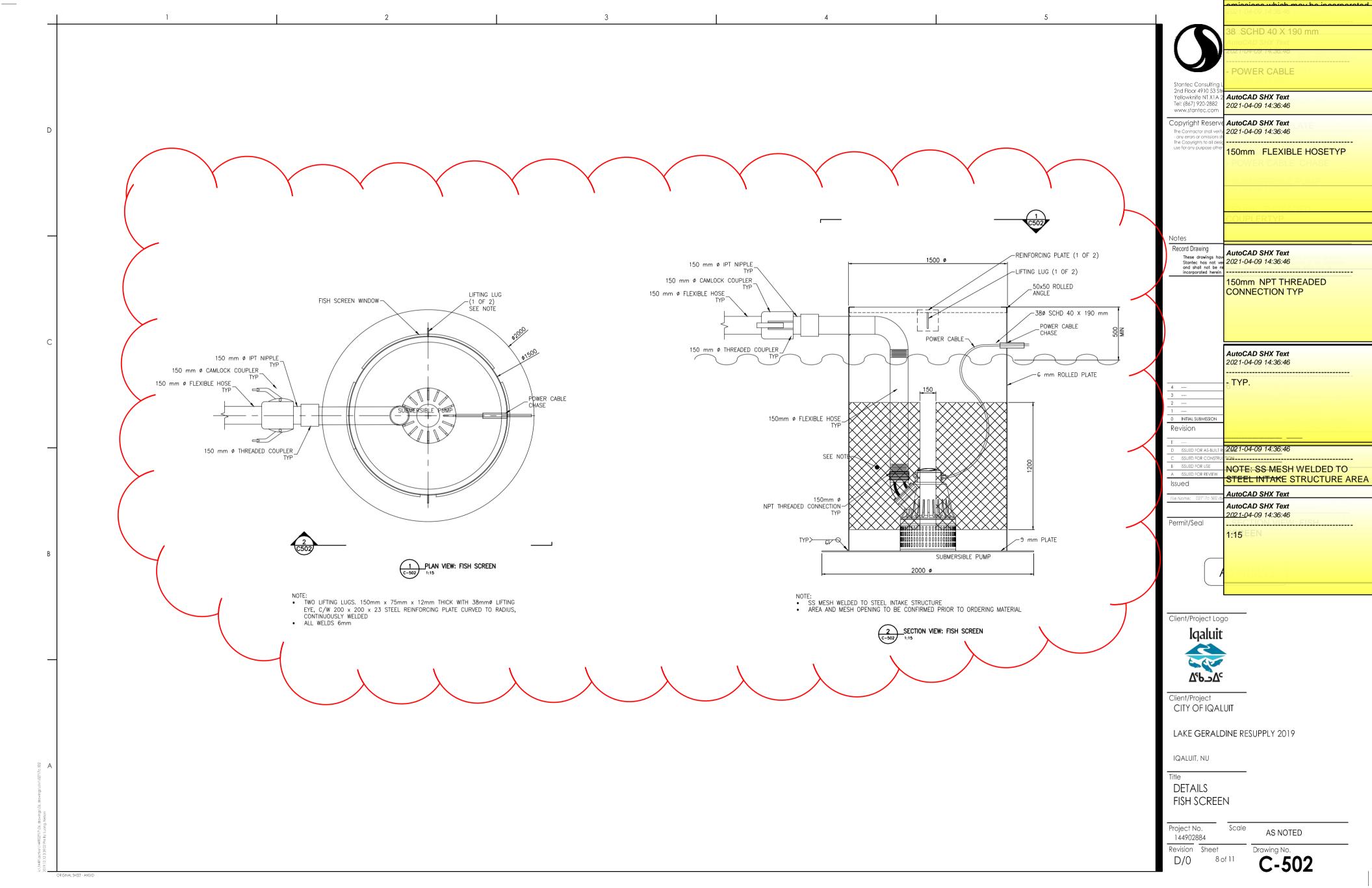
## CONSTRUCTION SERVICES **RFT – Supporting Documents**

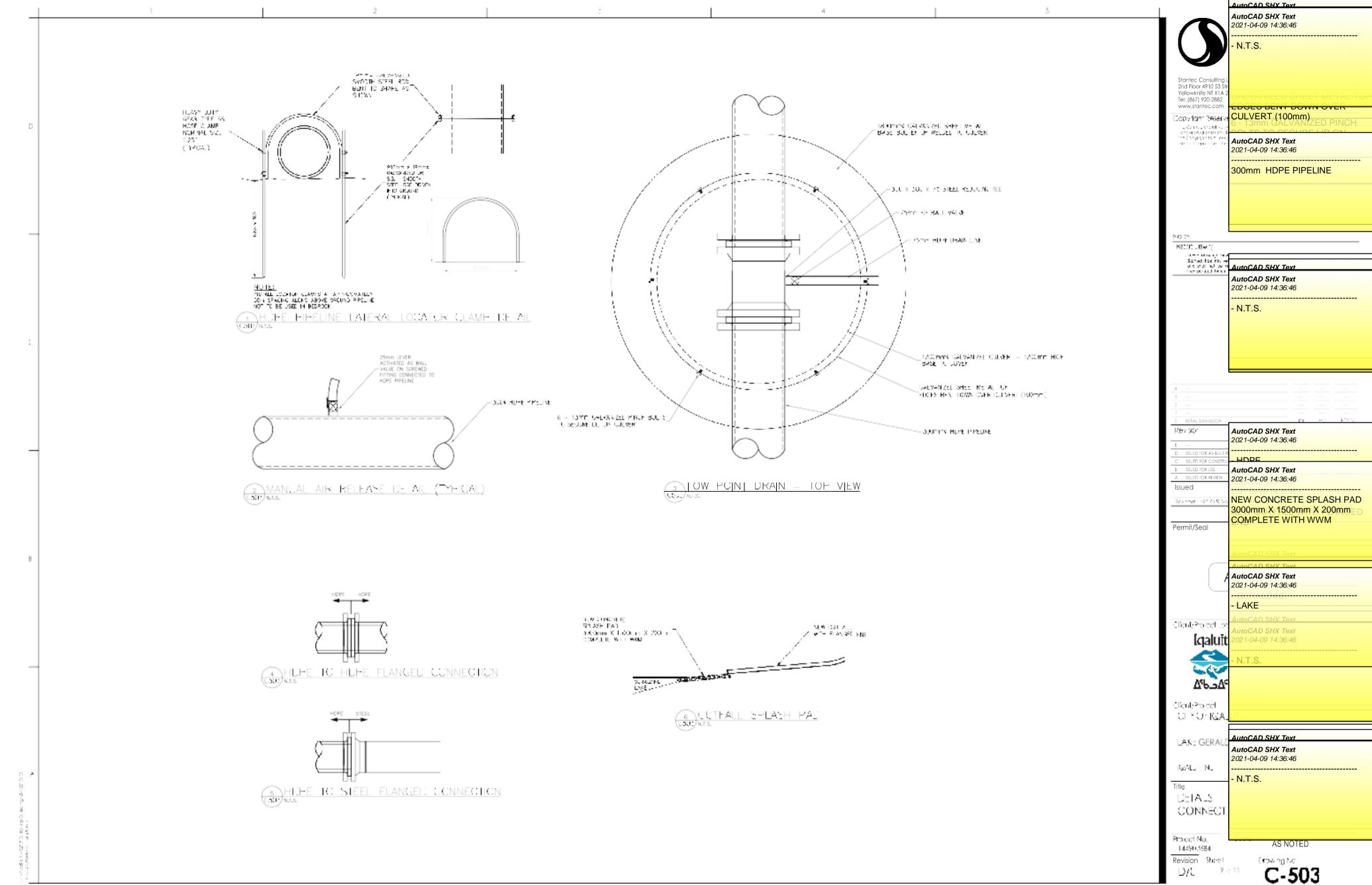


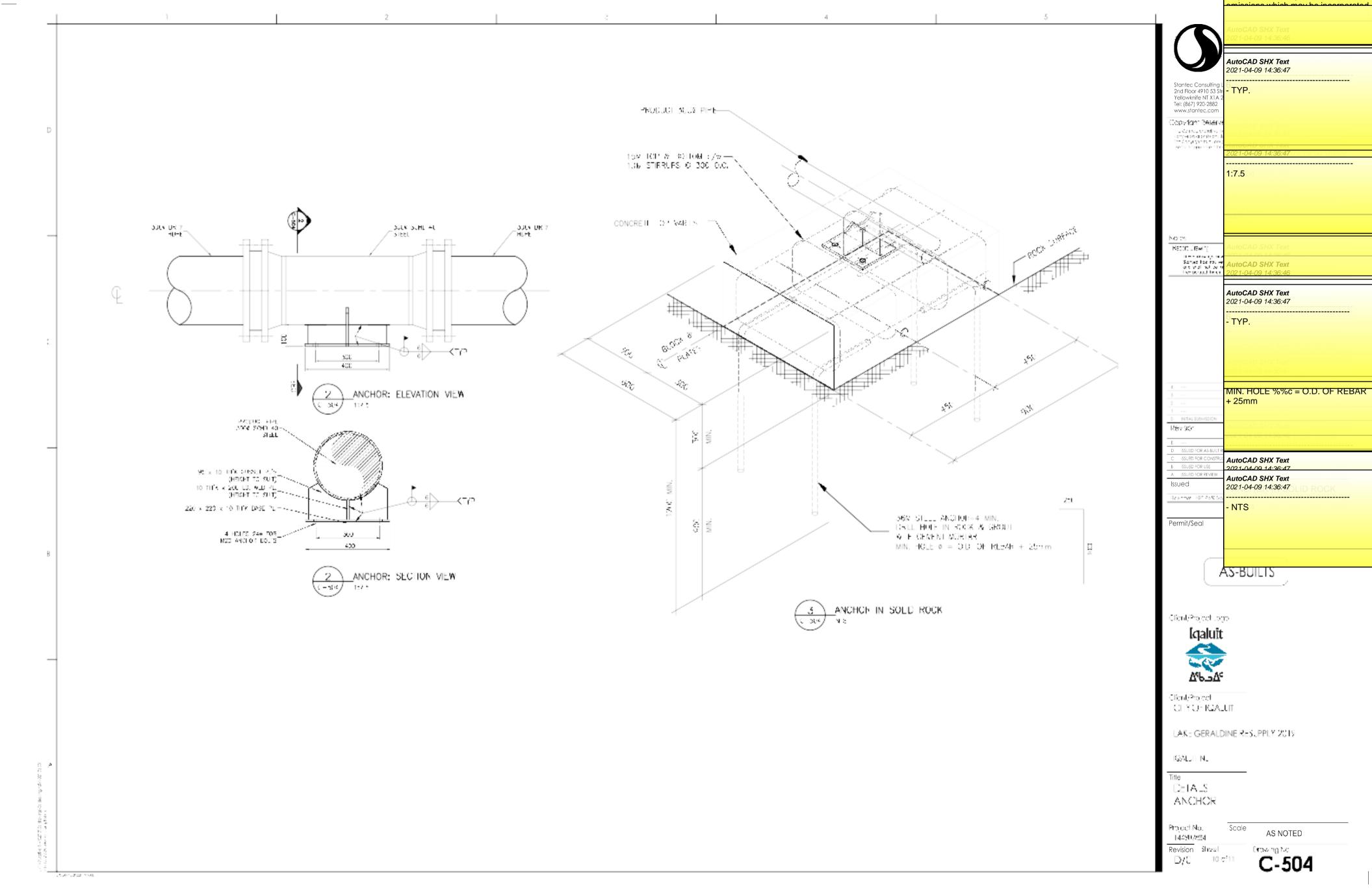
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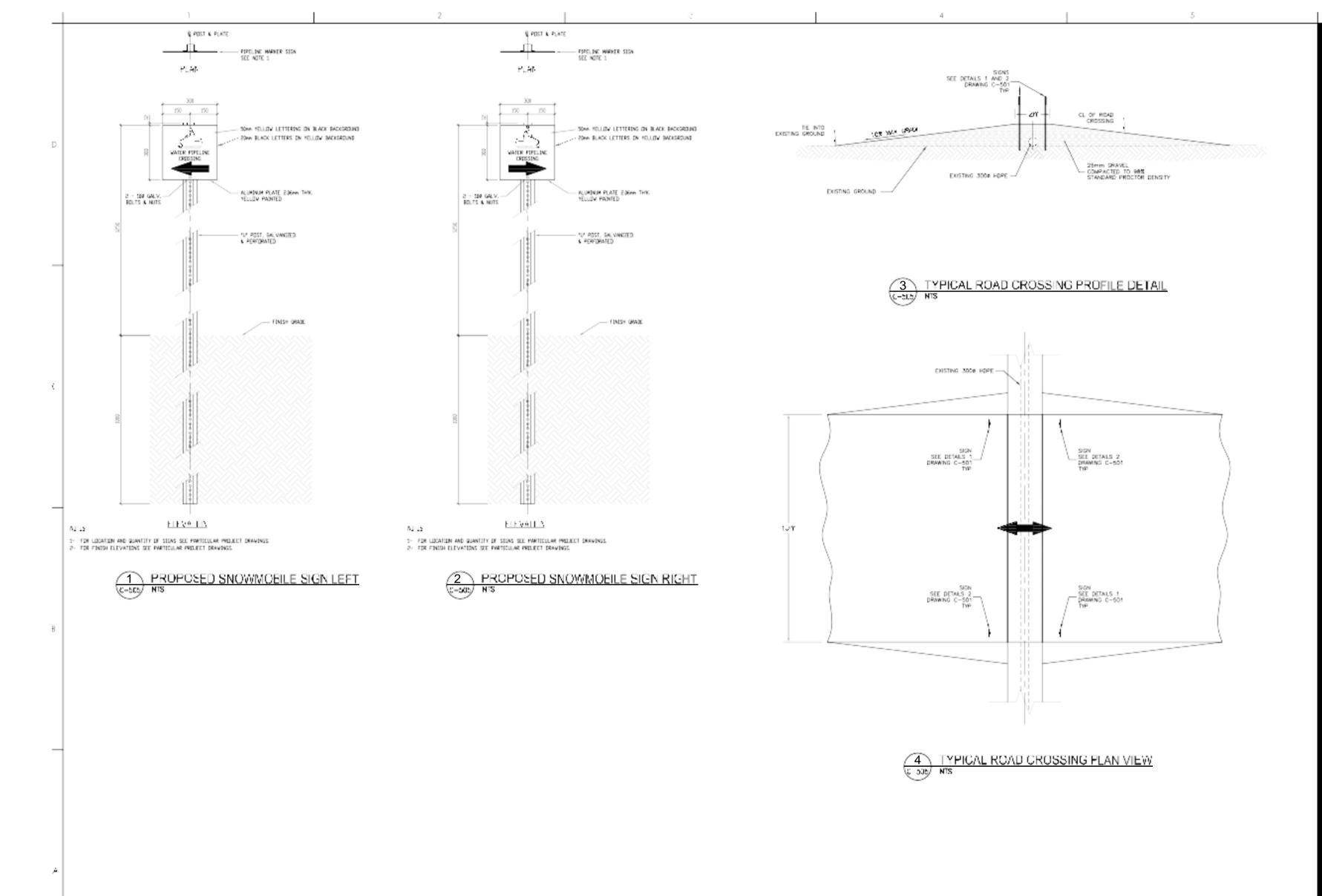














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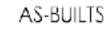
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Revision Sheet

Drawing No.

C-505



## REQUEST FOR TENDER FOR THE PROVISION OF CONSTRUCTION SERVICES FOR APEX PUMPING SUPPLEMENTAL PUMPING



## REQUEST FOR TENDER FOR THE PROVISION OF CONSTRUCTION SERVICES FOR APEX PUMPING SUPPLEMENTAL PUMPING 2025-RFT-089

# SECTION I – OTHER REFERENCE DOCUMENTS

Curve number

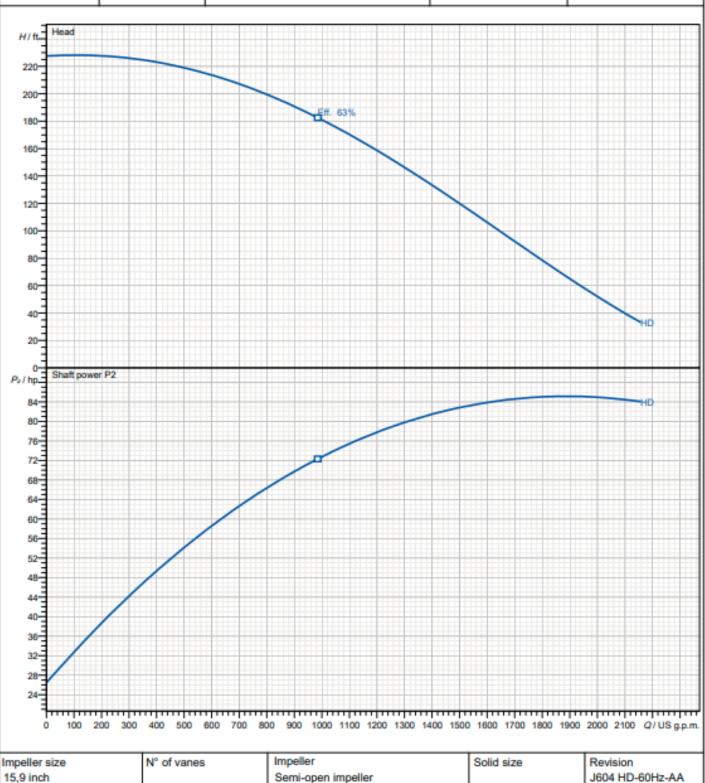
Reference curve

J604HD60HZ

### Pump performance curves J 604 HD 60HZ



Discharge Frequency 60 Hz Rated speed Date Density Viscosity Testnorm ISO 9906: 2012, HI 11.6/14.6 Gr 3B 62,32 lb/ft3 1,077E-5 ft2/s 2016-04-26 1730 rpm Flow Head Rated power Hydraulic efficiency NPSH



## ABS submersible drainage pump J 604

Specification

Electric submersible pump.

Maximum submergence: 65 ft. • Protection class IP 68.

Max temperature of pumped medium at max power input and con-

tinuous duty 104°F.

Max medium density 0.0397 Lbs/inch3.

pH of the pumped medium 5-8.

Strainer hole <sup>1</sup>/<sub>2</sub>" x 2 <sup>3</sup>/<sub>8</sub>". • Max number of starts 30/hour.

J 604 ND Medium head, 3-phase. J 604 HD High head, 3-phase.

Electric Motor

3-phase squirrel-cage induction motor, 60 Hz. Service factor 1.1. Class F insulation. Motor rating  $P_2$ : 94.0 Hp. Speed: 1732 rpm

Voltage, V	230	460	575	
Nominal current, A	226.0	113.0	91.0	



D.O.L. start with built-in terminal block.

Star-Delta start with built-in terminal block.

When used with VFD, pump must be equipped with terminal block.

#### Power Cable

Heavy duty power cable for submersible pump applications 100 ft 2 x AWG 2/3 GGC (UL, CSA, MSHA), 230 V 100 ft 1 x AWG 2/3 GGC (UL, CSA, MSHA), 460-575 V

Control cable: 100 ft 1 x AWG 16/7 SOOW (UL, CSA, MSHA).

#### Motor Protection

Built-in thermal switches in the stator windings (284°F, ±5). DI leakage sensor in the junction box, DI leakage sensor in the oil chamber, thermal sensors at upper (248°F) and lower (194°F) bearing all connected to a separate starter and control unit.

#### Shaft Seal

Double mechanical seal in oil bath.

Primary seal: Silicon carbide on silicon carbide.

Secondary seal: Carbon on stainless steel.

#### Bearings

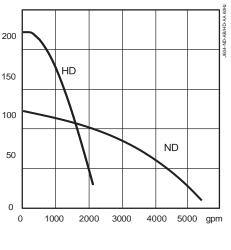
Upper bearing: Single-row deep groove ball bearing. Lower bearing: Double angular contact ball bearing.

#### Discharge Connections

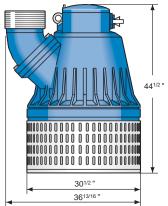
6", 8", 10" hose connections.

6"(standard HD), 8", 10" (standard ND) NPT threaded

connections.



US 60 Hz



Weight (without cable) 1157 lb

#### Options and Accessories

Zinc anodes • Surface protection coating

ft

Wear plate in polyurethane • Series connection (HD)

Starter and control units • Automatic level control unit

Floatation system • Repair kit

Discharge connection accessories and hose

Materials		ASTM
Casing and castings	Aluminium	ASTM AlSi10mg
Strainer and fasteners	Stainless steel	AISI 304
Shaft	Stainless steel	AISI 420
Impeller	Hardened chrome steel	AISI 420
Wear parts / O-rings	Nitrile rubber	



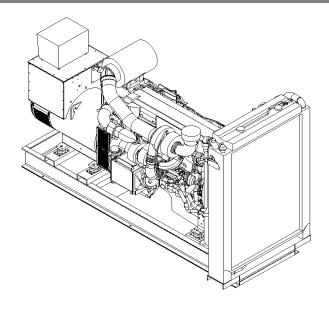






## DIESEL PRODUCT LINE

SVW350 T6-T3 120/240/208/480/600 Volts 60 Hz/1800 RPM | Standby/Prime



#### **60Hz POWER RATINGS**

Voltage AC	Phase	PF	Star	ndby	Prir	ne*
· snags / is			KW	Α	Kw	Α
120/240	1	1	399	1663	363	1512
120/208	3	0.8	402	1393	365	1267
277/480	3	0.8	403	606	366	<del>551</del>
347/600	3	0.8	405	487	368	443

<sup>\*</sup> Prime power rating for reference only.

#### Overview of the SIMMAX series of Industrial Generator Sets

Simson-Maxwell generators are factory-built in facilities that utilize the latest technology, mechanical and electrical component assembly, production, and testing. Each model is the result of computer-aided design and modeling backed up by exhaustive prototype-testing. Our development technology results in a unique range of innovative designs for highly reliable generator sets backed-up by a comprehensive warranty covering all components.

#### **Standard Configuration of Industrial Sets**

- Long-life, heavy-duty, 4-cycle, direct injection diesel engine from a world-renowned manufacturer for economy of operation and maximum reliability and durability. Capable of fullrated load acceptance in one step.
- Cooling: Radiator with belt driven pusher fan.
- Filtration: Heavy duty replaceable element aircleaner.
- Alternator: Single bearing, 4-pole, rotating field, self-excited, self-ventilated, 12-wire re-connectable (6-wire dedicated for 600V), 60Hz brushless alternator with Class H insulation. Automatic voltage regulator (AVR) providing close voltage regulation.

- Arrangement: Open skid with engine and alternator units close coupled together and with seismic antivibration isolators mounted between the assembly and a heavy- duty steel base. Lifting lugs are provided as per application.
- Auto Start Control Panel: Digital auto-start microprocessor based control panel with remote start capability.
- Starting System: Electric starter motor, battery cables, battery and belt driven charging alternator.
- CSA certified and meets CSA C282 requirements.

Rev: A Date: 3/29/2018





## DIESEL PRODUCT LINE

SVW350 T6-T3 120/240/208/480/600 Volts 60 Hz/1800 RPM | Standby/Prime

ENGINE SPECIFICATION	
	Volvo
Manufacturer Model	TAD1353GE
EPA certified	Tier-3
	1800
Crank shaft speed: rpm	Diesel
Fuel type	Direct
Injection Aspiration	Turbocharged
Number of cylinder	6
Cylinder arrangement	Inline
Displacement: L	12.78
Bore: mm	131
Stroke: mm	158
Engine standby power: kW	430.0
Engine prime power: kW	391.0
Cooling	Water cooled
Governor	Electronic-EMS2.2
Starting motor voltage	24V DC
Compression ration	18.1:1
Air cleaner type	Air filter with replaceable paper insert
EXHAUST SYSTEM	
Maximum engine exhaust temperature: °F (°C)	923 (495)
Exhaust gas flow: CFM (m3/hr)	2790.0 (4740.3)
Max. permissible back pressure: PSI (kPA)	1.451 (10)
COOLING SYSTEM	
Radiator cooling air flow: CFM (m3/hr)	14663 (24913) @Max 40°C ambient temperature
Max. restriction of cooling air: in.w.g. (kPA)	1.407 ( 0.4 )
Engine combustion air flow: CFM (m3/hr)	1102 (1873)
Total intake air requirement: CFM (m3/hr)	15765 (26785)
Total coolant capacity: Litre	44
HEAT BALANCE	
Heat at rejection to coolant: kW	178.0
Heat at rejection radiation from engine: kW	11.0
Heat at rejection to engine exhaust: kW	338.0
LUBRICATION SYSTEM	
Oil pan capacity: Litre	30.0
Oil pan capacity with filter: Litre	36.0
Oil cooler	Integrated full flow
Recommended lubricating oil grade	VDS3/VDS2
Oil consumption at full load: Litre/hr	0.05
Oil pressure: PSI (kPA)	65.3 (450)

Rev: A Date: 3/29/2018

## SIMMAX



Tank size: L x W x H - m

## DIESEL PRODUCT LINE

SVW350 T6-T3 120/240/208/480/600 Volts 60 Hz/1800 RPM | Standby/Prime

5 x 1.7 x 1

ENGINE ELECTRICAL SYSTEM					
Starting motor voltage		24V DC			
Battery capacity Cranking Amps minimum		4D, 12V, 1000A			
		280 A at +20 °C			
FUEL SYSTEM Recommended fuel		ACTM DOZE Not and 2 D.I	US KK 2204 EN 500		
		ASTM-D975-No1 and 2-DJ	15 KK 2204, EN 590		
Fuel supply line, min. ID: mm		15.0			
Fuel return line min. ID: mm		15.0			
Fuel supply line max. restriction: kpa		10			
Fuel pump type		Engine-driven			
Fuel filter		Fuel filter 0.005mm Prefilte			
FUEL CONSUMPTION	Standby Power	Prime Power			
100% Load Standby: Litre/hr	105.6	100% Load Prime: Litre/hr	97.0		
75% Load Standby: Litre/hr	84.0	75% Load Prime: Litre/hr	77.1		
50% Load Standby: Litre/hr	59.2	50% Load Prime: Litre/hr	55.3		
25% Load Standby: Litre/hr	36.8	25% Load Prime: Litre/hr	34.3		
ALTERNATOR SPECIFICATION					
Alternator manufacturer		STAMFORD			
Alternator model		HCI434			
Voltage		120V - 480V, 600V			
Alternator type		Four pole, Rotating field			
Excitation system		Brushless, PMG (MX341)			
Power factor		0.8			
Number of leads		12 leads reconnectable (120V-480V-600V)			
Stator pitch		2/3			
Insulation		Class H			
Windings - temperature rise / Ambie	nt °C	125 / 40			
Enclosure rating		IP23			
Bearing		Single, Sealed			
Amortisseur windings		Full			
Voltage regulation - no lead to full loa	ad with DSR AVR	± 1%			
TIF		<50			
Line harmonics			5% MAXIMUM		
Alternator cooling air flow: CFM (m3	3/hr)	2100 (3568)			
STANDARD FEATURES	,,,	( 3333 )			
Radiator with pusher fan		Standard fuel filter			
Medium-duty, Air filter with replaceable paper insert		All rotating components protected with metal guards			
Heavy-duty engine start batteries with cables  • Operation and installation literature		J			
• Emergency stop switch • CSA certified		incitatoro			
Control Panel (See next page for details)		Steel base for mounting on fuel tank/concrete surface			
OPTIONAL FEATURE: SUB-BASE FUEL TANK *		Sieer base for mounting C	on rue tally concrete surface		
Runtime	24 hour	48 hour	72 hour		
Tank volume - US gal (L)	669.9 (2535.6)	1339.7 (5071.1)	2009.5 (7606.6)		
Tank volume - 05 gar (L)  Tank size: L x W x H - inch	126 x 49 x 29	167 x 49 x 40	197 x 64 x 40		
Tank Size. L X VV X H - Inch	120 X 49 X 29	107 X 49 X 40	197 X 04 X 40		

 $<sup>^{*} \</sup> All \ measurements \ are \ approximate \ and \ for \ estimation \ purposes \ only. \ The \ tank \ dimensions \ may \ vary. \ For \ specific \ sizes, \ contact \ sales \ representative.$ 

3.2 x 1.3 x 0.8

Rev: A Date: 3/29/2018

4.3 x 1.3 x 1

## SIMMAX



## DIESEL PRODUCT LINE

SVW350 T6-T3 120/240/208/480/600 Volts 60 Hz/1800 RPM | Standby/Prime

#### Control Systems Standard Features - Generator Digital Control Panel

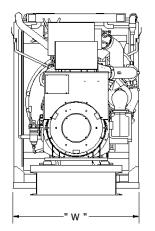
Standard Configuration of Control Systems

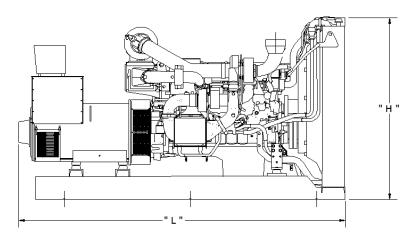
- Numerous control systems available, depending on customer requirements
- Automatic or manual start/stop
- · Pre-lube function with timers
- Adjustable crank attempts
- Engine warm up/cooling functions
- Digital metering with alarms and shutdowns

- · LCD display
- LED indicators
- · In-built PLC function
- RS232 (optional RS485 or CAN) communication
- Data logging up to 350 events
- Password protection



#### **Key dimensions and Weights**





GENERATOR DATA *				
L = LENGTH - inch (mm)	W = WIDTH - inch (mm)	H = HEIGHT - inch (mm)	DRY WEIGHT - lbs (kg)	
125 ( 3175 )	48 ( 1219.2 )	66.5 (1689.1)	7200.4 ( 3265.5 )	

\* All measurements are approximate and for estimation purposes only. Images are reference only. Any deviation can change dimensions.

Materials and specifications subject to change without notice.







Rev: A Date: 3/29/2018

#### Simson Maxwell

Calgary | Edmonton | Nanaimo | Port Coquitlam | Prince George | Terrace | Ft. St. John www.simson-maxwell.com | 800-374-6766



Rev: A Date: 3/29/2018



#### LONDON, ONTARIO

700 Richmond Street, Suite 307 London, ON N6A 5C7

T 519.452.7700

**F** 519.452.1712

**TF** 1.866.919.4531

#### OTTAWA, ONTARIO

2327 St. Laurent Boulevard, Unit 100 Ottawa, ON K1J 4J8

**T** 613.824.8900

**F** 613.824.8901

**TF** 1.866.919.4530

#### WINNIPEG, MANITOBA

1600 Ness Avenue, Unit 300 Winnipeg,

MB R3J 3W7 **T** 204.783.1276

**F** 204.478.4940

**TF** 1.866.919.4531

#### SASKATOON, SASKATCHEWAN

3530 Millar Avenue, Unit 400 Saskatoon,

SK S7P 0B6 **T** 306.343.5500

**F** 306.343.3601

**TF** 1.866.919.8899

#### **IQALUIT, NUNAVUT**

P.O. Box 957

Iqaluit, NU X0A 0H0

T 867.979.3300 TF 1.866.919.4533 **F** 867.979.3302

#### TORONTO, ONTARIO

300 The East Mall, Suite 302 Toronto,

ON M9B 6B7

647.351.0096 **F** 647.351.0069

#### COQUITLAM, BRITISH COLUMBIA

1900B Brigatine Drive Coquitlam, BC V3K 7B5 **T** 604.787.6883 Project No. 17-1719

August 12, 2018 City

of Iqaluit c/o Colliers Project Leaders Building 901, City Hall, Box 460 Iqaluit, Nunavut X0A 0H0

Attn: Mr. Steve Archibald, P.Eng., Sr. Project Manager Re:

Road to Nowhere Bridge, Iqaluit, NU – Temporary Emergency Use

Dear Mr. Archibald:

Pursuant to your recent request and ongoing correspondence, Concentric has been asked to provide recommendations for the temporary emergency use of the bridge on the Road to Nowhere.

#### **Background**

Concentric was retained by the City of Iqaluit in 2017 to complete a condition assessment and report of the Road to Nowhere (RTN) bridge, Astro Hill bridge and Apex Bridge. Concentric completed the assessments in the summer of 2017. As a result of this assessment, the RTN was closed until such time as the recommended repairs could be completed.

Concentric was asked to provide a design and tender package to repair the bridges based on the recommendations in our report.

The City of Iqaluit has recently concluded that the Lake Geraldine water reservoir could potentially run out of water as early as this winter. As the City's primary source of drinking water, the reservoir will be supplemented with water from the Apex River. The bridge on the Road to Nowhere spans the Apex river and will need to be utilized to facilitate the installation of pumps.



#### Road to Nowhere Bridge Construction and History

Concentric has completed a review of inspection and construction documents with the purpose of establishing the originally designed loading requirements. A visit to the site was conducted on August 2<sup>nd</sup>, 2018 to evaluate the effects of erosion on the existing abutments. At the request of Concentric, staff of Stantec Engineering completed a supplemental visit to verify conflicting information found during Concentric's document review.

Concentric has concluded the following information about the Bridge:

- The Bridge was most likely constructed in the early 1980's
- The superstructure consists of:
  - Deck structure consisting of two layers of 2x12 planking alternating in directional orientation (top layer laid transversely and bottom laid longitudinally).
  - o The deck is supported with 8x8's deck beams spaced at approximately 12" o/c
  - The deck beams are supported by nine wide flange steel girders that span approximately 26' across the river. The girders measure approximately 14" deep and 7" wide.
  - o Girders are supported by rock filled heavy timber cribs.
  - The grades of materials \*(with the exception of the timber decking) and standards used to construct the original bridge is not known to Concentric.

Based on Concentric's recent site visit, the erosion under the abutments has not progressed in a significant manner, when compared to site inspection photos from 2017. Concentric remains concerned over the stability of the abutment due undermining cause by erosion.

The load capacity of the bridge could not be determined by reviewing record documentation. A report from 2002 indicates that the steel is capable of supporting a vehicle with a GVW (Gross Vehicle Weight) of 21t and the wood decking capable of supporting a GVW of 11.5t. Since this report, a sign was posted on the bridge indicating a load limit of 14t. It should be noted that the timber decking has been changed in composition several times between the 2002 report and the current conditions. As a result, it was concluded that a structural analysis would be required to determine the load carrying capacity.

#### **Construction Equipment**

Kudlik Construction has provided a list of equipment, for the purposes of evaluating the bridge. The

maximum equipment loads can be summarized as follows:

- Front end loader empty (34,750 kg)
- Full truck including fuel (31,740kg)
- Triaxle dump truck including load (30,000 kg)
- Tractor trailer (21,000 kg)
  - o with excavator (63,000 kg)
  - o with bulldozer (54,500 kg)
- Excavator (30,200 kg)
- Bulldozer (21,500 kg)



#### **Analysis**

Concentric performed a structural analysis on the bridge's superstructure based on the equipment provided by Kudlik Construction Limited. This included an analysis of the timber deck beams and the steel girders. None of the equipment listed by Kudlik meets the criteria required under Limit States Design as dictated by the Canadian Highway Bridge Design Code (NHBDC) and the National Building Code of Canada (NBCC).

The purpose of utilizing the bridge on the Road to Nowhere is to provide temporary access for the construction of a supplemental supply for drinking water to Lake Geraldine. The bridge is currently closed, no public access is allowed. Given that the bridge is required to be used on a temporary basis with the specific equipment listed above, we have analyzed the bridge using Allowable Stress Design.

Under Allowable Stress Design, the calculated resistance of the structural element is divided by the anticipated load that will be placed upon it. The result of this calculation is referred to as a factor of safety. Depending on the element being deigned, the Factor of Safety is typically required to be greater than 2:1. None of the vehicles listed above meet this typical Factor of Safety.

The tractor and trailer loaded with either an excavator or bulldozer have a calculated Factor of Safety less than 1:1, indicating structural failure. A loaded tractor and trailer shall not be driven across the bridge.

For the triaxle dump truck, fuel truck, and front-end loader, the Factor of Safety for the steel girders is approximately 1.1:1. The wood deck and deck beams have a Factor of Safety of 1:1.

#### Conclusion

Our analysis has concluded that the triaxle dump truck, fuel truck, front-end loader, and empty tractor with trailer can be driven across the RTN bridge on a temporary basis provided the following criteria are met:

- The top and bottom flange thickness of the steel girders are measured and confirmed to be at least 9.8mm thick prior to equipment being driven across the bridge.
- Only a single vehicle, regardless of weight, can be on the bridge at any given time
- Vehicles shall only use the bridge on the upstream side (Northwestern side of bridge)
- Vehicles must not travel more than 5 km/h while on the bridge
- The locations of the beams should be painted on the bridge deck and vehicles must be guided by a flag person at all times.
  - Rubber tired vehicles (fuel truck, triaxle, tractor/trailer, front end loader) should have their tires
    positioned such that they are as close to being on top of the underlying steel girders as possible.
  - Tracked vehicles (excavator, bulldozer) should be positioned such that their tracks are placed between underlying steel girders.
- Tractor and trailer (float truck) can not cross the bridge with equipment. Equipment must be unloaded and cross separately.
- The front-end loader, excavator, and dozer shall cross the bridge empty. Trips across the bridge shall be minimized, i.e. Drive it across the bridge, complete the work, and return the equipment once work is completed.
- The triaxle dump truck and fuel truck shall not have full payloads. The maximum payload permitted at this time is 60% of capacity.



- The structure shall be constantly monitored while in use. Any defect in the structure must immediately be reported to Concentric for evaluation. This includes, but is not limited to:
  - o Cracks developing in timber
  - o Permanent deflection of the steel girders
  - Shifting in the abutment(s)
  - Sudden lose of granular on the road surface.
- The structure shall also be inspected prior to use every day

As this bridge is going to be used at or near the calculated capacity of the structure, damage to the structure is possible.

#### Limitations

This analysis was limited only to the superstructure elements outlined above and did not include an analysis of the abutments. The conclusions of the analysis do not meet the criteria listed under the National Building Code of Canada or the Canadian Highway Bridge Design Code. Structural recommendations found within are meant for the purposes of informed risk analysis.

This report was prepared exclusively for the purposes, projects and site location outlined in the report. The report is based on information provided to, or collected and/or obtained by Concentric as indicated in the report, and applies solely to the information provided to us at the time of the review. Concentric's report represents a review of available information within an established work scope, schedule, and budget.

Concentric prepared this report for the sole benefit of the City of Iqaluit c/o Colliers Project Leaders. The material in it reflects Concentric's best judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Concentric accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

Should there be any questions, please contact the undersigned. Yours sincerely,

**Concentric Associates International Incorporated** 

Travis Parker

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# NUNAVUT WATER BOARD TYPE "A" WATER LICENCE NO. 3AM-IQA1626



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### Licence No. 3AM-IQA1626

Pursuant to the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to the

	CITY OF IQAL	JIT			
(Licensee)	BOX 460 IQALUIT, I	NU X0A OHO			
(Mailing Address)					
		, divert or otherwise use Water or and conditions contained within this			
Licence Number / Type:	3AM-IQA1626 / TY	PE "A"			
Water Management Area:	FROBISHER BAY	WATERSHED (53)			
Location:		QALUIT'S MUNICIPAL KIQTANI REGION, NUNAVUT			
Classification:	MUNICIPAL UNDE	RTAKING			
Purpose:	USE OF WATERS AND DEPOSIT OF WASTE				
Quantity of Water not to be Exceeded:	1,100,000 CUBIC METRES ANNUALLY				
Date Licence Issuance:	JUNE 17, 2016				
Expiry of Licence:	JUNE 16, 2026				
This Licence issued (Motion Number: 2016-02-P6-14) and recorded at Goji Haven, Nunavut, includes and is subject to the annexed conditions.					
Norman Mike Nunavut Water Board, Hearing Chair	APPROVED BY: APPROVAL DATE:	Minister of Indigenous and Northern Affairs Canada			



### PART A: SCOPE, DEFINITIONS, AND ENFORCEMENT

### 1. SCOPE

a. This Type "A" Water Licence No. 3AM-IQA1626 ("Replacement and Amended Licence" or "Licence") authorizes the City of Iqaluit ("Licensee" or the "City") to use Water and deposit Waste in support of a Municipal undertaking, as classified under Schedule 1 of the *Regulations*, within the City's municipal boundaries at the following approximate geographic coordinates:

Undertaking	Latitude	Longitude
	63° 50′ 56.31″ N	68° 39' 49.87" W
	63° 50′ 57.30″ N	68° 33' 41.94" W
Overall Extents	63° 43′ 48.91″ N	68° 18' 12.53" W
Overall Extents	63° 41′ 06.60″ N	68° 18' 18.82" W
	63° 41' 04.08" N	68° 32' 44.20" W
	63° 44′ 46.02″ N	68° 39' 43.1 0" W
West 40 Landfill	63° 43′ 58.15″ N	68° 32' 08.54" W
Water Treatment Plant	63° 45′ 12.24″ N	68° 30' 22.79" W
Wastewater Treatment Plant	63° 44' 45.15" N	68° 32' 19.80" W

The scope of activities, works, and undertakings authorized in accordance with the terms and conditions of this Replacement and Amended Licence is as follows:

- a. Use, management, and protection of the Lake Geraldine drainage basin;
- b. Management and protection of Waters surrounding the West 40 Landfill site;
- c. Management, collection, and monitoring of leachate from the West 40 Landfill site and adjacent Sludge Management Facility;
- d. Management of improved drainage works at the West 40 Landfill site;
- e. Management, operation, and eventual closure and reclamation of the current West 40 Landfill site and associated solid waste disposal facilities;
- f. Upgrades, operation, maintenance, monitoring, and eventual closure and reclamation of a Wastewater Treatment Plant (WWTP);
- g. Operation, maintenance, monitoring, and eventual closure and reclamation of a Sludge Management Facility;
- h. Operation, maintenance, monitoring and eventual closure and reclamation of a Sewage Lagoon Facility;
- i. Implementation of contingency measures for the Wastewater and Landfill management facilities; and
- j. Implementation of changes to the monitoring requirements including frequency, parameters, and stations being monitored.
- This Licence is issued subject to conditions contained herein with respect to the taking of Waters and the depositing of Waste of any type in any Waters or in any place under any



conditions where such Waste or any other Waste that results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the Act, or other statutes imposing more stringent conditions relating to the quantity, type or manner under which any such Waste may be so deposited, this Licence shall be deemed to be subject to such requirements; and

c. Compliance with the terms and conditions of this Licence does not absolve the Licensee from the responsibility for compliance with all applicable legislation, guidelines, and directives.

#### 2. **DEFINITIONS**

a. The Licensee shall refer to Schedule A for definitions of terms used in this Licence.

#### 3. ENFORCEMENT

- a. Failure to comply with this Licence shall be a violation of the Act, subjecting the Licensee to the enforcement measures and the penalties provided for in the Act.
- b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the Act.
- c. For the purpose of enforcing the terms and conditions of this Licence with respect to the use of Water and deposit or Discharge of Waste in Waters, Inspectors appointed under the Act, hold all powers, privileges, and protections that are conferred upon them by the Act or by other applicable laws.

### PART B: **GENERAL CONDITIONS**

- 1. The Licensee shall file, with the Board for review, no later than the 31<sup>st</sup> of March of the year following the calendar year being reported, an Annual Report formulated in accordance with the requirements under Schedule B of this Licence.
- 2. The Licensee shall maintain a copy of this Licence at the Municipal Office, potable Water Treatment Facility, and the Waste Treatment Facilities at all times.
- 3. The Licensee shall file an application for renewal of this Licence at least one (1) year prior to the Licence expiry.
- 4. The Licensee shall, to the satisfaction of an Inspector, install, operate, and maintain metres, devices or other appropriate methods for measuring the volumes of Water used and Waste Discharged or deposited.



- 5. The Licensee shall post the necessary signs to identify the stations of the Monitoring Program included under <u>Schedule I</u> of this Licence. All signage shall be in the Official Languages of Nunavut.
- 6. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted cannot be undertaken without subsequent written approval and/or directions from the Board. The Board may alter or modify a Plan if necessary to achieve legislative objectives and will notify the Licensee in writing of acceptance, rejection, or alteration of the Plan.
- 7. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
- 8. The Licensee shall, within thirty (30) days of notification or within the timeframe specified by the Board, submit for review and/or Board's approval revisions for any plan found to be unacceptable to the Board.
- 9. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of the Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board shall also become part of the Licence. All relevant terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
- 10. The Licensee shall review the Plans referred to in this Licence as required by changes in operation and/or technology and modify the Plans accordingly. Revisions to any Plan shall be submitted in the form of an addendum to be included within the Annual Report required under Part B, Item 1, complete with the lists of revisions detailing where significant content changes are made.
- 11. The Licensee shall immediately report to the NWT/NU 24-Hour Spill Report Line (867-920-8130) any spills of Waste associated with the Undertakings under this Licence including the potable Water Treatment Facility and Waste Treatment Facilities, which are reported to or observed by the Licensee.
- 12. Any communication with respect to this Licence shall be made in writing to the attention of:

Manager of Licensing Nunavut Water Board P. O. Box 119 Goji Haven, NU X0B 1J0

Telephone: (867) 360-

6338

Fax: (867) 360-6369 Email: licensing@nwb-oen.ca

13. Any notice made to an Inspector shall be made in writing to the attention of:





Water Resources Officer Nunavut District, Nunavut Region P.O. Box 100 Iqaluit, NU X0A 0H0 Telephone: (867) 975-

4295

Fax: (867) 979-6445

- 14. The Licensee shall submit, to the Board for information or as otherwise directed, one (1) paper copy and one (1) electronic copy of all reports, studies, and Plans generated for the works, activities, and undertakings under this Licence. All Reports, studies or Plans submitted to the Board by the Licensee shall include an executive summary in English, Inuktitut, and French.
- 15. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the Board is received by the Board and maintain on file a copy of the acknowledgment of receipt issued by the Manager of Licensing or his/her designate.
- 16. This Licence is assignable as provided for in section 44 of the Act.
- 17. The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.

### PART C: CONDITIONS APPLYING TO SECURITY

1. The Licensee is not required to post reclamation security for the activities, works, and undertakings authorized under this Licence.

# PART D: CONDITIONS APPLYING TO THE USE OF WATERS AND WATER MANAGEMENT PLANS

- 1. The Licensee is authorized to withdraw, from the Lake Geraldine Reservoir at Monitoring Station No. IQA-01, up to 1,100,000 cubic metres of Water annually for the relevant activities, works, and undertakings authorized under the scope of this Licence.
- 2. The Licensee shall submit to the Board for approval, within sixty (60) days of the Effective Date of the Licence, an updated manual for the potable Water Treatment Facility. The Manual shall be prepared in accordance with relevant aspects of the format outlined in the Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories (GNWT, 1996). The manual shall, address among other items, the following:
  - a. Purpose of facility;



- b. Site setting;
- c. Operational procedures for storage, treatment and distribution of potable Water; Waste generated and hazardous substances associated with the facility; site inspections; and personnel training;
- d. Maintenance procedures including equipment servicing;
- e. Sampling and monitoring requirements; and
- f. Emergency response measures.
- 3. The Licensee shall equip all freshwater intake structures with screens of appropriate mesh size that meet the requirements of Fisheries and Oceans (DFO) Canada's Freshwater Intake End-of-Pipe Fish Screen Guidelines (1995 or the most current) so as to prevent the entrainment of fish and control Water withdrawal rates such that fish do not become impinged within the screens.
- 4. The Licensee shall undertake Dam Safety Inspections (DSI) and/or Dam Safety Reviews (DSR) of the Lake Geraldine water supply facility in accordance with requirements of the Canadian Dam Association (CDA), Dam Safety Guidelines (2007, or the most current version). The Licensee shall submit for the Board's review, within the Annual Report required under Part B, Item 1, the report generated for the DSIs or DSRs along with the Licensee's recommended actions to address any deficiencies identified in the inspections and/or reviews.
- 5. The Licensee shall not remove any material from below the ordinary High Water Mark of any Water body unless otherwise approved by the Board in writing.
- 6. The Licensee shall not cause erosion to the banks of any body of Water and shall provide the necessary controls to prevent such erosion.
- 7. The Licensee shall implement necessary measures to control sediment and erosion prior to and during operations to prevent entry of sediments into Water.
- 8. The Licensee shall maintain the potable Water Treatment Facility in accordance with applicable guidelines, procedures, and regulations and to the satisfaction of an Inspector.
- 9. The Licensee shall, as part of any proposal to supplement the Lake Geraldine Reservoir, evaluate the potential impact on freshwater resources, including fish and fish habitat. The results of the evaluation must be included as part of any application to augment the Lake Geraldine Reservoir with Water from proximal water bodies.

## PART E: CONDITIONS APPLYING TO THE DEPOSIT OF WASTE AND WASTE MANAGEMENT PLANS

1. The Licensee is authorized to use the Sewage Lagoon Facility and the Wastewater Treatment Plant to treat and dispose of Wastewater generated by the Undertaking authorized under this Licence until such time that the Upgraded Wastewater Treatment Plant authorized by the Licensee is constructed and commissioned, or



as otherwise approved by the Board in writing.

- The Licensee shall provide written notice to an Inspector and the Board at least ten (10) days prior to any planned Discharges from the Solid Waste Facility, Sewage Lagoon Facility, Wastewater Treatment Plant, and the Upgraded Wastewater Treatment Plant once commissioned.
- 3. The Licensee shall establish the relevant monitoring stations for the facilities authorized under this Licence in accordance with Schedule I.
- 4. The Licensee shall ensure that Surface Drainage or surface Water runoff associated with site activities or generated during the construction of any facility designed to withhold, divert, or retain Water or Waste, does not exceed the following Effluent criteria:

Parameter	Maximum Average Concentration	Maximum concentration of Any Grab Sample		
Total Suspended Solids (TSS)	50.0 mg/L	100.0 mg/L		
pН	Between 6 and 9.			

- 5. Upon commissioning of the Upgraded Wastewater Treatment Plant, the Sewage Lagoon Facility shall be used as a back-up facility or closed and reclaimed in accordance in Part J, Item 4.
- 6. The Licensee shall submit to the Board for approval in writing, within four (4) months of the Effective Date of the Licence, an Operation and Maintenance Manual for the Sewage Lagoon Facility that addresses requirements for both the Sewage Lagoon and Sludge Management Facilities. The manual shall be prepared in accordance with the Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories (GNWT, 1996).
- 7. The Licence shall submit to the Board for approval in writing, by December 21, 2018 or as otherwise directed by the Board in writing, an Operations and Maintenance Manual for the Upgraded Wastewater Treatment Plant that incorporates the requirements of Part E, Item 6. The manual shall be prepared in accordance with the Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories (GNWT, 1996).
- 8. The manual referred to in Part E, Item 7 shall supersede the manual referenced in Part E, Item 6, following approval by the Board in writing.
- 9. The Licensee shall submit to the Board for approval in writing, by December 31, 2018, an updated version of the plan entitled *City of Iqaluit Solid Waste Management Plan*, dated January 2014 that addresses relevant intervener's comments and recommendations made during the licensing process, such as



inclusion of details related to future uses of the landfill, timeframe for closure, and ongoing activities within the scope of this Licence.

- 10. The Licensee shall undertake Dam Safety Inspections (DSI) and/or Dam Safety Reviews (DSR) of the Wastewater Treatment Facilities in accordance with requirements of the Canadian Dam Association (CDA), Dam Safety Guidelines (2007, or most current version). The Licensee shall submit for the Board's review, within the Annual Report required under Part B, Item 1, the report generated for the DSIs or DSRs along with the Licensee's recommended actions to address any deficiencies identified in the inspections and/or reviews.
- 11. The Licensee shall dispose of and contain all municipal solid waste generated by the City at the West 40 Landfill as associated site(s) authorized under this licence or as otherwise approved by the Board in writing.
- 12. The Licensee shall submit to the Board for approval, within sixty (60) days of the Effective Date of the Licence, an updated Landfill Operation and Maintenance Manual that addresses concerns raised by intervening parties during the licensing process including the following:
  - a. Management of Leachate from the facility;
  - b. Updated sampling and monitoring requirements; and
  - c. Open burning practices.
  - d. Ongoing activities within
- 13. The Licensee shall collect and contain all leachate generated by the West 40 Landfill within the Landfill.
- 14. The Licensee shall submit to the Board for review, by December 31, 2017, an updated version of the document entitled *West 40 Landfill Drainage Management Review*, dated September 16, 2011, that addresses the concerns raised by intervening parties including information on the absence of permafrost related data.
- 15. The Inspector may authorize an emergency Discharge ,following the Licensee's written submission to the Inspector and to the Board, at least fifteen (15) days prior to discharge or as instructed by the Inspector, that includes the following information:
  - a. Proposed quantity of discharge;
  - b. Reason for discharge;
  - c. Identification of the Final Discharge Location;
  - d. Proposed sampling and analysis to be conducted; and
  - e. Proposed mitigation measures to implemented.
- 16. The Licensee shall submit to the Board and the Inspector for review, within sixty (60) days following any emergency Discharge authorized by the Inspector, a report that includes, among other items, an analysis of results for the emergency Discharge.
- 17. The Licensee shall maintain the Licensed Facilities to the satisfaction of an Inspector.



- 18. The Licensee shall remove from the site associated with the undertaking, all Hazardous Wastes, waste oil and non-combustible waste generated through the course of the operation, for disposal at a licensed waste disposal facility.
- 19. The Licensee shall maintain records of all Waste removed from site and records of confirmation of proper disposal of removed Waste. These records shall be made available to an Inspector or the Board upon request.

### PART F: CONDITIONS APPLYING TO CONSTRUCTION

- 1. The Licensee shall, submit to the Board for review, within thirty (30) days prior to commencing construction of any facilities or infrastructure authorized under this Licence, for-construction designs and drawings, signed and stamped by an Engineer.
- 2. The Licensee shall ensure that all relevant approved facilities are designed and constructed to engineering standards such that, at a minimum, they comply with the most current version of the *Canadian Dam Safety Guidelines*.
- 3. The Licensee shall implement measures to ensure that all materials used in the construction of relevant facilities or infrastructure included under the scope of this Licence are free of contaminants, to the extent that they do not cause harmful or significant effects to Water.
- 4. The Licensee shall maintain shoreline stability during construction.
- 5. The Licensee shall ensure that all final designs and drawings are qualified by an Engineer confirming that:
  - a. Works are designed under sound engineering principles;
  - b. Design limitations are understood and communicated within the report; and
  - c. Measures are implemented to minimize impact to Water.
- 6. The Licensee shall, submit to the Board for review, within ninety (90) days of completion of any structure authorized under this licence, to contain, withhold, divert or retain Water or Wastes; a construction summary report prepared by an Engineer that includes, among other relevant information, as-built drawings, documentation of field decisions that deviated from original plans, and any data used to support these decisions.
- 7. The Licensee shall, if contamination of surface and/or ground water is encountered during construction and excavation, notify the Inspector immediately and implement the Spill Contingency Plan.
- 8. The Licensee shall develop and implement measures necessary to prevent and mitigate erosion and/or the release of sediment into Water during the construction



of the Upgraded Wastewater Treatment Plant or during any construction activities associated with the Undertaking.

### PART G: CONDITIONS APPLYING TO MODIFICATIONS

- The Licensee may, without written consent from the Board, carry out Modifications
  to the potable Water Treatment Facility and Waste Treatment Facilities provided
  that such Modifications are consistent with the terms of this Licence and the
  following requirements are met:
  - a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
  - b. Such Modifications are consistent with the NPC Land Use Planning (NPC) Conformity Determination and the NIRB Screening Decision;
  - c. such Modifications do not place the Licensee in contravention of the Licence or the *Act*.
  - d. the Board has not, during the sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
  - e. The Board has not rejected the proposed Modifications.
- 2. Modifications for which all of the conditions referred to in Part G, Item 1 have not been met can be carried out only with written approval from the Board.
- 3. The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modifications. These plans and drawings shall be stamped by an Engineer.

### PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

- 1. The Licensee shall, submit to the Board for approval in writing, within thirty (30) days of the Effective Date of this Licence, an amalgamated and updated Spill Contingency Plan. The Plan shall address spill contingency planning requirements for all relevant aspects of works, activities, and undertakings associated with the scope of this Licence including the Sewage Lift Station.
- 2. The Licensee shall, subject to section 16 of the Regulations, report any unauthorized deposits of Waste or foreseeable unauthorized deposits of waste and/or Discharges of Effluent, and:
  - a Employ, as required, the approved Spill Contingency Plan;
  - b Report the incident immediately via the NWT/NU 24-Hour Spill Reporting Line (867) 920-8130 and to the Inspector at (867) 975-4295; and
  - c For each spill occurrence, submit a detailed report to the Inspector, no later than thirty
    - (30) days after initially reporting the event. The report shall include the



amount and type of spilled product, the GPS location of the spill, and the measures taken to contain, clean up and restore the spill site.

3. The Licensee shall, in addition to Part H, Item 2, regardless of the quantity of release of a harmful substance, report to the NWT/NU Spill Line if the release is near or into a Water body.

### PART I: CONDITIONS APPLYING TO MONITORING

- 1. The Licensee shall monitor the relevant potable Water Treatment Facility and Waste Treatment Facilities authorized under this Licence in accordance with requirements included under <a href="Schedule I">Schedule I</a>.
- 2. The Licensee shall, submit Board for approval in writing, within sixty (60) days of the Effective Date of this Licence, an updated Monitoring Program that addresses monitoring requirements for the Water Treatment Facility and Waste Treatment Facilities. The Monitoring Program shall address, among other items, the requirements outlined in Schedule I.
- 3. All analyses required under <u>Schedule I</u> shall be conducted using methods as described in the most recent edition of "Standard Methods for the Examination of Water and Wastewater", or by such other methods as approved by the Board in writing.
- All laboratory analyses shall be performed at a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
- 5. The Licensee shall, submit to the Board for review, within sixty (60) days of the Effective Date of the Licence, an updated Quality Assurance/Quality Control (QA/QC) Plan prepared in accordance with Quality Assurance (QA) and Quality Control (QC) Guidelines for Use by Class "A" Licensees in Meeting SNP Requirements and for Submission of a QA/QC Plan (INAC, 1996 or most current version). The updated plan shall be accompanied by a letter from an Analyst of an accredited laboratory confirming acceptability of the Plan.
- 6. The Licensee shall measure by instrument and record in cubic metres, the monthly quantities of freshwater extracted from the Lake Geraldine Reservoir, at Monitoring Program Station No. IQA-01, used for all purposes under this Licence.
- 7. The Licensee shall measure, by instrument and record in cubic metres, the quantities of Effluent released from the Sewage Lagoon Facility at Monitoring Station No. IQA-02, Wastewater Treatment Plant and/or Upgraded Wastewater Treatment Plant at Monitoring Station No. IQA-04 and the West 40 Landfill at Monitoring Station No. IQA-08.
- 8. The Licensee shall measure and record in cubic metres, the monthly and annual

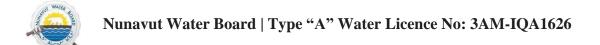


volumes of sludge removed from the Wastewater Treatment Facilities.

- The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds
  of latitude and longitude) of all locations of sources of Water utilized and Waste
  deposited under this Licence.
- 10. The Licensee shall include all of the data and information required by the Monitoring Program under <u>Schedule I</u> within the Annual Report required under Part B, Item 1 of the Licence or as otherwise requested by an Inspector and/or the Board.
- 11. Additional Monitoring may be requested by the Board and/or the Inspector.
- 12. The Monitoring Program and compliance dates specified in the Licence may be modified at the discretion of the Board in writing and do not constitute an application for Amendment as defined in the *Act*.

### PART J: CONDITIONS APPLYING TO CLOSURE AND RECLAMATION

- 1. The Board has accepted the document entitled *Iqaluit Solid Waste Management Plan West 40 Landfill Decommissioning Technical Memorandum*, dated January 2014, submitted as additional information with the Application.
- 2. The Licensee shall submit to the Board for approval in writing, at least one (1) year prior to commencing the decommissioning of the West 40 Landfill, a Final Closure and Reclamation Plan prepared by an Engineer in accordance with industry's best practices and relevant guidelines.
- 3. The Licensee shall, for the Plan required under Part J, Item 2, include a presentation of data and a discussion of environmental conditions existing before the use of the site by the Licensee as a municipal landfill, as well as remediation objectives.
- 4. The Licensee shall notify the Board in writing, at least one year prior to the implementation of final closure, of its intentions to proceed with final closure of any Water use or Waste disposal facilities included within the scope of this Licence, excluding the Facility under Part J, Item 2.



### **SCHEDULES**

Schedule A: Scope, Definitions, and

Enforcement Schedule B: General

Conditions

Schedule C: No Schedule for Security

Schedule D: No Schedule for Use of Water and Water Management

Plans Schedule E: No Schedule Waste Disposal and Waste

Management Plans Schedule F: No Schedule for Construction

Schedule G: No Schedule for Modifications

Schedule H: No Schedule for Spill Contingency

Planning <u>Schedule I</u>: Monitoring

Schedule J: No Schedule for Closure and Reclamation



### **Schedule A: Definitions**

In this Licence, 3AM-IQA1626:

- "Act" means the Nunavut Waters and Nunavut Surface Rights Tribunal Act,
- "<u>Addendum</u>" means the supplemental text that is added to a full plan, manual, or report, usually included at the end of the document and is not intended to require a full resubmission of the revised report. It may also be considered as an appendix or supplement;
- "<u>Amendment</u>" means a change to any terms and conditions of this Licence through application to the NWB, requiring a change, addition, or deletion of specific terms and conditions of the Licence not considered as a modification;
- "Analyst" means an Analyst designated by the Minister under section 85 (1) of the Act,
- "Annually" means, in the context of monitoring frequency, one sampling event occurring every 365 days with a minimum of 200 days between sampling events;
- "<u>Application</u>" means, for the purposes of this License, the totality of the NWB Public Register opened as a result of the filing of the application to replace and amend expired Water Licence 3AM-IQA0611(3AM-IQA0612);
- "Biannually" means, in the context of the monitoring frequency, two sampling events occurring per calendar year, with a minimum of 150 days and a maximum of 210 days between sampling events;
- "Board" means the Nunavut Water Board established under Article 13 of the *Nunavut Land Claims Agreement* and under section 14 of the Act;
- "Discharge" means the release of any Water or Waste to the receiving environment;
- "Effective Date" means the date on which the Minister of Indigenous and Northern Affairs Canada approves the Licence;
- "<u>Effluent</u>" means treated or untreated liquid Waste material that is Discharged into the environment from the site water management facilities such as a settling pond or a treatment plant;
- "Engineer" means a professional engineer registered to practice in Nunavut in accordance with the Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2 and the Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12;



- "<u>Engineered Structure</u>" means any facility, designed and approved by a Professional Engineer who is registered with the Association of Professional Engineers, Geologists and Geophysicists of Nunavut;
- "<u>Grab Sample</u>" means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected;
- "<u>Greywater</u>" means the component of Effluent produced from domestic use (i.e. washing, bathing, food preparation and laundering), excluding Sewage;
- "<u>Hazardous Waste</u>" means materials or contaminants categorized as dangerous goods under the *Transportation of Dangerous Good Act* (1992), no longer used for their original purpose and intended for recycling, treatment, disposal or storage at appropriate facilities;
- "<u>High Water Mark</u>" means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. *Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities*);
- "Inspector" means an Inspector designated by the Minister under section 85 (1) of the Act;
- "<u>Licence</u>" means this Type "A" Water Licence No. 3AM-IQA1626, issued by the Nunavut Water Board to the City of Igaluit in accordance with the Act;
- "Licensee" means the entity to whom Licence No. 3AM-IQA1626 is issued or assigned;
- "Minister" means the Minister of Indigenous and Northern Affairs Canada (INAC);
- "Modification" means an alteration to a physical work that may introduce a new structure or eliminates an existing structure and does not alter the purpose or function of the work;
- "Monitoring Program" means the program to collect data on surface water and groundwater quality to assess impacts to the environment of an appurtenant undertaking;
- "Monthly" means, in the context of monitoring frequency, one sampling event occurring within calendar month with a minimum of twenty-one (21) days between sampling events;
- "Nunavut Land Claims Agreement" (NLCA) means the "Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada," including its preamble and schedules, and any Amendments to that agreement made pursuant to it:
- "Quality Assurance / Quality Control (QA/QC)" Quality Assurance means the system of activities designed to better ensure that quality control is done effectively; Quality Control means the use of established procedures to achieve standards of measurement



for the three principle components of quality: precision, accuracy and reliability;

<u>Quarterly</u>" means divisions of the calendar year, comprised of three month intervals from January to December, inclusive (January – March, April – June, July – September and October – December);

"Regulations" means the Nunavut Waters Regulations (SOR/2013/669 18th April, 2013);

"Sewage" means all toilet wastes and greywater;

"<u>Sewage Lagoon Facility</u>" refers to the waste disposal facility and associated structures designed and constructed to treat Sewage in the City of Iqaluit since 1978, which has also been upgraded in subsequent years;

"Sludge Management Facility" means the facility located within the West 40 Landfill that is used for the disposal and treatment of sludge generated by the Wastewater Treatment Plant;

"<u>Solid Waste Facility</u>" means the West 40 Landfill, Sludge Management Facility and all other facilities identified in the Application that are designed and constructed to manage solid waste generated by the City of Iqaluit;

"<u>Surface Drainage</u>" means all surface waters resulting from the flow over, through or out of an operations area and is collected by means of Engineered structures;

"<u>Undertaking or Undertakings</u>" means an undertaking or undertakings in respect of which Water is to be used or Waste is to be deposited, as classified in Schedule 1 of the *Regulations*;

"<u>Upgraded Wastewater Treatment Plant (UWWTP)</u>" means the current Wastewater Treatment Plant, which was designed, constructed, and commissioned under Phase 1, for the preliminary treatment of Wastewater, in addition to the infrastructure scheduled for construction and commissioning by December 2018, under Phase 2, for the secondary treatment of Wastewater as described in the Application:

"<u>Use</u>" means use as defined in section 4 of the Act;

"Waste" means Water as defined in section 4 of the Act;

"<u>Waste Treatment Facilities</u>" refers to all facilities constructed and operated by the City of Iqaluit to manage solid and liquid Waste associated with this licence.

"<u>Wastewater</u>" means the water generated by site activities or originates on-site that requires treatment or any other water management activity;

"<u>Wastewater Treatment Facilities</u>" means the Sewage Lagoon, Wastewater Treatment Plant, Upgraded Wastewater Treatment Plant and associated facilities



authorized under this Licence;

"<u>Wastewater Treatment Plant</u>" means the engineered system, located adjacent to the Sewage Lagoon Facility that is designed for the containment and preliminary treatment of Sewage generated by the City of Iqaluit as described in the Application;

"Water or Waters" means water as defined in section 4 of the Act,

"<u>Water Treatment Facility</u>" means the engineered facilities and appurtenances designed and constructed for the withdrawal storage treatment and distribution of fresh water for domestic purposes, described in the Application; and

"<u>West 40 Landfill</u>" means the Solid Waste Facility or original landfill facility along with its Northern Expansion and Sludge Management Facility that is designed to manage solid waste generated by the City of Iqaluit.

### **Schedule B: Annual Reporting Requirements**

The Annual Report referred to in Part B, Item 1, shall include the following:

- a. The monthly and annual quantities in cubic metres of fresh Water withdrawn from the Lake Geraldine Reservoir at Monitoring Station No. IQA-01;
- b. The monthly and annual quantities in cubic metres of any Discharges from the Wastewater Treatment Facilities at Monitoring Stations IQA-02, IQA-04, and IQA-08:
- Copy of reports generated from Dam Safety Inspections and Dam Safety Reviews along with the Licensee's proposed actions to address issues identified and/or updates on continuing actions to address issues;
- d. The monthly and annual quantities in cubic metres of sludge removed from the Wastewater Treatment Facilities;
- e. The monthly and annual quantities of Wastes disposed of at the West 40 landfill;
- f. A summary report which includes all data and information generated under the Monitoring Program, including the QA/QC program, in electronic and printed formats acceptable to the Board;
- g. A summary of all construction activities carried out for facilities under the Licence;
- h. A summary of modifications and/or major maintenance work carried out on the potable Water Treatment and Waste Treatment Facilities, including all associated structures;
- i. A progress report and revisions (if applicable) to any studies requested by the Board that relate to Waste management, Water use or reclamation and a brief description of any future studies planned by the Licensee including, a non-technical executive summary for the general public, translated into Inuktitut;
- j. Any revisions required, in the form of addenda, to Plans, Manuals and Reports approved under the Licence;
- k. A list and description, including volumes and Spill Report Line Identification Number, of all un-authorized Discharges, spills and summaries of follow-up action taken;
- A summary of any closure and reclamation work undertaken and an outline of any work anticipated for the next year, including any changes to implementation and scheduling;
- m. A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector;
- n. A brief update on the implementation plan of all facilities within the scope of this Licence including changes projected implementation and status of the Upgraded Wastewater Treatment Plant:
- A summary of any studies, reports and plans requested by the Board that relate to Waste disposal, Water use or reclamation and a brief description of any future studies planned; and
- p. Any other details on the use of Water or Waste disposal requested by the Board by November 1<sup>st</sup> of the year being reported.



### Schedule I: Condition Applying to Monitoring

Test Groups	Analytical Parameters	Units
Routine (R)	Alkalinity, Acidity, Chloride, Carbonate, Bicarbonate, Total Hardness, Hydroxide, Sulphate, Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Total Organic Carbon (TOC), Total Inorganic Carbon (TIC)	mg/L
	DH (fleid and lab)	ph units
	Oxidation-Reduction Potential (ORP) (field)	mv
	Conductivity (fleid and lab)	u5/cm
	ı emperature (тівіа)	°C
	Turbidity	NTU
	Total Suspended Solids (TSS)	mg/L
Effluent (E)	ı emperature (тівіа)	ი.
	Conductivity (fleid and lab)	u5/cm
	pH (field and lab)	pH units
Acute Lethality (AL)	Based on Environment Canada's Procedure for pH Stabilization During the Testing of Acute Lethality of Wastewater Effluent to Rainbow Trout (EPS 1/RM/50, March 2008), if single concentration test fails and unionized ammonia concentration is less than or equal to 1.25 mg/ L	"Pass" / "Fail"
ICP- Metals Scan (Total)	Al, Sb, As, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Mo, Ni, Se, Sn, Ag, Sr, Tl, Ti, U, V, Zn, Hg	mg/L
N. ( ' ( /N.))	Ammonia-N, Nitrate-N, Nitrite-N	mg N/L
Nutrients (N)	Total Phosphorus, Orthophosphate	mg/L
Dialogical (D)	Biochemical Oxygen Demand	mg/L
Biological (B)	Total and Fecal Coliform	CFU/100 mL
	Fecal Coliform	CFU/100 mL
Potable Water (PW)	ICP Metals (Total and dissolved)	mg/L
, ,	Total Suspended Solids –TSS	mg/L
Flow (F)	Volume	m³



Landfill Specific (LS)	Polychlorinated Biphenyls (PCBs) Benzene, Toluene, Ethylbenzene and Xylene (BTEX)	mg/L
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Table 2<sup>1</sup> - Water Quality Monitoring Criteria

Station ID	Description	Status	Parameter	Testing / Measureme nt Frequency	Reportin g Frequenc y																			
10.1.01	Lake Geraldine		R, PW	Monthly	Biannually																			
IQA-01	Reservoir – Raw Water	Active	F	Monthly																				
IQA-01(#)	Based on Part I, Item 4 of Expired Licence	Inactive	N/A	N/A	N/A																			
IQA-02	Sewage Lagoon  – Effluent Discharge Point	B, N, E, ICP		Once prior to discharge; once during discharge; and once prior to the completion of discharge	Annually																			
			F	During decant																				
IQA-03	Sewage Lagoon – Influent	Inactive	N/A	N/A	N/A																			
	Wastewater Treatment Plant - Effluent	Active	B, N, E, ICP	Quarterly – Prior to commissioning of the WWTP																				
IQA-04			Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	B, N, E,	Monthly – Following commissioning of the WWTP	Annually
			F	During Discharge																				
				Biannually – Prior to commissioning of the WWTP	Annually																			
IQA-05	Wastewater Treatment Plant - Influent	Active	B, E, N, ICP	No testing requirements following commissioning of the WWTP	N/A																			
IQA-06	Sludge – From WWTP	Active	B, E, N, ICP	Quarterly	Annually																			



IQA-07	Surface Water entering West 40 Landfill – Based on Part E, Item 4 of the Expired Licence	Inactive	N/A	N/A	N/A
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Station ID	Description	Status	Parameter	Testing / Measureme nt Frequency	Reportin g Frequenc y
IQA-08	West 40 Landfill – Effluent Discharge Point, Based on Part E, Item 4 of the Expired Licence	Active	B, E, N, ICP, F, LS	Once prior to discharge; once during discharge; and once prior to the completion of discharge	Annually
			F	During Discharge	
IQA-08(#)	Based on E, Item 17, Part F, Item 10 & Part I, Item 4 of the Expired Licence	Inactive	N/A <sup>2</sup>	N/A	N/A
IQA-08A	Station situated upgradient of West 40 Landfill	Active	B, E, N, ICP,	Annually	Annually
IQA-08B	Station situated down- gradient of West 40 Landfill	Active	F, LS	,	-
IQA-09	Contaminated soil accepted at the West 40 Landfill	Inactive	NA	N/A	N/A

<sup>&</sup>lt;sup>1</sup> Table 2 may be modified by the Board and re-issued where necessary. Re-issuance is not considered an Amendment to the application or Licence as defined in the *Act*.

<sup>2</sup> Means not applicable

Lootie Toomasie Chairman Nunavut Water Board PO Box 119 GJOA HAVEN NU X0B 1J0

Dear Mr. Toomasie:

Thank you for the Nunavut Water Board's correspondence of September 4, 2019, received by the Department on September 4, 2019, conveying the Board's reasons for decision and recommendation that I approve Amendment No. 4 to the City of Iqaluit's existing type A water Licence 3AM-IQA1626.

In accordance with subsection 56(2.1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, I understand that the Deputy Minister of Crown-Indigenous Relations and Northern Affairs notified you, in a letter dated October 17, 2019, of the invoking of the approval decision extension to allow for the making of a more informed and appropriate ministerial decision by December 2, 2019.

I am pleased to inform you that I have approved the Licence amendment as recommended by the Nunavut Water Board. The signed original is enclosed.

Sincerely,

Hon. Daniel Vandal, P.C., M.P. Minister of Northern Affairs

c.c.: Her Worship Mayor Madeleine Redfern



### **EXTERNAL ADDRESSES:**

Her Worship Mayor Madeleine Redfern City of Iqaluit Building 901, Box 460 IQALUIT NU X0A 0H0

Via email: mayorredfern@city.iqaluit.nu.ca

### Note:

When sending the letter please email to the following addresses:
Lootie Toomasie lootie toomasie@nwb-oen.ca
Stephanie Autut stephanie.autut@nwb-oen.ca
Richard Dwyer richard.dwyer@nwb-oen.ca



NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No. 3AM-IQA1626 / Amendment No. 4

September 4, 2019

Amy Elgersma Chief Administrative Officer City of Iqaluit P.O. Box 460 Iqaluit, NU, XOA 0H0

Email: cao(acity.iqaluit.nu.ca

Matthew Hamp

Director of Public Works and Engineering

City of Iqaluit P.O. Box 460 Iqaluit, NU, X0A 0H0

E-mail: M. Hamp@city.iqaluit.nu.ca

Subject:

Licence No. 3AM-IQA1626 - City of Iqaluit; Amendment No. 4 - Seasonal Replenishment of Lake Geraldine Reservoir from the Niaqunguk River (Apex River)

Dear Ms. Elgersma and Mr. Hamp:

Please find attached Amendment No. 4 to the Type "A" Licence No. 3AM-IQA1626 along with the associated Reasons for Decision, duly issued by the Nunavut Water Board (NWB) (Motion No.: 2019-11-P6-03) to the City of Iqaluit (City or Licensee), pursuant to the Board's authority under Article 13 of the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (Nunavut Agreement) and the Nunavut Waters and Nunavut Surface Rights Tribunal Act, S.C. 2002, c. 10 (NWNSRTA).

Amendment No. 4 primarily addresses changes to terms and conditions within Part D: Conditions Applying to the Use of Waters and Water Management Plans contained in Licence No. 3AM-IQA1626 to allow for seasonal pumping of water from Niaqunguk River (Apex River) to Geraldine Lake and associated monitoring for the remaining term of the Licence (expiring in 2026). The terms and conditions of the original Licence related to the use of Waters and deposit of Waste remain an integral part of this approval. Please note that before the amendments to the Licence included in Amendment No. 4 as issued take effect, the amendments must be approved by the Minister of Crown-Indigenous Relations and Northern Affairs (Minister) pursuant to 3. 56 of the NWNSRTA.

The NWB recommends that the Licensee consult the accompanying Reasons for Decision Including Record of Proceedings and all comments received by interested persons on the Application during the licensing process.

Please also note that the Board is providing the Amendment and the accompanying Reasons for Decision Including Record of Proceedings to the Minister under a separate cover.

Sincerely,

Lootie Toomasie

Nunavut Water Board, Chair

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Enclosure:

Licence No. 3AM-IQA1626 - Amendment No. 4

CC.

Iqaluit Distribution List

#### **DECISION**

### WATER LICENCE 3AM-IQA1626 - AMENDMENT NO. 4

Licensee:

Licence No:

Licence Issued: Licence Expiry:

Amendment No. 4 Effective:

The City of Iqaluit

3AM-IQA1626 Type "A"

June 17, 2016

June 16, 2026

April 1, 2020

Pursuant to its authority under Article 13 of the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (Nunavut Agreement) and the Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA or Act), with respect to the Application for an amendment to the Licence noted above, dated February 1, 2019, provided by the City of Iqaluit, the Nunavut Water Board (NWB or Board) hereby grants the following licence amendments (Amendment No. 4).



### NUNAVUT WATER BOARD WATER LICENCE 3AM-IQA1626 - AMENDMENT NO. 4

### AMENDMENT NO. 4

Amend Page 3 Quantity of Water not to be exceeded to read:

2,000,000 CUBIC METERS ANNUALLY FROM LAKE GERALDINE RESERVOIR, 500,000 CUBIC METERS ANNUALLY FROM NIAQUNGUK RIVER (APEX RIVER) FOR TRANSFER TO LAKE GERALDINE RESERVOIR.

### PART A: SCOPE, DEFINITIONS, AND ENFORCEMENT

Insert Item 1, k.:

Construction, operation, and removal of temporary facilities for the Supplementary Pumping Program (SPP).

# PART D: CONDITIONS APPLYING TO THE USE OF WATER AND WATER MANAGEMENT PLANS

#### Amend Item 1 to Read:

The Licensee is authorized to withdraw, from the Lake Geraldine Reservoir at Monitoring Station No. IQA-01, up to 2,000,000 cubic metres of Water annually for the relevant activities, works, and undertakings authorized under the scope of this Licence.

The Licensee is authorized to withdraw, from the Niaqunguk River (Apex River) at Monitoring Station No. IQA-10, up to a total of 500,000 cubic metres of Water annually for the supplementation of Water levels in the Lake Geraldine Reservoir.

#### Insert Item 10:

Unless approved or otherwise authorized by Fisheries and Oceans Canada, the Licensee shall ensure that withdrawals from the Niaqunguk River (Apex River) at Monitoring Station No.: IQA-10 only occur when the natural flow in the Niaqunguk River (Apex River) is above 30% of the mean annual discharge (MAD) and the withdrawals will not exceed 10% of the instantaneous flow of the Niaqunguk River (Apex River). If, at any time, Fisheries and Oceans Canada advises the Licensee that due to potential effects on fish or fish habitat the withdrawals from the Niaqunguk River (Apex River) are no longer acceptable, the withdrawals must cease until Fisheries and Oceans Canada indicates that the withdrawals can resume.

### Insert Item 11:

The Licensee shall, at least thirty (30) days prior to the intended annual start of water withdrawals referred to in Part D, Item 10, submit to the Board, for review, an updated Lake Geraldine Water Balance Model completed with the most up to

date data available.

#### Insert Item 12:

The Licensee shall, prior to the expiry of this Licence in 2026, submit to the Board a contingency plan in either a standalone document or as an addendum to a current plan that includes the options for action if the Niaqunguk River (Apex River) is found to have insufficient water volumes to fully supplement the Lake Geraldine Reservoir.

### PART F: CONDITIONS APPLYING TO CONSTRUCTION

#### Insert Item 9:

The Board has approved under this Licence 3AM-IQA1626 Amendment No. 4, the Plan entitled "Apex River Water Withdrawal: Erosion and Sedimentation Control Plan," dated December 21, 2018.

### PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

### Amend Item 1:

The Board has approved under this Licence 3AM-IQA1626 Amendment No. 4, the Plan entitled "Apex River Water Withdrawal: Site Specific Spill Contingency Plan," dated December 21, 2018.

### PART 1: CONDITIONS APPLYING TO MONITORING

#### Insert Item 13:

The Licensee shall monitor the Supplementary Pumping Program (SPP) in accordance with requirements included under Schedule I.

### SCHEDULE A: DEFINITIONS

#### Insert Item:

"Supplementary Pumping Program (SPP)" means the pumps, pipe/hose, intakes, coffer dams, and related temporary facilities to use fresh Water from the Niaqunguk River (Apex River)), to augment Water levels in the Lake Geraldine Reservoir. The active pumping under the SPP is authorized to proceed in accordance with the terms and conditions of the Licence from June to October annually to address a potential Water shortage in the following winter.

### SCHEDULE B: ANNUAL REPORT REQUIREMENTS

### Insert Item q:

The 2019 Annual Report referred to in Part B, Item 1, shall provide the following information about the SPP including:

1. A summary of the SPP program, including lessons learned, based on

monitoring and mitigation efforts.

- 2. GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) and datum for the locations of all water withdrawals.
- The daily and monthly quantities in cubic metres of fresh Water withdrawn from the Niaqunguk River (Apex River) watershed at Monitoring Station No. IQA-10.
- 4. The daily water levels and/or flow rates in the Niaqunguk River when withdrawals are occurring at Monitoring Station No. IQA-10.
- 5. All other monitoring conducted to meet the Fisheries and Oceans Canada requirements.
- 6. Discussion of any observed trends, exceedances, or unanticipated impacts.

### SCHEDULE I: CONDITIONS APPLYING TO MONITORING

#### Amend Table 2:

Station ID	Description	Status	Parameter	Testing/ Measurement Frequency	Reporting Frequency
1QA-01	Lake Geraldine Reservoir – Raw Water Intake	Active	R, PW	Monthly	Biannually
IQA- 01(#) <sup>1</sup>	Additional Monitoring Points for Lake Geraldine Reservoir - Raw Water Intake	N/A	F N/A	Monthly N/A	N/A
IQA-02	Sewage Lagoon –Effluent Discharge Point	Active	B, N, E,	Once prior to discharge; once during discharge; and once prior to the completion of discharge	Annually
10 . 00			F	During decant	
IQA-03	Sewage Lagoon - Influent	Inactive	N/A	N/A	N/A
			B, N, E, ICP	Quarterly – Prior to commissioning of the WWTP	
IQA-04	Wastewater Treatment Plant - Effluent	Active	B, N, E,	Monthly – Following commissioning of the WWTP	Annually
			AL .	Annually – following commissioning of the WWTP	The second secon

<sup>1 &</sup>quot;#" is a place holder for any additional monitoring sites added to the program.

Station ID	Description	Status	Parameter	Testing/ Measurement Frequency	Reporting Frequency
			F	During Discharge	
IQA-05	Wastewater Treatment Plant -		B, E, N,	Biannually – Prior to commissioning of the WWTP	Annually
	Influent	Active	ICP	No testing requirements following commissioning of the WWTP	N/A
IQA-06	Sludge - From WWTP	Active	B, E, N,	Quarterly	Annually
IQA-07	Surface Water entering West 40 Landfill	Inactive	N/A	N/A	N/A
IQA-08	West 40 Landfill –Effluent Discharge Point	Active	B, E, N, ICP, F, LS	Once prior to discharge; once during discharge; and once prior to the completion of discharge	Annually
			F	During Discharge	
IQA- 08(#) <sup>2</sup>	Additional Effluent Discharge Points for the West 40 Landfill	N/A	N/A	N/A	N/A
IQA-08A	Station situated up-gradient of West 40 Landfill	Active	B, E, N,	Annually	A
IQA-08B	Station situated down- gradient of West 40 Landfill	Active	ICP, F, LS	'minually	Annually
IQA-09	Contaminated soil accepted at the West 40 Landfill	Inactive	NA	N/A	N/A
QA-10	Withdrawal from Upper Niaqunguk River for transfer directly into the Reservoir.	Active	F	Daily when withdrawals occurring at this station.	Annual Report
QA-11	Withdrawal from Middle Niaqunguk River watershed for transfer directly into the	Inactive	F	Daily when withdrawals occurring at this	N/A

<sup>&</sup>lt;sup>2</sup> "#" is a place holder for any additional monitoring sites added to the program.

Station ID	Description	Status	Parameter	Testing/ Measurement Frequency	Reporting Frequency
The state of the s	Reservoir. Withdrawal point to be located on an ephemeral tributary near where it enters the Niaqunguk River or on the river itself just downstream of the confluence with the tributary.			station.	
IQA-12	Withdrawal from small unnamed source water lakes adjacent to Lake Geraldine Reservoir for transfer directly to the reservoir.	Inactive	F	Daily when withdrawals occurring at this station.	N/A
IQA-13	Withdrawal from large unnamed source water lake for transfer into ephemeral tributary to Niaqunguk River. Intent of withdrawal is to provide water to withdrawal point at Monitoring Station IQA-10.	Inactive	F	Daily when withdrawals occurring at this station.	N/A

All remaining terms and conditions of Type "A" Water Licence 3AM-IQA1626 dated June 17, 2016, still apply.

This Licence Amendment No. 4 issued and recorded at Gjoa Haven, NU on September 4, 2019.

Lootie Toomasie Chairperson, Nunavut Water Board APPROVED BY: Carolyn Bennett

Minister of Crown-Indigenous

Relations and Northern Affairs

DATE:

2019-11-29