

REQUEST FOR A STANDING OFFER AGREEMENT (RFSO) - GENERAL SERVICES IN VARIOUS SEWER SERVICING INCLUDING CLEANING, CCTV INSPECTION, REPAIR AND SEWER RE-LINING OPERATIONS FOR VARIOUS LOCATIONS IN THE NATIONAL CAPITAL REGION - NATIONAL CAPITAL COMMISSION (NCC) -TENDER FILE # AL1834

REQUEST FOR STANDING OFFER AGREEMENT (RFSO)

GENERAL SERVICES IN VARIOUS SEWER SERVICING INCLUDING CLEANING, CCTV INSPECTION, REPAIR AND SEWER RE-LINING OPERATIONS



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1 PAGE TO BE SUBMITTED WITH THE TECHNICAL PROPOSAL

ADDRESS ENQUIRIES TO: Allan Lapensée, Sr. Procurement Advisor, Allan.lapensee@ncc-ccn.ca	BID DEADLINE: July 28, 2022 at 3:00pm EDT
RETURN BIDS TO:	Bids-soumissions@ncc-ccn.ca Reference NCC tender file AL1834

This page is to be dated, signed and returned with your proposal, thereby acknowledging having read, understood and accepted the terms of reference of this RFSO and any/all other attachments referred to herein.

We hereby OFFER to sell and/or supply to the National Capital Commission upon the terms and conditions set out herein, the supplies and/or services listed above and on any attached sheets at the submitted price(s).	
	Insert one « X »
Bidding to perform the services in Ottawa, ON	
Bidding to perform the services in Gatineau, QC	
Bidding to perform the services in both; Ottawa and Gatineau	
Bidder's Name & Address Tel: Email:	Print Name Signature Date
ADDENDUM ACKNOWLEDGEMENT: I/We acknowledge receipt of the following addendums and have included for the requirement of it/them in my/our tendered price:	_____ _____ Bidder to enter the number of addendums issued (i.e. #1, #2, etc.) if any.

2 TYPICAL INSTRUCTIONS TO BIDDERS

- 2.1 Enquiries regarding this proposal must be submitted in writing to Allan Lapensée , Sr. Procurement Advisor, at e-mail address Allan.lapensee@ncc-ccn.ca as early as possible within the solicitation period. Enquiries should be received no later than fourteen (14) calendar days prior to the date set for solicitation closing to allow enough time to provide a response. Enquiries received after that time may result in an answer not being provided. To ensure consistency and quality of the information provided to all Proponents, the Sr. Procurement Advisor shall examine the content of the enquiry and shall decide whether to issue an amendment. All enquiries and other communications related to this proposal sent throughout the solicitation period are to be directed ONLY to the Sr. Procurement Advisor named above. Non-compliance with this requirement during the solicitation period can, for that reason alone, result in disqualification of a proposal.
- 2.2 BID DEADLINE: July 28, 2022 at 3:00pm EDT
Return bids to : Bids-soumissions@ncc-ccn.ca , Reference NCC tender file AL1834
- 2.3 The technical proposal is to include the cover form (see item 1) and all information as defined in sections 'The Proposal' and 'Proposal Evaluation'.
- 2.4 The Fee schedule form must be emailed separately from the technical proposal documents. Unless otherwise specified by the NCC, the all-inclusive unit prices quoted shall be net prices in Canadian funds excluding taxes, F.O.B Destination: National Capital Region, including all costs as detailed in the Statement of Work.
- 2.5 All proposals will be evaluated against mandatory and point rated technical requirements. Proposals meeting all mandatory requirements and obtaining a minimum score of 70% on the total for the technical component will be considered as technically admissible. The selection of the successful firm(s) shall be made based on the lowest overall value of the Fee Schedule, per province. The overall value for the purpose of evaluating proposals shall be the sum of the Appendix 1 Fee Schedule items excluding taxes. The NCC intends to award one (1) Standing Offer Agreement per province.
- 2.6 A debriefing of a Proponent's Technical Proposal will be provided, if requested to the NCC Contracting Authority, within 15 days of an award posting or email notification. The debriefing will include an outline of the reasons the bidder's submission was not successful.
- 2.7 If any supplier holding an SOA has their SOA terminated, the NCC reserves the right to 'replenish' the list of SOAs, by offering an SOA to another supplier. The basis for deciding which suppliers are offered 'replenishment' SOAs shall be 'the next ranked supplier(s)' as per rankings established in 2.5.
- 2.8 The Commission is a Crown Corporation subject to the Goods and Services Tax (GST) and the Provincial Sales Tax (HST or QST). The successful supplier will be required to indicate separately, with the request for payment, the amount of GST and HST/QST, to the extent

applicable, that the Commission will pay. These amounts will be paid to the successful Bidder who will be required to make the appropriate remittances to Revenue Canada and the respective provincial governments. The successful bidder(s) must complete & return the T1204 form and attach a voided cheque for direct deposit purposes.

- 2.9 The Occupational Health & Safety Requirements, the Security Requirements and the General Conditions will also form part of the resulting SOA and subsequent call-up purchase order(s).
- 2.10 In order to avoid any misunderstanding and be fair to all suppliers, please note that proposals received after the closing time and date will not be accepted.
- 2.11 The Commission reserves the right to not accept the lowest or any of the proposals submitted, to cancel the RFSO, and/or to reissue the RFSO in its original or revised form. The Commission also reserves the right to negotiate with the successful proponent and/or any/all proponents.
- 2.12 Facsimile transmittal of proposals will not be accepted.
- 2.13 Proposals will be held in strict confidence. There will not be a public opening of the proposals submitted for this RFSO. Notwithstanding the foregoing, proponents are advised that as a Crown Corporation, the Commission is subject to the provisions of the Access to Information Act. Information submitted by third parties will only be exempted from disclosure if the records or part of them qualify for an exemption under the ATI Act.
- 2.14 The Commission shall not be obligated to reimburse or compensate any proponent, its sub-contractors or manufacturers for any costs incurred in connection with the preparation of a response to this RFSO. All copies of proposals submitted in response to this RFSO shall become the property of the Commission and will not be returned.
- 2.15 This RFSO and all supporting documentation have been prepared by the Commission and remain the sole property of the Commission, Ottawa, Canada. The information is provided to the proponent solely for its use in connection with the preparation of a response to this RFSO and shall be the proprietary information of the Commission. These documents are not to be reproduced, copied, loaned or otherwise disclosed directly or indirectly, to any third party except those of its employees having a need to know for the preparation of the Bidder's response, and the Bidder further agrees not to use them for any purpose other than that for which they are specifically furnished.
- 2.16 The successful Bidder shall indemnify and save harmless the Commission from and against all claims, damages, costs and expenses sustained or incurred by the Commission resulting from any action or legal proceeding on infringement, made, sustained, brought, prosecuted, threatened to brought or prosecuted, by any person that was under the direction and control of the Bidder during the term of the resulting SOA and call-up purchase order(s) and which person is claiming or claims a moral right, as set out under the Copyright Act. The obligation to indemnify under this clause survives termination of the resulting SOA and call-up purchase order(s) and will remain in force for the duration of the copyright in the work created under the resulting SOA and call-up purchase order(s). This obligation to indemnify relative to alleged moral rights infringement(s) is in addition to the Bidder's other obligations to indemnify and save harmless which are set out in the Commission's General Conditions.

3 REQUEST FOR A STANDING OFFER AGREEMENT (SOA)

One method of supply used by the NCC to satisfy the requirements of identified internal users is to arrange a Standing Offer Agreement (SOA) to provide goods, services or both to the NCC during a specified period. The identified internal users to be served may then be a delegated purchasing authority and may access the source of supply directly, as and when requested, by issuing purchase orders detailing the exact quantities of goods or services they wish to order from the Offeror at a particular time during the effective period of the Offeror's offer and in accordance with the predetermined conditions. This method of supply is particularly useful in acquiring frequently ordered commercially and non-commercially available goods or services when the total volume or value of goods or level of services that may be required by one or more identified users can be estimated beforehand, but it is not possible at the outset to identify the exact requirements for any given user at a specific time in the future.

The NCC foresees a potential need for **SERVICING INCLUDING CLEANING, CCTV INSPECTION, REPAIR AND SEWER RE-LINING OPERATIONS FOR VARIOUS LOCATIONS IN THE NATIONAL CAPITAL REGION**, as more particularly stated herein and in the attached; you are hereby invited to provide to the NCC a Standing Offer. If you wish to submit an offer you are required to do so, on the enclosed forms and format. Please be advised that the quantity of goods and/or services and the estimated expenditure specified in the attached are only an approximation of requirements given in good faith. The making of a standing offer by the Offeror shall not constitute an agreement by the NCC to order any or all of the said goods and/or services. The NCC may make one or several purchase orders against a Standing Offer, each such purchase orders constituting an acceptance of said Standing Offer for the part of the said goods or services described in the purchase order. A request does not commit the NCC to authorize the utilization of a Standing Offer or to pay any cost incurred in the submission of offers, or cost incurred in making necessary studies for the preparation thereof, or to procure or contract for any goods or services. The NCC reserves the right to reject or authorize for utilization any offer in whole or in part, with or without further discussion or negotiation.

The Offeror acknowledges that a Standing Offer is not a contract. The Offeror offers to sell or provide and deliver to the NCC, upon the terms and conditions hereinafter set out, the goods and/or services detailed herein and at the prices listed herein or on the pricing basis set out herein, AS AND WHEN REQUESTED by authorized NCC users such goods and/or services the authorized user orders, in accordance with the following provisions.

It is understood and agreed that:

- a purchase order against a Standing Offer shall form a contract only for those goods or services, or both, which have been ordered, provided always that such a purchase order is made in accordance with the provisions of the Standing Offer;
- the issue and distribution of the authorization to use any resulting Standing Offer does not oblige the NCC to authorize or order all or any of the goods and/or services described in the Standing Offer;
- The NCC's liability shall be limited to that which arises from purchase orders against any resulting Standing Offer made within the period specified herein;
- The NCC reserves the right to procure the specified goods and/or services by means of contracts, standing offers, or by other contracting methods.

4 STANDING OFFER REQUIREMENT

The National Capital Commission (NCC) wishes to retain the services of a qualified contractor per province as detailed in the Terms of Reference on an "as and when requested" basis under a Standing Offer Agreement. The term proponent, used throughout this document, is defined as the entity submitting a proposal and shall mean a supplier, an entity formed through a prime Bidder/sub-Bidder relationship, a consortium or a joint venture. Proponents shall provide all of the required services enumerated within the terms of reference. To ensure equal opportunities for all proponents, and to eliminate risk of conflict of interest, all proponents are advised that the National Capital Commission will not accept more than one submission per supplier, whether the supplier applies as a single entity, part of a joint venture, or as a sub-consulting member of the team.

5 PERIOD OF THE STANDING OFFER AGREEMENT

The duration of the SOA is for a period of four (4) years from the date of award or until total expenditure level is attained, whichever comes first.

6 CALL-UP PURCHASE ORDER DOCUMENT

The authorized "Purchase order Against a Standing Offer" document will be NCC Purchase Order # XXXXXX. The purchase order document shall specify the supplier name and address, Purchase Order number, delivery date required, delivery location, description of goods or services performed quantities, unit prices, purchase order limit, and an approval signature to proceed by the authorized designated user.

7 CALL-UP PURCHASE ORDER LIMITATION

The SOA is intended for use on small and medium scale projects. The maximum all-inclusive amount payable for any one purchase order (call-up) shall be \$250,000 CDN including applicable taxes. Services should not be delivered until NCC's Contracts has issued a purchase order number specific to that call-up purchase order. If no extra services are authorized by the NCC Project Manager, the written quotation shall constitute the maximum amount payable under the call-up purchase order.

8 TOTAL ESTIMATED SOA EXPENDITURE

The combined total estimated expenditure for all Standing Offer Agreements awarded is \$ 1,000,000.00 CDN including taxes. As operational requirements become more defined, the NCC reserves the right to increase the total estimated expenditure by 30% but in no circumstance will the total estimated expenditure for the SOA(s) be more than \$ 1,300,000.00 including taxes. The best ranked bidder for Ottawa will obtain a SOA worth 50% of the total estimated expenditure (\$500,000.00) and the best ranked bidder for Gatineau will obtain a SOA worth 50% (\$500,000.00) of the total estimated expenditure.

The NCC reserves the right to terminate the SOA of any supplier that shows repeated failure to satisfactorily manage the quality of the goods and/or timeliness of delivery of services.

9 INVOICING

Send one Adobe pdf invoice directly to:

National Capital Commission, Accounts Payable

E-mail to the following address payables@ncc-ccn.ca

To ensure prompt payment, please prepare your invoice in accordance with the prices quoted. Errors in invoicing can cause delay of payment. Submit your invoice and clearly indicate the Call Up Purchase Order number.

Itemized invoices are to be submitted to NCC Accounts Payable at intervals of not less than 30 days.

10 NOTIFICATION OF WITHDRAWAL OF STANDING OFFER:

In the event the SOA Offeror wishes to withdraw their offer, they will inform the NCC with a minimum of 30 days prior written notice. Any withdrawal of the offer will not affect any purchase orders made prior to the 30 days written notification.

11 OVERVIEW

The National Capital Commission (NCC) wishes to retain the services of firms that can provide servicing including cleaning, CCTV inspection, repair and sewer re-lining operations for various locations in the National Capital Region on an "as and when requested" basis under a standing offer agreement (SOA). All proponents identified as successful will be required to enter into a formal NCC Standing Offer Agreement. once awarded, these SOAs will serve as the contractual instrument against which individual call-ups can be made (on a project by project basis). the NCC reserves the right to amend any provisions contained herein and/or to issue any addenda.

Call-up POs made under a SOA for servicing including cleaning, CCTV inspection, repair and sewer re-lining operations for various locations in the National Capital Region (2022-2026) will be managed by NCC's design and construction division, engineering section.

The Request for Standing Offer (RFSO) for General Services in various sewer servicing including cleaning, CCTV inspection, repair and re-lining operations (2022-2026), including its appendices, will be used as the basis for evaluation of proposals submitted in response to the RFSO, and shall be thereafter considered as requirements for SOAs awarded.

Further information regarding the NCC can be found at www.ncc-ccn.gc.ca.

12 DETAILS OF THE STANDING OFFER AGREEMENT (SOA)

12.1 Number and types of Standing Offer Agreement

It is the NCC's intention to award one (1) SOA per province which will be in effect for a period of four (4) years from the date of award or until total expenditure level is attained, whichever comes first. The projects to be addressed under the SOA will be at various locations within the National Capital Region, in the provinces of Ontario and Québec.

Appendices General Conditions, Occupational Health and Safety Requirements, and, Security Requirements will also form part of the resulting SOA and call up purchase orders.

12.2 Duration and Extension(s) of Standing Offer Agreement

SOA(s) will be established for a period of four (4) years from the date of award or until total expenditure level is attained, whichever comes first

12.3 Future Adjustment to Fees

The unit rates proponents quote on the Fee Schedule form will be applicable for the first year. At SOA award, the second, third- and fourth-year rates will be adjusted by a fixed 2% rate of inflation per year.

ie. Year 2 unit rate = Year 1 unit rate + 2%

Year 3 unit rate = Year 2 unit rate + 2%

Year 4 unit rate = Year 3 unit rate + 2%.

12.4 Replenishment of Standing Offer Agreement List

If any firm holding an SOA has their SOA cancelled or SOA holder withdraws his Standing Offer, the NCC reserves the right to 'replenish' the list of SOAs by offering an SOA to another firm. The basis for deciding which firms are offered 'replenishment' SOAs shall be 'the next highest ranked firm(s)' as per rankings established in 2.5. Firms offered 'replenishment' SOAs after the initial award of SOAs to previous holders will be offered an adjustment of their unit/hourly rates according to formulae utilized in 12.3

12.5 Evaluation of Firms

The NCC will evaluate the quality and performance of the Contractor's services and deliverables for each project. The Contractor Performance Evaluation Form is available in Appendices. The NCC reserves the right to cancel any SOA if the performance of the Contractor is evaluated to be non-satisfactory or unacceptable.

12.6 Eligibility for Standing Offer Agreements

The NCC reserves the right to refuse the award of any Proponent that it finds does not meet the mandatory service requirements. This section outlines the mandatory service requirements:

12.6.1 Mandatory service requirements

To be eligible for award, firms must, for the duration of the SOA, satisfy the following mandatory service requirements:

- a. Be certified with the Infrastructure Health and Safety Association (IHSA) and/or ASP Construction (Association sectorielle paritaire)

- b. Be licensed, or eligible to be licensed, certified, or other authorized to undertake these services to the full extent that may be required by provincial or territorial law in the provinces of Ontario and Québec to undertake.
- c. This firm must have the staff with qualifications for all the services required for this Standing Offer Agreement and Call up PO. Including and not limited to plumbers, qualified professionals to undertake sewer servicing works including cleaning, CCTV inspection, repair and re-lining operation services as one of their primary areas of expertise.
- d. Must meet and maintain the requirements outlined in the Security, Requirements (see Appendices). The NCC reserves the right to cancel SOA held by a firm that fails to uphold any of the security levels (at a minimum Reliability).

12.6.2 Urgent services

Occasionally, Contractors may be expected to provide services within little or no delay. All Contractors must be in a position, by way of the firm's Core Team (see Section 12.8), to provide immediate response when called upon, as follows:

- a. Be capable of attending meetings or briefings remotely, at NCC offices or on site, within 14 working hours of being requested.
- b. When called upon for construction related services, be capable of being on the construction site within 4 working hours of being requested.
- c. Be capable of rendering construction review and supervision services daily if/when called upon by the NCC Technical Authority (NCC DL).

12.7 Roles and Authorities

12.7.1 NCC Technical Authority (NCCTA)

The NCC will appoint a Technical Authority who:

- a. Is responsible for managing the call up po, and, on behalf of the NCC, is responsible for the day-to-day management of the Contractor.
- b. Acts as a liaison between the NCC and the Contractor.
- c. Is required to be kept informed always of the progress of the work and of any problems and/or potential changes to the scope, cost, schedule, quality of work, communications, or risks immediately as they occur.
- d. In conjunction with NCC's Contracting Authority call up purchase order approval, the NCC Technical Authority is the only one with authorization for any change to the scope, cost, or schedule of the Contractor's call up PO.

12.7.2 Contractor's Project Manager

The Contractor shall appoint a Project Manager who:

- a. Will be the Contractor's principal contact for the duration of the call-up.
- b. Has full authority to act on behalf of the NCC on all aspects of the work except scope, cost and schedule changes (unless explicitly stated elsewhere in this RFSO document or additional direction is given by the NCC Technical Authority).

- c. Shall ensure that proposed changes or refinements to the scope of work are communicated to the NCC Technical Authority for approval, together with any associated risks, cost implications or changes in schedule, and that all related issues are properly identified and reported.

12.8 Contractor's Core Team

For this SOA to work most effectively, the NCC requires the Contractors to have a 'Core Team able to provide year-to-year continuity in servicing the NCC's project work. The Contractor's 'Core Team' shall be comprised of persons able to undertake the roles and responsibilities of the following classifications

- a. Principal
- b. Project Manager
- c. Site Superintendent
- d. Foreman
- e. Estimator
- f. Technician / Technologist
- g. Clerical
- h. Construction Supervisor

Note: All subcontractors must meet NCC requirements and be approved by the NCC. Any replacement or addition of members in the Core Team must be submitted for review and approval by the NCC.

12.9 Insurance

12.9.1 Commercial Liability Insurance

Contractor shall maintain an "Occurrence Based" commercial liability insurance policy with the following minimum requirements:

- a. Insurance limit shall not be less than \$5,000,000 per occurrence.
- b. Shall contain a cross liability clause and severability of interest clause.
- c. Name the NCC as an "additional named insured" by way of an endorsement.

12.9.2 Subcontractors

Contractor shall ensure that their subcontractors have commercial liability insurance at the same coverage levels.

12.9.3 Insurer Responsibilities

Contractor insurance policies shall contain a clause requiring the insurer to inform the NCC in writing thirty (30) days before policies are cancelled, altered or expired.

12.9.4 Insurance Coverage

In all cases, said insurance shall cover the Contractor, its directors, and all its employees.

12.10 Safety, Security and Confidentiality

See Appendices for Security Requirements in effect for these SOAs.

12.11 Formatting, Labelling and Handling of Documents

All textual information (e.g. specifications, cost estimates, reports) submitted to the NCC must be in Microsoft Excel or Microsoft Word format. Electronic copies of all such documents must be transferred to the NCC at completion of projects or information must be made available to the NCC Technical Authority for downloading. All software used in the production of documents must be a recent version of PC platform.

12.12 Project Communications

The Contractor shall represent the NCC's interests to the full extent that communications may be reasonably required between the NCC, the Contractor, and any other party.

Direct communications between the Contractor and other parties is permitted to enable the discussion and prompt resolution of routine technical issues. Decisions made or directions given by other parties must be documented and sent by the Contractor's PM for submission without delay to the NCC Technical Authority.

The Contractor's PM will provide information and updates as required and, if requested by the NCC, provide members of the Contractor's team to participate in media interviews, speak at press conferences or media briefings, review communications material for accuracy or other communications related activities, in both official languages.

All communications, other than communications with Contractor team members, shall be copied to the NCC Technical Authority within one (1) week of the correspondence being signed or received. The NCC Technical Authority shall be permitted access to all the Contractor's communications and files at any time. However, such files and copies of communications will remain in the care, custody and control of the Contractor and shall not be destroyed at any time.

The Contractor shall ensure that no subcontractors communicate project information to the media unless requested to do so in writing by the NCC Technical Authority. Should reporters or representatives of the media contact the Contractor, its employees or its sub-Contractors, the Contractor shall refer the media to the NCC Technical Authority (or designated NCC communications staff) and notify the NCC Technical Authority immediately.

The Contractor will collaborate with NCC staff and with a joint communications team that includes project stakeholders, to enable effective public communications and media relations regarding their portion of work within a given project.

12.13 Stakeholders

In addition to the usual contractual relationship between the NCC and the Contractor, other parties who have an interest in certain aspects of the project may be involved. The Contractor, in carrying out his mandate, may have to interface with stakeholders as required to ensure that their concerns are adequately addressed and approval, when necessary, is obtained. Contractor interface with

stakeholders shall include, but not be limited to, responsibility for the logistics (i.e. organizing, preparing, attending, and recording) of meetings and preparing responses to inquiries and requests for technical information in a timely manner.

13 CONDITIONS & PROCEDURES FOR CALL UP PURCHASE ORDERS

13.1 Initiating a Call Up Purchase Order

Once a SOA is in place, individual requests for various sewer servicing including cleaning, CCTV inspection, repair and re-lining operations will be handled as purchase orders (or call-ups) against the SOA. The number of purchase orders awarded by the NCC will vary annually, depending on workload and funding. The NCC cannot guarantee the number or cumulative value of purchase orders Contractors will receive in any given year or for the duration of the SOA. The procedure for initiating an SOA purchase order (call-up) is as follows:

13.1.1 Initial contact

The NCC Technical Authority will contact the Contractor to provide information and following either of the two following procedures:

- a) The NCC Technical Authority will have already prepared a written Terms of Reference (TOR) for the work request, to which the Contractor will provide a proposal or quote against a pending call-up.
- b) The NCC Technical Authority may request that the Contractor confirm the work request details back to the NCC in a proposal or quote for pending call-up.

13.1.2 Minimum requirements of a proposal or quote against a call-up:

The Contractor should include the minimum following details in their proposal or quote against a call-up:

- a. Detailed description and location of the scope of work and deliverables.
- b. List of staff assigned to the project (including the Contractor PM and their direct contact information) and a breakdown of time or quantity allocated to each (this applies to in-house staff and subcontractor(s), if applicable).
- c. Timeframe to complete the project work.
- d. SOA pre-approved unit rates times estimated quantities, other expenses, Subtotal, applicable taxes, and, Total.

13.1.3 Proposal or Quote Review

The proposal or quote against a call-up shall be submitted to the NCC Technical Authority for final review and approval and shall be revisited, edited and/or resubmitted as necessary until the NCC Technical Authority finds the submission acceptable in terms of content, clarity, and cost.

13.1.4 Approved Proposal or Quote

The Contractor's work cannot proceed until NCC Procurement has issued a PO for the call-up.

Unless otherwise approved by the NCC Technical Authority, the Contractor personnel assigned to a call-up must be selected from the Core Team in place for the Contractor (i.e. the list of individuals evaluated as part of the SOA proposal submission).

The NCC will not permit the Contractor to reassign or subcontract in its entirety a call-up PO to any other firm.

The NCC reserves the right to request Contractors to seek subcontractors and specialists other than those suggested by the Contractor (and as required, consider proposals from subcontractors and specialists named by the NCC).

- b. c. Cancel any portions of the work and assign subsequent portions to another firm.
- d. Award work to firms not included in the SOA.

There will be no compensation for the preparation of written offers-of-service, proposals or quotations, whether they are accepted or rejected, or if the project is cancelled, prior to initiation of an SOA call-up purchase order.

13.2 Establishing costs and cash flow on a Standing Offer Agreement purchase order

If no extra work is authorized by the NCC Technical Authority, the written quotation shall constitute the upset amount payable for the purchase order.

In all instances, the SOA rates will be from the price schedule sheet in appendix 1, plus applicable taxes.

13.3 Contractor acting as General Contractor

When Contractors are required to act as General Contractor, contracting with, and organizing/coordinating subcontractors, their proposal or quote for call-up shall include the following as separate line items:

- a) The time and costs for SOA 'Core Team' staff members responsible for engaging, coordinating, and managing the subcontractors for that call-up.
- b) Details regarding the scope, nature, and cost of all subcontracted services for that call-up in the same manner and level of detail as the fees of the SOA Contractor.

Notes:

- a) Contractors and their sub-Contractors shall maintain a detailed record (e.g. using timesheets) of all time spent on each PO to enable the NCC to verify, when required, the time-cost of the Contractor's work.
- b) The NCC reserves the right to award POs as 'lump sum' contracts
- c) The NCC reserves the right to request cash flow projections on individual call-ups to facilitate reporting of quarterly accruals and projected costs-to-yearend.
- d) The contract amounts shown for any PO will be adjusted and reduced to reflect any de-scoping in the work requested by the NCC. Adjustments (i.e. change orders) are to be confirmed in writing by the NCC Technical Authority.

13.4 Invoicing

By mail or via payables@ncc-ccn.ca, itemized invoices are to be submitted to NCC Accounts Payable at intervals of no less than 30 days, according to procedures approved by the NCC Technical Authority (e.g. monthly billing, proportion of work, or billing at completion of each project phase or as directed by the NCC Technical Authority).

The performed services will be invoiced according to the unit rates schedule to an upset limit in accordance with the amount negotiated in each call-up TOR/ Contractor proposal. Unit rates and other fees must be in accordance with those quoted in the firm's SOA proposal or, in the case of subcontractor work, amounts based on sub-Contractor proposals and pre-approved by the NCC Technical Authority. Total fees (including expenses) must remain within the maximum amount authorized for each purchase order.

Any extras or changes to the original scope and cost of PO work must be discussed with the NCC Technical Authority and authorized in writing by the NCC before the execution of said work. The NCC will not compensate the Contractor for additional work undertaken without the prior written authorization of the NCC Technical Authority.

Contractors shall clearly identify the following on each invoice/billing submitted to the NCC:

- a) SOA number
- b) Call-up and/or PO number
- c) Original call-up contract amount and any confirmed changes to the contract amount
- d) Value remaining on the SOA before the call-up
- e) Fee(s) billed to date against that call-up
- f) A current account of time and costs resulting from the Contractor's 'Core Team' work on the call-up, as well as all project costs and sub-Contractor costs approved by the NCC Technical Authority
- g) All applicable taxes, each in separate line items

To ensure good project communication, it is mandatory that Contractors advise the NCC Technical Authority when 50% and 75% of approved costs have been incurred for a given call-up (or if so requested by the NCC Technical Authority, when 50% and 75% of each phase's approved costs have been expended). Advisement of status of billable hours does not constitute an amendment to the purchase order.

14 STANDING OFFER AGREEMENT – TYPICAL SCOPE OF WORK

14.1 Description

The work under this SOA shall include but not be limited to the provision of all labour, materials, accessories, equipment, tools, transportation, services and technical competence for performing the following work in strict accordance with the specifications and subject to the terms and conditions of the contract.

The work is in the National Capital Region in Ottawa of Gatineau. The successful Contractor shall fully acquaint himself with all applicable federal, provincial and municipal regulations, codes and guidelines relating to the work of this Standing Offer Agreement. The Contractor will be required to comply with

these by-laws without extra compensation of any nature. The Contractor shall also be required to obtain permits and other such licenses required for any project and pay for any other charges incidental to such permits at no additional cost to the NCC.

Sewer servicing including cleaning, CCTV inspection, repair, and re-lining operations for the NCC are typically related to one or more of the following areas:

1. Sewer inspection using closed circuit television inspection (CCTV) of sewers 2,100 mm in diameter or less at specified locations within the NCC lands. The Contractor will not be required to clean sewers before conducting any sewer inspection unless directed by the NCC.
2. Cleaning of Sanitary sewers, storm sewers, combined sewers and Culverts including removal of all silt, debris, grease, and gravel where deemed necessary by the NCC.
3. CCTV Inspection Septic Tank and Report (including recommendations for repair or replacement)
4. Cleaning of Manhole and Catch basin sumps.
5. Reports containing paper report along with video media as specified herein.
6. Sewer spot repairs.
7. Sewer lining.
8. Consultation required for site specific requirements (eg.Gatineau Park slope condition thus affecting access.)

Note: The Contractor shall be familiar with the land access permit (and the implications of their work with respect to the Canadian *Environmental Protection Act*).

Note: Reports, presentation material and tender documents, are required in both official languages unless otherwise indicated by the NCC Technical Authority.

14.2 General Services

14.2.1 Schedules

The Consultant shall provide a baseline schedule for project implementation, to be included in the proposal submitted for a given call-up

Once a proposal and fee for a given call-up has been agreed upon with the NCC Technical Authority, the Consultant shall update this schedule on a regular basis and advise the NCC Technical Authority of any deviations without delay.

The Consultant shall be responsible to provide adequate resources to adhere to the approved baseline of, and approved variations to, the schedule.

The Contractor may be required to attend meetings for Regular work assignment or Emergency work if deemed necessary by the NCC at no additional cost to the NCC.

14.2.1.1 Regular Work Assignment

The Contractor shall start work within fourteen (14) hours of receiving a call up purchase order from the NCC. Every effort/attempt will be made by the NCC to provide at least a full day's work in a limited

work area on each call-out, however, the NCC may require CCTV on a less than 8 hours per day basis. For callouts requiring less than one full working day, a minimum charge of four hours will apply.

The NCC, on the working day prior to the regular work being done, will advise the Contractor of the location where the contractor's unit will be working on the following day. The NCC Inspector shall be notified immediately, if for any reason, the contractor's unit will not be available to complete work on any particular day or part thereof. In the case of lost time due to inclement weather, excessive fogging within the sewers, breakdown, change in work requests, etc., the Contractor shall only be paid for the actual hours worked or metres of work requested.

Where appropriate, the Contractor may be required to submit detailed work schedule to the NCC for work requested. The work shall be scheduled for continuous work if required. The NCC reserves the right to change or cancel work without any given notice to the Contractor.

14.2.1.2 Emergency Work

When emergency work is scheduled by the NCC, the Contractor is required to respond within four (4) hours of receipt of a written work order or work request. The NCC, because of urgent or emergency requirements, may request work to be completed within forty-eight (48) hours.

14.2.2 Quality Management

The Contractor shall use their quality management system to ensure a clear, concise, and traceable quality control implementation as to provide the best service and delivery quality to be reviewed by the NCC Technical Authority.

14.2.3 Reports and Meetings

Progress meetings shall be held between the NCC and the Contractor on a regular basis and shall be organized by the Contractor in agreement with the NCC Technical Authority. At the request of the NCC Technical Authority, the Contractor PM shall submit, in advance, a progress report (and/or cash flow projection) to the NCC in preparation for these meetings. The Contractor shall prepare agendas and minutes, issue progress reports, provide briefings, and obtain advice and guidance on issues (related to the study process, assumptions, methodologies, deliverables, and public consultation process), as required. Progress meetings will normally be held at NCC offices.

14.3 Investigation and Studies

SOA call-ups may involve participation in investigation, studies, and associated research and analysis. Typical studies could involve feasibility studies regarding all aspects of work cited above in relation to proposed real estate developments. The activities will vary by project and could include, but are not limited to, the following:

- Identification of requirements and issues.
- Study and recommendations regarding the impact of proposed Sewer related works or interventions.
- Data collection.

- Monitoring, analysis, and diagnosis of problems to be integrated into a condition assessment report.
- Options identification, analysis, and elaboration, indicative cost estimates and preferred option recommendations.
- Cost/benefit analysis and value for money assessment.
- Participation in multidisciplinary review and co-ordination meetings.
- Field work to determine design parameters, site conditions and constraints.
- Materials sampling and testing.
- Establishment of design criteria.
- Interpretation of design criteria for other Contractors and/or consultants engaged by the NCC for the project.
- Preparation of final recommendations and reports.

14.4 **Miscellaneous**

14.4.1 **Daily Reports**

The Contractor shall prepare report(s) for each working day in a form approved by the NCC. This report shall include the following information:

- a. Day, date, start time, end time, hours worked, any downtime and reason for loss of time.
- b. A summary of the location and amount of work done including location (using the NCC's structure numbers if assigned), lengths of sewer inspected, sewer sizes and comments describing any unusual circumstances encountered.
- c. Number of passes, amount and type of material removed for each pipe section cleaned (sewer cleaning).

Daily reports shall be in a format that is acceptable to the NCC. Any changes to the daily report shall be made by the Contractor at no extra cost to the NCC.

14.4.2 **Contractors Personnel**

The Contractor shall provide competent and experienced operators, satisfactory to the NCC, who shall always be on-site when work is in progress. Any employee, agent or subcontractor of the Contractor deemed for any reason unsatisfactory by the NCC, shall be removed from the work and replaced upon receipt of written notification to this effect from the NCC to the Contractor. All operators shall be fully skilled and adequate in number to complete the work on schedule. At no time shall a work crew be composed of less than two people. In areas where an additional person is required, such as for confined space entry or traffic control reasons, the Contractor shall provide additional personnel at no additional cost to the NCC.

14.4.3 **Ownership of Documents**

All plans, drawings, designs, infrastructure data, and documentation provided by the NCC to the Contractor shall remain the property of the NCC, and the content of these documents shall not be communicated in any way to any other party nor used for any purpose other than to execute the work of this Agreement. All documents shall be returned to the NCC at the completion of the contract period or as specified by the NCC. All draft reports, final reports and video recordings (analog or

digital) of the inspection work shall become the property of the NCC, and the contents of those reports shall be treated as confidential and not communicated to any party other than the NCC. The Contractor shall not divulge any information communicated to or found by him while carrying out the work of this Agreement, and such information shall not be used by the Contractor on any other project without the approval of the NCC. The Contractor shall not duplicate any documents or data, such as plans, maps, reports, videos, or digital information without the approval of the NCC.

14.4.4 Traffic Control

Prior to the commencement of work, the Contractor shall submit a Traffic and Pedestrian Control Plan to the NCC detailing the proposed work area, types and location of traffic control devices to be used and how pedestrian traffic will be managed. Signs, the placement of signs, flashers and channelizing methods for the guidance and protection of pedestrian and vehicular traffic must conform to all Ministry of Transportation Ontario (MTO) and Ministry of Transportation Quebec (MTQ) Regulations. Specifically, the MTO, Ontario Traffic Manual Book 7, Temporary Conditions (January 2014) and the Ministry of Transportation of Quebec (MTQ) Ouvrages Routiers Volume V – Traffic Control Devices (December 2021). Materials and equipment must be confined to one (1) side of the street only and stored so as not to interfere with visibility and/or corner movement. Sidewalks must not be totally obstructed at any time. Satisfactory facilities for pedestrian crossing at corners must be provided. Flag person to guide pedestrian and vehicular traffic when required must be provided.

14.4.5 Sewer Accessibility

Certain sewer locations may not be accessible by roadway and ground conditions may not be suitable for heavy equipment during or soon after a wet weather period. The Contractor is responsible for re-scheduling work and notifying the NCC in the event a sewer may not be accessible. Should the Contractor or his representative damage an area and is deemed responsible by the NCC, the Contractor will be responsible to reinstate the damaged area to its original condition at no cost to the NCC.

14.4.6 Available Water – Hydrant

Water from fire hydrants may be used after obtaining a permit from the City of Ottawa or the City of Gatineau (only when additional quantities of water are required to avoid delays in normal working procedures). The water shall be conserved and not used unnecessarily. No fire hydrant shall be obstructed in case of a fire in the area served by the hydrant.

14.5 CONTROL OF FIRE HYDRANTS PROGRAM

Registration of Water Carrying Vehicles

Every water-carrying vehicle that would draw water from a City flusher hydrant must be registered with the appropriate municipal drinking water authority by the owner of the vehicle or his/her agent.

The following vehicle information is recorded:

- a) name, address and telephone number of each registered owner

- b) vehicle registration number
- c) license plate number
- d) capacity of vehicle in gallons or cubic meters

Permit Issuance & Displaying of Permit

Each registered vehicle must have a permit to take from a City flusher hydrant. The permit shall be displayed in the windshield of the vehicle while taking water. The combination of the vehicle permit in the windshield and the flusher band on the hydrant would confirm that the hauler is registered, and, the water is being taken from a designated hydrant.

14.6 Sewer Line Cleaning and Inspection

14.6.1 General

The intent of sewer line cleaning is to remove foreign materials from the lines and restore the sewer to the original carrying capacity. It is recognized that there are some conditions such as broken pipe and major blockages that prevent cleaning from being accomplished or where additional damage would result if cleaning were attempted or continued. The method of cleaning will depend on the size of the pipe and accessibility for heavy equipment. Selection of a method that suits the conditions is the responsibility of the Contractor.

14.6.1.1 Equipment

COMBINATION HIGH-VELOCITY JET (HYDRO-CLEANING)/VACUUM EQUIPMENT

All high velocity sewer cleaning equipment shall be truck-mounted for ease of operation. The equipment shall have a minimum of 150 m of 25 mm I.D. high pressure hose, with a selection of two or more high velocity nozzles. The nozzles shall have a capacity of 230 l/minute (60 GPM) at a working pressure of 13,790 KPa (2,000 PSi). The nozzles shall be capable of producing a scouring action from 15 degrees to 45 degrees in all size lines designated to be cleaned.

Equipment shall carry its own 4,540 litre (1,200 imperial gallons) water tank (minimum) capable of holding corrosive or caustic cleaning or sanitizing chemicals if required by the Inspector, auxiliary engine, pump, and hydraulic drive hose reel. All controls shall be located so that the equipment can be operated above-ground. Suction hose shall be minimum 200 mm (8 inch) diameter capable of a minimum 5,080 mm (200 inches) of negative water pressure and up to 227 m³/min (8,000 CFM) suction.

14.6.1.2 Execution of Work

No work shall be carried out at any time without a valid land access permit and no work shall be started without the NCC's Inspector present to inspect the work.

The NCC's Inspector will determine the scope of work for all sewer cleaning.

The Contractor must review the cleaning requirements as established by the NCC's Inspector and select a method of cleaning which will allow for difficult access conditions, (i.e. soft ground unsuitable for vacuum truck) should they exist. The Contractor is responsible for coordinating all sewer-cleaning activities.

The contractor shall ensure that the equipment arrive on site with no disposable materials. The NCC's inspector will verify this. Should the equipment arrive on site with disposable material, the Contractor will be required to immediately empty the equipment at an approved location, as specified herein, at no additional cost to the NCC.

14.6.1.3 Trial Sewer Cleaning

Prior to executing a Standing Offer Agreement, the best ranked Bidder may be required to undertake a cleaning demonstration of a test section of sewer at his cost. This may include calcite and roots. Failure to meet equipment specifications will result in rejection of the Tender.

14.6.1.4 Cleaning Precaution

During sewer cleaning operations, all reasonable precautions shall be taken in the use of cleaning equipment. When hydraulically propelled cleaning tools (which depend upon water pressure to provide their cleaning force) or tools that retard the flow in the sewer line are used, precautions shall be taken to ensure that the water pressure created will not damage or cause flooding of public or private property. When possible, the flow of sewage in the sewer shall be used to provide the necessary pressure for hydraulic cleaning devices. When additional water from fire hydrants is necessary to avoid delay in normal work procedures, the water shall be conserved and not used unnecessarily. No fire hydrant shall be obstructed in case of a fire in the area served by the hydrant.

14.6.1.5 Sewer Cleaning

The designated sewer sections shall be cleaned between consecutive manholes using high-velocity jet. In general, sewer cleaning will start at the upstream sewer sections and work in a downstream direction. Selection of the equipment used shall be based on the conditions of lines and access limitations. The equipment and methods selected shall be satisfactory to the NCC. The equipment shall be capable of removing dirt, grease, rocks, sand, and other materials and minor obstructions from the sewer lines and manholes (e.g. large rocks, manhole covers, etc.). If cleaning of an entire section cannot be successfully performed from one manhole, the equipment shall be set up on the other manhole and cleaning again attempted. If, again, successful cleaning cannot be performed or the equipment fails to traverse the entire manhole section, it will be assumed that a major blockage exists, and the cleaning effort shall be abandoned. Where possible, the location of major blockages shall be identified using CCTV equipment.

14.6.1.6 Material Removal

All sludge, dirt, sand, rocks, grease, and other solid or semi-solid material resulting from the cleaning operation shall be removed at the downstream manhole of the section being cleaned. Passing material from manhole section to manhole section, which could cause line stoppages, accumulations of sand in wet wells, or damage pumping equipment, shall not be permitted. The Contractor shall maintain record of the amount and type of material removed for each section of pipe in a format approved by the NCC.

14.6.1.7 Disposal of Materials

Debris shall be kept in totally enclosed containers at all times and shall be removed from the site at the end of each day or when the containers are full. Under no circumstances will the Contractor be allowed to accumulate debris, etc. on the site of work beyond the stated time. All debris shall be removed from the site and disposed by the Contractor at no additional cost to the NCC.

All solids or semi-solids resulting from the cleaning operations shall be removed from the site and disposed of in accordance with the Regulations governing the Province. The Contractor must notify the NCC prior to commencing work and throughout the contract period (if changed) of the landfill site or method used for material disposal.

14.6.1.8 Final Acceptance

Sewer cleaning shall be carried out in accordance with NCC's standards to the satisfaction of the NCC's Inspector. Final acceptance of the sewer cleaning shall be made upon the acceptance review of the corresponding video CCTV inspection. Should CCTV inspection results reveal the sewer cleaning work to be deficient, the sewer shall be re-cleaned and re-inspected (CCTV) at the Contractor's expense until the work complies with these specifications. All sewer cleaning activities including number of passes, the amount and type of material removed shall be included in the daily report.

14.6.2 Sewer Line Inspection

14.6.2.1 General

The sewer inspection shall be performed to observe and record structural and service defects along with construction features. The results shall be submitted in an inspection report consisting of paper report along with digital video recording (on CD-R or DVD).

14.6.2.1.1 Equipment

Inspection equipment shall consist of inspection unit, cameras, lighting, cables, power source, monitor (s), data acquisition system, digital video recorder, and other related equipment.

14.6.2.1.2 Inspection Unit (Vehicle)

The inspection unit shall consist of a self-contained vehicle with separate areas for viewing and equipment storage. The vehicle shall be equipped with a cellular telephone or a suitable communication system linking all required crewmembers. The inspection unit shall provide direct accessibility of the CCTV camera/crawler to the manhole from the rear of the vehicle. The inspection unit shall have sufficient spare parts to ensure a minimum of down time. The equipment must be in good mechanical condition to ensure project completion within the time frame specified with minimal equipment breakdown.

The CCTV unit shall be equipped with a winch.

The video monitoring area shall be arranged such that the NCC's Inspector is provided with sufficient space to sit comfortably and have a clear and direct view of the video.

14.6.2.1.3 Camera (CCTV)

The closed-circuit television (CCTV) colour camera shall be specifically designed and constructed for sewer inspection. The CCTV camera shall be operative in environments with 100% humidity. Camera equipment shall consist of a self-contained, CCTV camera (high resolution, 400 lines of resolution) with a monitoring unit connected by a co-axial cable. The CCTV camera shall be self propelled and must be capable of surveying in a stable condition any pipe diameter up to 1980 mm and pipe length of up to 300 meters where entry can be obtained at each end, without reversals. The cable shall be of a single length and joining cables to attain 300 meters in cable length will not be permitted.

The CCTV camera must be a true **PAN & TILT** camera physically capable of radial rotation of 360-degree, lateral rotation (tilting) of 275-degree. The adjustment of focus and iris shall allow optimum picture quality and the focal range shall be adjustable from 100 mm to infinity. The camera lens shall include built in directional lighting.

The mounting of the camera shall be adjustable such that the central axis of the camera lies at a point equidistant between the invert and obvert of the pipe during the inspection of the sewer. The camera's picture resolution shall, at the discretion of the NCC, be confirmed at any time using a RS resolution chart (retina type) or other method.

14.6.2.1.4 Camera Transporter

The camera shall be transported through the sewer by means of a self-propelled camera transporter. The transporter shall permit complete inspection of the sewer from the centre of the start manhole to the centre of the finish manhole while maintaining a centerline path. The camera transporter shall be capable of moving forward and reverse at variable speeds. The camera transporter must be stable and adjustable so as the position of the lens (centre) is in the centre of the sewer. The camera position tolerance shall be +/- 10% of the vertical dimension of the sewer.

Example:

Pipe diameter	Adjustable Height requirements
305 mm	152 mm
610 mm	305 mm
900 mm	450 mm
1500 mm	750 mm

The Contractor shall immediately notify the NCC's Inspector if the camera can not be adjusted to the required height within the sewer. The Contractor shall not manually transport or mount the camera on a float or skid type apparatus unless approved by the NCC's Contract Administrator.

14.6.2.1.5 Lighting

Lighting for the camera shall be suitable to allow a clear picture of the entire periphery of the pipe. The unit shall have a self-contained lighting system capable of providing a clear monitor picture and lighting the periphery of the pipe of a minimum illumination level of 100 foot candles over a minimum distance of two (2) meters. If picture quality is unsatisfactory, as determined by the NCC's Inspector, the equipment shall be removed, and no payment will be made for an unsatisfactory inspection.

The lighting shall be set-up in such a manner that will project a shadow of the body of the camera and /or transporter onto the surface of the pipe within the field of vision of the camera when it is aimed at the centre of the sewer line.

In order to minimize down time, the contractor shall have the required additional lighting within the CCTV inspection unit.

14.6.2.1.6 Recording Equipment

The Contractor shall provide to the NCC a recordable compact disc (CD/CD-R) or digital versatile disc (DVD) made by a reputable manufacturer acceptable by the NCC. The digital video files shall be supplied in MPEG1 format (no audio) or MPEG4 DivX format. Picture size shall be 352x240 @ 30 frames per second with a data/bit rate of MPEG-1 @ 2.4 M-bits/sec.

Each video file must show start and ending manhole numbers along with a continuous display of the distance in metres from the starting manhole location. This information shall be shown continuously in the bottom center portion of the video.

Monitor

A monitor located on site shall provide a clear colour picture of sufficient size and clarity to be easily viewed by the Contractor's Operator and the NCC's Inspector, and it shall clearly define the details of the interior of the sewer. The picture quality on the monitor shall provide a continuous 300-line (or greater) resolution video picture. Should the monitor not be of sufficient size or clarity, the contractor will be required to upgrade the monitor immediately.

Electronic Distance Measurement (encoder)

Accurate distance measurements are important. Measurement for location of defects shall be above ground by means of a meter device. Marking on the cable, or the like, which would require interpolation for depth of manhole, will not be allowed. The accuracy of the distance meter shall be checked by use of a roll-a-tape, and the accuracy shall be satisfactory to the NCC's Inspector. Linear measure through pipes from the center of manhole must be accurate to within +/- 2 % of the actual measured pipe length by the Contractor.

The Contractor shall replace the Rolatape if deemed to be inaccurate by the NCC's Inspector

14.6.2.2 Execution of Work

14.6.2.2.1 Prior to commencing sewer inspection

No work shall be carried out at any time without a valid work permit.

[Land Access Permit - National Capital Commission \(ncc-ccn.gc.ca\)](http://ncc-ccn.gc.ca)

[Permis d'accès aux terrains - Commission de la capitale nationale \(ccn-ncc.gc.ca\)](http://ccn-ncc.gc.ca)

Prior to commencing the sewer inspection, the linear distance between the centre of the manhole at each end of the pipe section shall be measured by the Contractor, using a Rolatape and recorded.

Flow control measures shall be implemented in the event flow levels are greater than what is specified in section 2.2.1. The NCC's inspector will verify the accuracy of the Contractors Rolatape as required. The Contractor shall provide all necessary equipment to produce "fog-free" conditions in the sewer, e.g. enclosure, heater, and blowers, etc. This is to be completed to the satisfaction of the NCC's Inspector. No sewer inspection shall proceed while FOG is present in the pipe or with a dirty camera lens.

14.6.2.2.2 Camera/ transporter movement

All sewer inspections shall be performed in the direction of the flow unless there's no accessibility to a manhole or a reverse setup is required (due to obstruction). The sewer inspection shall be conducted on a single sewer section at any one time and **always starting at the upstream manhole and proceed downstream in a consecutive manner**. Each sewer section shall be inspected by moving the camera equipment along the pipe axis

in a self-propelled fashion. The contractor shall not winch the camera without approval of the NCC's Inspector.

The face of the start manhole shall be clearly visible at the start of the inspection and the sewer inspection shall proceed to the centre of the downstream manhole. The sewer inspection recording shall have a continuous chainage/distance indicated on the screen and on the video, media used to record the inspection. The chainage/distance shall commence when the front of the CCTV camera is approximately one (1) meter from the centre of the starting manhole and begin to move immediately as the camera moves. The method used shall be the same for all CCTV inspection conducted.

The accuracy measured by the camera/transporter shall be within 2 percent (%) of the length of the sewer as compared to the above ground measured pipe length (Rolatape). If the chainage/distance is not accurate to this limit, the NCC can decide to reject the sewer inspection and the Contractor shall re-inspect the sewer at no extra cost to the NCC.

The maximum speed of the camera/transporter during the sewer inspection shall be ten (10) meters per minute.

14.6.2.2.3 Survey & defect identification

The contractor shall record and report survey and defect information to the NCC in a report format as defined in section 4.6.2.3. Prior to commencing the defect identification process, the Contractor shall complete all survey information except for the distance measured by the camera/transporter, which is completed at the end of the sewer inspection.

The Contractor shall always begin the defect identification process by entering start of inspection, water level (if available) and reversal should a reverse sewer inspection be required. The end of the defect identification process shall always end by entering the water level (if available) and end of inspection unless the inspection is abandoned. The water level is recorded at the start of the inspection and as it changes within the sewer in increments of 5% the pipe diameter (if available).

During the sewer inspection the picture shall be in focus from the point of the observation to a minimum of two (2) pipe lengths ahead of the camera. The contractor shall take the necessary time to identify all defects and/or observations necessary to describe to condition of the pipe. The Contractor shall use as many defects/observations necessary to describe what is seen during the sewer inspection. The camera/transporter shall be stopped to ensure accurate recording of all defects or observations. The Contractor shall ensure all defects/observations are identified in a same manner with respect to camera distance and position of the camera. The camera shall stop for a minimum of two (2) seconds and then pan & tilt for all major defects and connections. While the camera is in the process of panning & tilting a defect or connection, the Contractor shall ensure the transporter does not move forward or backward. For all service connections, the operator shall ensure that the camera is observing directly down the connection for no less than five (5) seconds.

It is important to identify all defects and not just the worst ones.

14.6.2.2.4 Reverse sewer Inspection

If the sewer inspection of an entire sewer line cannot be completed due to a collapse, excessive deformation or intruding connection, obstruction or severe displaced joint (s), the equipment shall be moved to the other manhole (opposite end) and the inspection again attempted.

Should the Contractor not complete the reverse inspection, the NCC's Inspector must be advised immediately. The NCC will decide whether to abandon the sewer inspection, modify the camera/transport set-up, remove the obstruction or perform an emergency repair.

For uncompleted inspections, the Contractor shall provide the following information to the NCC's Inspector:

- a) Structure ID
- b) Measured pipe length (m)
- c) CCTV length information (m)
- d) Reason for abandoned inspection.

14.6.2.2.5 Sump condition (SAG)

If water levels in the sewer do not permit a full view of the pipe due to sag or dips, the Contractor may be required to complete the sewer inspection (first pass) to document the start and end of every sag conditions in the line. Subsequent to identifying sag conditions, the Contractor may be required to perform flow control measures while conducting a second sewer inspection (second pass). The second sewer inspection shall be performed in the same manner as the first inspection. If required, the NCC Inspector will schedule flow control measures and the second sewer inspection with the Contractor.

The NCC's Inspector must be on site when the Contractor performs any flow control measures.

Reports and video recording of sewers requiring second sewer inspection shall be provided with the report submission.

Payment for the subsequent sewer inspection will be based upon the price schedule CCTV sewer inspection per unit rate.

14.6.2.2.6 New manhole

Should a new manhole or new pipe section be identified (discovered) during the sewer inspection, the Contractor shall perform the following activities:

- a) Split the existing pipe section into separate segments.

- b) The new pipe section will carry the same identifier (Structure ID) as the previous pipe section inspected and modified to include a suffix such as a, b, c... Each pipe section shall be referenced as individual pipe sections in the inspection log/reports.
- c) The new manhole number shall be the same as the upstream manhole number provided by the NCC and modified to include a suffix a, b, c...
- d) The location of the new pipe section shall be marked on the drawing and provided in the associated paper report.

14.6.2.2.7 Camera/Transporter becomes stuck

The Contractor shall take every reasonable precaution to ensure that his equipment does not become stuck or jammed in the sewer. Should this occur, the Contractor shall notify the NCC immediately. Should excavation be required to remove the camera, the NCC shall arrange for this and provided the contractor is not deemed responsible, will pay the cost. Excavation of the equipment will begin within forty-eight (48) hours of notification.

The Contractor shall be responsible for marking the location of the equipment within the sewer on the ground surface and shall remain on site during the excavation. Once the excavation is secure and the top of pipe is visible, it shall be the Contractor's responsibility to retrieve his equipment from the sewer. No claim for lost time or to retrieve the equipment will be considered due to this occurrence.

14.6.2.3 Inspection Reports and Video Recording

14.6.2.3.1 Submission and Deliverables

The Contractor shall submit the deliverables (reports) within 10 working days from the date of the last sewer section (structure ID) was inspected for each paper report. This includes paper reports (2 copies), digital report and video media (including case) for the associated sewer.

If any report is inaccurate, incomplete, or in the opinion of the NCC insufficient, or if the clarity of the colour video is unacceptable to the NCC, the Contractor shall re-inspect the runs in question and provide new reports at no cost to the NCC.

Documentation of the television report shall be in a format acceptable to the NCC and include the following minimum information.

14.6.2.3.2 Paper Report

The Contractor shall prepare a hard copy paper report in duplicate to the NCC for every video recording provided.

The paper report shall be presented on a street-by-street basis (Survey ID) and be sequenced in the same order as the sewer inspection on the video media. The paper report shall consist of the following:

- a) Title page.
- b) Index summarizing the content of the paper report (sorted by Structure ID).
- c) Sewer Inspection (CCTV) information including Survey & Defect information
- d) Digital images of all major pipe defects and two (2) images showing typical pipe condition.
- e) Digital images of all manholes (two (2) images per manhole).
- f) Map or plan per report showing each pipe inspected including the start and end manholes and surrounding area. (Maps will be provided by the NCC) Contractor may be required to make photocopies to produce necessary maps.

The paper report shall be submitted for each Survey ID with appropriate cover and backing and its entire content shall be assembled with a plastic comb type binding (Cerlox). Each report shall be properly labeled with a title page (on the cover of the binder) with the project number; survey ID; street information, sewer type (s) along with the date the CCTV inspection was performed.

The digital images for the sewer pipe shall not exceed six (6) per page and shall be positioned in the report to provide viewing of the images and the corresponding defect/observation information. In addition, the Contractor shall provide two (2) digital images of the sewer showing its typical condition at the starting and mid point of the sewer pipe.

Manhole images shall include for each manhole a picture showing the surface surrounding the manhole along with manhole cover and another picture showing the inside condition of the manhole.

The paper report shall be in a format and quality acceptable to the NCC.

14.6.2.3.3 Digital Report

The Contractor shall also provide to the NCC a recordable compact-disc (CD-R), digital video disc (DVD) or USB memory stick in one of the following formats:

- a) MPEG1 (MPG) file format. (30 fps, 352 x 240, 2.4 M-bits/sec) (no sound)
- b) MPEG4 DivX (MPG) file format. (30 fps, 352 x 240, 2.4 M-bits/sec) (no sound)

The compact disc CD-R, digital video disc DVD or USB memory stick used shall be made by a reputable manufacturer and must be approved by the Inspector. The NCC must approve the process used and quality of the digital video produced by the Contractor.

Should the Contractor have capability of recording the digital video file within the CCTV unit during the CCTV inspection, the Contractor shall provide a single digital video file for all sewer pipes inspected for every survey ID and the file name for each video file shall be the Survey ID.

Should the digital video file be recorded following the CCTV inspection such as the Contractors office, the Contractor shall provide a single digital video file for every report and the file name for each video file shall be the report ID. The digital video file(s) shall only include complete and not partial pipe sections (structure ID). Should additional CD-R's, DVD's or USB sticks be required per report-ID, the Contractor shall include a prefix to the report-id. (a,b,c.)

14.6.2.4 Survey Information (for overlay & report)

The Survey information shall be displayed on the screen and recorded during the sewer inspection for a minimum of fifteen (15) seconds at the start of each sewer pipe section. The overlay shall be displayed on the screen and recorded with a black background and white text or other format acceptable to the NCC. The sewer inspection shall not proceed when the survey information is displayed or without having entered all of the information with the exception of the CCTV pipe length. The survey information overlay shall be displayed on the screen and recorded with the following information **as a minimum**:

Item	Description
Job/Report Number	Provided by NCC
Operator Name	Operator of CCTV Unit
Tape Number/Survey ID	Provided by NCC
Structure ID	As provided by the NCC (unique identifier) (include "R" for reversal type inspection)
Street Name	Identify Street Name including from and to street
Upstream Cross Street	(If available) Identify name of cross street near upstream manhole
Downstream Cross Street	(If available) Identify name of cross street near downstream manhole
Upstream Manhole ID	As provided by the NCC
Downstream Manhole ID	As provided by the NCC
From House	House address at U/S Manhole
To House	House address at D/S Manhole
CCTV Pipe Length	Obtained from CCTV Distance (meters)
Sewer Type	Identify the type of sewer as sanitary, storm or combined
Pipe Size	Pipe Diameter in mm
Pipe Material	Pipe Material see schedule D-1
Camera Travel Direction	With Flow or Against Flow
Date of Inspection	Date of inspection
Video Recording Equipment Index or Count	Video Index

Comments	
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14.6.2.5 Defect Information (for report)

The report shall contain as a minimum the following defects or observations:

Defect/Observation	Major	Pan & Tilt	Defect Description
Longitudinal Cracks	Y		Hairline or open crack running along pipe axis, pieces still in place.
Circular Cracks	Y		Hairline or open crack running along pipe circumference, pieces still in place.
Multiple Cracks (spider web)	Y		Hairline or open crack in a spider web or similar arrangement (no deformation), pieces still in place.
Fractures/Broken Pipe	Y	Y	Cracks become visibly open and pipe walls becomes slightly dislodged, pieces still in place.
Collapse Pipe	Y	Y	Severe deformation greater than (>) 20% of vertical height of pipe
Partially Collapse pipe	Y	Y	Minor or moderate pipe deformation less than (<) 20% of vertical height of pipe
Deformed Pipe	Y	Y	Plastic pipes only, pipe is out of round. Enter %H in comments
Missing Pipe	Y	Y	Missing or hole in pipe significantly larger than a puncture
Puncture		Y	Small hole in pipe from external device.
Broken Joint		Y	Piece of pipe is missing at the joint, includes severe chipping.
Offset Joint			The spigot of the pipe is not significantly aligned with the socket of the adjacent pipe.
Open Joint			Joint in which adjoining pipe segment is significantly displaced longitudinally
Exposed Gasket			Gasket at joint is visible within sewer, use clock from & clock to reference to identify location.
Exposed Rebar	Y	Y	Interior surface of the pipe is defective, and the reinforcing steel is visible.
Debris			Any deposition at invert of pipe, Minor ≤10% Moderate: >10% and ≤25% Major >25% of vertical height of pipe
Grease	Y	Y	Usually located at inside upper surface of the pipe, Minor: ≤10% Moderate: >10% and ≤25% Major >25% of cross-sectional area of the pipe.
Obstruction	Y	Y	Significant accumulation of material or single object obstructing flow (includes concrete) Describe obstruction in comments.
Roots	Y	Y	Roots entering pipe through joints, defects, connections. Minor: taps, strings Moderate: root mass ≤10% Major >10% of cross-sectional area of the pipe.

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Sag			Consists of a significant change in water level for an extended distance within the sewer. Generally, when the water level increase by approximately 50% of the vertical height of the pipe.
Evidence of Infiltration			Visible staining indicating previous infiltration, excludes calcite.
Active Infiltration	Y	Y	Visible groundwater entering the sewer though joints, defects, or connections, etc. Minor: seepers, slow drips. Moderate: fast drips or stream Major: Gusher, fast stream.
Calcite			Encrustation of mineral deposits from infiltration, etc. Minor: <=10% Moderate: >10% and <=25% Major >25% of cross-sectional area of the pipe.
Line Deviation			Horizontal line deflection only, pipe ahead of camera does not lie in a straight line. Clock From used to identify direction of deviation.
Diameter change			Each occurrence of an increase or decrease in pipe diameter; Describe approximate new diameter in comments.
Connection			A lateral pipe which as been added (connecting) to sewer.
Protruding Connection	Y	Y	Connection (lateral) is extending into the sewer, Minor: <=10% Mod: >10% and <=25% Major: >=25% of horizontal width of pipe.
Connection Defective		Y	Adjacent connection has visible defects. Provide details in comments.
Observation	Y	Y	Used in conjunction with a comment. Describe observation (s) in comments.
Start of Inspection			Identifies the start of the sewer inspection. Digital Image Required.
End of Inspection			Sewer inspection completed; Camera at downstream manhole or end point of inspection.
Inspection abandoned			Used to identify sewer inspection could not be completed. Describe reason for abandoning the inspection.
Reversal			Identifies the sewer inspection is proceeding against the flow required due to obstruction or other reason. Provide reason for reversal in comments.

14.6.2.6 Sewer Inspection (overlay):

Prior to commencing the sewer inspection, the Contractor shall ensure the video index on the recording equipment is adjusted to zero (00:00:00). A continuous video overlay to be displayed and recorded at the bottom of the screen or video image as follows:

Start MH # _____, Distance _____ m, End MH# _____

Should the sewer inspection be a reversal, the contractor shall provide in addition to the above the word "REV" (or similar) located just above the distance. (*reversal inspection is performed only when an obstruction exists in the line segment*)

Labeling:

The Contractor shall ensure that the case and the DVD or CD-R is properly labeled with a number conforming to the NCC's format. The disc number shall be the survey id number as provided by the NCC.

DVD, CD-R and Case:

Each video media (DVD and CD-R) and its case shall be labeled with the following information:

<p style="text-align: center;">National Capital Commission</p> <p style="text-align: center;">Street Name</p> <p style="text-align: center;">SURVEY ID</p> <p style="text-align: center;">Date (Month/Day/Year)</p>

14.6.2.7 Quality Assurance

14.6.2.7.1 Camera Position

The camera position tolerance shall be +/- 10% of the vertical dimension of the sewer. Should the camera position not meet this tolerance requirement, the Contractor will be required to reinspect the sewer at no extra cost to the NCC.

14.6.2.7.2 Distance Accuracy

Distance measurement within the sewer (CCTV unit) shall be within 2% of the above ground measurement as confirmed by the measured pipe length (Rolatape) between the start & finish manhole (centre of the cover).

Should the distance measurement not satisfy this distance accuracy requirement as determined by the NCC's Inspector, the Contractor shall re-inspect the sewer at no extra cost to the NCC.

14.6.2.7.3 Video Recording Resolution

The video recording playback shall provide a minimum 400 lines of resolution around the periphery of the picture. If requested by the NCC, the Contractor shall perform a resolution test using a Retina type resolution chart as follows:

- a) Recording shall show the camera and accessories set up for an actual inspection where specified by the NCC.
- b) Should the recording be within a sewer, the recording shall show the camera being introduced and reaching its final position for the test.

- c) Resolution chart shall be placed in front of the camera to provide full picture on the monitor/screen.
- d) Resolution chart shall be illuminated evenly and uniformly without reflection and illumination source shall accurately simulate the lighting conditions used during the sewer inspection.
- e) The test shall be recorded for a period of 30 seconds.
- f) The camera shall be identified on the recording.
- g) The test shall be performed at the beginning of the video recording media.

14.6.2.7.4 Operator Qualification

Each inspection unit shall have at a minimum of one operator on site at all times who has a minimum of three (3) years experience operating a sewer CCTV inspection unit. The operator shall have complete knowledge and ability with the operation of the inspection unit and capable of making accurate observations and recording of all conditions.

The operator shall be conversant with and able to carry out field repairs to equipment.

The Contractor shall not perform any sewer inspections without a qualified operator.

14.6.2.7.5 Survey and defect identification accuracy

NCC's Verification

On-Site:

The NCC's Inspector may conduct random on site inspection of the survey & defect identification accuracy and will provide the results to the Contractor. Should this verification not meet the NCC's defect identification requirements, the Contractor will be required to make the necessary corrections or may be required to re-inspect the sewer at not additional cost to the NCC.

Report Submissions:

The NCC may review all report submissions for survey & defect identification accuracy, etc. Should this verification not meet the NCC's requirements, the report with deficiencies will be returned to the Contractor. The Contractor shall review and correct all the survey and defect/observation information (report) and re-submit to the NCC.

The process will be repeated until the report submission meets the NCC's requirements.

14.6.2.7.6 Acceptance of Inspection

Sewer inspection paper report(s) and video recording will be reviewed by the NCC to ensure compliance with the specifications. Non-compliant report submissions will be returned to the Contractor for correction, at the Contractor's expense. The Contractor shall re-submit the corrected submission within seven (7) working days. This process shall be repeated until the NCC is satisfied with the submission.

14.6.2.7.7 Damages and complaints

The Contractor shall immediately notify the NCC's Inspector of each complaint received. The Contractor shall provide to the NCC the following information:

- a) Address
- b) Persons name(s) (if known)
- c) Description of the Complaint (if known) d) Action taken by the Contractor (if any) laws in force in Ontario and Quebec.

14.6.3 Cured in Place Pipe (CIPP) Rehabilitation

14.6.3.1 General

This specification covers the requirements for the rehabilitation of pipelines by the installation of a continuous and tight fitting cured-in-place pipe liner. Unit rates are to include all labour, equipment and materials required to complete the CIPP lining work including inversion and inflation equipment, curing equipment, hoisting equipment including boom trucks and/or mobile cranes, dewatering equipment and traffic and pedestrian / cyclist control devices.

14.6.3.2 References

CSA Standards

B64.5-07 Double Check Valve (DCVA) Backflow Preventers [Part of B64 Series-07, Backflow Preventers and Vacuum Breakers Compendium]

ASTM

D 638-08 Standard Test Method for Tensile Properties of Plastics

D 790-07e1 Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials

D 2990-09 Standard Test Methods for Tensile, Compressive, and Flexural Creep and Creep-Rupture of Plastics

F 1216-09 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube

F 1743-08 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of Cured-in-Place Thermosetting Resin Pipe (CIPP)

NSF International

61-2008 Drinking Water System Components - Health Effects

American Water Works association (AWWA)

C510-07 Double Check Valve Backflow Prevention Assembly

14.6.3.3 Definitions

For the purpose of this specification, the following definitions apply:

Cured-In-Place Pipe (CIPP) Lining means the rehabilitation of sewers and watermains by installation of a CIPP liner system within an existing pipe.

Engineer means a professional engineer licensed by the provincial regulating authority to practice in the province where the project is located: Professional Engineers of Ontario (PEO) or Ordre des ingénieurs du Québec (OIQ)

Resin means a general purpose, unsaturated, styrene-based, thermoset resin and catalyst system or an epoxy resin and hardener that is compatible with the inversion process.

14.6.3.4 Design and CIPP Submission Requirements

14.6.3.4.1 Design Requirements

The engineering design shall be in accordance with ASTM F 1216 with the following criteria:

Design conditions:

- a. CIPP design shall assume fully deteriorated condition of the original pipe.
- b. CIPP design shall assume no bonding to the original pipe wall.

Parameters for design:

- a. Design life of 50 years.
- b. Safety factor of 2 on external load.
- c. Groundwater depth is full soil depth, unless otherwise known.
- d. Soil modulus of 4.8 MPa, unless otherwise known.
- e. Soil density of 1925 kg/m³, unless otherwise known.
- f. Live load is Highway H20 of 110 MPa.
- g. Ovality no greater than 10%.
- h. Long-term flexural modulus.

Tube installation forces or pressures shall be limited so as not to stretch the tube longitudinally by more than 5% of the original length.

The flexible tube shall be fabricated to a size that neatly fits the internal circumference of the host pipe. Allowance shall be made for circumferential stretching during insertion.

14.6.3.4.2 CIPP Submission Requirements

The design for the lining shall be submitted to the Project Manager for approval 14 days prior to installation. The design calculations shall show technical assumptions, identify the design

formulas used, and show the wall thickness and finished inside diameter. The ovality condition used in the calculations shall be identified.

The engineering design shall graphically illustrate the installation conditions (i.e., depth of pipeline, water table, pipe invert and crown, and full details of the parameters used).

The following information shall be submitted to the Project Manager seven (7) days prior to commencing Work:

- a. A work plan outlining the schedule, procedures, and work site.
- b. A list of personnel, including backup personnel, with their qualifications and experience.
- c. A traffic, pedestrian and cyclist control plan.
- d. Safety plan, including the company safety manual and emergency procedures.
- e. Product by-pass or temporary supply system plans, including methods, with a list of equipment to be used.
- f. Manufacturer's technical data containing complete information on:
 - I. Material composition, physical properties, and dimensions of the new product.
 - II. Recommendations for transportation, handling, and storage.
 - III. Repair of product damaged during installation.
 - IV. Installation and connection details.
 - V. Inversion pressures.
 - VI. Product curing procedures listing the curing temperature and duration, including cool down time for the product.
- g. Contingency plans for the following potential conditions:
 - I. Damage to the existing service connections.
 - II. Improper placement of the CIPP.
 - III. Damage to the host pipe.
 - IV. CIPP's failure to achieve structural integrity.

14.6.3.5 Materials

14.6.3.5.1 Liner

The CIPP liner material shall have the following minimum characteristics:

- a. Initial Structural Properties of the Lining
 - I. Flexural modulus 1,724 MPa according to ASTM D 790.
 - II. Flexural strength 31 MPa according to ASTM D 790.
 - III. Tensile strength, for pressure pipes only, 21 MPa according to ASTM D 638.
 - IV. 50-year creep reduction of 50%+ according to ASTM D 2990.
- b. Material Properties for Pipelines The finished CIPP liner shall meet the chemical resistance requirements in accordance with ASTM F 1216 and shall be resistant to all chemicals and agents found in the water supply.

For CIPP liners installed in watermains, the liner shall be NSF/ANSI 61 compliant.

14.6.3.5.2 Tube

The CIPP tube shall consist of one or more layers of flexible needled felt or an equivalent non-woven material capable of carrying resin able to withstand installation pressures and curing temperatures and shall be compatible with the resin system used. The material shall be capable of stretching to fit irregular pipe sections and negotiate bends. The inner layer and the finished pipe surface shall have an impermeable plastic coating for enhancement of corrosion protection, flow, and abrasion properties of the liner. The tube shall be fabricated to a size that fits tightly to the internal circumference and the length of the original conduit, when installed.

The tube shall be marked at regular intervals not to exceed 1.5 m along its entire length with the manufacturer's name or identification symbol.

14.6.3.5.3 Resin

The CIPP resin shall meet the requirements of ASTM F 1216.

14.6.3.5.4 Calibration Hose

If a calibration hose is used for inflation of the CIPP liner system, it shall comply with the requirements of ASTM F 1743.

14.6.3.5.5 Double Check Valve Backflow Preventers

Double check valve backflow preventers shall be according to CSA B64.5 or AWWA C510.

14.6.3.6 Construction

14.6.3.6.1 General

The Project Manager shall be notified at least 48 hours in advance of starting work.

The Contractor shall confirm the exact size and length of all existing pipes to be rehabilitated prior to undertaking the manufacturing of any tubes.

All required equipment shall be on-site and in satisfactory working order prior to commencing the installation of a lining section.

Work shall progress and continue as required to minimize downtime on pipelines and out-of-service periods on laterals.

At least 7 days prior to any interruption in service, the Contractor shall advise, in writing, all residents who may be affected by the rehabilitation process about the nature, duration, and expected date of any interruption in service and the contact information of the Contractor. The Contractor shall notify all affected residents or businesses of the specific time of the disruption to their service at least 24 hours in advance and shall endeavour to minimize their

inconvenience. During the rehabilitation and any associated service interruption, the residents shall be kept regularly informed regarding any matters that affect them. When the interruption has ended, residents shall be advised immediately either verbally or in writing.

The Contractor shall carry out testing as specified in the Contract Documents to confirm that each service connection is live.

14.6.3.6.2 [Transporting, Unloading, Storing, and Handling Materials](#)

Manufacturer's recommendations for transporting, unloading, storing, and handling of materials shall be followed.

14.6.3.6.3 [Dewatering](#)

Dewatering shall be according to OPSS 517 or approved Dewatering Plan.

14.6.3.6.4 [Sewer Lining, By-pass of Flows for Sewers](#)

When specified in the Contract Documents, during the execution of the work, the sewer flow shall be by-passed around the pipeline being relined.

Pumps and by-pass lines shall be of adequate capacity and size to handle all flows.

When interruption of sewer line flows is necessary to properly conduct the inspection and rehabilitation operations, acceptable methods of flow control shall be used. The Contractor is to make all necessary arrangements with the owners, property managers, and residents of each building. The Contractor shall contact all property owners or tenants or both to coordinate the repair work to the sewer and minimize any impact to the residents and businesses.

During the inspection and rehabilitation, sewer flows shall be shut off in order to enable proper inspection of the pipe invert. After the work is completed, flows shall be restored to normal.

On all liner installation dates, the Contractor shall maintain a primary and stand-by bypass pump and pump power supply on-site. Sufficient power supply and hoses shall be on-site in order to allow the pump to discharge into the next downstream sewer section. The stand-by by-pass pump and power supply shall be of an equal or better capability than the primary by-pass pump and power supply. No by-pass pumps or related equipment shall be disconnected or removed from the sewer or work site until after all service connections have been reinstated and the Contractor has recorded the post installation video.

All by-pass pumping shall be in place and operational prior to the final pre-installation inspection. All by-pass pumping capacities and configurations shall be approved by the Project Manager prior to the actual liner installation date. When specified in the Contract Documents,

all by-pass pumps and related equipment shall be silenced equipment or contained within an acceptable sound reduction structure.

14.6.3.6.5 Preparation of Existing Pipeline

A pre-installation inspection shall be completed in the presence of the Project Manager prior to the commencement of the pipeline rehabilitation.

The existing pipeline to be rehabilitated shall be prepared in accordance with the manufacturer's requirements for CIPP installation. Debris, grease, and other deposits shall be removed from the pipeline. Any obstructions remaining after flushing and cleaning shall be removed without damaging the existing pipeline walls. All roots that interfere with the lining installation shall be removed. Any calcite build-up in the existing pipeline that interferes with the CIPP shall be removed by means that do not damage the existing pipeline walls. Protrusions from deposits such as calcite shall not exceed 6 mm. Existing service laterals that protrude more than 6 mm into the pipeline shall be removed without damage to the lateral or the pipeline wall. Flail type equipment is not permitted for the removal of protruding laterals.

The Contractor shall also install a screen in the downstream maintenance hole in order to catch any material, including cut outs from service connection openings that may migrate downstream. Such material shall be removed from the maintenance hole.

If the pre-installation inspection reveals an obstruction such as a protruding service connection, a dropped joint, or a collapse that prevents the inversion process and it cannot be removed by conventional sewer cleaning equipment, then the Contractor shall attempt a trenchless technique to remove or repair the obstruction. Any necessary excavation shall be approved in writing by the Project Manager prior to the commencement of the work.

When the filling of voids is necessary to ensure structural integrity of the pipeline and to prevent bridging of the liner, the Contractor shall submit a detailed procedure outlining the process and materials to be used to fill the voids to the Project Manager for approval.

14.6.3.6.6 Cured-In-Place Pipe (CIPP) installation

The installation of the CIPP lining shall be according to the manufacturer's procedure.

Before installation begins, the Contractor shall obtain manufacturer's recommendations of the minimum pressure required to hold the tube tight against the existing pipes and the maximum allowable pressure, so as not to damage the existing pipe. Once the installation has started, pressure shall be maintained between the minimum and maximum pressures until the installation has been completed.

The existing pipes shall be dewatered for any CIPP installation that does not use an inversion method to expand the tube against the pipe wall.

14.6.3.6.7 Curing

The CIPP installation shall be according to ASTM F 1216. Qualified personnel shall monitor the curing process and maintain written records, including boiler monitor graphs, water temperatures, lining temperatures, and water head throughout the curing process. These records shall be made available to the Project Manager upon request.

The CIPP shall be inserted and cured in accordance with the manufacturer's parameters and procedures required for the process.

Readings shall be made and recorded at 30-minute intervals of:

- a. the boiler water, temperature in.
- b. the boiler water, temperature out.

Liner external surface temperatures at access points shall be measured using thermocouples. Thermocouples shall be placed at the invert level at the remote end of the repair to determine temperature at this location during the curing cycle.

The time required for the cure shall be determined by the temperature monitoring and shall be adjusted to suit the lengths, diameter, thickness, field conditions, and ambient temperature applicable to each pipe lining section.

Leakage testing of the CIPP shall be conducted during the cure while under hydrostatic pressure.

14.6.3.6.8 Cool down

The CIPP shall be cooled to a temperature below 38 °C before relieving the hydrostatic head. Cool-down may be accomplished by the introduction of cool water into the CIPP to replace water being drained from a small hole made in the down-stream end. Care should be taken in the release of the static head so that a vacuum does not develop that could damage the newly installed CIPP.

Prior to releasing the water used for curing the liner, the water shall be cooled to the ambient temperature of the sewer into which it is to drain.

14.6.3.6.9 Inflation bladder removal

For pulled-in-place installation techniques where the inflation bladder is designed to not bond to the CIPP, all portions of the bladder material shall be removed from the CIPP.

14.6.3.6.10 Liner termination

The liner termination at and through sections shall be neat and free of obstructions. If the liner termination fails to make a watertight seal with the existing pipe, a seal shall be applied at this point. Sealing process shall use a material compatible with the liner pipe.

In the case where the liner is installed through an existing maintenance hole, the liner shall be trimmed neatly and parged at the spring line of the liner and at the interface between the liner and any other existing sewers or service connections entering into the maintenance hole.

14.6.3.7 Site restoration

Following completion of the work, the contractor is responsible for restoring areas damaged by work activities to restore disturbed areas to the pre-work conditions.

- Grassed areas are to be reinstated with topsoil and seed or sod at the direction of the NCC Inspector.
- Road cuts, where authorized, are to be reinstated to match the existing road structure, or as directed by the Engineer.

14.6.3.8 Safety and flow control

14.6.3.8.1 Information and warning devices

In addition to vehicular traffic management, the contractor shall provide additional measures as required to control pedestrian and cyclist traffic within the work area. These additional measures may include, but not limited to, the following:

- 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.
- Supply and erect signs, delineators, barricades and miscellaneous warning devices, as specified in applicable standards.
- Place signs and other devices according to applicable standards in recommended locations.
- Meet with Engineer prior to commencement of work to prepare a list of signs and other devices required for the project. If on site situation changes, revise list to approval of Engineer.

14.6.3.8.2 Traffic Control Personnel

In situations listed below, provide competent flag persons, trained and equipped in accordance with the relevant workplace safety legislation: Occupational Health and Safety Act (OHSA), Ontario or Act Respecting Occupational Health and Safety (AOHS), Quebec.

- When public traffic is required to pass working vehicles or equipment, which block all, or part of travelled roadway.
- When it is necessary to institute one-way traffic system through construction area or other blockage where traffic volumes are heavy, approach speeds are high and traffic signal system is not in use.

- When workmen or equipment are employed on travelled way over brow of hills, around sharp curves or at other locations where oncoming traffic would not otherwise have adequate warning.
- Where temporary protection is required while other traffic control devices are being erected or taken down.
- For emergency protection when other traffic control devices are not readily available.
- In situations where complete protection for workers, working equipment and public traffic is not provided by other traffic control devices.

14.6.3.8.3 Flow area management

Work areas where bypass flow control is required, the contractor is to prepare and submit a flow bypass management plan which is to include as a minimum:

- Calculations showing required bypass flow capacity
- Schematic layout showing bypass layout, pump locations, effluent discharge locations, suction inlet locations, fish screen locations (if required)
- Proposed pumping equipment
Associated erosion and sediment control measures related to bypass flow control.

15 THE PROPOSAL

The NCC shall:

- Not assume responsibility for incomplete proposals and is not required to request missing information.
- Reserve the right to amend any provision contained herein and/or to issue any addenda

15.1 Contents of the Proposal

The Proponent is required to submit their proposal in two (2) separate emails, in the manner described below.

The Technical Proposal (email #1) shall contain:

- a) One (1) electronic copy in Adobe pdf format of the RFSO page that accepts the terms and conditions of the RFSO; and,
- b) One (1) electronic copy in Adobe pdf format of the Technical Proposal developed in response to this RFSO.

The Financial Proposal (email #2) shall contain:

- a) One (1) electronic signed copy in Adobe pdf format of Appendix 1 Fee Schedule.
Note: The Financial Proposal cannot be part of the Technical Proposal electronic copy.

15.2 The Technical Proposal (email #1)

15.2.1 Format and Quantities

- a) Technical Proposals must not exceed:
 - i. 50 pages of letter (8.5"x11") size

Any Technical Proposals exceeding these limits will have as many pages as required removed from the end of the proposal to comply with the page-count limits of the Technical Proposal. The following will not be included in the page count for the Technical Proposal:

- a) Page 1 of the RFSO, and, the cover sheet, provided it is composed of titles and/or graphics only.
- b) 'Letters of introduction', CVs and Table of Contents
- c) Blank sheets, and/or tab sheets used as separators

Proponents are asked to make their submissions clear and legible. Widespread use of 9 pt. font and less carries the risk of having the submission deemed illegible, and therefore ineligible. Technical Proposals in electronic Adobe pdf format must encompass all accompanying graphics, photographs, company profiles, CVs etc. submitted to the NCC.

Pages in the proposal are to be numbered.

Technical Proposals must include a table of contents, with page number information.

Technical Proposals will not be returned to the Proponent following evaluation. They will be kept on file at the NCC.

15.3 The Financial Proposal (email #2)

The Financial Proposal is to be submitted in email #2, as per instructions provided under the RFP.

15.3.1 Financial Proposal (Appendix 1 Fee Schedule) (email #2)

The Financial Proposal shall include one (1) signed electronic copy in Adobe pdf format. Unsigned Fee Schedule shall render your offer non compliant.

15.3.2 Fee Evaluation

The all-inclusive unit rates tendered are to cover all costs associated with the service including, but not limited to:

- a. Scheduling, supervision, co-ordination, training and reporting.
- b. All safety related items such as confined space requirements and traffic control.
- c. Conducting quality control verification of deliverables, etc.
- d. CCTV inspection including measuring actual pipe length, final inspection report, mandrel testing, and “stringing” of sewer if required.
- e. Cleaning of sewers including any disposal costs of residue and time to refill with water.
- f. Sewer re-lining.
- g. Any applicable permits.
- h. Costs related to disposal of materials.
- i. All expenses, administration, overhead and profit.
- j. Costs related to travel to/and from your place of business and a NCC site located in the National Capital Region (Ottawa & Gatineau)
- k. Costs related to employee accommodation and meals, if applicable

Rates must be stated in Canadian dollars and must not include taxes.

The Proponent must ensure that the information is clear and legible, and that one of the principals of the firm has signed and dated the completed Financial Schedule (Envelope B) submitted to the NCC.

In order to evaluate the proposal, rates submitted by the Proponent in the Financial Schedule will be used as the basis of comparison between submissions.

The rate for any given category cannot be \$0 or nil value. Failure to insert a rate for each service listed will render the proposal non-responsive.

15.3.3 Disbursements Included in Unit Rates

The following costs shall be included in the rates, and shall not be reimbursed separately:

- a. Travel and travel-related expenses within the National Capital Region (e.g. Gatineau, Ottawa and surrounding areas), including:
 - I. Travel time
 - II. Travel fare
 - III. Mileage
 - IV. Parking fees
 - V. Taxi charges
- a. Reproduction and delivery costs of drawings, specifications and other technical documentation specified in the TOR.
- b. Standard office expenses: Photocopying, computers, internet, cellular phones, long-distance telephone calls and faxing (including that between the Contractor's main office and branch offices and between the Contractor's offices and other team members' offices).
- c. Courier and delivery charges for deliverables specified in the TOR.
- d. In-house computer workstations
- e. Plotting charges
- f. Presentation materials
- g. Rental of office space

15.3.4 Disbursements not included in Unit Rates

Extraordinary requirements should be described and estimated in the TOR for the call-up, or, if their need is only identified during the call-up, formalized and approved in writing in advance by the NCC Technical Authority.

16 PROPOSAL EVALUATION

16.1 Evaluation Process

The evaluation process will involve the following phases:

- a. Technical Proposal Evaluation
- b. Financial Proposal Evaluation
- c. Basis of Selection

16.2 Technical Proposal Evaluation

The NCC shall evaluate and numerically score each technical proposal in accordance with the evaluation criteria shown in the Evaluation Criteria Grid contained within this document.

- a. To be declared responsive, a proposal must:
 - i. Comply with the requirements of the solicitation,
 - ii. Meet all mandatory technical bidding requirements; and
 - iii. Obtain the required minimum of 70 points overall (on a scale of 100 points) for the technical evaluation based on the Rated Requirements of Subsection 16.2.2 (Rated Requirements).
- b. Proposals not meeting requirements (i), (ii) and (iii) will be declared non-responsive.
- c. All technical proposals will be reviewed for basic eligibility by NCC Procurement. All proposals deemed eligible will then be evaluated by NCC's Technical Evaluation Committee, according to the criteria described in Subsection 16.2.2.
- d. The Technical Evaluation Committee will be comprised of no fewer than three (3) engineers currently working with the federal government in the design and construction field and overseen by a fairness monitor from Procurement Services.
- e. Technical evaluation of the proposal will be completed in accordance with the clauses contained in the RFSO document and evaluated based on the following rated requirements and Evaluation Criteria.

16.2.1 Mandatory Technical Bidding Requirements

ID	MANDATORY TECHNICAL BIDDING REQUIREMENTS	COMPLIANT (YES OR NO)	REFERENCE TO TECHNICAL BID (PAGE NUMBER)
M1	Include documentation showing that the bidder is certified with the Infrastructure Health and Safety Association (IHSA) and/or ASP Construction Association sectorielle paritaire		
M2	Include documentation showing that the bidder is licensed or certified to undertake these various types services to the full extent that may be required by provincial or territorial law in the provinces of Ontario and/or Québec to undertake.		
M3	Include documentation showing that the bidder is has the staff with qualifications for all the services required for this RFSO, including and not limited to plumbers, qualified professionals to undertake sewer servicing works including cleaning, CCTV inspection, repair and re-lining operation services as one of their primary areas of expertise		

16.2.2 Rated Requirements

Proposals meeting the mandatory requirements will be evaluated in accordance with the following criteria:

16.2.2.1 Rated Requirement 1 – Organizational Structure

The Proponent shall provide:

- Their organizational structure as it relates to delivering services for this SOA and a brief description of the same.

Structure of Response:

- The organizational structure should be presented graphically and focus on all personnel who will be providing services for this SOA.
- Each member of personnel should be shown with their respective title, anticipated role in providing services, their proposed category level (see Section 12.8) and discipline.
- To provide context to the organizational structure, the Proponent should provide an accompanying brief description of the identified roles and rationalize the selection of personnel assigned to fulfill them.

Evaluation Criteria for Rated Requirement 1:

The Proponent’s response will be evaluated in accordance with the following criteria:

ID	RATED REQUIREMENTS	WEIGHT FACTOR (POINTS)
1A	How well the Proponent’s organizational structure demonstrates their ability to provide for the needs of this SOA. This includes having an organizational structure that effectively facilitates the provision of services, with clearly defined lines of communication and the illustration of all relevant positions that will be directly providing services.	8.0
1B	How clearly the Proponent has identified roles and respectively assigned personnel that are expected to provide for the needs of this SOA. The roles are well defined and relevant to providing services as defined throughout the RFSO, and that the personnel assigned to each role has a relevant combination of experience, training, and competencies to fulfill that role.	8.0
1C	How well the Proponent demonstrates that they have the capacity, in numbers and expertise, to provide the services under each discipline (including subcontractors) of this SOA.	8.0
	TOTAL	24.0

16.2.2.2 Rated Requirement 2 – Service Management

The Proponent shall provide:

- A description detailing how the Proponent will provide and manage their services throughout a call-up, including how quality control will be carried out for deliverables.

Structure of Response

General statements that do not convey the day-to-day activities that will take place will not receive the same amount of consideration as specific statements. For example, general statements such as “we follow the highest service standards available to ensure our deliverables are of a high quality”, will receive less consideration than more detailed statements such as “our quality process includes the review of all deliverables prior to submission, which entails these specific steps carried out in these specific ways...”.

Evaluation Criteria for Rated Requirement 2:

The Proponent’s response will be evaluated in accordance with the following criteria:

ID	RATED REQUIREMENTS	WEIGHT FACTOR (POINTS)
2A	How the Proponent proposes to provide and manage their service throughout a call-up. The approach is proportional, applicable, and holistically addresses the services required and types of projects listed in the RFSO.	8.0

ID	RATED REQUIREMENTS	WEIGHT FACTOR (POINTS)
2B	How the Proponent's proposed quality control process is expected to consistently ensure high quality deliverables under this SOA. The quality control process is systematic and specific to the deliverables required.	8.0
	TOTAL	16.0

16.2.2.3 Rated Requirement 3 – Example Projects

The Proponent shall provide:

- Three (3) examples of projects for which the Proponent has provided sewer cleaning, inspection and relining services which have reached substantial performance at the issuance date of this RFSO as stated on its cover page at the time of proposal submission.
- The Proponent must possess direct knowledge and experience on the example projects. Past project experience from entities other than the Proponent will not be considered in the evaluation unless these entities form part of a Joint Venture Proponent.
- Only the first three (3) projects listed in sequence will be rated and evaluated.

Structure of Response:

- A general description of the project, including the purpose, goals, and other relevant information as applicable to provide context.
- Start and end dates, plus original end date.
- A detailed description of the services provided by the Proponent.
- Cost of the services provided by the Proponent.
- Client reference information per project, including the title of the reference, a valid mailing address, a valid email address and a valid telephone number.

Where a submitted example project is ongoing, the services accomplished to date by the Proponent should be clearly delineated from the services that are anticipated to occur in the future. Please note that the Evaluation Committee cannot consider services that have not yet been rendered. Where a submitted example project is being carried out as a joint venture, the Proponent should indicate the responsibilities of each of the involved persons or entities.

Evaluation Criterion for Rated Requirement 3:

The example projects provided by the Proponent will be evaluated in accordance with the following criterion. Additionally, each of the example projects will be evaluated in accordance to the following:

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ID	RATED REQUIREMENTS	WEIGHT FACTOR (POINTS)
3A	To what extent the 3 example projects are similar in context, complexity and scope to those anticipated to occur under this RFSO.	60.0 (20 pts/project)
	TOTAL	60.0

16.2.3 Evaluation and Rating

Each criterion will be evaluated based on the Evaluation Rating Table below, and the points granted will be multiplied by the Weight Factor in order to generate the Weighted Rating for that specific criterion.

	0 %	20%	40%	60%	80%	100%
	Incomplete	Inadequate	Weak	Acceptable	Good	Strong
Organizational Structure (Rated Requirement 1A)	Did not submit information which could be evaluated.	Extremely poor, insufficient organizational chart(s); lacks complete or almost complete understanding of the required organizational structure in order to deliver the service requirements	Limited organizational chart(s); has some understanding of the required organizational structure but lacks adequate understanding of the required organizational structure in order to deliver the service requirement	Adequate organizational chart(s); demonstrates a good understanding of the required organizational structure in order to deliver the service requirements	Very good organizational chart(s); demonstrates a very good understanding of the required organizational structure in order to deliver the service requirements	Superior organizational chart(s); demonstrates an excellent understanding of the required organizational structure in order to deliver the service requirements
Organizational Structure (Rated Requirement 1B)	Did not submit information which could be evaluated.	Extremely poorly assigned roles and respectively assigned personnel; lacks complete or almost complete understanding of the required experience, training, and competencies to fulfill those roles in order to deliver the service requirements	Limited assigned roles and respectively assigned personnel; has some understanding of the required experience, training, and competencies to fulfill those roles in order to deliver the service requirements	Adequate assigned roles and respectively assigned personnel; demonstrates a good understanding of the required experience, training, and competencies to fulfill those roles in order to deliver the service requirements	Very good assigned roles and respectively assigned personnel; demonstrates a very good of the required experience, training, and competencies to fulfill those roles in order to deliver the service requirements	Superior assigned roles and respectively assigned personnel); demonstrates an excellent understanding of the required experience, training, and competencies to fulfill those roles in order to deliver the service requirements

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Organizational Structure (Rated Requirement 1C)	Did not submit information which could be evaluated.	Extremely poor capacity, in numbers and expertise; lacks complete or almost complete capacity requirement required in order to deliver the service requirements	Limited capacity in numbers and expertise; has met some capacity requirement required in order to deliver the service requirements	Adequate capacity in numbers and expertise; demonstrates meeting most of the capacity requirement required in deliver the service requirements	Very good capacity in numbers and expertise; demonstrates meeting all of the capacity requirement required in order to deliver the service requirements	Superior capacity in numbers and expertise; demonstrates exceeding most of the capacity requirement required in order to deliver the service requirements
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	0 %	20%	40%	60%	80%	100%
	Incomplete	Inadequate	Weak	Acceptable	Good	Strong
Service Management (Rated Requirement 2A)	Did not submit information which could be evaluated.	Poor and insufficient plan; lacks complete or almost complete understanding of the planning requirements in order to deliver the service requirements	Limited plan; has some understanding of the requirements but lacks adequate understandings in some areas of the planning requirements in order to deliver the service requirements	Adequate plan; demonstrates a good understanding of the planning requirements in order to deliver the service requirements	Very good plan; demonstrates a very good understanding of the planning requirements in order to deliver the service requirements	Superior plan; demonstrates an excellent understanding of the planning requirements in order to deliver the service requirements
Service Management (Rated Requirement 2B)	Did not submit information which could be evaluated.	Poor and insufficient quality control process or almost lacs complete understanding of the systematic quality control process required in order to ensure high quality deliverables	Limited quality control process or has some understanding of the systematic quality control process required in order to ensure high quality deliverables	Adequate quality control process or has good understanding of the systematic quality control process required in order to ensure high quality deliverables	Very good quality control process or has very good understanding of the systematic quality control process required in order to ensure high quality deliverables	superior quality control process or has excellent understanding of the systematic quality control process required in order to ensure high quality deliverables

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	0 %	20%	40%	60%	80%	100%
	Incomplete	Inadequate	Weak	Acceptable	Good	Strong
Example Project (Rated Requirement 3A)	Did not submit information which could be evaluated.	Sample projects examples do not relate to this requirement	Majority of sample projects examples are not related to this requirement	Majority of sample projects examples are related to this requirement	Sample projects examples are directly related to this requirement	Superior sample projects examples that are directly related to this requirement

Proposals that are responsive (i.e. which meet all the mandatory requirements set out in the Request for Standing Offer) will be reviewed, evaluated and rated by the Evaluation Committee. In the first instance, price envelopes will remain sealed and only the technical components of the proposal will be evaluated in accordance with the following to establish Technical Ratings.

CRITERION	WEIGHT FACTOR	RATING	WEIGHTED RATING*
Organizational Structure			
1A	8	0 – 100%	8
1B	8	0 – 100%	8
1C	8	0 – 100%	8
Service Management			
2A	8	0 – 100%	8
2B	8	0 – 100%	8
Example Projects			
3A	60 (20 per project)	0 – 100%	60
Total			100

16.3 **Fee Proposal Evaluation and Basis of Selection**

All proposals will be evaluated against mandatory and point rated technical requirements. Proposals meeting all mandatory requirements and obtaining a minimum score of 70% on the total for the technical component will be considered as technically admissible. The selection of the successful firm(s) shall be made based on the lowest overall value of the Fee Schedule, per province. The overall value for the purpose of evaluating proposals shall be the sum of the Appendix 1 Fee Schedule items 'Bid Grand Total' excluding taxes. The NCC intends to award one (1) Standing Offer Agreement per province.

Note: The 'estimated quantities' used in appendix 1 Fee Schedule are for bid evaluation purposes only and do not constitute a commitment by the NCC. Only quantities approved under a call up purchase order will be paid as per quantity provisions of item 24 'Payment' of the General Conditions.

Appendix 1 RFSO Fee Schedule

REQUEST FOR A STANDING OFFER AGREEMENT (RFSO) - GENERAL SERVICES IN VARIOUS SEWER SERVICING INCLUDING CLEANING, CCTV INSPECTION, REPAIR AND SEWER RE-LINING OPERATIONS FOR VARIOUS LOCATIONS IN THE NATIONAL CAPITAL REGION - NATIONAL CAPITAL COMMISSION (NCC) -TENDER FILE # AL1834

FEE SCHEDULE

ITEM #	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY*	ALL INCLUSIVE UNIT PRICES EXCL TAXES	EXTENDED TOTAL
1	CCTV Inspection of Sewers and Culverts equal to or less than 600 mm (24") in diameter - Includes paper report with video only	\$ / m	500		
2	CCTV Inspection of Sewers and Culverts greater than 600 mm (24") in diameter - Includes paper report with video only.	\$ / m	500		
3	Cleaning of Sanitary or Combined Sewers equal to or less than 600 mm (24") in diameter. (Combo Unit)	\$ / m	500		
4	Cleaning of Sanitary or Combined Sewers greater than 600 mm (24") in diameter. (Combo Unit)	\$ / m	500		
5	5 Cleaning of Storm Sewers and Culverts equal to or less than 600 mm (24") in diameter. (Combo Unit)	\$ / m	500		
6	Cleaning of Storm Sewers and Culverts greater than 600 mm (24") in diameter. (Combo Unit)	\$ / m	500		
7	Repair Storm, Sanitary or Combined Sewers greater than 600mm (24") in diameter	\$ / m	500		
8	Repair Storm, Sanitary or Combined Sewers. Equal to or less than 600mm (24") in diameter	\$ / m	500		
9	Miscellaneous and Emergency CCTV Inspection of sewers	\$ / hr	500		
10	Cleanout of MH's and CB's	Each	200		
11	CCTV Inspection of Septic Tanks	Each	100		
Bid Subtotal excluding taxes:					

* Note: The 'estimated quantities' used in appendix 1 Fee Schedule are for bid evaluation purposes only and do not constitute a commitment by the NCC. Only quantities approved under a call up purchase order will be paid as per quantity provisions of item 24 'Payment' of the General Conditions.

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ITEM #	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY*	ALL INCLUSIVE UNIT PRICES EXCL TAXES	EXTENDED TOTAL
1	CULVERTs – 600MM (24”) DIAMETER OR LESS, COVER OF 3.0M OR LESS				
1.1	CCTV Inspection of Culverts. - Includes paper report with video only	\$ / m	60		
1.2	Post Repair CCTV Inspection of Culverts. - Includes paper report with video only	\$ / m	60		
1.3	Cleaning of Culverts	\$ / m	60		
1.4	Repair of Culvert	\$ / m	60		
1.5	Pipeline Rehabilitation By Cured-In-Place Pipe Liner	\$ / m	60		
2	CULVERTs – 600MM (24”) DIAMETER OR LESS, COVER OF 3.0M to 6.0M				
2.1	CCTV Inspection of Culverts. - Includes paper report with video only	\$ / m	60		
2.2	Post Repair CCTV Inspection of Culverts. - Includes paper report with	\$ / m	60		
2.3	Cleaning of Culverts	\$ / m	60		
2.4	Repair of Culvert	\$ / m	60		
2.5	Pipeline Rehabilitation By Cured-In-Place Pipe Liner	\$ / m	60		
	Bid Subtotal excluding taxes:				

* Note: The 'estimated quantities' used in appendix 1 Fee Schedule are for bid evaluation purposes only and do not constitute a commitment by the NCC. Only quantities approved under a call up purchase order will be paid as per quantity provisions of item 24 'Payment' of the General Conditions.

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ITEM #	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY*	ALL INCLUSIVE UNIT PRICES EXCL TAXES	EXTENDED TOTAL
3	CULVERTS – 600MM OR LESS IN DIAMETER, COVER OF 6M OR MORE				
3.1	CCTV Inspection of Culverts. - Includes paper report with video only	\$ / m	60		
3.2	Post Repair CCTV Inspection of Culverts. - Includes paper report with video only	\$ / m	60		
3.3	Cleaning of Culverts	\$ / m	60		
3.4	Repair of Culvert	\$ / m	60		
3.5	Pipeline Rehabilitation By Cured-In-Place Pipe Liner	\$ / m	60		
4	CULVERTS – 600MM TO 1200MM IN DIAMETER, COVER OF 3M OR LESS				
4.1	CCTV Inspection of Culverts. - Includes paper report with video only	\$ / m	60		
4.2	Post Repair CCTV Inspection of Culverts. - Includes paper report with	\$ / m	60		
4.3	Cleaning of Culverts	\$ / m	60		
4.4	Repair of Culvert	\$ / m	60		
4.5	Pipeline Rehabilitation By Cured-In-Place Pipe Liner	\$ / m	60		
	Bid Subtotal excluding taxes:				

* Note: The 'estimated quantities' used in appendix 1 Fee Schedule are for bid evaluation purposes only and do not constitute a commitment by the NCC. Only quantities approved under a call up purchase order will be paid as per quantity provisions of item 24 'Payment' of the General Conditions.

REQUEST FOR A STANDING OFFER AGREEMENT (RFSO) - GENERAL SERVICES IN VARIOUS SEWER SERVICING INCLUDING CLEANING, CCTV INSPECTION, REPAIR AND SEWER RE-LINING OPERATIONS FOR VARIOUS LOCATIONS IN THE NATIONAL CAPITAL REGION - NATIONAL CAPITAL COMMISSION (NCC) -TENDER FILE # AL1834

ITEM #	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY*	ALL INCLUSIVE UNIT PRICES EXCL TAXES	EXTENDED TOTAL
5	CULVERTS – 600MM TO 1200MM IN DIAMETER, COVER OF 3M TO 6M				
5.1	CCTV Inspection of Culverts. - Includes paper report with video only	\$ / m	60		
5.2	Post Repair CCTV Inspection of Culverts. - Includes paper report with video only	\$ / m	60		
5.3	Cleaning of Culverts	\$ / m	60		
5.4	Repair of Culvert	\$ / m	60		
5.5	Pipeline Rehabilitation By Cured-In-Place Pipe Liner	\$ / m	60		
6	CULVERTS – 600MM TO 1200MM IN DIAMETER, COVER OF 6M OR MORE				
6.1	CCTV Inspection of Culverts. - Includes paper report with video only	\$ / m	60		
6.2	Post Repair CCTV Inspection of Culverts. - Includes paper report with	\$ / m	60		
6.3	Cleaning of Culverts	\$ / m	60		
6.4	Repair of Culvert	\$ / m	60		
6.5	Pipeline Rehabilitation By Cured-In-Place Pipe Liner	\$ / m	60		
7	SITE RESTORATION, SAFETY & CONTINGENCY				
7.1	Restore Site	each site	20		
7.2	Safety and Flow Control Contingency	Contingency	N/A	NCC to establish at call up	NCC to establish at call up
	Bid Subtotal excluding taxes:				
	Bid Grand Total of all sections excluding taxes:				

Note: The 'estimated quantities' used in appendix 1 Fee Schedule are for bid evaluation purposes only and do not constitute a commitment by the NCC. Only quantities approved under a call up purchase order will be paid as per quantity provisions of item 24 'Payment' of the General Conditions.

REQUEST FOR A STANDING OFFER AGREEMENT (RFSO) - GENERAL SERVICES IN VARIOUS SEWER SERVICING INCLUDING CLEANING, CCTV INSPECTION, REPAIR AND SEWER RE-LINING OPERATIONS FOR VARIOUS LOCATIONS IN THE NATIONAL CAPITAL REGION - NATIONAL CAPITAL COMMISSION (NCC) -TENDER FILE # AL1834

For the purposes of Financial Proposal evaluation, proponents must provide hourly/unit rates that will apply for the first SOA year for the following:

Hourly/unit rates must be stated in Canadian dollars.

- **Failure to include an appropriate rate for each classification outlined above will result in the disqualification of the proposal.**
- The following costs shall be included in the unit rates, and shall not be reimbursed separately:
 - Travel and travel-related expenses within the National Capital Region (e.g. Gatineau, Ottawa and surrounding areas), including:
 - I. travel time
 - II. travel fare
 - III. mileage
 - IV. parking fees
 - V. taxi charges
 - Reproduction and delivery costs of drawings, specifications and other technical documentation specified in the TOR;
 - Standard office expenses: Photocopying, computers, internet, cellular phones, long-distance telephone calls and faxing (including that between the Contractor's main office and branch offices and between the Contractor's offices and other team members' offices).
 - Courier and delivery charges for deliverables specified in the TOR;
 - In-house computer work station;
 - Plotting charges;
 - Presentation materials;
 - Rental of office space; and
 - Any other expense identified in the TOR that the NCC will not pay for.
- The following disbursements are not to be included in the hourly rates. When pre-approved by the NCC Technical Authority they will be reimbursed to the Contractor at actual cost or as described below:
 - Extraordinary reproduction and delivery costs of drawings, documents, presentation material files, specifications and other Technical Documentation, to comply with NCC requests;
 - Extraordinary transportation costs for material samples and models additional to that specified in the Terms of Reference;
 - Fees for approvals and permits to conduct field investigations and material testing;
 - Extraordinary travel and accommodation requirements requested by the NCC shall be reimbursed in accordance with the current Treasury Board Travel Policy;
 - Other extraordinary disbursements provided they are:
 - reasonably incurred by the Contractor
 - related to the services required for a call-up

In all such cases, extraordinary requirements should be described and estimated in the Terms of Reference for the call-up, or, if their need is only identified during the call-up, formalized and approved in writing in advance by the NCC Technical Authority.

- All payable disbursements must be itemized and supported by receipts where possible.

Failure to include an appropriate unit rate for item of the Fee Schedule outlined above will lead to the disqualification of the proposal. Note: by signing this form, this individual confirms they have the authority to legally bind the firm.

Firm (Bidder) Name _____

Submitted by _____
Name Signature Date

17 APPENDICES UNDER SEPARATE COVER

- 17.1 General conditions**
- 17.2 Occupational Health & Safety Requirements**
- 17.3 Security requirements**
- 17.4 Contractor Evaluation Form**
- 17.5 Supplier registration form (for successful bidders only)**
- 17.6 Certificate of insurance (for successful bidders only)**
- 17.7 Sample SOA document**