



Renfrew

REQUEST FOR TENDER

MUNROE AVENUE & HARRY STREET RECONSTRUCTION

CONTRACT 2026-03-IPWE

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Renfrew, Ontario K7V 1P8
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The Tenderer is advised that the following CHECK LIST is provided to assist in the completion of an accurate and acceptable Tender Form. While every effort has been made to include all the information necessary, this CHECK LIST may not be complete, therefore the Tenderer is reminded to check all the tendering requirements outlined in Section A, General Special Provisions, prior to delivery of the completed Tender Form.

TENDERER'S CHECK LIST

- Tenderer's name and address (Tender Form on Page 10)
- Addenda numbers inserted on Tender Form page 12 (as applicable)
- All tender items bid
- Unit price(s) inserted
- Mathematical extension(s) complete with total(s)
- Mathematical summation complete with TOTAL TENDER AMOUNT
- TOTAL TENDER AMOUNT BID indicated on Tender Form Page 14
- List of Sub-contractors provided
- Erasures, over-writing or strike-outs initialed by person signing on behalf of the Tenderer
- Tender Form dated, signed and witnessed on last page
- Tender Deposit included in the form of a certified cheque or Bid Bond
- Agreements to Bond included
- Submit all required hard copy documentation at Renfrew Town Hall, 127 Raglan Street South, Renfrew Ontario K7V 1P8, by time and date specified in Section A: Instructions to Bidders.

Queries during preparation of tenders shall be submitted via email to Ashley Robertson, Purchasing Assistant, Purchasing@renfrew.ca . All responses that are not part of the Contract Documents will be sent to all tender takers via Addendum.

All communications during the tendering period shall be completed to the Town of Renfrew via email to Ashley Robertson, Purchasing Assistant, Purchasing@renfrew.ca , and only questions received via email during the tendering process will be answered via Addendum, which will be circulated to all tender takers. It is the tenderers responsibility to ensure that all addenda have been included in their bid submission.

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SECTION A: INSTRUCTIONS TO BIDDERS

TENDER INFORMATION

A.01.1 Definitions

Bidder: means a person, sole proprietorship, firm, partnership, corporation, or any other business venture that submits a bid to the Town.

Itemized Bid Form: means the Owner approved form that the bidder is to use to price the items specified in the tender documents to perform the Work.

Late Bid: means a bid received after Tender Closing.

Late Bid Notification: is a statement sent by the Owner to a Bidder notifying the Bidder that their bid is late, will not be considered and is rejected.

Non-Resident Contractor: means any Contractor residing outside of the Province of Ontario and with respect to a corporate Contractor, not being incorporated pursuant to the laws of Ontario and who has not maintained a permanent place of business in Ontario continuously for twelve months prior to tender closing.

Tender or Bid: can be used interchangeably and mean the offer submitted by a Bidder to perform the Work required of the Tender Documents at the prices set out in the offer, and in accordance with the procedures more particularly described in these Instructions to Bidders. More particularly, the forms shall include, among other things, the Summary Bid Submission Form, and the Itemized Bid Form.

Tender Closing or Tender Opening: can be used interchangeably and mean the last date and time that the Owner will receive Bids.

Tender Documents: means the Tender, MTO General Conditions of Contract, Standard Specifications and Drawings, Special Provisions, Contract Drawings, Addenda incorporated into any aforementioned document, and documents referenced in the aforementioned documents.

Unbalanced Bid: means a Bid containing a lump sum or unit price amount, which does not reflect reasonable actual costs to do the Work as described in the Tender Documents, plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs.

A.01.2 Project Description

Munroe Avenue and Harry Street Reconstruction including paving, grading, concrete curbs, concrete sidewalks, sanitary sewer replacement, storm sewer new construction and removals, watermain replacement and upsizing, partial residential/municipal servicing replacement/renewal.

A.01.3 Compliance with Instructions

Bidders must comply with these Instructions to Bidders and those failing to do so may have the bid rejected.

A.01.4 Registration as a Bidder

It is mandatory that you register as a bidder with the Corporation of the Town of Renfrew, hereinafter referred to as the Town or Owner. **Failure to register will result in non-acceptance of your submission.**

Please remit Name of Company, Name of Contact Person, and Contact Information to:

Ashley Robertson, Purchasing Assistant, Town of Renfrew

Email: Purchasing@renfrew.ca

All communications must reference Tender 2026-03-IPWE in the subject line.

A.01.5 Questions During Tendering Period

All enquiries shall be in writing only.

Questions will be received until **2:00 PM local time, March 27th, 2026**. All responses to enquiries will be made by the Contract Administrator by **4:00 PM local time, April 2nd, 2026**.

Questions during the Tendering Period shall be submitted to the Town of Renfrew via email to Ashley Robertson, Purchasing Assistant, Purchasing@renfrew.ca. In the subject line state: "Tender 2026-03-IPWE for Munroe Avenue & Harry Street Reconstruction".

All responses that are not part of the Contract Documents will be sent to all tender takers via Addendum.

All communications during the tendering period shall be completed to the Town of Renfrew via email to Ashley Robertson, Purchasing Assistant, Purchasing@renfrew.ca, and only questions received via email during the tendering process will be answered via Addendum, which will be circulated to all tender takers. It is the tenderers responsibility to ensure that all addenda have been included in their bid submission.

A.01.6 Tender Closing Date

Tenders for Munroe Avenue & Harry Street Reconstruction will be received until:

2:00 P.M., Local Time, April 13th, 2026

A.01.7 Tender Closing Location

Tenders shall be enclosed in a sealed envelope marked "TENDER 2026-03-IPWE for Munroe Avenue & Harry Street Reconstruction" and will be addressed to Ashley Robertson, Purchasing Assistant, Town of Renfrew. Tenders shall be delivered by hand to 127 Raglan Street South, Renfrew, Ontario K7V 1P8, before: **2:00 pm Local Time, April 13th, 2026**. No bid submitted by facsimile or electronic means will be accepted. Bids received after closing time will not be considered.

Bidders will be informed of the results once the Tender closes. Please note that these results will not be an official award. The contract will be awarded once the bids have been reviewed by the Town of Renfrew.

Respondents to this Tender are responsible for ensuring they have access to all documents pertaining to this Tender. Hard copies of this Tender will not be available or supplied by the Town. Respondents are responsible for all costs associated with, but not limited to, printing and compiling the Tender documents with associated attachments or appendices, drawings, and addenda.

The Tender and Addendum will be advertised on www.Biddingo.com and posted on the Town of Renfrew website www.Renfrew.ca. Respondents to this Tender are responsible for ensuring they have received and reviewed all Addendum and noted this in Section B.01.1 of the Tender Form.

A.01.8 Tender Opening

A public tender opening will take place at **2:05 pm, local time, April 13th, 2026**, at the Town of Renfrew Town Hall.

A.01.9 Tender Acceptance/ Contract Award

The Owner reserves the right to return any or all “unopened” tenders. The lowest or any tender will not necessarily be accepted by the Owner, and the Town reserves the right to award any portion of this Tender. The Owner shall not be liable for any costs, expenses, loss or damage incurred, sustained or suffered by any bidder prior, or subsequent to, or by reason of the acceptance or the non-acceptance by the Owner of any tender, or by reason of any delay in the acceptance of a tender. The award of this Contract will be considered at a Town of Renfrew Council meeting. The lowest or any tender may not necessarily be accepted by the Town of Renfrew.

A.01.10 Contract Adjustment

The Owner reserves the right to extend, reduce or alter the extent of the Contract should they determine it is necessary at their sole discretion and to suit budget constraints. Variations in tender quantities shall be dealt with in accordance with GC 8.01.02 of the OPS General Conditions of Contract.

A.01.11 Document Discrepancies

Should a bidder find discrepancies or omissions from the Drawings or Contract Documents, they should immediately notify the Contract Administrator who may send a written instruction to all bidders.

A.01.12 Oral Interpretation

No oral interpretation shall be effective to modify any of the provisions of the Contract Documents. All requests for interpretations shall be made in writing to the Contract Administrator.

A.01.13 Addenda

All clarifications or other instructions issued by the Consultant during the time of tendering will be in writing by form of an Addendum and will be issued to all who have been issued with tender documents.

Tenderers may, during the tendering period, be advised by Addenda of required additions to, deletions from, or alterations to the requirements of the Tender Documents. All such changes shall become an integral part of the Tender Documents and shall be allowed for in arriving at the Tender Price.

Tenderers shall insert, in the space provided in the Tender Form, the Addenda numbers of all Addenda received by them during the tendering period including any bound into the specifications. If no Addenda have been received, the word “None” shall be inserted in the space provided.

Copies of addenda shall be signed and enclosed with the tender documents for the tender opening.

A.01.14 Subsurface Information

GEMTEC’s Geotechnical Investigation Final Report dated May 5, 2023, and GEMTEC’s Preliminary Slope Stability Assessment are included in SECTION G: GEOTECHNICAL INVESTIGATION .

A.01.15 Issued for Construction Drawings

The Contractor is hereby notified that the “Issued for Construction” drawings shall be provided approximately two (2) weeks after the award of the Contract.

TENDER REQUIREMENTS

A.01.16 Preliminary Schedule Submission

The bidder will submit at the time of tender submission a Preliminary Schedule of Work. The Schedule will include a time scale by the week, execution of task, duration, start and finish date of each task, and milestones. The schedule will show project completion as per the Contract documents and will be completed within the time frame set out in the Contract.

A.01.17 Schedule Submission

The bidder shall submit, at the Contract Award, the Contractor’s Schedule of Work updated from the Preliminary Schedule Submission baseline.

A.01.18 Tender Deposit

Each tender must be accompanied by a certified cheque, money order, bank draft, or bid bond, made payable to the "The Corporation of the Town of Renfrew" in the amount of at least 10% of the bid price before taxes and must be enclosed in the same envelope as the tender.

The Tender Deposits of the three (3) lowest acceptable bidders shall be retained until the successful bidder has executed the Contract documents. All remaining Tender Deposits shall be returned to the respective bidders on the next business day following the acceptance of Tender. The Tender Deposit of the successful bidder will be returned when he has fully complied with the conditions outlined in the Contract documents following the Town of Renfrew Procurement Policy.

A.01.19 Agreement to Bond

Each tender must be accompanied by the attached Agreement to Bond Form or acceptable equivalent completed by the Bonding Company.

A.01.20 Performance & Maintenance and Labour & Material Payment Bonds

When the Contract Agreement is signed, the successful bidder must furnish a Performance and Maintenance Bond for 100% of the tender amount and a Labour and Material Payment Bond for 50% of the Tender amount. Both bonds to be issued by a bonding company.

A Contract Performance Bond for 100% of the Total Tender Amount, including all applicable taxes, issued by an approved surety company, or cash or acceptable collateral in the amount of 100% of the Total Tender Amount, must be furnished by the Contractor within 10 days of acceptance of the Contract by the Town.

A Labour and Materials bond for 50% of the Total Tender Amount, including all applicable taxes, issued by an approved surety company, or cash or acceptable collateral in the amount of 50% of the Total Tender Amount, must be furnished by the Contractor within 10 days of acceptance of the Contract by the Town.

Where the Bonds are furnished, it shall cover the faithful performance of the Contract and the payment of all obligations, including all materials and supplies for all sub-contractors and equipment, arising under the Contract.

Where cash or other collateral is furnished in lieu of a Bond, other arrangements for the one-year maintenance period, acceptable to the Town, shall be made.

A.01.21 Tender Form and Signing Authority

Tenders shall be submitted on the Tender Form supplied herein and must be properly signed and witnessed or signed and sealed if the bidder is a Corporation.

The entire work is to be awarded to (1) one Contractor and therefore ALL ITEMS on the Tender Form must be bid.

All unit prices must be clearly indicated. Erasures, over-writing, or strikeouts must be initialed by the person signing on behalf of the Contractor.

In the event of a discrepancy between the unit price submitted and the extension utilized in the calculation of the total for any item, then the unit price shall govern. Any errors will be corrected in red by the Town to recalculate a revised tender bid amount. The tenderer will be made aware of any errors prior to award of the contract.

The total bid must not be restricted by a statement added to the Tender Form, or a covering letter, or alterations to the Tender Form provided by the Town. Adjustments to a Tender already submitted will not be considered. A bidder desiring to make adjustments to a Tender must withdraw the Tender and/or supersede it with a later submission, on or before the closing date and time of this tender.

A.01.22 Tender Alteration

The Tender Form must be legible, and all items must be bid on. Each amount in the Tender shall be a reasonable price for each item. Tenders which are incomplete, unbalanced, conditional, or obscure, or contain erasures or alterations not properly initialed, or irregularities of any kind, may be rejected as informal or void. Tenders submitted by facsimile will not be accepted.

Bidders that submit tenders that contain unit prices that appear to be an Unbalanced Bid may be referred to the Owner and any Tenders that are so unbalanced that it may adversely affect the interests of the Owner, may be rejected.

The Owner will not allow any Bidder to adjust the total tender amount after Tender Closing. In the event of a mathematical error or discrepancy in the Itemized Bid Form, the Owner may request the Bidder to resubmit the itemized bid form without changing the total tender amount.

A.01.23 A.01.1 Tender Deposit Returns

When copies of the executed Contract are returned and found acceptable, the tender deposits of the successful bidder and the second low bidder shall be returned. The tender deposits of the remaining unsuccessful bidders will be returned within ten (10) days of the opening of tenders.

A.01.24 Tender Deposit Forfeiture

The tender deposit of the bidder whose tender is accepted shall be forfeited by the tenderer should they fail to execute the agreement and provide the required bonds and insurance certificate within ten (10) days after receiving written notice from the Owner of the award of the contract to them.

A.01.25 Liability Insurance

Sub-section GC6.03.02 of Section D, General Conditions of Contract, is hereby amended with the addition of the following provisions:

The Certificate of Insurance required under this Section shall be submitted as soon as is practical after notification of acceptance of the Tender. The liability insurance coverage shall specifically include coverage to the limit of not less than five (5) million dollars (\$5,000,000.00), exclusive of interest and cost, in respect of any one accident.

The Certificate of Insurance shall name the following as additional insured:

The Corporation of the Town of Renfrew – 127 Raglan Street South, Renfrew, Ontario K7V 1P8
Stantec, 1331 Clyde Ave. #300, Ottawa, ON K2C 3G4
GEMTEC Consulting Engineers and Scientists Ltd., 32 Steacie Drive, Ottawa, Ontario K2K 2A9
Ontario Clean Water Agency – 122 Patterson Crescent, Carleton Place, Ontario K7C 4J9

Sub-section GC6.03.03 of Section D, General Conditions of Contract, is hereby amended by the following:

The automobile liability insurance coverage shall include coverage of not less than two million dollars (\$2,000,000.00), inclusive per occurrence.

A.01.26 Health and Safety Submission

The successful bidder will submit, with the Contract Award, a copy of the company's formal documented Occupational Health and Safety Program Manual. Along with the OHSP Manual, the successful bidder will submit at time of Contract Award a current Company organization chart indicating the reporting structure of safety personnel. Be advised that, before the award of the Contract, the bidder will be required to provide the name(s) of Safety Designate(s) assigned to the specific project, complete with proof of current training.

The Contract documents will be sent to the successful bidder after acceptance of Tender. The bidder shall fully execute and return the documents together with the applicable bonds, if such are required, to the Contract Administrator within seven working days of the date the documents are received.

Following receipt of the properly executed documents, certificate of liability insurance and, where applicable, the contract bonds, the Bidder will receive written authority to proceed with the work by the Contract Administrator.

If the successful Bidder fails to return the applicable documents to the Contract Administrator, within seven working days of receipt, the matter may be referred to the Owner without prejudice to any right or remedy the Owner may have in law.

A.01.27 Contractor's Experience

When so required by the Town, the Contractor shall produce evidence as to their qualifications and previous experience in the types of work contemplated by this Contract. The Town, at its sole discretion, reserves the right to reject any bid submission from any proponent, if upon request by the Town, that proponent cannot provide evidence of their experience, including but not limited to resumes of key personnel assigned to the works, list of previous projects completed, references, etc. If a proponent submitting a Tender has ever, past or present, exercised legal action against the Town or any of its agents, staff, or personnel, for any reason, their Tender may be rejected at the sole discretion of the Town.

SECTION B: TENDER FORM

Tender for the: **MUNROE AVENUE & HARRY STREET RECONSTRUCTION**
CONTRACT 2026-03-IPWE

NAME OF TENDERER (Firm or Individual)

ADDRESS OF TENDERER

(Telephone Number)

NAME OF PERSON SIGNING FOR TENDERER

OFFICE/TITLE OF PERSON SIGNING FOR TENDERER

NOTE: If the Tender is submitted by or on behalf of any Corporation, it must be signed in the name of such Corporation by some duly authorized officer or agent thereof. The said officer or agent shall subscribe his own name and office and affix the seal of the Corporation thereto.

Tender for the: **MUNROE AVENUE & HARRY STREET RECONSTRUCTION**
CONTRACT 2026-03-IPWE

TENDERS TO BE RECEIVED BY: Hard copy at the Town of Renfrew, [127 Raglan Street South, Renfrew Ontario K7V 1P8](#)

BEFORE: **2:00pm Local Time, Monday April 13th, 2026**

Deposit Required with Tender: **As specified in General Special Provisions**

Bond Required for Contract: **100% Performance Bond, 50% Labour and Materials Bond**

Completion of Work and Delivery of Materials under this Contract: **Friday September 4th, 2026**
(Substantial Performance Date)

The Corporation of the Town of Renfrew reserves the right to, increase, decrease, or delete an item in its entirety, or reject any or all Tenders if it is deemed advisable to do so. The lowest or any tender will not necessarily be accepted.

B.01.1 Addenda Confirmation

The Mayor and Council

Corporation of the Town of Renfrew

Sir / Ma'am:

The Tenderer has carefully examined and understands and accepts the Provisions, Specifications, Conditions and Drawings referred to in the Schedule of Provisions, Specifications, Conditions and Drawings and **Addenda Nos. __ to __*** attached hereto as part of this Tender, and has carefully examined the site, including the nature of the utilities and location of the work to be done under this Contract and, for the prices set forth in this Tender, hereby offers to furnish all labour, materials, machinery, tools, apparatus and other means of construction necessary to complete the work in strict accordance with the Provisions, Specifications, Conditions and Drawings referred to in the said Schedule.

Notification of acceptance and delivery of the Form of Agreement shall be made by the Town by courier, addressed to the Tenderer at the address contained in the Tender and, upon such notification of acceptance, the Tenderer shall complete the Form of Agreement between the parties and execute the Contract and furnish the Performance Bond, duly completed, and necessary proof of insurance, within 14 days of mailing of said notification to the Tenderer.

Attached to this Tender is a certified cheque or bid bond in the amount required by the General Special Provisions and made payable to: The Corporation of the Town of Renfrew. The proceeds of this cheque or bid bond shall, upon acceptance of the Tender, constitute a deposit which shall be forfeited to the Town if the Tenderer fails to file with the Town, the Form of Agreement duly executed, together with the Performance Bond and Labour and Materials Bond, proof of insurance and proof of Workplace Safety and Insurance Board, all as specified.

**** The Tenderer will insert the numbers of the Addenda received by him during the tendering period and taken into account by him in his Tender.***

Addendum #	Date Received
# _____	_____
# _____	_____
# _____	_____

Check here if No Addenda considered.

AGREEMENT TO BOND AND FORM OF BOND

We, the undersigned, hereby agree to become bound as Surety for

(Name of Tenderer)

an amount equal to One Hundred Per Cent (100%) of the Total Tender Amount including all applicable taxes, and conforming to the Instruments of the Contract attached hereto, for the full and due performance of the works shown as described herein, Contract 2026-03-IPWE, Corporation of the Town of Renfrew, such Performance Bond to provide a period of maintenance of One (1) years after the date of Substantial Performance of the work, and a 50% Labour and Materials Bond.

It is a condition of this Agreement that, if the above-mentioned Tender is accepted, application for a Performance Bond and Labour and Materials Bond must be made to the undersigned within ten (10) days of notice of Contract Acceptance. Otherwise, this Agreement shall be null and void.

Dated this _____ day of _____, 2026.

Name of Bonding Company

By: _____

Attorney-in-Fact

Note: In lieu of the above "Agreement to Bond and Form of Bond" form, the Town will accept a similar type of form issued by the Bonding Company provided all the conditions as outlined above are stipulated on the Bonding Company's form.

TENDER SUMMARY

MUNROE AVENUE & HARRY STREET RECONSTRUCTION

CONTRACT 2026-03-IPWE

TOTAL TENDER AMOUNT BID FOR CONTRACT 2026-03-IPWE \$ _____

(Amount transferred from Page 23, **excluding** HST)

SCHEDULE OF UNIT PRICES

In accordance with the first paragraph of the Tender, the Tenderer hereby offers to complete the work specified in the Contract for the following unit prices.

ITEM NO.	DESCRIPTION	SPEC. NO	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
Section A – General						
A-0001	Traffic Control Plan	D.39, D.40, F.01	LS	1		
A-0002	Field Office for Contract Administrator	D.51	LS	1		
A-0003	Erosion and Sediment Control Plan	F.03, D.54	LS	1		
A-0004	Erosion and Sediment Control Measures	F.03, D.54	LS	1		
A-0005	Utility Support during Construction	D.38, F.06	LS	1		
A-0006	Pre-Construction Survey	D.50, F.04	LS	1		
A-0007	Tree Protection Plan	D.56	LS	1		
A-0008	Construction Dewatering	0	LS	1		
A-009	Well Abandonment	F.24	ea	3		
A-010	Contract Initiation	F.05	LS	1		
A-011	Excess Soils Management Plan	D.52, F.02	LS	1		
A-012	Remove and Dispose of Category 3 Contaminated Material to Licensed MECP Landfill	D.52, F.02	t	600		
SECTION A SUBTOTAL						

Section B – Removals						
B-0001	Earth Excavation – Grading	206, F.07	m3	3840		
B-0002	Cutting Existing Pavement	510, F.07	m	116		
B-0003	Removal of Asphalt Pavement (Full Depth)	510, F.07	m2	8067		

ITEM NO.	DESCRIPTION	SPEC. NO	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
B-0004	Removal of Asphalt Pavement (Partial Depth)	510, F.07	m2	123		
B-0005	Removal of Concrete Sidewalk	510, F.07	m2	993		
B-0006	Removal of Gravel Driveways and Pathways	510, F.07	m2	173		
B-0007	Removal and Salvage of Interlock Driveways and Pathways	510, F.07, F.08, F.09	m2	39		
B-0008	Removal of Asphalt Driveways and Pathways	510, F.07	m2	578		
B-0009	Clearing	510, F.07	m2	1602		
B-0010	Removal of Steel Beam Guiderail	510, F.09	m	17		
B-0011	Removal and Salvage of Fence and Gates	510, F.09	m	30		
B-0012	Removal of Signs	510, 703	each	4		
B-0013	Tree Removal	201	LS	1		
SECTION B SUBTOTAL						

Section C – New Construction						
C-0001	Superpave 12.5 Traffic Level B – 40 mm Lift – PG 58-34	310,	m2	7756		
C-0002	Superpave 19 Traffic Level C – 60 mm Lift – PG 58-34	310,	m2	7540		
C-0003	Granular A	314, F.10, F.11	t	2960		
C-0004	Granular B	314, F.10, F.11	t	5430		
C-0005	Class II Woven Geotextile (Provisional)	511, 1860, F.26	m2	3250		
C-0006	Concrete Sidewalk – Monolithic	351, 904, F.10	m2	1945		
C-0007	Concrete Curb and Gutter	353, 904, F.11	m	235		
C-0008	Tactile Walking Surface Indicator (TWSI)	351, F.12	each	11		
C-0009	Interlock Driveways and Pathways	355, F.08, F.09	m2	26		

ITEM NO.	DESCRIPTION	SPEC. NO	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
C-0010	Asphalt Driveways and Pathways	310, 311	m2	405		
C-0011	Gravel Driveways and Pathways	314, F.13	m2	70		
C-0012	Signs (Including Installation)	F.13	each	20		
C-0013	Steel Beam Guiderail	721	m	17		
C-0014	Reinstatement of Fencing	772	m	30		
C-0015	Pavement Markings	710	LS	1		
C-0016	Topsoil (100mm depth)	802, F.25	m3	100		
C-0017	Sod	803, D.22	m2	1000		
C-0018	Catch Basin Adjustments any size	408	each	33		
C-0019	Manhole Adjustments any size	408	each	11		
C-0020	Water Valve Adjustments and size	408	each	13		
C-0021	100mm Perforated Pipe Subdrain	405, 410	m	856		
C-0022	100mm Non-Perforated Pipe Subdrain	405, 410	m	116		
SECTION C SUBTOTAL						

Section D – Sanitary, Storm Sewer, & Watermain Removals						
D-0001	Catchbasin Removal	510	ea	7		
D-0002	Sanitary MH Removal	510	ea	4		
D-0003	Sanitary Sewer Removal	510	m	550		
D-0004	Watermain Removal	510, F.17	m	530		
D-0005	Water Valve Removal	510, F.17	ea	16		
D-0006	Fire Hydrant Removal	510, F.17, F.19	ea	3		

ITEM NO.	DESCRIPTION	SPEC. NO	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
D-0007	Storm MH Removal	501, F.14, F.15	ea	2		
D-0008	Storm Sewer Removal	510, F.14, F.15	m	280		
D-0009	Catchbasin Lead Removal (Any Size)	510, F.14, F.15	m	80		
D-010	Sanitary services (150mm dia.), Water Service (50mm dia.) Removal	510, F.16	m	300		
SECTION D SUBTOTAL						

Section E – Storm Sewers & Appurtenances						
ITEM NO.	DESCRIPTION	SPEC. NO	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
E-0001	100mm Perforated Pipe Subdrain	405, F.21, F.22	m	1000		
E-0002	1200mm dia. Storm Maintenance Hole	407, F.14	ea	8		
E-0003	1500mm dia. Storm Maintenance Hole	407, F.14	ea	1		
E-0004	600mm x 600mm PCC Catchbasin	4407, F.14, F.22	ea	33		
E-0005	600mm x 600mm DI Catchbasin	4407, F.14, F.22	ea	1		
E-0006	1200mm x 600mm Catchbasin	4407, F.14, F.22	ea	5		
E-0007	200mm dia. PVC Catchbasin Lead – SDR 35	410, F.14, F.22,	m	150		
E-0008	250mm dia. PVC Catchbasin Lead – SDR 35	410, F.14, F.22,	m	35		
E-0009	300mm PVC Pipe Storm Sewer – Class SDR 35	410, F.22	m	320		
E-0010	375mm Concrete Pipe Storm Sewer – Class 100D	410, F.22	m	90		
E-0011	525mm Concrete Pipe Storm Sewer – Class 100D	410, F.22	m	100		
E-0012	600mm Concrete Pipe Storm Sewer – Class 100D	410, F.22	m	80		
E-0013	Concrete Headwall for Pipe Less than 900mm dia. per OPSD 804.030	441, F.22	ea	1		

ITEM NO.	DESCRIPTION	SPEC. NO	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
E-0014	Rip-Rap at Stormwater Outfall	120, 401, 403, F.22	m2	55		
E-0015	CCTV Inspection (Storm Sewers)	409, F.20	m	780		
E-0016	Miscellaneous 20MPa Concrete, Unformed, where not otherwise provided	904, F.22	m3	60		
E-0017	Select Subgrade Material for Trench Backfill	212, 314, F.14, F.21	m3	250		
E-0018	Additional Excavation and Backfill with Granular 'B' Type II	314	m3	150		
SECTION E SUBTOTAL						

Section F – Sanitary Sewer						
ITEM NO.	DESCRIPTION	SPEC. NO	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
F-0001	Sewer Flow Bypass	F.15	LS	1		
F-0002	1200mm dia. Sanitary Maintenance Holes	407, F.14	ea	4		
F-0003	Sanitary Pipe Service Connections, PVC Pipe – Class SDR 28 or SDR 35, any size, OPSD 1006.02	410, F.22	m	280		
F-0004	200mm PVC Sanitary Pipe Sewer, Class SDR 35	410, F.22	m	210		
F-0005	375mm Concrete Pipe Sanitary Sewer, Class 140-D	410, F.22	m	340		
F-0006	Connection to Existing Sanitary Maintenance Holes and Pipe Sewers	410, F.22	ea	8		
F-0007	CCTV Inspection (Sanitary Sewers)	409, F.20	m	550		
F-0008	Miscellaneous 20MPa Concrete, Unformed, where not otherwise provided	904, F.22	m3	40		
F-0009	Additional Excavation and Backfill with Granular 'B' Type II	212, 314, F.14, F.21	m3	250		
F-0010	Select Subgrade Material for Trench Backfill	314	m3	250		
SECTION F SUBTOTAL						

ITEM NO.	DESCRIPTION	SPEC. NO	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
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Section G – Watermain						
G-0001	150mm Watermain, PVC, CL 150, DR-18 Including all Appurtenances	441, F.17	m	300		
G-0002	200mm Watermain, PVC, CL 150, DR-18 Including all Appurtenances	441, F.17	m	220		
G-0003	300mm Watermain, PVC, CL 150, DR-18 Including all Appurtenances	441, F.17	m	60		
G-0004	Temporary Water Supply	493, F.16	LS	1		
G-0005	Insulation, 50mm Thick HI-40,	F.19	m2	30		
G-0006	Hydrants	441, F.17, F.18	ea	3		
G-0007	Supply and Install 50mm Water Service Material (by Contractor)	441, F.17, F.19	m	80		
G-0008	Supply and Install 19mm Water Service Material (by Contractor)	441, F.17, F.19	m	280		
G-0009	Miscellaneous 20MPa Concrete, Unformed, where not otherwise provided	904, F.22	m3	50		
G-0010	Additional Excavation and Backfill with Granular 'B' Type II	212, 314	m3	250		
G-0011	Select Subgrade Material for Trench Backfill	314, F.14, F.21	m3	250		
SECTION G SUBTOTAL						

Section H – Labour and Equipment						
H-0001	Unskilled labour (including supervision where not otherwise provided)	F.24	hr	60		
H-0002	Skilled labour (including supervision where not otherwise provided)	F.24	hr	60		
H-0003	Dump truck - tri axle, 32,000kg GVW min (operated)	F.24	hr	60		

ITEM NO.	DESCRIPTION	SPEC. NO	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
H-0004	Front end loader backhoe, rubber tired 45 kW min (operated)	F.24	hr	40		
H-0005	Sweeper (Operated)	F.24	hr	80		
H-0006	Hydro Excavating/Vacuum Truck (Operated)	F.24	hr	40		
SECTION H SUBTOTAL						

Section I – Central School Parking Lot						
ITEM NO.	DESCRIPTION	SPEC. NO	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
I-0001	Earth Excavation, Grading	206, F.07	m3	370		
I-0002	Removal of Asphalt Pavement (Full Depth)	510, F.07	m2	756		
I-0003	Clearing and Stripping	510, F.07	m2	513		
I-0004	Superpave 12.5 Traffic Level B – 60mm Left – PG 58-34	310	m2	930		
I-0005	Granular A	314, F.10, F.11	t	353		
I-0006	Granular B	314, F.10, F.11	t	796		
I-0007	Concrete Barrier Curb	353, 904, F.11	m	134		
I-0008	Asphalt Pathways – Superpave 12.5 Traffic Level B – 50mm Lift – PG 58-34	310	m2	56		
I-0009	Pavement Markings	710	LS	1		
I-0010	600mm x 600mm PCC Catch Basin, Including Adjustment	408	each	1		
I-0011	300mm PVC Pipe Storm Sewer – Class SDR 35	410, F.14	m	21		
I-0012	Storm Sewer Removal	510, F.14, F.15	m	13		
I-0013	Relocate Existing Drainage Basin (Including Locate and Connect to Existing Storm Sewer)		each	1		
I-0014	Removal of Existing Fence	510, F.09	m	118		

ITEM NO.	DESCRIPTION	SPEC. NO	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
I-0015	4' Height (1.2m) Chain Link Fence c/w Top Rail, Terminal Posts, Brace Panel and Appurtenances	772	m	81		
I-0016	4' Height - Single Swing Gate - 10' Wide Incl. Gate Posts OPSD 972.102	772	each	1		
I-0017	4' Height - Double Swing Gate - 20' Wide Incl. Gate Posts OPSD 972.102	772	each	1		
SECTION I SUBTOTAL						

SECTION	DESCRIPTION	TOTAL PRICE
A	General	
B	Removals	
C	New Construction	
D	Municipal Removals	
E	Storm Sewer & Appurtenances	
F	Sanitary Sewer	
G	Watermain	
H	Labour and Equipment	
I	Central School Parking Lot**	
SUBTOTAL *		
H.S.T. (13.0%)		
TOTAL TENDER PRICE		

*Enter this amount on page 14.

**Section I Central School Parking Lot is subject to approval

The following list of Subcontractors will be carrying out part of this Contract.

Name of Subcontractor	Address	List of Work to be Completed by Subcontractor

SCHEDULE OF PROVISIONS, SPECIFICATIONS, CONDITIONS, AND DRAWINGS

The work specified in the Contract will be performed in strict accordance with the following:

SECTION A	General Special Provisions
SECTION B	Item Special Provisions
SECTION C	Standard Specifications
SECTION D	General Conditions of Contract (OPS General Conditions of Contract)
SECTION E	Standard Drawings and Specifications (attached)
SECTION F	Geotechnical Report (attached)
SECTION G	Contract Drawings
SECTION H	Quantity Sheets

FAIRNESS IS A TWO-WAY STREET

Italicized terms have the same meaning as in Section D.31 of the Tender.

I/we certify that neither the Bidder nor any proposed sub-contractor is a person who is resident in a *Designated Jurisdiction* in accordance with the criteria set out in Section D.31 of the Tender documents.

Authorized Signing Officer

The Tenderer, by this Tender, offers to complete this Contract in accordance with the terms and conditions contained herein.

Dated on _____ this _____ day _____ of 20 _____.
(ex. Monday) (ex. 24th) (ex. April)

Witness _____

Signature of Authorized Person
Signing for Tenderer

Position

This is the 26th and last page of the Tender Form to be submitted.

SECTION C: AGREEMENT BETWEEN OWNER AND CONTRACTOR

AGREEMENT BETWEEN OWNER AND CONTRACTOR

This Agreement made on the _____ day of _____ in the year _____,

by and between

The Corporation of the Town of Renfrew

hereinafter called the "Owner",

AND

hereinafter called the "Contractor".

The Owner and the Contractor agree as follows:

ARTICLE A-1 THE WORK

The Contractor shall:

- 1.1 Perform the work contained in the Contract Documents which are:
Contract No. 2026-03-IPWE – Munroe Avenue & Harry Street Reconstruction

Located on: Munroe Avenue & Harry Street, Renfrew, Ontario.

DESCRIPTION

Renewal of Munroe Avenue and Harry Street including the replacement of the watermain and water services, sanitary sewer and sewer services, storm sewer and new outlet, reconstruction of the roadway, installation of sidewalks, and installation of pedestrian crossover.

- 1.2 Do and fulfill everything indicated by the Agreement.
 - 1.3 The successful tenderer shall **Substantially Perform** the Work as defined in GC8.02.04.04 by **September 4th, 2026**.
 - 1.4 The successful tenderer shall **Complete** the Work as defined in GC8.02.04.06 by **September 30th, 2026**.
-

- 1.5 Pursuant to Section GC8.02.09 of the General Conditions of Contract, the Liquidated Damages shall be in the amount of:

One Thousand Five hundred dollars (\$1,500.00) per calendar day beyond the dates specified for Substantial Performance and Completion.

ARTICLE A-2 AGREEMENTS AND AMENDMENTS

- 2.1 The Contract supersedes all prior negotiations, representations, or agreements, either written or oral, relating in any manner to the work, including the bidding documents that are not expressly listed in Article A-3 of the Agreement — CONTRACT DOCUMENTS.
- 2.2 The Contract may be amended only as provided in the Contract Documents.

ARTICLE A-3 CONTRACT DOCUMENTS

- 3.1 The following are the Contract Documents referred to in Article A-1 of the Agreement — THE WORK:
- Agreement Between Owner and Contractor
 - The General Conditions of Contract
 - Information for Tenderers
 - Form of Tender
 - Special Provisions for Items
 - Ontario Provincial Standard Specifications
 - Addenda
 - Contract drawings

ARTICLE A-4 CONTRACT PRICE

- 4.1 The quantities shown in the Schedule of Contract Unit Prices are estimated. The Contract Price shall be the final sum of the products of the actual quantities that are incorporated in, OR made necessary by the Work, as confirmed by count and measurement, AND the appropriate Contract Unit Prices, together with any adjustments that are made in accordance with the provisions of the Contract Documents.
- 4.2 The Estimated Contract Price shall be the sum of the products of the estimated quantities and the appropriate Contract Unit Prices in the Schedule.
- 4.3 Schedule of Contract Unit Prices are in the Form of Tender.
- 4.4 Estimated Contract Price, excluding Harmonized Sales Tax is:
\$ _____ dollars and _____ cents. (\$ _____)
- 4.5 Contingency including such additional amounts or sums for such extra or additional Work at the unit rates or the amounts, as the case may be stipulated in written orders of the Contract Administrator/Town Representative or Owner, authorizing the extra or additional Work.
- 4.6 Harmonized Sales Tax (13%) payable by the Owner to the Contractor is:
\$ _____ dollars and _____ cents. (\$ _____)

-
- 4.7 Total amount payable by the Owner to the Contractor for the construction of the Work is:
\$ _____ dollars and _____ cents. (\$ _____)
- 4.8 All amounts are in Canadian Funds.
- 4.9 These amounts shall be subject to adjustments as provided in the Contract Documents.

ARTICLE A-5 PAYMENT

- 5.1 The Owner shall pay the Contractor in Canadian funds for the performance of the Contract, the amount being determined by actual measured quantities of the individual Work items contained in the Schedule of Contract Unit Prices, in the Form of Tender of this Agreement, and measured in accordance with the methods of measurement given in the Specifications.
- 5.2 Subject to the provisions of the Contract Documents, and in accordance with legislation and statutory regulations respecting holdback of ten percent (10%), the Owner shall:
1. Make progress payments to the Contractor on account of the Work performed when due in the amount certified by the Owner including Harmonized Sales Tax, and
 2. Upon Substantial Performance of the Work, pay to the Contractor the unpaid balance of the holdback amount when due, including Harmonized Sales Tax, and
 3. Upon the issuance of the final certificate for payment, pay to the Contractor the unpaid balance when due, including Harmonized Sales Tax.
- 5.3 In the event of loss or damage occurring where payment becomes due under the property and boiler insurance policies, payments shall be made to the Contractor in accordance with the provisions of GC 6.03.
- 5.4 Interest
1. Should either party fail to make payments as they become due under the terms of the Contract or in an award by arbitration or court, interest at one percent (1%) per annum above the bank rate on such unpaid amounts shall also become due and payable until payment. Such interest shall be compounded on a monthly basis. The bank rate shall be the rate established by the Bank of Canada as the minimum rate at which the Bank of Canada makes short term advances to the chartered banks.
 2. Interest shall apply at the rate and in the manner prescribed by GC 8.02.03.09 for late payments or GC 8.02.03.10 on the amount of any claim settled pursuant to GC 3.14.

ARTICLE A-6 RIGHTS AND REMEDIES

- 6.1 The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights, and remedies otherwise imposed or available by law.
- 6.2 No action or failure to act by the Owner or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such actions or failure to act constitute an approval of or acquiescence in any breach there under, except as may be specifically agreed in writing.
-

ARTICLE A-7 LAW OF THE CONTRACT

7.1 The law of the place of Work shall govern the interpretation of the Contract.

ARTICLE A-8 RECEIPT OF AND ADDRESSES FOR NOTICES

8.1 Notices in writing between the parties or between them and the Town Representative shall be considered to have been received by the addressee on the date of delivery if delivered to the individual, or to a member of the firm, or to an officer of the corporation for whom they are intended by hand or by registered post; or if sent by regular post, to have been delivered within five (5) Working Days of the date of mailing when addressed as follows:

The Owner at: 127 Raglan Street South

Name of Owner, Street, Postal Box Number (if applicable)

Renfrew, ON K7V 1P8

City, Province, Postal Code

The Contractor at:

Name of Contractor, Street, Postal Box Number (if applicable)

City, Province, Postal Code

ARTICLE A-9 SUCCESSION

The Contract Documents are to be read into and form part of this Agreement and the whole shall constitute the Contract between the parties, and subject to the law and the provisions of the Contract Documents shall inure to the benefit of and be binding upon the parties hereto, their respective heirs, legal representative, successors, and assigns.

In witness whereof, the parties hereto have executed this Agreement and by the hands of their duly authorized representatives.

SIGNED AND DELIVERED

In the presence of:

OWNER

Town of Renfrew

Name of Owner

Mayor

Signature

Clerk

Signature

CONTRACTOR

Name of Contractor

Name and Title of person signing

Signature

Name and Title of person signing

Signature

N.B.

- i. If the Contractor is a corporation, an authorized officer of the corporation shall sign the Agreement and shall affix the corporate seal.
- ii. If the Contractor is a partnership, a minimum of two partners shall sign the Agreement and the signatures shall be witnessed.
- iii. If the Contractor is a sole proprietorship; the sole proprietorship shall sign the Agreement and the signature shall be witnessed.

SECTION D: SPECIAL PROVISIONS – GENERAL

TABLE OF CONTENTS – SPECIAL PROVISIONS – GENERAL

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 - D.55 WORK IN CONFINED SPACES
 - D.56 TREE PROTECTION
 - D.57 PROTECTION OF SPECIES AT RISK AND WILDLIFE PROTOCOL
 - D.58 OPERATIONAL CONSTRAINTS

D.01 SCOPE OF WORK

The work described within these documents includes the construction of the following:

Renewal of Munroe Avenue East and Harry Street including the replacement of the watermain and water services, replacement of storm and sanitary sewer systems with the addition of a storm outlet at the west end of the project area, and new roadway with streetscape revitalization, new signage including a Pedestrian Crossover (PXO) and pavement markings.

D.02 CLARIFICATION

It will be the Contractor's responsibility to clarify with the Director of Infrastructure, Public Works & Engineering any questions or concerns relating to details contained within the contract documents, plans and accompanying reports before advancing with construction of the works. All questions raised will be promptly investigated by the Contract Administrator and reported back to the Contractor prior to advancement of the work.

D.03 DEFINITION OF OWNER AND ENGINEER

Wherever the words "Town" or "Corporation" or "Owner" appear in this contract, it may be interpreted as meaning the "Corporation of the Town of Renfrew".

Wherever the word "Director" appears in this contract, it shall be interpreted as meaning the "Director of Infrastructure, Public Works and Engineering", or his designate.

Wherever the word "Engineer" or "Contract Administrator", it shall be interpreted as meaning the Morrison Hershfield Ltd., now Stantec.

D.04 GENERAL CONDITIONS OF THE CONTRACT

The requirements of Ontario Provincial Standards for Roads and Public Works – General Conditions of Contract (OPSS.MUNI 100 – November 2024) shall apply to this contract.

D.05 ONTARIO PROVINCIAL STANDARDS

Ontario Provincial Standard Specifications (OPS) and Ontario Provincial Standard Drawings (OPSD) form part of this contract.

D.06 INSURANCE

Prior to the commencement of work, the successful respondent shall obtain and maintain until the termination of the contract or otherwise stated, and provide the Town of Renfrew with evidence of:

D.06.1 Commercial General Liability Insurance

Commercial General Liability Insurance issued on an occurrence basis for an amount of not less than \$5,000,000 per occurrence / \$5,000,000 annual aggregate for any negligent acts or omissions by the Contractor relating to its obligations under this Agreement. Such insurance shall include, but is not limited to, bodily injury and property damage including loss of use; personal injury; contractual liability; premises, property & operations; non-owned automobile; broad form property damage; broad form completed operations; owners & Contractors protective; occurrence property damage; products; employees as

Additional Insured(s); contingent employers liability; tenants legal liability; cross liability and severability of interest clause.

Such insurance shall include the following as Additional Insureds including a waiver of subrogation with respect to the operations of the Contractor. This insurance shall be non-contributing with and apply as primary and not as excess of any insurance available to the Town / Township.

The Corporation of the Town of Renfrew – 127 Raglan Street South, Renfrew, Ontario K7V 1P8

Stantec, 1331 Clyde Ave. #300, Ottawa, ON K2C 3G4

GEMTEC Consulting Engineers and Scientists Ltd., 32 Steacie Drive, Ottawa, Ontario K2K 2A9

Ontario Clean Water Agency – 122 Patterson Crescent, Carleton Place, Ontario K7C 4J9

D.06.2 Automobile Liability Insurance

Automobile liability insurance with respect to owned or leased vehicles used directly or indirectly in the performance of the services covering liability for bodily injury, death and damage to property with a limit of not less than \$2,000,000 inclusive for each and every loss.

D.06.3 Environmental Liability

Environmental Impairment Liability with a limit of not less than \$2,000,000 Per Incident /Annual Aggregate. Coverage shall include Third Party Bodily Injury and Property Damage including on-site and off-site clean-up. If such insurance is issued on a claim made basis, coverage shall contain a 24-month extended reporting period or be maintained for a period of two years subsequent to conclusion of services provided under this Agreement.

The Policies shown above shall not be cancelled, permitted to lapse or materially changed unless the Insurer notifies the Corporation of the Town of Renfrew in writing at least thirty (30) days prior to the effective date of the cancellation, lapse or material change. The insurance policy will be in a form and with a company which are, in all respects, acceptable to the Corporation of the Town of Renfrew.

The bidder shall be responsible for any deductible to the above noted policies. The bidder is also responsible to keep the physical damage of the equipment insured and the Town shall bear no responsibility for any damage to such equipment.

D.06.4 Indemnification:

The successful Contractor shall indemnify and hold Corporation of the Town of Renfrew harmless from and against any liability, loss, claims, demands, costs and expenses, including reasonable legal fees, occasioned wholly or in part by any negligence acts or omissions whether wilful or otherwise by the Contractor, their officers, employees or other persons for whom the Contractor is legally responsible.

D.07 QUALIFICATIONS AND EXPERIENCE – GENERAL CONTRACTOR

The Town reserves the right to request the General Contractor to demonstrate satisfactory performance in the construction of works that are similar in magnitude and complexity to this project.

If requested, the General Contractor will have to provide the mandatory experience indicated below within 24 hours of the request. The General Contractor shall satisfactorily prove that the mandatory

requirements have been met. Failure to meet the mandatory requirements listed herein will result in the tender being deemed non-responsive and will not be considered for contract award.

The Town reserves the right to request additional information from Tenderers and shall be the sole judge to whether a bidder meets the requirements of this Special Provision.

Key staff members shall have a minimum of 10 years' experience in works of similar nature. Contractor shall not be permitted to change proposed staffing unless approved by Contract Administrator.

The following is to be completed and submitted upon request.

D.07.1 Experience of the General Contractor

The General Contractor must have successfully completed a minimum of three (3) projects of similar magnitude and complexity within the last five (5) years in the capacity of the General Contractor. Failure to meet the requirements will result in the tender being deemed non-responsive and will not be considered for contract award.

D.07.2 Experience of the Project Manager

The General Contractor shall confirm the name and experience of the Project Manager who will have the responsibility of the overall management of the project. The Project Manager must have the authority to enter into binding agreements on matters concerning this tender on behalf of the company. The Project Manager's experience shall demonstrate at least three (3) successful construction projects of similar magnitude and complexity managed. Failure to meet the experience requirements will result in the tender being deemed non-responsive and will not be considered for contract award.

D.07.3 Experience of the Project Site Superintendent

The General Contractor shall confirm the name and experience of the Site Superintendent to be supervising all operations and activities on site on a full-time basis. The Superintendent's experience shall demonstrate at least three (3) successful construction projects of similar magnitude and complexity supervised, with proven experience in dealing with strict construction schedule and high public scrutiny. Failure to meet the experience requirements will result in the tender being deemed non-responsive and will not be considered for contract award.

D.08 WORK PERMITS

The Contractor is responsible for obtaining all necessary permit(s). The Contractor is required to obtain any Federal and/or Provincial permits as per applicable legislation(s).

All costs associated with obtaining any and all permits shall be deemed to be included in the contract price for the items associated with this requirement.

D.09 CONTRACT LIMITS

The Owner reserves the right to reduce or extend the limits of this contract, should the Owner determine it is necessary at their sole discretion and to coincide with the funds available.

Any change in the contract limits or extent of the work shall be considered as relating solely to quantities and payment for the work shall be made at the appropriate contract unit price. In the case of an extension

of the contract limits, the Contractor will be eligible for a pro rata extension of time based on the value of the additional work when the contract unit prices are applied to the additional quantities.

The application of Subsection GC8.01.02 of the OPS General Conditions of Contract, shall be based on the adjusted tender quantities subsequent to the change in the contract limits.

D.10 PROGRESS AND TIME FOR COMPLETION

Time shall be of the essence of this agreement.

It is a requirement of this contract that all works be completed according to the following schedule:

The successful tenderer shall Substantially Perform and shall Complete the Work by the dates indicated in Article A-1.

All schedules are based on the assumption that a Notice of Award will be issued by May 1st, 2026.

The following works shall be excluded from the calculation of Substantial Performance, but shall be required to be complete for Completion:

- Topsoil and sod placement

If this completion date is not sufficient to permit completion of the work by the Contractor working a normal number of hours each day or week on a single daylight shift basis, it is expected that additional and/or augmented daylight shifts will be required throughout the life of the contract to the extent deemed necessary by the Contractor to ensure that the work will be completed within the limit specified. No additional compensation will therefore be allowed.

The Contractor shall prepare a work schedule and supply the required labour and equipment to complete the contract substantially on or before the dates outlined above.

D.11 TIME EXTENSIONS

If the Contractor is delayed in completion of the work,

- a) by reason of changes or alterations made under section GC 3.11 of the General Conditions;
- b) by reason or any breach of contract or prevention by the Corporation of other Contractors of the Corporation to carry out work;
- c) by reason of delay by the Corporation in issuing instructions or information in delivering materials;
- d) by any other act of neglect of the Corporation or any other Contractor of the Corporation or any employee of any one of them;
- e) for any cause beyond reasonable control of the Contractor; or
- f) by Acts of God, or of the Public Enemy, Acts of the Province or any Foreign State, Fire, Flood, Epidemics, Quarantine, Restrictions, Embargoes, or delays of Sub-Contractors due to such cause.

The time of completion may be extended in writing at any such time of such terms and for such period as shall be determined by the Contract Administrator, and notwithstanding such extensions, time shall continue to be deemed of the essence for this contract.

An application by the Contractor for any extension of time as herein provided shall be made to the Corporation in writing at least fifteen days prior to the date of completion fixed by the Contract. All Bonds or other Surety furnished to the Corporation by the Contractor shall be amended where necessary at the expense of the Contractor to provide coverage beyond the date of any extensions of time granted, and the Contractor shall furnish the Corporation with evidence of such amendment of the Bonds or other Surety.

D.12 LIQUIDATED DAMAGES

It is agreed by the parties in the contract that in case all work called for under the Contract is not finished or completed within the date as set forth in Section 5.1.2, damage will be sustained by the Corporation and that it is said will be impracticable and extremely difficult to ascertain and determine the actual damage which the Corporation will sustain in the event of and by any reason of such delay and the parties here to agree that the Contractor will pay to the "Corporation" the sum of One thousand five hundred dollars **(\$1,500.00)** for liquidated damages for each and every calendar days delay in finishing the work beyond the noted completion date, except Saturdays, Sundays and Statutory holidays, and it is agreed that this amount is an estimate of the actual damage to the Corporation which will accrue during the period in excess of the prescribed completion date.

The Corporation may deduct any amount due under this paragraph from any monies that may be due or payable to the Contractor on any account whatsoever. The liquidated damages payable under this paragraph are in addition to and without prejudice to any other remedy, action or other alternative that may be available to the Corporation. The Contractor shall not be assessed with liquidated damages for any delay caused by Acts of God, or of the Public Enemy, Acts of Province or any Foreign State, Fire, Flood, Epidemics, Quarantine Restrictions, Embargoes, or any delays of Sub-Contractor's due to such causes.

D.13 THE "CONTRACTOR'S SCHEDULE OF WORK"

Forthwith upon award of this Contract, the Contractor shall prepare a "Contractor's Schedule of Work". The "Contractor's Schedule of Work" will be completed by the Contractor and remitted to the Corporation with his signed contract documents for execution by the Corporation.

The Contractor shall prepare the Detailed Work Schedule in bar chart form. The Detailed Work Schedule shall display the following items against a weekly time scale representing the total time period for the completion of the Work.

- all major construction activities included in the Work including their respective start and completion dates and the number of days allocated to each activity;
- Commence Work Order date, operational constraints, interim completion dates, important milestone dates, and other significant scheduling requirements specified in the Contract. No on-site work shall be shown prior to the Commence Work Order date.
- the controlling operations as per the definition in the OPS General Conditions;

The Contractor shall update the Detailed Work Schedule on a monthly basis or, if directed to do so by the Contract Administrator, at more frequent intervals. The Contractor shall notify the Contract Administrator 48 hours prior to any changes to construction activities including schedule, location, and type of activities.

The submission and updating of the Detailed Work Schedule form an integral part of the Work. Should the Contractor fail to meet its obligations to submit and update the Detailed Work Schedule, the Owner, in its sole discretion, may withhold monthly progress payments under the Contract until the obligations are met.

The Contractor shall not make any claim for extra compensation for the cost of fulfilling the obligations set out in this Special Provision.

D.14 IDENTIFICATION OF LOCAL REGULATORY AUTHORITIES

The following is provided for information only, to facilitate contact with and notification to regulatory authorities as specified in the Contract Documents:

Regulatory Authority	Notification Requirement
MOE: Spills Action Centre (SAC) 1-800-268-6060	For notification of a spill to the environment under the Environmental Protection Act
TOWN OF RENFREW 127 Raglan Street South, Renfrew, Ontario K7V 1P8 (613) 432-4848	For notification of a spill to the environment under the Environmental Protection Act
MOE: District Office Ottawa District Office 2430 Don Reid Rd. Ottawa, Ontario K1H 1E1 1-800-860-2195	For Waste Management Approval under the Environmental Protection Act
Renfrew County Joint Transportation Consortium (613) 732-8419	School Bus Lines
MNR: District Office Ministry of Natural Resources Box 220, Riverside Dr. Pembroke, Ontario K8A 6X4 (613) 732-5568	For notification of the release of a deleterious substance to a watercourse under the Fisheries Act
DFO: District Office Prescott office 401 King St. W. P.O. Box 1000 Prescott, Ontario K0E 1T0 (613) 925-2865	For notification of the release of a deleterious substance to a watercourse under the Fisheries Act
Ontario Provincial Police 127 Raglan Street South Renfrew, Ontario K7V 1P8 (613) 432-3211	For notification of a Dangerous Occurrence involving dangerous goods under the Transportation of Dangerous Goods Act
Enbridge Gas: Mark Mullan (613) 720-2463 Renfrew Hydro: Jamie Riopelle (613) 432-4884 Bell Canada: Brad Wilson (613) 432-9101 Cogeco: Rick Bechamp (613) 432-9078 or Guy Lafrance (613) 330-0308	Utility companies to be advised in advance of work, in addition to Ontario OneCall requirements

D.15 HEALTH AND SAFETY REQUIREMENTS

The Contractor shall submit a WSIB Certificate of Clearance prior to commencing work. Additional certificates of clearance may be requested before the release of any holdback.

The Contractor assumes full responsibility for conforming with all legislation regarding the safety of his employees and the public on this contract, and all notices required to comply with the legislation. The Contractor will be deemed to be the "Constructor" for the duration of this contract.

The Contractor shall not make any claim for extra compensation for the cost of fulfilling the obligations set out in this Special Provision – General.

D.16 WORKING HOURS

The Contractor shall comply with the Municipal by-laws regulating hours of work in the Municipality. The Municipality reserves the right to charge the Contractor any and all costs associated with work outside of the Municipality's standard working hours for those staff affected, which may differ from Municipal by-law regulated hours of work.

The Contractor shall not work on statutory holidays recognized by the Municipality (i.e. holidays that the Municipal employees do not work) unless special permission is granted by the Contract Administrator, which shall not be unreasonably withheld.

No Saturday or Sunday work will be permitted except with written permission of the Contract Administrator. The Municipality reserves the right to charge the Contractor any premium costs associated with the Contract Administrator's fees for field review during these days.

If the Contractor intends to undertake work on a Saturday or Sunday, the Contractor is required to inform the Contract Administrator in writing at least five (5) working days prior to the planned weekend. The Contract Administrator will make every effort to approve, or deny, this request in writing within 48 hours of receiving this request. If the Contractor does not receive an approval by this time, then the Contractor is to assume that the request has been denied. The Contractor is also reminded that construction activities must conform to the Municipal Noise By-Law current at the time of the work.

D.17 GOVERNMENT REQUIREMENTS

The Contractor shall obey all Federal, Provincial and Municipal Laws, Acts, Ordinances, Regulations, Orders-In-Council and By-Laws which could in any way pertain to the work outlined in the Contract or the Employees of the Contractor, or Sub-Contractor.

D.18 CONTRACTOR CONDUCT

All Contractors and workers are expected to be considerate of their surrounds. All workers shall refrain from use of foul language/gestures. Should issues/complaints arise regarding conduct or continued occurrences, the Contract Administrator may enforce; at his sole discretion, further actions, such as permanent staff removal request from the site, if repeated occurrences are encountered.

There will be no additional payment for this requirement.

D.19 LAYOUT

Section G.C. 7.0.2 of the OPSS General Conditions shall apply to this Contract. The Contractor shall provide at their expense all material, equipment, and labour for all layout on this Contract. The Contractor shall provide layout for Contract Administrator with station offsets for road layout at 10m intervals on tangent

sections and 10m intervals on curves. The Contractor will also provide layout on all structures, including but not limited to manholes, catch basins, headwalls, valves, hydrants, lot services, etc.

Established alignment and grade control points within the contract limits will be reset by the Contractor if they are in danger of being destroyed. They will be reset to a location where they will be protected against damage. New data for the reset points will be given to the Contract Administrator.

The Contractor acknowledges that the survey layout and grading information listed herein will be provided, if requested by the Contractor, within five (5) working days following the issuance of the Commence Work Order, provided that the Contractor confirms in writing the acceptance of the following conditions:

- a) The electronic files and hardcopy formats are provided as “information only” and do not form part of the Contract.
- b) The electronic files will be provided in AutoCAD format, unless otherwise indicated below.
- c) Any discrepancies shall be immediately disclosed to Contract Administrator for interpretation.
- d) The information provided on the electronic files will not form a basis for a claim.
- e) The use of the electronic files will not supersede the requirements of the Contract Documents regarding survey layout (stakes).
- f) The files will not be released to other parties without the written consent from the Owner.
- g) The tender hardcopy of the contract drawings shall be considered the official document unless superseded by other hardcopy drawings issued by the Contract Administrator.

Items that are not checked off in the following list are not anticipated to be provided to the Contractor with this Contract.

Survey Control Points

CAD Files (Components to be provided in CAD are listed below):

Alignment, Roadway Geometry, Grading and Drainage, Pavement Elevations, and Pavement Markings

Grading templates are not provided.

D.20 UNIT OF MEASUREMENT

All items are estimated in metric units as are specifications and standards.

D.21 CONTRACTOR PROGRESS PAYMENTS

Except as herein provided, payments under this contract will be made in accordance with Section G.C.8.0.2 of the OPSS General Conditions.

The Contractor shall submit an Application for Progress Payment monthly after starting the work on this Contract. This Application for Progress Payment must be for work completed at the agreed monthly cut-off date. The format of the application must be approved by the Contract Administrator.

Within five (5) Business Days following the agreed monthly cut-off dates, the Contractor shall submit an updated Application to the Contract Administrator.

D.21.1 Invoice Detailing

Item Numbers, Description, Unit of Measurement, Original Tender Quantity, Approved Revised Quantity, Total Quantity to Date, Quantity Previous Invoice, Quantity This Period, Unit Price, Dollars This Period, and Total Dollars to Date.

Subtotals must be detailed for Tender Items, Change Orders, Incentives, Disincentives, and Quality Assurance Material Bonuses or Penalties.

The Item information appearing on the invoice must agree exactly with those as shown in the bid Tender document.

D.21.2 Invoice Submission

Invoices shall be submitted in digital format(.pdf). to the Contract Administrator via e-mail.

The Contract Administrator will review the invoice for completeness within five (5) Business Days. Invoices returned to the Contractor as deficient shall be resubmitted to the Contractor Administrator within (3) business days.

The Owner will pay the approved invoice within the timelines as stated in the contract after the Application for Progress Payment date, or after the date of receipt of an invoice which had to be resubmitted due to deficiencies, errors, or noncompliance with the Owner's request in the preceding paragraphs.

D.22 RESTORATION

Restoration beyond the contract limits and not covered by the Topsoil, Sodding and Seeding items shall be completed in accordance with OPSS 492 Construction Specification for Site Restoration following Installation of Pipelines, Utilities and Associated Structures in Open Cut.

The following amendments apply to OPSS 492 Construction Specification for Site Restoration.

Section **492.07.05 Topsoil** is amended with the addition of the following after the first paragraph 100 mm depth of topsoil shall be placed on all disturbed areas.

Section **492.07.07 Sodding and Seeding** is amended with the addition of the following:

Landscaped and maintained lawns shall be restored with nursery sod and other landscape areas shall be restored with seeding and mulching.

A new Section **492.07.10 Driveway Restoration** shall be added as follows:

The restoration of driveways shall be scheduled to follow closely behind trench backfilling. The driveway shall be made and maintained safe for the passage of traffic after completion of backfilling and until permanent restoration takes place. Driveway restoration shall be completed to grading and layout indicated on the Contract Drawings.

Gravel driveway restoration shall consist of a minimum compacted depth of 150 mm of Granular 'A' in accordance with the requirements of OPSS.MUNI 314 Construction Specifications for Untreated Granular, Subbase, Base, Surface, Shoulder and Stockpiling.

Asphalt driveway restoration shall consist of a minimum compacted depth of 150 mm of Granular 'A' base course in accordance with the requirements of OPSS.MUNI 314 and 50 mm compacted depth of Hot Mix Superpave 12.5 asphalt surface in accordance with the requirements of OPSS 310.

D.23 SURFACE REQUIREMENTS

Construction operations shall be scheduled to ensure minimal duration of time required that traffic to be subjected to a driving surface other than a smooth asphalt surface.

For the purpose of this Contract, granular surfaces are restricted to 40 calendar days after asphalt removal. \$500/day shall be deducted to monies owed to the Contractor for every calendar day beyond this allotment.

For the purpose of this Contract, milled surfaces are restricted to 40 calendar days after asphalt removal. \$500/day shall be deducted to monies owed to the Contractor for every calendar day beyond this allotment.

Asphalt shall not be mixed into subgrade soils and/or used as trench backfill.

Under no circumstances will any travelled portion open to traffic be left without a hard asphalt surface during a seasonal shutdown.

D.24 AS-BUILT DRAWINGS

Upon completion of the Works, the Contractor shall provide the Contract Administrator with a copy of As-Built Drawings. As-Built drawings will consist of a Paper Copy (to scale) and electronic copy (CAD and PDF) updated of all drawings with red-line markups that note the as-built location of the installed works, including, but not limited to:

- Location and inverts for all structures (top of pipes not acceptable)
- Location, complete with field measured ties to known points, for sewer services and waterboxes at the property line
- Location and elevations for any underground utilities that were exposed during the execution of the Work
- Alignment of all sewers, watermains and utilities installed
- Location of all hydrants, valves, tees and bends with field measured ties to all tees and bends
- Locations and elevations of all catch basins

Notes on the Paper Copy must be sufficiently descriptive to explain the information required.

D.25 WARRANTY

The Contractor shall be responsible for the warranty of the Work for a 12-month period in accordance with G.C. 7.16.

In order to ensure that any defects or deficiencies in the Work are repaired in a timely manner a Maintenance Guarantee will be held by the Owner for the duration of the warranty period.

Maintenance Guarantee

The following maintenance guarantee will apply to this Contract:

Two and one half (2.5) percent of the Final Contract Value (Including H.S.T) for the Warranty Period will be held by the Owner as security for any defects or deficiencies that arise.

The Maintenance Guarantee sum will be retained at the time of the release of the Substantial Release Holdback.

The Maintenance Guarantee will be released at the end of the Warranty Period subject to no outstanding defects or deficiencies.

D.26 MATERIALS – SUPPLY OF MATERIALS

The Contractor shall be responsible for supplying materials required to complete the work in accordance with the specifications. The source of supply and quality of all materials supplied by the Contractor must be approved by the Municipality prior to their use in the contract.

The Contractor shall be responsible for submitting shop drawings for sewers, structures and watermain appurtenances.

D.27 MATERIAL / PRODUCT RECORDS

The Contractor shall supply the Owner with a complete list of all materials supplied and installed in a permanent nature on this project. The list shall include, where applicable, manufacturer's name, supplier's name, make, model, and serial numbers.

Submission to the Owner is to be completed prior to the issuance of the final payment certificate.

Costs associated with the assembly and submission of this information shall be deemed to be included in the associated tender unit prices.

D.28 ADMINISTRATION OF PITS AND QUARRIES

The Contractor shall ensure that all pits and quarries operated for extraction of aggregate, earth or rock borrow are operated in accordance with current legislation. On request the Contractor shall provide the Contract Administrator with a copy of all permits, approvals and agreements. The cost of complying with legislative requirements shall be deemed to be included in the prices bid for the various items and no additional payment will be made.

D.29 DUST CONTROL AND NOISE SUPPRESSION

The Contractor shall take such steps as may be required to prevent dust nuisance resulting from the Contractor's operations either within the right-of-way or elsewhere or by public traffic where it is the Contractor's responsibility to maintain a roadway or access to properties within or through the work site.

Where the work requires the sawing of asphalt or the sawing or grinding of concrete, blades and grinders of the wet type shall be used together with sufficient water to prevent the incidence of dust, wherever dust would affect traffic or wherever dust would be a nuisance to residents of the area where the work is being carried out.

To control construction noise, the Contractor shall ensure that construction equipment is maintained in good operating condition so as to prevent unnecessary noise. This shall include, but not be restricted to, effective muffler systems, properly secured components, and lubrication of moving parts.

Idling of equipment shall be restricted to the minimum necessary to perform the specified work.

The cost of all such preventative measures shall be borne by the Contractor including reshaping the roadway and water for dust suppression, and applied as directed by the Contract Administrator.

D.30 LIMITATIONS OF OPERATIONS

Subsection G.C. 7.07 of the OPSS General Conditions is amended by the addition of the following:

The Contractor shall co-operate with other Contractors, utility companies and the Corporation and they shall be allowed free access to their work at all times. The Municipality reserves the right to alter the method of operations on this Contract to avoid interference with other work.

Prior to submission of a work schedule, the successful Contractor shall receive a Schedule of Proposed Works being undertaken by the Municipality and all other Authorities within and adjacent to this project.

D.31 FAIRNESS IS A TWO-WAY STREET

In this Article;

“Construction” includes all work in or about:

- Constructing, altering, decorating, repairing, demolishing, erecting or remodeling the whole or any part of a building or structure;
- Laying pipe and conduit above or below ground level;
- Excavating, tunneling, fencing, grading, paving, land clearing and bridging;
- Building a highway, as defined in section 1 of the Highway Traffic Act.
- Carrying out other activities prescribed by the Minister of Labour under the Fairness is a Two-Way Street Act (Construction Labour Mobility), 1999 for inclusion in the definition of Construction; and
- Providing consulting services, including architectural or engineering services, with respect to the matters set out in the five clauses above.
- “Contractor” means a person that enters into a contract for Construction and includes any sub-contractor;
- “Controlled” has the same meaning as in subsection 1 (5) of the Business Corporations Act;
- “Designated Jurisdiction” means a province or territory of Canada prescribed by the

Lieutenant Governor in Council as a designated jurisdiction under the Fairness is a Two-Way Street Act (Construction Labour Mobility), 1999.

- “Person who is resident in a Designated Jurisdiction” means:
 - In the case of an individual or a sole proprietor, a person who is ordinarily resident in that jurisdiction;
 - In the case of a corporation,
 - A person whose head office or registered office is located in that jurisdiction; or
 - A person controlled directly or indirectly by a person described in sub clause (i);
 - In the case of a partnership, a partnership that includes at least one partner who is resident in that jurisdiction under clause (a) or (b).

No ministries, municipalities, agencies / boards or commissions prescribed by the Minister of Labour under the Fairness is a Two-Way Street Act (Construction Labour Mobility), 1999 or other bodies as set out in the Schedule to the Pay Equity Act, shall award a Construction contract to a Contractor who is a person resident in a Designated Jurisdiction. Such a person is not eligible and will be disqualified from this Quotation.

All Bidders are required to provide the following information in respect of themselves and any sub-contractors:

- In the case of an individual or sole proprietor, whether he / she is ordinarily resident within a Designated Jurisdiction;
- In the case of a corporation, whether the corporation’s head office or registered office(s) is / are in a Designated Jurisdiction or whether any person who controls the corporation, either directly or indirectly, is a person who is ordinarily resident in a Designated Jurisdiction;
- In the case of a partnership, whether the partnership includes one partner who is resident in a Designated Jurisdiction under clause (a) or (b) above, and
- Whether any exemptions prescribed under the Act are applicable.

In any Construction contract awarded under this Quotation, if any, the Contractor will be required to:

- Represent and warrant that neither the Contractor nor any sub-contractors are persons who are resident in a Designated Jurisdiction;
- Acknowledge that any sub-contracts not identified in the bid following the award of the contract will be subject to the approval of the Town of Renfrew.
- Acknowledge that any material misrepresentation or breach of the representation and warranty in clause (a) will be grounds for termination of the contract.

D.32 ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES

Pursuant to the Accessibility for Ontarians with Disabilities Act, 2005, Regulation 191/11 (the Act), the Contractor shall ensure that all of their employees, agents, volunteers, or others who will be involved in providing service on behalf of the Town, receive training about the provision of goods and services provided to people with disabilities.

The Contractor shall submit to the Town, documentations describing their accessible training policies, practices and procedures, and a summary of the contents of training, together with a record of the dates on which training was provided and the attendees.

The City reserves the right to require the Contractor, at the Contractor's expense, to amend their training policies, practices and procedures, if the City deems them not to be in compliance with the requirements of the Regulation.

The Contractor shall only assign those employees who have successfully completed training, in accordance with Section 5 of the Integrated Accessibility Standards (IASR), to provide services on behalf of the Town.

D.33 CONTRACTOR'S REPRESENTATIVE

The Contractor's site representative shall be a competent, English-speaking Superintendent or Foreman, fully authorized to act for the Contractor and capable of coordinating the operation in an orderly and progressive manner. The Contractor's representative's primary role/responsibility will be coordinating and supervising the work. At no time shall the Contractor's representative operate equipment or perform labour work to install the works. The Supervisor or Supervisor Designate will be in attendance at all times at the core work activity site during core work activities. Failure to comply WILL result in a "Stop Work" order.

The Contractor's site representative shall maintain on the construction site at all times at least one complete set of Contract Drawings and Contract Documents including copies of all referenced OPSS and OPSP documents.

The site representative shall be capable of reading and interpreting the documentation and shall ensure that all work is in conformance with the Contract Documents and the Contract Drawings.

D.34 CONTRACTOR'S NOTICE TO RESIDENTS

The Contractor must provide each household and/or business on every street covered by the Contract with a copy of a letter as shown below. This letter, complete in every detail and written on letterhead paper, shall be delivered by the Contractor to each home and/or business prior to commencement of work and the Municipality must be informed by letter when such notification has been served. The letter shall be reviewed by the Contractor Administrator prior to delivery to households and /or businesses.

(Example Letter)

Name of Contractor

Date

Attention: Resident/Occupant

The firm of _____ (Construction Company) has been engaged by the Town of Renfrew to construct _____ (list of works) on your street. It is proposed that this construction will commence on or after _____ estimated start date).

Should you require any information or assistance because of our construction, please call our office at _____. As part of our contract, our company is assuming all responsibility for the construction work until it is completed in entirety. It would be appreciated if you can direct any calls or concerns to our office in order that we can address the concern as quickly as possible.

Yours truly,

Signed by Contractor

The Contractor shall not make any claim for extra compensation for the cost of fulfilling the obligations set out in this Special Provision.

D.35 PRIVATE LANDS

The Contractor shall not enter upon or occupy with people, equipment, or materials of any nature or store any materials on any private property unless he has obtained a written consent from the property owner and a copy of such consent has been furnished to the Contract Administrator.

Notwithstanding the above, the Contractor is advised that the existing easements are in place for sewer works at the east end of Munroe Street. Access to and work within these easements shall be permitted solely for the purposes of the works.

D.36 FIRE DEPARTMENT LIAISON

The Fire Department shall be informed by the contractor of the status of fire hydrants and watermains as the project progresses. Fire hydrants taken out of service are to be covered with a plastic garbage bag or similar symbol that the Fire Department will recognize.

The Fire Department must be immediately notified by the contractor of any gas leak and is available to assist with other emergencies on the work site.

D.37 FIRE HYDRANT AND GATE VALVE OPERATION

Contractors are reminded that no water shall be taken from hydrants that are not designated flusher hydrants by the Town of Renfrew. A permit is required to take water from designated flusher hydrants located at the Town of Renfrew Fire Hall. The cost of bulk water taking for the Munroe Avenue & Harry Street Project at the fire hall will be charged to the Contractor but reimbursed by the Town.

The Owner shall supply manpower to operate existing fire hydrants and gate valves. The Contractor shall submit advanced notice within a minimum 72-hour notification to the Town of Renfrew and copying the Contract Administrator for valve and hydrant operation as required to conduct the contract process. The Contractor shall avoid all requests which could lead to Municipal employees working overtime. The Contractor shall not operate any water main valves nor hydrants.

D.38 UTILITIES

Underground Utilities

The location of underground utilities shown on the Contract Drawings, are based on the information provided to the Contract Administrator. It is, however, the Contractor's responsibility to contact the Municipal Authorities or Utility Companies for further information in regard to the exact location of these utilities, to exercise the necessary care in construction operations and to take such other precautions as are necessary to safeguard the utilities from damage.

Prior to construction, the Contractor shall excavate such test pits as may be required to accurately locate all existing sewers, watermains and other underground utilities which may cross or be in conflict with the proposed underground works within this Contract to permit the Contract Administrator to determine and implement any required adjustments due to grade conflicts. The Contractor shall have no claim against the Owner for any delays or costs to replace underground works already installed which may result from failure to accurately locate any underground facility as requested in advance.

No responsibilities will be assumed by the Owner for the correctness or completeness of the plans with respect to the existing utilities, pipes, catch basins, chambers, or other objects, either underground or on the surface, and should the plots of such be found incorrect or incomplete, the Contractor shall have no claim on this account. The Owner does not ensure the accuracy of such information, and the Contractor shall not make any claim against the Owner for damages or extra work caused or occasioned by his relying upon such records, reports or information either as a whole or in part.

Overhead Utilities

The Contractor shall protect all utility poles and lines in accordance with the Utility company requirements. Payment for protection, temporary bracing, standby and associated work shall be deemed to be included in the contract price for the item associated with the protection requirement.

Utility Access

In accordance with GC7.08 "Access to Properties Adjoining the Work & Interruption of Utility Services" and any other contract requirement, during the course of the work, the Contractor will ensure access to all in-service utility structures and plants (sewer maintenance holes, water valves, etc.) within the limit of contract to the satisfaction of the local authority by the end of each construction day. Failure to comply with this requirement will result in the Contract Administrator taking whatever action is necessary to expose and grade ironworks immediately and deduct incurred expenses from monies owing to the Contractor.

D.39 ONTARIO TRAFFIC MANUAL

All references in the contract to the Manual of Uniform Traffic Control Devices (MUTCD), including all Parts and Division thereof, or MTO Traffic Control Manual for Roadway Work Operations, or Traffic Control Manual for Roadway Operations Field Edition are hereby deleted and replaced by the following books of the Ontario Manual (OTM):

- Book 1 – Introduction to the Ontario Traffic Manual;
- Book 1A – Illustrated Sign and Signal Display Index;

- Book 1B – Sign Design Principles;
- Book 1C - Positive Guidance Toolkit;
- Book 5 – Regulatory Signs;
- Book 6 – Warning Signs;
- Book 7 – Temporary Conditions (and Temporary Conditions Field Edition);
- Book 11 – Pavement, Hazard and Delineation Markings;
- Book 12 – Traffic Signals.
- Book 15 – Pedestrian Crossing Treatments

Any reference in the contract to OTM shall be deemed to be the Ontario Traffic Manual (Books 1, 1A, 1B, 1C, 5, 6, 7, 11, 12, & 15.)

The Contractor shall comply with the applicable requirements of the above Ontario Traffic Manual book(s).

D.40 CONTROL OF VEHICULAR AND PEDESTRIAN TRAFFIC

The Contractor shall provide the appropriate traffic control signage and/or appropriately attired flag persons, as required during the course of construction to comply with the safety requirements of latest edition of the M.T.O. publication “Book 7 – Ontario Traffic Manual Temporary Conditions”.

When in accordance with Section G.C.7.0.6 of the OPSS General Conditions, it is the Contractor’s responsibility to maintain a road throughout the work, the Contractor shall supply at his expense, all labour, equipment, and material to maintain the road in a satisfactory condition.

The Contractor shall be fully and solely responsible to ensure the development and implementation of a submitted/reviewed Traffic Control Plan (TCP) and Construction Site Pedestrian Control Plan (CSPCP) as required in S.P F.01.

D.40.1 Vehicle Access to Entrances and Side Roads

The Contractor shall maintain through, or around, the working area a satisfactory condition for traffic, shall provide vehicle access for all existing entrances, private approaches, and side roads, and ensure that all driving surfaces are maintained and are operational, all to the satisfaction of the Contract Administrator. All vehicle access to existing entrances, private approaches, and side roads must be fully operational once the construction for the day is completed, unless the owner of the property has provided consent to allow the access to remain closed. Documentation of consent shall be provided to the Contract Administrator. All the costs associated with this work shall be borne by the Contractor.

Any temporary loss of access/egress necessary to complete the works must be identified in the Contractor’s TCP and requires a minimum 24-hour prior notification to the business or resident(s). Such notification regarding the loss of access/egress is the sole responsibility of the Contractor.

D.40.2 Site Pedestrian Control

Pedestrian control within the work zone is the responsibility of the Contractor and shall be provided in accordance with the requirements of S.P. F.01 and the Contractor’s Construction Site Pedestrian Control Plan.

The Construction Site Pedestrian Control Plan shall ensure the provision of a safe and accessible path of travel for all pedestrians through and/or around the construction site. The plan shall ensure that

pedestrians with disabilities, as well as those with increased mobility needs (parents with strollers and/or young children, elderly pedestrians using canes, walkers, or wheelchairs, etc.), shall be accommodated either through or around the construction site at all times.

In addition to the provision of a safe and accessible path of travel for all pedestrians through and/or around the construction site, a safe and accessible path of travel shall be provided to gain pedestrian access to all buildings, properties, and other destinations within or immediately adjacent to the Contract limits.

The Contractor shall make every effort to keep the existing sidewalks as long as possible until they are removed. All temporary sidewalks shall have a firm and stable surface at all times. Granular surfaces will not be accepted. Asphalt and or rubber mats may be used as temporary surfaces. The cost of fulfilling this obligation shall be deemed to be included in the item for Construction Site Pedestrian Control Plan.

D.40.3 Pedestrian Barriers

Erection of temporary barriers or fencing is required to separate pedestrians from construction operations or related hazards to the satisfaction of the Contract Administrator in areas where existing pedestrian facilities cannot be used due to construction activities. The temporary barrier type shall be steel interlocking with a cane detectable boundary protection.

The barrier shall be constructed in a rigid and secure manner, thus providing a physical limitation through which a pedestrian would not normally pass.

All work zones shall be completely fenced at all times. The cost of fulfilling this obligation shall be as per the tender item for steel interlocking pedestrian barriers.

D.40.4 Parking

Contractor may prohibit on street parking only for the areas under construction. Other areas not under construction shall remain open for on-street parking until construction begins.

The Contractor's employees must be advised that parking regulations on Town streets in the vicinity of the construction zone will be enforced and will be subject to the Town's Traffic and Parking By-Law.

A designated safe parking area shall be specified in the Traffic Control Plan for the Contract Administrator for the duration of the contract. This parking area shall accommodate a minimum of 2 vehicles reserved for contract administration staff.

The Contractor shall make no claim for any parking tickets issued to its employees.

D.40.5 Detours

The Contractor shall be responsible to supply, install, maintain, and remove all necessary signage for any proposed detour routes. The Contractor shall submit plans and notify the Town a minimum of two weeks in advance of the requirement for the detour.

TC-64 and TC-66/67 signage shall be provided by the contractor.

D.40.6 Signage

Any road closures are the responsibility of the Contractor and any associated temporary signage, temporary line painting, and other traffic control devices are the responsibility of the Contractor, including

those which may be required outside of the construction zone (for example, TC-54 flexible drums and signs required to close auxiliary lanes).

Where required, the Contractor shall be responsible to supply and install:

RB-25 “Keep Right”

RB-41 through RB 48, “Lane Designation”

RB-90A “Construction Zone Begins”

RB-90B “Construction Zone Ends”

RB-91 “Yield to Oncoming”

Wa-33 “Object Marker”

If necessary, the Contractor shall remove the street name signs and install on temporary post for the duration of construction. The signs shall be made visible at all times and follow the approved Traffic Control Plan. The cost of fulfilling this task shall be deemed to be included in the item Traffic and Pedestrian Control Plan.

New street name signs shall be installed on new posts upon project completion. The cost of fulfilling this task shall be included in the tender bid item A-0001.

D.41 RESIDENTIAL GARBAGE COLLECTION

If the occupation of a street by the Contractor prevents, in the opinion of the Town, the Town’s waste collection contractor from carrying out the collection of garbage and/or recyclables on his regular route, the Contractor shall remove the garbage from the area to the garbage disposal site at his expense or make arrangements with the Town’s waste collection contractor to have garbage, green bin and/or recyclables set out in designated areas with containers returned to the correct property owner.

The Contractor shall not make any claim for extra compensation for the cost of fulfilling the obligations set out in this Special Provision – General.

Collection schedules can be obtained by contacting the Town of Renfrew.

D.42 LOCATION AND STORAGE OF MATERIALS AND EQUIPMENT

The Contractor shall make all necessary arrangements for his own work and storage areas at or near the site. Materials and/or equipment shall not be stored within 1m of the travelled portion of any roadway.

Notwithstanding the foregoing, the Contractor shall, at his own expense, remove any equipment or materials which, in the Contract Administrators opinion, constitutes a traffic hazard.

D.43 CLEAN UP

The Contractor shall thoroughly remove all asphaltic and other discarded materials which may have been placed along the roadway during the performance of the work. Clean up will be done to the satisfaction of the Works Inspector.

D.44 PREVENTION OF DAMAGE

The failure of the Municipality to order necessary precautionary measures, protective works or any other requirements shall not relieve the Contractor of the responsibility for the prevention of damage to the project, buildings, or other surface or sub-surface structures, or for accidents to persons, whether employed on the project or not, which might result from such failure to install, place or use such precautionary measures, protective works or other precautionary measures, protective requirements shall not relieve the Contractor from any of his responsibilities under this Contract.

D.45 EMERGENCY AND MAINTENANCE MEASURES

Whenever the construction site is unattended by the general superintendent, the name, address, and phone number of a responsible official of the contracting firm, shall be given to the Contract Administrator.

The official shall be available at all times and have the necessary authority to mobilize workmen and machinery to take any action as directed by the Contract Administrator in case emergency or maintenance measures are required; regardless of whether the emergency or requirement for maintenance was caused by the Contractor's negligence, act of God, or any cause whatsoever.

Should the Contractor be unable to carry out immediate remedial measures required, the Town will carry out the necessary repairs, the cost of which shall be charged to the Contractor.

D.46 SPILLS REPORTING

Spills or discharges of pollutants or contaminants under the control of the Contractor, and spills or discharges of pollutants or contaminants that are a result of the Contractor's operations that cause or are likely to cause adverse effects shall forthwith be reported to the Contract Administrator. Such spills or discharges and their adverse effects shall be as defined in the Environmental Protection Act R.S.O. 1980.

All spills or discharges of liquid, other than accumulated rainwater, from luminaries, internally illuminated signs, lamps and liquid type transformers under the control of the Contractor, and all spills or discharges from this equipment that are a result of the Contractor's operations shall, unless otherwise indicated in the Contract, be assumed to contain PCB's and shall forthwith be reported to the Contract Administrator.

This reporting will not relieve the Contractor of his legislated responsibilities regarding such spills or discharges.

D.47 MATERIAL DESIGN AND TEST DOCUMENTATION

Upon official notification of award of tender, the Contractor shall submit for the Contract Administrator's review and approval, the following documentation:

- Hot mix asphalt design mixes
- Concrete design mixes
- Aggregate gradation test results
- Topsoil organic test results

Hot mix and concrete designs shall identify the granular sources they are based upon and which shall be in effect for this Contract.

The topsoil sources shall be identified for this Contract.

The granular test results for Granular 'A' and 'B' shall be current and shall conform to the pit source in effect for this Contract.

All documentation shall be prepared by a licensed Geotechnical firm.

Asphalt Mix Design Requirements

General

The following requirements are in addition to the requirements provided in OPSS 310 and specific Special Provisions.

Mix designs are valid for the calendar year in which they were prepared.

Mix designs shall be submitted in writing for review a minimum of (10) ten working days before placement of the mix to the Contract Administrator.

The Contractor shall provide the Contract Administrator a minimum of 24 hours written notice prior to placing any asphalt on this project. The Contractor will be responsible for any expenses incurred as a result of his failure to provide the minimum 24-hour notice to the Contract Administrator.

Referee Testing

All costs associated with referee testing shall be the responsibility of the Contractor. Referee testing shall be conducted and shall include full compliance testing. Where the Contract Administrator and the Contractor agree that specific mix attributes do not require referee testing, those attributes will be considered acceptable. The Contractor shall be reimbursed for the cost of the testing provided the mix is acceptable as per the requirements of OPSS 310. Where referee testing indicates rejectable asphalt, the Contractor shall remove and replace the asphalt.

D.48 CONTRACTOR QUALITY CONTROL OBLIGATIONS

All mix designs, testing and sampling of granular asphalt and concrete materials required on this project will be the responsibility of the Contractor and all results will be forwarded to the Contract Administrator/Town of Renfrew. Independent testing laboratories will be the Contractor's choice but must be a Certified Member of the Canadian Council of Independent Laboratories.

D.48.1 SCOPE

This Specification describes the Contractor's Quality Control obligations under this Contract. The Contractor is responsible for all quality control activities required to ensure the level of quality for all aspects of the Work specified elsewhere in this contract. The Contractor shall provide the individuals, the management of such individuals and resources necessary to implement a quality control process which meets the requirements detailed in the Contract Documents.

D.48.2 REFERENCES

D.48.2.1 Ontario Provincial Standard Specifications, Material

OPSS 1001 Aggregates – General OPSS 1002 Aggregates – Concrete

OPSS 1003 Aggregates – Hot Mix Asphalt

OPSS 1010 Aggregates – Base, Sub-base, Select Subgrade, and Backfill Material

OPSS 1101 Performance Grade Asphalt Cement OPSS 1301 Cementing Materials

OPSS 1350 Concrete – Materials and Production

Section 1101.02 of OPSS 1101 is amended by the addition of the following under Ontario Ministry of Transportation Publications:

LS-100 Method for Rounding-Off of Test Data and Other Numbers

Section 1101.02 of OPSS 1101 is amended by the deletion of the following under American Association of State Highway and Transportation Officials (AASHTO):

TP 70 Multiple Stress Creep and Recovery (MSCR) of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)

Section 1101.02 of OPSS 1101 is further amended by the addition of the following under American Association of State Highway and Transportation Officials (AASHTO):

T 350-14 Standard Method of Test for Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)

D.48.2.2 Ontario Provincial Standard Specifications, General

OPSS 206 Grading

OPSS 314 Untreated Granular, Subbase, Base, Surface, Shoulder, and Stockpiling

OPSS 401 Trenching, Backfilling and Compacting OPSS 501 Compacting

D.48.3 DEFINITIONS

Acceptance Test Results: means the test results that are used for the final assessment of compliance with the specification for the material. Depending on the specification for the material, the final assessment of compliance is based on one of the following: quality control, quality assurance, owner acceptance, or referee test results.

Deficient Materials: means, for quality control purposes, materials which have an attribute, property or characteristic that does not meet the requirements of the Contract Documents

Deficient Workmanship: means, for quality control purposes, the final product does not meet the requirements of the Contract Documents due to the Contractor's construction activities including but not limited to incorrect elevations, dimensions, alignment, appearance and/or crossfall of individual elements, products and finished construction (for example: incorrect pavement crossfall, segregation of asphalt pavement or honeycombing of concrete).

Quality Control (QC): means a system or series of activities carried out by the Contractor to ensure that the final product and materials supplied to the Owner meet the specified requirements.

Quality Control Administrator (QC Administrator): means the Contractor's representative responsible for monitoring and ensuring quality control compliance and submission of QC documentation.

Notification of Non-Conformance: means a formal notification by the Contract Administrator to the Contractor identifying aspects of the work which do not conform to the Contract requirements and which have not been adequately identified by the Contractor to the Contract Administrator.

Non-Conformance Report: means a report issued by the Contractor to the Contract Administrator which identifies the Quality Control Performance Measure that was not met, will not be met, or may not be met. This report will include a proposal for corrective or mitigating action and must be approved by the Contract Administrator.

D.48.4 DECLARATIONS OF QUALIFICATIONS

D.48.4.1 Submissions

The Contractor shall submit a Declaration of Qualifications, identifying the Quality Control Administrator, other quality control personnel and/or firms to the Contract Administrator prior to commencing work on the project. If, for any reason, the Contractor decides to substitute the named quality control individual(s) or firm(s) a Declaration of Qualifications accompanied by proof of experience shall be submitted to the Contract Administrator five days prior to the changed quality control personnel and/or firms providing services to the Contractor.

The Contract Administrator will respond in writing with an acknowledgement of receipt. Submissions that are incomplete or otherwise do not meet the requirements of this Special Provision will be returned for re-submission at no additional cost to the Owner.

D.48.5 QUALITY CONTROL PERFORMANCE MEASURES

D.48.5.1 General

The Contractor is responsible for all quality control activities on the Contract and shall provide the staff and resources necessary to implement quality control processes that result in compliance to the quality control performance measures.

D.48.5.2 Applicability of the Quality Control Performance Measures

The Contract Administrator will assess the Contractor's compliance to the performance measures related to:

- a) The production and supply of Engineering Materials,
- b) The removal, rehabilitation, modification or construction of temporary or permanent elements of work that are comprised of Engineering Materials, and
- c) Inspection, sampling, testing and QC records associated with a) and b) above.

For the purposes of this special provision, Engineering Materials includes, but not limited to:

- Granular Base & Sub-Base Materials
- Bituminous Materials

- Concrete Materials
- Electrical Materials
- Grading, Drainage and Backfill Materials
- Structures and Foundations Materials
- Pavement Markings Materials
- Water Plant Materials
- Sewer Infrastructure Materials

D.48.5.3 Quality Control Personnel/Firms

The Contractor shall ensure that:

- a) The name of the QC Administrator is identified to the Contract Administrator, in writing when specified, before they carry out the positions' responsibilities. If the Contractor divides the QC Administrator's responsibilities between more than one person, the Contract Administrator is provided with their names and a written explanation of the responsibilities of each person before any of them carries out the position's responsibilities,
- b) The QC Administrator shall attend all contract meetings.
- c) The QC Administrator shall only undertake quality related responsibilities as described within this Special Provision.
- d) Submissions of declarations for firms and personnel performing QC functions are accurate, complete and submitted in accordance with the timeframes as detailed in Section 4.1 Submissions,
- e) Personnel and firms meet the qualifications as specified in the Contract Documents and maintain these qualifications for the duration of their participation in the work.

D.48.5.4 Sampling, Testing and Submission of Results

The Contractor shall ensure that QC test results are recorded on the day on which the tests were performed and are submitted to the Contract Administrator under the signature of the QC Administrator, and that each of the following is performed in accordance with the Contract Documents:

- a) quality control and quality assurance material sampling, preparation, handling, delivery and storage, quality control testing and the timing for the testing, and timing for the submission of results for all quality control testing.

D.48.6 PGAC Requirements

Subsection 1101.08.03 of OPSS 1101 is amended by deleting the last paragraph in its entirety and replacing it with the following:

Sampling frequency, minimum quantities and additional labelling shall be as shown in Table 2.

D.48.7 1101.08.06 Referee Testing

Subsection 1101.08.06 of OPSS 1101 is amended by deleting the first paragraph in its entirety and replacing it with the following:

Referee testing by an independent laboratory may be invoked by the Contractor for any lot of PGAC within 5 Days of receiving all the QA test results for the lot.

Table 1 is deleted in its entirety and replaced with the following:

Table 1:

Additional Testing Requirements and Acceptance Criteria for All PGAC Grades (Notes 1 and 2)

PGAC Grade	Property and Attributes (Unit)	Test Method	Results Reported Rounded to Nearest	Acceptance Criteria	Major Borderline	Rejectable
All PGAC Grades except PG58-28 PG58-28	Ash Content, % by mass of residue (%)	LS-227	0.01	≤ 0.60	> 0.60 and ≤ 0.80	> 0.80
				≤ 0.40	> 0.40 and ≤ 0.60	> 0.60
All PGAC Grades Except PG58-28 and PG52-34	Non-recoverable creep compliance at 3.2 kPa (J _{nr-3.2}) (kPa ⁻¹)	AASHTO T 350 testing conducted at * °C	0.01	< 4.50	N/A	≥ 4.50
	Average percent recovery at 3.2 kPa (R _{3.2}) (%)		0.1	> the lesser of 55.0 or [(29.371) (J _{nr-3.2}) ⁻	N/A	≤ the lesser of 45.0 or [(29.371) (J _{nr-3.2}) ^{-0.2633} -10]
	Percent difference in non-recoverable creep compliance between 0.1 kPa		0.1	Testing carried out for information purposes only		
PG70-28, PG64-28	CTOD, δ _t (mm)	LS-299	0.1	≥ 10.0	< 6.0 and ≥ 4.0	< 4.0
	Low temperature limiting grade (LTLG) (°C)	LS-308	0.1	≤ -	> -25.0 and ≤ -	> -22.0
	Grade Loss (°C)	LS-308	0.1	≤ 6.0	> 6.0 and ≤ 8.0	> 8.0
PG58-28	CTOD, δ _t (mm)	LS-299	0.1	≥ 6.0	N/A	< 4.0
	Low temperature limiting grade (LTLG) (°C)	LS-308	0.1	≤ -25	> -25 and ≤ -22.0	> -22.0
	Grade Loss (°C)	LS-308	0.1	≤ 4	N/A	> 6.0
PG70-34, PG64-34, PG58-34, PG52-34	CTOD, δ _t (mm)	LS-299	0.1	≥ 14.0	< 10.0 and ≥ 8.0	< 8.0
	Low temperature limiting grade (LTLG) (°C)	LS-308	0.1	≤ -	> -31.0 and ≤ -	> -28.0
	Grade Loss (°C)	LS-308	0.1	≤ 6.0	> 6.0 and ≤ 8.0	> 8.0
PG58-40, PG52-40	CTOD, δ _t (mm)	LS-299 (Note 2)	0.1	≥ 18.0	< 14.0 and ≥ 12.0	< 12.0
	Low temperature limiting grade (LTLG) (°C)	LS-308	0.1	≤ -	> -37.0 and ≤ -	> -34.0
	Grade Loss (°C)	LS-308	0.1	≤ 6.0	> 6.0 and ≤ 8.0	> 8.0

Notes:

1. PGAC grades are as specified in the Contract Documents.
2. The rounding-off procedure, for all values, shall be according to LS-100.
3. Sections 6.1 and 6.3 of LS-299 (Rev 31 dated 2017 09 01) are deleted and replaced with the following:
 - 6.1 After trimming, condition the samples on their base plates at $15 \pm 0.5^{\circ}\text{C}$ for $3 \text{ h} \pm 5 \text{ min}$ in their molds in a temperature-controlled bath under a minimum of 25 mm of water.
 - 6.3 Run the test according to AASHTO T 300 at a displacement rate of $50 \pm 2.5 \text{ mm/min}$ in a bath maintained at $15 \pm 0.5^{\circ}\text{C}$, until ductile failure is reached, or a stroke length of 1000 mm is reached.

Table 2 is deleted in its entirety and replaced with the following:

Table 2: Sampling Requirements

Samples	Frequency	Minimum Sample Quantity	Labelling
QA	Each Lot	2 litres (Note 1)	Label shall include:
Referee	Each Lot	2 litres (Note 1)	- Grade - Supplier
Samples for possible Owner testing (Note 2)	First Lot for each grade and source of asphalt cement used on the Contract and for any subsequent Lot requested by the Contract Administrator.	2 litres (Note 1)	Label shall include: - Grade - Supplier - MERO Sample

Notes:

1. Two litres shall be provided in 2 suitable one litre containers or a container able to hold a minimum of 2 litres.
2. Samples for possible Owner testing shall be delivered to:
Materials Engineering and Research Office (MERO)
Bituminous Laboratory, Room 15
145 Sir William Hearst Avenue
Downsview, Ontario M3M 0B6

D.48.8 Construction Materials and Mix Designs

D.48.8.1 Concrete Mix Data Submission

At least two weeks prior to the delivery of concrete, the Contractor shall submit the following concrete mix information to the Contract Administrator for review and approval.

- a) Purchaser's name
- b) Contract number
- c) Concrete supplier name
- d) Supplier mix design number. The mix number shall be unique to the design submitted.
- e) Primary and secondary plant locations
- f) Cement Type
- g) Cement content of the mix
- h) Maximum water-to-cementing materials ratio (W/C)
- i) Maximum content of each supplementary cementing material
- j) Material source information including inventory number
- k) General admixtures usage including manufacturer and brand name.

- l) Air and slump requirements
- m) All relevant information pertaining to mix use. Where multiple mixes are to be used on a project, the contractor is to supply a concrete placement plan detailing the location where each mix is to be placed.

Sampling, testing, and preparing test cylinders shall be done as per CSA A23.1-14/A23.2- 14.

Field concrete testing and sampling shall be conducted by qualified individuals with valid ACI or CCIL certification.

D.48.9 1101.04.01.02 PGAC Documentation

For each grade of PGAC specified in the Contract Documents, the Contractor shall supply the following items to the Contract Administrator 2 weeks prior to the commencement of HMA production:

- a) PGAC documentation from the asphalt cement supplier in the form of bill of lading and certificate of analysis, confirming the grade of PGAC. The bill of lading and certificate of analysis shall also be supplied for each subsequent delivery of PGAC that will be used for the HMA production.

Documentation identifying the PGAC storage tank that the PGAC will be supplied from for the HMA production. The Contractor shall notify the Contract Administrator and provide updated documentation prior to changing the storage tank that is being used to supply PGAC for the HMA production.

D.48.10 QC Compaction Plan Submission

The Contractor shall, at least ten (10) business days prior to commencing work, provide the CA with a QC Compaction plan that shall include the following information:

- Contract Number
- Contract Name
- General Contractor Name
- Quality Control Administrator Name
- Subcontractor conducting the compaction, if different than general Contractor
- Name of the person conducting the QC Testing using nuclear gauge
- Make and Model of the Nuclear Density/Moisture Gauge
- Calibration Date of the Nuclear Density/Moisture Gauge
- Name of the lab conducting the QC testing.
- Section/Lot/Sublot Structure including a) the tender item number that the lot corresponds to b) material type and c) method of determining target density.
- Identification of any perceived areas with potential difficulties (i.e. around existing utilities, constrained spaces) and the compaction methodology that will be followed for these areas.

The Contractor shall ensure:

- a) Each of the following complies with and is supplied in accordance with the Contract Documents:
 - i. materials from approved/designated sources,
 - ii. mix design submission, including all supporting documentation, and
 - iii. submission of certification for all materials that require certification.
- b) Each of the following is performed in accordance with the Contract Documents:
 - i. mix designs,

- ii. materials testing and/or inspection prior to incorporation into the work, and checking that materials meet the applicable specifications,
- iii. materials handling and/or storage, and that no materials are used that are identified as deficient prior to incorporation into the work. The Contractor shall ensure that no materials are used that would have been identified as deficient prior to incorporation into the work if QC test results had been available when specified.

D.48.11 Other Quality Control Responsibilities

The Contractor shall ensure that all QC inspection activities and associated records are completed in accordance with the quality control requirements of the Contract Documents and that each of the following is in accordance with the Contract Documents:

- a) submission of materials-related documentation prior to proceeding with construction of particular elements of work,
- b) the existing condition of substrate, formwork or other locations against which material is to be placed,
- c) environmental conditions for material placement, including but not limited to temperature and weather constraints and placement restrictions,
- d) equipment,
- e) construction methods for material placement and/or removal, and
- f) provision of environmental protection of materials and elements of work and/or maintenance of environmental conditions after material placement (for example, curing of concrete, cold weather protection).

D.48.12 Disposition of Deficient Materials and Workmanship

For each occurrence of deficient materials and/or workmanship the Contractor shall:

- a) Immediately identify and notify the Contract Administrator of the deficiency prior to the Contract Administrator bringing it to the Contractor's attention,
- b) Implement preventative measures prior to continuing with the operation and shall not proceed with subsequent operations that would prevent or impede corrective work on the deficiency,
- c) Record a brief description of the deficiency in a daily diary immediately after identifying the deficiency and the complete details within one business day of each occurrence,
- d) Within 3 business days, unless otherwise mutually agreed in writing, submit a Deficiency Report to the Contract Administrator containing the following:
 - i. the cause and extent of the identified deficiency,
 - ii. a proposal for corrective work
 - iii. for information purposes, a description of preventative measures to be undertaken that will effectively prevent reoccurrence of the event, and
 - iv. a testing and/or inspection proposal for the written approval of the Contract Administrator and undertake the approved testing and/or inspection to demonstrate that the corrective action has been effective, and the resulting material or elements of work are acceptable, and
- e) Implement the corrective work, testing and/or inspection in accordance with the approved proposals.

D.48.13 COMPLIANCE WITH QUALITY CONTROL PERFORMANCE MEASURES

D.48.13.1 Assessment of Compliance

During the course of construction and within 30 calendar days after the date of certification of Completion of the Work, the Contract Administrator will assess compliance to the quality control performance measures.

The Contract Administrator's assessment of compliance may consist of random or milestone inspections, continuous inspection, sampling and testing for audit purposes, audits of the quality control documentation specified in the Contract Documents or any combination of the preceding actions, at the discretion of the Owner.

For workmanship, if the Contract Documents do not specify a test method or tolerance for a specified property or measurement of a final product and the Contract Administrator identifies deficient workmanship in the final product that the Contractor did not identify, the Contract Administrator will provide the Contractor with a description of the deficiency in writing within three business days of its identification. The Contractor shall use the Contract Administrator's assessment of compliance of that particular aspect of workmanship for inspection of work already completed and for future work.

D.48.13.2 Non-Conformances to Quality Control Performance Measures Identified by the Contractor

A non-conformance to a quality control performance measure occurs when the Contractor does not comply with that quality control performance measure.

When a non-conformance occurs, the Contractor shall:

- a) immediately notify the Contract Administrator verbally or in writing.
- b) within 24 hours of the non-conformance, submit a Non-Conformance Report containing a description of the quality control performance measure that was not met together with a proposal for corrective or mitigating action to the Contract Administrator for approval, and
- c) carry out corrective or mitigating action in accordance with the approved proposal.

D.48.13.3 Non-Conformances to Quality Control Performance Measures Identified by the Contract Administrator

A non-conformance to a quality control performance measure occurs when the Contractor does not comply with that quality control performance measure.

When a Notification of Non-Conformance is issued to the Contractor, the Contractor shall:

- a) Within 24 hours of the non-conformance, submit a Non-Conformance Report containing a description of the quality control performance measure that was not met together with a proposal for corrective or mitigating action to the Contract Administrator for approval, and
 - b) Carry out corrective or mitigating action in accordance with the approved proposal
 - c) Within 24 hours after a non-conformance has been assessed, the Contractor shall comply with the requirements of the Contract Documents that were the subject of the non-conformance. The non-conformance will not be waived regardless of the Contractor's subsequent compliance.
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D.48.13.4 Financial Penalties

For each non-conformance report issued to the Contractor by the Contract Administrator, or for each failure of the contractor to follow the requirements of clause 13.2 a \$500.00 deduction shall be made from the Contractor's final progress payment. The final decision on the application of a penalty shall be at the sole discretion of the Owner.

D.48.14 **PAYMENT**

D.48.14.1 Quality Control Activities

Full compensation for carrying out quality control activities and for meeting the requirements of this Special Provision shall be included in the contract prices of the Work.

D.49 **ROCK EXCAVATION**

Bedrock removal should be carried out, if required, using large hydraulic excavation equipment in combination with hoe ramming and or line drilling. Given the proximity to existing services and structures, blasting techniques are not an acceptable method of excavation for this contract.

D.50 **PRE-CONSTRUCTION SURVEY**

One week prior to commencement of operations the Contractor shall file with the Owner and Contract Administrator a pre-construction survey completed by a professional firm of the municipal right-of-way and of properties adjoining the work. Refer to Section *F.05 – Pre-Construction Inspection* for additional requirements.

D.51 **CONTRACT ADMINISTRATOR'S FIELD OFFICE**

Scope

Under this tender item, the Contractor shall supply and maintain a field office and its associated items for the sole use of the Contract Administrator or his representatives prior to the beginning of construction.

Location

Prior to the commencement of work on this tender item, the Contractor shall receive approval from the Contract Administrator for the location of the field office.

Field Office Dimensions and Condition

The field office shall have a minimum floor area of 24 m².

All doors shall be solid and capable of being locked with a 25 mm throw dead bolt lock.

The inside of the field office shall be moisture tight and capable of being lit to a level that is satisfactory to the Contract Administrator. It shall have adequate windows, heating, and ventilating equipment capable of maintaining the working area at 21°C during both summer and winter weather conditions.

Field Office Equipment

The Contractor shall supply for the sole use of the Contract Administrator the following furnishings for the appropriate trailer size:

- Floor Area 24 m²
- 2 – drafting tables (2 m² ea.)

1 – lockable filing cabinet (3 drawers)

2 – stools

Adequate number of chairs to accommodate site meetings 1 electrical adding machine

1 – plan rack

The Contractor shall supply a water cooler capable of maintaining a water supply of 7°C, and a small, refrigerated compartment. Water shall be potable and supplied at a rate as dictated by the Engineer.

Utilities and Sanitary Facilities

The Contractor shall provide within the floor area of the field office a working telephone line and hydro facilities for the sole use of the Contract Administrator.

It is the responsibility of the Contractor to provide and maintain adequate sanitary facilities for the exclusive use by Owner staff and its Consultants.

Measurement for Payment

Payment at the contract unit price will be compensation in full for the Contract Administrator's field office.

- a. The Contractor shall include in the contract unit price all costs for connections with the above facilities, including but not limited to:
- b. Service and connection charges for utilities and services.
- c. Heating and ventilating costs.
- d. The supply of bottled water.
- e. All land and rental costs for the field office.
- f. Supply of steps or stairs so as to provide proper access to field office.
- g. The provision of at least two (2) parking spaces adjacent to field office, with at least a gravel surface.
- h. Winter maintenance (snow removal, sanding).
- i. Removal of the field office, clean-up and reinstatement of the area occupied by the field office.

D.52 MANAGEMENT AND DISPOSAL OF EXCAVATED SOILS, EXCESS MATERIAL AND CONTAMINATED SOIL

OPSS.MUNI 180 and all contract provisions for the management of soil are extended and amended herein.

General

This Special Provision covers the requirements for the management and deposition of all excess soil generated from the Contract. Where the item specifications for work generating excess soils does not include OPSS.MUNI 180, OPSS 180.MUNI and this specification shall be deemed to apply and are in addition to any requirements provided in the item specific special provisions.

The Contractor is advised to comply with Ontario Regulation (O. Reg.) 406/19 On-Site and Excess Soil Management, as amended, the Waste Regulation (O.Reg. 347/90), associated regulations and all other documents applicable to O. Reg. 406/19 including, but not limited to, the Rules for Soil Management and

Excess Soil Quality Standards (Soil Rules). Any reference throughout the document to O. Reg. 406/19 also refers to the Soil Rules, as applicable.

The Town is the Project Leader for this Project. A Section 8 Notice will not be filed on the Registry for this project, as this project is deemed to be exempt under O. Reg 406/19.

The Contractor is the Operator of the Project Area and shall be responsible for the management of all soil, aggregates and excavated rock associated with this Project, including but not limited to excavation, handling, temporary storage, sampling and analysis, transportation, placement and disposal, whether it is reused on-site, removed off-site or imported to the Project Area for use as fill.

Unless otherwise specified in the contract documents, the Contractor shall be responsible for designating Receiver Sites (i.e., soil reuse sites and/or disposal sites) for the management of excess soil generated from the project.

The Contractor shall retain the services of a Qualified Person (QP-C) and fulfill all the requirements of a Qualified Person with respect to on-site soil management and placement of excess soils on Contractor designated Receiver Sites in accordance with O. Reg 406/19 and all applicable laws. The Contractor’s QP-C shall be familiar with the MECP’s document entitled “Management of Excess Soil – A Guide for Best Management Practices” (BMP), as amended, and the objectives of O. Reg. 406/19 which encourage the beneficial reuse of excess soil in a manner promoting sustainability and the protection of the environment. The QP-C shall be aware of their professional and ethical responsibilities as outlined in the PEO’s Environmental Site Assessment, Remediation and Management Guideline and shall meet the following minimum requirements:

1. 10 years or more of demonstrated work-related experience as a Qualified Person (QP_{ESA}) for projects of similar size, scope and complexity to the current project.
2. A current license to practice within Ontario such as Professional Engineers of Ontario or Professional Geoscientists of Ontario.
3. Demonstrated knowledge of relevant federal and Ontario environmental policies, procedures and legislations/regulations, including O.Reg. 406/19 and O.Reg. 153/04.
4. Not in a conflict of interest, as defined in O.Reg. 406/19, Section 26.

The Town has retained a Qualified Person (QP-PL) to prepare design studies and to support the review of applicable Contractor submissions and deliverables by the Contract Administrator.

Types of Excess Soil

For the purpose of this specification, excess soil has been categorized as follows:

Excess Soil Type	Description	Material Use Recommendation
1	Material that: <ul style="list-style-type: none"> • Meets MECP Table 1 RPI/ICCSCS • Meets MECP Table 3 ICC SCS • Meets MECP Table 3.1 RPI ESQS 	<ul style="list-style-type: none"> • Re-use on site as clean / inert fill; • Re-use on-site; • Re-use at Mat-e-Way Infilling beneficial re-use site;

	<ul style="list-style-type: none"> Meets MECP Table 3.1 ICC ESQS Provided the material is free of deleterious substances, odour and discolouration(i), (ii) 	<ul style="list-style-type: none"> Re-use at Town of Renfrew Gravel pit beneficial re-use site; or, Dispose of at MECP Licensed Landfill
2	<p>Material that:</p> <ul style="list-style-type: none"> Exceeds MECP Table 1 RPI/ICC SCS Meets MECP Table 3 ICC SCS for all parameters or meets for all except EC and SAR Meets MECP Table 3.1 RPI ESQS for all parameters or meets for all except EC and SAR Meets MECP Table 3.1 ICC ESQS for all parameters or meets for all except EC and SAR Provided the material is free of deleterious substances, odour and discolouration(i), (ii) 	<ul style="list-style-type: none"> Re-use on-site; Re-use at Mat-e-Way Infilling beneficial re-use site providing the provisions of the Rules document regarding salt impacted excess soils (Section D.1 (3)) can be adhered to and/or; Re-use at Town of Renfrew Gravel Pit beneficial re-use site providing the provisions of the Rules document regarding salt impacted excess soils (Section D.1 (3)) can be adhered to and/or; Dispose of at an MECP Licensed Landfill
3	<p>Material that:</p> <ul style="list-style-type: none"> Exceeds MECP Table 1 RPI/ICC SCS Exceeds MECP Table 3 ICC SCS Exceeds MECP Table 3.1 RPI ESQS Exceeds MECP Table 3.1 ICC ESQS Provided the material is free of deleterious substances, odour and discolouration(i), (ii) 	<ul style="list-style-type: none"> Dispose of at an MECP Licensed Landfill
<p>Note: Tables above refer to those presented in the MECP Rules for Soil Management and Excess Soil Quality Standards (ESQS)</p>		
<p>Notes:</p> <p>i. If deleterious material, odours, or discolouration is identified, the material should be separated from the bulk soil to be sampled to confirm waste class and, pending confirmation, disposed of at an approved licensed landfill.</p> <p>ii. Landfill disposal dependant on confirmation of acceptance by chosen landfill.</p>		

Town infrastructure projects are expected to generate excess soil with high salt impacts. The Contractor shall select Receiving Sites which permit the deposition of salt impacted soils in accordance with MECP guidelines.

Excess Soil Receiving Sites Designated by the Owner

Owner Designated Reuse Sites

- Town of Renfrew Gravel Pit
- Mat-Te-Way Park infilling

Owner Designated Class 1 Soil Management Site or MECP Landfill

-
- No sites are identified by the Owner for the management and disposal of Category 3 excess soils generated from the project.

Owner Designated Stockpile Sites

- No sites have been designated by the owner for the temporary stockpiling of soils within the Project Area.

Excess Soil Receiving Sites Designated by the Contractor

Contractor Designated Reuse Sites

- Contractor Designated Reuse Sites have NOT been identified as a requirement of this contract.

Contractor Designated Class 1 Soil Management Site and/or MECP Landfills

- **Contractor designated Class 1 SMS and/or MECP landfill(s) shall be identified as a requirement of this contract.**

Contractor Designated Stockpile Sites

- The Contractor shall be responsible for the temporary stockpiling of soils for the purpose of reuse within the project. The contractor shall not stockpile soils for future reuse outside of the current contract requirements.

The Contractor shall provide a list of proposed Receiving Sites within 15 days after contract award for review by the Contract Administrator. The Town reserves the right to contact the owner/operator to request and review any applicable Environmental Compliance Approvals, Reuse Site Fill Management Plans, or any other pertinent information about the proposed Receiving Site(s) as may be required to confirm the suitability of the proposed Receiving Site for deposition of excess soils prior to approval. All excess soil sent to a Reuse Site must be finally placed for a beneficial purpose in accordance with the Soil Rules within 2 years of being deposited.

The Contractor shall not utilize any alternate Receiving Sites other than those identified by the Town or Contractor and approved by the Contract Administrator without expressed written consent by the Town.

The Contractor is responsible for all coordination with the Receiving Sites, including the costs of undertaking any additional soil sampling and analysis necessary to comply with all Contractor-designated Receiver Site requirements. All costs related to delays in sourcing a Contractor-designated Receiving Site meeting the requirements of the Excess Soil Regulation shall be the sole responsibility of the Contractor.

The Town reserves the right to direct excess soil to an alternative Town controlled location at their sole discretion. Any additional haul costs associated with directing soil to an alternative site shall be negotiated with the Contractor based on an assessment of additional haul distance and other demonstrated cost factors attributed to aggregate back hauls. Site tipping fees will not be measured for payment for the quantity of soil directed to an alternative Town controlled location.

Management of Excavated Materials

The Contractor shall preferentially re-use soil as backfill and grading fills within the Project Area in a manner that is consistent with Best Management Practices for the Management of Excess Soil, O.Reg. 406/19, and the Ontario Environmental Protection Act.

The Contractor shall not mix or blend materials of differing excess soil quality standards. Specifically, the Contractor shall ensure that soils of lower category are not mixed with soils of higher category.

All asphalt pavement, and concrete shall be disposed of at a licensed pit or quarry for subsequent reuse as engineered materials. Where excavated road granulars or other recyclable aggregates have been identified for recycling at a pit/quarry, at a City stockpile location or for reuse within the work area, these materials shall not be mixed with other excavated site soils.

Hydro-excavated materials shall be disposed of at an MECP licensed facility capable of accepting liquid soils based on the identified soil quality.

The disposal of non-soil materials such as excavated bedrock, removed pipes and other scrap material shall be the sole responsibility of the Contractor.

Management of excavated soils will require scheduling and staging of the work such that excavated soils can be beneficially re-used on-site as backfill, subject to geotechnical and environmental suitability. Soil shall be stored in accordance with Soil Storage Rules as outlined in Section C of the Soil Rules.

The Contractor shall, to the extent practicable, minimize the quantity of excess soil leaving the site by minimizing excavation sizes to no greater than what is required to accomplish the Work and shall re-use suitable excavated site soils to address backfill and grading needs within the project.

Where insufficient quantities of excavated soil remain available from the current work area to meet immediate backfill requirements, the Contractor shall organize the work such that backfill materials can be sourced from other portions of the work or from stockpiles of previously excavated materials from the Project Area. The use of Select Subgrade Materials or other imported fill materials to meet immediate backfill quantity requirements shall be at the sole discretion of the Contract Administrator.

Where excess soils are generated from the project, the Contractor shall preferentially remove from site lower category soils prior to removing higher category excess soils subject to higher disposal costs.

The OPSS 180.MUNI Excess Soil Reuse Plan shall be replaced with a Soil Management Plan. The Soil Management Plan shall be prepared by the Contractor's QP-C in compliance with the contract requirements as outlined in the applicable Special Provision. Implementation of the Soil Management Plan shall be overseen by the Contractor's QP-C.

Excess Soil Quality and Characterization

The Contractor is hereby informed that the following soils information is provided for the Contractor's consideration in determining the excess soil management and disposal requirements for the project including selection of Contractor Designed Receiving sites, where required:

- Soil Quality Screening Characterization Report, Gemtec, dated January 27, 2023, included in **Section G.**

The Contractor shall review the soil report presented above for more complete understanding of the expected soil quality at the site.

Excess soil has been classified as either Category 1, 2 or 3. Refer to Appendix A of this Special Provision for restrictions for onsite reuse and offsite receiving site category within the project limits and, where applicable, by soil type.

No hazardous waste has been identified within the project limits. Subsurface workers should wear personal protective equipment (e.g., gloves, long pants) when in direct contact with soil to mitigate exposure to contaminants in soil. In addition, dust mitigation measures should be used to minimize dust levels. If there are visible levels of dust, dust masks should be worn.

If the Contractor or their sub-contractor or employees working in the Project Area makes an observation during excavation within the Project Area, including any visual or olfactory observation, that suggests that the material being excavated may be affected by the discharge of a contaminant not identified in the design studies, the Contract Administrator shall be notified immediately and the suspect soil shall be segregated from other excavated soil in the Project Area until the Contractor is otherwise notified by the Contract Administrator.

Soil Testing and Classification

If the owner or operator of the Receiving Site(s) require additional soil sampling and analysis, beyond what has been provided in the Contract Documents, the Contractor's QP-C shall carry out all additional sampling, analyses and reporting as required. All costs associated with additional testing to satisfy receiving site requirements shall be the sole responsibility of the Contractor. This includes any waste classification or leachate testing of excess soil required to meet MECP licensed landfill entry requirements and additional testing required to meet volumetric sampling and analysis requirements in accordance with the Soil Rules for reuse of soils at a non-instrument site.

The Contractor shall provide the results of any additional sampling and analysis carried out by the Contractor's QP-C to meet the Receiving Site(s) requirements to the Contract Administrator within 5 days of receiving the results.

Hauling, Transportation, and Excess Soil Tracking

The Contractor shall ensure that all excess soil and excess soil designated as waste is collected and transported by retained haulers in vehicles satisfying the requirements of O. Reg. 406/19.

The Contractor shall ensure that vehicle operators have available at all times during the transportation of excess soil a complete and accurate written or digital haul record that document excess soil movement for every load leaving the project in accordance with O. Reg, 406/19 Sections 18(1). The Contractor shall further ensure that all haul records are completed with the receiver information and that the receiver site representative signs the declaration on the hauling records in accordance with Section 18(2). Use of proprietary soil tracking software in lieu of haul records is acceptable, provided it meets the requirements of O. Reg 406/19 Sections 18(1) and 18(2). Documentation related to hauling and tracking of excess soils

shall be prepared in compliance with the contract requirements as outlined in the applicable Special Provision.

Additionally, the Contractor shall retain all excess soil related information for a period of two years after substantial performance of the Contract and provide this information to the City upon request at any time during this retention period.

Basis of Payment

Payment for all plans, reports, documentation, and record-keeping to support excess soils management and deposition shall be under the Soil Management Plan and Documentation Contract Item.

All costs associated with management of soils for immediate or subsequent re-use on site of excavated soil shall be deemed to be included in the associated tender item requiring the excavation of soil.

All costs associated with the haulage and disposal of Category 1 or 2 excess soil shall be deemed to be included in the associated tender item requiring the excavation.

All costs associated with the haulage and disposal of Category 3 excess soil shall be deemed to be included in the tender items for haulage and disposal of Category 3 excess soils.

No additional payment will be made for increased handling, scheduling, delays, construction staging or stockpiling of materials for reuse on-site or off-site.

APPENDIX A – SOIL CLASSIFICATION

Considering the soil quality sampling results obtained, the proposed material categories for the borehole sampling locations within the project area are provided below. The recommended material categorizations presented are based on discrete sampling locations within the boreholes and may not be representative of the soil quality conditions between sampling locations. Should any indication of contamination be identified during construction, additional sampling to confirm soil quality is recommended.

Location	Material Categorization
Vicinity of BH22-01	2
Vicinity of BH22-05	2
Vicinity of BH22-07	3

D.53 GEOTECHNICAL INVESTIGATION

The Contractor is hereby informed of a Geotechnical Investigation Report prepared by GEMTEC Consulting Engineers and Scientists Limited, dated March 2023, which is available for review in SECTION G: GEOTECHNICAL INVESTIGATION of these tender documents.

The geotechnical information shown on the drawings was obtained for the purposes of preparing the design of the project only and is provided for general information purposes only. The information indicates the subsurface conditions at the specific test locations only. The Contractor should examine the factual results of the investigation to satisfy themselves as to the adequacy of the information for construction purposes and make their own interpretation of the factual data as it affects their construction techniques, schedule, safety, and equipment capabilities.

The Contractor declares that in tendering for the work and entering into the contract, he did not and does not rely upon the accuracy of any geotechnical information provided by the Owner. The tenderer acknowledges that all geotechnical information provided by the Owner is for information only and the Owner makes no representation or warranty as to the accuracy of the information.

The Geotechnical Investigation Report is specifically excluded from the warranty stated in Subsection GC2.01 of the OPS General Conditions.

The contractor is responsible for modification of any construction practices based on the geotechnical investigation recommendations.

D.54 COMPLIANCE WITH REGULATIONS FOR EROSION AND SEDIMENT CONTROL

The Contractor acknowledges that surface erosion and sediment runoff resulting from his construction operations may have a detrimental impact on any downstream watercourse or sewer, and that all construction operations that may impact upon water quality shall be carried out in a manner that strictly meets the requirements of all applicable legislation and regulations on Application of Erosion and Sediment Control on Construction Projects.

The Contractor shall consider control measures such as limiting the amount of exposed soils, using filter cloths in catch basins or other open structures, sedimentation traps or other such methods they deem appropriate in order to minimize the negative impacts their construction activities will have on the area drainage systems and ultimately the receiving water course.

Whatever system of controls the Contractor utilizes on the project, it is necessary for them to monitor the effectiveness of the measures regularly and maintain, clean, repair, replace or undertake any additional measures in order to achieve the desired results.

The contractors acknowledges that failure to implement appropriate erosion and sediment control measures may be subject to penalties imposed by any applicable Regulatory Agency.

The cost of fulfilling this work shall be paid for under the appropriate tender item.

D.55 WORK IN CONFINED SPACES

Subsection GC7.01, General, of the OPS General Conditions shall be supplemented by the following provisions:

The Contractor shall provide their detailed written Confined Space Entry Policy and site-specific procedures, for each confined space at the work site. All work associated with these confined spaces shall

be conducted in accordance with the site-specific procedures and the requirements of the Occupational Health and Safety Act and any regulations that may affect the performance of the work.

Site-specific procedures shall contain a hazard assessment and hazard control method for all work performed within or around the confined space. The assessment will include, but is not necessarily limited to, the proposed work within, material use, and equipment use. They shall also include the rescue procedures from the confined space(s) to be followed in the event of worker injury or if evacuation of all personnel from an unsafe condition is required. This rescue procedure will be included as an appendix to the Contractors/Constructors Emergency Procedures developed for the site.

The Contractor shall have personnel trained in Confined Space Entry and rescue procedure readily available on site and shall take all other precautions necessary to meet its obligations under the Occupational Health and Safety Act.

The Confined Space Policy and site-specific procedures shall be kept on site and made available to all workers, on request. Submittal of the Policy and site-specific procedure shall be made to the Contract Administrator, prior to the commencement of the work.

D.56 TREE PROTECTION

Protection from the Contractor's operations of trees not designated for removal shall be ensured by, but not restricted to the following:

The Contractor shall ensure that his operations do not cause flooding or sediment deposition on areas where trees not designated for removal are located.

Unless the Contract requires work within the dripline of trees not designated for removal, equipment shall not be operated within that dripline area. When the Contract requires work within the dripline of trees not designated for removal, operation of equipment within that dripline area shall be kept to the minimum necessary to perform the work required.

Equipment and vehicles shall not be parked, repaired, or refuelled, nor shall construction materials be stored, or earth materials be stockpiled within the dripline areas of any tree not designated for removal.

The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outmost branches.

Subsection GC7.14, Limitations of Operations, of the Modified OPS General Conditions is supplemented by the following:

The Contractor shall not make any claim for extra compensation for the cost of fulfilling the obligations set out in this Special Provision.

D.57 PROTECTION OF SPECIES AT RISK AND WILDLIFE PROTOCOL

Subsection GC 3.07, Delays, of the Modified OPS General Conditions of Contract is amended by the addition of the following to clause GC3.07.01:

f) The presence of Species at Risk, defined as endangered or threatened species protected under the provincial Endangered Species Act, 2007 and/or the federal Species at Risk Act, 2002, where that Act has jurisdiction (i.e. on federal lands, or with respect to federally regulated migratory birds and aquatic species) not otherwise identified in the Contract Documents,

Subsection GC 3.07 is further amended by the addition of the following clause:

- .4 If the Contractor encounters Species at Risk as defined in clause GC 3.07 not otherwise identified in the Contract Documents within the Contract limits that are likely to be impacted by the Contractor's operations:
 - a) The Contractor shall immediately notify the Contract Administrator and suspend operations within the area identified by the Contract Administrator.
 - b) Work shall remain suspended within that area until otherwise directed by the Contract Administrator in writing, according to subsection GC 7.10, Suspension of Work.
 - c) Any delay in the completion date of the Contract that is caused by such a cessation of construction operations shall be considered to be beyond the Contractor's control according to clause GC3.07.01.
 - d) Any increases in the cost of the work to be done that are caused by such a cessation of construction operations shall be considered as a Change in the Work according to clause GC3.10.01.
 - e) Any work directed or authorized in connection with the unexpected presence of Species at Risk shall be considered as Changes in the Work according to clause GC 3.10.01, Changes in the Work.

D.57.1 Wildlife Protocol for Road Construction/Rehabilitation Projects

General Provisions:

Use caution when driving to and from the work site – watch out for turtles and other small animals on the road surface and shoulder. Avoid hitting them, provided that it is safe to do so.

Ensure sediment and erosion control measures (i.e., silt fencing) are in place prior to beginning work. Inspect them regularly, and particularly after storm events, to ensure their effectiveness.

Silt fencing may also be used to prevent turtles and other small animals from entering the work area. Lightweight silt fencing is preferred for this purpose (nylon netting on heavy duty silt fencing may entrap some species of wildlife). Make sure it is securely embedded at the bottom.

Prior to beginning work each day, check for wildlife by conducting a thorough visual inspection of the work area and immediate surroundings.

Restrict all activities, vehicles, and materials to the designated work area.

Litter and other waste materials must be appropriately contained and disposed of.

Do not feed any wildlife or leave food out where it could attract them.

Avoid or minimize disturbances to any natural features adjacent to the work area to the extent possible. DO NOT cut or damage any trees (of any size) unless the absence of Butternut (which is protected under the Endangered Species Act, 2007) has been confirmed by an expert.

Wildlife Encounters:

Do not harass or harm any wildlife.

Turtles are among the most likely animals to occur on or adjacent to roads, especially during the spring. See attached Turtle Identification sheets for more information.

Eastern Musk, Painted, Map and Snapping Turtles are protected under the Fish and Wildlife Conservation Act, 1997. If one is encountered within the work area, it should be gently removed and placed in the roadside ditch at a safe distance from the work site. Wear gloves or use a broom to steer the turtle into a bucket or other container. Handle with care to avoid injury to the turtle or yourself, particularly when dealing with Snapping Turtles, which may bite or scratch. Turtles may also wet themselves when handled. Inspect the silt fencing to determine whether repairs or extensions are needed.

Blanding's, Spiny Softshell, and Spotted Turtles are protected under the *Endangered Species Act, 2007*. If one is seen near the work site, all work must **stop immediately**. Take a photograph of the animal if possible, to confirm the sighting, and contact the following people:

Ontario Ministry of Natural Resources and Forestry – Pembroke District, (613)732-5505.

Bank Swallows, Barn Swallows and some bats are also protected under the *Endangered Species Act, 2007*. Bank Swallows nest in colonial groups in burrows in sandy banks and slopes. If any Bank Swallow colonies are seen nearby, or if Barn Swallow nests or roosting bats are found in or on a culvert or bridge, **stop work**, take a photo, and contact the OMNRF.

Where work has stopped due to *Endangered Species Act* issues, it must remain stopped until authorized to resume by the OMNRF. Additional mitigation measures may be required by the Ministry.

Snakes may also be found on or adjacent to roads. Most local snakes are protected under the *Fish and Wildlife Conservation Act, 1997*. None of our local species are venomous, so their bites are not dangerous. Some snakes will produce a foul-smelling musk when handled, instead of biting. Snakes will usually try to escape or hide when disturbed, and only defend themselves when trapped. If a snake is found in the work area, it should be gently removed or herded out to a safe location.

SECTION E: STANDARD SPECIFICATIONS AND STANDARD DRAWINGS

Standard Detail Drawings

The Contractor acknowledges that certain standard detail drawings, which are provisions of this Contract, have not been reproduced for inclusion in the Contract Documents. These standard drawings are listed in subsection E and/or referenced by the Contract Documents. Some of the standard detail drawings may be shown on the Contract Drawings.

The Contractor acknowledges that the standard drawings referred to in subsections E are the Ontario Provincial Standard Drawings (OPSD).

Only the municipal and provincial common standards on OPS Volumes 1 to 4 and the municipal-oriented specifications in OPS Volumes 7 and 8 apply to this Contract, unless specified otherwise in the Contract Documents.

The Contractor shall obtain its own copy of the standard detail drawings from the Standard Tender Documents Vol. #2: Material Specifications and Standard Detail Drawings. Drawing revision date shall be the most recent up to and including March 2025.

E.01.1 Ontario Provincial Standard Drawings (OPSD)

The Ontario Provincial Standard Drawings (OPSD) which are provisions of this Contract include, but are not limited to:

DRAWING No.	DESCRIPTION	DRAWING No.	DESCRIPTION
OPSD 310.033	Concrete Sidewalk Ramps, at Unsignalized Intersections	OPSD 802.010	Flexible Pipe – Embedment and Backfill Earth
OPSD 310.039	TWSI	OPSD 802.013	Flexible Pipe – Embedment and Backfill Rock
OPSD 400.010	Catch Basin Frame and Grate	OPSD 802.031	Rigid Pipe–Bedding, Cover and Backfill Earth
OPSD 400.070	Catch Basin Frame and Grate	OPSD 802.033	Rigid Pipe – Bedding, Cover and Backfill Rock
OPSD 401.020	MH Cover	OPSD 1006.010	Services Connections
OPSD 405.010	Maintenance Holes Steps, Hollow	OPSD 1103.010	Concrete Thrust Blocks for Tees, Plugs, and Horizontal Bends
OPSD 404.020	MH Safety Platform	OPSD 1103.020	Concrete Thrust Blocks for Vertical Bends
OPSD 406.010	MH Ladder	OPSD 1103.021	Dimension Tables for Concrete Thrust Blocks for
OPSD 551.010	Concrete and Composite Pavement	OPSD 1104.010	Water Services
OPSD 552.010	Concrete Pavement Joint Details	OPSD 1104.020	Water Services
OPSD 552.051	Load Transfer Device for Right angle Contraction Joint	OPSD 1105.010	Hydrant, Installation

OPSD 600.100	Gutter	OPSD 1109.011	Cathodic Protection for PVC Watermain Systems
OPSD 600.110	Barrier Curb	OPSD 1109.012	Cathodic Protection of Existing Metallic
OPSD 701.010	MH Structure	OPSD 1109.025	Waterproofing of Splices
OPSD 701.011	MH Structure	OPSD 1109.030	Insulation for Sewers and Watermains in Shallow Trenches
OPSD 705.010	Catch Basin	OPSD 1100.010	Cast-in-Place Chamber for Valves Up to 350mm Diameter
OPSD 705.020	Catch Basin		

E.01.2 City of Ottawa Standard Drawings

The Contractor also acknowledges that the standard detail drawings referred to in the contract are the Standard Detail Drawings as produced and amended by the City of Ottawa.

The Contractor shall obtain its own copy of the standard detail drawings from the Standard Tender Documents Vol. #2: Material Specifications and Standard Detail Drawings.

The City of Ottawa Standard Detail Drawings which are provisions of this Contract are:

STD Det	Rev. Date	Description
SC9	Feb 16	UNIT PAVING - ON GRANULAR
S1	Mar 19	INSTALLATION OF CATCH BASIN WITH CURB AND GUTTER
S2	Mar 19	INSTALLATION OF CATCH BASIN WITH MONOLITHIC SIDEWALK AND CURB BARRIER, AND DEPRESSED CURB
S3	Mar 09	INSTALLATION OF CURB INLET TYPE CATCH BASIN
S10.	May 01	SUPPORT DETAIL FOR EXISTING UTILITY CROSSING SEWER OR WATERMAIN TRENCH
W17	Jan 26	STANDARD TRENCH DETAIL
W22	Jan 26	THERMAL INSULATION FOR WATERMAINS
W23	Feb 04	THERMAL INSULATION FOR WATERMAINS AT OPEN STRUCTURES
W25	Jan 26	WATERMAIN CROSSING BELOW SEWER
W25.2.	Jan 26	WATERMAIN CROSSING OVER SEWER
W25.6	Jan 26	TABLES OF RESTRAINED LENGTHS FOR PVC AND DI PIPE 400MM AND UNDER
W26	Mar 21	TYPICAL SERVICE LINE 19 & 25MM (NOMINAL) DIAMETER
W35	Mar 21	SERVICE POST ASSEMBLY FOR SERVICES UP TO 50MM
W37	Mar 13	WATERMAIN LAYOUT FOR RESIDENTIAL CUL-DE-SACS
W39	Mar 21	CATHODIC PROTECTION FOR DUCTILE IRON WATERMAIN SYSTEMS

Standard Specifications

The Contractor acknowledges that certain standard specifications, which are provisions of this Contract, have not been reproduced for inclusion in the Contract Documents. These standard specifications are

listed in subsection E.02.1 and SECTION F: SPECIAL PROVISIONS – ITEM SPECIFIC and in the Schedule of Prices.

The Contractor acknowledges that the standard specifications referred to in subsection E.02.1 and SECTION F: SPECIAL PROVISIONS – ITEM SPECIFIC and in the Schedule of Prices are the Ontario Provincial Standard Specifications (OPSS) as produced and amended by the government of the Province of Ontario

Only the municipal and provincial common standards on OPS Volumes 1 to 4 and the municipal-oriented specifications in OPS volumes 7 and 8 apply to this Contract, unless specified otherwise in the Contract Documents.

E.01.3 Ontario Provincial Standard Specifications (OPSS)

The Ontario Provincial Standard Specifications (OPSS) which are provisions of this Contract include, but not limited to:

OPSS	Vol.	Rev. Date	Description
106	7	Apr. 23 19Nov.2019	Electrical Work
127	5	Jul. 25	Schedule of Rental Rates for Construction Equipment, Including Model and Specification Reference
180	7	Apr. 25	Management of Excess Material
206	7	Apr. 25	Grading
212	7	Apr. 25	Earth Borrow
310	7	Nov. 17	Hot Mix Asphalt
314	7	Nov. 23	Untreated Granular Subbase, Base, Surface, Shoulder, and Stockpiling
350	1	Nov. 21	Concrete Pavement and Concrete Base
351	1	Nov. 21	Concrete Sidewalk
353	7	Nov. 21	Concrete Curb and Gutter Systems
355	5	Nov. 20	Installation of Interlocking Concrete Pavers
401	7	Nov. 24	Trenching Backfilling and Compacting
402	7	Nov. 24	Excavating. Backfilling and Compacting for Maintenance Holes, Catch Basins, Ditch Inlets, and Valve Chambers
403	7	Nov. 23	Rock Excavation for Pipelines, Utilities, and Associated Structures in Open Cut
405	7	Nov. 17	Pipe Subdrains
407	1	Nov. 21	Maintenance Holes, Catch basin installation
408	1	Nov. 21	Adjusting or Rebuilding Maintenance Holes, Catch Basins, Ditch Inlets and Valve Chambers
409	7	Apr. 25	Close-Circuit Television (CCTV) Inspection of Pipelines
410	7	Nov. 18	Pipe Sewer Installation in Open Cut
441	7	Nov. 25	Water Main Installation in Open Cut

442	7	Nov. 20	Corrosion Protection of Watermains
493	7	Nov. 19	Temporary Potable Water Supply Services
501	5	Nov. 17	Compacting
510	7	Nov. 18	Removal
511	7	Nov. 19	Rip Rap, Rock Protection and Granular Sheeting
602	7	Nov. 17	Installation of Electrical Chambers
603	7	Nov. 24	Installation of Ducts
604	7	Nov, 17	Installation of Cables
609	1	Nov. 19	Grounding
610	1	Apr. 25	Removal of Electrical Equipment and Materials
615	7	Nov. 22	Installation of Poles
616	7	Apr. 18	Footings and Pads for Electrical Equipment
617	1	Nov. 19	Installation of Roadway Luminaires
710	1	Nov. 22	Pavement Marking
805	7	Nov. 21	Temporary Erosion and Sediment Control Measures
902	1	Nov. 21	Excavating and Backfilling, Structures
904	7	Nov. 24	Concrete Structures

SECTION F: SPECIAL PROVISIONS – ITEM SPECIFIC

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F.01 TRAFFIC AND PEDESTRIAN CONTROL

F.01.1 Scope

The Scope of the work addressed in this specification “Traffic and Pedestrian Control Plan” shall include the preparation and submission of a Traffic Control Plan (TCP) and a Construction Site Pedestrian Control Plan (CSPCP) as outlined in this specification and in Special Provision – General D.40.2. The TCP and the CSPCP may either be combined or submitted separately.

F.01.2 References

Ontario Traffic Manual latest edition

F.01.3 Design And Submission Requirements

F.01.3.1 Traffic Control

Where construction pursuant to this Contract is being carried out on or adjacent to a roadway, the supply, placement, monitoring, and disassembly of all traffic control devices shall be performed under the direction of the Contractor in accordance with the Ontario Traffic Manual latest edition.

The Contractor shall be responsible for construction means, methods, techniques, sequences, and procedures and for coordinating the various parts of the traffic control. The Contractor shall prepare and submit a Traffic Control Plan that details the specific traffic control layout(s), necessary for the completion of the works. The Traffic Control Plan shall be in the form of drawing(s) and written description(s) of how the Contractor intends to control traffic through and around the work zone. The TCP shall include, and not necessarily be limited to:

- a) Monitoring and Repair (24-hour contact number if not acquired)
- b) Reference to Applicable OTM Book 7 Typical Layouts
- c) Traffic control signs (regulatory, warning and temporary);
- d) Contract-specific operational requirements;
- e) Traffic staging and scheduling;
- f) Construction vehicle access/egress;
- g) Public access/egress for all existing entrances and side roads
- h) Pedestrian safety; barriers and barricades;
- i) Emergency Vehicle access
- j) Parking for Contract Administrator
- k) Any other traffic control measures.

The Contractor shall refer to Special Provision-General 12.0 for general and contract specific requirements of traffic operations, and definition of terms.

Two (2) weeks prior to commencing construction, the Contractor shall submit the Traffic Control Plan to the Contract Administrator. The Contractor acknowledges that revisions to the Traffic Control Plan may be necessary, where it concerns public safety and mobility.

The Contractor shall ensure that all workers, including sub-contractors, in the Working Area are aware of the importance of the Traffic Control Plan measures.

The Contractor shall be required to review and modify the TCP for errors, omissions, deficiencies, or because of any new hazards are identified and not previously addressed within the document.

The condition of all traffic control devices shall be maintained for the duration of the contract, in accordance with the OTM.

The Contractor shall immediately repair, replace or otherwise make good the practice deemed unsafe or non-compliant when the owner makes the Contractor aware of any violation of the TCP.

Should the Contractor disagree, the Ministry of Labour will be consulted to provide clarification of the observed deficiency.

It is the responsibility of the Contractor to ensure that all necessary training has been provided prior to commencement of the work.

The acceptance and review of the TCP by the Consultant will make no representation and/or warranty that the document is accurate, complete, or compliant with all applicable legislation. Any errors, omissions or deficiencies within the TCP will remain the sole responsibility of the Contractor. The contract shall not commence, until the Consultant has reviewed the TCP and the Contractor has addressed all comments.

The Contract Administrator reserves the right to ask for revisions to the Traffic Control Plan at submission time or reject it if the Plan does not meet the Contract language. In addition, the Contract Administrator reserves the right to instruct the Contractor to revise it at any time during the Contractor's execution of the plan, when the Contract Administrator finds that the Contractor is not providing the commitments shown in the original Traffic Control Plan submission, or the Contractor's Traffic Control Plan proves to be insufficient to address the field conditions.

F.01.3.2 Pedestrian Control

The Construction Site Pedestrian Control Plan shall ensure the provision of a safe and accessible path of travel for all pedestrians through and/or around the construction site. The plan shall ensure that pedestrians with disabilities, as well as those with increased mobility needs (parents with strollers and/or young children, elderly pedestrians using canes, walkers, or wheelchairs, etc.), shall be accommodated either through or around the construction site. The scope of the work addressed in CSPCP will include temporary pedestrian signing; directional signing; maintenance of sidewalk; relocation, maintenance, and removal of pedestrian barriers; and all necessary delineation or any other measures to provide a safe environment for pedestrians.

Two (2) weeks prior to commencing construction, the Contractor shall submit the Construction Site Pedestrian Control Plan to the Contract Administrator. The Contractor acknowledges that revisions to the CSPCP may be necessary, in consultation with the Owner, where it concerns accessibility, public safety and mobility.

The Contractor shall ensure that all workers, including sub-contractors, in the Working Area are aware of the importance of the CSPCP measures.

The Contractor shall be required to review and modify the CSPCP for errors, omissions, deficiencies, or because of any new obstacles to accessibility are identified and not previously addressed within the document.

The condition of all pedestrian control materials and/or devices shall be maintained for the duration of the contract.

The Contractor shall immediately repair, replace or otherwise make good the practice deemed unsafe or non-compliant when the owner makes the Contractor aware of any violation of the CSPCP.

It is the responsibility of the Contractor to ensure that all necessary training has been provided prior to commencement of the work.

The acceptance and review of the CSPCP by the Consultant will make no representation and/or warranty that the document is accurate, complete, or compliant with all applicable legislation. Any errors, omissions or deficiencies within the CSPCP will remain the sole responsibility of the Contractor. The contract shall not commence, until the Consultant has reviewed the CSPC and the Contractor has addressed all comments.

The Contract Administrator reserves the right to ask for revisions to the CSPCP at submission time or reject it if the Plan does not meet the Contract language. In addition, the Contract Administrator reserves the right to instruct the Contractor to revise it at any time during the Contractor's execution of the plan, when the Contract Administrator finds that the Contractor is not providing the commitments shown in the original CSPCP submission, or the Contractor's CSPCP proves to be insufficient to address the field conditions.

F.01.3.3 Pedestrian Barriers

The interlocking pedestrian barriers, identified elsewhere in the Contract Documents, shall be approximately 2.4 m in length and minimum 1.8m in height manufactured of steel and galvanized. The foundation shall be the flat foot configuration. The barriers must be capable of being interlocked with attachments integral to the barrier (i.e. tying the barriers together will not be acceptable).

Once the barriers are on site, they shall not be removed off-site until such a time that the Contract Administrator approves their removal.

If the contractor removes the barriers off-site without the Contract Administrator's approval, the contractor shall not be paid under this item to return onto the site the length of barrier that was removed off-site.

F.01.4 Measurement For Payment

Measurement shall be by Lump Sum.

F.01.5 Basis Of Payment

Payment at the contract Lump Sum Price for the items "Traffic Control Plan" and "Construction Site Pedestrian Control Plan" shall be full compensation for the research, preparation and implementation of the TCP and CSPCP, and shall include all labour, equipment and material to supply, and maintain all traffic and pedestrian control measures detailed therein. This payment includes supply, installation, monitoring, operation, maintenance and removal of all required traffic control devices and pedestrian control devices in exception of Steel Interlocking Pedestrian Barriers which shall be paid under its respective tender item.

Payment shall be full compensation for all labour, equipment, and material required to do the work.

F.02 MANAGEMENT OF EXCAVATED SOILS, EXCESS MATERIAL AND CONTAMINATED SOIL

OPSS 180 shall apply except as amended and extended herein.

F.02.1 SOIL MANAGEMENT PLAN AND EXCESS SOIL DOCUMENTATION

This specification covers the requirements for submission of all plans, reports, documentation, and record-keeping to support the management of excess soils.

Refer to Special Provision D.52 for additional information and requirements.

Site Selection Notifications and Property Owner Consent

Where Receiving Sites are not designated by the Owner, the Contractor shall provide a list of proposed Receiving Sites within 15 days after contact award for review by the Contract Administrator.

The list shall include the following information for each Receiving Site:

- the municipal address of the Receiving Site;
- the name and contact information of Receiving Site owner and operator;
- the type of instrument under which the Receiving Site is operating, where applicable (in the absence of another instrument, the municipal site-alteration by-law would apply);
- the name and qualifications of the QP overseeing the Receiver Site activities;
- the quantity and quality of Excess Soil planned to be deposited at the Receiving Site;
- if the material is being sent to a Reuse site:
 - the contact information of the person that will be overseeing placement (in accordance with the site's Fill Management Plan) and acknowledging receipt of loads on behalf of the Receiving Site;
 - the zoning and land use of the proposed reuse site;
 - the beneficial purpose for which the excess soil will be re-used; and,
 - Reuse Notice ID on Excess Soil Registry (RPRA) for sites importing greater than 10,000 cu.m.

The Town shall require a minimum of 10 business days to review any subsequent revision to the original receiving site(s) including all requested documentation.

For receiving sites governed by an instrument, the Contractor shall provide the Contract Administrator, for record purposes at least 10 Business Days prior to removing excess soil from the Project Area, with a signed copy of the latest revision of OPSF 180-2 form "SITE SELECTION NOTIFICATION FOR MATERIAL MANAGED AS DISPOSABLE FILL".

For receiving sites not governed by an instrument, a signed property owner consent and release acknowledging informed consent and QP signoff for excess soils will be required.

The Contractor will need to select and identify the MECP licensed disposal facility that will receive the liquid soil as waste from the Project Area.

Excess Soil Destination Assessment Report (ESDAR) and Registration

An ESDAR is NOT required to be prepared by the Contractor's QP for this project, which is exempt from Registration.

Soil Management Plan

The OPSS 180.MUNI Excess Soil Reuse Plan shall be replaced with a Soil Management Plan. The Soil Management Plan shall be prepared by the Contractor's QP-C. Implementation of the Soil Management Plan shall be overseen by the Contractor's QP-C.

The plan shall be submitted a minimum of 20 business days prior to the start of excavation.

The Soil Management Plan shall provide the following information to support on and off-soil management, reuse and disposal in compliance with BMP, O. Reg. 406/19, all applicable laws, and shall include:

- An estimated volume of Excess Soil and proposed methods for minimizing these quantities, including methods to maximize the reuse of excavated material within the Project Area.
- Protocols for any further characterization of soil and excavated material quality to determine management, including re-use and/or disposal requirements, as required.
- Outline of how excavated materials will be temporarily staged or stored at the Project Area for re-use or subsequent transfer to disposal in accordance with the requirements of the Soil Rules.
- Identify measures to minimize soil and wind erosion, leaching and runoff when excavating material or stockpiling it prior to offsite disposal or reuse on site.
- Procedures for verifying truck loads and soil volumes deposited at Receiving Sites without weigh-scales, in compliance specific Contract Measurement for Payment clauses.
- Haul Record documentation procedures to be utilized by the Contractor that meet the requirements of Section 18 of O.Reg. 406/19 (provide project-specific sample).
- All pertinent information listed in OPSS.MUNI.180 Section 180.04.01.08 (Excess Soil Reuse Plan) for each identified receiving site.
- Identification of source site(s) proposed for imported fill (aggregate and soils) to be used in the Project Area.
- Contingency plans for any excess soil which may be rejected by Contractor-designated Receiving Site(s).
- Risk management measures (RMM) to mitigate potential exposure to contaminants during construction activities should they be encountered.
- Contingency plan to be followed if hazardous material, as it pertains to O. Reg 347, is encountered on site.

Soil Tracking System

The Contractor is not required to maintain a soil tracking system, in accordance with O.Reg. 406/19 Section 16, for this project.

Hauling Records

The Contractor shall ensure that vehicle operators have available at all times during the transportation of excess soil and liquid soil a complete and accurate written or digital haul record that document excess soil and liquid soil movement for every load leaving the project in accordance with O. Reg, 406/19 Sections

18(1). The Contractor shall further ensure that all haul records are completed with the receiver information and that the receiver site representative signs the declaration on the hauling records in accordance with Section 18(2).

Use of proprietary soil tracking software in lieu of haul records is acceptable, provided it meets the requirements of O. Reg 406/19 Sections 18(1) and 18(2). Where a digital soil tracking system is used, the Contractor shall provide equivalent .pdf haul records to the Contract Administrator.

Prior to commencement of excavation, the Town shall provide the Contractor with an excel file template which will be used to summarize the haul information obtained under Section 18 of the Regulation. The Contractor shall submit the updated Excel summary form and copies of all completed Hauling Records to the Contract Administrator on a weekly basis and no later than Wednesday of the following week.

The Contractor, including the hauler of excess soil and liquid soil, shall retain all documents, including hauling records, tracking files and documentation related to excess soil management including bills of lading and other records associated with the Project for a period of at two years after substantial performance of the Contract, and provide these documents and records to the Contract Administrator or their authorized representative, as part of the Submittals requirements for issuance of Final Completion, or as requested at any time during this retention period.

Other Documentation

Upon completion of the excess soil movements, the Contractor shall provide the Contract Administrator with written notice of final placement summarizing the total amount of excess soil removed from the Project Area, the amount deposited at each Receiving Site, the date on which the last load of excess soil was removed from the Project Area, and any other pertinent information requested by the Contract Administrator.

The Contractor shall also submit to the Contract Administrator signed copies of the OPSF-180(3) "PROPERTY OWNER'S RELEASE" from each Receiving Site (except for Town-owned Receiving Sites) within sixty (60) days after the date of final excess soil placement.

The Contractor shall submit to the Contract Administrator all documents, including hauling records, tracking files and documentation related to excess soil management including bills of lading and other records associated with the Project prior to issuance of Final Completion.

The Contractor shall retain all excess soil related information for a period of two years after substantial performance of the Contract and provide this information to the Town upon request at any time during this retention period.

MEASUREMENT FOR PAYMENT

Payment shall be on a Lump Sum basis.

Payment shall be based upon the following schedule:

1. 50% upon satisfactory submission and acceptance of the Soil Management Plan and Property Owner Consent; and,
2. 50% upon satisfactory submission of all related hauling records and other documentation.

BASIS OF PAYMENT

Payment at the Contract price for tender item Soil Management Plan and Excess Soil Documentation shall be full compensation for all Labour, Equipment and Material for the preparation and implementation of the Contractor's Soil Management Plan as well as the preparation, record-keeping and submission of all related plans, reports, and documentation listed herein.

F.02.2 DISPOSAL AND HAULING OF CATEGORY 3 EXCESS SOIL

This specification covers the requirement for the disposal/deposition and haulage of Category 3 Excess Soil from the Site.

Refer to General Special Provision D.52 for additional information and requirements.

Excess Soil Quality and Characterization

Refer to D.52 for any specific soil quality information and supporting soil reports.

The Contractor shall expect to generate excess soil with impacts exceeding Table 3.1 ICC including but not limited to those indicated in the Soil Quality Screening Characterization Report, which will require management as waste at a Class 1 Soil Management Facility, Landfill or Dump.

MEASUREMENT FOR PAYMENT

Measurement of the following items shall be by mass in tonnes.

The Contractor may request an alternative measurement for payment using surveyed cross section or Truck Box Method and converted to tonnes based on an appropriate soil density calculation.

The Contract Administrator shall have sole discretion in allowing the use of alternative measurements for payment including determining the appropriate soil density calculation and any calibration requirements such as directing periodic loads to a weight scale for verification.

All costs associated with determining payment quantity that does not involve the use of certified weight scales shall be the responsibility of the Contractor.

BASIS OF PAYMENT

Payment at the Contract price for the following tender item shall be full compensation for all Labour, Equipment and Material, to do the work.

Remove and Dispose of Category 3 Contaminated Material to Licensed MECF Landfill

All costs associated with management of soils for immediate or subsequent re-use on site shall be deemed to be included in the associated tender item requiring the excavation of soil.

No additional payment will be made for increased handling, scheduling, delays, construction staging or stockpiling of materials for reuse on-site or off-site.

F.02.3 Measurement For Payment

Measurement shall be by meter of fence installed.

F.02.4 Basis Of Payment

Payment at the contract unit price per meter of steel interlocking pedestrian barrier shall be full compensation for all labour, equipment, and material required to do the work. The contractor shall not be paid separately for the maintenance and relocation of steel interlocking pedestrian barrier. The maintenance and relocation of the barriers shall be paid under the item "Construction Site Pedestrian Control".

F.03 EROSION AND SEDIMENT CONTROL PLAN, MONITORING, AND MEASURES

F.03.1 Scope of Work

The work under the applicable items includes the preparation, implementation and monitoring of an Erosion and Sediment Control Plan to prevent sediment-laden runoff resulting from the Contractor's construction operations from entering all sewers and watercourses both within and downstream from the Working Area. The plan shall include management and monitoring of water discharged from dewatering operations. The specification is limited to the management of sediment laden water and the management of contaminants such as hydrocarbons and volatile organic compounds present within groundwater at the site shall be managed as described elsewhere in the contract documents.

F.03.2 General

The Contractor acknowledges that surface erosion and sediment runoff resulting from construction operations has potential to cause a detrimental impact to any downstream watercourse, and that all construction operations that may impact upon water quality shall be carried out in a manner that strictly meets the requirements of all applicable legislation and regulations.

Accordingly, the Contractor shall be responsible for determining and conforming to the requirements of the Ontario Ministry of the Environment, Conservation and Parks (MECP), the Ontario Ministry of Natural Resources, the Town of Renfrew, applicable Conservation Authorities and any other Governmental Regulatory Agencies (collectively "Regulatory Agencies") having jurisdiction in the Working Area or over any potentially affected watercourses.

F.03.3 Erosion and Sediment Control Plan

Before commencing the Work, the Contractor shall submit to the Contract Administrator six copies of a detailed Erosion and Sediment Control Plan. The ESC Plan will consist of a written description and detailed drawings indicating the on-site activities and measures to be used to control erosion and sediment movement for each step of the Work. The written description shall be signed by, and the drawings shall bear the stamp and signature of a qualified Professional Engineer licensed in Ontario, herein designated as the Engineer of Record (EOR).

The Contractor acknowledges that the scheduling of the implementation of erosion and sediment controls is the key component for successful sediment control. Accordingly, the ESC Plan will contain a detailed schedule which identifies the following:

- a) Phasing of the steps for the installation of all control measures.
- b) Inspection, monitoring, and maintenance of all control measures during construction.
- c) Phasing of the removal and disposal of the control measures.

The Contractor acknowledges that no one measure is likely to be 100% effective for erosion protection and controlling sediment runoff and water discharges from the site. Therefore, where necessary the ESC Plan will implement sequential measures arranged in such a manner so as to mitigate sediment release from construction operations and achieve specific maximum permitted criteria where applicable. Suggested on-site measures may include, but shall not be limited to, the following methods: sediment ponds, filter bags, pump filters, settling tanks, silt fences, straw bales, filter cloths, check dams and/or berms, or other recognized technologies and methods available at the time of construction. Specific measures shall be installed in accordance with the requirements of OPSS 805 where appropriate, or in accordance with manufacturer's recommendations.

F.03.4 Inspection and Monitoring of Mitigation Measures

The Contractor shall be solely responsible for inspecting, monitoring, and maintaining the effectiveness of the ESC Plan upon implementation. The Contractor shall submit to the Contract Administrator weekly inspection reports demonstrating the performance of the installed measures, identifying deficiencies, and identifying required maintenance issues. These reports shall be prepared, signed by the EOR and provided to the Contract Administrator within 48 hours of the inspection.

Maintenance issues are defined as any measure which is not functioning to the satisfaction of the EOR and in the opinion of the EOR may be repaired by the contractor with subsequent re-inspection at the next scheduled EOR site inspection.

Deficiencies are defined as any measure or lack of measure which has potential to cause an adverse environmental impact at the site given the current/forecasted conditions and schedule of the work.

Maintenance issues which have previously been identified but not adequately corrected shall be considered deficiencies.

Deficiencies shall be immediately corrected. Corrective actions shall be re-inspected and documented by the EOR. Re-inspection reports shall be specific to the deficiency observed and may be written field reports.

EOR monitoring reports submitted shall include:

- a) The date and time of the inspection and monitoring.
- b) General description of the mitigating measures being utilized at the site.
- c) Confirmation as to the effectiveness of the measures inspected.
- d) Description of any maintenance issue which requires minor repair, improvement or maintenance.
- e) Description of any deficiency observed including timeline for correction and re- inspection.
- f) Deficiency re-inspection reports outstanding for the site.

The Contractor shall notify the Contract Administrator in all situations where a regulatory agency has identified deficiencies in erosion/sediment control measures, quality of runoff or quality of water quality discharged from dewatering operation.

Where in the opinion of the Contract Administrator either the proof of performance submitted is or the measures implemented are considered inadequate, the Contractor shall have the EOR review measures in the presence of the Contract Administrator within 24 hours of being notified in writing.

The Contractor shall monitor all weather forecasts and schedule the Work in order to minimize the risk of sediment-laden water from entering any watercourse or sewer system. The ESC Plan shall contain a Contingency Plan to include the provision of additional labour, equipment or materials to install additional control measures, and detail an emergency response plan in case of an accidental event. As such, the Contractor shall have additional control materials on site at all times which are easily accessible and may be implemented at a moment's notice.

F.03.5 Contractor's Responsibilities

The Contractor shall ensure that all workers, including sub-contractors, in the Working Area are aware of the importance of the erosion and sediment control measures and informed of the consequences of the failure to comply with the requirements of all Regulatory Agencies and the specifications detailed herein.

The Contractor shall periodically, and when requested by the Contract Administrator or EOR, clean out accumulated sediment deposits as required at the sediment control devices, including those deposits that may originate from outside the construction area. Accumulated sediment shall be removed in such a manner that prevents the deposition of this material into any sewer or watercourse and avoids damage to the control measure. The sediment shall be removed from the site at the Contractor's expense and managed in compliance with the requirements for excess earth material, as specified elsewhere in the Contract.

The Contractor shall immediately report to applicable regulatory agencies and the Contract Administrator any accidental discharges of sediment material into either the watercourse or the storm sewer system. Failure to report will be constitute a breach of this specification and the Contractor may also be subject to the penalties imposed by any applicable Regulatory Agency. Appropriate response measures, including any repairs to existing control measures or the implementation of additional control measures, shall be carried out by the Contractor without delay.

The sediment control measures shall be removed when, in the opinion of the EOR, the measure(s) is no longer required. No control measure may be permanently removed without prior written authorization from the EOR. All sediment and erosion control measures shall be removed in a manner that avoids the entry of sediment or debris into any sewer or watercourse within or downstream of the Working Area. All accumulated sediment shall be removed from the Working Area at the Contractor's expense and managed in compliance with the requirements for excess earth material, as specified elsewhere in the Contract. Any seeding and mulching, temporary cover, sodding or original turf cover that is disturbed by the removal of the control measures and accumulated sediment, shall be brought to final grade and restored. Payment for the supply and placing of ground cover at these locations shall be made under the applicable items listed elsewhere in the Contract.

Where, in the opinion of either the Contract Administrator or a Regulatory Agency, any of the terms specified herein have either not been complied with or not performed in a suitable manner, the Contract Administrator or Regulatory Agency has the right to immediately withdraw its permission to continue the work but may renew its permission upon being satisfied that the defaults and/or deficiencies in the performance of this specification by the Contractor have been remedied. No compensation will be made to the Contractor for the withdrawal of permission to do the work resulting from non-compliance with the requirements of this specification and the Regulatory Agencies.

In addition to any other remedy and/or penalty provided by law, where there has been default or non-compliance with any of the terms specified herein and the Contractor refuses to perform or rectify same within forty-eight (48) hours of the receipt of the written demand of the Contract Administrator to do so, the Owner is hereby entitled to enter upon the Working Area and either complete the work in conformity with the Contract or have the work done that it considers necessary to complete the Work to its intended condition, whichever, in the Owner’s sole opinion, is the most reasonable course of action. The Contractor and the Owner further agree that the costs incurred for any such work shall be retained by the Owner from monies otherwise due to the Contractor.

F.03.6 Monitoring of Water Quality Impacts and Point Source Discharges

The Contractor shall monitor runoff quality and quantity of water discharged from dewatering operations. The work shall include turbidity monitoring of impacts to watercourses (upstream vs downstream conditions), total suspended solids (TSS) monitoring of point sources such as those from dewatering operations. Discharge shall be in accordance with site specific constraints, regulatory requirements and sewer use bylaw requirements. Where no specific criteria have otherwise been identified, the contractor shall meet the following discharge objective.

Source	Objective	Monitoring Frequency (min)
Watercourse Impacts	Downstream turbidity not to exceed upstream levels by greater than 25%	Minimum of daily for first three days of operation Minimum of twice weekly on an ongoing basis Daily for situations where the work is being conducted within 20 metres of a watercourse.
Discharge from Dewatering Operations	TSS maximum level of 25 mg/L	Minimum of daily for first three days of operation Minimum of twice weekly on an ongoing basis

Monitoring frequency to increase where scheduled construction operations have potential to impair water quality.

F.03.7 Mitigation and Action by Contractor Where Monitoring Indicates Water Impacts or Discharges Over Criteria or Objectives

Where site specific criteria or objectives are not attained, the Contractor and/or EOR shall immediately notify applicable regulatory agency of the monitoring results and possible impacts to sewers and watercourses. The Contractor shall implement an Action/Mitigation Plan acceptable to the EOR and applicable regulatory agency prior to continuing or resuming construction activities.

F.03.8 Measurement and Basis of Payment

F.03.8.1 Item – Erosion and Sediment Control Plan and Monitoring

Payment at the Contract price for the item “Erosion and Sediment Control Plan and Monitoring” shall be full compensation for the preparation and monitoring of the Erosion and Sediment Control Plan.

Payment shall be based upon the following schedule:

- a) 25% upon satisfactory submission and implementation of the ESC Plan; and,

- b) 75% pro-rated into equal payments over the term of the contract.

This payment schedule may only be modified as agreed upon in writing between the Contractor and the Contract Administrator.

F.03.8.2 Item – Erosion and Sediment Control Measures

Payment at the Contract price for the item “Erosion and Sediment Control Measures” shall be full compensation for the implementation and maintenance of erosion and sediment control measures required for the site, and shall include all labour, equipment and materials to supply, construct, monitor and maintain all erosion and sediment control measures detailed therein.

Payment shall be based upon the following schedule:

- a) 20% upon satisfactory installation of the control measures;
- b) 70% pro-rated into equal payments over the term of the contract; and,
- c) 10% upon successful completion and removal of the ESC Plan protection measures.

This payment schedule may only be modified as agreed upon in writing between the Contractor and the Contract Administrator.

F.04 PRE-CONSTRUCTION SURVEY

The Contractor acknowledges that there are existing buildings and structures in the vicinity of the work area, which may be affected by the construction works. This special provision details the pre- construction inspection requirements of buildings and structures, for both interior and exterior conditions.

All inspections shall be performed in accordance with applicable Federal and Provincial Privacy legislation including the Canadian Personal Information Protection and Electronic Documents Act (PIPEDA). Documentation confirming compliance with this legislation shall be made available to the homeowner and submitted with the pre- construction inspection report.

F.04.1 Scope

Under this work the Contractor will be required to supply the services of a reputable firm experienced in pre-construction inspections of existing buildings and structures prior to commencement of any construction work.

The pre-construction inspection shall include whatever inspection work is deemed necessary to satisfactorily document the state of a building or structure prior to construction for the purpose of resolving possible claims by residents or building owners. The Contractor shall ensure that the extent and degree of the pre-construction inspection include the following, as minimum criteria:

- a) As a minimum, the pre-construction survey will be done on all structures within 30m of the work zone.

A letter of introduction shall be provided to the property owner, after it has been reviewed and approved by the Contract Administrator. If the Contractor receives no response from the property owner, a second letter shall be provided.

Where a second letter has been sent and still no response is received, the property owner is deemed to have been notified, and no further action is required by the Contractor with respect to documenting the state of the property.

The pre-construction inspection shall be carried out in the presence of the affected property owners. The Contractor acknowledges that property owners are not required by the Town to grant access to their property, and that access is at the discretion of the individual property owner.

F.04.2 Pre-Construction Inspection

The pre-construction inspection shall indicate if signs of building or structure settlement are present, include photographs of all sides of the building exterior, a representative sampling (description and photographs) of visible cracks or settlement from both the interior and exterior of the building, and a representative sampling (description and photographs) of staining or repairs visible at the time of inspection.

The pre-construction inspection shall identify any concerns regarding sensitive equipment contained within the buildings which should be taken into account during potential rock removal and/or excavation operations.

F.04.3 Design And Submission Requirements

The Contractor shall submit a pre-Construction Inspection Report with the following:

- a) Overview of the inspection process and the equipment used;
- b) PIPEDA compliance confirmation;
- c) Copies of the letter of introduction distributed including the distribution dates;
- d) A map showing the locations where the letters were distributed;
- e) Listing of properties for which inspections were performed including the dates of the inspections;
- f) Listing of properties for which inspections were not performed and the reason (example: property owner refused by phone or in writing).

This report shall not include specific results of the inspections performed. Two (2) copies of the Project Pre-Construction Inspection Report shall be submitted to the Contract Administrator prior to the commencement of any other site work.

For each property inspected, a separate Building/Structure Pre-Construction Report shall be prepared, dated, and signed by the firm undertaking the inspection. These reports are confidential and shall not be shared with the Contractor, Contract Administrator, or others. Each Building/Structure Report shall be detailed and shall include specific results of the inspection. In the event of a request by the property owner at any time, a copy of the Building/Structure Pre- Construction Report shall be sent directly to the property owner and the Contract Administrator at no additional cost to the Town or the property owner.

F.04.4 Measurement For Payment

Measurement for payment shall be by lump sum.

F.04.5 Basis Of Payment

Payment at the Contract price for the lump sum item "Pre-Construction Inspection" shall be full compensation for the preparation and submission of the pre-construction inspection and reports, and shall

include all labour, equipment, and materials to prepare and submit the pre-construction inspection and reports.

F.05 CONTRACT INITIATION

F.05.1 Scope

This item is intended to provide the Contractor with funds at the onset of the project. The Contractor is permitted to include project costs in the “Contract Initiation” item which should be no more than 2% of the total tender cost as submitted in the Form of Tender.

Contract initiation shall include all required submissions prior to commencement of work including, but not limited to:

- a) Detailed Construction Schedule
- b) Survey Process and Procedures
- c) Quality Control Obligations
- d) Traffic and Pedestrian Control Plans
- e) Pre-construction Health and Safety Submissions

F.05.2 Measurement for Payment

The tender item “Contract Initiation (no more than 2% of Contract Value)” will be paid as a lump sum item.

F.05.3 Basis of Payment

Payment for the item “Contract Initiation” shall be compensation for the Contractor’s contract initiation costs for this project. The item will be paid in full on the first payment certificate.

F.06 UTILITY PROTECTION AND SUPPORT

F.06.1 Scope

The work under this item shall include all labour, materials, and equipment necessary for coordination with the Town and utility companies regarding protection and/or relocation of their equipment. This item shall also include payment by the Contractor of all fees charged by utility companies regarding protection and/or relocation of their equipment.

F.06.2 Contractor as Constructor

The Contractor shall coordinate all works within the Contract limits during the construction period. If at any time the Contractor believes that it is no longer able to act as the Constructor as defined by the Occupational Health and Safety Act, the Contractor shall immediately advise the Contract Administrator of this situation. The Contract Administrator may require the Contractor to stop work until the situation is resolved.

F.06.3 Utility Coordination

Wherever work is required above, below or in the vicinity of existing utility plant (including hydro poles) the Contractor shall support and protect, or arrange for the utility to support and protect, such plant to

the satisfaction of the utility. The Contractor shall be responsible for all costs associated with support and protection of existing utility plant.

The Contractor shall schedule sufficient time for utility coordination, in accordance with the advance notice requirements of each utility. No claims for delays or related costs will be considered where the Contractor failed to provide a utility with all necessary information in a timely manner and in accordance with the utility's specified requirements.

F.06.4 Measurement and Basis of Payment

Payments made to the Contractor under this item shall include all labour, materials, and equipment for the work described by this specification.

Payment shall be made in accordance with the following schedule:

- a) 25% upon satisfactory completion of utility locates;
- b) 50% pro-rated into equal payments over the term of the contract; and,
- c) 25% upon substantial completion.

F.07 EARTH EXCAVATION – GRADING (INCLUDING ALL REMOVALS)

F.07.1 SCOPE

OPSS 206 and OPSS 510 shall apply except as amended and extended by the addition of the following:

F.07.2 Removals

Any information on removals given herein or shown on the drawings is approximate only and the Contractor shall base his bid on the findings of his investigation of the site.

Where existing features or underground utilities, known or unknown, are located within the limits of construction and are not identified to be removed, the Contractor shall undertake all appropriate measures and actions to protect the features or utilities. In scenarios where implementation of these actions is determined not to be feasible, the Contractor may remove and re-instate the feature to existing or better condition, in accordance with all applicable specifications and regulations.

Where existing features or abandoned underground Utilities conflict with the line of construction, the Contractor shall remove these items and dispose of them in waste areas, provided by the Contractor at his own expense outside the Contract limits in accordance with OPSS 180. Where the Contract Administrator determines that the Contractor's methods are responsible for damage to adjacent features and materials not specified for removal, the Contractor shall carry out remedial measures at his own expense to the satisfaction of the Contract Administrator. The Contractor shall correct damage and/or replace materials with a product of equal or better quality and to the satisfaction of the Contract Administrator.

There shall be no extra payment for the work associated with protection, reinstatement or removal of existing features or utilities; this work is deemed to be included in the Contract price for the item "Earth Excavation – Grading", or incidental to other items in the Contract.

Saw-cutting of existing concrete curbs is required to produce neat lines at removal limits and will be considered as incidental to the works required. The existing Pavement shall be cut full depth to produce

neat lines to accommodate asphalt transitions at the limits of full road reconstruction. No additional payment will be allowed for saw-cutting, as the cost of such work is deemed to be included in the Contract price for the item “Earth Excavation – Grading”, or incidental to other items in the Contract.

F.07.3 Designated Construction Work Areas

The Contract Drawings indicate the right-of-way limits and designated Work Area limits where required to allow grading and Pavement tie-ins. The Contractor shall strictly confine his operations to within the right-of-way limits or designated construction Work Area limits, as well as to the grading limits and Pavement match lines specified on the Contract Drawings unless otherwise authorized by the Contract Administrator. The Contractor shall clearly identify onsite the edge of designated Work Areas, grading limits and Pavement match lines and ensure all workers are aware of these limits. Unless specified elsewhere in the Contract or directed by the Contract Administrator, any disturbance outside specified construction or grading limits shall be reinstated by the Contractor at his expense to original conditions to the Contract Administrator’s satisfaction.

No additional payment will be allowed for this requirement as the cost of such work is deemed to be included in the unit price bid for this item.

F.07.4 Salvaged Materials

Where specified in the Contract, materials designated to be salvaged shall be stored for re-use prior to general removals and grading operations. Any material deemed by the Contract Administrator to be unsuitable for reinstallation and any salvaged material in excess of Contract requirements shall be removed by the Contractor and disposed of in waste areas, provided by the Contractor at his own expense outside the Contract limits in accordance with OPSS 180.

Where the Contract Administrator deems that materials to be salvaged have been damaged by the Contractor's operations, the Contractor shall replace the material with a product of equal or better quality at his expense to the satisfaction of the Contract Administrator.

F.07.5 Removal of Existing Miscellaneous Debris, Refuse, Piles, etc.

Where existing miscellaneous deleterious material such as debris, refuse, piles, fallen trees, branches, etc. is encountered within the Contract limits the Contractor shall dispose of them in waste areas, provided by the Contractor at his own expense outside the Contract limits in accordance with OPSS 180.

Unless otherwise allotted for under a separate Contract item, no additional payment will be allowed for removal of existing miscellaneous debris, refuse, piles, etc, as the cost of such work is deemed to be included in the Contract price for the item “Earth Excavation – Grading”.

F.07.6 Disposal

No additional payment shall be allowed for disposal of surplus excavated material and unsuitable and waste material by the Contractor OUTSIDE of the contract limits in waste areas, provided by the Contractor at his own expense, in accordance with OPSS 180. Where existing items are designated to be removed, the Contractor shall remove these items and dispose of them in waste areas, provided by the Contractor at his own expense outside the Contract limits in accordance with OPSS 180.

F.07.7 Approved Native Fill / Backfill Requirements

The Contractor shall be solely responsible to stage excavation operations or alternatively stockpile suitable excavated material at an approved location, offsite if necessary, to ensure Contract requirements

for approved native materials for fill (for grading) and backfill (for trenches). No additional payment will be allowed for this work as the cost of such work is deemed to be included in the unit price bid for this item.

F.07.8 Road Subgrade

The Contractor shall be fully responsible to take necessary measures and schedule construction activities to ensure that the road Subgrade remains undisturbed and stable. Where the Contract Administrator determines that the Contractor's methods are responsible for Subgrade instability, the remedial measures will be carried out by the Contractor at his own expense to the satisfaction of the Contract Administrator. Measures proposed by the Contractor to correct defective Subgrade will be subject to the Contract Administrator's approval.

No additional payment will be allowed for removal of subgrade, as the cost of such work is deemed to be included in the Contract price for the item "Earth Excavation – Grading".

F.07.9 Proof Rolling Subgrade

A large rubber tired smooth drum roller shall be used to proof roll the Subgrade prior to placing Roadway granulars. The Contract Administrator may authorize use of other proof rolling equipment.

Make sufficient passes with the proof rolling equipment to subject every point on the surface to three separate passes of the full load of the roller.

Where proof rolling reveals areas of defective Subgrade:

- a) Remove Subgrade material to a depth and extent as directed by the Contract Administrator.
- b) Backfill excavated Subgrade with approved native material and compact in accordance with this section.

No additional payment will be allowed for this requirement as the cost of such work is deemed to be included in the Contract price for the item "Earth Excavation – Grading" unless specified elsewhere in the Contract.

Payment for removal of Subgrade material where directed will be included under "Earth Excavation – Grading". However, where the defective subgrade is deemed by the Contract Administrator to be caused by the Contractor's construction methods or due to the Contractor's other construction activities, all measures associated with correction of the defective Subgrade shall be at the Contractor's expense.

F.07.10 Measurement for Payment and Basis of Payment

Sub-section 206.09.02 of OPPS 206 is deleted and replace by the following:

Earth Excavation – Grading – ITEM

Measurement shall be by Plan Quantity, as may be revised by Adjusted Plan Quantity, of the volume in cubic metres computed from field measurements of existing cross sections taken during the pre-construction stage and shall be based on the theoretical limits designed in the Contract. If portions of the work that entail earth excavation are not required or installed, the excavation volume associated with the work that has been omitted shall be subtracted from the total estimated quantity in the Contract. If the excavation for portions of the work do not meet the lines and grades specified, the Contract Administrator may subtract the volume associated with the difference in what should have been excavated (based on

proposed lines/grades) compared to what was actually excavated (based on actual lines/grades) from the total estimated quantity in the Contract.

Sub-section 206.09.01.02 of OPSS 206 is deleted in its entirety; Section 206.10.02 of OPSS 206 is deleted in its entirety.

Section 510.09, of OPSS 510 is amended in that no separate payment will be made for the removal of items listed and specified herein except where specified elsewhere in the Contract and the costs shall be deemed to be included in the contract price for the item “Earth Excavation - Grading”, and will be full compensation for all labour, equipment and materials necessary to complete the work herein described and specified in the Contract drawings.

Section 510.09, Measurement for Payment, and Section 510.10, Basis for Payment, of OPSS 510 are amended and extended by the deletion of the following items:

- Removal of Curb and Gutter
- Removal of Asphalt Curb and Gutter
- Removal of Concrete Curb and Gutter
- Abandonment of Maintenance Holes, Catch Basins, Ditch Inlets, and Valve Chambers Partial-Depth
- Capping of Maintenance Holes, Catch Basins, Ditch Inlets, and Valve Chambers
- Removal of Pipes and Culverts
- Abandonment of Pipes and Culverts
- Removal of Residential Services
- Removal of Pipe Subdrains
- Removal of Hydrants, Valves and Watermain Appurtenances
- Removal of Fence and Noise Barrier
- Removal of Delineator Posts
- Removal of Cable Guide Rail
- Removal of Concrete Barrier
- Removal of Steel Beam Guide Rail
- Removal of Steel Box Beam Barrier
- Removal of Anchor Blocks
- Removal of Energy Attenuators
- Removal of Ramp Closure Gates
- Cutting Existing Pavement
- Removal of Asphalt Pavement
- Removal of Asphalt Pavement from Concrete Surfaces
- Removal of Concrete Pavement
- Removal of Sundry Driveways and Sidewalks
- Removal of Asphalt-Treated Base
- Removal of Concrete Base
- Removal of Asphalt Pavement, Partial-Depth
- Removal of Concrete Pavement, Partial-Depth
- Removal of Concrete Curb
- Removal of Asphalt Pavement from Concrete Surfaces on Structures
- Removal of Concrete

- Removal of Driveways, Sidewalks, and Sundry Asphalt Pavements
- Removal of Interlocking Brick Driveways and Walkways
- Removal of Concrete Sidewalk
- Removal of Gabions
- Removal of Sign Support Structure
- Removal of Sign Support Structure Footings
- Removal of Flagstone Walkways
- Removal of Patio Stones
- Removal of Gardens
- Removal of Wood curb
- Removal of Stone, Concrete and Interlocking Brick Retaining Walls
- Removal of Cedar Hedges and Trees
- Removal of Fence
- Removal of Miscellaneous Landscaping Features
- Milling for Asphalt Key-Ins
- Removal of Concrete Sidewalks
- Removal of Rip Rap

Section 510.10, Basis of Payment, of OPSS 510 is amended and extended in that where work of the type listed above is designated to be carried out, no separate payment will be made for this work and the Contract Price for the Tender item “Earth Excavation – Grading” shall include full compensation for all labour, equipment and material required to do the work.

F.08 REMOVE AND REINSTATE INTERLOCKING CONCRETE PAVERS

F.08.1 Scope

This Special Provision covers the removal and reinstallation of interlocking concrete pavers. This applies to driveways, sidewalks, and other areas within the boulevard.

F.08.2 General

The existing interlocking concrete pavers shall be salvaged in accordance with OPSS.MUNI 510.

OPSS.MUNI 550 shall apply to reinstallation, except as follows:

Interlocking concrete pavers salvaged under this Contract shall be used in place of new interlocking concrete pavers. Broken or damaged interlocking concrete pavers shall not be reused and shall be disposed off-site in accordance with OPSS 180. The Contractor shall supply and use all new bedding and joint sand materials. Existing granular base materials shall be left in place and supplemented as necessary, provided that adequate depth and compaction can be confirmed to the satisfaction of the Contract Administrator.

Where insufficient salvaged interlocking concrete pavers are available, the work shall be completed in accordance with OPSS.MUNI 550 using new materials.

F.08.3 Measurement for Payment

Reinstallation of Salvaged Interlocking Concrete Pavers shall be measured in square metres (m²).

F.08.4 Basis of Payment

Payment at the Contract price for the tender items “Removal of Interlock Driveways and Pathways” and “Interlock Driveways and Pathways” shall be full compensation for all labour, equipment, and material required to do the work, including excavation, stone dust levelling course, and mortar sand.

The Granular ‘A’ shall be paid under the Granular ‘A’ item.

Work requiring new interlocking concrete pavers due to insufficient salvaged pavers being available shall be paid under the “Interlock Driveways and Pathways” item.

F.09 REMOVAL, SALVAGE, AND REINSTALLATION

F.09.1 Scope

This Special Provision covers the removal, salvage, and reinstallation of specified items including but not limited to gates and fence.

F.09.2 General

The specified items shall be removed and salvaged in accordance with OPSS.MUNI 510. These items shall be safely and securely stored until required for reinstallation.

Reinstallation shall be carried out in accordance with applicable OPSS specifications and standard details. New footings shall be installed where required.

Following reinstallation, the items shall be cleaned.

Items lost, stolen or damaged shall be replaced by the Contractor at no additional cost to the Town.

F.09.3 Measurement for Payment

Measurement shall be per item removed, salvaged, and reinstalled.

F.09.4 Basis of Payment

Payment at the Contract price for the tender items “Removed and Salvage of Fence and Gates” and “Reinstatement of Fencing and Gates” shall be full compensation for all labour, equipment, and material required to do the work.

F.10 CONCRETE SIDEWALK, MEDIANS, BOULEVARDS, AND ISLANDS

Amendments to OPSS 351

OPSS 351, shall apply except as amended and extended herein.

F.10.1 Scope

Section 351.01 of OPSS 351 is extended to include construction of concrete medians, boulevards, and islands.

F.10.2 Materials

F.10.2.1 Concrete

Section 351.05.01 of OPSS 351 shall be amended in that the Class of Concrete shall be CSA 32 MPa, Class C-2, the air entrainment shall be 5% to 8% prior to placement and the slump shall be less than 60mm for extruded concrete curbs and less than 90mm for placed concrete curbs and sidewalk.

F.10.3 Granular

Subsection 351.05.04 of OPSS 351 shall be amended in that bedding material for sidewalks shall be Granular 'A' conforming to OPSS 1010, unless specified otherwise in the Contract.

F.10.4 Construction

Subsection 351.07 of OPSS 351 is amended by the addition of the following:

Where specified on the contract drawings, approved Tactile Walking Surface Indicators (TWSIs) shall be supplied and installed in accordance with S.P. F.12.

When monolithic construction has been specified, the Contractor shall obtain written approval from the Contract Administrator prior to proceeding with non-monolithic construction.

F.10.5 Concrete Curing

Subsection 351.07.13 of OPSS 351 is amended by the addition of the following:

The membrane curing compound shall be applied to the concrete surface by means of approved spraying equipment that includes provision for agitation of the material so that it shall be homogeneous at the time of application.

When applicable for use, membrane curing compound shall be applied 2 metres behind finishing operations or upon dissipation of any bleed water, whichever comes later. A second coat of curing compound shall be applied within 30 to 60 minutes of the first application.

Where concrete curing has not been provided in accordance with specification requirements (such as the absence of curing procedures or delays in application of curing compounds), the contractor shall submit a remedial action plan for consideration by the owner which includes but not limited to the prolonged wet curing of the concrete. Concrete which does not conform to the contract requirements shall not be accepted into the work.

Where coverings are used as part of the curing process in areas accessible to pedestrians, the coverings shall be maintained in such a manner as to prevent trip and slip hazards.

F.10.6 Measurement for Payment

F.10.6.1 Actual Measurement

Subsection 351.09.01.01 of OPSS 351 is deleted and replaced with the following:

Measurement will be of the area of concrete in sidewalk, medians, boulevards, and islands, measured in square metres.

F.10.6.2 Plan Quantity Measurement

Clause 351.09.02 of OPSS 351 is deleted and replaced by the following:

When measurement is by Plan Quantity, it may be revised by Adjusted Plan Quantity, of the horizontal area in square metres without separation into types of construction whether sidewalk, median, boulevard or island.

F.10.7 Basis of Payment

Subsection 351.10.01 of OPSS 351 is amended by the addition of the following:

No additional payment will be made for the work in connection with providing depressed access crossings as the cost of such work is deemed to be included in the Contract price for the applicable item.

The granular "A" used as sidewalk bedding shall be paid for under the "Granular A" item in this contract.

Subsection 351.10.02 of OPSS 351 is amended by the addition of the following: TWSIs shall be paid for under S.P. F.12.

F.11 CONCRETE CURB AND GUTTER

Amendments to OPSS 353

OPSS 353, shall apply except as amended and extended herein.

F.11.1 Material

F.11.1.1 Concrete

Section 353.05.01 of the OPSS 353 shall be amended in that the Class of Concrete shall be CSA 32 MPa, Class C-2 and the slump shall be less than 60mm for extruded concrete curbs.

F.11.2 Construction

F.11.2.1 Depressed Curbs at Access Crossings

Section 353.07 of OPSS 353 is amended by the addition of the following:

Depressed curbs at access crossings shall be constructed where shown on the Contract drawings or as directed by the Contract Administrator.

F.11.2.2 OPSD Type Curb and Gutter Systems

Section 353.07 of OPSS 353 is amended by the addition of the following:

Where OPSD type curb and gutter systems are designated to be constructed, the OPSD detail drawings are amended in that the additional thickness specified for the curb where adjacent to sidewalk or median shall not apply.

F.11.2.3 Extrusion Methods

Subsection 353.07.07 of OPSS is amended by the addition of the following:

Two No. 15 reinforcing bars shall be added to the curb or curb and gutter section for the full length of the depress accesses if the full section depth of 400mm is not maintained.

Two dowels, 300mm long, made of No. 15 reinforcing bars shall be installed at the end of an extruded pour in preparation for the continuation of the extruded pour the next day.

F.11.2.4 Addition of Material on Site:

Section 1350.07.07.02 of OPSS 1350 is deleted in its entirety and replaced with the following:

Normal field quality assurance testing such as slump and air content will be made on site. If the test results are out of the specified range, a re-test will be done if requested by the Contractor. This will allow the Supplier to make the necessary adjustments. If the re-test is within the specification limits, the load will be accepted only if it can be placed within (2) two hours, and no water has been added after the first hour.

If the re-test is out of the specified limits the concrete will be rejected regardless of the time limits.

F.11.3 Basis for Payment

Subsection 353.10.01 of OPSS 353 is amended by the addition of the following:

No additional payment will be made for the work in the connection with providing depressed curbs as the cost of such work is deemed to be included in the Contract price for this tender item.

F.12 TACTILE WALKING SURFACE INDICATORS

Amendment to OPSS 351

OPSS 351, shall apply to this work except as amended and extended herein.

F.12.1 Scope

Subsection 351.01 of OPSS 351 is amended by the addition of the following:

This Special Provision covers the supply and installation of Tactile Walking Surface Indicator plates (TWSIs) for sidewalk, walkway, and pathway ramps to warn visually impaired pedestrians that they are entering the roadway.

F.12.2 Design and Submission Requirements

Subsection 351.04.01 of OPSS 351 is deleted in its entirety and replaced with the following:

TWSIs shall be 610 to 650mm in depth and extend along the bottom portion of the depressed curb that is flush with the roadway, to the width as shown on the Contract Drawings.

For curb ramps, TWSIs shall extend the full width of the curb ramp/area.

Plates shall be parallel with the curb radius (i.e. not necessarily perpendicular to the direction of pedestrian travel). This will require the use of radius TWSI plates in some instances.

Radius TWSIs are available in various radii. Careful consideration of radius design is required as the TWSI radius shall follow as close as possible the back of curb radius. When using different radius TWSIs to match the back of a single curb radius, plates with varying radii should be alternated.

Contractor shall submit shop drawings at least two weeks before TWSI installation showing the proposed plate arrangement at each TWSI location, the width and radius as shown on the Contract Drawings, and the width and radius achieved by the proposed plates, for review by the Contract Administrator. When requested by the Contract Administrator, Contractor shall provide written confirmation that selected TWSI product meets applicable material specifications.

F.12.3 Material

Subsection 351.05.06 of OPSS 351 is deleted in its entirety and replaced with the following:

Contractor shall select products from the following list of approved suppliers and products to meet the width and radius of TWSI required at each specific location as shown on the Contract Drawings:

- Neenah
- East Jordan – Duralast
- Advantage Cast Iron

- Ironped
- ADA Solutions – Irondome
- Bibby-Ste-Croix – Safety Detection System
- Star

F.12.4 Construction

Subsection 351.07.09 of OPSS 351 is deleted in its entirety and replaced with the following:

All installations shall be completed in accordance with: Contract Drawings, supplemented by the applicable detail drawings as referenced within the Contract, manufacturer's installation procedures; and the following additional requirements:

- a) TWSIs shall be set back 150 to 200mm from the back of curb. Where TWSIs are installed in monolithic sidewalk, plates shall be set back 300 to 350mm from the front face of curb.
- b) Unless indicated otherwise on the contract drawings, for depressed corner areas serving two crossing directions provide 300mm +/- 50mm gap between the TWSI sets.
- c) All TWSIs shall have 6mm wide x 6mm deep drain grooves at corners between the TWSI and the curb. Panel joints may be adapted for use if touching.
- d) TWSI sets shall be bolted together with Stainless Steel bolts and nuts.
- e) Tops of TWSIs shall be aligned and level with the adjacent concrete surface and installation in wet concrete shall be effective in permanently securing the TWSI in place once dry.

F.12.5 Measurement for Payment

No change to OPSS 351.

F.12.6 Basis of Payment

Subsection 351.10.02 of OPSS 351 is deleted in its entirety and replaced with the following:

Payment at the Contract price for the tender item shall include full compensation for all labour, equipment and material required to do the work, including the supply, hauling, preparation, bolting, setting/placing, and finishing of the TWSIs.

No additional payment will be made for the work in connection with providing shop drawings, depressed access crossings, flared sides, curb transitions, or blended transitions as the cost of such work is deemed to be included in the Contract price for the applicable item.

Where the TWSI is set in a 150-200mm concrete border to suit non-concrete sidewalks, walkways and pathways, the concrete border and base shall be paid under the applicable concrete item, separate from and in addition to the TWSI tender item.

F.13 SIGNAGE

This Specification describes the requirements for the removal, salvage, supply, and installation of signs.

F.13.1 References

All work under these items shall be carried out in accordance with OPSS 510 and 703 except as extended or amended herein:

F.13.2 Construction

F.13.2.1 Removal, Salvage, and Reinstallation of Existing Signs

The contractor shall remove and salvage existing sign boards on existing street lighting or traffic poles for later re-use.

The contractor shall remove and salvage existing sign boards on existing steel posts for re-use upon project completion. Existing steel posts and existing accessible parking signs shall be disposed of offsite.

The Contractor shall install salvaged signs on new street side pole at locations specified in the Contract Drawings. Installation shall be as shown in the Contract Drawings and in accordance with the requirements of latest edition of the applicable books of the Ontario Traffic Manual.

F.13.2.2 Supply and Install New Signs – Ground Mounted, Any type

The Contractor shall supply and install new signboards assembly on new posts at locations specified in the Contract Drawings. Installation shall be as shown in the Contract Drawings and in accordance with the requirements of latest edition of the applicable books of the Ontario Traffic Manual.

F.13.3 Measurement For Payment

Measurement for payment for the item “Signs” shall be by each board or board and steel post assembly removed, salvaged, and reinstalled.

F.13.4 Basis Of Payment

Payment at the Contract price for the above item shall be full compensation for all Labour, Equipment, and Material to do the work, including the supply and installation of new poles for reinstallation of new and salvaged signs.

F.14 PRECAST CONCRETE MAINTENANCE HOLES AND CATCH BASINS

This Specification describes the requirements for the supply and installation of concrete maintenance holes and catch basins.

F.14.1 References

All work under these items shall be carried out in accordance with OPSS 407 except as extended or amended herein:

F.14.2 Construction

A minimum of 300 mm of granular material shall be placed and compacted in the bottom of the excavation for bedding prior to placing the unit.

After the precast unit has been placed plumb and true to alignment and grade, and the pipe sewer connections placed and neatly grouted into the openings provided, the excavation shall be filled with Granular "A" material to a minimum thickness of 300 mm around all sides of the precast concrete unit to the full depth of the structure. The granular material shall be deposited in layers so that when compacted, each layer shall not exceed 150 mm in depth and in such manner as to not disturb the structure.

Approved hand compaction equipment shall be used to consolidate the material. Granular material for bedding and backfill purposes shall meet the requirements of OPSS 1010 and shall be compacted to 100% of the maximum dry density.

All manhole and catch basin frames and covers shall be placed to top of base course asphalt grade. Prior to placing the final lift of roadway asphalt, the Contractor shall adjust all frames and covers using precast concrete adjusters and place to final top of asphalt grade and no additional compensation will be made. All manhole and catch basin frames shall have a minimum of 1 (50 mm) concrete adjustment rings. There shall be no insert-a-ring type adjustment grates used to adjust manhole covers to final asphalt grade.

All precast catch basin and manhole joint sections shall have proper manufactured watertight seals between sections. Catch basin weep hole parging shall be decided in the field on an individual structure basis.

All manhole frames must be adjusted to final grade with shims then set in concrete prior to the final lift of asphalt. The gap between the frame and adjustment ring shall be no less than 50mm to allow concrete to fill the gap. All cost associated with this shall be borne to the Contractor and included in the unit price.

The Contractor is required to submit shop drawing for review and approval prior to ordering any materials.

F.14.3 Measurement For Payment

Measurement shall be by each structure installed.

F.14.4 Basis Of Payment

Payment at the Contract price for manholes and catch basins, as described herein shall be full compensation for all Labour, Equipment, and Material to do the work including but not limited to shoring, 'build-in' all connecting sewer pipes where shown on the Drawings, placing and compacting of Granular "A" backfill, supply and installation of frames and covers, and for all other items of work and materials incidental to the satisfactory completion of the work.

F.15 MAINTAINING FLOW IN SEWERS AND SEWER SERVICES

F.15.1 Scope

The Contractor is required to maintain the combined, storm, and sanitary flows during sewer installation in accordance with OPSS 491 except as amended or extended herein:

F.15.2 References

The Contractor is required to maintain the storm and sanitary flows during sewer installation in accordance with OPSS 491 except as amended or extended herein.

F.15.3 Construction

OPSS 491.07.03, Scope, is extended to state that flow in all sewers shall be maintained at all times with no interruption in services to properties. Flow monitoring data is not available for sewers within the project area. The Contractor shall either monitor flows within the existing sewers to obtain a sufficient understanding of typical flow rates (including during wet weather events), or shall size bypasses for peak flows (sanitary) or 2-year rainfall event flows (storm). These flow rates can be provided on request by the Engineer.

The Contractor shall ensure that the flow through all storm and sanitary sewer service connections is maintained at all times.

The Contractor is deemed to have included within this item all costs associated with bypass pumping required for diversion of service connection flows and diversion of flows from the existing sewer to the

new sewers as and when required. Bypasses shall have sufficient capacity for dry- and wet-weather flows that can be reasonably anticipated to occur during the period when each bypass is in operation, considering the duration for which the bypass will be in operation, season, and weather forecast.

The Contractor is deemed to have included within this item for all costs associated with bypass pumping as and when required, to divert flows in the existing sewer systems. A fully installed and ready-to-run backup pump of equal capacity to the largest duty pump shall be in place at all times when pumped bypasses are in operation.

On no account shall the Contractor be permitted to temporarily divert any sanitary water into the storm system.

The Contractor shall be responsible for any back-ups, basement flooding incidents or environmental spills associated with the work. All clean up and restoration in the event of such occurrences shall be at the Contractors cost.

Contractor shall have personnel on site at all times when pumped bypasses are in operation. Such personnel shall be adequately trained and equipped to monitor and operate the equipment.

F.15.4 Design And Submission Requirements

The Contractor shall submit for review a detailed flow maintenance plan that shall be coordinated with the proposed removals.

F.15.5 Measurement For Payment

No measurement for payment shall be made.

F.15.6 Basis Of Payment

Payment for the above works is deemed to be included within the appropriate payment items for sanitary and storm sewer and sewer service installations.

F.16 TEMPORARY WATER

Temporary overland water distribution will be required and is to be supplied, installed, commissioned, maintained, decommissioned, and disassembled by the Contractor. The Contractor will be required to plan their work so as to not interfere with the conveyance of water to residents via the temporary overland water distribution during this Contract. This temporary overland water distribution system may cross streets to ensure the adequate supply of water to residents in the area affected by construction. The Contractor will ensure that, in locations where the temporary overland water distribution pipes cross the roadway, that they are adequately supported when excavating and installing pipes underneath, to the satisfaction of the Town.

F.16.1 Scope

This Specification describes the requirements for the installation of temporary watermains, service connections and associated appurtenances prior to disconnecting service of an existing watermain on a temporary basis.

F.16.2 References

The provisions of OPSS 493 shall apply except as modified herein.

F.16.3 Materials

All temporary water pipe shall be NSF 61 compliant.

Material shall be capable of having the pipe contents freeze and thaw without breaking the pipe or fittings.

Embedment material, bedding material, and cover material shall be Granular A. Backfill material shall be acceptable Native Material and/or Granular A.

F.16.4 Construction

The Contractor must provide temporary potable water supply to residents under the approval of the Owner. Water shall be supplied by approved temporary by-pass line and service connections complete with valves and backflow prevention devices as required. All supply points for temporary water systems must be obtained from a watermain, connections to fire hydrants will not be permitted.

Temporary water supply shall maintain existing flows and pressures. Temporary fire hydrants shall not be required.

Connections to the private plumbing system of a residential unit shall be by one of the following methods:

- a) Dig the water service at the property line and connect directly to the existing service at or near the curb stop. All safety procedures must be met to protect the open trench, and the property owner must be notified of the need for a temporary shutdown to allow the temporary condition.
- b) Through a window or hole in the basement wall and connected to an inside tap connection (i.e. washtub), with the existing water service shut-off at the curb stop. Any drilling or cutting on a private building shall be with the owners' consent and shall be done in such a way as to prevent possible unauthorized entry into the building.
- c) Through an exterior hose bib connection, provided the hose bib is in good working condition and equipped with an approved backflow preventer and consent from the property owner.

For individual property connections, the pipe, hose and all other materials which are to be furnished by the Contractor for use in conjunction with the temporary service pipe and temporary connections to property services and branches shall be approved by the Owner, and shall be fully adequate to withstand the pressures and all other conditions of use and shall be of material which does not impart any taste or odour to the water.

The pipe and fittings shall be able to withstand the design pressure without visual leakage. Care shall be exercised throughout the installation of any temporary pipe and service fittings to avoid any possible contamination of any watermain or property service or contamination of the temporary service pipe proper.

The by-pass line and private service connections shall be chlorinated prior to their use. The temporary service connections shall include a valve near the point of connection to the by-pass line and at the connection to the private plumbing system so that both the by-pass and private services may be chlorinated except for the final connection.

The Contractor shall be responsible for all flushing and disinfection operations. The Contractor shall also be responsible for all sampling and testing, including chlorine residual and bacteriological testing. All flushing, disinfecting, and testing shall be completed in the presence of the Contract Administrator and Ontario Clean Water Agency.

After the project work is completed and/or municipal water service connections restored and excavations backfilled, the main will be returned to service and the temporary water supply lines shall be removed.

The Contractor shall be responsible for all work and costs associated with supplying, maintaining, and removing the temporary water.

F.16.5 Design And Submission Requirements

The Contractor shall submit a detailed plan of his proposed temporary supply scheme to the Contract Administrator for review, at least 5 business days prior to implementation.

F.16.6 Measurement For Payment

Measurement of Temporary Water shall be by Lump Sum.

F.16.7 Basis Of Payment

Payment at the contract price for the above tender item shall be full compensation for all labour, equipment and material required to do the work.

Payment for this item shall be made as follows:

- a) 50% for installation of measures outlined above;
- b) 50% for maintenance prorated over construction period.

F.17 WATERMAIN CONSTRUCTION

OPSS 441 (April 2025) Construction Specification for Watermain Installation in Open Cut is amended as follows:

Section 441.03 is amended as follows:

“Associated Appurtenance” shall include fittings such as tees, crosses, bends, reducers, caps, cathodic protection, tracer wire, thrust blocks and/or retaining/restraining glands.

Section 441.03 is further amended with the addition of the following:

“Municipal Forces: means employees of the owner that are certified to perform "operator" functions with the Municipality’s water distribution system as defined by Ontario Regulation 128/04 "Certification of Drinking Water System Operators and Water Quality Analysts”.

“Drawings: means the approved plans and profiles issued for construction;”

“In Service: references any water plant that has passed approved bacteriological testing and/or is connected to the existing water distribution system. For the purposes of this specification the terms "existing", "live", "in-service", or "commissioned" watermain are interchangeable.”

Section 441.05.04.03 is deleted.

Section 441.05.05 is deleted.

Section 441.05.06 is deleted.

Section 441.05.09.01 is amended by deleting the valve type options a) to d) and inserting the following:

“Valves shall be C509 Epoxy Coated, Resilient Seat by Mueller or approval equal. Valves shall include a standard 50 mm operating nut and opening counter clockwise. Valve boxes shall be 130 mm dia. screw type. Valve box covers shall be marked ‘Water’.

Section 441.05.09.03 is amended with the addition of the following:

“For PVC watermains one packaged zinc anode type Z-12-24 shall be installed on each valve, metallic bend, tee and restraining ring and wrapped with a Petrolatum corrosion protective wrap three part system Denso Wrap (Petrolatum Wrap Primmer Paste, Petrolatum Wrap Mastic and Petrolatum Wrap Anti-Corrosion Tape) shall be used.”

Section 441.05.12 is amended with the addition of the following:

“Approved service connection fittings and appurtenances are:

- Main Stops
- Mueller B-25008 Compression
- Curb Stops
- Mueller B-25155 Compression
- Couplings
- Mueller H15403 Compression
- Service Boxes (Sliding Type) (complete with Stainless Steel Rods)
- Mueller A-726
- Factory Made PVC Pressure Pipe Service Fittings
- IPEX tapped coupling factory made fittings
- Mechanical Joint Restraints
- Romac
- Uni-Flange,
- Megalug
- or approved equal
- Tracer Wire and Connectors
- Connectors: Copperhead Industries DryConn 3-Way Direct Bury Lug
- Tracer Wire 10 gauge stranded copper, plastic coated tracer wire TWU 75C 600 V
- Temporary Water Piping
- Yelomine Temporary Potable Water Piping System
- or approved equal
- Valves and Valve Box
- Valves shall be C509 Epoxy Coated, Resilient Seat by Mueller or approval equal.
- Valves shall include a standard 50 mm operating nut.
- Valves shall “opening” counter-clockwise
- Valve boxes shall be 130 mm dia. screw type, Bibby-Ste-Croix VB3200
- Valve box covers shall be marked 'Water'.”

Section 441.05.13 Concrete is amended by the addition of the following:

“1. The minimum strength of concrete shall be not less than 25 MPa

2. The maximum slump shall not be greater than 75 mm

3. In disturbed ground concrete shall be formed against plywood or similar material to be left in place. Thrust surfaces shall be formed against undisturbed ground.

4. Except for the addition of water, concrete for thrust blocks shall come premixed from a concrete supplier or as 'ready mix' from a concrete truck. On-site mixing of cement, sand and aggregate etc., by the Contractor, for the purpose of making concrete thrust blocks/anchors will not be accepted."

Section 441.05.17 Tracing Wire is added as follows:

"Tracing wire shall be TWU or RWU, 10 gauge, 7 strands or more, copper, 60°C or higher, 600V or approved equivalent."

Section 441.07.01 is amended by the addition of "Associated Appurtenances".

Section 441.07.07, 2nd paragraph, is revised as follows:

All pipe up to and including 600 mm diameter shall be delivered to the Work Area with end covers on both ends and a tamper evident seal on only the bell end. These components shall adhere sufficiently to withstand the stresses caused during shipment.

Section 441.07.14 is amended with the addition of the following:

Tracing Wire

The Contractor shall supply and install tracing wire for all PVC, HDPE and concrete watermains. Tracing wire shall also be installed on all hydrant laterals and services connected to PVC, HDPE and concrete watermains.

The tracing wire shall be laid flat and secured every 3m at the top or spring line of the watermain, hydrant laterals and water services. Tracer wire shall be continuous and only unavoidable splicing shall be completed. The hydrant lateral tracing wire shall extend a minimum of 300mm above the hydrant break away flange and neatly wrap around hydrant to terminate. The tracer wire at the main shall be carefully exposed and the hydrant lateral tracer wire shall be connected to the main tracer wire.

Water service lateral tracing wire shall extend from the main and be attached to the top 152mm of the service post using the appropriate brass ground clamp suitable for underground installations. The wire shall be stripped of insulation and passed through the clamp to make contact with the service box, for continuity purposes. The wire shall be loosely wrapped around the service box, extending a minimum of 300mm above the surface and then neatly wrapped around the service box for termination. The tracer wire at the main shall be carefully exposed and the service tracer wire shall be connected to the main tracer wire.

All splices and connections shall be made using a DryConn 3-Way Direct Bury Lug Yellow 90120, installed in accordance with the manufacturer's instructions.

Where PVC, HDPE or concrete watermains are to be connected to ductile iron or cast pipes the tracing wire shall be attached to the ductile iron or cast pipe by cadweld.

At watermain end caps, approximately 3.0 m of tracing wire shall be extended, coiled and properly secured for future connections.

All tracing wire shall be continuity tested after all services have been installed and before the base course of asphalt is applied. Testing shall be done in the presence and to the satisfaction of the Contract Administrator with at least 48 hours' notice.

Tracing wire installations that fail the testing must be corrected and retested to the satisfaction of the Contract Administrator.

Section 441.07.16 is amended with the addition of the following:

"PVC pipe may be cut with a fine-toothed hand saw, power saw or hacksaw; chain saws shall not be used. It is recommended that the pipe be marked around its entire circumference prior to cutting to assure a square cut. Use a factory-finished bevelled spigot end as a guide for proper bevel angle, and depth of bevel plus the distance to the insertion mark. The end may be bevelled using a pipe bevelling tool or a wood rasp, portable sander or abrasive disc. Round off any sharp edges.

Use a factory finished spigot end as a guide to determine the correct taper. The end may be bevelled using specially designed tools for this work, portable sanders or a coarse flat file.

After cutting, draw a new and visible reference mark on the spigot end of the pipe. The reference mark is defined as the line marking the limit of insertion of the spigot end into the bell end of the pipe. The proper distance for the reference mark from the spigot end of the pipe shall be in accordance with the manufacturer's specifications for each size of pipe.

Cut off the factory bevelled end and provide approximately 3 mm of bevel when inserting into a push-on joint. No bevel is permitted for an MJ fitting.

All cutting dust and debris shall be removed from the inside of the pipe prior to installation."

Section 441.07.18.01 is amended with the addition of the following:

"Epoxy Coating Repairs

Damage such as small nicks or chips to factory applied protective epoxy coatings caused by field handling shall be repaired immediately using a liquid epoxy coating material. Oils or other contaminants shall be removed from the damaged area using suitable solvents. All visible rust shall be removed by wire brush, grinding, filing or sanding methods. Roughen the surface of the existing epoxy coating surrounding the damaged area. Two layers of the liquid epoxy coating shall be applied overlapping the existing coating and allowed to dry as per manufacturer's recommendations."

Section 441.07.18.03 Valves is added as follows:

"All isolation valves located at the end of a dead end watermain will require at least one full pipe length to be installed and capped beyond the downstream side of the valve. The valve shall remain in the closed position and the operating nut removed to prevent opening of the valve. Bedding for valves shall be in accordance with the standard pipe bedding specifications unless otherwise noted.

Valve Boxes shall be installed in accordance with standard drawing details. Bedding and backfilling around the valve boxes will be in accordance with the standard pipe bedding specifications unless otherwise noted. Valve boxes, including TVS valve boxes shall be centred and plumb over the valve nut with the cover adjusted to match the final surface.”

Section 441.07.18.04 Cathodic Protection is added as follows:

“The provisions of OPSS 442 shall apply except as extended or amended herein.

Anodes & Petrolatum Wrap

Anodes shall be installed as per OPSD 1109.011 and a Petrolatum corrosion protective wrap three part system Denso Wrap (Petrolatum Wrap Primmer Paste, Petrolatum Wrap Mastic and Petrolatum Wrap Anti-Corrosion Tape) shall be used. For PVC watermains one packaged zinc anode type Z-12-24 shall be installed on all buried valves, tees, bends and pipe restraining devices and be wrapped with a Petrolatum corrosion protective wrap three part system (Petrolatum Wrap Primmer Paste, Petrolatum Wrap Mastic and Pertrolatum Wrap Anti-Corrosion Tape). Denso shall be used.

One bare magnesium anode type M-9-14 shall be installed on all valves enclosed in valve chambers. If the anodes are installed with their packaged container, the container shall be cut and fully opened along its entire length.

The anode lead shall be bared of insulation and either cad welded to a flange area or attached to a valve body bolt using a copper compression connector or serrated washer. One anode may be used for all the valve and fittings within a valve box or valve chamber provided they are electrically connected together using approved wire.

Each anode shall be placed horizontally to the side of the valve.

In addition to the specified anodes, the following surface areas of all valves which include the gate, butterfly, air and drain valves shall be completely wrapped with a Petrolatum corrosion protective wrap three part system (Petrolatum Wrap Primmer Paste, Petrolatum Wrap Mastic and Petrolatum Wrap Anti-Corrosion Tape). Denso shall be used on:

the flange and all bolt areas on the valve body;

the two (2) flange ends and bolt areas including the associated metallic restraining and retaining devices to complete the connection.

The petrolatum corrosion protective wrap system shall be applied as per the Denso Wrap manufacturer's application instructions to cover the entire specified surface areas.

Section 441.07.21 is deleted and replaced with the following:

“The Contractor shall contact the Contract Administrator a minimum of 72 hours prior to requiring a valve or hydrant operated. The Contractor shall not operate any portion of the Drinking Water System including any temporary water system unless under the supervision of Municipal Forces.”

Section 441.07.22, 2nd paragraph is deleted and replaced with the following:

“All connections to existing watermains shall be co-ordinated with the Contract Administrator at least 72 hours in advance to arrange for a mutually acceptable date and time. Connections are to be performed by the Contractor in the presence of Municipal Forces, or at the discretion of the Town, may be performed by Municipal Forces.

All Swabbing, Chlorination, Pressure Testing and Bacteriological testing shall be completed prior to connection to the existing Drinking Water System.”

Section 441.07.23 is deleted and replaced with the following:

“All connections, caps, vertical bends, horizontal bends, reducers, hydrants or other fittings where changes occur in pipe diameter or direction shall be restrained by thrust blocks and restrained joints as specified in the Contract Documents. All valves shall be installed with restrained joints. Joints and couplings shall remain free from concrete. Only restrained joint products specifically designed for use with the pipe material shall be used.

Where both thrust blocks and restrained joints systems are used, each system shall be designed independently of the other.”

Section 441.07.24.01 is amended by addition of the following:

“All watermains 5.5 m and longer shall be tested for hydrostatic pressure and leakage in the presence of the Contract Administrator and Town forces. The measured length shall include any portion of installed watermain beyond an isolation valve or any stub watermain installed for future connections.

Testing against a closed valve that is used to isolate the "in-service" water plant from the new watermain shall not be permitted.

The length of the new watermain being tested at one time shall not exceed 600 m unless otherwise approved by the Contract Administrator.

Valves 406 mm or larger in size that equal or exceed 600 m in spacing shall be tested in both the open and closed position and shall be included in the hydrostatic test.

Hydrostatic pressure and leakage tests shall be performed after the trench has been properly backfilled but before placement of any permanent reinstatement. Where concrete thrust blocks have been cast in place, seven (7) days should have passed to allow an initial setting time for the concrete, before commencement of any tests.”

Section 441.07.24.03 is amended by addition of the following:

“The specified hydrostatic test pressure shall start at a pressure of 1034 kPa (150 psi). The pressure test shall be considered satisfactory if after a period of two hours, with no addition of water, the pressure has not dropped by more than 34.5 kPa (5psi). The test pressure shall be applied at the lowest point in the test section by means of a pump connected to the pipe in a satisfactory manner.

If there is zero pressure drop and no make-up water was added during test period, the test has passed and no leakage calculation is required. Leakage is defined as the quantity or volume of make-up water (measured in litres) that must be supplied to maintain pressure within 34.5 kPa (5 psi) of the specified test pressure of 1034 kPa (150 psi) for a period of two hours.

No pipe installation shall be accepted if the actual leakage is greater than that determined using the following formula:

$$L = \frac{HSD\sqrt{P}}{715,317}$$

Where: H = test duration in hours

L = allowable leakage in litres

S = length of pipeline being tested, in meters.

D = nominal diameter of the pipe in mm.

P = average test pressure in kPa gauge.

The following table illustrates the Allowable Leakage for a two (2) hour test:

Nominal Pipe Diameter (D)	Allowable Leakage (L)
100	0.0092 x S
150	0.0137 x S
200	0.0183 x S
250	0.0228 x S
300	0.0274 x S
400	0.0365 x S
>400	per formula

Section 441.07.25 is amended by addition of the following:

“The provisions of the MECP Watermain Disinfection Procedure (August 2020) shall apply except as modified herein.

The Contractor shall submit the proposed methodology for swabbing, flushing and disinfection to the Contract Administrator for review a minimum of 14 days before the planned start of these operations.

Swabbing

Unless otherwise approved by the Contract Administrator, all new watermain sections up to and including 300 mm diameter, which are 5.5 m or longer shall be cleaned by swabbing prior to disinfection. The Contractor shall obtain permission to proceed from the Contract Administrator before flushing and swabbing. Permission to proceed shall not relieve the Contractor of total responsibility for the swabbing operation. All swabbing must be done in the presence of the Contract Administrator.

The watermain shall be swabbed with a minimum of three swabs put through the entire system and each hydrant. Swabs shall be of one-piece construction with a cone shaped leading edge and a density ranging from 32 kg/m³ to 128 kg/m³, sized a minimum of 50 mm larger than the nominal pipe diameter and with a minimum length of one and one half (1.5) times its diameter. Swab may

have a rotating patterned surface. The swabs shall be clearly identified as per the proposed methodology. Only new clean swabs are to be used

Swabs shall be launched into the new watermain at hydrants, or at special entry sections installed by the Contractor utilizing an appropriate swab launcher facility. Swabbing is to continue until the discharge water runs clear.

The Contractor shall control and dispose off-site all discharge water from the swabbing operation meeting requirements of all applicable acts, legislation and regulations.

The Contractor shall not rely on the Municipality's water supply to achieve the required flow rate. The Contractor shall consider additional storage, pumps or shorter swabbing lengths instead.

Where possible, the swab shall travel from a low elevation launch location to a high elevation discharge location to provide better control over the swab speed.

The Contractor shall provide all piping complete with a valve at the discharge point to provide controlled discharge of the water used in the swabbing operation. Additional outlet connections will be at the Contractors expense. Swabs shall be retrieved from the watermain utilizing swab catcher outlet connections.

The swabs shall be marked (numbered) as per the approved procedure and must be inspected by the Contract Administrator after the swabbing operation is complete.

The Contractor shall repeat the swabbing procedure as often as required to achieve the required result, at no additional cost to the Town.

The watermain shall be flushed until the water is clear of swab material and all pieces of the swab are to be accounted for.

Disinfection

The Contractor shall adhere to the Ontario MECP Water Main Disinfection Procedure and shall submit a disinfection plan/procedure to the Town for approval.

Bacteriological Sampling and Testing

Municipal Forces (or the Contractor under the supervision of Municipal Forces) shall collect the bacteriological sampling from various points throughout the newly installed watermain. The contractor shall provide "sampling points" as directed by the Contract Administrator and Municipal Forces, at no additional cost to the Town.

The Contractor will assist Municipal forces during the sampling process with a minimum of two competent employees. The Contractor shall be responsible to deliver all samples taken by the Town to a preapproved laboratory. If E-Coli or total coliforms be detected, the disinfection procedure and testing shall be repeated.

Completion of Commissioning Operation

No section or portion of the installed water plant shall be reconnected to the existing water system until the installed watermains and water services have been successfully disinfected and passed the bacteriological testing requirements of the Town.”

F.17.1 Measurement For Payment

The requirements described herein shall be considered incidental to the scope of work which the Contractor shall be responsible to fulfill as part of the overall Contract requirements related to the water plant installation.

F.17.2 Basis Of Payment

Payment at the Contract price for the applicable tender item(s) specified for the water plant shall be full compensation for all labour, equipment and materials required to do the work.

F.18 HYDRANTS

F.18.1 Scope

This Specification describes the requirements for hydrants.

All connections to existing mains are to be coordinated with the Contract Administrator at least 72 hours in advance to arrange for a mutually acceptable date and time. Connections are to be performed by the Contractor in the presence of the Town of Renfrew Staff.

F.18.2 References

The provisions of OPSS 441 shall apply except as amended or modified herein.

F.18.3 Submittals

Submit data sheet for proposed hydrant.

F.18.4 Materials

Hydrants to be Canada Valve Century Fire Hydrant by Mueller Canada with 2.4m bury.

Hydrants shall be Darling B-50-B24, 4.5” valve seat and boot with the following features:

- Red colour
- Two (2) hose nozzles
- One (1) mechanical pumper nozzle
- Caps and chains
- 150 mm mechanical joint base
- “opening” counterclockwise
- Self-draining
- 2.1m Bury and conforming to OPSD 1105.010.
- For PVC watermains one packaged zinc anode type Z-24-48 shall be installed on each hydrant.
- For PVC watermains one packaged zinc anode type Z-12-24 shall be installed on each valve, bend, tee and restraining rings and wrapped with a Petrolatum corrosion protective wrap three-part system Denso Wrap (Petrolatum Wrap Primer Paste, Petrolatum Wrap Mastic and Petrolatum Wrap Anti-Corrosion Tape) shall be used.

F.18.5 Measurement For Payment

Measurement for payment shall be for each hydrant installed.

F.18.6 Basis Of Payment

Payment at the Contract price for the above item shall be full compensation for all Labour, Equipment, and Material to do the work.

F.19 INSULATION FOR WATERMAINS

F.19.1 Scope

This Specification describes the requirements for the supply and installation of insulation. Insulation is required for watermains and water services with less than 2.4m of cover and with less than 2.4m of separation from a catch basin or manhole. Insulation shall be installed in accordance with the details shown on the Contract Drawings.

F.19.2 Materials

Extruded polystyrene insulation boards to be Grade A (minimum 275 kPa compressive strength).

F.19.3 Measurement For Payment

Measurement shall be by square meters of 50mm thick board insulation.

F.19.4 Basis Of Payment

Payment at the Contract price for the above item shall be full compensation for all Labour, Equipment, and Material to do the work.

F.20 CLEANING OF CATCH BASINS AND SEWERS

The Contractor shall clean all structures in which the iron has been adjusted.

“Cleaning” shall be defined as the removal, by machine, and disposal of all soil, asphalt, concrete, sticks, stone, litter, etc., to the satisfaction of the of the Contract Administrator or authorized delegate. Any materials not removed by machine shall be removed by hand.

Disposal of all materials shall be the sole responsibility of the successful Contractor. There will be no additional reimbursement for the removal and disposal of materials.

It shall be the responsibility of the Contractor to be aware of, and to possess, all applicable licenses and certificates which may be required by the Ministry of the Environment and Conservation and Parks (MECP), or by other provincial or federal authorities, in order to comply with the collection, transportation, and disposal of cleaning residue.

F.20.1 Basis of Payment

Payment for this provision shall be included in the applicable Contract items, i.e. “Adjusting or Rebuilding Catch Basins, any size, any type including twin”, “Adjusting or Rebuilding Maintenance holes and valve Chambers, any size, any type”.

F.21 CONNECT TO EXISTING SUBDRAIN

F.21.1 Scope

This Special Provision covers connections of subdrain to existing subdrain.

F.21.2 General

OPSS 405 shall apply, except as amended and extended herein:

Under “Construction”, add section “Connect to Existing Subdrain”, as follows:

“Where specified, new subdrain shall be connected to existing subdrain using a suitable coupler. Prior to laying new subdrain, the Contractor shall be responsible for confirming the depth of the existing subdrain and shall lay the new subdrain at an appropriate depth to allow positive drainage. The Contractor shall advise the Contract Administrator if an existing subdrain cannot be found or is not suitable condition for connection.”

F.21.3 Basis of Payment

All work described by this special provision is considered to be incidental to the item “100mm Perforated Pipe Subdrain”. No separate of additional payment will be made.

F.22 CONNECTING TO EXISTING MAINTENANCE HOLES, CATCH BASINS, DITCH INLETS, CULVERTS, AND SEWERS

Amendments to OPSS 410

OPSS 410, shall apply except as may be amended or extended herein.

F.22.1 Definition of Existing Structures and Sewers

Section 410.09, Measurement for Payment, of OPSS 410 is amended by the addition of the following:

For purposes of measurement for payment for connecting to, or, breaking into and connecting to, existing maintenance holes, catch basins, ditch inlets, culverts and sewers, “existing” shall mean those structures and sewers that are not part of the new construction under this Contract but existed prior to the commencement of work or were subsequently constructed by others or under separate contract during the course of this Contract.

Consequently, connecting to maintenance holes, catch basins, ditch inlets, culverts and/or sewers constructed under this Contract will not be measured for payment under this tender item, except when such connections are brought about by changes in the work as may be ordered in writing by the Contract Administrator.

Breaking into and connecting to a structure or sewer is defined as any work required to create a new opening in an “existing” structure or sewer and connecting a new sewer into the new opening, or any work required to connect to an existing” structure, sewer opening, including modifications to existing openings or sewer pipe with the exception of sewer laterals at the property line.

Connections shall be in accordance with F-4100.

F.22.2 Measurement for Payment

F.22.2.1 Actual Measurement

Subsection 410.09.01.03 of OPSS 410 is amended by the addition of the following:

For the items “Breaking into and connection to existing Storm Maintenance Holes, Catch Basins, Ditch Inlets, Pipe Culverts and Pipe Sewers” and “Breaking into and connection to existing Sanitary Maintenance

Holes and Pipe Sewers”, measurement will be made of the number of new connections/openings into “existing” structures, culverts and sewers, required for the connection of the new sewer pipe, or construction of a new structure.

F.22.2.2 Plan Quantity Measurement

Subsection 410.09.02, Plan Quantity Measurement, of OPSS 410 is amended by the addition of the following:

For the items “Breaking into and connection to existing Storm Maintenance Holes, Catch Basins, Ditch Inlets, Pipe Culverts and Pipe Sewers” and “Breaking into and connection to existing Sanitary Maintenance Holes and Pipe Sewers”, measurement is by Plan Quantity, as may be revised by Adjusted Plan Quantity, of the of the number of new connections/openings into “existing” structures, culverts and sewers, required for the connection of the new sewer pipe, or construction of a new structure.

F.22.3 Basis of Payment

Subsection 410.09.02, Basis of Payment, of OPSS 410 is amended by the addition of the following:

Payment for the items “Breaking into and connection to existing Storm Maintenance Holes, Catch Basins, Ditch Inlets, Pipe Culverts and Pipe Sewers” and “Breaking into and connection to existing Sanitary Maintenance Holes and Pipe Sewers” at the contract price shall be full compensation for all labour, equipment and material to do the work.

No separate payment will be made for connections of subdrains or service laterals, as this cost shall be considered incidental to the per metre cost of the subdrain or service laterals, themselves, under the appropriate item.

F.23 LABOUR AND EQUIPMENT

F.23.1 SCOPE

During the course of this Contract the Contract Administrator may require the Contractor to perform certain work which the Contract Administrator does not consider included in other tender items listed in the Schedule of Prices.

The Contractor must obtain written permission from the Contract Administrator prior to commencing with this work and no payment will be made for any work performed without the Contract Administrator's authorization.

F.23.2 Measurement For Payment

Measurement shall be by hours for all items listed in Section 0 of Schedule of Prices.

F.23.3 Basis of Payment

The Contract unit price per hour for labour shall include the cost of any supervisory staff that may be required and the supply of all tools necessary for hand labour work.

The Contract unit price per hour for equipment shall include the operator's wages and the cost of all fuel, lubricant, repairs, etc.

All costs associated with the management and disposal of materials resulting from the work performed by the labour force or operation of the equipment shall be deemed to be included in the Contract unit price for the workers. Management of material shall conform to OPSS 180.

Payment shall be made only for the time in which the labour force is effectively employed on the work or the time in which the equipment is in effective operation.

F.24 WELL ABANDONMENT

F.24.1 General Requirements

Three monitoring wells are located within the work area and shall be properly decommissioned prior to any construction activities being undertaken. The wells are located in **Boreholes 22-02, 22-05, and 22-07**. The construction details of these wells are provided on the corresponding Record of Borehole Sheets provided in the Geotechnical Report for this project.

The well abandonment method must satisfy the minimum requirements of Ontario Regulation 903. Approval of the proposed abandonment methodology, including plugging material used, depth of plugging material and limit of the casing removal, must be obtained from the Contract Administrator before proceeding. In addition, the Contractor shall provide a copy of the well record (for the abandonment) to the Contract Administrator.

Without superseding the full scope of Ontario Regulation 903, the abandonment of the well should at least include plugging the wells using an abandonment barrier, starting from the bottom, up to approximately two metres from the ground surface.

F.24.2 Basis of Payment

Payment at the Contract price for the tender item “Well Abandonment” shall be on a per well basis, the price of which shall include full compensation for all labour, equipment and materials required to properly abandon each monitoring well including reporting and documentation.

F.25 TOPSOIL

This Specification describes the requirements for topsoil.

Amendments to OPSS 802 shall be as per the following:

Section 802.07.03 and SP F-8021 is amended by the addition of the following:

Topsoil shall be 100 mm thick. If the grade is low in the area as over-excavated by the Contractor and the amount of topsoil will exceed the minimum 100 mm thickness, it will be the Contractor’s choice to either place selected native fill in these low points or fill with topsoil. At no point shall the topsoil be less than 100 mm thick. There will be no compensation for placing topsoil over 100 mm thick.

F.26 CLASS II WOVEN GEOTEXTILE (PROVISIONAL)

F.26.1 Scope

This Special Provision describes the requirements for the activation and use of geotextile materials.

The contractor shall acknowledge that certain items have been identified as provisional within the limits of the budget if this project. Such items can only be activated and carried out on the instruction of the Consultant and the Owner.

The activation of the item is subject to review and approval of the owner. The owner reserves the right to delete this component of the work from the Contract. The deletion of provisional item shall not be a basis of claim against the Owner.

F.26.2 General Requirements

The Contractor shall notify the Contract Administrator of any areas identified where pumping of water or clay may occur into subgrade granular materials. Upon confirmation the Contractor shall apply Class II Woven Geotextile materials as a separator between the limit of excavation and subgrade granular materials as identified elsewhere in the contract documents.

F.26.3 Construction Requirements

Geotextile shall be as per OPSS MUNI 514 and OPSS MUNI 1860

SECTION G: GEOTECHNICAL INVESTIGATION

(UNDER SEPARATE COVER)

SECTION H: CONTRACT DRAWINGS

(UNDER SEPARATE COVER)