CONTRACT DOCUMENTS

TOWN OF PELHAM
for
HAROLD BLACK PARK

PARKING LOT GRADING

PROJECT 85605(01)

May, 1985

PROCTOR & REDFERN LIMITED
Consulting Engineers & Planners
210 King Street
St. Catharines, Ontario
L2R 3J9

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WB/bb

PROCTOR & REDFERN LIMITED TENDERER'S CHECK LIST

Bef	ore submitting your tender, check the following points:	
1.	Has your tender been signed, sealed and witnessed?	
2.	Have you enclosed the Tender Deposit, i.e. certified cheque or bid bond? (whichever is required by the Contract Documents)	
3.	Have you enclosed the Agreement to Bond, signed and sealed by your proposed Surety?	
4.	Have you completed all schedules and prices in the Form of Tender?	
5.	Have you indicated and included the Contingency Allowance in the Form of Tender? (if you are required to do so)	
6.	Have you indicated the number of addenda included in the tender price?	
7.	Have you shown the time for completion of the work? (if applicable)	
8.	Have you listed your Sub-Contractors? (if applicable)	
9.	Have you listed your Experience in Similar Work? (if applicable)	
10.	Have you listed your Senior Staff? (if applicable)	
11.	Have you listed the Tenderer's Plant? (if applicable)	·
12.	Are the documents complete?	
Note	: Items 13 and 14 are for Ministry of Transportation and Communication projects only.	
13.	Have you completed the Qualification Rating and forwarded to the Ministry of the Transportation and Communications? (if applicable)	
14.	Have you enclosed the Form of Tender stamped "For Tendering Purposes Only" (if applicable)	
Noțe	: 1. Your tender will be informal and may be disqualified if ANY of the foregoing points (if applicable) have not been complied with.	
	SURE THAT YOU SEAL THE TENDER IN AN ENVELOPE AND MARK THEREON CONTRACT NAME AND E.O. NUMBER.	
	tor and Redfern Limited CD-30 - February 1973	·

LIST OF CONTRACT DOCUMENTS

The following shall form the Contract Documents:

	Paper Colour	No. of Pages
Addenda Numbered to Tenderer's Check List List of Contract Documents Tendering Information Form of Tender Tendering Statements:	Green Orange Pink Blue Yellow	1 1 2 4
Agreement Agreement to Bond Performance Bond (CCA Document No. (S)21) Labour and Material Payment Bond (CCA Document No. (S)22) Tenderer's Experience in Similar Work (CD-4)	White White White White White	1 1 1 2 1
Tenderer's Senior Staff (CD-5) Tenderer's Plant (CD-6) Supplementary General Conditions General Conditions of Contract Project Specifications: Section 01010 - General	White White Blue Blue White	1 1 2 8
Section 02550 - Site Clearing, Excavating, Backfilling and Restoration of Trenches	White	5

LIST OF DRAWINGS

Drawing No.

A1-85605-G1

H. Black Park Drainage Plan

LIST OF STANDARDS

E-STD-2-1M

Pipe Bedding Details

SECTION 00100 - TENDERING INFORMATION

TI.01 DELIVERY AND OPENING OF TENDERS

A. Sealed tenders, marked with the name of the project, will be received by - MR. M. HACKETT, CLERK CO-ORDINATOR, TOWN OF PELHAM, P.O. BOX 400, FONTHILL, ONTARIO LOS 1E0

up to 1 p.m., local time -

MONDAY, MAY 27, 1985

- B. The tenders will be opened publicly as soon after the closing time as possible.
- C. Tenders shall be completed on the detachable Form of Tender included in the Contract Documents.

TI.02 · DISCREPANCIES

- A. If a Tenderer finds discrepancies in, or omissions from the Contract Documents, or if he is in doubt as to their meaning, he shall notify the Engineer, who may issue a written addendum. Neither the Owner nor the Engineer will make oral interpretations of the meaning of the Contract Documents.
- B. Should the Tenderer not agree that the materials and methods specified, or designed on the Drawings, will provide an installation to meet the requirements of the project, he shall notify the Engineer in writing, stating his reason for objection and may submit a suggested alternative. In such an event, the Engineer may choose to issue an addendum.
- C. Addenda issued during the tendering period shall be allowed for by the Tenderer.

TI.03 EXAMINATION OF SITE

- A. The Tenderer shall visit the site of the Work before submitting his tender and shall by personal examination satisfy himself as to the local conditions that may be encountered during construction of the Work. He shall make his own estimate of the facilities and difficulties that may be encountered and the nature of the subsurface materials and conditions.
- B. He shall not claim at any time after submission of his tender that there was any misunderstanding of the terms and conditions of the Contract relating to site conditions.

TI:04 SALES TAX

- A. The Tenderer shall include or exclude sales tax in accordance with current sales tax legislation taking into account any changes that have been made known by the Government and that will occur during the life of the Contract.
- B. If sales taxes are increased or decreased, or other amendments are made in the legislation, during the course of the Contract, that alter tax amounts carried in the Contract price, an adjustment will be made accordingly.
- C. The Contractor shall keep records and invoices of accounts subject to Federal and Provincial Sales Tax for the purpose of establishing taxes paid and for substantiation in the event of changes to the tax legislation during the course of the Contract.

EO 85605 SEC 00100 TENDERING INFORMATION Page 1

TI.04 SALES TAX (Cont'd)

D. The Tenderer shall contact the Sales Tax authorities and determine what the applicable taxes are and the procedures for tax exemption and/or refunding and include related administrative costs in the tender.

TI.05 PROOF OF ABILITY

- A. The Tenderer shall be competent and capable of performing the various items of Work. The Tenderer shall complete the following statement sheets, which shall form a part of the Contract Documents -
 - 1. Tenderer's Experience on Similar Work (CD-4) with list of specific examples completed within the last 5 yrs., with appropriate references
 - 2. Tenderer's Plant to be used (CD-6)
- B. The Tenderer may be required to furnish additional statements covering other matters, including financial resources.

TI.06 TENDER DEPOSIT

A. Every tender shall be accompanied by a tender deposit in the form of a Certified Cheque payable to the Owner in an amount equal to \$2,000.00

The Tenderer shall keep his tender open for acceptance for 60 days after the closing date. Withdrawal during this period will result in forfeiture of the tender deposit.

Upon being notified that his tender has been accepted, the Contractor shall execute copies of the Agreement, supply bonds and insurance documents as specified, and start Work as specified.

Failure to execute the copies of the Agreement, or to supply bonds and insurance documents, all within 2 weeks of the date of acceptance of the tender, or to start Work as specified, will automatically mean the forfeiture to the Owner of the tender deposit.

Cheques of unsuccessful Tenderers will be returned not later than 2 weeks following Contract award.

The cheque of the successful Tenderer will be returned with the first progress certificate.

TI.07 AGREEMENT TO BOND

A. Every tender shall be accompanied by an 'Agreement to Bond' in the form attached, and shall be completed by a surety company lawfully doing business in the Province.

TI.08 ACCEPTANCE OF TENDERS

A. The lowest or any tender need not necessarily be accepted by the Owner.

FORM OF TENDER

FT.01 TENDER PRICE

- 1. Offer by Name Alfred Beam Excavating Ltd.

 Address 1259 Sunset Drive, Fort Erie

 Date May 27, 1985
- 2. To
- A. We, the undersigned, having examined the site of the Work, having carefully investigated the conditions pertaining to the Work and having secured all the information necessary to enable us to submit a bona fide tender, and having inspected all the Contract Documents, hereby agree to enter into a contract and to perform all the Work in a good and Workmanlike manner in accordance with the Contract Documents to the satisfaction of the Engineer for the total tender price of thirty two thousand, ninety-three dollars and fifty-three cents

 dollars (\$ 32,093.53)

FT.02 CONTINGENCIES AND ALLOWANCES

A. We agree that the tender price includes the contingency sum of \$2,000.00 and that no part of this sum shall be expended without the written direction of the Engineer, and any part not so expended shall be deducted from the tender price.

FT.03 QUANTITIES

A. The tender price is compiled from the Schedule Of Tender Prices included hereinafter. The quantities in the schedule being approximate, we agree that the final valuation will be made on the basis of actual quantities measured during and on completion of the Work at the prices in the schedule.

FT.04 ADDITIONS AND DEDUCTIONS

- A. We agree that the valuation of additions to, and deductions from, the Contract shall be made as follows -
 - The prices in the Schedule Of Tender Prices shall apply where appropriate.
 - 2. If the prices in subsection 1 are not appropriate, valuation will be made by one of the following methods -
 - (A) The Engineer may ask the Contractor for a quotation for the proposed Work.
 - (B) If the quotation referred to in (A) above is not accepted by the Engineer, the actual cost of the Work will be determined as the total of only the following -
 - Actual cost of labour, including such items as Workmen's Compensation and Unemployment Insurance.
 - (2) Actual cost of materials to be incorporated into the Work, including such items as freight and taxes.
 - (3) For Work done by the Contractor, an amount equal to 15 percent of the totals from subsections (1) and (2) above, which shall constitute overhead and profit of the Contractor.
 - EO 85605 SEC 00300 FORM OF TENDER Page 1

FT.04 ADDITIONS AND DEDUCTIONS (Cont'd)

- A. (Cont'd) 2. (B) (Cont'd)
 - (4) For Work done by Sub-contractors, an amount equal to 20 percent of the totals from subsections (1) and (2) above, which shall constitute overhead and profit of the Contractor and Sub-contractors.
 - (5) Rental of equipment and plant having a new value greater than \$300. Rental rates shall be as set out in the current edition of MTC form 527.
 - 3. Whenever extra Work is being performed under subsection 2(B) above, we agree to submit daily reports in writing, indicating the total chargeable costs incurred for the day. Valuation of the extra Work being so performed will be made only on the basis of the approved daily reports.

FT.05 ADDENDA

A. We agree that we have received addenda to inclusive, and the tender price includes the provisions set out in such addenda.

FT.06 COMPLETION

A. We agree to commence Work as specified, to proceed continuously to the completion and to complete all Work within 3 weeks from the date of issue of the written order to start Work.

FT. 07 SCHEDULE OF TENDER PRICES

THIS SCHEDULE IS REFERRED TO IN CLAUSE FT.03 ABOVE.

Item No.	Description	Unit	Estimated Quantity	Un	it Price	то	tal Price
1.	Strip topsoil and dispose off site (200 mm thickness)	LUMP	SUM (C	R E	DIT)	(440.00)
2.	Rough grade parking area to grades shown on plan	L U M P	SUM			\$	900.00
3.	Place, compact and fine grade granular A material in parking area (95% Proctor - 300 mm thickness)	_m 3	700	\$	15.00	\$	10,500.00
4.	Surface treat parking area (MTC form 303)	m ²	2200	\$	4.85	\$	10,670.00
5.	Excavate ditches and swales to grades and cross section shown on the plans, including disposal of surplus excavated material	lin.m.	400	\$	4.20	\$	1,680.00
6.	Clean out existing ditch on Haist Street to the lines and grades shown; including disposal of surplus excavated material	lin.m.	214	\$	3.00 m	\$	642.00
7.	Provide CSP culverts						
	300 mm diameter	lin.m.	6	\$	32.40	\$	194.40
	450 mm diameter	lin.m.	12	\$	44.94	\$	539.28
8.	Provide 450 mm concrete pipe including excavation, granular A bedding (class B), native backfill and restoration	lin.m.	55		72.87	\$	4,007.85
9.	Provide rip rap stone for inlet and outlet of concrete culvert	_m 2	20	\$	30.00	\$	600.00
10.	Provide sod	_m 2	200	\$	4.00	\$	800.00
11.	Contingency Allowance			•		\$	2,000
			TOTAL TENDE	R PR	ICE	\$	32,093.53

EO 85605 SEC 00300 FORM OF TENDER PAGE 3

. . .

OFFERED ON BEHALF OF THE CONTRACTOR

OF THE CONTRACTOR .	1 / Ithen
Vaughn Gibbons	Vaugh Stor
SIGNATURE	9
	CONTRACTOR'S SEAL
SIGNATURE	
Alfred Beam Excavating	
COMPANY NAME	
	Edward F.A. Lever, Jr.
	WITNESS
1259 Sunset Drive, Fort Erie	
ADDRESS	
May 27, 1985	

DATE

Proctor & Redfern Limited Project EO 85605(01)

AGREEMENT

.This Agreement made in triplicate this 19 85 between

1754

day of lung

ALFRED BEAM EXCAVATING LIMITED

hereinafter called "The Contractor",

CORPORATION OF THE TOWN OF PELHAM hereinafter called "The Owner".

WITNESSETH, that the Contractor agrees with the Owner to perform all the Work in accordance with the Contract Documents referred to in the tender of the Contractor dated the

day of , 19 , (which shall be deemed to form part of this Contract) to the satisfaction of the Engineer for the total contract price of. S which Contract Documents are attached hereto and which are hereby expressly made part of this Contract.

The Owner hereby agrees with the Contractor, that in consideration of the Work being performed by the Contractor as specified, the Owner shall pay the Contractor for said Work in accordance with the prices set out in the Form of Tender attached hereto, and in accordance with the provisions set out in the attached Contract Documents.

Time shall be deemed the essence of this Contract.

IN WITNESS WHEREOF the parties hereto have executed this Agreement under their respective corporate seals and by the hands of their proper officers thereunto duly authorized.

SIGNED, SEALED AND DELIVERED in the presence of:

OWNER	
CORPORATION OF THE TOWN OF PELHAM	•
Кате	
	•
EGBergenstein	•
Signed ()	
E.G. BERGENSTEIN - MAYOR	
Name and Title	
Signed / Saskers	Witness
MURRAY MACKETT CLERK Name and Title	Name and Title
CONTRACTOR	
Alfred Beam Excavating Ltd.	I
Vame	
Valuaba Dillors	
Signed President	ρ
iane and Title	the back of the
	Theblia detto
Signed	Withes
Same and Title	HCCC Vary
ions and itte	Name and Title

N.B. Where legal jurisdiction, local practice or Owner or Contractor requirement calls for proof of authority to execute this document, proof of such authority in the form of a certified copy of a resolution naming the person or persons in question as authorized to sign the Agreement for and on behalf of the Corporation or Partnership, parties to this Agreement, should be attached. 1

Proctor & Redfern Limited Project E.O. 85605 Date Contract No.

2

3

N

Gentlemen:

Construction of Parking Lot for H. Black Park in the ... Town of Pelham

Yours very truly,

NOTE: This Agreement must be executed on behalf of the surety company by its authorized officers under the company's corporate seal.

Enter name and address of surety company at the top of

NOTES TO THE ENGINEER:

1. Show project Numbers, Descriptions and Location.

2. Delete reference to Payment Bonds if inapplicable.

Insert percentage of bond(s).

April 1979

PERFORMANCE BOND

No		\$	
KNOW ALL MEN BY THESE PRE	SENTS THAT		
	•	as Principal,	
hereinafter called the Principal, and	***************************************	***************************************	
		und unto	
hereinafter called the Obligee, in th	e amount of	as Obliges,	
lawful money of Canada, for the p	payment of which sum, we	Dollars (\$	
		ith the Obligee, dated the	
***************************************	***************************************		
In accordance with the Specification by reference made part hereof and NOW, THEREFORE, THE CONDITIONS faithfully perform the Contract the	ons and Drawings submitted are hereinafter referred to a DITION OF THIS OBLIGATION.	therefor which contract, Specifications and Drawings, are is the Contract. ATION is such that if the Principal shall promptly and null and void; otherwise it shall remain in full force and	
effect.	•		
Whenever the Principal shall be, ar performed the Obligee's obligations	nd declared by the Obligee thereunder, the Surety ma	to be, in default under the Contract, the Obligee having promptly remedy the default, or shall promptly	
(1) complete the Contract in a			
(2) obtain a bid or bids for submission to the Obligee for completing the Contract in accordance with its terms and conditions, and upon determination by the Obligee and the Surety of the lowest responsible bidder, arrange for a contract between such bidder and the Obligee and make available as work progresses (even though there should be a default, or a succession of defaults, under the contract or contracts of completion, arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the Contract price," as used in this paragraph, shall mean the total amount payable by the Obligee to the Principal under the Contract, less the amount property paid by the Obligee to the Principal.			
Any suit under this Bond must be payment under the Contract falls do	pe instituted before the exue.	piration of two (2) years from the date on which final	
The Surety shall not be liable for a	greater sum than the specif	ied penalty of this Bond.	
	this Bond, to or for the t	ISE Of any person or corporation other than the Obliges	
IN WITNESS WHEREOF, the Princ	ipal and the Surety have Si	aned and Sealed this Bond this	
day of	19	pied and dealed this bond this	
SIGNED and SEALED In the presence of:	(
	\	Principal (Seal)	
	į	Surety (Seal)	

LABOUR AND MATERIAL PAYMENT BOND (TRUSTEE FORM)

No	\$
Note:	This Bond is issued simultaneously with another Bond in favour of the Obligee conditioned for the full and faithful performance of the Contract.
	ALL MEN BY THESE PRESENTS THAT
hereinal	iter called the Principal, and
	ration created and existing under the laws of
	y authorized to transact the business of Suretyship in
as Suret	y, hereinafter called the Surety are, subject to the conditions hereinafter contained, held and firmly bound unto
hereinaf administ	ter called the Obligee, for the use and benefit of the Claimants, their and each of their heirs, executors, trators, successors and assigns, in the amount of
themselv	Dollars (\$
WHERE,	AS, the Principal has entered into a written contract with the Obligee, dated the
day of	19 , for
Seconomical	
which co Contract.	ontract, Specifications & Drawings are by reference made a part become and the

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Principal shall make payment to all Claimants for all labour and material used or reasonably required for use in the performance of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A Claimant for the purpose of this Bond is defined as one having a direct contract with the Principal for labour, material, or both, used or reasonably required for use in the performance of the Contract, labour and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment directly applicable to the Contract provided that a person, firm or corporation who rents equipment to the Principal to be used in the performance of the Contract under a contract which provides that all or any part of the rent is to be applied towards the purchase price thereof, shall only be a Claimant to the extent of the prevailing industrial rental value of such equipment for the period during which the equipment was used in the performance of the Contract. The prevailing industrial value of equipment shall be determined, insofar as it is practical to do so, In accordance with and in the manner provided for in the latest revised edition of the publication of the Canadian Construction Association titled "Rental Rates on Contractors Equipment" published prior to the period during which the equipment was used in the performance of the Contract.

- 2. The Principal and the Surety, hereby jointly and severally agree with the Obligee, as Trustee, that every Claimant who has not been paid as provided for under the terms of his contract with the Principal, before the expiration of a period of ninety (90) days after the date on which the last of such Claimant's work or labour was done or performed or materials were furnished by such Claimant, may as a beneficiary of the trust herein provided for, sue on this Bond, prosecute the suit to final judgment for such sum or sums as may be justly due to such Claimant under the terms of his contract with the Principal and have execution thereon. Provided that the Obligee is not obliged to do or take any act, action or proceeding against the Surety on behalf of the Claimants, or any of them, to enforce the provisions of this Bond. If any act, action or proceeding is taken either in the name of the Obligee or by joining the Obligee as a party to such proceeding, then such act, action or proceeding, shall be taken on the understanding and basis that the Claimants; or any of them, who take such act, action or proceeding shall indemnify and save harmless the Obligee against all costs, charges and expenses or liabilities incurred thereon and any loss or damage resulting to the Obligee by reason thereof. Provided still further that, subject to the foregoing terms and conditions, the Claimants, or any of them, may use the name of the Obligee to sue on and enforce the provisions of this Bond.
- 3. No suit or action shall be commenced hereunder by any Claimant:
 - (a) unless such Claimant shall have given written notice within the time limits hereinafter set forth to each of the Principal, the Surety and the Obligee, stating with substantial accuracy the amount claimed. Such notice shall be served by mailing the same by registered mail to the Principal, the Surety and the Obligee, at any place where an office is regularly maintained for the transaction of business by such persons or served in any manner in which legal process may be served in the Province or other part of Canada in which the subject matter of the Contract is located. Such notice shall be given
 - (1) in respect of any claim for the amount or any portion thereof, required to be held back from the Claimant by the Principal, under either the terms of the Claimant's contract with the Principal, or under the Mechanics' Liens Legislation applicable to the Claimant's contract with the Principal, whichever is the greater, within one hundred and twenty (120) days after such Claimant should have been paid in full under the Claimant's contract with the Principal;
 - (2) in respect of any claim other than for the holdback, or portion thereof, referred to above, within one hundred and twenty (120) days after the date upon which such Claimant did, or performed, the last of the work or labour or furnished the last of the materials for which such claim is made, under the Claimant's contract with the Principal;
 - (b) after the expiration of one (1) year following the date on which the Principal ceased work on the Contract, including work performed under the guarantees provided in the Contract;
 - (c) other than in a Court of competent jurisdiction in the Province or District of Canada in which the subject matter of the Contract, or any part thereof, is situated and not elsewhere, and the parties hereto agree to submit to the jurisdiction of such Court.
- 4. The Surety agrees not to take advantage of Article 1959 of the Civil Code of the Province of Quebec in the event that, by an act or an omission of a Claimant, the Surety can no longer be subrogated in the rights, hypothecs and privileges of Said Claimant.
- 5. The amount of this Bond shall be reduced by, and to the extent of any payment or payments made in good faith, and in accordance with the provisions hereof, inclusive of the payment by the Surety of Mechanics' Liens which may be filed of record against the subject matter of the Contract, whether or not claim for the amount of such lien be presented under and against this Bond.
- 6. The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

IN WITNESS WHEREOF, the Principal	and the Surety have Signed and Sealed this Bond this
day of 19	
SIGNED and SEALED In the presence of	(
	Surety (Seal)

Endorsed by R.A.I.C., A.C.E.C., C.C.A., E.I.C., S.W.A.C.

Approved by INCHESING SHEESHOESSIANA

TENDERER'S EXPERIENCE IN SIMILAR WORK

YEAR COMPLETED	DESCRIPTION OF CONTRACT	FOR WHOM WORK PERFORMED	NAME OF CONSULTANT ENGINEER	VALUE
85	Site services to Parking Lot	Kenmore Commercial	K.T. Howe	\$75,000.00
85	Road Reconstruction	City of Niagara Falls	City of Niagara Falls	\$67,000.00
		,		·
		· •		
		·		
				·
Note to Te	nderer - Refer to	article TI.05 of	F Tendering Info	ormation

Proctor & Redfern Limited Consulting Engineers November, 1977

TENDERER'S SENIOR STAFF

NAME	APPOINTMENT	QUALIFICATIONS AND EXPERIENCE
<u>Office</u>		
Alf Beam	President	16 years
Vaughn Gibbons	Vice-President	10 years
<u>Field</u>		
Alf Beam	Operator Foreman	16 years
Vaughn Gibbons	Operator Foreman	10 years
		-
	·	

Proctor & Redfern Limited Consulting Engineers November, 1977

TENDERER'S PLANT

The Tenderer shall list the plant, machinery and equipment he proposes to use on the work.

PLANT OWNED:

1 yd. excavator 225 Cat
Case 850 dozer
Tandem dump truck
950 Cat wheel loader
875 Insley.excavator c/w hoe pak

PLANT TO BE RENTED OR LEASED:

Tandem dump truck vibratory roller

PLANT TO BE PURCHASED:

Proctor & Redfern Limited Consulting Engineers

SECTION: 00800 - SUPPLEMENTARY GENERAL CONDITIONS

SC.01 GUARANTEE PERIOD

A. The guarantee period for the Contract shall be twelve months, unless an extended guarantee period is called for in any specific Section.

SC.02 DEFINITION

- A. 'Department of Highways' and 'DHO' means 'The Ministry of Transportation and Communications' and 'MTC'.
- B. 'The Department of Transportation and Communications' and 'DTC' means 'The Ministry of Transportation and Communications' and 'MTC'.

SC.03 INSURANCE

- A. Damage insurance
 - Notwithstanding the provisions of Section 29 of the General Conditions, no 'Damage Insurance' will be required on this Contract.

SC.04 LIQUIDATED DAMAGES

- A. Should the Contractor fail to complete the Work in accordance with the Contract and to the satisfaction of the Engineer, within the time specified in the Form of Tender, or as amended on the written authority of the Engineer, the Contractor shall pay to the Owner the sum of \$200.00 for each calendar day that the Work shall remain unfinished after such time.
- B. Such payments are agreed upon and fixed as liquidated damages that the Owner will suffer by reason of delay and default, and not as a penalty. The Owner may deduct and retain the amounts of such liquidated damages out of the moneys which may be due or become due to the Contractor under the Contract.

SC.05 HOLDBACK FOR RECTIFICATION AFTER ACCEPTANCE OF THE WORK

A. To cover rectification costs during the guarantee period, the Owner will retain 5 percent of the value of Work done, such amount being held back after the value of the Work performed reaches 70 percent of the Contract Price. This holdback will be retained for a period of 1 year from the 'Acceptance Date' which is described in Section 36 of the General Conditions. Additional moneys will be held back as required by Provincial Statutes.

SC.06 PAYMENT BOND

A. The Contractor, together with a surety company approved by the Owner and authorized by law to carry on business in the Province shall furnish a 50 percent, 100 percent labour and materials payment bond to the Owner using C.C.A. Document (S) 22. The bond shall remain in effect until the issue by the Engineer of the final payment certificate.

EO 85605 SEC 00800 SUPPLEMENTARY GENERAL CONDITIONS
Page 1

SC.07 PERFORMANCE BOND

A. The provisions of the General Conditions shall apply except that C.C.A. Document (S) 21 shall be used.

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GENERAL CONDITIONS OF THE CONTRACT

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PROCTOR & REDFERN LIMITED Consulting Engineers

GENERAL CONDITIONS OF THE CONTRACT

- 1. Wherever used in the Contract Document, or other documents forming part of the Contract:
- 1.
 DEFINITIONS

DOCUMENTS

SUB-

CONTRACTORS

- (a) the word "Contract" means: the Contract to do the Work, the Bonds or Securities, the Addenda (if any), the Specifications, the General and Supplementary General Conditions, the Tendering Information, the List of Contract Documents, the Drawings, and other documents referred to or connected with the Agreement, except that the soils report and any other soils information are not a part of the Contract Documents.
- (b) the word "Owner" means the person or corporation accepting the Tender.
- (c) the word "Contractor" means the person or corporation to whom the Contract for the Work has been awarded.
- (d) the word "Sub-contractor" means the person or corporation having a contract with the Contractor (or with another sub-contractor) for the performance of a part or parts of the Work included in the Contract, or for the supplying of material for the Contract and worked to a special design according to the Drawings and Specifications.
- (e) the word "Engineer" means Proctor & Redfern Limited, Consulting Engineers, and its duly authorized representatives.
- (f) the word "Work" or "Works" means labour, materials and other things required to be done, that are shown, described or implied in the Contract Documents and includes extra and additional Work that may be ordered by the Engineer and the words "work" or "works" have the same meaning.
- (g) the word "provide" means supply labour, materials, equipment, handling and cartage required for complete installation of the item concerned.
- (a) The Contract Documents shall be signed and sealed, in duplicate, by the Owner and the Contractor.
 - The Contract Documents are complementary and what is called for by any one shall be as binding as if called for by all. The intention of the Documents is to include plant, labour and materials (except as specifically excepted) necessary for the complete and proper performance of the Work.
 - (c) Drawings and Specifications shall be read and interpreted together. Work not specifically described, but obviously necessary for the satisfactory completion of the Work for the purpose intended shall be supplied and performed by the Contractor as though it had been described and shown in the Drawings and Specifications.
 - (d) Reference to published standard specifications shall be to the edition current at the time of the signing of the Contract Documents.
- 3. (a) Without the written consent of the Engineer, the Contractor shall not change the Sub-contractors named in the Contract.
 - (b) The Contractor shall be held as fully responsible to the Owner for the acts and omissions of its Sub-contractors (and of persons directly and indirectly employed by them) as for the acts and omissions of persons directly employed by the Contractor.
 - (c) The Contractor shall bind every Sub-contractor to the terms of the Contract Documents, as far as applicable to the Sub-contractor's Work.
 - (d) Nothing in the Contract Documents shall create any contractual relation between Sub-contractors and the Owner.
 - (e) Division of the Specifications into sections or subsections shall be only for clarity of reading and reference, and shall not be taken to be a division into trades, subtrades or sections of Work of any kind.
- 4. (a) Any notice or communication to the Contractor shall be deemed to be legally well and sufficiently given and served, if:
 - NOTICES
 - (i) handed to the Contractor or its authorized representatives, or
 - (ii) posted or sent to the address given in the Tender, or,
 (iii) posted or sent to the Contractor's domicile or usual place of business, or
 - (iv) posted or sent to the place where the Work is, or is to be, performed, or
 - (v) posted to or left at its last known address.

During the progress of the Work, the Contractor shall keep the site and the Work in as tidy a condition as practicable. The Contractor shall not deposit materials on a street, sidewalk, boulevard or other public or private property without the approval of the representative of the Municipality or the authority having jurisdiction over such public or private property. Materials so deposited shall be removed without delay as soon as possible and when directed.

10. PUBLIC SAFETY

- (b) If the Work is closed, suspended or stopped for the winter (or for other acceptable reasons), the Contractor shall remove material from streets, sidewalks, boulevards and other public property.
- (c) The Contractor shall ensure that the charges of explosives used, and the time at which they are exploded, shall be such as not to cause suffering, inconvenience or injury to persons nor damage to property.
- (d) Explosives shall be properly housed and protected, and no explosives that have deteriorated shall be used. Proper methods of handling and thawing frozen explosives shall be followed. In blasting operations, the Contractor shall exercise the greatest care at all times.
- (e) The Contractor shall provide, erect and maintain necessary barriers, fences and other proper protection, and shall provide and maintain watchmen and lights as may be necessary to ensure the safety of the public and others. Unless otherwise specified, the Contractor shall keep streets and sidewalks open for use by the public. The Contractor shall provide, erect and maintain a sufficient number of detour signs, and other proper notices, wherever the use of streets or sidewalks is dangerous due to the Contractor's operations.
- (f) When Work is performed at night, the Contractor shall provide, erect and operate a sufficient number of lights to enable the Work to be performed satisfactorily.
- 11. (a) The Contractor shall complete the Work in accordance with a schedule set down in co-operation with the Engineer at the time of the award of the Contract. Amendments to this schedule may be made by the Engineer, on application by the Contractor.

PERFORMANCE OF THE WORK

- (b) Should the Engineer be of the opinion that the quantity or quality of labour or plant supplied by the Contractor is not sufficient, or that the methods being employed are not such as will ensure that the Work will be completed within the specified time, the Contractor shall forthwith improve the quality and increase the number of men employed, shall make revisions to the plant, and shall improve its Work methods to the satisfaction of the Engineer.
- 12. (a) Damage, loss, expense and delay incurred or experienced by the Contractor in the performance of the Work, by reason of unanticipated difficulties, bad weather, strikes, wars, acts of God, or other mischances, shall be borne by the Contractor and shall not be the subject of a claim for additional compensation or an extension to the completion time.

OPERATIONAL RISKS

- (b) The position of pole lines, conduits, watermains, sewers and other underground and overground utilities and structures is not necessarily shown on the Contract Drawings, and where shown, the accuracy of the position of such utilities and structures is not guaranteed. Before starting Work, the Contractor shall inform itself of the exact location of such utilities and structures, and shall assume liability for damage to them. Unless otherwise specified, the Contractor shall support such utilities and structures, or temporarily remove them, and restore them, to the satisfaction of the owners of the utilities and structures.
- 13. (a) Workmanship shall be first-class and material new and of best quality. The Contractor shall pay due regard to the neat and attractive appearance of the finished Work.

WORKMANSHIP
AND MATERIALS

- (b) If ordered by the Engineer, the Contractor shall make such openings in the Work as are needed to re-examine the Work, and shall forthwith make the Work good again. Should the Engineer find the Work so opened to be faulty, the whole of the expense of opening, checking and making good shall be borne by the Contractor. Should the Engineer find the Work opened to be in an acceptable condition, such expense will be borne by the Owner.
- (c) The Contractor shall remove and make good defective Work, and the entire cost of such removal and making good shall be borne by the Contractor.

In the event of any claim by the Contractor arising out of or in any way related to the Contract, no court proceeding shall be commenced until 60 days after the Contractor has submitted to the Owner in writing full particulars of the claim, including such of the Contractor's records as may be relevant, and answered fully all reasonable requests for information by the Owner (or by the Engineer if the Owner so designates). The requirements of this condition precedent to the said proceedings are supplementary to any other conditions of the Contract and shall not be construed as in any way modifying such other conditions which are to remain in full force and effect.

The claim shall be settled by the Engineer who shall communicate his decision in writing to the parties and such decision shall forthwith be given effect by the parties, and the Contractor shall proceed with the Works with all due diligence in accordance therewith, whether or not such claim shall be referred to a court of competent jurisdiction.

Owner's Claims

Any claim which the Owner may have against the Contractor based on any dispute or difference of any kind whatsoever arising out of the Contract or Work may, at the option of the Owner, and after notification in writing to the Contractor, be settled in accordance with the procedure set out in subsection (a) hereof and the provisions thereof shall apply mutatis mutandis.

- The Engineer may condemn and reject Work which, in his opinion, is not in accordance with the Contract Documents or the Engineer's instructions, and the Engineer will require the substitution of proper materials. Rejected materials shall be promptly removed from the site. 20.
- REJECTION OF WORK AND **MATERIALS**

21. (a) The Engineer will make such decisions as are necessary with respect to:

THE ENGINEER

- Discrepancies in the Contract Documents, or Differences of opinion or misunderstanding that may arise as to the meaning of the
- (iii)
- Omissions or misstatements in the Contract Documents, or Quality, dimensions and sufficiency of plant, materials or Work, or The due and proper execution of the Work, or (iv)
- (vi) The measurement, quantity or valuation of the Work, including additional Work and deductions, or
- (vii) Other questions or matters arising out of the Contract.

The Engineer's decision as to matters referred to in this section shall be binding upon the parties

- When the Engineer makes a decision under this section, the Contractor shall immediately proceed with Work affected by the decision. Additions to or deductions from the Contract price shall be made only as provided for in the Contract, and no revisions to the completion time shall be made, (b) unless decided by the Engineer.
- The Engineer may at reasonable times visit, enter and check at buildings, factories, workshops, works or sites wherever materials are being prepared, made or treated, or where other Work is being performed in connection with the Contract. The Engineer may also take such samples as he (c) may consider necessary.
- Shop Drawings will be reviewed only to check general arrangement and conformance with the design concept of the project and compliance with the Contract Documents. 22. (a)
 - Where the Engineer requires Shop and Setting Drawings, the Contractor shall submit them in sufficient time to allow for examination by the Engineer and for any corrections that he may require to be made. The Contractor shall not commence Work on items covered by Shop Drawings (b)
 - (where such drawings have been requested) before the Engineer's review. The Contractor shall make changes in Shop and Setting Drawings as the Engineer requires consistent with the Contract and shall submit revised prints to the Engineer. When submitting Shop and Setting Drawings, the Contractor shall notify the Engineer of every change made from (c)
 - the Contract Documents. Review of Shop Drawings by the Engineer shall not relieve the Contractor from compliance with requirements of the Contract Documents, nor relieve him of responsibility for errors made in the Shop Drawings.
 - The Contractor shall be responsible for confirming and correlating quantities and dimensions; (e) selecting fabrication processes and techniques of construction; and co-ordinating the Work of Subcontractors.

SHOP DRAWINGS The Contractor shall properly guard the Work and make good loss or damage of whatever nature or origin that may arise out of the Contract, until the Work is complete as indicated by the issue by the Engineer of the Total Completion Certificate.

- 29. The Contractor shall insure the Work and maintain such insurance against "all risks", which shall, unless otherwise specified, include flood and earthquake. Such insurance shall:
- 29. DAMAGE INSURANCE
 - be in the joint names of the Owner, the Contractor and the Sub-contractors, and the Engineer,
 - be for an amount equal to 100% of the total contract price and cover labour, materials, equipment and similar items to be incorporated into the Work, and that are on the site of the Work, or in transit to such site, and
 - (c)remain in force until the issue by the Engineer of the Total Completion Certificate.
- 30. (a) When the successful Tenderer is notified that his Tender has been accepted, he shall deposit with the Owner

30. INSURANCE **POLICIES AND** CERTIFICATES

- a copy of damage insurance policy as required in Section 29, and
- (ii) copies of liability and automobile insurance policies indicating compliance with Sections 25
- Insurance policies shall stay in force and not be amended, cancelled or allowed to lapse without thirty (30) days' prior notice.
- The Contractor shall deposit certificates with the Owner indicating that the Contractor has paid assessments under the Workers' Compensation Act as provided in Section 27. Such certificates (c)shall be deposited:
 - at the time of award of the Contract, and
 - (ii)
 - at intervals of six months during the course of the Contract, and before issue of the Substantial Performance Certificate after substantial performance, and
 - before issue of the Final Certificate. (iv)
- Claims or alleged claims received by the Contractor shall be dealt with immediately by the Contractor. If a claim is settled to the satisfaction of the claimant, the Contractor shall submit 31. (a) to the Engineer a copy of the claimant's release.

INSURANCE CLAIMS

- If a claim or alleged claim is rejected by the Contractor and/or his insurance company, the Contractor shall report this fact in writing to the Engineer. (b)
- (c) Should 30 days elapse after the claim or alleged claim has been received by the Contractor, and the Contractor is not able to report settlement or rejection of the claim, it shall report to the Engineer the steps being taken with respect to the claim.
- 32. The Engineer may prohibit the Contractor from performing Work during hours of the day in which the Engineer, in his judgement, deems such operations to be a disturbance or nuisance to the public.

32. HOURS OF WORK

Such prohibition may be made notwithstanding prior consent, order, agreement or requirement in the Contract that stipulates maximum or minimum hours of Work.

At monthly intervals, the Contractor and the Engineer shall make a valuation of the Work and materials supplied under the Contract. Should the Engineer wish to measure the Work or materials supplied, the Contractor shall assist in such measurements and furnish particulars 33. (a) required.

VALUATION

- The monthly valuations described in subsection (a) above shall not bind the Owner, the Contractor or the Engineer to final valuation of the Work to be performed under the Contract, but shall be (b) construed as approximations only for the purpose of Progress Certificates.
- (c) The final valuation of the Work shall be prepared as soon as possible after the whole of the Work has been completed.
- The Contractor shall be entitled to receive partial payments upon the certificate of the Engineer of the value of Work performed and materials supplied.

PROGRESS CERTIFICATES 40. (a) The Owner may terminate the employment of the Contractor, if the Engineer certifies that sufficient cause exists to justify such action. Such termination of employment may be made:

TERMINATE EMPLOYMENT CONTRACTOR

if the Contractor should be adjudged a bankrupt, or

if it should make a general assignment for the benefit of its creditors, or

(iii) if a receiver should be appointed on account of its insolvency, or (iv)

if it should take the benefit of any Act relating to insolvent debtors, or

if a winding up order be made against the Contractor, or

if it should refuse or fail to supply enough plant, properly skilled labour or proper materials after having received seven (7) days notice in writing from the Engineer so to do, or

(vii) if it should fail to make prompt payment to Sub-contractors and suppliers, or

- (viii) if it should persistently disregard laws, regulations or the instructions of the Engineer, or, (ix) if it should otherwise be guilty of a substantial violation of the provisions of the Contract.
- Should the Owner terminate the employment of the Contractor, as provided in subsection (a) above, he shall give the Contractor seven (7) days' written notice of such termination of employment.
- Should the Owner terminate the employment of the Contractor, as provided in subsection (a) above, he may take possession of the premises and of materials and plant on the premises, and may finish the Work by methods he may deem expedient, but without undue delay or expense. In such case, the Contractor shall not receive further payment until the Work is complete.
- If the unpaid balance of the contract price exceeds the expense of finishing the Work (including compensation to the Engineer for his additional services), such excess shall be paid to the Contractor. If such expense exceeds the unpaid balance, the Contractor shall pay the difference (d) to the Owner. The additional expense incurred by the Owner due to the Contractor's default shall be certified by the Engineer.
- The Contractor, together with a Surety Company approved by the Owner and authorized by law to carry on business in the Province in which the Work is to be performed, shall furnish a Performance Bond to the Owner in the form attached in the amount of 100% of the Contract price. The Bond shall unconditionally guarantee the performance of the Contract, shall be at the expense of the Contractor, and shall remain in effect until the issue by the Engineer of the Final Certificate.

PERFORMANCE BOND

The Contractor shall not assign the Contract, or any part of it without the written consent of the Owner, nor shall the Contractor assign moneys due, or to become due, to it without the written consent of the Owner.

ASSIGNMENT

The Contractor shall employ a competent supervisor and necessary assistants who shall at all times, be in attendance at the place of the Work while Work is being performed.

SUPERINTENDENCE

The supervisor shall be satisfactory to the Engineer and shall not be changed except for good reason and only then after consultation with the Engineer.

The supervisor shall represent the Contractor at the place of the Work and directives given to him by the Engineer shall be held to have been given to the Contractor.

The Contractor shall provide the Engineer with the name, address and phone number of the supervisor and other responsible person(s) who may be contacted for emergency or other reasons.

PROCTOR & REDFERN LIMITED Consulting Engineers Toronto, Ontario **MAY 1984**

APPENDIX 1 OF THE GENERAL CONDITIONS OF THE CONTRACT APPLICATION FOR RELEASE OF SUBCONTRACTOR'S HOLDBACK

Owner:	
Project:	
EO: Contracte	or:
Sub-contract:	
Sub-contractor:	
 We, contractor hereby confirm that the Work und was completed on , that the \$, and hereby request the issue of sub-contract Work has been completed. 	sub-contract price was
Date: Signature	:
SEAL:	
2. We, hereby confirm that Work of the above completed in accordance with the Contract is sub-contract price was \$, and here in holdbck with respect to the sub-contract, provisions of the Construction Lien Act.	Documents and that the by apply for a reduction
Date: Signature	
SEAL:	
PROCTOR & REDFERN LIMITED Consulting Engineers MAY 1984	

APPENDIX 2 OF THE GENERAL CONDITIONS OF THE CONTRACT APPLICATION FOR RELEASE OF CONTRACTOR'S HOLDBACK

Owner:			
Project:			
EO:	Contractor:		
We, confirm	the said Contractor, hereby		
(i)	that the Work under the above Contract is "substantially performed" as defined in the Construction Lien Act, and		
(ii)	that there are no outstanding liens, garnishees, attachments or other charges affecting the Work, and		
(iii)	That the value of Work performed to the date of substantial performance is \$ and		
(iv)	that the value of Work remaining to be done is \$		
	by apply for release of holdback moneys in accordance with the s of the Construction Lien Act.		
Date:	Signature:		
	SEAL:		

PROCTOR & REDFERN LIMITED Consulting Engineers

May 1984

SECTION 01010 - GENERAL

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

Topsoil stripping, earthworks, ditching and parking lot construction in Harold Black Park, Town of Pelham.

1.02 LIMITS OF SITE

- A. The limits of the site are -
 - 1. The road or street allowances on which Work is to be performed.
 - 2. Such additional land as indicated in the Contract.
 - Such areas of private property adjacent to road or street allowances on which the Contractor is directed, in writing, to enter to carry out Work.

1.03 SETTING OUT OF THE WORK

A. The Engineer will set such stakes as are necessary to mark the location, alignment, elevation and grade of the Work. Give adequate notice of the need for such setting out.

Carefully protect and preserve stakes, lot pins, marks and reference points and replace if destroyed or removed.

Provide grade stakes, masts, scaffolds, batter boards, straight edges, templates and other equipment necessary for laying out, and inspecting the Work.

Wherever necessary suspend Work temporarily to permit the Engineer to inspect and check the line and grade of any portion of the Work.

1.04 MEASUREMENT FOR PAYMENT

A. Unless otherwise specified, measurements will be taken in the horizontal plane.

1.05 CONSTRUCTION SCHEDULE

A. Within 2 weeks after being awarded the Contract, submit proposed construction schedule to the Engineer for approval. In the schedule show proposed progress in weekly stages for the main sections and subsections of the Work.

PART 2 EXECUTION

2.01 WORK ON ROADS

A. Do not perform Work on public rights-of-way without the approval of the road authority.

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PART 2 EXECUTION (Cont'd)

2.02 TRAFFIC

- A. Do not perform Work on public right-of-ways without approval of the road authorities.
- B. Perform traffic control on streets in accordance with the rules of the appropriate road authority. Ensure that flagmen wear fluorescent red or orange safety vests, arm bands and hats.
- C. Streets may be closed to through traffic only with the written permission of the Road Authority. Adequately mark detours on adjacent streets. Erect and maintain barricades on the closed streets and light at night. Inform the Road Authority when a road is re-opened to traffic.
- D. On streets that are not officially closed, always maintain one lane of traffic in each direction. Should temporary detours be constructed, comply with the requirements of the road authority as to location, dimensions, strength, road markings, signing and other relevant details. Remove detours when no longer needed, and restore surfaces to the original condition.
- E. Whether streets are officially closed or not, maintain reasonable access to adjacent properties for pedestrians and vehicles.
- F. Maintain traffic signs in their original positions. Be sure that the signs are not obscured.

2.03 NOTIFICATIONS

- A. When streets are to be closed, or traffic restricted, notify the appropriate fire and police departments, giving at least 7 days notice of the closing or restriction.
- B. If bus routes are affected, notify the bus company, giving at least 7 days notice.
- C. When streets are to be re-opened, or restrictions removed, notify the fire, police and bus authorities.

2.04 MUNICIPAL INSPECTORS

A. Municipal inspectors may be present during the construction of the Work. They have the power to order the Contractor to stop Work if the Work, in their opinion, is not being done in accordance with the set lines and grades or to the Drawings and Specifications.

Unless otherwise specified, the cost of municipal inspectors will not be charged to the ${\tt Contractor.}$

2.05 USE OF HYDRANTS

- A. Keep fire hydrants accessible and free of obstructions.
- B. Fire hydrants may be used as a source of water only with the approval of the water authority, and subject to its rules and conditions.

2.06 INCLEMENT WEATHER

- A. Make adequate protection and take precautions at times of inclement weather.
- B. Inclement weather or extra Work caused by such weather will not be accepted as reason for additional payment.

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PART 2 EXECUTION (Cont'd)

2.07 MUD AND DUST

- A. Keep streets and other construction areas clean. If it is necessary to haul wet material, use suitable watertight trucks.
- B. Control dust by the use of water or calcium chloride, or both.

2.08 OTHER CONSTRUCTION

A. Other construction may be proceeding at the same time near the Work of this Contract. Extend cooperation and free access to other companies and employees who may be Working in the area.

2.09 EXISTING UTILITIES

- A. Contact the various utility companies prior to commencing Work and become informed of the exact location of utilities and protect them during construction and assume liability for damage to utilities.
- B. Utilities that require relocation will be the responsibility of the Utility Company concerned at no expense to the Contractor. Cooperate with the utility companies concerned and always provide them free access to their plant.
- C. Support existing pipes, ducts, or other underground services that intersect the pipe trench, or support the pipe trench in a manner acceptable to the Engineer and the Utility Company.
- D. Where existing overhead pole lines are adjacent to the excavation, temporarily support them to the approval of the Engineer and the Utility Company concerned.

2.10 TEMPORARY ACCESS

A. Where necessary for access, provide and maintain suitable safe, temporary roads, walkways and bridges. Remove temporary access facilities and restore disturbed areas, after the Work of the Contract has been completed.

2.11 CLEAN-UP AND TIDY CONDITION

- A. On a daily basis as the Work progresses and on completion of the Work, clean-up and remove the rubbish and debris from the site. Remove excess material that is not required to be left on the site by the conditions of the Contract.
- B. Keep the site and the Work as tidy as practicable at all times.

PART 1 GENERAL

1.01 INTENT

- A. This Section covers the Work for site clearing, excavating, backfilling and restoration for sewers, watermains, forcemains and yard piping, from 600 mm beyond the exterior wall of structures. It also covers the site clearing, excavating, backfilling and restoration for valve chambers, manholes and catchbasins.
- B. Work included is as follows -
 - 1. Existing utilities
 - 2. Site clearing
 - 3. Stripping topsoil
 - 4. Excavating

1.02 EXISTING UTILITIES

- A. Contact the various utility companies prior to commencing Work and become informed of the exact location of utilities and protect them during construction and assume liability for damage to utilities.
- B. Utilities that require relocation will be the responsibility of the Utility Company concerned at no expense to the Contractor. Cooperate with the utility companies and always provide them free access to their plant.
- C. Where existing pipes, ducts, or other underground services intersect the pipe trench support the pipe trench to the approval of the Engineer and the Utility Company.
- D. Where existing overhead pole lines are adjacent to the excavation, temporarily support them to the approval of the Engineer and the Utility Company concerned.

1.03 EXISTING DRAINAGE

A. Maintain temporary and permanent flow in sewers, drains, gutters, ditches, watercourses, house and inlet connections.

1.04 BASIS FOR PAYMENT

- A. Conditions
 - 1. Unless otherwise specified, include temporary access, site clearing, earth excavating, shoring, sheathing, support of existing utilities, dewatering, testing of material, backfilling, removal of surplus excavation, restoration and other labour, equipment and materials necessary for the complete installation of the Work, in unit prices for culverts, ditches and earthworks.
 - 2. Where additional depth of bedding is ordered by the Engineer, additional payment will be made based on the unit prices in the Table of Prices for additional excavation and for the additional bedding material requested. Payments will be based on the actual additional depth requested and the

EO 85605 SEC 02130 SITE CLEARING, EXCAVATING, BACKFILLING AND RESTORATION OF TRENCHES Page 1

maximum width of trench as specified in PART 3.03 of this Section.

1.05 MATERIALS -

- Conform to latest edition of reference standards.
- $\boldsymbol{\text{-}}$ Where MTC specifications are referred to comply also with supplements to those specifications.

A. Granular Materials

- 1. Granular 'A', in accordance with MTC Form 1010.
- 2. Granular Bédding Material Granular A.

B. Surface Treatment

1. Surface treatment with bituminous materials - MTC Form 304.

C. Topsoil

- Use existing topsoil wherever suitable and as approved by the Engineer. Before re-using the topsoil clean out foreign matter and stones over 50 mm in size.
- Notify the Engineer at least 3 days before starting topsoil stripping operations. Sources of supply will require the Engineer's approval before being brought on the job.

D. Fertilizer

 Use complete commercial fertilizers, in compliance with the Canadian Fertilizer Act, not less than 60 percent urea-formaldehyde and the following percentages by weight -

Nitrogen	Phosphoric Acid	Potash
10 0	10 20	10 or 10

E. Sod

- Use No.1 nursery grown, 50 percent Kentucky blue, 50 percent Merion blue sod, fully root permeated in a close mat, uniform in texture.
- Cut sod by approved methods in accordance with the Nursery Sod Growers
 Association of Ontario. Cut pieces 1 sq. metre in area with a minimum of
 20 mm soil portion.

PART 2 EXECUTION

2.01 SITE CLEARING

A. Remove trees, shrubs, roots, vegetation, loose surface rock, fences, and other obstructions on the line of the Work.

EO 85605 SEC 02130 SITE CLEARING, EXCAVATING, BACKFILLING AND RESTORATION OF TRENCHES Page 2

Carefully protect trees, fences, shrubs and other vegetation designated by the Engineer and save from injury during the construction operation.

2.02 EXCAVATING

- A. Dig the trench to the alignment and depth required and only so far in advance of pipe laying as the Engineer will permit.
- Minimum and maximum trench widths up to a point 300 mm above top of pipe, for single pipe -

1. Minimum

300 mm greater than the external diameter of pipe or 750 mm for earth excavation or 1 m for rock excavation whichever is greater, excluding an allowance for shoring.

2. Maximum

- Not more than 400 mm greater than the external diameter of pipe or 750 mm whichever is greater for pipe up to and including 850 mm dia., excluding an allowance for shoring.
- Not more than 600 mm greater than the external diameter of pipe for 900 mm dia. pipe and larger, excluding an allowance for shoring required to a point 300 mm above top of pipe.
- C. The width of the trench at ground level is not to be less than the width at any depth in the trench. Fill overbreak and slides that have occurred during excavation with approved materials.
- D. Where trench excavations are not kept within the design limits of the pipe, the Engineer may order sheathing and shoring, and/or a heavier class of pipe, and/or use of a higher class of bedding.
- E. Grade and shape the pipe trench and the specified bedding to give uniform and even bearing for the length of the pipe. Dig bell holes at each joint. Ma corrections in the grade with compacted granular material acceptable to the Engineer, or with fill concrete.
- Where the subgrade in its natural state is inadequate to support the pipe, the Engineer will give instructions as to the proper procedure, and such additional Work as ordered will be paid for as described in the Form of Tender.
- G. Remove the subgrade where it has been adversely changed by construction operations and is not adequate to support the pipe. Replace stone or other approved material as directed by the Engineer. Replace with crushed

2.03 DEWATERING

A. Always maintain the excavation free of water.

2.04 BACKFILLING

- Backfill trenches from the top of the pipe bedding to the underside of surface restoration with site selected excavated material. Provide backfill free of roots, organic material and stone larger than 250 mm. Place backfill material in lifts not exceeding 150 mm. Compact to 95 percent Standard Proctor Density. Place backfill to 600 mm above top of pipe by hand.
- If the Engineer decides that the site selected excavation material either wholly or partially, is not suitable for backfill, then provide imported

EO 85605 SEC 02130 SITE CLEARING, EXCAVATING, BACKFILLING AND RESTORATION OF TRENCHES

PART 2

ART 2 EXECUTION (Cont'd) 2.04 BACKFILLING (Cont'd)

material of a type approved by the Engineer. Compact to 95 percent Standard Proctor Density.

2.05 DISPOSAL OF SURPLUS EXCAVATED MATERIAL

- A. Remove surplus excavated material from the site.
- B. Roadways, Driveways and Parking Lots
 - Restore roadways, driveways and parking lots as follows unless shown otherwise on the Drawings -
 - (A) Surface Treated Roadways, Driveways and Parking Lots
 - (1) Primer M.C.-O Grade l litre/sq. m. - 1 coat
 - (2) Seal R.C.-OGrade 1 litre/sq. m.- 2 coats
 - (3) 9.5 mm stone 12 kg/sq. m. - 2 coats
 - (4) Granular 'A' 300 mm
 - (B) Gravel Roadways, Driveways and Parking Lots
 - (1) Granular 'A'
 - 2. Carry out placing of Granular A & B in accordance with MTC specification Form 314.
 - 3. Carry out surface treatment work in accordance with MTC specification Form 303. Place surface treatment over full width of roadways.
 - 4. Where filling is required, construct fills in accordance with MTC specification Form 200.
- C. Preparation of Subgrade for Seeding and Sodding
 - Verify the subgrade and if required make adjustments to allow for topsoil and seeding or sodding to finish level with adjacent surfaces.
 - Scarify the backfill and disturbed areas to a minimum deptf of 75 mm to produce an even, loose textured surface, free of stones, roots, branches larger than 75 mm in dia., and live weeds.
 - 3. Have the finished subgrade approved by the Engineer prior to placing the topsoil.
- D. Preparation of Finish Grade
 - Spread the topsoil evenly over the approved subgrade to a minimum of 100 mm. Compact to 80-85 percent Standard Proctor Density.
 - Work the fertilizer into the top 25 mm of the topsoil by discing, raking or harrowing to provide a smooth, fine textured finish surface, and firm against footprints.
 - 3. Base quantities of fertilizer on the following minimum rates au
 - (A) 10 10 10 at 11 kg/100 sq. m. or
 - 0 20 10 at 6.5 kg/100 sq. m. with
 - Lay sod or spread seed within 48 hours of working the fertilizer into the topsoil.

EO 85605 SEC 02130 SITE CLEARING, EXCAVATING, BACKFILLING AND RESTORATION OF TRENCHES Page $4\,$

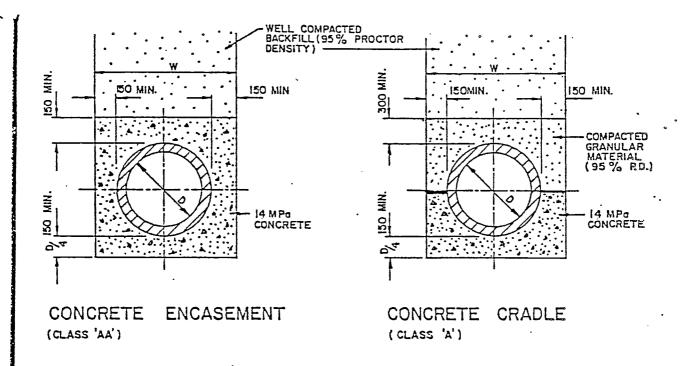
PART 2 EXECUTION (Cont'd) 2.05 DISPOSAL OF SURPLUS EXCAVATED MATERIAL (Cont'd)

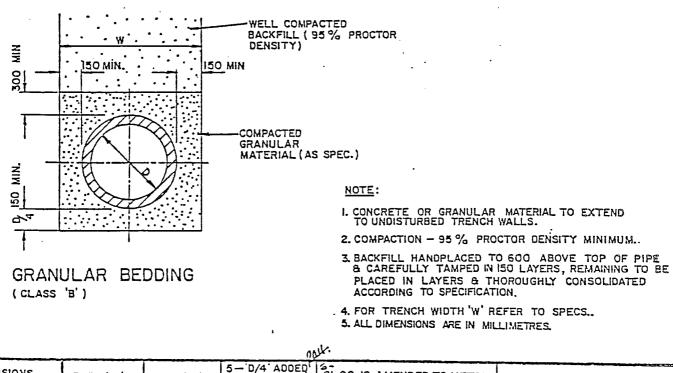
E. Laying sod

- 1. Lay sod as soon as possible after delivery.
- 2. Lay sods together so that there are no open joints or pieces overlapping. Lay sod smooth and flush with existing grade.
- Immediately after laying sod spread sufficient water to saturate the sod and the upper 100 mm of topsoil.
- 4. After sod and soil has dried sufficiently to prevent damage, roll the area with a roller providing 72 kPa pressure to ensure a good bond between sod and soil and to remove minor depressions and irregularities.
- 5. Water with sufficient amounts to ensure continued healthy and vigorous growth.

F. Seeding

- 1. Spread seed by means of a mechanical dry seeder, at a rate of 11.4 kg/ha.
- 2. Spread seed in two (2) intersecting directions at right angles to each
- 3. Work seed into the top 50 mm of the topsoil by raking or harrowing and compact so that the surface is smooth and firm.
- 4. After working the seed into the topsoil and compacting, water with sufficient amounts to ensure germination and continued healthy growth.





REVISIONS 3-30/11/76 4-16/2/77 5-D/4 ADDED 81-02-19 AMENDED TO METRIC

APPROVED BY

PIPE BEDDING DETAILS

(PIPE SIZES UP TO D = 1200 Ø)

CMANNE HO. E-STD.-2-1 M REV 6