

CORPORATION OF THE TOWNSHIP OF WESTMEATH

BY-Law Number 88-16

A By-Law to enter into an agreement regarding a supply of water for industrial purposes.

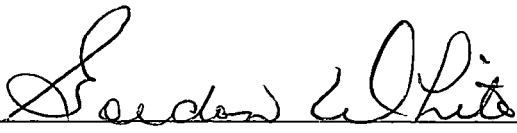
Whereas:

- 1) The Council of the Corporation of the Township of Westmeath has authority under Section 208 (2) of the Municipal Act RSO 1980 to enter into agreements for the purpose of contracting a supply of water:
- 2) The Council of the Corporation of the Township of Westmeath considers it expedient to enter into an agreement with Timminco Ltd. to supply the industry with water for industrial purposes.


Now therefore the Council of the Corporation of the Township of Westmeath enacts as follows:

1. That the Corporation of the Township of Westmeath enters into an agreement, known as Schedule "A" attached to, and forming part of this By-Law, with Timminco Ltd. for the supply of water to the Industry at their plant in the Township's Industrial Park
2. That the Reeve and Clerk are hereby authorised to sign the agreement referred to in Section 1 on behalf of the Corporation.

Passed and ENACTED this 19th day of October, 1988.



Reeve



Clerk

SCHEDULE "A" TO BY-LAW 88-16.

THIS AGREEMENT made this 19th day of October
A.D. 1988

B E T W E E N :

CORPORATION OF THE TOWNSHIP OF WESTMEATH

Hereinafter called the Township

-and-

TIMMINCO LIMITED

Hereinafter called the Manufacturer

WHEREAS the Manufacturer requires a supply of water to service its plant located in the Westmeath Industrial Park (the Plant) being part of Lot 27 Concession B. East of Muskrat Lake in the Township of Westmeath in the County of Renfrew;

AND WHEREAS the Township has employed the consulting firm of Janota Patrick Engineering Consultants to prepare a feasibility and cost study for the installation by the Township of a system to supply water to the Plant from lands owned by the Township;

AND WHEREAS the Township, for the purpose of assisting the industry on a cost recovery basis, proposes to construct maintain and operate a water supply system on its lands which will have the capability and capacity to supply the water requirements of the Plant; the water supply to be used for industrial purposes only;

B. *[Signature]*

NOW THEREFORE in consideration of the sum of one dollar (\$1.00) of lawful money of Canada and the mutual covenants herein contained, the parties agree as follows:-

1. WATER SUPPLY SYSTEM

1.01 The Township will construct, operate and maintain on lands owned by it adjacent to the Plant and at its sole expense, a system designed to have the capability and the capacity to supply water to the Plant's property line at a rate of up to 20 gallons of water per minute at a pressure of not less than 60 p.s.i. (the Supply System).

1.02 The Supply System will be comprised of the equipment parts and other items described and referred to in Appendix "A" and "B" hereto and will be constructed as Appendix "C" or as otherwise specified by the Township's Consulting Engineer and agreed to by Timminco.

1.03 As part of the Supply System the Township shall supply and install, at its sole expense, a water measuring device at the point where the water enters the Plant building for the purpose of measuring the amount of water supplied by the Township to the Plant. The Township shall have the right at all reasonable times to enter upon the premises of the Manufacturer for the purposes of inspecting and repairing the water measuring device.

1.04 The Township reserves the right to use the Supply System for other purposes during the term of this agreement provided that at all times during which it is using the Supply System for such other purposes it will provide on a priority basis for the Manufacturer's requirements.

1.05 It is agreed that the Township will use its best efforts to supply the Plant with its requirements for unfiltered and untreated water 24 hours each day, every day, during the term of the Agreement.

2. PRICE PER GALLON

2.01 Subject as hereinafter provided, the Manufacturer agrees to pay to the Township the sum of \$ 1.00 per thousand imperial gallons of water supplied by the Township to the Plant.

2.02 The parties hereto agree that price per gallon referred to in Section 2.01 shall be revised on ~~June~~^{October} 1, 1990, and ~~June~~^{October} 1, 1992, and on each such date the price per gallon shall be the lesser of the amounts determined under subparagraphs (a) and (b) below:

- a.(i) the price per gallon prior to such date, plus
- (ii) an amount determined by applying the aggregate of the percentage increase in the Consumer Price Index for the two years ending on December 31 of the year prior to such revision date to the price in subparagraph (a) (i), plus
- (iii) two percent (2%) of the price in subparagraph (a) (i);
- b. such other amount as may be agreed upon by the parties.

2.03 The price per gallon of water will be revised on the mutual consent of the parties hereto in the event that the cost of the installation of and/or the cost of operating the Supply System exceeds the estimates in the letter attached as Appendix A hereto.

2.04 Notwithstanding the provisions of Section 2.01 hereof, the Manufacturer agrees to pay the Township a minimum fee for the water supplied by the Township to the Plant hereunder at the rate of \$ 14.21 per day, payable monthly, such amount to be credited against the charges for water actually delivered by the Township to the Plant for the month. The minimum fee shall be payable for 60 consecutive months following the Effective Date of this Agreement (the Minimum Payment)

2.05 The Minimum Payment shall not be paid by the Manufacturer in respect of days:

- (a) on which water is not supplied to the Plant at the request of the Township and agreed to by the Manufacturer;
- (b) on which the Township is in default of its obligations to supply water to the Plant under this agreement; or
- (c) on which the Consent referred to in Section 7.01 hereof has been revoked unless such revocation is on account of some act or on account of some conduct of the Manufacturer.

2.06 The Minimum Payment shall be payable notwithstanding Section 2.05 hereof, in the event that Timminco is in default of its obligations under this agreement, or in the event that Timminco terminates this agreement pursuant to Section 4 hereof.

3. LIABILITY

3.01 Subject as hereinafter provided the parties agree that the Township shall not be liable for any losses or damages incurred or suffered by the Manufacturer for the failure on the part of the Township to supply water to the Plant in accordance with the requirements of the Agreement for whatever cause, or for any consequential damages which may result directly or indirectly from a breach of this agreement.

4. TERMINATION

4.01 Either party may terminate this agreement upon 90 days written notice to the other party.

5. NOTICE

Any notice required or permitted to be given under this Agreement may be given by sending the same by prepaid registered mail or by facsimile transmission, or by delivering the same as follows:-

(i) In the case of the Township:

Township of Westmeath,
Westmeath, Ontario
K0J 2L0
Attention: Gordon White, Reeve.

(ii) In the case of Timminco:

Timminco Limited
130 Adelaide Street West
Suite 2900
TORONTO, Ontario
M5G 1G5
Attention: Secretary.

Any such notice, if delivered or sent by telecopier, shall be deemed to have been given or received on the date on which it was delivered or sent by telecopier and, if mailed, shall be deemed to have been given or received on the 5th business day following the day on which it was mailed. No party shall send a notice by mail if a mail strike is imminent or threatened or a disruption in postal service is in progress or is imminent or threatened, provided that in the event of any disruption of mail service after mailing and prior to receipt or deemed receipt, such notice shall be deemed to have been given on the 5th day following full resumption of mail

service. Any party may change its address for service by giving notice of such change to the other party pursuant to the provisions of this agreement.

6. ASSIGNMENT

6.01 Neither party hereto shall have the right to assign this agreement or any of the rights contained herein without the prior written consent of the other.

7. MINISTRY CONSENT

7.01 This agreement and the obligations of the parties under this agreement is conditional upon the Township obtaining the written consent (Consent) of the Ministry of the Environment prior to the Effective Date hereof to the construction and operation of the Supply System.

7.02 This agreement shall terminate upon the revocation, made in good faith, of the Consent and the Township and Timminco shall have no further obligations hereunder upon such revocation other than the payment of the Minimum Payment previously referred to if the revocation is on account of the conduct or any act of the Manufacturer.

8. MISCELLANEOUS

8.01 If any provision of this agreement is held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions of this agreement shall not in any way be affected or impaired.

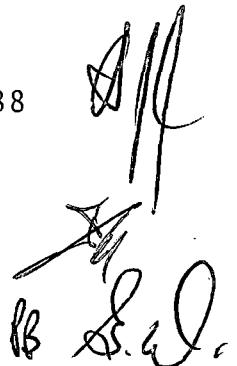
8.02 This agreement shall be governed by the laws of the Province of Ontario.

8.03 Time shall be of the essence of this agreement.

8.04 This agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and no variation or amendment hereto shall be binding unless agreed to in writing by both parties.

9. EFFECTIVE DATE

The effective date of this agreement is ^{October} ~~June~~ 1 1988
(Effective Date).

Handwritten signatures and initials in the bottom right corner of the page. There are two distinct signatures, one appearing to be 'J.P.' and another below it, possibly 'B.S.L.' or similar. The text is written in black ink.

IN WITNESS WHEREOF the parties hereto have set their corporate seals attested by the signatures of their respective officers in that behalf.

CORPORATION OF THE TOWNSHIP OF WESTMEATH

London White
Reeve

Pat Bunn
Clerk.

TIMMINCO LIMITED

BY: [Signature]
Authorized Signing Officer

BY: [Signature]
Authorized Signing Officer



Appendix A

August 26, 1987

Township of Westmeath
Westmeath, Ontario
K0J 2L0

Att: Reeve & Members of Council

Re: Proposed Water Supply to Timminco Plant
Westmeath Industrial Park

Gentlemen:

At the request of Mr. Barry Derouin, we have investigated the possibility of providing a continuous water supply to the Timminco Plant from the Industrial Park's Pumphouse and offer the following report:

1. Investigation of Existing Conditions

We visited the site on August 7 and August 24, 1987 to determine and assess existing conditions at the pumphouse and reservoir.

Two submersible pumping systems pump groundwater from drilled wells into a wet well chamber located near the south-west corner of the reservoir. An underground drain ("French" drain) is also connected to the wet well. A pump test, carried out to determine the yield of the french drain, indicated that the drain is dry. Because of the extended dry period this summer, the groundwater table has dropped below the drain so that this drain should not be counted on as a source of water supply. From this wet well chamber, water flows through a pipe under gravity conditions into the wet well under the main pumphouse.

We obtained the Water Well Records for the wells which had been drilled in 1973 as a source of water supply for the reservoir. At that time 10 wells were drilled and the pertinent information can be summarized as follows:

.....2

<u>Well</u>	<u>Pumping Rate</u> (gpm)	<u>Static Level</u> (ft.)	<u>Pump Setting</u> (ft.)	<u>Well Depth</u>
1	16	1	230	235
2	15	3	205	212
3	16	1	220	225
4	15	2	220	227
5	5	30	620	625
6	25	2	240	245
7	25-35	12	60	65
8	4	7	140	145
9	3	6	100'	125
10	10+	3	40'	145

It appears that, since some of the wells tapped the same aquifers, only 4 wells were left as production wells, ie: wells no 1,5,6,& 7. Of these, well nos. 1 & 5 are in operation at the present time and the reported yield based on a 2 hour pump test is 20 gpm.

On the basis of discussions with a Timminco representative, their plant requires a continuous supply of 15 usgpm at a minimum pressure of 40 p.s.i. Their plant could tolerate a down period of 4 hours, so that some form of standby would be required in the event the plant supply pump broke down.

2. Proposed Well Water Pump Supply System

As noted above, the reported yield of the 2 operational wells is 20 gpm. It is important to note that the actual yield could be significantly less than this if the wells are pumped on a continuous basis over a long period. For this reason it is suggested that the groundwater supply be supplemented by installing submersible pumping systems to pump water from well no's. 6 and 7 into the wet well at the pumphouse. Based on our analysis, we propose the following system:

- 2 submersible pumps, capable of 25 usgpm c/w 230v, 3Ø, 2 Hp motors. (Myers model # SJ2025 or similar)
- Flow control devices in discharge line to limit flow to 25 usgpm.
- Check valves in discharge line to prevent backflow into the well.

.....3

- 2" \emptyset discharge piping (SDR 160 plastic) from each pump to the wet well at the pumphouse.
- Duplex control panel c/w 3 level control system (2-to control water level in wet well & 1-to signal alarm), and low well water shutoff protection for the submersible pumps in the drilled wells.

Our preliminary cost estimate for the above system is \$18,000.00.

Proposed Timminco Plant Water Supply System

We propose to install a submersible pump in the wet well at the pumphouse with the capability of supplying 20 usgpm at a discharge pressure of 60 p.s.i. The pump would be controlled by a pressure switch to shut off at 80 p.s.i. and start up at 60 p.s.i., which is 5 p.s.i. above the pressure at which the fire pump starts up. The discharge from wells no. 6 and/or 7 could be interconnected with this system to serve as an emergency pump, i.e. if the plant supply pump fails, the submersible pump in, say, well no. 7 could be manually operated to discharge directly into the piping to supply the plant. Based on our review and analysis, the proposed system would consist of the following:

- 1 submersible pump capable of 20 usgpm at a discharge pressure 60 p.s.i. c/w 230v, 1 \emptyset motor (Myers model no. SJ1018 or similar).
- Flow control device at the pump and at the supply line in the plant to limit the water flow rate to 15 usgpm.
- Check valve in the discharge line.
- Pressure switch to replace the existing mercoid switch in the pump control panel.
- 120 gallon air guard glass-lined pressure tank.
- Galvanized discharge piping and fittings.
- Electrical wiring to hook up pumps (existing pump panel would be reused).

Our preliminary estimated cost for this system, installed in the pumphouse is \$3,200.00.

.....4

Handwritten signature

1. Life Cycle Cost Analysis

The submersible pumps can be purchased with the standard 1 year warranty or, for a small additional cost, the warranty period can be extended to 5 years. For the purposes of this analysis, we have therefore assumed the life expectancy of the pumps to be 5 years. On the basis of our analysis the annual cost for the proposed pumping systems can be summarized as follows:

i) Cost of electricity to operate pumps	\$1,052.00
ii) Maintenance cost (say 1 visit/week plus some minor repairs)	1,240.00
iii) Capitalization cost based on straight line depreciation 21,200 + 5 =	4,300.00
iv) Approximate interest costs on money borrowed to pay for system	<u>1,000.00</u>
Total	<u>\$7,592.00</u>



The total annual gallonage consumed by Timminco, using 15 usgpm continuously would be 6.57 million gallons. The cost charged would, therefore, be: $\frac{7592}{6570} = \underline{\underline{\$1.16/1000 \text{ IGal}}}$

116

Recovering the capital cost of the system over a 10 year period would result in a cost of\$0.82/1000 IGal

For comparison puposes; the water rates in the City of Pembroke are:

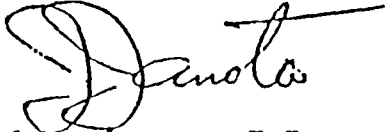
1st 30,000 IGal	\$1.60/1000 IGal
30,000 to 100,000	1.25/1000 IGal
over 100,000	1.00/1000 IGal

Please note that a permit to take water would be required from the Ministry of the Environment since the daily water volume taken from the ground (18,000 IGal) is greater than 10,000 IGal.

.....5

We trust that the foregoing is sufficient for your present purposes.
We would be pleased to review this report at Council's convenience.'

Yours truly,
JANOTA PATRICK
ENGINEERING CONSULTANTS



J.M. Janota P.Eng.

JMJ/ss

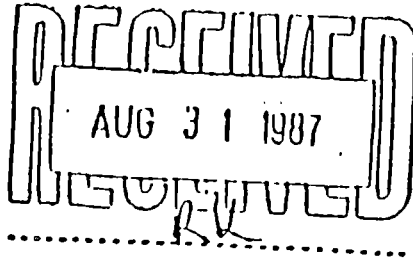
Handwritten initials

955 MacKAY Street, Pembroke, Ontario K8B 1A2

Telephone: (613) 735-2507

August 28, 1987

Appendix B.



Ownership of Westmeath
Westmeath, Ontario
N7J 2L0

Attn: Ms. P. Burn

Re: Proposed Water Supply to Timminco Plant
Westmeath Industrial Park

Dear Ms. Burn:

Further to our meeting of August 26, 1987 and with reference to our letter of the same date, we have listed below the main parts of the proposed pumping systems. Model numbers refer to parts supplied by J.E. Myers (Canada) Ltd.

Proposed Well Water Pump Supply System

- a) 2 - submersible Pumps Model no. SJF 2023-J2025P
- b) 2 - 2"Ø FIP X FIP Dole Flow Control rated at 25 usgpm
- c) 2 - 2"Ø Brass spring loaded line check valve
- d) - Duplex alternating panel in CEMA 1 enclosure c/w:
 - low level protection in wells
 - low level alarm in wet well
 - alternating pumps 1 & 2 with override
 - alarm on level c/w dry alarm contacts
 - on/off test switches and running lights
 - electrode wiring & control wiring
- e) 160 psi SDR 160 poly service line tubing c/w compression fittings
- f) Miscellaneous items - valves, fittings, power wiring, etc.

.....2

Handwritten signature

Proposed Timminco Plant Water Supply System

- a) 1 - Submersible pump - Model no. S2J102-J1018P
- b) 2 - 1"Ø G X Dole Flow Control rated at 20 usgpm
- c) 1 - pressure switch - Model no. PS 10D4
- d) 1 - pressure tank - Model no. AV 120 GL
- e) 1"Ø Schedule 40 A53 galvanized continuous weld steel pipe and fittings
- f) 14/3 submersible wiring c/w HS-3 wire connectors
- g) Water meter - Rockwell model no. SR-3/4" water meter c/w flange set

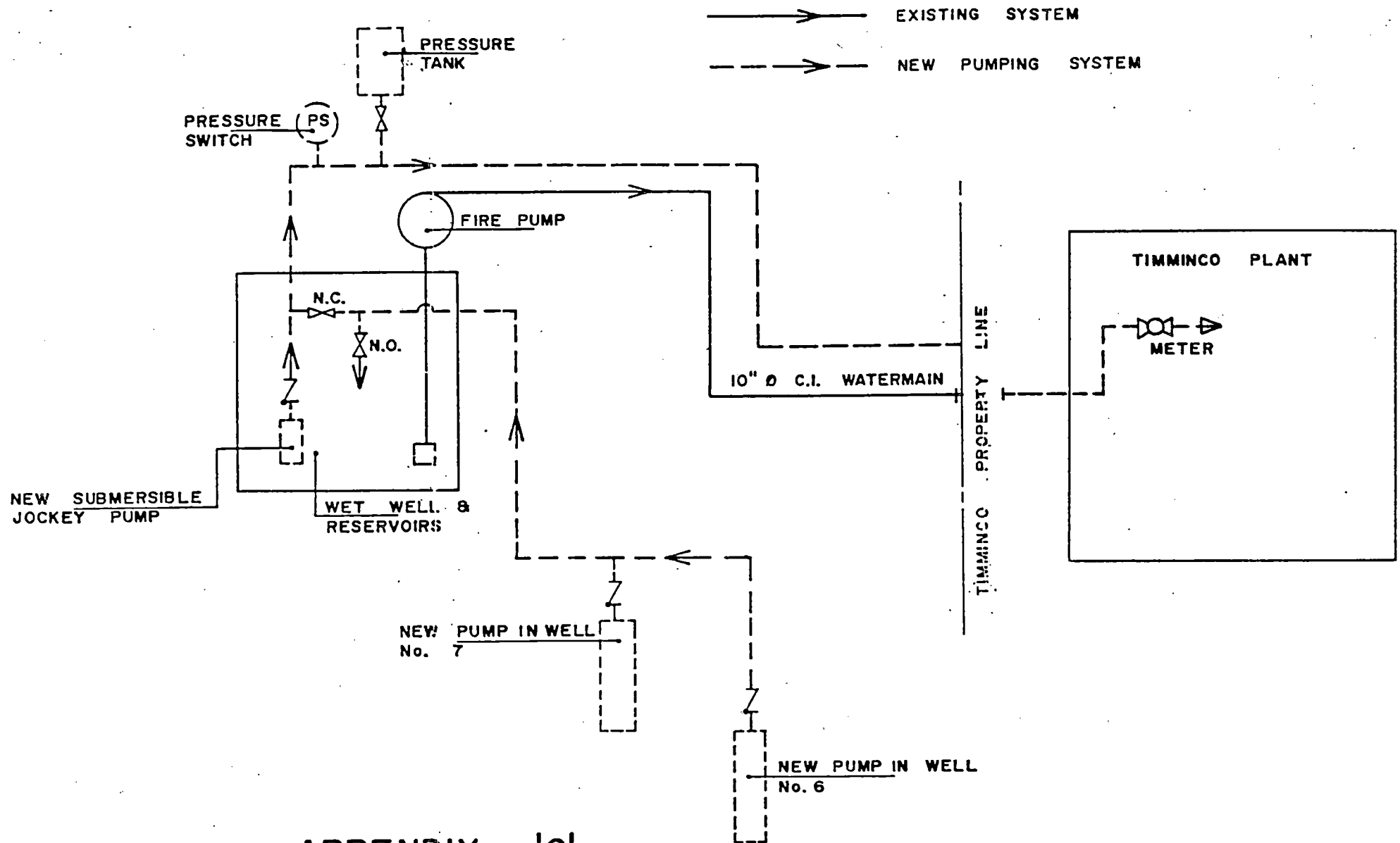
Note that the electrical power source, lengths and arrangement of piping and wiring should be confirmed on site before finalizing a contract for the work.

call if you require additional information.

Truly,
PATRICK
RING CONSULTANTS

Patrick Ring
Patrick Ring, P.Eng.

Recd
[Signature]



APPENDIX 'C'
 SCHEMATIC OF WATER SYSTEM
 TO SUPPLY TIMMINCO PLANT

