

TEMP



SPG-201

1147-4

3585-3

OTTAWA, November 21, 1972

TEMPORARY SPECIAL APPROVAL

Granted to: Wintering Hills Gas Co-op. Ltd.,
Wintering Hills, Alberta.

Attention: Bell & Fenske Consulting Engineering Ltd.,
1344 Acadia Drive S.E.,
Calgary, Alberta.

Subject: Use of Pressure Factor in Gas
Metering Installation.

Temporary Special Approval has been granted by the Standards Branch to Wintering Hills Gas Co-op. Ltd., to apply a pressure factor in the measurement of gas at the following installation under the stated conditions:

Seller	- Alberta Gas Trunk Line Co. Ltd.
Buyer	- Wintering Hills Gas Co-op. Ltd.
Location of meter	- SW $\frac{1}{4}$ -SEC5-TP26-R20-W4M
Nature of load	- Farmstead in NE $\frac{1}{4}$ -SEC5-TP26-R20-W4M
Size of load	- 200 cfh
A.G.T.L. pressure	- 900 psig
Metering pressure	- 25 $\frac{2}{3}$ psig
Upstream regulators	- 1" Fisher 620-3/32 orifice set at 100 psig, ahead of 1" Fisher 624-3/32 orifice set at 23 psig. Relief valve built into 624 regulator set at 23 psig
Downstream regulator	- 3/4" Reliance 268-5/16 orifice
Meter type	- Canadian meter AL425 rated 25 psig working pressure. Temperature com- pensated - positive displacement- diaphragm meter
Base pressure	- 14.4 psia

Average atmospheric pressure	- ASL 3000 FT-13.25 psia
Pressure compensation factor	- $\frac{13.25 + 23.0}{14.4} = 2.517$

This approval is temporary and will expire when permanent regulations pertaining to pressure factor measurement are put into effect.

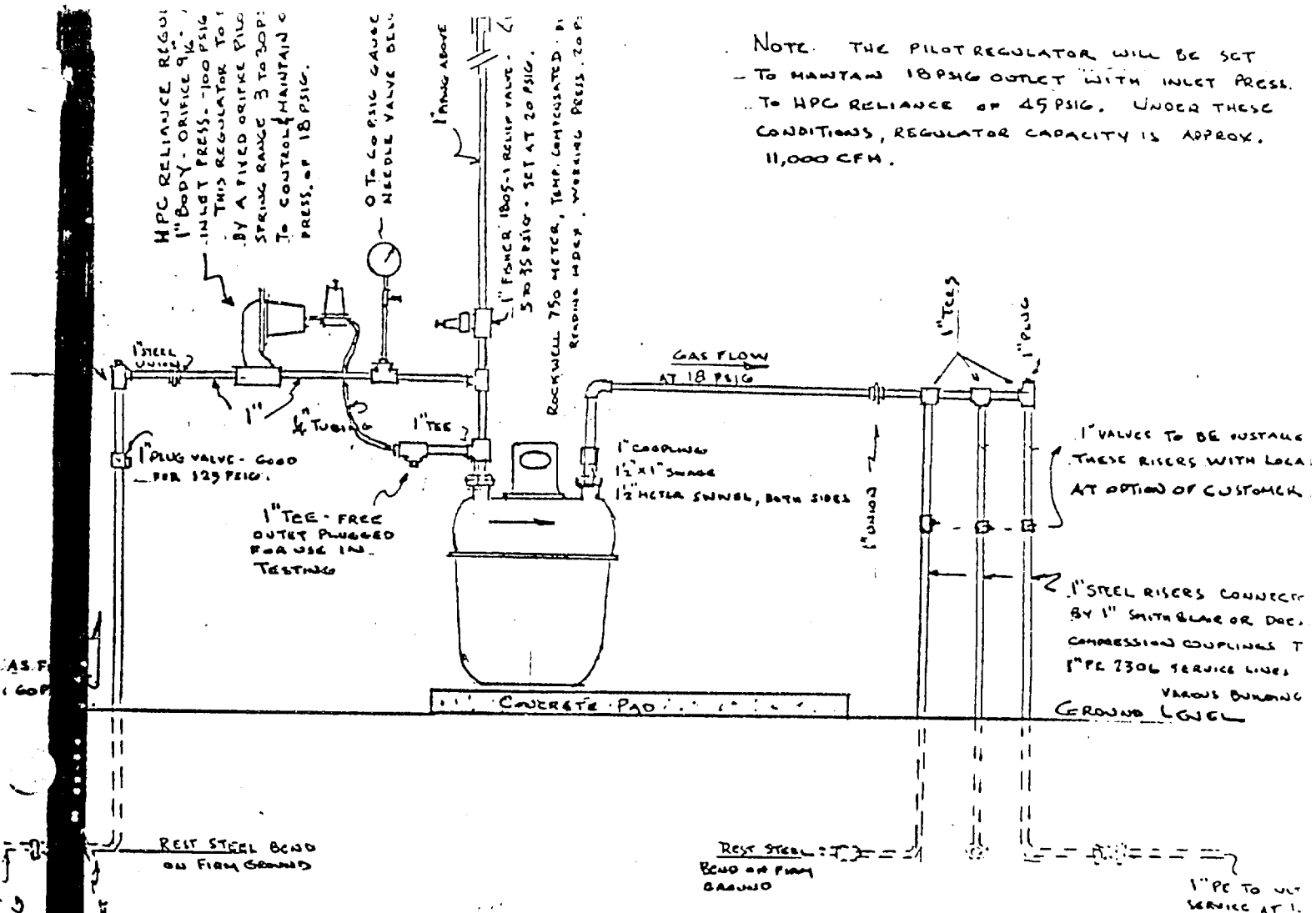
This service may be subject to "spot checks" by the Electricity and Gas Inspection Service at any time with reasonable notice.

W.J.S. Fraser

W.J.S. Fraser,
Chief,
Electricity and Gas Division.

c.c. Mr. A. S. Park, Calgary
Mr. J. Bileski, Winnipeg.

NOTE: THE PILOT REGULATOR WILL BE SET
 - TO MAINTAIN 18 PSIG OUTLET WITH INLET PRESS.
 - TO HPC RELIANCE OF 45 PSIG. UNDER THESE
 CONDITIONS, REGULATOR CAPACITY IS APPROX.
 11,000 CFM.



- FIXED FACTOR CALCULATIONS -

30 YEAR AVERAGE AT INTERNATIONAL AIRPORT, EDMONTON, ALTA, = 27.587" Hg = 13.55 PSIG AT F.
 ADJUSTMENT FOR CORONADO, ALTA, 250' LOWER ELEV = 0.25" Hg = 13.60 PSIG.

FIXED METER INLET PRESS. - 18 PSIG.
 PRESS. TO CUSTOMER - 0.25 PSIG. (4 ounces - 7" H₂O)

- FIXED FACTOR OR
 METER MULTIPLIER

$$= \frac{18.0 + 13.6}{13.6 + 0.25} = \underline{\underline{2.28}}$$

CAPACITY REQ'D BY CUSTOMER +
 MINUM LOAD TO BE REGULATED
 METERED AT 18 PSIG CONSTANT PRESSURE
 = 2400 CFM.

SKETCH & CALCULATIONS TO SUPPORT AN
 APPLICATION FOR A 'FIXED FACTOR' GAS
 METERING INSTALLATION IN THE PREMISES
 OF OREST MELNYCHUK, NE 10-57-23 W4
 CORONADO, ALTA.
 PREPARED BY
 CANCROD ENGINEERING LTD.

No SCALE

22 AUG. 7.
 REVISED 20 AUG. 7.

