

**MECHANICAL ADDENDUM MA-2
CITY OF VAUGHAN FIRE STATION NO. 7 - 12
PROJECT NO. 2104
JSC PROJECT NO. 21-237
MAY 23, 2024**

The following document is hereby made a part of the Contract Documents.

The following revisions and/or additions shall be made to Drawings and/or specifications and the cost shall be included in Tender Price.

REVISIONS TO SPECIFICATIONS

SECTION 23 31 00 – AIR DISTRIBUTION

2.7 – Heat Recovery Unit

1. Replace Paragraph .9 – Indirect Gas Fired Auxiliary Heat, with .9 – Electric Heat as follows:

“.9 **Electric Heat**

1. Electric resistance heaters shall be provided in the capacities, voltage, and steps of control as noted in the Schedules and shall bear a listing or certification mark from an authorized agency.
2. Heater element wiring shall terminate in a full height enclosure at one end of the heater. All internal wiring shall terminate on clearly identified terminal blocks. A wiring diagram shall be provided on the enclosure cover.
3. Heaters shall be equipped with an automatic reset disc type thermal cut-out. Heaters rated at 30 kW and less shall be equipped with an additional manual reset disc type thermal cut-out.
4. Heater elements shall be open type nickel-chromium construction, (2/3 Ni, 1/3 Cr) with a maximum of 22.5 kw/ft² (Sheathed coils shall be a maximum of 13 kw/ft²). Coil terminal pins shall be mechanically secured and insulated from the frame by means of non-rotating ceramic bushings.
5. Discharge air control with Silicon Controlled Rectifier (SCR) performing time based sine wave phase control. The SCR shall be controlled by a factory installed solid-state proportional integral controller.

6. Delete Paragraph .11 – Remote Control Panel in its entirety.

2.13 – Gas Piping & Service

1. Add new Subsection 2.13 – Gas Piping & Service as follows:

“2.13 GAS PIPING & SERVICE

- .1 Provide gas piping and connections as shown to gas equipment noted. Piping shall conform to CGA #B149 and Ontario Gas Code, Regulation #826/82 as amended to date. Obtain local Gas Company approval of system, valving and sizing before starting piping. Install all work in compliance with CGA Natural Gas Appliance Installation Manual of latest date.

- .2 Gas Piping: black steel pipe, Schedule #40, CSA #B-63 (ASTM-#A53), with 150# black malleable iron fittings. Install piping to conform to CGA #B149 and Provincial Gas Utilization Code both amended to date. Weld piping 2½" and larger and all concealed piping using ANSI #B16.9 butt-welding or #B16.11 socket welding fittings and test to Code Regulations.
- .3 Gas Valves: CGA or ULC approved self-lubricated ball valve or lubricated plug with greasing nipple, each with manual lever handle. Provide valve at each unit connection including equipment supplied by Owner or another Section."

3.5 – Heat Recovery Unit

- 1. Delete Paragraphs .5, .6 and .7 in its entirety.

3.10 – Gas Piping & Service

- 1. Add new Subsection 3.10 – Gas Piping & Service as follows:

"3.10 GAS PIPING & SERVICE

- .1 Pressure test gas piping with not less than 50# air for at least 24 hours without decrease in pressure. Check each joint with soap and water solution during test. Disconnect system during tests. Do not use oxygen for testing.
- .2 Painting of gas piping will be done by this Section.
- .3 Provide gas piping necessary and connect up each unit. Provide shut-off valve on each connection.
- .4 Support piping on roof on minimum 200 x 200 x 50 mm long pressure treated blocks set on 50 x 25 x 900 mm long pressure treated boards secured to 450 x 900 x 13 mm thick W.R. Meadows "Roof Tread" hot mopped set after removal of gravel at each block. Secure pipe to blocks with Myatt 161 pipe clamps or equal to allow pipe and block movement. See Detail #H-13.
- .5 Arrange and pay charges for gas meter/regulator assemblies by local Gas Company to approval. Meter/Regulator assembly shall be sized to provide not less than capacity noted at 1740 Pa for building service.
- .6 Provide wire harness. provide wire harness from manufacturer (Dresser Canada part M1S046-000. The pulse signal shall be 4-20 milliamp. Division 15 must also provide a Zenor barrier between the monitoring system and the meter pulse output, as required by Enbridge Consumers Gas. The Zenor barrier shall be as follows:

Hoffman Model S604NF-5 NEMA 4 as manufactured by Alpha Controls Rated CSA/UL listed enclosure (6"H x 4"W x 4"D)

Compression glands (IE – 0.25") containing R.Stahl I.S. positive barriers. Model 8901/31-086/150/70."

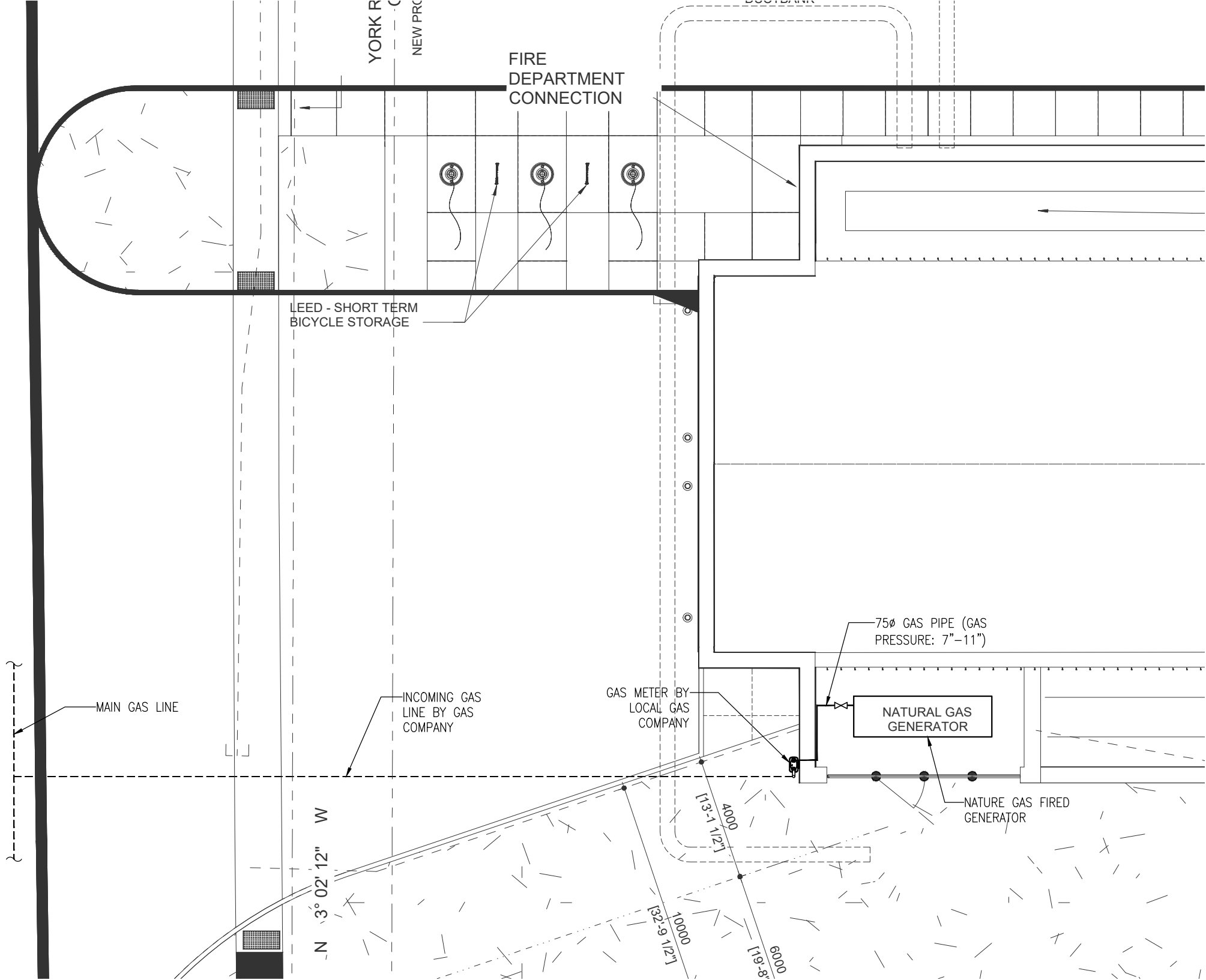
REVISIONS TO DRAWINGS

DRAWING M2.0

1. Provide new gas pipe to the generator as per attached Sketch MSK-1.

END

WESTON ROAD



PROJECT

CITY OF VAUGHAN FIRE STATION 7-12
9511 WESTON ROAD, VAUGHAN

TITLE

REVISION OF GAS METER AND PIPE FOR GENERATOR



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DATE	MAY 23, 2024
SCALE	1:150
DRAWN BY	JY
CHECKED BY	EM
J.A.L. JOB NO.	21-237
ARCH. JOB NO.	

DRAWING NUMBER:

MSK-1

REV. No.

REFERENCE DRAWING(S):
M2.0