Defence Infrastructure Organisation

Gas Safety Management Plan (Section A)

Cirencester ARC ACF ATC

22/04/2025

Produced to meet the requirements of the Gas Safety (Installation and Use) Regulations 1998

(Gas Safety Management Plan (Section B) covers the requirements of the Gas Safety (Management) Regulations 1996

ESTABLISHMENT KEY PERSONALITIES (GAS) CONTACTS

Role	Name	Tel No.	Email
Head of Establishment	LT Col EDL Hodges	01929 403774	Edward.Hodges675@mod.gov.uk
Establishment's SHEF	Capt. Wayne Price	0300 164 8316	Wayne.Price924@mod.uk
Establishments 4C's Coordinator	Capt. Wayne Price	0300 164 8316	Wayne.Price924@mod.uk
Senior DIO Estate Representative or Equivalent	Mark Cubitt	07955280440	wx-est-hd@rfca.mod.uk
Site DIO Estate Representative or Equivalent	Mark Armstrong	07508 129987	wx-est-mgr3@rfca.mod.uk
MMO Site Manager or equivalent	Paul Wakeford	07356101565	Paul.wakeford@vivodefence.com
Gas Safety Manager (GSM)	Justin Westcott	07793222820	Justin.westcott@vivodefence.com
Gas Responsible Person (GRP)	Jason Cuthbert	07592112763	Jason.cuthbert@vivodefence.com

The Content of this Gas Safety Management Plan (GSMP) have been Approved by the Gas Safety Manager:

Signature:	JP Westcott	**Date: 22/04/2025**

Authorisation for Implementation

The content and format of this GSMP has been agreed and authorised for implementation by Defence Infrastructure Organisation Technical Services Principal Gas Engineer (DIO TS PGE) and a unique reference number has been generated to support this.

Approved – J Obbard PGE – 18th Feb 2022

The Content of this GSMP have been agreed by the Senior DIO Estate Representative or Equivalent and future works following the findings will be supported:

Signature:	M Cubitt	**Date: 8/5/2024**

The content of this GSMP have been agreed by the Head of Establishment and future works following the findings will be supported

Signature:	Ed Hodges	**Date:25/06/25**

REVIEWS AND AMMENDMENTS

GSMPs are 'living documents' that should be subject to continual review and updating as required. Although the level of attention required will vary considerably depending on the size and complexity of each site, GSMPs should be reviewed at least once per quarter by the GRP, unless otherwise agreed by the PGE. Although it is likely that changes are not required at each review, the date of review and any changes made should be indicated on the tables below. The review of the GSMP will include a site visit to ensure that the site and the content of the GSMP remain valid. The reviews and amendments made will be deleted during the DIO TS three yearly review when the GSMP is re-authorised by the PGE.

Date	Page No.	Amendment
27/10/2021	All	Initial Development
06/05/2022	2	Updated Gas Emergency Helpdesk Number
06/05/2022	3	Updated RFCA Gas Emergency Contact Number
06/05/2022	3	Added New Gas Supplier Details
06/05/2022	3	Changed MAM Details
06/05/2022	3	Changed Gas Emergency Number
06/05/2022	10	Changed Gas Emergency Number
23/06/2022	9/Annexes	Added Gas Line & Network Drawings
02/08/2022	9	Inserted Icon for Gas Line & Network Drawings
02/02/2023	4	Meter Replaced – Added New Details
02/02/2023	5	Annexe Heaters Removed – Altered Annexe Description
02/02/2023	8	Updated Gas Pressure Readings
02/02/2023	11	Removed Annexe Heaters from Equipment List
10/05/2023	N/A	No Changes
16/08/2023	ii & 1	Updated HoE Details
14/09/2023	ii	Wessex Head of Estates Signed Document
27/11/2023	N/A	No Amendments Required
29/02/2024	N/A	No Amendments Required
16/05/2024	12	Added Kitchen SSOV Information
09/08/2024	All	Added References to Capped Meter Outlet on Caretakers Flat Supply
18/10/2024		GSM re-authorisation (previously authorised 28/01/2022)
14/11/2024	N/A	No Amendments Required
18/02/2025	Various	Updated document to reflect VIVO as MMO and also now responsible for Gas Safety management.

Date	Reviewed by	Authorised by	Comments
28/01/2022	M Fenwick	N King	Initial Review
06/05/2022	M Fenwick	M Fenwick	Quarterly Review
02/08/2022	M Fenwick	M Fenwick	Quarterly Review
10/11/2022	M Fenwick	M Fenwick	Quarterly Review
02/02/2023	M Fenwick		Annual Review
10/05/2023	M Fenwick	M Fenwick	Quarterly Review
16/08/2023	M Fenwick	M Fenwick	Quarterly Review
27/11/2023	M Fenwick	M Fenwick	Quarterly Review
29/02/2024	M Fenwick		Annual Review
16/05/2024	M Fenwick	M Fenwick	Quarterly Review

09/08/2024	M Fenwick	M Fenwick	Quarterly Review
18/10/2024	Neville King	Neville King	GSM re-authorisation
14/11/2024	M Fenwick	M Fenwick	Quarterly Review
27/01/2025	M Fenwick	M Fenwick	DNV De-Mobilisation Review / Handover
18/02/2025	J Cuthbert	J Westcott	Review and adoption of GSMP
22/04/2025	*J Westcott*	*J Westcott*	*Initial review/approval*

FORWARD

MOD, as a gas conveyor within Great Britain, has submitted an Exemplar Gas Safety Case (MOD GSC) to demonstrate compliance with the Gas Safety (Management) Regulations 1996 (GS(M)R). Maintenance Management Organisations (MMO's) are engaged who have the overall contractual responsibility to operate and maintain the gas network assets under their Contract, including the management of the safe flow of gas within the system and the provision of an emergency service. The MOD delegate specific duties to the MMO but accountability for gas safety on each site rests with the Head of Establishment.

Whilst gas downstream of the Emergency Control Valve (ECV) fall outside of the scope of (GS(M)R) similar criteria as those referred to above must be accommodated within an appropriate management system. The specific criteria required to adequately manage gas infrastructure downstream of the ECV are described in the Gas Safety (Installation and Use) Regulations 1998 (GS(IU)R).

The MOD GSC considers all parts of the MOD estates gas supply system that forms part of the gas supply network. This includes all parts of the MOD gas network from the Bulk Primary Meter Installation to the individual gas appliances and the safe release of the products of combustion. The MOD GSC considers primarily those matters that relate to the management of the safe flow of gas within the system and the provision of an emergency service for all aspects of the gas system.

Following initial approval of the Gas Safety Management Plans (GSMPs) by the DIO Principal Gas Engineer (PGE), the Gas Safety Manager (GSM) is required to reapprove this GSMP annually. GSMPs must be submitted to DIO PGE every three years for authorisation.

GSMP Section A document contains site specific details of the establishments utilisation infrastructure to assist with measures to ensure compliance with the GS(IU)R for installation pipework and associated components.

GSMP Section B documents contain site specific details and arrangements as a direct annex to the MOD GSC in line with the Gas Safety (Management) Regulations 1996 (GS(M)R).

GSMP Section C document contains site specific details and requirements of the establishment's LPG networks.

Although the legal status of this document applies in the UK only, the MOD apply the same requirements to the management of gas on its overseas estate, in accordance with the currently published Secretary of State's Health and Safety policy statement.

Contents

1 THE DUTY HOLDER AND ESTABLISHMENT LEVEL KEY PERSONALITIES

1.1. Gas Safety Case Duty Holder.	
The duty holder for the MOD Gas Safety Case is the Permanent Under Secretary for Defence (PUS). However, day to day responsibility for the preparation and maintenance of the document is delegated to the DIO TS Head of Engineering and Construction, who also has the responsibility for managing the system in accordance with the Safety Case. PUS delegates maintenance responsibility to the Top-Level Budget Holders (TLB's), to manage safety of the gas network. The TLB's utilise MOD Contracts i.e. MMOs who have responsibility for maintaining the gas network on behalf of the MOD.	
Name: Address:	Permanent Under Secretary Main Building Horse Guards Parade Whitehall London SW1A 2HB

1.2. DIO Technical Services Principal Gas Engineer (PGE).	
The PGE assumes the role of Senior Authorising Authority which is a term used within the MOD to recognise the authority of the person responsible for overseeing the appointment of, and auditing Authorising Engineers (AEs). For Gas the AEs are replaced by Gas Safety Managers (GSMs).	
Name: Address: ☎: ✉:	Jeremy Obbard DIO HQ Whittington Barracks Lichfield WS14 9TJ 07748 903260 Jeremy.obbard100@mod.gov.uk

1.3. Establishment Personalities.		
Name of Establishment:	Cirencester ARC ACF ATC	
Establishment Address:	Cirencester ARC ACF ATC 55 Somerford Rd Cirencester Gloucester GL7 1TT	
Head of Establishment (HoE) (This is the most senior MOD person identified, by the chain of command, as responsible for the establishment. The HoE holds accountability for ensuring site compliance with the requirements of GSMR and the MOD GSC, including this GSMP.)	Name: Position: Organisation: Address: ☎: ✉:	Lt Col Edward Hodges CO MoD, British Army Regimental Headquarters Allenby Barracks Bovington Wareham BH20 6JA 01929 403774 Edward.Hodges675@mod.gov.uk

Senior DIO representative or equivalent (This may be the SEFM, but will vary depending on the contract this establishment falls under)	Name: Position: Organisation: Address: ☎: ✉:	Mark Cubitt Head of Estates Wessex Reserve Forces' & Cadets' Association Mount House Mount Street Taunton Somerset TA1 3QE 07955 280440 wx-est-hd@rfca.mod.uk

1.4. **Maintenance Management Organisation (MMO).**		
The MMO for this establishment is:		**VIVO Defence Services**
Gas Emergency Helpdesk (Typically, MMO Helpdesk) (24 Hours) **Note:** Please do not contact the general public National Gas Emergency Service for suspected gas escapes on RFCA infrastructure.	Organisation: ☎:	VIVO Helpdesk Helpdesk 25 Goodlass Road Hunts Cross Liverpool L24 9HJ 0800 030 9320
Gas Safety Manager (GSM)	Name: Organisation: Address: ☎: ✉:	Justin Westcott Vivo Defence Bldg. 003, CTCRM Lympstone Nr Exmouth Devon EX8 5AR 07725 038039 Justin.westcott@vivodefence.com
Gas Responsible Person (GRP)	Name: Organisation: Address: ☎: ✉:	Jason Cuthbert Vivo Defence Imjin Barracks Innsworth Gloucester Gloucestershire GL31HW 07592 112763 Jason.cuthbert@vivodefence.com

1.5. Additional Gas Contacts.		
External Gas Distribution Network (EGDN)	Organisation: Address: ☎: ✉:	Wales & West Utilities Wales & West House, Spooner Close, Celtic Close Coedkernew Newport NP10 8FZ 0800 912 2999 Steve.Harding@WWUtilities.co.uk

Gas Supplier	Organisation: Address: ☎: ✉:	Total energies Gas & Power 55-57 High Street Redhill Surrey RH1 1RX 01737 275 746 gp.redhill.ccs@totalenergies.com
LPG Supplier	Organisation: Address: ☎: ✉:	Not Applicable, no bulk LPG on site.
Meter Asset Manager (MAM)	Organisation: Address: ☎: ✉:	Energy Assets Ltd 6 Almond vale Business Park Almond vale Way Livingston EH54 6GA 0800 001 4310 box.ngm.meteringdataenquries@nationalgrid.com
National Gas Emergency Centre (24 Hours)	☎:	0800 111999

2 SITE SPECIFIC DETAILS

2.1 Site Overview.

A brief description of the establishment and its current use. This should include how many separate sites are present and the number of buildings being supplied by gas.

Cirencester ARC ACF ATC is a single site establishment with three buildings on site, one of which is supplied by gas. This is the main building including the annexe. The main building was constructed in 1868 with the Annexe and workshop buildings added in 1954. These buildings are supplied with gas from the Low Pressure (LP) MoD Network.
There is also an individual EDGN supply to the Caretakers flat on the 2nd floor of the main building.
The reserve centre is occupied by The Royal Armoured Corps, C Squadron Royal Wessex Yeomanry, B Company Gloucester ACF Cirencester Platoon and the 1247 (Cirencester) Squadron of the ATC.
The main building which is supplied from the MoD network is used for office space, meeting/conference rooms, stores, catering, drill hall and a lounge/bar. The Caretakers Flat on the top floor has its own individual EGDN supply which is currently capped on the meter outlet. The Caretakers flat is no longer occupied but is used for occasional overnight stays at present.
The other building is the newer Annexe attached to the main building. This is supplied with gas from the MoD network.
Day to Day there are around 10 people on site and there can be up to 150 people on site when there are functions, events or parades.

2.2 Natural Gas.

A brief description of the natural gas installations, including how many MOD networks are present, the number of buildings each MOD network supplies and how many buildings are supplied direct from the EGDN. This should also include any demarcations in place between stakeholders and responsibilities.

There is 1 bulk fiscal meter on site supplied at Low pressure by the EGDN network. This meter then supplies an MoD network at 22.9 mbar with 1 building (Main building and the Annexe) fed from the MoD network.
The bulk fiscal meter is in a brick-built meter house adjoined to the West side of the building within the wire.

Bulk Fiscal Meter – Honeywell BK – G25E
S/N – E040 K01281 20 D6
40 m/3hr
MPRN - 3493110

The EGDN network enters the Bulk Fiscal Meter house in 2” steel with an insulation joint and runs through an EGDN ECV and a MAM owned and operated Meter and Regulator. From the meter outlet valve the pipework transitions to the MoD gas network. Within the meter house the MoD network enters a tee piece. One outlet section is 1½” steel which runs through a manual isolating valve, runs internally to the right hand side of the meter house and enters the basement of the main building to feed the plant room.

Plant Room

On entry to the basement there is no Utilization meter or valve so currently the demarcation point between the network and installation pipework is the manual valve in the gas meter house.
The 1 ½" gas pipe runs for 6 metres through the basement and up to a 1 ½" lever ball valve. From here the gas pipework reduces to 28mm copper and runs for a further 6 metres before connecting to the boiler rig with a lever drop valve just before entry to the boiler rig.

Boilers – 2 x Vaillant VU 446/5-5 (H-GB) Ecotec Plus
The total load on this installation is 96 KW.
There is steel and copper pipe within the installation.

The 2nd outlet from the tee within the gas meter house is 2" steel. This exits the meter house on the left hand side and drops directly into the ground. This section of network pipework travels around the building to the opposite side and rises in 1½" steel into the annexe at the store section.

Annexe

The gas pipework enters the building in 1½" steel pipe. There is no PRI or ECV as a demarcation point. The network pressure and installation pressure are 21 mbar. A demarcation point will need to be installed. The steel pipework runs in 1 ½" steel through the store to the manual isolation valve outside of the Galley. Throughout the installation there are 8 tee sections which are now plugged. These sections used to feed wall mounted heaters in the classrooms and offices. All the heaters are now removed.

Galley

The gas pipework runs at high level in the corridor next to the Galley, fed from the Annexe inlet supply. There is a manual isolation valve before the gas tees off in 22mm copper to feed the water heater within the Galley. The Gas continues after the tee through the Kitchen Gas interlock solenoid and enters the Galley directly behind the 4 Galley gas appliances.

Rinnai REU V2632FFU-E Instantaneous Water Heater
Zanussi Fryer
Falcon Grill
Falcon Solid Top with Oven
Blue Seal 6 Burner Range with Oven

There is a section of below ground network feeding the MT Workshop which enters the workshop in 2" steel and is capped on the outlet of the ECV.

The total load on this installation is 155.5 KW
There is steel and copper pipe within the installation.

The MoD network pipework is thought to have been installed in the early 1990's.
The total load on the bulk fiscal meter is 275 KW.
There is thought to be only steel pipe within the network.
The Gas Safety Management Plan Part B will contain all Network information.

Caretakers Flat

The EGDN network enters a Single Supply Primary gas meter for the Caretakers house in 25mm PE.

Utilisation Meter – Transco G4
6 m/3hr
S/N – G4 W01 134780
MPRN – Not Known at Present

The installation pipework on the meter outlet was capped in June 2024 and the installation pipework to the caretakers flat has been left redundant in situ. Reference remains within the GSMP, highlighted red where applicable.

2.3 LPG Gas.

A brief description of the LPG installations, including how many compounds are at the establishment, condition and make up of each compound, the number and size (kg) of vessels in each compound, the number of LPG MOD networks, the number of buildings supplied from the LPG MOD networks, how many buildings are supplied direct and not from an LPG MOD network. Details of the LPG pipework after the first stage regulator up to the building(s).

Note: The demarcation agreement between the LPG supplier and the MOD has been agreed and the MOD take responsibility from the outlet of the first stage regulator. The LPG supplier is responsible for the vessel, vessel associated components (excluding any earth bonding) pipework up to and including the first stage regulator.

No LPG on this establishment

2.4 External Installation Pipework.

A brief description of the external installation pipework (above or below ground) on each building. This is from the ECV to where it enters the building(s), the material, diameter, lengths, supports, conditions etc.

Caretakers Flat – There is approx…. 4 metres of external installation pipework. This exits the single supply meter box in 22mm copper at low level and rises vertically for around 4 metres and then enters the Caretakers flat on the 2nd floor. This pipework was capped on the meter outlet June 2024

2.5 Details of buildings served.

A list of the buildings being supplied by gas via an MOD network, LPG compound or directly from the EGDN and the usage of the gas (catering, hot water, heating, fire training, etc) at the building.

Ser	Building Number	Building description	Supplied by	Gas usage
1	Main Building	Office space, meeting/conference rooms, catering, and a lounge/bar.	MoD Network 01	Heating
2	Annexe	Galley	MoD Network 01	Hot Water, Catering
3	MT Workshop	Workshop	MoD Network 01	Capped on ECV outlet
4	Caretakers Flat (Within Main Building)	Accommodation	EGDN Network	Meter outlet capped

2.6 Additional details of buildings being served.

Any additional detail about a building that may be required or useful in an emergency or requires more details than captured above.

NOTE: This section is to be used to capture the Service Family Accommodation (SFA) properties where it is not practical to fit above.

N/A

3 METER DETAILS

3.1 Primary Meter Details.

The following table describes the basic arrangement of the primary meter installation(s). (These are the responsibility of the MAM)

NOTE: More detail on the primary meters that supply MOD networks can be seen in the GSMP part B.

Number of primary meter installations: 2 (1 x BFPM & 1 x EGDN Single Supply)

Meter Name / ID	MPRN	Supplying (MOD network ID or Bldg number)	location	Incoming pressure tier – HP, IP, MP, LP	Outlet pipeline				Max Flow (M^3 hr)
					P tier – HP, IP, MP, LP	Pressure (mbar)	Material	Diameter (mm)	
EGDN Bulk Fiscal Meter 001	3493110	MoD Network WX25	External Meter House – West Side of Building	LP	LP	22.9	Steel	50	40
EGDN Single Supply Meter 001	Not Known at Present	Main Building – Caretakers Flat	External Meter House – West Side of Building – meter outlet capped June 2024	LP	LP	21.9	Copper	22	6

3.2 Utilisation Meter Details. (meters supplied directly from the MOD gas network)

The following table describes the basic arrangement of the utilisation meter installation(s). (These are the responsibility of the MOD)

Number of utilisation meter installations: 0

Meter Name / ID	Being supplied from (MOD network ID)	Inlet pipeline				Outlet pipework				Max Flow (M^3 hr)
		P tier – HP, IP, MP, LP	Pressure (mbar)	Material	Diameter (mm)	P tier – HP, IP, MP, LP	Pressure (mbar)	Material	Diameter (mm)	
Not Metered										
Main Building Plant Room	MoD Network 01	LP	NTP	Steel	40	LP	NTP	Steel	40	N/A
Annexe	MoD Network 01	LP	21.8	Steel	40	LP	21.8	Steel	50	N/A
MT Workshop	MoD Network 01	LP	NTP	Steel	50	Capped	Capped	Capped	Capped	Capped

4 DIAGRAMS AND DRAWINGS

4.1 Line diagrams for building(s) internal gas installation pipework.
This section is to contain line diagrams for building internal installation pipework and associated components. This diagram should be fixed to the building at a practical and accessible location as well as within any associated document centres. It may be embedded as a PDF to this document for online use.

NOTE: Drawings are only required for commercial installations or for installation in commercial settings (non-domestic use). This may mean more installations than listed in IGEM/UP/2 Edition 3 (4.2.14), depending on the installations intended use.

Drawing Number	Building	Comments
WX25-A-A3	Main Building – Plant Room	Not to Scale Gas Installation Line Drawing
WX25-A-A3	Caretakers Flat (Within Main Building)	Not to Scale Gas Installation Line Drawing NB; gas supply capped on meter outlet June 2024, drawing to be updated
WX25-A-A3	Annexe	Not to Scale Gas Installation Line Drawing
		 WX25-A-A3.pdf

4.2 Additional drawings.
This section is to contain any additional drawings that may be required or may be of benefit to this GSMP or emergency procedures.

Drawing Number	Building	Comments
WX25-B-A1	Site Gas Network	Not to Scale Site Gas Network Drawing
		 WX25-B-A1.pdf

5 GAS INCIDENTS

5.1 Site reporting procedures for dealing with gas incidents.

This section is to contain the establishment's site-specific procedure for dealing with reports of gas incidents with regards the external installation pipework, internal installation pipework and equipment. Details of all individuals with responsibilities under this procedure should be included.

Procedure for an incident involving the gas installations on site:

- Call the VIVO helpdesk on 0800 030 9320 0800 317 960, open 24 hours per day.
- The helpdesk will contact the EGDN who shall attend and make safe a gas incident.
- The VIVO Gas Responsible Person shall be informed immediately by the site personnel or helpdesk text alert system

6 GAS EQUIPMENT

6.1 Equipment List.
This section is to include details of all the gas equipment being used at the establishment.

Building number	Equipment location	Equipment type (make, model)	Serial Number	Appliance kW rating	Flue classification	Comments
Main Building	Plant Room	Vaillant VU 446/5-5 (H-GB) Ecotec Plus	211906001002152013008051 67N3	48	Open Flue	
Main Building	Plant Room	Vaillant VU 446/5-5 (H-GB) Ecotec Plus	211906001002152013008065 52N4	48	Open Flue	
Main Building	Caretakers Flat	Ideal Elan 2 RS 260	116 805 A01	22	Room Sealed	Gas supply to flat capped at meter June 2024
Main Building - Annexe	Galley	Rinnai REU V2632FFU-E Instantaneous Water Heater	Not Visible	54	Room Sealed	
Main Building - Annexe	Galley	Zanussi Fryer	No Data Plate	15	Flueless – Canopy Extract	
Main Building - Annexe	Galley	Falcon Grill	No Data Plate	6.5	Flueless – Canopy Extract	
Main Building - Annexe	Galley	Falcon Solid Top with Oven	No Data Plate	35	Flueless – Canopy Extract	
Main Building - Annexe	Galley	Blue Seal 6 Burner Range with Oven	No Data Plate	45	Flueless – Canopy Extract	

6.2 Additional equipment information.
This section is to contain any additional equipment information that may be required or may be of benefit to this GSMP or emergency procedures.

Safety shut off valves are required to be frequently checked every year in accordance with CRFCA hard FM task list: 160418-GL-EST-Task2Ser9-GasApplianceandPipework
A list of the checks is captured below.

160418-GL-EST-Task 2Ser09-GasAppliance

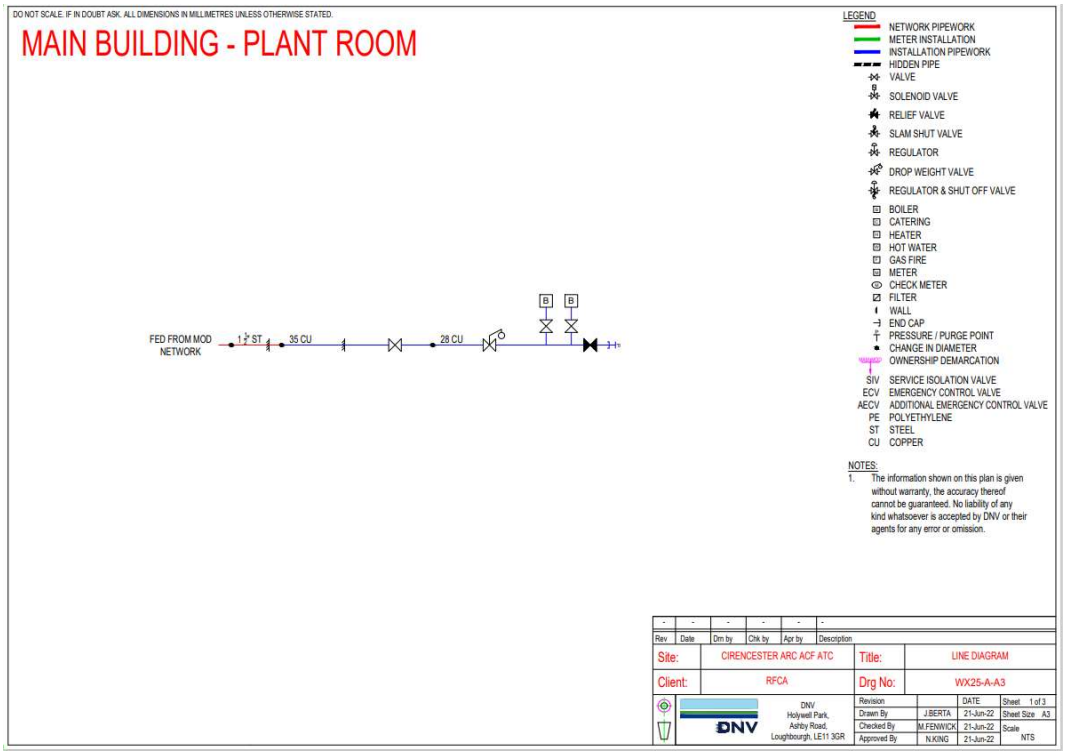
Kitchen Canopy Gas Interlock installed in Main Building Kitchen, with SSOV and emergency stop button by exit door.

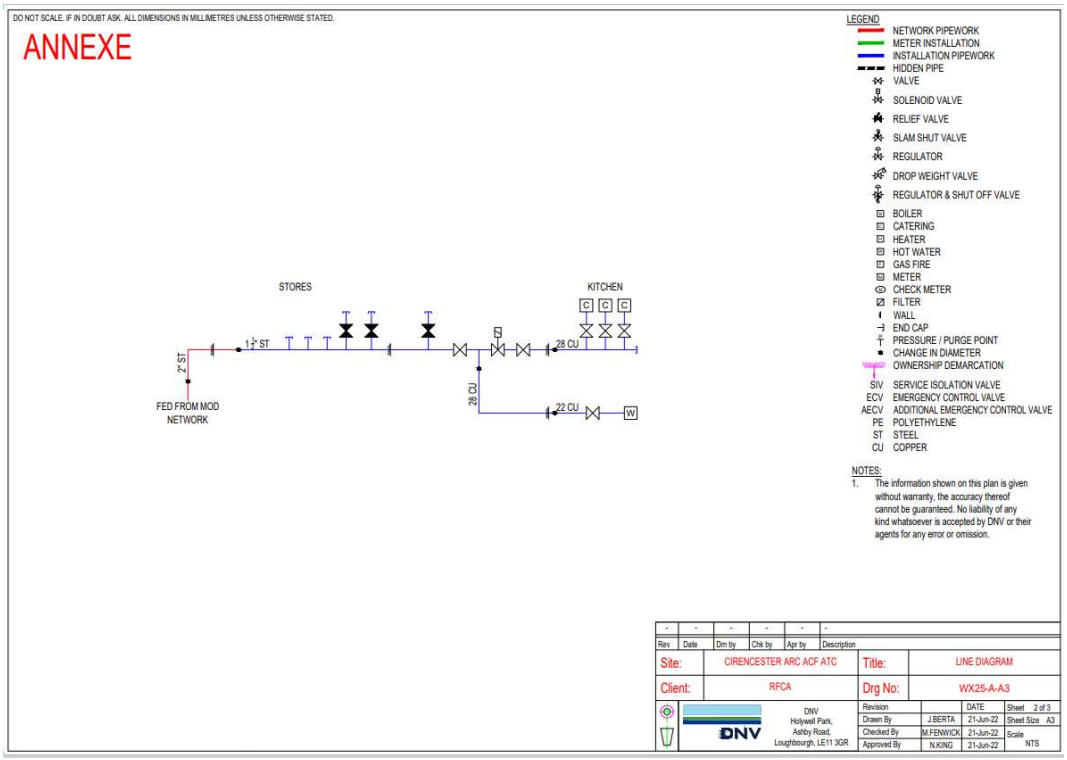
CIRENCESTER ARC JB50344 57644 PMV.

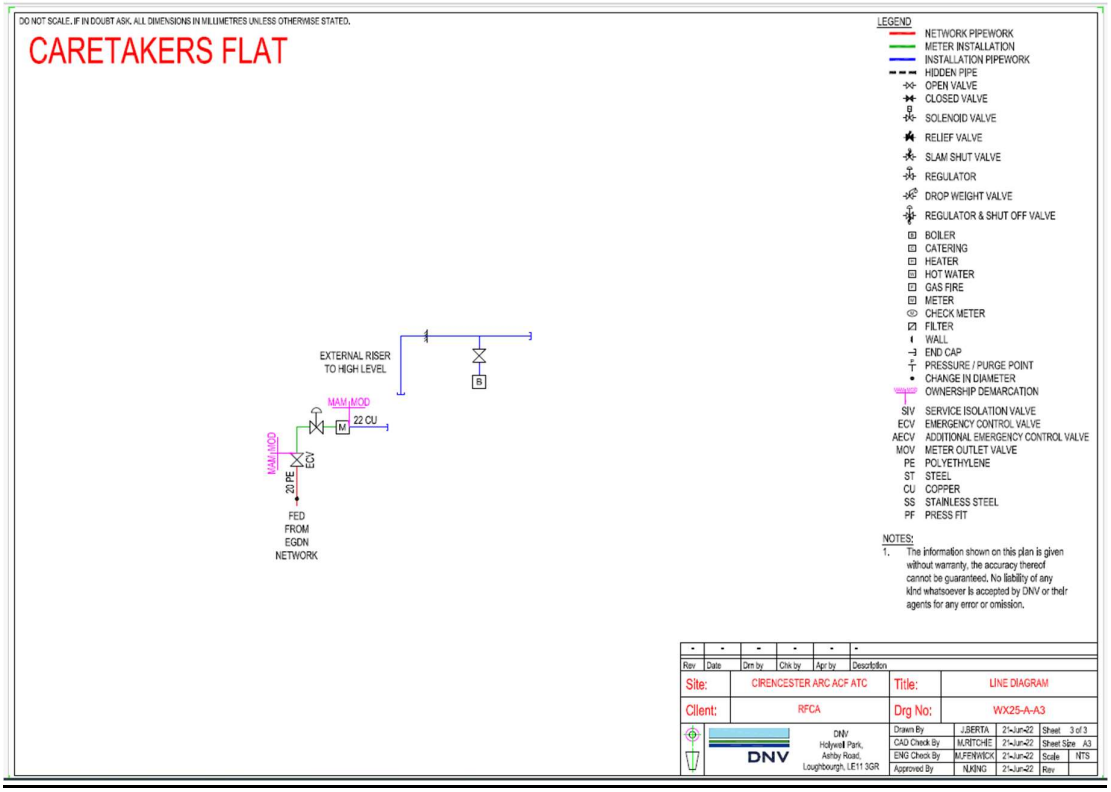
In-line solenoid observed in plantroom, believed to be fire alarm linked, unable to validate and test.

7 ANNEXES

Gas Line Drawings







Site Gas Network