



TENDER NO: RFB/MW/ES-04/ 2025-26/02

**THE APPOINTMENT OF CONTRACTOR FOR SUPPLY, DELIVERY & INSTALLATION OF
VAALKOP WTW FIRE SUPPRESSION PLANT UPGRADE PROJECT CIDB 4SF OR
HIGHER**

ISSUED BY:

MAGALIES WATER
38 HEYSTEK STREET
RUSTENBURG
0300

PREPARED BY:

SUPPLY CHAIN MANAGEMENT UNIT
MAGALIES WATER
38 HEYSTEK STREET
RUSTENBURG
0300

Tender Queries:

Contact Name: Rabelani Mulaudzi

Telephone: 014 597 4636

Technical Queries:

Contact Name: Mr A R Lopez

Telephone: 071 604 4009

Name of Tenderer.....

Contact Person.....

Contact details.....

VIRTUAL COMPULSORY BRIEFING SESSION: 14 May 2026

CLOSING DATE: 27 May 2026 at 12:00

TENDER SUBMISSION BOX: 38 Heystek Street, Rustenburg, 0299



TENDER NO: RFB/MW/ES-04/ 2025-26/02
THE APPOINTMENT OF CONTRACTOR FOR SUPPLY, DELIVERY & INSTALLATION OF
VAALKOP WTW FIRE SUPPRESSION PLANT UPGRADE PROJECT

TENDER SUMMARY PAGE

Name of Tendering Entity	
Name of Tendering Entity Representative	
Physical Address of Tendering Entity	
Postal Address of Tendering Entity	
Contact Details of Tendering Entity	Tel.
	Fax.
	Cell.
	E-mail:
Tender Amount carried from Form of Offer (incl. VAT)	R _____ (incl. VAT)
CIDB Grading & CRN No.	
Time for Completion Offered:	

Note: This page is used for tender opening purposes only. Where there is a discrepancy between this page and the Form of Offer and Acceptance, then the latter will be taken as the valid offer.

TENDER NO: RFB/MW/ES-04/ 2025-26/02

Supply, Delivery & Installation of
Vaalkop WTW Fire Suppression
Plant Upgrade Project

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C4	Site Information
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TENDER NO: RFB/MW/ES-04/
2025-26/02

Supply, Delivery & Installation of
Vaalkop WTW Fire Suppression
Plant Upgrade Project



PORTION 1: TENDER

Tendering Procedures

TENDER NO: RFB/MW/ES-04/ 2025-26/02

Supply, Delivery & Installation of
Vaalkop WTW Fire Suppression
Plant Upgrade Project

Magalies Water is a schedule 3B Public Business Enterprises (PFMA, Act 1 of 1999), which has been established in terms of the Water Services Act (Act 108 of 1997). and is, in terms of the Public Finance Management Act (PFMA), Act 1 of 1999, Schedule 3B, a National Government business entity, which reports to the Executive Authority, represented by the Minister of Water and Sanitation through the Department of Water and Sanitation (DWS).

Employer's Objective

Magalies Water invites suitable qualified and experienced Contractors to submit tenders for SUPPLY, DELIVERY & INSTALLATION OF VAALKOP WTW FIRE SUPPRESSION PLANT UPGRADE PROJECT

It is estimated that tenderers should have a CIDB contractor grading designation of **4 SF** or Higher. Enterprises who satisfy criteria stated in the Tender Data may submit tender offers.

The physical address for collection and delivery of tender documents is 38 Heystek Street, Rustenburg, 0299, Magalies Water Head Quarters Tender Box.

The tenders must be Completed in Black ink and submitted in a sealed envelope and clearly marked BID: **RFB/MW/ES-04/2025-26 SUPPLY, DELIVERY & INSTALLATION OF VAALKOP WTW FIRE SUPPRESSION PLANT UPGRADE PROJECT.**

Tender documents shall be available from the Magalies Water for collection during working hours from **08:00 to 16:00** starting from **18 May 2026**

Upon submission of proof of payment, the tender documents will also be made available at the compulsory clarification meeting.

Tender documents will be made available upon submission of proof of payment to tenders@magalieswater.co.za and copy & rabelanim@magalieswater.co.za

A non-refundable tender deposit of R500.00 payable into the Magalies water bank account is required on collection of the tender documents.

Tenders will be evaluated using the 80/20 preference points

Queries relating to the issue of these documents may be addressed in writing to Mr. A. Lopes (technical matters) Tel: 014-597 4636 & Email tenders@magalieswater.co.za and copy rabelanim@magalieswater.co.za.

A compulsory virtual clarification meeting with representatives of the Employer will take place on 10 March 2026. Tenders received from Tenderers who did not attend the Briefing Session will not be considered

Any verbal replies given at the briefing session or elsewhere shall not be regarded as binding unless confirmed in writing by means of an addendum.

Any such addenda will be sent to all Tenderers.

The closing time for receipt of tenders is **12:00 PM on the 27 May 2026**. Proposals which are incomplete, filled incorrectly, or telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted. Should you do not receive any feedback from Magalies Water after 60 days of submission, consider your tender unsuccessful.

Tenders may only be submitted on the tender documentation that is issued. A two-envelope system will not be followed

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

The invitation for proposal does not amount to an invitation for offers and Magalies Water reserves the right to accept or reject any proposal or part thereof. Magalies Water reserves the right to withdraw or cancel the tender without notice or not appoint any of the tenderers

NB: Service Providers to all departments, constitutional institutions and public entities listed in schedule 2 and 3 of the PFMA are required to self-register on the Central Supplier

TENDER NO: RFB/MW/ES-04/ 2025-26/02
Supply, Delivery & Installation of Vaalkop
WTW Fire Suppression Plant Upgrade

TENDER NO: RFB/MW/ES-04/ 2025-26/02

**THE APPOINTMENT OF CONTRACTOR FOR SUPPLY, DELIVERY & INSTALLATION OF
VAALKOP WTW FIRE SUPPRESSION PLANT UPGRADE PROJECT**

TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the Construction Industry Development Board's Board Notice 12 of 2009 (contained in Government Gazette No. 31823 of 30 January 2009), bound into section T1.3.

The Standard Conditions of Tender makes several references to the tender data. The tender data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of tender.

Each item of data given below is cross referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

Clause number	Tender Data
F.1.1	The employer is Magalies Water
F.1.2	The Tender Documents issued by the Employer comprise the following documents: THE TENDER Part T1: Tendering procedures T1.1 - Tender notice and invitation to tender T1.2 - Tender data Part T2 : Returnables documents T2.1 - List of returnable documents (Mandatory) T2.2 - Returnable schedules THE CONTRACT Part C1: Agreements and Contract data C1.1 - Form of offer and acceptance C1.2 - Contract data C1.3 - Performance Bond Part C2: Pricing data C2.1 - Pricing assumptions C2.2 - Bill of Quantities Part C3: Scope of work C3 - Scope of work Part C4: Site information C4 - Site information

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Clause number	Tender Data
F.2	Tenderer's obligations
F.2.1	The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated: a) who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) of 25 (7A) of the Construction Industry Development Regulations, for a 4 SF class of construction work; and b) Contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of (a) above and who satisfy the following criteria: 1) the Employer is satisfied that such a contractor has the potential to develop and qualify to be registered in that higher grade as determined in accordance with the provisions of the CIDB Specification for Social and Economic Deliverables in Construction Works Contracts; and 2) the Employer agrees to provide the financial, management or other support that is considered appropriate to enable the contractor to successfully execute that contract. Joint ventures are eligible to submit tenders provided that: 1) every member of the joint venture is registered with the CIDB. 2) the lead partner has a contractor grading designation in the 4 SF class of construction work; and 3) the combined contractor grading designation calculated in accordance with the Construction industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 4 SF class of construction work or a value determined in accordance with Regulation 25 (1B) of 25 (7A) of the Construction Industry Development Regulations.

T1.1 Tender Data

Clause number	Tender Data
F2.4	If a tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's agent. Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal. Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.
F.2.5	The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender. Tenderers must sign the attendance list in the name of the tendering entity. Addenda will be issued to and tenders will be evaluated from only those tendering entities appearing on the attendance list.
F.2.6	Alternative tender offer, will not be Consider
F.2.7	Parts of each tender offer communicated on paper shall be submitted as an original, plus NIL copies.
F2.7	Add the following to the clause: Only authorised signatories may sign the original and all copies of the tender offer where required in terms of the tender data In the case of a ONE-PERSON CONCERN submitting a tender, this shall be clearly stated. In case of a COMPANY submitting a tender, include a certified copy of the Certificate of Incorporation of such company shall, together with a <u>resolution by its board of directors</u> authorising a director or other official of the company to sign the documents on behalf of the company. In the case of a CLOSED CORPORATION submitting a tender, include a certified copy of the Founding Statement of such corporation, together with a <u>resolution by its members</u> authorising a member or other official of the corporation to sign the documents on each member's behalf. In the case of a PARTNERSHIP submitting a tender, <u>all the partners</u> shall sign the documents, unless one partner or a group of partners has been authorised to sign on behalf of each partner, in which case <u>proof of such authorisation</u> shall be included in the Tender. In the case of a JOINT VENTURE submitting a tender, include <u>a resolution</u> of each company of the Joint Venture together with a resolution by its members authorising a member of the Joint Venture to sign the documents on behalf of the Joint Venture."
F.2.8 F.2.8.1	The employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are: Location of tender box: Magalies Water Offices Physical address: 38 Heystek Street, Rustenburg Identification details: Tender reference number, Title of Tender and the closing date and time of the tender

Clause number	Tender Data
F.2.9	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
F.2.10	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender .
F.2.11	The tender offer validity period is 120 days .
F.2.12	Access shall be provided for the following inspections, tests and analysis: • None
F.2.13	The Bidders must submit with his tender the Mandatory Returnable Documents as Part T2.2. Failure to any of the requested documents will result in disqualification.
F.3	The Employer's undertakings
F.3.1.1	The Employer will respond to requests for clarification received up to 7 working days before the tender closing time.
F.3.2	The employer shall issue addenda until 5 working days before tender closing time.
F.3.3	Tenders will be opened immediately after the closing time for tenders.
F.3.4	Corrections, omissions and discrepancies. Correct the errors as follows: - To correct errors made, draw a line through the incorrect entry and write the correct entry above in black ink and place the full signatures of the authorised signatories next to the correct entry. - Corrections in terms of price may not be made by means of a correction fluid such as Tippex or a similar product. - If correction fluid has been used on any specific item price, such item will not be considered. No correction fluid may be used in a Bill of Quantities where prices are calculated to arrive at a total amount. If correction fluid has been used the tender will not be considered.
F.3.5	Arithmetical errors: - If bills of quantities or pricing schedules apply and there is an error in the line-item total resulting from the product of the unit rate and the quantity, the line-item total shall govern, and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line-item total as quoted shall govern, and the unit rate shall be corrected. - Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the Bidder's addition of prices, the corrected total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of prices. Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of the arithmetical error in the manner described above

Clause number	Tender Data
F.3.6.1	Evaluation of tender offers Stage 1 – Administrative Requirements and Mandatory Requirements During this stage, the Tenderer will be evaluated on Stage 1.1 Administrative Requirements and Stage 1.2 Mandatory requirements. If the Tenderer does not meet all requirements as specified in Stage 1.2, the tender will not be evaluated any further. Stage 2 – Quality Criteria During this stage, the Tenderer will be evaluated according to the Quality criteria as stipulated in F 3.11.4 Any tenderer that does not meet a minimum score of 60 points for functionality (quality) will not qualify for further adjudication. Stage 3 – Price and Preference. Evaluation of tender offers will be done in accordance with F3.11.4. Apply Method 2: Financial offers and Preference points system, where a maximum of 80/90 tender adjudication points be awarded for price of the tender under consideration and a maximum of 20/10 will be awarded to a tenderer for the specific goal in terms of the Preferential Procurement policy of Council 2022
F.3.6.2	The tender evaluation method to evaluate all responsive tender offers that score a minimum of 60 points in the evaluation of functionality will be Method 2– Price and Preference The formula to be used in the scoring of the financial offer will be: $\text{Price PS} = \frac{80}{\text{Pmin}} (1 - (\text{Pt} - \text{Pmin}))$ Where Ps = Point scored for price of tender under consideration Pt=Rand value of Tender under consideration Pmin = Rand value of the lowest responsive tender The maximum possible number of tender evaluation points awarded for the financial offer W=(80). The financial offers will be scored in terms of formula 2, option 1 of the Standard Conditions of Tender. Refer to the preferential procurement policy appended to the returnable documents. The maximum possible number of tender evaluation points awarded for the specific goal NP=(20)

Clause number	Tender Data
F.3.6.3	Tenders will be evaluated in four stages: Stage 1 – Administrative Requirements and Mandatory Requirements 1.1 Administrative Requirements (Non-mandatory). a) Certificate of Authority for Signatory. b) Joint Venture Agreement and Power of Attorney, if applicable c) The bidder completed and signed all prescribed standard bid forms. d) Proof of Central Supplier Database (CSD) Registration Report or MAAA number e) The tender document must be filled in Permanent Ink. (Preferably black) f) Filled and signed POIPA act consent form g) Copy of Company Registration Certificate (C.K), in case of a JV, both JV partners must submit respectively. Stage 1B – Mandatory Requirements During this stage, the Tenderer will be evaluated on responsiveness under mandatory requirements. <u>If any of the following requirements are not adhered to it will lead to disqualification.</u> 1) Attendance Register at Clarification Meeting. 2) Bidder must submit electronic copy (PDF Format) on USB 3) Valid CIDB Grading of 4SF class of construction work or Higher 4) Attach signed Record of Addenda to Tender Document and complete T2.26 form B4 with addenda received information. 5) Valid Workman's Compensation Commissioner - Letter of Good Standing (COIDA) 6) A rate/amount is to be entered against all items in the schedule of fees / Bill of Quantities, an item against which no rate/amount is entered will lead to immediate disqualification due to unfair price advantage.

Stage 2: - Functionality Criteria

The assessment of functionality must be done in terms of the functionality evaluation criteria and the minimum threshold. A bid must be disqualified if it fails to meet the minimum threshold for functionality as per the bid invitation and Functionality points will be allocated as follows for solicitation of bids from Professional Services Providers. During this stage, the Tenderer will be evaluated according to the Functionality

Any tenderer that does not meet a minimum score of 60 points for functionality (quality) will not qualify for further adjudication.

The quality criteria and maximum score in respect of each of the criteria are as follows:

Quality criteria	Maximum number of points
Schedule 1: Experience of the tenderer in Supply, Delivery & Installation of Vaalkop WTW Fire Suppression Systems	40
Schedule 2: Experience of Key Personnel: Site Foreman and Safety Officer	40
Schedule 3 Availability of key (major) Plant and Equipment	15
Schedule 4: Proposed programme	5
Maximum possible score for quality (Ms)	100

Quality shall be scored by not less than three evaluators in accordance with the following schedules:

- Schedule 1: Experience of the tenderer in the supply and installation of Fire Suppression Systems.
- Schedule 2: Experience of Key Personnel: Site Foreman and Safety Officer.
- Schedule 3: Availability of key (major) Plant and Equipment
- Schedule 4 Proposed programme of works

Functionality Criteria	Max Points
1. Company Experience: Relevant experience of the Company in, installation of Fire Suppression Systems. The information shall be within the previous 10 years and may include contracts that have been completed in terms of the contract Only projects with the relevant appointment letter, accompanying with a corresponding successful completion Certificate from previous Employers signed by the bidder, will be considered. NB: In case a sub-contracting, attach also letter of appointment for the main Contractor from the client and a Completion Certificate, duly signed by contracting party, Contractor and the appointed Consulting Engineer on the project.	(40)
Projects with no appointment and completion letters attached	0
One (1) to Two (2) Projects with appointment and completion letter attached	15
Three (3) to Four (4) Projects with appointment and completion letters attached	30
Five (5) or more Projects with appointment and completion letters attached	40

	2.1 Technical Skill: Site Foreman (Qualifications and Registration)	
	Qualification: A Site Foreman with a minimum National diploma in Electronics or National diploma in Fire Engineering, or National diploma in Electrical Engineering. (Minimum NQF Level 6) Registration: A Site Foreman must be registered with the SAQCC (Fire).	(5)
	✓ The Qualification and Registration Copies must be Certified.	
	✓ N.B: Attach SAQA accreditation for Foreign Qualifications equivalent to NQF Level 6 minimum.	
	No Proof of Qualifications and registration for Site Foreman attached	0
	Proof of Qualifications and registration for Site Foreman attached	5
	2.2 Technical Skill: Site Foreman (Experience)	
	The Site Foreman has experience in projects related to Installation of Fire Suppression System.	(15)
	Attach Comprehensive CV.	
	Zero (0) projects or no CV attached	0
	One (1) to Two (2) projects	5
	Three (3) to Four (4) projects	10
	Five (5) or More projects	15
	2.1 Technical Skill: Safety Officer (Qualifications)	
	Qualification: A Safety officer with a minimum National Diploma in Safety Management. (Minimum NQF Level 6)	(5)
	No Proof of Qualifications for Safety Officer attached	0
	Proof of Qualifications for Safety Officer attached	5
	2.2 Technical Skill: Safety officer (Experience)	
	The Safety officer should demonstrate capacity in terms of experience on Construction or Installation of Fire Suppression System.	(15)
	Attach Comprehensive CV.	
	Zero (0) projects or no CV attached	0
	One (1) to Two (2) projects	5
	Three (3) to Four (4) projects	10
	Five (5) or More projects	15

	3. Specific Plant and Equipment The tenderer must prove that the following plant and equipment will be available or access for the project, bidders to submit Proof of ownership (Vehicle Registration Certificate, copies of invoices, Pictures, etc.). or proof of intent to lease plant, The Vehicle Registration Certificate copies and copies of invoices must be Certified.		(15)
	1 x Trucks		4
	1 x LVD		4
	Access equipment for working at heights (scaffolding, cherry pickers, ladders)		4
	Power tools (drills, grinders)		3
	4. Project Implementation Plan in Gant Chart format The Bidder shall submit a logic and sequencing programme in Gant Chart format.		(5)
	No attached Programme in Gant Chart		0
	Attached Programme in Gant Chart		5
	Max points		100
	The minimum number of evaluation points for quality is 60 points of the maximum number of quality evaluation points. Any tenderer that does not score this minimum threshold will not be considered. Stage 3: Financial Offer and Preference. Evaluation of tender offers will be done in accordance with F3.11.3. Apply Method 2: Financial offers and Preference points system. Where a maximum of 80/90 tender adjudication points are awarded for price of the tender under consideration and a maximum of 20/10 will be awarded to a tenderer for the specific goal in terms of the Preferential Procurement policy of Council 2022 All responsive tenders that qualify by meeting the minimum thresholds for functionality are then evaluated on the basis of price and preference in accordance with the Preferential Procurement Regulations 2011 (Government Gazette No. 34350 dated 8 June 2011). The points scored for Functionality are not carried over or considered in the calculation of the Financial and Preference evaluation. Magalies water has adopted the new Preferential Procurement Regulations of 2022 (PPR's, 22) under the Preferential Procurement Policy Framework Act 5 of 2000 (PPPFA) with effect from 16 January 2023 as guidelines for the procurement and adjudication of Tenders for this Contract, also applying the 80/20 preference point system for the calculation of Tender points.		

Clause number	Tender Data																																			
	The maximum possible number of tender evaluation points awarded for the financial offer = $W_1 = (80)$ The financial offer will be scored in terms of formula for procurement of goods and services, formula 2 (80/10) of the Standard Conditions of Tender. Refer to the Preferential Procurement Policy appended to the returnable document All bids that achieved the minimum threshold for functionality (acceptable bids) will be evaluated further in terms of the 80/20 preference point system, as follows: <table><tr><th>CRITERIA</th><th>POINTS</th></tr><tr><td>Price</td><td>80</td></tr><tr><td>Specific Goal</td><td>20</td></tr><tr><td>TOTAL</td><td>100 points</td></tr></table> SPECIFIC GOAL: The specific goal will be evaluated in terms of the Preferential Procurement policy of Council 2022 Application of the preference point system for Quotation & Tender procurement of below 50million. <table><tr><th>Specific goal</th><th>Number of points (80/20 system)</th><th>Means of verification</th></tr><tr><td>Black people ownership equity</td><td>5</td><td>Central Supplier Database (CSD) report</td></tr><tr><td>Women equity</td><td>3</td><td>Central Supplier Database (CSD) report</td></tr><tr><td>Youth equity</td><td>2</td><td>Central Supplier Database (CSD) report</td></tr><tr><td>Disability</td><td>2</td><td>Medical certificate or (CSD)</td></tr><tr><td>Promotion of small businesses Medium- 2 Points Small- 3 Points Micro- 4 Points Other- 0 Points</td><td>4</td><td>1. Central Supplier Database (CSD) report for transactions from rand value to R500 000.00. 2. Signed Financial Statements for transactions above R500 000.00</td></tr><tr><td>Locality</td><td>3</td><td>Proof of address (tribal authority letter/ Lease agreement accompanied by municipal rates invoice/statement)</td></tr><tr><td>Military Veterans (MVA)</td><td>1</td><td>MVA force number/CSD</td></tr><tr><td>Total</td><td>20</td><td></td></tr></table>	CRITERIA	POINTS	Price	80	Specific Goal	20	TOTAL	100 points	Specific goal	Number of points (80/20 system)	Means of verification	Black people ownership equity	5	Central Supplier Database (CSD) report	Women equity	3	Central Supplier Database (CSD) report	Youth equity	2	Central Supplier Database (CSD) report	Disability	2	Medical certificate or (CSD)	Promotion of small businesses Medium- 2 Points Small- 3 Points Micro- 4 Points Other- 0 Points	4	1. Central Supplier Database (CSD) report for transactions from rand value to R500 000.00. 2. Signed Financial Statements for transactions above R500 000.00	Locality	3	Proof of address (tribal authority letter/ Lease agreement accompanied by municipal rates invoice/statement)	Military Veterans (MVA)	1	MVA force number/CSD	Total	20	
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Clause number	Tender Data
F.3.16.1	Notice to successful and unsuccessful tenderers Add the following to the clause: Before accepting the tender of the successful tenderer, the Employer shall notify the successful tenderer in writing of the decision of the Employer to award the tender to the successful tenderer. The Employer shall, at the same time as notifying the successful tenderer of the Employer's decision to award the tender to the successful tenderer, also publish tender results on the relevant websites.
F.3.17	The number of paper copies of the signed contract to be provided by the employer is one .
F.3.18	The number of paper copies of the signed Contract to be provided by the Employer is 1.
F4. Additional Conditions Applicable to This Tender	The additional Conditions of Tender are: 1. The Employer/Engineer may also request that the Tenderer provide written evidence that his financial, labour and other resources are adequate for carrying out the contract. The Employer reserves the right to appoint a firm of chartered accountants and auditors and/or execute any other financial investigations on the financial resources of any Tenderer. The Tenderer shall provide all reasonable assistance in such investigations.
F4.1 Compliance with Occupational Health and Safety Act 1993	Tenderers are to note the requirements of the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations, 2014 issued in terms of Section 43 of the Act. The Tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith. In terms of Clause 4.(1), the Client (Employer) shall be responsible for the following in order to ensure compliance with the provisions of the Act : - to prepare a health and safety specifications for the construction work, and provide any Principal Contractor who is making a bid or appointed to perform construction work for the Client with the same : See Volume 3, Scope of Work & Specifications, Part C3.8 Health and Safety. (Close Proximity Permit as per ORHVS to be obtained from Eskom when digging or offloading near overhead lines) - to ensure that every Principal Contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site; and - to ensure that potential Principal Contractors (Contractors) submitting tenders, have made provision for the cost of health and safety measures during the construction process : See Volume 2, Returnable Documents, Part C 2.2 Schedule of Quantities
F4.2 Quality Management	Only Contractors capable of testing and commissioning of plant and equipment to the quality standards required under this tender will be considered. Materials and components used by the Contractor shall comply with the requirements of the specification and, in addition, shall be of demonstrated quality for the purpose for which they are intended. Tenderers will be required, to understand and demonstrate compliance with these requirements by the submission of their Quality System at the time of tender.

END OF SECTION

TENDER NO: RFB/MW/ES-04/ 2025-26/02
Supply, Delivery & Installation of Vaalkop
WTW Fire Suppression Plant Upgrade

MAGALIES WATER

**TENDER NO: RFB/MW/ES-04/ 2025-26/02
THE APPOINTMENT OF CONTRACTOR FOR SUPPLY,
DELIVERY & INSTALLATION OF VAALKOP WTW FIRE SUPPRESSION
PLANT UPGRADE PROJECT CIDB 4SF OR HIGHER**

PORTION 1: TENDER

Section T1.3 Standard Conditions of Tender

TENDER NO: RFB/MW/ES-04/ 2025-26/02
Supply, Delivery & Installation of Vaalkop
WTW Fire Suppression Plant Upgrade

MAGALIES WATER

TENDER NO: RFB/MW/ES-04/2025-26/02
THE APPOINTMENT OF CONTRACTOR FOR SUPPLY, DELIVERY & INSTALLATION OF VAALKOP WTW
FIRE SUPPRESSION PLANT UPGRADE PROJECT CIDB 4SF OR HIGHER

PORTION 1: TENDER

Section T1.3 **Standard Conditions of Tender**

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STANDARD CONDITIONS OF TENDER

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The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the Construction Industry Development Board's Board Notice 12 of 2009 (contained in Government Gazette No. 31823 of 30 January 2009)

END OF SECTION

STANDARD CONDITIONS OF TENDER

1. GENERAL

1.1 Actions

1.1.1 The employer and each tenderer submitting a tender offer shall comply with the conditions of tender. In their dealings with each other, they shall discharge their duties and obligations, as set out in Section 2 and Section 3, timeously and with integrity, and behave equitably, honestly and transparently.

1.1.2 The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict, and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.

3) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

The employer shall not seek, and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

1.2 Tender documents

The documents issued by the employer for the purpose of a tender offer are listed in the tender data.

1.3 Interpretation

1.3.1 The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of the conditions of tender.

1.3.2 The conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender. For the purposes of these conditions of tender, the following definitions apply:

a) **conflict of interest** means any situation in which:

- i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially.
- ii) an individual or organisation can exploit a professional or official capacity in some way for their personal or corporate benefit; or
- iii) incompatibility or contradictory interests exist between an employee and the organisation which employs that employee.

b) **comparative offer** means the tenderer's financial offer after all tendered parameters that will affect the value of the financial offer have been taken into consideration in order to enable comparisons to be made between offers on a comparative basis

c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process; and

d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels

d) **organization** means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body

f) **quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs

1.4 The Employer's right to accept or reject any tender offer

1.4.1 The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection but shall give reasons for such action.

1.4.2 After the cancellation of a tender process or the rejection of all tenders offers the employer may abandon the proposed procurement and re-issue a similar tender notice and invitation to tender not less than six months after the closing date for tender offers or have it performed in another manner at any time.

1.5 Procurement procedures

1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to 3.13, be concluded with the tenderer who in terms of 3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

1.6.2 Competitive negotiation procedure

Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of 3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of 3.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

All responsive tenderers, or not less than three responsive tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information. Notwithstanding the provisions of 2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.

At the conclusion of each round of negotiations, tenderers shall be invited by the employer to make a fresh tender offer, based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.

The contract shall be awarded in accordance with the provisions of 3.11 and 3.13 after tenderers have been requested to submit their best and final offer.

1.6.3 Proposal procedure using the two stage-system

1.6.3.1 Option 1

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

1.6.3.2 Option 2

Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.

The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data and award the contract in terms of these conditions of tender.

2. TENDERER'S OBLIGATIONS

2.1 Eligibility

Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.

Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.

2.2 Cost of tendering

Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

2.3 Check documents

Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.

2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

2.5 Reference documents

Obtain, as necessary for submitting a tender offer, copies of the latest version of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

2.6 Acknowledge addenda

Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary, apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

2.7 Site visit and clarification meeting

Attend, where required, a site visit and clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply, and raise questions. Details of the meeting(s) are stated in the tender data.

2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the employer at least five working days before the closing time stated in the tender data.

2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

2.10 Pricing the tender offer

2.10.1 Include in the rates, prices and the tendered total of the prices (if any) all duties, taxes (except value-added tax (VAT)), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.

2.10.2 Show Vat payable by the employer separately as an addition to the tendered total of the prices.

2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.

2.10.4 data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

2.11 Alterations to documents**2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the tenderer proposes.**

2.12.2 Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

2.12 Submitting a tender offer

2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.

2.13.2 Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing **legibly in non-erasable ink**.

2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.

- 2.13.4** Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.
- 2.13.5** Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- 2.13.6** Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- 2.13.7** Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.
- 2.13.8** Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.
- 2.13.9** Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.
- 2.13 Information and data to be completed in all respects**
Accept that the tender offers, which do not provide all the data or information requested completely and, in the form, required, may be regarded by the employer as being non-responsive.
- 2.14 Closing time**
- 2.15.1** Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Proof of posting shall not be accepted as proof of delivery. The employer shall not accept tender offers submitted by telegraph, telex, facsimile or e-mail, unless stated otherwise in the tender data.
- 2.15.2** Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of the conditions of tender apply equally to the extended data.
- 2.15 Tender offer validity**
- 2.16.1** Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.
- 2.16.2** If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period.
- 2.16.3** Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted.

2.16.4 Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of 2.13 with the packages clearly marked as "SUBSTITUTE".

2.16 Clarification of tender offer after submission

Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the total of the prices or substance of the tender offer should be sought, offered, or permitted. The total of the prices stated by the tenderer shall be binding upon the tenderer.

Note: Sub-clause 2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.

2.17 Provide other material

2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as being non-responsive.

2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

2.18 Inspections, test and analysis

Provide access during working hours to premises for inspections, test and analysis as provided for in the tender data.

2.19 Submit securities, bonds, policies, etc.

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

2.20 Check final draft

Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

2.21 Return of other tender documents

If so instructed by the employer, return all retained tender documents within 28 days after the expiry of the validity period stated in the tender data.

2.22 Certificates

Include in the tender submission or provide the employer with any certificates as stated in the tender data.

3. EMPLOYER'S UNDERTAKINGS

3.1 Respond to requests from the tenderer

3.1.1 Unless otherwise stated in the Tender Data, respond to a request for clarification received up to five working days before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.

3.1.2 Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if consequently:

- a) an individual firm, or a joint venture, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements.
- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

3.2 Issue addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date of the tender notice until 7 days before the tender closing time stated in the tender data. If, as a result of the issuing of addenda, a tenderer applies for an extension to the closing time stated in the tender data, the employer may grant such extension and shall then notify all tenderers who drew documents.

3.3 Return late tender offers

Return tender offers received after the closing time stated in the tender data, unopened (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.

3.4 Opening of tender submissions

3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

3.4.2 Announce at the public meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened the total of his prices, preferences claimed and time for completion, if any, for the main tender offer only.

3.4.3 Make available the record outlined in 3.4.2 to all interested persons upon request.

3.5 Two envelope system

3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.

3.5.2 Evaluate the quality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers who score in the functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any preferences claimed. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.

3.6 Non-disclosure

Do not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the event of a contract, until after the award of the contract to the successful tenderer.

3.7 Grounds for rejection and disqualification

Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

3.8 Test for responsiveness

3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:

- a) complies with the requirements of the Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.

3.8.2 A responsive tender is one that conforms to all the items, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the employer's opinion, would

- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the scope of work,
- b) change the employer's or the tenderer's risks and responsibilities under the contract,
or

- c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

3.8.3 Reject a non-responsive tender offer, and do not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

3.9 Arithmetical errors

3.9.1 Check responsive tender offers for arithmetical errors, correcting them in the following manner:

- a) Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.
- b) If a bill of quantities (or schedule of quantities or schedule of rates) applies and there is an error in the line-item total resulting from the product of the unit rate and the quantity, the line-item total shall govern, and the rate shall be corrected. Where there is an obvious gross misplacement of the decimal point in the unit rate, the line-item total as quoted shall govern, and the unit rate shall be corrected.
- c) Where there is an error in the total of the prices, either because of other corrections required by this checking process or in the tenderer's addition of prices,
- d) the total of the prices shall govern, and the tenderer will be asked to revise selected items prices (and their rates if a bill of quantities applies) to achieve the tendered total of the prices.

3.9.2 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with 3.11 for.

- a) the gross misplacement of the decimal point in any unit rate.
- b) omissions made in completing the pricing schedule or bills of quantities; or
- c) arithmetic errors in:
 - i) line-item totals resulting from the product of a unit rate
 - ii) and a quantity in bills of quantities or schedules of prices; or
 - iii) the summation of the prices.

3.9.3 Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

3.10 Clarification of a tender offer

Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

3.11 Evaluation of tender offers

3.11.1 General

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate it using the tender evaluation methods that are indicated in the tender data and described as methods 1, 2, 3 and 4.

3.11.2 Method 1: In the case of a financial offer:

- a) Rank tender offers from the most favourable to the least favourable comparative offer
- b) Recommend the highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- c) Re-rank all tenderers should there be compelling and justifiable reasons not to recommend the highest ranked tenderer and recommend the highest ranked tenderer, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

3.11.3 Method 2: In the case of a financial offer and preferences:

- a) Score each tender in respect of the financial offer made and preferences claimed, if any, in accordance with the provisions of 3.11.7 and 3.11.8.
- b) Confirm that tenderers are eligible for the preferences claimed and, if so, score tender evaluation points for preferencing.
- c) Calculate the total number of tender evaluation points (TEV) in accordance with the following formula:

$$T_{EV} = N_{FO} + N_p$$

where: NFO is the number of tender evaluation points awarded for the financial offer made in accordance with 3.11.7; and

N_p is the number of tender evaluation points awarded for preferences claimed in accordance with 3.11.8.

- d) Rank tender offers from the highest number of tender evaluation points to the lowest.
- e) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- f) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

3.11.4 Method 3: In case of a financial offer and quality:

- a) Score each tender in respect of the financial offer made and the quality offered in accordance with the provisions of 3.11.7 and 3.11.9, rejecting all tender offers that fail to score the minimum number of points for functionality stated in the tender data, if any.
- b) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula:

$$T_{EV} = N_{FO} + N_q$$

where: NFO is the number of tender evaluation points awarded for the financial offer made in accordance with 3.11.7; and

Nq is the number of tender evaluation points awarded for functionality offered in accordance with 3.11.9.

- c) Calculate the total tender evaluation points.
- d) Rank tender offers from the highest number of tender evaluation points to the lowest.
- e) Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- f) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

3.11.5 Method 4: In the case of a financial offer, quality and preferences:

- a) Score each tender in respect of the financial offer made, preference claimed, if any, and the quality offered in accordance with the provisions of 3.11.7 to 3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Score tender evaluation points for each financial offer.
- c) Confirm that tenderers are eligible for the preferences claimed and, if so, score tender evaluation points for preferencing.
- d) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula, unless otherwise stated in the Tender Data:

$$T_{EV} = N_{FO} + N_p + N_q$$

where: NFO is the number of tender evaluation points awarded for the financial offer made in accordance with 3.11.7;

Np is the number of tender evaluation points awarded for preferences claimed in accordance with 3.11.8; and

Nq is the number of tender evaluation points awarded for quality offered in accordance with 3.11.9.

- e) Rank tender offers from the highest number of tender evaluation points to the lowest.
- f) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons no to do so.

- g) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

3.11.6 Decimal places

Score financial offers, preferences and quality, as relevant, to two decimal places.

3.11.7 Scoring financial offers

Score the financial offers of the remaining responsive tender offers using the following formula:

$$N_{FO} = W_1 \times A$$

Where

N_{FO} is the number of tender evaluation points awarded for the financial offer;

W_1 is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the tender data;

A is the number calculated using the formula and option described in table F.1 as stated in the tender data.

Table F.1 – Formula for calculating the value of A^a

1	2	3	4
Formula	Basis for comparison	Option 1	Option 2
1	Highest price or discount	$\left(1 + \frac{(P - P_m)}{P_m}\right)$	P/P_m
2	Lowest price or percentage commission/fee	$\left(1 - \frac{(P - P_m)}{P_m}\right)$	P_m/P
^a P_m is the comparative offer of the most favourable comparative offer. P is the comparative offer of the tender offer under consideration.			

3.11.8 Scoring preferences

Confirm that tenderers are eligible for the preferences claimed in accordance with the provisions of the tender data and reject all claims for preferences where tenderers are not eligible for such preferences. Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.

3.11.9 Scoring quality (functionality)

Score each of the criteria and sub criteria for quality in accordance with the provisions of the Tender Data.

Calculate the total number of tender evaluation points for quality using the following formula:

$$N_Q = W_2 \times S_o / M_s$$

where:

- S_o is the score for quality allocated to the submission under consideration.
- M_s is the maximum possible score for quality in respect of a submission; and
- W_2 is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data.

3.12 Insurance provided by the employer

If requested by the proposed successful tenderer, submit for the tenderer's information the policies or certificates of insurance (or both) which the conditions of contract identified in the contract data require the employer to provide.

3.13 Acceptance of tender offer

Accept the tender offer, if in the opinion of the employer, it does not present any unacceptable commercial risk and only if the tenderer:

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
- c) has the legal capacity to enter into the contract,
- d) is not insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,

- e) complies with the legal requirements, if any, stated in the tender data, and
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

3.14 Prepare contract documents

If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents,
- c) other revisions agreed between the employer and the successful tenderer, and
- d) the schedule of deviations attached to the form of offer and acceptance, if any.

3.15 Complete adjudicator's contract

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

3.16 Notice to unsuccessful tenderers

- 3.16.1** Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the tender data or agreed additional period.
- 3.16.2** After the successful tenderer has been notified of the employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.

3.17 Provide copies of the contracts

Provide to the successful tenderer the number of copies stated in the tender data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

3.18 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions offender but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

END OF SECTION

TENDER NO: RFB/MW/ES-04/ 2025-26/02

**THE APPOINTMENT OF CONTRACTOR FOR SUPPLY, DELIVERY & INSTALLATION OF
VAALKOP WTW FIRE SUPPRESSION PLANT UPGRADE PROJECT**

PORTION 1: TENDER

**Section T2
Returnable Documents**



TENDER NO: RFB/MW/ES-04/ 2025-26/02
SUPPLY, DELIVERY & INSTALLATION OF VAALKOP
WTW FIRE SUPPRESSION PLANT UPGRADE PROJECT

T.2 LIST OF RETURNABLE DOCUMENTS AND SCHEDULE

PAGE (S)

The bidder must complete the following returnable documents.

T2.1 RETURNABLE DOCUMENTS ADMINISTRATIVE REQUIREMENTS (NON-MANDATORY)	T2.1
T2.2 RETURNABLE DOCUMENTS MANDATORY	T2.2
T2.3 RETURNABLE SCHEDULES REQUIRED FOR BID	
EVALUATION PURPOSES	T2.3

NOTE:
Although the documents under Part T2 is headed “Returnable Documents” in line with the CIDB model, these are not the only documents to be returned together with the bid. All the documents indicated on Part T1, must be completed and signed where applicable and submitted as a complete set of documents.

MAGALIES WATER

RFB/MW/ES-04/ 2025-26/02

**THE APPOINTMENT OF CONTRACTOR FOR SUPPLY, DELIVERY & INSTALLATION OF
VAALKOP WTW FIRE SUPPRESSION PLANT UPGRADE PROJECT**

The Tenderer's attention is drawn to the eligibility criteria which require the tenderer to provide the required evidence in their tender submissions in order to be eligible to have their tenders evaluated.
Tenderers who fail to provide the required documentation will not have their tenders evaluated.

1. Tenderers are required to submit the following with their tenders:
 - a. **SBD 1** Invitation to Bid & Company Information.
 - b. **SBD 4** Bidder's Disclosure
 - c. **SBD 6.1** Preference Points Claim Form in Terms of The Preferential Procurement Regulations 2022
 - d. Proof of registration with the Central Supplier Database drawn from the National Department of National Treasury website.
 - e. Certified Proposed Joint Venture Agreement
 - f. Certificate of Authority of Signature
 - g. **Copy of Company Registration Certificate (C.K)**, in case of a JV, both JV partners must submit respectively.

END OF SECTION

Tender No. RFB/MW/ES- 04/2025-26/02

- m. **Soft Copy** of the entire tender document including returnable documents saved in the Memory Stick. (**Failure to submit the Memory Stick will result in disqualification**).

TENDER NO: RFB/MW/ES-04/ 2025-26/02
Supply, Delivery &Installation of Vaalkop
WTW Fire Suppression Plant Upgrade

TENDER NO: RFB/MW/ES-04/ 2025-26/02
Supply, Delivery & Installation of Vaalkop
WTW Fire Suppression Plant Upgrade

SBD 1 - INVITATION TO BID PART A

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	RFB/MW/ES/03/2025-26/01	CLOSING DATE:	07 MAY 2026	CLOSING TIME:	12H00
DESCRIPTION	SUPPLY, DELIVERY AND INSTALLATION OF WTW FIRE SUPPRESSION PLANT IN VAALKOP				
BID RESPONSE DOCUMENTS MUST BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
MAGALIES WATER, OFFICE: 38 HEYSTEK STREET, RUSTENBURG, 0300					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	R. Mulaudzi		CONTACT PERSON	T. Makwela	
TELEPHONE NUMBER	014 597 4636		TELEPHONE NUMBER	014 597 4636	
FACSIMILE NUMBER	N/A		FACSIMILE NUMBER	N/A	
E-MAIL ADDRESS	tenders@magalieswater.co.za Cc : rabelanim@magalieswater.co.za		E-MAIL ADDRESS	alexl@magalieswater.co.za Cc : tender@magalieswater.co.za	
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES OFFERED?		☐ Yes ☐ No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?			☐ YES ☐ NO		
DOES THE ENTITY HAVE A BRANCH IN THE RSA?			☐ YES ☐ NO		
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?			☐ YES ☐ NO		
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?			☐ YES ☐ NO		
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?			☐ YES ☐ NO		
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.					

PART B TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION. 1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED--(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT. 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT. 1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).
2. TAX COMPLIANCE REQUIREMENTS
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS. 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS. 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA. 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID. 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED; EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER. 2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED. 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:.....

CAPACITY UNDER WHICH THIS BID IS SIGNED:.....

(Proof of authority must be submitted e.g. company resolution)

DATE:

CAPACITY UNDER WHICH THIS BID IS SIGNED:.....

(Proof of authority must be submitted e.g. company resolution)

DATE:

3: SBD 4 - DECLARATION OF INTEREST

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

1.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

.....

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.



2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract?**YES/NO**

2.3.1 If so, furnish particulars:

3 DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

² Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

..... Signature	 Date
..... Position	 Name of bidder

.2.4: SBD 6.1 - DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)

SBD 6.1

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 **To be completed by the organ of state**

(delete whichever is not applicable for this tender).

- a) The applicable preference point system for this tender is the 80/20 preference point system.
- b) Either the 90/10 or 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 The maximum points for this bid are allocated as follows:

	POINTS
PRICE	80
SPECIAL GOALS	20
Total points for Price and B-BBEE must not exceed	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to

claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

4. POINTS AWARDED FOR PRICE

4.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20	or	90/10
$Ps = 80 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)$	or	$Ps = 90 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)$
Where		
Ps = Points scored for price of bid under consideration		
Pt = Price of bid under consideration		

P_{min} = Price of lowest acceptable bid

4.2 FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME-GENERATING PROCUREMENT

4.3 POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20	or	90/10
$Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$	or	$Ps = 90 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$
Where		
Ps = Points scored for price of bid under consideration		
Pt = Price of bid under consideration		

P_{max} = Price of highest acceptable bid

5. POINTS AWARDED FOR SPECIFIC GOALS

- 5.1 In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 5.2 In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- 5.2.1 an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
- 5.2.2 any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,
- then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

Application of preference point system for Quotation & Tender procurement of below 50million.

Specific goal	Number of points (80/20 system)	Means of verification
Black people ownership equity	5	Central Supplier Database (CSD) report
Women equity	3	Central Supplier Database (CSD) report
Youth equity	2	Central Supplier Database (CSD) report
Disability	2	Medical certificate or (CSD)
Promotion of small businesses Medium- 2 Points Small- 3 Points Micro- 4 Points Other- 0 Points	4	Signed Financial Statements for transactions above R500 000.00
Locality Within 100km radius of where goods/service is required	3	Proof of address (tribal authority letter/ Lease agreement accompanied by municipal rates invoice/statement)
Military Veterans (MVA)	1	MVA force number/CSD
Total	20	

DECLARATION WITH REGARD TO COMPANY/FIRM

5.3 Name of company/firm.....

5.4 Company registration number:.....

5.5 TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

5.6 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct.
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 2, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;

iv) If the specific goals has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –

- (a) disqualify the person from the bidding process;
- (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
- (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
- (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
- (e) forward the matter for criminal prosecution.

..... SIGNATURE(S) OF TENDERER(S) SURNAME AND NAME: DATE:..... ADDRESS:.....
--

T2.1.1: VALID COPY OF REGISTRATION ON THE CENTRAL SUPPLIER DATABASE

The Tenderer must attach hereto a valid copy of Registration on the National Treasury Central Supplier Data Base. In the case of Joint Venture partnerships this requirement will apply individually to each party of the Joint Venture.



FORM T2.1.2 CERTIFIED PROPOSED JOINT VENTURE AGREEMENT

The following legal business entities agree to deliver the services and/or goods as required under this Contract as a Joint Venture as follows:

Name and Addresses of Joint Venture:
.....
.....

Consisting of the following businesses (Joining Entities)

NAME JOINING ENTITY	TAX No	PROPORTIONAL PAYMENT THAT WILL BE RECEIVED UNDER THIS CONTRACT
.....		 %
.....		 %
.....		 %
.....		 %
.....		 %

The above-mentioned Joint venture will execute the Contract under the management of (full name)
.....

who is an employee of (name of joining entity) ;
and in accordance with any further agreements as attached to this document, titled

.....
And dated.....(if applicable).

Bank guarantees and retention money (where required) will be provided or paid by (name of joining entity)
.....
who will be responsible for the fulfillment of the retention obligations (where required) asset out in the Contract Document.

Signed by the duly authorized representatives of the above-mentioned Joint Entities:



JOINING ENTITY AND POSITION	FULL NAME (Position)	SIGNATURE	DATE
.....			
.....			
.....			
.....			
.....			

WITNESSES:	1.		
	2.		

FORM T2.1.3 CERTIFICATE OF AUTHORITY OF SIGNATURE

Indicate the status of the Tenderer by ticking the appropriate box hereunder. The Tenderer must complete the certificate set out below for the relevant category.

(I) COMPANY	(II) CLOSE CORPORATION	(III) PARTNERSHIP	(IV) JOINT VENTURE	(V) SOLE PROPRIETOR

All signatories, including sole proprietors, shall confirm their authority by **attaching to this page of this tender** a duly signed and **dated original or certified copy** of the relevant resolution of their members or their board of directors, as the case may be

(I) Certificate for Company

I, ..., chairperson of the Board of Directors of

....., hereby confirm that by resolution of the Board (copy attached) taken on 20....., Mr/Ms, acting in the capacity of, was authorized to sign all documents in connection with the tender for **CONTRACT BW/236/WB/16** and any contract resulting from it on behalf of the company.

Chairman:

As Witnesses: 1.....

2.....

Date:

(II) Certificate for Close Corporation

We, the undersigned, being the key members in the business trading as

..... hereby authorize Mr/Ms, acting in the capacity of

....., to sign all documents in connection with the

tender for Tender **CONTRACT BW/236/WB/16** and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

Note: *This certificate is to be completed and signed by all key members upon whom rests the direction of the affairs of the Close Corporation as a whole.*

(III) Certificate for Partnership

We, the undersigned, being the key partners in the business trading as, ...

....., hereby authorize Mr/Ms ,
 acting in the capacity of , to sign all documents in connection
 with the tender for Tender **CONTRACT BW/187/WB/12** and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

Note : This certificate is to be completed and signed by all key partners upon who rests the direction of the affairs of the partnership as a whole.

(IV) **Certificate of Authority for Joint Ventures**

This Returnable Schedule is to be completed by joint ventures.

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorize Mr/Ms . . .
 , authorized signatory of the company
 , acting in the capacity of lead partner, to sign all documents in connection with the
 tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		Signature. Name Designation
		Signature. Name Designation
		Signature. Name Designation
		Signature. Name Designation

Note : *This certificate is to be completed and signed by all key partners upon who rests the direction of the affairs of the Joint Venture as a whole.*

(V) Certificate for Sole Proprietor

I, ... , hereby confirm that I am the sole owner of the Business
 trading as

Signature of sole owner: Date:

As Witnesses:

1. Date:

2. Date:

**FORM T2.1.4: REGISTRATION CERTIFICATE / AGREEMENT / POWERS
 OF ATTORNEY / ID DOCUMENT (IF APPLICABLE)**

Important note: Tenderer must submit Certified Registration Certificates for Companies, or Close Corporation and Partnerships, or Agreements and Powers of Attorney for Joint Ventures, or ID Document for Sole Proprietor,

T2.1.5: POPIA CONSENT BY THE BIDDER

Magalies Water undertakes to process the personal information of the Bidder and any related information supplied only in accordance with the conditions of lawful processing as set out in terms of POPIA and only to the extent that it is necessary to evaluate the tender document and within the framework of the Procurement process.

The bidder acknowledges that the collection of personal information is only for the evaluations process of the tender document.

The bidder irrevocably and unconditionally agrees:

- That he/she is notified of the purpose and reason for the collection and processing of such information in so far as it relates to the tendering and evaluation process,
- That he/she consents and authorizes Magalies Water to undertake the collection, processing, and further processing of the bidder's personal information and any information supplied to Magalies Water, for the purposes of evaluating the tender document.

The bidder gives and authorizes this consent unconditionally for Magalies Water to lawfully process their personal information solely to evaluate the tender document

Thus, Done and Signed at

On This Day Of

2026

The Director / CEO Name and Surname.

Witnesses _____
(Signature)

Witnesses _____
(Signature)

T2.1.6: COPY OF COMPANY REGISTRATION CERTIFICATE (C.K), IN CASE OF A JV, BOTH JV PARTNERS MUST SUBMIT RESPECTIVELY.

The Tenderer must attach hereto Copy of Company Registration Certificate (C.K), In Case of a Jv, Both Jv Partners Must Submit Respectively.

RFB/MW/ES-04/ 2025-26/02

**THE APPOINTMENT OF CONTRACTOR FOR SUPPLY, DELIVERY & INSTALLATION OF
VAALKOP WTW FIRE SUPPRESSION PLANT UPGRADE PROJECT**

PORTION 1: TENDER

**Section T2.2
Returnable Schedules**

T.2.2 . RETERNABLE DOCUMENTS MANDATORY

- a) Only those Tenderers who have attended the virtual compulsory briefing session.
- b) Only those Tenderers who have proof of active CIDB Grading of 4 SF.
- c) Only those tenderers who have attached a certify copy of the Workmen's Compensation Letter of Good Standing (COIDA).
- d) Record of Addenda to Tender Documents

Note:

- Failure to submit any of these documents will result in the tender not being evaluated
- Failure to sign and complete these documents will result in the tender not being evaluated.

**FORM T2.2.1 CERTIFICATE OF ATTENDANCE AT CLARIFICATION
MEETING**

This is to certify that (tenderer).....

of (address).....

..... was represented by the person(s) named below
 at the compulsory meeting held for all tenderers at (location).....

..... on (date)..... starting at (time)

I / We acknowledge that the purpose of the meeting was to acquaint myself / ourselves with the Site of the Works and its surroundings and / or matters incidental to doing the work specified in the Tender Documents in order for me / us to take account of everything necessary when compiling our rates and prices included in the tender. I / We also acknowledge that I / we have examined the Site Data made available by the Employer (including borehole cores and related information).

Particulars of person(s) attending the meeting:

Name: Signature: Capacity:

Name: Signature:
 Capacity:

Attendance of the above person(s) at the meeting is confirmed by the Employer's representative, namely:

Name: Signature: Capacity:
 Date and Time:

T2.2.2: CONTRACTOR'S OR A JOINT VENTURE' S CRS NUMBER FOR CIDB GRADING

CONTRACTOR'S CERTIFIED OR A JOINT VENTURE'S CERTIFIED COPY OF CIDB REGISTRATION CERTIFICATE

CONTRACTOR'S CRS NUMBER

--

The Tenderer shall attach hereto the Contractor's Certificate of Registration with CIDB. Failure to submit the certificate with the tender document will lead to the conclusion that the Tenderer is not registered with the CIDB and therefore not eligible to tender.

Tenderers who have made application to CIDB for registration and are capable of being so registered prior to the evaluation of submissions must attach a notification from CIDB that their application is being considered.

--	--

SIGNATURE OF TENDERER

DATE

**FORM T2.2.3 CERTIFIED COPY OF LETTER OF GOOD STANDING WITH
THE COMPENSATION COMMISSIONER OR WITH A
LICENSED COMPENSATION INSURER**

The Tenderer must attach hereto Letter of good standing with Compensation Commissioner or with a licensed compensation insurer.

T2.2.4. RECORD OF ADDENDA TO TENDER DOCUMENT

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

NB: The Tenderer shall acknowledge receipt of the addenda to the tender documents via email and/or complete the FORM T2.2.4 RECORD OF ADDENDA TO TENDER DOCUMENTS with all the addenda issued to the bidders as per clause F3.2. Failure to acknowledge receipt of any addenda will result in disqualification.

Notice Number	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Name of Bidder: _____

Signed by or on behalf
of Bidder: _____

Official
Capacity: _____

Date: _____

RFB/MW/ES-04/ 2025-26/02

**THE APPOINTMENT OF CONTRACTOR FOR SUPPLY, DELIVERY & INSTALLATION OF
 VAALKOP WTW FIRE SUPPRESSION PLANT UPGRADE PROJECT**

PORTION 1: TENDER

Section T2.3 Returnable Schedules

T2.3 . RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES

Returnable Schedules required for tender evaluation purposes.

The tenderer must complete the following returnable schedules as relevant:

- a) Experience of the tenderer in the Supply, Delivery & Installation Fire Suppression Systems
- b) Experience of Key Personnel: Site Foreman, and Safety officer.
- c) Availability of key (major) Plant and Equipment
- d) Proposed Programme of works

FORM T2.3.1: EXPERIENCE OF THE TENDERER IN THE SUPPLY, DELIVERY & INSTALLATION OF VAALKOP WTW FIRE SUPPRESSION PLANT UPGRADE PROJECT

The experience of the tenderer as a company in the supply and installation of Fire Suppression System over the last ten (10) years will be evaluated.

Only projects with the attached relevant appointment letter, accompanying with a corresponding successful Completion Certificated from previous Employers signed by the bidder, will be considered. Failure to attach the Completion Certificates and the appointment letter, will be taken to indicate that the Tenderer has no experience in this nature of work and will result in a "0" score..

The description should be put in tabular form with the following headings:

Employer, contact person, Telephone number, email address	Description of work (service)	Date completed	Completion certificate and Appointment Letter attached Yes / No

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed

Date

Name

Position

Tenderer

FORM T2.3.2:EXPERIENCE OF KEY PERSONNEL: SITE FOREMAN/ SAFETY OFFICER

The Site Foreman is the person who will manage the day-to-day activities required to ensure that the installation of the Fire Suppression System is according to the procedures and standards. This person must be based permanently on-site during installation. The person identified will be committed by name at the time of concluding the Contract.

A CV of the site foreman should be attached to this schedule.

The CV should be structured under the following headings:

- 1 Personal particulars
 - a. name
 - b. date and place of birth
 - c. place (s) of education and dates associated therewith
- 2 Name of past and current employers and positions in enterprises
- 3 Overview of work experience (year, organization, position and applicable references per position held)
- 4 Outline of past experience that has a bearing on the scope of work

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Name of Site Foreman/ Safety Officer: _____
--

Signed

Date

Name

Position

Tenderer

FORM T2.3.3:AVAILABILITY OF KEY (MAJOR) PLANT AND EQUIPMENT

Availability/Allocation of resources

The tenderer must prove that the following plant and equipment will be available or access for the project, bidders to submit Proof of ownership or proof of intent to lease plant, or copies of invoices or Pictures.

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed

Date

Name

Position

Tenderer

FORM T2.3.4: PROPOSED PROGRAMME OF WORKS

The bidder must provide a project schedule for the execution of works.

The project plan must demonstrate the sequencing and approach and should include the duration of activities and the overall completion dates.

Tenderers must attach their proposed programme to this schedule.

The evaluation of the tenderer’s programme and activity schedule will be as follows:

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed		Date	
Name		Position	
Tenderer			
			

END OF SECTION

MAGALIES WATER

TENDER NO:RFB/MW/ES-04/2025-26/02

**SUPPLY,DELIVERY AND INSTALLATION OF WTW FIRE SUPPRESSION PLANT IN
VAALKOP**

VOLUME 2: CONTRACT

Part C1

Agreements and contract data

VOLUME 2 - THE CONTRACT

1.3 PART C1. AGREEMENT AND CONTRACT DATA

General Conditions of Contract for Construction Works, Third Edition (2015)

1.3.1.1.1 PRO FORMAS

The General Conditions of Contract for Construction Works, Third Edition (2015) has been compiled on the basis that the following supplementary documentation in the format of pro formas, once completed by the party or parties as relevant, shall form part of the Contract.

APPENDIX 1: FORM OF OFFER AND ACCEPTANCE

APPENDIX 2: CONTRACT DATA

APPENDIX 3: PERFORMANCE GUARANTEE

APPENDIX 4: DISCLOSURE STATEMENT

APPENDIX 5: ADJUDICATION BOARD MEMBER AGREEMENT

MAGALIES WATER

TENDER NO:RFB/MW/ES-04/2025-26/02

**SUPPLY,DELIVERY AND INSTALLATION OF WTW FIRE SUPPRESSION PLANT IN
VAALKOP**

VOLUME 2: CONTRACT

Part C1.1

Forms of offer and acceptance

1.3.2 1 APPENDIX 1 - FORM OF OFFER AND ACCEPTANCE

General Conditions of Contract for Construction Works, Third Edition (2015)

Agreement

Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the provision of works as described in Part 1 of the Contract Data.

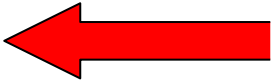
The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the Contractor under the contract including compliance with all its terms and conditions for an amount to be determined in accordance with the conditions of contract identified in the Contract Data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX (VAT) IS:

(in words)..... Rand;

R..... (IN FIGURES)



This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the Contractor in the conditions of contract identified in the Contract Data.

For the Tenderer:

Signature(s)
Name(s)
Capacity
Name and address of organisation
Signature of witness
Name(s)
Date



Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work
Part C4	Site Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the tenderer (now *Contractor*) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

For the Employer

Signature(s)

Name(s)

Capacity

Name and
address of
organisation

Signature of
witness

Name(s)

Date

1.3.3 C1.1.2 Schedule of Deviations

1. Subject
Details
.....
.....
2. Subject
Details
.....
.....
3. Subject
Details
.....
.....
4. Subject
Details
.....
.....

By the duly authorised representatives signing this agreement, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification, or changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the Tenderer:For the Employer:

..... Signature

..... Name

..... Capacity

..... Name of Organisation.....

..... Address of Organisation

..... Witness Signature

..... Witness Name

..... Date

1.3.4 C1.1.3 Confirmation of Receipt

The Tenderer (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today:

the.....(day)
of.....(month)
20..... (year)
at.....(place)

For the Contractor:

Signature(s).....
Name(s).....
Capacity.....

Signature and name of witness:

Signature(s).....
Name(s).....

RFB/MW/ES-04/5025-26/02

**SUPPLY,DELIVERY AND INSTALLATION OF WTW FIRE SUPPRESSION PLANT IN
VAALKOP**

VOLUME 2: CONTRACT

Part C1.2

Contract data

PART C1.2 CONTRACT DATA

The Conditions of Contract are the “**General Conditions of Contract for Construction Works, Second Edition 2010 (GCC 2010)**” available from SAICE, tell: 011 805 5947, or online at www.saice.org.za

Each item of data given below is cross-referenced to the clause in the “General Conditions of Contract for Construction Works, Second Edition 2010 (GCC 2010)” which requires it. The following contract specific data, referring to the General Conditions of Contract for Construction Works, Second Edition, 2010, are applicable to this Contract:

Part two - Data provided by the *Contractor*

Clause The *Contractor* is (Name):
1.1.1.9:

Clause The Contractor's address:
1.2.1.2:

Address	
Postal Address	
Tel No	
Fax No	
Mobile No	
Contact person	

Clause The time for achieving Practical Completion is: 16 weeks
1.1.1.14:



TENDER NO: RFB/MW/ES-04/ 2025-26/02

SUPPLY,DELIVERY&INSTALLATION OF VAALKOP WTW FIRE SUPPRESSION
PLANT UPGRADE PROJECT



TENDER NO: RFB/MW/ES-04/ 2025-26/02

SUPPLY,DELIVERY&INSTALLATION OF VAALKOP WTW FIRE
SUPPRESSION PLANT UPGRADE PROJECT

PART C1.2 CONTRACT DATA

The Conditions of Contract are the “**General Conditions of Contract for Construction Works, Second Edition 2010 (GCC 2010)**” available from SAICE, tell: 011 805 5947, or online at www.saice.org.za

Each item of data given below is cross-referenced to the clause in the “General Conditions of Contract for Construction Works, Second Edition 2010 (GCC 2010)” which requires it. The following contract specific data, referring to the General Conditions of Contract for Construction Works, Second Edition, 2010, are applicable to this Contract:

Part two - Data provided by the *Contractor*

Clause The *Contractor* is (Name):
1.1.1.9:

Clause The Contractor's address:
1.2.1.2:

Address	
Postal Address	
Tel No	
Fax No	
Mobile No	
Contact person	

Clause The time for achieving Practical Completion is: 16 weeks
1.1.1.14:

C.2.1 PRICING ASSUMPTIONS

C.2.1.1 General

The Bill of Quantities forms part of the Contract Documents and must be read and priced in conjunction with all the other documents comprising the Contract Documents, which include the Conditions of Tender, Conditions of Contract and the Specifications.

The Tenderer is advised to check the number of pages and should any be found missing or in duplicate or the figures or writing indistinct or these Bill of Quantities contain any obvious errors, the Tenderer must inform the Engineer at once and have it rectified. No liability whatsoever will be admitted in respect of errors due to the foregoing.

Should there be any doubt or obscurity as to the meaning of any particular item, the Tenderer must obtain an explanation of it, in writing, from the Engineer. No claims for extras arising from any such doubt or obscurity will be admitted after delivery of the tender.

2.1.2 Quantities reflected in the Bill

The quantities given in the Bill of Quantities are the estimated quantities of work to be done, and will be subject to re-measurement during the execution of the work. The Contractor shall obtain the Engineer's detailed instructions for all work before ordering any materials or executing work or making arrangements for it. Any additional works or any extension of work quantities over and above that contained in the Bill of Quantities shall be agreed before the work is completed in the form of an Extra Works Authorization in the case of additional works or a Change Order in the case of an increase in quantities, whichever is the applicable. All documentation must be signed by the Engineer before the work is commenced and such additional works or increased quantities will not be paid for if certified for payment without the approved documentation.

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Bill of Quantities, and the contract price for the completed contract shall be computed at the relevant unit rates and prices, all in accordance with the General and Special Conditions of Contract, the Specifications and Project Specifications.

The validity of the contract will in no way be affected by differences between the quantities in the Bill of Quantities and the quantities finally certified for payment.

The quantities of work as measured and accepted and certified for payment in accordance with the specifications, and not the quantities stated in the Bill of Quantities, will be used to determine payments to the Contractor. The validity of the Contract shall in no way be affected by differences between the quantities in the Bill of Quantities and the quantities certified for payment.

Ordering of materials is not to be based on the Bill of Quantities, but only on information issued for construction purposes.

2.1.3 Pricing of the Bill of Quantities

All unit prices, extensions and totals must be filled in black ink and unit prices, extensions and totals submitted in electronic format will not be acceptable.

The prices and rates to be inserted by the Tenderer in the Bill of Quantities shall be the full inclusive prices to be paid by the Employer for the work described under the several items and shall include full compensation for all costs and expenses that may be required in and for the completion of the work and maintenance during the defects notification period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Tender is based.

Reasonable unit rates and prices shall be entered in the Bill of Quantities as these will be used as a basis for assessment of payment for additional work that may have to be carried out.

Each item shall be priced and extended to the "Total" column by the Tenderer, with the exception of the items for which only rates are required, or items which already have Prime Cost or Provisional Sums affixed thereto. If the Contractor omits to price any items in the Bill of Quantities, then these items will be considered to have a nil rate or price.

All items for which terminology such as "inclusive" or "not applicable" have been added by the Tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract and shall be reflected in the Bill of Quantities as having a nil rate or price.

The Tenderer shall fill in rates for all items where the words "rate only" appear in the "Total" column. "Rate Only" items have been included where:

- (a) an alternative item or material is contemplated and may be used at the discretion of the Engineer;
- (b) variations of specified components in the make-up of a pay item may be expected; and
- (c) no work under the item is foreseen at tender stage but the possibility that such work may be required is not excluded.

For "Rate Only" items, no quantities are given in the "Quantity" column but the quoted rate shall apply in the event of work under this item being required. The Tenderer shall however note that in terms of the Tender Data the Tenderer may be asked to reconsider any such rates, which the Employer may regard as unbalanced.

All rates and amounts quoted in the Bill of Quantities shall be in Rands and cents and shall include all levies and taxes (other than VAT). VAT will be added in the summary of the Bill of Quantities.

2.1.4 Provisional Sums

Where Provisional sums or Prime Cost sums are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with Clause 45 of the General Conditions of Contract. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstances whatsoever delete or amend any of the sums inserted in the "Amount" column of the Bill of Quantities and in the Summary of the Bill of Quantities unless ordered or authorized in writing by the Employer before closure of tenders. Unauthorized changes made by the Tenderer to provisional items in the Bill of Quantities, or to the stated provisional percentages and sums in the Summary of the Bill of Quantities, will not be permissible.

2.1.5 Correction of Entries

Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry in black ink, and the alteration must be initialled by the Tenderer.

2.1.5 Arithmetical Errors

Arithmetical errors found in the Bill of Quantities because of faulty multiplication or addition will be corrected by the Engineer at the tender evaluation stage, as set out in the Conditions of Tender F3.9.

2.1.6 Monthly Payments

Unless otherwise specified in the Specifications or Project Specifications, progress payments in Interim Certificates, referred to in Clause 49.1 of the General Conditions of Contract, in respect of "sum" items in the Bill of Quantities shall be by means of interim progress instalments assessed by the Engineer and based on the measure in which the work actually carried out relates to the extent of the work to be done by the Contractor.

2.1.7 Contingency

The sum provided under contingency in the Bill of Quantities is under the sole control of the Employer and may be deducted in whole or in part and shall only be expended by order of the Employer as Variation Order.

2.1.8 Defined terms

For the purposes of this Bill of Quantities, the following words shall have the meanings hereby assigned to them:

Unit: The unit of measurement for each item of work as defined in the Standardized, Project or Particular Specifications

Quantity: The number of units of work for each item

Rate: The payment per unit of work at which the Tenderer Tenders to do the work

Amount: The quantity of an item multiplied by the tendered rate of the (same) item

Sum: An amount tendered for an item, the extent of which is described in the Bill of Quantities, the Specifications or elsewhere, but of which the quantity of work is not measured in units

Provisional Sum: A budgetary amount that reflects the anticipated cost for a specific element of the works that is not yet defined in enough detail for tenderers to price. When the item is clearly defined, the contractor will be required to source a suitable subcontractor to perform these works, or undertake them with in-house expertise. The costs entailed will first be approved by the Engineer in consultation with the Employer.

2.1.9 Units of Measurement

The units of measurement described in the Bill of Quantities are metric units for which the standard international abbreviations are used. Abbreviations used in the Bill of Quantities, including some non-standard abbreviations, are as follows:

Nr =Number
mm=millimetre
m =metre
km =kilometre
m² =square metre
m³ =cubic metre
kW =kilowatt
kN =kilonewton
kg =kilogram
t =ton (1 000 kg)
% =per cent
PC Sum=Prime Cost Sum
Prov Sum=Provisional Sum



Tender No. RFB/MW/ES-04/2025-26/02

SUPPLY, DELIVERY & INSTALLATION OF VAALKOP WTW FIRE SUPPRESSION
PLANT UPGRADE PROJECT

MAGALIES WATER

RFB/MW/ES-04/5025-26/02

SUPPLY, DELIVERY AND INSTALLATION OF WTW FIRE
SUPPRESSION PLANT IN VAALKOP

VOLUME 2: CONTRACT

Part C2

Pricing Data (Bill of Quantities)

1.1 PART C2 PRICING DATA

PRICING DATA FOR: EXTENSION OF THE EXISTING CHLORINE BUILDING AT PLANT 3

1.1.1 C2.1 PRICING ASSUMPTIONS

C.2.1.1 General

The Bill of Quantities forms part of the Contract Documents and must be read and priced in conjunction with all the other documents comprising the Contract Documents, which include the Conditions of Tender, Conditions of Contract, the Specifications (including the Project Specification) and the Drawings.

The Tenderer is advised to check the number of pages, and should any be found missing or in duplicate or the figures or writing indistinct or these Bill of Quantities contain any obvious errors, the Tenderer must inform the Engineer at once and have it rectified. No liability whatsoever will be admitted in respect of errors due to the foregoing.

Should there be any doubt or obscurity as to the meaning of any item, the Tenderer must obtain an explanation of it, in writing, from the Engineer. No claims for extras arising from any such doubt or obscurity will be admitted after delivery of the tender.

2.1.2 Quantities reflected in the Bill

The quantities given in the Bill of Quantities are the estimated quantities of work to be done and will be subject to re-measurement during the execution of the work. The Contractor shall obtain the Engineer's detailed instructions for all work before ordering any materials or executing work or planning for it. Any additional works or any extension of work quantities over and above that contained in the Bill of Quantities shall be agreed before the work is completed in the form of an Extra Works Authorization in the case of additional works or a Change Order in the case of an increase in quantities, whichever is the applicable. All documentation must be signed by the Engineer before the work is commenced, and such additional works or increased quantities will not be paid for if certified for payment without the approved documentation.

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Bill of Quantities, and the contract price for the completed contract shall be computed at the relevant unit rates and prices, all in accordance with the General and Special Conditions of Contract, the Specifications and Project Specifications and the Drawings. Unless otherwise stated, items are measured net in accordance with the Drawings and Conditions of Contract, and no allowance has been made for waste.

The validity of the contract will in no way be affected by differences between the quantities in the Bill of Quantities and the quantities finally certified for payment.

The quantities of work as measured and accepted and certified for payment in accordance with the Drawings and Conditions of Contract, and not the quantities stated in the Bill of Quantities, will be used to determine payments to the Contractor. The validity of the Contract shall in no way be affected by differences between the quantities in the Bill of Quantities and the quantities certified for payment.

Ordering of materials is not to be based on the Bill of Quantities, but only on information issued for construction purposes.

2.1.3 Pricing of the Bill of Quantities

All unit prices, extensions and totals must be filled in black ink and unit prices, extensions and totals submitted in electronic format will not be acceptable.

The prices and rates to be inserted by the Tenderer in the Bill of Quantities shall be the full inclusive prices to be paid by the Employer for the work described under the several items and shall include

full compensation for all costs and expenses that may be required in and for the completion of the work and maintenance during the defects notification period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Tender is based. Reasonable unit rates and prices shall be entered in the Bill of Quantities as these will be used as a basis for assessment of payment for additional work that may have to be carried out.

Each item shall be priced and extended to the "Total" column by the Tenderer, except for the items for which only rates are required, or items which already have Prime Cost or Provisional Sums affixed thereto. If the Contractor omits to price any items in the Bill of Quantities, then these items will be considered to have a nil rate or price.

All items for which terminology such as "inclusive" or "not applicable" have been added by the Tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract and shall be reflected in the Bill of Quantities as having a nil rate or price.

The Tenderer shall fill in rates for all items where the words "rate only" appear in the "Total" column. "Rate Only" items have been included where:

(a) an alternative item or material is contemplated and may be used at the discretion of the Engineer.

(b) variations of specified components in the make-up of a pay item may be expected; and

(c) no work under the item is foreseen at tender stage but the possibility that such work may be required is not excluded.

For "Rate Only" items, no quantities are given in the "Quantity" column, but the quoted rate shall apply in the event of work under this item being required. The Tenderer shall however note that in terms of the Tender Data the Tenderer may be asked to reconsider any such rates, which the Employer may regard as unbalanced.

All rates and amounts quoted in the Bill of Quantities shall be in Rands and cents and shall include all levies and taxes (other than VAT). VAT will be added in the summary of the Bill of Quantities.

2.1.4 Provisional Sums

Where Provisional sums or Prime Cost sums are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with Clause 45 of the General Conditions of Contract. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstances whatsoever delete or amend any of the sums inserted in the "Amount" column of the Bill of Quantities and in the Summary of the Bill of Quantities unless ordered or authorized in writing by the Employer before closure of tenders. Unauthorized changes made by the Tenderer to provisional items in the Bill of Quantities, or to the stated provisional percentages and sums in the Summary of the Bill of Quantities, will not be permissible.

2.1.5 Correction of Entries

Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry in black ink, and the alteration must be initialled by the Tenderer.

2.1.5 Arithmetical Errors

Arithmetical errors found in the Bill of Quantities because of faulty multiplication or addition will be corrected by the Engineer at the tender evaluation stage, as set out in the Conditions of Tender F3.9.

2.1.6 Monthly Payments

Unless otherwise specified in the Specifications or Project Specifications, progress payments in Interim Certificates, referred to in Clause 49.1 of the General Conditions of Contract, in respect of "sum" items in the Bill of Quantities shall be by means of interim progress instalments assessed by the Engineer and based on the measure in which the work carried out relates to the extent of the work to be done by the Contractor.

2.1.7 Contingency

The sum provided under contingency in the Bill of Quantities is under the sole control of the Employer and may be deducted in whole or in part and shall only be expended by order of the Employer as Variation Order.

2.1.8 Defined terms

For the purposes of this Bill of Quantities, the following words shall have the meanings hereby assigned to them:

Unit:	The unit of measurement for each item of work as defined in the Standardised, Project or Particular Specifications
Quantity:	The number of units of work for each item
Rate:	The payment per unit of work at which the Tenderer Tenders to do the work Amount: The quantity of an item multiplied by the tendered rate of the (same) item
Sum:	An amount tendered for an item, the extent of which is described in the Bill of Quantities, the Specifications or elsewhere, but of which the quantity of work is not measured in units
Provisional Sum:	A budgetary amount that reflects the anticipated cost for a specific element of the works that is not yet defined in enough detail for tenderers to price. When the item is clearly defined, the contractor will be required to source a suitable subcontractor to perform these works or undertake them with in-house expertise. The costs entailed will first be approved by the Engineer in consultation with the Employer.

2.1.9 Units of Measurement

The units of measurement described in the Bill of Quantities are metric units for which the standard international abbreviations are used. Abbreviations used in the Bill of Quantities, including some non-standard abbreviations, are as follows:

Nr=Number
mm=millimetre
m=metre
km=kilometre
km-pass=kilometre-pass
m²=square metre
m²-pass=square metre-pass
ha=hectare
m³=cubic metre
m³-km=cubic metre-kilometre
kW=kilowatt
kN=kilonewton

kg =kilogram
t=ton (1 000 kg)
%=per cent
MN=meganewton
MN-m=meganewton-metre
PC Sum=Prime Cost Sum
Prov Sum=Provisional Sum

PRICING DATA FOR: EXTENSION OF THE EXISTING CHLORINE

1.1.2 PRICING SCHEDULES OR BILL OF QUANTITIES (BoQ)

The Bidder must refer to Annexure C2.2: Pricing Schedule / Bill of Quantities (BoQ) provided with this tender document.

The Bidder is required to submit the following:

- **Excel® format of the completed pricing schedule or BoQ in USB flash drive.**
- **Printed format and signed version of the completed pricing schedule or BoQ.**

C2.2 BILL OF QUANTITIES

ITEM NO	DESCRIPTION	UNIT	QTY	Rate	AMOUNT
1.010	SCHEDULE 1 : PRELIMINARY & GENERAL ITEMS				
1.012	Clearance of Rubbish	Item	1		
1.013	Site Establishment & Clearance	Item	1		
1.014	Retention Interest	Item	1		
1.015	Tests and Inspections	Item	1		
1.016	Preparation of Operating and Maintenance Manuals	Item	1		
1.017	As-built Drawings	Item	1		
1.018	12 Months Guarantee and Maintenance	Item	1		
1.019	Scaffolding	Item	1		
1.020	Programming of the Work	Item	1		
1.021	Testing, Balancing & Commissioning	Item	1		
1.021	Equipment Submissions	Item	1		
1.022	Equipment Labels	Item	1		
1.023	Water & Power for commissioning If JBCC Document				
	Any additional items of preliminary nature that the tenderer may wish to add to comply with requirements of the specification and/or bill of quantities. (To be listed hereunder by the Tenderer)				
i		Item	1		
ii		Item	1		
1.024	Provisional sum for construction Changes	Prov	1		
1.025	Contractor's overhead and profit on Item 1.024	%	10		
	CARRIED TO FINAL SUMMARY		R		
	SCHEDULE 1 :				
	PRELIMINARY & GENERAL ITEMS				

ITEM NO	DESCRIPTION	UNIT	QTY	Rate	AMOUNT
	The Tenderer should include for all plant, special scaffolding and equipment necessary for placing in position and hoisting from ground level. SUPPLEMENTARY PREAMBLES View site: Before submitting the tender, the tenderer shall visit the site and satisfy himself/herself as to the nature and extent of the work to be done. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained. Work and Materials: The work to be done and materials to be used in the works on site are to be similar to those specified. All rubble and debris are to be carted away without delay and the site is to be left clean and tidy. Notices: The Contractor shall allow for the disconnection of electricity prior to any works on the electrical rooms. The Contractor shall, before commencing work, obtain all necessary authorisation for carrying out the work, by whatever means, give all necessary notices and pay all charges and fees in connection therewith. The contractor shall also comply with all relevant regulations including client regulations. Demolitions: All demolition works shall be carried out in accordance with the local By-laws and to the requirements of the Authorities and Building Regulations. Water, etc.: The Contractor shall allow for watering the works with a jet or spray from a hose sufficiently to prevent any nuisance from dust. Temporary coverings, screens, etc.: The Contractor shall supply, erect and maintain in position as required any temporary coverings to protect the existing work and property from damage and inclement weather during the progress of the works and particularly. The Contractor will be held responsible for any damage to property or goods in the existing building due to his not having taken adequate precautions, and all damage caused shall be made good at this own expense. He must allow for providing all necessary screens, partitions, barriers, etc., to protect the work and prevent any nuisance from dust as may be required. Damage to persons or property: The Contractor will be responsible for any damage to persons or property and for the safety of structures and he shall allow for protecting and indemnifying persons using the existing buildings from injury by virtue of building operations, including providing necessary barriers, signs, etc. Making good: Prices of all work described throughout these Bills of Quantities shall include for making good, in all trades except Painting, unless otherwise described. All new materials used in making good are to match existing and the works shall be left complete and perfect in every respect.				

ITEM NO	DESCRIPTION	UNIT	QTY	Rate	AMOUNT
2	SCHEDULE 2 : PLANT 2D- SWITCH ROOM SUBSTATION				
2.010	BUILDERS WORKS				
	ROOF				
2.011	Supply and install plastered gypsum board ceiling with sealed joints. The ceiling must be rigid and airtight. Ceiling at 3600mm. Two inspection hatches are required and shall have gasketed lids to maintain tightness. Joints between wall and ceiling shall be sealed with continuous flexible mastic.	m²	40		
2.012	Relocate existing light fittings from wall to ceiling. Use sealed or gas-tight covers to seal light-fitting openings.	No.	4		
	WALLS				
2.013	Replace the main two leaf access door (1600 x 2200 - L x H) with fire rated two leaf door (Class D) c/w door frame and ironmongery. Door perimeter (sides and top) shall be properly sealed with smoke/compression seals. Door threshold plate with a gasket shall be installed at the as a bottom seal. Install a reliable automatic door closers.	No.	1		
2.014	Replace the standard one leaf door with a fire rated door (Class D) c/w door frame and ironmongery. Door perimeter (sides, top) shall be properly sealed with smoke/compression seals. Door threshold plate with a gasket shall be installed at the as a bottom seal.	No.	1		
2.015	Supply and retrofit operable window sash with fixed window sash (800 x 650 - L x H) into an existing window frame. The window panes to be supplied and installed. The gaps between the window frame and the wall shall be properly sealed. The gaps between the window frame and all five window panes shall be properly sealed.	No.	3		
	FLOORS				
2.016	Supply and install vastrap plates (9000 x 600)	m²	6		
2.017	Supply and apply FIRE RATED seal on a 1200 x 100 penetration and ensure a tight and continuous seal on a 120 minutes fire rated wall.	m².	1		
2.018	Supply and apply 120 min FIRE RATED seal on a 600 x 600 cable entry penetration and ensure a tight and continuous seal on a 120 minutes fire rated wall.	m²..	1		
				Sub-Total	
	Carried Forward to Next Page				

ITEM NO	DESCRIPTION	UNIT	QTY	Rate	AMOUNT
	SCHEDULE 3 : VAALKOP WTW PLANT 1 SUBSTATION				
	BUILDERS WORKS				
	ROOF				
	Supply and install gas-tight covers or sealed enclosures on all light-fitting openings to maintain room integrity on the roof slab.	No.	3		
	Fill cracks in the slab with structural filler mortar or epoxy filler. Seal small cracks with polyurethane or elastomeric sealant.	m²	5		
	WALLS				
2.011	Replace the main two leaf access door (1500 x 2400 - L x H) with fire rated two leaf door (Class D) c/w door frame and ironmongery. Door perimeter (sides and top) shall be properly sealed with smoke/compression seals. Door threshold plate with a gasket shall be installed at the as a bottom seal. Install a reliable automatic door closers.	No.	1		
2.012	Remove the board above the door and replace with 120 min FIRE RATED gypsum drywall (1500 x 900 - L x H) and fire seal the perimeter.	No.	1		
2.013	Replace the standard one leaf door with a fire rated door (Class D) c/w door frame and ironmongery. Door perimeter (sides, top) shall be properly sealed with smoke/compression seals. Door threshold plate with a gasket shall be installed at the as a bottom seal.	No.	1		
2.014	Supply and retrofit operable window sash with fixed window sash (800 x 650 - L x H) into an existing window frame. The windowpanes to be supplied and installed. The gaps between the window frame and the wall shall be properly sealed. The gaps between the window frame and all seven windowpanes shall be properly sealed.	No.	3		
2.015	FLOORS Supply and apply 120 min FIRE RATED seal on a 600 x 600 cable entry penetration and ensure a tight and continuous seal on a 120 minutes fire rated wall.	No.	2		
	Carried Forward to Next Page			Sub-Total	

ITEM NO	DESCRIPTION	UNIT	QTY	Rate	AMOUNT
	SCHEDULE 3: VAALKOP WTW PLANT 1 SUBSTATION				
	Brought forward from Previous Page				
	FIRE DETECTION				
	Flooded Gas Suppression Systems (FM - 200 Clean Agent) - Volume = 160.56 m3				
	GST301 Conv. Ext. Control Panel, 2+1 Detection Zones, Integrated PSU /W Battery Charger, Excl. Batteries, or similar approved.	No	1		
	BS127N Battery 12 V 7.2 Ah, or similar approved.	No	2		
	Innovation Conventional Optical Detector with Flashing LED, Indicator output & Magnetic Sensitivity test.	No	1		
	Innovation Conventional Ionisation Smoke Detector with Flashing LED, Indicator output & Magnetic Sensitivity test	No	1		
	Al671 Apollo Minidisc Remote Indicator, or similar approved.	No	1		
	6" Fire Bell for Indoor Use, 24Vdc	No	1		
	Sounder-Beacon, Multi tone, shallow base	No	1		
	Manual trigger device	No	1		
	25mm PVC Conduits and accessories	m	20		
	PH30 Cabling	m	40		
	Gas Suppression				
	58L Capacity Piped Cylinder, c/w a frame	No	2		
	FM-200 Gas	L	94		
	Complete pipework inc fittings, pressure switches, valves, nozzles, manifolds, hangers, etc	m	20		
	Warning Door Sign	No	2		
	Labour	Sum			
	CARRIED TO FINAL SUMMARY			R	
	SCHEDULE 3: VAALKOP WTW PLANT 1 SUBSTATION				

ITEM NO	DESCRIPTION	UNIT	QTY	Rate	AMOUNT
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SCHEDULE 4: PLANT 2D TRANSFORMER SWITCHGEAR ROOM							
BUILDERS WORKS							
ROOF							
	Supply and install gas-tight covers or sealed enclosures on all light-fitting openings to maintain room integrity on the roof slab.	No.	2				
	WALLS						
	Replace the main two leaf access door (1600 x 2200 - L x H) with fire rated two leaf door (Class D) c/w door frame and ironmongery Door perimeter (sides and top) shall be properly sealed with smoke/compression seals. Door threshold plate with a gasket shall be installed at the as a bottom seal.	No.	1				
	Install a reliable automatic door closer.						
	Supply and retrofit operable window sash with fixed window sash (800 x 650 - L x H) into an existing window frame. The windowpanes need to be supplied and installed.	No.	3				
	The gaps between the window frame and the wall shall be properly sealed. The gaps between the window frame and all five windowpanes shall be properly sealed.						
2.019	Fill cracks in the wall with structural filler mortar or epoxy filler. Seal small cracks with polyurethane or elastomeric sealant.	m²	4				
	FLOORS						
	Supply and apply 120 min FIRE RATED seal on a 600 x 600 cable entry penetration and ensure a tight and continuous seal on a 120-minute fire rated wall.	m²	1				
2.020	FIRE DETECTION						Sub-Total
	Flooded Gas Suppression Systems (FM - 200 Clean Agent) - Volume = 75.09 m3						
2.021	GST301 Conv. Ext. Control Panel, 2+1 Detection Zones, Integrated PSU /W Battery Charger, Excl. Batteries, or similar approved.	No	1				
2.022	BS127N Battery 12 V 7.2 Ah, or similar approved.	No	2				
2.023	Innovation Conventional Optical Detector with Flashing LED, Indicator output & Magnetic Sensitivity test.	No	2				
2.024	Innovation Conventional Ionisation Smoke Detector with Flashing LED, Indicator output & Magnetic Sensitivity test	No	2				
2.025	AI671 Apollo Minidisc Remote Indicator, or similar	No	2				
2.026	approved. 6" Fire Bell for Indoor Use, 24Vdc	No	1				
2.027	Sounder-Beacon, Multi tone, shallow	No	1				
2.028	base Manual trigger device	No	1				
2.029	25mm PVC Conduits and accessories	m	30				
2.0210	PH30 Cabling	m	60				
2.0211	Gas Suppression						
2.0212	58L Capacity Piped Cylinder, c/w a frame.	No	1				
2.0213	FM-200 Gas	L	44				
2.0214	Complete pipework inc fittings, pressure switches, valves, nozzles, manifolds, hangers.	M	25				
2.0215	Warning Door Sign	No	2				
	Labour	Sum					
	CARRIED TO FINAL SUMMARY		R				
	SCHEDULE 4: PLANT 2D TRANSFORMER SWITCHGEAR ROOM						

ITEM NO	DESCRIPTION	UNIT	QTY	Rate	AMOUNT
	SCHEDULE 5: PLANT 4 SUB-STATION SWITCHGEAR ROOM				
	BUILDERS WORKS				
	ROOF				
2.021	Replace suspended ceiling with plastered gypsum board ceiling with sealed joints. The ceiling must be rigid and airtight. Ceiling at 5800mm. Two inspection hatches are required and shall have gasketed lids to maintain tightness. Joints between wall and ceiling shall be sealed with continuous flexible mastic.	m²	60		
	WALLS				
2.022	Replace the main two leaf access door (1600 x 2100 - L x H) with fire rated two leaf door (Class D) c/w door frame and ironmongery. Door perimeter (sides and top) shall be properly sealed with smoke/compression seals. Door threshold plate with a gasket shall be installed at the as a bottom seal. Install a reliable automatic door closers.	No.	2		
2.023	Replace the standard one leaf door with a fire rated door (Class D) c/w door frame and ironmongery. Door perimeter (sides, top) shall be properly sealed with smoke/compression seals. Door threshold plate with a gasket shall be installed at the as a bottom seal.	No.	1		
2.024	Replace louvered window with a fixed window frame (1000 x 600- L x H). The window panes to be supplied and installed. All gaps between the window frame and the wall shall be properly sealed. All gaps between the window frame and all five window panes shall be properly sealed.	No.	1		
2.025	Supply and install a 120 min FIRE RATED gypsum drywall (600 x 600 - L x H) and fire seal the perimeter.	No.	1		
	FLOORS				
	Supply and apply 120 min FIRE RATED seal on a 800 x 800 cable entry penetration and ensure a tight and continuous seal on a 120 minutes fire rated wall.	No.	4		
	Carried Forward to Next Page			Sub-Total	

ITEM NO	DESCRIPTION	UNIT	QTY	Rate	AMOUNT
	SCHEDULE 5 : PLANT 4 SUB-STATION SWITCHGEAR ROOM BUILDERS WORKS Brought forward from Previous Page FIRE DETECTION Flooded Gas Suppression Systems (FM - 200 Clean Agent) - Volume = 335.24 m3 GST301 Conv. Ext. Control Panel, 2+1 Detection Zones, Integrated PSU /W Battery Charger, Excl. Batteries, or similar approved. No 1 BS127N Battery 12 V 7.2 Ah, or similar approved. No 2 Innovation Conventional Optical Detector with Flashing LED, Indicator output & Magnetic Sensitivity test. No 1 Innovation Conventional Ionisation Smoke Detector with Flashing LED, Indicator output & Magnetic Sensitivity test No 1 AI671 Apollo Minidisc Remote Indicator, or similar No 0 approved. 6" Fire Bell for Indoor Use, 24Vdc No 1 Sounder-Beacon, Multi tone, shallow base No 1 Manual trigger device No 1 25mm PVC Conduits and m 20 accessories PH30 Cabling m 40 Gas Suppression 58L Capacity Piped Cylinder, c/w No 4 a frame FM-200 Gas L 195 Complete pipework inc fittings, pressure switches, valves, nozzles, manifolds, M 30 hangers, etc Warning Door Sign No 2 Labour Sum CARRIED TO FINAL SUMMARY SCHEDULE 5 : PLANT 4 SUB-STATION SWITCHGEAR ROOM				
			R		

ITEM NO	DESCRIPTION	UNIT	QTY	Rate	AMOUNT
2.026	SCHEDULE 6: PLANT 4 SUB-STATION MCC ROOM BUILDERS WORKS ROOF				
2.027	Replace suspended ceiling with plastered gypsum board ceiling with sealed joints. The ceiling must be rigid and airtight. Ceiling at 5800mm. Two inspection hatches are required and shall have gasketed lids to maintain tightness. Joints between wall and ceiling shall be sealed with continuous flexible mastic.	m²	75		
2.028	WALLS Replace the standard one leaf door with a fire rated door (Class D) c/w door frame and ironmongery. Door perimeter (sides, top) shall be properly sealed with smoke/compression seals. Door threshold plate with a gasket shall be installed at the as a bottom seal.	No.	2		
2.029	Replace louvered window with a fixed window frame (1000 x 600- L x H). The windowpanes to be supplied and installed. All gaps between the window frame and the wall shall be properly sealed. All gaps between the window frame and all five windowpanes shall be properly sealed.	No.	1		
2.030	Supply and install a 120 min FIRE RATED gypsum drywall (600 x 600 - L x H) and fire seal the perimeter.	No.	1		
2.031	FLOORS Supply and apply 120 min FIRE RATED seal on a 800 x 800 cable entry penetration and ensure a tight and continuous seal on a 120 minutes fire rated wall.	No.	3		
	Carried Forward to Next Page			Sub-Total	

ITEM NO	DESCRIPTION	UNIT	QTY	Rate	AMOUNT
	SCHEDULE 6: PLANT 4 SUB-STATION MCC ROOM				
	BUILDERS WORKS				
	Brought forward from Previous Page				
	FIRE DETECTION				
	<u>Flooded Gas Suppression Systems (FM - 200 Clean Agent) - Volume = 422.01 m3</u>				
	GST301 Conv. Ext. Control Panel, 2+1 Detection Zones, Integrated PSU /W Battery Charger, Excl. Batteries, or similar approved.	No	1		
	BS127N Battery 12 V 7.2 Ah, or similar approved.	No	2		
	Innovation Conventional Optical Detector with Flashing LED, Indicator output & Magnetic Sensitivity test.	No	1		
	Innovation Conventional Ionisation Smoke Detector with Flashing LED, Indicator output & Magnetic Sensitivity test	No	1		
	AI671 Apollo Minidisc Remote Indicator, or similar	No	1		
	approved. 6" Fire Bell for Indoor Use, 24Vdc	No	1		
	Sounder-Beacon, Multi tone, shallow base	No	1		
	Manual trigger device	No	1		
	25mm PVC Conduits and	m	30		
	accessories PH30 Cabling	m	60		
	Gas Suppression				
	58L Capacity Piped Cylinder, c/w	No	5		
	a frame FM-200 Gas	L	245		
	Complete pipework inc fittings, pressure switches, valves, nozzles, manifolds,	M	40		
	hangers, etc Warning Door Sign	No	2		
	Labour	Sum			
	CARRIED TO FINAL SUMMARY				
	SCHEDULE 6: PLANT 4 SUB-STATION MCC ROOM		R		

SUMMARY OF BILL OF QUANTITIES

SCHEDULE NO	DESCRIPTION	TOTAL
1	PRELIMINARY & GENERAL	
2	PLANT 2D SWITCH ROOM SUBSTATION	
3	VAALKOP WTW PLANT 1 SUBSTATION	
4	PLANT 2D TRANSFORMER SWITCHGEAR ROOM	
5	PLANT 4 SUB-STATION SWITCHGEAR ROOM	
6	PLANT 4 SUB-STATION MCC ROOM	
	SUB TOTAL (A)	
	ADD 10% CONTINGENCIES(B)	
	SUB-TOTAL (C)=(A+B)	
	ADD VAT @ 15%	
	TOTAL PRICE CARRIED TO TENDER FORM OF OFFERT	

SIGNATURE OF TENDERER.....

DATE.....

NAME OF TENDERER.....

ADDRESS.....

C3: SCOPE OF WORK

1 Description of the works

1.1 Employer's objectives

The following Objectives have been addressed:

- Means of limiting / controlling the intensity and spread of fire through the building,
- Adequate structural stability during a fire is maintained,
- Minimize fire-related injuries and prevent undue loss of life,
- Minimise fire-related damage to the building, its contents, features, and attributes, and
- Minimise undue loss of operations and business-related revenue due to fire-related damage.

2 Location of the works

The works are located at Vaalkop Water Treatment Plant.

Vaalkop WTP:

The location of the Plant 2D is indicated in Google earth image captured in Figure 1.1 below. The approximate co-ordinates of the Magalies Water Vaalkop site are 25°18'35"S 27°29'08"E.



3 Description of the Works

3.1 Introduction

The Fire suppression systems are required inside the electrical equipment rooms to protect against ever-present risk of total destruction in the event of a fire, as per the minimum requirements of the National Building Regulations and Building Standards Act (Act 103 of 1977) under the auspices of a Rational Design as defined under Regulation T1(2)(a) of the Act.

Fire suppression systems are required inside the electrical equipment rooms to protect against ever-present risk of total destruction in the event of a fire.

The Project are aimed to minimize fire-related injuries and prevent undue loss of life, damage to the building, its contents, features, and attributes, and of operations and business-related revenue due to fire-related damage.

3.2 Project Scope of Work

The survey focused on the condition/ status of the existing Fire Protection systems installed to serve the different areas of the Vaalkop WTW.

Furthermore, particular attention was drawn to the following:

Designing fire suppression systems and determining cost estimates for the upgrades to ensure that the compliance requirements are met in the following electrical rooms:

- a) Plant 1
 - Substation 1
- b) Plant 2
 - MCC Room,
 - Switch Gear Room,
 - Transformer Bays.
- c) Plant 2D
 - MCC Rooms,
 - Switch Gear Room,
 - Transformer Bays.
- d) Plant 3
 - Chemical Room,
 - Switch Gear Room,
 - Transformer Bays.

- e) Plant 4
 - Central Inlet Works,
 - Switch Gear Rooms,
 - Transformer Bays.

3.3 FIRE PROTECTION INSTALLATIONS

The following fire protection systems / requirements are proposed for the electrical rooms:

- i. Automatic Gas Suppression Systems,
- ii. Automatic Deluge Suppression Systems,
- iii. Smoke Detection Systems,
- iv. Fire Stopping.

3.4 DESIGN CODES AND GUIDELINES

The fire protection installations shall be done in line with the applicable Magalies Water as well as local and international standards, codes, and regulations for fire protection systems, which include:

- i. End User Requirements (Magalies Water),
- ii. National Building Regulations and South African National Standards (SANS), e.g.,
 - SANS 246 - Fire protection for electronic equipment installations – Code of practice,
 - SANS 369-1 – Electrical actuation of gaseous total flooding extinguishing systems,
 - SANS 193 & 1238 - Fire dampers
 - SANS 10139 - Fire Detection & Alarm Systems for Buildings, System Design, Installation and Servicing,
 - SANS 10400-O: 2011 - Lighting and ventilation,
 - SANS 10400-T: 2011 - Fire Protection,
 - SANS 1910 - Portable refillable fire extinguishers,
 - SANS 530-9 - Fire detection and fire alarm systems for buildings Part9: Code of Practice for the design, installation, commissioning, and maintenance of emergency voice communication systems,
 - SANS 530-9 - Fire detection and fire alarm systems for buildings Part9: Code of Practice for the design, installation, commissioning, and maintenance of emergency voice communication systems,
 - SANS 1066 - Remote centres receiving signals from fire and security systems,
 - SANS 14520 - Gaseous fire-extinguishing systems – Physical properties and system design,
 - SANS 10400 - The application of the National Building Regulations Local Authority's codes and by-laws,
- iii. BS7974 - Application of fire safety engineering principles to the design of buildings –Code of practice
- iv. Life Safety Code based on NFPA 101,
- v. ASIB - Twelfth Edition Rules for Automatic Sprinkler Installations - 2018 Release,

- vi. Local Authority – Emergency Services requirements for rational fire design,
- vii. SFPE - Handbook of Fire Protection Engineering, 2nd edition,
- viii. EN 12101 - Smoke and heat control systems.
- ix. NFPA 70E - National Fire Protection Association.
- x. NFPA 170 - Standard for Fire Safety Symbols, 2002 edition.
- xi. NFPA 220 - Standard on Types of Building Construction, 1999 edition.
- xii. BS 5306 (all parts), Fire extinguishing installations and equipment on premises.
- xiii. BS 5306-4:1986, Fire extinguishing installations and equipment on premises Part 4: Specification for carbon dioxide systems.
- xiv. BS 5839-1:1988, Fire detection and alarm systems for buildings, Part 1: Code of practice for system design, installation, and servicing.
- xv. BS 6266, Code of practice for fire protection for electronic data processing installations.
- xvi. BS 7671, Requirements for electrical installations IEE Wiring Regulations, Sixteenth edition.
- xvii. BS 7629 (all parts), Specification for 300/500 V fire resistant electric cables having low emission of smoke and corrosive gases when affected by fire.
- xviii. BS EN 54-2, Fire detection and fire alarm systems Part 2: Control and indicating equipment.
- xix. BS EN 54-4, Fire detection and fire alarm systems Part 4: Power supply equipment. DD 233, Code of practice for gaseous firefighting systems.
- xx. Occupational Health and Safety Act (No. 85 of 1993)

The assessment of the electrical equipment rooms and fire systems installed within the rooms was carried out as follows:

- a) Visual and audio inspection of the systems,
- b) Equipment data and performance specifications obtained from equipment data plates, labels, and display panels,
- c) Information received from the maintenance personnel that accompanied out team on the surveys.

3.5 OVERVIEW

3.5.1 Details of Design

The primary purpose of this Section is to detail the fire protection design, along with the necessary motivation, supporting documentation and technical data for the proposed upgrade

3.5.2 Legal Basis

The National Building Regulations and Building Standards Act (Act 103 of 1977) allows for so-called “functional regulations” specifying the performance of systems rather than prescriptive methods in achieving such performance. This has allowed for engineered solutions capable of providing comparable levels of safety to conventional approaches possible through what is termed a “Rational Design”. Such a Rational Design completed with regards the fire protection systems offers the Fire Engineer the opportunity to explore innovative,

and alternative methods of dealing with the various aspects of fire safety without compromising on the level of safety provided.

In terms of this engineered approach, the following report aims to describe the approach and methods adopted in fire protection systems for this proposed upgrades. This is done whilst taking into account the legal requirements as contained in the National Building Regulations, Occupational Health and Safety Act, municipal by-laws and related Department of Health legislation in South Africa.

Whilst ensuring compliance with the above, every effort shall be made to ensure that the fire protection measures to be provided are as unobtrusive as possible.

3.5.3 Legal Compliance

The primary departure point for the design of the fire protection provisions for a project is to comply fully with the minimum applicable legal fire safety requirements.

3.6 DESIGN BASIS

3.6.1 Goals and Objectives

Through our design, the following principal goals and objectives are aimed to:

- Minimise fire-related injuries and prevent undue loss of life,
- Minimise fire-related damage to the building, its contents, features, and attributes, and
- Minimise undue loss of operations and business-related revenue due to fire-related damage.

We aim to achieve the goals and objectives listed above by means of a Rational [Fire] Design, which is defined by the Act as being:

“Any design involving a process of reasoning and calculation and may include any such design based on the use of a code of practice or other relevant technical document.”

3.6.2 Derivation of Brief

3.6.2.1 Assumed Brief

We have assumed the following to be our brief:

- a) Compliance with the minimum requirements of the National Building Regulations and Building Standards Act (Act 103 of 1977) under the auspices of a Rational Design as defined under Regulation T1(2)(a) of the Act,
- b) Ensuring the safety of occupants/ patients,
- c) Compliance with all client and authority specific specifications,
- d) Conduct the above in a cost-effective manner (i.e., budgetary savings due consideration to value, benefits, life cycle costs, business impact, etc.).

3.7 DESIGN CRITERIA

3.7.1 Occupation Classification

The proposed occupation classification of the electrical rooms is as follows:

Class of Occupancy - D4 Plant Room: Occupancy comprising usually unattended mechanical or electrical services necessary for the running of a building.

3.8 QUALITATIVE DESIGN REVIEW (QDR)

3.8.1 Overview

The first stage in the design of the fire protection systems for the new building was to establish the basic parameters of the project.

This includes:

- i. Reviewing of the scheme,
- ii. Identification of any overriding constraints,
- iii. Defining of design objectives,

This initial stage drew mainly on the expertise and experience of the consulting engineer and design team.

3.8.2 Statement of Fire Safety Objectives

The following objectives in terms of Regulation T1 have been addressed in this section and accompanying plans:

- i. Provision of adequate life safety measures,
- ii. Means of limiting and controlling the intensity and spread of fire through the building,
- iii. Adequate structural stability during a fire is maintained,
- iv. The generation and spread of smoke are managed,
- v. Means of access for emergency services as well as equipment for detecting, controlling, and extinguishing a fire are provided,

3.8.3 Results of Architectural and Building Review

The building elements were reviewed, and the interventions are to incorporate installations of fire suppression systems into the electrical rooms.

3.8.4 Significant Hazards and Possible Consequences

No significant hazards were identified.

3.8.5 Specification of the Fire Scenarios for Analysis

We propose that the scenarios, presented in Annexure A be considered for analysis.

3.8.6 Design Fire

For design purposes a rapidly growing fires are considered with its characteristics (heat, smoke and species release rate). MCC and switchgear panel electrical fires originate in electric wires, cables, circuit breakers, and within electrical components. Fires start in electrical panels from overloaded circuits or age of the panel. The panel and circuits become overloaded when the distribution of electricity is inadequate. Overloaded equipment acts as a source of heat that is too close to easily combustible materials

Power transformers are oil-cooled and consists of an oil tank, mostly filled with mineral oil and containing the transformer core and coils. To prevent short-circuits, the coil wires are coated with an insulating material. The floor pan is installed below the tank to contain oil in case of possible leaks. The cooling oil used in the transformer is flammable at high temperatures and presents a considerable fire hazard due to the large quantity used. A defective or aged insulation of the coil wires or a high electrical surge, may cause overheating in the transformer and lead to the ignition of the oil. If this situation is compounded by damage to the transformer tank or the oil-carrying lines, spray fires and the ignition of puddles of oil outside the transformer often occur as well. Spray fire is fed by oil emitted under pressure from a leak on the transformer. Puddles of fire may result in the floor pan, if oil, which has escaped from the transformer tank, collects there and ignites.

3.8.7 Critical Design Assumptions

In compiling this report, the following assumptions were made which are critical to the success of the design:

- i. The design is based on a single source of fire, with no allowance for multiple simultaneous fire incidents,
- ii. The building, systems, equipment, and interfacing shall be maintained on completion of this project in accordance with the manufacturer's specifications as well as the building operations and maintenance manual and shall at all times be in good working order,
- iii. Employees shall be well drilled in the emergency evacuation procedures and use of firefighting equipment,
- iv. Flammable liquids shall not be stored in the building (except for use with the electric generator),

3.9 FIRE SUPPRESSION DESIGN

3.9.1 Automatic Gas Suppression System

The system uses the FM-200 (HFC-227ea) chemical agent and consist of three basic components. The basic components used for this system are:

1. Storage/Distribution Components

The storage components consist of the gas cylinders, container supports (racks), piping and discharge nozzles for the distribution of the extinguishing gas.

2. Control Panels

The control panel are:

- i. Alarm detection and gas control Panel
- ii. Extinguishant control panel

3. Detection and Alarm Devices

The detection, alarm devices, and accessories are the external devices that that are incorporated into the system to provide audible or visual signals.

The design of such a system requires that the FM-200 chemical agent be discharged from its gas cylinder within 10 seconds and be thoroughly mixed throughout the room or area, reaching a minimum concentration level of 6.25% but not exceeding 9% in normally occupied spaces.

3.9.2 System Design

The design of FM-200 system consists of amount of gas required in a protected space, selection and proper placement of the following equipment:

- i. Gas Cylinder(s)
- ii. Nozzle(s)
- iii. Detection
- iv. Pipe and fittings

Proper FM-200 system design requires completion of the following steps to determine the selection, placement and installation of the gas cylinders, nozzles, pipes and fittings.

3.9.3 FM-200 Gas Calculations

The calculations are based on, NFPA Code 2001, "Standard on Clean Agent Fire Extinguishing Systems" The type of potential fire for a protected space is classified to calculate the required amount of gas to extinguish the fire. The classifications are shown in the table below:

Table 1: Fire Classifications

Class A	Fire in ordinary combustible materials such as paper, wood, cloth, rubber, plastic, etc
Class B	Fire in flammable liquids like oil, grease, tars, oil based paints, flammable gasses, etc
Class C	Fire that involves energised electrical equipment

The design concentration for fire hazard and safety factors are dependent of the class of fire as follows:

Table 2: Design Concentration and Safety Factors for Fire Hazards.

Fire Hazard Classification	Design Concentration for fire hazard classes	Safety factor for Design Concentration for Fire
Class A	6,7	1,2
Class B	8,97	1,3
Class C	7,2	1,2

At elevations above sea level, FM-200 gas expands to a greater specific vapor. FM-200 system designed for sea level will develop a greater concentration level at an elevation above sea level. To correct for the effects of elevation, the quantity of agent required is corrected as follows:

Altitude (m)	Correction Factor	Altitude (m)	Correction Factor
-920	1,11	1220	0,86
-610	1,07	1520	0,82
-300	1,04	1830	0,78
0	1	2130	0,75
300	0,96	2440	0,72
610	0,93	2740	0,69
920	0,89	3050	0,66

Gas quantity required in a protected space is calculated as follows:

$$W_g = V/S * (C/100-C)$$

Where: W_g Gas weight in kg

V Protected Space Volume in m³ C Design Concentration

S Specific Vapour Volume in m³/kg

Where

$$S = 0,1269 + 0,0057T$$

and T is Room Design Temperature in oC,

designed for $T = 21$ oC.

The volume of gas required in the protected space is $V = \frac{W}{g\rho}$
Where: " ρ " is the density of FM-200 gas.

3.9.4 Number of Gas Cylinders

When the quantity of gas has been determined, the number of gas cylinders and their location are the next consideration. The size and number of containers is selected based the sizes of gas cylinders based on the available sizes in the market.

3.9.5 Number of Nozzles

The nozzles are designed for 180° and 360° coverage. The maximum nozzle discharge height and the maximum coverage of a single nozzle is dependent on the nozzle manufacture.

The minimum number of nozzles required (N) in a system is determined by protected space floor area, (A_s) and nozzle coverage area (A_c) as:

$$N = A_s / A_c$$

The final number of nozzles is decided based on the room design and any obstructions that may be present.

3.9.6 Automatic Detection System

The automatic detection system consists of the following devices:

- i. Fire Alarm Control Panel with integrated PSU and battery charger,
- ii. Detecting devices,
- iii. Remote indicators for void detectors,
- iv. Indoor Fire Bell,
- v. Sounder Beacon,
- vi. Manual Call Point
- vii. PH30 cabling and accessories.

The automatic detectors used shall be capable of detecting and indicating heat, smoke, flame, or combustible vapours that are likely to produce a fire. When choosing detectors, the four fire stages considered are incipient, smoldering, flame, and heat.

- i. Incipient Stage - This stage is when visible products of combustion are present without smoke, flame, or heat.
- ii. Smoldering Stage - During this stage, visible products of combustion and smoke are present; however, flame and heat are still not present.
- iii. Flame Stage - When this stage is reached, an actual fire is present but without appreciable heat, which will follow very quickly.
- iv. Heat Stage - This is the final stage, with rapidly expanding gases and uncontrollable heat present.

The consideration in choosing detector type should be based on vibration, response time, and the amount of dirt or corrosive products in the environment. Ionization (smoke) detectors respond best during the incipient stage and decrease in effectiveness during the smoldering, flame and heat stages. Photo-electric detectors respond best during the early smoldering stage. A thermal- type detector gives the best response during the later flame and heat stages of a fire.

They are selected by temperature range in conjunction to the area being protected. For this design the photo-electric detectors are selected based on:

- Supports drift compensation to enable good environmental adaptability
- Self-diagnostic
- Local test activation with reed switch
- Chamber contamination checking
- All round LED visibility (360° viewing angle) avoids time spent on specific detector orientation
- Configurable polling LED support
- Remote indicator output for detectors in the void spaces.
- Removable sensing chamber for easy maintenance
- 2 Programmable smoke sensitivity levels

C4: SITE INFORMATION

1 Location of the site

The location of the site will be at Vaalkop Water Treatment Plant. The works will be undertaken on the site, and at the Contractor's preferred workshop locations, as approved and agreed with the Engineer in advance.



Site information

The approximate co-ordinates of the Magalies Water Vaalkop site are 25°18'35"S 27°29'08"E.

1.1.3 C2.3 APPENDIX 4 - DISCLOSURE STATEMENT

General Conditions of Contract for Construction Works, Third Edition (2015)

(Please note that works in italics within brackets are items which should be stated)

Date:.....

Contract:.....

Contractor:.....

Employer:.....

Employer's Agent:.....

Dear Sirs

I am willing and available to serve as (ad-hoc/standing) Adjudication Board Member in the above-mentioned Contract.

In accordance with the General Conditions of Contract for Construction Works'

Adjudication Board Rules relating to disclosure statements by selected or nominated persons to the adjudication, I hereby state that:

- I shall act with complete impartiality and know of nothing at this time, which could affect my impartiality.
- I have had no previous involvement with this project.
- I do not have any financial interest in this project.
- I am not currently employed by the Contractor, Employer or Employer's Agent.
- I do not have any financial connections with the Contractor, Employer or Employer's Agent.
- I do not have or have not had a personal relationship with any authoritative member
- of the Contractor, Employer or the Employer's Agent which could affect my impartiality.
- I undertake to immediately disclose to the parties any changes in the above position
- which could affect my impartiality or be perceived to affect same.

Should there be any deviation from the foregoing statements, details shall be given.

I further declare that I am experienced in the work which is carried out under the Contract and in interpreting contract documentation.

Name in full:

Signature:

1.1.4 C2.4 APPENDIX 5 - ADJUDICATION BOARD MEMBER AGREEMENT

General Conditions of Contract for Construction Works, Third Edition (2015)

(Please note that works in italics within brackets are items which should be stated)

This Agreement is entered into between:

Adjudication

Board

Member:

.....

(Name, physical address, postal address, e-mail address, fax number, telephone number and mobile number.)

Contractor:

.....

(Name, physical address, postal address, e-mail address, fax number, telephone number and mobile number.)

Employer:

.....

(Name, physical address, postal address, e-mail address, fax number, telephone number and mobile number.)

The Contractor and the Employer will hereinafter be collectively referred to as the Parties.

The Parties entered into a Contract for (name of project) which provides that a dispute under or in connection with the General Conditions of Contract for Construction Works, Fourth Edition (2022) must be referred to (ad-hoc adjudication/standing adjudication).

The undersigned natural person has been appointed to serve as Adjudication Board Member and together with the undersigned Parties agree as follows:

1. The Adjudication Board Member accepts to perform all duties in accordance with the terms of the Contract, the General Conditions of Contract for Construction Works' Adjudication Board Rules and this Agreement.
2. The Adjudicator undertakes to remain independent and impartial of the Contractor, Employer and Employer's Agent for the duration of the Adjudication Board proceedings.
3. The Adjudication Board Member agrees to serve for the duration of the Adjudication Board proceedings.
4. The Parties may at any time, without cause and with immediate effect, jointly terminate this Agreement.
5. Unless the Parties agree, the Adjudication Board Member shall not act as arbitrator or representative of either Party in any subsequent proceedings between the Parties under the Contract. No Party may call the Adjudication Board Member as a witness in any such subsequent proceedings.
6. The standing Adjudication Board's duties shall end upon the Adjudication Board Member(s) receiving notice from the Parties of their joint decision to disband the Adjudication Board.
7. The Adjudication Board Member shall be paid in respect of time spent upon or in connection with the adjudication including time spent traveling:

7.1 A monthly retainer of (amount) for (number) of months, and/or

7.2 A daily fee of (amount) based on a (number) hour day, and/or

7.3 An hourly fee of (amount), and/or

7.4 A non-recurrent appointment fee of (amount) which shall be accounted for in the final sums payable.

8. The Adjudication Board Member's expenses incurred in adjudication work shall be reimbursed at cost. On submission of an invoice for fees and expenses to the Parties, the Parties shall pay the full amount within 28 days of receipt of the invoice. Late payment of such invoice shall attract interest at prime plus 3% points compounded monthly at the prime rate charged by the Adjudication Board Member's bank.

This Agreement is entered into by:

Contractor's signature:

Contractor's name:

Place:

Date:

Employer's signature:

Employer's name:

Place:

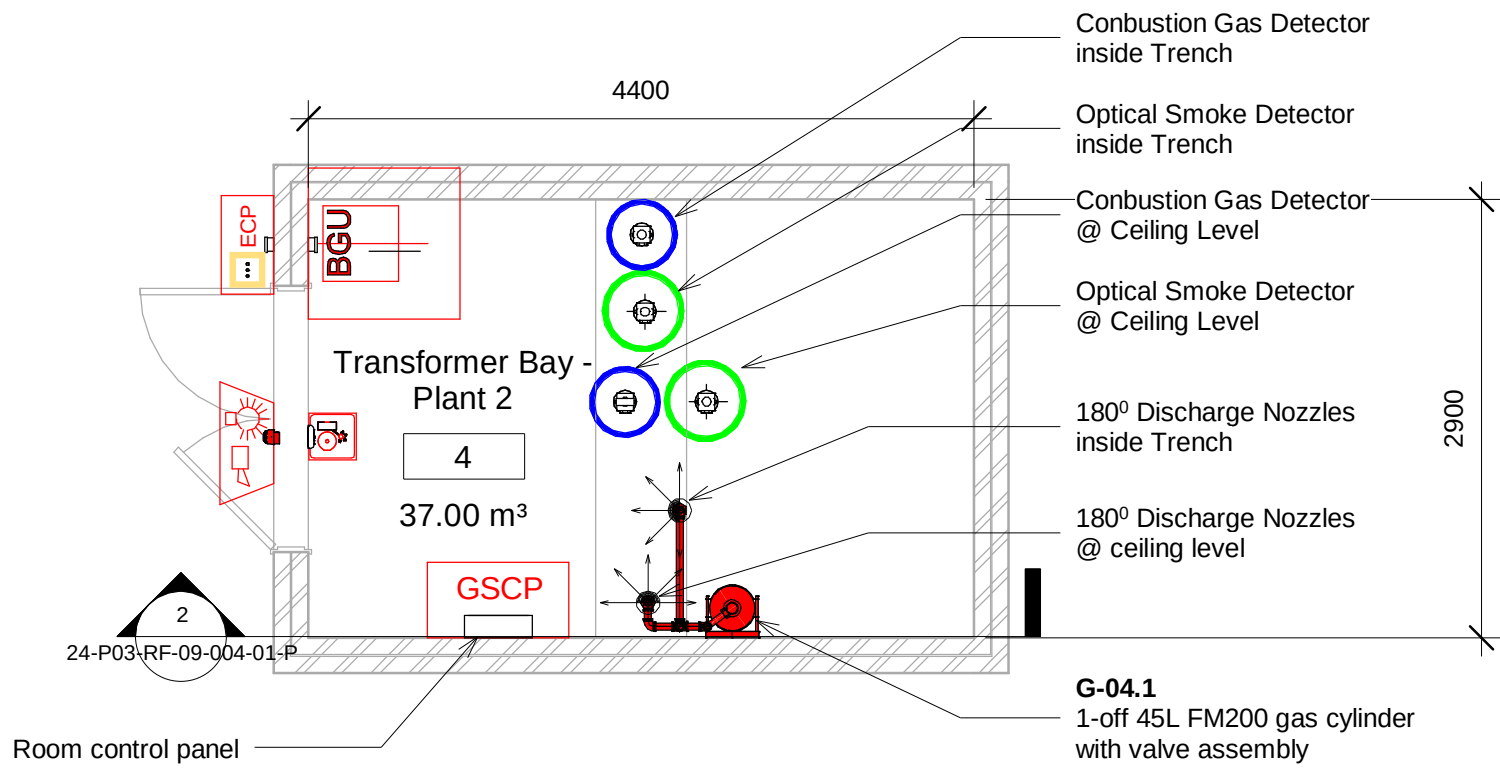
Date:

Adjudication Board Member's signature:

Adjudication Board Member's name:

Place:

Date:

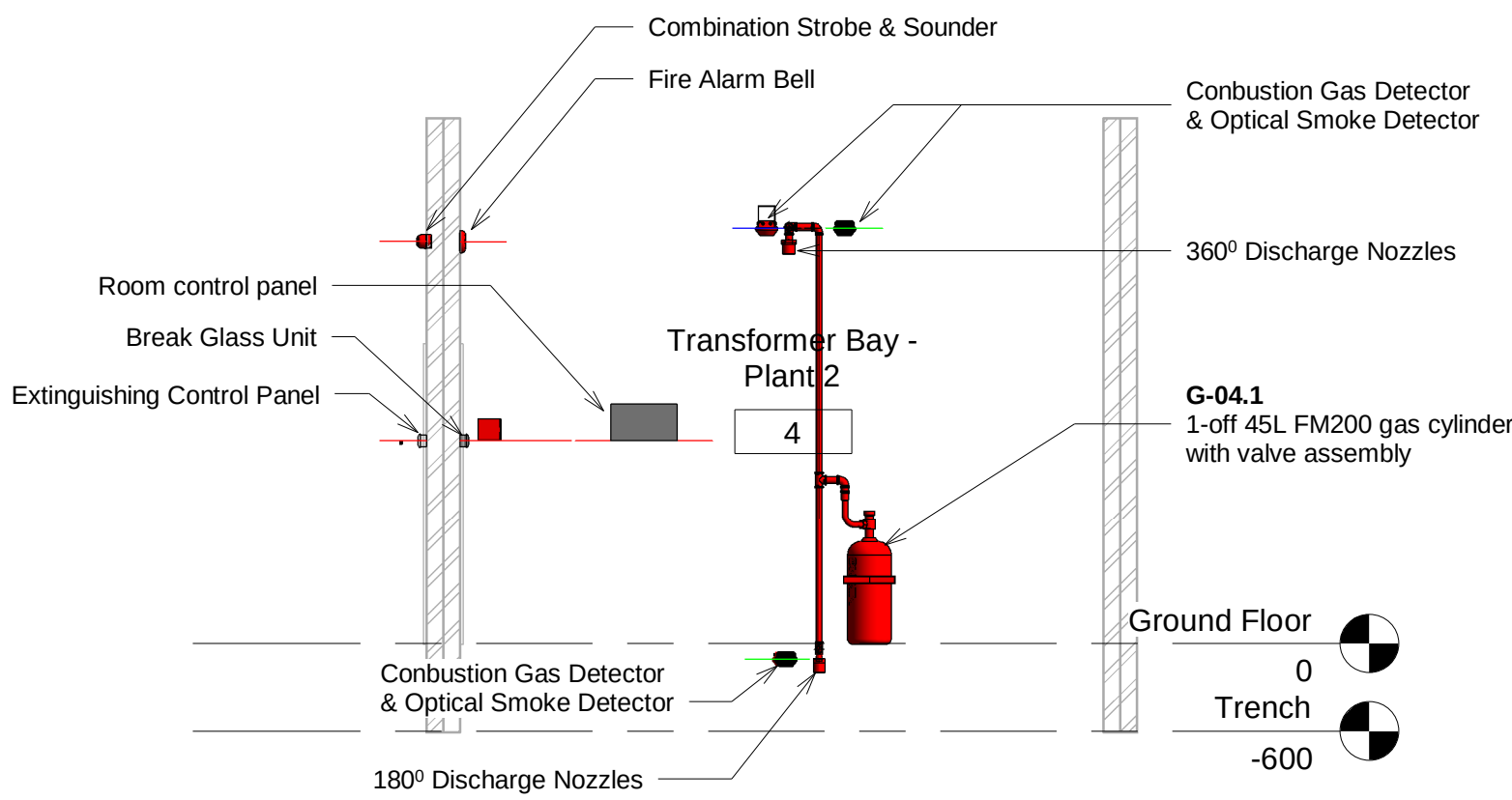


CLEAN AGENT GAS CYLINDERS SCHEDULE					
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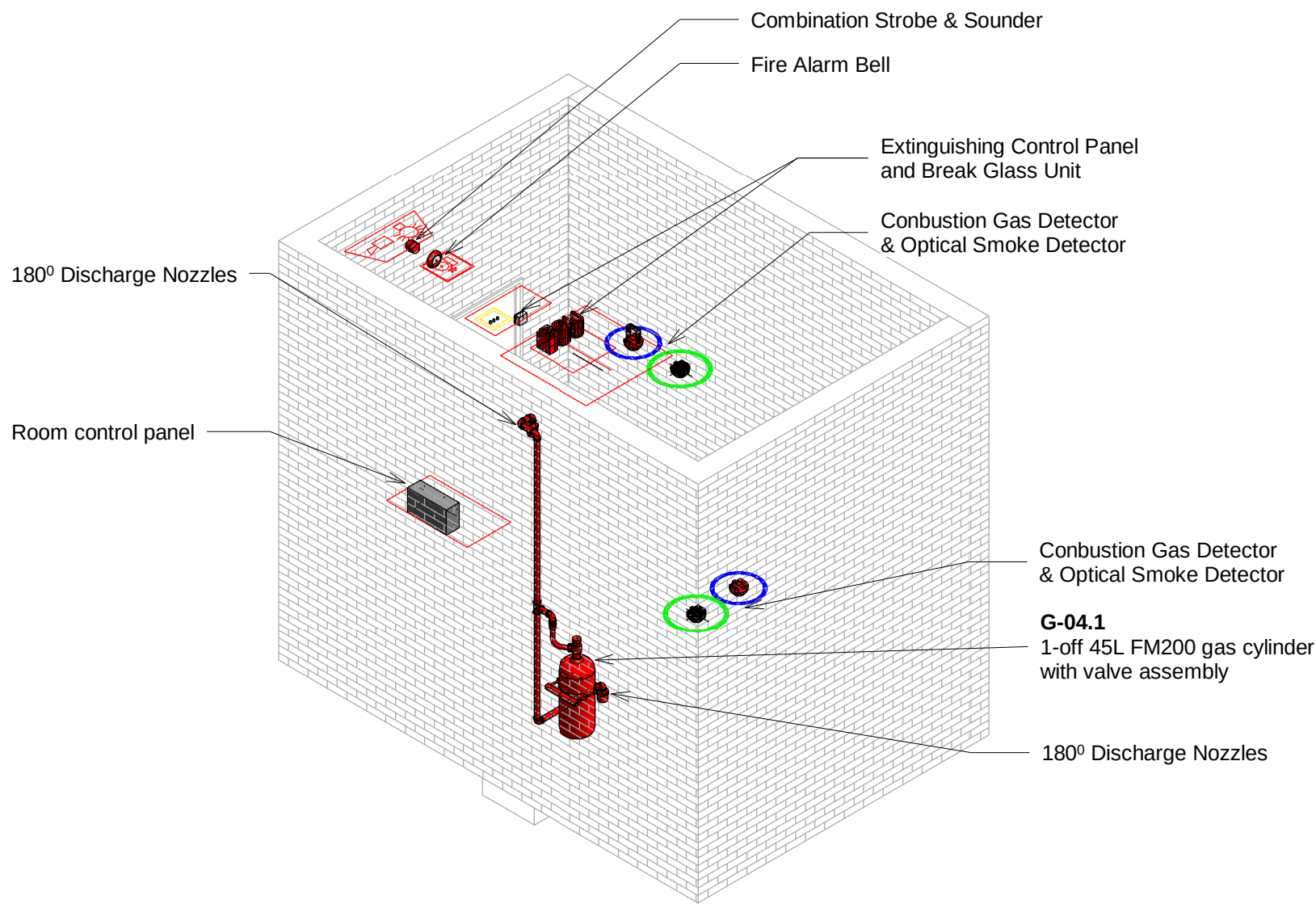
LEGEND	
	FM200 GAS CYLINDER
	360° NOZZLE
	180° NOZZLE
	PIPING (CEILING)
	PIPING (VOID)

FIRE DETECTION SYMBOLS	
(ACCORDING TO BS 1635 AND ISO 6790)	
PICTOGRAM	DESCRIPTION OF FIRE DETECTION SYSTEM COMPONENT
	FIRE ALARM CONTROL PANEL
	GAS CONTROL PANEL
	EXTINGUISHANT CONTROL PANEL
	REPEAT DISPLAY UNIT
	MANUAL CALL POINT: TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	MANUAL TRIGGERING DEVICE: TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	COMBUSTION GAS DETECTOR LOCATED ON WALLS/CEILING/SLAB SOFFIT.
	OPTICAL SMOKE DETECTOR
	HEAT DETECTOR - FIXED TEMPERATURE
	HEAT DETECTOR - RATE OF RISE
	IONIZATION SMOKE DETECTOR
	STROBE LIGHT
	SOUNDER
	COMBINATION STROBE & SOUNDER
	FIRE ALARM BELL

1 04 - CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - TRANSFORMER BAY PLANT 2
1 : 50



2 Section 4
1 : 50



3 04 CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - 3D

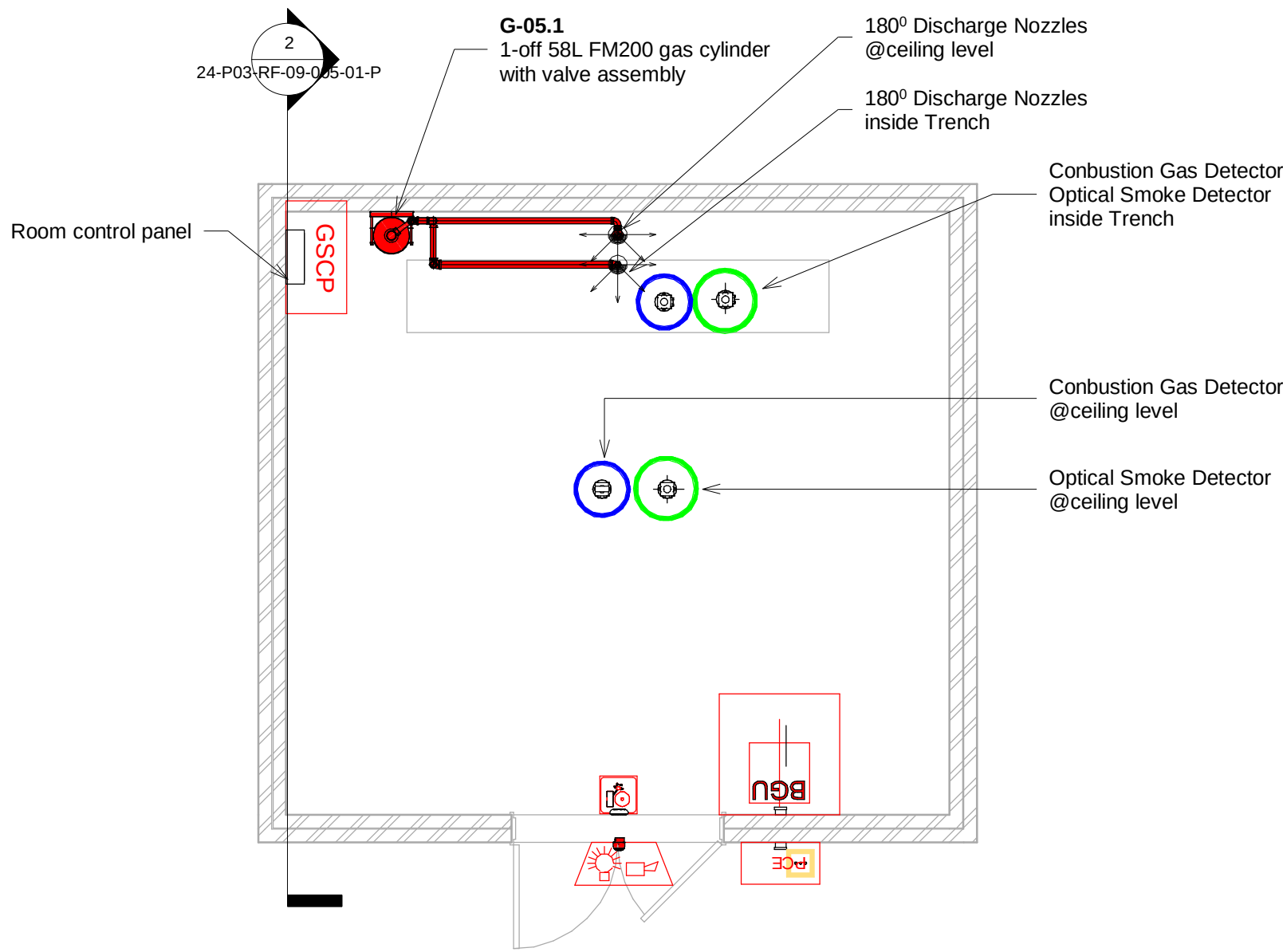
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					NO	DESCRIPTION	DATE	DRAWN	CHECKED	scope:	FIRE PROTECTION			
	reference drawings:	architectural:	1.	-	A	ISSUED FOR INFORMATION & APPROVAL	18-06-2024	MH	NM	drawing title:	CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - TRANSFORMER BAY PLANT 2			
		structural:	1.	-										
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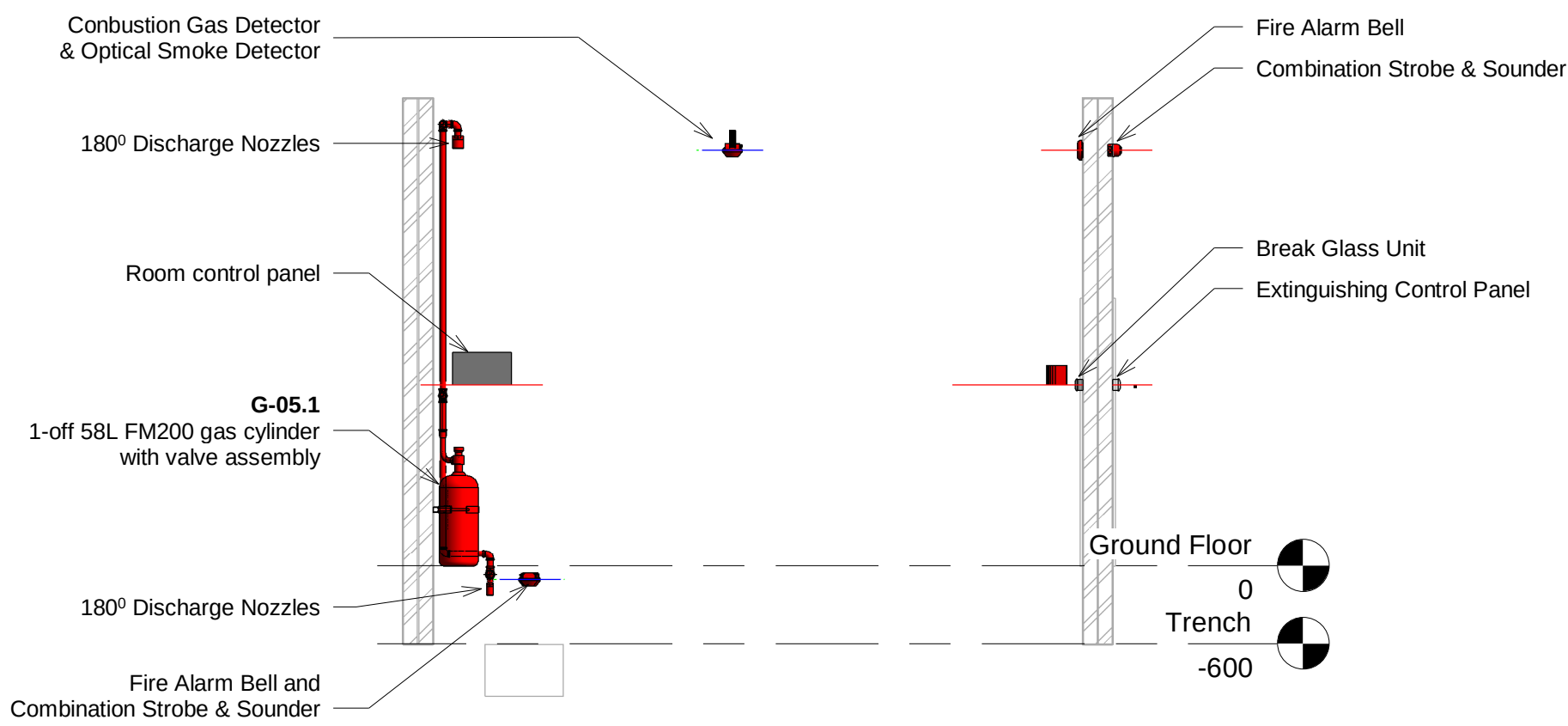
CLEAN AGENT GAS CYLINDERS SCHEDULE					
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G-05.1	MCC Room 1	75.09	FM200	58L	1 - off

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	FM200 GAS CYLINDER
	360° NOZZLE
	180° NOZZLE
	PIPING (CEILING)
	PIPING (VOID)

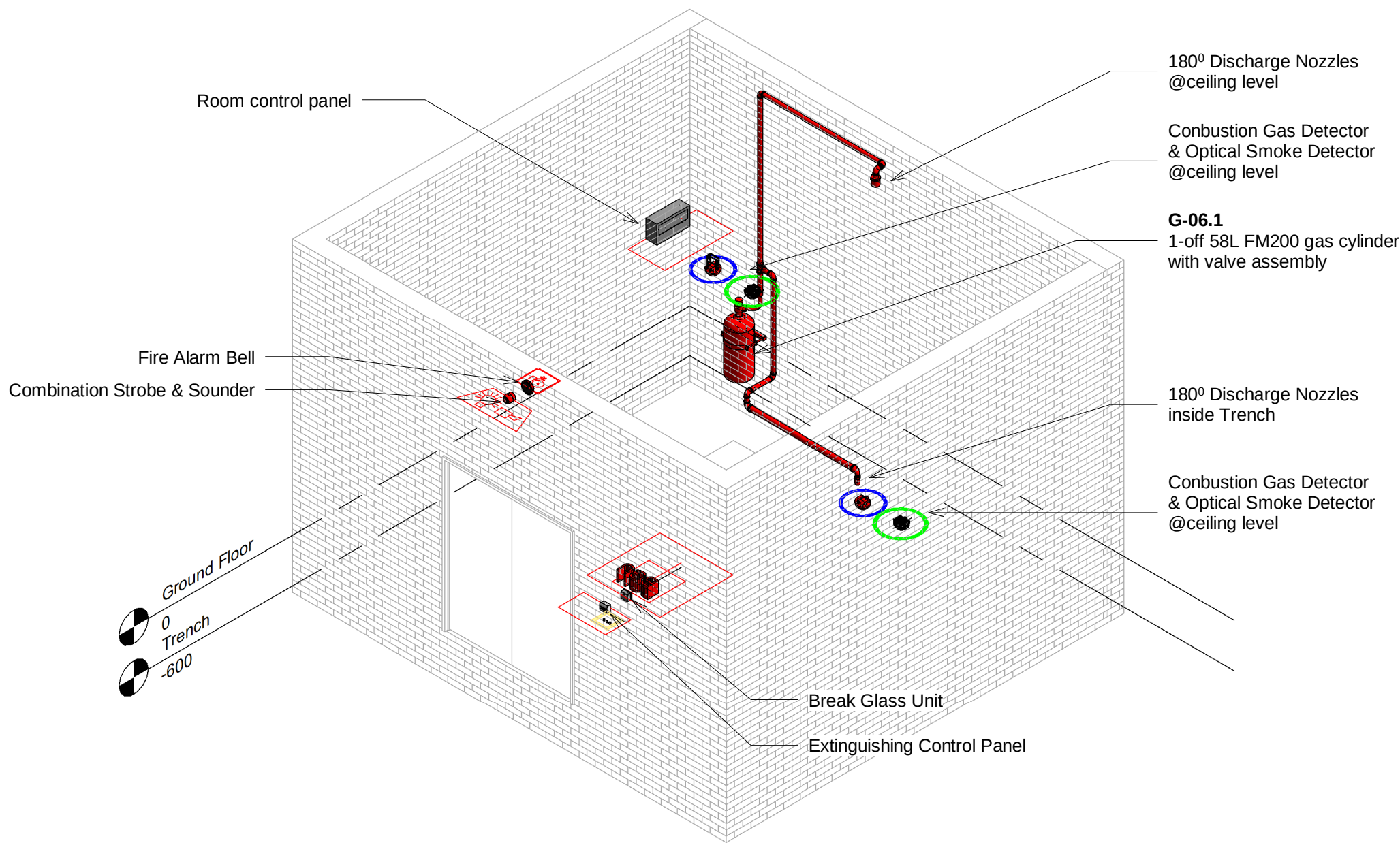
FIRE DETECTION SYMBOLS	
(ACCORDING TO BS 1635 AND ISO 6790)	
PICTOGRAM	DESCRIPTION OF FIRE DETECTION SYSTEM COMPONENT
	FIRE ALARM CONTROL PANEL
	GAS CONTROL PANEL
	EXTINGUISHANT CONTROL PANEL
	REPEAT DISPLAY UNIT
	MANUAL CALL POINT: TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	MANUAL TRIGGERING DEVICE: TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	COMBUSTION GAS DETECTOR LOCATED ON WALLS/CEILING/SLAB SOFFIT.
	OPTICAL SMOKE DETECTOR
	HEAT DETECTOR - FIXED TEMPERATURE
	HEAT DETECTOR - RATE OF RISE
	IONIZATION SMOKE DETECTOR
	STROBE LIGHT
	SOUNDER
	COMBINATION STROBE & SOUNDER
	FIRE ALARM BELL



1 05 - CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - MMC ROOM 1 PLANT 2D
1 : 50



2 Section 5
1 : 50



3 05 CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - 3D

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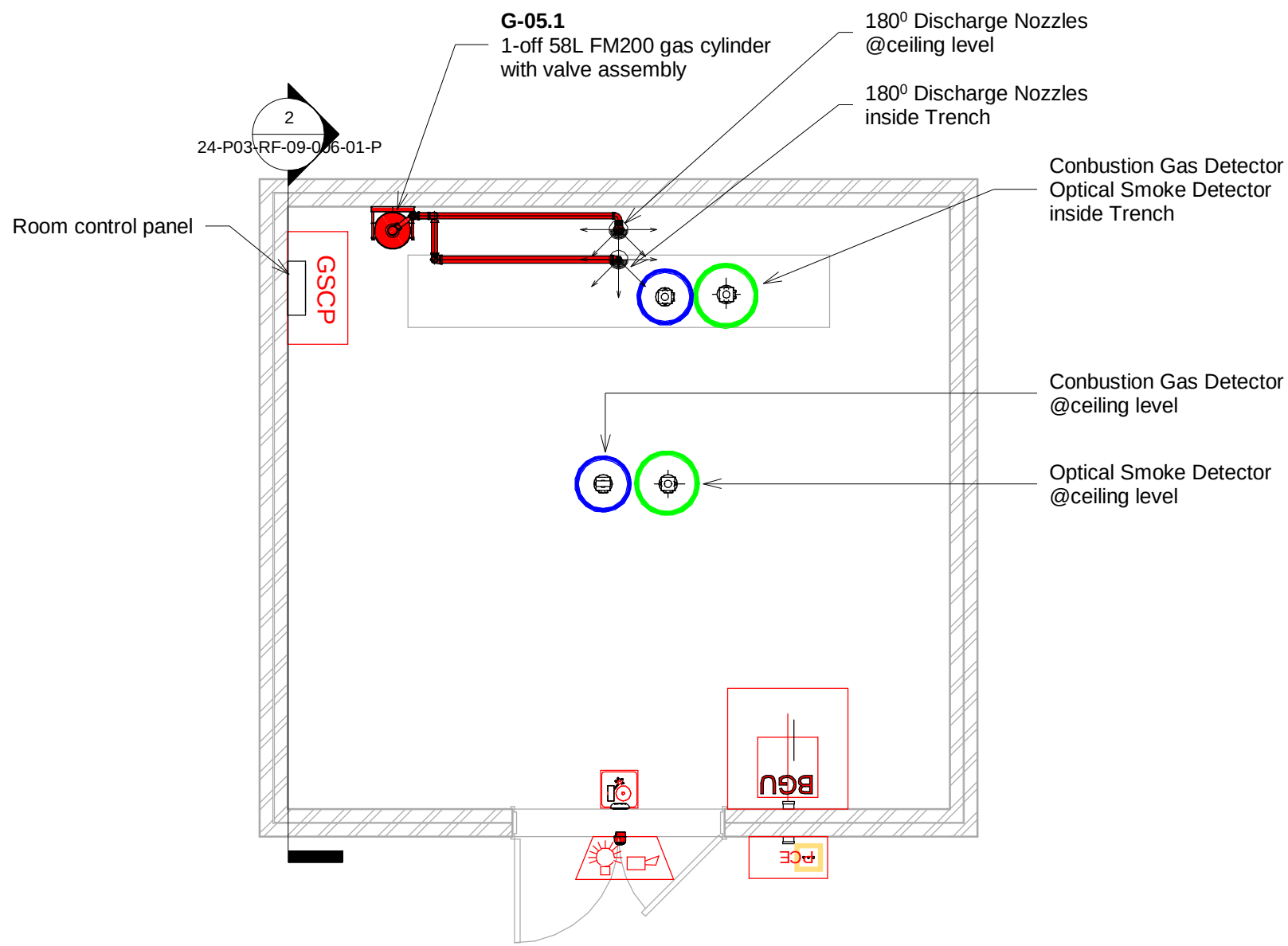
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									NO		DESCRIPTION		DATE		DRAWN		CHECKED		scope:		FIRE PROTECTION																						
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reference drawings:		architectural:		1.																				design:		NM		signature:				scale:		AS SHOWN		RVT #:		24-P03-RF-09-005-01-P		A		rev:	
				2.		-																		pr eng/ tech no.:		20110298		date:		17-05-2024													
		structural:		1.		-																																					
				2.		-																																					

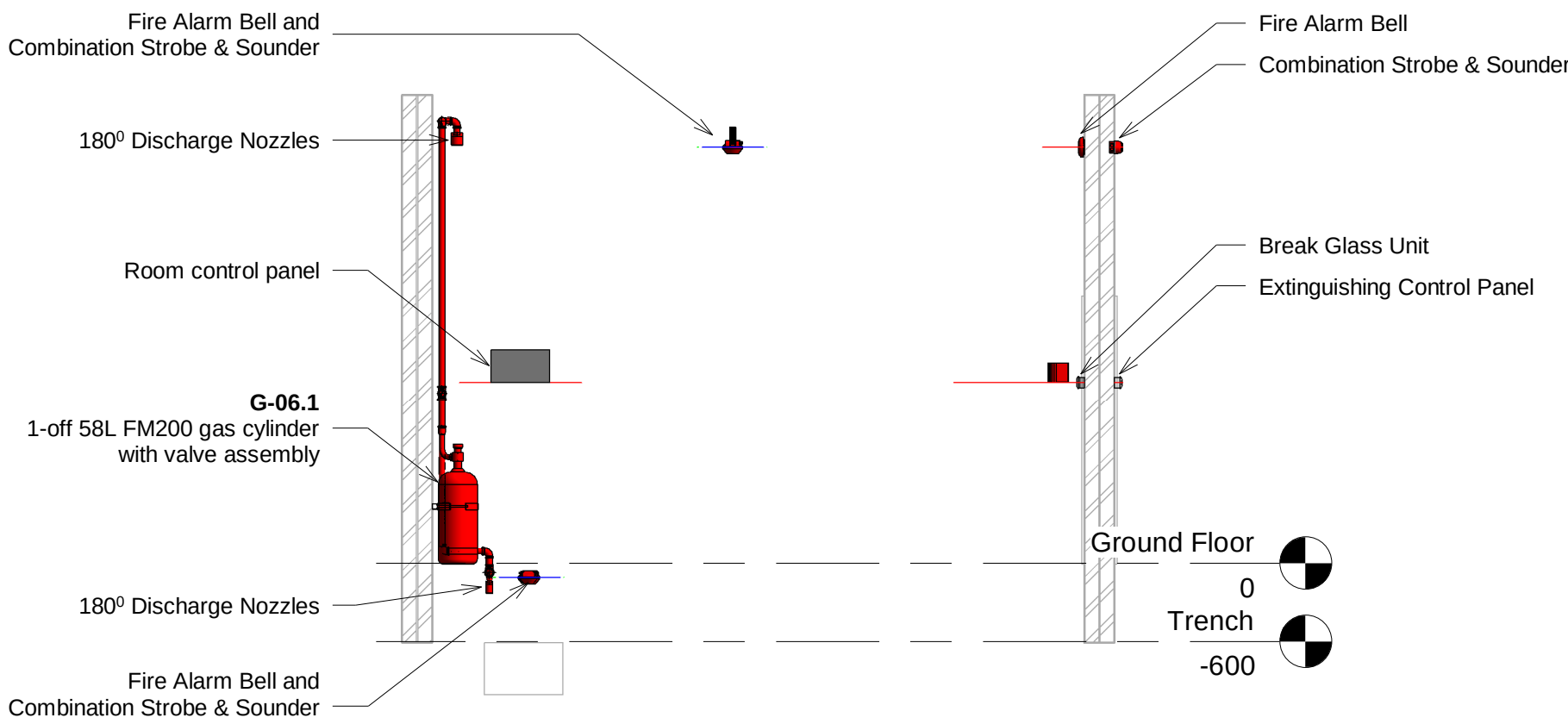
CLEAN AGENT GAS CYLINDERS SCHEDULE					
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G-06.1	MCC Room 2	75.09	FM200	58L	1 - off

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	FM200 GAS CYLINDER
	360° NOZZLE
	180° NOZZLE
	PIPING (CEILING)
	PIPING (VOID)

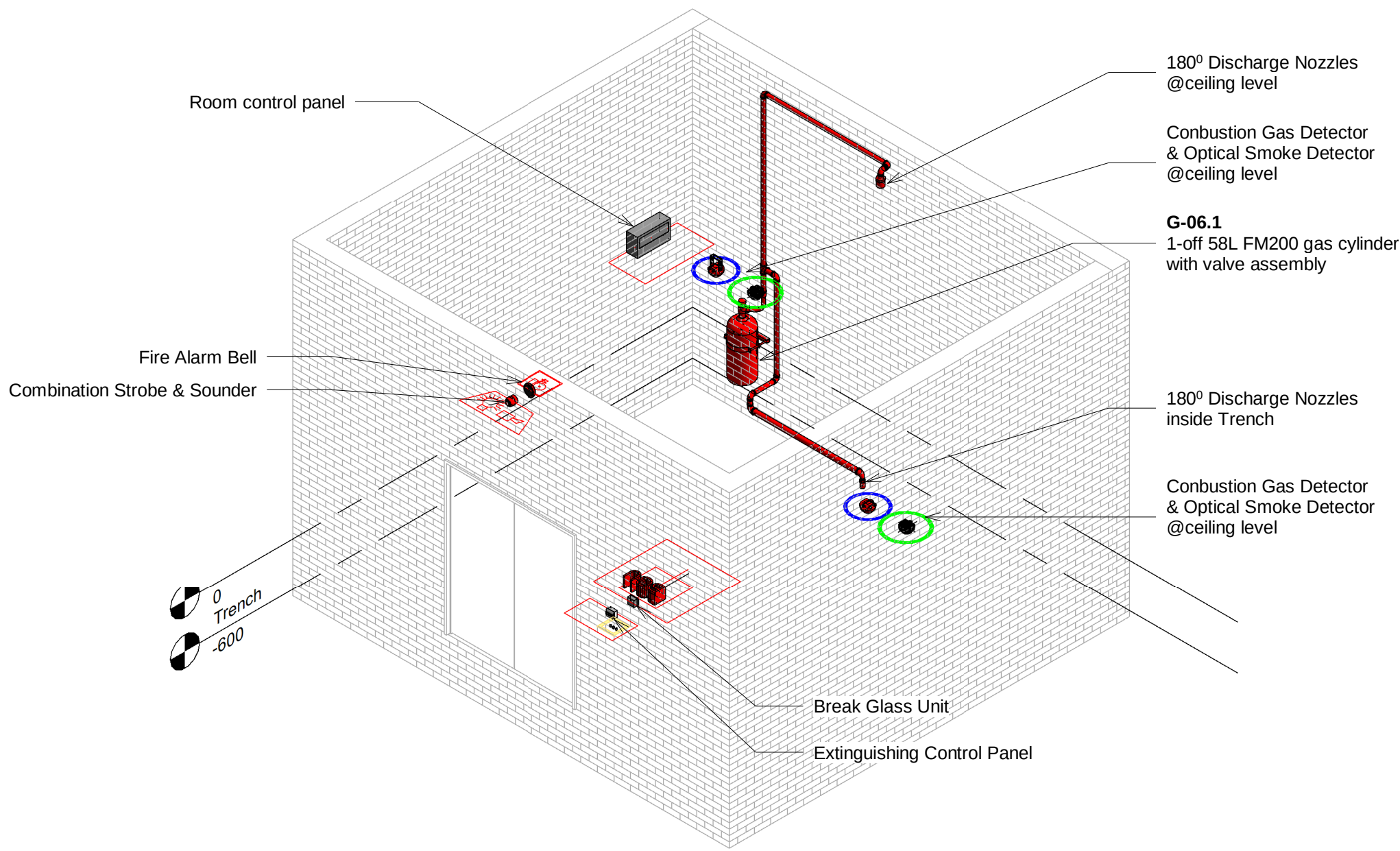
FIRE DETECTION SYMBOLS	
(ACCORDING TO BS 1635 AND ISO 6790)	
PICTOGRAM	DESCRIPTION OF FIRE DETECTION SYSTEM COMPONENT
	FIRE ALARM CONTROL PANEL
	GAS CONTROL PANEL
	EXTINGUISHANT CONTROL PANEL
	REPEAT DISPLAY UNIT
	MANUAL CALL POINT: TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	MANUAL TRIGGERING DEVICE: 4x4 DRAWBOX AT 1400 ± 200mm AFFL WITH Ø25mm CONDUIT TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	COMBUSTION GAS DETECTOR LOCATED ON WALLS/CEILING/SLAB SOFFIT.
	OPTICAL SMOKE DETECTOR
	HEAT DETECTOR - FIXED TEMPERATURE
	HEAT DETECTOR - RATE OF RISE
	IONIZATION SMOKE DETECTOR
	STROBE LIGHT
	SOUNDER
	COMBINATION STROBE & SOUNDER
	FIRE ALARM BELL



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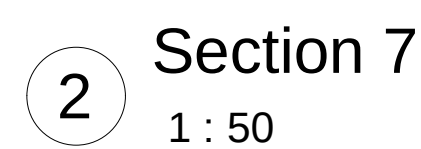
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3 06 CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - 3D

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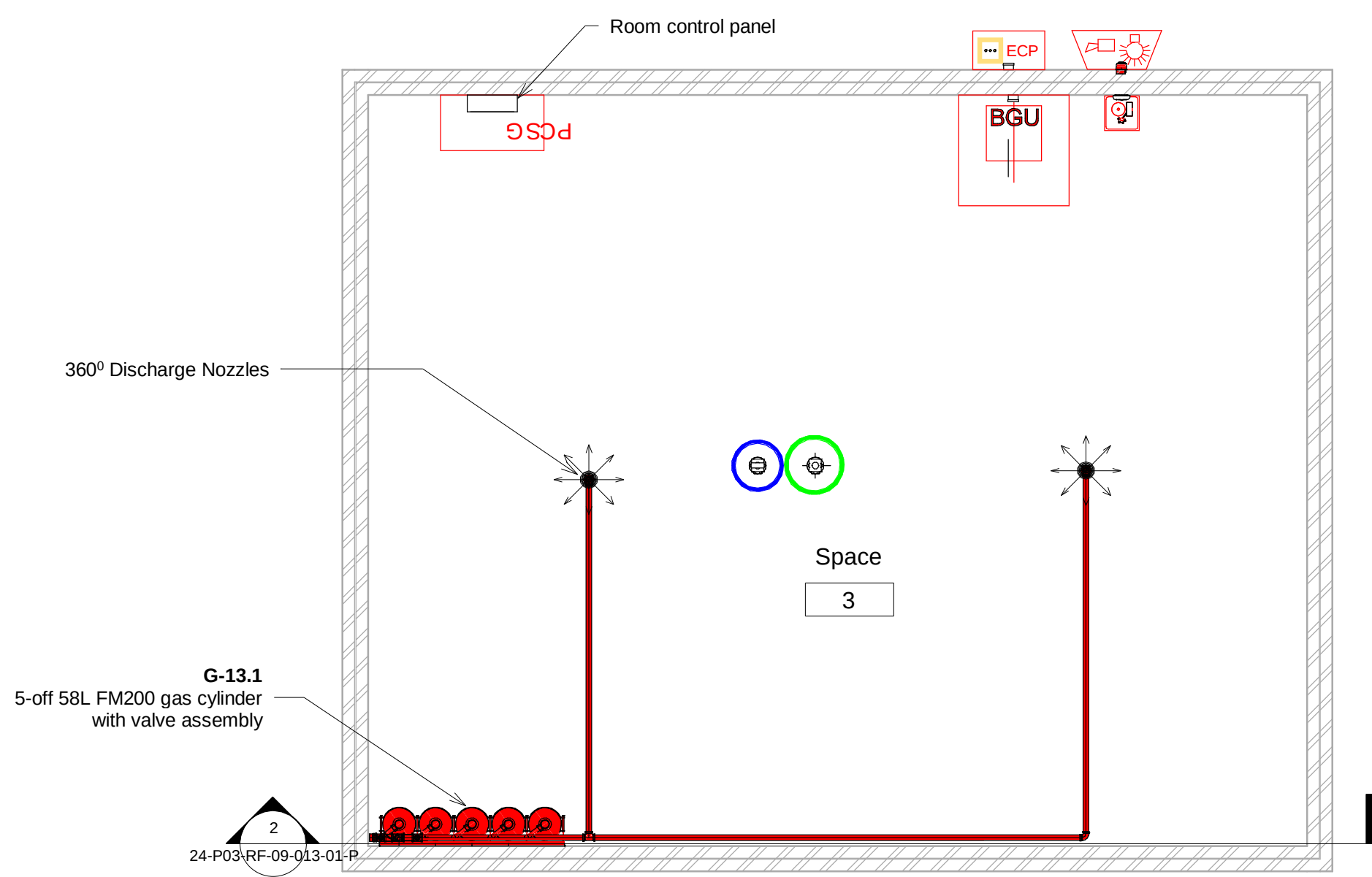
LEGEND	
	FM200 GAS CYLINDER
	360° NOZZLE
	180° NOZZLE
	PIPING (CEILING)
	PIPING (VOID)

FIRE DETECTION SYMBOLS	
(ACCORDING TO BS 1635 AND ISO 6790)	
PICTOGRAM	DESCRIPTION OF FIRE DETECTION SYSTEM COMPONENT
	FIRE ALARM CONTROL PANEL
	GAS CONTROL PANEL
	EXTINGUISHANT CONTROL PANEL
	REPEAT DISPLAY UNIT
	MANUAL CALL POINT: A44 DRAWBOX AT 3400 ± 200mm AFFL WITH 0.25mm CONDUIT TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	MANUAL TRIGGERING DEVICE: A44 DRAWBOX AT 3400 ± 200mm AFFL WITH 0.25mm CONDUIT TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	COMBUSTION GAS DETECTOR LOCATED ON WALLS/CEILING/S LAB SOFFIT.
	OPTICAL SMOKE DETECTOR
	HEAT DETECTOR - FIXED TEMPERATURE
	HEAT DETECTOR - RATE OF RISE
	IONIZATION SMOKE DETECTOR
	STROBE LIGHT
	SOUNDER
	COMBINATION STROBE & SOUNDER
	FIRE ALARM BELL

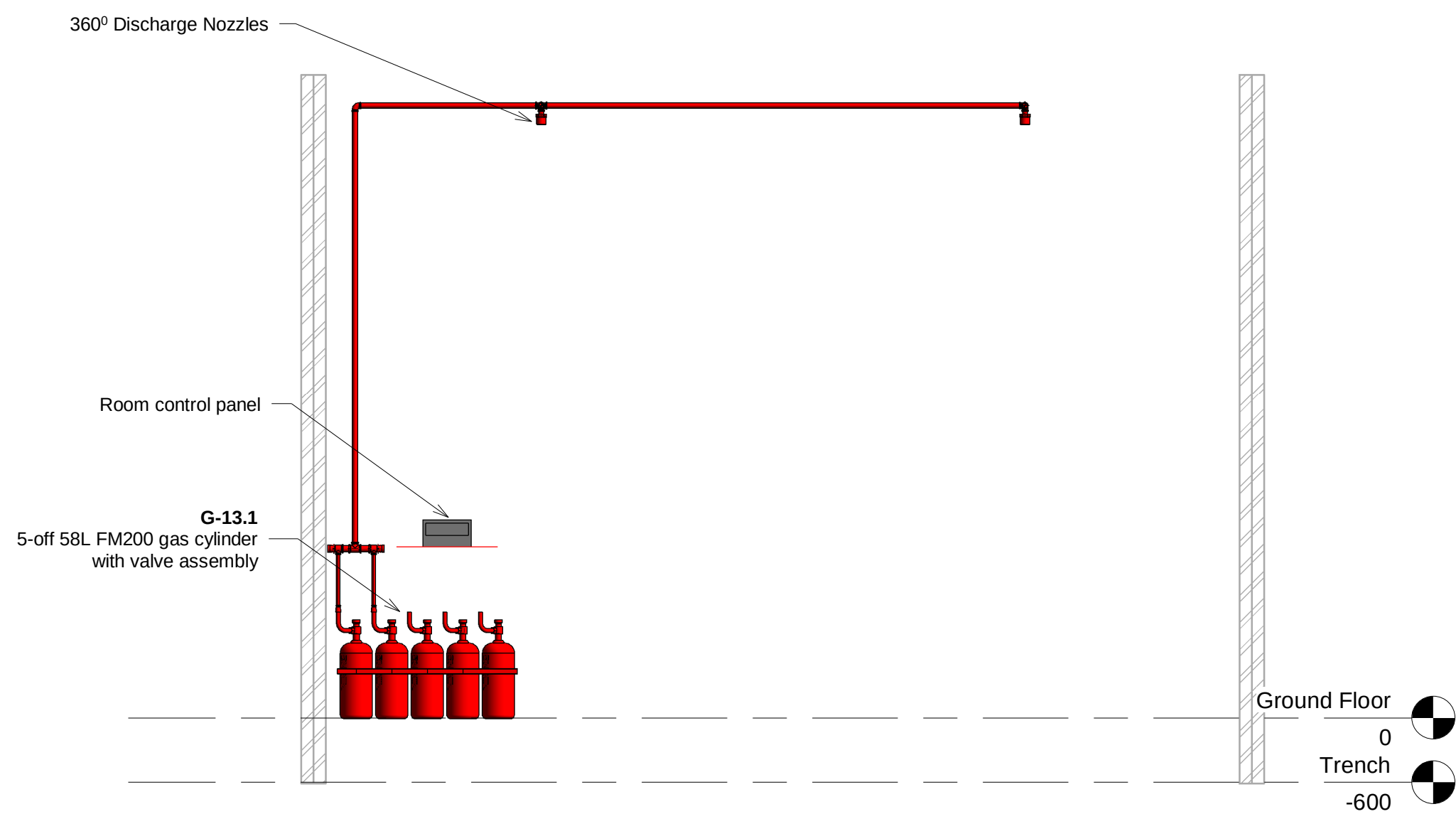


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1 13 - CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - SWITCH GEAR ROOM 1 PLANT 4 SUBSTATION
1 : 50

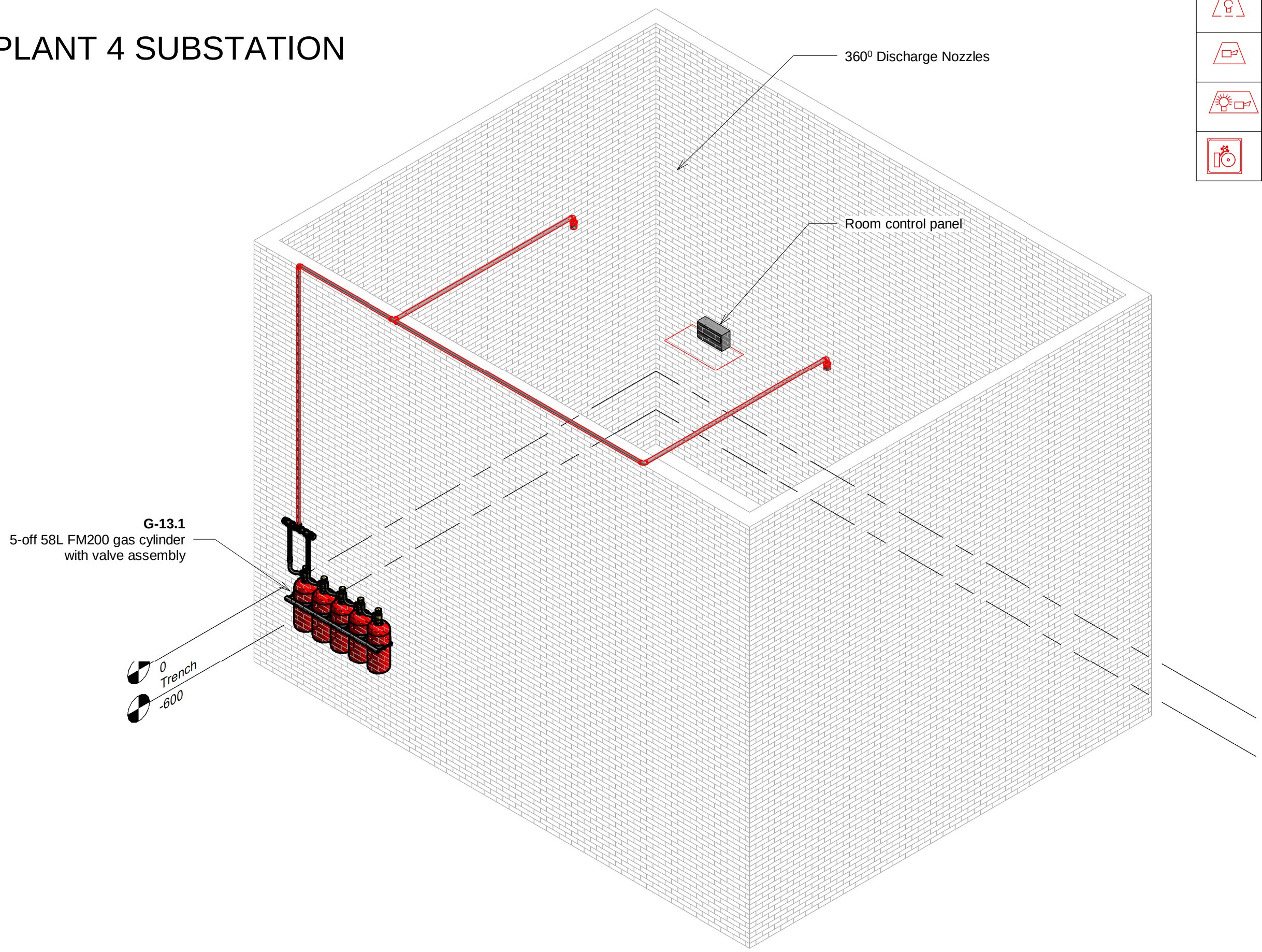


2 Section 13
1 : 50

CLEAN AGENT GAS CYLINDERS SCHEDULE					
TAG	ROOM NAME	VOLUME (m³)	AGENT	CYLINDER SIZE	NO. OF CYLINDERS
G-13.1	Switch Gear Room 1	335.24	FM200	58L	5 - off

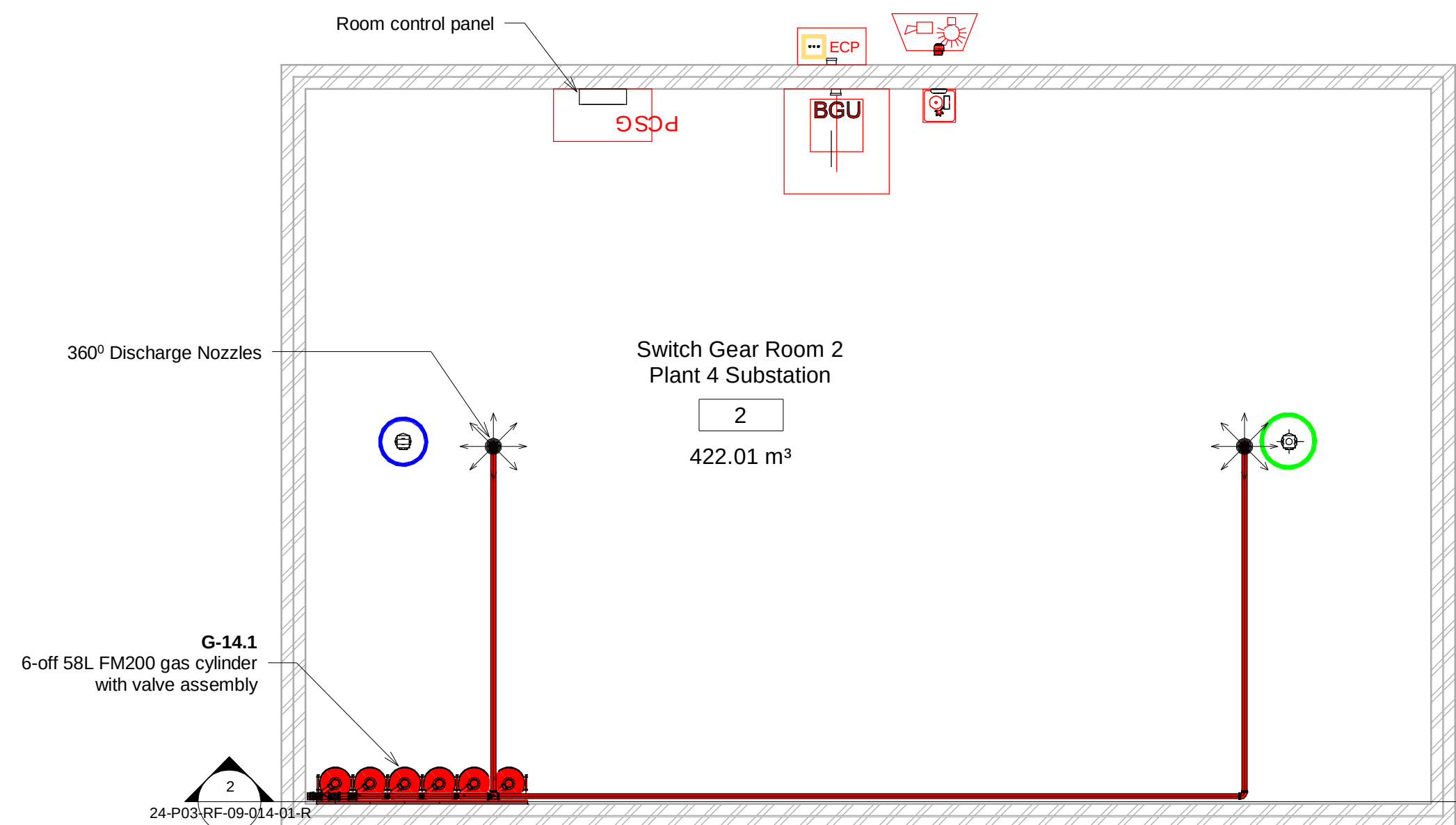
LEGEND	
	FM200 GAS CYLINDER
	360° NOZZLE
	180° NOZZLE
	PIPING (CEILING)
	PIPING (VOID)

FIRE DETECTION SYMBOLS	
(ACCORDING TO BS 1635 AND ISO 6790)	
	FIRE ALARM CONTROL PANEL
	GAS CONTROL PANEL
	EXTINGUISHANT CONTROL PANEL
	REPEAT DISPLAY UNIT
	MANUAL CALL POINT: TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	MANUAL TRIGGERING DEVICE: TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	COMBUSTION GAS DETECTOR LOCATED ON WALLS/CEILING/SLAB SOFFIT.
	OPTICAL SMOKE DETECTOR
	HEAT DETECTOR - FIXED TEMPERATURE
	HEAT DETECTOR - RATE OF RISE
	IONIZATION SMOKE DETECTOR
	STROBE LIGHT
	SOUNDER
	COMBINATION STROBE & SOUNDER
	FIRE ALARM BELL

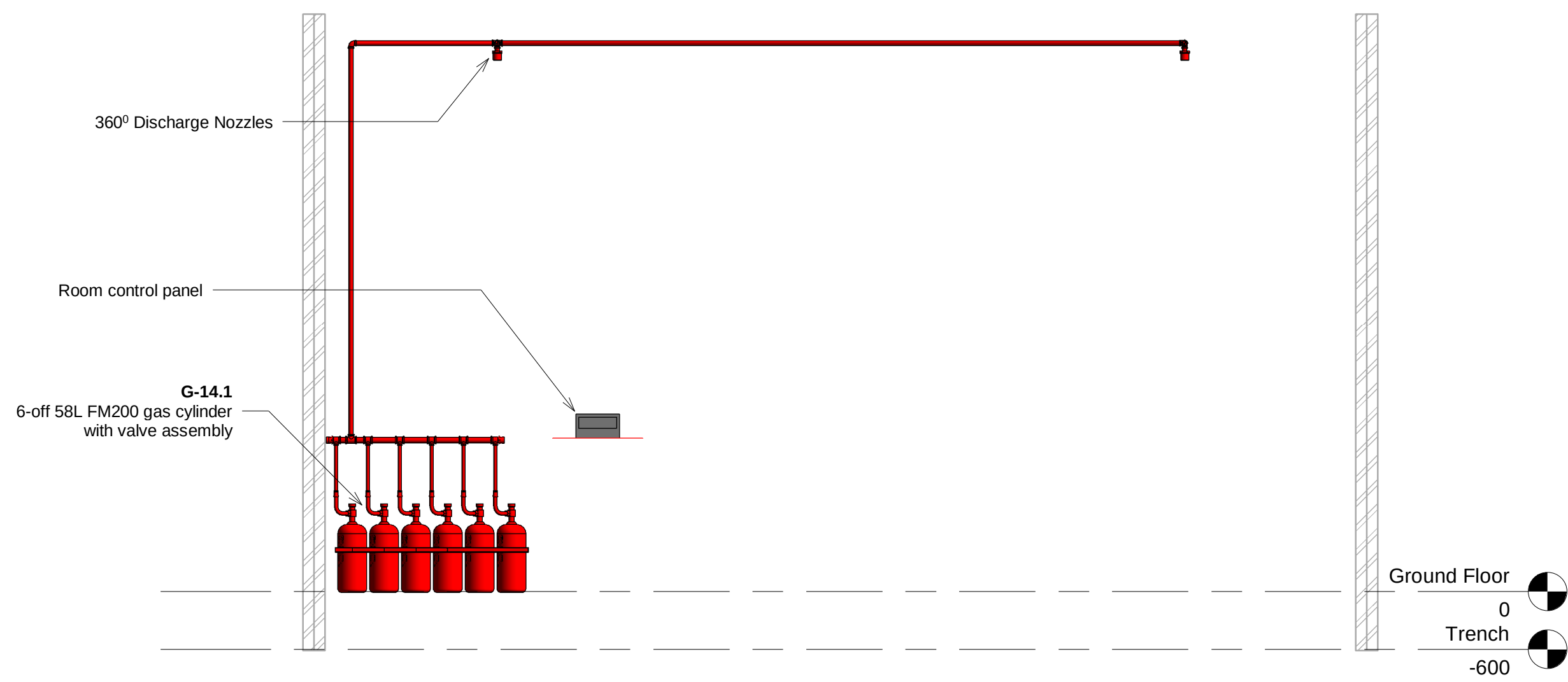


3 13 - CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - 3D

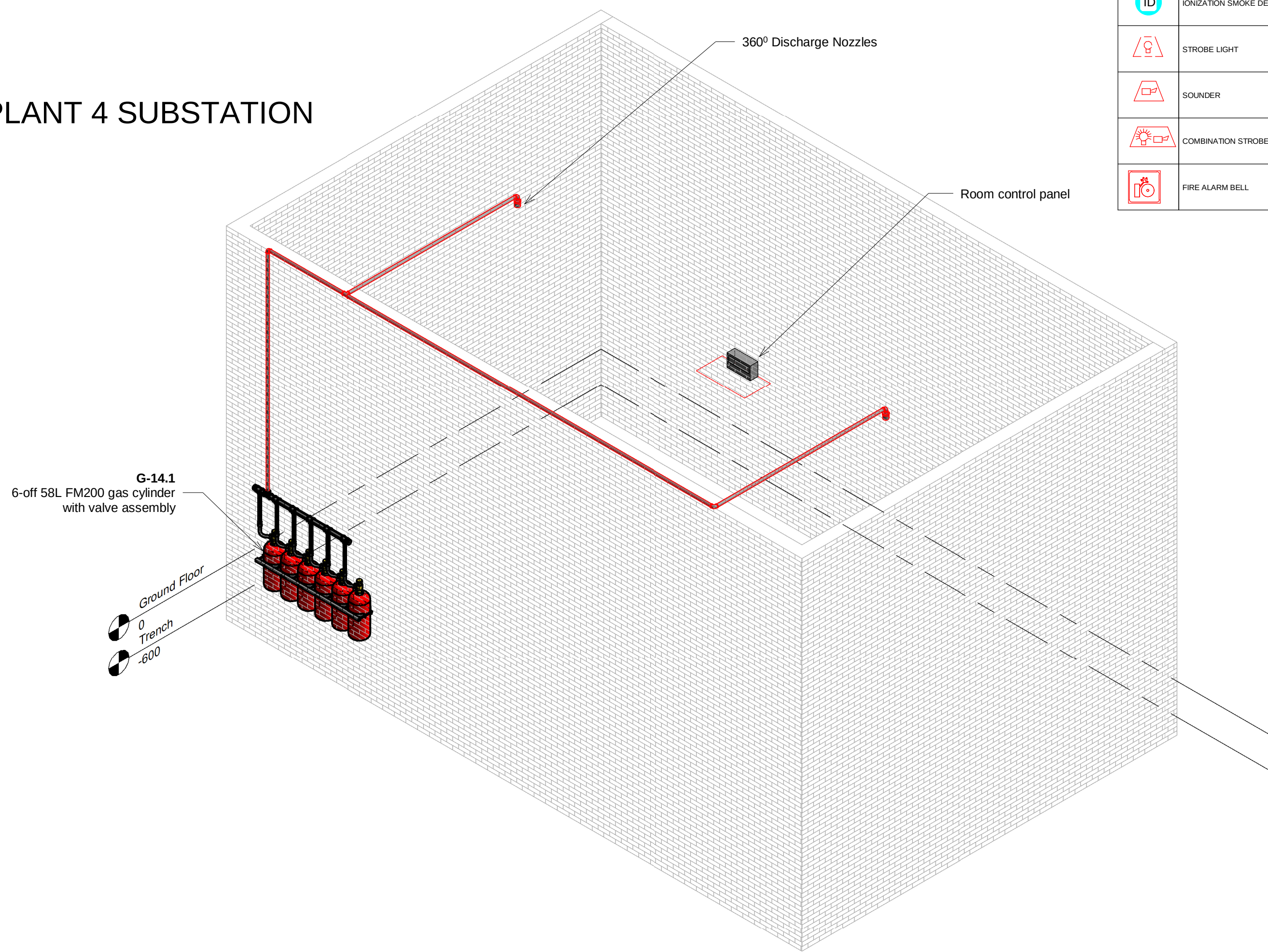
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									A	ISSUED FOR INFORMATION & APPROVAL		18-06-2024	MH	NM	drawing title: CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - SWITCH GEAR ROOM 1 PLANT 4 SUB								
reference drawings:		architectural:	1.							design: NM				signature: 		scale: AS SHOWN		RVT #:		24-P03-RF-09-013-01-P		A rev:	
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			2.																				
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1 14 - CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - SWITCH GEAR ROOM 2 PLANT 4 SUBSTATION
1 : 50



2 Section 14
1 : 50



3 14 CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - 3D

CLEAN AGENT GAS CYLINDERS SCHEDULE					
TAG	ROOM NAME	VOLUME (m³)	AGENT	CYLINDER SIZE	NO. OF CYLINDERS
G-14.1	Switch Gear Room 2	422.01	FM200	58L	6 - off

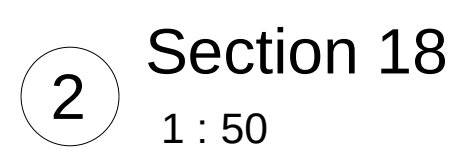
LEGEND	
	FM200 GAS CYLINDER
	360° NOZZLE
	180° NOZZLE
	PIPING (CEILING)
	PIPING (VOID)

FIRE DETECTION SYMBOLS	
(ACCORDING TO BS 1635 AND ISO 6790)	
PICTOGRAM	DESCRIPTION OF FIRE DETECTION SYSTEM COMPONENT
	FIRE ALARM CONTROL PANEL
	GAS CONTROL PANEL
	EXTINGUISHANT CONTROL PANEL
	REPEAT DISPLAY UNIT
	MANUAL CALL POINT: 4x4 DRAWBOX AT 1400 ± 200mm AFFL WITH Ø25mm CONDUIT TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	MANUAL TRIGGERING DEVICE: 4x4 DRAWBOX AT 1400 ± 200mm AFFL WITH Ø25mm CONDUIT TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	COMBUSTION GAS DETECTOR LOCATED ON WALLS/ CEILING/ SLAB SOFFIT.
	OPTICAL SMOKE DETECTOR
	HEAT DETECTOR - FIXED TEMPERATURE
	HEAT DETECTOR - RATE OF RISE
	IONIZATION SMOKE DETECTOR
	STROBE LIGHT
	SOUNDER
	COMBINATION STROBE & SOUNDER
	FIRE ALARM BELL

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	reference drawings:	architectural:	1. -	
		structural:	1. -	
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REVISION DESCRIPTION				
NO	DESCRIPTION	DATE	DRAWN	CHECKED
A	ISSUED FOR INFORMATION & APPROVAL	18-06-2024	MH	NM

project:	MAGALIES WATER VAALKOP PLANT FIRE SUPPRESSION			
scope:	MAGALIES WATER, VAALKOP, NORTH WEST			
drawing title:	CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - SWITCH GEAR ROOM 2 PLANT 4 SUB			
design:	NM	signature:		scale: AS SHOWN
pr engl tech no.:	20110298	date:	17-05-2024	size: A1
				RVT #:
				24-P03-RF-09-014-01-R
				A rev.

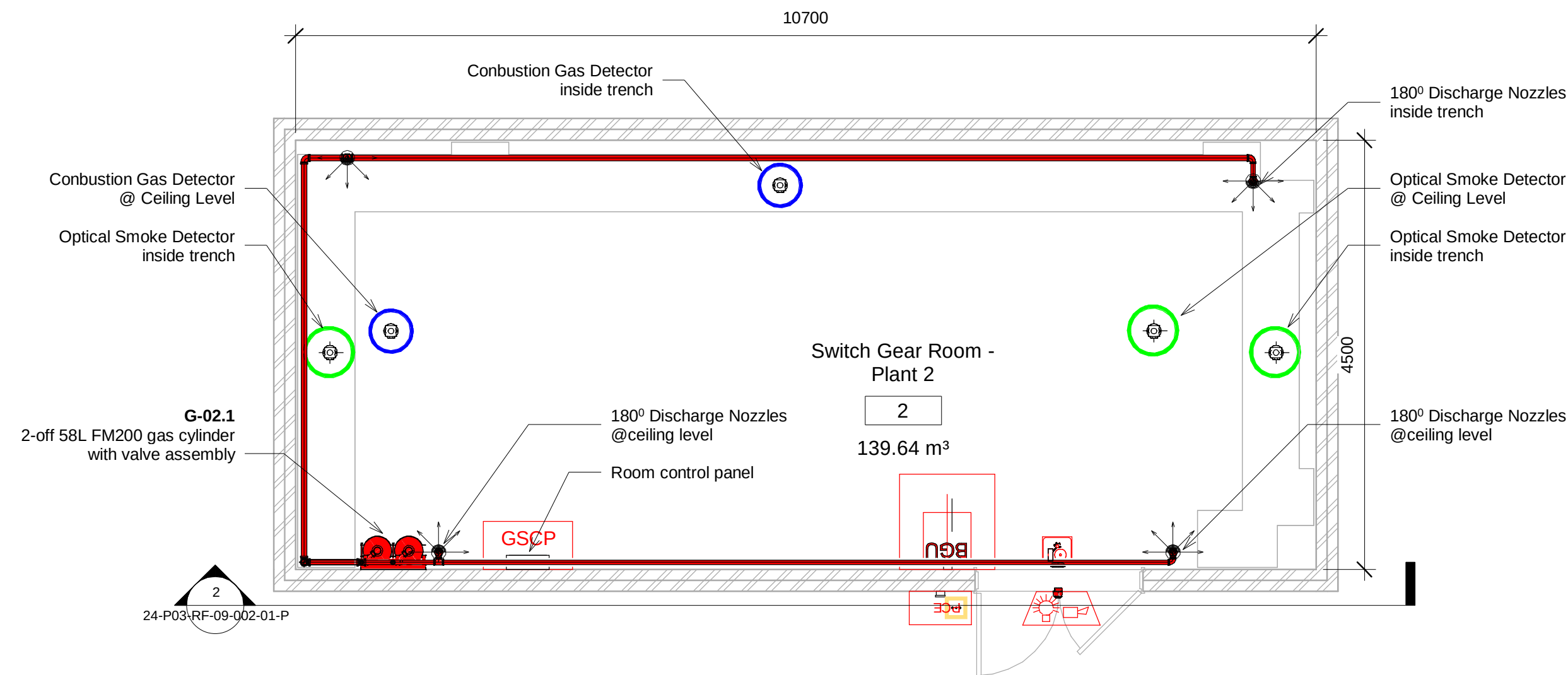


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	reference drawings:	architectural:	1.	This document including all design and information therein is Confidential Intellectual Property of Arquero Technical Support (Pty) Ltd. Copyright and all other rights are reserved by Arquero Technical Support (Pty) Ltd. This document may only be used for its intended purpose.					
			2.						-
		structural:	1.						-
			2.						-
	REVISIONS:								
	PROJECT DETAILS:								
	project: MAGALIES WATER VAALKOP PLANT FIRE SUPPRESSION MAGALIES WATER, VAALKOP, NORTH WEST								
	scope: FIRE PROTECTION								
drawing title: CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - CENTRALISED INLET WORKS PLANT4									
design: NM signature:  scale: AS SHOWN size: A1 RVT #: 24-P03-RF-09-018-01-P A rev:									

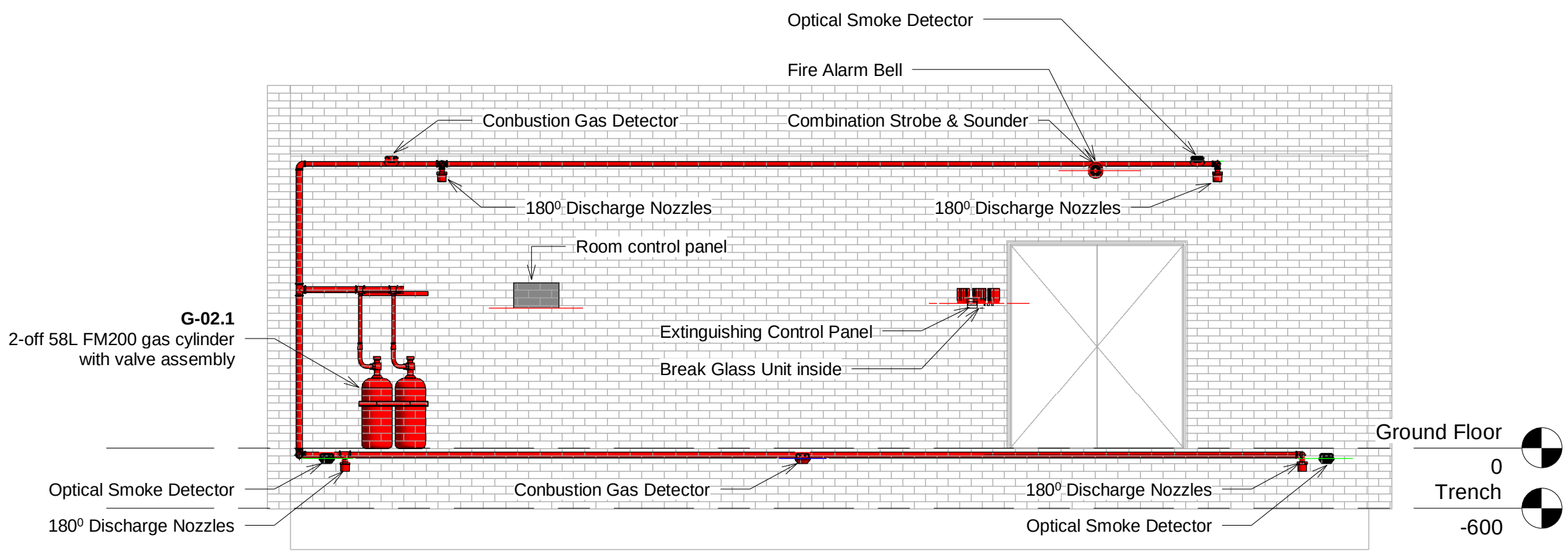
CLEAN AGENT GAS CYLINDERS SCHEDULE					
TAG	ROOM NAME	VOLUME (m³)	AGENT	CYLINDER SIZE	NO. OF CYLINDERS
G-02.1	Switch Gear Room	144.09	FM200	58L	2 - off

LEGEND	
	FM200 GAS CYLINDER
	360° NOZZLE
	180° NOZZLE
	PIPING (CEILING)
	PIPING (VOID)

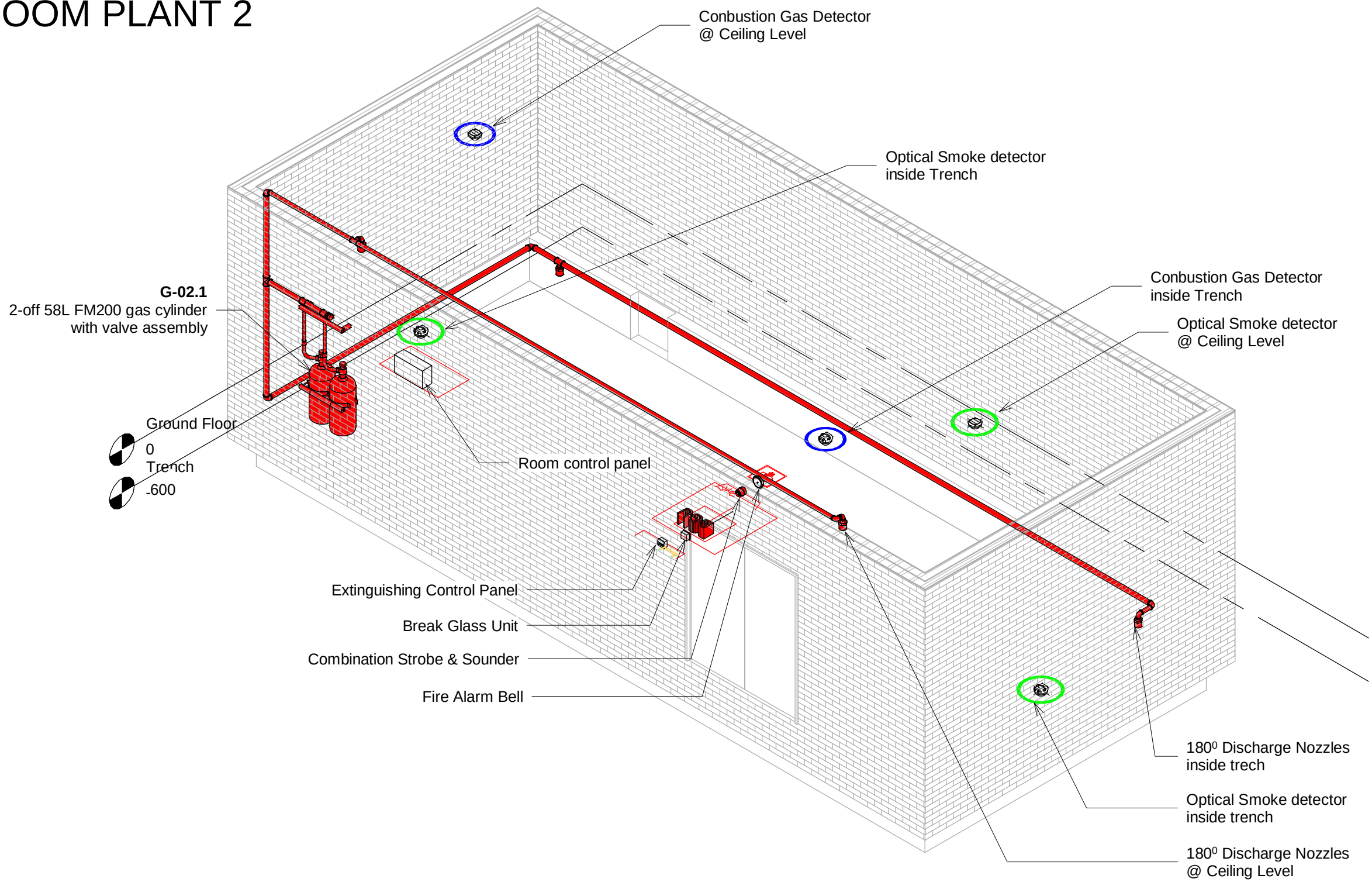
FIRE DETECTION SYMBOLS	
(ACCORDING TO BS 1635 AND ISO 6790)	
PICTOGRAM	DESCRIPTION OF FIRE DETECTION SYSTEM COMPONENT
	FIRE ALARM CONTROL PANEL
	GAS CONTROL PANEL
	EXTINGUISHANT CONTROL PANEL
	REPEAT DISPLAY UNIT
	MANUAL CALL POINT: TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	MANUAL TRIGGERING DEVICE: TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	COMBUSTION GAS DETECTOR LOCATED ON WALLS/CEILING/SLAB SOFFIT.
	OPTICAL SMOKE DETECTOR
	HEAT DETECTOR - FIXED TEMPERATURE
	HEAT DETECTOR - RATE OF RISE
	IONIZATION SMOKE DETECTOR
	STROBE LIGHT
	SOUNDER
	COMBINATION STROBE & SOUNDER
	FIRE ALARM BELL



1 02 - CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - SWITCH GEAR ROOM PLANT 2
1 : 50



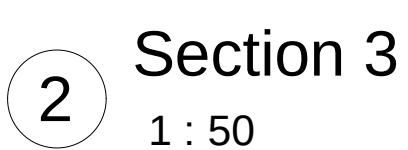
2 Section 2
1 : 50



3 02 CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - 3D

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					NO	DESCRIPTION	DATE	DRAWN	CHECKED	scope:	FIRE PROTECTION		
					A	ISSUED FOR INFORMATION & APPROVAL	18-06-2024	MH	NM	drawing title:	CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - SWITCH GEAR ROOM PLANT 2		
REVISIONS:	reference drawings:	architectural:	1.	-						design:	NM	signature:	
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		structural:	1.	-						scale:	AS SHOWN		
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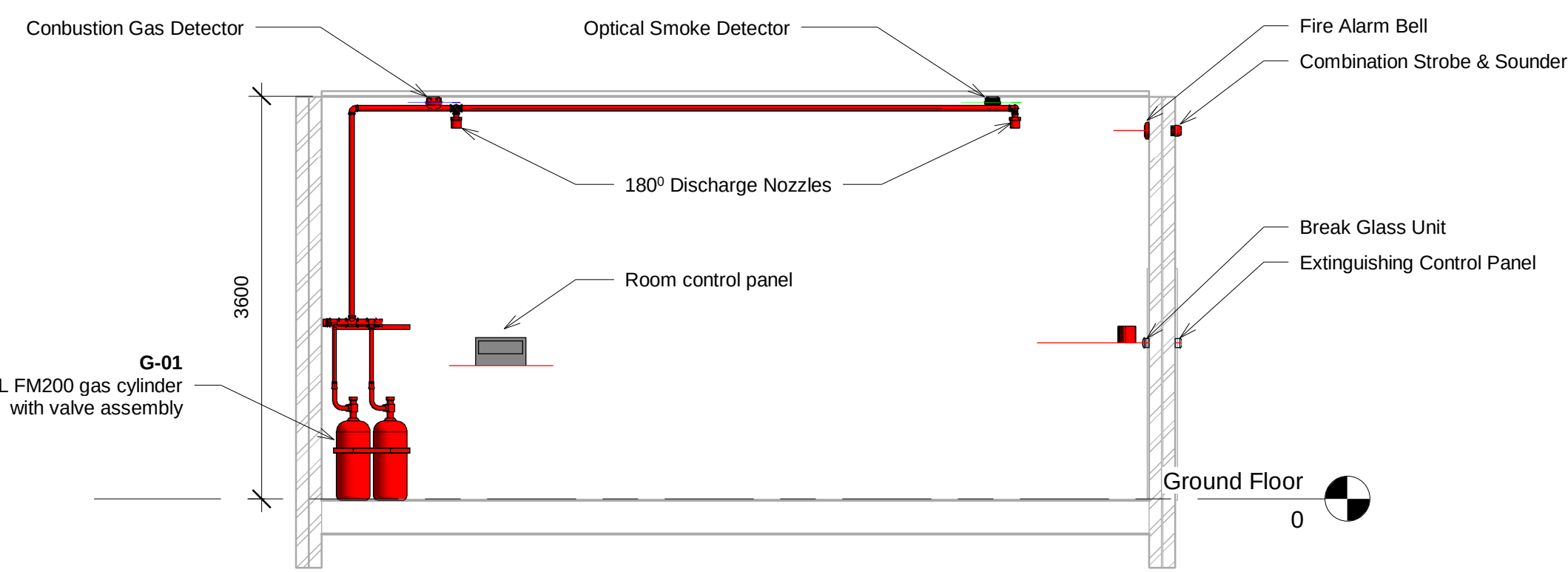


FIRE DETECTION SYMBOLS	
(ACCORDING TO BS 1635 AND ISO 6790)	
PICTOGRAM	DESCRIPTION OF FIRE DETECTION SYSTEM COMPONENT
	FIRE ALARM CONTROL PANEL
	GAS CONTROL PANEL
	EXTINGUISHANT CONTROL PANEL
	REPEAT DISPLAY UNIT
	MANUAL CALL POINT: 4x4 DRAW/BOX: AT 1400 ± 200mm AFFL WITH 325mm CONDUIT TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	MANUAL TRIGGERING DEVICE: 4x4 DRAW/BOX: AT 1400 ± 200mm AFFL WITH 325mm CONDUIT TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	COMBUSTION GAS DETECTOR LOCATED ON WALLS/ CEILING/ SLAB SOFFIT.
	OPTICAL SMOKE DETECTOR
	HEAT DETECTOR - FIXED TEMPERATURE
	HEAT DETECTOR - RATE OF RISE
	IONIZATION SMOKE DETECTOR
	STROBE LIGHT
	SOUNDER
	COMBINATION STROBE & SOUNDER
	FIRE ALARM BELL

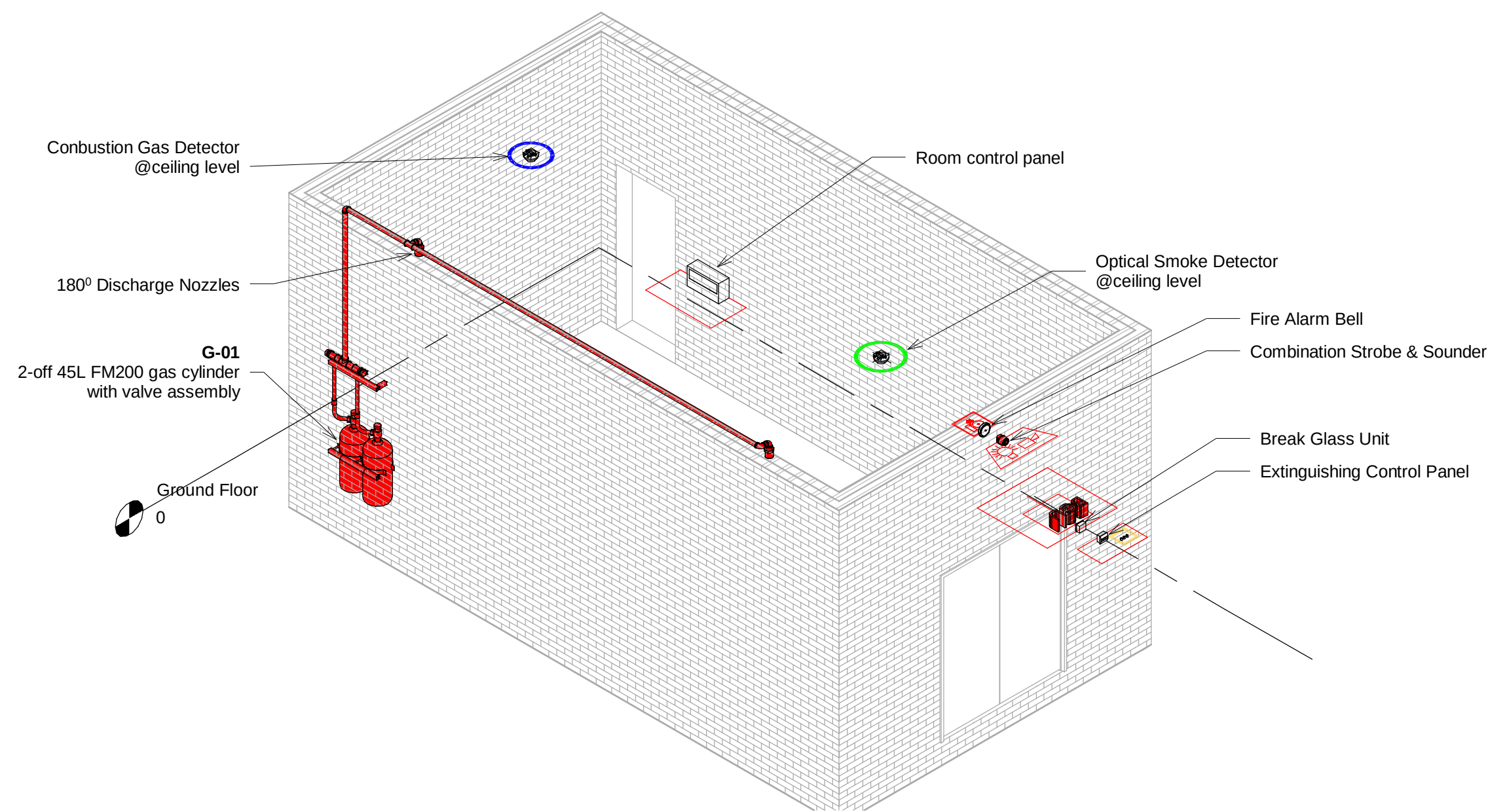


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1 01 - CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - VAALKOP WTW PLANT 1
1 : 50



2 Section 1
1 : 50



3 01 CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - 3D

CLEAN AGENT GAS CYLINDERS SCHEDULE					
TAG	ROOM NAME	VOLUME (m³)	AGENT	CYLINDER SIZE	NO. OF CYLINDERS
G-01	Vaalkop WTW Plant 1	160.56	FM200	45L	2 - off

LEGEND	
	FM200 GAS CYLINDER
	360° NOZZLE
	180° NOZZLE
	PIPING (CEILING)
	PIPING (VOID)

FIRE DETECTION SYMBOLS	
(ACCORDING TO BS 1635 AND ISO 6790)	
PICTOGRAM	DESCRIPTION OF FIRE DETECTION SYSTEM COMPONENT
	FIRE ALARM CONTROL PANEL
	GAS CONTROL PANEL
	EXTINGUISHANT CONTROL PANEL
	REPEAT DISPLAY UNIT
	MANUAL CALL POINT: 4x4 DRAWBOX AT 1400 ± 200mm AFFL WITH Ø25mm CONDUIT TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	MANUAL TRIGGERING DEVICE: 4x4 DRAWBOX AT 1400 ± 200mm AFFL WITH Ø25mm CONDUIT TO BE SUPPLIED BY SITE ELECTRICIAN AT POSITIONS INDICATED ON DRAWING
	COMBUSTION GAS DETECTOR LOCATED ON WALLS/CEILING/SLAB SOFFIT.
	OPTICAL SMOKE DETECTOR
	HEAT DETECTOR - FIXED TEMPERATURE
	HEAT DETECTOR - RATE OF RISE
	IONIZATION SMOKE DETECTOR
	STROBE LIGHT
	SOUNDER
	COMBINATION STROBE & SOUNDER
	FIRE ALARM BELL

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					NO	DESCRIPTION	DATE	DRAWN	CHECKED	scope:	FIRE PROTECTION		
					A	ISSUED FOR INFORMATION & APPROVAL	18-06-2024	MH	NM	drawing title:	CLEAN AGENT GAS FIRE SUPPRESSION LAYOUT - VAALKOP WTW PLANT 1		
REVISIONS:	reference drawings:	architectural:	1.	-						design:	NM	signature:	
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