



FIRE SERVICES DESIGN SUMMARY SCHEDULE				
1 OCCUPANCY INFORMATION				
1.1 FLOOR AREA:	1125	m²	OCCUPIED	
1.2 OCCUPANCY CLASS:	G1		OFFICE	
1.3 POPULATION:	1/ SEAT	161	NUMBER OF PEOPLE	
1.4 ROUTES OF ESCAPE required:	1-off 873mm, 1-off 1449mm & 1-off 1065mm wide			
2 FIRE PROTECTION EQUIPMENT				
2.1 FIRE HYDRANT:	1/ 1000	m² = 1	REQUIRED, 90 METERS APART	
2.2 FIRE HOSE REEL:	1/ 500	m² = 2	REQUIRED, WITH 30 METER LONG HOSES	
2.3 EXTINGUISHERS:	1/ 200	m² = 6	REQUIRED, 4.5 KG DCP TYPE	
2.4 SPRINKLER PROTECTIONS:	NO	NOT REQUIRED		
3 RELATED SERVICES				
3.1 FIRE DETECTION:	YES	THROUGHOUT THE BUILDING IN ACCORDANCE WITH SANS 10139:2012 (Category L1)		
3.2 SMOKE VENTILATION:	NO	COMPARTMENTALISED		

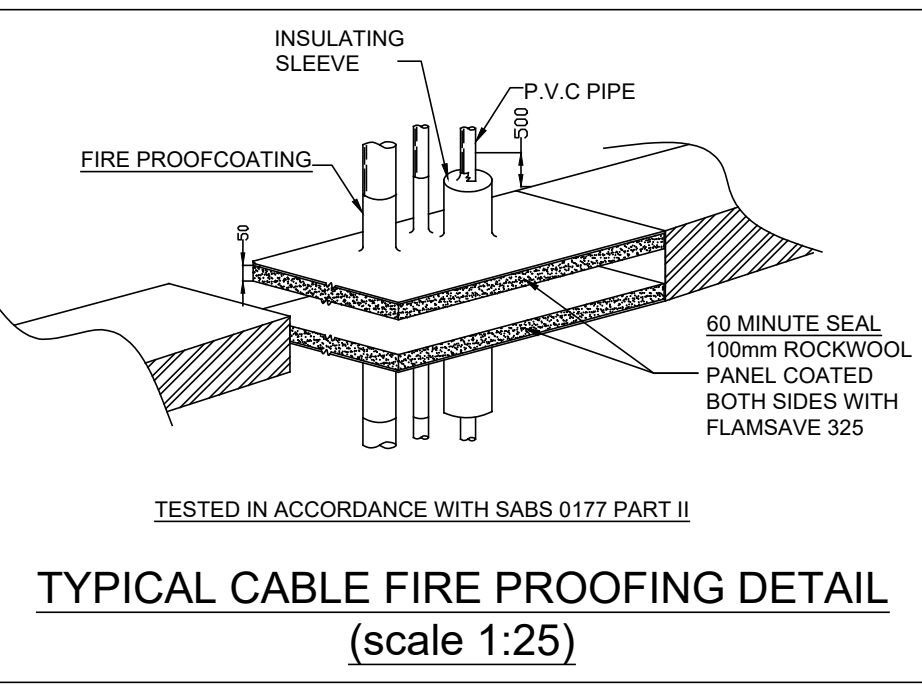
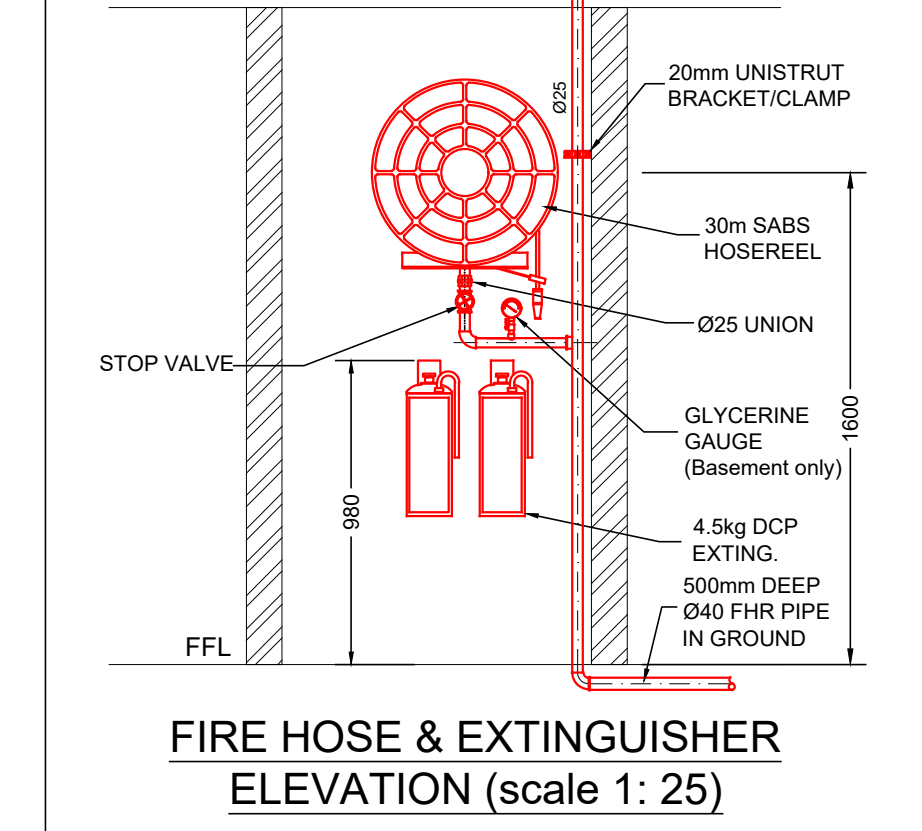
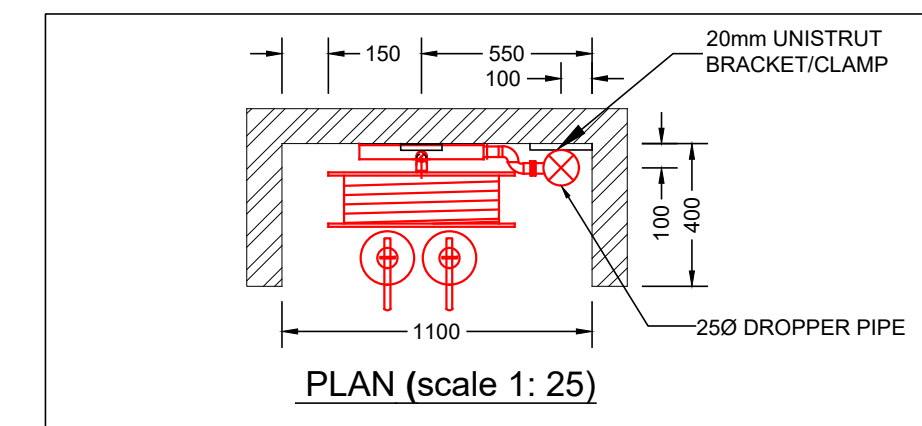
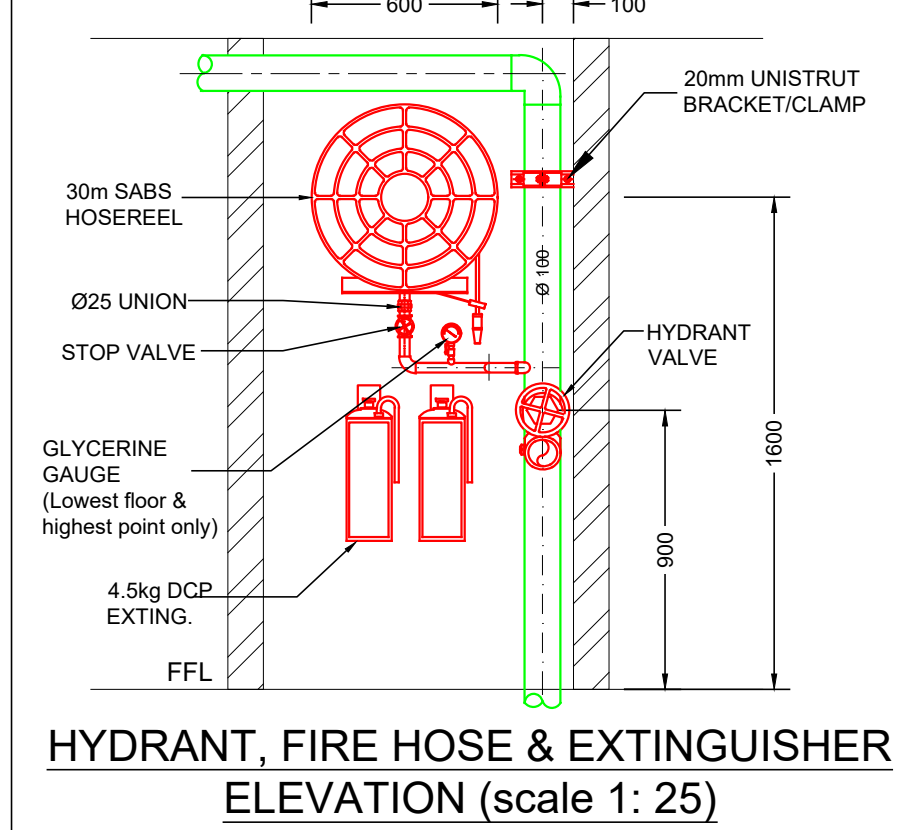
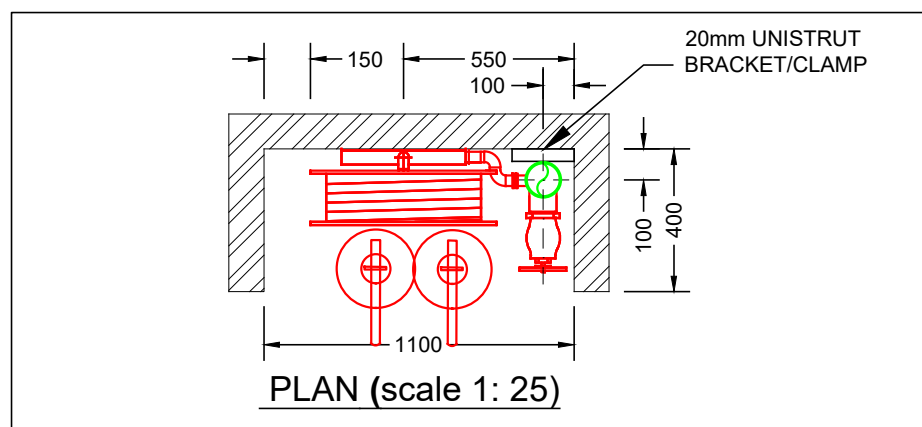
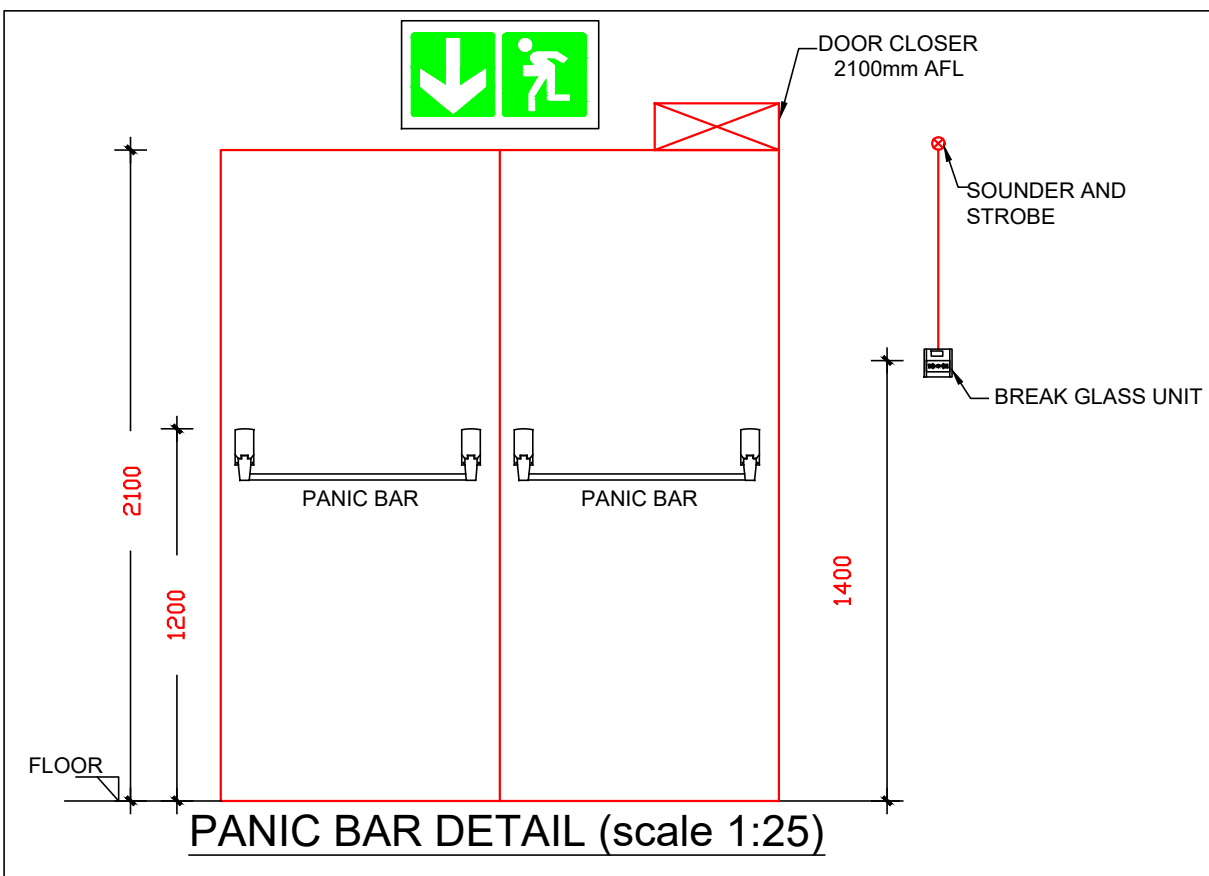
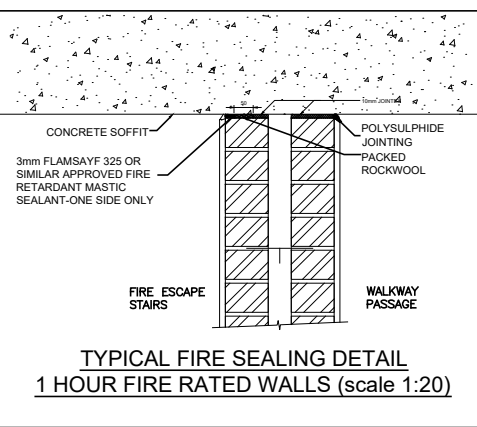
- SCOPE OF WORKS CLARIFICATION**
- A. FIRE CONTRACTOR
- SERVICE AND RE-USE EXISTING FIRE EXTINGUISHERS AND 2-OFF FIRE HOSE REELS.
  - SUPPLY & INSTALL NEW FIRE FIGHTING EQUIPMENT AS INDICATED ON PLAN.
  - SUPPLY & INSTALL NEW FIRE SIGNAGE AS INDICATED ON PLAN.
  - NEW EVACUATION PLANS & PROCEDURES.
- B. ELECTRICAL CONTRACTOR
- SUPPLY AND INSTALL EMERGENCY LIGHTING THROUGHOUT THE SPACE AS SHOWN ON PLAN, c/w BATTERY BACKUP.
- C. BUILDER.
- SUPPLY AND INSTALL PANIC BARS c/w WHITE ON GREEN "PUSH BAR TO OPEN" SIGN
  - PROVIDING PENETRATIONS THROUGH CEILINGS AND WALLS AND MAKING GOOD THEREOF.
  - FIXING OF EXTINGUISHER BACKING BOARDS TO WALLS SUPPLIED BY FIRE CONTRACTOR.
  - SUPPLY & INSTALL NEW FIRE DOORS C/W 25mm STEEL FRAME AND DOOR CLOSER.
  - FIRE SEALING OF PENETRATIONS THROUGH FIRE WALLS.

**ESCAPE ROUTE #2**  
- 1449mm WIDE ESCAPE STAIRS c/w:  
• 170mm HIGH STEP RISERS  
• 250mm WIDE STEP TREADS  
• HAND RAILS BOTH SIDES IN ACCORDANCE WITH SANS PART M & S  
- EMERGENCY LIGHTING

EMERGENCY LIGHTS ALONG ESCAPE ROUTE AND IN FRONT OF DB - TO ELECTRICAL ENGINEER DETAIL

FIRE SIGNS & EQUIPMENT COUNT															
SYMBOL															
REFERENCE	E1	E2	E3	E6	E16	E17	F13	F16	F19	F4	F5	F6	F14	F45	F31
QUANTITY	10	7	4	1	1	1	1	4	-	2	2	1	1	1	2

FIRE DOOR SCHEDULE									
DOOR TAG	SWING	FIRE RATING	WIDTH (mm)	HEIGHT (mm)	OPEN	CLOSED	PANIC BAR	DOOR CLOSER	HOLD OPEN
FD_1	ONE WAY	60 minute	815	2100	N/A	YES	NO	YES	NO
FD_2	ONE WAY	60 minute	800	2100	N/A	YES	NO	YES	NO
FD_3	ONE WAY	60 minute	800	2100	N/A	YES	NO	YES	NO



**FIRE INSTALLATION NOTES**

**PORTABLE FIRE EXTINGUISHERS**  
FIRE EXTINGUISHERS SHALL BE 4.5kg AND 9kg DRY CHEMICAL POWDER TYPE AND SHALL COMPLY WITH SABS 810.  
ALL FIRE EXTINGUISHERS SHALL BE MOUNTED ON WOODEN BACKING BOARDS.

**FIRE HOSE REELS**  
FIRE HOSE REELS SHALL CONFORM TO SABS 543.  
ALL FIRE HOSE REELS SHALL BE COMPLETE WITH 30 METERS OF HOSE AND SHALL HAVE A MINIMUM FLOW RATE OF 0.5 l/s AT 300 kPa.

**FIRE HYDRANTS**  
FIRE HYDRANTS SHALL COMPLY WITH SABS 543 AND HAVE A MINIMUM FLOW RATE OF 20 l/s AT 300 kPa.

**PIPING**  
NO PIPEWORK TO BE EMBEDDED IN SCREED OR CONCRETE FLOORS.  
ALL PIPEWORK SHALL CONFORM TO SABS 62 (STEEL, MEDIUM).

THE DISTANCE BETWEEN PIPE SUPPORT BRACKETS FOR THE HORIZONTAL & VERTICAL PIPEWORK, SHALL NOT EXCEED THE FOLLOWING:  
NOMINAL DIAMETER      MAXIMUM SPACING  
< 65 MM      4M  
> 65MM      <100MM

PIPING SHALL BE PROPERLY CLEANED OFF SITE, FROM RUST & LOOSE MILL SCALE WITH A HARD WIRE, & DECREASED PRIOR TO APPLICATION OF A RED OXIDE PRIMER.FINAL COATS OF PAINT TO BE 2 OFF SIGNAL RED, HIGH GLOSS ENAMEL TO SABS 630.  
ALL BRACKETS, SUPPORTS & FITTINGS TO BE GALVANIZED.  
ALL SCREWED JOINTS TO COMPLY WITH BS 21 OR SIMILAR.  
SEALINGS OF JOINTS WILL BE WITH HEMP, STOGG OR PTFE TAPE.  
HYDRAULIC PRESSURE TESTING SHALL BE DONE TO 15 BAR FOR A PERIOD OF 24 HOURS.

**SYMBOLIC SAFETY SIGNAGE**  
SYMBOLIC SAFETY SIGNAGE SHALL COMPLY WITH SABS 1186 PART V AND SHALL BE OF THE PHOTOLUMINESCENT TYPE.  
SIGNAGE SHALL BE INSTALLED SUCH AS TO CLEARLY INDICATE THE POSITIONS OF ALL FIRE EQUIPMENT AND ESCAPE ROUTES.  
EACH FLOOR LEVEL SHALL BE NUMBERED IN THE ESCAPE STAIRS.  
SIGNAGE ON DRAWING IS AN INDICATION OF SIGNAGE REQUIRED.  
FINAL SIGNAGE TO BE DETERMINED ON SITE.  
ADDITIONAL SIGNAGE TO BE ADDED SHOULD IT BE REQUESTED BY THE LOCAL AUTHORITIES.  
FINAL FIRE SIGNAGE IS TO BE DETERMINED ON SITE BY THE COUNCIL'S FIRE OFFICER.

**FIRE DOORS**  
FIRE DOORS OF THE RATING AND WIDTH AS INDICATED ON THE DRAWINGS, SHALL BE INSTALLED AND SHALL COMPLY WITH SANS 1253.  
ALL FIRE DOORS TO BE FITTED WITH SELF CLOSING MECHANISMS

**FIRE ALARM / DETECTION**  
FIRE DETECTION AND ALARM SYSTEM SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS AND IN ACCORDANCE WITH SANS 10139

**ESCAPE DOORS**  
ALL ESCAPE DOORS SHALL BE COMPLETE WITH FIRE ESCAPE IRONMONGERY.

**FIRE ESCAPE ROUTES**  
FIRE ESCAPE ROUTES, INCLUDING CORRIDORS AND STAIRWAYS SHALL HAVE MINIMUM WIDTH OF 1500mm UNLESS SHOWN OTHERWISE.  
ALL ESCAPE ROUTES SHALL HAVE A FIRE RESISTANCE AS INDICATED.  
ALL EMERGENCY ROUTES SHALL HAVE A FIRE RESISTANCE AS INDICATED ON THE DRAWINGS.

FIRE SERVICES LEGEND			
	BREAK GLASS UNIT		HOSE REEL
	FIRE HYDRANT		4.5kg DCP FIRE EXTINGUISHER
	DIRECTIONAL ARROW		FIRE ESCAPE
	60MIN FIRE RATED LIFT LANDING DOOR		60 MINUTE FIRE RATED WALL

FIRE DESIGN CONFIRMATION			
DEEMED TO SATISFY WITH SANS 10400		N/A	
RATIONAL ASSESSMENT		YES	
RATIONAL DESIGN EQUIVALENT OR SUPERIOR TO SANS 10400		N/A	

ISSUE DATE: 2023-08-23  
REVISION: B  
X FOR INFORMATION  
FOR APPROVAL  
FOR TENDER  
FOR CONSTRUCTION  
AS-BUILT

REVISIONS					
No	Date	Description	Rev By	Ckd By	
A	02/08/2021	ISSUED FOR INFORMATION	S.M	H.R	
B	23/08/2023	ISSUED FOR INFORMATION	S.M	H.R	

**CONSULTMECH**  
Mechanical Engineers

09 Plantanus Street  
Kuilsvier  
7580

Cell: (072) 948 4470  
Tel.: (021) 903 1407  
Email: info@consultmech.co.za

PROJECT: LAHA LA SARS - BLOCK A  
BROOKLYN

DWG TITLE: SECOND STOREY - PROPOSED  
FIRE SERVICES LAYOUT

DWG NUMBER: 21B09-F-501-06  
REV. B

DESIGNED BY: S. MAFUYA  
SCALE: 1:100 @ A1

CHECKED BY: H.D ROUX  
ECSA NUMBER: 201070151

APPROVED BY: H.D ROUX  
ECSA NUMBER: 201070151

COPYRIGHT AND RIGHT OF REPRODUCTION OF THIS DRAWING OR ANY PORTION THEREOF IS RESERVED BY THE ENGINEERS

SECOND STOREY - PROPOSED FIRE SERVICES LAYOUT (Scale 1:100)