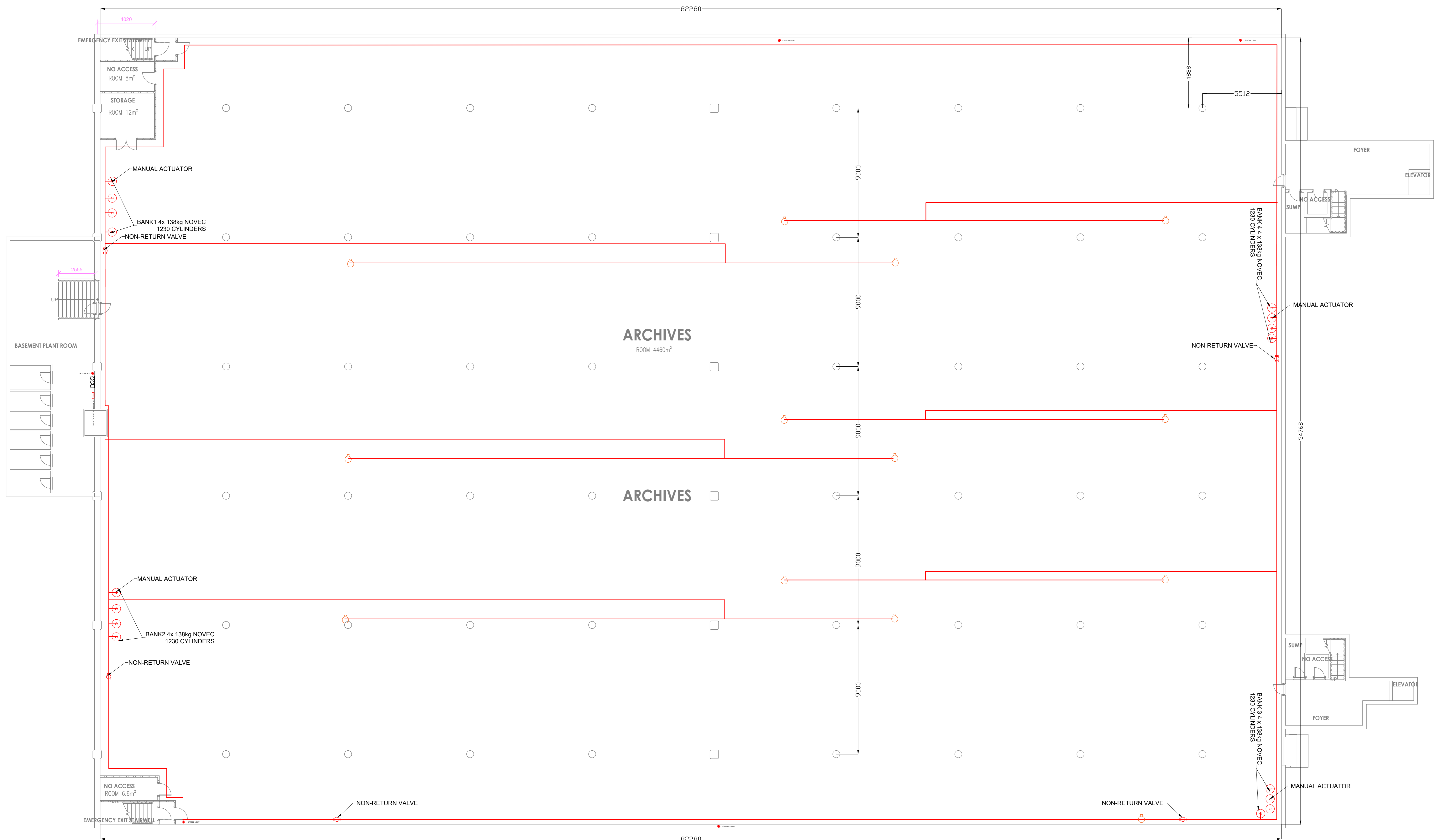


FIRE LEGEND

- FIRE EXTINGUISHER
- (F.H.R) FIRE HOSE REEL
- F.D FIRE DOOR
- FIRE HYDRANT

Fire Detection system
 Detection shall be allowed for a fire detection and alarm system complying with SANS 10139, SANS 246, ISO standards and Code of Practice. The systems will be designed and installed as follows:

- Smoke detectors, sounders and beacons in accordance with an L1 Classification system in terms of SANS 10139, SANS 246 and ISO standards.
- The detection system shall also incorporate manual alarm call-points (Category M) installed in accordance with SANS 10139 & SANS 246 Code of Practice.
- FirePro system together with smoke & heat detectors shall be provided according to the Eng's design.



LEGEND

GENERAL ENGINEERING NOTES:

1. DRAWINGS MUST NOT BE SCALED
2. DRAWINGS TO BE READ WITH THE GENERAL NOTES DRAWINGS AND ALL TYPICAL DETAIL DRAWINGS WHERE APPLICABLE
3. DRAWINGS TO BE READ WITH THE ARCHITECT'S DRAWINGS AND ALL DISCREPANCIES TO BE REPORTED TO THE RESPONSIBLE ENGINEER IMMEDIATELY
4. DRAWINGS TO BE READ WITH THE PROJECT SPECIFICATIONS AND APPLICABLE SANS 1200 CODES

STANDARD MECHANICAL NOTES:

This drawing shall not be used as a construction/ installation drawing.
 Routes and zones have been allocated to this service, locations dimensions are indicated of these.
 To prepare his construction/ installation drawing, the (sub) contractor shall adhere to this co-ordination principle and shall inspect all the architect's drawings, including structural and other services design drawings pertaining to the works. The (sub) contractor shall acquire himself with the general arrangement of all other services and ensure that in fixing his/her work it shall not obstruct the fixing of future maintenance of other services.
 The (sub) contractor shall be responsible for the correct field dimensions: clearances and heights, quantities, fabrication processes and techniques of construction co-ordination of his/her work with that of all other trades, providing all devices necessary for safe and satisfactory operation.

Fire Protection Notes

1. FIRE PROTECTION TO SANS 10400 PART-1, DEEM TO SATISFY SET OF RULES APPLICABLE, AS SET OUT IN T1.
2. OFFICES AND PARKING.
3. MAIN OCCUPANCY CLASSIFIED AS C2, G1 AND H3.
4. 1 PERSON PER 15 (M²/TAJ) / OR NUMBER OF SEATS.
5. SAFETY DISTANCES ARE IN ORDER FOR G1, C2 AND H3.
6. STRUCTURAL STABILITY, 120 MINUTES, AS PER SANS 10400 PART-1, TABLE 6. ALL FLOORS AND EMERGENCY ESCAPE ROUTES ARE CONSTRUCTED FROM CONCRETE WITH A STRUCTURAL STABILITY OF 120 MINUTES.
7. ALL ESCAPE ROUTES TO COMPLY TO SANS 10400 PART 1A, BE 500MM WIDE, HANDRAILS ON BOTH SIDES OF A STAIRWAY, MAX 120 STEP RISE, LANDING EVERY 1530MM OF LEVEL CHANGE, RAMP 1:12 ON FINAL EXIT, DOORS TO OPEN IN DIRECTION OF ESCAPE.
8. EMERGENCY STAIRWAYS TO BE NATURALLY VENTILATED WHERE POSSIBLE, IF NOT POSSIBLE MECHANICAL VENTILATION TO BE PROVIDED.
9. AUTOMATIC FIRE DETECTION TO BE INSTALLED TO SANS 10139 CATEGORY L3(M) TO PRIMARILY SHUTDOWN VENTILATION SYSTEMS, HOME LIFT AND NOTIFY OCCUPANTS OF A FIRE CONDITION WITHIN REASONABLE TIME.
10. EMERGENCY LIGHTING TO BE PROVIDED IN ALL ENCLOSED ESCAPE PASSAGES AND EMERGENCY ROUTES TO SANS 10114-1 AND 1464-21.
11. FIRE EXTINGUISHERS, FIRE HOSE REELS AND FIRE HYDRANTS TO SANS 10400, PART-1 AND BE SERVICED BY A CERTIFIED INSTALLER BEFORE OCCUPATION OF THE BUILDING.
- 11.1. 1 X 9 KG EXTINGUISHERS, PER 100M² OR PART THEREOF, TO BE INSTALLED IN ACCORDANCE WITH SANS 10105 AND CLAUSE 4.35
- 11.2. 1 X 30 M HOSE REELS, PER 500M² OR PART THEREOF, TO BE INSTALLED IN ACCORDANCE WITH SANS 543 AND CLAUSE 4.34
- 11.3. HYDRANTS TO BE INSTALLED IN ACCORDANCE WITH SANS 1128: PART 1 AND CLAUSE 4.35
12. FIRE SIGNAGE TO SANS 1186, PHOTO LUMINESCENT TYPE, 190X190MM FOR G1 AND 290X290MM FOR H3 AREA, INTERNALLY ILLUMINATED "EXIT" SIGNS WITH 60 MINUTE BATTERY BACKUP TO BE PROVIDED, EXCEPT WHERE EMERGENCY LIGHTING IS CLOSE ENOUGH TO PROVIDE SUFFICIENT LIGHT ON PHOTO LUMINESCENT SIGNS.
13. THE AUTOMATICALLY OPENABLE PANELS/LOUVERS ARE ACTIVATED BY HEAT OR SMOKE AND WILL BE DISTRIBUTED IN SUCH A WAY THAT SMOKE WILL EVENLY BE EXTRACTED FROM ALL PARTS OF THE FLOOR.
14. VENTILATION TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH EN 12101 AS PER 4.42.
15. ROOF VOID SUBDIVIDED WITH NON-COMBUSTIBLE FIRE STOPS, WITH A STABILITY AND INTEGRITY RATING OF AT LEAST 20 MINUTES, INTO AREAS NOT EXCEEDING 250M²
16. SUSPENDED CEILING AND ITS SUPPORTING MEMBERS SHALL BE OF NON-COMBUSTIBLE MATERIAL.
17. CEILING VOID SUBDIVIDED WITH NON-COMBUSTIBLE FIRE STOPS, WITH A STABILITY AND INTEGRITY RATING OF AT LEAST 20 MINUTES, INTO AREAS NOT EXCEEDING 250M².
18. AN APPROVED SPRINKLER SYSTEM, COMPLYING WITH ATTACHED DEEMED TO SATISFY DESIGN, TO BE INSTALLED.
19. INSULATION MATERIAL TO COMPLY WITH SANS 428: 2006.
20. AN APPROVED GAS SUPPRESSION SYSTEM, COMPLYING WITH ATTACHED DEEMED TO SATISFY DESIGN, TO BE INSTALLED AT THE BASEMENT.

LEGEND:

- GAS CONTROL UNIT
- GAS CYLINDER
- GAS PIPING, SCHEDULE 40 TO BS STANDARDS
- DISPERSING NOZZLE
- EXTINGUISHANT CONTROL PANEL
- STROBE LIGHT

REV	DATE	REVISION DETAILS
00	13.10.2022	PRELIMINARY DESIGN
1	03.06.2024	ISSUED FOR APPROVAL

COPYRIGHT OF THIS DESIGN AND DRAWINGS IS RESERVED. SCALED DIMENSIONS ARE INVALID. ALL DIMENSIONS AND LEVELS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK.
 DISCREPANCIES TO BE REPORTED IMMEDIATELY.
 ALL BUILDING WORK TO BE IN COMPLIANCE WITH NATIONAL BUILDING REGULATIONS, SOUTH AFRICAN NATIONAL STANDARDS AND LOCAL AUTHORITY BY-LAWS.

THE MASTER IS HELD AT ELTEK ENGINEERING SERVICES AND BEARS THE ORIGINAL SIGNATURE OF APPROVAL.

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JOHANNESBURG CENTRAL LIBRARY

BASEMENT & PLANTROOM FLOOR LEVEL GAS SUPPRESSION LAYOUT

DATE	SCALE
02/06/2022	1:100
DESIGNED: N. MANUZA	DRAWN: K. LLOYD

ISSUED FOR APPROVAL