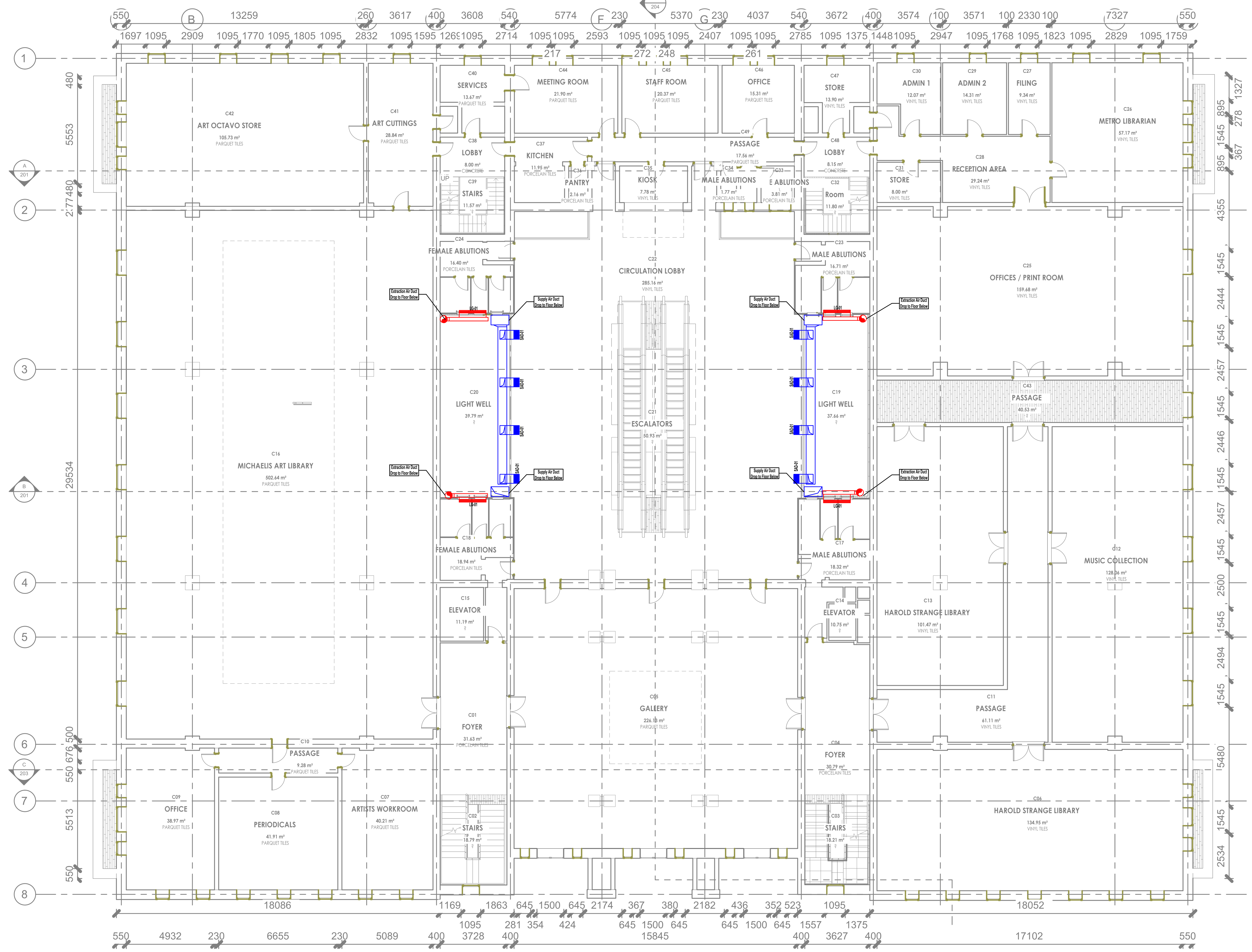

01_FIRST FLOOR
1 : 100

Legend

- Externally insulated supply ducting
- Externally insulated return ducting
- Uninsulated extract ducting
- Cladded extract ducting
- CV01 – 600x600 Constant Volume Supply Air diffuser with flow rate.
- ø32 galvanised condensate/drain piping
- Refrigerant piping
- SE – Duct stop end
- Single phase isolator by electrician
- Three phase isolator by electrician
- 4 Way Blow Ceiling Cassette with Cooling Capacity
- FD – Fire Damper with fusible link
- UC(25mm) – Under Cut door (25mm)
- DG01(600x350) – Door Grille with size and flow rate
- DV01 – Disc valve with flow rate
- Return Air Grille (600x600) with flow rate
- VRF-01 – Variable Refrigerant Flow Condensers
- Mid Wall unit
- Hide Away (Concealed) Unit
- Axial Fan
- SA – Sound Attenuator (1.5D)
- WL03(800x450) – Weather Louvre with size and flow rate
- Condenser

CONSTRUCTION NOTES

Notes:

This drawing is not to be used as a construction/installation drawing.

Routes and zones have been allocated to this service, location dimensions are indicative of these.

To prepare his construction/installation drawing, the subcontractor must adhere to this co-ordination principle and must inspect all the architect's drawings, including structural and other services' design drawings pertaining to the works shall acquaint himself with the general arrangement of all other services and ensure that in fixing his work it will not obstruct the fixing of future maintenance of other services.

The subcontractor is responsible for correct field dimensions; clearances and heights, quantities, fabrication processes and techniques of construction co-ordination of his work with that of all other trades, providing all devices necessary for safe and satisfactory operation. Detailed drawings, typical sections, typical weight including all typical details as well as the legend can be read off drawing number MA –100

1. All installation should be carried out as per Part IV of the tender specification.
2. Duct sizes shown are sheet metal sizes.
3. All ducting to be manufactured & installed in accordance with the SANS standards.
4. All A/C shaft to be fitted with mentis grid platform on floors with access door.
5. All exposed ducting to be painted to an approved colour.
7. All take-offs from supply & exhaust air ducting to be 45° boots.
8. AC equipment to be fitted with anti-vibration mountings as per specification.
9. HVAC contractor to ensure that all condensate drains are trapped and slope adequately. All drains to be tested for leaks and operation.
10. All ducting to be flat on top and installed hard-up to the underside of the slab above.
11. HVAC Contractor is responsible for connecting the condensate drains to the drain stack or the nearest drain. The connection must be a solid connection to prevent leakage.
12. Thermostat positions are provisional. Final positions shall be determined on site in conjunction with Client/Engineer. Where full height partitioning is not available for mounting the thermostat, it must be mounted on the brick wall.
13. All refrigerant piping, electrical and control wiring between indoor and units must run in trunking/on cable trays with cover plate securely fitted against wall.
14. Condenser must be mounted on galvanised cantilever frame.
15. All supply air ducting must be externally insulated.
16. All BMS wiring must be installed in PVC conduit by BMS controller.

DIVISION OF WORK

Work by Main Contractor

- Openings in doors for door grilles.
- Openings in ceiling for air terminals and/or fans.
- Openings in structure complete with timber frames (in non-fire walls) and making good after installation of HVAC equipment.
- Concrete bases for fan sets, etc.
- Enclosures around HVAC openings
- Mentis grid platform in AC shafts.
- Building in and sealing of fire dampers.

Work by Electrical Subcontractor

- Power supply terminating in Distribution boards.
- Heater interfacing safeties with the air pressure switch.
- Stop/Start interfacing of toilet exhaust fans.
- Fire interfacing signal to each AHU.

Work by Plumbing Subcontractor

- Fullbore outlets on roof.
- Water outlet points for Chiller Units

REV	DATE	REVISION DETAILS
00	07.06.2022	PRELIMINARY DESIGN
01	14.10.2022	ARCHITECTS PLAN UPDATED

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

THE BUS FACTORY NO. 3
HELEN JOSEPH STREET
NEWTOWN
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PROJECT
JOHANNESBURG CENTRAL LIBRARY

DRAWING
FIRST FLOOR LEVEL HVAC LAYOUT

DATE	02/06/2022	SCALE	N.T.S
DESIGNED	J. MAPHILA	DESIGNED	T. MATHONI

PROJ - JCL/DW 016-MP-103 01

ISSUED FOR INFORMATION