



**SAMPLE  
DATA CENTRE  
DESIGN**

## 2.1 Solution Specifications

- The specification of all services and individual components are attached as Appendix A

## 2.2 Works Out of Scope

The following responsibilities and tasks fall outside of the *Subcontractor's* Price List scope and design.

### 2.34.1 Common Infrastructure

Item	Required for	Requirement
I	Total Solution	Supply and fit Main AC supply-breaker of 600A@400V 3-phase inside main buildings DB.

### 2.34.2 IM Infrastructure

Item	Required for	Requirement
I	IM	All network cabling beyond those that will be supplied for the NetBotz Environmental Monitoring System
II	IM	Relocation of any existing equipment
III	IM	Powers cords between PDU's and servers
IV	IM	Termination of BMS and NetBotz systems to Eskom LAN/WAN
V	IM	Workstation/s for communication with BMS and/or NetBotz

### 2.34.3 SCADA Infrastructure

Item	Required for	Requirement
I	Scada	All network cabling beyond those that will be supplied for the NetBotz Environmental Monitoring System
II	Scada	Power reticulation to lights and work-stations and PC's from new UPS-DB in call-center on 1 <sup>st</sup> floor's, to be done by Eskom
II	Scada	Relocation of any existing equipment

### 2.34.4 Telecom Infrastructure

Item	Required for	Requirement
I	Telecom	All network cabling beyond those that will be supplied for the NetBotz Environmental Monitoring System
II	Telecom	Relocation of any existing equipment
III	Telecom	All DC cabling or DC terminations

## 2.3 Services and other things to be provided by Contractor

220VAC within 15 meters from where the data centre, generator and condensers will be installed

Water within 15 meters from where the data centre, generator and condensers will be installed

Storage space for building material where data centre will be erected

Storage space for building material where plinths for generator and condensers will be erected

Secure storage space for new data centre equipment and condensers

Parking and sanitary facilities for Subcontractor's workers

Access to a knowledgeable Contractor representative on site at all times.

3 x Mobile SIM-cards for NetBotz modems (IM, Scada and Telecom)

### 3 Site Information

#### 3.1 Access limitations

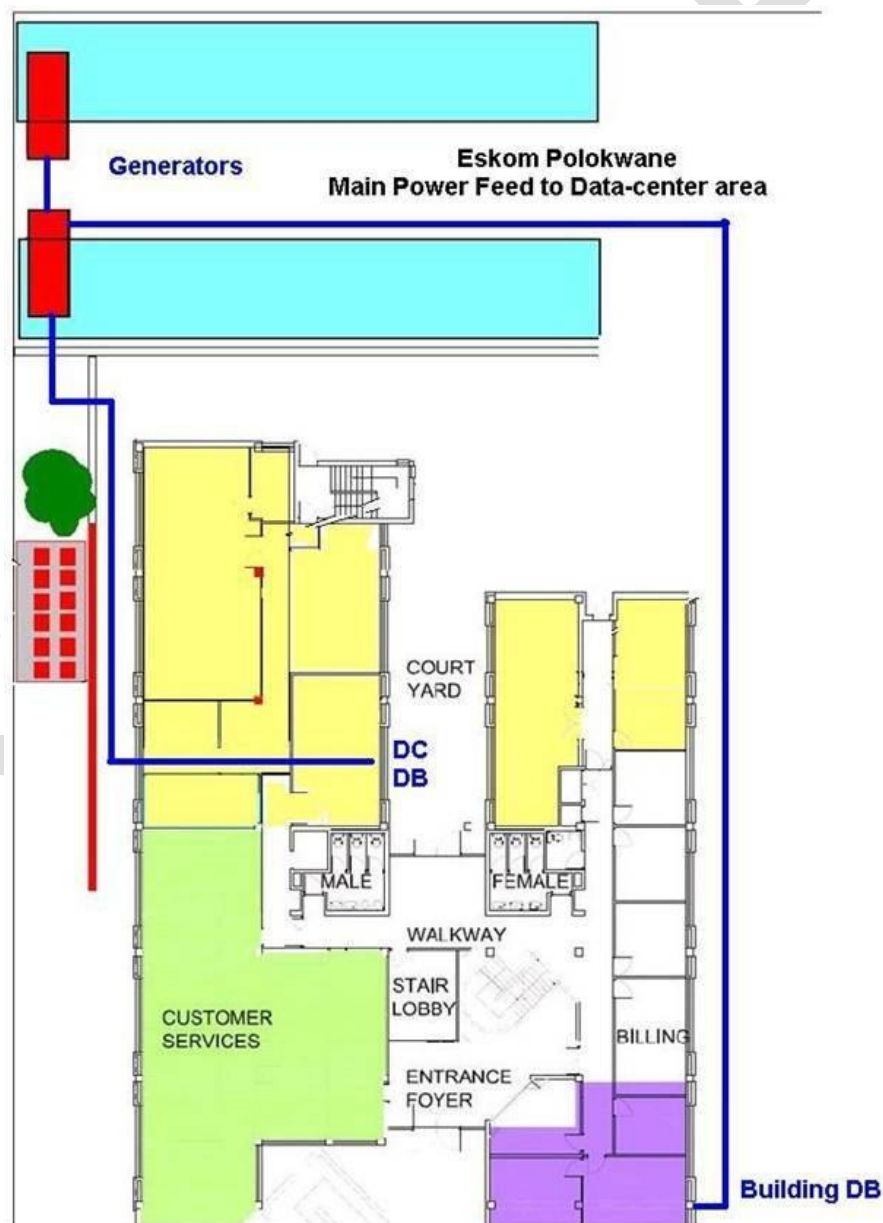
No access restrictions have been identified by the Contractor. The Contractor will clearly point out access restrictions prior to the execution of this contract, which might have an impact on the execution of this contract.

#### 3.2 Hidden and other services within the site

No hidden or other services identified by the Contractor. The Contractor will clearly point out any hidden electrical, water and/or other hidden services, pipes and cables that might have to be bridged during the execution of this contract.

#### 3.3 Details of existing buildings / facilities which subcontractor is required to work on

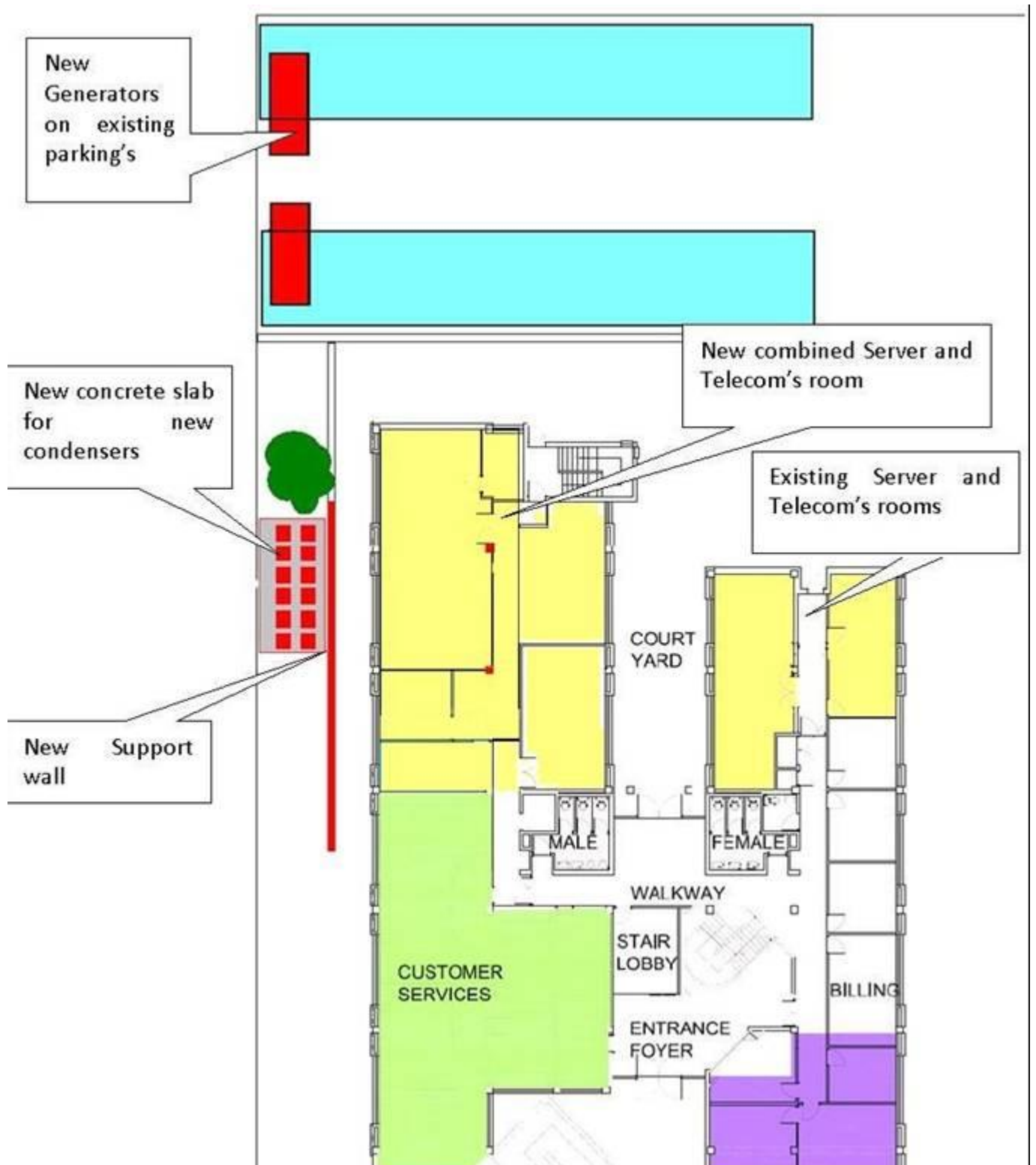
The subcontractor agreed to take photographs and supply it to the subcontractor prior to commencing the subcontract work.



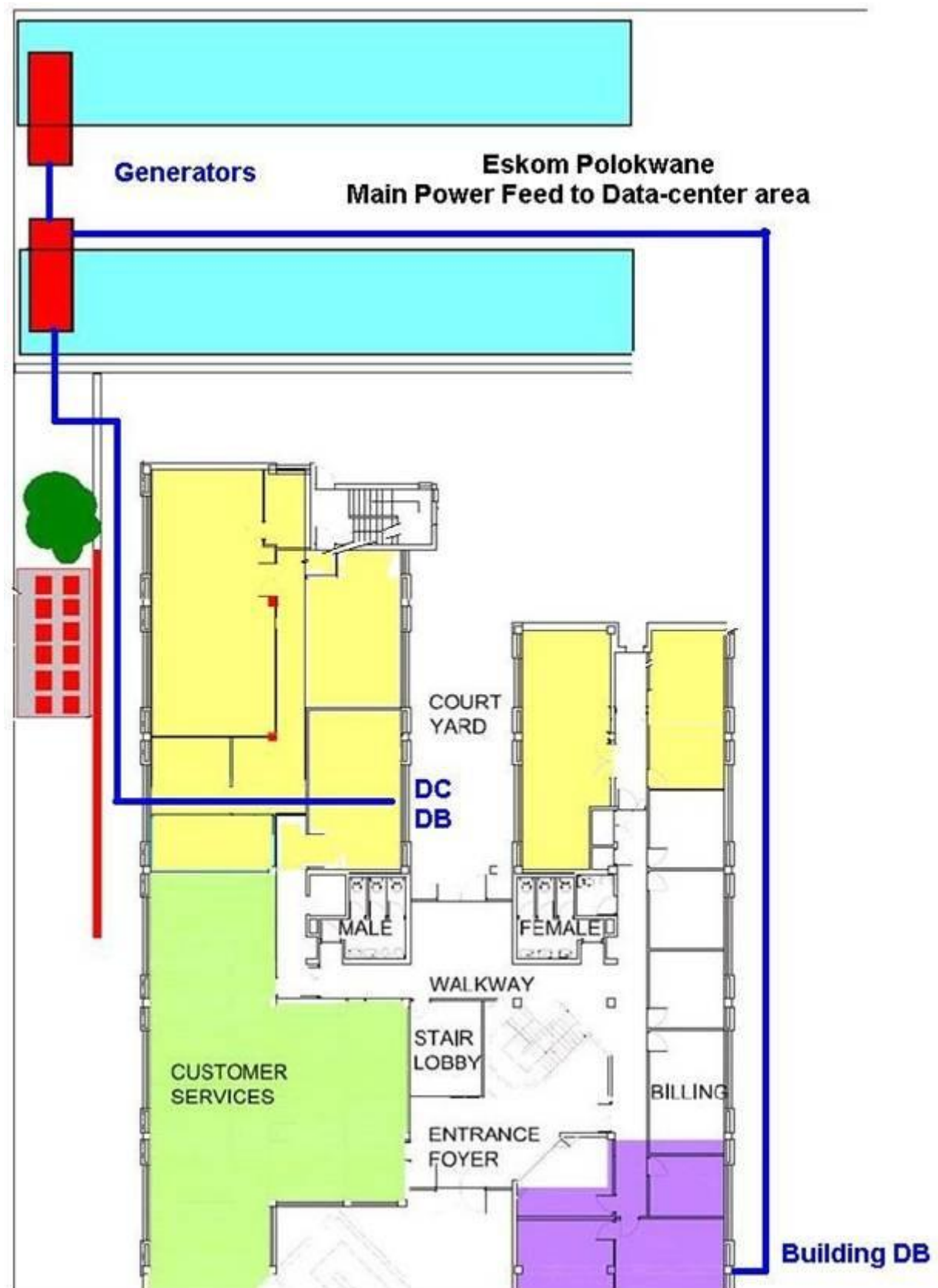
### 3.5 List of Drawings

Drawing Description	Revision	Point
Site Plan	Final	2.33.1
AC Cable Route	Final	2.33.2
Area Plan	Final	2.33.3
Cable-tray Plan	Final	2.33.4
New IM server room layout	Final	2.33.5
3-D IM Server room layout	Final	2.33.6
IM Environmental and Security System Diagram	Final	2.33.7
New Telecoms room layout	Final	2.33.8
Telecoms Environmental & Security System Diagram	Final	2.33.9
New Scada room layout	Final	2.33.10
Scada Environmental and Security System Diagram	Final	2.33.11
3-D Scada Server room layout	Final	2.33.12
Electrical and Cooling Redundancy Diagram	Final	2.33.13
AC Power Distribution Diagram	Final	2.33.14

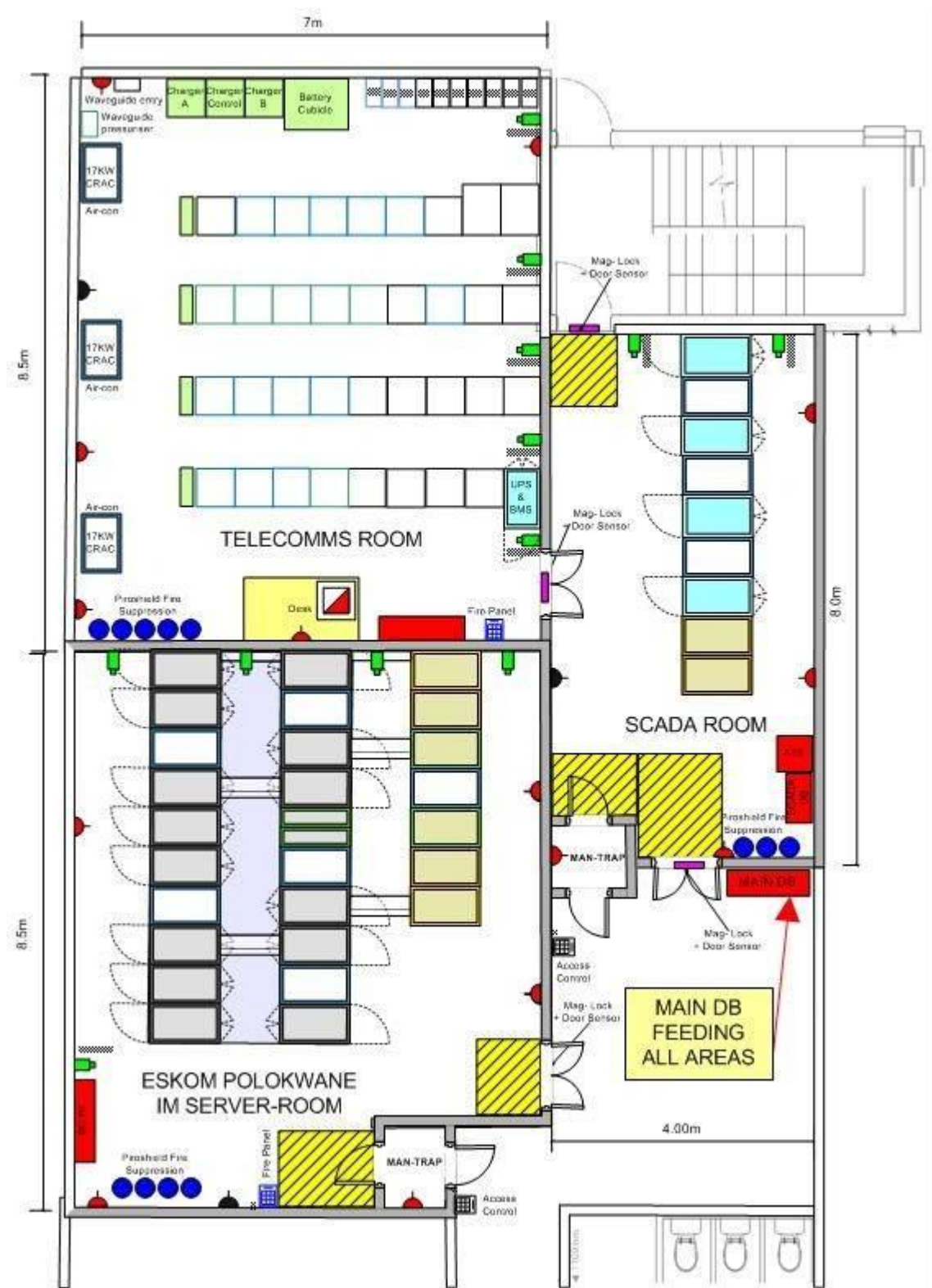
Site Plan



AC Cable Route



Area Plan

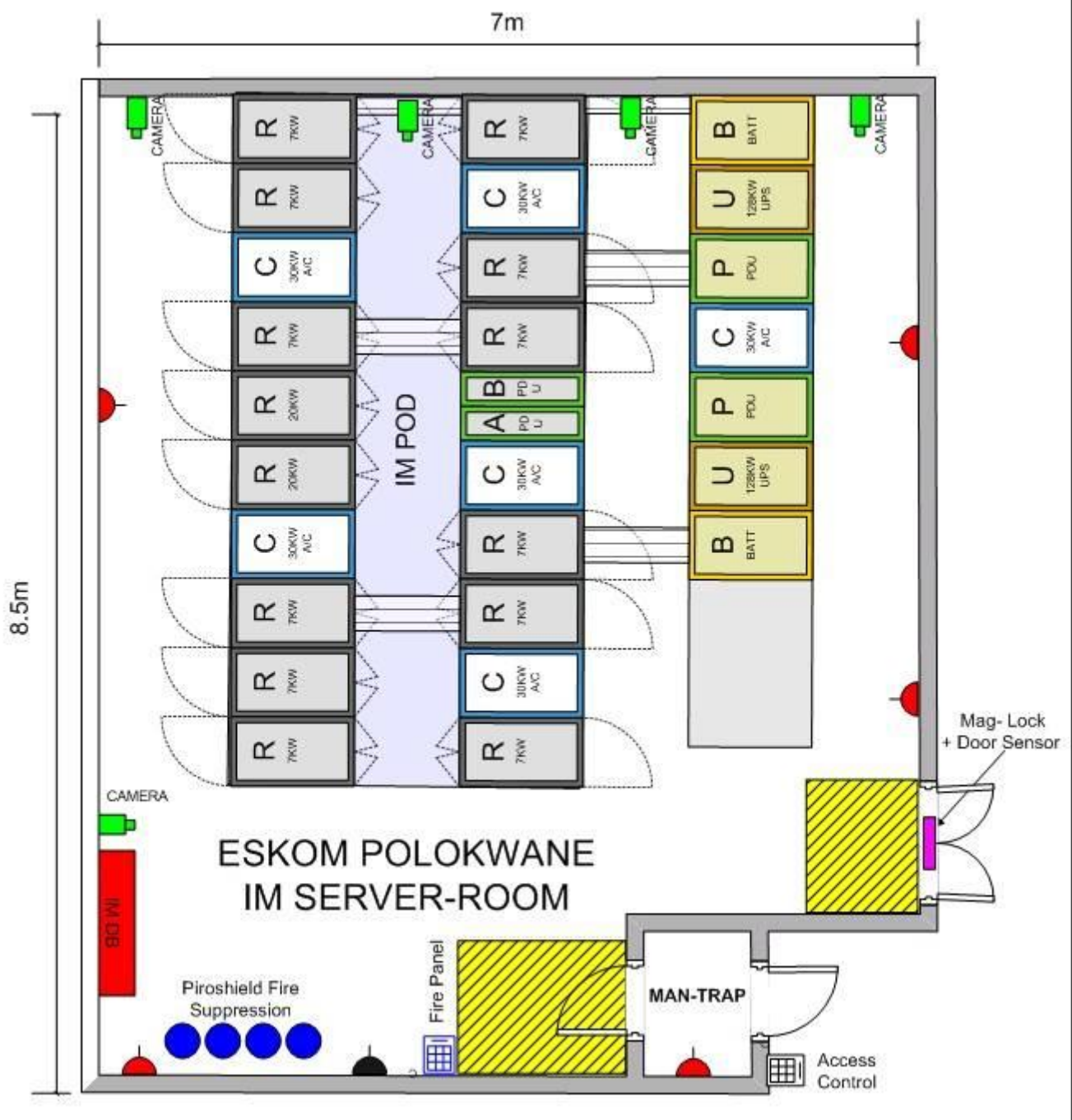


Cable-tray Plan

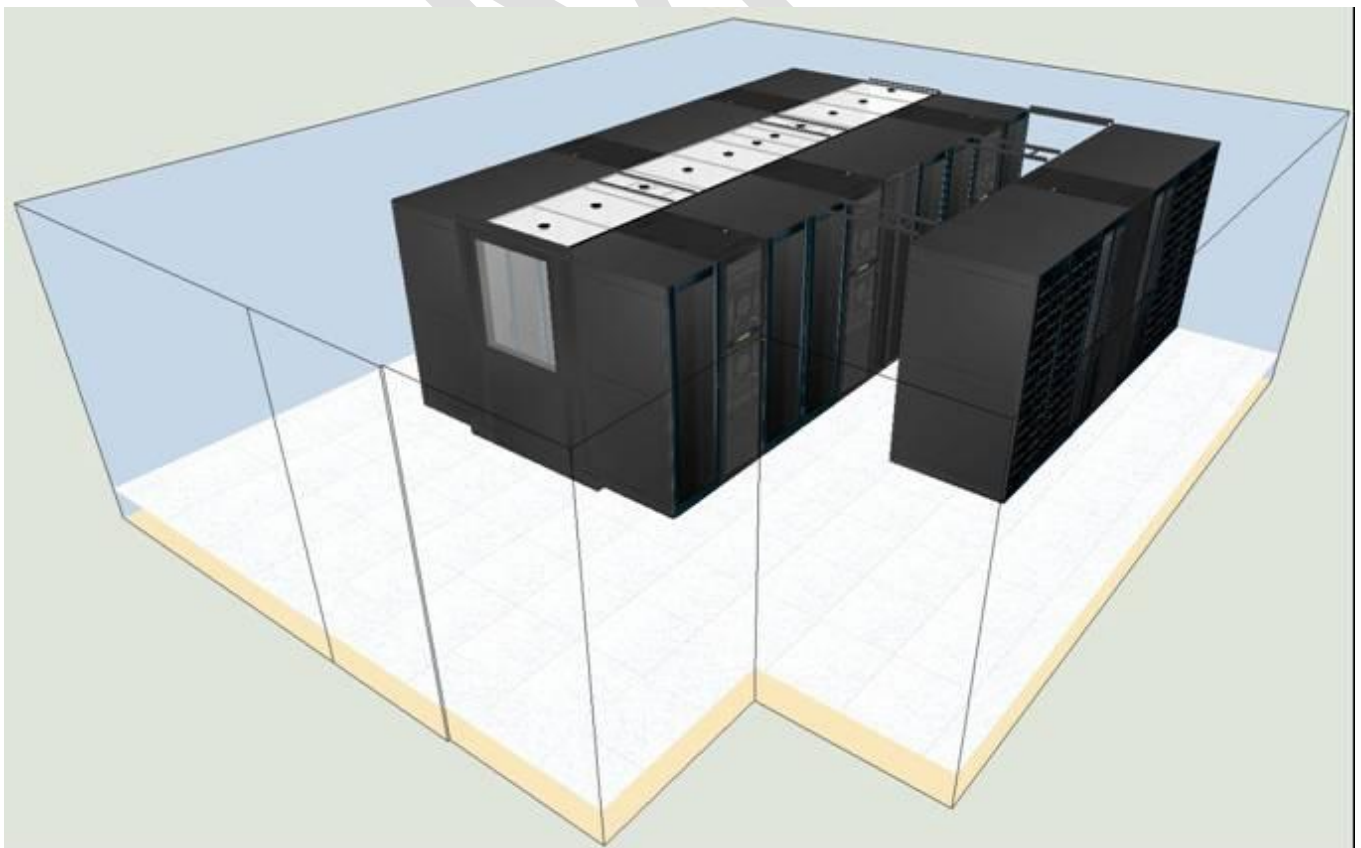
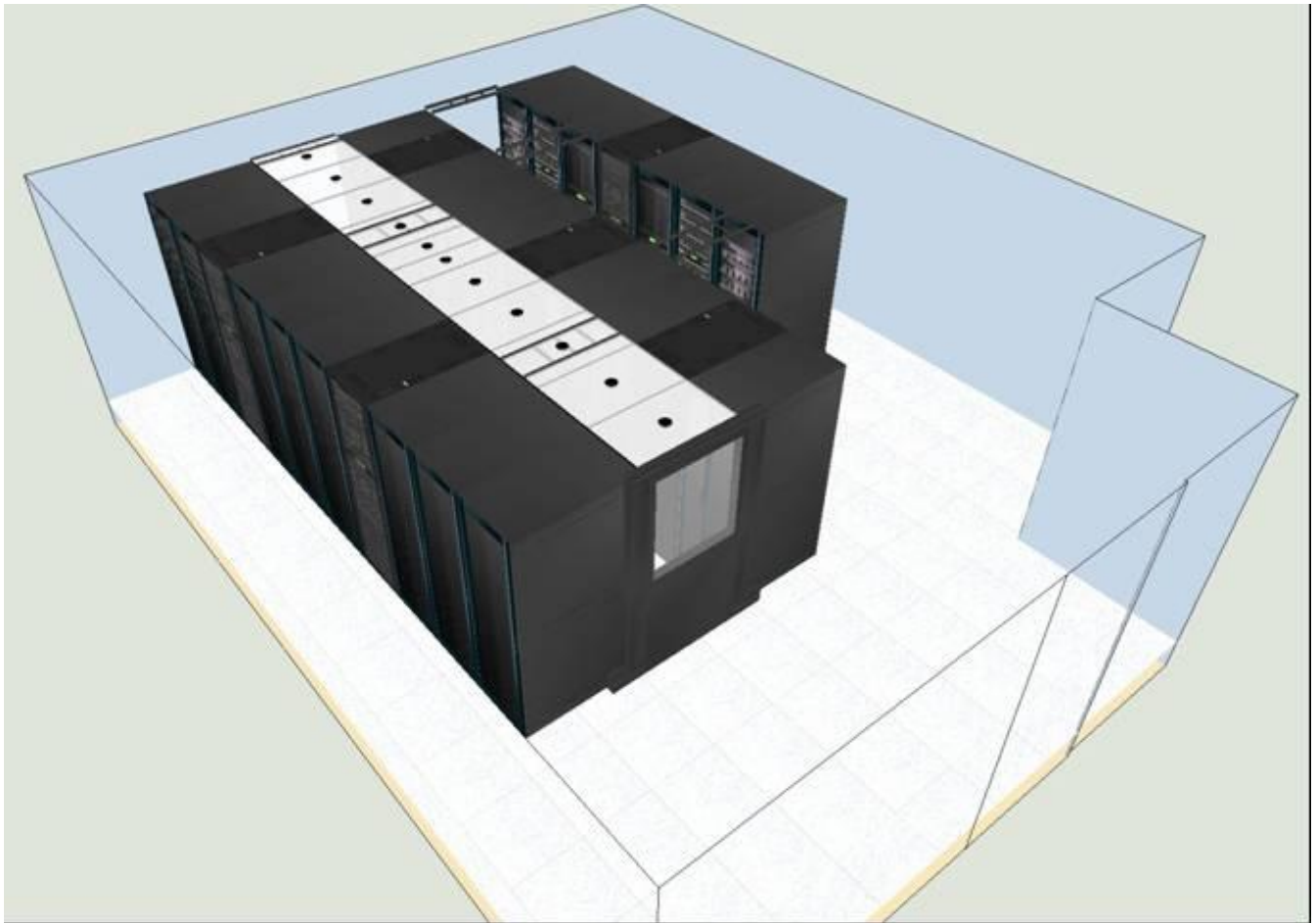




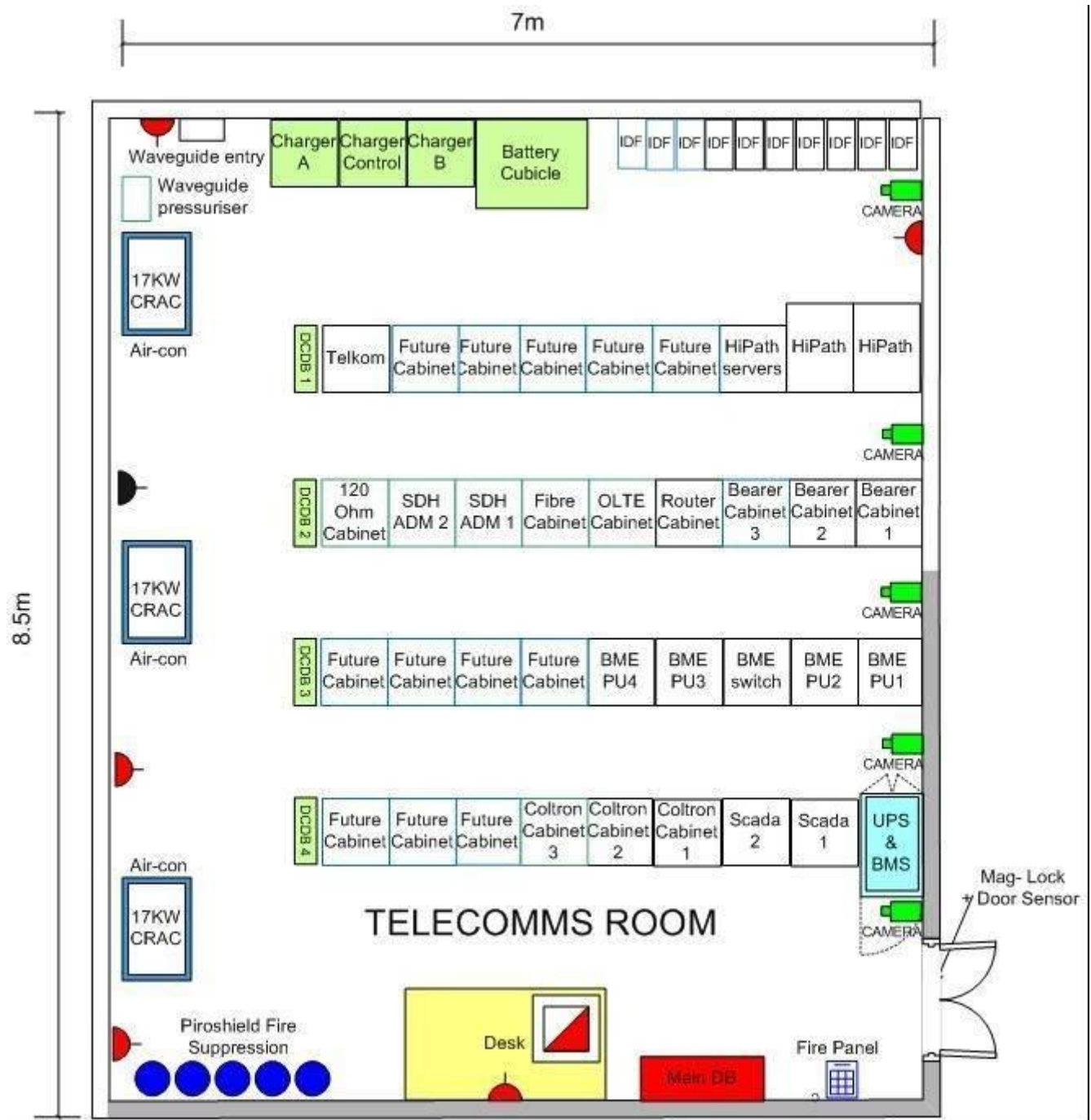
New IM server room layout



3-D IM Server room layout

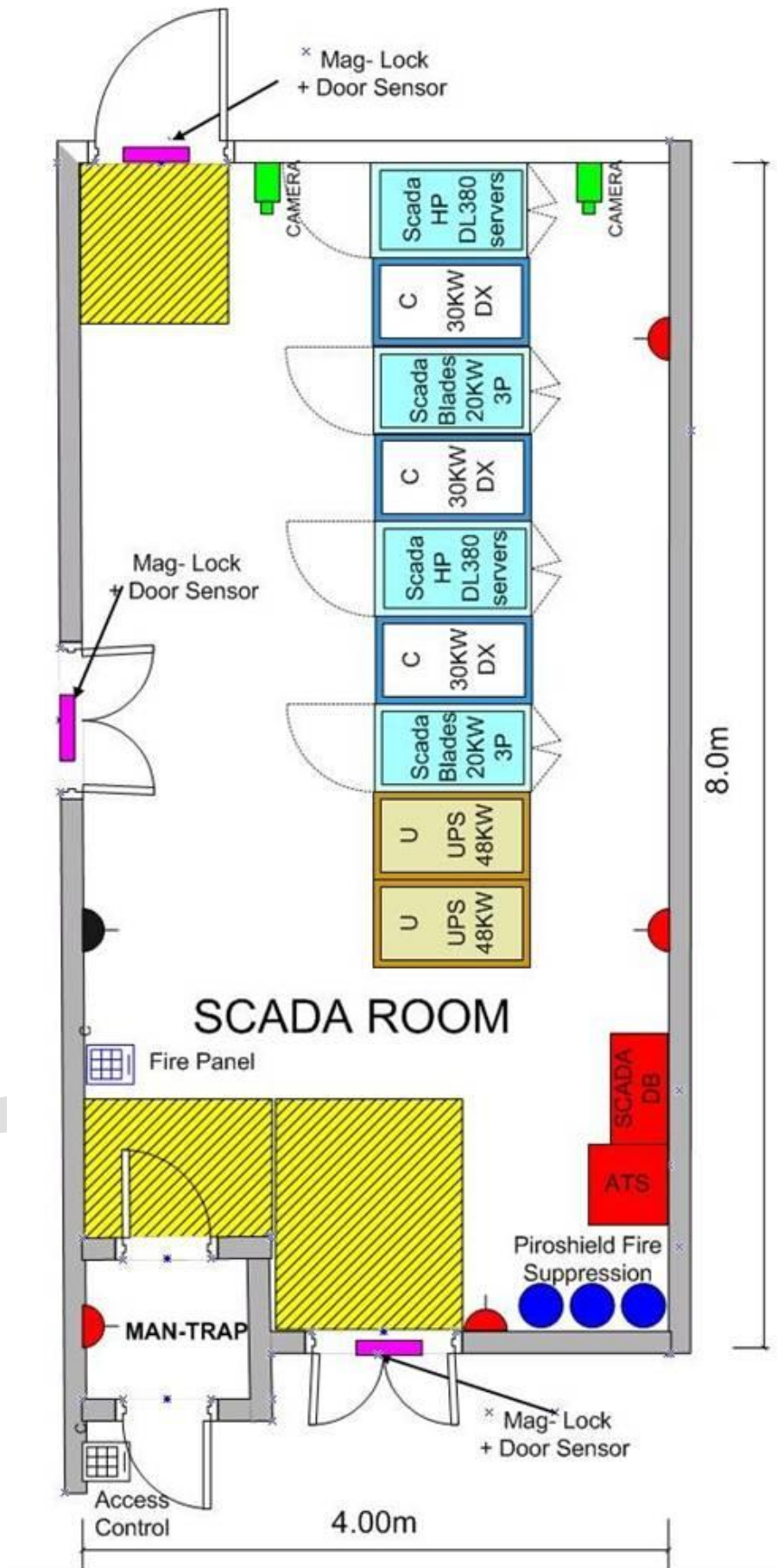




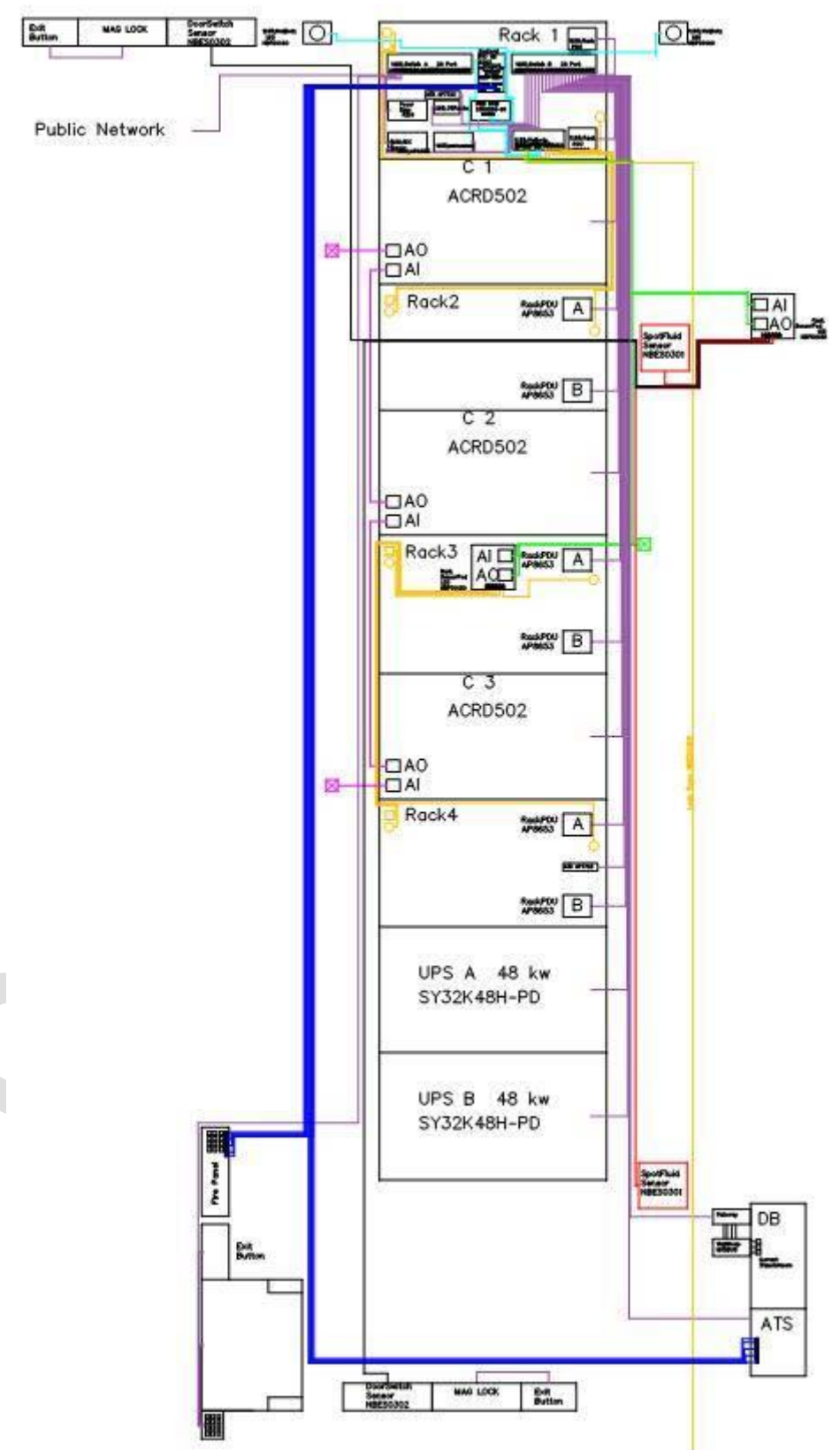




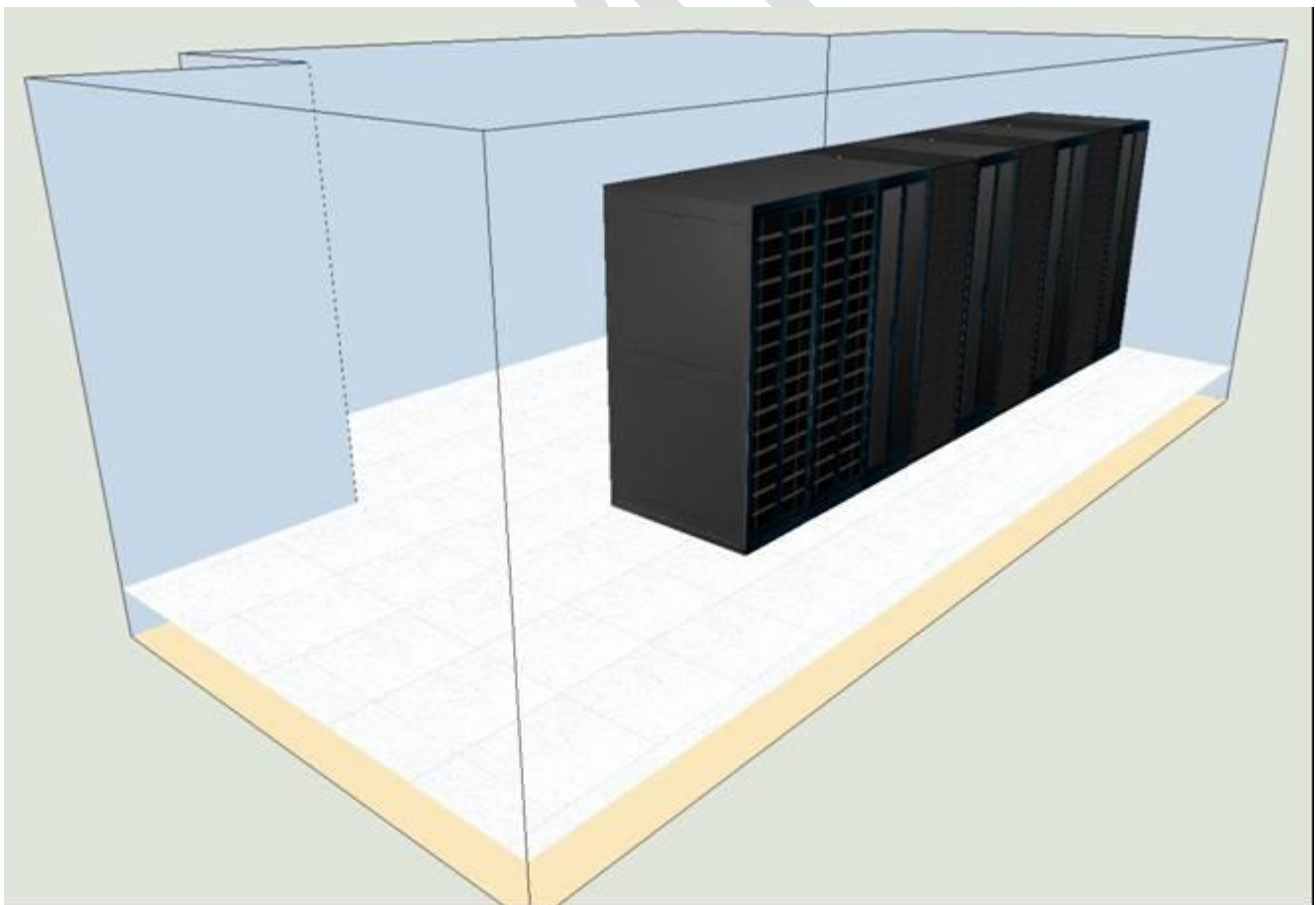
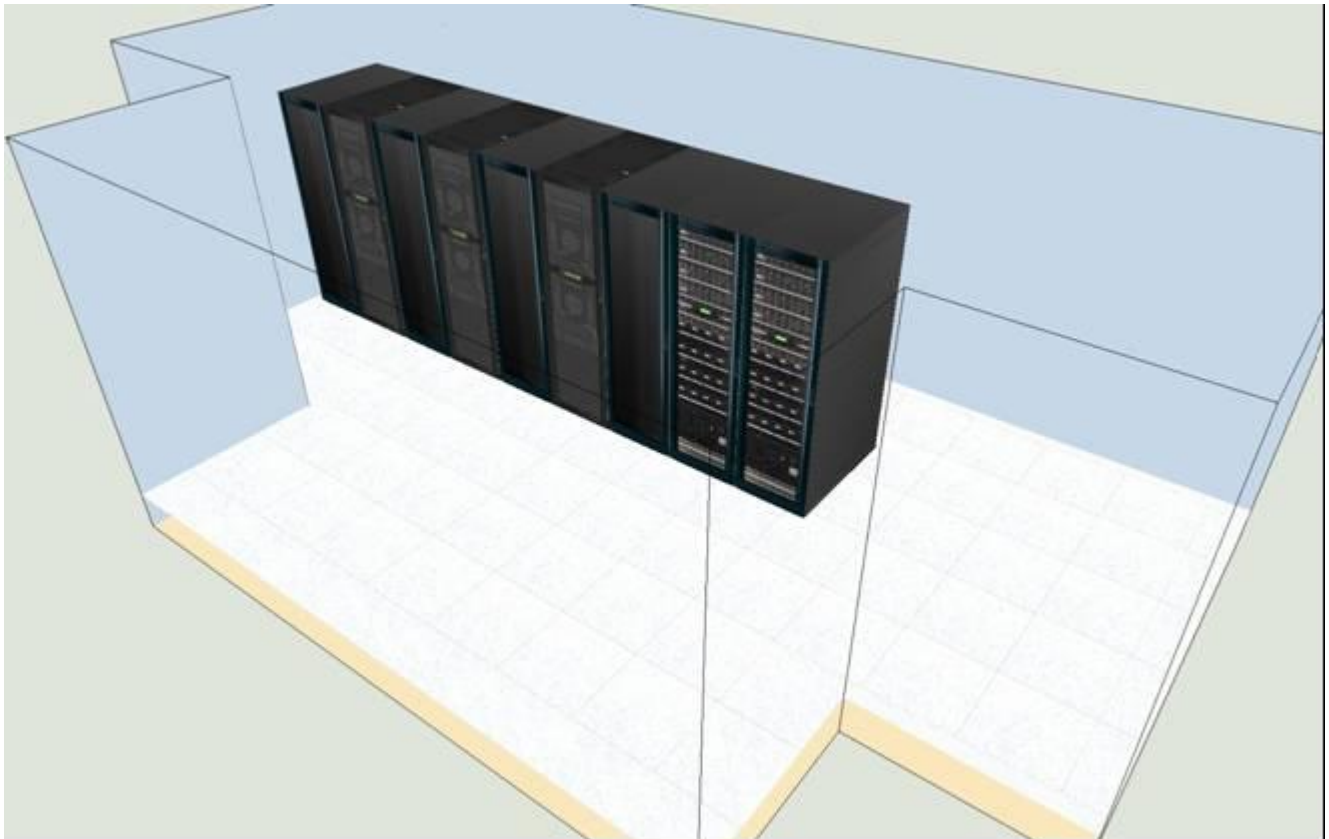
New Scada room layout



Telecoms Environmental and Security System Diagram

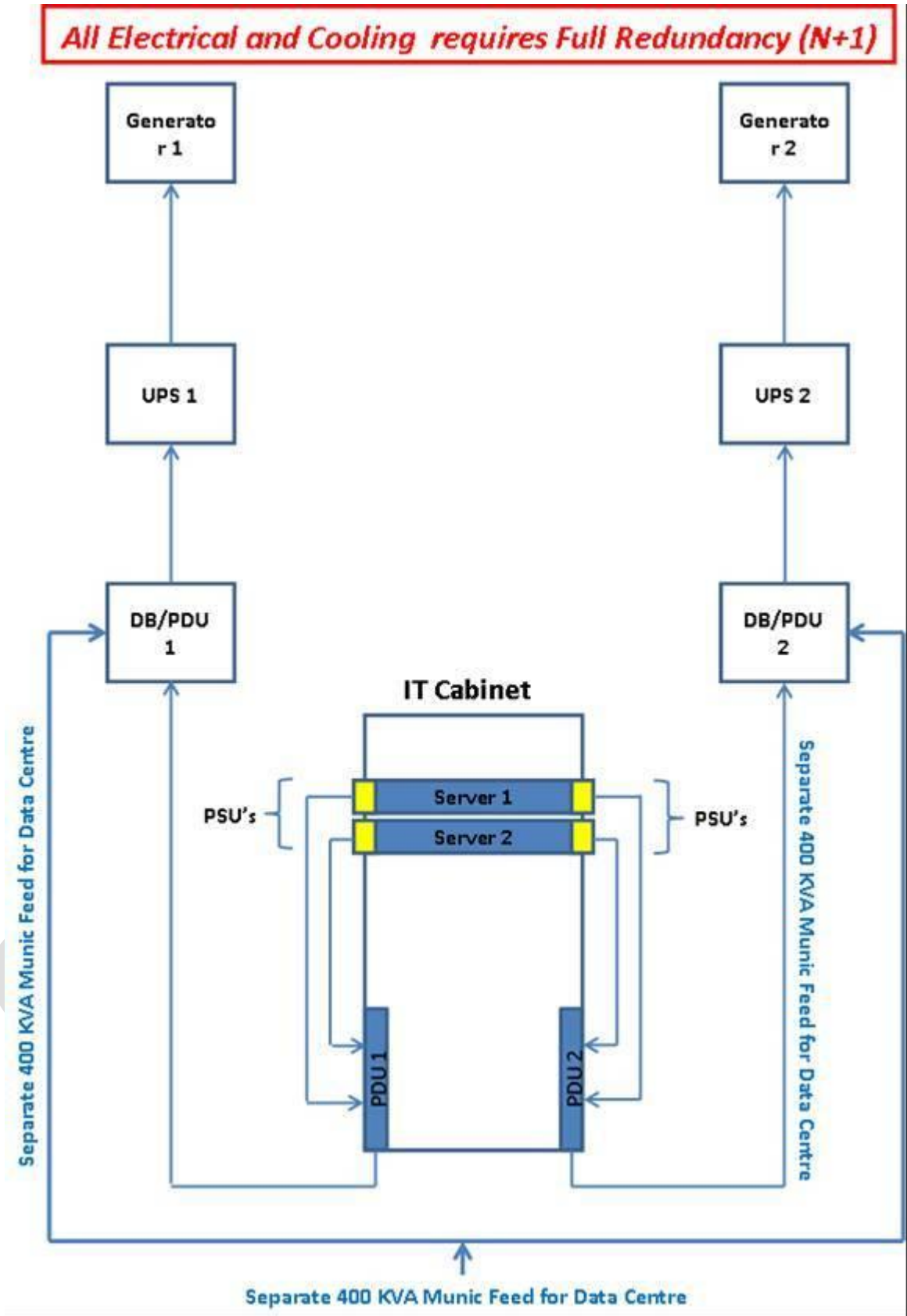


3-D Scada Server room layout





Electrical and Cooling Redundancy Diagram



2.33.11 AC Power Distribution Diagram

