Notes

This drawing represents an early-stage planning layout, not a final construction drawing.
The purpose is to communicate logical network layout to clients, services engineers, and contractors.
Buildings are arranged on a minimum site of 400m × 200m.
Each block is calulated to around 10m by 10m

Network Structure
Each building contains a Campus Distributor (CD) rack.
Inter-building connectivity is provided using single-mode fibre in a ring topology.
Ring topology provides resilience: each building has two network paths.

Ducting and Containment
100mm underground duct: single-mode fibre only.
50mm duct: Cat6 copper cabling for local services.
Fibre is installed in a loop between all major buildings to allow continued operation if one link fails.

External Connectivity
Ducting routes are planned to avoid single points of failure.
Carrier connections are assumed to enter at physically separated buildings for resilience.

Buildings Served
Supermarket
Forecourt building
Test & service building
Slow charge area
Fast charge area
Battery building 1
Battery building 2
Substation 1
Substation 2
Car wash
All buildings with automation, monitoring, retail, or telemetry requirements are connected.

Legend

- Campus Distributor Rack (10 in Total)

- Wireless Access Points (6 in Total)

- CCTV Networked Security Camera's (21 Total)

50mm ducting used for CAT6 Network cables

- 100mm Ducting for Fibre cables

- Cat 6 Cable supports 10Gbps