Nicholsons House
Maidenhead

Electrical Infrastructure Report

Date: 26/03/2025

Issue: 1

Reference:	DS-S25-035
Property Address:	Nicholsons House
Client:	Columbia Threadneedle Investments
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1.0 Introduction

Direct Synergy were instructed by the Client Columbia Threadneedle Investments, to survey the existing incoming electrical supply arrangement, identify the source of the electrical supplies and provide indication of the existing incoming supply capacity at Nicholsons House, Maidenhead.

The report is based on the visual survey, which was undertaken by the engineering surveyor on Monday 24th March 2025.

Access was provided to the basement areas and the electrical service cupboards on floors 1 to 7 in Nicholsons House.

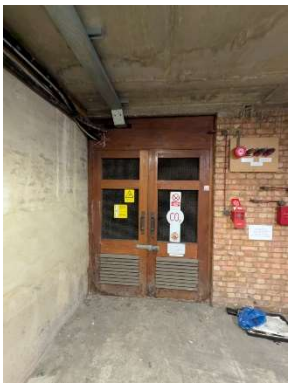
2.0 Description of the Premises

The premises is a nine storey office building originally providing circa 2474 sq.m of office accommodation over seven floors. A main reception is provided on the ground floor with two passenger lifts and staircase.

A utility substation and electrical switch room is provided in the basement area under the reception.

3.0 Existing Incoming Electrical Supply Arrangement

Nicholsons House is currently provided with a single incoming electrical supply from the SSE substation (Ref: Maidenhead High Street S/S No. 1614772) located in the basement.

Photos: Basement SSE Substation

The incoming supply cables are routed from the substation in the basement corridor to the main intake fuse switch isolator cubicle in the basement switch room. The intake cubicle is rated at 1200A three phase and serves the main building busbar chamber.

The busbar chamber provides supplies for the landlord's areas and the tenant's office floors in the building via separate landlord's and tenant's fuse switch isolators connected to the busbar chamber. The arrangement is a building network operator (BNO) arrangement which allows for different areas in the same building to be provided with their own dedicated electricity utility meters.


Photos: Intake Cubicle and Main Busbar Chamber


Photos: Tenant's and Landlord's Fuse Switch Isolators

Landlord's Supply

The landlord's supply is rated at 100A three phase with a digital meter provided for the landlord's supply.

The landlord's meter is non-half hourly direct reading whole current meter which has a maximum electricity draw capacity of 69 kVA.

Photo: Landlord's Meter

The landlord's supply terminates into a secondary busbar chamber which in turn serves the landlord's distribution boards, fire alarm panel and lifts via individual fuse switches connected to the busbar chamber. Check meters are provided on some of the landlord's distribution boards.


Photos: Landlord's Busbar Chamber, Fuse Switches and Distribution Boards

Tenant's Office Supplies

The tenants' office supply main fuse switch isolator is rated at 800A three phase. From the fuse switch isolator, two sub-main multicore armoured cables are routed to serve the rising busbar system installed in the electrical cupboard. The busbar system rises from 1st floor to 7th floor.

Photos: Tenant's Main Isolator and Sub-Main Cables

Tap off connections are provided to the rising busbar to serve a composite distribution board located in the electrical cupboard on each floor. Each office floor is provided with a 100A three phase supply with dedicated utility electricity meter installed in the composite distribution board.

Photos: Tenant's Rising Busbar System Tap Off and Office Composite Boards

There are seven meters provided for the office areas; one for each floor. The meters are all non-half hourly direct reading whole current meters. Each meter can provide a draw down capacity of 69 kVA so the office floors in total can draw down 483 kVA (7 x 69 kVA) if the capacity was available from SSE.

Photos: Office Floor Utility Meters

Other Supplies

A total of two other utility supplies are provided from the basement SSE substation which terminate into local service heads in the basement corridor.

Each supply is provided with its own dedicated utility supply meter. The supplies are rated at 100A three phase and 200A three phase respectively. It is likely that these supplies serve three retail units in the Shopping Centre as there is no labelling provided on them and the cabling is not routed in any of the office building areas.

Photos: Other Supply Service Heads and Meters

4.0 Utility Meters, Serial Numbers and MPAN Numbers

Service	Meter Serial Number	MPAN
Landlord's	EM23 D14073	2000004668042
1st floor office	L04C 02549	**Unknown**
2nd floor office	EM23 D14069	2000004668024
3rd floor office	EM23 D14068	2000027325144
4th floor office	L04C 02548	**Unknown**
5th floor office	K90C 77010	**Unknown**
6th floor office	D04C 01440	2000004668060
7th floor office	P96C 00446	2000004668070

5.0 Building Supply Capacity and Suitability

The utility meters for the landlord's supply and the seven tenant's office supplies are of the non-half hourly type and as such there is no agreed capacity for the various supplies in the building.

Each supply can draw a maximum of 69 kVA as long as the basement substation provides the capacity. This will give an installed capacity of 552 kVA in the building based on the 8 utility meters. It is highly unlikely that the building would be provided with such a large supply without an agreed capacity.

Based on the area of the building, an electrical supply capacity of circa 215 to 230 kVA (three phase) would normally be a standard provision for an office building of this type and size. The current substation in the basement is likely to provide this capacity for Nicholsons House. It would however be prudent to get this checked and confirmed by SSE.

We have been informed by the Client that there is a permitted development consent in place for change of use from office building to residential at Nicholson House. There is approval to create 42 residential units under Application No: 24/01643.

We have reviewed the electrical supply requirements for the change of use to residential and anticipate the load requirements to be as below:

Apartments	-	126 kVA (9 kVA single phase per apartment for all electric residential flats giving a total requirement of 378 kVA single phase or 126 kVA three phase)
Communal areas	-	65 kVA (general lighting + power, lifts, booster pumps, heating, security and ancillary landlord's services)
Total	-	191 kVA (circa 300A three phase)