

# Windsor **One & Two**

SPECIFICATION

# Summary Specification

## 1.1 Project Description

The project comprises the comprehensive refurbishment and extension of two existing commercial office buildings constructed in 1998 and originally known as Windsor Dials. The refurbishment is extensive and includes associated works to external paving, hard and soft landscaping, cycle stores, street furniture and external lighting.

## 1.2 Base Specification

This outline specification is a high level description of the scope and quality of the work to be carried out. The quality of the work will be supported by identifiable samples where necessary and where defined by The Employers Agent (EA) during the construction of the works.

## 1.3 General scope of works

### 1.3.1 Building Fabric

The existing roof covering, roofing accessories, plant spaces, louvres and associated primary and secondary structure are to be removed in full to allow the creation of additional office storeys, reconfigured plant and services spaces. The upper levels are therefore completely new build. The lower level brickwork is of a high standard and will be retained and cleaned. The punched windows to the lower floors will also be retained, frames will be recoated, gaskets and seals replaced, new ironmongery installed and the fenestration tested to the satisfaction of the façade engineer.

### 1.3.2 Receptions and main entrances

A new double height dedicated entrance foyer and reception space is added to the building with fully glazed curtain walling and a roof terrace.

### 1.3.3 Glazing and Cladding

The upper storeys will be formed in a combination of polyester powder coated glazed curtain walling, rainscreen coated panels and new masonry to match the existing building. All facades will be tested to CWCT standards.

### 1.3.4 Toilet cores

Basic drainage connections are retained and the cores are remade in their entirety, increased in size with new cubicles, sanitaryware, showers and internal finishes.

### 1.3.5 Primary Core and Lifts

Lift lobbies have been remodelled with new finishes throughout and new lifts installed.

### 1.3.6 Secondary fire escape staircases and lobbies

Have been retained and taken back to base shell prior to a full new refit including floor, wall and ceiling finishes.

### 1.3.7 Repairs to Existing Envelope

Repairs to brickwork, windows, curtain walling, pre-cast cills/heads and ashlar courses.

### 1.3.8 Suspended Ceilings

New metal suspended grid ceilings to office areas. Plasterboard painted ceiling finish to communal areas with contemporary lighting feature details to main communal areas.

## 1.3.9 Wall Finishes

Full re-decoration of plastered surfaces, new skirting, architraves, linings and doors, with new ironmongery and existing doors removed and replaced with new doors, (including existing fire escape doors).

## 1.3.10 Raised Access Floors

Shall be provided throughout all office spaces, lower floors shall be retained, comprehensively refurbished and tested. Upper floors will new raised floors.

## 1.3.11 Services installations

All service installations are brand new.

## 1.4 Occupancy Criteria

Office space is designed to accommodate 1 person/8sqm.

Toilet provision – 1 person/8sqm with a 60/60% male female split, calculated using the HSE Workplace Standards

Services – 1 person/8sqm

Fire – 1 person/6sqm maximum (Approved Document B)

## 1.5 Planning

The project benefits from Full Planning Consent – Approval Ref : 19/02416

## 1.6 Building Regulations

An independent inspector will be appointed for the project and approval sought where applicable for the works.

## 1.7 Breeam

The proposed works will target a Breeam Excellent rating subject to the extent of alteration and refurbishment works undertaken and where applicable the tenants fit-out.

## 1.8 Statutory Compliance

The work will be designed and constructed (where practical and not constrained by the base build) in accordance with the latest edition of, relevant Acts of Parliament and Regulations made under, current British BS or BS EN Codes of Practice and Standards, Fire Regulations, Health and Safety legislation, Building Regulations, the regulations and standards of local Service Authorities and other enforceable regulations applicable to design and construction of the development.

## 2.0 SUMMARY OF CRITICAL DESIGN DATA

### 2.1 Clear internal dimensions/ floor Areas (IPMS 3)

Building 01		Building 02	
Ground	9,563ft <sup>2</sup>	Ground	7,0873ft <sup>2</sup>
Reception	1,193ft <sup>2</sup>	Reception	972ft <sup>2</sup>
First	11,663ft <sup>2</sup>	First	7,645ft <sup>2</sup>
Second	11,663ft <sup>2</sup>	Second	7,631ft <sup>2</sup>
Third	11,773ft <sup>2</sup>	Third	7,478ft <sup>2</sup>
Fourth (New)	11,533ft <sup>2</sup>	Fourth	480ft <sup>2</sup>
Total	57,388ft <sup>2</sup>	Total	31,293ft <sup>2</sup>

# M&E Specification

## 1.0 Services – Design Parameters

### 1.1.1 Internal Design Conditions

Offices (summer):	22oC (+/- 2.0oC); no specific humidity control.
Offices (winter):	21oC (+/- 2oC); no specific humidity control.
Core Areas (summer):	Ambient; no specific humidity control.
Core Areas (winter):	21oC minimum.

### 1.1.2 External Ambient Design Conditions

Summer:	30oC db/20oC wb.
Winter:	-4oC saturated.
Air cooled condensers:	35oC db.

### 1.1.3 Ventilation Rates

Fresh Air Supply:	13 litres/sec per person.
Occupancy:	8m <sup>2</sup> /person.
WC extract rate:	10 ac/hr.

### 1.1.4 Design Loads

Solar and Fabric Gains:	Calculated in accordance with CIBSE guidance.
Power Heat Load:	25W/m <sup>2</sup>
Lighting Heat Load:	10W/m <sup>2</sup>
Occupancy Load:	85W per person sensible

### 1.1.5 Noise Criteria

General Office Areas:	NR 38
WC's, Core and Circulation Areas:	NR 40

### 1.1.6 Control Zones

Perimeter Zones:	6.0m x 4.5m.
Internal Zones:	60m <sup>2</sup> (max.).

### 1.1.7 Electrical Loadings

Lighting:	10W/m <sup>2</sup>
Small Power:	25W/m <sup>2</sup>
VRV Fan Coil Units:	8W/m <sup>2</sup>
HVAC Plant:	50W/m <sup>2</sup>

### 1.1.8 Lighting Levels

Reception:	300-400lux
Office Areas:	300-500lux
Core and circulation areas:	200lux.

## 1.2 Mechanical Services

### 1.2.1 Ventilation

Fresh air ventilation is distributed to the office floors via ductwork from AHU's mounted at roof level. Fresh air is introduced to the occupied space via VRV fan coil units.

### 1.2.2 Comfort Cooling and Heating

The office floors are comfort cooled and heated by VRV heat recovery systems comprising ceiling mounted fan coil units with associated air-cooled condensing units mounted at roof level. The systems incorporate a refrigerant leak detection system. Comfort cooling and heating is provided to the reception areas via dedicated VRV heat pump systems comprising ceiling mounted fan coil units with associated air-cooled condensing units mounted at roof level. Heating of the reception areas is further supplemented by a gas fired LTHW system serving trench heating and main entrance door heaters.

### 1.2.3 Core and Staircase Heating

The core and staircases are heated by radiators and fan convectors respectively fed via the gas fired LTHW system.

### 1.2.4 Toilet Ventilation

Toilets are ventilated via a dedicated AHU at roof level.

### 1.2.5 BMS

A new BMS has been provided to allow fully integrated control from a central source. For a multi-tenancy arrangement, the BMS has the facility to allow each individual tenant to monitor and control their own systems. The BMS also incorporates an energy monitoring system which can monitor and log energy and utility consumption for each individual tenant.

## 1.3 Electrical Services

### 1.3.1 LV Distribution System

Each building has its own dedicated sub-station.

An LV distribution system is provided comprising a main LV distribution board with outgoing ways serving various landlord and tenant distribution boards located throughout the building at each floor level. All distribution boards incorporate energy metering connected directly to the BMS energy monitoring system.

Each building has the facility to incorporate a standby generator.

### 1.3.2 Small Power Installation

Dedicated distribution boards are provided to all landlord areas at each floor level. Tenant office areas are provided with cleaner's sockets only, with the main small power installation to the floor by the incoming tenant.

### 1.3.3 Lighting Installation

A high efficiency LG7 compliant LED lighting system with DALI dimmable fully addressable control system is provided. Luminaires incorporating an air handling facility are provided to all office areas with LED downlights provided to all landlord core and circulation areas. Bespoke feature lighting is provided to the main entrances/reception areas. An emergency lighting system is provided comprising luminaires with self-contained 3-hour battery packs.

### 1.3.4 Access Control and CCTV

A CCTV system is provided covering all entrances which is monitored from reception.

An access control system is provided to all entrances to the building, entrance doors to each office area via the lift lobby and the staircase entrances onto each floor. The system is expandable allowing a tenant to add additional devices.

### 1.3.5 Fire Alarm System

An analogue addressable 'LI' fire detection system comprising a network of smoke and heat detection, manual break glass units, sounders, beacons and interface devices for plant shut-downs. The main fire alarm panel is located within the main reception area.

### 1.3.6 Disabled Refuge

A disabled refuge system is provided with an intercom system in each refuge area linked to the main reception desk.

### 1.3.7 Disabled Toilet Alarm

A disabled toilet alarm call system is provided to all disabled toilets comprising call cords, remote reset units and over door indicators. All alarm signals are monitored at the main reception desk.

### 1.3.8 Lightning Protection System

A lightning protection system is provided in compliance with BS EN 62305.

### 1.3.9 IT and Data Services Provision

New incoming cable ducts and chambers are provided for tenants to bring in their own connections.