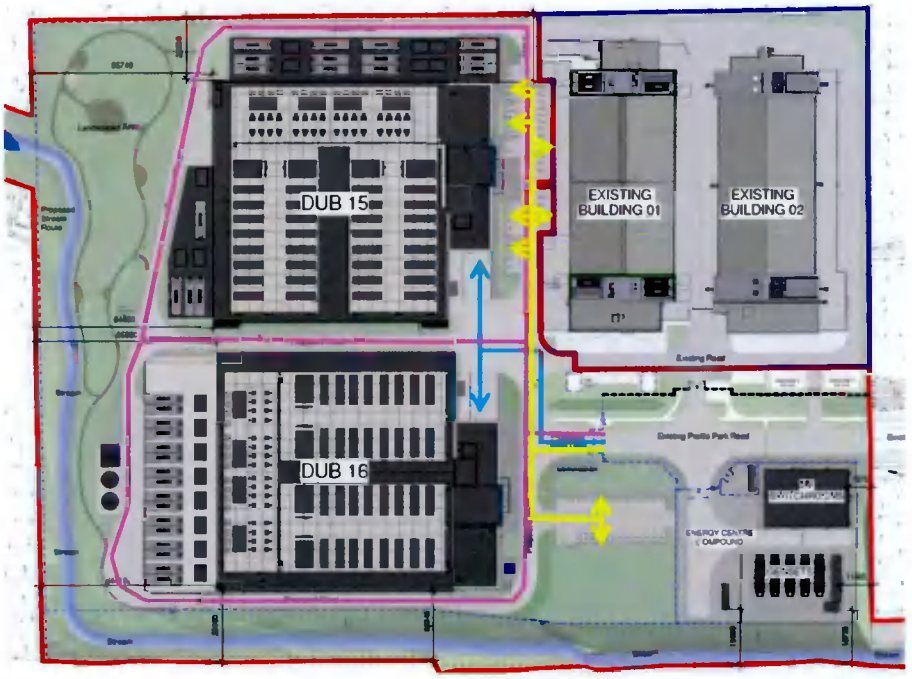
Picture 27: Site masterplan with traffic routes marked up:

- Continuous cyan line – access to Deliveries area for HGV
- Continuous pink line – access for fire tender, oil tanker and HGV vehicle for maintenance only
- Continuous yellow line – private car access



7.2 Parking spaces

Parking spaces have been provided in the vicinity of the office portion of the buildings, to the front of each building, with disabled car spaces in close proximity to the main building entrance together with car parking spaces that have electrical charging points.

Car provision has been focused to the front of the buildings to ensure the Biodiversity area to the south and east of the data halls remains free from as much vehicle movement as possible to provide a tranquil environment and walkways for staff to enjoy within these naturally landscaped areas.

The site will provide 71 car spaces to cater for the proposed development – refer to ARUP report - traffic & transport Assessment & mobility Management Plan for information on modal split & parking calculations.

Out of the proposed 71 car spaces 4 no. will be disabled car spaces and 8no. will be for electrical car spaces with charging points.

In addition to the car parking spaces there is also provision for 26 no. bicycles parking spaces. These will be provided in close proximity to the main access gates.

7.3 Pedestrians and Cyclists Site Access

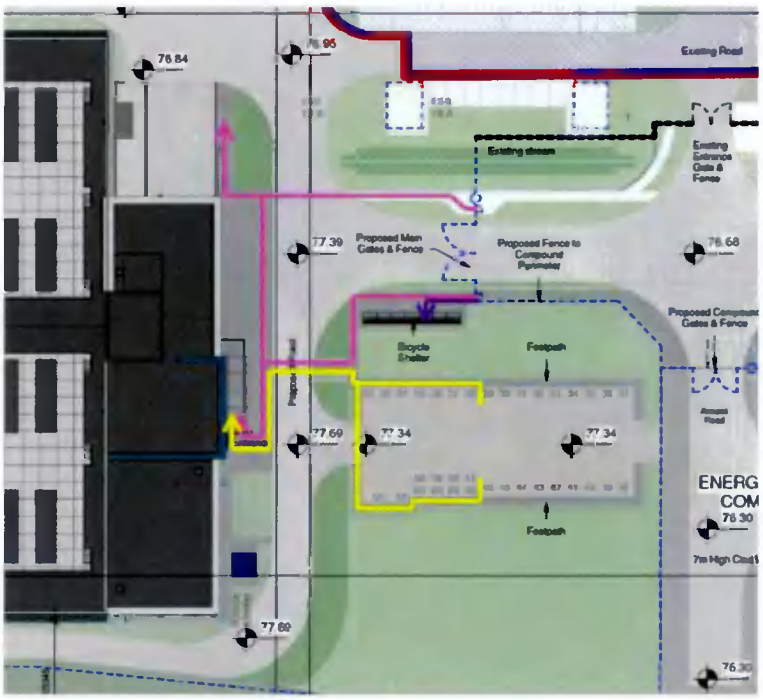
Pedestrians and cyclists will use a separate access point to the site beside the main vehicle access, located to the northern boundary of the site and utilising the existing business park road. Cycle lanes are provided within the network of internal roads & paths of the Profile park. The access gate will include a mantrap for security. Both turnstile and a gate for cyclists will be provided. Pedestrians and cyclists will have a short route to access the building entrance and bicycle shelter located in vicinity of the main site access entrance and within close proximity of building entrances.

To minimise conflicts between vehicles and pedestrians, pedestrian traffic across the site is separated with minimal cross overs. Crossing routes will have the appropriate signage and clear road markings indicating designated pedestrian crossings.

Picture 28: DUB 16

Site masterplan with pedestrians' routes marked up

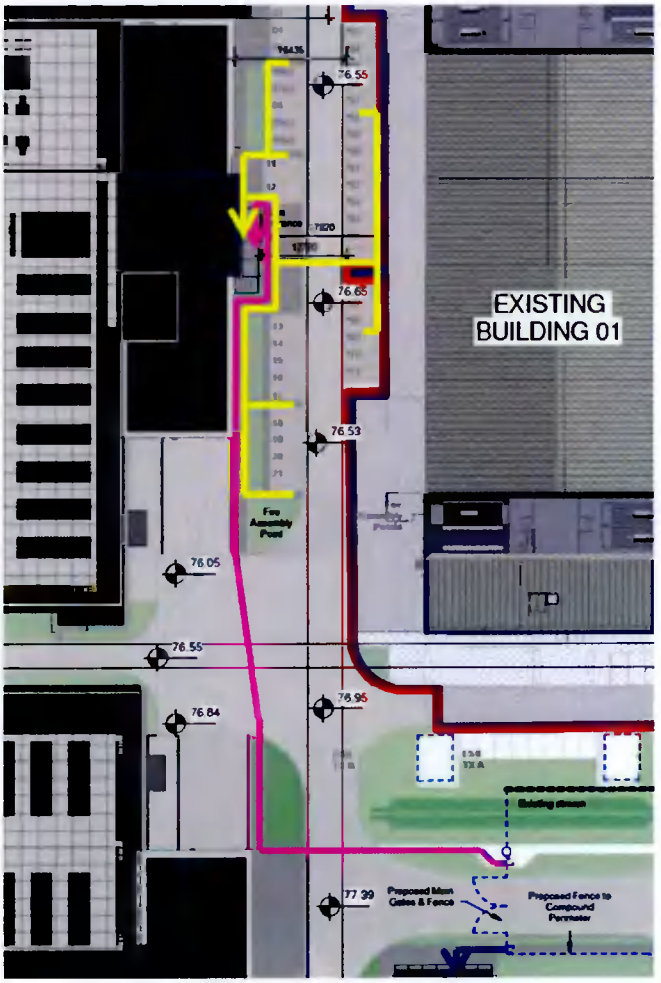
- Continuous purple line – cyclists access route
- Continuous pink line – staff and visitors pedestrians access route
- Continuous Yellow line – pedestrians access route from car parking spaces



Picture 28a: DUB 15

Site masterplan with pedestrians' routes marked up

- Continuous purple line – cyclists access route
- Continuous pink line – staff and visitors pedestrians access route
- Continuous Yellow line – pedestrians access route from car parking spaces



7.4 Security strategy

The site access points are limited to 1 no. secure vehicular gate and 1 no pedestrian access gate. The main pedestrian gate access to the site will incorporate a turnstile mantrap controlled secure access.

There is a secondary access gate to the Energy generation compound which is for maintenance purposes only.

A portion of the Biodiversity zone along the riparian strip to the eastern boundary will be outside of the secure fence line, however it will have controlled pedestrian access. There will be 2 no. access points into the biodiversity zone along the eastern boundary and will be for maintenance purposes only.

The data halls are proposed to be accessible 24 hours a day for maintenance and service vehicles. The office building will be accessible also 24hrs however the standard office working hours will be 8am-6pm.

8.0 Design and Layout

The proposed buildings are 2 storey high structure with partial 3rd storey for roof access only, and are a regular rectangular plan, orientated on the east-west axis. External dimensions are approximately 89m x 67m. The Loading dock area is incorporated into the ground level of the office building with first floor office cantilevered out over the loading bay. DUB16 has 5 no staircases for a combined circulation & escape purposes and DUB 15 has 6 staircases, 2 of which are external staircases along the eastern façade of the building.

Picture 29: Image of external staircases.

Picture 30: Image of external staircases from verified views.

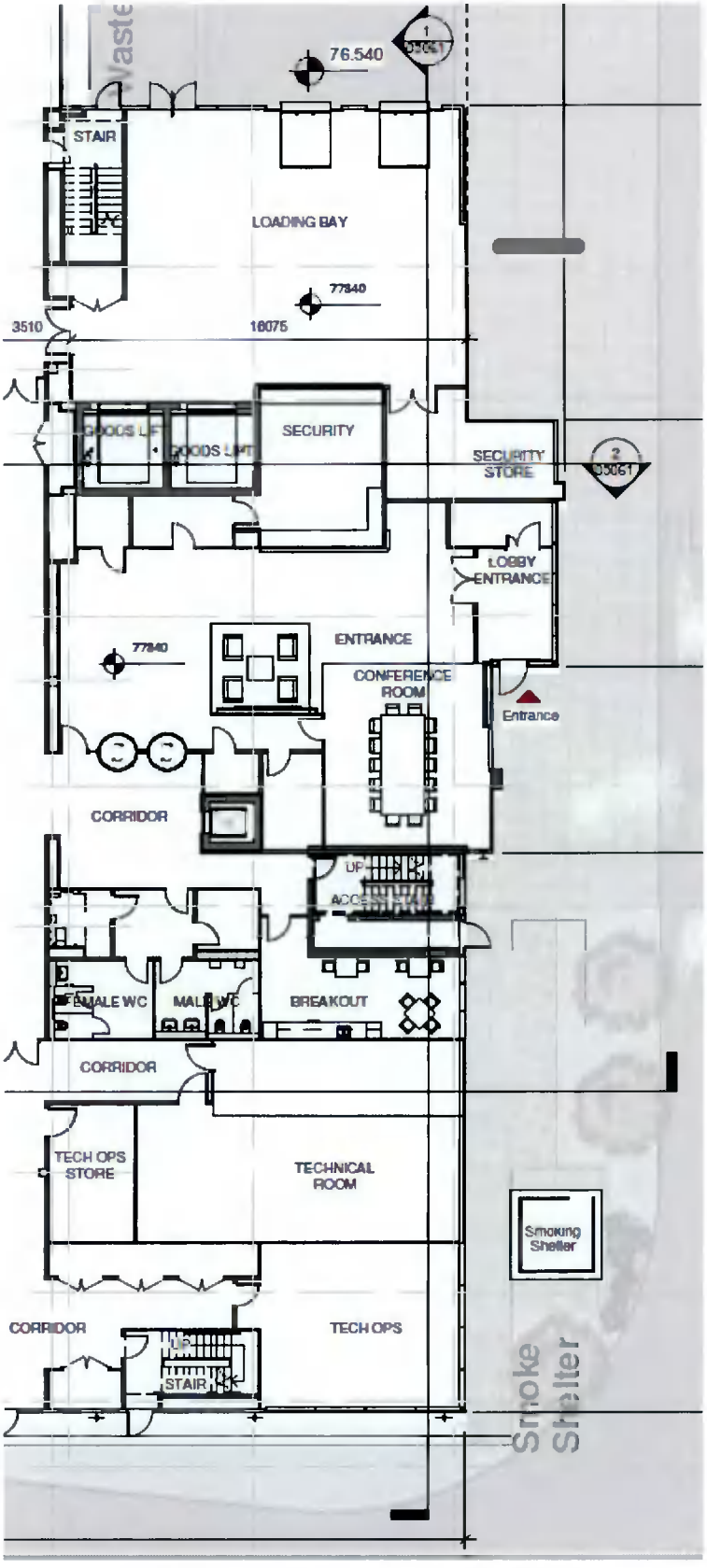
The building consists of 2 main parts: office block and a data centre. Offices comprise approx. 1989sqm each. The Data centre facility will provide services to customers, who will have an opportunity, to rent office space as well as renting the data service space, so that their personnel can be based permanently on site.

The facility will be occupied by approximately 118 people at any one time across both buildings within the development -DUB15 & 16.

The office block of each building is approx. 17m wide and provides the following services:

- Building entrance leading to the entrance lobby with security reception desk and conference room, and a mantrap lobby providing access to the secure side of the building. Tech ops rooms and storage for operations team, looking after day to day functioning of the data centre, break-out spaces and welfare facilities are provided on the secure access side of the ground floor, together with passenger lift and circulation stair between ground & first floor levels.
- Shipping and Receiving area on the ground floor which includes 2 no. loading docks with roller shutters and levelling plates, unloading area, security and storage area. This area is directly linked with the external delivery yard and waste compound.
- All corridors on ground floor and upper floor which will be used for transport of goods are 2.5-2.7m wide.
- 1st floor is the area intended mainly for customers and includes customer offices, canteen/break out area, and welfare facilities including shower.

Picture 31: Extract from DUB16 Ground floor plan showing the office block with entrance zone, staff facilities and loading bays



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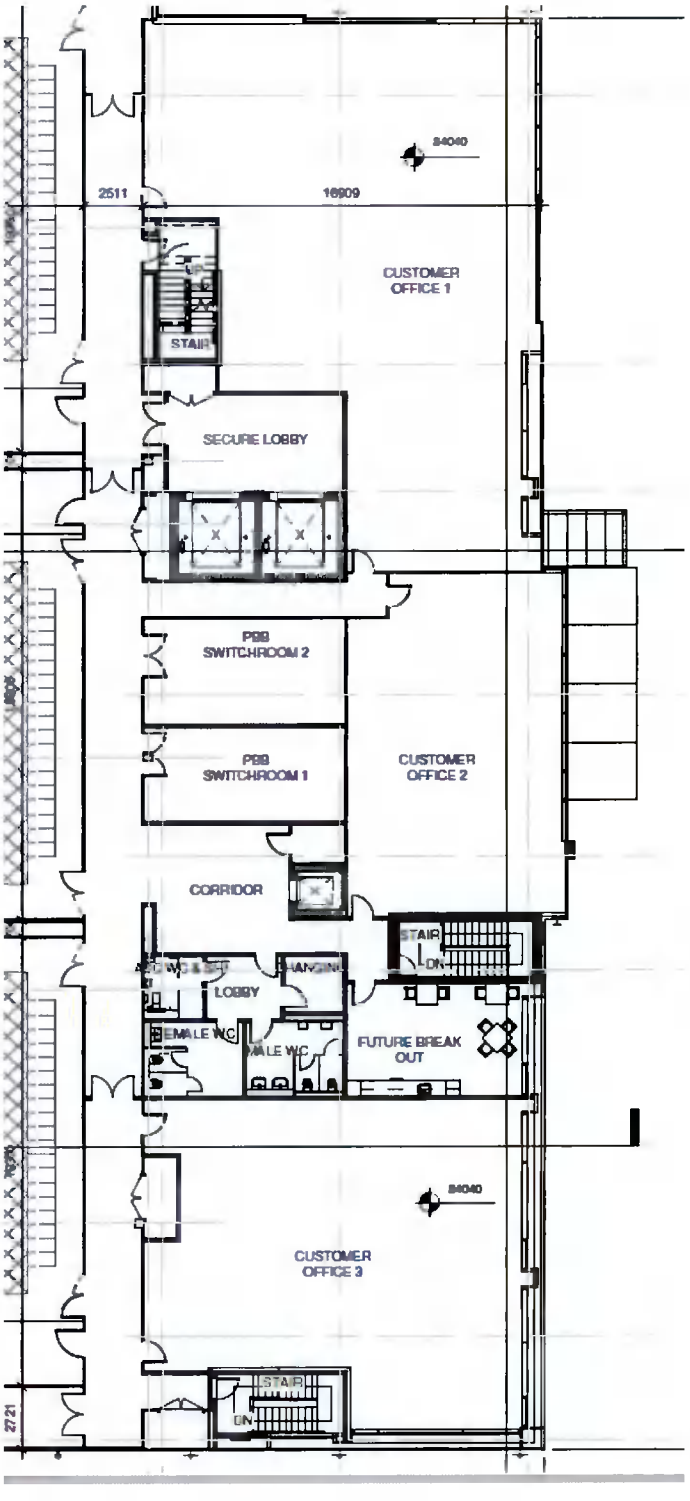
Picture 32: Extract from DUB16 First floor plan showing the office block with customer facilities



The Data centre is separated from the Front of House by an internal corridor. The main stair and goods lift core accessed from the loading bay at ground level, serves each floor including roof access level. The passenger lift is within the entrance lobby area of the office building and serves both floors of both office & data hall. The main stair and goods lifts lead onto a steel gantry elevated over the sloping roof surface at 1:60 fall, and extending over approx. 2/3rd of the data centre roof. The steel gantry contains chiller units for office block and Data

Halls. The Gantry is surrounded by a solid 7m tall enclosing wall to contain the noise from the equipment as well as to visually screen the roof plant & equipment. Acoustic louvers at low level within the screen wall provide low level air flow for all roof plant & equipment. The remainder of roof space is accessible for maintenance of all services travelling across the roof. Galvanized steel stepovers are provided where necessary to cross over the services.

Means of escape from the roof is provided by stairs which extend to this level to provide escape and safe access for maintenance. Front of house roof is at a lower level, accessible via stairs & lift core of office building and step overs as required. Roof parapet to office building is higher than 1.1m for collective safety protective measures, this roof area is screened by wall cladding of façade that extends up to parapet level. Lifts and staircase roofs are accessible via steel ladders. Fall arrest system will be provide on these small roofs, as parapets are low, in order to keep the overall building height as low as possible.

The Data centre block of each building, which is 2 storeys high, houses 4 no. open plan server rooms on each floor together with all associated technical support and plant rooms together with storage rooms. A perimeter corridor is provided around the data halls and separates the data halls from the office building.

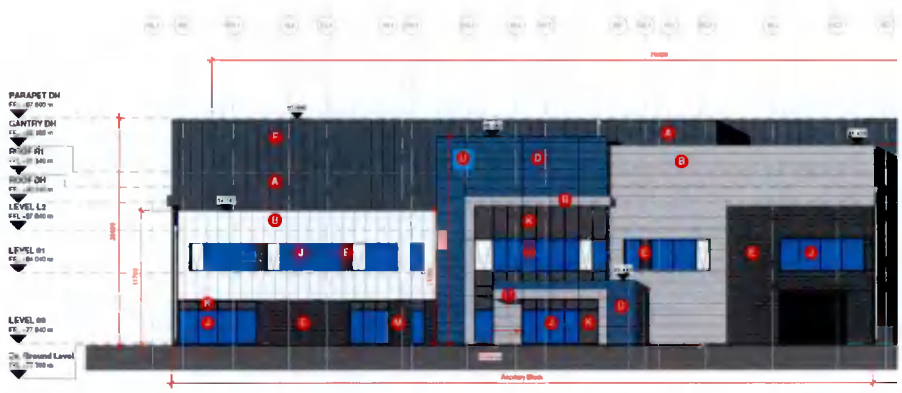
8.1 Building height

We have reviewed the requirements of the development plan and in addition have reviewed the most recent applications made in Profile Park. We believe the scheme presented falls within the parameters set out in the development Plan.

The height of each building is a maximum of 20m's from the immediately surrounding paths, to comply with the height limit of 20m as prescribed in the South Dublin County Council Development Plan. The buildings differ in ground FFL by 990mm, the higher of the 2 buildings – DUB 16, having a ridge level of 97.690 0.D. The existing highest ground level within the site boundary is 80.170 O.D, resulting in DUB 16 ridge level being 17.52m's above the highest existing ground level within the site.

All proposed generator flues, roof level plant and lift over runs are all within the 20m max height requirement.

Picture 33: DUB 16 extract north elevation – max height 20m



Picture 34: DUB 15 extract north elevation – max height 20m

8.2 Elevations' Design and Materials

The buildings have been designed with an aesthetic that reflects the surrounding landscape and existing facilities within the business park and in adjacent business parks. The design of each building revolves around the separation of building function into data centre and office administration, which has been translated into the façade design by use of different materials, colours and variations in articulation of the form of each element. These combined, provide for interest to the façade with the aim to achieve high-quality architecture.

The colour palette proposed revolves around the applicants branding and incorporates blue tones together with variations between light and dark greys.

Data centre is clad with horizontally fixed, composite trapezoidal metal panels, powder coated to a merlin grey colour. The uniform look of the cladding colour and the massing of the data halls is broken up by incorporating stairs projecting from the main building line and incorporating mesh clad external stairs.The walls around the perimeter of the generator yards are clad with composite panels matching the data centre walls.

Picture 35: Mood image of grey composite cladding

Picture 36: RAL colours for flat unprofiled panelised composite cladding panels to Office building and Data halls

External stairs on the east façade of DUB15 are clad with dark grey painted stainless steel woven mesh cladding. Their steel support structure and stringers will be painted to match this so as not to dominate the feature.

Picture 37: View of external stairs with mesh woven cladding

Lifts and staircase protruding above the roof level will be clad in vertically installed composite flat metal panels, in a merlin grey colour to match the cladding of the main data centre hall.

Picture 38: Stairs & Lifts to provide safe access to roof levels with cladding finish

The office block facades are visually differentiated from the data centre part of the overall building. Office block features a 2 storey tall building with variations in parapet heights and incorporates large glazed elements to all facades.

The Building entrance is the focal point of the office block facades and has been accentuated by a covered canopy and a projecting pressed metal profile from the main wall cladding line, defining the building entrance point.

The Loading dock area has merged seamlessly into the office block facades with the first floor of the office building cantilevering out over the loading dock and supported on cladded fin walls & columns which aid in screening the activities within the loading dock area together with the proposed landscaping to the of this zone.

Picture 39: View of proposed DUB16 from north-west, showing entrance and loading dock integration

Picture 40: DUB16 Entrance view from north-east position

Generator yard enclosures will be constructed of composite metal flat panels to match the data hall buildings, in medium grey colour – merlin grey, reaching up to max. 9.0m above ground level, in order to screen the highest plant elements within the yard.

Picture 41: View from south east position showing data halls & screen enclosures to generator yards

The design of ancillary structures such as the Pump House, Substation and Waste Store are in keeping with the main data centre building, ie. use of flat composite panels in medium grey colour (merlin grey).

8.3 Visualisations

Refer to Visual Impact Assessment report prepared by Digital Dimensions for verified views.

9.0 Schedule of Areas

Refer to RKD Area drawing IE-DUBZZ-ZZZZ-ZZ-RKD-DR-A-00025:

DATA CENTRE BUILDINGS GFA SCHEDULE	
BUILDING	AREA
DUB15	16865 m²
DUB16	16712 m²
BUILDING TOTAL	33577 m²

SUPPORTING BUILDINGS GFA SCHEDULE	
NAME	AREA
DISTRIBUTION GAS COMPOUND	27 m²
HEAT RECOVERY BUILDING	27 m²
HV CONTAINER	40 m²
LV & CONTROL CONTAINER	21 m²
MV SWITCHROOMS	644 m²
PUMP ROOM	52 m²
REFUSE	25 m²
TRANSFORMERS	19 m²
GRAND TOTAL	856 m²

DUB 15/16 Building Gross Floor Areas - 30/06/2021

		Proposed Area m²	Totals m²	Comments
Datahall Building - DUB 15	Ground	8280		Area Includes Admin Area - 640sqm & Data Halls - 7310sqm
	First	8382		Area Includes Admin Area - 1045sqm & Data Halls - 7337sqm
	Second	203		Area Includes Admin Area,stairs & lift to continue to roof & 131sqm & Data Halls- Stairs to roof - 78sqm
	Total		16865	
Datahall Building - DUB 16	Ground	8220		Area Includes Admin Area - 640sqm & Data Halls - 7274sqm
	First	8303		Area Includes Admin Area - 1028sqm & Data Halls - 7274sqm
	Second	189		Area Includes Admin Area,stairs & lift to continue to roof & 133sqm & Data Halls- Stairs to roof - 56sqm
	Total		16712	
Total DUB15/16 Building Area			**33577**	
Site Auxiliary Buildings				
Refuse /Bin Store	Ground	25.5		
Hydrant Tank Pump Room	Ground	52.5		
Energy Centre Compound				
Distribution Gas Compound	Ground	27		
HV Container	Ground	40		
LV & Control Container	Ground	21		
Transformers	Ground	19		
MV Switchroom / ESB Substation	Ground	644		
Heat recovery building	Ground	27		
	Total		856	
Total Ancillary Building Area			**856**	

Site Areas

	Area m²	Area acre	Totals hectare	Comments
Site (Redline Boundary Area)	61813	15.274	6.181	

Existing Building Gross Floor Areas

		Area m²	Totals m²	Comments
Existing ESB Buildings	Ground	112		this is the total GFA of Existing Substations A & B adjacent to DUB13 – potential works as part of this development
	Total		112	
Total Building Area			**112**	

Car Parking Provision

		Spaces No.	Totals No.	Comments
Datahall Building DUB 15 & DUB 16	Accessible Parking	4		
	Electric vehicle Parking	8		
	Standard Parking	40		
	Existing Parking	19		Existing car parking spaces to the south of existing DUB 14 Data Centre
	Total		71	
Total Car Parking Spaces			**71**	

Bicycle Parking Provision

		Spaces No.	Totals No.	Comments
Datahall Building DUB 15 & DUB 16	Bicycle Parking	26		Two Covered Bicycle stands providing a total of 13 sheffield stands
Total Bicycle Spaces			**26**	

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