

Planning Application



SD22A/0420

Additional Information Design Statement

DUB 13- Falcon Avenue

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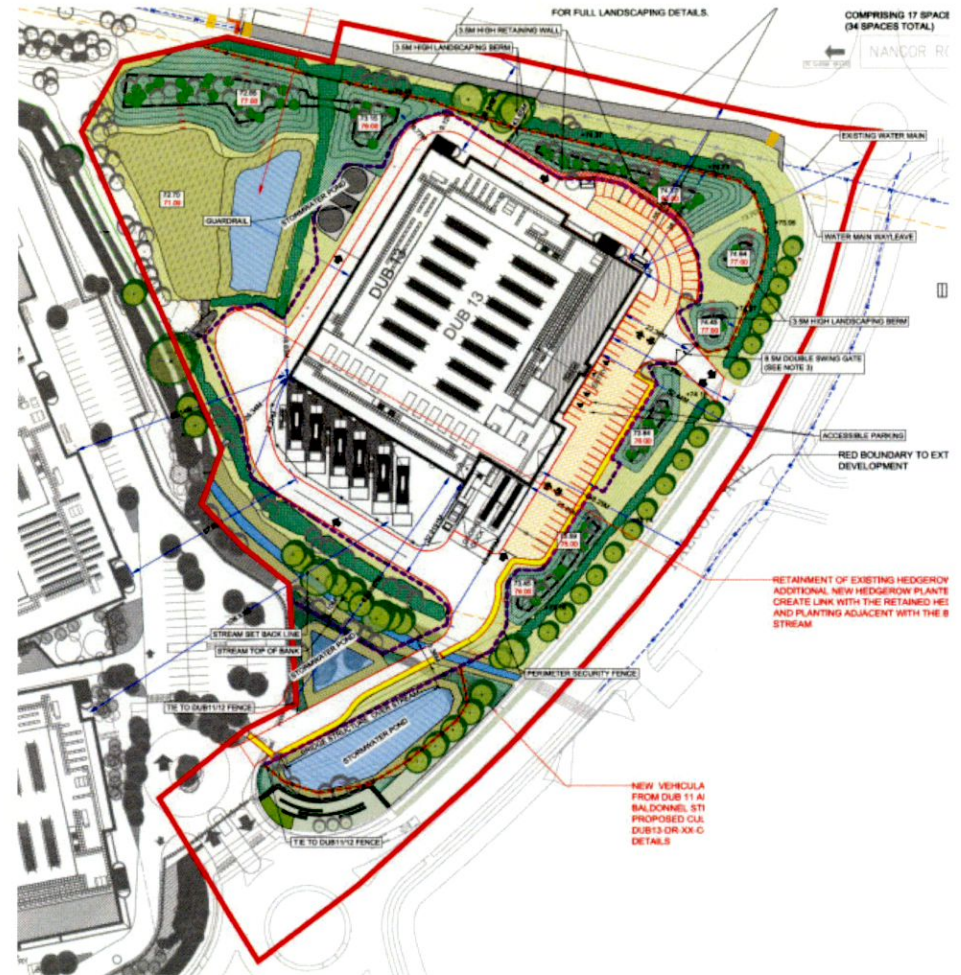


Figure 1 - Development Plan

1. Introduction

This additional information design statement refers to the planning application for a proposed Data Centre called DUB 13 (Figure 2, outlined in red), ref SD22A/0420 lodged 8th November 2022.

Following on from the Request for Additional Information request, on 12th January 2023, the following items have been addressed and the proposed design modified as required, which will be highlighted throughout this additional information design statement:

- Item 1(f)
- Item 2(a)
- Item 2(b)

The additional information design statement should be read in conjunction with previously submitted drawings and documents, as well as any further drawings and documents submitted on behalf of the request for additional information, for this planning application. Continuing to document the application's compliance with the principles contained within the South Dublin County Development Plan 2022-2028.

Appendix A contains a Drawing List indicating the full list of additional architectural drawings submitted with this application.

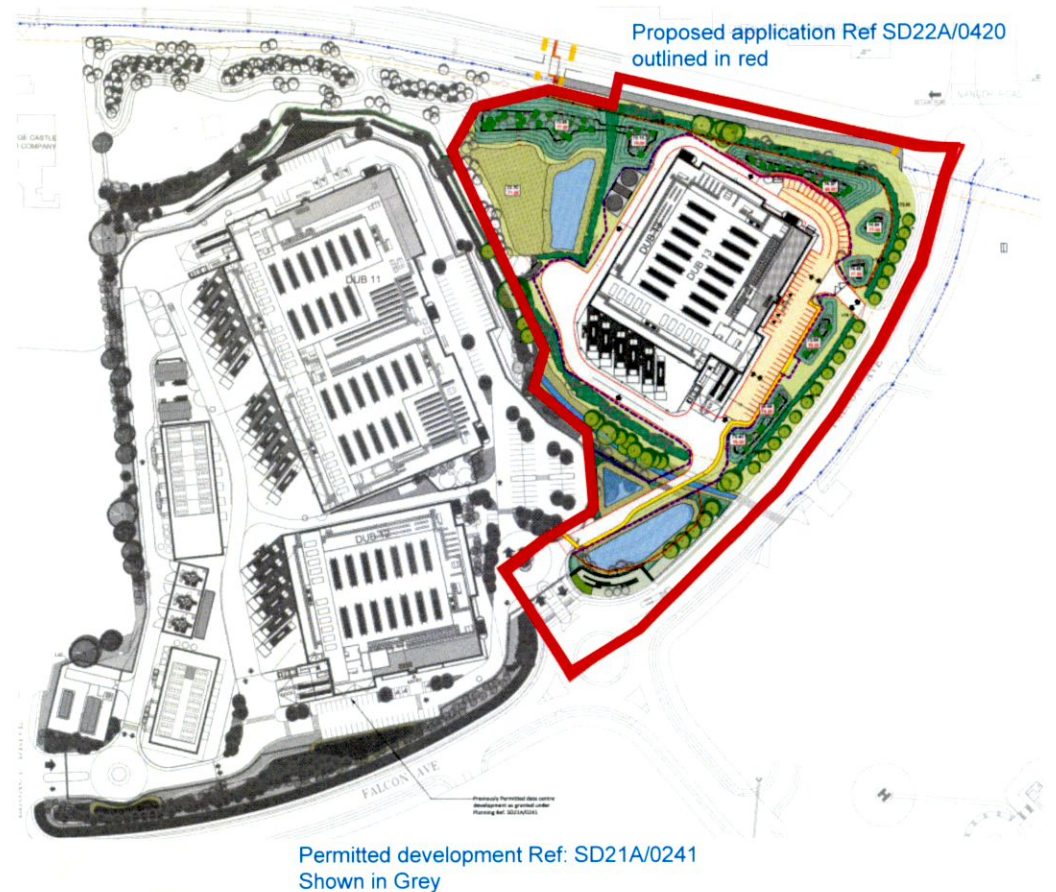


Figure 2 - Campus Plan

2. Requested Additional Information

The following sets out the requested additional information, that will be addressed:

- Item 1(f)

The applicant is requested to provide a design statement that indicates compliance with QDP2 Objective 1, Policy QDP3 and objective 1, QDP4 Objective 2, QDP7 Objective 6, 7 and 8, QDP8 Objective 1, Policy QDP11 and Section 12.5.2

- Item 2(a)

The applicant is requested to reconsider the elevational treatment and design along prominent frontages in terms of design and materials used.

- Item 2(b)

The applicant is requested to provide details of fencing / boundary treatment.

3. The Plan Approach - QDP2 Objective 1

QDP2 Objective 1

To ensure that applications for new development are accompanied by a statement from a suitably qualified person detailing how 'The Plan Approach' has been taken into consideration and incorporated into the design of the development including the materials and finishes proposed and demonstrating how the overarching principles for the achievement of successful and sustainable neighbourhoods have been integrated as part of the design proposal.

The Plan Approach

In line with SDCC Development Plan QDP2 Objective 1, the site has been reviewed to ensure the achievement of successful and sustainable neighbourhoods have been addressed under the following overarching principles:

- Context
- Healthy Placemaking
- Connected Neighbourhoods
- Thriving Economy
- Inclusive and Accessible
- Public Realm
- Built Form and Mix
- Design and Materials

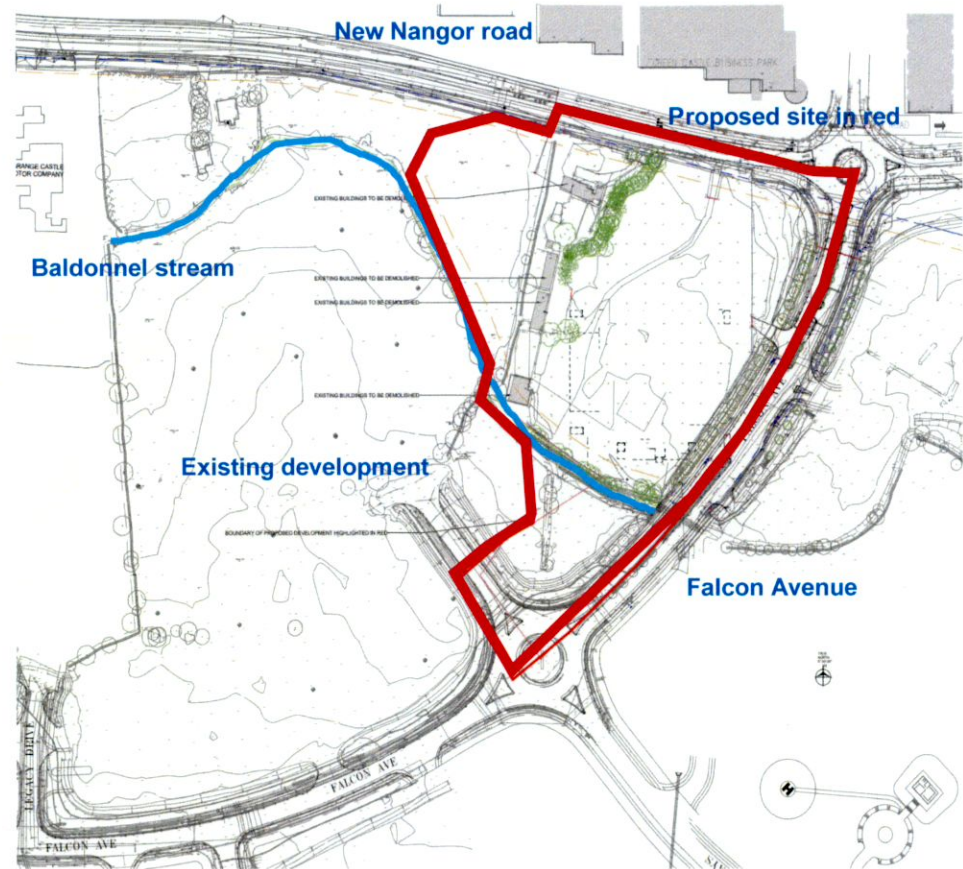


Figure 3 - Existing Site Plan, with Proposed Site outlined in Red

4. Context - Policy QDP3 & Objective 1

Policy QDP3

Support and facilitate proposals which contribute in a positive manner to the character and setting of an area.

QDP3 Objective 1

To ensure that new development contributes in a positive manner to the character and setting of the immediate area in which a proposed development is located taking into consideration the provisions set out in Chapters 3 and 4 of this Plan and having regard to the requirements set out in Chapter 13 'Implementation and Monitoring' in relation to design statements.

EXISTING SITE

The site, area of 3.79 hectares, is undeveloped land within the Profile Park Business Park, a privately enclosed Business Park of 40.5 hectares with controlled access. Situated on a corner site, it overlooks the roundabout accessing Kilcarbery Park, to the North, and Falcon Avenue, the main route through Profile Park, which in turns forms the Eastern and Southern boundaries.

PREVIOUS LAND USES

The land is undisturbed agricultural land, with a recently occupied two-storey house and outbuildings fronting New Nangor Road. According to recent archaeological investigations in the Grange Castle area, there is no evidence of any previous settlement within the site.

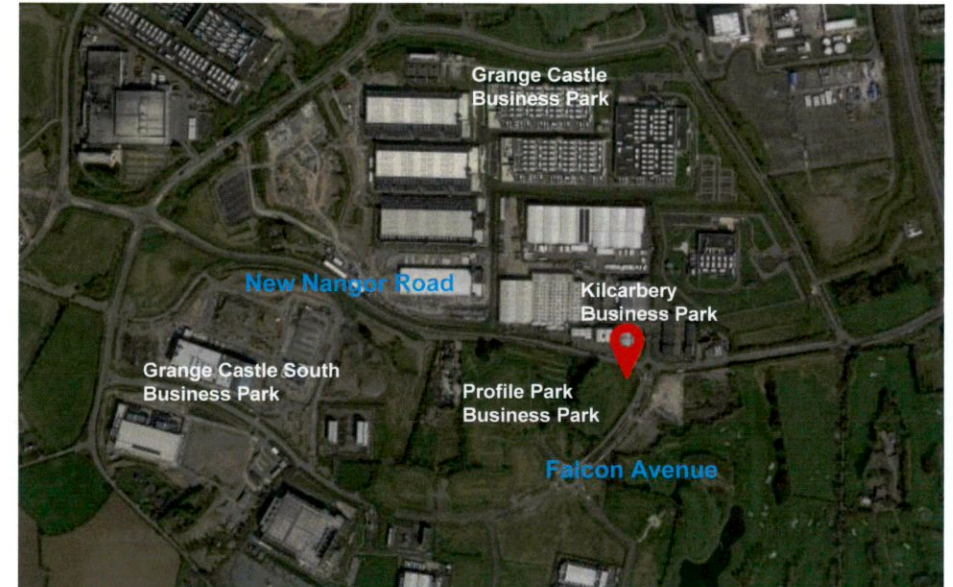


Figure 4 - Site Location's Surrounding Developments



Figure 5 – Photograph of Neighbouring Building in the Immediate Vicinity of the Proposed Development



Figure 6 – Photograph of Neighbouring Building in the Immediate Vicinity of the Proposed Development

4. Context - Policy QDP3 & Objective 1

ADJACENT LAND USES

The lands beyond Falcon avenue are undeveloped, however the site is located within an industrial area, where there are multiple operational data centres and industrial buildings, occupied by companies including Microsoft, Amazon, Google, Cyrus One, Edge Connex and Digital Reality, along the New Nangor Road as well as in the adjacent Grange Castle Business Park (North of Kilcarbery Park) and Grange Castle South Business park to the East and Grange Castle Business Park, North of Kilcarbery Park.

The site and the immediately adjacent sites have been zoned for Objective EE, under the South Dublin Development Plan 2022-2028:

“To provide for enterprise and employment related uses.”

Which also identifies Data Centres as being open for consideration under the zoning.

The land to the West has been granted planning under application SD21A/0241 with the lands further west occupied by Bolands Garage, a vehicle repair business. aw

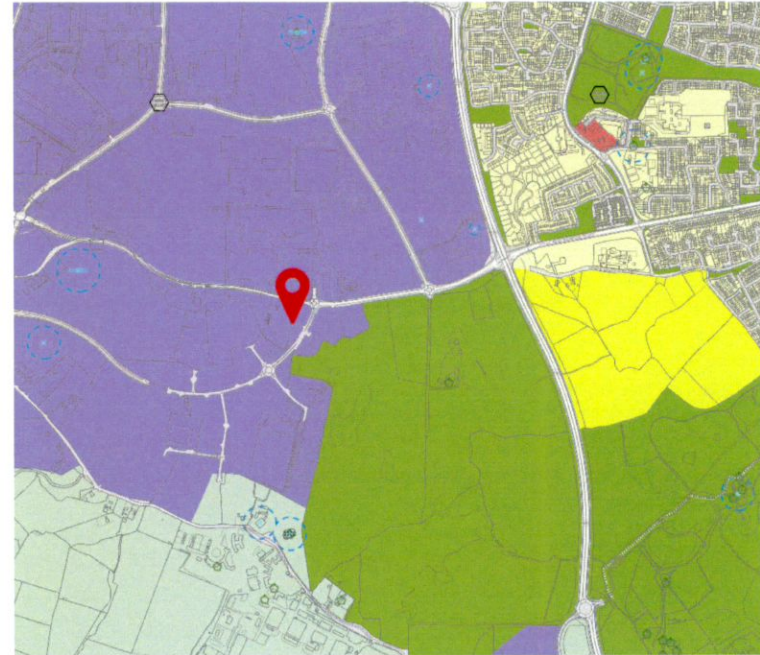


Figure 7 - Site Zoning, per South Dublin County Council 2022-2028 Plan



Figure 8– Photograph of Neighbouring Building in the Immediate Vicinity of the Proposed Development



Figure 9– Photograph of Grange Castle South Business Park, in the Vicinity of the Proposed Development

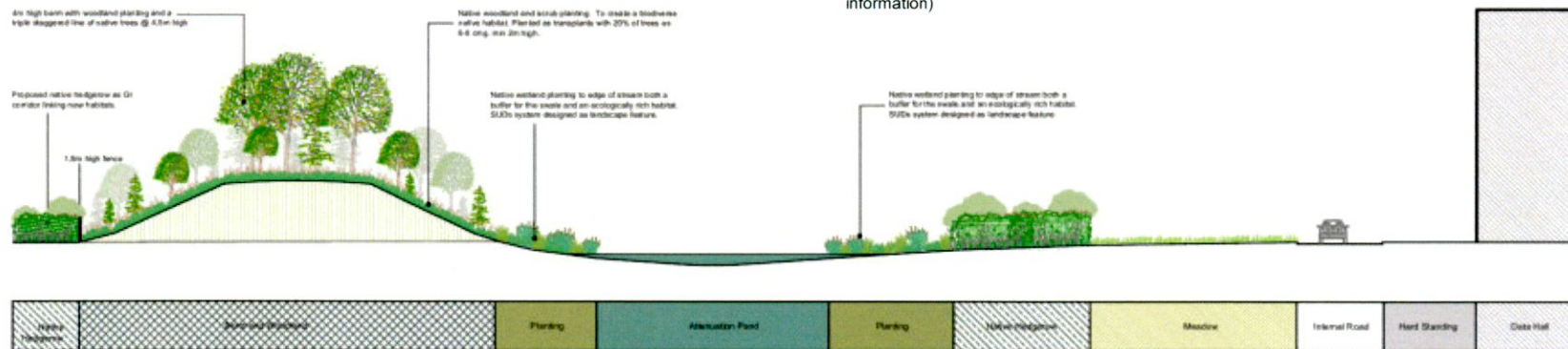
5. Healthy Placemaking – QDP4 Objective 2

QDP4 Objective 2

To promote a high standard of building and urban design, creating public spaces that are distinctive, safe, universally accessible and facilitate social and cultural diversity and interaction.

The landscaping and planting strategy is a continuation of the previously approved strategy, SD21A/0241, for the campus. To assist with the enhanced SuDS requirement of the site, the attenuation ponds sizing have been modified as well as an additional pond to the South, to the that previously approved and originally applied for. The view of the Data Centre is largely to be screened behind large berms, with planting and attenuation ponds creating a wildlife habitat. With select views available from Falcon avenue, as per Figure 11.

It is proposed to use natural screening solutions, including soft landscaping and a SuDS drainage design, which offer benefits to ecology and the environment. These are described in further detail in the Civil & Structural Engineers Report, prepared by Pinnacle Ireland, and the Landscape Report and drawings, prepared by Kevin Fitzpatrick Landscape Architecture.



8 Figure 11 – Extract of KFLA's landscape screening detail (Modified as per additional information)

Landscape screening

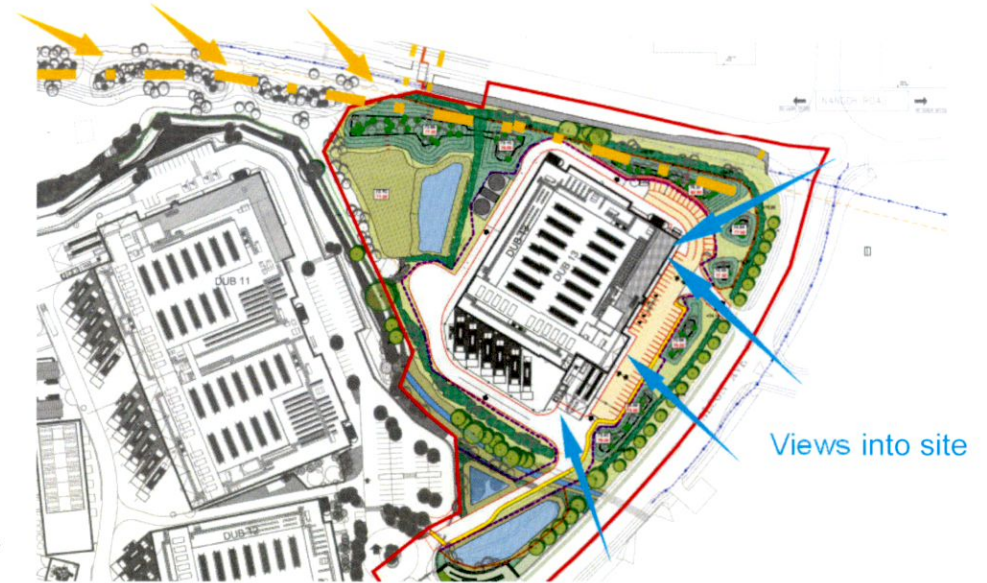


Figure 10 – Site Plan showing the Landscape Screening and Views into the Site (Modified as per additional information)

5. Healthy Placemaking – QDP4 Objective 2

The proposed development's location in Profile park has limited opportunity for engagement with the public realm at street level. Therefore, an alternative approach has been taken. The proposed scheme has strived to find a balance between the secure facility required by the client, given the nature of their business, and creating a welcome and inviting area around the building. Sighting the site back from the road enables us to create a secure zone, which in turns allows for this area to be adopted and used to add to the ecological value of the site.

As such the Design Team wanted to promote the existing natural attributes of the site and thus undertook a thorough review of the site layout to minimize any alteration to the Baldonnel Stream. To protect the stream and provide suitable habitats for biodiversity a minimum of 10 meter riparian margin has been preserved along the length of the stream measured from the top of each bank. Furthermore, in lieu of the original applied culvert to the Baldonnel Stream, a bridge has been proposed, to provide access for heavy vehicles and cranes as required to install and remove rooftop plant, which would be kept separate from daily office traffic.

The existing hedgerow, running North to South, within the site has also been retained as far as possible, with additional hedgerow proposed to create an additional connection with the hedgerow that runs lateral to the Baldonnel Stream, thus creating a natural habitat highway through the site.

Alterations to the existing granted planning application are also requested to create new attenuation ponds and modifying of previously approved which will further assist in the biodiversity enhancement of the site.

Furthermore, in the shifting of DUB-13 clockwise, it allows for the more “aesthetically pleasing” face to be seen from Falcon Avenue, as well as reducing the visual impact along the northern frontage, in particular the view from New Nangor Road roundabout and offering a distinct, high-quality landmark building at the entrance to the industrial estate. With berms and landscaping, implemented along the northern and eastern boundaries to provide screening of the proposed development from New Nangor Road. Reducing the visual impact along Falcon avenue, and allowing for select views of the building facade.

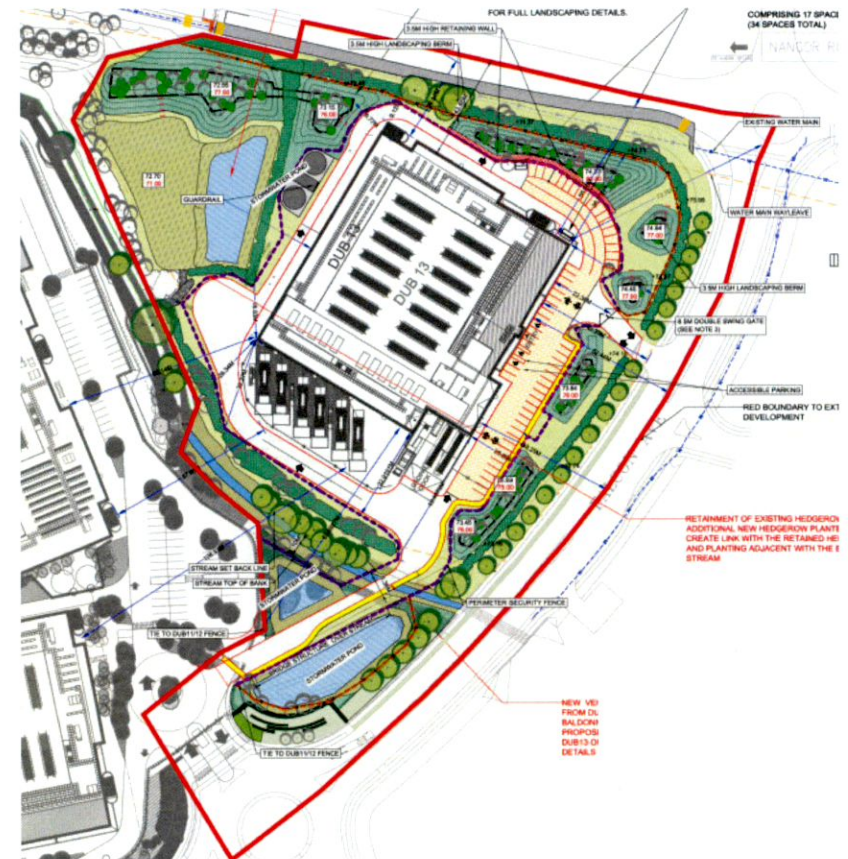


Figure 12– Proposed Development With Landscaping (Modified as per a

6. Connected Neighbourhoods – QDP 7 Objective 6

QDP7 Objective 6

To ensure that development provides an integrated and balanced approach to movement, healthy placemaking and streetscape design in accordance with the requirements of the 'Design Manual for Urban Roads and Streets', DTTAS and DEHLG (2013).

For better integration and balance with the street and the proposed site, the space between was re-explored to ensure that the design aligned with the 'Design Manual for Urban Roads and Streets'. Due to the proposed building's situate on a corner site, it allowed for strategies such as active edges and passive surveillance to be employed.

ACTIVE EDGES

Within Active Edge the user priority hierarchy is:

1. Pedestrians
2. Cyclists
3. Public Transport
4. Private Motor Vehicles

With the restriction of the New Nangor Road being an existing public road the Design Team in its re-exploration wanted to better the orientation of the existing hierarchy to a better balance for pedestrians and cyclists, using the existing infrastructure and public transport as a basis.

The originally submitted application maintained the existing circumstances of the cycle lane and footpath, which terminated and crossed at the Falcon Avenue and New Nangor Road roundabout junction. As such in the modified design, this crossing has been adapted and extended along the site's Northern boundary so that the cycle path and footpath terminated at the 3415 bus stop. By providing better walking facilities it leads to increased walking and in turn slower vehicular movement.



Figure 13 – Site Layout showing the location of Cycle Routes and Bus Stops in Locality of the Proposed Site

6. Connected Neighbourhoods – QDP 7 Objective 6

PASSIVE SURVEILLIANCE

Additionally, the North-East corner of the building site overlooks the Falcon Avenue Roundabout, which opened to opportunity to introduce passive surveillance as per the 'Design Manual for Urban Roads and Streets'. By introducing additional glazing to the Eastern elevation which then also wrapped around the buildings corner on to the North elevation, it allowed for passive surveillance over the roundabout to occur, which would promote pedestrian activity and have a traffic-calming effect.

Although the proposed building sits back from the road edge, this has been mitigated by maintain a single car depth parking to this North-East corner, as setting further back would have reduced the sense of enclosure on the New Nangor Road and thus reduced any positive effect of promoting pedestrian activity occurring.

It should also be noted that the planting at the North-East corner was also reduced to ensure that it didn't obstruct movement or surveillance, as well as creating a focal point at the Falcon Avenue Roundabout, strategies contained within the 'Design Manual for Urban Roads and Streets'.



Figure 14 – Extract of Site Layout showing the passive surveillance and parking

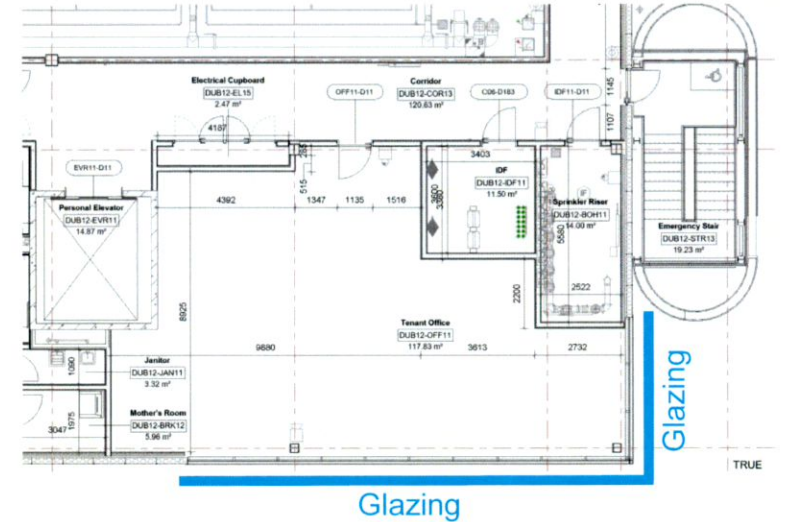


Figure 15 – First Floor Plan of Proposed Glazing to the North-East Elevation, which encourages Passive Surveillance at the Falcon Avenue Roundabout

7. High Quality Design: Development General – QDP7 Objective 7

QDP7 Objective 7

To ensure that all proposals for development contribute positively to providing a coherent enclosure of streets and public spaces, taking into consideration the proportions and activities of buildings on both sides of a street or surrounding a public space, providing for good standards of daylight and sunlight, and micro climatic conditions and having regard to the guidance and principles set out in the South Dublin County's Building Height and Density Guide and the 'Design Manual for Urban Streets and Roads' (DMURS) (2019).

The existing street scape is of Industrial to the North of New Nangor Road, and currently undeveloped land to the South. The proposed through the utilization of planting and berming, greatly screen the DUB13 from the New Nangor road. Gabion walls have been introduced along the internal road, to the New Nangor Road, which assists to increase the height of the berm and provide greater screening. As such the street would still maintain a green screening element to it and a new enclosing element.



Figure 16 – Image from Google Street showing the Existing Streetscape on New Nangor Road

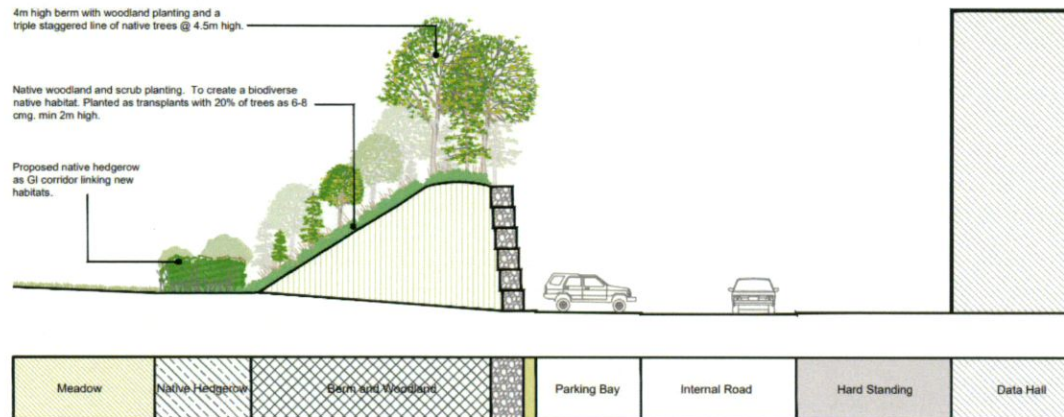


Figure 17 – Extract of KFLA's landscape gabion wall screening detail.

7. High Quality Design: Development General – QDP7 Objective 7

Localised views into the site have been created from the roundabout and along Falcon Avenue, by reducing the berm heights and less dense tree planting, however maintaining the streetscape and enclosure of the street that existing trees created, whilst also creating the passive surveillance and active edge as per QDP7 Objective 6 *To ensure that development provides an integrated and balanced approach to movement, healthy placemaking and streetscape design in accordance with the requirements of the 'Design Manual for Urban Roads and Streets', DTTAS and DEHLG (2013).*

Select views of the front façade are available from the entry to Profile park and along Falcon avenue. This allows the passerby to catch glimpses of the building façade and have a direct connection with the glazed entrance. With the North-Easterly corner of the building the prominent elevation on to the roundabout entry of Profile Park and along Falcon Avenue, there has been the introduction of additional glazing along the East wrapping on to the North elevations, allowing this elevation to become further animated, to that of the originally applied, and draw a human attribute of the building closer in proximity to that of the public realm outside of the DUB 1 campus, reflecting ODP7 Objective 7 taking into consideration the activities within the proposed building.



Figure 18 – Existing View from the Roundabout and Falcon Avenue



Figure 19 – Proposed Day 1 View from the Roundabout and Falcon Avenue



Figure 20 – Proposed Year 5 View from the Roundabout and Falcon Avenue

7. High Quality Design: Development General – QDP7 Objective 7

As previously noted planting and berming have been utilized to screen the view of DUB 13 from the New Nangor road. The proposed Northwest corner berms have been amended to allow the existing hedgerow to be retained and thus the berm split, to allow it to maintain its existing course, with minimal impact to what had been previously proposed to the North West corner of the site.

Figure 21 shows the existing view, with figures 22 and 23 the proposed views of the North-west corner of the building, where the external stair is expressed as a semi-transparent element with a green wall growing on same. Day 1, the proposed planting sizes and impact to the surrounding streetscape, to the proposed 5 years view, increased greenery through the growth of trees to the berms as well as the planting to the external stairs maturing and growing up the mesh paneling, further reducing the visual impact of the proposed building and imbedding to the surrounding landscape.



Figure 21 – Existing View to the Northwest corner of the Site and DUB 13 Building



Figure 22 – Proposed Day 1 View to the Northwest corner of the Site and DUB 13 Building



Figure 23 – Proposed Year 5 View to the Northwest corner of the Site and DUB 13 Building

8. Inclusive and Accessible – QDP7 Objective 8

QDP7 Objective 8

To promote and support a Universal Design Approach to residential and non-residential development – having regard in particular to the universal design principles and guidance in relation to Buildings for Everyone, Housing and Shared Space as promoted by the Centre for Excellence in Universal Design at the National Disability Authority – ensuring that all environments are inclusive and can be used to the fullest extent possible by all user regardless of age, ability or disability consistent with RPO 9.12 and 9.13 of the RSES. (See also Chapter 8 ‘Community Infrastructure and Open Space’).

The Universal Design concept of creating an environment that can be used by all people, regardless of their age, size, disability or ability has been applied to this development from first principles.

The design and layout of the scheme, public realm and community infrastructure have incorporated universal design insofar as is feasible, having regard to the provisions of the National Disability Authority ‘Building for Everyone: A Universal Design Approach - Planning and Policy’ (2012).

The following provisions have been made throughout the scheme

- Provision of designated accessible parking and set down points for people with disabilities;
- Level pedestrian routes with sufficient width;
- Use of surfaces suitable for wheelchairs and buggies;
- Use of tactile and blister paving;
- Use of colour contrast, particularly in the public realm;
- Ensuring level access to buildings from the street that is suitable for wheelchairs and buggies;
- Toilets and showers for disabled staff;
- DDA compliant lifts (see GA drawings); and
- Ambulant disabled stairs.

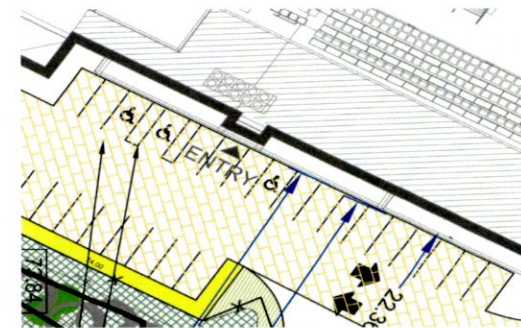


Figure 24 – Disabled Parking at Primary Entrance

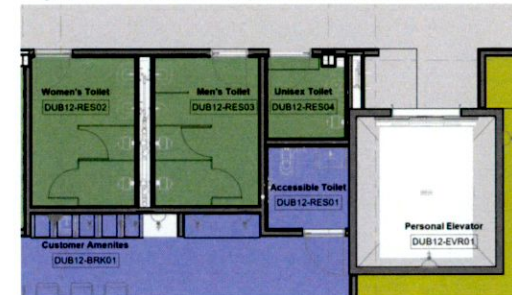


Figure 25 – Accessible Toilets and Ambulant Disabled Toilets on Ground Floor In Close Proximity to Lift

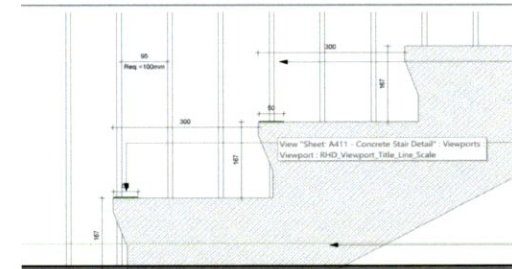


Figure 26 – stairs in full compliance with TGD Part M, K and B

9. Built Form and Mix – QDP8 Objective 1

QDP8 Objective 1

To assess development proposals in accordance with the Building Height and Density Guide set out in Appendix 10 of this Development Plan and associated planning guidelines. In this regard, all medium to large scale and complex planning applications (30 + residential units, commercial development over 1,000 s.q.m. or as otherwise required by the Planning Authority) shall be accompanied by a 'Design Statement'. The Design Statement shall include, inter alia, a detailed analysis of the proposal and statement based on the guidance, principles and performance-based design criteria set out in the South Dublin County's Height and Density Guide. Any departures within the proposed development from the guidance set out in the Building Height and Density Guide for South Dublin County (Appendix 10) shall be clearly highlighted in the Design Statement. (See Chapter 13 'Implementation and Monitoring').

MASSING

The site is located within the area zoned Objective EE, with typical buildings in this area being 2 storey industrial units, with heights ranging from 12m to 20m.

The main mass of the proposed building has a prevailing height of 12m, with plant rooms and chimney flues extending upwards to 22m, replacing the existing residential property on the site (9.5m). The same heights that were permitted in development Ref: SD21A/0241. There are no increased heights beyond the norm proposed in this development and surrounding developments.

TYOLOGY

The building typology within Profile Park and surrounding areas, is long format industrial building, typically two story, with some three-story accentuation. Typically set back from the main road behind a security barrier. With a simple utilitarian design of flat roofs, cladding panels and carparking out the front.



Figure 27 – Front Elevation of residential proposed to be demolished



Figure 28 – Contiguous Elevation showing proposed DUB13 and the previously approved structures on the DUB1 Campus

10. Materials, Colours and Textures – Policy QDP11

Policy QDP11

Promote high-quality building finishes that are appropriate to context, durable and adhere to the principles of sustainability and energy efficiency.

The overall scale of the building has broken down through the expression of each separate component using a variety of materials, colours and massing.

The glazed entrance area has been extruded out from the main mass and emphasized with a horizontal overhang. With sedum “green” roofs introduced over the office and non-critical areas of the Data Centre.

Whilst the stair cores have been expressed with curved perforated metal mesh panels, which will allow planting to grow up same becoming green walls, adding texture and visual interest, as well as contributing to the biodiverse habitat of the landscaping. This gives more visual interest and affords staff and visitors an attractive view over the landscaped stream and berms.

In addition, we have introduced living Green Walls in front of the loading bay and the generator compound, to further increase biodiversity and soften the building at street level.

The main façade is proposed to be made up of high-quality insulated panels with a powder-coated finish. Using a rhythmic colour pattern of grey/green/white to the façade, strengthening the visual impact at ground level, whilst diminishing as the elevation progresses through the first level, eventually reverting to a solid white cladding at parapet level, reducing the visual bulk.

Further broken up through the introduction of a canopy at first floor level, breaking up the visual massing at street level, with a glazed element to the North-East corner.

The rooftop plant has been recessed back from the roof parapet and screened with a dark grey mesh panels.



Figure 28 – Glazing To Be Used On Front Entrance



Figure 29 – Mesh & Green Wall To External Stair Core



Figure 30 – Example of Proposed Green Wall System



Figure 31 – Proposed Grey Metal Panels Proposed



Figure 32 – Example of metal Panel Proposed



Figure 33 – Screening To Plan on Roof

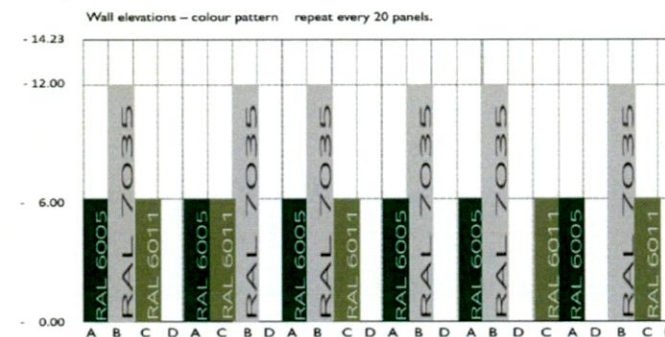


Figure 34 – Proposed Panel Design

10. Materials, Colours and Textures – Policy QDP11

1. Plant room recessed from the front façade and expressed as an individual element.
2. The scale of the main façade and side are reduced by a horizontal canopy which corresponds to the change in colours of the façade and encloses the glazed curtain walling.
3. Escape staircase expressed as individual transparent elements and softened with planting climbers.
4. Roof plant recessed and screened
5. Office and storage elements on the ground floor projected out and softened with a green wall.
6. Darker coloured panels at low level with white panels above.
7. Glazing wrapped around the North-East corner of building.

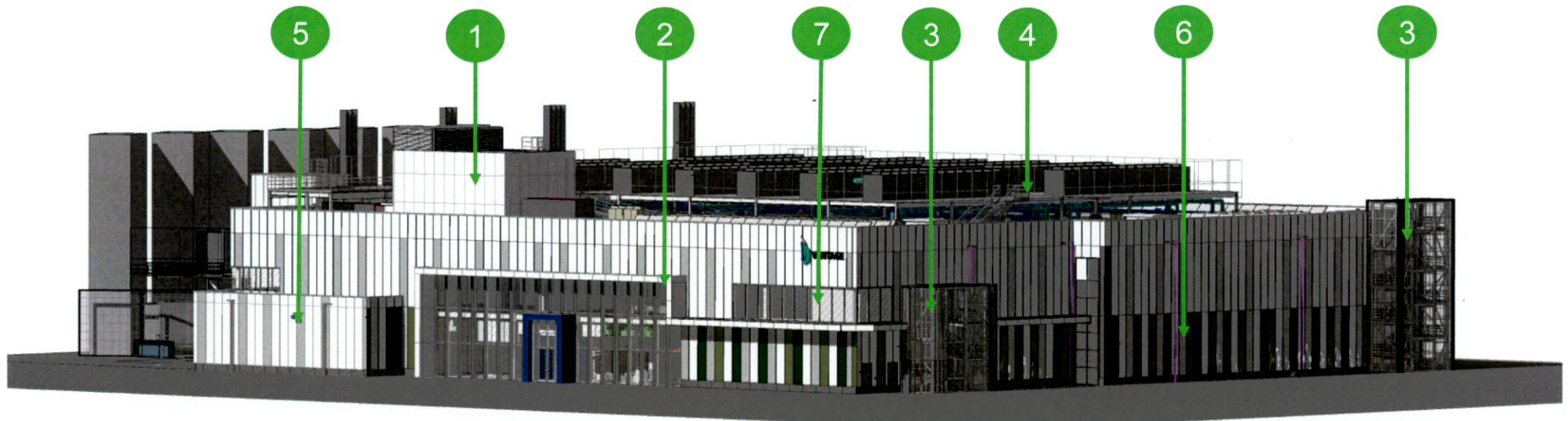


Figure 35 – Modified Perspective From Roundabout on New Nangor Road

11. Elevational Treatment and Design – Item 2(a)

Item 2(a)

The applicant is requested to reconsider the elevational treatment and design along prominent frontages in terms of design and materials used.

Following on from the request for additional information, item 2(a) request, the Design Team reviewed and explored a variety of possible design changes on the prominent frontage, as previously noted, the North East corner looking over the New Nangor Road and Falcon Avenue Roundabout. This exploration included:

- Greenery
- Canopy
- Glazing

Upon reviewing, the design team settled on increasing glazed elements being the most appropriate action. As per Figure 36 and 37, the originally applied application provided glazing on three of the four elevations, to the exclusion of the North elevation. With reconsidering the elevational treatment, Figure 38 and 39, the proposed design introduces additional glazing to the East, extended from the originally proposed first floor glazing on the East elevation, which then wraps around the building's corner on to the Northern elevation. Which further aligns the proposed with the South Dublin 2022-2028 County Development Plan and the Design Manual for Urban Roads and Streets.



Figure 36– Originally Applied Elevation To Falcon Avenue



Figure 37– Originally Applied Elevation To New Nangor Road



Figure 38– Proposed Elevation To New Nangor Road



Figure 39 – Proposed Elevation To Falcon Avenue

12. Fencing and Boundary Treatment – Item 2(b)

Item 2(b)

The applicant is requested to provide details of fencing / boundary treatment.

Due to the nature of the proposed site, security for the occupants is of importance, as such a secure line has been designed within the landscaped berms, of a 3.0m high anti-climb security fence.

For boundary purposes a different fence has been employed, a 1.5m high rigid mesh fence, with openings to accommodate the movement of fauna through the site. The much lower fence height, is also to ensure that this fencing does not dominate its immediate surroundings and that the landscaping is more dominant.



Figure 40 – 3.0m Anti-Climb Security Fence



Figure 41 – 1.5m Rigid Mesh Fence

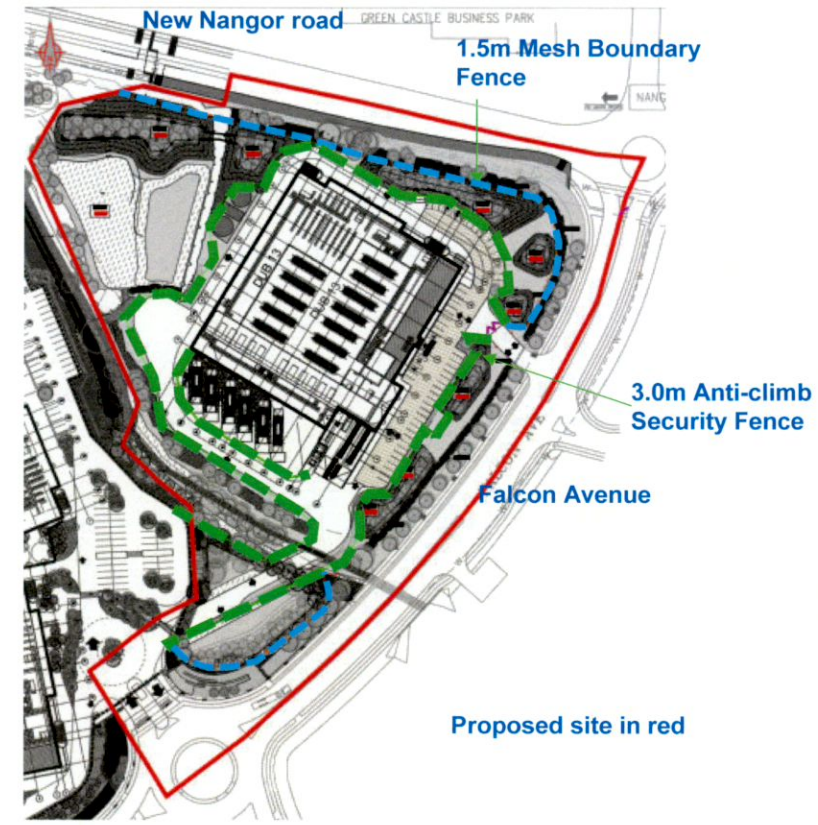


Figure 42 – Site Layout showing Fencing Plan

Drawing List – Architectural

DUB13-DR-00-A106-V1-PL-HYP-PROPOSED SITE PLAN
DUB13-DR-00-A107-V1-PL-HYP-ARCHITECTURAL PROPOSED FENCING PLAN
DUB13-DR-ZZ-A201-V1-PL-HYP- DUB13 ELEVATIONS - EAST AND WEST
DUB13-DR-ZZ-A202-V1-PL-HYP- DUB13 ELEVATIONS - NORTH AND SOUTH

