Design & Access Statement

Queens Hospital, Romford – 32 Bed Ward

Client – Sodexo

October 2026

Contents

00 Introduction

01 Location and Site Analysis

Site Location and Analysis

Existing Site Plan and Site Topography

Existing Elevations

Site Constraints / Opportunities

Transport

02 Design Development and End-User Engagement

Functional Requirements of the Project

Design Development and Clinical Engagement

Material Palette

03 The Proposal

Floor Plans

Roof Plan

Elevations

Proposed Site Plan

Proposed Landscaping Plan

Proposed Sections

Waste Management Plan

Proposed Car Parking Plan / Management Plan

Fire Strategy

Service and Delivery Plan

04 Secure By Design

Security Statement

05 Sustainable Development

Sustainable Design and Construction Statement

Energy Strategy / Energy Statement

06 Construction and Delivery

Construction Logistics Plan

07 Conclusion

00 Introduction

00 Introduction

0.1 Introduction

This Design and Access Statement has been prepared in support of proposals for a new modular 32 Bed Ward at Queens Hospital, Romford on behalf of the client Sodexo who are working for Barking, Havering and Redbridge University Hospitals NHS Trust who will be the end user.

The document explains the design rationale and development process undertaken to establish a high-quality, functional and sustainable facility that responds appropriately to the operational requirements of the Trust, the characteristics of the existing hospital, and the principles of inclusive design. The statement demonstrates how site analysis, stakeholder engagement and operational requirements have informed the final proposal and should be read in conjunction with the accompanying planning drawings and supporting documents.

The Trust provides from a number of healthcare facilities throughout the region, mainly focusing on acute and specialist hospital-based healthcare services to a population of over 750,000 people across outer North-East London and Essex. Queens Hospital is one of the Trust's principal sites and provides major acute and emergency services.

The Proposal

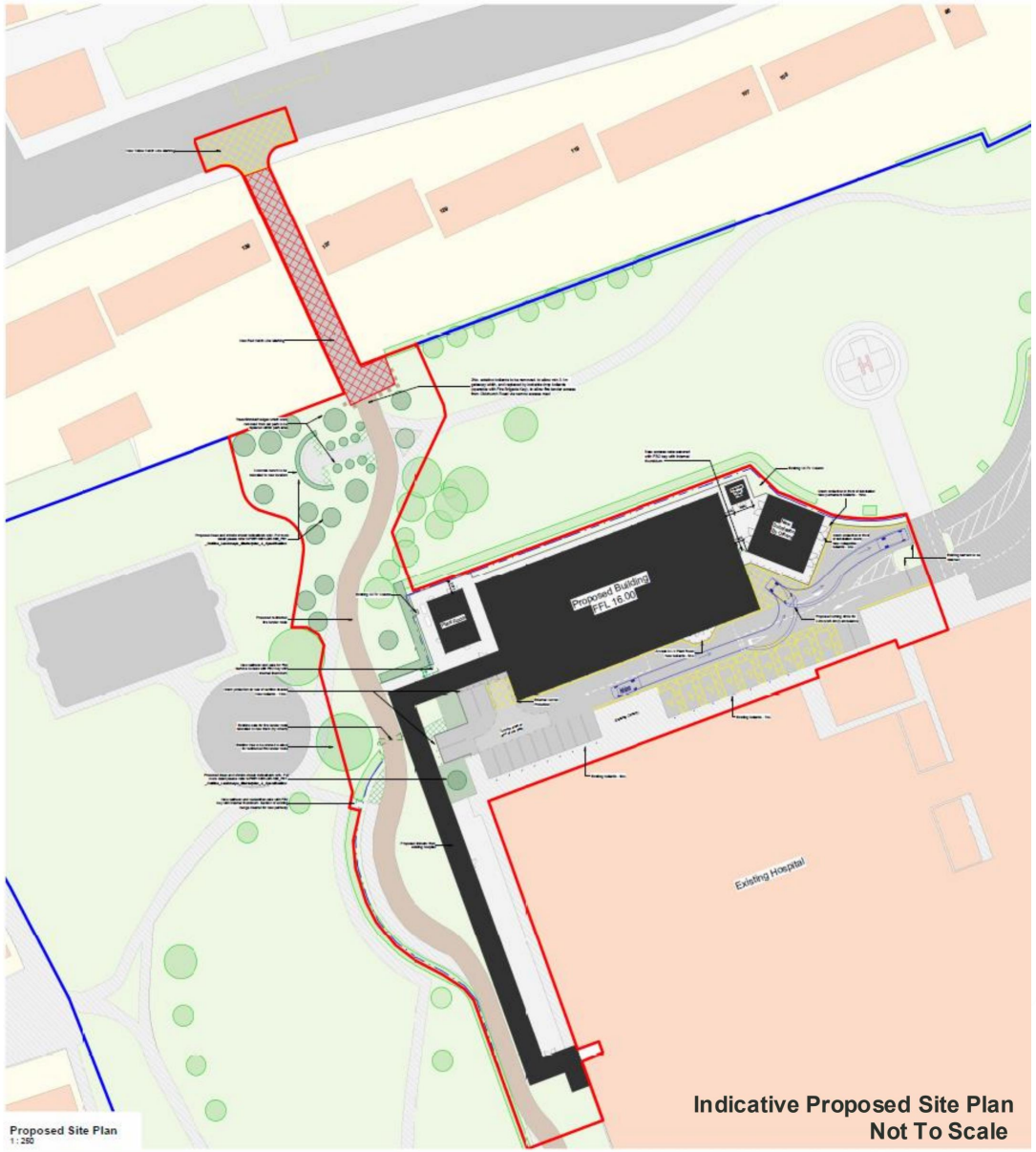
The proposal comprises the installation of a new single-storey modular 32 Bed Ward building within the Queens Hospital site. The facility will provide general ward space for the Trust's Emergency Department whilst they undergo renovation works and following that will be used as general ward space for the Hospital.

The development will deliver approximately **1379m² Gross Internal Floor Area (GIFA)** and will include:

- 8 Single Bed Facilities complete with individual En-Suites.
- X4 Open Plan 6 Bed Wards, with two En-Suites.
- Hospital Linkway connecting back to the existing Hospital.
- General Store and Linen Store.
- Dirty Utility and Clea Utility Rooms.
- Staff breakout and welfare facilities.
- Open Plan Staff Base.
- Cleaners Cupboard and Storage Spaces.
- Staff Office Facilities.
- WCs including Assessable WCs.
- Plant and storage rooms.
- Associated circulation spaces.
- External local landscaping and access improvements.

The new facility will provide modern, efficient and adaptable workspace capable of supporting the Trust's critical need for emergency department facilities. The building has been designed using modern methods of construction (MMC), allowing rapid delivery, reduced site disruption and the flexibility to adapt to changing operational requirements in the future.

The development will support the continued enhancement of services across North-East London and Essex by providing a dedicated, purpose-designed environment that improves staff wellbeing, operational efficiency and service resilience while remaining sensitive to the wider Queens Hospital estate.



Indicative Proposed Site Plan
Not To Scale

01 Location and Site Analysis

Site Location and Analysis

Existing Site Plan and Site Topography

Existing Elevations

Site Constraints / Opportunities

Transport

DarwinGroup

01 Site Location and Analysis

01.1 Site Location and Analysis

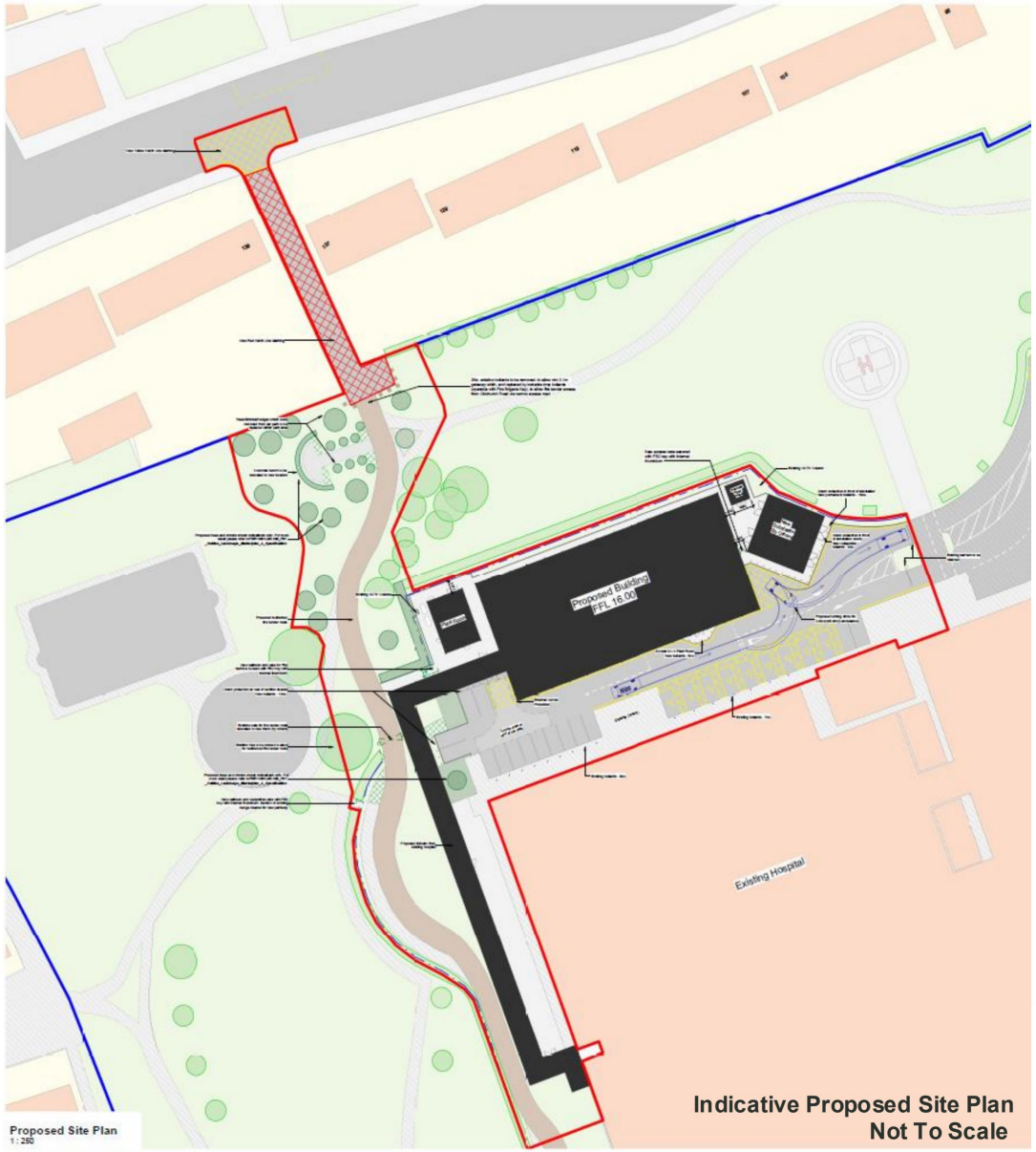
The proposed development site is located within the Queens Hospital located off Rom Valley Way, approximately 29km north-west of London City Centre. Queens Hospital serves as a principal facility for Barking, Havering and Redbridge University Hospitals NHS Trust and provides a range of acute and specialist general hospital services, featuring a major emergency department, alongside regional centres of excellence for neurosciences, stroke care and maternity services across the region. The hospital site is situated on Rom Valley Way in the London Borough of Havering, just south of Romford town centre. It is surrounded by a predominately residential and commercial mix.

The application site is positioned within the north area of the hospital site, situated on the existing carpark. The proposed ward will be situated on an area of previously developed land, allowing the facility to integrate efficiently with the wider hospital environment whilst maintaining the continued operation of surrounding healthcare services.

Accessibility and Connectivity

Queens Hospital benefits from excellent accessibility by a range of transport links, including a dedicated onsite bus station and close rail connections. The site is accessed directly from Rom Valley Way via both car and pedestrian access. There is an onsite bus station where several direct bus routes stop right inside the hospital grounds (5, 128, 175, 193, 365, 496, 498 and 499). There is an additional route (103 and 174) which serves Oldchurch Road nearby, which is a short walk via Oldchurch Rise. There is a direct connecting bus from the hospital link to London Underground District Line stations, including Dagenham Heathway, Elm Park and Hornchurch. The hospital is accessible via Rom Valley Way (RM7 0AG) via car and there is onsite parking facilities available. The proposed location of the development provides strong regional connectivity for staff, visitors and service users.

Existing pedestrian and vehicular infrastructure within the hospital estate provides convenient access to the proposed development site.

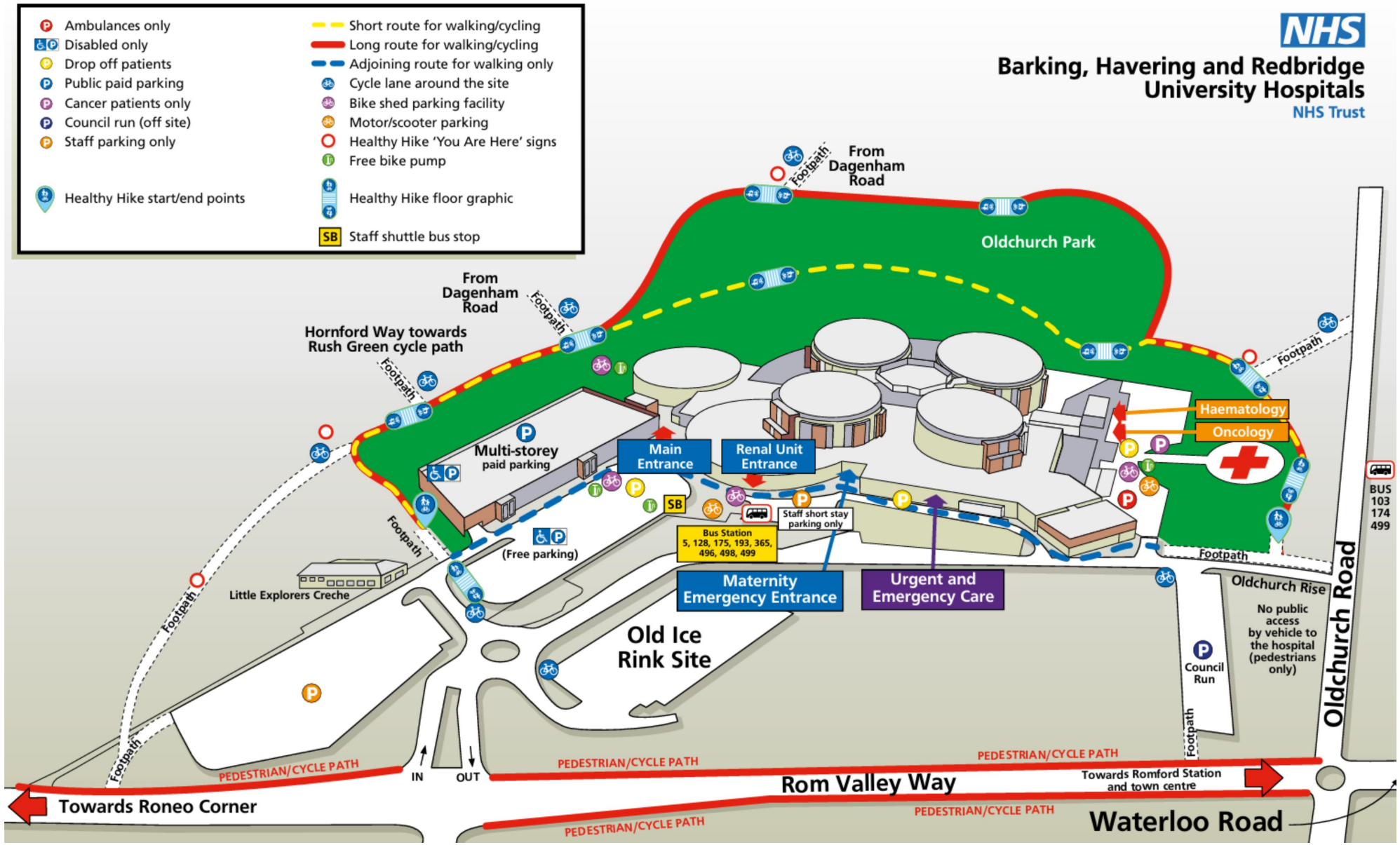


Indicative Proposed Site Plan
Not To Scale

01 Site Location and Analysis

01.1 Site Location and Analysis

Queens Hospital Map

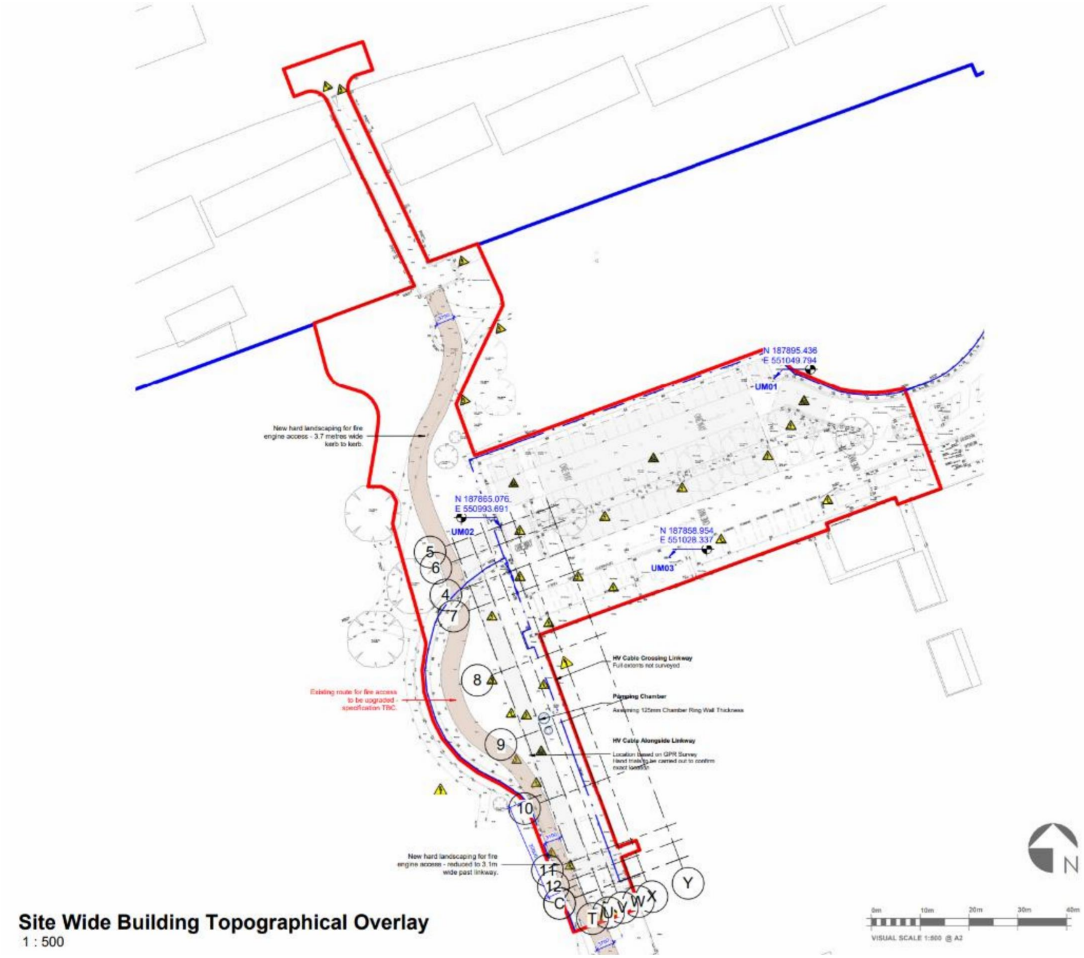


01 Location and Site Analysis

01.2 Existing Site Plan and Topography
Not To Scale



Site Location Plan
1 : 1250



Site Wide Building Topographical Overlay
1 : 500

01 Site Location and Analysis

01.3 Existing Elevations

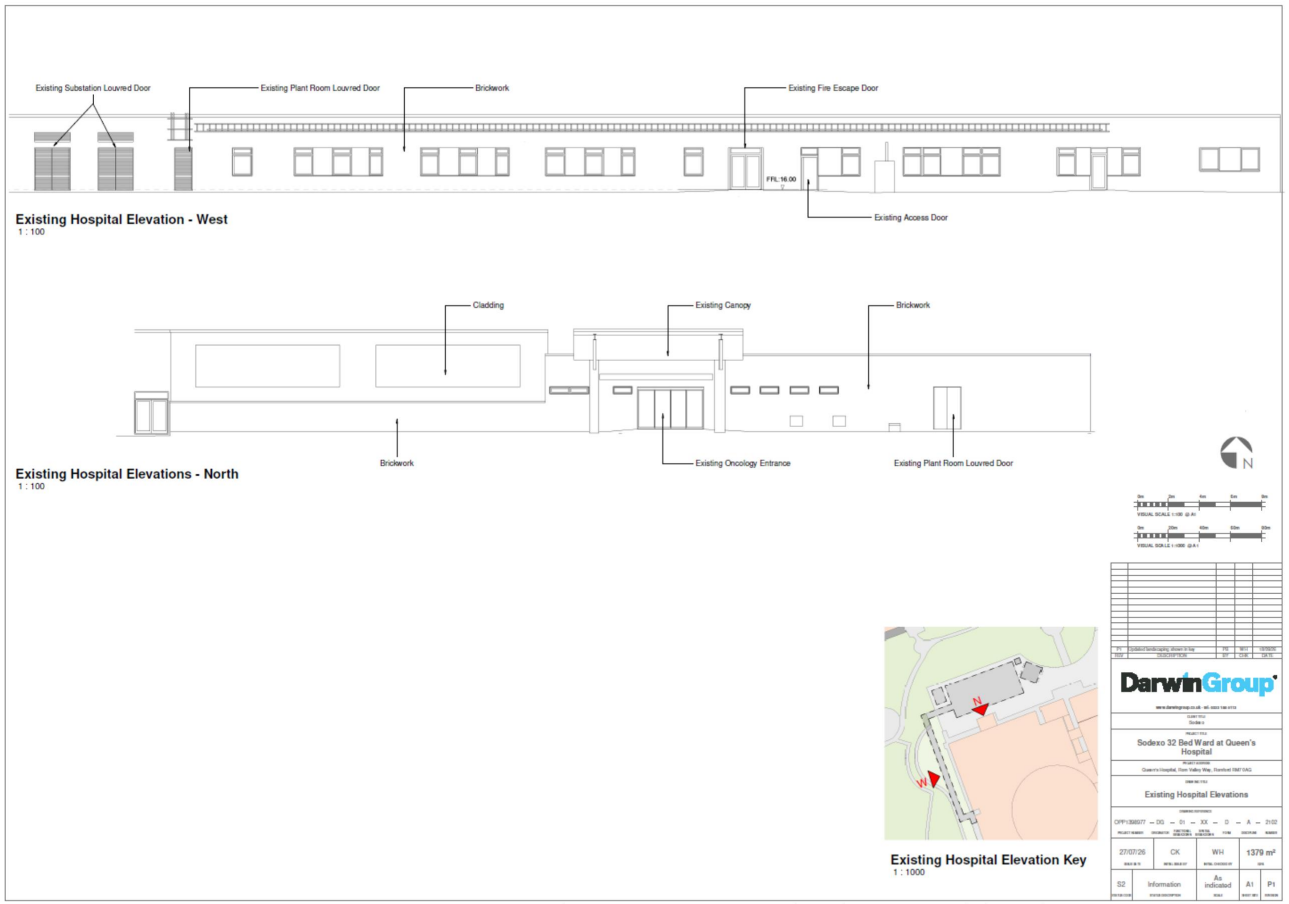
The existing elevations of Queens Hospital, Romford features a contemporary healthcare facility that include a series of distinctive circular ward towers linked by a lower-rise clinical accommodation. The curved building forms help to reduce the perceived scale of the development, creating a more visually accessible appearance when viewed from the surrounding areas.

The elevations incorporate a combination of glazing, metal cladding and light-coloured façade materials, contributing to a modern and functional aesthetic appropriate for a major healthcare facility. Extensive glazing is utilised throughout the building, promoting natural daylight to internal spaces whilst creating a sense of openness and transparency across the external appearance.

The architecture adopts a clean and contemporary design, with repeating fenestration patterns providing rhythm and consistency across the facades. The circular ward blocks create visual interest and soften the overall appearance of the large-scale development, contrasting with the traditional style of buildings.

Overall, the existing elevations convey a modern, well-established healthcare facility with a strong architectural identity. The buildings form, material palette and use of glazing contribute to a visually cohesive development that balances the functional requirements of a large acute hospital with an approachable and patient-focused appearance.





1.0 Site Location and Analysis

01.4 Site Constraints

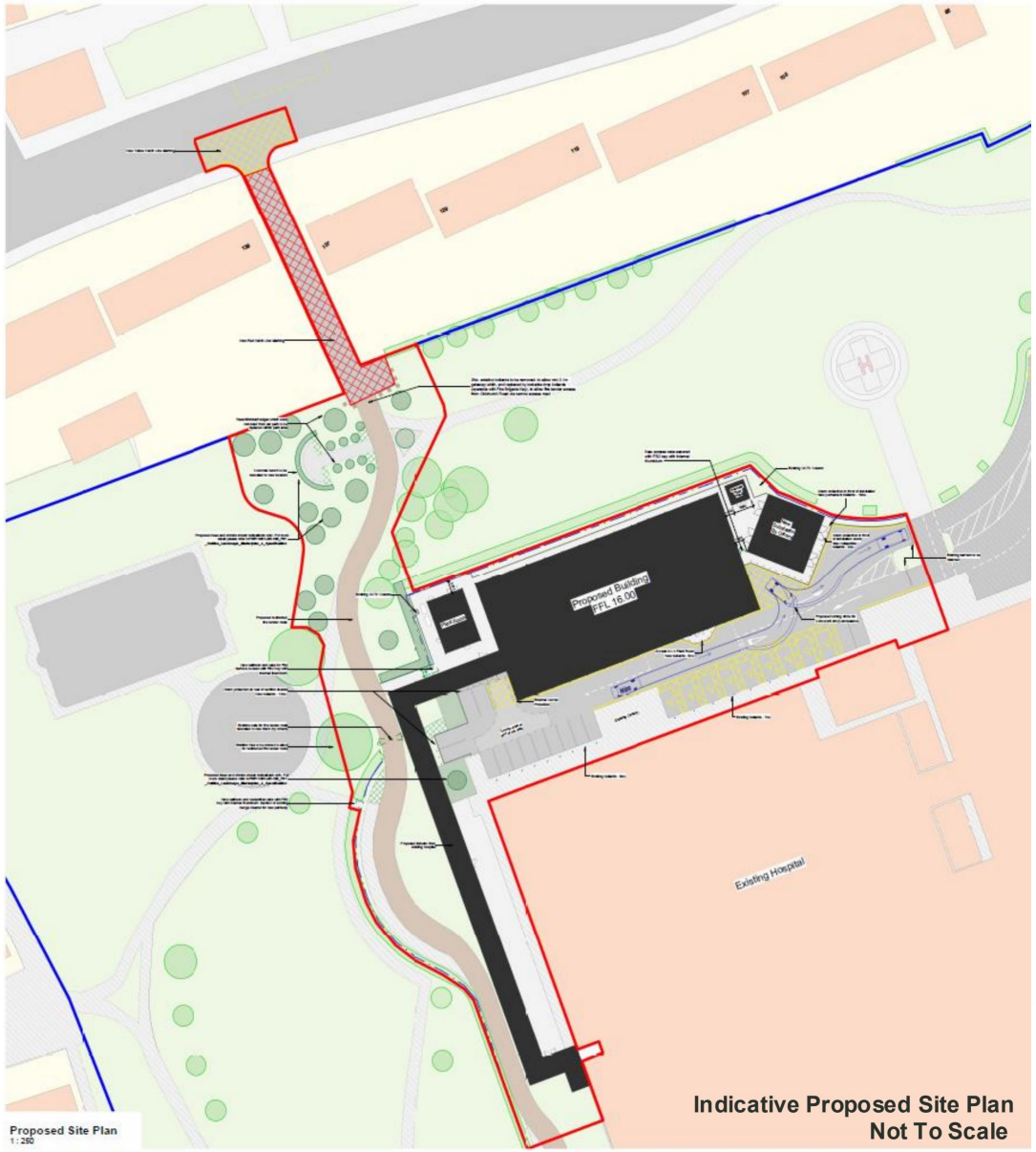
The proposed development is located within the grounds of Queens Hospital, Romford, occupying an area of approximately 0.54 hectares on the northern side of existing hospital site. The site is currently utilised as hardstanding, parking and service areas associated with the operational hospital and is surrounded by existing hospital buildings, access roads, emergency service routes and ancillary infrastructure.

A key constraint influencing the design and layout of the proposed development is the need to maintain the continuous operation of the hospital throughout both construction and occupation. The site is situated adjacent to the existing emergency department and ambulance circulation areas, with designated blue light access routes and ambulance parking located in proximity. As a result, the proposed building footprint and associated site works have been carefully arranged to avoid disruption to emergency services and critical hospital functions.

Emergency vehicle access presented a significant design consideration. An existing fire engine route passes through the site area, requiring the proposal to incorporate a redirected fire render route, relocated access gates and dedicated turning arrangements to ensure unrestricted access for the emergency services. Existing barriers, bollards and access controls have been reviewed and amended where necessary to maintain compliance with fire services requirements whilst accommodating the new development.

The presence of existing utilities and below ground infrastructure also constrained the site layout. Information contained within the site surveys identifies the potential presence of underground high-voltage and low-voltage electrical services within the vicinity of the development site. In addition, the site information highlights areas of potential unexplored ordnance (UXO) risk and references buried infrastructure requiring careful consideration during construction. These constraints have informed both the building location and the strategy for construction management and groundworks.

The site is enclosed by existing roads, fencing, landscaping and operational hospital facilities, which limits opportunities for expansion beyond the identified development. Existing trees, shrubs and landscaped areas surrounding the site have been considered within the design process, with the proposals including the replacement of vegetation removed during the works and the introduction of new soft landscaping to mitigate visual impacts and enhance the appearance of the development within the wider hospital setting.



Indicative Proposed Site Plan
Not To Scale

1.0 Site Location and Analysis

01.5 Transport

Accessibility and Connectivity

The proposed development is located within the established grounds of Queen's Hospital, Romford, benefiting from a comprehensive and well-developed transport network that supports accessibility for patients, visitors, staff and service providers. The site occupies a sustainable location within a major healthcare campus and is well connected by public transport, pedestrian routes and the surrounding road network.

The hospital is served by a dedicated on-site bus station, providing direct access to several local and regional bus services. Routes 5, 128, 175, 193, 365, 496, 498 and 499 serve the hospital directly, while additional services including routes 103 and 174 operate along Oldchurch Road within walking distance of the site. These services provide convenient links to the surrounding residential areas, local centres and wider public transport network.

Connections to the wider London public transport network are further enhanced through direct bus services linking the hospital with London Underground District Line stations, including Dagenham Heathway, Elm Park and Hornchurch. The site also benefits from proximity to Romford Station, which provides National Rail and Elizabeth Line services, offering efficient access to central London and destinations across the region.

Vehicular access to the development will be achieved via the existing hospital road network accessed from Rom Valley Way. The proposal has been designed to integrate with established circulation routes within the hospital estate, ensuring that the development does not adversely impact the operation of the wider site. Existing access arrangements remain largely unchanged, allowing efficient movement for patients, visitors, deliveries, emergency vehicles and servicing requirements.

The scheme has been carefully designed to maintain and enhance pedestrian connectivity within the hospital campus. Existing footways provide safe and direct access between the proposed development, surrounding hospital buildings, public transport facilities and parking areas. The development's location enables users to access services without reliance on private vehicles, supporting sustainable travel choices and promoting active travel.

Consideration has also been given to maintaining the operation of emergency access routes within the hospital estate. The proposed layout safeguards essential ambulance and fire service access while ensuring that vehicle movements associated with the development can be accommodated safely and efficiently. The development therefore responds appropriately to the operational requirements of a live healthcare environment.

Overall, the site benefits from excellent transport accessibility, supported by a combination of public transport services, pedestrian infrastructure and established highway connections. The development is located within a highly sustainable and accessible location that promotes a range of travel options whilst maintaining the efficient operation of the wider hospital campus.



02 Design Development and End-User Engagement

Functional Requirements of the Project

Design Development and Clinical Engagement

Material Palette

DarwinGroup

02 Design Development and End-User Engagement

02.1 Functional Requirements of the Project

PROJECT PURPOSE AND USE

- Primary function of the development is to provide modern healthcare facilities to Queens Hospital, Romford.
- To provide a decant ward and accommodate an increased inpatient capacity and reduce pressure on the hospital's existing wards and emergency department.

USER NEEDS

- Target users for the building are NHS staff, patients and visitors.
- The proposed design accommodates their requirements through accessibility, safety, comfort, and convenience.

SPATIAL REQUIREMENTS

- Key spaces that were required and accommodated include:
  - 4x Six Bed Ward with En Suite facilities
  - 8x Single Bed Room with En Suite facilities
  - 2x Large open plan Staff Bases
  - Clean and Dirty Utilities
  - 2x Staff / Sisters Offices
  - Staff Room
  - Staff WC's
  - Cleaners Room
  - Clinical Store Rooms

PERFORMANCE CRITERIA

- Technical and environmental performance expectations:
  - Energy efficiency
  - Acoustic performance
  - Ventilation and daylighting

ACCESSIBILITY

- Inclusive design principles have been proposed and complies with Approved Document M and HBN's.
- Step-free access at all main entrances and fire exits
- Wide doorways (minimum 900mm) and corridors for wheelchair users.
- Level access from existing building into new proposed internal linkway

CULTUTAL AND SOCIAL INCLUSION

- Gender-neutral restrooms and changing facilities on both floors.



02 Design Development and End-User Engagement

02.2 Design Development and Clinical Engagement

DESIGN EVOLUTION THROUGH DARWIN GROUP



Original scheme at Tender included an internal linkway connection point to the existing Northern elevation of the hospital, one external plant room, four staff bases to provide one per 6 bed ward, interview / consult rooms at either end of the building and two dirty utilities and disposal holds.

This evolved into the linkway connection point moving to the Western elevation of the hospital and the linkway increasing in size. External plant rooms increased from one to three through development with stakeholder and understanding existing site services. Clinical spaces were then developed to suit client requirements and end user requests.



RIBA Stage 0 → RIBA Stage 1 → RIBA Stage 2 → RIBA Stage 3 → RIBA Stage 4

02 Design Development and End-User Engagement

02.2 Design Development and Clinical Engagement

CLINICAL ENGAGEMENT
Meaningful consultations with clinical stakeholders and their input has shaped the design to the current proposal.

STAKEHOLDER INVOLVEMENT
Various teams across Sodexo and Barking, Havering and Redbridge University Hospitals NHS Trust have engaged with the project from the Director of Capital Projects & Property, various services providers and the estates teams.

ENGAGEMENT PROCESS
Darwin Group have provided various workshops, user group meetings, and design reviews to develop the design and ensure that the proposed brief by the client has been met through the current design.

Design RESPONSES
From the feedback that was given via the engagement process, the comments were incorporated into the design by providing layout changes to improve adjacencies, to maximise clinical space and inclusion of staff areas.

ONGOING ENGAGEMENT
During the next design phase of detailed design, continued consultations will be needed to ensure that the proposed facilities meet the Trusts requirements.

WC's in 6 Bed Bays to be omitted as there's a WC within the En-Suite

Staff Bases to be open plan between two ward rooms to improve communication

Interview / Consult rooms to be amended o Sisters office and staff office to provide further staff facilities

Only one Dirty Utility needed within building, and Staff Room and Staff toilets need to be included

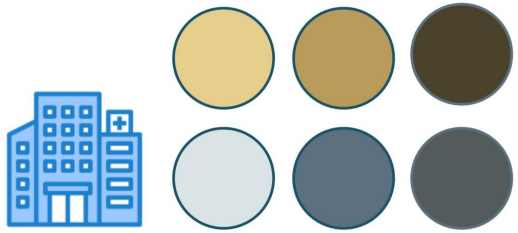


02 Design Development and End-User Engagement

02.3 Material Palette

ANALYSIS OF SURROUNDING CONTEXT

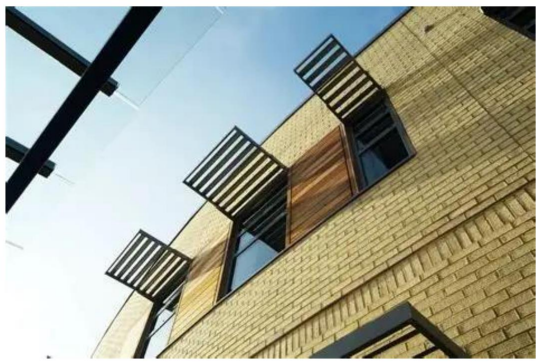
ARCHITECTURAL CHARACTER:





Buff / Yellow Brick Cladding

A prominent feature within Queens Hospital is the use of light buff-coloured facing brickwork. This creates a consistent external appearance and provides a durable, low-maintenance façade commonly used in healthcare buildings.



Strong Horizontal and Vertical Expression

The building elevations emphasise horizontal lines through:
- Continuous window bands.
- Horizontal and Vertical metal cladding panels.
- Long façade lengths.
- Deep parapet and roof edge detailing.



Metal Cladding Elements

All images incorporate areas of grey cladding, including:
- Dark grey rainscreen or louvre panels.
- Grey aluminium feature panels at the main entrance.

The combination of brick and grey creates visual contrast while maintaining a modern institutional character.



Extensive Glazing

Large areas of glazing are visible:
- Full-height entrance glazing.
- Curtain wall systems.
- Horizontal window bands.
- Glazed canopies.

The design appears to prioritise daylight penetration and visual connection between inside and outside.





Exposed Steel Structures

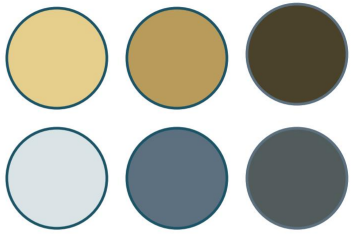
The main entrance prominently features:
- Exposed painted steel framing.
- Steel canopy structures.
- Glazed roof canopies supported by steel members.

This gives the entrance emphasis through architectural style and welcoming character compared with the largely functional ward blocks.

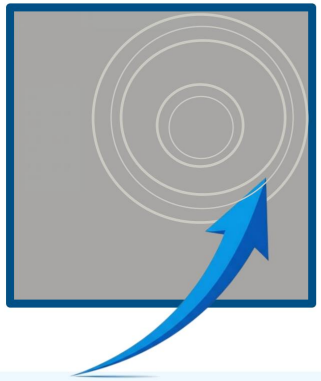
02 Design Development and End-User Engagement

02.3 Material Palette

PROPOSED MATERIALS:

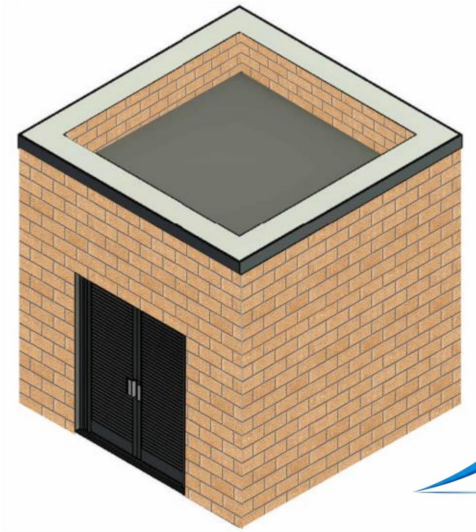


Plastisol Cladding Vinyl Wrap

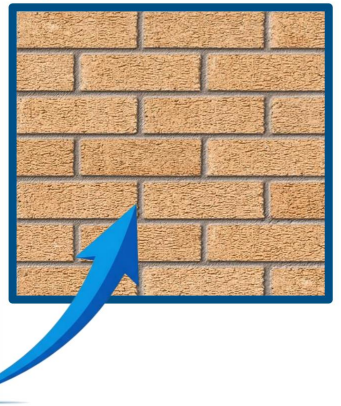


Plastisol Cladding Goosewing Grey



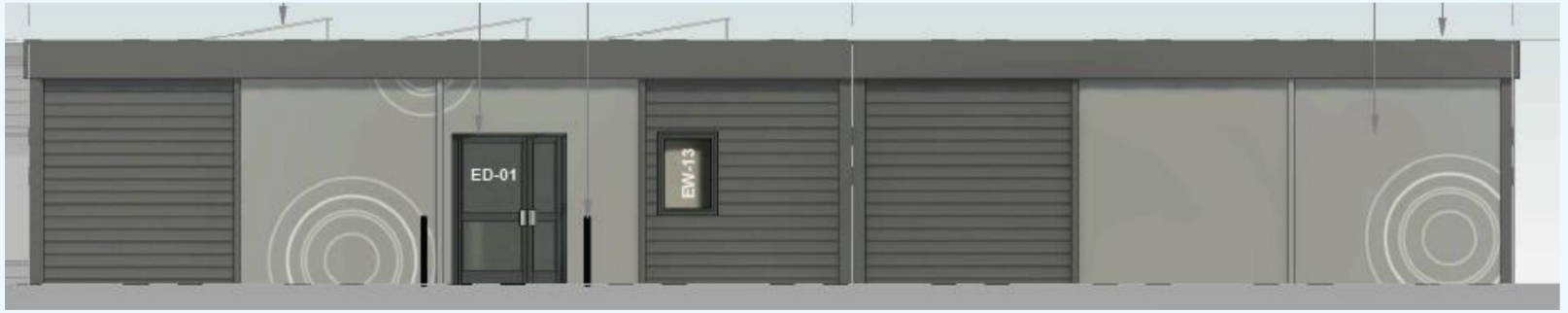


Anglian Buff Multi Rustic



Cedral Click Cladding Slate Grey C18







03 The Proposal

Floor Plans

Roof Plan

Elevations

Proposed Site Plan

Proposed Landscaping Plan

Proposed Sections

Waste Management Plan

Proposed Car Parking Plan / Management Plan

Fire Strategy

Service and Delivery Plan

Darwin Group

03 The Proposal

03.1 Floor Plan – General Arrangement

Not To Scale



GIFA

32 Bed General Ward Building - 990m²
Independant Plant Block - 60m²
Indicative Linkway - 306m²

Please refer to *OPP1398977-DG-01-00-D-A-2050-Module Layout*

Module Schedule

Module Type	W x L x H (m)	Total
UK123 Ultima 2 *Thermal + Fire Upgrade*	3.3 x 12.2 x 3.2	14
UK093 Ultima 2 *Thermal + Fire Upgrade*	3.3 x 9.3 x 3.2	14
UK093 Ultima 2 *Fire Upgrade*	3.3 x 9.3 x 3.2	2
DG Modules - Refer to Module Layout (2050)		9
		Total: 39

Healthcare Departments

- 6 Bed Ward
- Administrative Support Space
- Circulation
- Clinical Support Facilities
- Plant / Services
- Single Bed
- Staff Facilities
- Visitor WCs

03 The Proposal

03.1 Floor Plan – General Arrangement with Linkway

Not To Scale



GIFA

32 Bed General Ward Building - 990m²
Independant Plant Block - 60m²
Indicative Linkway - 306m²

Please refer to *OPP1398977-DG-01-00-D-A-2050-Module Layout*

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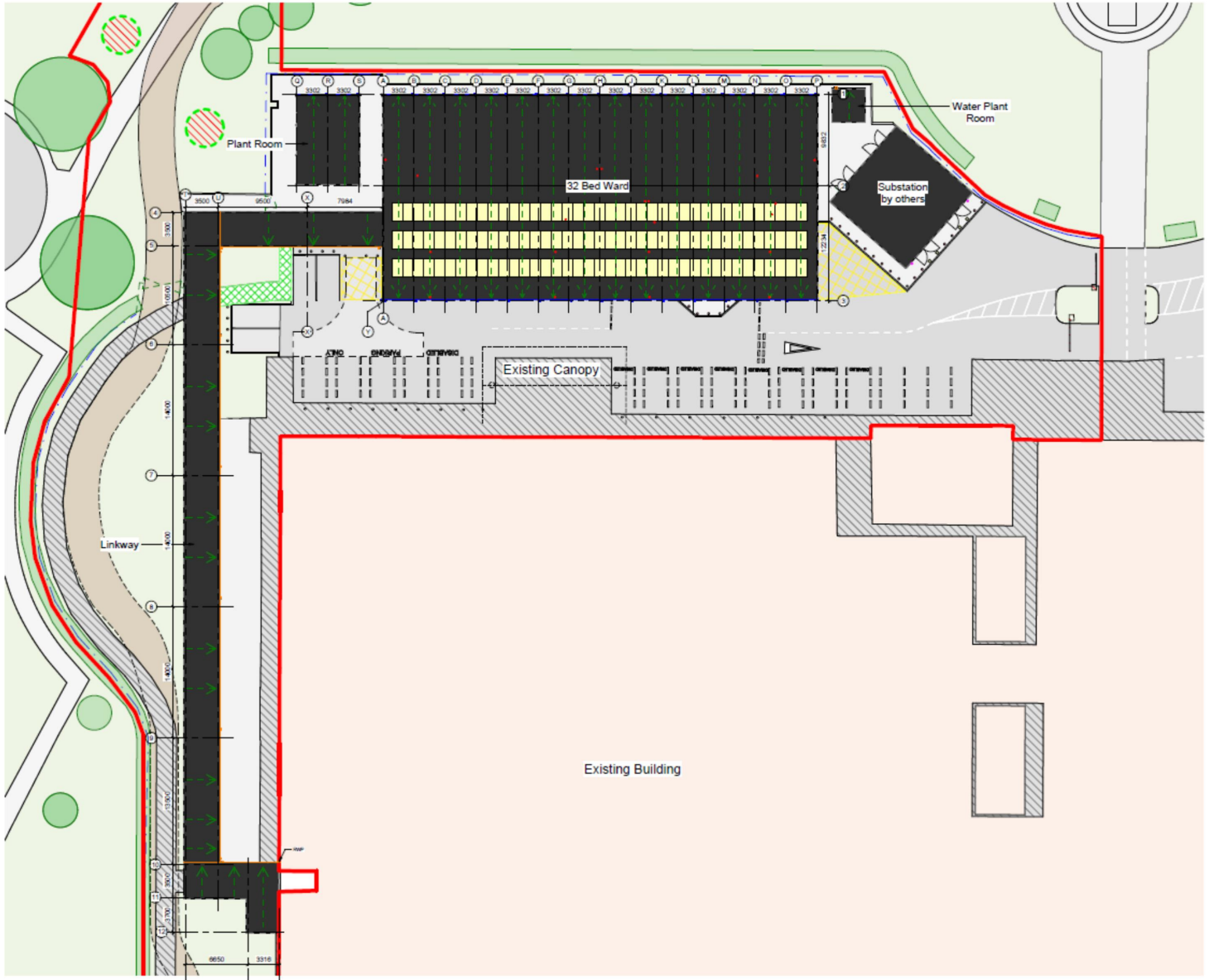
Healthcare Departments

- 6 Bed Ward
- Administrative Support Space
- Circulation
- Clinical Support Facilities
- Plant / Services
- Single Bed
- Staff Facilities
- Visitor WCs

03 The Proposal

03.2 Roof Plan

Not To Scale



Proposed Roof Plan
1 : 200

PV Panels
Exact Layout and Quantity TBA

SVP

11 no. Darwin Group UPVC Anthracite Down Pipe with Gutter System

30 no. Portakabin UPVC Anthracite Down Pipes with Gutter System

2 no. RWP by others

Roof Fall Direction

Hidden Gutter System

Ridge Line

Existing Building

03 The Proposal

03.3 Elevations – Main Building and Plant Room

Not To Scale

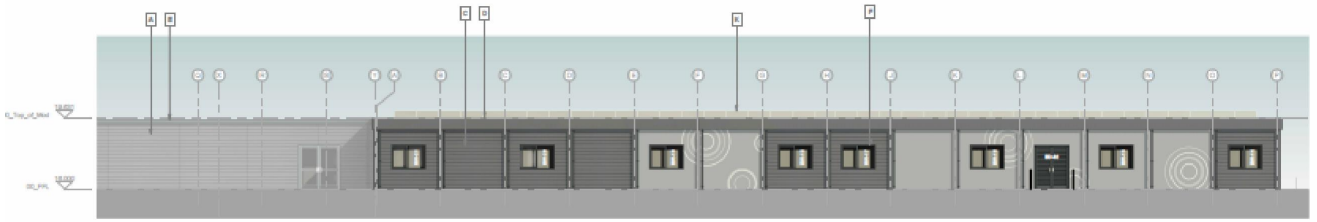


Elevation 1 - Main Building
1 : 100

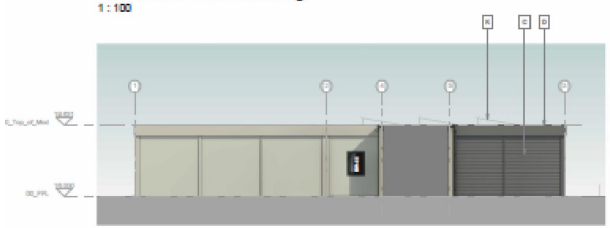
For full linkway elevation please refer to drawing
OPP1388977-DGI-01-XX-DR-A-2101-Linkway Elevations



Elevation 2 - Main Building
1 : 100



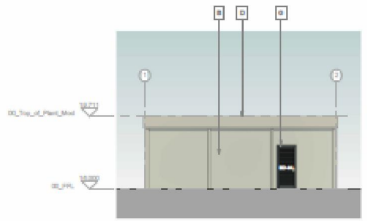
Elevation 3 - Main Building
1 : 100



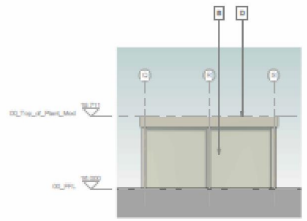
Elevation 4 - Main Building
1 : 100



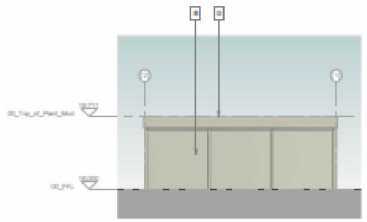
Elevation Key



Elevation 5 - Plant Room
1 : 100



Elevation 6 - Plant Room
1 : 100



Elevation 7 - Plant Room
1 : 100

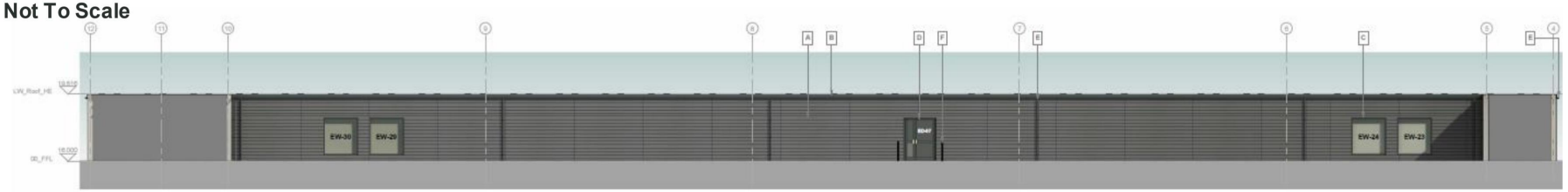


Elevation Key 2

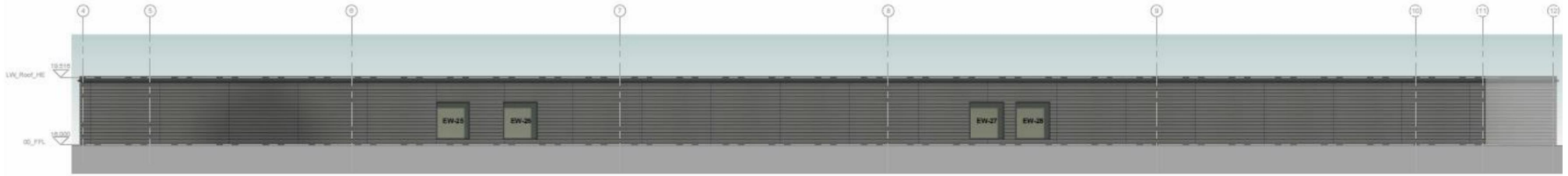
03 The Proposal

03.3 Elevations – Linkway

Not To Scale



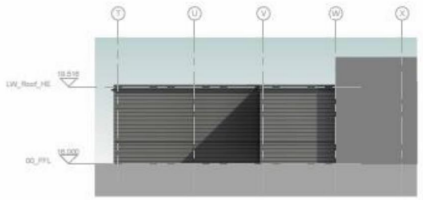
Elevation 2 - Linkway
1 : 100



Elevation 4 - Linkway
1 : 100



Elevation 1 - Linkway
1 : 100



Elevation 3 - Linkway
1 : 100

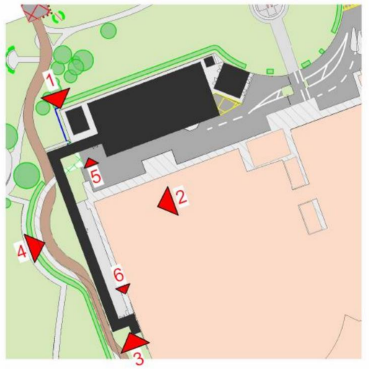


Elevation 5 - Linkway
1 : 100



Elevation 6 - Linkway
1 : 100

Material_Key	
A	Cedral Click Cladding - Slate Grey C18
B	GRP Profiled Fascia - RAL 7016 (Anthracite Grey)
C	External Window UPVC Frame - RAL 7016 (Anthracite Grey)
D	External Door - PPC Aluminium Glazed - RAL 7016 (Anthracite Grey)
E	Gutter and Downpipes- RAL 7016 (Anthracite Grey) Size and style TBC
F	Door Hoops

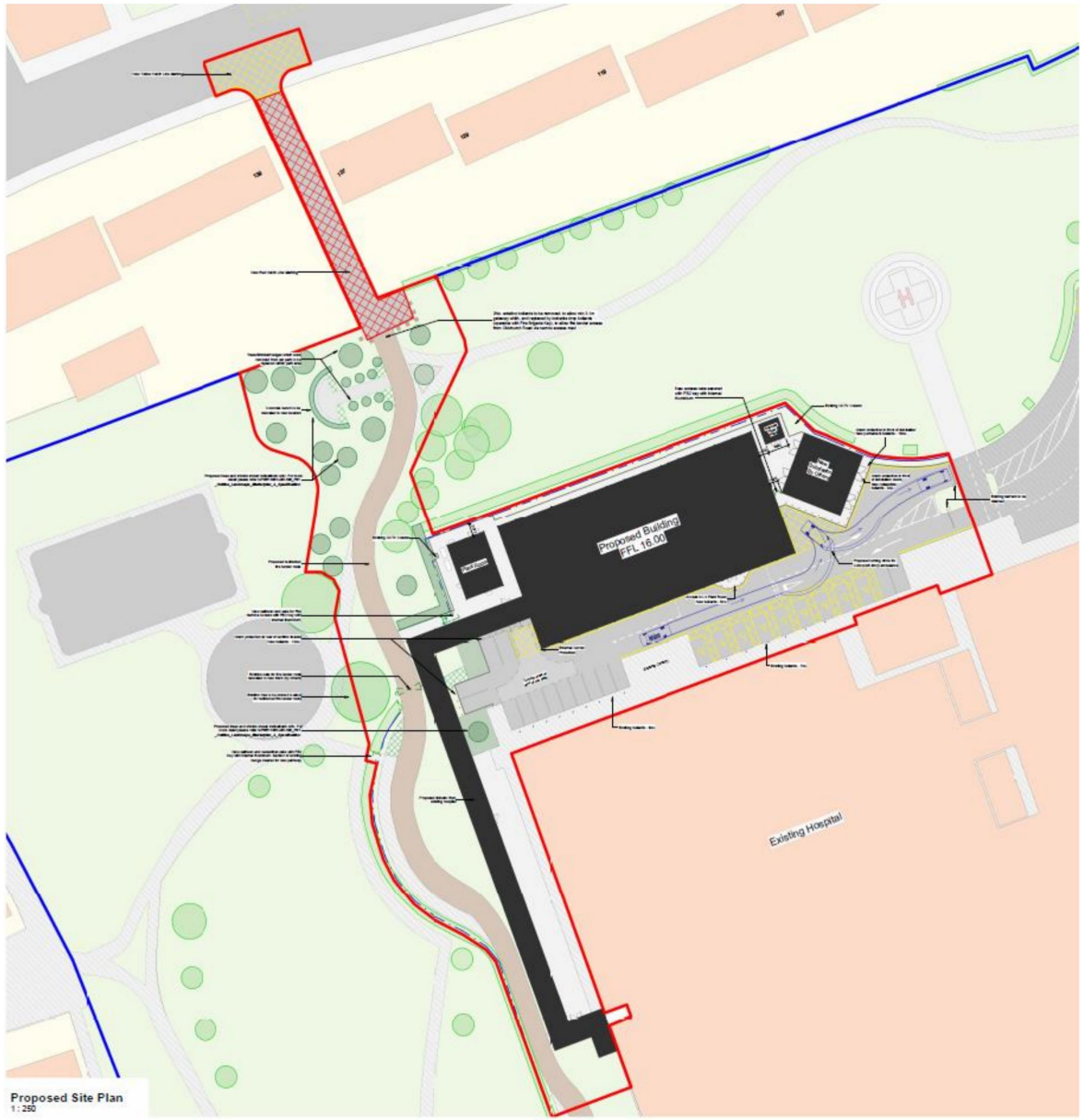


Linkway Elevation Key

03 The Proposal

03.4 Indicative Proposed Site Plan

Not To Scale



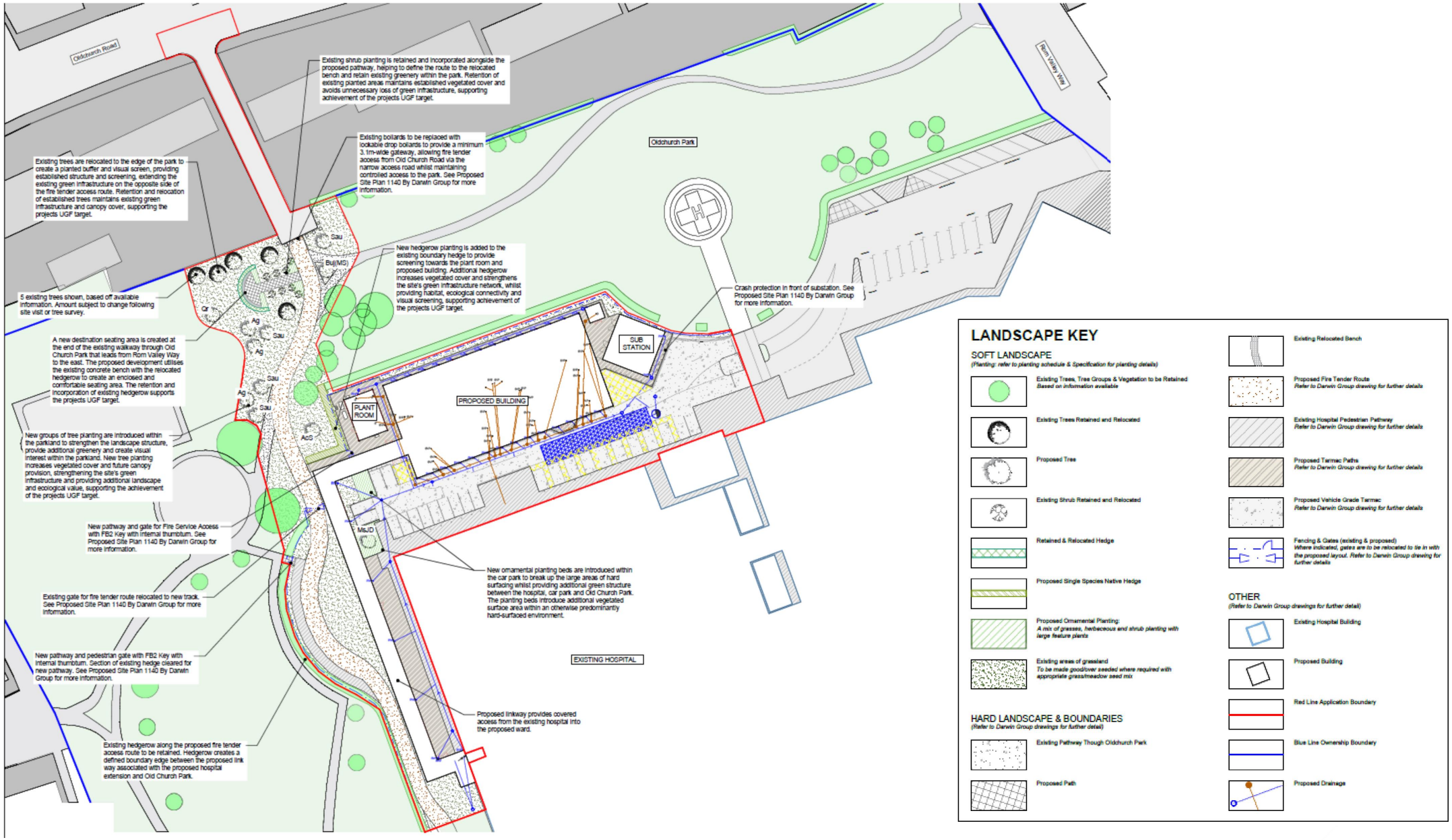
Key	
	Site Boundary
	Proposed Buildings
	Existing Buildings
	Proposed Soft Landscaping
	Existing Soft Landscaping
	Existing Shrubs/Trees
	Proposed Shrubs/Trees
	Proposed Hard Landscaping - Pathways
	Existing Hard Landscaping - Pathways
	Proposed Hard Landscaping - Fire Tender Route
	Existing Hard Landscaping - Car Park/Roads
	Proposed No Parking hatched zone
	Proposed Permanent Bollards - 33No.
	Proposed Collapsible Bollards - 6No.
	Proposed External Corner Protector - 1No.
	Proposed Fence / Gate (FB2 key accessible)
	Existing Fence

For further details, please refer to:
PWP-1061-SK-600_02_Sketch_Landscape_Masterplan

03 The Proposal

03.5 Landscaping Plan

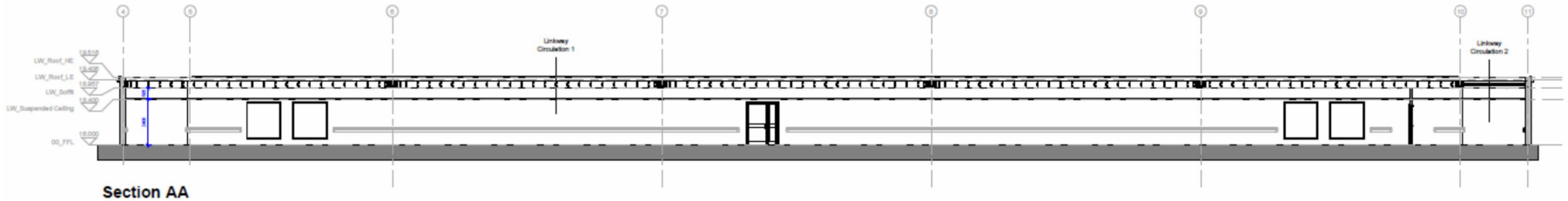
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03 The Proposal

03.6 Proposed Sections

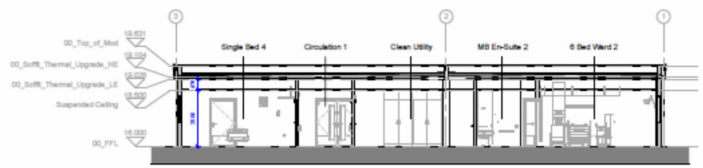
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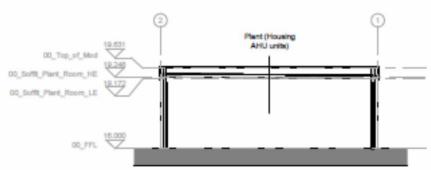
Section AA
1 : 100



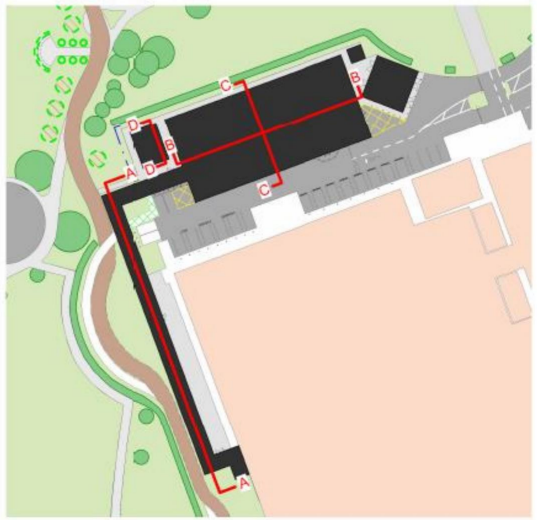
Section BB
1 : 100



Section CC
1 : 100



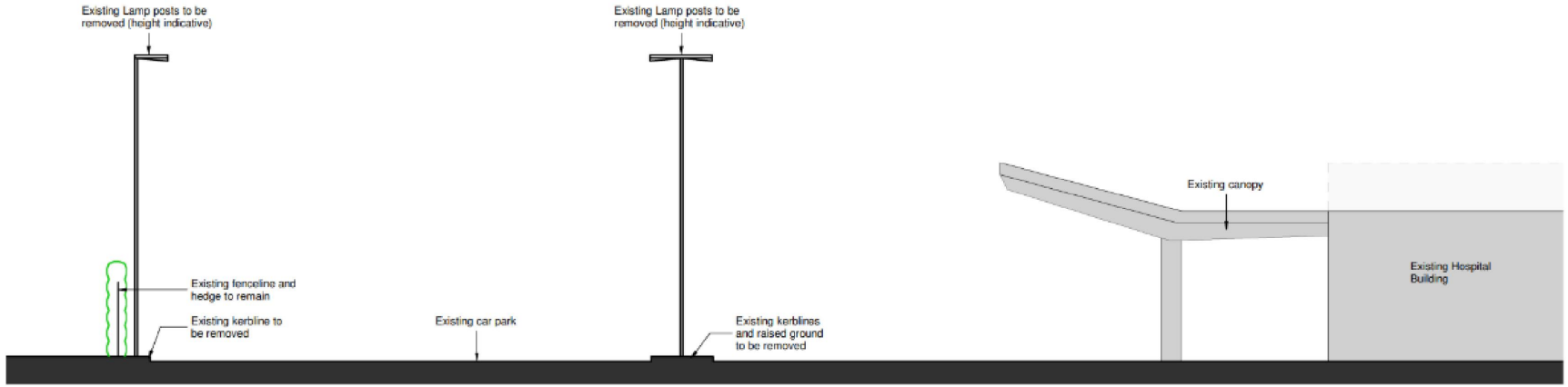
Section DD
1 : 100



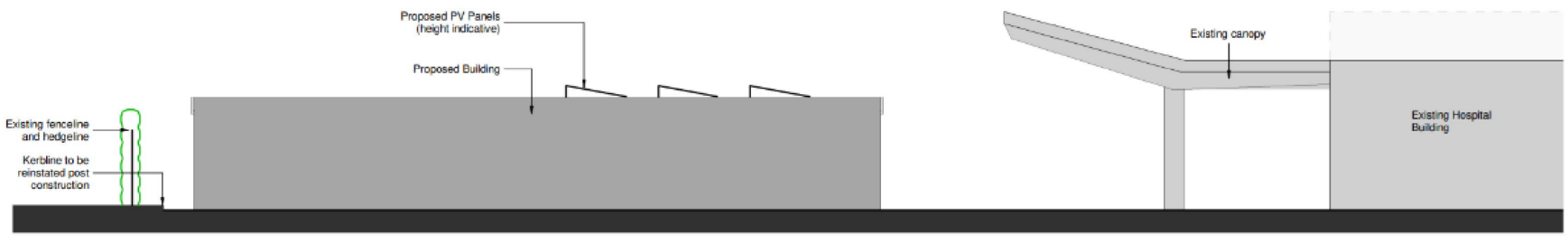
03 The Proposal

03.6 Proposed Sections

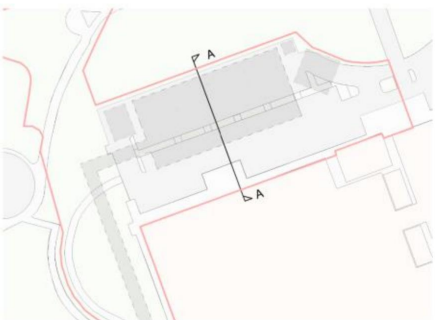
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Existing Site Section A-A
1 : 100



Proposed Site Section A-A
1 : 100



Building_Section Key

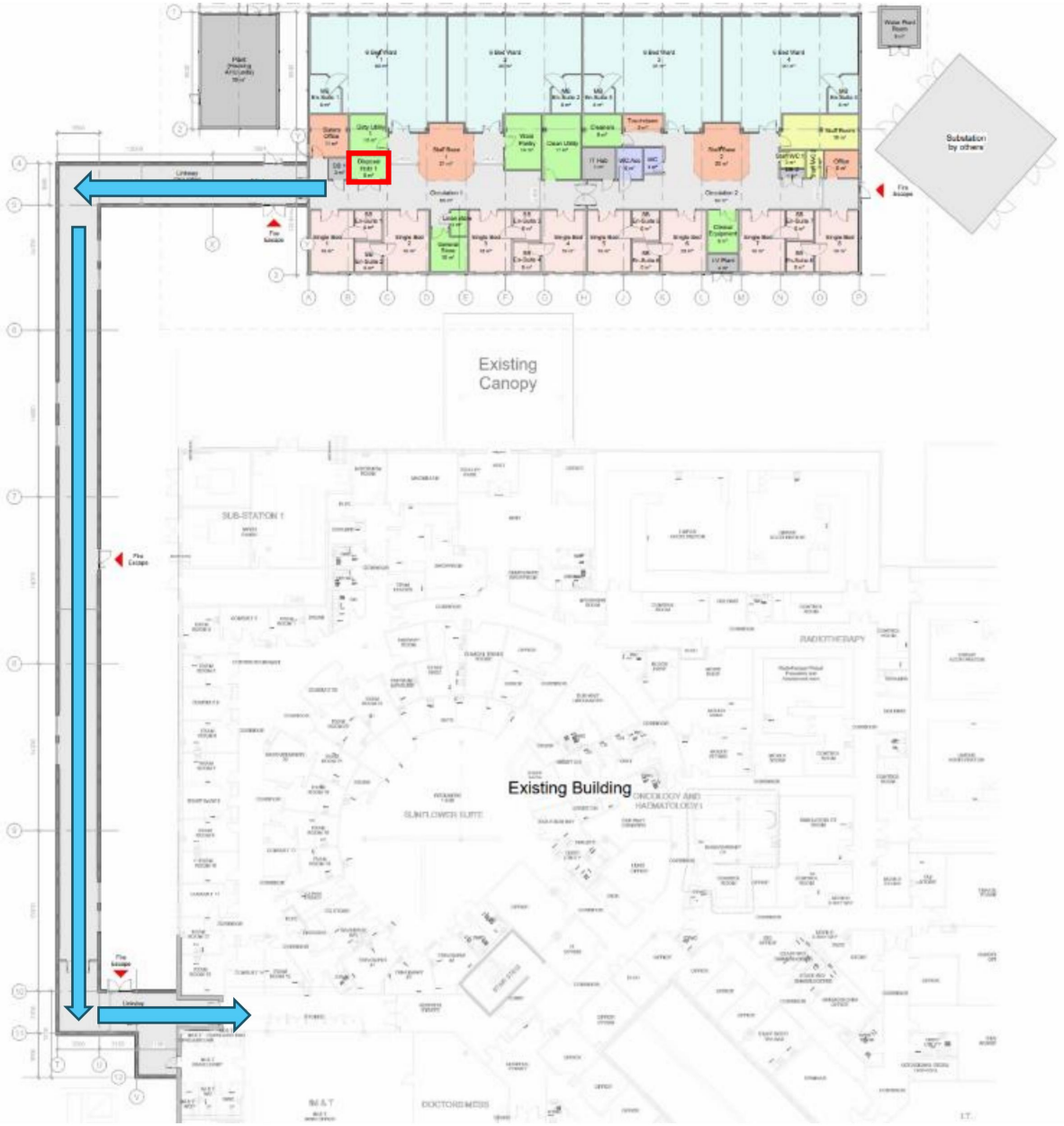
03 The Proposal

03.7 Waste Management Plan

Waste generated within the facility will be temporarily stored within the designated waste disposal room before being transferred to the wider Trust waste management system.

Waste will be removed from the disposal room via the internal link corridor, with approximately three to four collections undertaken each day, subject to operational demand.

The frequency of removals has been planned to ensure the safe and efficient management of waste and to prevent the accumulation of materials within the disposal area.



03 The Proposal

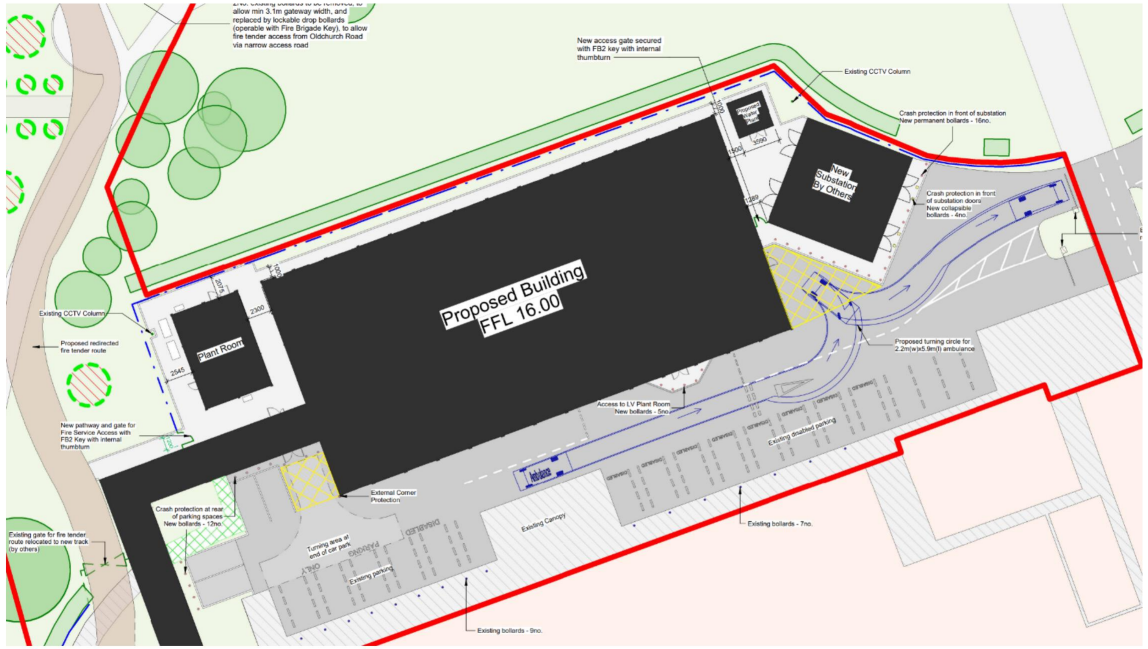
03.8 Proposed Car Parking Plan / Management Plan

The proposed development includes 7 standard parking spaces and 14 accessible (disabled) parking spaces.

The surrounding parking provision is arranged as follows:

- **Blue:** Resident permit and pay-and-display parking areas located outside the hospital estate.
- **Red:** Temporary car park located outside hospital ownership.
- **Black/Grey:** Existing maternity car park.
- **Green:** Designated accessible (disabled) parking spaces.
- **Yellow:** Staff parking area.
- **Purple:** Multi-storey car park serving hospital staff and visitors.

The proposed parking arrangement has been designed to integrate with the existing parking infrastructure and support the operational requirements of the hospital.

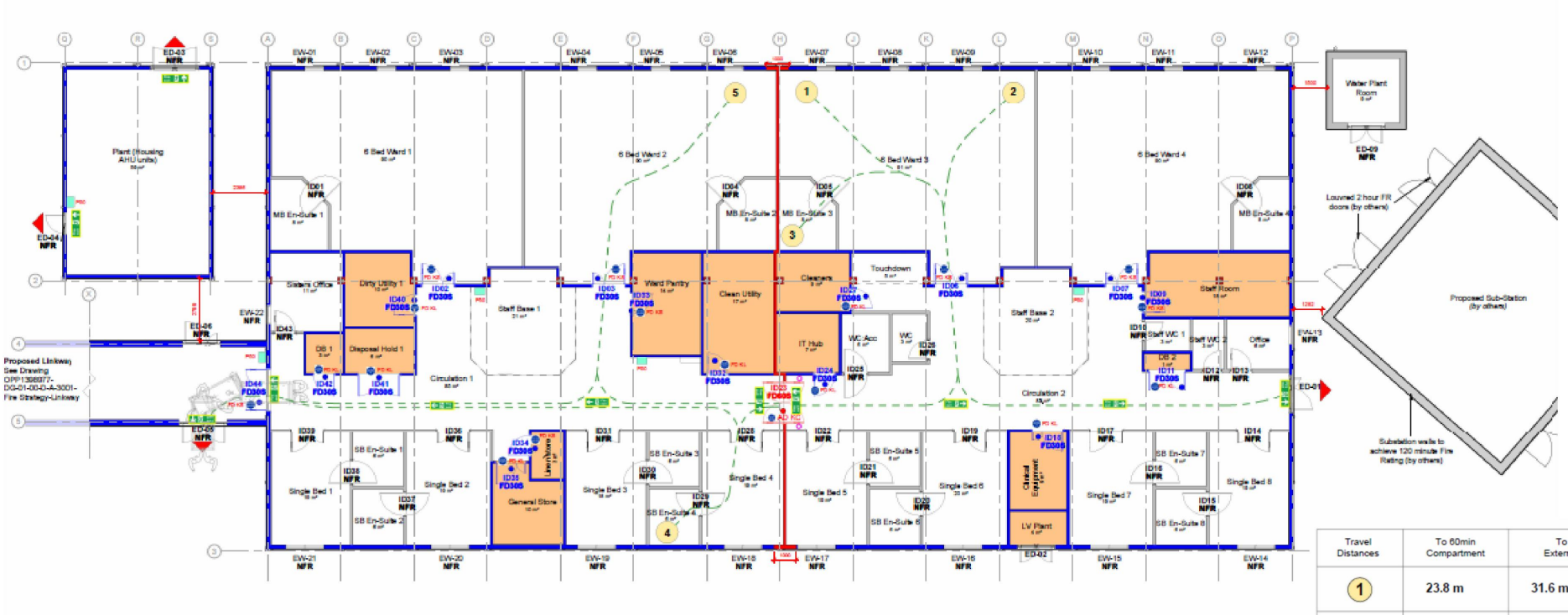




03 The Proposal

03.9 Fire Strategy – Main Building and Plant

Not To Scale



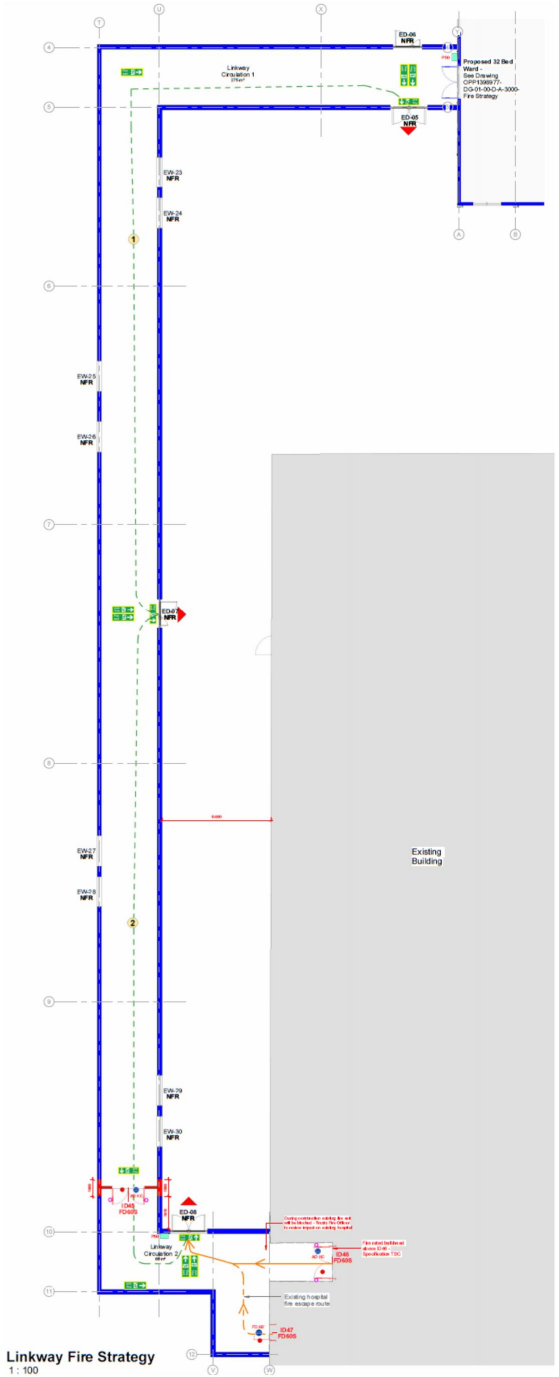
Travel Distances	To 60min Compartment	To External
1	23.8 m	31.6 m
2	21.9 m	29.3 m
3	24.2 m	31.4 m
4	8.4 m	33.3 m
5	23.7 m	35.9 m

Fire Strategy Key	
	Blue fill indicated a fire safety rating of30 **minutes** (External wall - Inside to outside only)
	Red fill indicated a fire safety rating of60 **minutes** (External Wall in to out and out to in)
	Internal column encasements to provide **60 minute** protection to all columns
	FD30S Internal Door (smoke seal)
	FD60S Internal Door (smoke seal)
	Hazard Rooms
	External Doors and Windows withFR30
	External Doors and Windows withFR60
	Final Fire Escape
Exit	Illuminated final 'Fire Exit' Sign
Fire exit	Illuminated 'Fire Exit' Directional Sign
FD KL	'Fire Door Keep Locked Shut' (one per leaf)
FD KS	'Fire Door Keep Shut' (one per leaf)
AD KC	'Automatic Fire Door Keep Clear' (one per leaf)
	Doors with Hold Open Device
P50	P50 Fire Extinguishers - Foam 27A - 6No total (locations requested by Trust's Fire Officer)
	Travel Distances

03 The Proposal

03.9 Fire Strategy – Linkway

Not To Scale



Linkway Fire Strategy
1 : 100

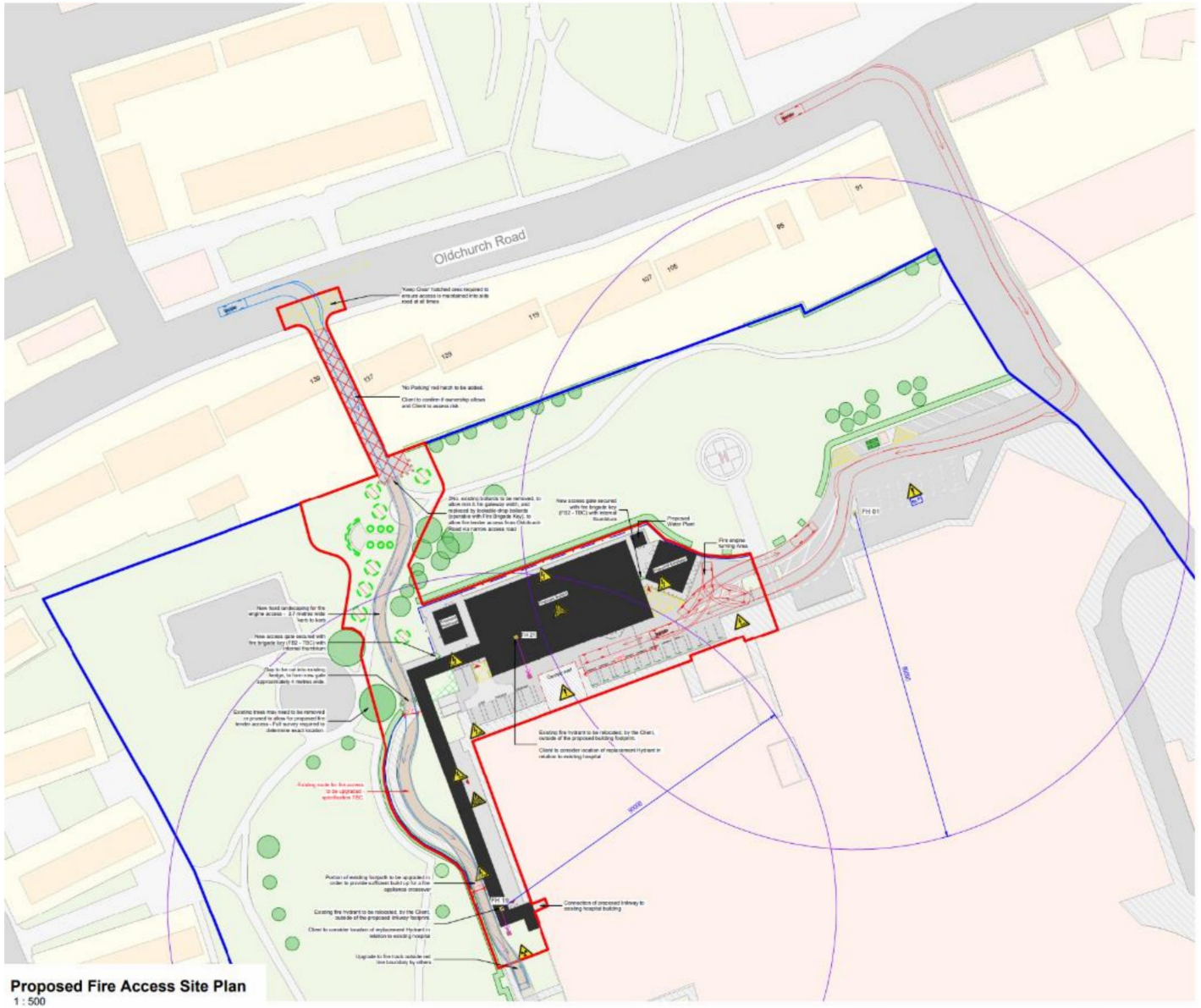
Travel Distances	To Compartment	To External
1	N/A	23.8 m
2	15.6 m	18.3 m

Fire Strategy Key	
	Blue fill indicated a fire safety rating of **30 minutes** (External wall - Inside to outside only)
	Red fill indicated a fire safety rating of **60 minutes** (External Wall in to out and out to in)
	Internal column encasements to provide **60 minute** protection to all columns
	FD30S Internal Door (smoke seal)
	FD60S Internal Door (smoke seal)
	Hazard Rooms
	External Doors and Windows with **FR30**
	External Doors and Windows with **FR60**
	Final Fire Escape
Exit	Illuminated final 'Fire Exit' Sign
Fire exit	Illuminated 'Fire Exit' Directional Sign
FD KL	'Fire Door Keep Locked Shut' (one per leaf)
FD KS	'Fire Door Keep Shut' (one per leaf)
AD KC	'Automatic Fire Door Keep Clear' (one per leaf)
	Doors with Hold Open Device
P50	P50 Fire Extinguishers - Foam 27A - 6No total (locations requested by Trust's Fire Officer)
	Travel Distances

03 The Proposal

03.9 Fire Strategy – Fire Appliance Tracking

Not To Scale



Proposed Fire Access Site Plan
1 : 500

Fire Strategy Key	
	Fire Appliance access for proposed building
	Fire Appliance access for existing building
	Proposed additional hard landscaping for Fire Appliance access
	Existing Hydrant location
	Suggest location or re-located Fire Hydrant for existing building -**to be reviewed by client**
	Proposed Building
	Site Boundary
	Hospital Boundary
	90metre Hydrant Radius
	Existing Shrubs/Trees
	Existing Fenceline
	Proposed Soft Landscaping
	Proposed Shrubs/Trees

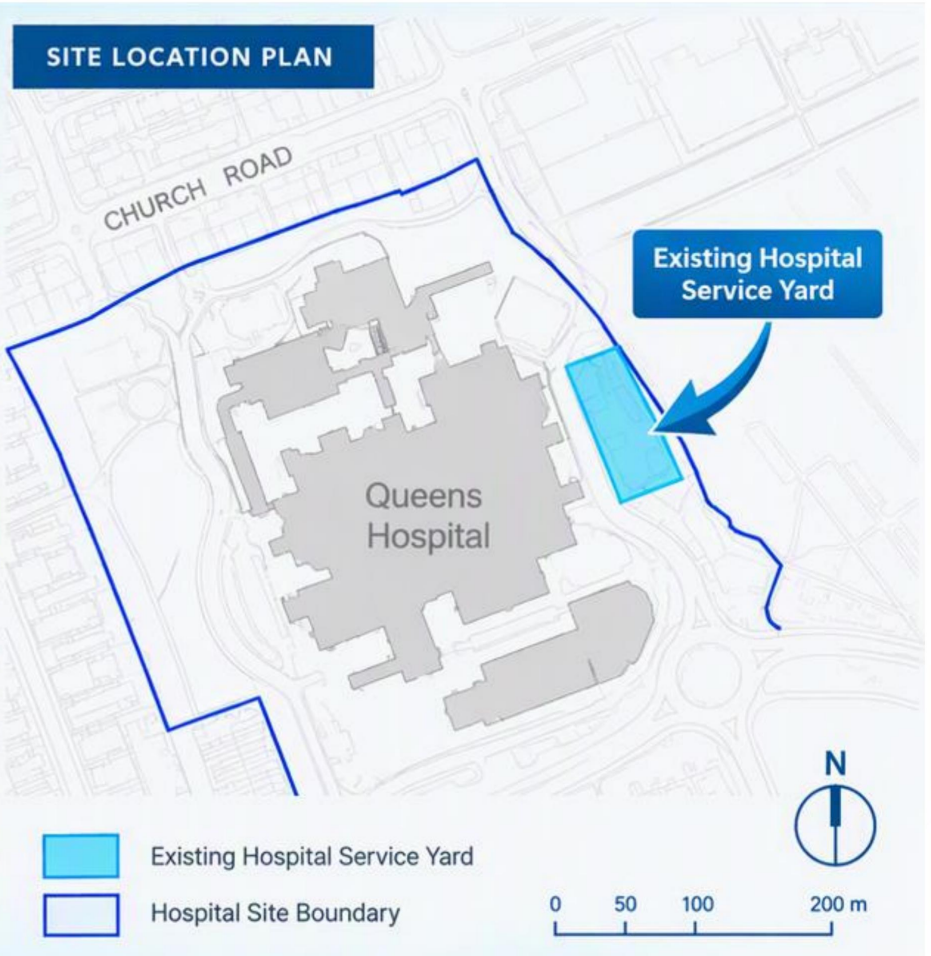
CDM Warning Sign Key	
	Pedestrian Emergency Egress - to remain active during construction
	Blue Light Parking - Ambulances, etc. only
	Potential Explosive Material in Area For potential explosive material - "UXO Risk Managment Plan template" to be completed prior to works commencing (template guidelines available)
	Radioactive Material or Ionizing Radiation Below Ground
	HV Electricity Below Ground (Location Varies) (for buried see UM26- 4144-EVA Queens Hospital, Romford_Preliminary)
	LV Electricity Below Ground (Location Varies) (for buried see UM26- 4144-EVA Queens Hospital, Romford_Preliminary)

03 The Proposal

03.9 Service and Delivery Plan

All deliveries associated with the proposed development will be received via the existing hospital service yard and managed in accordance with the Trust's established operational procedures. The development is not expected to generate any unusual delivery requirements or necessitate changes to the existing servicing arrangements.





04 Secure By Design

Security Statement

DarwinGroup

04 Secure By Design

04.1Security Statement

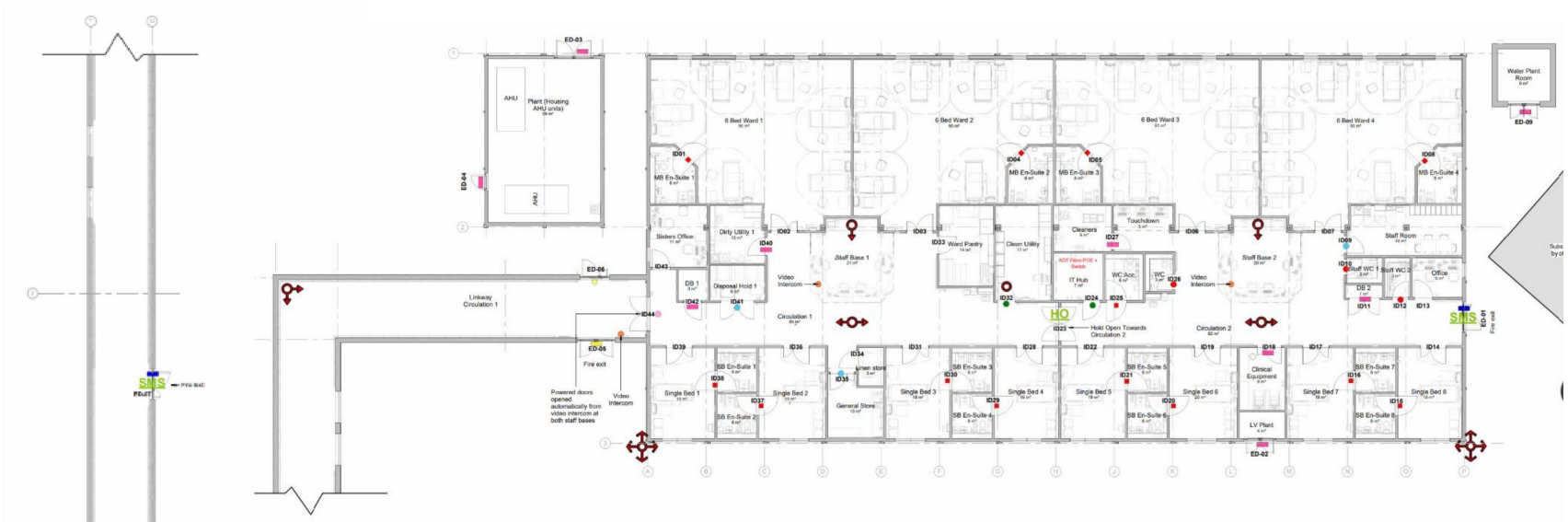
The proposed 32-bed ward at Queen's Hospital, Romford, is supported by a structured, evidence-led security strategy aligned with national best practice, including the Security Overlay to the RIBA Plan of Work, relevant NHS security guidance, Secured by Design principles and Crime Prevention Through Environmental Design (CPTED).

The approach reflects the ward layout, acute healthcare operations and foreseeable risks to patients, staff, visitors, contractors, clinical assets and critical infrastructure. Key considerations include the ward entrance, enclosed hospital linkway, staff bases, patient accommodation, utility and equipment rooms, emergency exits, external approaches, and the air-handling and plant enclosure.
Security will be developed with the Metropolitan Police Designing Out Crime Officer, CPTED-UK Ltd as appointed Security Advisors, clinical stakeholders and the wider design team. This coordinated process will ensure that physical, electronic and operational measures remain proportionate, support patient care and accessibility, and do not compromise fire safety, infection control or emergency procedures.

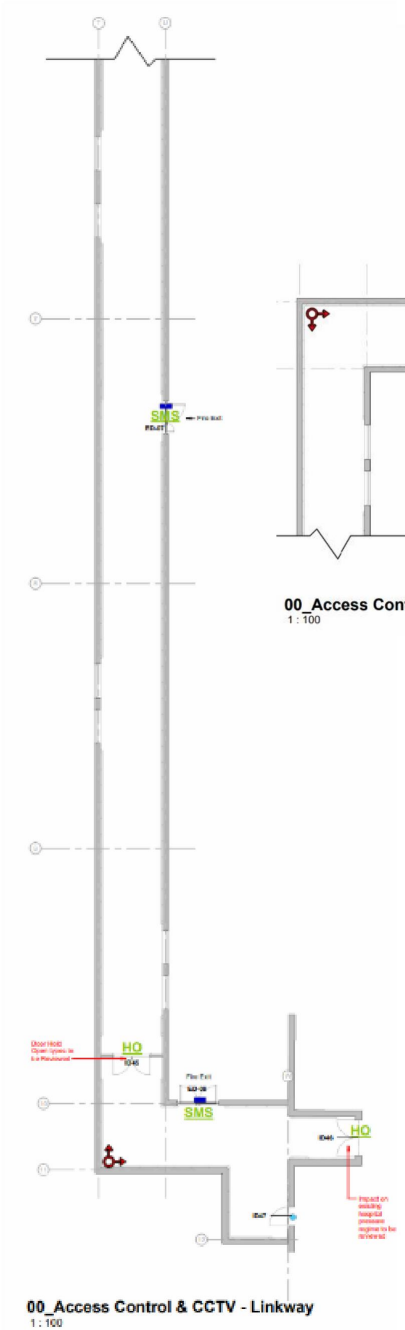
A layered security approach will distinguish public, controlled clinical and staff-only areas. Entry from the hospital linkway will be managed through a clearly defined ward entrance. Electronic access control or restricted-key systems will protect staff rooms, utility areas, stores, the IT hub and clinical equipment spaces. Emergency exits will remain available for evacuation but, where appropriate, will be monitored or alarmed to discourage misuse, unauthorised entry and unnoticed patient egress.
Natural surveillance will be supported by the two staff bases and clear sightlines along principal circulation routes, while preserving patient dignity and confidentiality. CCTV will be reviewed for entrances, the linkway interface, external approaches and plant areas, with each camera serving a defined operational purpose and providing evidential image quality. Staff duress arrangements, secure storage, and robust protection of medicines, portable equipment, IT assets and plant will strengthen safety and operational resilience.

The strategy will be refined through detailed design to coordinate access control, doors and locks, CCTV, alarms, lighting and management procedures. Subject to implementation, these proportionate, risk-led measures will provide a safe, secure and welcoming ward for patients, visitors and staff while supporting the continuing operation and resilience of Queen's Hospital.

CPTED UK



00_Access Control & CCTV
1 : 100



00_Access Control & CCTV - Linkway
1 : 100

Not To Scale

Access Control & CCTV Key	
	12MP Fisheye Camera looking down on drugs cabinet
	5MP Varifocal Mini Dome Camera
	10MP Dual Sense Camera
	4 way multisensor camera Either 16MP 4 way multisensor fixed or 20MP 4 way multisensor.
	Access control device, swipe to enter, flush mount touch-free infrared exit button, mag lock **RELEASED ON FIRE**, green breakglass unit putty pads required on fire walls
	Access control device, swipe to enter, flush mount touch-free infrared exit button, mag lock **NOT RELEASED ON FIRE**, green breakglass unit putty pads required on fire walls
	Access control device, swipe to enter, swipe to exit, mag lock **RELEASED ON FIRE**, green breakglass unit internally and externally with putty pads required on fire walls
	Powered Internal Doors with Access control device, video intercom (operated from both staff bases), swipe to enter, flush mount touch-free infrared exit button, mag lock **RELEASED ON FIRE**, green breakglass unit putty pads required on fire walls

	Video intercom (operated from both staff bases),
	Key lock / thumb turn
	Panic Exit Bar
	Exidor400 Panic Exit Bar with exit alarm and internally fitted microswitches (3 point locking mechanism) Linked to Access Control swipe to enter, manually push bar to exit
	Digi lock
	'Lift to Lock' Bathroom Lock Kit with lever handles, in use indicator and external overide
	Standard Bathroom Lock/Indicator on Rose - with external 'coin' override
HO	Hold open device release on fire. Specification TBC
SMS	Security Monitoring Sensor

05 Sustainable Development

Sustainable Design and Construction Statement

Energy Strategy / Energy Statement

Darwin Group

05 Sustainable Development

05.1Sustainable Design and Construction Statement

The proposed development has been designed in accordance with the principles of sustainable development, balancing environmental, social and economic considerations. Sustainability has been integrated throughout the design process with a focus on reducing carbon emissions, minimising waste, improving energy efficiency and creating a high-quality environment for users.

The scheme utilises Modern Methods of Construction (MMC), delivering significant sustainability benefits through off-site manufacturing, reduced construction waste, reduced vehicle movements and improved programme certainty.

Modern Methods of Construction (MMC)
The building will be predominantly manufactured off-site within a controlled factory environment before being transported and assembled on site.
Benefits include:
- Reduction in construction waste through precision manufacturing.
- Reduced material consumption and improved resource efficiency.
- Reduced site construction period compared with traditional construction methods.
- Fewer vehicle deliveries and associated carbon emissions.
- Improved quality control and building performance.
- Reduced disruption to neighbouring occupiers and hospital operations.

Energy Efficiency
The building has been designed to reduce operational energy demand through:
- High-performance building fabric with enhanced insulation values.
- Air tightness measures to minimise heat loss.
- Energy efficient glazing systems.
- LED lighting throughout.
- Occupancy and daylight sensors where appropriate.
- High-efficiency heating, ventilation and cooling systems.

The design seeks to minimise regulated and unregulated energy consumption whilst providing a comfortable and healthy internal environment.

Carbon Reduction
The development aims to reduce both embodied and operational carbon emissions through:
- Use of off-site manufactured building components.
- Optimisation of structural materials to minimise material quantities.
- Efficient building orientation and solar gain management.
- Selection of products with Environmental Product Declarations (EPDs) where appropriate.
- Consideration of low-carbon heating technologies.
- Selection of durable materials with long service lives and reduced maintenance requirements.

Renewable and Low Carbon Technologies
Where appropriate and subject to detailed design, the development will consider incorporation of renewable and low-carbon technologies including:
- Roof-mounted photovoltaic panels.
- Air Source Heat Pumps (ASHP).
- Energy efficient heat recovery systems.
- Future adaptability for emerging low-carbon technologies.

These measures will contribute towards reducing the building's operational carbon emissions.

Sustainable Drainage
Surface water management has been considered through the incorporation of Sustainable Drainage Systems (SuDS), which may include:
- Attenuation storage systems.
- Flow control devices.
- Permeable paving where feasible.
- Controlled discharge rates in accordance with the requirements of the Lead Local Flood Authority.

The drainage strategy seeks to manage runoff sustainably, reduce flood risk and improve resilience to climate change.

Construction Waste Management
Construction waste will be minimised through:
- Factory-based manufacturing processes.
- Material optimisation and standardisation.
- Segregation and recycling of waste streams.
- Responsible disposal of unavoidable waste.
- Compliance with site Waste Management Procedures.

The MMC approach substantially reduces site-generated waste compared with traditional construction methods.

The proposed development has been designed in accordance with sustainable design and construction principles. Through the adoption of Modern Methods of Construction, energy-efficient design measures, sustainable material selection and responsible construction practices, the development will deliver environmental benefits whilst providing a high-quality, adaptable and future-proof facility.



06 Construction and Delivery

Construction Logistics Plan

DarwinGroup

6.0 Construction and Delivery

06.1 Construction Logistics Plan

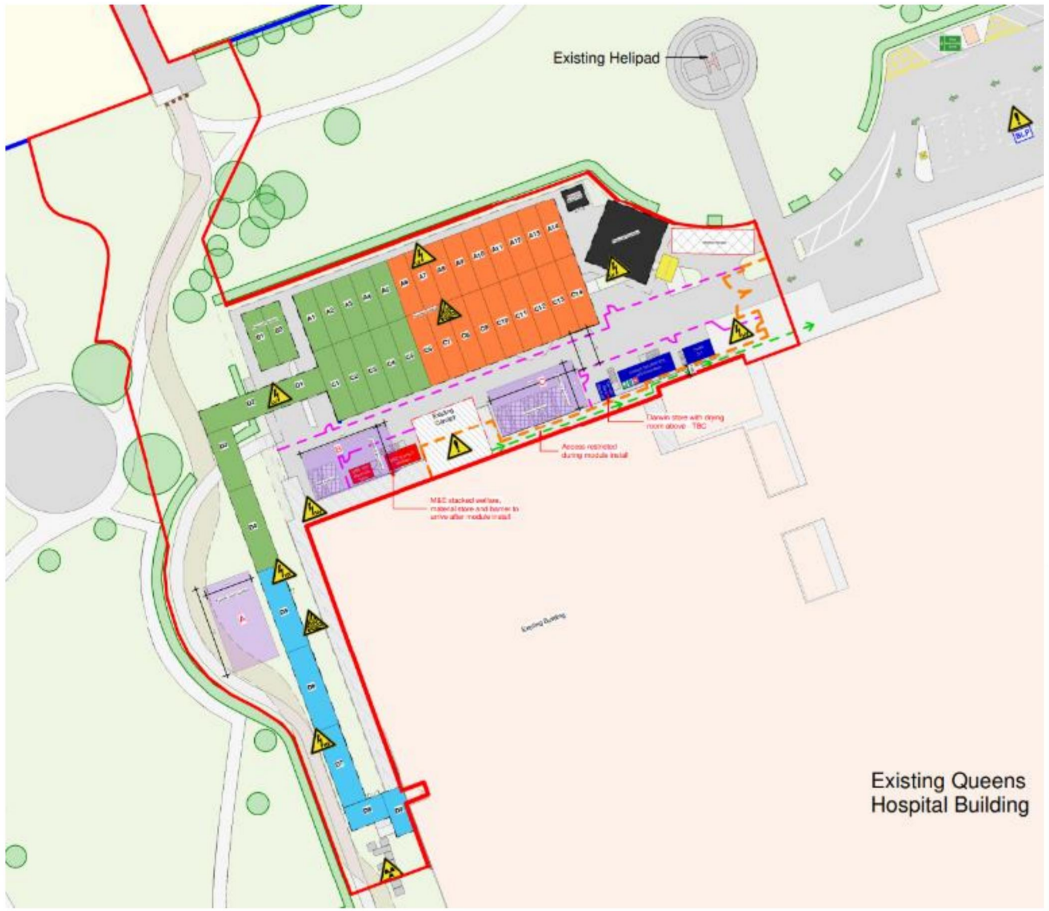
A detailed Construction Logistics Plan has been prepared to facilitate the safe and efficient delivery of the proposed development whilst ensuring the continued operation of Queen's Hospital throughout the construction period. Owing to the site's location within a live healthcare environment, the logistics strategy has been carefully developed to minimise disruption to hospital services, patients, visitors and staff.

Construction access will be provided from Rom Valley Way via a dedicated site entrance, allowing construction traffic to enter and exit the site independently of the main hospital circulation routes. A secure construction compound will be established adjacent to the development site and will accommodate site offices, welfare facilities, contractor parking, material storage areas and waste management facilities. Consolidating these functions within a dedicated compound will reduce unnecessary movements across the hospital campus and support the efficient management of construction activities.

The development will be delivered using a modular construction methodology, with dedicated crane operating areas established to facilitate the phased installation of the building modules. This approach has been adopted to reduce the overall construction programme, minimise on-site activity and decrease the number of deliveries required when compared to traditional construction methods, thereby reducing potential impacts on the surrounding hospital environment.

Throughout the construction period, emergency vehicle access, ambulance routes and pedestrian movement will be maintained at all times. Temporary fencing, barriers and controlled access points will be implemented to safely segregate construction activities from operational hospital areas, ensuring a safe environment for patients, visitors and staff.
A managed delivery strategy will be employed, with deliveries coordinated through a booking system and scheduled, where practicable, to avoid peak periods of hospital activity. This will assist in minimising congestion within the hospital estate and reducing the potential for disruption to essential healthcare operations.

Given the sensitive nature of the surrounding healthcare setting, construction activities will be undertaken in accordance with a Construction Environmental Management Plan. Appropriate measures will be implemented to manage noise, dust and general construction impacts, including the use of modern and well-maintained plant and equipment, the careful programming of noisy operations, and the application of good housekeeping practices. Collectively, these measures will ensure that the development can be delivered safely and efficiently whilst maintaining the functionality and operational requirements of the wider hospital campus.



KEY

- Hospital Boundary
- Site Boundary
- Darwin Site Welfare, toilets and material storage container
- Space allowed for MEPH Office and storage - by others
- Skip
- Material Storage Zone
- Main access point to site - Including deliveries - Road to be kept clear
- Module Delivery Vehicle Tracking
- Site Parking Spaces
- Pedestrian Barrier: 30m with 3xgate
- Heras Fencing with DG Debris Netting for module install: 136m
- Emergency Egress route from existing hospital exit - 1.8m minimum width
- Crane Pad approx. 12m x 17m - Location TBC

Module Installation Phases

- Phase 1 - Crane Pad Position **A** - Modules D5 - D9
- Phase 2 - Crane Pad Position **B** - Modules A1-A5, B1-B2, C1-C5, D1-D4
- Phase 3 - Crane Pad Position **C** - Modules A6-A14, C6-C14

CDM Warning Sign Key	
	Pedestrian Emergency Egress - to remain active during construction
BLP	Blue Light Parking - Ambulances, etc. only
	Potential Explosive Material in Area For potential explosive material - "UXO Risk Managment Plan template" to be completed prior to works commencing (template guidelines available)
	Radioactive Material or Ionizing Radiation Below Ground
HV	HV Electricity Below Ground (Location Varies) (for buried see UM26- 4144-EVA Queens Hospital, Romford_Preliminary)
LV	LV Electricity Below Ground (Location Varies) (for buried see UM26- 4144-EVA Queens Hospital, Romford_Preliminary)


Site rules board @ site office, with statutory notices


Site entrance signage example


Solid vinyl heras fencing

Pedestrian Barrier

Pedestrian Gate

Bottled water to be provided to the welfare unit for the duration of the works

7.0 Conclusion

The proposed development will provide Barking, Havering and Redbridge University Hospitals NHS Trust with a purpose-designed facility for its Emergency Department, delivering modern, flexible and efficient accommodation within the established Queens Hospital site. The building has been carefully developed in response to the Trust's operational requirements and will provide high-quality workspace, staff welfare facilities and supporting accommodation within an accessible and sustainable environment.

The proposed location represents an appropriate and sustainable site for development, making effective use of previously developed land whilst maintaining the continued operation of the wider hospital estate. The design has been informed by the site's context, existing movement patterns and landscape setting, resulting in a proposal that integrates sensitively with its surroundings and minimises impacts on existing infrastructure and green space.

The use of modern methods of construction will facilitate rapid delivery, minimise disruption during construction and provide a high-quality building that can respond to future changes in service requirements. The proposals also incorporate inclusive design principles, ensuring the building is accessible to all users and capable of supporting staff wellbeing and operational efficiency.

Overall, the proposed Ward represents a positive investment in the Trust's estate and will support the continued delivery of essential treatment spaces across North-East London and Essex. The development will create a functional, adaptable and sustainable facility that meets the needs of the Trust both now and into the future and is therefore considered an appropriate form of development within the Queens Hospital site.

This proposal delivers a modern, patient-focused healthcare facility that meets the highest standards of design and accessibility. The scheme responds sensitively to its context while providing a welcoming, inclusive environment for patients, staff, and visitors.

Through thoughtful design and stakeholder engagement, the development promotes community wellbeing, enhances local healthcare provision, and supports the NHS's long-term objectives for quality care and operational efficiency.

We believe this building represents a well-considered solution that will serve the community for generations to come.




DarwinGroup®