

Good morning



Tangram Architects



Working with Cygnet Healthcare a Projects Retrospective

Who are Tangram Architects?



- Healthcare specialist practice with 30 years experience.
- Based near Tower Bridge in Central London
- We are an SME with 3 design directors
- 90% healthcare including mental health working with both the NHS and independent sectors
- We have been working with Cygnet Healthcare on their projects for over 10 years
- We have worked on over 50 commissions with Cygnet Healthcare and have seen completed over 20 refurbishment and new build schemes.
- These schemes include Medium & Low Secure, PICU, CAMHS, Locked Rehabilitation and Transitional Living services

Who are Cygnet Healthcare?

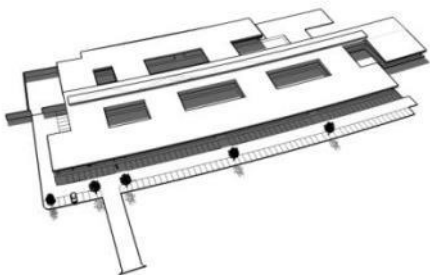
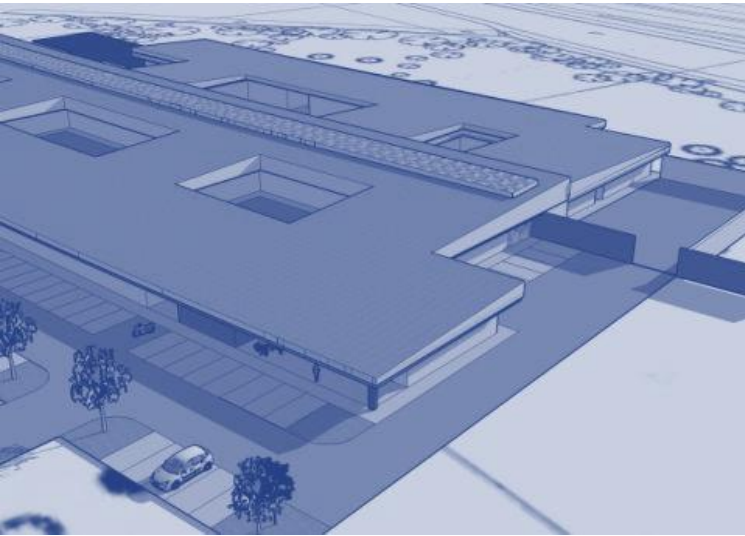


- A leading provider of mental health services across the UK including Medium & Low Secure, PICU, CAMHS, Locked Rehabilitation and Transitional Living services
- Acquired by UHS an independent provider of mental health services across the US in 2014
- Before being acquired Cygnet Healthcare ran over 20 sites across the UK and added 305 beds with the subsequent takeover of Alpha Hospitals in 2015.
- Additional beds will be added through the further acquisition of Cambrian Adult Services this year.
- A programme of building works to add further beds is currently underway and Tangram is a core part of the team helping to facilitate this work.



Our Work With Cygnet Healthcare

Range of Work



- Feasibility Studies & Completed Buildings
 - Medium Secure Units
 - Low Secure Units
 - Step Down Units
 - Locked Rehabilitation Units
 - Psychiatric Intensive Care Units
 - Transitional Living
 - CAMHS
- Benchmarking

List of commissions for Cygnet Healthcare

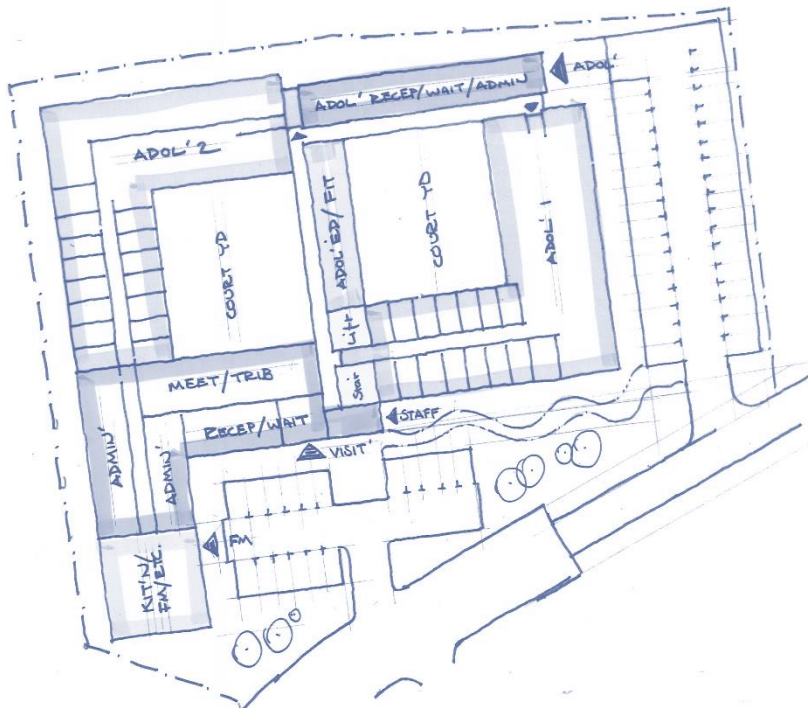


- **Bexleyheath Crooklog Site – Bid Support**
- Chelmsford Chelmer Village Way – Feasibility Design
- **Warrington – Feasibility Design**
- Harrow – Feasibility Design
- **Stevenage – Full Service - Novated to Design & Build Contractor**
- Nottingham – Feasibility Design
- **Manchester – Feasibility Design**
- Barlborough Links – Full Service up to Planning Application Pulled
- **Kewstoke – Full Service up to Planning - Approval Granted**
- **Stevenage 2 – Minor Works - Partial Service - Works Completed**
- Park Royal – Feasibility Study
- **Ballyclare – Feasibility Study**
- Lewisham – Partial Service - Works Completed
- **Derby – Full Service - Works Completed**
- Manchester – Feasibility Study
- **Cleckheateon – Feasibility Study**
- Stockport – Partial Service - Works Completed
- **Weston Supermare – Feasibility Study**
- Bridgwater – Full Service up to Planning - Approval Granted
- **Bradford - Partial Service - Works Completed**
- Kewstoke Lodge - Partial Service - Works Completed
- **Godden Green – Partial Service**
- Godden Green PICU – Feasibility Design
- **Benchmarking Exercise**
- Derby Extension 1 - Full Service up to Planning - Approval Granted
- **Derby Extension 2 - Full Service up to Planning - Approval Granted**
- Stevenage LSU & SSL Full Service up to Planning - Approval Granted
- **Coventry LSU & SSL Full Service up to Planning - Approval Granted**
- Wyke Extension - Feasibility
- **Harrow 16 Bed Ward - Feasibility**
- ***Tangram have completed over 50 commissions for Cygnet Healthcare with a 100% record in securing full planning***



Formulating The Brief

External Sources



Design Guidance

- **ADB**
- Fire strategy (HTM 05/02)
- **Other HTM's – Component Design**
- DDA (Inclusive Design)
- **Building Regulations & British Standards**
- Conferences & such as *Design in Mental Health*
- **Our peers**
- P22 mental health bedroom design & Building Better Health bedroom design
- **Mental health design guidance & in house standards**

Component Design



Proprietary Components

- Security Fencing & Gates
- External Windows & Doors
- Internal Doors & Ironmongery
- Sanitaryware & Taps
- Fitted Furniture
- Loose Furniture
- Floor & Wall Coverings
- Light Fittings
- IPS

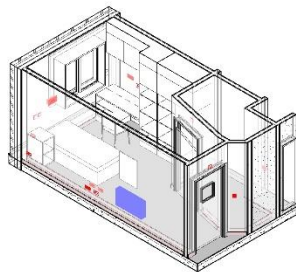
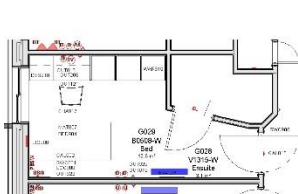
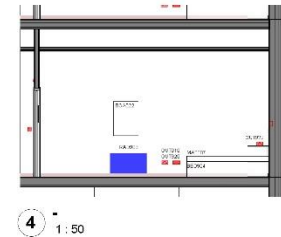
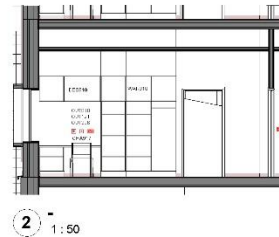
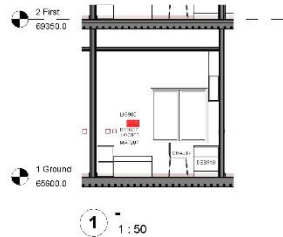
Internal Sources



Design Guidance

- **Client brief**
- Standard rooms
- **Post Occupancy Evaluation**
- Benchmarking

Standard Rooms



3d View

Relevant HBN 03 - 01 Notes

8.40

Service user bedrooms should be single rooms and provide facilities to cater for the sleeping, personal, living and sanitary needs of service users.

8.41

The bedroom should be a minimum of 15 m² including an en-suite facility. If ensuite facilities are not achievable with projected numbers of beds, planners may wish to consider reducing the number of beds.

8.42

Each bedroom should have a staff-call facility.

8.43

The layouts of rooms, fixed furniture and equipment ideally should ensure that the service user is not able to position themselves unseen in the room.

8.44

The design should ensure that access to and egress from the room are not compromised in the event of a fire or other emergency.

8.45

The design should allow for such facilities as television, radio, personal media equipment and internet communications.

8.46

Bed height should be such that users can easily get in and out. Beds may be of a divan type to avoid problems with bed-making.

8.47

Appropriate bedside, drawers or shelves, a desk or work surface and a chair should be provided. Furniture and fittings within the bedroom should be built-in, where possible, including for TV and CD players.

8.48

Lockable personal storage facilities for clothing and possessions should be provided within each bedroom. Self-medication lockers may also be available within the bedroom, depending on local policy.

8.49

Speech privacy is very important, as service users may be interviewed in their rooms. An adequate level of sound attenuation is required.

8.50

Bedrooms should not be overlooked, and it should not be possible to approach the window closely from the outside to look into the room.

8.51

The window should be positioned to allow the service user to see out when seated.

8.52

Standard hospital bed-head units, piped oxygen and suction are not required, since service users with more serious physical illness would be cared for in an acute hospital setting.

8.53

Each room should have tamper-proof mechanical and electrical services fittings and fixings. The lighting, water and electrical controls should be located external to the bedroom.

8.54

Bedroom doors should have a vision panel to allow staff observation into the room. Some means of obscuring the vision panel, controlled by the service user but with staff override, will be required. A number of lockers are available, including observation panels that change from white to clear.

8.55

Generally, the use of inward-opening, single-leaf doors is considered to be more conducive to a homely, less institutionalised environment.

8.56

Doors should be capable of being opened upwards in an emergency situation, so that service users may not barricade themselves in. Care is required to ensure that sound privacy is not compromised and that the emergency anti-intrusion system does not allow a view into the room.

8.57

Service users should be able to lock their rooms both when they are inside the room and on leaving it to safeguard their property and to increase the feeling of safety, privacy and dignity. However, staff will need the facility to override the lock.

8.58

The number of electrical socket-outlets provided will depend on lighting and heating requirements and on the allowance for personal electronic equipment. These will be determined by the project requirements and local policy.

8.59

A single socket should be located close to each doorway so that cleaning can be undertaken easily in each room.

8.60

Provision may be made for data points within the room. If a built-in unit is to be constructed for media equipment, the socket-outlets should be located close to the unit. See Health Technical Memorandum 08-01 - Electrical services supply and distribution.

8.61 Wherever possible, rooms should be arranged in pairs so that they share common services. All pipework and services should be located in a secure duct adjacent to the room and should only be accessible from the circulation area or non-service user areas.

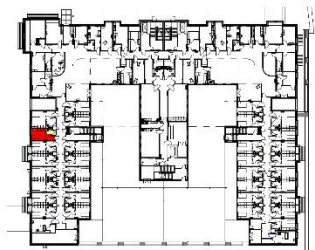
Bed G029 - G0508-W - Component Schedule			
ADBCode	ADBDescription	ADBGroup	Count
G029	1500mm x 2000mm bed frame with mattress	1	1
G030	1500mm x 2000mm bed frame with mattress	1	1
G031	1500mm x 2000mm bed frame with mattress	1	1
G032	1500mm x 2000mm bed frame with mattress	1	1
G033	1500mm x 2000mm bed frame with mattress	1	1
G034	1500mm x 2000mm bed frame with mattress	1	1
G035	1500mm x 2000mm bed frame with mattress	1	1
G036	1500mm x 2000mm bed frame with mattress	1	1
G037	1500mm x 2000mm bed frame with mattress	1	1
G038	1500mm x 2000mm bed frame with mattress	1	1
G039	1500mm x 2000mm bed frame with mattress	1	1
G040	1500mm x 2000mm bed frame with mattress	1	1
G041	1500mm x 2000mm bed frame with mattress	1	1
G042	1500mm x 2000mm bed frame with mattress	1	1
G043	1500mm x 2000mm bed frame with mattress	1	1
G044	1500mm x 2000mm bed frame with mattress	1	1
G045	1500mm x 2000mm bed frame with mattress	1	1
G046	1500mm x 2000mm bed frame with mattress	1	1
G047	1500mm x 2000mm bed frame with mattress	1	1
G048	1500mm x 2000mm bed frame with mattress	1	1
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G050	1500mm x 2000mm bed frame with mattress	1	1
G051	1500mm x 2000mm bed frame with mattress	1	1
G052	1500mm x 2000mm bed frame with mattress	1	1
G053	1500mm x 2000mm bed frame with mattress	1	1
G054	1500mm x 2000mm bed frame with mattress	1	1
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G080	1500mm x 2000mm bed frame with mattress	1	1
G081	1500mm x 2000mm bed frame with mattress	1	1
G082	1500mm x 2000mm bed frame with mattress	1	1
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G098	1500mm x 2000mm bed frame with mattress	1	1
G099	1500mm x 2000mm bed frame with mattress	1	1
G100	1500mm x 2000mm bed frame with mattress	1	1

KEY

Fluorescent described on sheet

Associated Rooms

Garden / Terrace



Lessons Learned



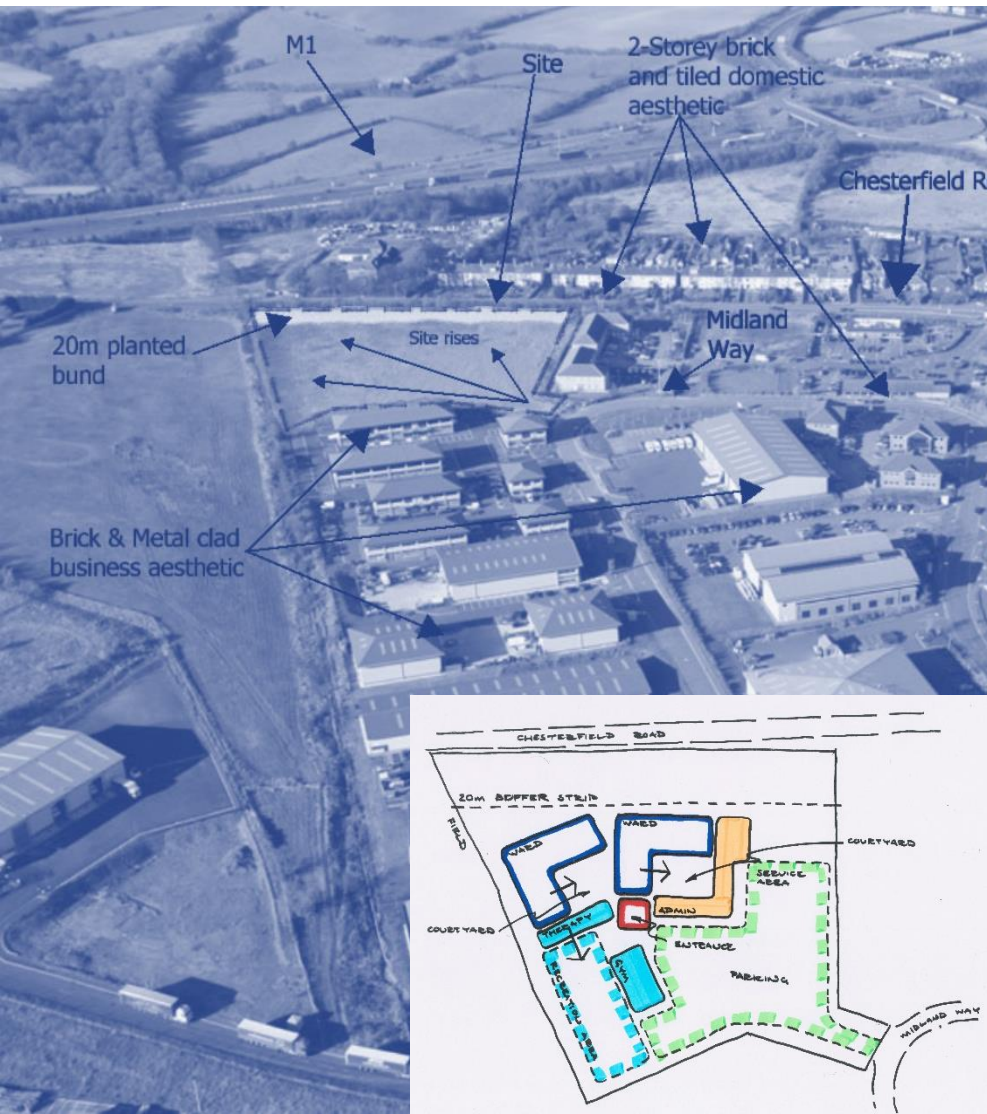
Post Project Completion Questionnaire:

This questionnaire is intended to help you prepare for the 'lessons learned' meeting on xxx. Please spend 30 minutes filling this in. The intention is to review the replies you give below during the meeting. All questionnaires will be collected at the end of the session. Please be honest and constructive. Always share with the group your assessment of the reasons why things went well or not.

What was your role on the project?

- 1. At the end of the project, do you feel the aims and objectives were achieved?**
- 2. If you could start again, what would you have done differently, and why?**
- 3. Name 5 aspects that worked particularly well on the project. Indicate the reason why.**
- 4. Name 5 aspects that did not work well and why?**
- 5. From your perspective what are the 5 key areas where costs savings can be achieved for future developments?**
- 6. Please name 5 key areas how the development can be delivered quicker (not necessarily cheaper).**
- 7. Any other comments?**

Good Sites Can be Hard to Come By



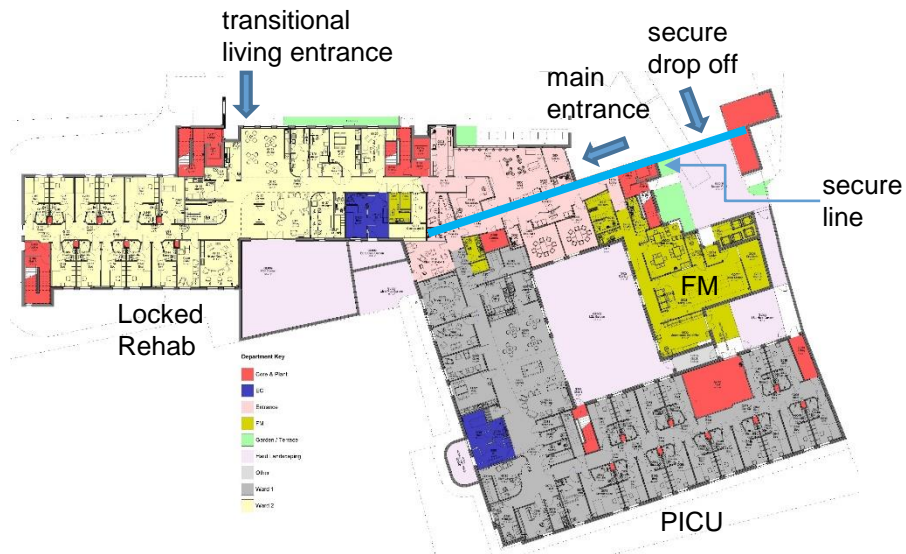
Extra-ordinaries

- Aggressive slopes
- Flood risk
- Overhead powerlines
- Consideration of surrounding context
- Compromised views out because of proximity of neighbours, roads & rail etc.
- Site shape & size
- Air / Noise pollution

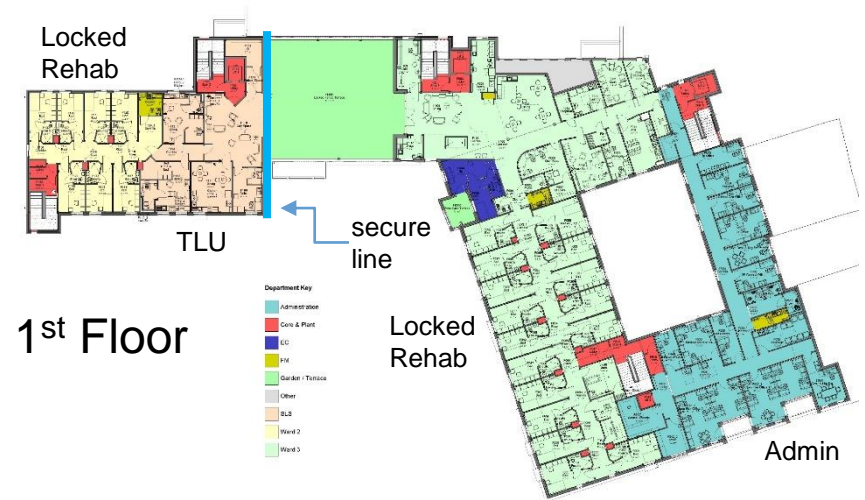
Do The Numbers Stack Up?

- Extra-ordinaries
- **Land / building cost & Number of beds**
- GIA....Area per patient.....Day space per patient....Minimising circulation

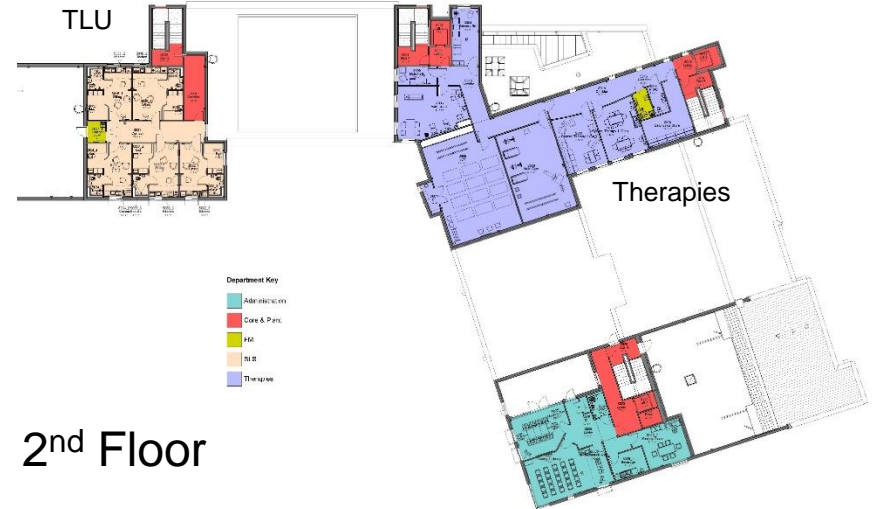
Security & HTM 05/02



Ground Floor

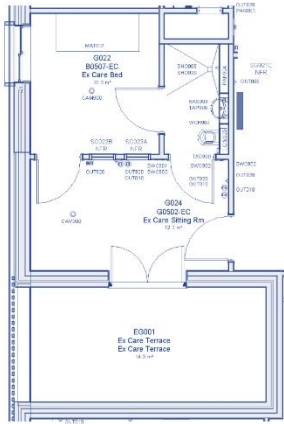


1st Floor

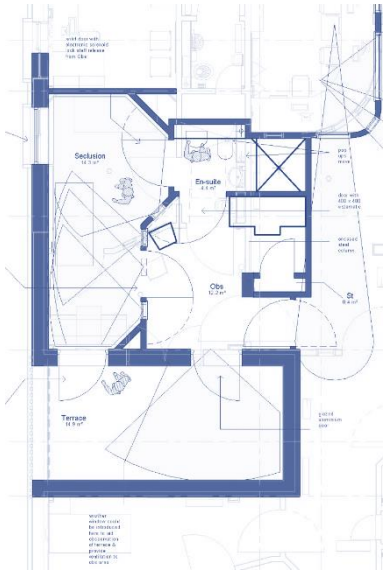


2nd Floor

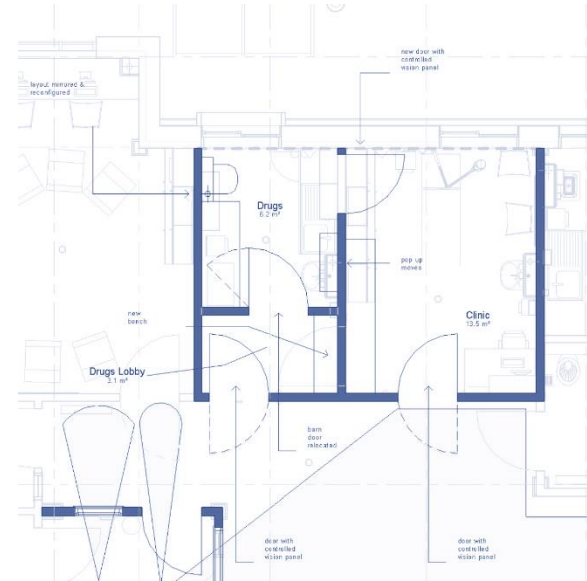
Room Design



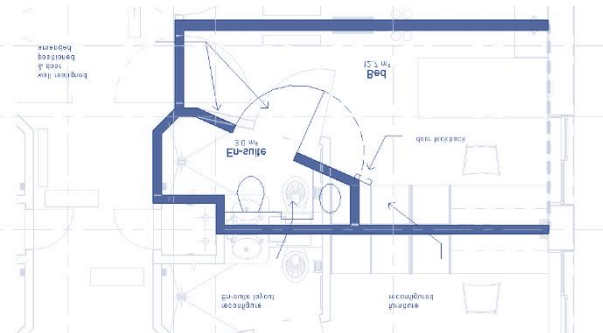
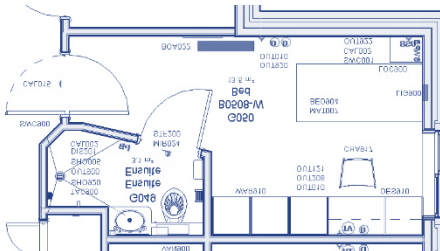
Extra Care



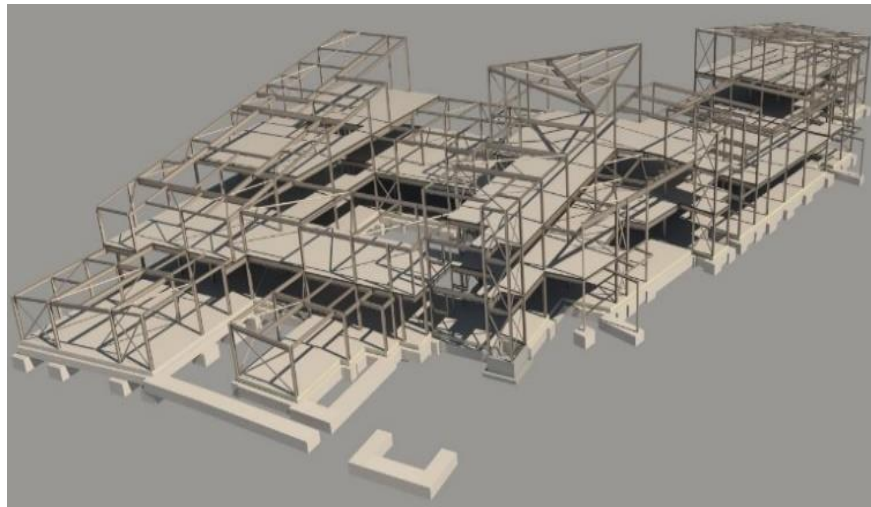
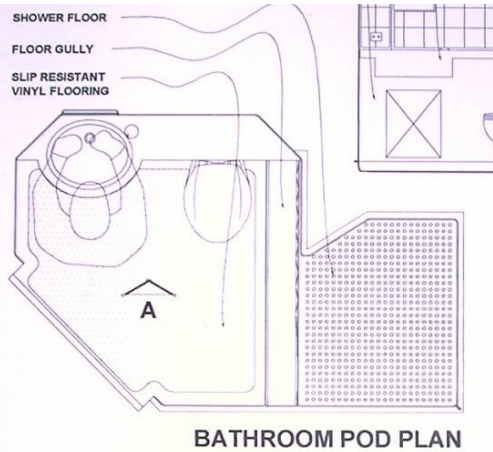
Drugs Dispensary



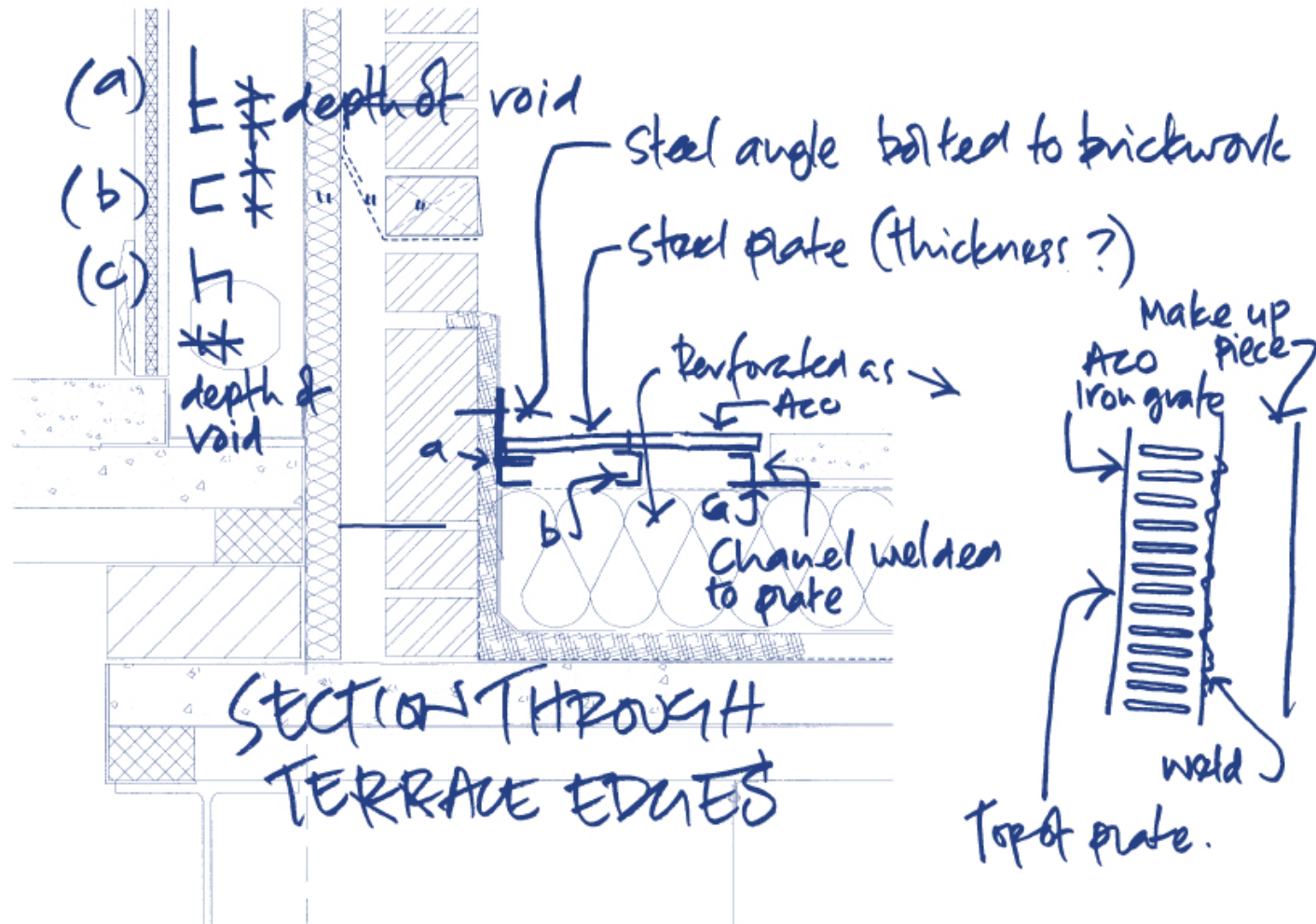
Bedroom / Ensuite



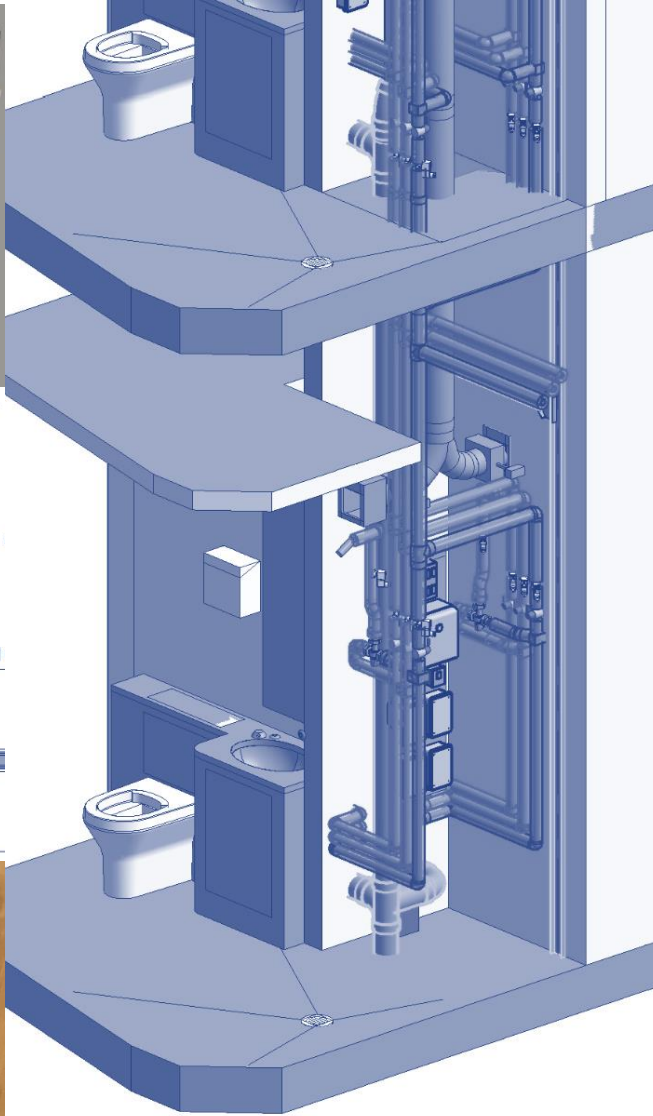
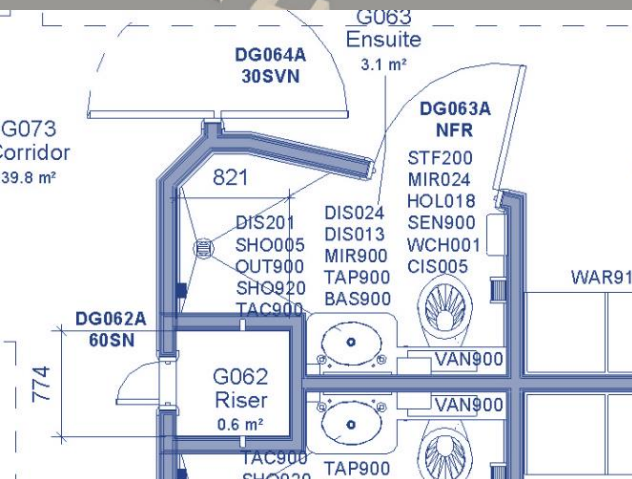
Speed Of Construction



Detailing



M&E Co-ordination



Benchmarking Design

August 12, 2010 [BENCHMARKING – REV A – 26/08/2010]

Site Wide Statistics

The Cygnet Healthcare Hospital at Derby was completed in March 2010 and was a redesign of an existing planning application by others.

The site provided 41 no. car parking spaces (2 no. of which are for disabled use).

The hospital provides 47 beds in 1 no. building over 3 storeys for low and step down patients.

The Gross Internal Area for the project is 3455.99m² and the Net Internal Area is 3203.66m².

The site area is 5530m² which equates to 1.37 acres.

There are 4 no. patient gardens for 3 no. wards and the area of these gardens is 1137m² which equates to 0.28 acres (20.6% of site area).

The external circulation & car parking is 1381m² which equates to 0.34 acres (25.0% of site area) & the remaining land is utilised for soft landscaping / buffer at 1032m² which equates to 0.26 acres (18.6% of site area).

The building footprint takes up the remainder of the site area at 1980m² which equates to 0.49 acres (35.8% of the site area).

Building Statistics

The following tables gather together the statistical data held within **Appendix 5**.



Formulating The Brief to Plan Form

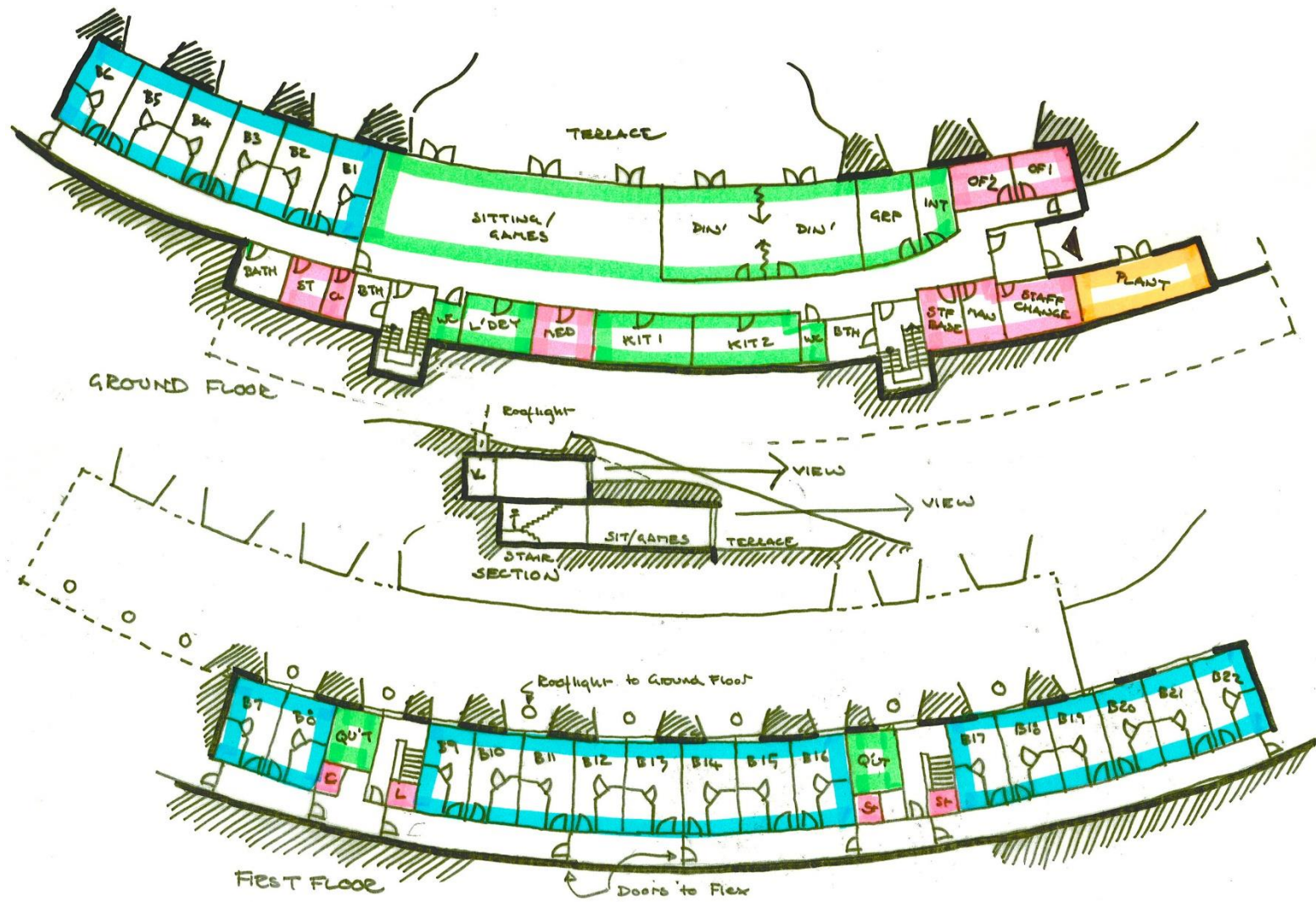
External Sources of Information

- Including Component Design

Internal Sources of Information Including

- Standard Rooms
- Post Occupancy Evaluation &
- Benchmarking

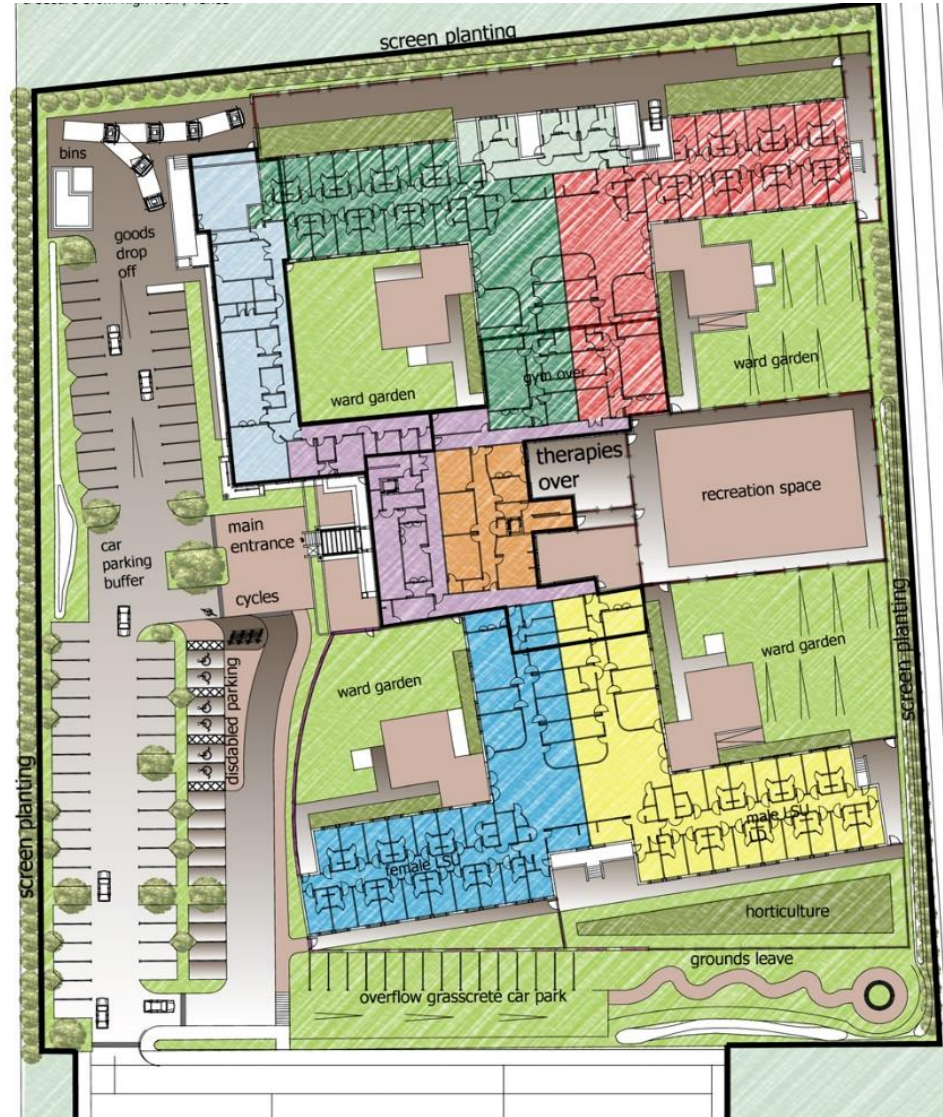
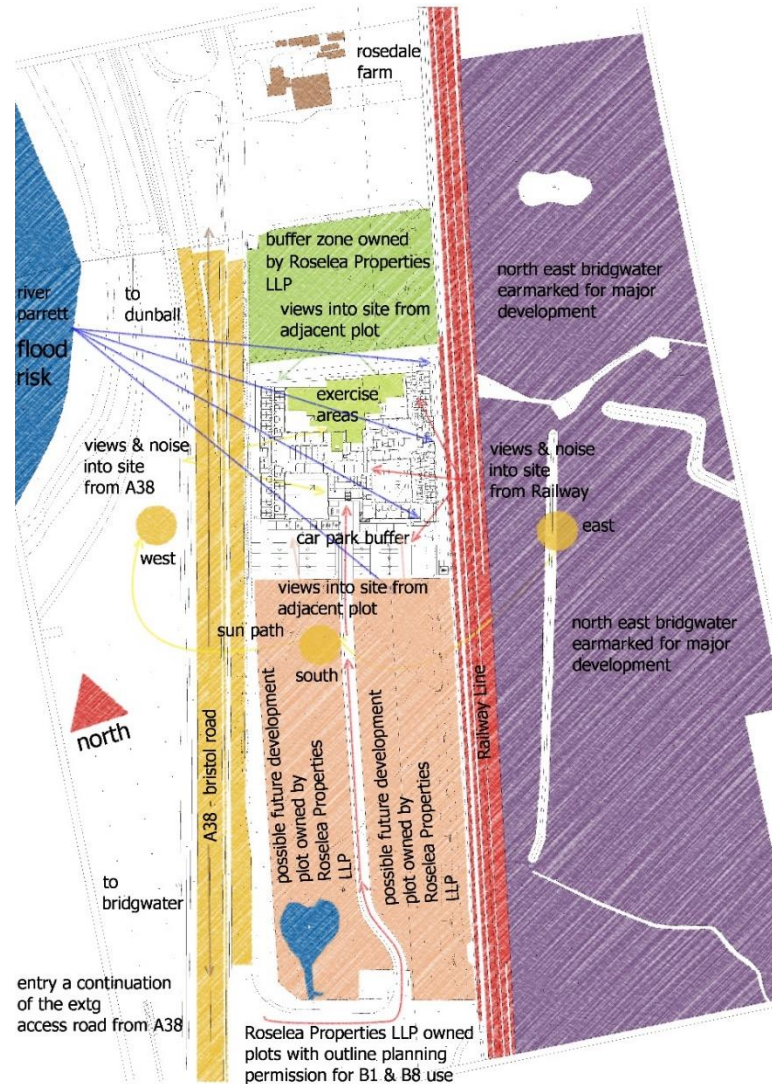
Linear Layout



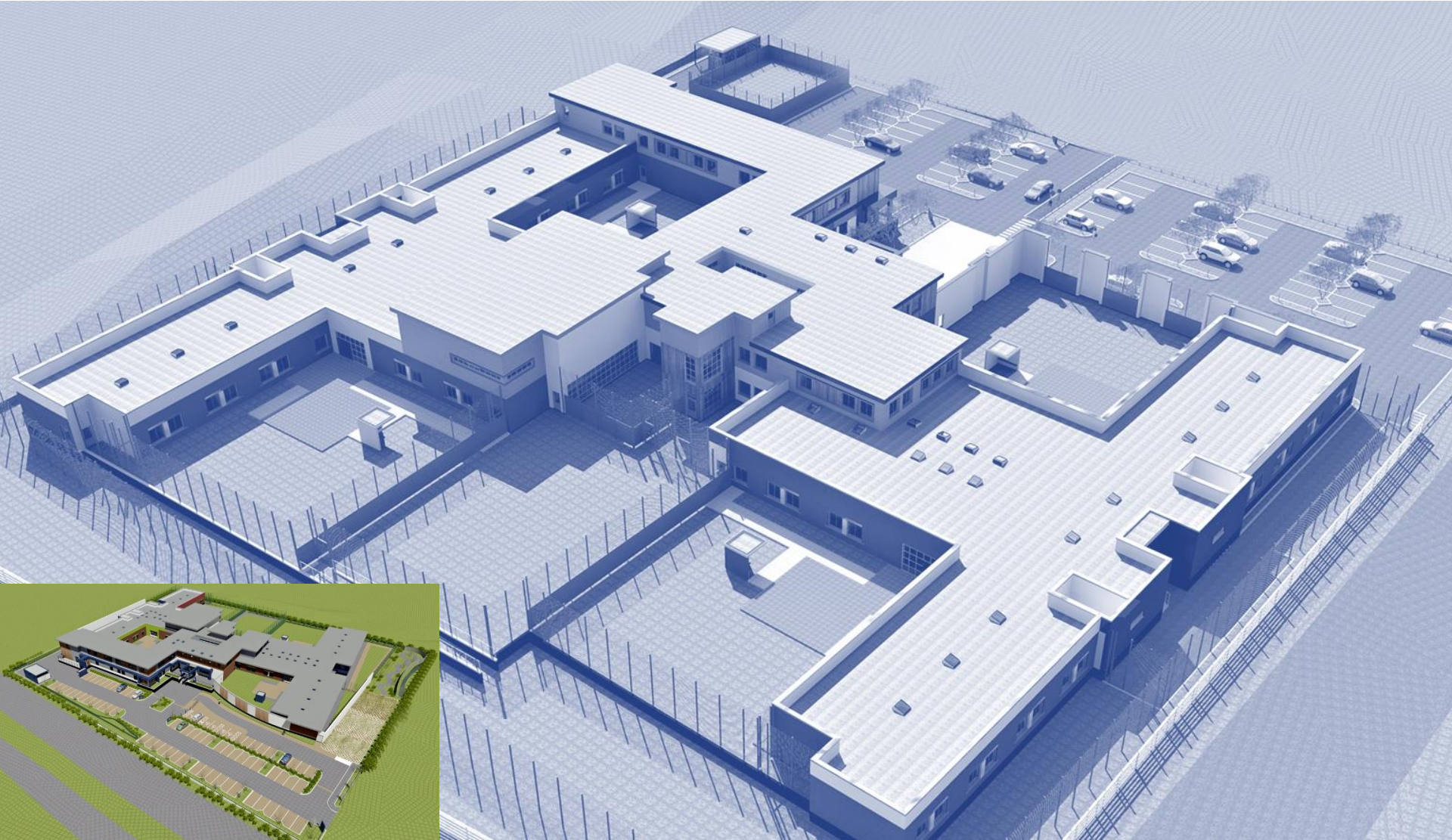
Linear Layout



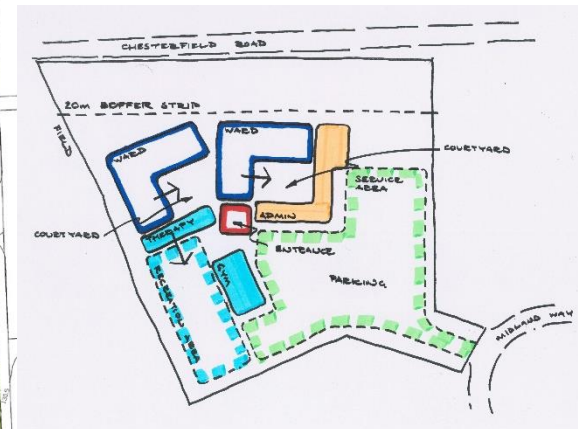
Back to Back - L Layout



Back to Back - L Layout



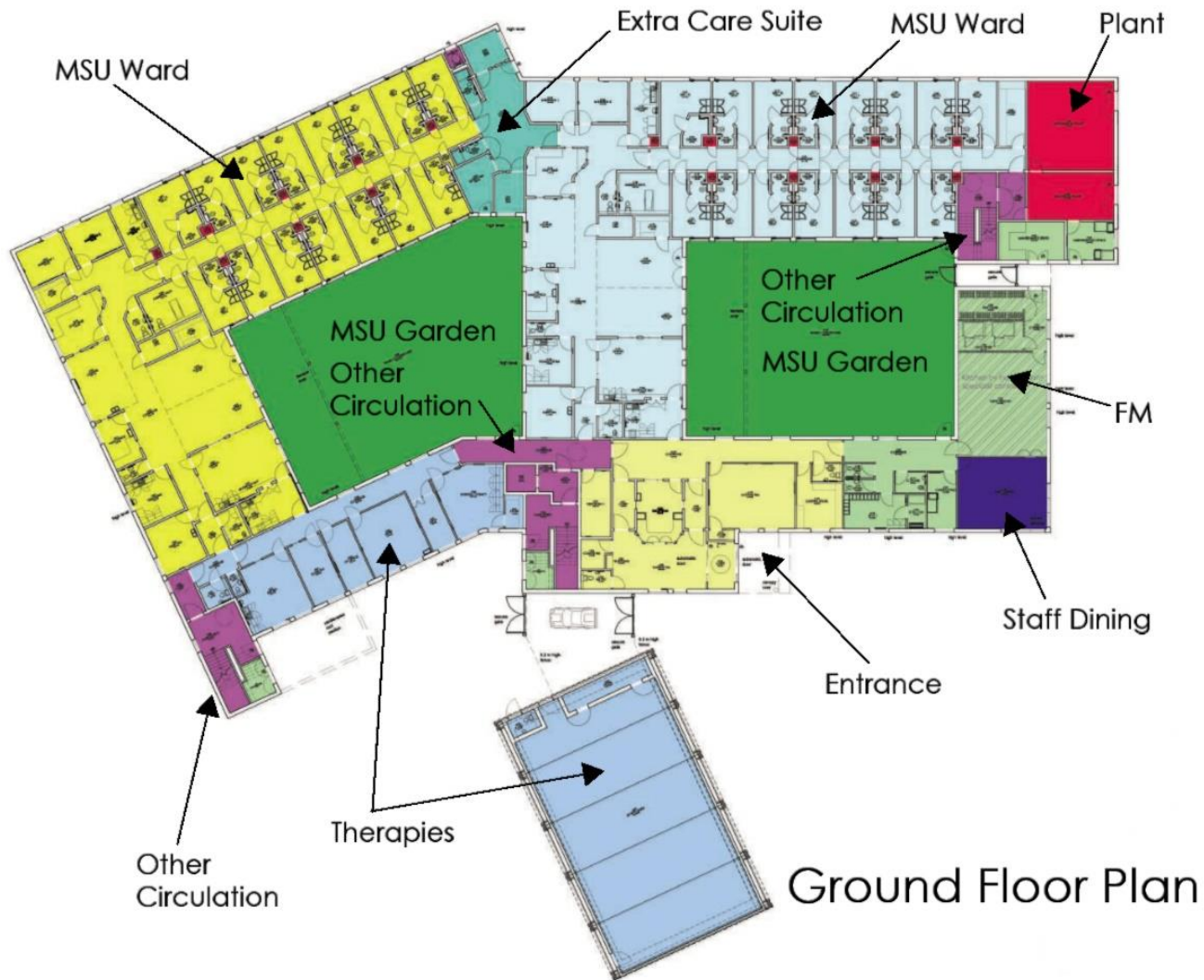
L Layout



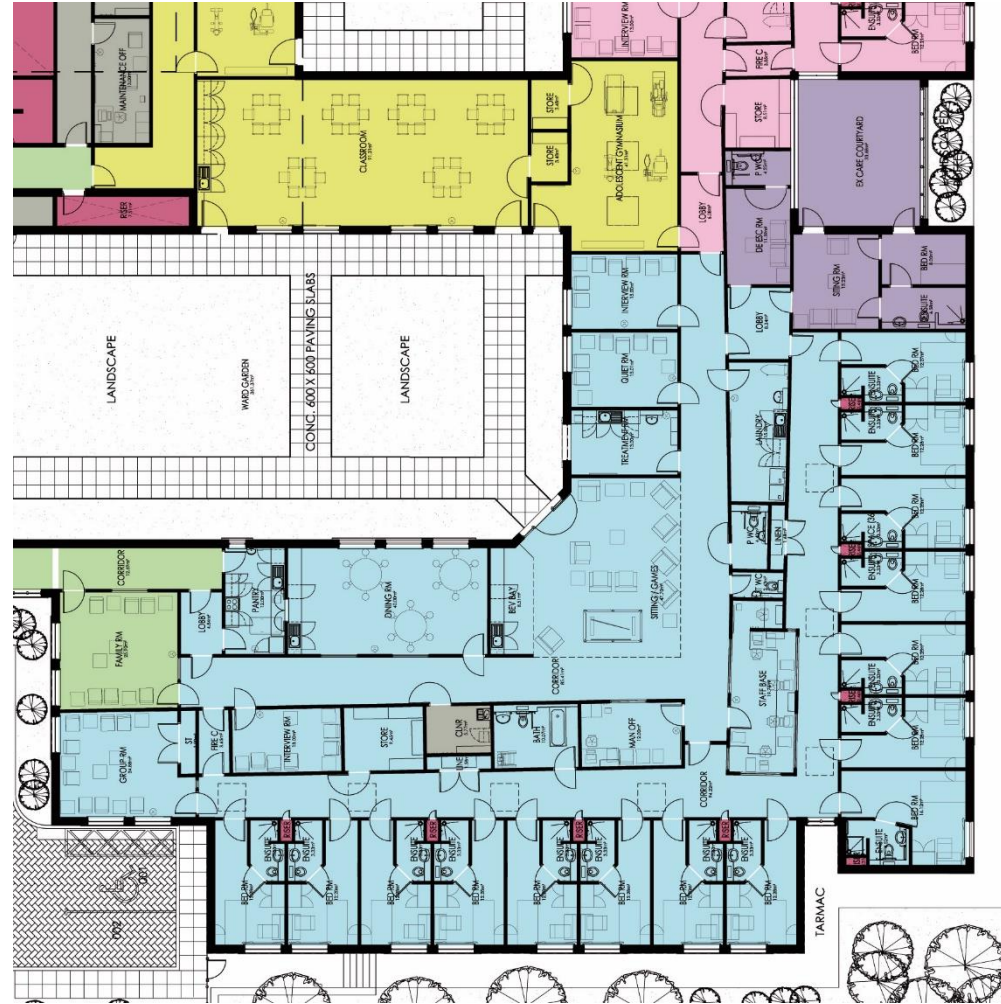
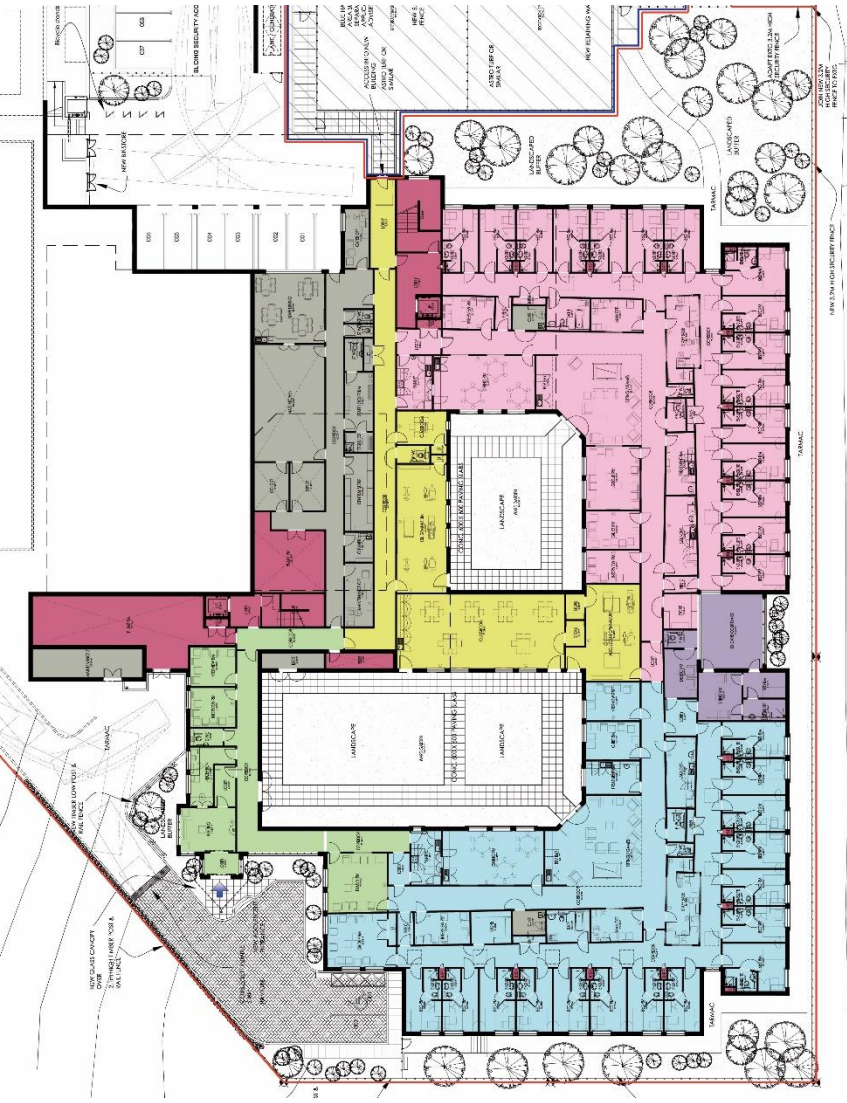
KEY

- 5.2m high security fence
- 3.2m high security fence
- 3.5m high anti-dash fence
- 1.5m high perimeter fence
- 0.4m high low rail fence

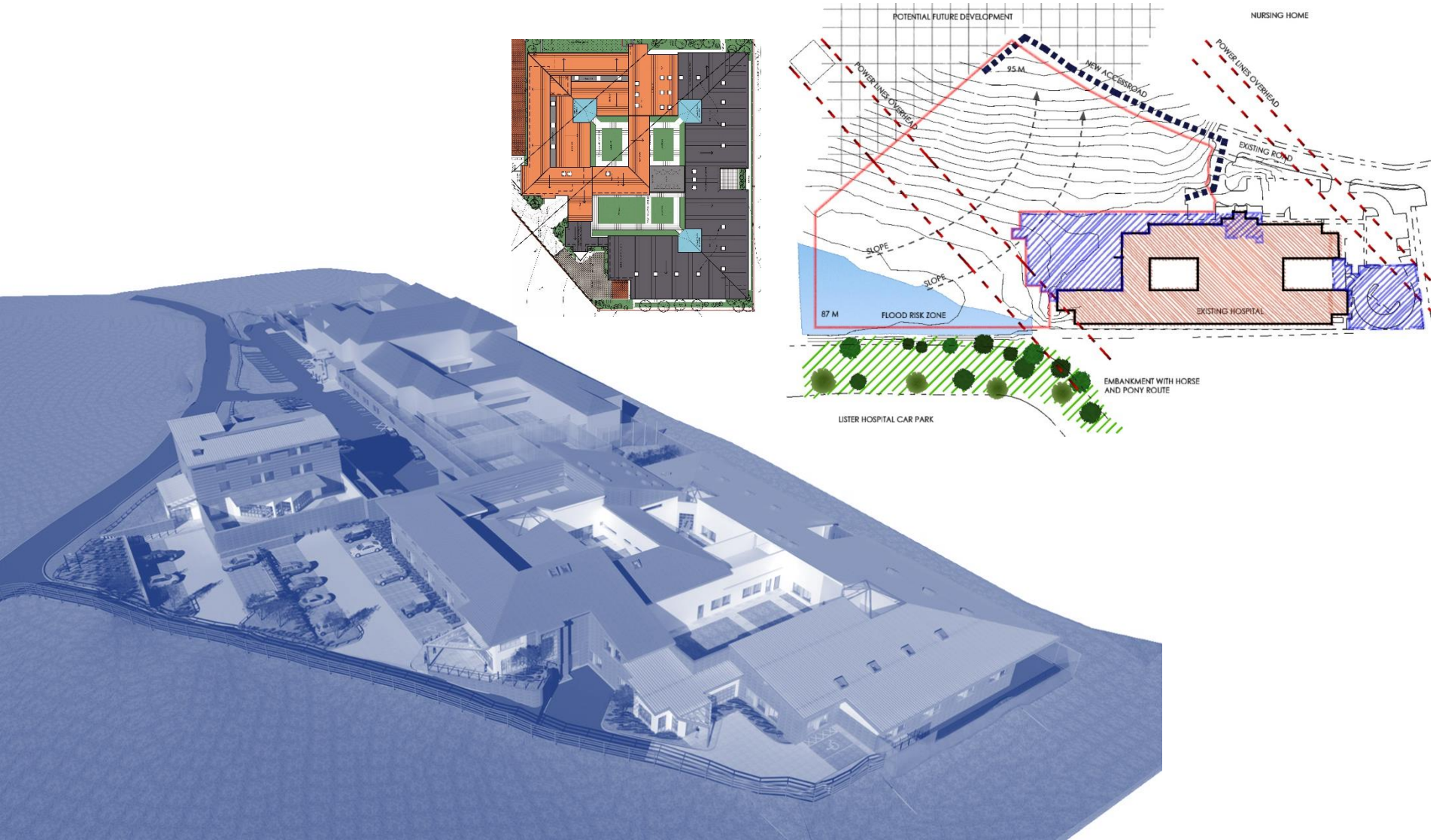
L Layout



Condensed - L Layout



Condensed - L Layout



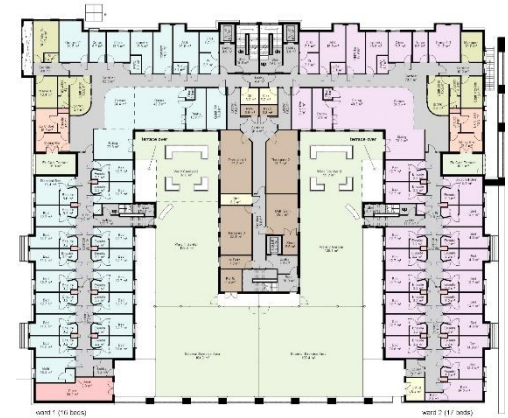
Other Variants



Derby



Coventry



Maidstone



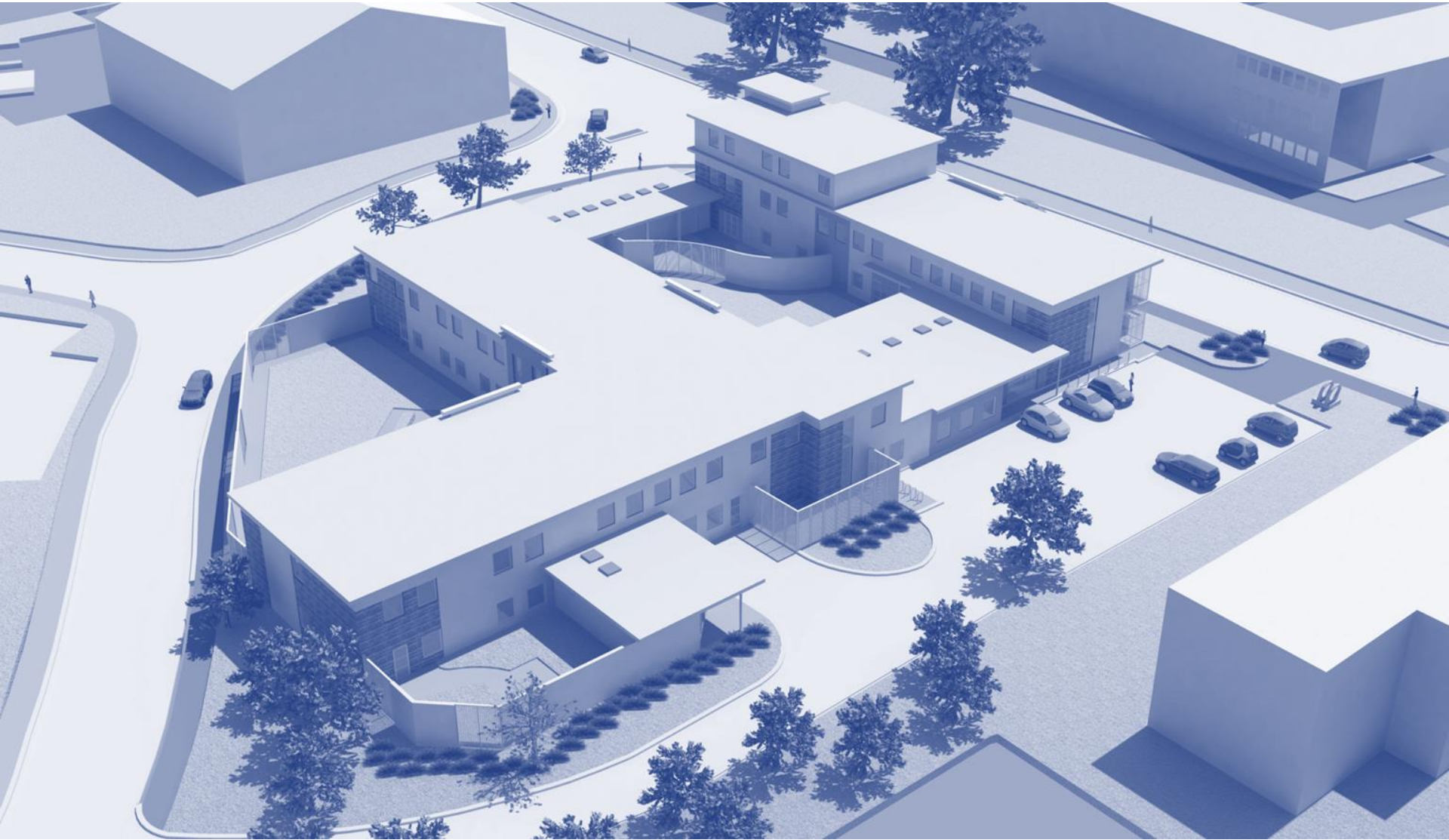
Cygnet Derby

Low Secure & Step Down Unit Derby



- 47 beds with en-suites with 1 ward of 16 beds and 1 ward of 15 beds Low Secure and 1 ward of 16 beds SDU
- The site area is 1.37 acres which afforded generous ward gardens
- LSU designed over 2 storeys with the 1st floor ward accessing it's garden via a stair at the end of the ward
- SDU designed over 3 storeys with it's own garden at ground floor
- Therapies are designed and located to allow sharing between all wards
- A small shared multi-gym is provided
- *Gross Internal Area = 3456m² at @ 73m² per patient*

Key Design Factors



Key Design Factors

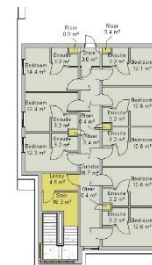
SUMMARY OF PRINCIPLE CHANGES		
ORIGINAL APPROVED DESIGN		NEW APPLICATION
1	48 Patients overall. Two wards for twenty patients in two groups of ten with 8 Step-Down patients.	46 Patients overall. Two wards, one for 15 patients, one for 16 patients and 15 Step-Down patients.
2	Support accommodation such as Main Kitchen and Laundry facilities located in Administration Block.	Main Kitchen located in new Link Block. Laundry facilities are ward based for patients personal laundry.
3	Staff facilities in ground floor of Administration Block	Staff Changing located in first floor Administration Block, Staff Restaurant provided in New Link Block.
4	Step-Down Unit designed as flats for eight people.	Step-Down designed as a "house" for fifteen people.
5	Step-Down accessed from central courtyard	Step-Down Unit independent with its own entrance from the street.
6	Four independent gardens for each patient group. Shared central courtyard.	Three gardens, one for the ward at ground floor, two for the ward at first floor (accessed via the stairway at the end of the wings). Step-Down has separate garden.
7		Layout revised to take account of small area adjacent to London Road not within site. Cycle store relocated.
8		Main Entrance relocated to Link Block.
9		Sports Barn linking both Blocks and enclosing the west end of the courtyard.
10		Elevations revised to suit new internal layouts (working within the established principles of the approved design)
UNCHANGED FEATURES		
Location of Administration and Ward Blocks on site		
Access from City Gate and numbers of parking spaces		
Massing of the design with two storey generally and second storey marking junction of City Gate and London Road		



Ground Floor



1st Floor



2nd Floor

Main Entrance



Typical Bedroom



Typical Day Space



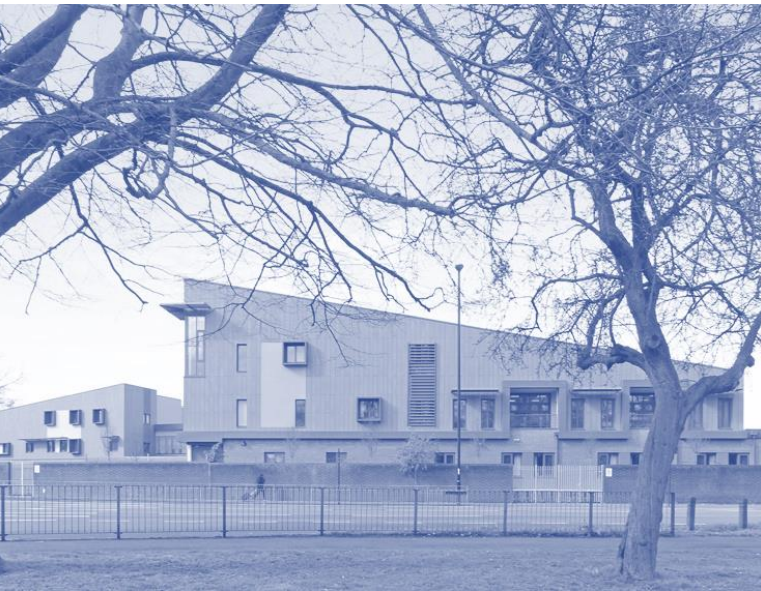
Typical Ward Graden





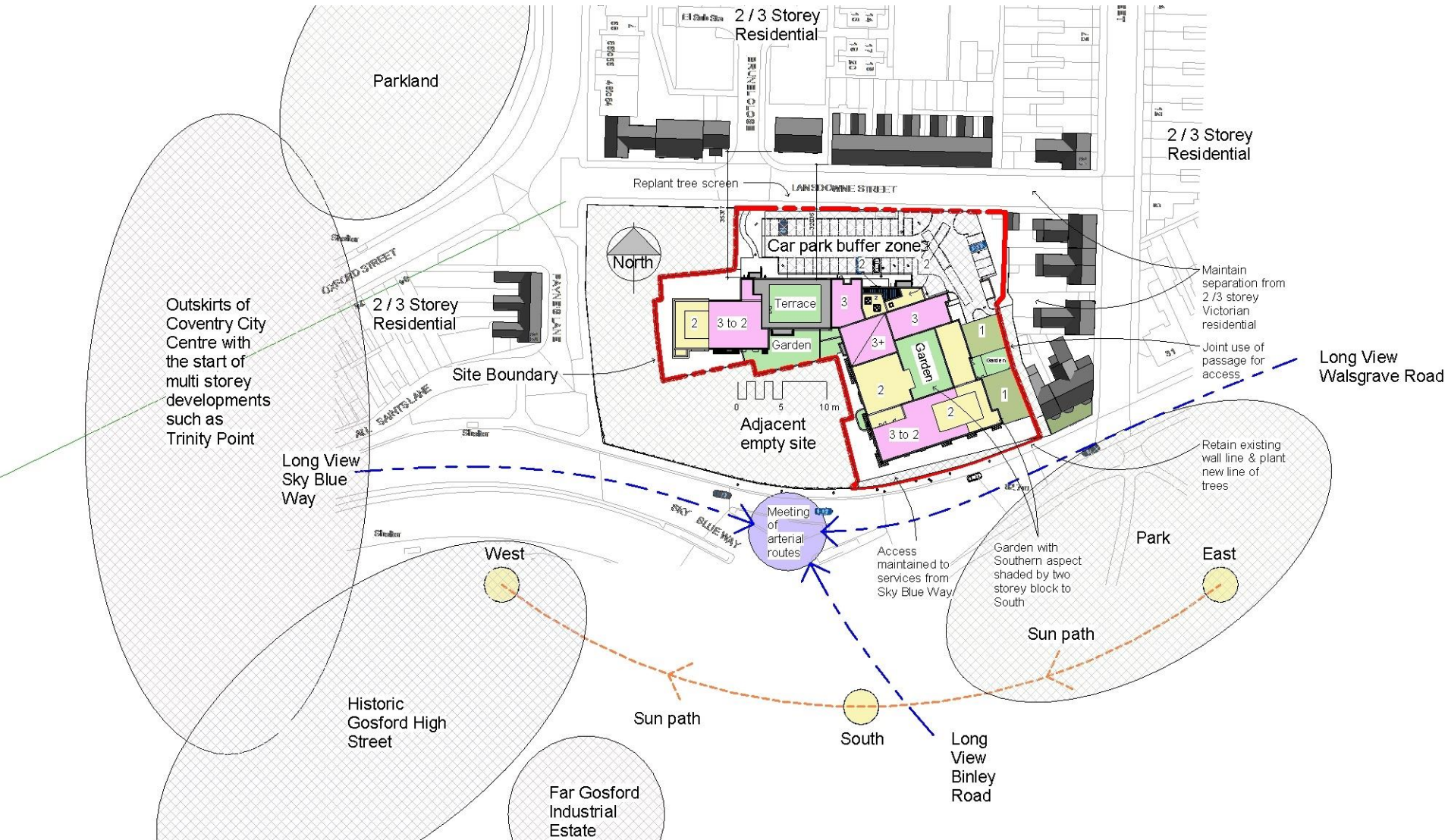
Cygnet Coventry

LSU, Rehabilitation Wards & TLU Coventry



- The Coventry project is a new build Low Secure, Rehabilitation & Transitional Living unit
- It contains 49 beds with en-suites in 2 wards of 16 beds (PICU & Locked Rehabilitation) & 1 ward of 17 beds (Locked Rehabilitation). A separately accessed part of the building houses 7 transitional living flats
- The proposal sits on an unusual shaped tight plot of land which is sized at 1.3 acres and because of this the hospital is part 2 and 3 storeys across the plan
- The ground floor PICU & Rehabilitation wards have direct access to a courtyard and at first floor the Locked Rehabilitation Ward has access to a large roof terrace
- A gymnasium & therapy rooms are provided at second floor
- *Gross Internal Area = 4464m² at @ 78m² per patient*

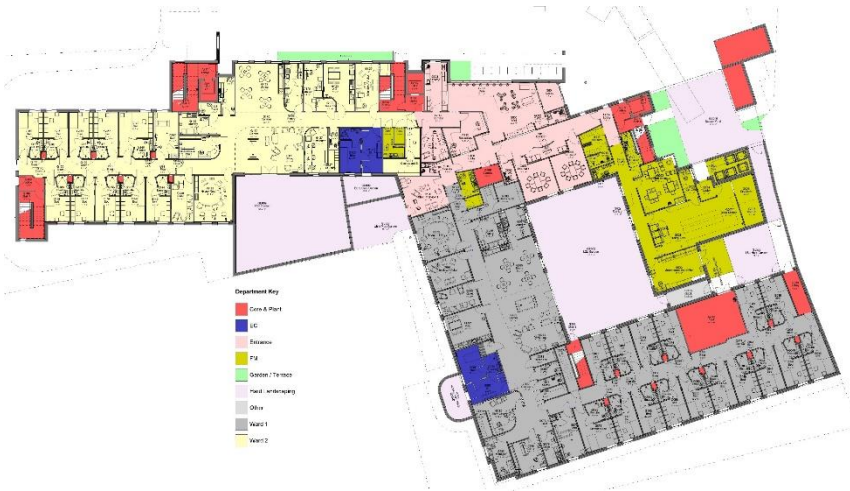
Key Design Factors



Key Design Factors



Plans



Ground Floor



1st Floor



2nd Floor

Main Entrance



Transistional Living Unit Entrance



Sky Blue Way



Main Entrance



Typical Day Space



Typical Bedroom



Extra Care



Therapy Spa



Therapy Gym



Ward Courtyard



Ward Terrace





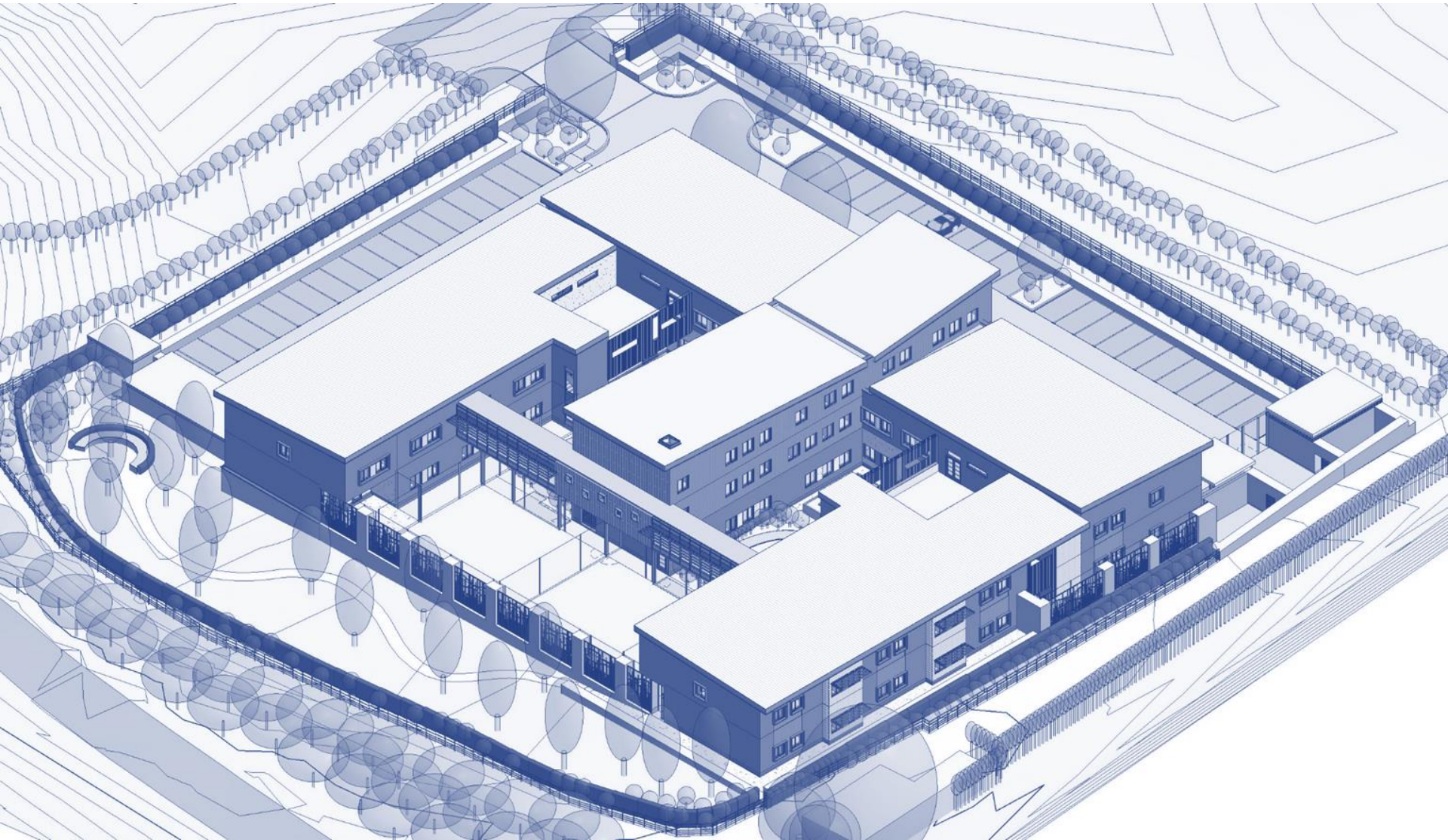
Cygnet Maidstone

LSU Wards Maidstone

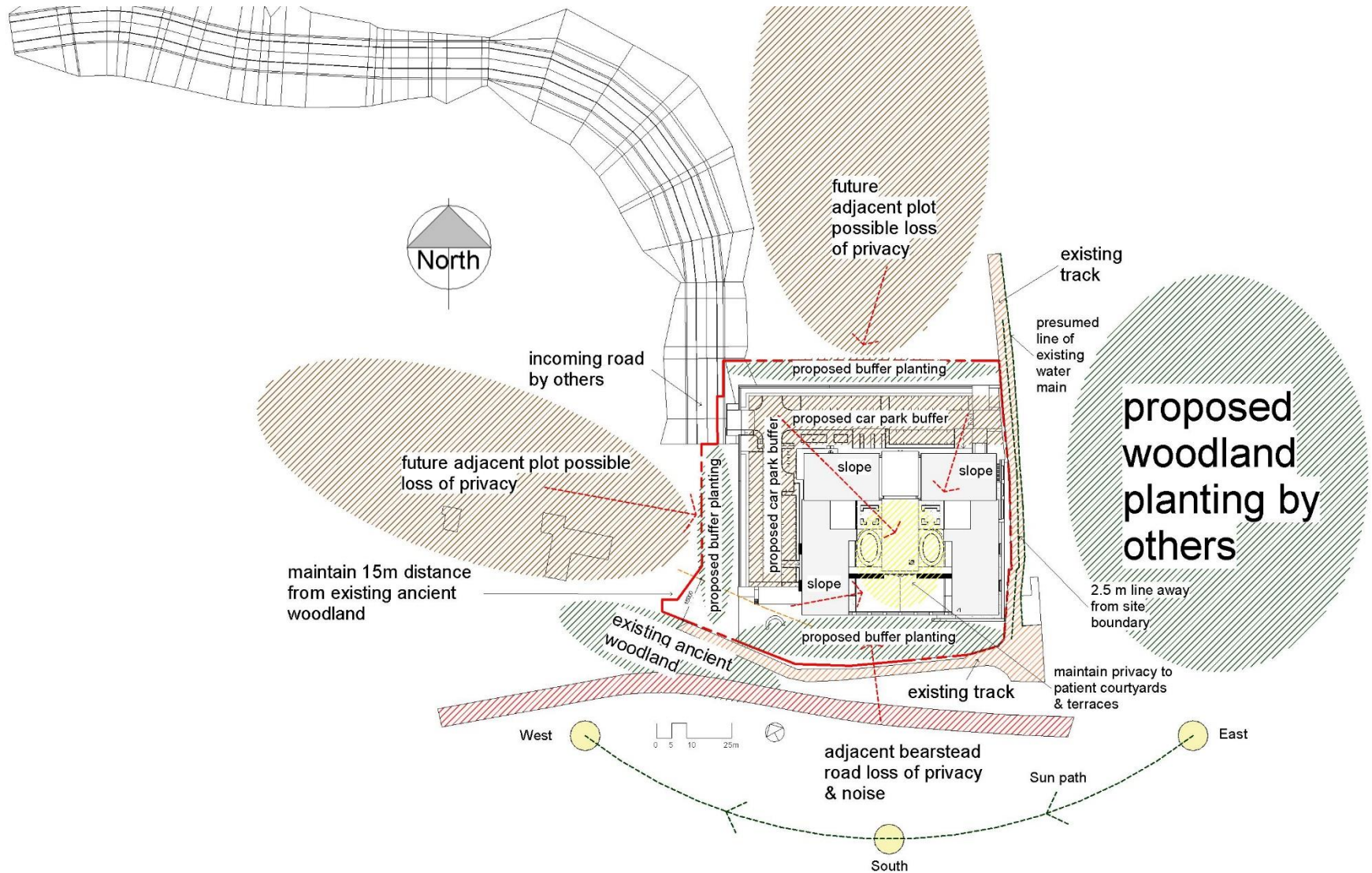


- The plot is part of a wider masterplan for the Kent Institute of Medical Sciences park site and the 'cul de sac' plot is semi-rural in nature
- A proposals are for an LSU unit with 65 beds, provided in 3 wards of 16 beds and 1 ward of 17 beds
- Although the building plot is regular in shape and reasonably sized at 2.0 acres, the rolling / sloping nature of the site means the building plot is bisected with each half sitting at different levels
- The ground floor LSU wards have direct access to their own gardens and at first floor terraces have been incorporated
- The ground floor central section of the building is used for patient therapies with the first & second floors being used primarily for office / administration
- *Gross Internal Area = 5665m² at @ 87m² per patient*

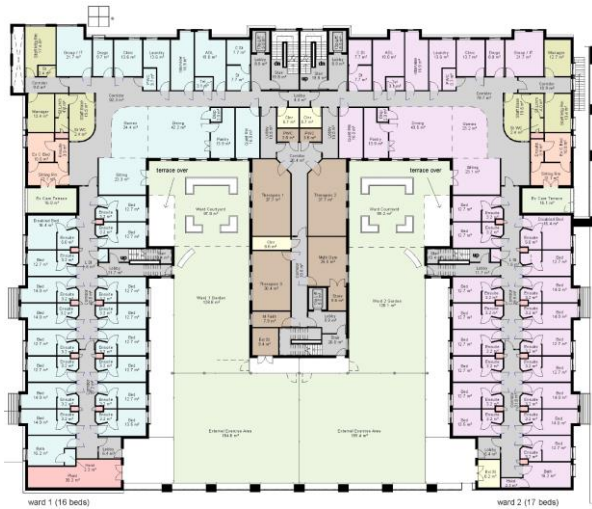
Key Design Factors



Key Design Factors



Plans



Ground Floor



1st Floor



Lower Ground Floor

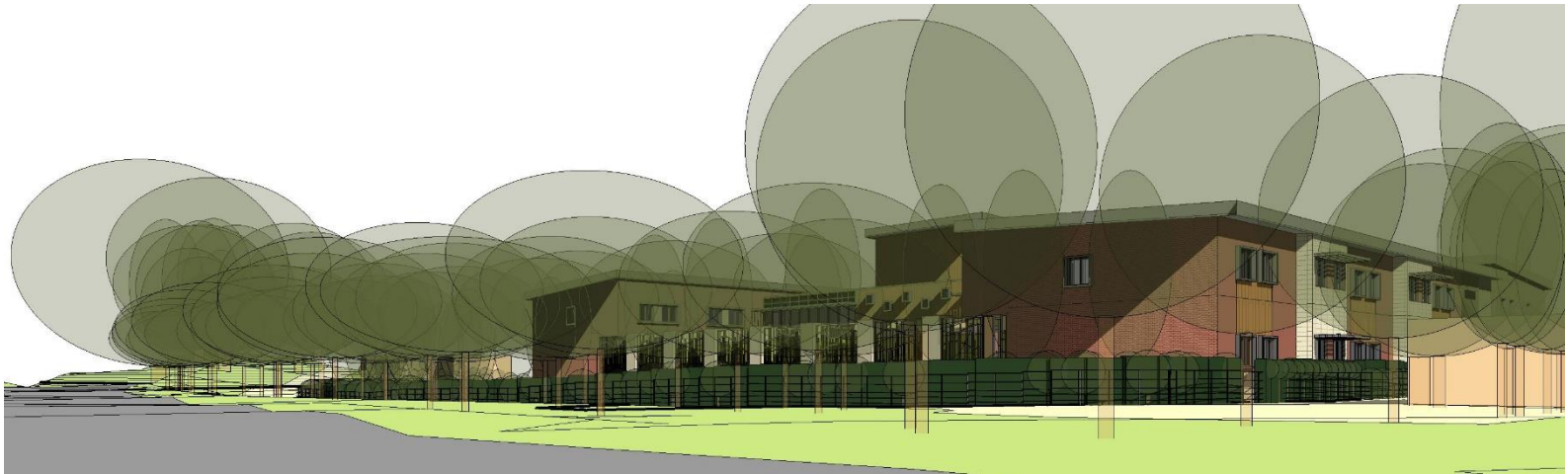


2nd Floor

Perspective Views



Perspective Views





Working with Cygnet Healthcare a Projects Retrospective

Any questions



Tangram Architects