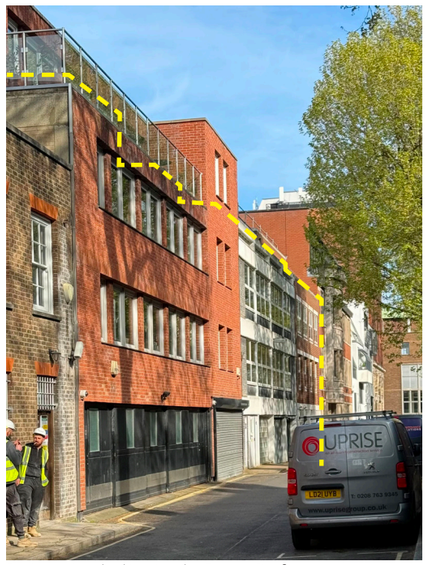
5.11 PLANT CONSOLIDATION

Views from Jockey's Fields show the street level implications of proposed plant screening. As demonstrated in the images the plant is not visible from Jockey's Fields street level. All efforts have been made to ensure the new enclosures are set back and shielded by existing buildings. from the street facing facade. They are designed to be as low as possible in order to reduce visibility. View B shows the implications of the new plant enclosure from Gray's Inn gardens. The plant enclosure at the roof of 12-13 Jockey's Fields is visible from this viewpoint, however it does not project above the existing key clamp railing or the stairwell structure providing access to roof level.

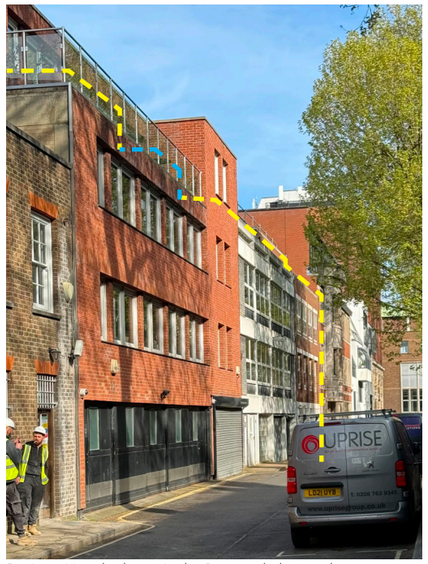
A - Long View looking South - Existing Roofline



B - Long View looking North - Existing Roofline

C - Long View from Gray's Inn - Plant in blue visible above roofline

A - Long View looking South - Proposed plant enclosure



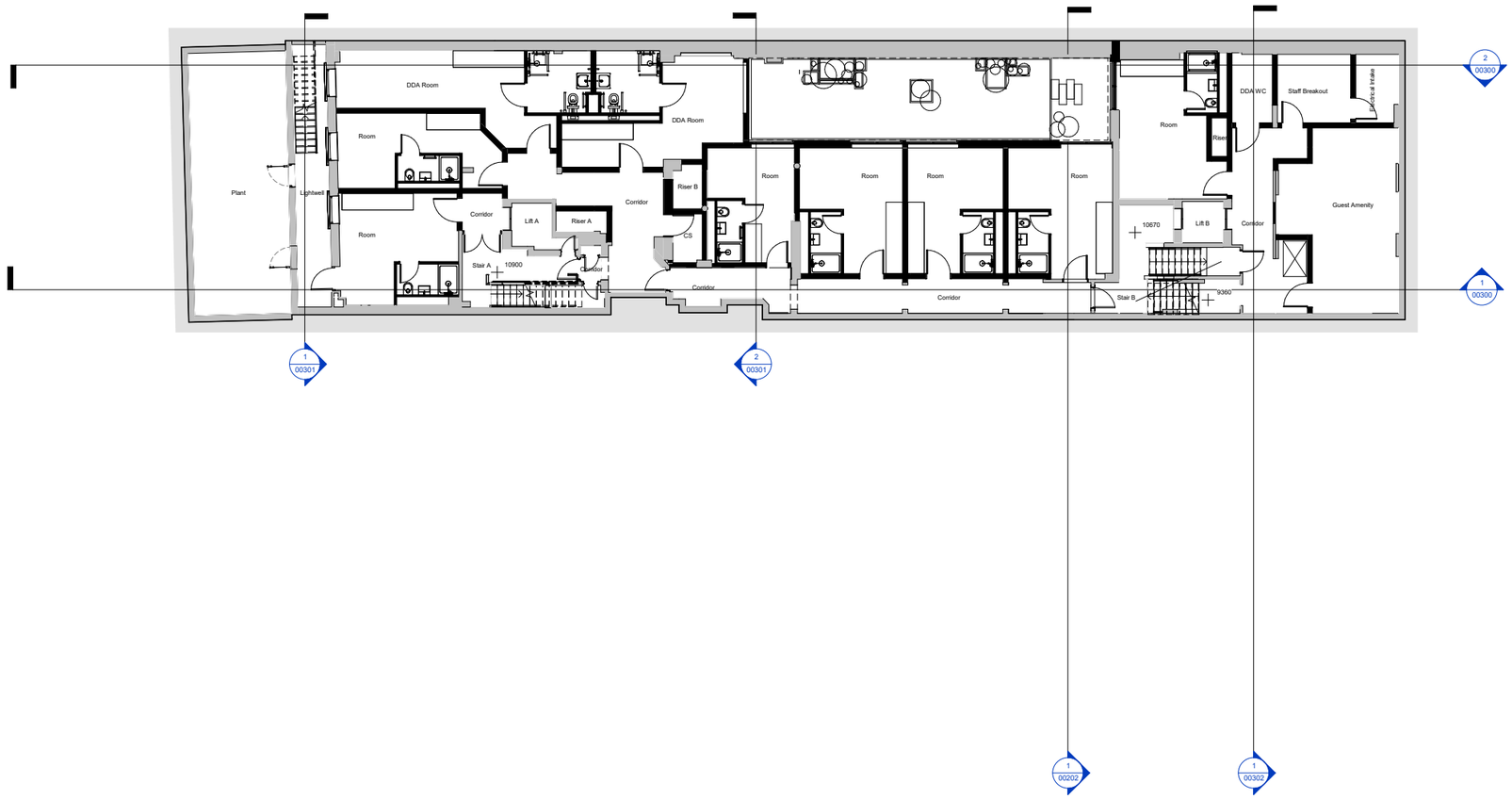
B - Long View looking North - Proposed plant enclosure

C - Long View from Gray's Inn - Plant in blue visible above roofline

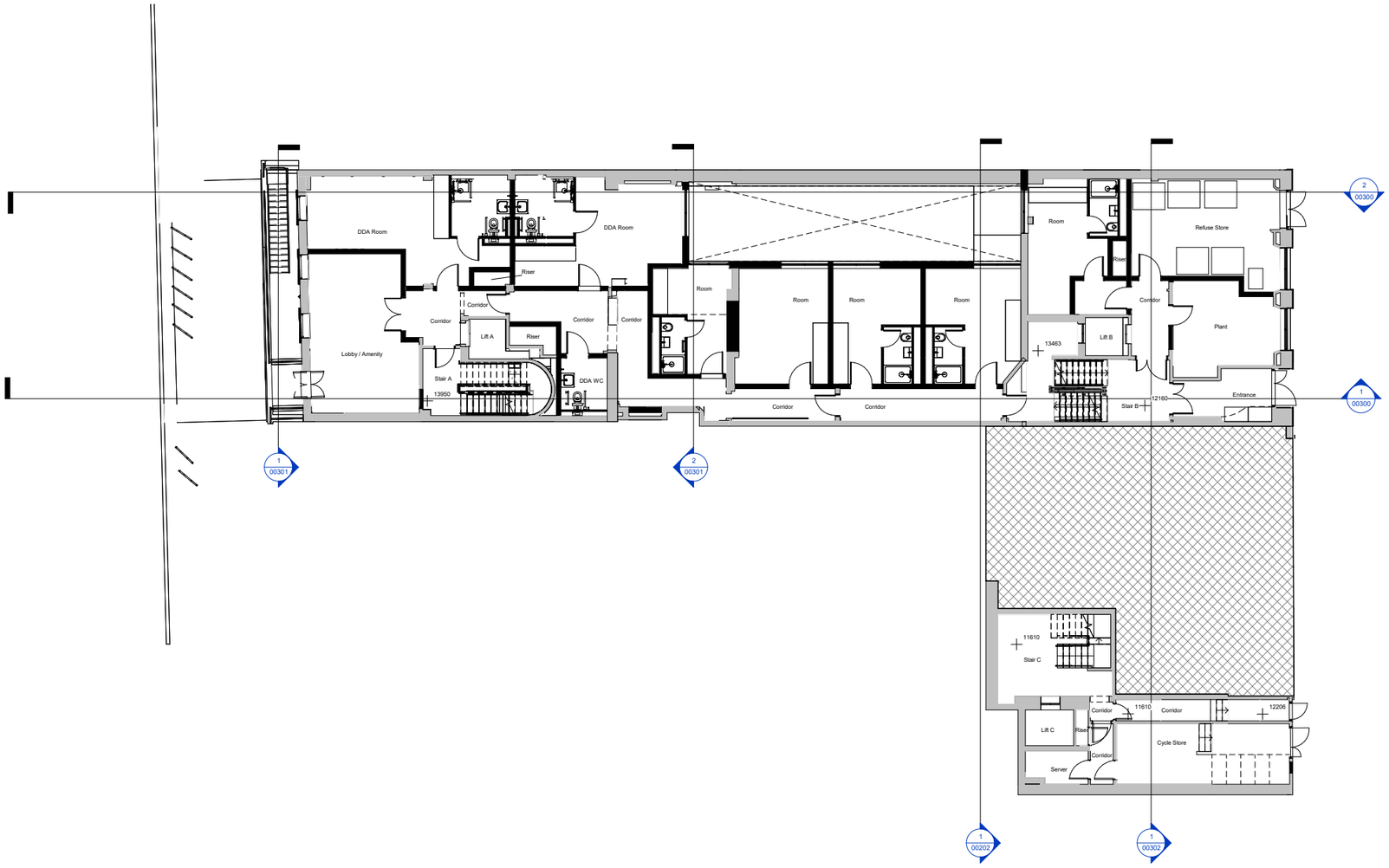
- Existing roof line
- Proposed Plant

6.0 LAYOUTS

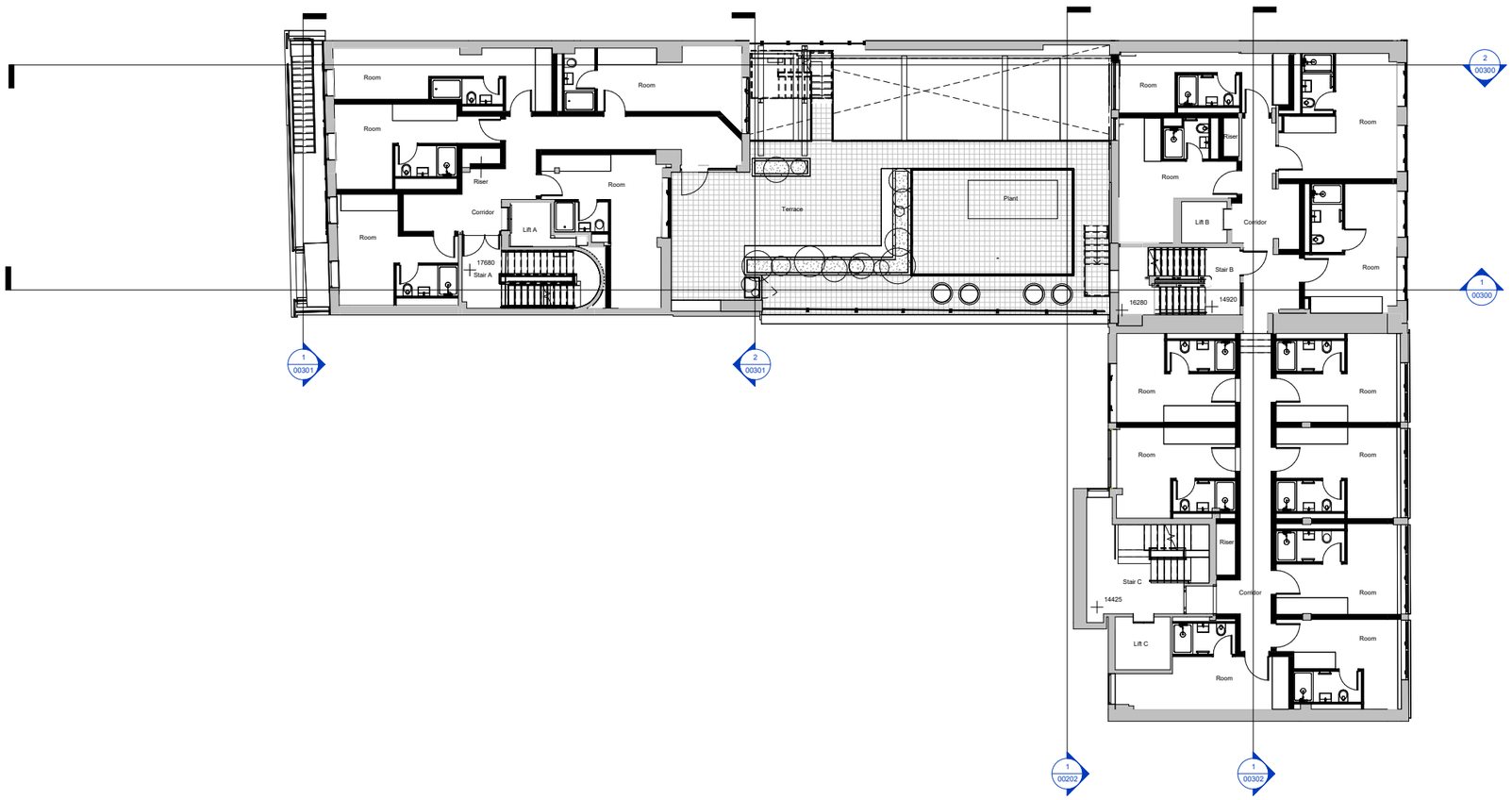
6.1 BASEMENT FLOOR PLAN



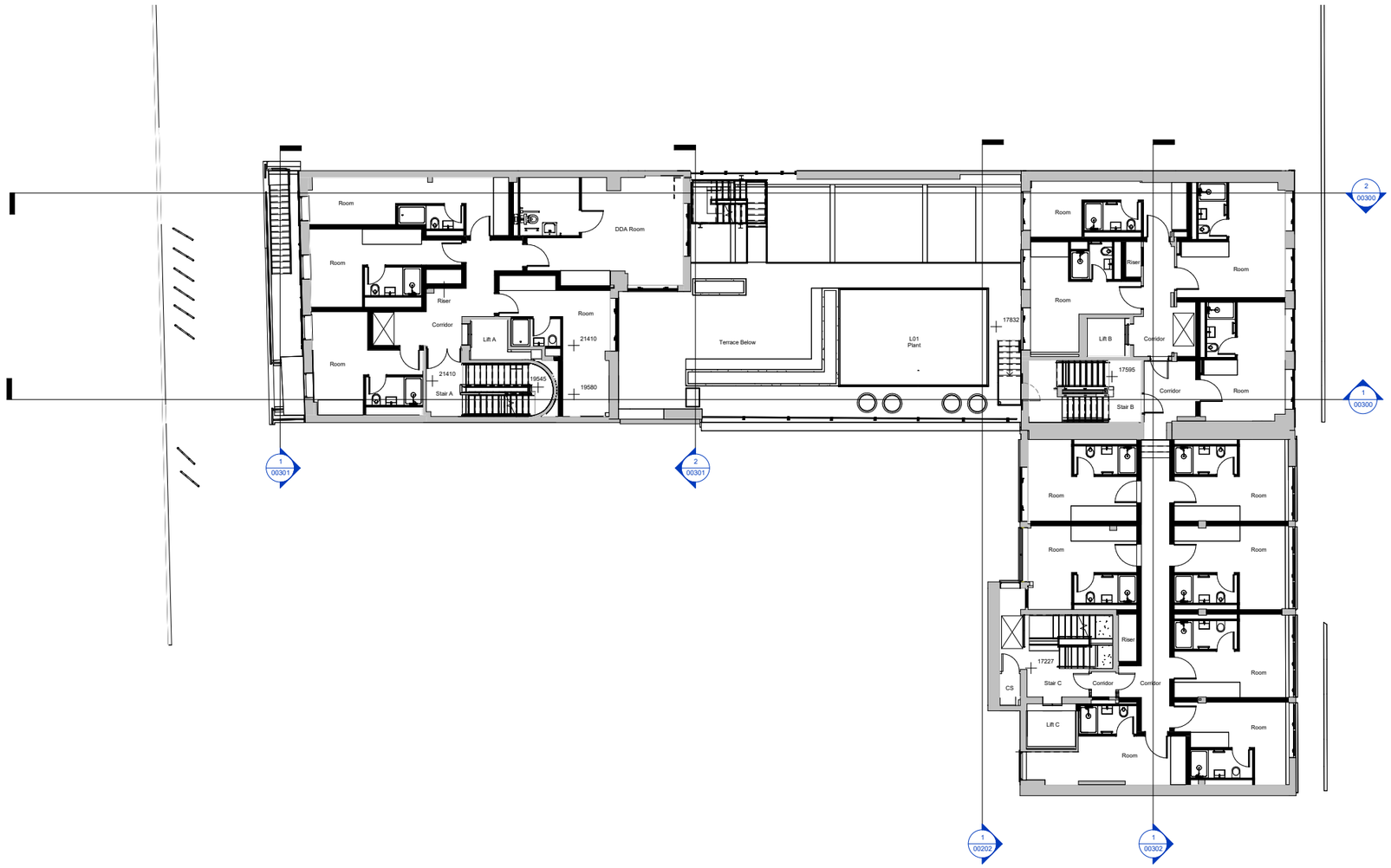
6.2 GROUND FLOOR PLAN



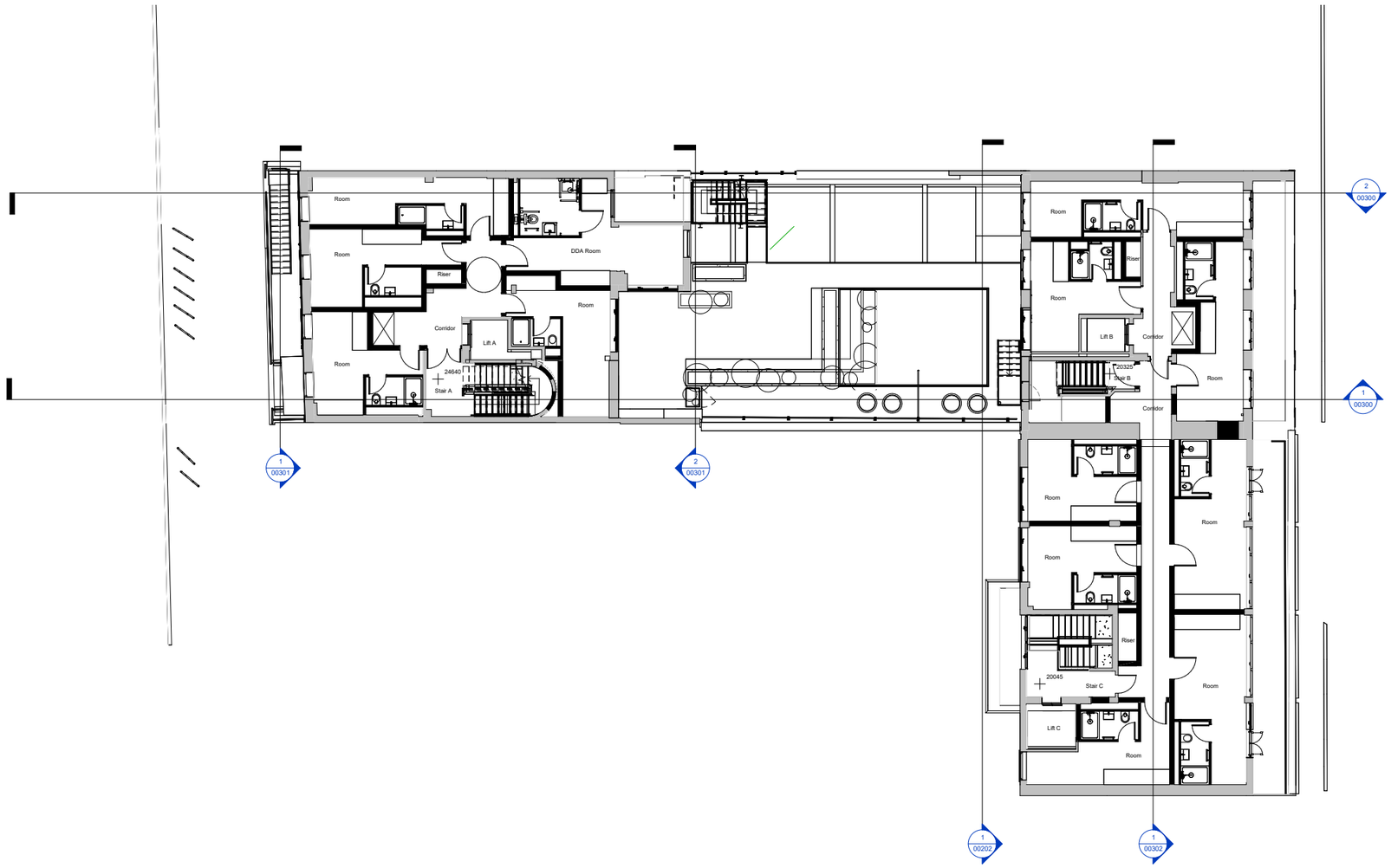
6.3 FIRST FLOOR PLAN



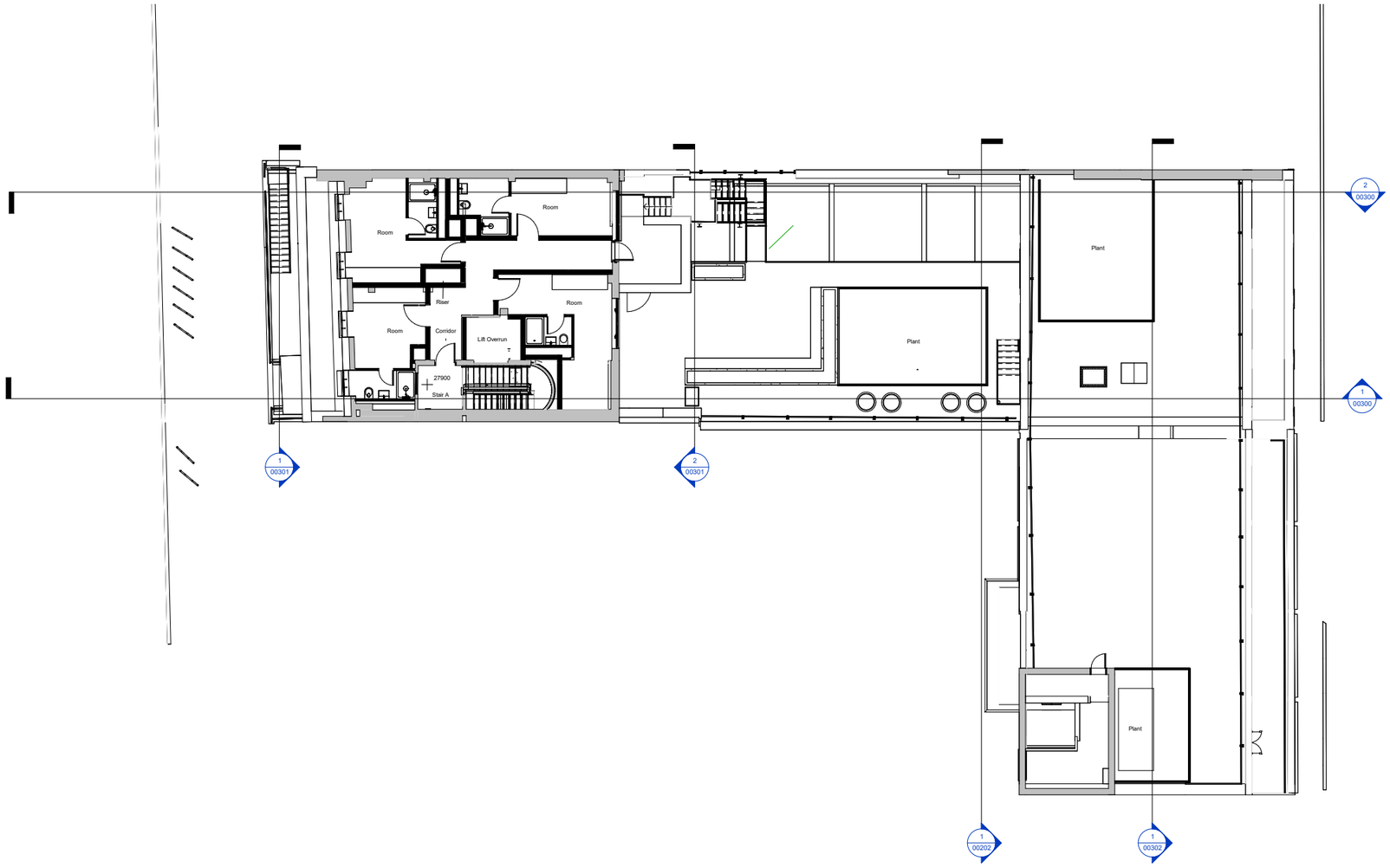
6.4 SECOND FLOOR PLAN



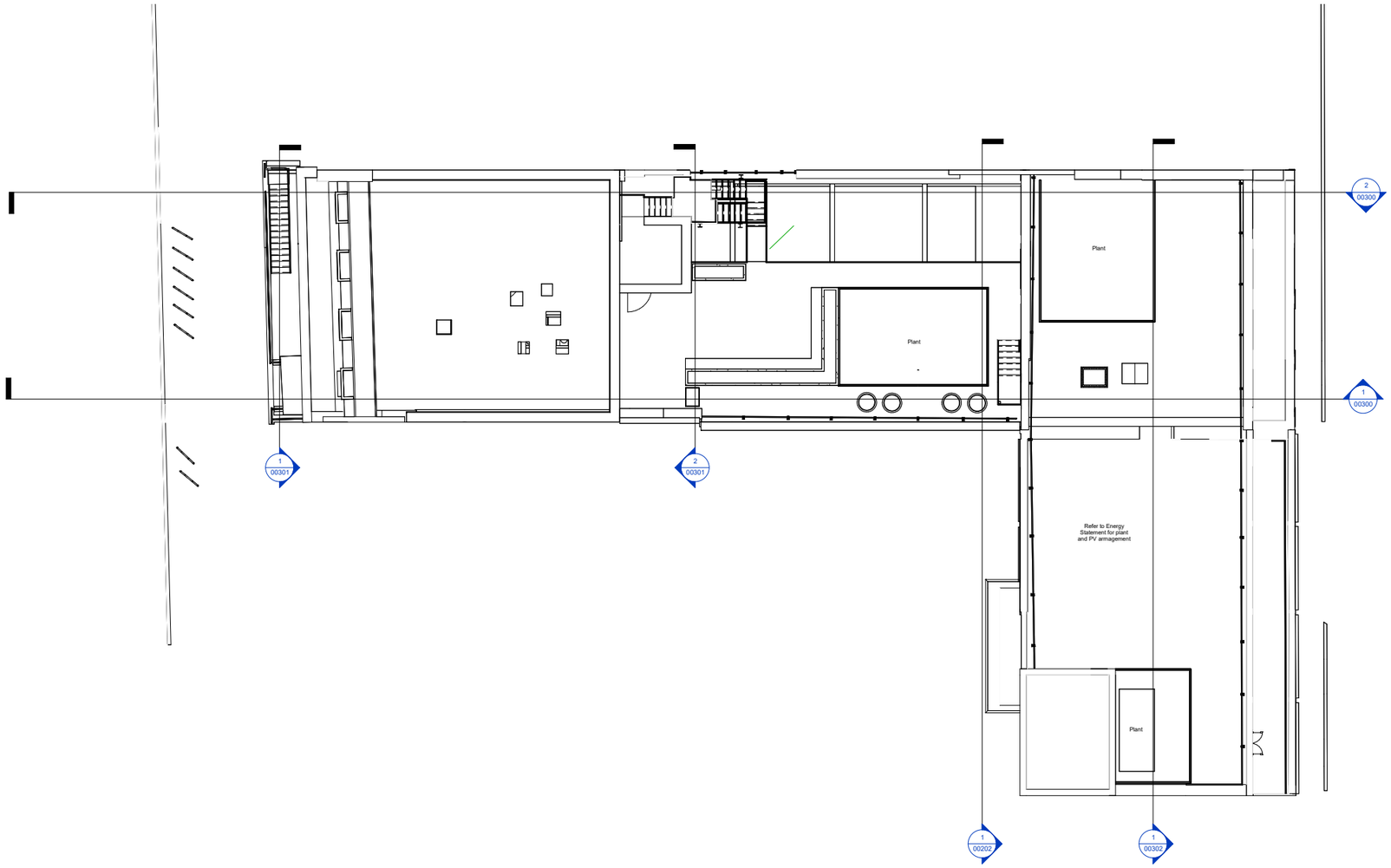
6.5 THIRD FLOOR PLAN



6.6 FOURTH FLOOR PLAN



6.7 ROOF PLAN


Plant
Plant
Refer to Energy Statement for plant and PV arrnagement
Plant
2
00300
1
00300
1
00301
2
00301
1
00202
1
00303

7.0 ACCESS

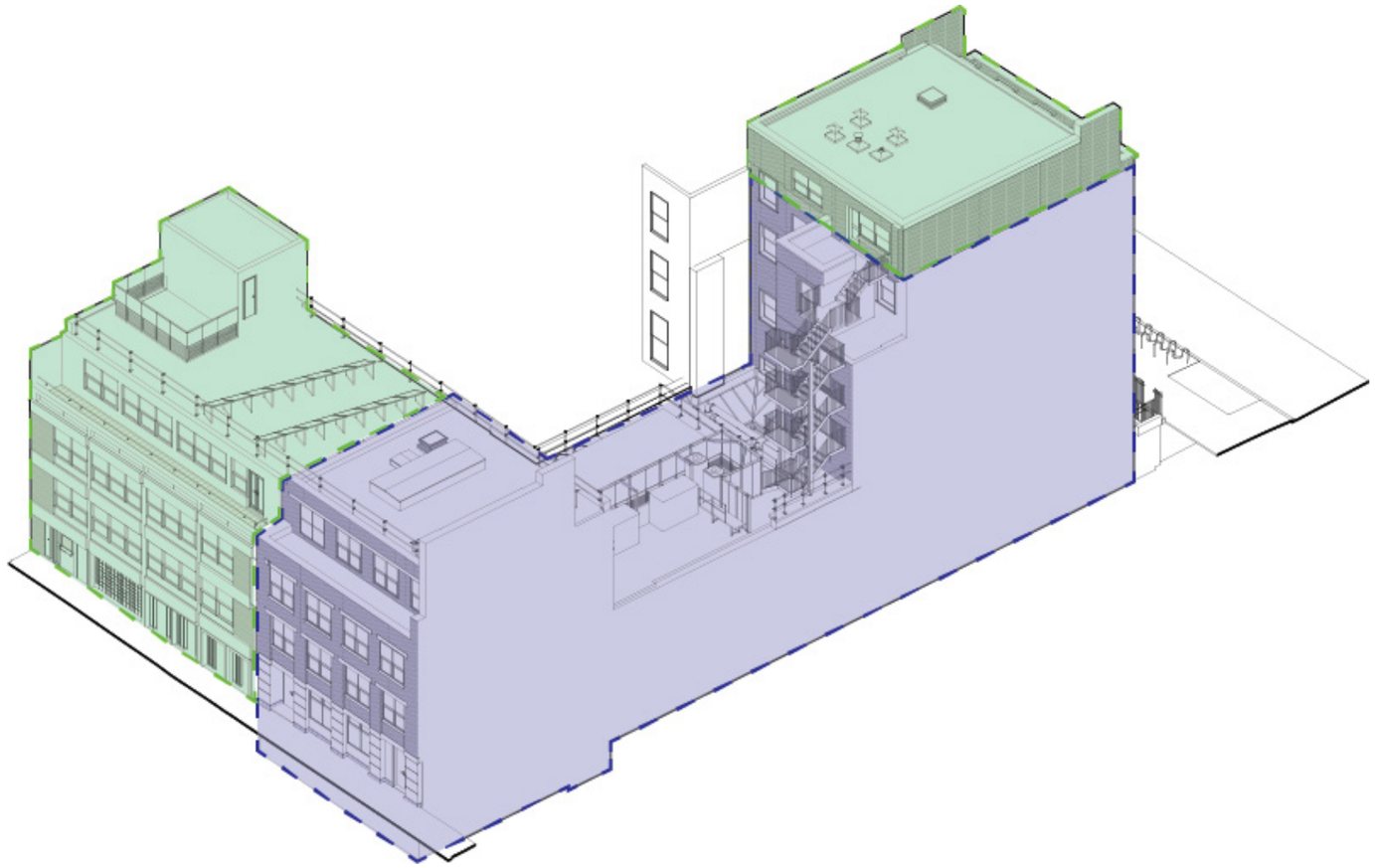
7.1 ACCESSIBILITY

Drop off will be possible immediately outside of the main entrance at 14 Bedford Row and in front of the rear entrance of Jockey's Fields at the opposite end of the site. The latter has a dropped kerb and level access up to and beyond the door whilst the Bedford Row entrance is stepped beyond the pavement. As the existing entrance is on the listed elevation it is not feasible to install a permanent ramp here to address the existing three steps. A portable ramp will instead be brought out by staff and an assistance call point mounted on the railings for those unable to access steps to ring for staff.

The lift in Bedford Row stops at L03. L04 contains the overrun and due to planning and heritage restrictions, it is not possible to extend to the Fourth Floor where a lift overrun would be visible above the roof line. The intent is to maintain the current strategy, with communal amenity (lounge and co-working space) provided at L03 and therefore accessible to all guests. L04 would only be accessible via stairs.

Our intention is to 'link' 12-13 and 14 Jockey's field through a structural opening. There is a level change between the two buildings with a number of existing restrictions that render it unfeasible for adaptation to offer wheelchair accessibility. Our intention is to 'link' the two buildings across this level change. We have tested multiple scenarios where we introduce ramped access (1:12), the implications of which compromise the usability of these spaces. As there are no accessible rooms proposed in 12-13 Jockey's Field, this area is served by stepped access only.

Please refer to the Access Statement in appendices (14 Bedford Row Access Statement) prepared by Earnscliffe for further information.



Stepped Access

Accessible

7.2 SERVICING

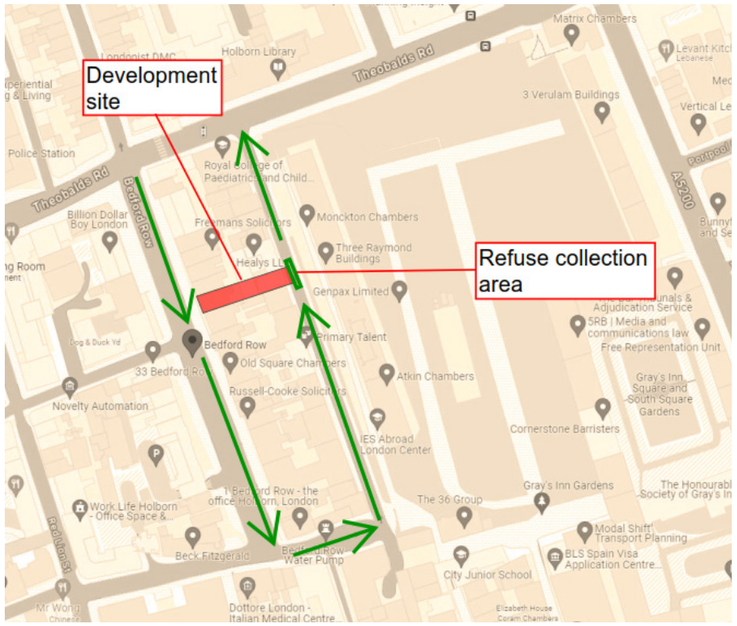
Servicing for the site will be undertaken via Bedford Row or Jockey's Fields to the rear of the development.

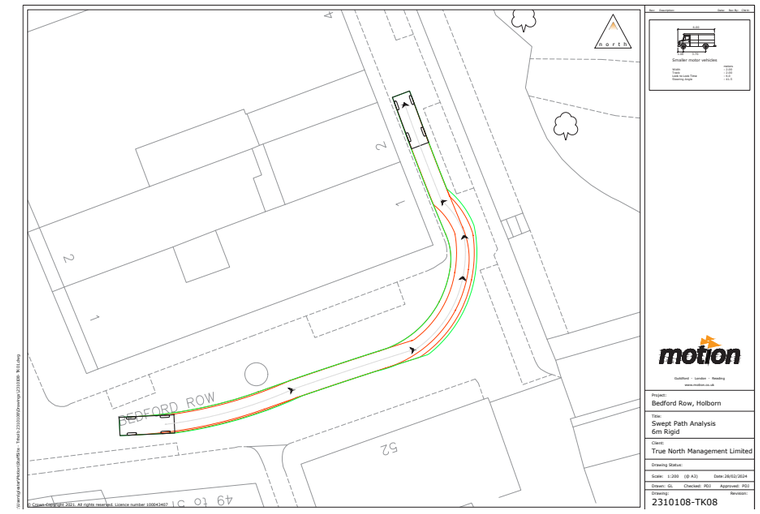
Vehicles will enter from Bedford Row and exit onto the A401 Theobalds Road. Due to the layout of Bedford Row and Jockey's Field, only service vehicles up to 6.7m long can be used to access the rear of the site.

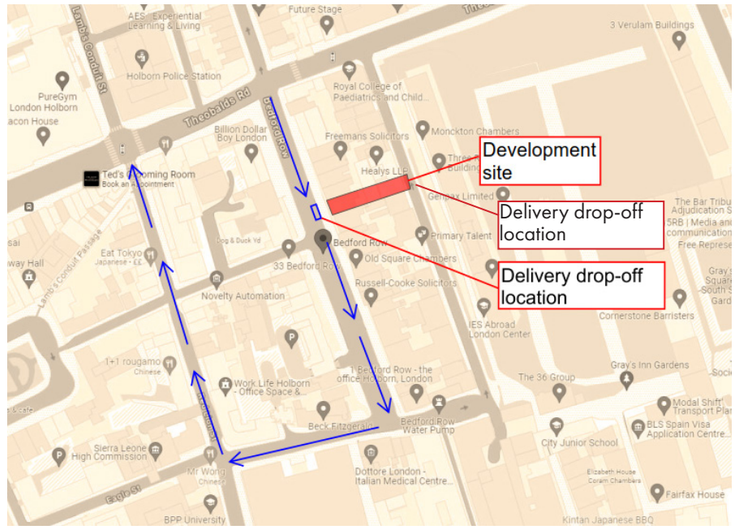
Delivery Vehicles

Deliveries for the development will have the option to take place either to the front of the development along Bedford Row at the single yellow line located to the front of the site, or to the rear along Jockey's Fields. Deliveries for guests will take place via Jockey's Field to reduce impact on the Georgian terrace. Any deliveries or refuse collections from Jockey's Field will be specifically carried out by 6.7m long vehicles. Confirmation has been provided by First Mile a London Waste contractor, that 6.7 m refuse lorries are available to collect from constrained locations.

Please refer to the Delivery and Servicing Plan (R01 14 Bedford Row-TS-29-04-23 d3.0) prepared by Motion for further information.







7.3 CYCLE STORAGE

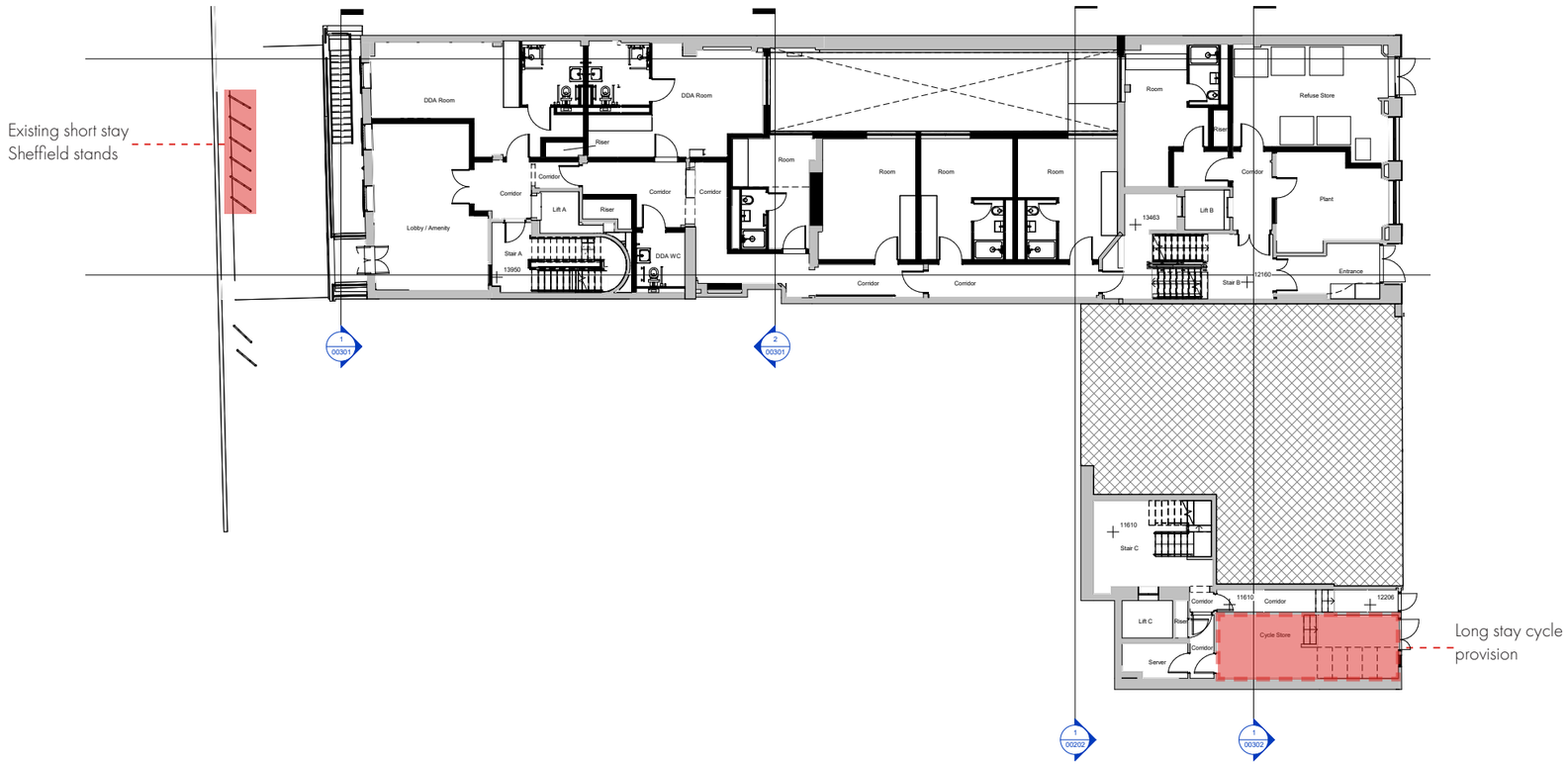
Cycle parking for the development will be located on the ground floor to the rear of the development with access via Jockey's Fields.

Cycle storage will be covered and secured, including provision for staff. Long-stay cycle parking will be provided in accordance with the London Plan for a C1 hotels use class.

The current office space does not include any cycle parking facilities. The proposed development will include long-stay cycle parking within the building in a dedicated store, in accordance with The London Plan, with a step-free access via Jockey's Fields to the rear of the development. The London Plan requires one space per 20 bedrooms long-stay provision for hotel use and therefore a minimum of 3 no. cycle parking spaces will be provided in the dedicated ground floor cycle store.

The London Plan requirement for short-stay cycle parking for hotel use is 1 space per 50 bedrooms,therefore at least two cycle spaces should be provided. The development site abuts directly onto the local footway (London Borough of Camden highway) and therefore there is no space to accommodate dedicated short-stay cycle parking for visitors. The proposed strategy will be to encourage visitors to utilise the existing Sheffield cycle stands (9 stands/18 spaces) located to the front of the development on Bedford Row directly outside the building. There are additional cycle parking spaces around the area, including a 'Lock-it Safe' provided along Red Lion Street, 100 metres west of 14 Bedford Row.

Please refer to the Delivery and Servicing Plan (R01 14 Bedford Row-TS-29-04-23 d3.0) prepared by Motion for further information.



7.4 REFUSE STRATEGY

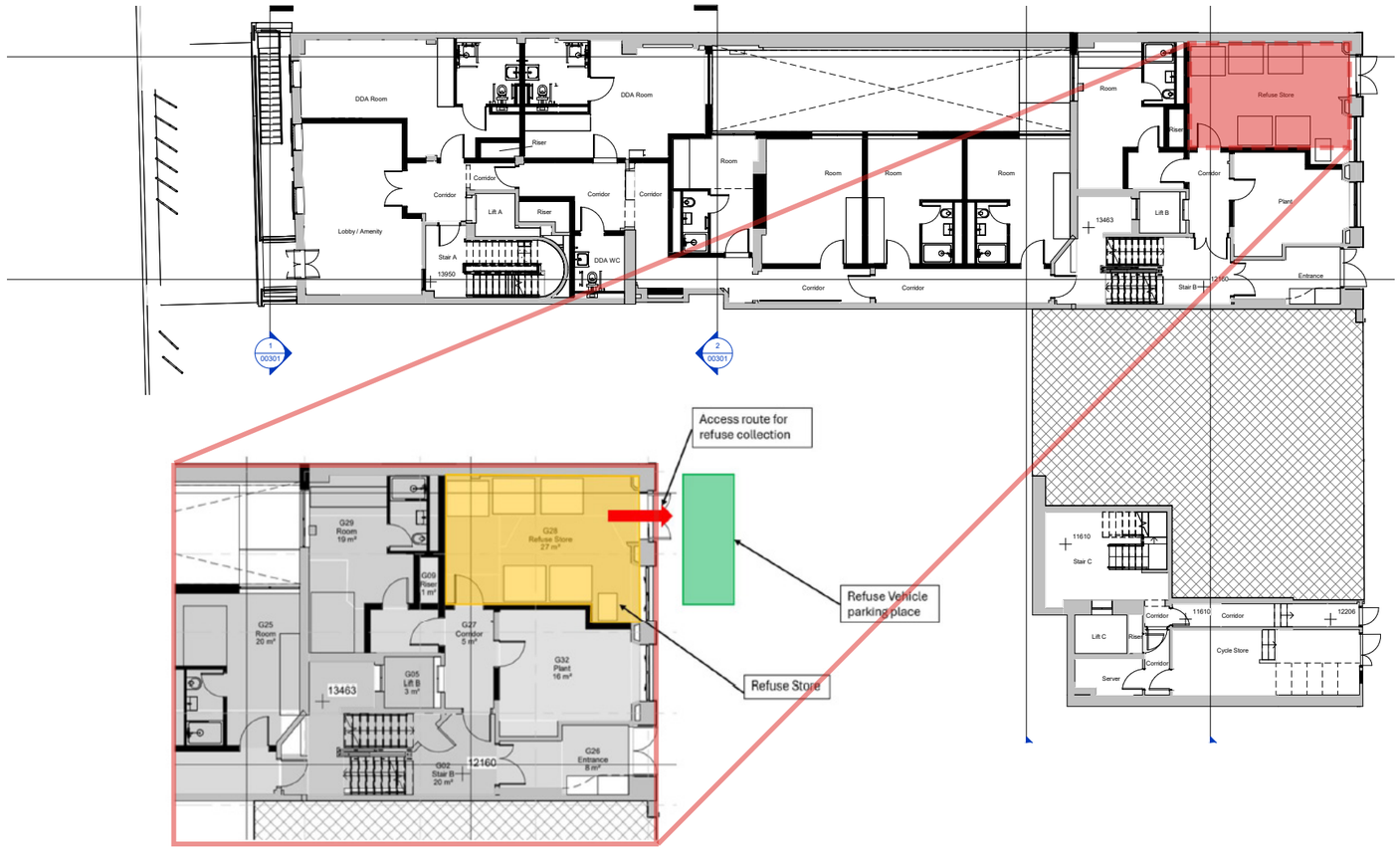
Refuse and recycling from the hotel development will be stored within the waste area until the prearranged collection day. On collection days, the appointed waste management contractor will temporarily park their Refuse Collection Vehicle on Jockey's Field close within 10 metres of the waste store. The waste from the bin will be transferred into the vehicle by the waste operatives.

The general refuse and recycling collections would be separate – the site management team would need to pre-arrange collection times to minimise conflict. The management team will ensure there are no other deliveries during the early morning period when the waste collections are programmed as part of the managed operations. The regular hotel waste collection may well be co-ordinated with other collections in the area.

The total waste generated per week for the development is 9,000 litres for both general waste and recyclable waste. The split of waste is proposed to be 60% general refuse and 40% recyclable The expected waste demand for each stream and the required refuse storage is provided in the table below.

The assumed split of refuse and recycling is 40:60 with refuse and recycling in 1,100 litre bins for the hotel use. The provision of 2 refuse bins and 3 dry mixed dry recyclable bins (1,100 litre) for the proposed hotel use is based on un-compacted waste and will offer three-day waste storage.

Please refer to the Delivery and Servicing Plan (R01 14 Bedford Row-TS-29-04-23 d3.0) prepared by Motion for further information.



	Commercial – BS Storage requirement – Central Waste Store		
	General Refuse (1,100 litre bins)	**Recyclable Waste (1,100 litre bins)**	**Total**
Refuse Generation (per week)	3,456 litres	5,184 litres	9,000 litres
Three-day storage (1,100 litre bins) – three collections per week	2	3	5

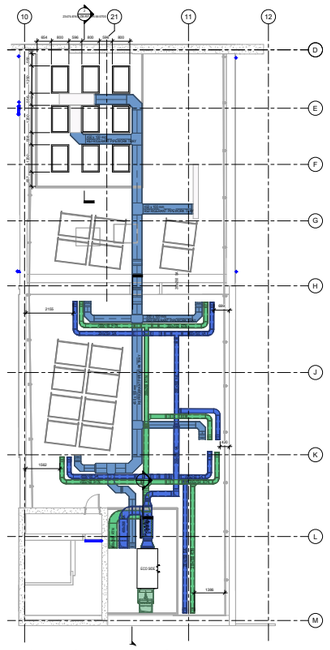
8.0 BUILDING SERVICES

8.1 VENTILATION STRATEGY

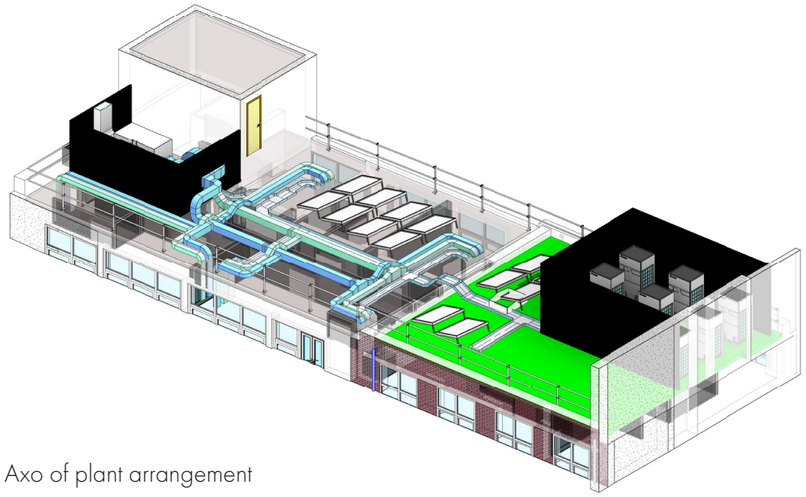
The building services systems proposed for 14 Bedford Row apart-hotel have been designed to ensure the guests' thermal comfort and optimising energy consumption in accordance with the government's objective of attaining zero carbon emissions by 2050.

Please refer to the Energy Statement prepared by Energylab for more information.

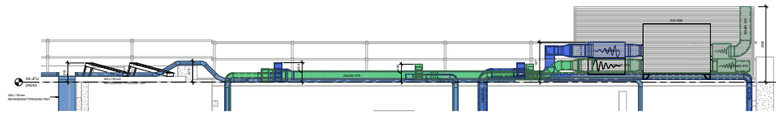
Roof of Jockey's Fields



Plan showing plant arrangement

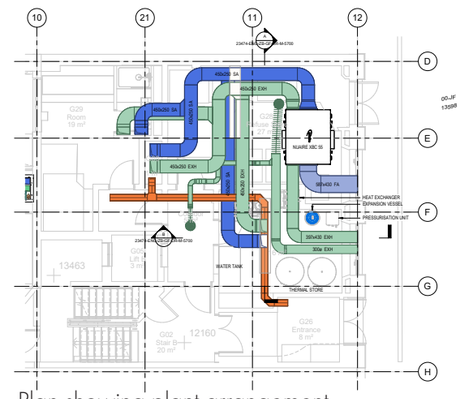


Axo of plant arrangement

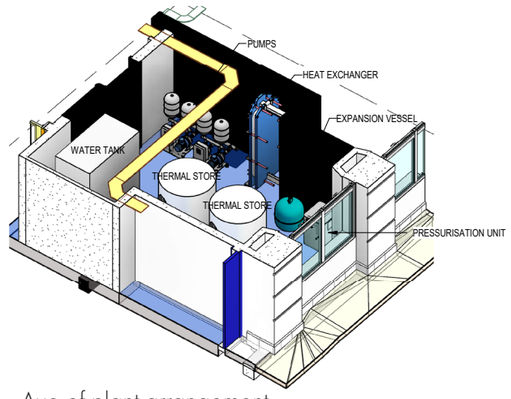


Section showing duct work and plant arrangement

Ground Floor Jockey's Fields



Plan showing plant arrangement

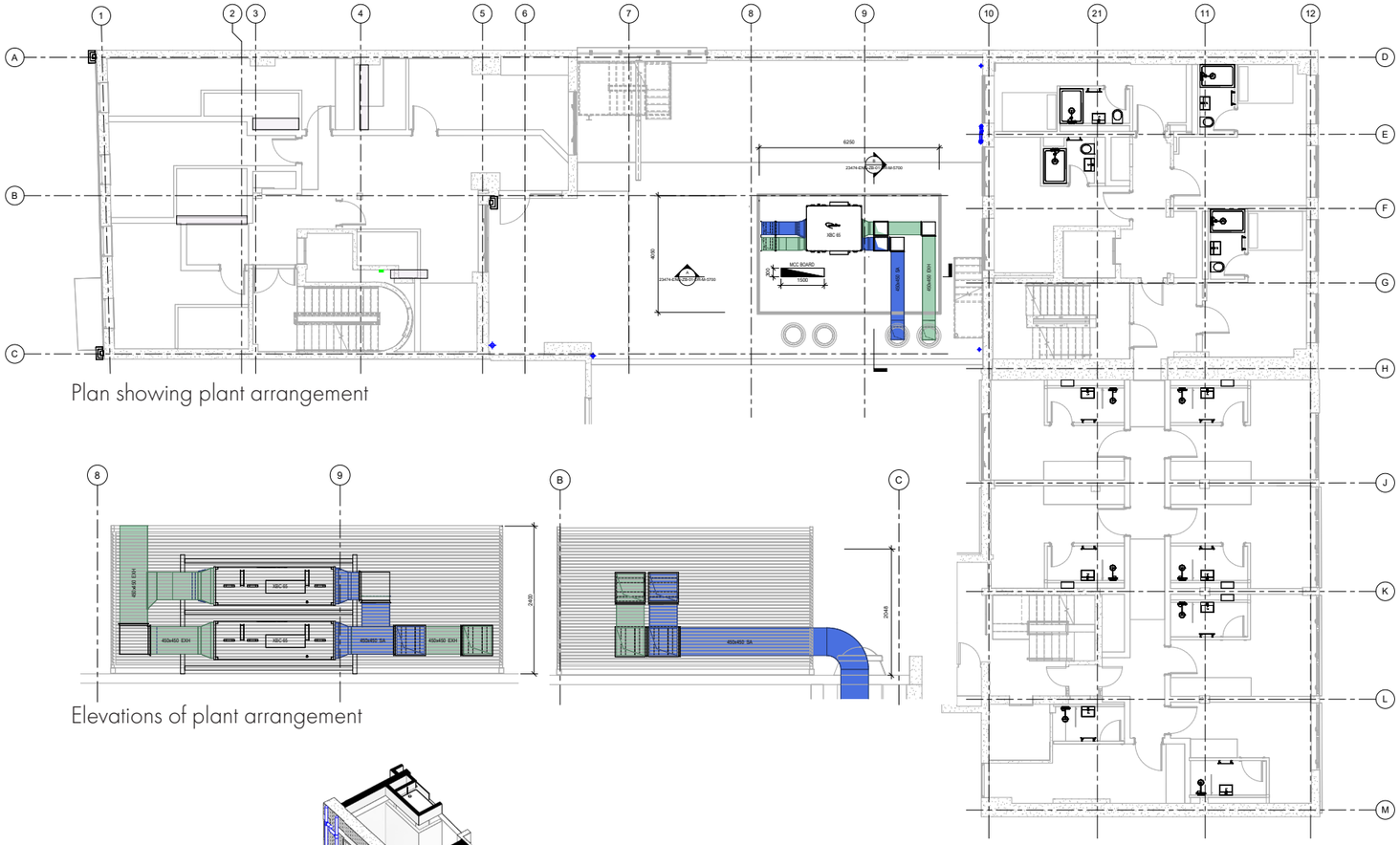


Axo of plant arrangement

8.1 VENTILATION STRATEGY - 'LINK' STRUCTURE

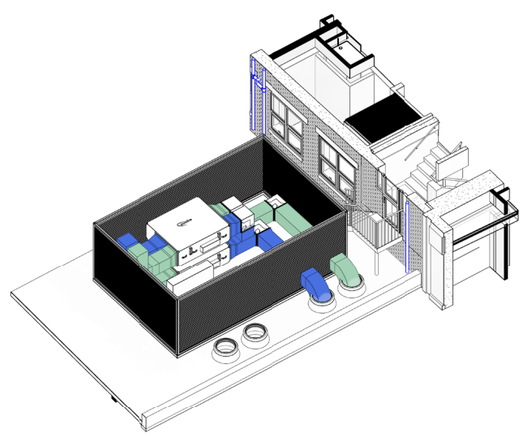
All primary energy-consuming building services, including lighting, ASHP (Air Source Heat Pump) system, and AHUs (Air Handling Unit) systems, will be individually metered and monitored to be able to make data driven performance improvements over time and enhance energy efficiency. The implementation of smart meters will be specified to facilitate this process.

Please refer to the Energy Statement prepared by Energylab for more information.



Plan showing plant arrangement

Elevations of plant arrangement



Axo showing plant arrangement

8.2 HEATING STRATEGY

The development aims to create a gas-free environment in order to eradicate any on-site emissions of harmful NOx or Particulate Matter (PM) that would otherwise be released from gas-fired heating sources.
By implementing an ASHP system with high efficiency, potential of a 300% improvement in efficiency compared to a standard boiler.

The development will make use of Air Source Heat Pump technology in order to supply space and water heating. This will be powered by 100% renewable electricity sourced from the grid.

The introduction of fresh air to the guest spaces will ensure that the guests' thermal comfort is maintained at the required levels. This will be achieved through the use of a dedicated mechanical Air Handling Units that is equipped with an efficient heat recovery mechanism. This will help reduce the energy consumption associated with the heating system.

Please refer to the Energy Statement prepared by Energylab for more information.

8.3 ELECTRICAL STRATEGY

A PV solar panel system will be implemented to harness solar energy. The eco-friendly electricity generated will be employed within the project to further diminish the energy usage associated with the building services' operation.

The development will benefit from of the installation of energy efficient LED light fixtures for both general and emergency purposes, along with suitable controls and motion sensors (PIRs) to optimise efficiency and minimise energy consumption. All external light fixtures will be carefully chosen to prevent light pollution and any adverse effects on the local wildlife.

The development will be equipped with high-speed fibre optic internet services which will be made available to all guests to ensure the quality of high speed connectivity is achieved at all times.

Please refer to the Energy Statement prepared by Energylab for more information.

9.0 SUSTAINABILITY

9.1 SUSTAINABILITY STRATEGY

The project team has developed a thorough plan to promote sustainability and energy efficiency by focusing on reducing energy demand. This will be achieved by improving the thermal performance of key building elements such as walls, windows, and roofs through the use of suitable internal insulation.

The energy and the associated CO_2 emission calculations for the proposed development were calculated using Integrated Environmental Solution Virtual Environment (IES VE). The target emission rate (TER) was produced utilising the limited information available to calculate the thermal performances of the existing building fabric along with specifying a gas boiler and service strategy in line with the notional specification for existing building set out Appendix 3 of the Mayor of London Energy Assessment Guidance 2022.

The appropriate building energy demand benchmarks were applied, similarly to the new build methodology to ensure accurate analysis of each space. The savings and reductions in CO2 emissions in both assessments, due to incorporating the climate change mitigation measures into the proposed design, have been calculated, compared and demonstrated against the estimated CO2 emissions of the notional/existing building.

Please refer to the Energy Statement prepared by Energylab for more information.

Table 7: Whole building weighted Thermal Performances for commercial refurbishment

	Existing	Proposed Design	Notional Specification for Existing Buildings
Walls U-Value Target	1.06	0.25	0.55
Floors U-Value Target	0.56	0.56	0.25
Roofs U-Value Target	2.47	0.12	0.18
Doors U-Value Target	2.2	1.56	-
Windows U-Value Target	2.21	1.49	1.4
Windows G Value Target	0.8 - 0.58	0.65 - 0.40	0.4
Air permeability	25	8	25
Heating system pipework	Insulated pipework and fittings within the plant room to reduce heat loss		
Thermal Mass	Medium		-