

3.2 Height & Massing Evolution

3.2.1 Layout & Height

Ground Floor

A landlocked site provides a unique dynamic, at once providing a feeling of seclusion and being of overlooked. The site layout is based around a series of private courtyards.

These work at several levels:

- Providing natural light and ventilation to all key rooms whilst maintaining privacy.
- Creating layers of visibility across the site, which perceptively increase the feeling of space.
- Provide additional physical connection to between related rooms.
- Reduction in the overall development footprint.

The ground floor includes all bedrooms and ancillary spaces for the house. These are divided into two wings: the east forming the primary family accommodation and the west forming visitor accommodation.

A generous hall acts to book end the main entrance sequence into the building. A double height void provides additional light to the ground floor and creates a visual connection to the main living spaces above.

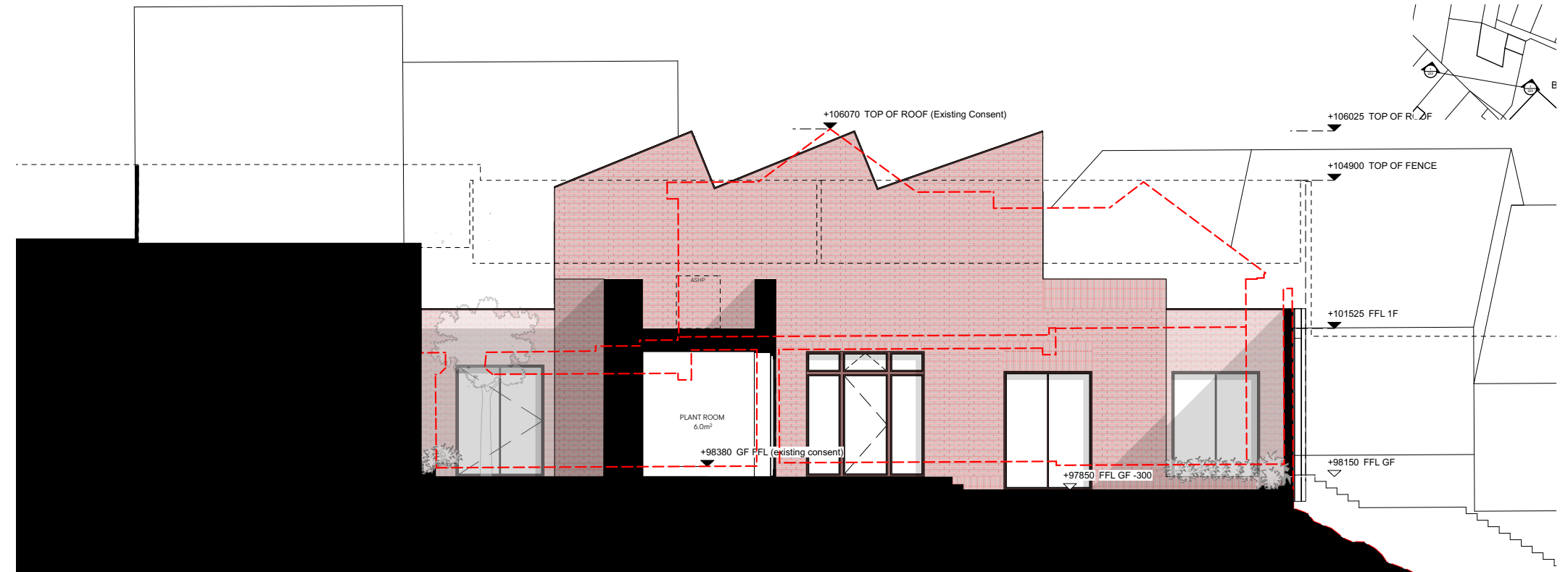
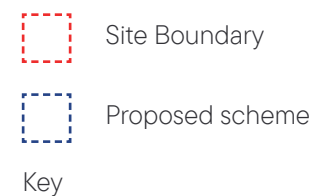


Figure 3.2: South elevation of proposed dwelling with the dashed overlay of the existing consent.

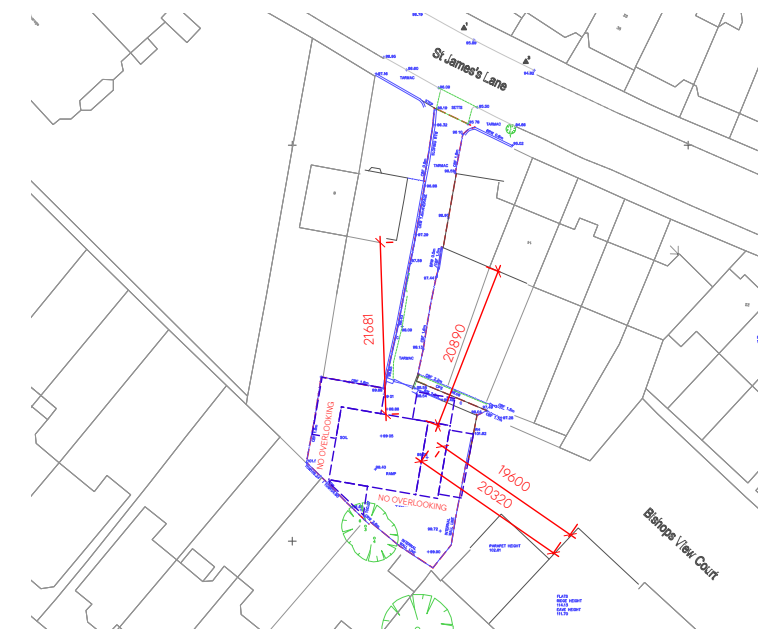


Figure 3.3: South elevation of proposed dwelling with the dashed overlay of the existing consent.

3.2 Height & Massing Evolution

First Floor

The first floor consists of a single open living spaces which contains the lounge, kitchen, and dining area. Care has been taken to ensure that the positions of windows do not create overlooking issues with neighbouring properties. A terrace is accessed via eastward facing glazed doors from the kitchen/dining space. The position of the terrace has been carefully considered to ensure there are suitable separation distances, in line with those recommended by The London Plan, to all adjacent habitable rooms.

All green roofs are to be accessed for maintenance only. This creates a physical buffer space to the site boundary and ensures that there is no direct overlooking to neighbouring gardens. This is a distinct improvement to the consented scheme which included an accessible garden space at first floor to the north-west.

Height

The proposed height of the building has been set to ensure that it does not exceed the ridge datum established by the existing planning consent.

Analysis of the existing consent found that the proposed ceiling heights of all primary rooms were not in compliance with the requirements of The London Plan. To alleviate this issue of habitability, the proposed design steps down the ground floor level of the building. It should be noted that the existing topography of the site ramps up steeply at the entrance gate, therefore the new proposed ground level provides a smoother transition.

3.2.2 Massing Evolution

The diagrams to the right display the design progress from the existing consent to the final proposal:

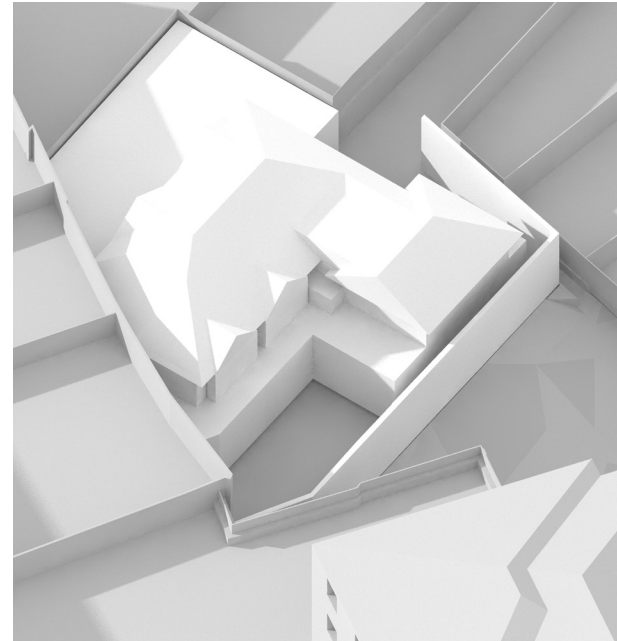


Figure 3.3: Evolution of massing - Previous consent, south east view.

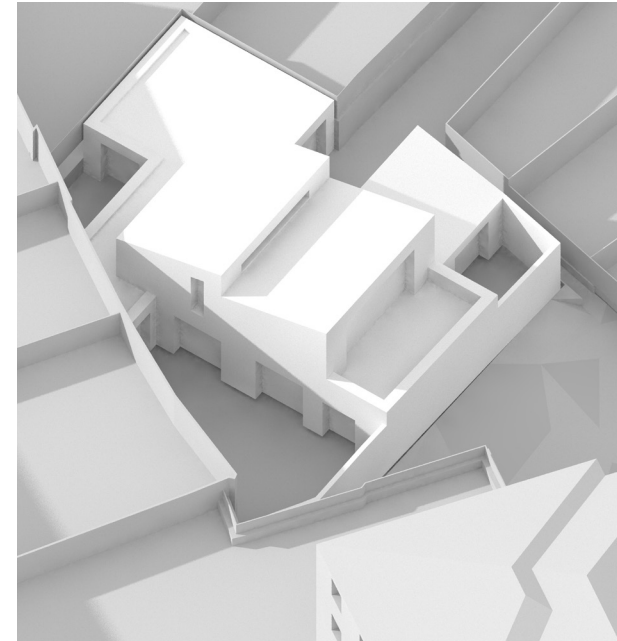


Figure 3.4: Evolution of massing - Initial massing, double saw tooth roof, south east view.

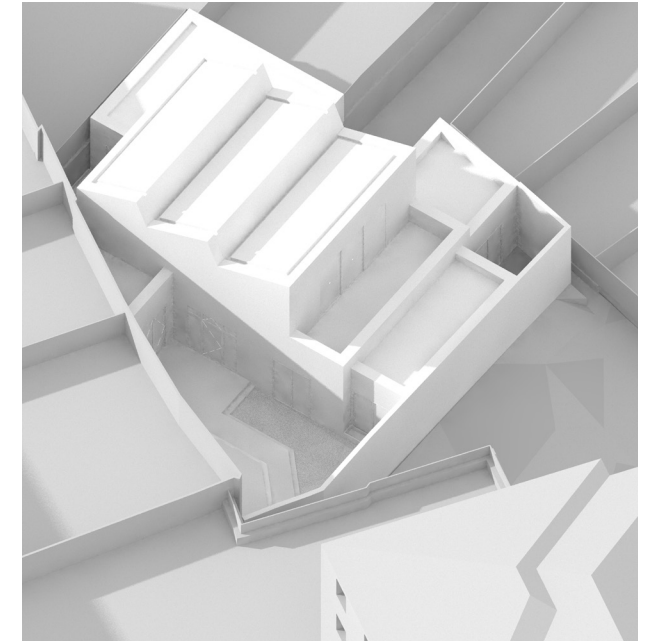


Figure 3.5: Evolution of massing - Final massing, tripple saw tooth roof, south east view.

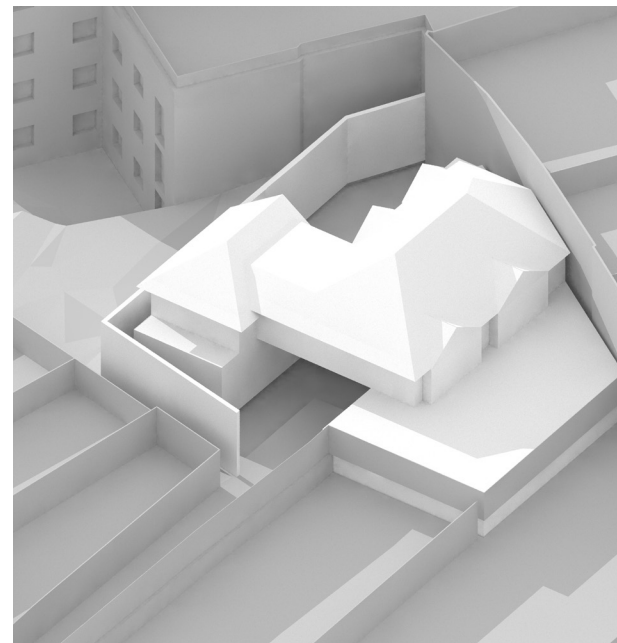


Figure 3.6: Evolution of massing - Previous consent, north east view.

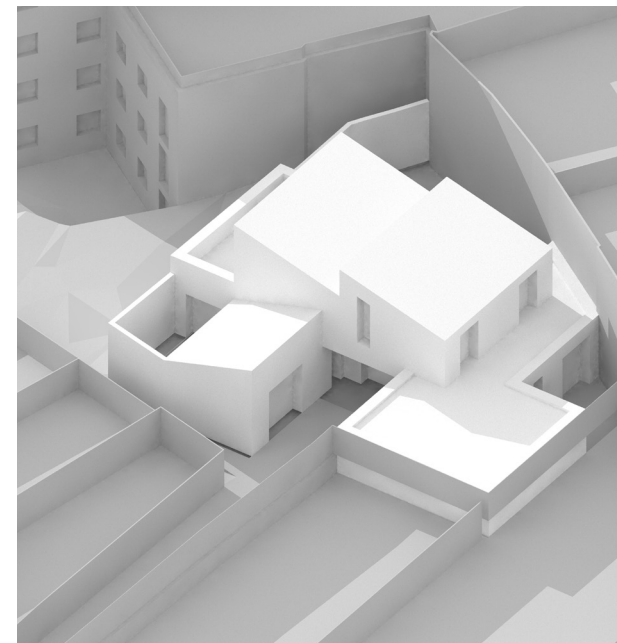


Figure 3.7: Evolution of massing - Initial massing, double saw tooth roof, north east view.

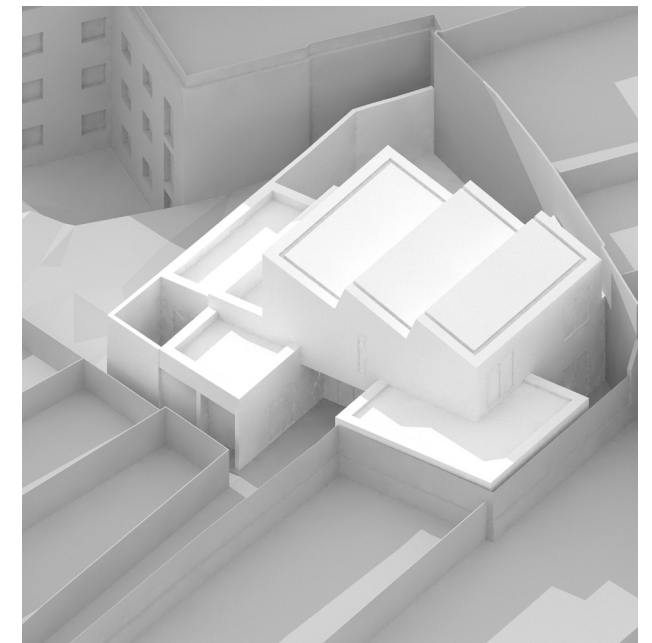


Figure 3.8: Evolution of massing - Final massing, tripple saw tooth roof, north east view.

3.3 Proposed Massing

3.3.1 Proposed Massing

The proposed massing is a greatly simplified and rationalised solution when compared to the current consent. The design is based on rigorous application of the proposed design approach, resulting in a singular coherent response to the site, where the proposed forms are a direct result of the building layout and site conditions.

When viewed from ground level to the north, the ground floor of the building reads simply as a boundary wall with only the sculptural roof form popping up above the boundary. This creates a dynamic layered composition.

When viewed from the ground level to the south, only small amounts of the roof form will be present. This adds to the cascading roofscape which is characteristic of view to St James's Lane to the east.

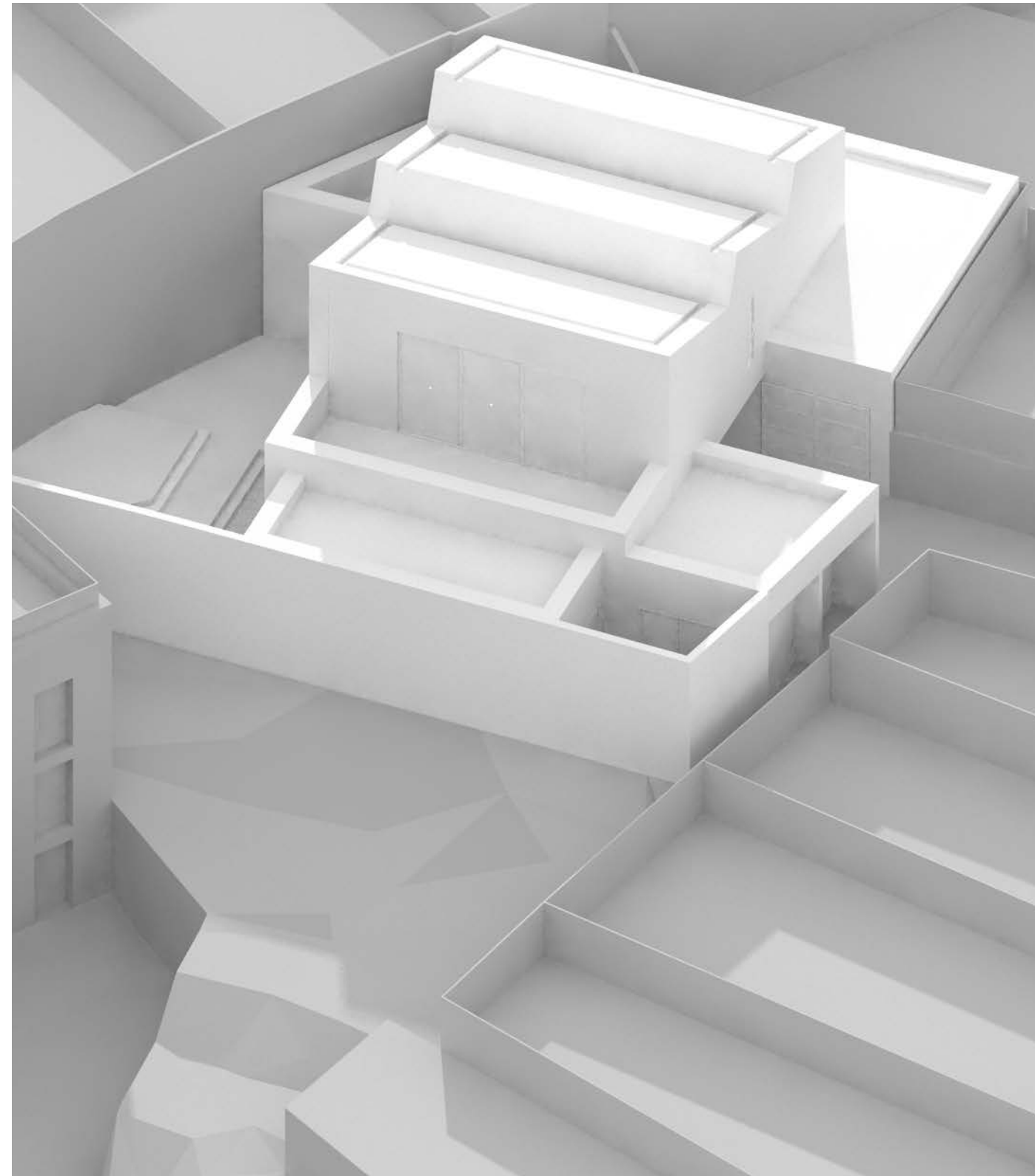


Figure 3.9: Evolution of massing - Final massing, tripple saw tooth roof, south east view.

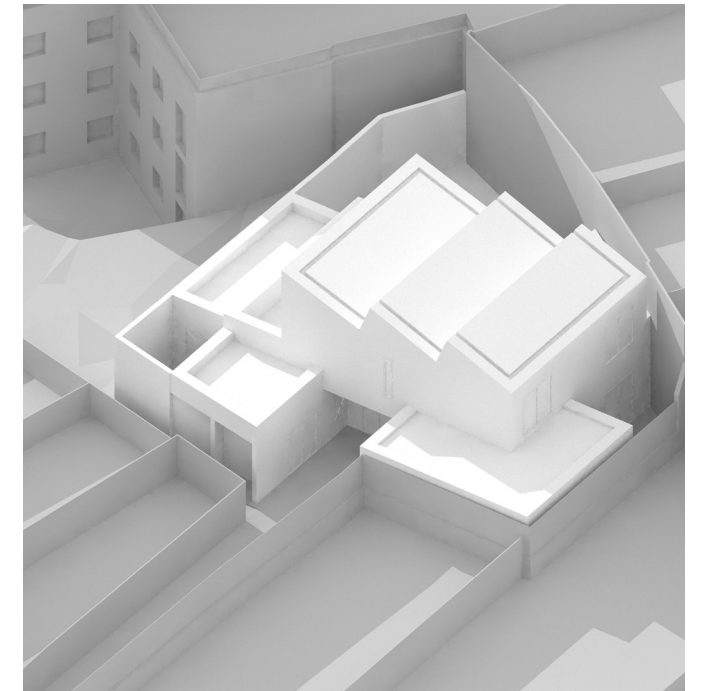


Figure 3.10: Evolution of massing - Final massing, tripple saw tooth roof, north east view.

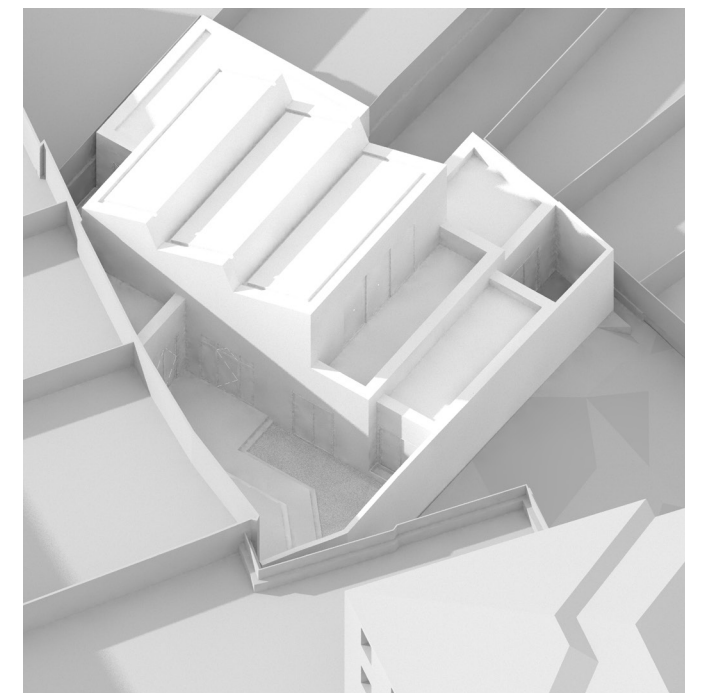


Figure 3.11: Evolution of massing - Final massing, tripple saw tooth roof, north east view.

3.4 Appearance

3.4.1 Material palette

The proposed material palette is limited to two materials: brick and zinc, which reinforces the massing approach.

The proposed brick will be of a similar tone to the brickwork of neighbouring properties, allowing the building to sit comfortably in the context. Areas of brick detailing, such as soldier courses and stack bond, have been introduced around windows and doors. These add a further layer of visual interest and add hierarchy to the elevation, for example valuing the main entrance.



Figure 3.12: Historical Precedent of old barrack yard, Belgravia, London, UK.

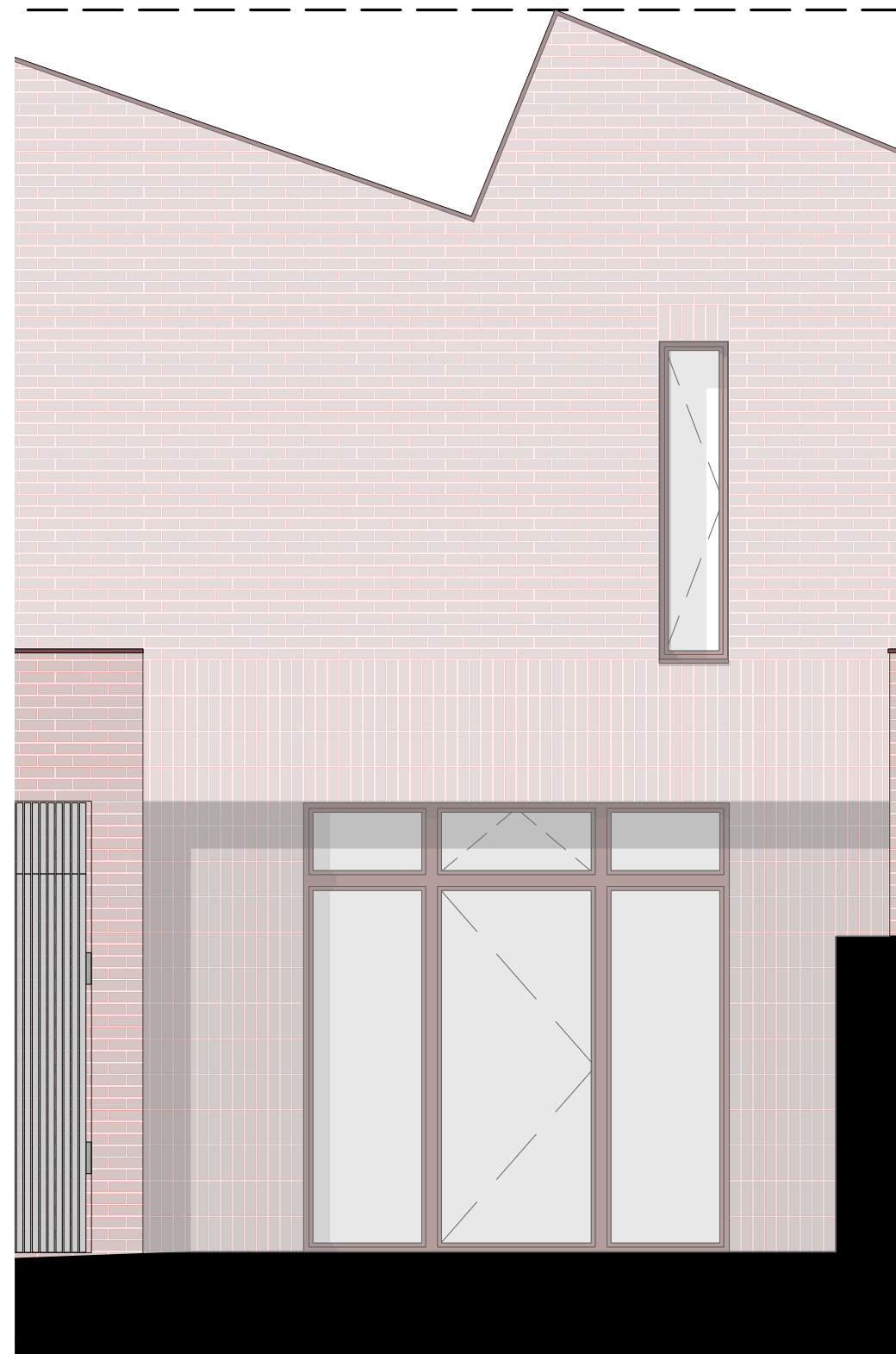


Figure 3.13: North elevation, front facade.



Figure 3.14 (Above): FORD Richmond Assembly Plant - View to east showing one of the openings in the second floor east wall through which a conveyor once passed for moving body panels to and from the second floor.



Figure 3.15 (Above): Front elevation of Building, showing closeup of sawtooth roof. - Merrill Silk Mill, 233 Canisteo Street, Hornell, Steuben County, NY Photos from Survey HAER NY-126.



Figure 3.16 (Above): First floor, Steel Frame warehouse, sawtooth roof monitor, detail, looking north east, Buhl Sons Company complex, 120-234 Adair Street, Detroit, MI Photos from Survey HAER MI-13.

3.4 Appearance

Standing seam zinc, in a brown tone, is proposed for the roof. This appears consistent both with the proposed brickwork, adding to the singular sculptural massing, and with the plain tiles of the surrounding roofscape of St James's Lane.

All glazing is to be slim framed aluminium, powder coated to a RAL colour to match the proposed zinc.



Figure 3.17: Photo of typical existing brick in St James' Lane neighbouring Edwardian houses.

Standing Seam Zinc Roof

- Finish to be within manufacturers colour range.

Hidden roof gutter in Zinc

- Gutter to appear seamless hidden within the roofline.

Windows

- Aluminium window frames to PPC RAL colour of roof.

Soldier course detail

- Brick faced lintel and fill brick sill band.

Flemish bond

- Main brick coursing to be Flemish bond in keeping with surrounding area.



Figure 3.18: West elevation detailing brick coursing, window and roof material palette.



3.5 Landscape

3.5.1 Landscape Design

Private garden and courtyard areas are to be planted with aspect appropriate species which contribute to improved biodiversity, are pollinator species or provide foraging opportunities for wildlife.



Figure 3.19: Precedent of residential flat green roof in London, UK.

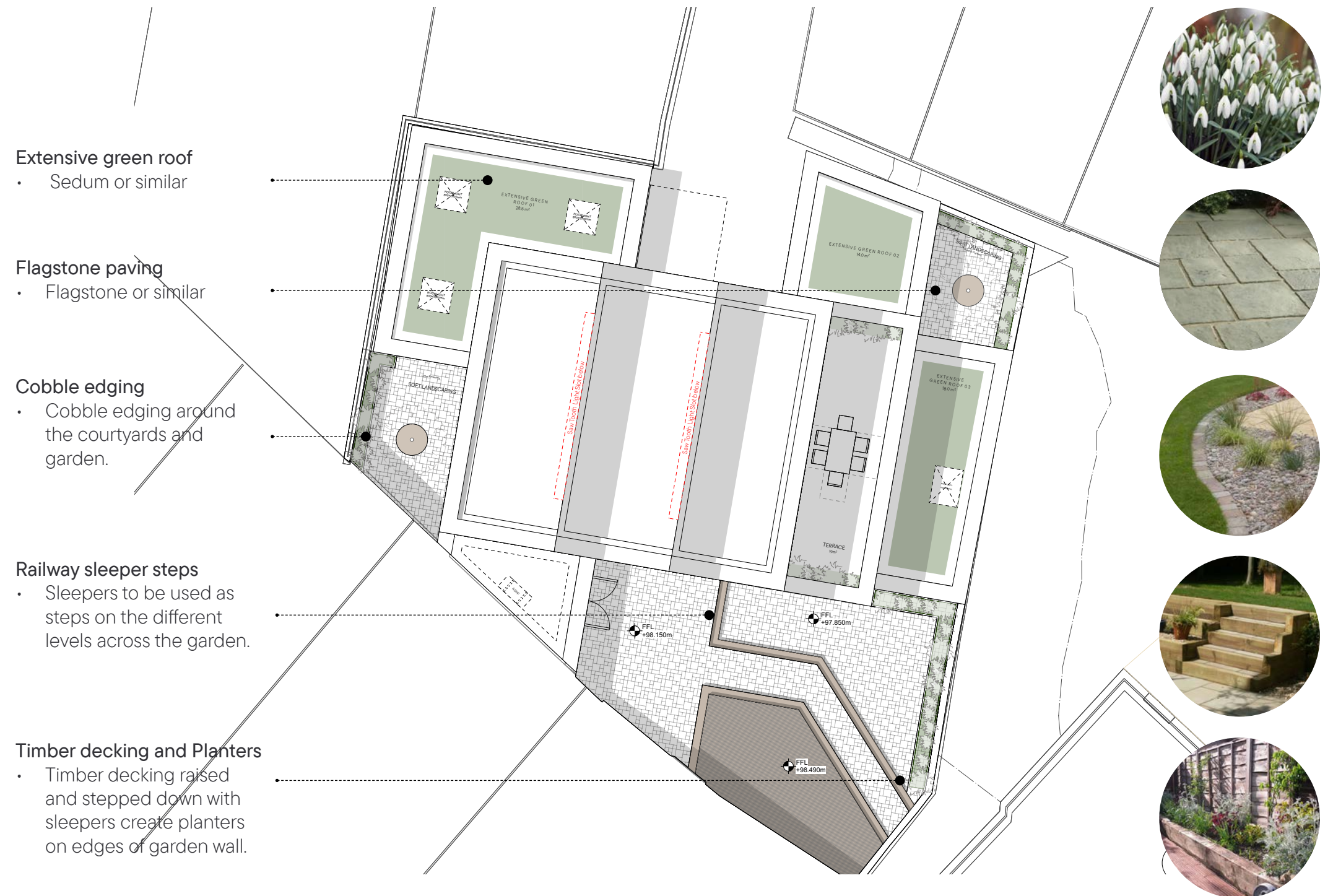


Figure 3.20: Proposed Roof Plan @ 1:100

3.5 Landscape

3.5.2 Landscape Design

Care has been taken to ensure the overall permeability of the site is improved by the proposals. Rainwater is to be discharge into the main sewer connection; however, the following proposed mitigation measures are included:

- Retention of areas of soft landscaping to garden to reduce impact to site base line.
- Introduction of permeable paving to existing areas of hard standing, connected to below ground cellular storage, to restrict speed of rainwater runoff.
- Introduction of bioretention beds to courtyards to slow down rainwater runoff.
- Use of extensive green roof system to areas of flat roofing to slow down rainwater runoff and increase biodiversity.

The final strategy will be subject to further detailed design.

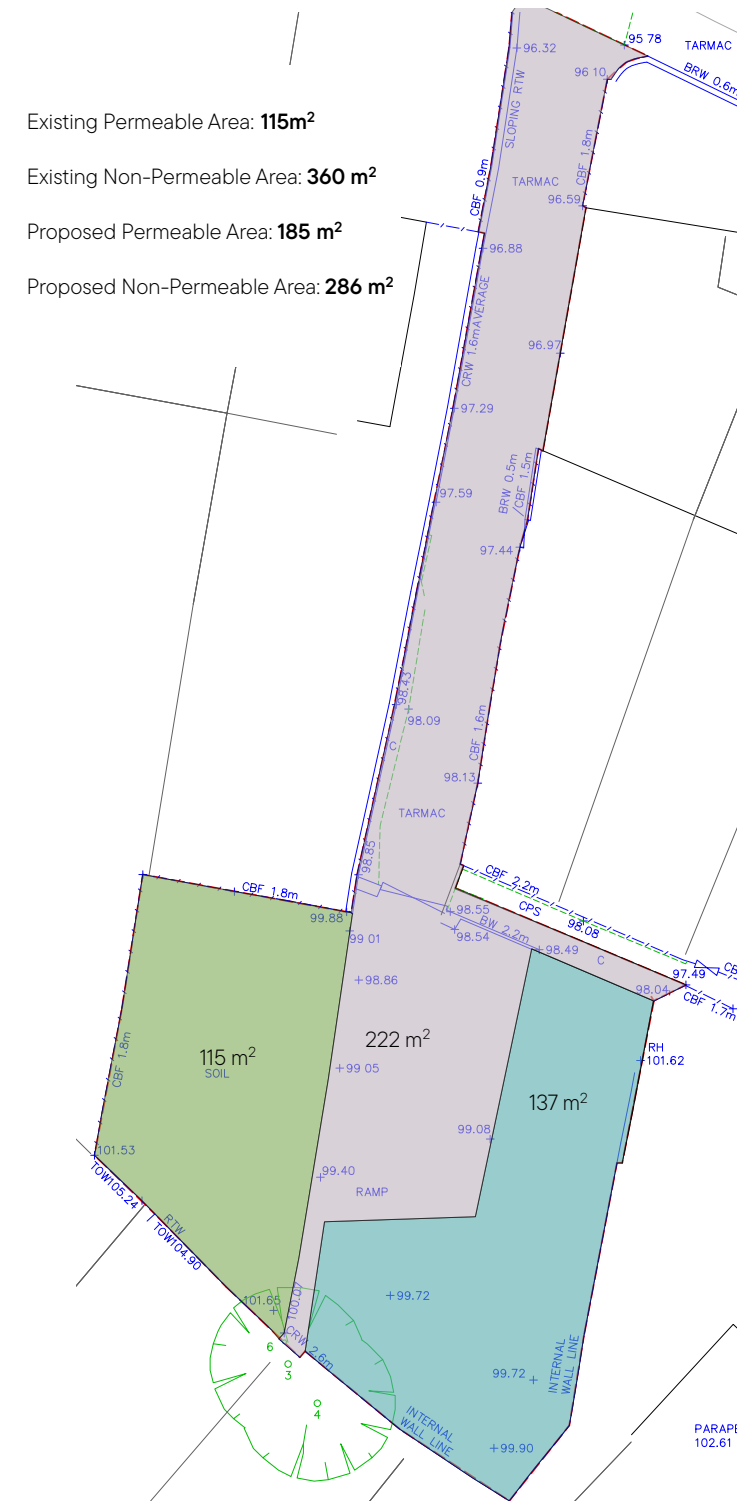
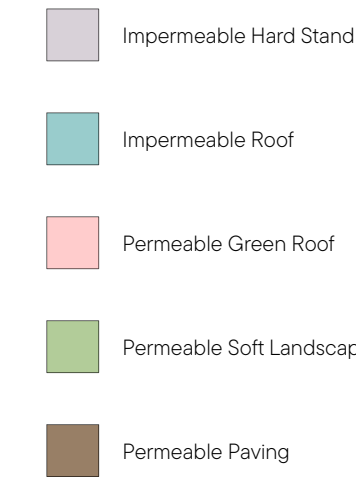


Figure 3.21: Existing Permeable/non-permeable surfaces.

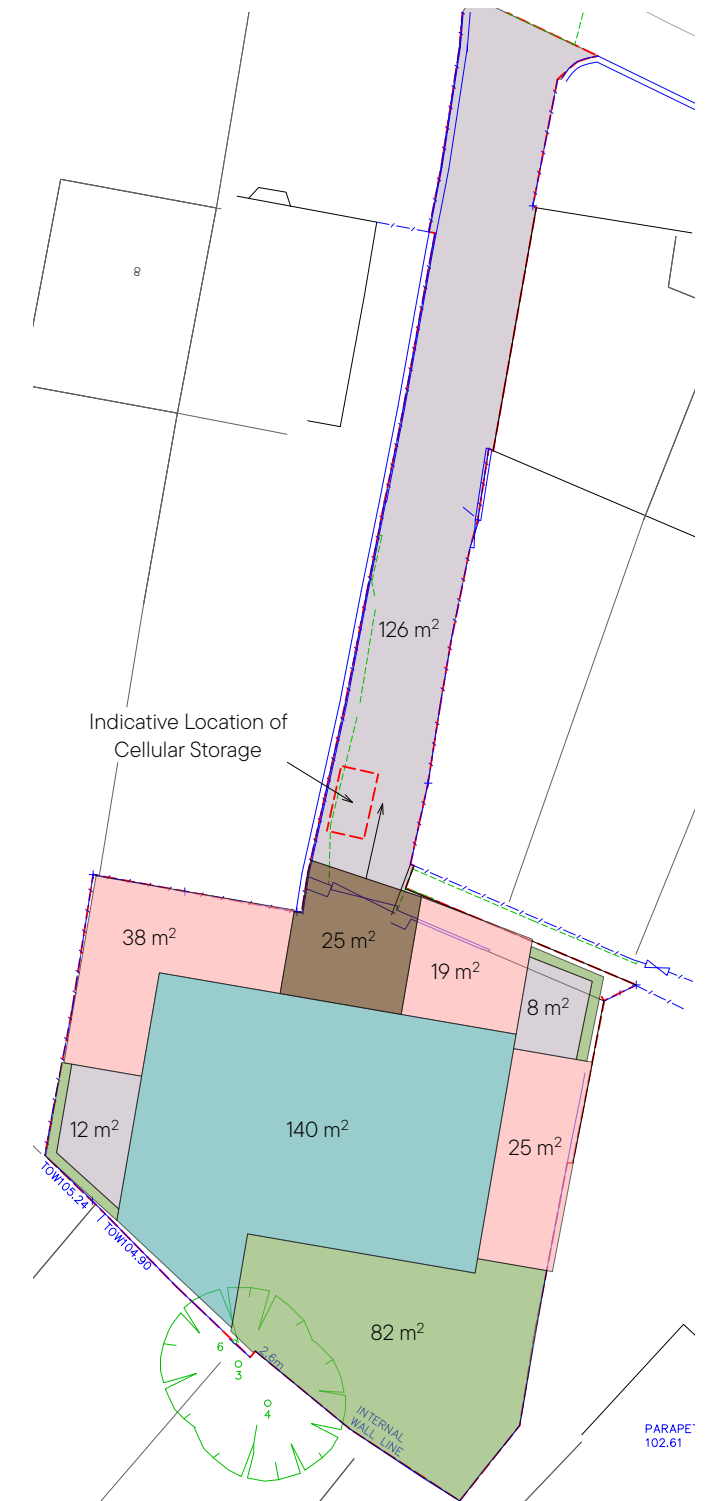


Figure 3.22: Proposed Permeable/non-permeable surfaces.

3.5 Landscape

3.5.3 Urban Green Factor

The London Housing Design Guide states that Urban Greening Factor is aimed at Major Development with required UGF scores to be in line with those set out in Local Plans. As a Minor Development, UGF is not directly applicable to the application. Despite this, the best practice approaches described in the Design Guide have been applied to the site to ensure a variety of greening habitats and features are accommodated. Please see adjacent table for types and areas.

SURFACE COVER TYPE	FACTOR	AREA (Sqm)	TOTAL
Standard trees planted in natural soils or in connected tree pits with a minimum soil volume equivalent to at least two thirds of the projected canopy area of the mature tree	0.6	7	4.2
Standard trees planted in connected tree pits with a minimum soil 0.8 volume equivalent to at least two thirds of the projected canopy area of the mature tree	0.8	7	5.6
Extensive green roof with substrate of minimum settled depth of 80mm (or 60mm beneath vegetation blanket) – meets the requirements of GRO Code 2014C.	0.7	60.5	42.35
Extensive green roof of sedum mat or other lightweight systems that do 0.3 not meet GRO Code 2014I	0.3	8.1	2.43
Hedges (line of mature shrubs one or two shrubs wide)	0.6	6	3.6
Rain Garden	0.7	7.4	5.18
Flower Rich Perennial Planting	0.7	26.7	18.69
Groundcover planting	0.5	13.7	6.85
Permeable paving	0.1	73.8	7.38
Sealed surfaces (e.g. concrete, asphalt, waterproofing, stone)	0	20.7	0
TOTAL UGF SCORE			96.28

URBAN GREEN FACTOR TOTAL SCORE	96.28
TOTAL SITE AREA (SQM)	475
TOTAL UGF SCORE	0.2026947

Figure 3.23: Table of Urban greening factor score

- Extensive Green Roof UGF 0.7
- Groundcover Planting UGF 0.5
- Standard Tree UGF 0.8
- Permeable Paving UGF 0.1
- Flower Rich UGF 0.7
- Hedges UGF 0.6
- Rain Garden UGF 0.7
- Extensive green roof (Light weight) UGF 0.3
- Impermeable Paving UGF 0

Key



Figure 3.24: UGF diagram with indicative Landscape arrangement

3.6 Sustainability

3.6.1 Sustainable Design

A fabric first approach has been taken to the proposed building. Suitable allowances have been made in the thickness of floors, walls and roofs to achieve U-values in exceed of those required by Building Regulations L 2023. Careful consideration will be given to detailing at the next design stage to ensure high levels of air tightness and minimum thermal bridging. High performance triple glazed windows and doors are to be used throughout.

The size and orientation of windows has been carefully considered to ensure suitable levels of are achieved within the building whilst avoiding issues of overheating.

Space heating and hot water is to be provided via Air Source Heat Pump located on the southern flat roof, with all associated plant contained within the room directly below. High parapets and the southern retaining wall act to contain and dissipate plant noise to ensure it does not disturb building occupants or neighbours – please see separate Acoustic Assessment for further detail. Mechanical heat will be included to all ventilated spaces i.e. bathrooms and kitchens. All other rooms are to be naturally ventilated via openable windows and/or rooflights.

Provision of solar PV panels was explored, however, was discounted due to limited direct light levels and the potential for visual impact to the Conservation Area.

Rainwater harvesting is to be included via concealed rainwater butts.

 Location of ASHP (indicatively shown)

Key

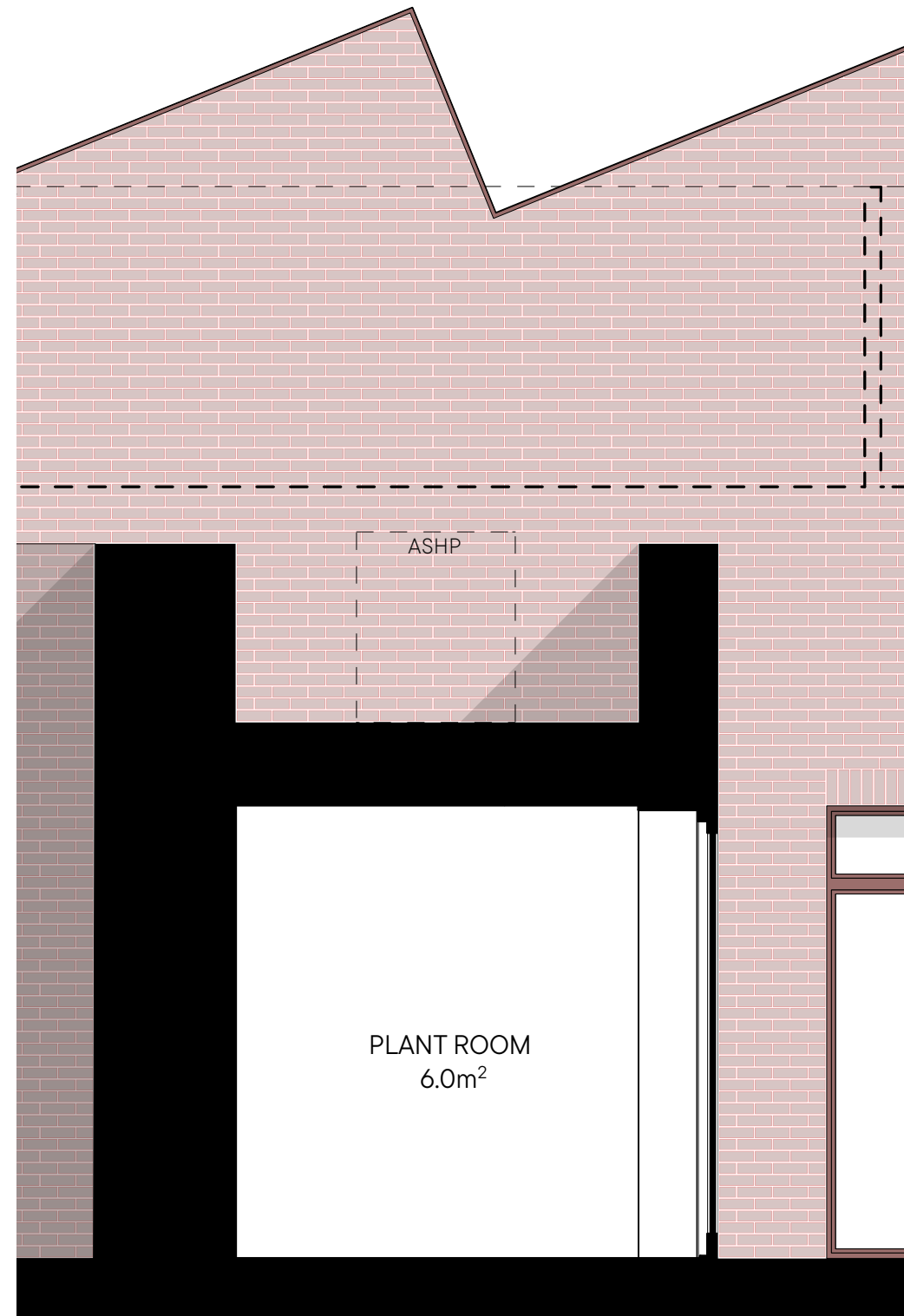


Figure 3.25: South elevation/section close up of plant room.

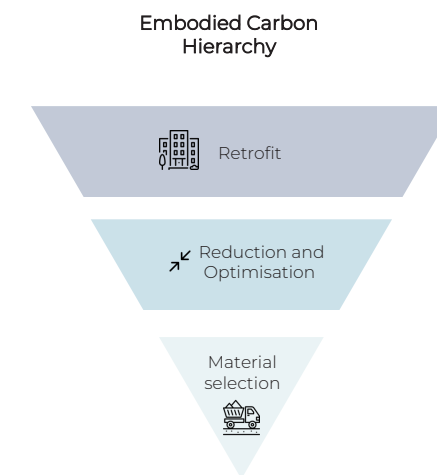


Figure 3.26: (Above): Embodied carbon hierarchy.

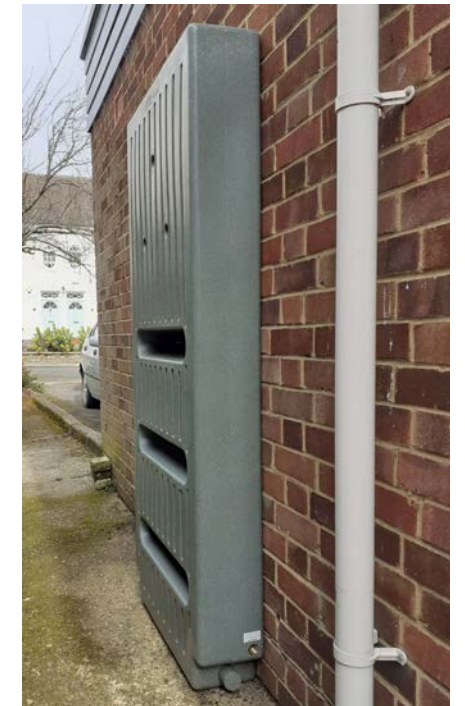


Figure 3.27: (Above): Slim line rainwater butt to be concealed within plant room.

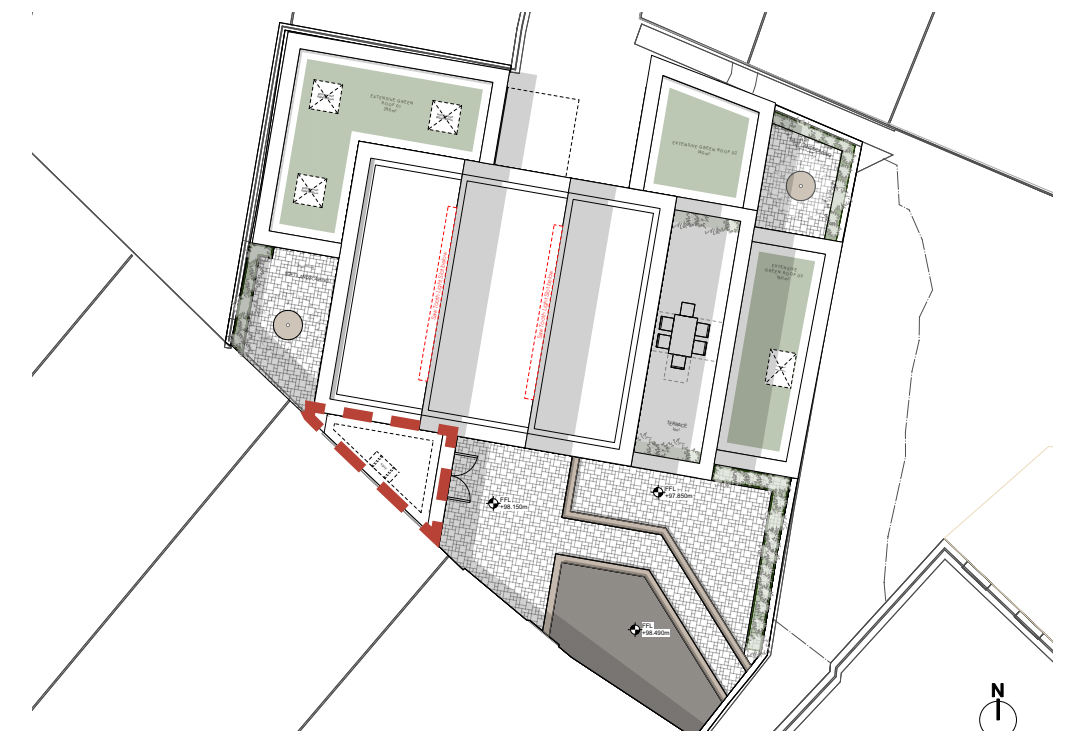


Figure 3.28: (above): Roof plan with the dashed line of the ASHP location.

4 Access

4.1 Accessibility

4.1.1 Accessibility

The layout has been to comply with all requirements of Building Regulations Part M4(2)

Accessible and Adaptable Dwellings. Key considerations included:

- A Level access approach to the dwelling.
- Level access thresholds to all external spaces.
- Suitably sized and positioned doorways.
- Provision of WC and bathroom facilities at entrance level including level access washing facilities.
- Provision of a suitable position to accommodate a future platform lift installation.
- Provision of suitable circulation zones to all key rooms.

-  WC for future adaptation to comply with M4(2)
-  Location of potential future ramp to navigate the level change
-  Location of potential provision of lift platform
-  Potential lift platform route to first floor

Key

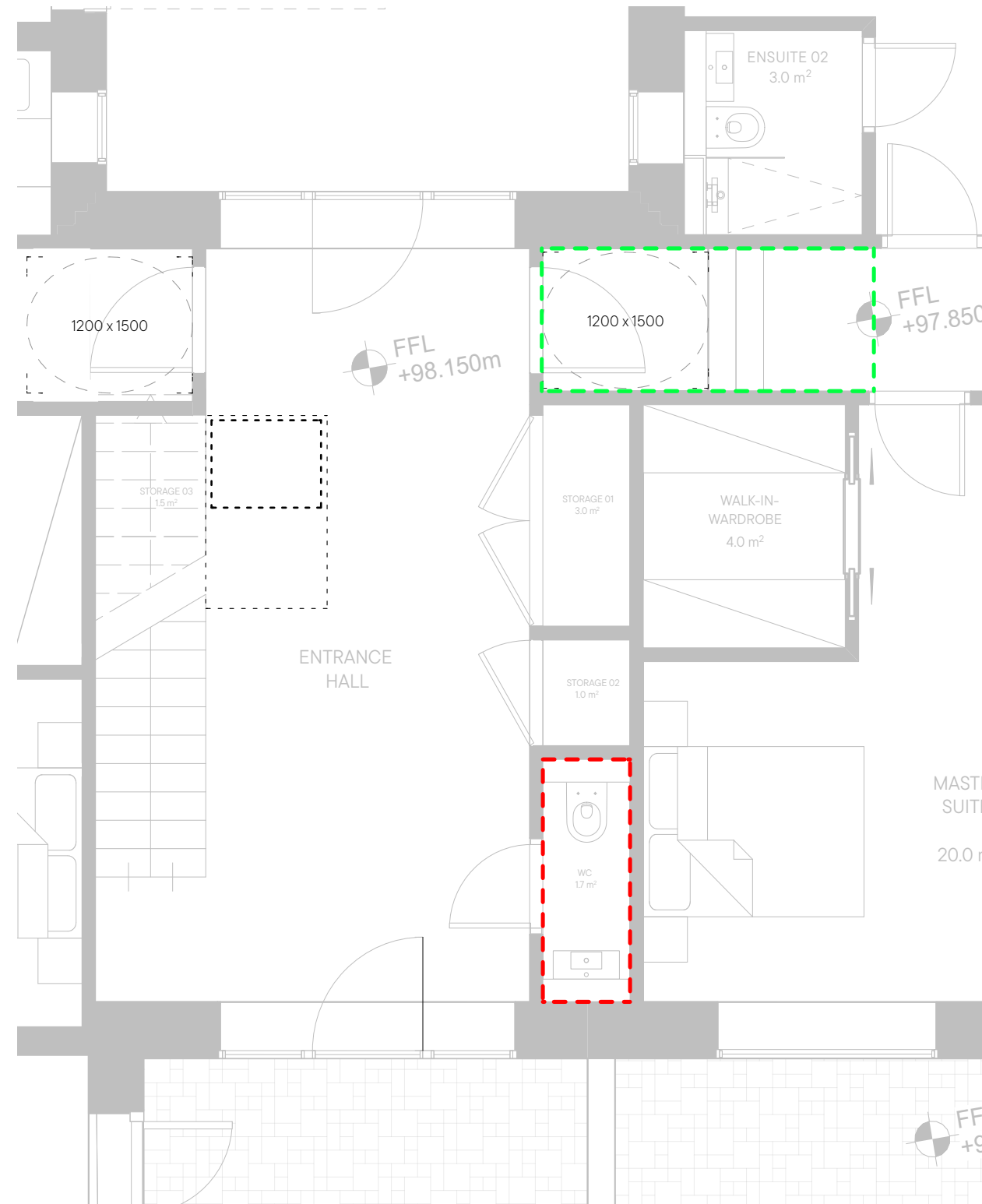


Figure 4.1: Ground floor entrance level with suitable circulation zone to accommodate a future platform lift.

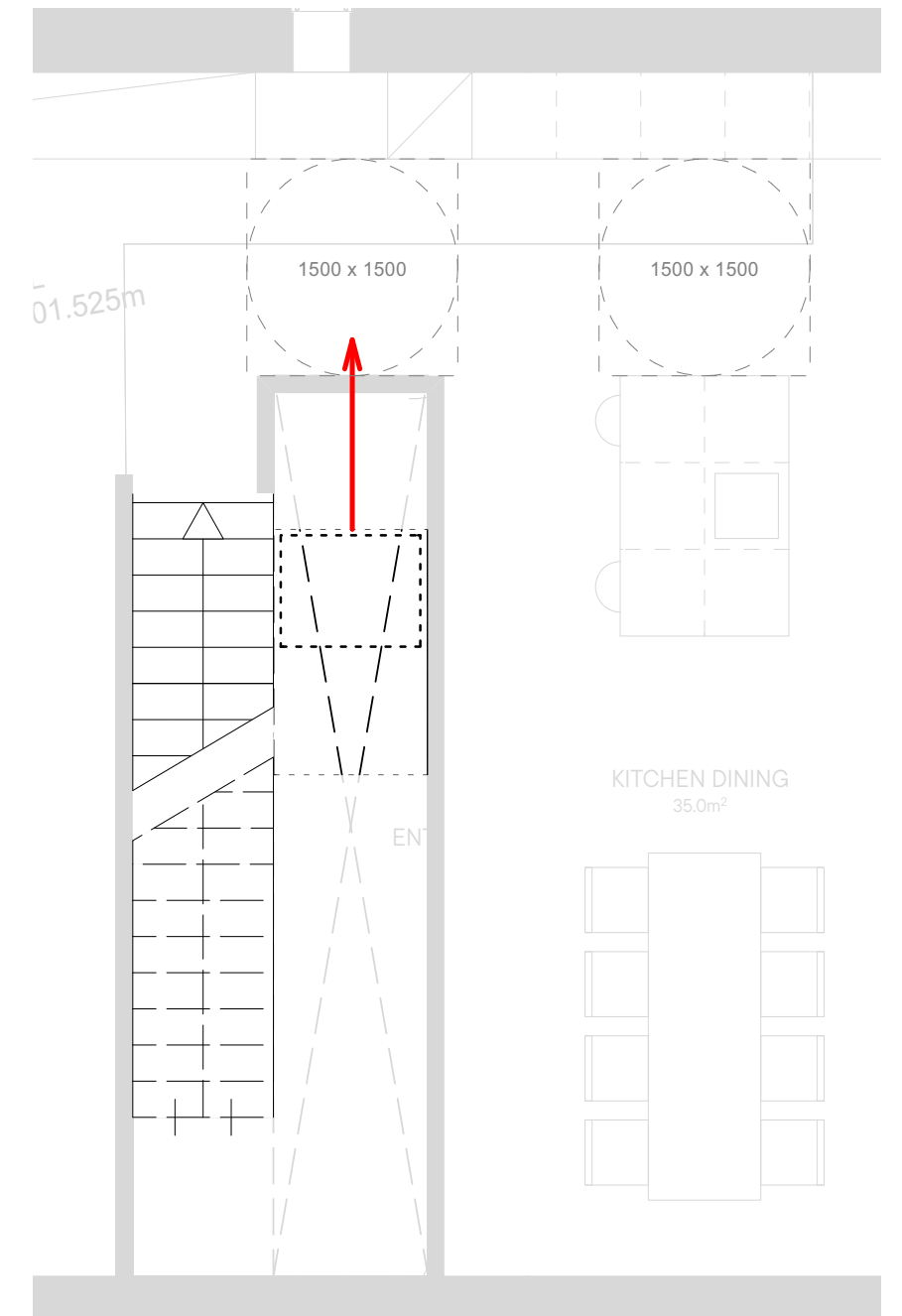


Figure 4.2: First floor space has a minimum 1500mm access space to all kitchen units and dining space.

4.2 Refuse & Waste Managment

4.2.1 Refuse

Refuse and waste management for the dwelling has been designed in line with the requirements for kerbside collections set out in Haringey Local Plan SPG 8a (A3).

Secure storage is to be provided for:

- 1no. 240L wheelie bin for refuse
- 1no. 240L wheelie bin for recycling
- 1no. food waste box (350mm D x 300mm W x 360mm H)
- 1no. garden waste sack (450mm D x 450mm W x 600mm H)

Collections are to be made kerbside from St James's Lane in line with kerbside collections for all other existing residential properties to the street.

A managed solution is proposed, whereby, refuse is held in the designated storage areas until collection day. On collection day the Applicant will arrange for all refuse to be transferred to the end of the entrance drive. The temporary holding position will ensure suitable collection distances for refuse workers whilst ensuring the public footpath is not impacted.

- Refuse taken to kerbside by applicant
- Kerbside collection by refuse worker

Key

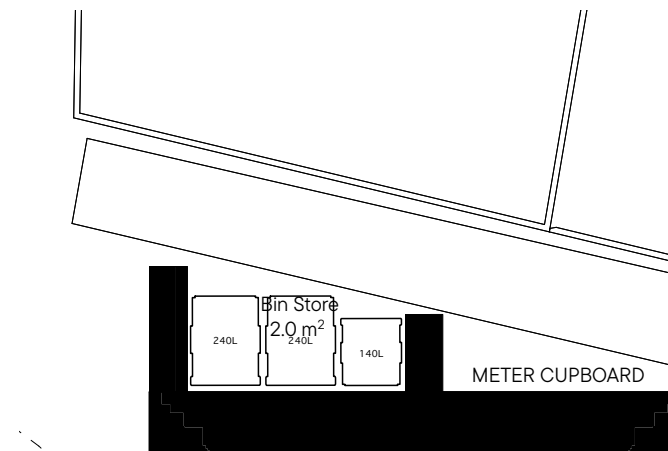


Figure 4.3: Location of wheelie bins & waste box north of site.



Figure 4.4: Refuse and waste strategy analysis.

4.3 Access & Transport

4.3.1 Access

The site has a PTAL rating of 4 and is served by several nearby bus routes on Muswell Hill Broadway and surrounding roads. The closest tube stations are East Finchley and Highgate to the west. To the east is Hornsey National Rail station.

Pedestrian and vehicle access is via a 4.7m wide driveway which forms part of the site area.

4.3.2 Swept Path & Turn Table

A large single garage is included as part of proposals. This can be accessed via the driveway described above. Swept path analysis demonstrates that access in forward gear can be achieved in a single manoeuvre, whilst egress requires a more complex series of manoeuvres to achieve a forward gear exit. Therefore, to ensure suitable safe access arrangements to the garage for larger vehicles a car turntable is proposed. This requires minimal excavation (200mm) and is powered by a standard 13a connection.

There is a pedestrian Right of Way for Bishop's View Court which is unaffected by the proposals.

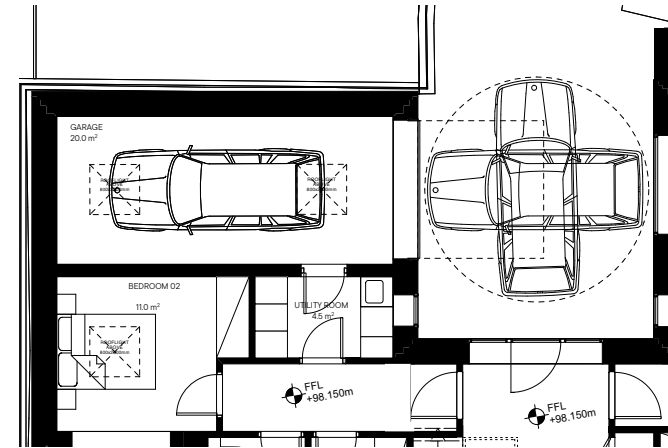


Figure 4.5: Turn Table at main entrance.

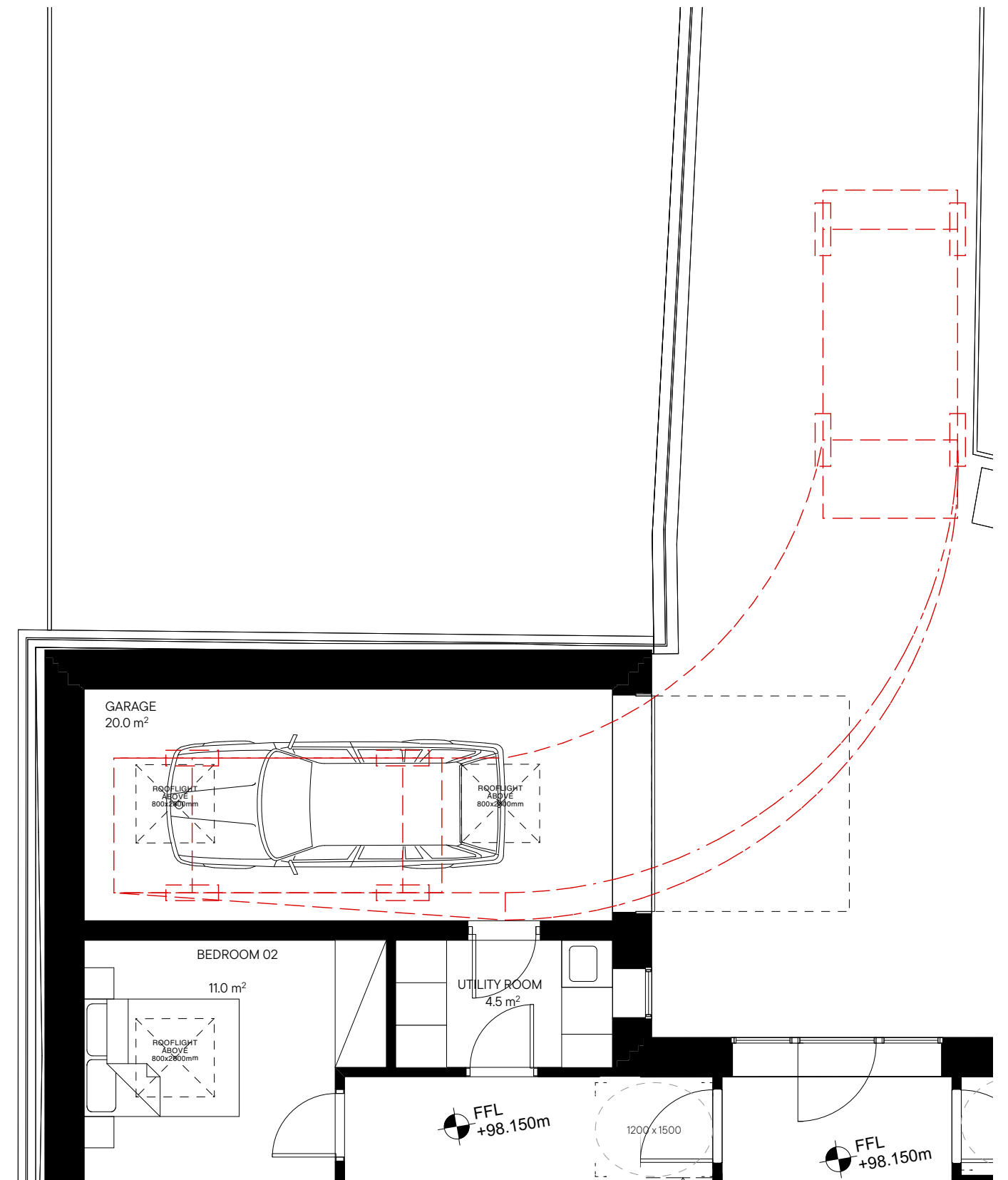


Figure 4.6: Swept Path Analysis.

5 Appendices

5.1 Area Schedules

5.1.1 Building Schedule Summary

As part of the application, we have audited the areas previously indicated and identified a number of discrepancies and observations:

- The existing planning consent indicates a total GIA of 197 sqm. When re-measured the total is 289 sqm. It appears that the ancillary garage spaces were discounted from the GIA measure, despite them contributing to the overall quantum of development.
- The proposed scheme has a GIA of 255sqm, representing a 34 sqm reduction in overall quantum of development.
- The total massing at first floor has been reduced by 23 sqm, which reduces the extent of visible development from neighbouring buildings.
- Existing consented room areas are incorrectly labelled. These include, but are not limited to, the master suite, labelled as 30 sqm but measured as 37 sqm and dining area, labelled as 25 sqm but measured as 41 sqm.
- Overall external amenity space is reduced by 39 sqm, this is primarily owing to the removal of accessible garden spaces at first floor to remove issues of overlooking.
- It should be noted that the overall application site area of 475 sqm was remeasured and found to be accurate.

All proposed areas are in line with, or in excess of, those required by The London Plan.

Area Schedule

Existing Consent		Proposed		Difference	
	GIA (m2)		GIA (m2)		GIA (m2)
Ground Floor	181	Ground Floor	171		11
First Floor	107	First Floor	84		23
Total	289	Total	255	Total Diff.	34
Private Ext. Amenity	227	Private Ext. Amenity	188		39

Figure 5.1: Land at rear of St James's lane existing consent and proposed scheme area schedule.

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