

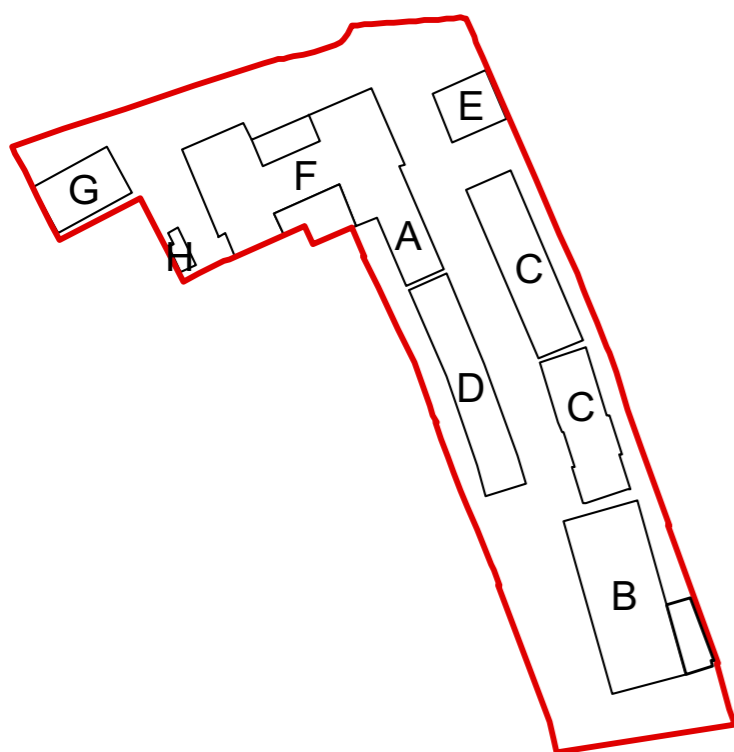
#### 4.4 Scale & massing

The site is in a mainly low-rise residential area and therefore the proposals have been mindful of this surrounding context. The general approach taken has been to keep the houses at a similar scale to their immediate neighbours, achieved by providing accommodation within the mansard roof on the second or third storey.

The proposed industrial building located off Edwin Road is designed to suit a multitude of possible uses. For the primary warehouse structure this requires a minimum height of 7.5m to the roof eaves and 10m to the roof peak, equivalent to a two storey residential building. A change in material above 3m reduces the scale of the elevation. The primary structure is set back from the boundary and the affordable industrial element is single storey aligning with the white brick base and boundary wall, minimising impact on the neighbouring houses.

As you move through the site towards the river, the buildings rise up in scale, with buildings at two, three, four and five storeys in height. The building footprints are bigger in this location matching their neighbours and the typical urban grain as you approach the river. These buildings have been broken up into smaller forms through the use of varied materiality and roofscapes, helping to embed the buildings into the existing townscape.

The majority of the dwellings (82 of 97 homes) are in buildings three storeys and below. The tallest building is similar to the recently approved affordable housing (19/2789/FUL) immediately to the east of our site. This taller massing has been positioned away from boundaries in a location which has the least impact on surrounding properties whilst adding interest and variety to the roofscape when viewed from more distant locations.



Building label key



Proposed massing showing heights in relation to context

### 4.5 Scheme layout & positioning

The layout and positioning of the scheme has been informed by the urban grain of the local context and its history, as well as key site constraints such as the existing sewer line and the 8m river corridor.

Firstly the Edwin Road frontage provides the industrial element of the scheme and better access, and responds to the existing industrial uses opposite. The footprint of the building has been positioned to avoid the sewer line, but has been pushed further away from the Norcutt Road houses, giving them better access to daylight and sunlight.

At the opposite end of the site and accessed via the existing Crane Road entrance the building forms are larger and set further apart as is common in the neighbouring context. The buildings have been laid out to avoid the creation of single large buildings which would be over dominant for the area. Instead there are four distinct building forms that can be read individually. These buildings have been set-back from the river edge to retain a minimum of 8m from the river bank, reducing the buildings impact from key views on Crane Park Recreation Ground and providing space for surface parking and riverside. A landscaped podium garden within the two apartment buildings conceals additional parking at ground floor.

The mews street is set at 13m wide, similar in width to many of the neighbouring streets. This allows for a driveway and front garden to the houses on the east side, and an integrated garage to the houses on the west side, whilst maintaining a large shared surface road and walkway. The houses are not centred on the site boundary so as to avoid the sewer line and increase the separation distance from the adjoining houses. This creates a greater separation distance than that of the streets to the east. The tight urban grain of the street and those nearby creates a clear domestic scale, level of comfort and safety when walking down the street, and sense of community. Gaps have been introduced in the east terrace to provide relief between the building and matching neighbouring streets. In addition the houses also step in and out, adding a playfulness to the street frontage, as well as further breaking down the massing of the terrace.

At the end of the street is the industrial building, which presents a walled end giving a natural cul-de-sac with space for vehicles to turn.

#### Surrounding proximity analysis

The surrounding residential street widths (marked in yellow) vary from the narrowest at 10-11m to approximately 19-20m at the widest points.

The distance between the rear of the surrounding housing (marked in green) range from 9m at the narrowest to 36m at the widest point.



Block plan showing street and garden widths

### 4.6 Industrial building layout & positioning

The industrial building has been designed to meet current market standards whilst minimising impact on near neighbours. The regular orthogonal shape creates the most flexible and usable spaces for a range of industrial uses.

The layout facilitates large vehicle movements with four loading bays provided. Front entrance doors sit adjacent to these loading bays giving clear legibility to visitors and users.

The layout has been designed to be used as one large space or subdivided in up to four units in the main warehouse and affordable E use is provided in the one storey element to the south. Mezzanine levels are provided at the front of the building for areas of office or storage. The units are provided with external space to the rear as amenity space for workers.



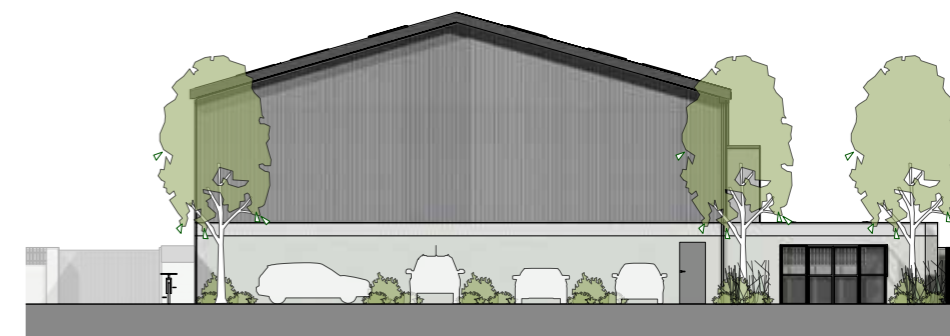
Elevation A



Elevation B



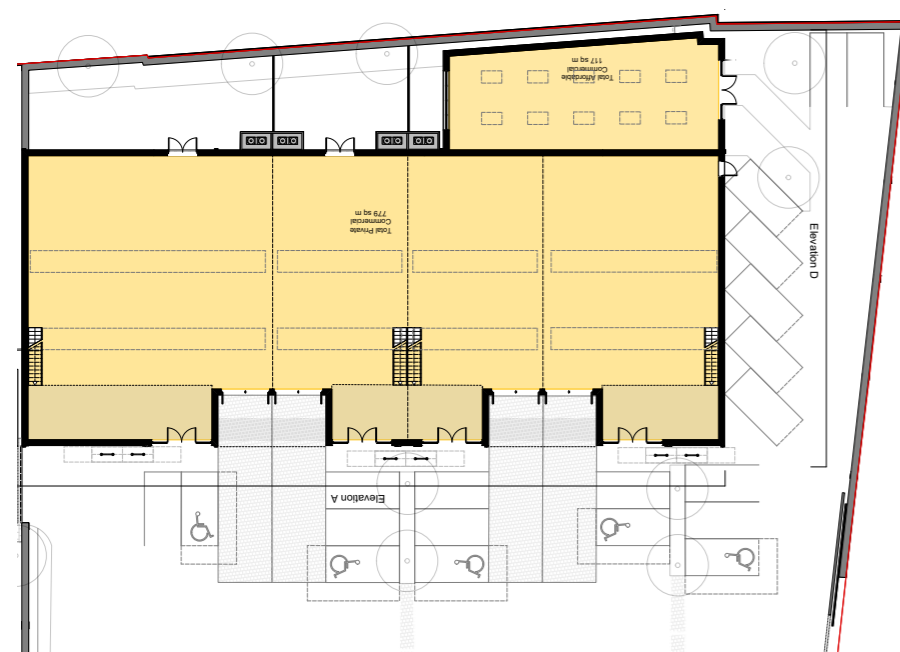
Elevation C



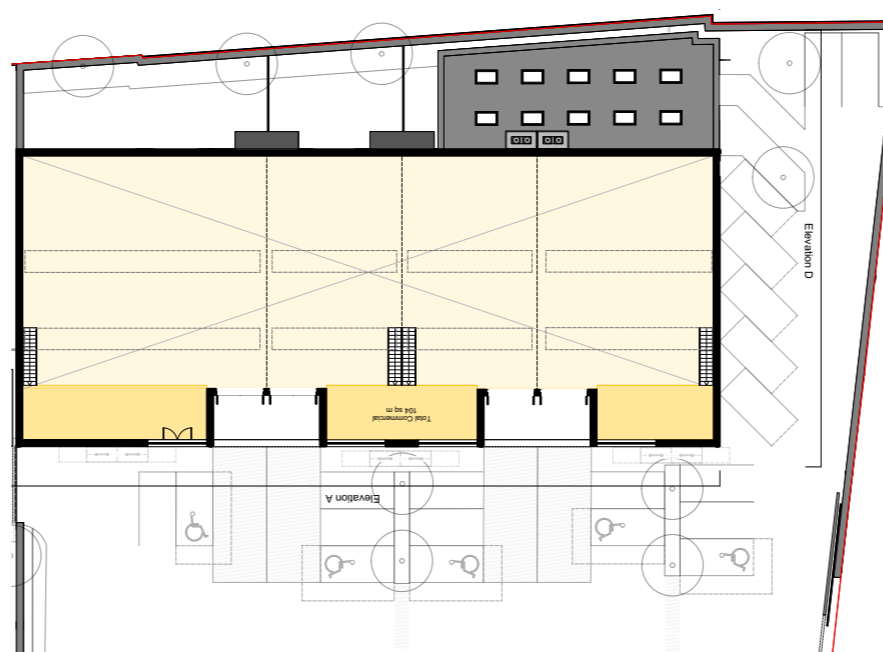
Elevation D



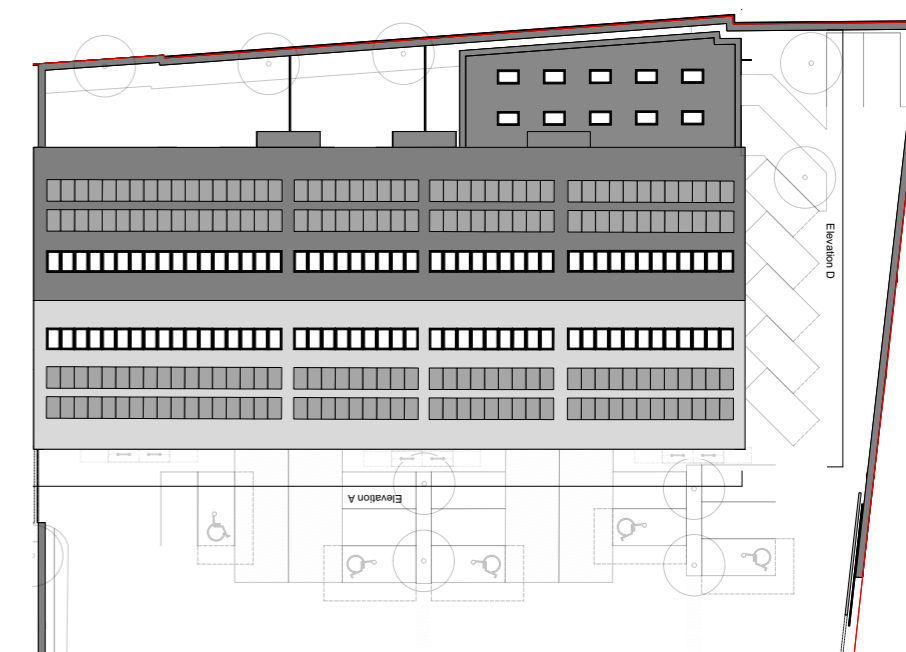
Positioning and adjacencies diagram



Ground floor plan - Industrial building



First floor plan - Industrial building



Roof plan - Industrial building

## 4.7 Aspect & arrangement

The proposals have been laid out in order to maximise dual-aspect dwellings where possible and avoid single aspect north facing homes. Across the scheme the proposals achieve 80.5% dual aspect dwellings. There are no single aspect north facing homes. All of the two, three and four bedroom homes benefit from dual-aspect.

The majority of apartments have very few dwellings per core. Building A and E have two apartments per core for all floors. Building F has two cores, the first accommodates between four and seven apartments per core, the second between four and eight apartments per core. This second core also includes two lifts.

### Location - house types

The residential element of the scheme is characterised by a rich variety of house types and building to provide visual interest from the public realm and greater choice for possible occupants.

The variety of house types and apartments are key to the creation of the character of the development. Within each of the house types there is also a variety of external finishes providing further variation along the street front and matching surrounding typologies.

### Location and layout - Industrial building

The industrial building is set away from the boundaries and is orientated east to west. The rectangular form suits the industrial uses that the building will be used for. The front of the site is enclosed by a boundary wall and sliding gate to secure the industrial buildings when not in use.

### Layout - apartments

Apartments have been designed to meet the following key principles:

- Floor areas in line with those required by the National Described Space Standards (NDSS) and London Plan
- Each apartment to have access from the living space to private external amenity space in the form of a balcony or terrace with living/kitchen/dining largely open plan
- In general, living spaces to have aspect on two sides where possible with good natural daylighting as a high proportion of the apartments are dual-aspect

### Layout - houses

Townhouses have been designed to meet the following key principles:

- Floor areas in line with National Described Space Standards (NDSS) and London Plan
- All living spaces to have direct access to the garden
- All houses to have a parking space in the form of a garage or driveway
- Recessed entrances
- Window boxes for plants
- Separate cloakroom for utility cupboard

### Accessible homes

Accessible homes are distributed across the scheme and take the form of both apartments and houses as detailed in the access section of this report. In accordance with the London Plan, 10% of all dwellings are M4(3) compliant. The remaining dwellings are M4(2) compliant. The layouts for the accessible/adaptable houses and apartments are included in the appendices of this document.



Typical floor showing aspect and dwellings per core



House type locations



Accessible M4(3) house type and apartment locations - typical floor



### 4.8 Privacy & overlooking

Privacy and overlooking has been a key consideration throughout the design process due to the sensitive location of the site. The section on this page shows the typical distance between the proposal and neighbouring houses on Crane Road and Norcutt Road.

#### West terraced houses (building D) and apartment building A

As is demonstrated in the section, the west terrace is set a considerable distance from the rear of the Crane Road houses (circa 22m at the closest point). Views into the rear gardens will be mitigated through planting and enhanced boundary treatment as detailed in the landscape section of this Design and Access Statement.

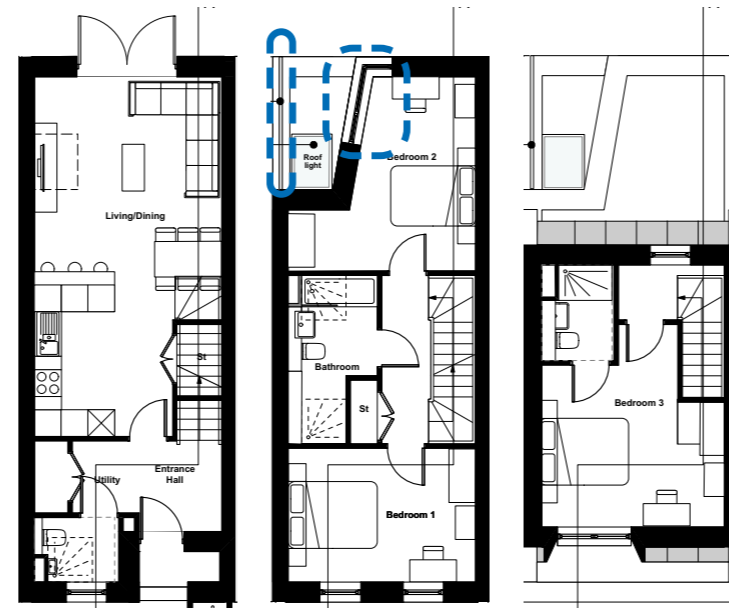
#### East terraced houses (building C)

The east terraced houses of the proposals is approximately 9m from the rear of the Norcutt Road houses at the closest point. This is a significant improvement on the current outlook with existing buildings occupying the full width of the plot, and is also a common condition within this area of Twickenham, with the houses on the opposite side of Norcutt Road having a similar condition with the Warwick Road houses. In order to mitigate potential overlooking and loss of privacy of the houses on Norcutt Road, the rear elevations of the east terraced houses have been designed with reduced window openings at the upper floors and a frosted finish. These windows all serve a bedroom or bathroom. The bedrooms benefit from a second larger window which does not face the Norcutt Road houses.

In addition, the rear of the east terraced houses has been designed to reduce the massing facing the houses opposite and increase the daylight and sunlight into the rooms. This has been achieved by angling the rear of the first floor level of the houses and introducing a corner window. The window facing the rear garden will be obscured glass to avoid direct overlooking. The window on the angle will provide oblique views to the gardens. A privacy screen on the party wall between the houses will prevent direct overlooking.

#### Industrial building

The industrial building has no windows on the east elevation facing Norcutt Road's houses and as such avoids any overlooking.



Typical east terrace floor plans with angled opaque glazed window and privacy screen highlighted in blue



View showing the rear elevation of the east terrace houses with opaque frosted windows and privacy screen highlighted in blue



Sketch perspective section overlooking distances

**Apartment building E**

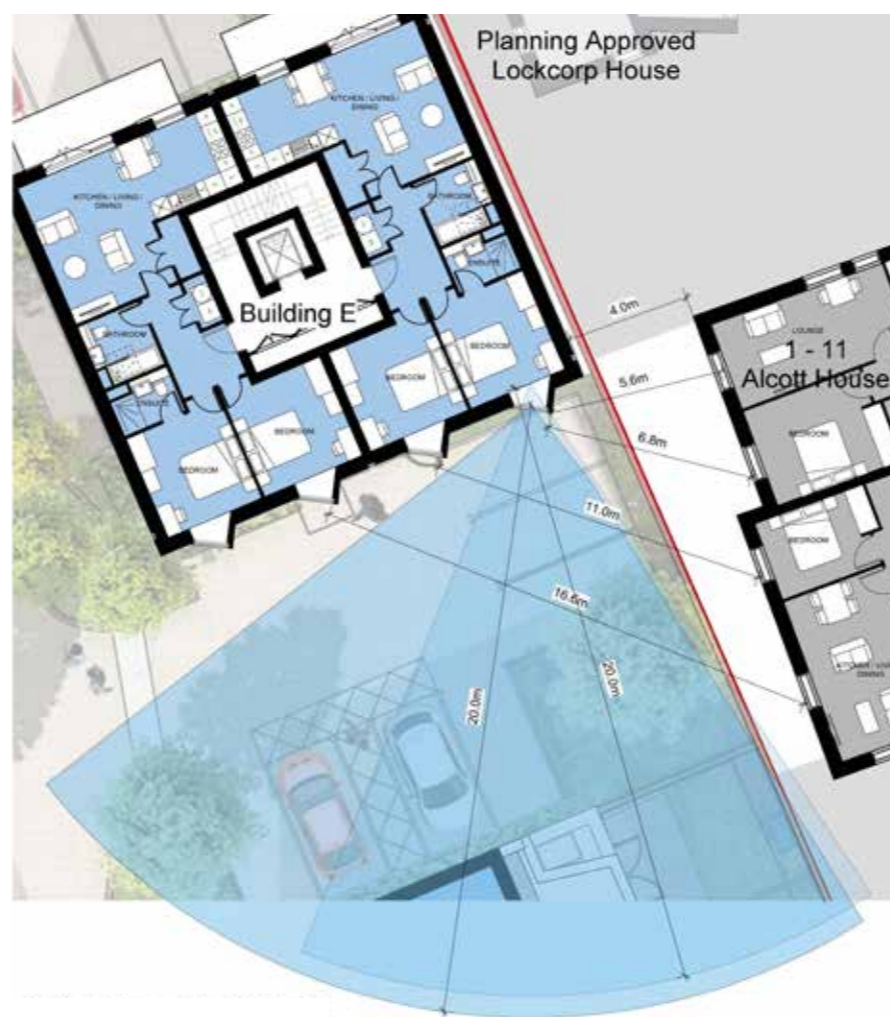
Building E adjoins the eastern boundary, Alcott House, and the approved application for Lockcorp House. In order to ensure privacy, Building E has been designed to incorporate directional oriel windows facing away from Alcott House. This has been tested and modelled to ensure overlooking is not possible between buildings. Flank walls are also proposed along the east and west elevations and balconies located along the north elevation, away from adjoining dwellings.

**Apartment Building F**

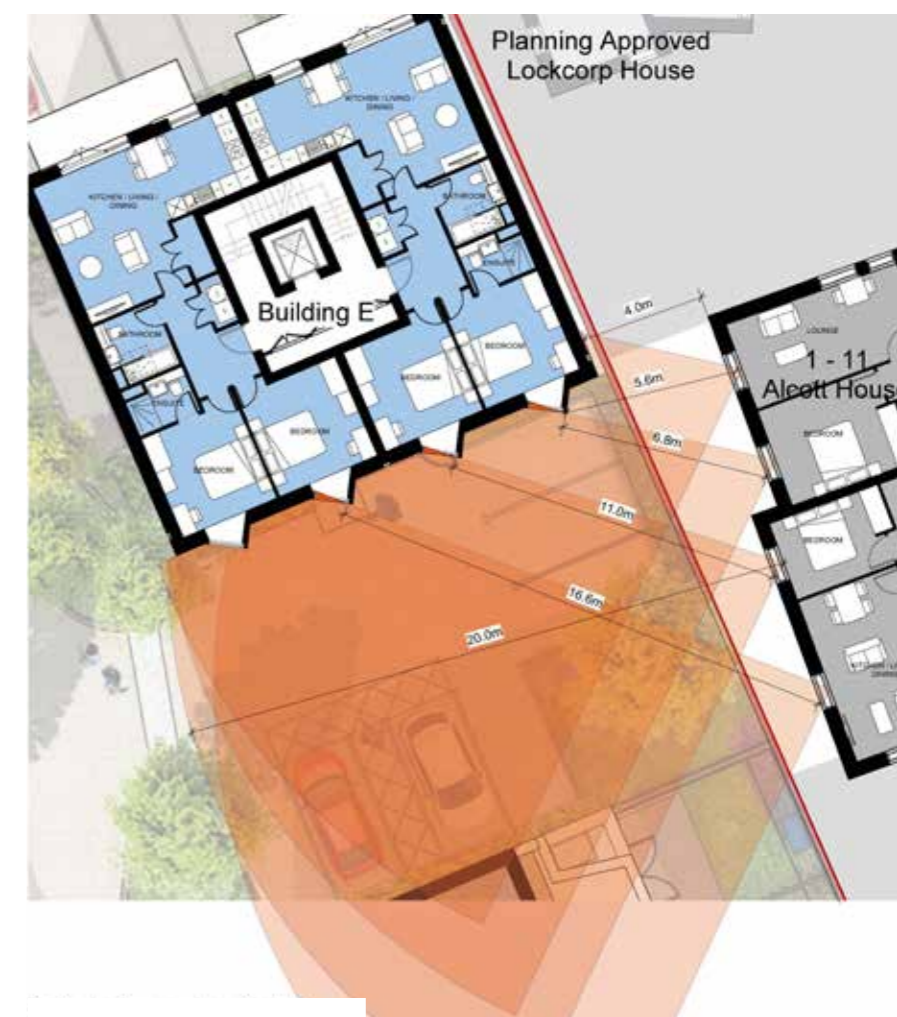
Following consultation the size and number of windows were reduced where windows faced towards neighbouring properties on building F. In all instances the remaining windows are more than 18m away from neighbouring windows. Further mitigation is provided by retaining the existing factory walls along the party wall lines adjacent to the Crane Road houses; this ensures the podium terrace cannot overlook neighbouring gardens.

**Houses Building G**

Building G has been designed to avoid all overlooking to the rear of the Gould Road houses being one and a half storeys and utilising roof lights and a dormer window which faces towards the river.



Overlooking arc from Building E showing oriel windows mitigating views to Alcott House



Overlooking arc from Alcott House windows showing oriel windows mitigating views from Alcott House



Building key



View showing oriel windows on Building E in the context of Alcott House



View showing oriel windows on Building E from Alcott House windows

### 4.9 Residents' private amenity strategy

Ensuring all homes have an appropriate amenity space has been a key part of the design development process. During the consultation and design development process, the size of the rear gardens was increased to maximise the private amenity space. This means all three bedroom houses have an average 28.9 sq m private amenity space, which is secure and enclosed. This provides a safe place for children to play within the home. The design of these gardens is covered in the landscape section of this document. The gardens to the houses are a comparable size to other dwellings in the area and achieve the maximum possible on this site.

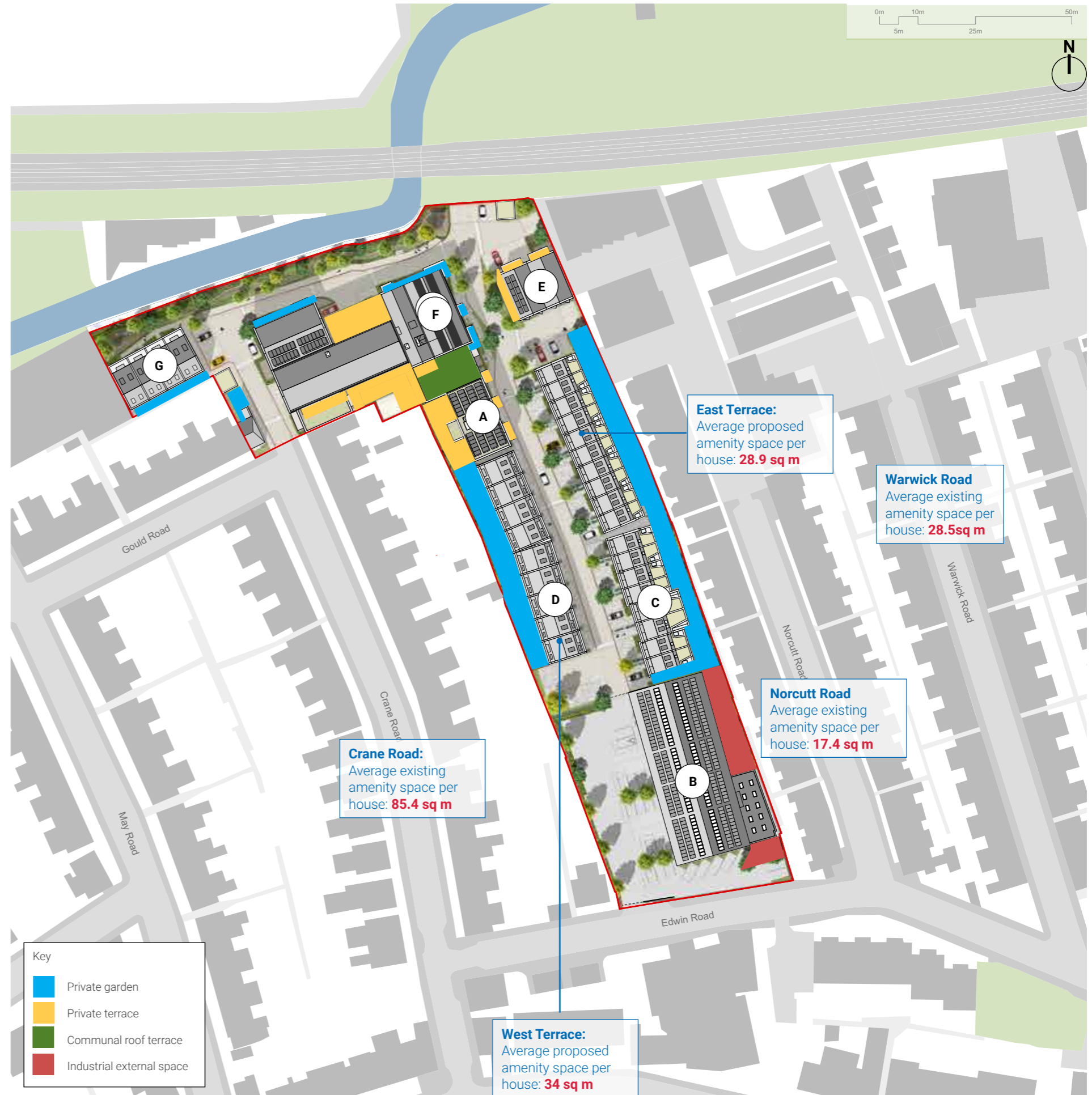
For the apartment buildings (A, E and F) and smaller two bedroom houses (G), amenity has been maximised with terraces (on the ground floor and roofs) and balconies, ensuring every apartment has a private amenity space either equal to or above the London Plan minimum requirements (with the exception of five no. one-bed apartments on the western end of Building F where balconies were replaced with Juliette balconies due to potential overlooking). Balcony locations can be seen in the diagram below and terrace locations can be seen in the diagram adjacent.

In addition to the private amenity, apartment building F benefits from a communal roof terrace that can be enjoyed by those living in the building. Except this one towards the centre of the site, there are no communal terraces on the roofs of apartment buildings; only smaller private terraces in order to reduce the potential for overlooking onto neighbouring properties.

The industrial use has been designed to accommodate external space to the rear of each unit for employees.



Diagram showing balcony locations (highlighted red) on Buildings A, E and F



Amenity space diagram



