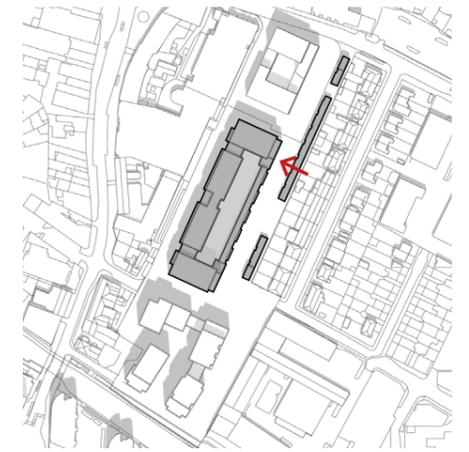


ILLUSTRATIVE VIEWS AND CGIS

View across Austin Road

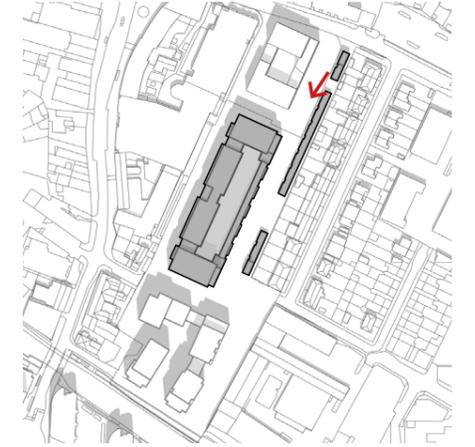


- M / 039
- M / 038
- M / 030
- M / 124
- M / 023
- M / 120
- M / 096

CGI is for illustrative purposes only. Please refer to the planning drawings for detail elevation design and material specifications.

ILLUSTRATIVE VIEWS AND CGIS

View South along Austin Road



M / 124

M / 120

M / 096

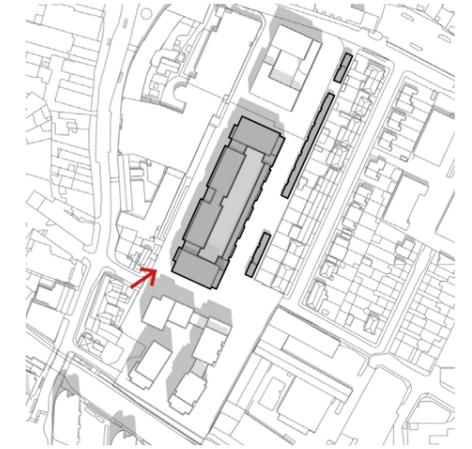
M / 062

M / 061

CGI is for illustrative purposes only. Please refer to the planning drawings for detail elevation design and material specifications.

ILLUSTRATIVE VIEWS AND CGIS

View North along Crown Close



M / 124

M / 120

M / 096

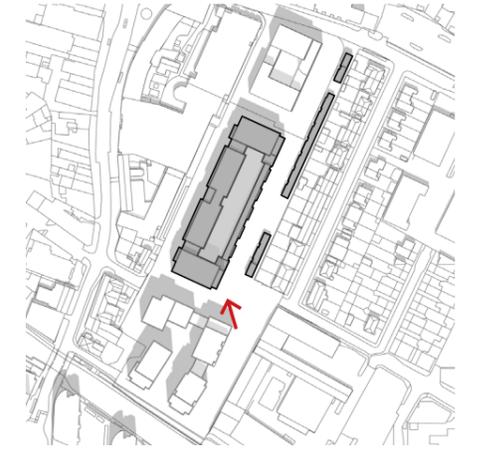
M / 062

M / 061

CGI is for illustrative purposes only. Please refer to the planning drawings for detail elevation design and material specifications.

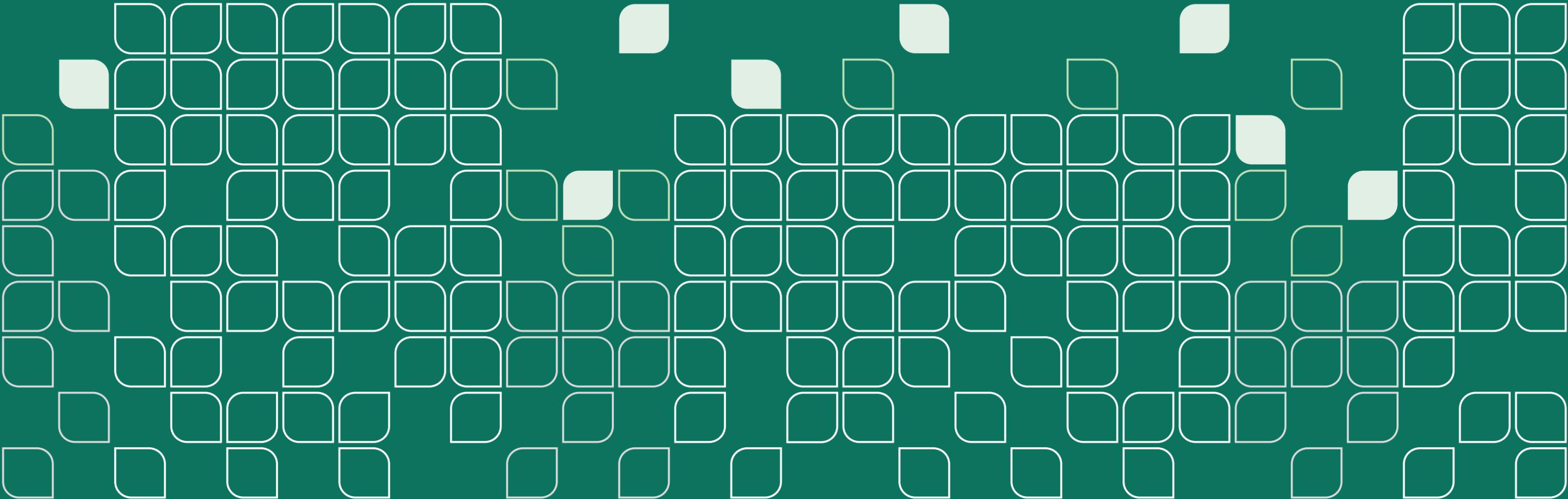
ILLUSTRATIVE VIEWS AND CGIS

View North towards Community Centre



CGI is for illustrative purposes only. Please refer to the planning drawings for detail elevation design and material specifications.

- M / 169
- M / 171
- M / 006
- M / 007
- M / 096
- M / 097



7. TECHNICAL CONSIDERATIONS

7.1 ACCESS, CLEANING AND MAINTENANCE

PLANT ACCESS

The ground floor plant rooms have level access, accessed either directly from the street or internally via the car parks in phase 3. There are two substations within the scheme, one in each phase. On-street loading bays have been provided adjacent to each phase as well.

ROOF ACCESS

The mid-rise block roofs (block C/D/E/F) will have access via full stair enclosure for maintenance, with an additional access hatch with ladder provided for means of escape only, providing safe and easy access for maintenance and equipment replacement purposes only. This will be secured to prevent access to residents. Any major plant replacement could also be done by crane from ground level.

The lower level roofs of the mid-rise block will have direct access from the adjoining residential corridor. These doors will be provided with access control to prevent use by residents.

Access to the green roofs atop the phase 3 duplexes (one storey change from podium) and town houses (one storey change from the duplexes) will be accessed via ladder. This ladder will either be non-permanent or fixed with a drop down that prevents ordinary use by residents. It has been coordinated with the podium landscape design.

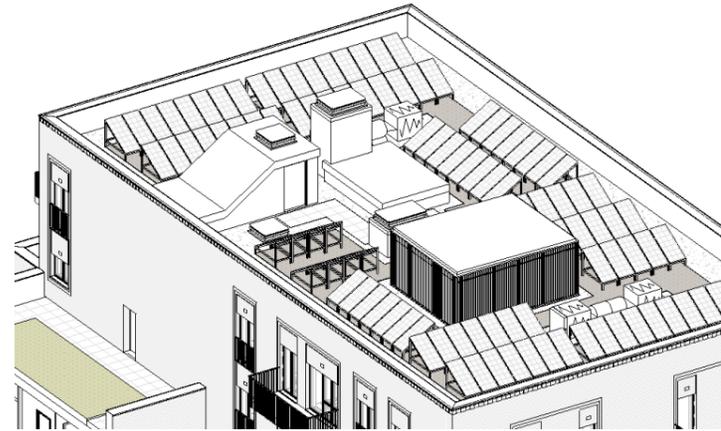
All parapets, except for houses have an 1100mm parapet for safe use by residents and/or maintenance workers.

The phase 2 houses will be maintained via Mobile Elevated Work Platform (MEWP), meaning that there is a lower parapet in these areas.

The access and maintenance strategy will be developed further at the next design stage.



PV panels on brown roofs

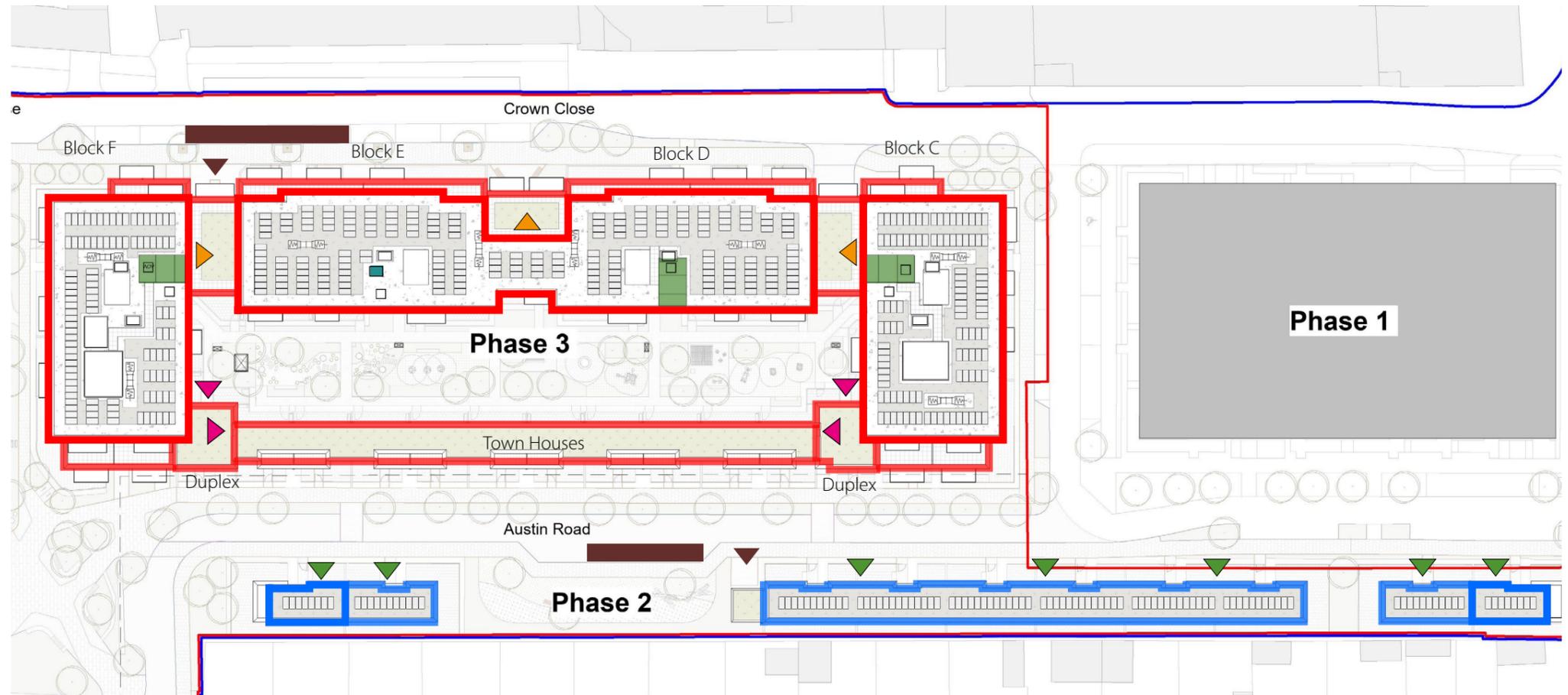


Roof layout with full stair enclosure for safe maintenance access
(Note: PV layout to be determined at technical design stage)

Key

- Phase 3 Roof parapet - 1100mm min
- Phase 2 House Roof parapet - 300mm min - maintenance to be carried out via Mobile Elevated Work Platform (MEWP)
- Full stair access with pop-up to roof level allowing safe and easy access to plant rooms and to roof, for maintenance only
- Escape only access hatch with ladder
- ▲ Access to green roofs via ladder (one storey height change from podium), for maintenance only
- ▲ Access to lower roofs via door at lower level with stepped access, for maintenance only
- ▲ Access to phase 2 house roofs via Mobile Elevated Work Platform (MEWP)
- ▲ Substation access at ground level
- On-street loading bay suitable for maintenance vehicle

ROOF PLAN ACCESS AND CDM CONSIDERATIONS



7.2 WINDOW CLEANING STRATEGY

Windows with level access, such as ground floor windows, podium level windows and balcony windows will be cleaned externally.

Façades with limited access and where required by overheating, windows have been provided with Juliet balconies to allow for these to be cleaned internally.

Windows that require external cleaning will be cleaned via poles up to level 6. Above level 6, windows will have self cleaning glass and when required will be cleaned externally via mobile elevated work platforms.



Pole Cleaning

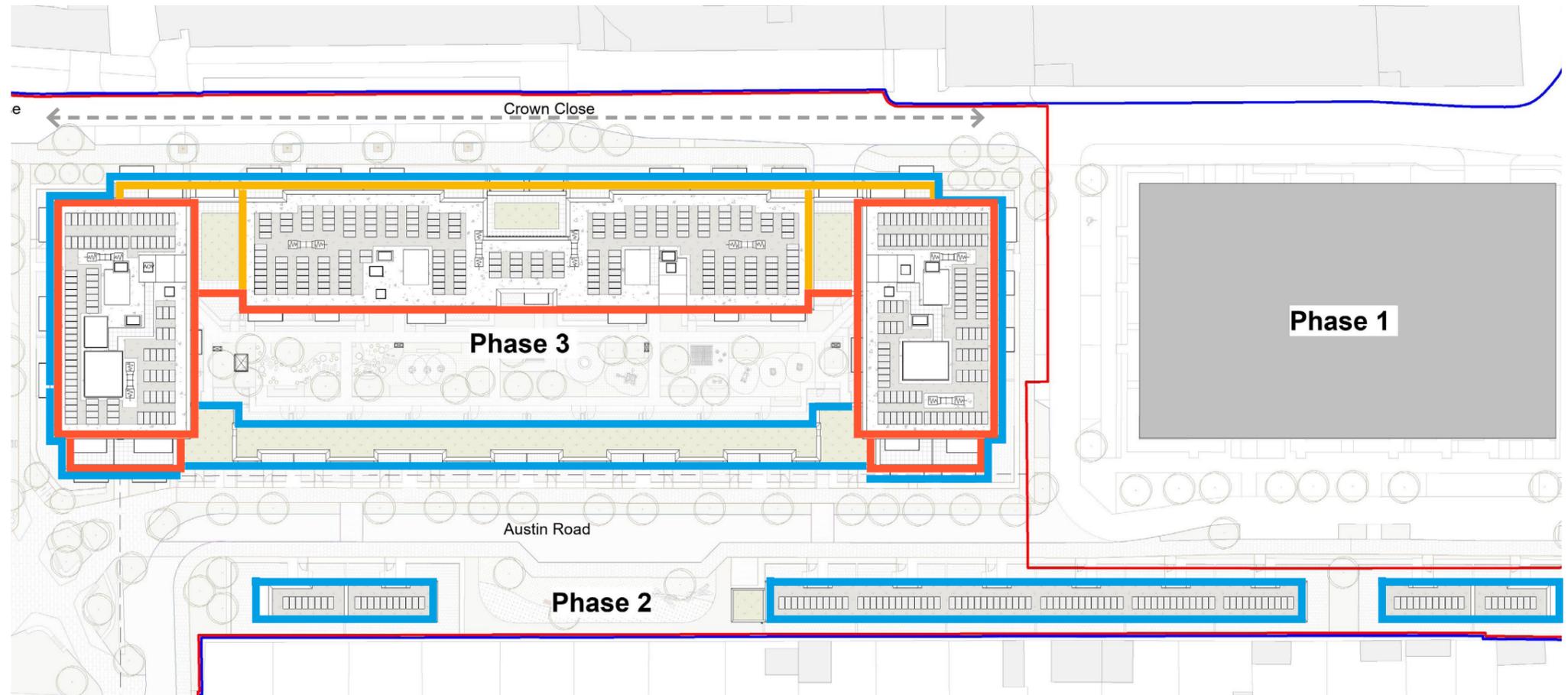


Mobile Elevated Work Platform (MEWP)

Key

- Windows to be cleaned externally by poles for up to level 6 (same as phase 1 courtyard)
 - Windows above level 6 will have self cleaning glass. When required, window to be cleaned externally by Mobile Elevated Work Platforms.
 - Windows to be cleaned internally - Juliet balcony
 - Mobile Elevated Work Platforms path 1.6m-2m wide
- *All balcony windows can be cleaned externally from the balcony.
- All ground floor windows can be cleaned from ground floor garden.
- All first floor windows onto the podium can be cleaned from the podium terrace.

WINDOW CLEANING STRATEGY



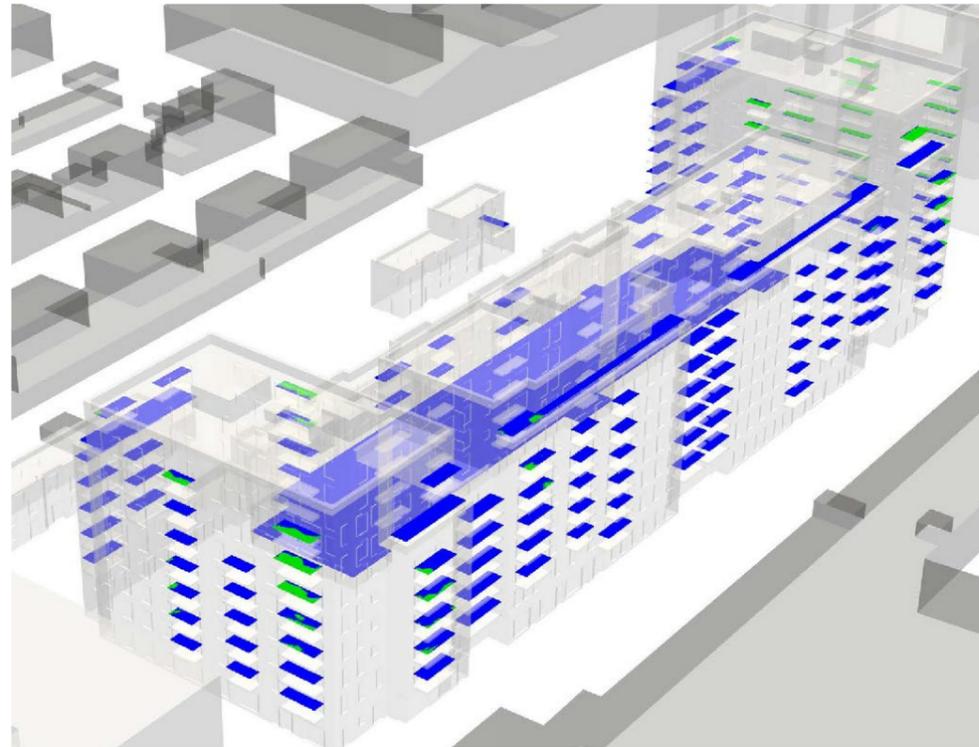
7.3 WIND TESTING

SUMMARY STRATEGY

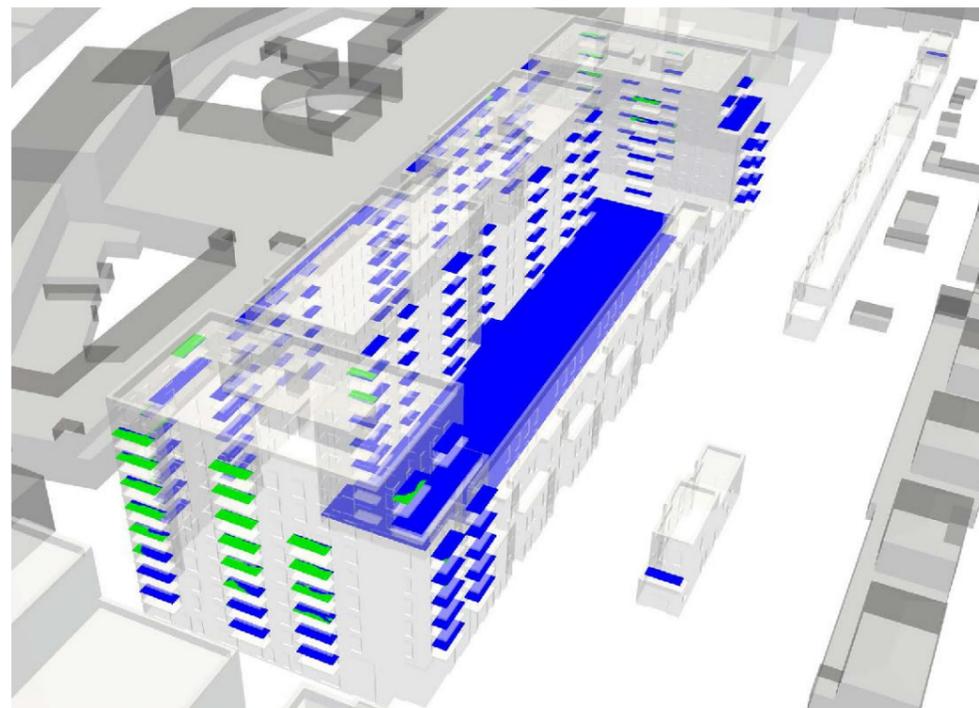
This study has been undertaken by WINDTECH Consultants to assess the wind microclimate around the proposed Phases 2 and 3 of the Hayes Town Centre development in London for the Reserved Matters Application. The key findings from the study are as follows:

- The wind conditions at ground and elevated levels are safe.
- The results of the assessment also show that the wind conditions at the ground level are suitable for the intended use in many areas. However, there is a minor exceedance where the wind conditions are unsuitable for intended use on a single entrance on the southern facade of phase 1.
- The results of the assessment also show that the wind conditions at the elevated levels are suitable for the intended use.

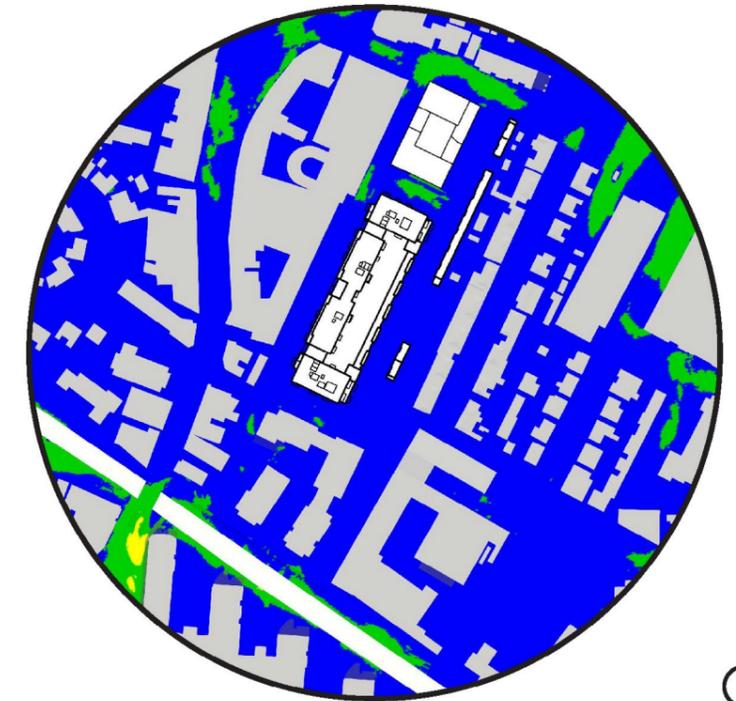
In the areas where the wind conditions are unsuitable for the intended use, mitigation measures have been implemented in the RMA proposals to ensure conditions are now suitable. For further detail refer to the wind environment report (Ref: WH580-04 F02(rev1) - CFD WE Report).



LAWSON COMFORT CONTOURS, SUMMER CONDITION



LAWSON COMFORT CONTOURS, SUMMER CONDITION



7.4 DAYLIGHT SUNLIGHT STRATEGY

SUMMARY

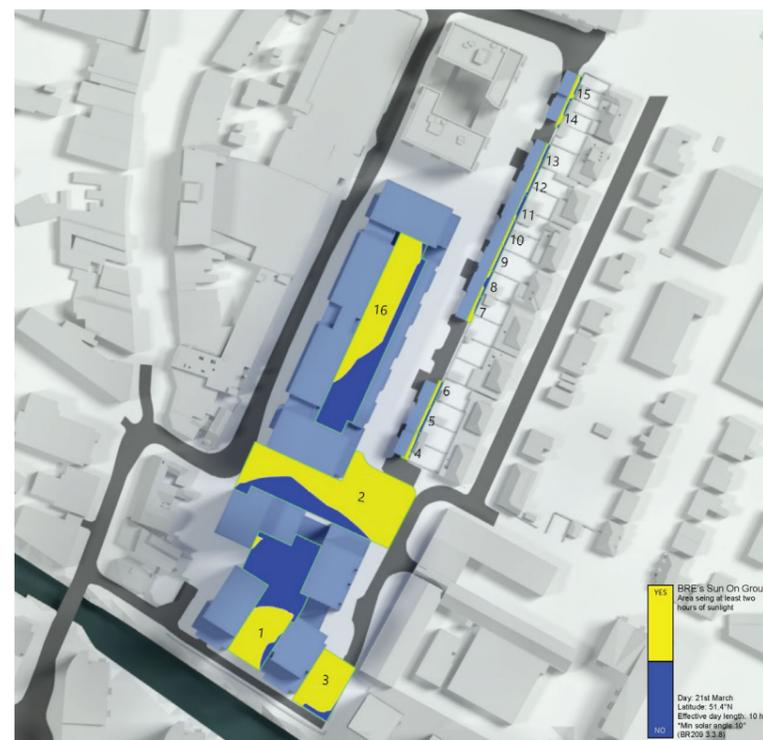
Daylight, sunlight and overshadowing have been integral to the development of the reserved matters scheme from the outset. The proposals have been informed by a comprehensive package of technical testing, ensuring that potential effects on neighbouring properties, future residents and on-site amenity spaces have been robustly assessed and appropriately addressed.

Detailed daylight and sunlight assessments have been undertaken for surrounding residential receptors, alongside sunlight amenity and overshadowing analysis for the proposed communal and private amenity areas within the scheme. The testing demonstrates that the layout, massing and orientation have been carefully calibrated to manage impacts and maintain a good level of environmental quality across the site.

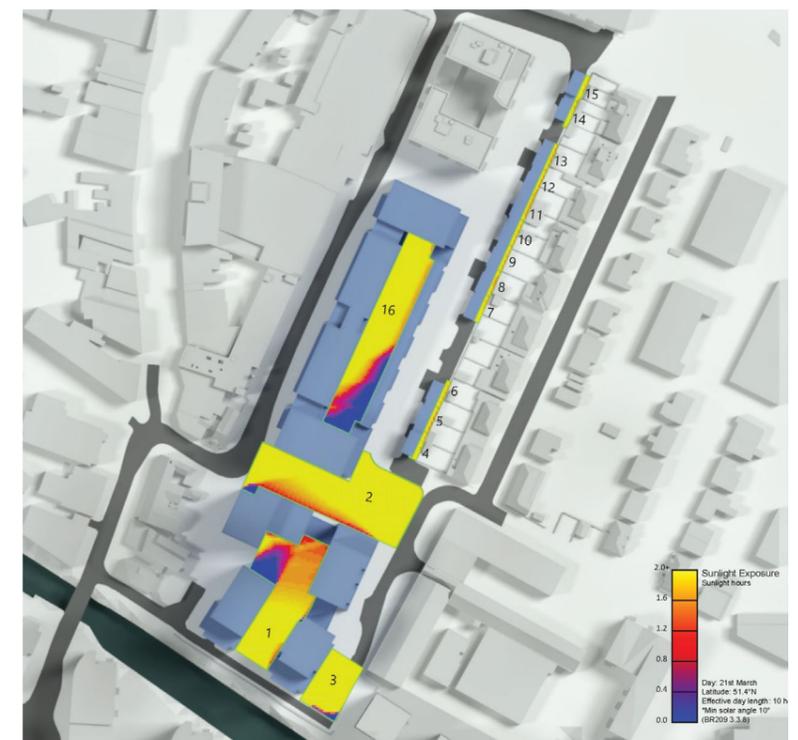
In addition, a full internal daylight and sunlight assessment has been carried out for the proposed accommodation. This confirms that the primary living spaces are well lit, with daylight performance optimised through unit arrangement, window placement and courtyard design. Where constraints are inherent to the urban context, the scheme has been designed to prioritise daylight to main habitable rooms, delivering a high-quality living environment overall.



SUNLIGHT AMENITY PROVISION, JUNE 21ST



SUNLIGHT AMENITY PROVISION, MARCH 21ST



SUNLIGHT EXPOSURE, MARCH 21ST

7.5 OVERHEATING STRATEGY



SUMMARY

This overheating risk assessment has been prepared by Watkins Payne on behalf of the London Borough of Hillingdon ('LBH') in support of a reserved matters application for the Land at Austin Road, pursuant to Condition 1 of the hybrid permission for the site. A Section 73 application (application ref: 76550/APP/2025/2864) is currently pending and will be determined prior to the approval of this Reserved Matters Application. Therefore, this RMA responds to the revised wording of the planning conditions within the Section 73 application.

The proposed scheme is for Phases 2 and 3 of the Hayes Town Centre Estate development providing 239 new homes alongside associated communal areas and a Community Centre within Phase 3. The purpose of this assessment is to evaluate the potential overheating risk across the development, including the Community Centre, and to demonstrate compliance with the Approved Document Part O (2021), CIBSE TM59 (2017) and CIBSE TM52 (2013), each applied in accordance with the requirements of the relevant building use.

An iterative modelling and design process has been undertaken to guide the development towards compliance with planning policy and regulatory requirements. Sequential dynamic simulations were carried out to test and optimise passive design measures and, where necessary, to incorporate targeted enhancements to the mechanical ventilation strategy, such as MVHR boost airflow and the provision of beneficial cooling via the integrated cooling coil. For higher risk dwelling typologies, notably selected townhouses, dedicated comfort cooling is proposed as a proportionate and targeted measure. This structured cooling hierarchy-led approach ensures that both phases of the development accord with the overarching objective of delivering a high quality, climate-resilient residential development, consistent with both local and regional planning policy expectations.

METHODOLOGY

Dynamic simulation modelling has been undertaken using EDSL TAS (version 9.5.7) for a representative sample of dwelling units across Phases 2 and 3, covering 63% of the total proposed residential units. The sample selection encompasses the full range of dwelling typologies and orientations across multiple floor levels, including those located in the most heat sensitive locations. All sampled dwellings have been assessed in accordance with the relevant CIBSE TM59 (2017) criteria for residential buildings. In addition, all communal areas, including internal corridors, staircores and entrance lobbies, have been

assessed separately using the corresponding TM59 criteria applicable to residential communal spaces.

The Community Centre, forming the non-domestic component of Phase 3, has been assessed independently in accordance with CIBSE TM52 (2013) to evaluate thermal comfort performance under both natural ventilation and mechanically conditioned scenarios.

All assessments have been undertaken using the DSY1 (2020s high emissions, 50th percentile) weather file for London Heathrow, as required by Part O, CIBSE TM59 and CIBSE TM52.

COOLING HIERARCHY

The proposed overheating mitigation strategy for the residential and non-residential elements of the development has been developed in accordance with the cooling hierarchy set out in the London Plan (2021) Policy SI 4 Managing Heat Risk, adopting a passive first design approach that seeks to minimise reliance on active cooling and ensure that acceptable thermal comfort conditions are achieved through inherently low energy measures wherever practicable.



7.6 TRANSPORT STRATEGY



SUMMARY

The development boasts excellent accessibility (PTAL 4-5) due to its central Hayes location, offering easy walking access to amenities, strong cycle routes (88, 88a), and immediate access to Hayes & Harlington Station (Elizabeth Line for London/Heathrow) and numerous bus services.

Key design updates from the previous Masterplan (S73) are minor, except for a significant change to Austin Road, which will become a one-way southbound carriageway. This change aims to maximize garden space for homes, align with other agreements, reduce traffic, and maintain existing local traffic patterns.

PEDESTRIAN AND CYCLE INFRASTRUCTUREs prioritized, with wide footways, new public realm areas (including a shared-use path), and safety features like drop-kerbs and raised crossings on Austin Road. Ample secure cycle parking is provided for residents (two-tier and individual house stores) and visitors, plus a proposed contra-flow cycle lane on Crown Close.

CAR PARKING is limited, with 42 spaces (8 blue badge) in a Phase 3 undercroft (0.18 spaces per unit, meeting London Plan blue badge requirements) and additional on-street car club and permit-holder spaces, totalling 53 spaces for 239 units. EV charging is included.

SERVICING includes accessible bin stores for kerbside collection and loading bays strategically placed to not impede traffic. Emergency access is well-planned, with all key areas within safe distances for fire tenders.

The project involves minor highway land adjustments and anticipates the adoption of public realm, footways, and the realigned Austin Road by the local authority. A Transport Assessment Addendum concludes that the development will have a minimal impact on local traffic, generating only a few additional vehicle trips due to the site's highly accessible location and emphasis on sustainable transport.



7.7 STRUCTURAL STRATEGY



THE SITE

The development is located at National Grid reference 509953E, 179751N to the east of Hayes in the London Borough of Hillingdon. The site is bounded by Crown Close to the north, Pump Lane to the east, residential houses and Little Lane beyond that to the south, and the Grand Union Canal to the west. The Elizabeth Line and Hayes and Harlington station are located further west, beyond the Grand Union Canal.

The site is roughly rectangular in shape, approximately 19,500m² and contains many existing residential buildings up to 3 storeys high, however, there is one taller block named Skeffington Court which is 15 storeys high. These buildings will be fully demolished to make way for the new residential blocks named Hayes Town Centre Phases 2 and 3. Phase 1 of the project has recently been completed.

Hesi completed the site investigation for the Phase 1 site in December 2022. The site investigation noted that Made Ground was encountered across the site at variable depths of between 0.00m and 1.90m below ground level. The Made Ground is above the Superficial Deposits with a depth range of 0.80m to 1.80m below ground level. The Superficial Deposits is above Lynch Hill Gravel with a depth range of 5.50 to 5.80m below ground level. The Lynch Hill Gravel is above London Clay. A moderate inflow of groundwater was identified at 8.20m below ground level. The site investigation notes that the sulphate class for the concrete in contact with the ground should be Class DS-1 / AC-1. A new geotechnical site investigation will need to be carried out for the Phase 2 and Phase 3 sites; however, similar ground conditions are expected.

STRUCTURAL DESIGN PRINCIPLES

The phase 3 block will be constructed using a reinforced concrete frame and will be 9 storeys high. The structure will be supported on 350mm diameter CFA bored piled foundations with a capacity of 1000kN (Combination 2 BS EN 1997) U.N.O. These piles are generally grouped in 1, 2 or 3 pile groups and are tied into the ground floor slabs for lateral tying. RC columns and walls will be supported on RC pile caps with the ground floor suspended slabs also supported by the pile caps.

The superstructure for the phase 3 block will comprise of an RC frame with 225mm deep reinforced concrete flat slabs at typical upper floors and a column grid in the region of 6m. Rectangular or blade columns (typically 800mm x 225mm) will be utilised within the construction in order that they are concealed within

party walls and partially within external walls. In order to provide lateral stability to the buildings, to resist wind loads or notional horizontal forces, it is necessary to provide reinforced concrete shear walls (250mm thick) to transfer the loads into the foundations.

The Phase 2 houses will be constructed using traditional load-bearing masonry with posi joists to form the upper floors and RC suspended slabs at ground level. The houses will be supported on strip foundations. The strip foundations will extend down at least 1.80m below ground level to be supported on the Lynch Hill Gravel, which has an allowable bearing capacity of 210kN/m².

KEY ELEMENTS

The transfer beams, transfer slabs and all columns below them will be designed as key elements.

DISPROPORTIONATE COLLAPSE CLASSIFICATION

For the phase 3 apartment building, the structure is 9 storeys of residential accommodation, giving the buildings a class of 2b in accordance with table 11 of Part A of the approved documents. Classification 2b requires effective horizontal and vertical ties for all floors, walls and columns.

Phase 2 houses, the structures are up to 3 storeys of residential accommodation, giving the buildings a class of 1 in accordance with table 11 of Part A of the approved documents

PERFORMANCE CRITERIA

All elements of structure will be designed for a life of 60 years. Unless specified otherwise, tolerances will (where applicable) be within the limits given in BS EN 13670-2009.

MATERIALS

Unless noted on the drawings otherwise all concrete will be grade C32/40 and all steelwork will be grade S355.

DEMOLITION

All blocks are constructed as reinforced concrete frames. There are no elements or design principles that should be unusual for a competent contractor.

STANDARDS AND REFERENCES

All designs are to be carried out in accordance with the appropriate Eurocodes, Codes of Practice and the Building Regulations.

IESISSTRUCTURES