

Section 7
The Consented Scheme
Conversion Block Issues &
Challenges
East Elevation

Challenges with material choices:

- Issues with drainage and adds construction complexity to inset terrace design
- This would be difficult to retain to an acceptable standard
- Timber is considered combustible and can't be used as part of the facade

East Elevation Design Development
_ Consented Block M



Consented Block M East Elevation



Section 8
Our Vision



A unique development for
Gravesend

Celebrate the virtues of the
existing building but being
realistic with the original
structure

A buildable and deliverable
solution

Make optimal use of land
which is currently vacant
and underutilised

Delivery of a high quality well
designed and well considered
building which respects and
enhances the areas history

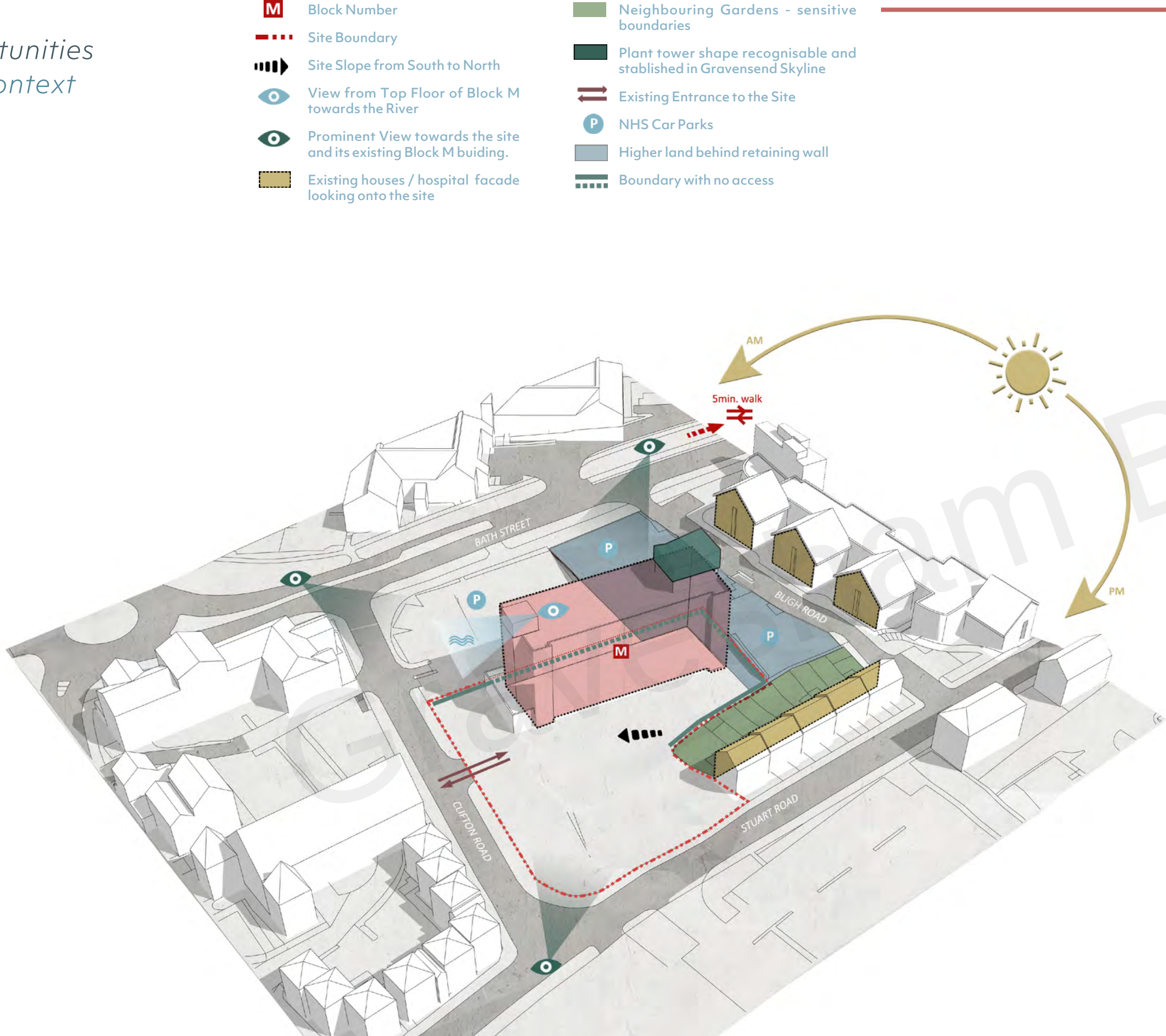
Revisit elevations and materials
considering a non-combustible
approach

Improve flat layouts and ensure they
comply Nationally Described Space
Standards and Part M building
Regulations

Develop a site wide energy strategy,
incorporating the plant sensitivtly
within the development

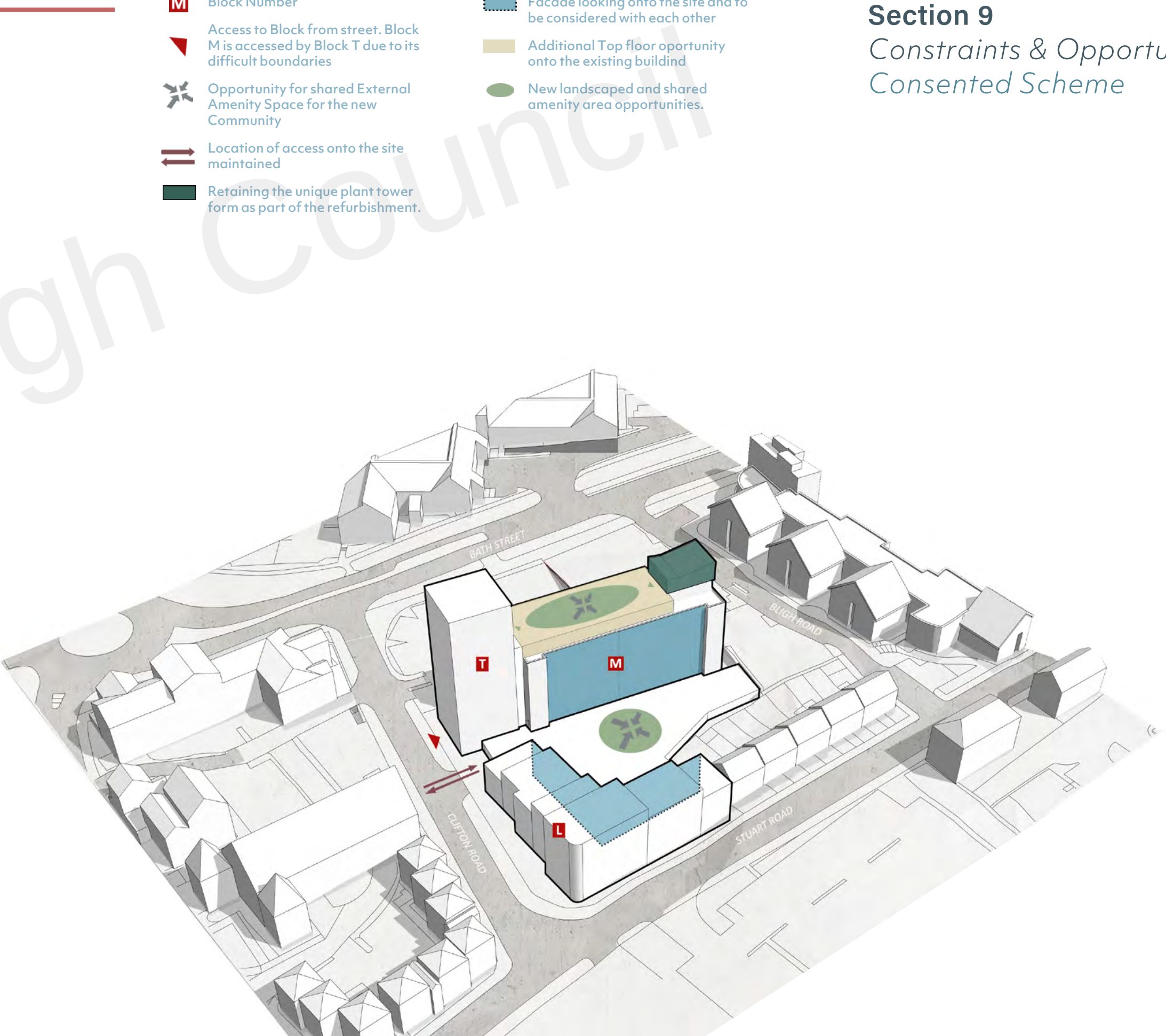
Review quantum of parking and seek to
reduce this, and maximise opportunities
for sustainable transport such as cycling

Section 9
Constraints & Opportunities
Block M & the Site Context



- Block M - Former Hospital Site

Section 9
Constraints & Opportunities
Consented Scheme

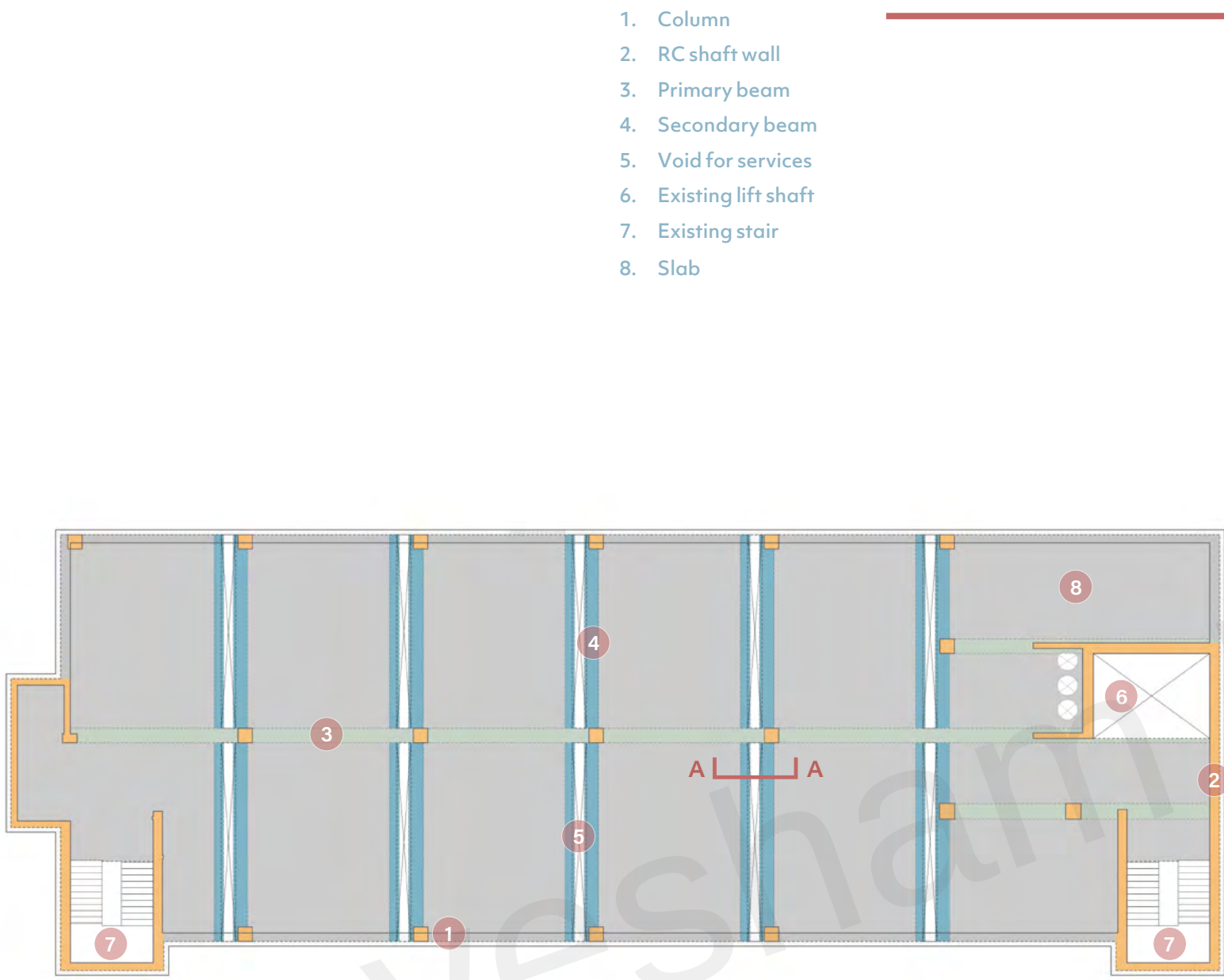


Section 10
Structure of the Existing Building
Block M Existing

The existing structural frame has been carefully assessed by the consultant team and particularly the Structural Engineer.

The following diagram identifies the existing structure including, column grid, core walls and existing voids in the concrete floor slabs.

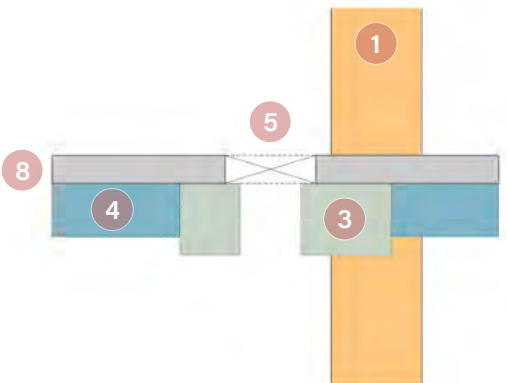
The section also details the primary and secondary beam arrangement in the building. The primary beam runs the full length of the building along the central column line and the secondary beams run the shorter width of the building. The secondary beams sit either side of a linear void in the slab which likely enabled the large quantity of services required for a hospital to pass between floors without needing individual penetrations in the slab. There is also a downstand that runs around the perimeter of the building which likely provides stiffness to the slab and structure.



- 1. Column
- 2. RC shaft wall
- 3. Primary beam
- 4. Secondary beam
- 5. Void for services
- 6. Existing lift shaft
- 7. Existing stair
- 8. Slab

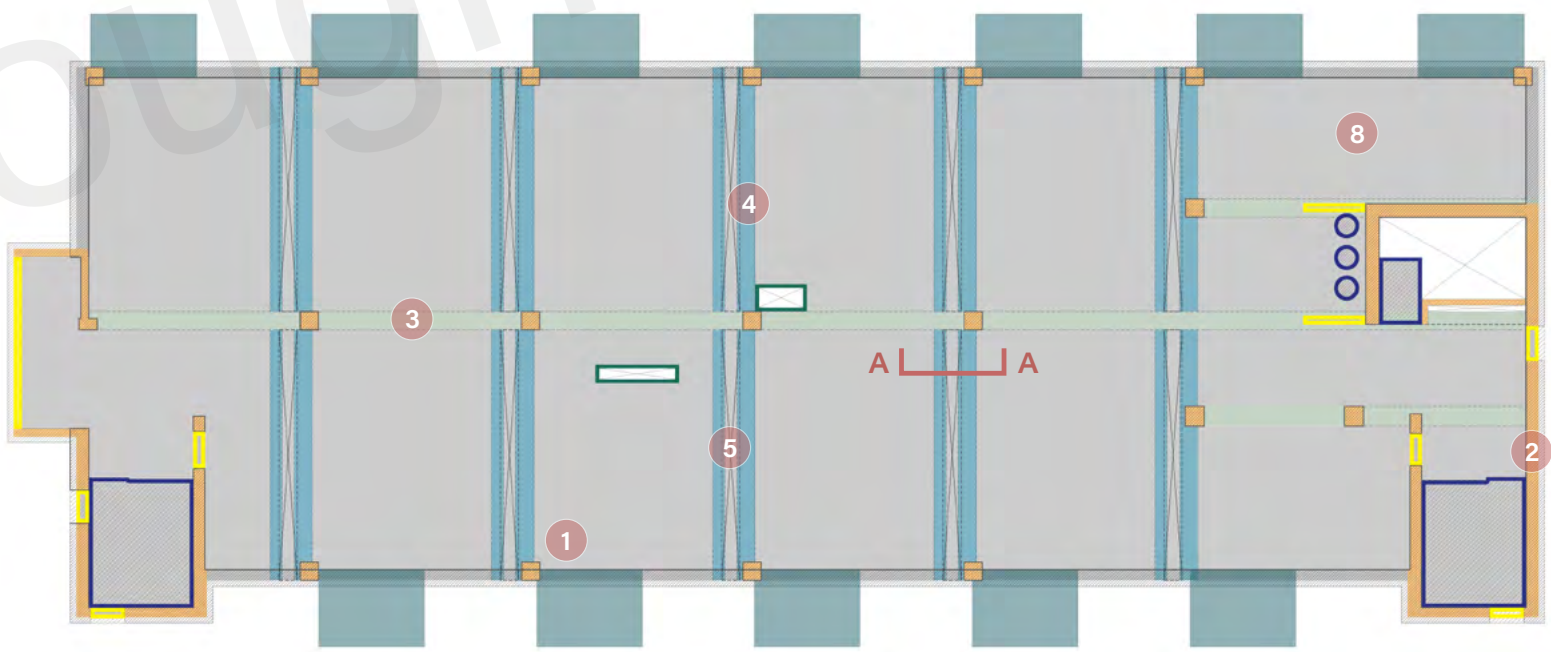
- Slab infilled
- Slab removed
- Section of shaft wall removed
- Balcony support required

Section A-A



The proposals retain as much of the original structure as possible and where changes have been required, these have been done with as minimal intervention as possible.

The core has been repositioned to utilise the existing lift shaft, while the existing stair cores are to be infilled to allow for residential accommodation. The linear void between the secondary beams will be used for services where possible and otherwise infilled to ensure acoustic, fire and thermal separation between flats. Projecting steel balconies are proposed which can be bolted on to the existing slab and does not require any floor slab or downstands to be removed.



Section 11
Design Development
Pre Application Evolution

This Section 73 application has been developed in consultation with local planning officers at Gravesham Council.

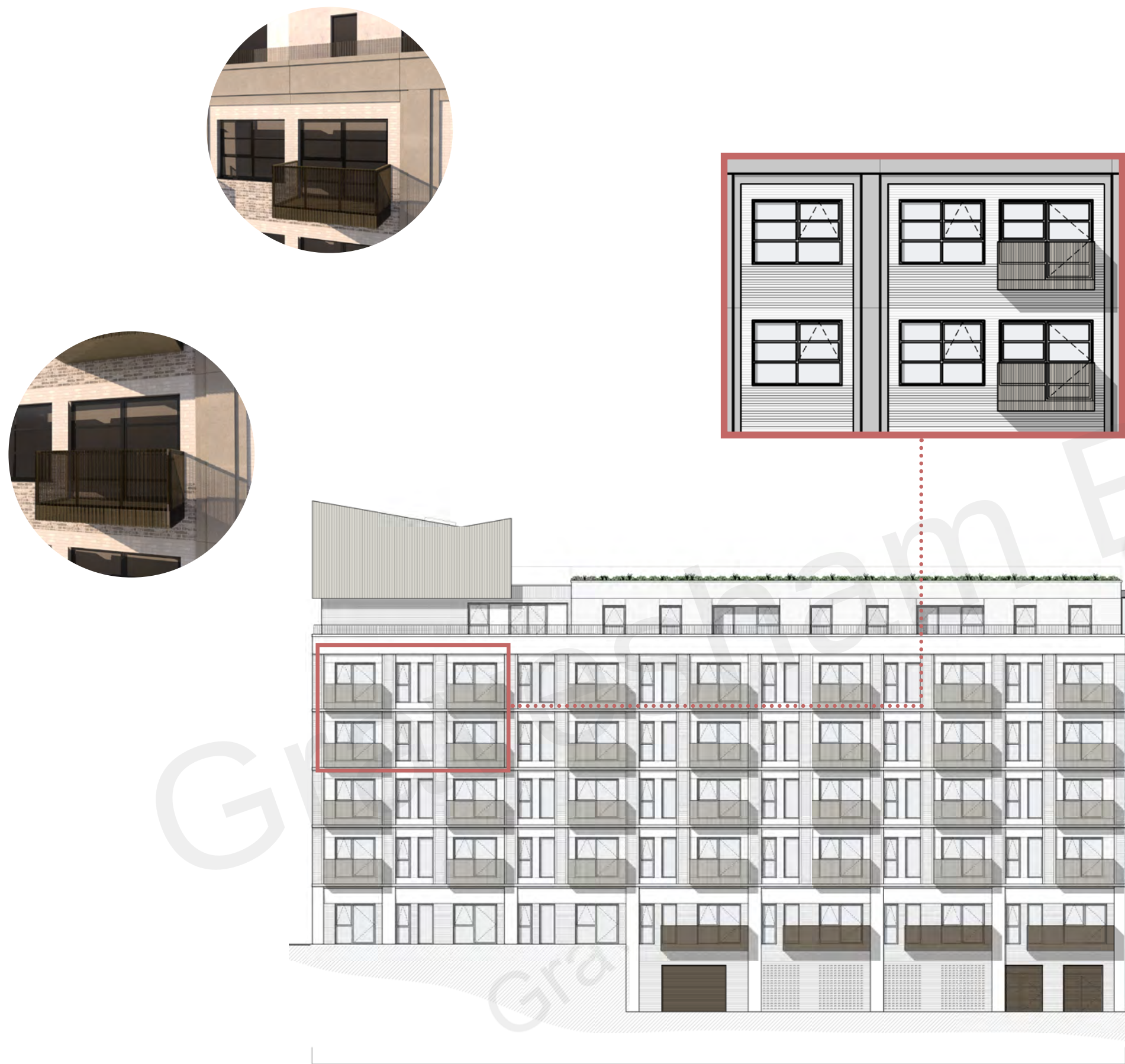
On the 6th of April 2022 an initial meeting was arranged to introduce the new Applicant and consultant team to local planning officers. During this meeting, the consented scheme was reviewed along with the vision for the following proposed amendments. This vision included detailing a fresh approach to the existing building and ways to make this an iconic structure and a much loved part of the skyline again.

A pre application meeting was held on the 21st of June 2022 to present the new layouts and elevation study. This was a positive meeting and the feedback, which mainly focussed on the elevations was taken into account and presented in a pre app response document to the planning officers in July 2022.

The images show the initial scheme shared with officers (left) and the amended scheme following the meeting (right). As noted above, the proposed amendments focussed on the articulation of the eastern elevation.

- Block M - Former Hospital Site

PRE APP MEETING



SECTION 73 PROPOSED EAST ELEVATION

PRE APP RESPONSE



Section 12
The Proposal

- 61 flats are proposed within the converted building, providing a mix of 40 x 1 beds and 21 x 2 beds.
- There are 5 levels of residential accommodation within the converted building with an additional level of accommodation proposed as a setback top floor. The existing M&E plant tower has been re-imagined to provide **high quality Residential Amenity** with views across Gravesend.
- The ground floor provides 12 under-croft parking spaces, 5 under-croft motorcycle spaces, cycle and bin stores, and plant area.
- **Working within the constraints of the existing building**, private amenity space is proposed as bolt on balconies in favour of inset balconies.
- **Façade materials:** The proposal is to strip off the current cladding panels and **clad the existing concrete structure with GRC panels and brickwork.**
- A new set of lifts and additional stair core is to be provided as part of the new build, which provides access to the conversion block. The secondary fire escape stairs is relocated where the double hospital lift shaft is currently positioned.



Section 13
Proposed Conversion Block
Ground Floor Plan

The ground floor has been redesigned to accommodate a new plant space including a sprinkler tank as required by Approved Document Part B, this serves the residential accommodation. A sprinkler tank for the commercial space contained in the new build tower (proposed in the future planning application) is to be provided below ground, outside the building footprint.

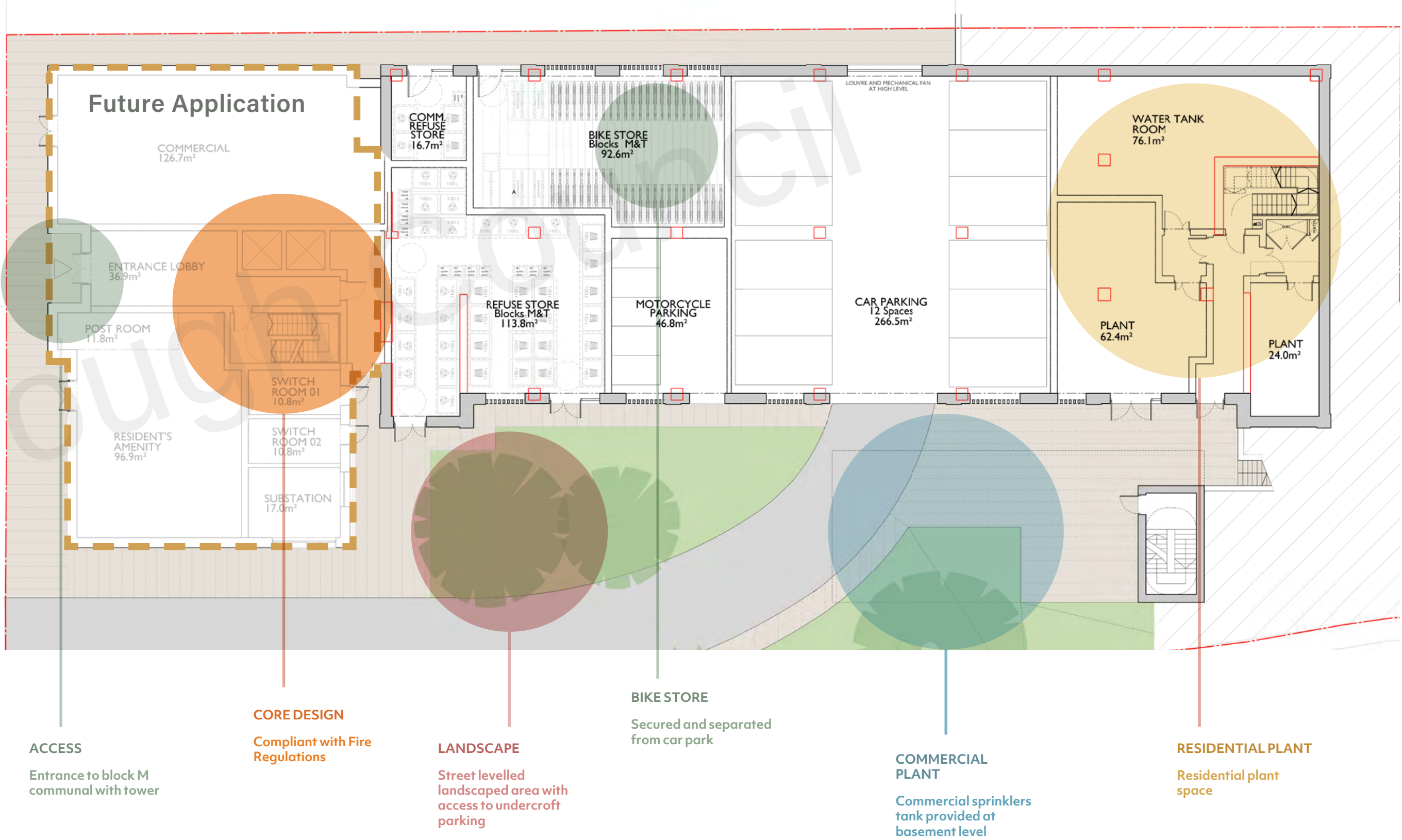
Refuse stores have been redesigned in line with the Gravesham Waste Management Policy.

Cycle storage has been consolidated into a single secure store for security and to meet Secured By Design requirements.

This general arrangement retains the existing structural frame which can now be accommodated within the plant room between machinery.

The parking spaces have been laid out around the existing columns grid.

Proposed Block M Ground Floor Plan



Section 13
Proposed Conversion Block
First Floor Plan

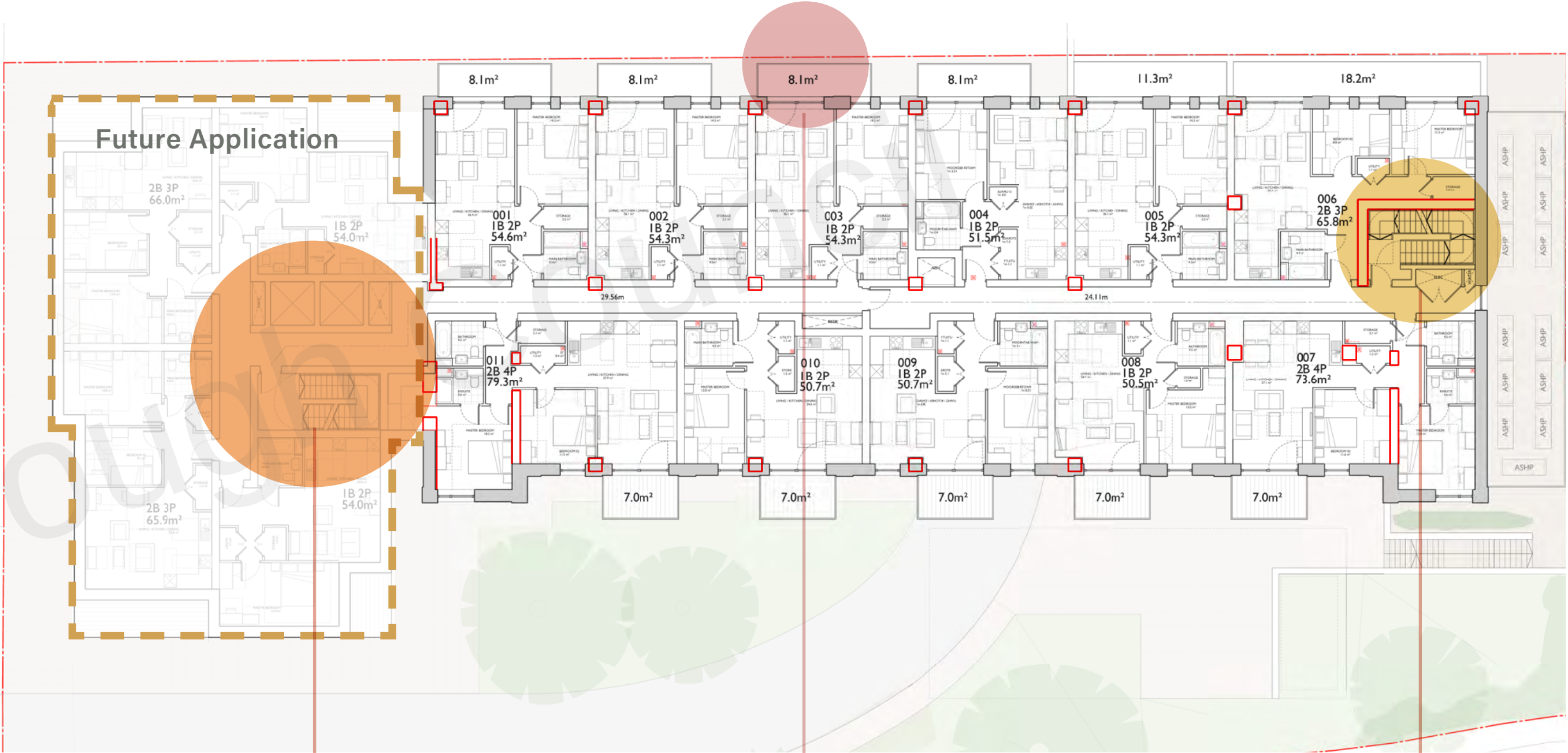
The first floor has been redesigned to work with the existing structure and ensure compliance with AD Part B.

The new stair is to be located within the existing lift shaft. This means that the shaft will not require any infill floors and means no further breaking out of the existing slab. This stair terminates at the first floor, providing escape out onto the raised landscaping directly from the protected lobby. The communal corridor within the building is split to ensure complaint escape distances between this stair and the proposed stair in the new build tower.

Party walls and flat plans have been adjusted to reduce the impact of the existing column grid and shaft walls. Inset balconies have been removed due to construction complexities with waterproofing and insulation. Bolt on balconies are proposed which allow for more spacious flats and greater daylighting internally. Balustrade materials have been considered to ensure privacy is retained.

The flat plans have been adjusted to ensure that the NDSS minimum requirements are met and exceeded where possible. Utility cupboards have been added to all flats in addition to storage cupboards and positioned close to entrance doors for easy servicing. All habitable rooms benefit from large windows which provide daylight and ventilation. Balcony sizes have been standardised and increased to ensure a usable area and meet industry standards.

Proposed Block M ty Floor Plan



CORE DESIGN

The core design will be adapted in the future application for Block T to be compliant with Fire Regulations

AMENITIES

Built on balconies to avoid issues with insulation and waterproofing

FIRE ESCAPE

Additional fire escape provided with exit at external level at first floor

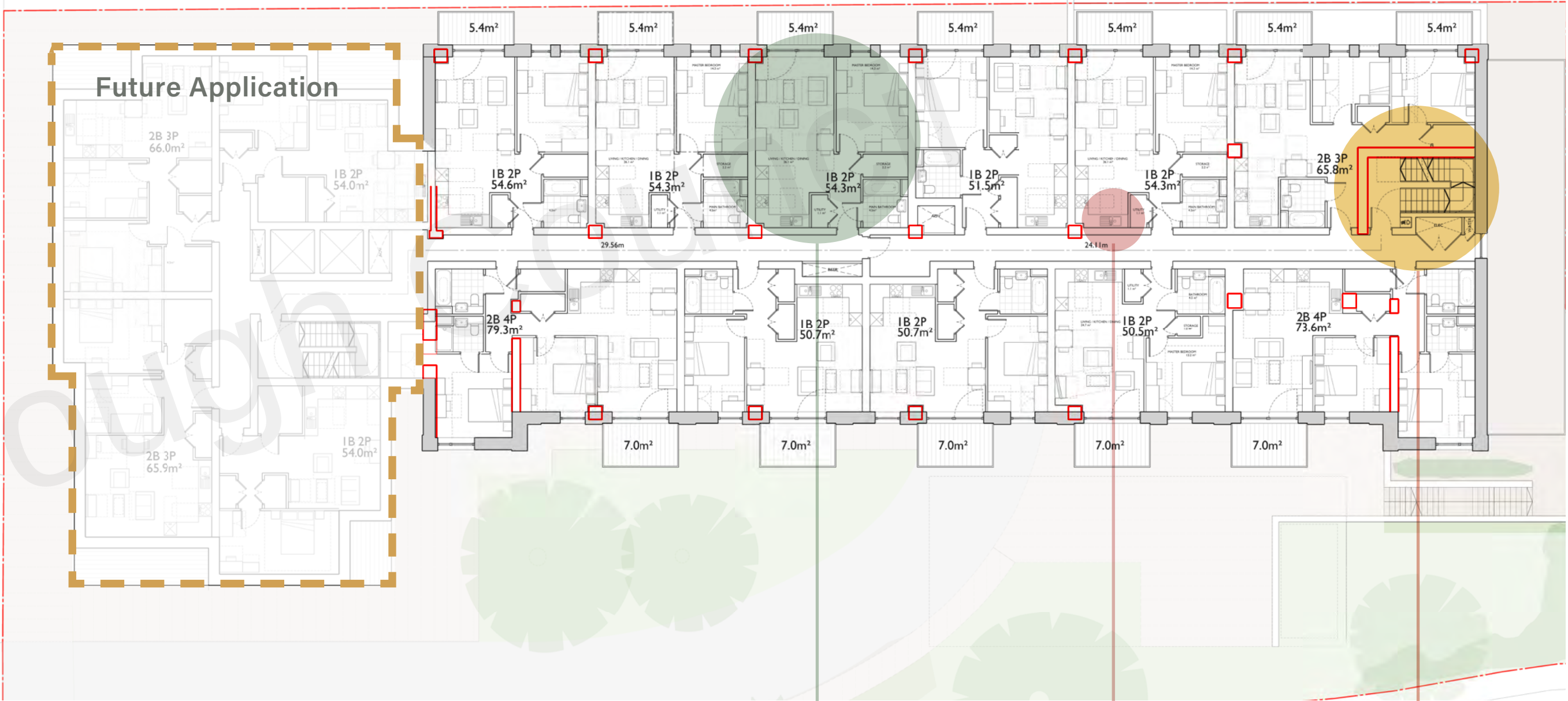
Section 13
Proposed Conversion Block
Typical Floor Plan

The new stair and communal corridor arrangement is the same as the first floor, which is fully compliant with AD Part B.

The flat plans stack and repeat up the building until the new sixth floor. As with the first floor, these have been adjusted to meet the NDSS minimum requirements and take into consideration the existing column grid and shaft walls.

Inset balconies have been removed due to construction complexities with waterproofing and insulation. Bolt on balconies are proposed which allow for more spacious flats and greater daylighting internally. Balustrade materials have been considered to ensure privacy is retained.

Proposed Block M Second Floor Pln



FLAT LAYOUTS

Compliant with AD M4(2) and Nationally Described Space Standards (NDSS)

MECHANICAL

AOV provision in both blocks as well as risers space

EXISTING STRUCTURE

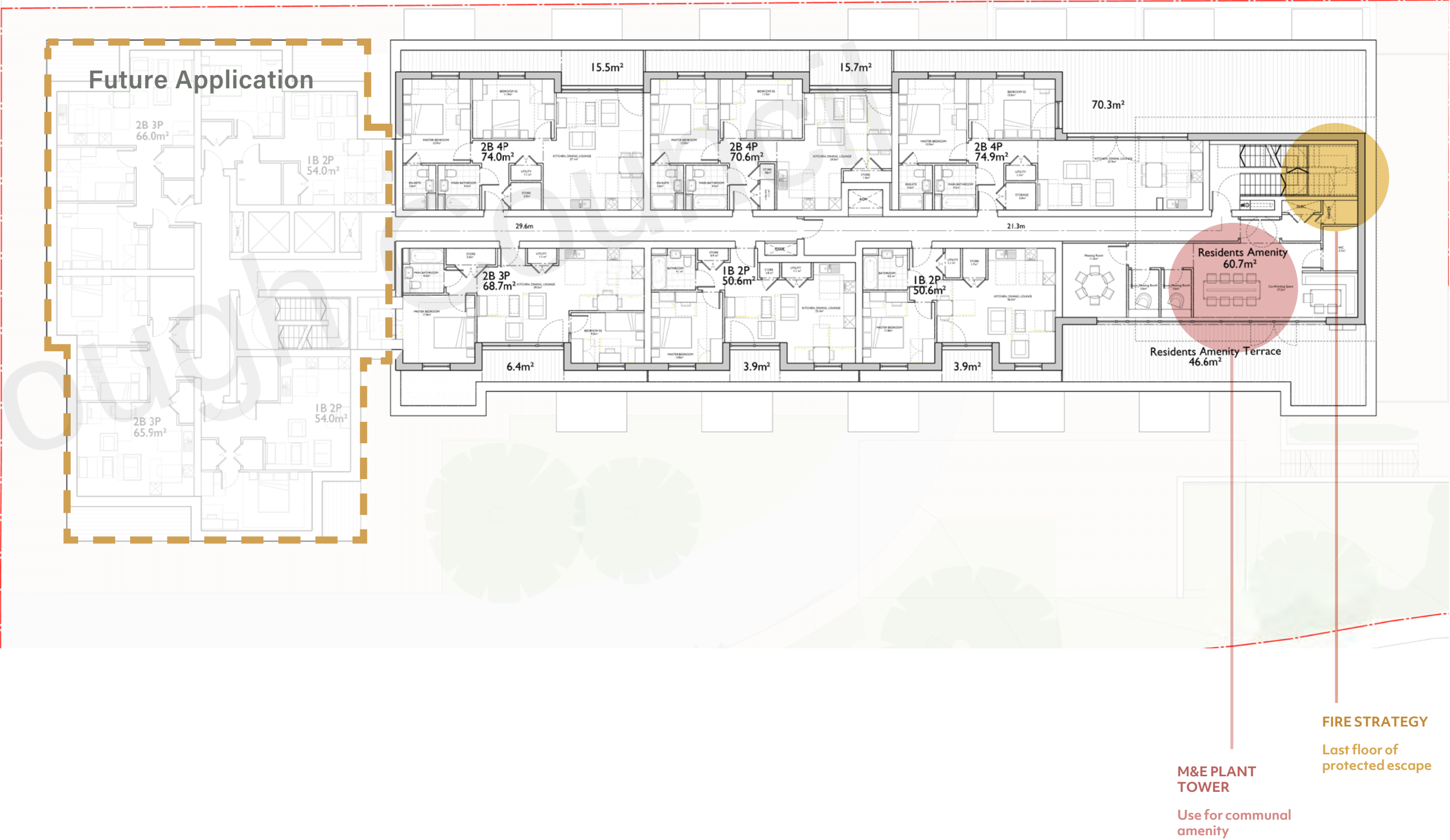
Proposed layout work with the structure to be retained

Section 13
Proposed Conversion Block
Sixth Floor Plan

The sixth floor now contains residents amenity spaces within the M&E plant tower. This is designed to provide both formal and informal internal spaces and external terraces. This removes the two residential units previously housed in the former M&E plant tower.

The external wall line for the residential units has been adjusted to step in in front of the living space. This provides a deeper amenity space which makes it more usable for the residents.

Proposed Block M Sixth Floor Plan

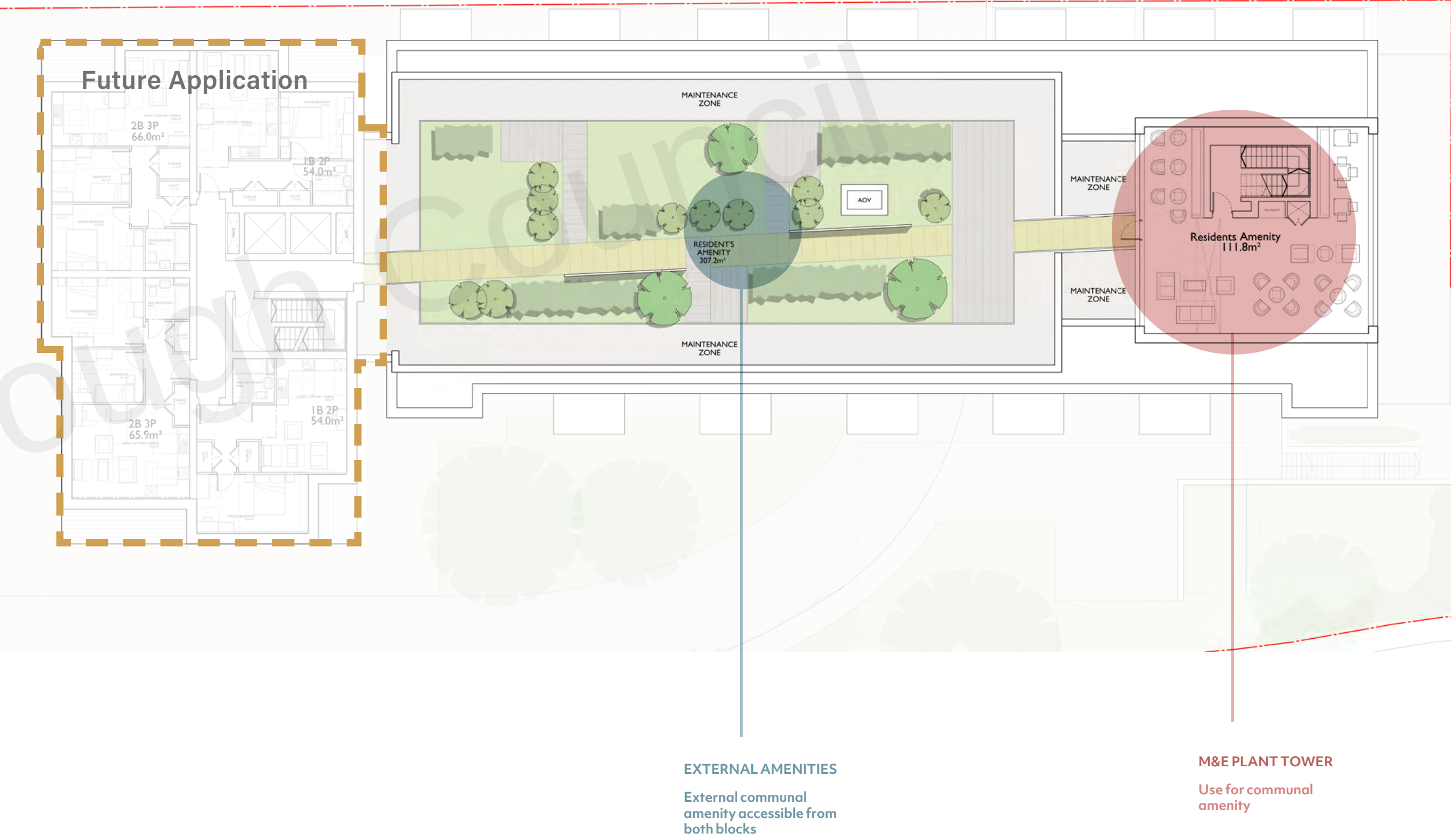


Section 13
*Proposed Conversion Block
Seventh Floor Plan
& Top floor amenity*

The seventh floor now contains residents amenity spaces within the M&E plant tower, designed to be both formal and informal areas. This removes the two residential units previously housed in the M&E plant tower.

A large external amenity space, accessed from the residents amenity space in the M&E plant tower, also serves as a fire escape to the core in the new residential tower. This external amenity is accessible from both cores.

Proposed Block M Second Floor Pln

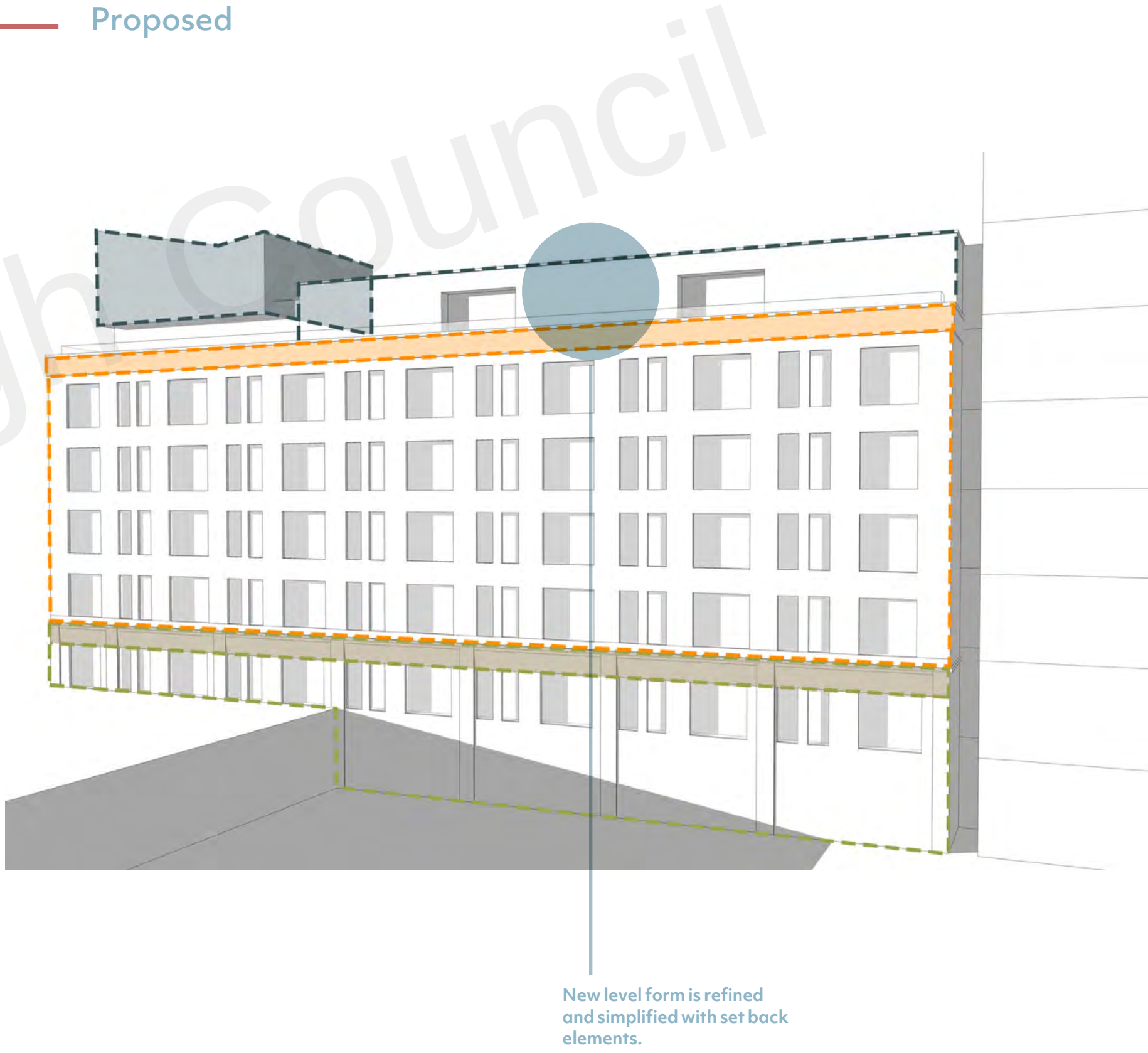
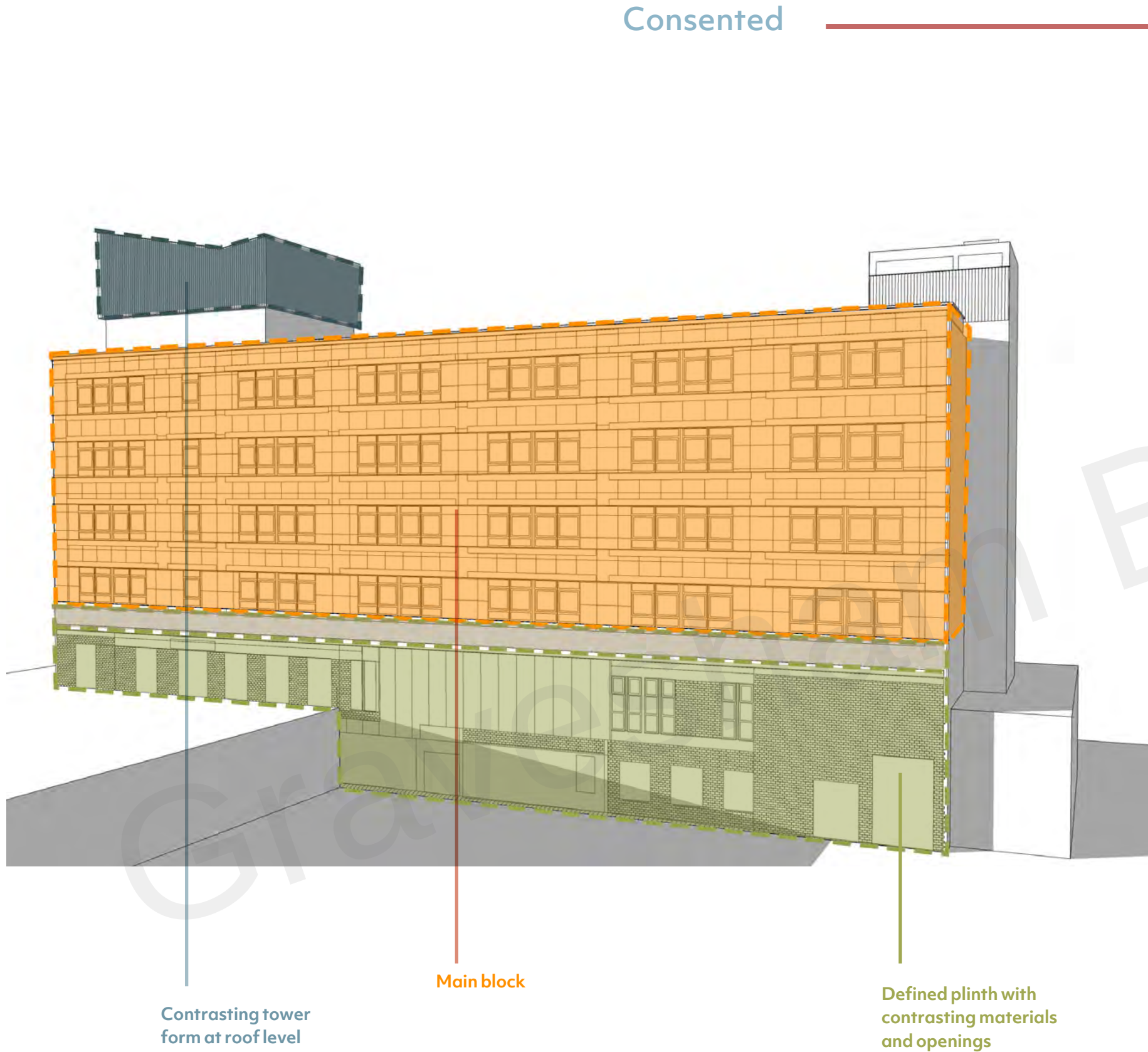


Section 13
Proposed Conversion Block
Existing Building Study
Composition

The series of studies on the following pages show the evolution of the elevational treatment and our approach to designing a new façade that considers and retains key elements from the existing building where appropriate.

These studies are split into building composition, rhythm of horizontal and vertical banding and perforation and openings.

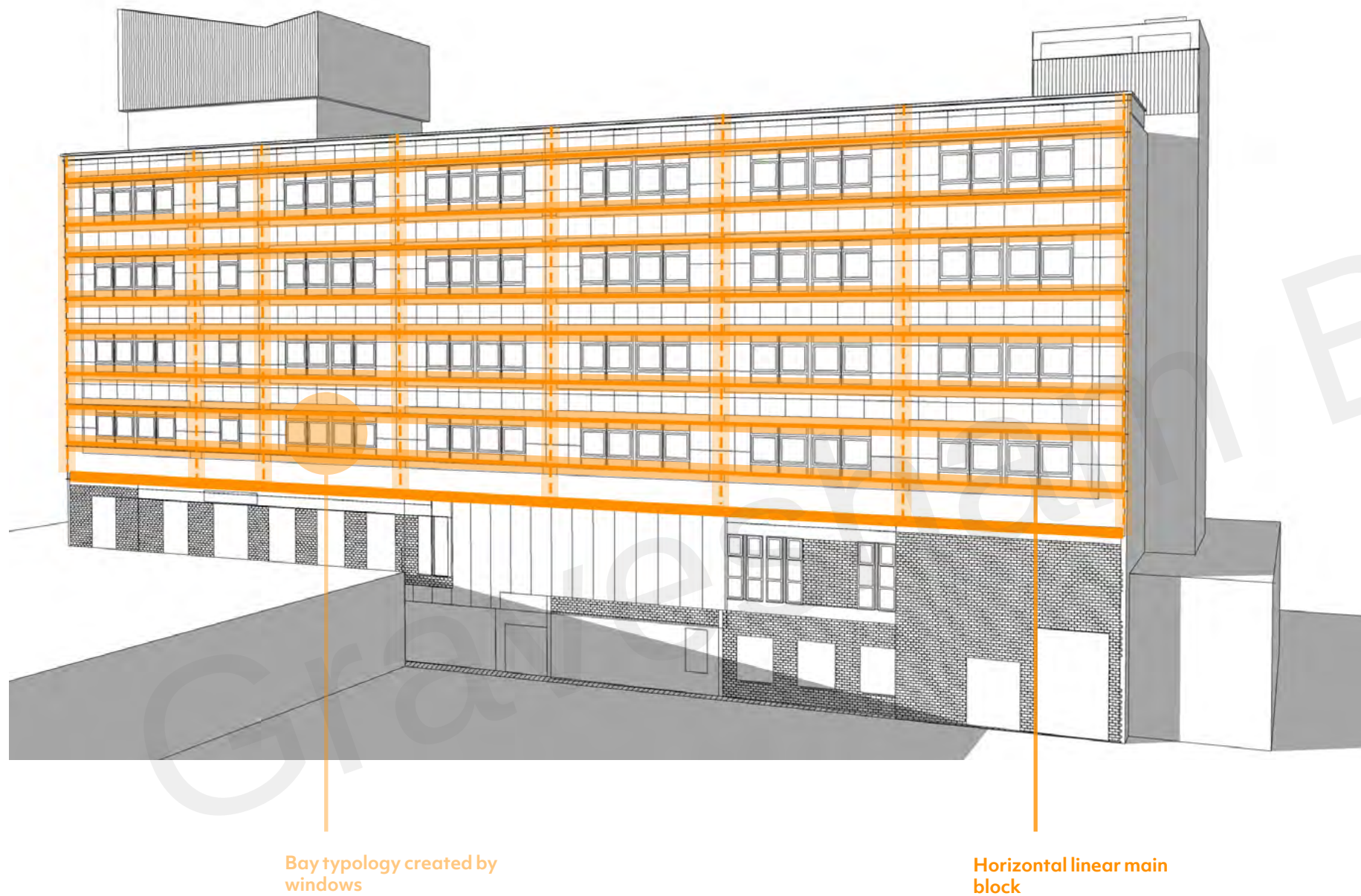
The composition clearly identifies a plinth, mid and top to the building. The plinth manages a change in level around the site and creates a strong horizontal emphasis to the main part of the building. This remains unchanged.



Section 13
Proposed Conversion Block
Existing Building Study
Rythmn

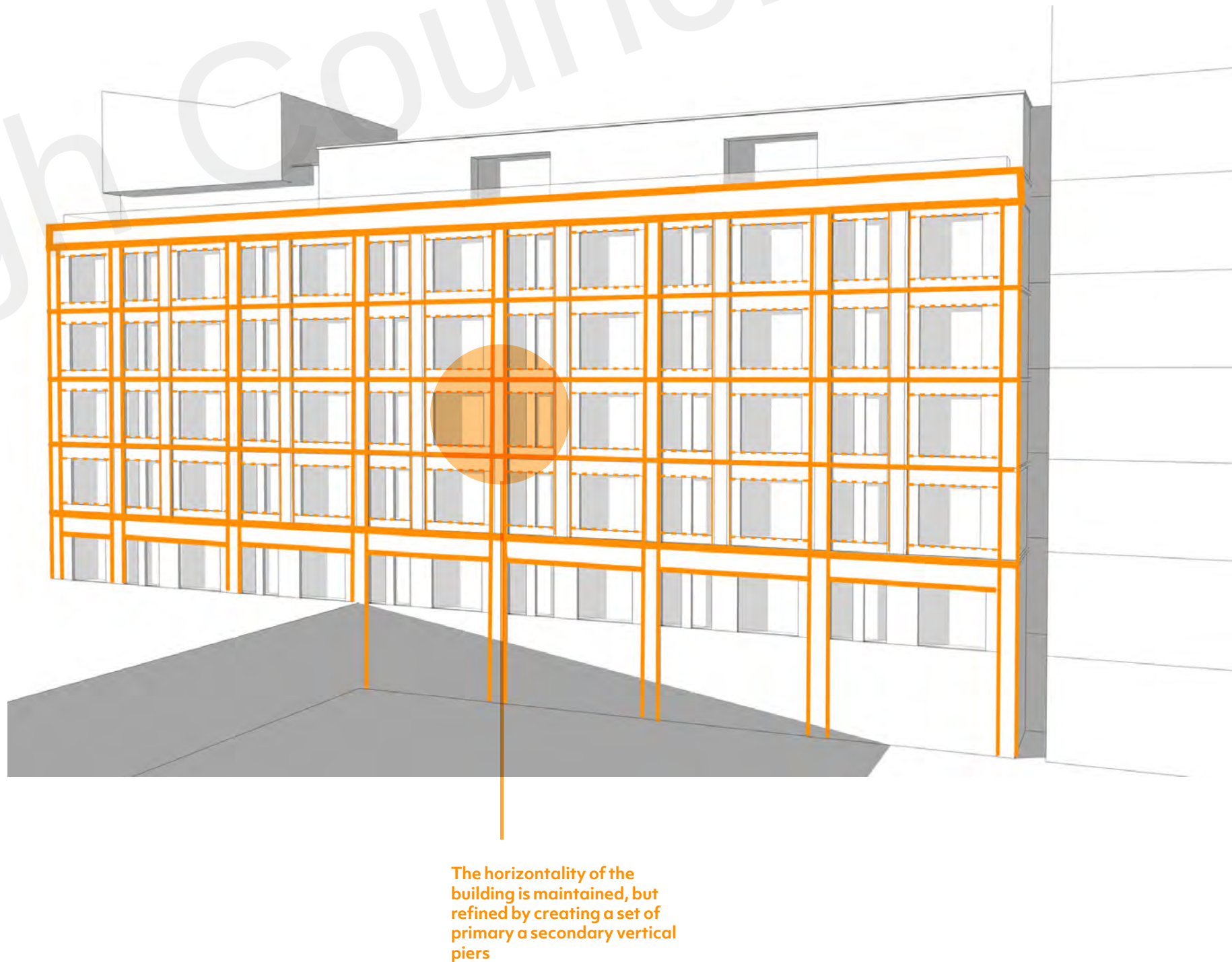
The rhythm of an elevation is identified in the language of solid and void, and the hierarchy of vertical and horizontal components. The existing building has a clear horizontal language through a deep floor banding and a secondary language of vertical lines as windows repeat up and down the elevation in a structured grid. Our proposal retains the horizontal language of the original building by emphasising the floor banding.

The building is brought to ground by adding vertical piers which were less prominent in the existing building.



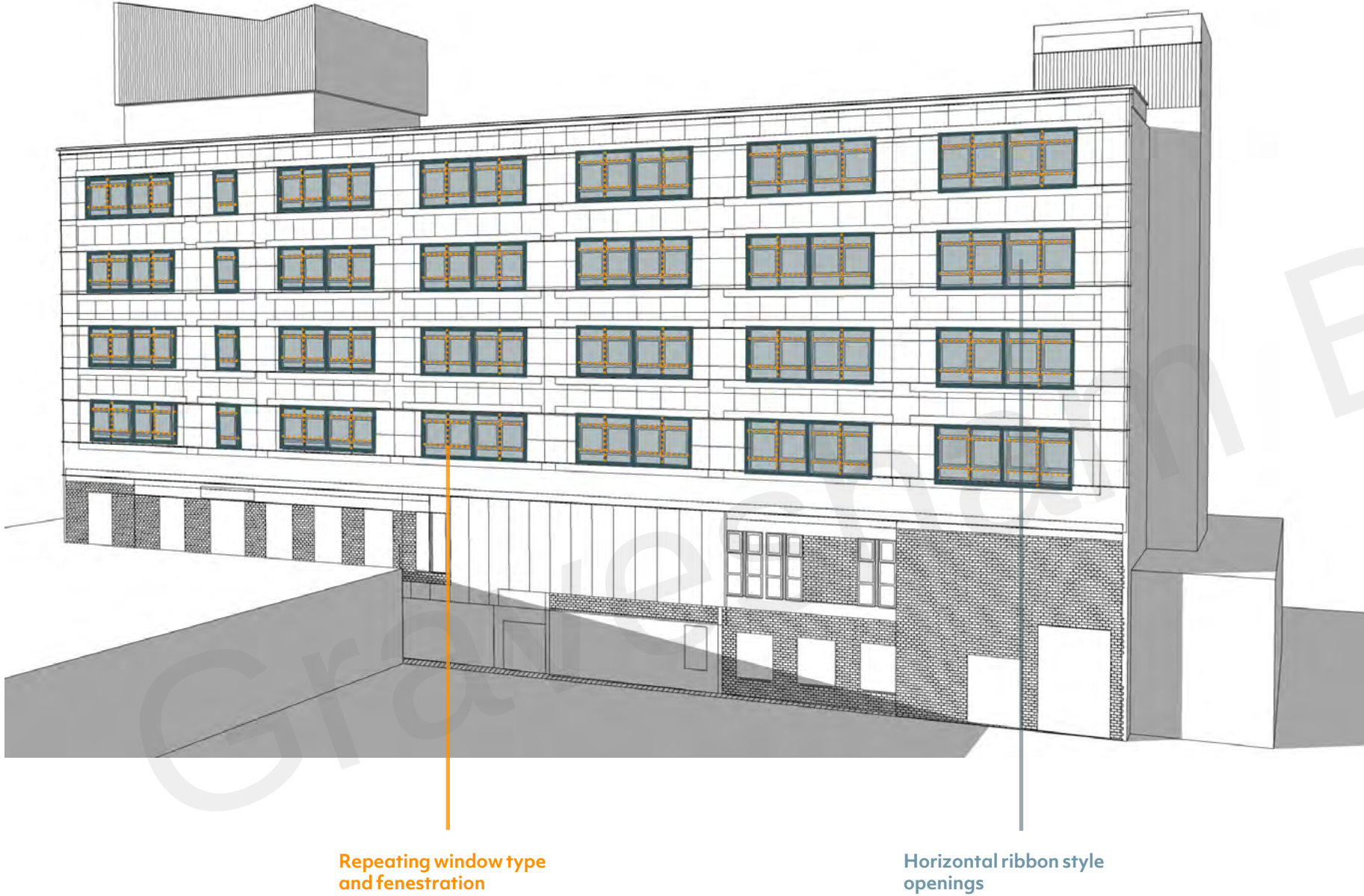
Consented

 Proposed



Section 13
Proposed Conversion Block
Existing Building Study
Perforation

Perforation explores the pattern of void which enhances the rhythm across the elevation. The existing elevation uses a single window type repeated across the elevation. A long, wide opening adds to the horizontal rhythm. The proposal explores a pattern of taller windows that repeat using two widths to create a structured grid that enhances the horizontal emphasis but with a much larger void to solid ratio.



Consented

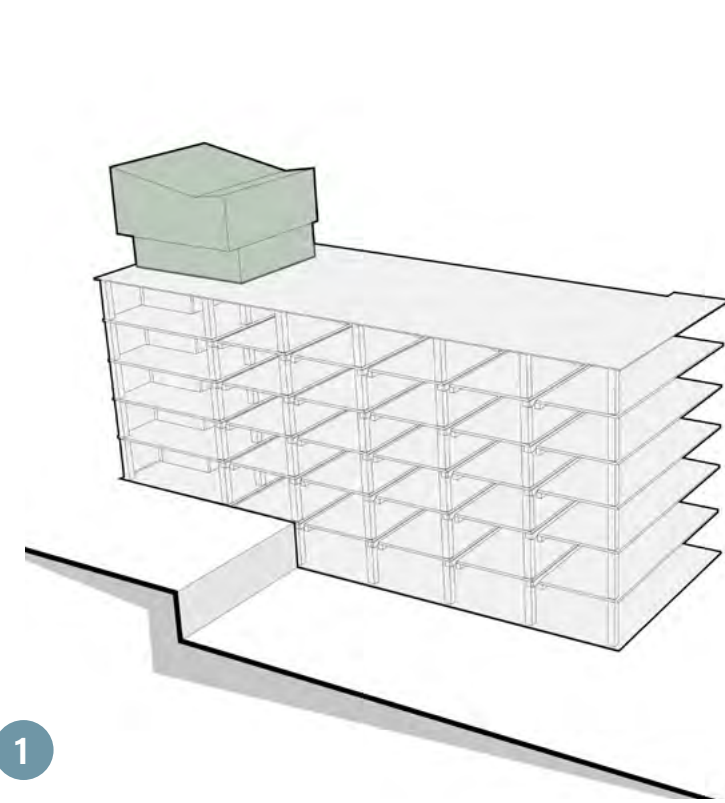
 Proposed



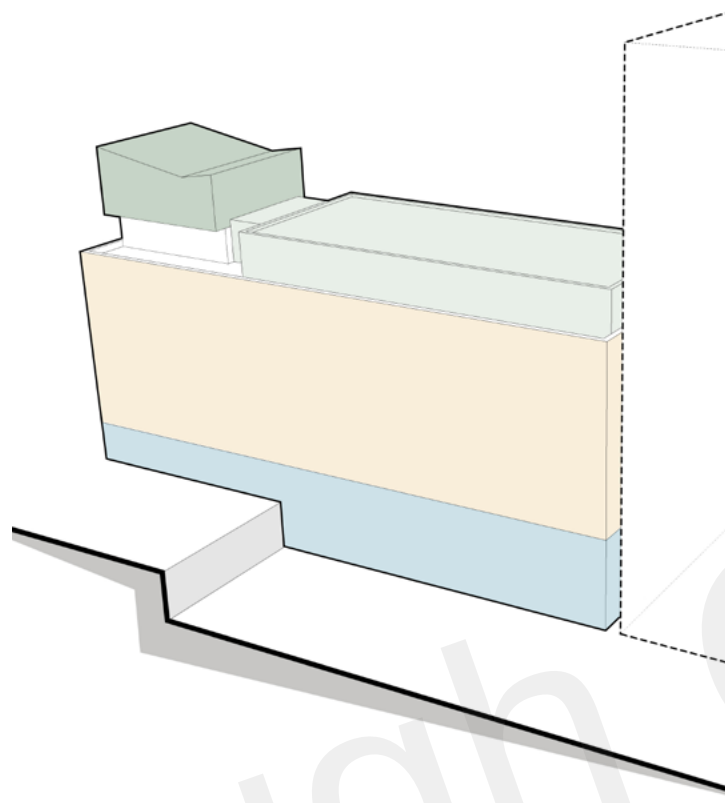
Section 13
Proposed Conversion Block
Massing Study

- 1. The existing reinforced concrete frame which is in good condition and capable of taking additional loads is kept, however the facade is removed. The existing plant tower shape is an established part of Gravesend skyline and will therefore be maintained in the proposal.
- 2. The existing building composition is maintained by proposing a double storey plinth, a main body and a crown. The proposed top floor steps away from the plant tower to retains its prominence in the skyline.
- 3. The horizontality of the existing building is reintroduced and reinterpreted as a fine banding which repeats at every floor and runs in front of the vertical piers. The form and proportion of the building is refined by creating a primary vertical pier that meets the ground and a secondary pier which stops above the plinth.

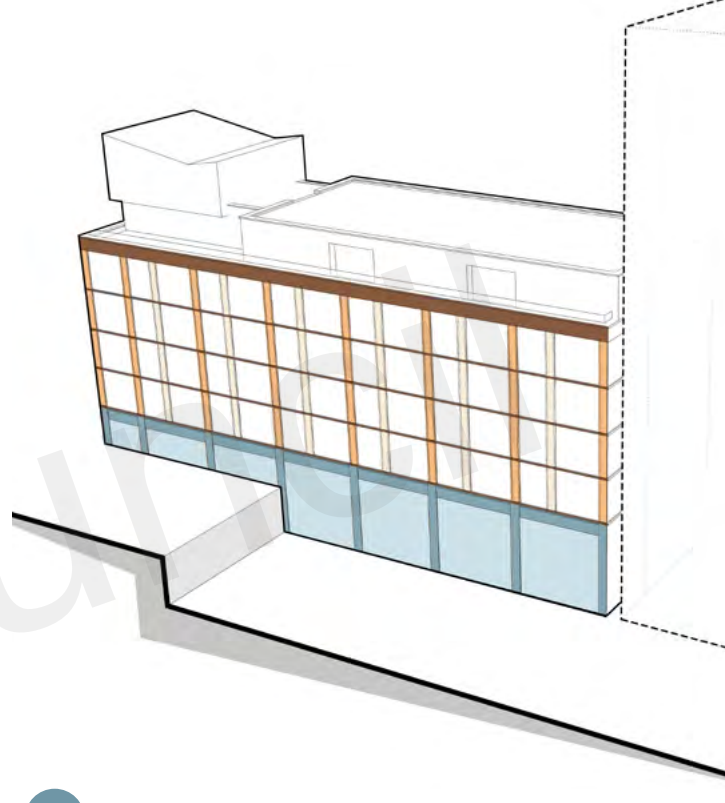
- 4. The horizontality created by the floor banding is strengthened by the choice of material within each bay: the material above and below the windows accentuates the horizontal band. The plinth is defined by a more prominent banding and contrasting materials within each bay .
- 5. The openings repeat in a structured rhythm, utilising two window opening sizes to create a softer and more residential feel.
- 6. The unique shape of the plant tower is enhanced by its materiality. The top element with the angled roofline is proposed in a different material to the rest of the building façade and has a similar texture to the existing material. This material is also used on the projected balcony to create a subtle link between the main part of the building and its crown.



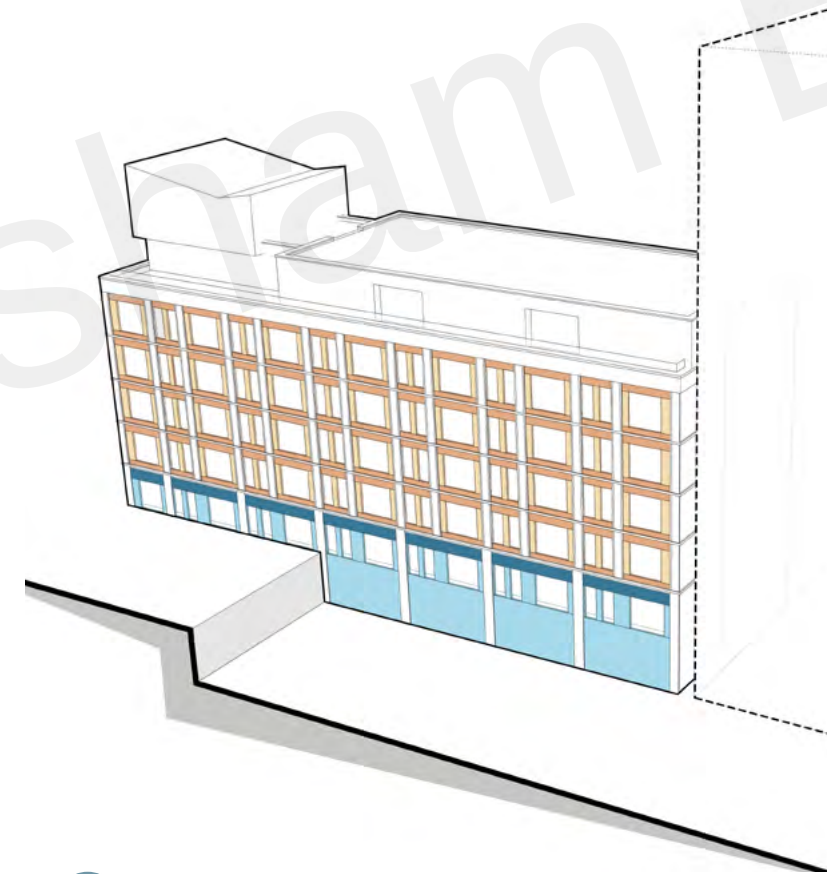
1



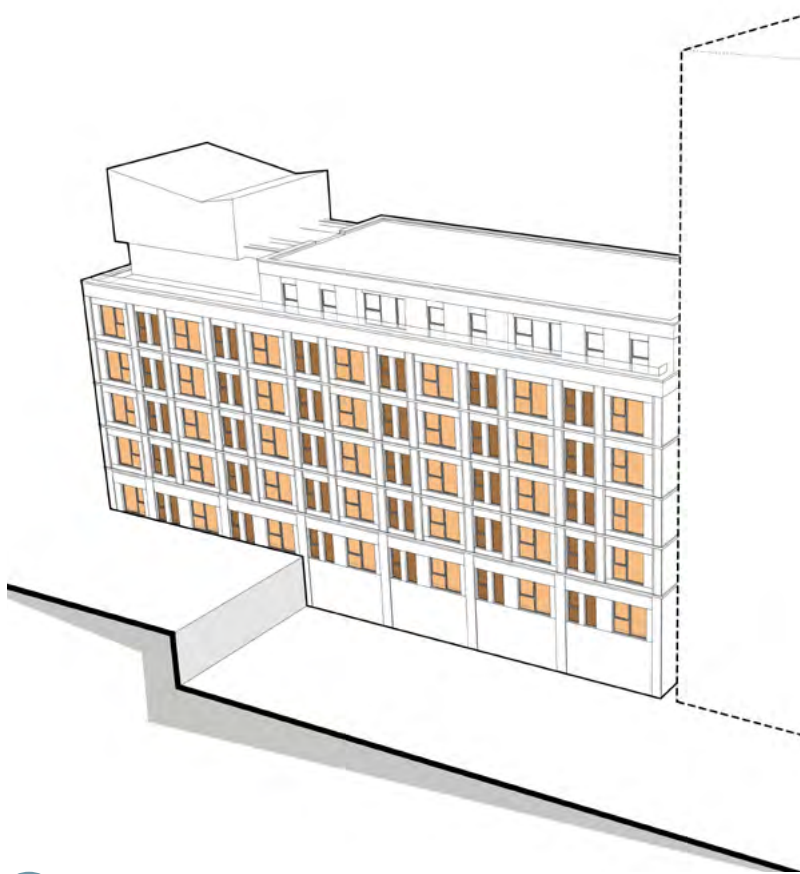
2



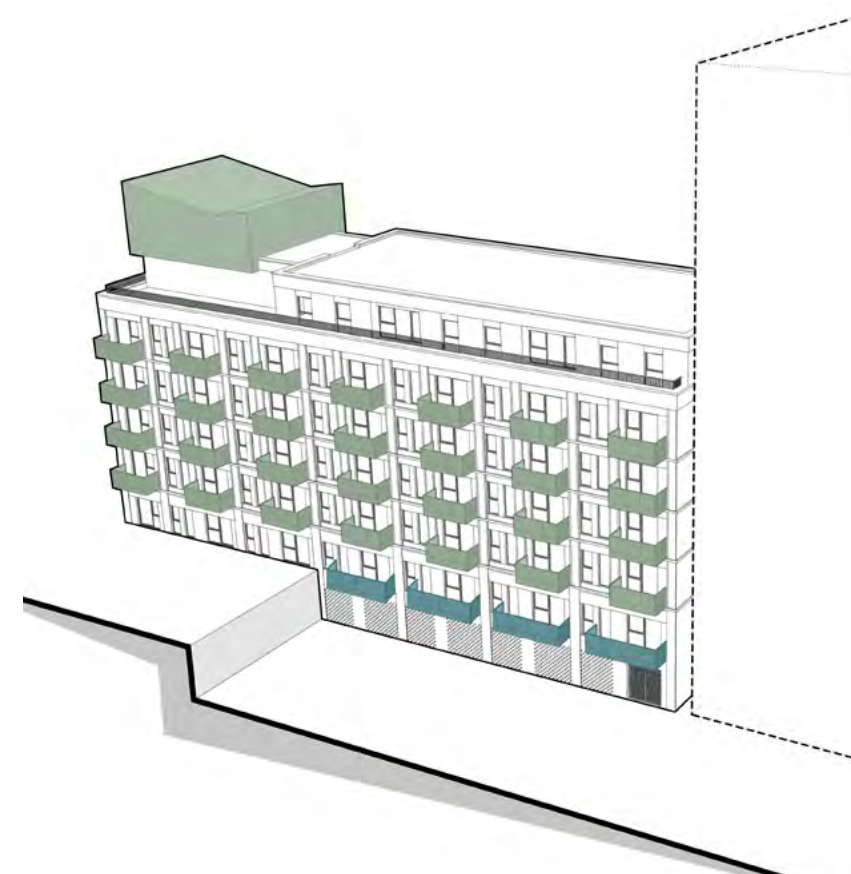
3



4



5



6