Cave Street
Standingford House Redevelopment

ADP Oxford | June 2021

Stage 2 Report
S2P6 08/10/21

Contents

01 Introduction and Brief
Overview

Introduction

Standingford House is an existing commercially let space owned by Oxford City Council and located just East of the city centre. The site includes the existing building and surrounding car-parking provision, as well as an adjacent plot formerly occupied as a workshop which has since been demolished and is now vacant. The legal site boundary also includes a number of in-use garages, accessed via Little Brewery Street.

The general condition of the existing building is poor and in need of major repairs and maintenance to both fabric as well as the mechanical and electrical equipment.

Some demolition has occurred over the life of the building (60-70 years) Leaving the main building of 480sqm. / 5,165 sqft on plan in a site of 1,450sqm/15,600sqft.

The brief for the redevelopment at Cave Street seeks to protect and maintain existing commercial space of at least 8,000 sq.ft (6,743 sq.ft lettable) in a modern and efficient manner and explore further options for increasing commercial space and options for introducing a mixed use for the site.

Scope of Report

The scope of this report is to develop Oxford City's preferred proposals outlined in the Stage 1 Report issued February 2021. These are referred to as Option A, Option D and Option G with sub-options within these. Option A represents the option developed previously to RIBA Stage 2 for the site and so is not covered in further detail but is used as a baseline comparison scheme in terms of commercial area available. Option D covers a scheme with commercial and mixed use potential, and Option G represents a wholly commercial development. The stage report is tailored to the level of information for Oxford City Council's requirements to support the business case approval process.

Planning

A pre-application was made in April 2021. At the time of this report a meeting has not been offered for the project. However pre-application from the previous scheme supported making more efficient use of a central Oxford Site already allocated for employment. The advice had also supported a reduction in parking spaces. The main issues raised to the development were the rights of Light and Privacy to the residential properties to the South of the site.

Standingford House is listed as a Category 2 employment site within the Oxford City Council Local Plan 2026 Adopted Document for which Policy E1 applies:

> *Planning permission will be granted for the intensification, modernisation and regeneration for employment purposes of any employment site if it can be demonstrated that the development makes the best and most efficient use of land and does not cause unacceptable environmental impacts and effects.*

Highways

The site is located on Cave Street, immediately off St Clement's Street. St Clement's street is one of the main bus routes to and from Oxford City, the site is 15 minutes walk to the centre of Oxford and a 15minute bus ride from Oxford City train station and so is well supported via public transport. Currently the site makes use of informal parking to the perimeter of the building. The proposed designs will look to reduce parking on site to the spaces required for accessibility and for the potential of electric charging and deliveries. This will reduce traffic movement to the site. The adjacent streets are within Oxford's Controlled Parking Zone which means parking will not impact the area.

Ecology and Landscape

There is no vegetation or landscaping of merit on the current site, however developing a landscape strategy to the new proposals is considered a beneficial element of the redevelopment.

Rights of Light and Daylighting

As highlighted in the previous scheme pre-application, Rights of Light and daylighting is considered a key issue for the development. The schemes within the report have been developed with RoL analysis and this is considered something that must be continued to be developed as the scheme develops.

01 Introduction and Brief
Overview

OCC core objectives for this scheme are:

+ To provide financial value to the Council via securing a financial return, and seeking opportunities to generate revenue streams.
+ Make optimum use of dedicated Oxfordshire Local Enterprise Partnership (OxLEP) funding (circa £1m), which requires the Council to provide entrepreneurial workspace. As part of this requirement OCC will want to consider opportunities to provide affordable workspace and to look at a range of different workspace typologies, including co-working, studio, workshops etc. OxLEP is also keen on explore the potential to create a creative workspace hub, so this will need to be explored through the design feasibility.
+ To explore the opportunity to partner with a workspace operator to manage and programme the new building and to ensure that any future partner is brought on board to inform the detailed design and fit out stages.
+ Respond to the REDO Workspace Assessment 2020 to provide opportunities for under-represented support sectors in the city centre.
+ To seek to create local employment and training opportunities including apprenticeships during the pre-construction, construction and post construction phases
+ The Council is working to be effective in delivering comprehensive development. It promotes the use of Council assets and will help foster strong working relationships with key stakeholders in the City
+ To promote development that is sustainable and energy efficient, having regard for emerging policy on public buildings and the Council's Climate status, including its low emissions principles.
+ Encourage innovative design including alternative models for live/work opportunities and compact urban living to support carbon reduction

Key Stakeholders

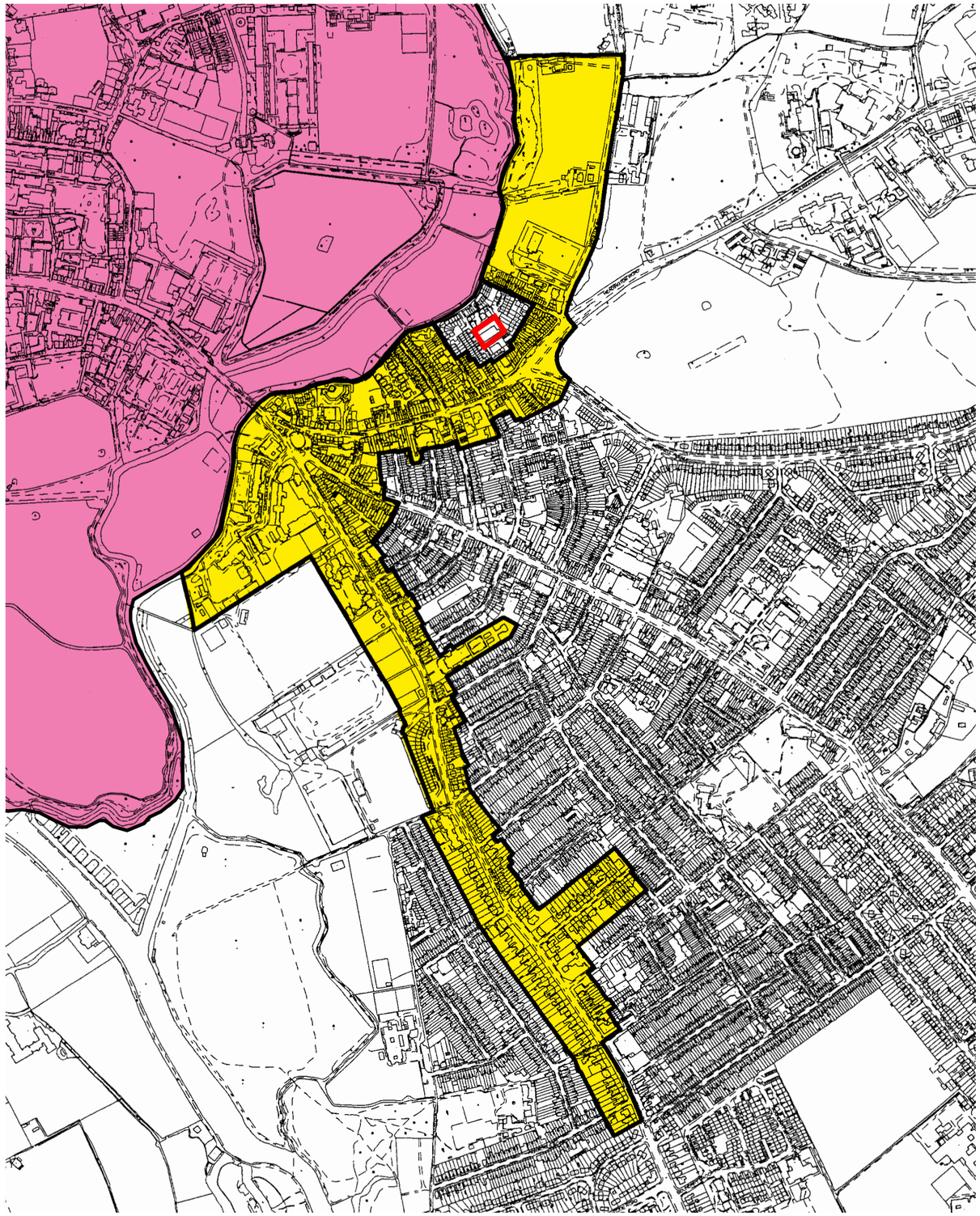
The following stakeholder groups are important to the success of the project and will be involved and consulted with throughout the process:

+ OCC Economic Development & Assets and Property teams
+ Oxford City Housing Limited (OCC wholly owned housing company)
+ OxLEP
+ Existing tenants
+ Local community (and ward members)
+ Statutory authorities: Environment Agency, and Oxford County Council
+ Commercial Operator

02 — Site Analysis

02 Site Analysis
Conservation Area

The area highlighted in yellow indicates the St Clements & Iffley Road Conservation Area. The Area highlighted in pink indicated the Central (University and City) Oxford Conservation Area. The site is highlighted in red and it indicates how the conservation areas exclude the immediate vicinity of the site, likely due to its former industrial / commercial use and more recent developments to housing.

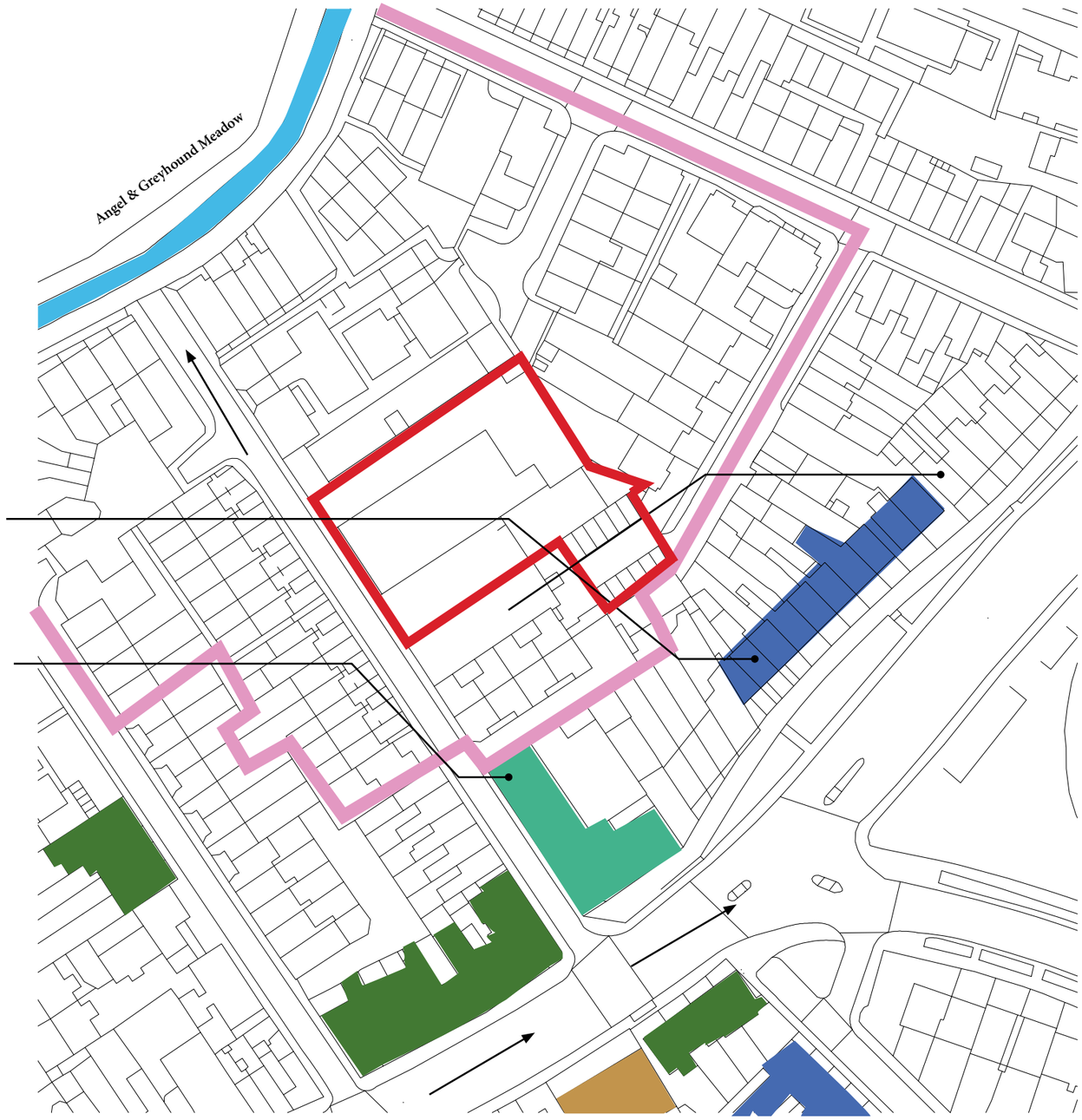


02 Site Analysis
Conservation Area

Below analysis is taken fro the St Clement's and Iffley Road Conservation Area Appraisal

London Place: *Two groups of terraced town houses overlooking south park built in the early 19th century, first group rendered and painted whilst second group are of yellow brick construction with gothic inspired features*

Cherwell House: *A 20th century development that does not sit comfortably in the streetscape, over dominating the smaller, more historic buildings*



02 Site Analysis
Existing Site Block Plan

Standingford House is well connected via a variety of means of transport. The site fronts Cave Street which provides vehicle access.

St Clements Street is a key route into Oxford via Headington or Cowley and so is well connected via local bus routes which also link to the train station and London services.

The site is also within walking distance of the city centre

St Clements also includes cycle lanes which are frequently used.

Current transport associated with the site is via car, walking or cycling. The site has a notional 17 car spaces to the perimeter of the building as well as an existing cycle rack to the rear.

02 Site Analysis
Building Heights

The properties surrounding the site are predominantly 1, 2 and 3 storeys. Further out to St Clements Street there are a number of buildings to the equivalent of 4 storeys. Of further relevance is that the site sits within the South Park Oxford View Cone, the Oxford Local Plan 2036 states:

The City Council will seek to retain significant views both within Oxford and from outside, in particular to and from the historic skyline. Planning permission will not be granted for any building or structure that would harm the special significance of Oxford's historic skyline.

It is proposed that once a preferred scheme has been chosen this is developed alongside a Landscape Visual Impact Assessment with specific reference to the Oxford View Cones, see image below from the Assessment of Oxford View Cones Report relating to the view from South Park.

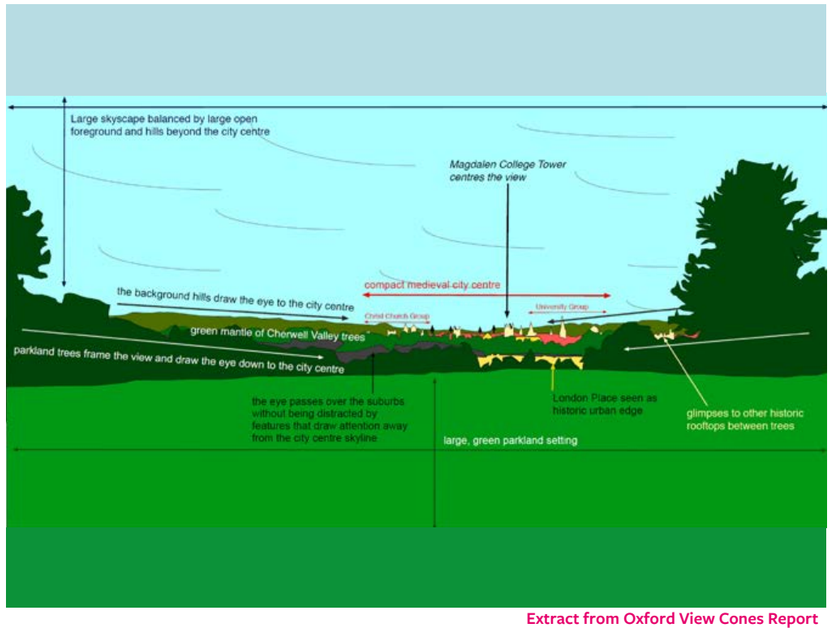
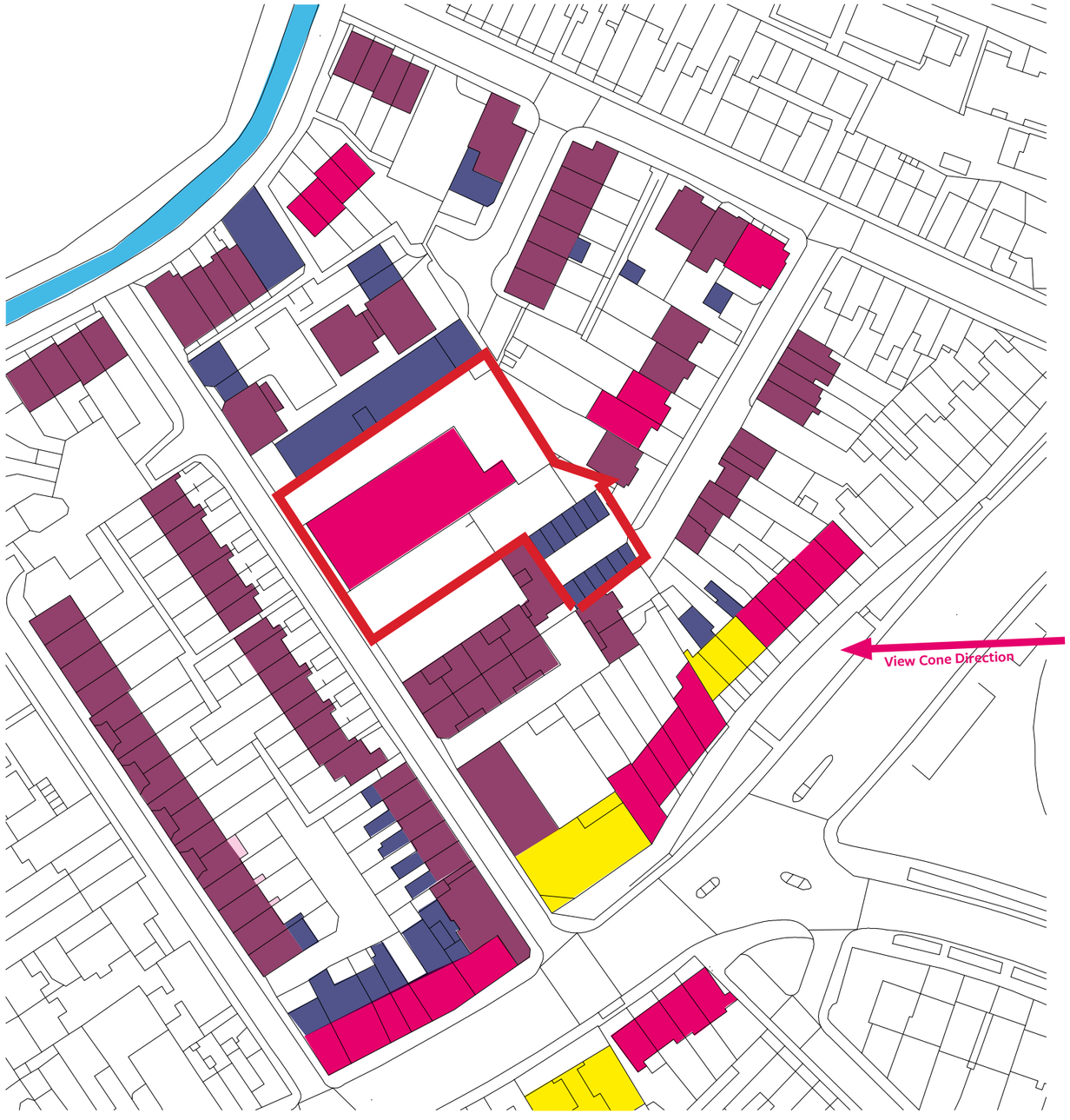


Figure 5.3.3
Illustration 2: Annotated render of the view from South Park

Extract from Oxford View Cones Report



02 Site Analysis
Internal Views

The development site is comprised of Standingford House, which sits centrally on the plot, surrounding the building is hard standing which is used an car parking although no formal markings exist for this.

A disused garage site which is currently separately fenced off and the previous building demolished in recent years sits South of Standingford House, this is now overgrown with self-seeded vegetation, this forms part of the development site.

02 Site Analysis
Site Context

The site is surrounded by residential properties on most sides. The houses are varied from more traditional set back terraced houses, to more modern developments.

02 Site Analysis
Site Photos

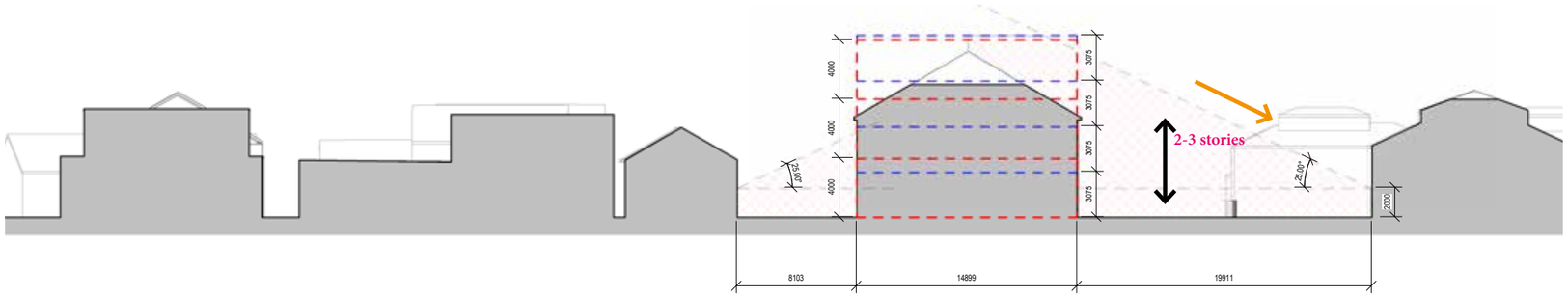
One of the challenges for the site will be the consideration of the residential properties around the site who all have views towards the site. The images reflect the relationship of the site within its residential context.

02 Site Analysis
Testing Constraints

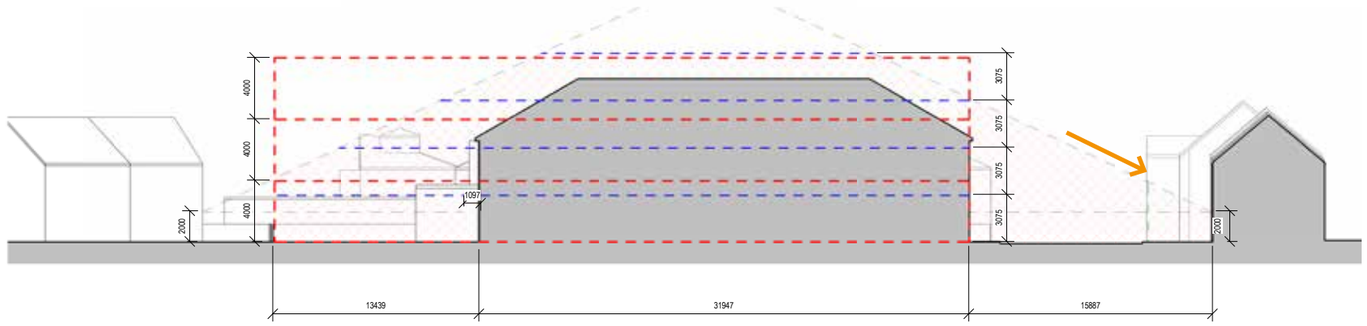
The section diagrams use the 25 degree and 45 degree tests to understand impact of surrounding properties on new development, outside the envelope of the existing building. "BRE Site Layout and Planning for Daylight and Sunlight : A Guide to Good Practice (2011).

A typical residential floor to floor height and commercial floor height have been overlaid to understand the possible development height achievable.

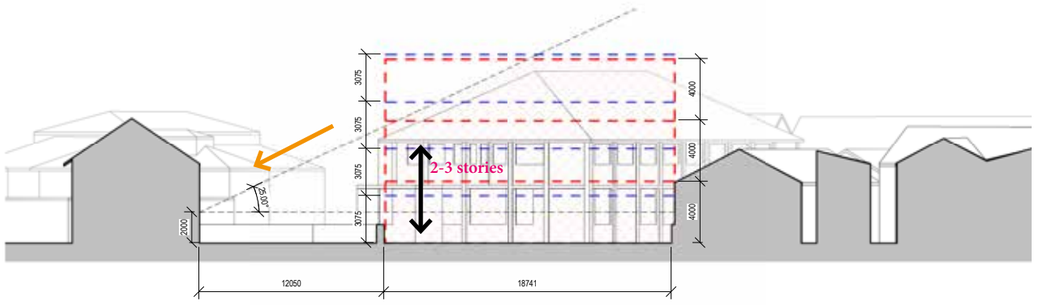
3 stories appears to sit comfortably on the majority of the site. 4 storeys could be tested in the centre dependent on the LPA view and site use. Care needs to be taken to the perimeters with regards to rights to light and overlooking to the neighbouring properties.



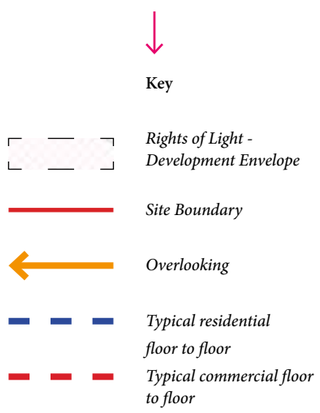
Cross Section AA



Cross Section BB



Cross Section CC



03 — Surveys

(surveys are available in the full version of this document)

04 — Preferred Options

04 Preferred Options

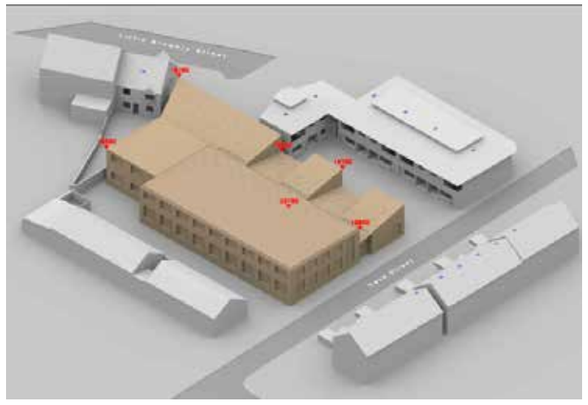
Review Against Criteria

Following the Stage 1 report options were narrowed down to address key criteria, these are defined as:

+ **Maximise development**
+ **Ensure a minimum gross internal area of 9,849sqft (i.e. not less than existing)**
+ **Mixed use development to enable site to be clearly divided between uses and potentially developed separately (e.g. no residential above workspace)**
+ **Maximise sustainability**
+ **Reduce risk**

Each option identifies the key criteria that the option meets and addresses. The options chosen are considered to address the full range of key strategies that could be taken forward; Keeping and developing alongside the existing building, developing a mixed use site, and delivering a maximum potential commercial site.

For the purposes of this report Option A has not been developed any further as this has already been developed to a pre-planning level in 2015.



OPTION A
Commercial Only

Ensure minimum gross internal workspace is not less than existing

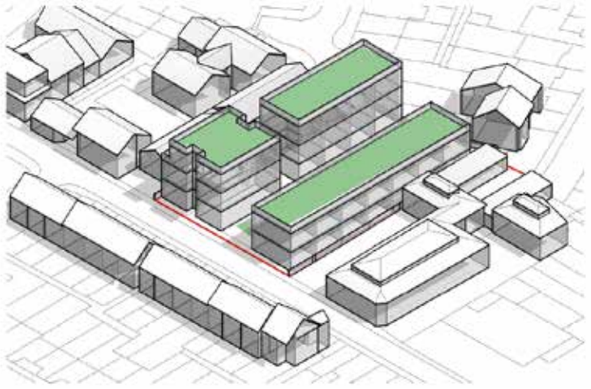
Making use of the existing building and expanding would increase the overall lettable area of the site.

Maximise Sustainability

Not demolishing the building would be preferable from an Whole Life Carbon perspective and sustainability perspective. The existing building could still be improved to meet high levels of performance and result in a low energy building

Reduce Risk

Keeping the existing building would reduce elements of risk such as the existing sub-station not requiring relocating. At the lower end of NIA and so likely to be more favourable from Planning Perspective



OPTION D
Mixed Use Scheme

Ensure minimum gross internal workspace is not less than existing

Overall commercial area would be increased

Mixed Use Development clearly divided

Residential and commercial use separated, with residential to the rear of the site

Maximise Sustainability

No limitations to sustainability at this stage

Reduce Risk

At the lower end of NIA and so likely to be more favourable from Planning Perspective

OPTION G
Commercial Only

Maximise Development

Option has the potential to provide highest NIA for the site

Ensure minimum gross internal workspace is not less than existing

Overall commercial area would be increased

Maximise Sustainability

No limitations to sustainability at this stage. One large development may offer advantages in terms of improved form factor and efficiency

05 — Development Strategies

05 Development Strategies
Overview

Parking / Transport

In line with Oxford Local Plan Policy M1 the development will look to prioritise walking, cycling and public transport, this will mean reducing the number of parking spaces on site to those required for accessible parking, deliveries and the potential for electric only spaces. This also allows the potential for the site to be maximised in terms of providing increased area of development and employment potential.

Cycle storage will form a key part of the scheme to provide safe and secure areas for bikes with appropriate facilities such as showers internally.

Landscaping

The existing site has no landscaping of note. The new options will look in introduce landscaping to provide attractive and usable external spaces which will be of benefit to both the occupants, the surrounding street and ecology.

Office Accommodation, Flexible and Shared Spaces

Discussion with an operator who will undertake the running of the commercial element has not been undertaken in this stage. The current options are being developed with the strategy of providing the required cores (for circulation, WCs, Plant etc.) around which the remaining floor plates can remain flexible to be divided up as required following input from the operator.

This consultation may also impact how much area becomes directly lettable as office and how much becomes shared or flexible spaces

WCs / Showers

Proposals allow for WC cores on each floor level. WC arrangement will be developed in the next stage with input from the operator in terms of preferences on arrangements such as unisex or split WCs. Areas will also be developed on the Ground Floor to indicate shower and changing provision. Final WC numbers need to be set once layout proposals have been progressed to a level where building occupancy can be firmed up.

Fire

Initial proposals indicate a minimum of 2 stair cores as part of the fire escape strategy, this will need to be developed once a preferred option is selected and is developed to levels where occupancy and layouts are firmed up.

Layouts that maximise the building footprint and limit vehicular access to side and back elevations may require fire risers as part of the fire strategy.

Party Wall / Boundary Ownership

Current building proposals are offset from boundaries whilst confirmation of boundary ownership is confirmed. Of particular relevance is also the roof to 25 Cave Street for which surface water from the roof discharges onto the site.

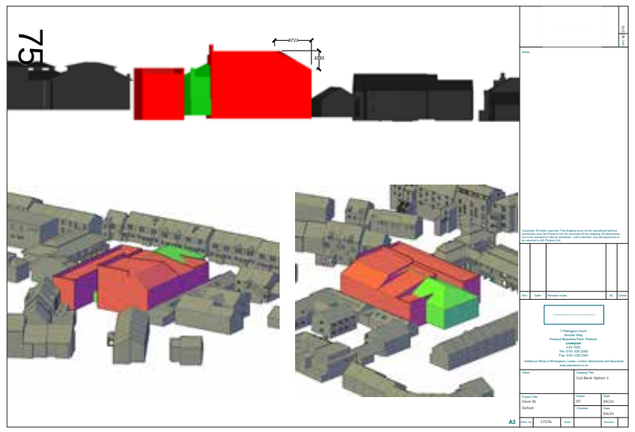
Substation

Current proposals include the relocation of the existing substation due to the access to the substation itself and the restriction on building over the cable route from the road. Current proposals allow for the guidance area keeping the substation clear from other buildings. Once a preferred option is chosen there may be options to consider relocation of a substation into the building which may allow for increase building footprint.

05 Development Strategies
Rights Of Light and Daylight

Initial Rights of Lights and Daylighting Analysis was undertaken by AA projects, the opposite diagram indicates the properties that are most sensitive and require consideration across the options. It also provides a summary of the sensitivity of the site to rights of light risk. Further analysis is required as options progress.

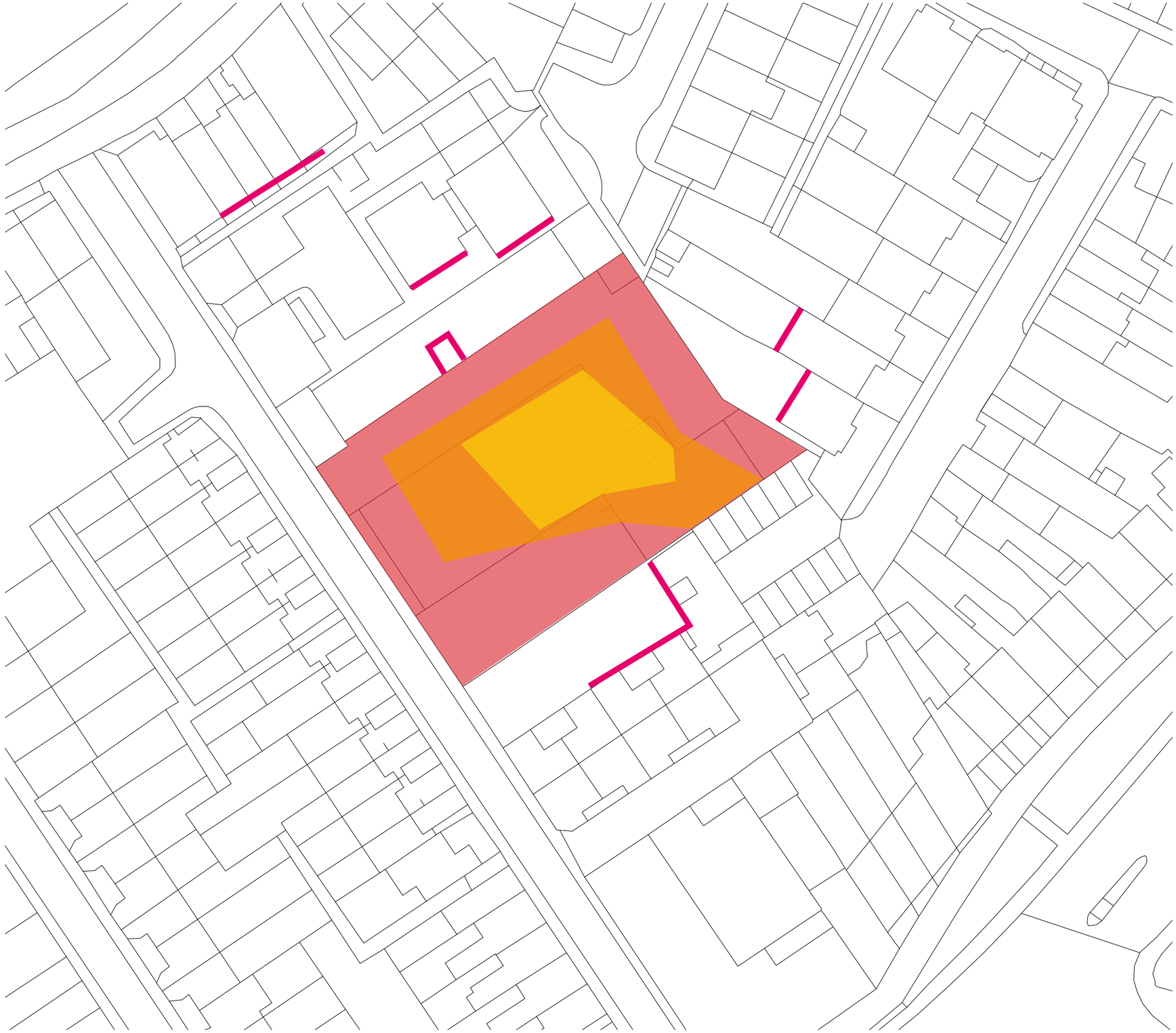
Specific results are provided against the following option sections.



Example Massing Alterations to address Rights Of Light

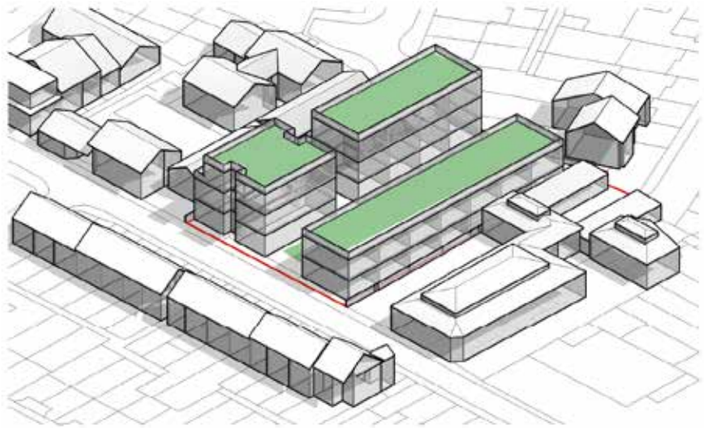
Sensitive Elevations

Height to risk ratio

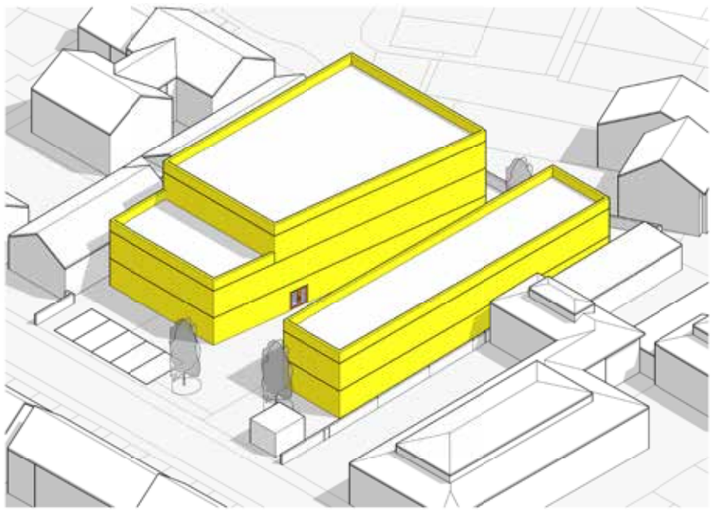


06 — Option D1

06 Option D1
Introduction



Option D - Stage 1



Option D - Start Stage 2

Introduction

At stage 1 Option D represented a mixed use strategy for the site, the massing indicating the potential for a commercial block to the South and a series of terraced houses and flats to the North. Dividing the site in this way meant the development could be subdivided cleanly between residential and commercial. At the start of Stage 2 this scheme was developed to better represent a priority for increased commercial development, this meant relocating the commercial to the North Boundary where initial Rights Of Lights information suggested more height could be achieved.

Option D1

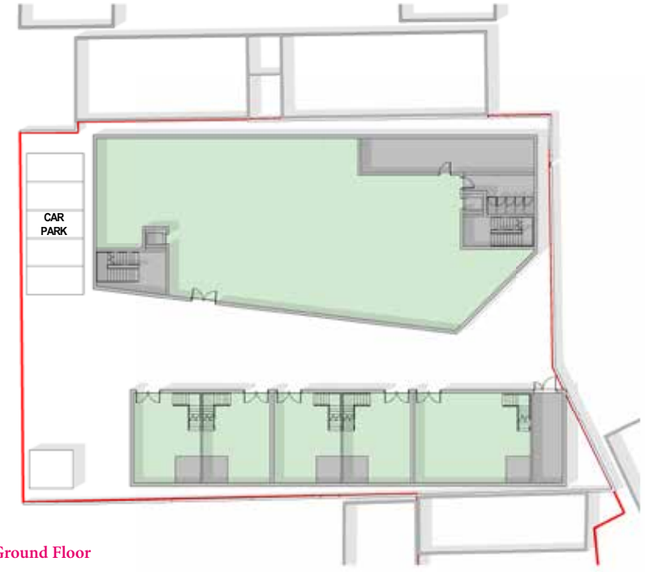
+ Option D1 development is split into two separate blocks, a larger office block and a smaller office block. The smaller block was considered as a variation of the typical commercial block and could open up alternative types of commercial use such as a series of individual units/premises/workshops that open onto the central street.
+ The central street would create a shared external space, this could be semi-public or could be gated to restrict access. There is the opportunity to introduce landscaping and external furniture into this area to allow it to become a beneficial and valuable space
+ Both buildings are pulled back from the main street to provide a more welcoming approach onto the site and provide the opportunity for landscaping and parking at the street frontage
+ An angled South Facade of main block orientates the main elevation closer to South to improve passive solar design and to also open out and provide more space to the central street
+ Car-parking is limited to 4no car parking spaces, attributed to accessible spaces and electric charging
+ Main block has a very good Form Factor which represents good energy efficiency in terms of massing.
+ Substation is relocated to South-West corner of site

06 Option D1
Floor Plans - Shell and Core

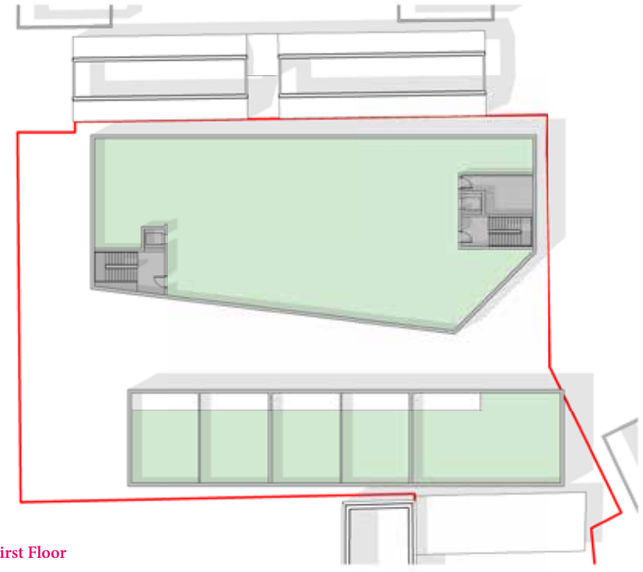
The opposite layouts illustrate a shell and core arrangement indicating Stair, WC and Plant areas. These would be subject to further design once a preferred option has been selected

Office arrangements are to be developed with Operator input.

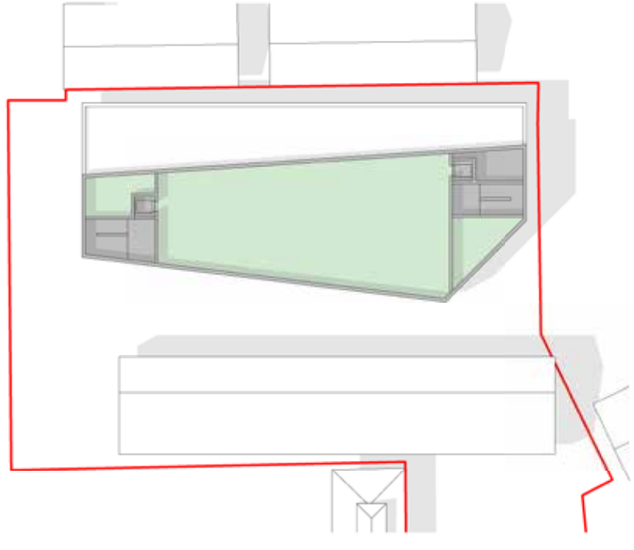
Option D1 Total GIFA 2,123m² / 22,852 ft²



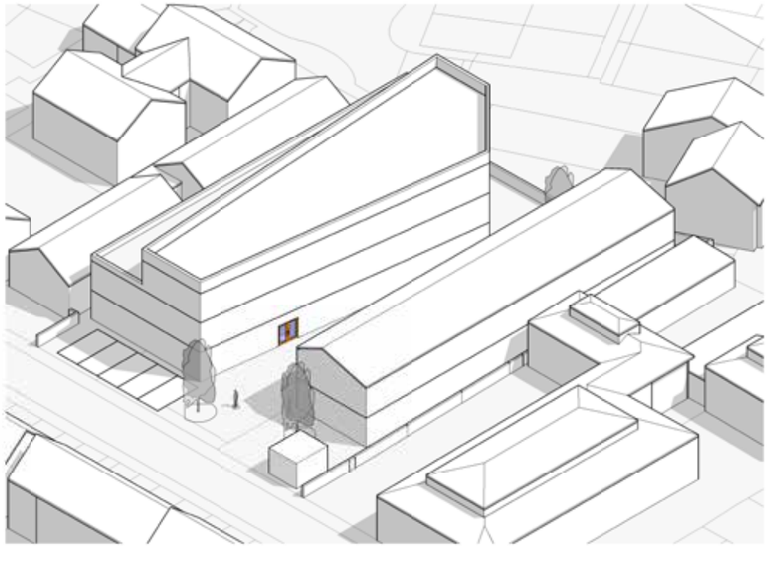
Ground Floor



First Floor



Second Floor



06 Option D1
Indicative Office Layouts

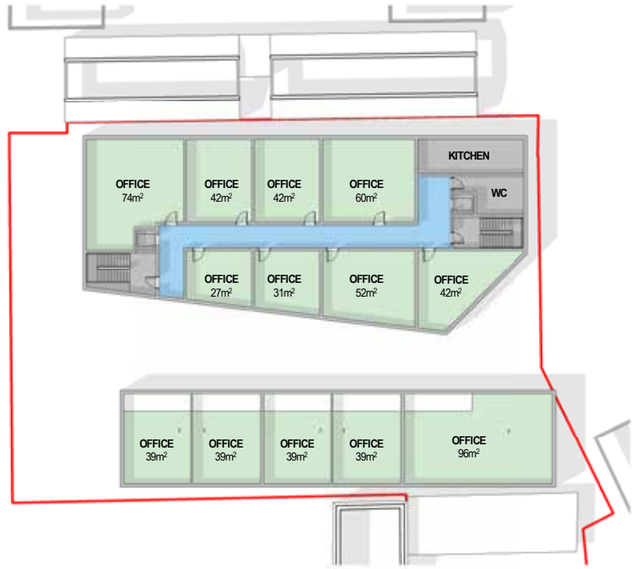
The opposite layouts illustrate an indicative developed arrangement of each floor.

Office arrangements are to be developed with Operator input.

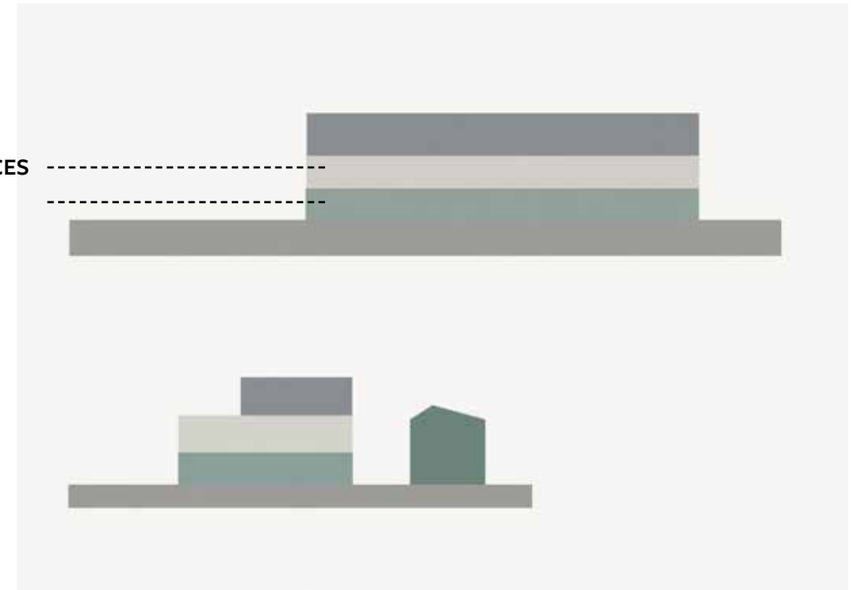
Key Areas

+ GIFA 2,123m² / 22,852 ft²
+ CIRCULATION 176m²/1894ft²
+ SERVICE 335m² / 3,606 ft²
+ OFFICE AREA 1,474m² / 15,866 ft²

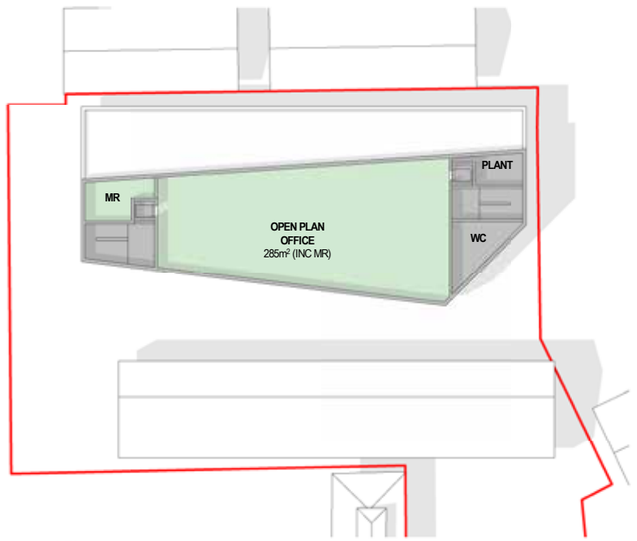
Ground Floor



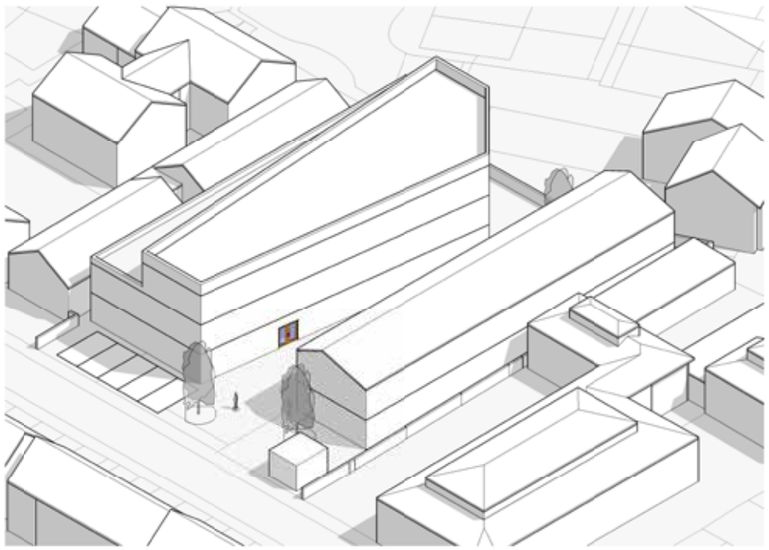
First Floor



Indicative Section Layout Strategy



Second Floor



06 Option D1
Fire Strategy

Option D1

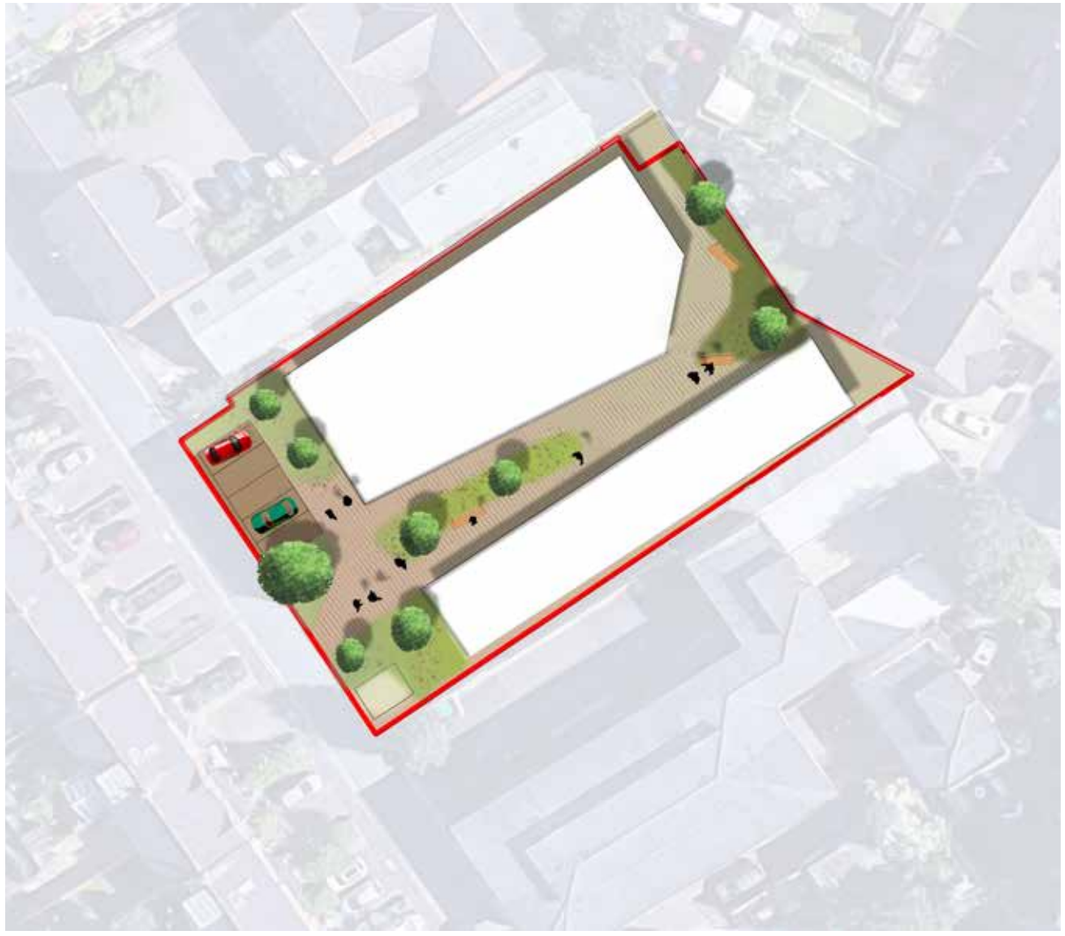
+ Two stair cores needed to all three floors
+ Individual stairs to the office in the smaller building
+ Due to the building being split the cores are less efficient

06 Option D1
Landscaping and Perspectives

The illustrative landscape proposals indicate how the scheme can improve the overall landscape and ecology of the site. The Central street providing external space that is useful as an amenity for the occupants of the offices shared on either side. This space could be open or gated.

External space is provided to the front with would be semi-public and a more private area to the rear. The increased landscaping area could offer opportunities for the space to be used in more flexible ways for example if makers units were part of the scheme the central street could become extensions of these spaces

The proposals indicate the reduced parking to 4no spaces at the front as well as relocated sub-station



Indicative Landscape Proposal

Indicative Entrance Sketch

06 Option D1
Rights Of Light and Daylighting

Rights Of Light

Infringements to:

B19 3 Dudley Gardens - £1000 - £3000

B20 4 Dudley Gardens - £2000 - £6000

B38 39 Cave St - £3000 - £9000

The above are not high figures in terms of Rights of Light compensation and indicate that the levels of light loss are relatively low. An insurance policy could be obtained to cover the risk.

Daylight Sunlight

VSC – Vertical Sky Component (the amount of daylight (sky visibility) reaching a window)

All pass except

2 minor fails to B38 – 39 Cave St

NSL – No sky line
(measure of how light is distributed around a room once the light (VSC) passes through the window)

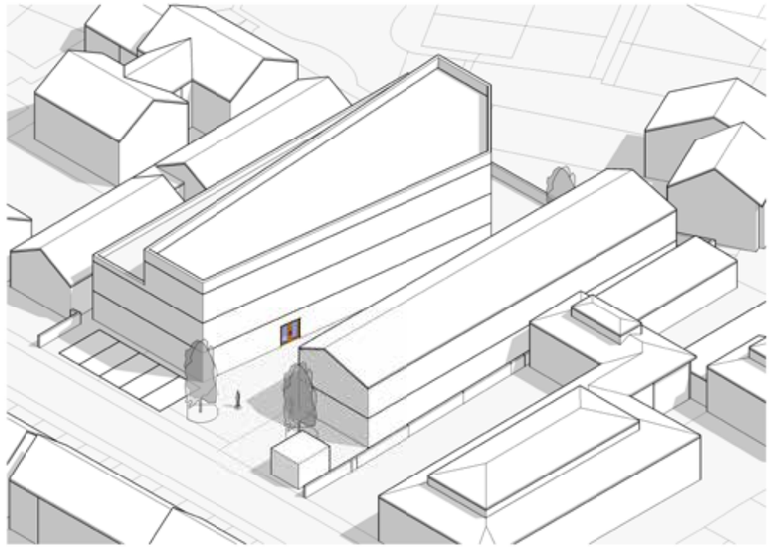
All pass except

1 major fail to B39 – 36 Cave St

1 major fail to B40 – 35 Cave St

APSH – Annual Probable Sunlight Hours (the amount of SUN light reaching a window)

All pass



Massing Tested

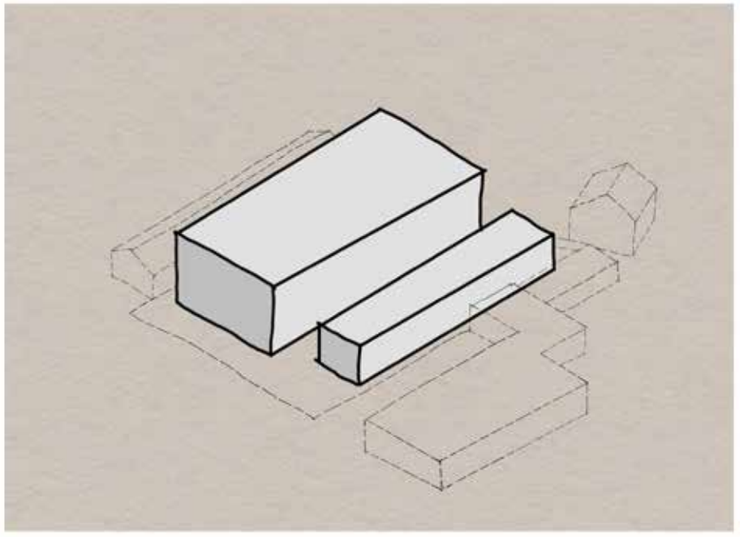
Diagram for property numbering only not to illustrate Option Massing

06 Option D1
Precedents

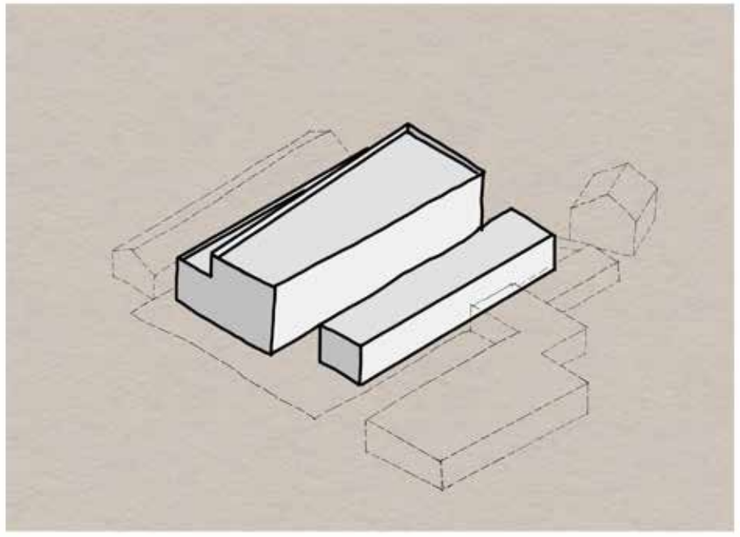
One North (Commercial developments around a shared external space)

MVRDV Offices (Shared Central Area with individual spaces accessed off it)

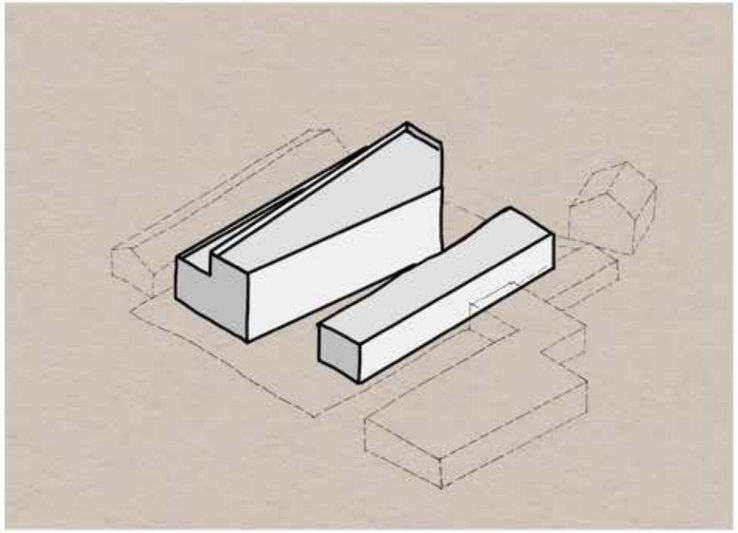
06 Option D1a
Alternative arrangement



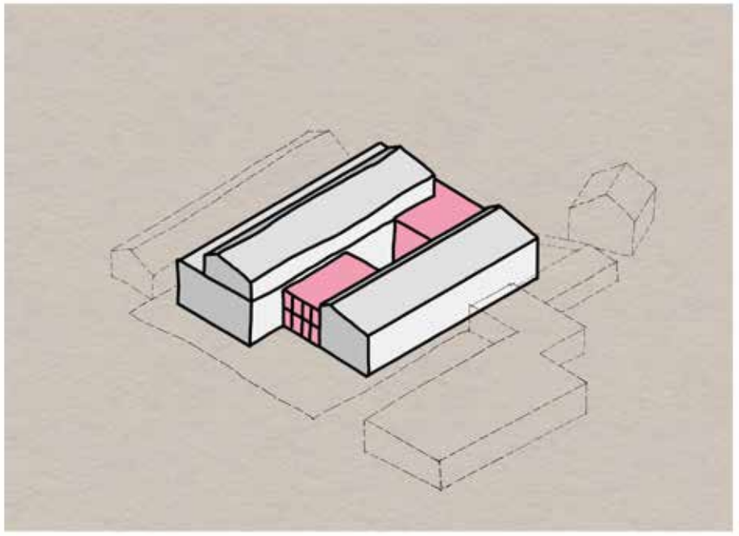
1. Initial Massing for Mixed Use Site Layout



2. Massing development to respond to initial Rights Of Light and Daylighting analysis



2. Massing development to respond to external quality of space (Option D1)



Alternative option/Development which indicates the potential to infill the central street and link the two blocks

06 Option D1a
Alternative arrangement

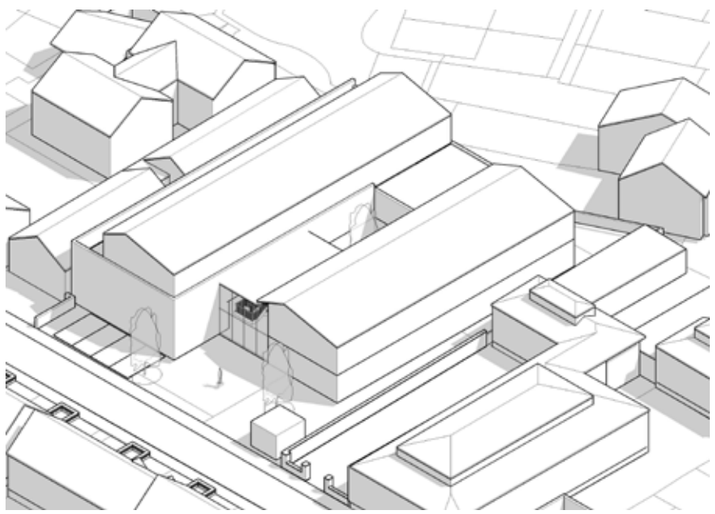
A development of option D1 could include a similar massing but infilling the central shared street/external landscaping between the two buildings. This could introduce efficiencies from reduction in external fabric, shared circulation cores and provide an increased area within the larger building. This could introduce a high quality of space with an atrium and external courtyard within the core of the building.

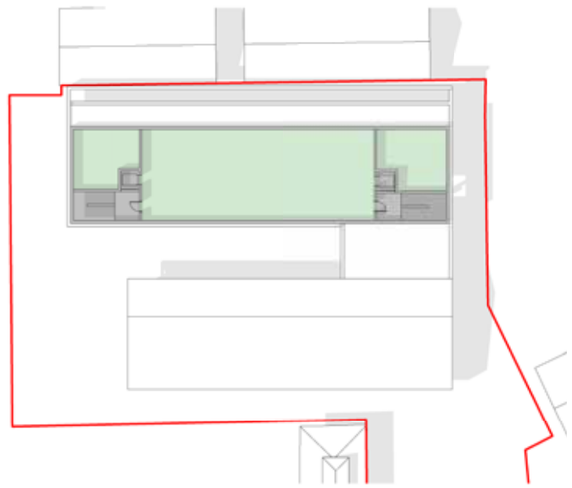
This would remove the element of independence that the separate block has which could be a desirable arrangement and would reduce external space. This change does introduce a building with deeper floor plans and also means the building must be set back from boundaries to allow for fire escape which means areas is not necessarily increased but this would be tested.

This Option has not been tested against Rights Of Light at this point

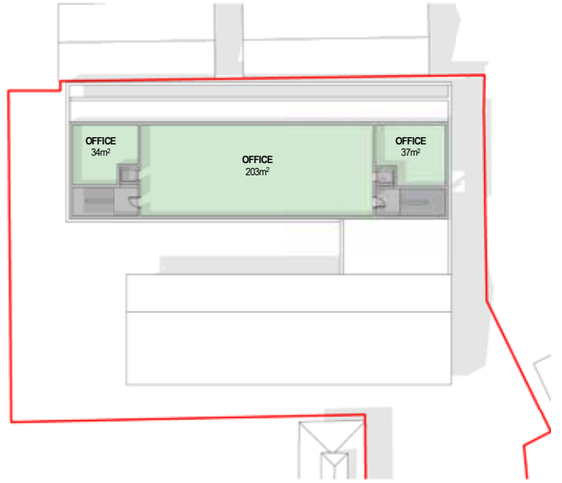
Key Areas (based on indicative Office Layout)

+ GIFA 2,035m² / 21,905 ft²
+ CIRCULATION 295m² / 3,175 ft²
+ SERVICE 258m² / 2,777 ft²
+ OFFICE AREA 1343m² / 14,456 ft²

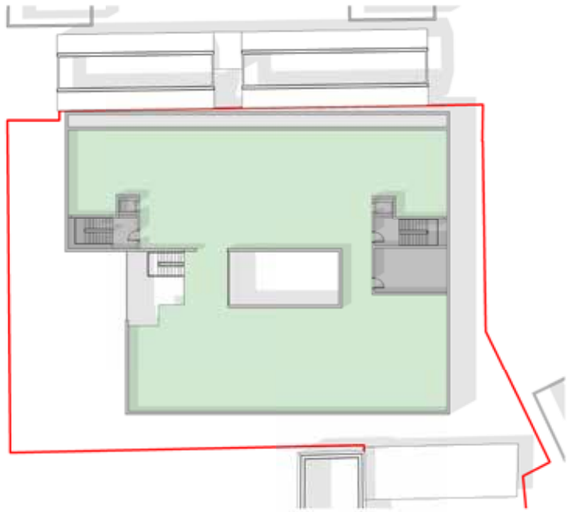




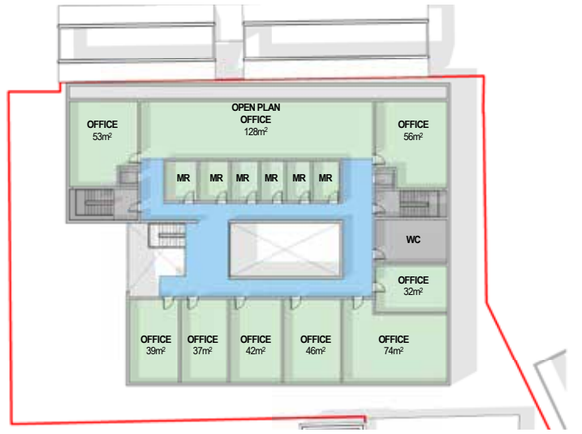
Second Floor - Shell and Core



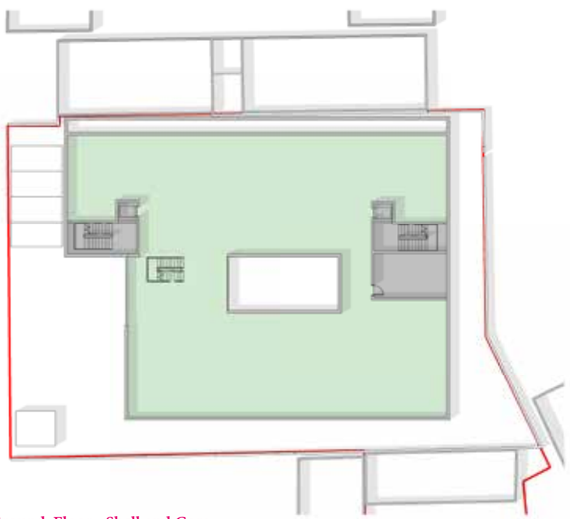
Second Floor - Indicative Layout



First Floor - Shell and Core



First Floor -Indicative Layout

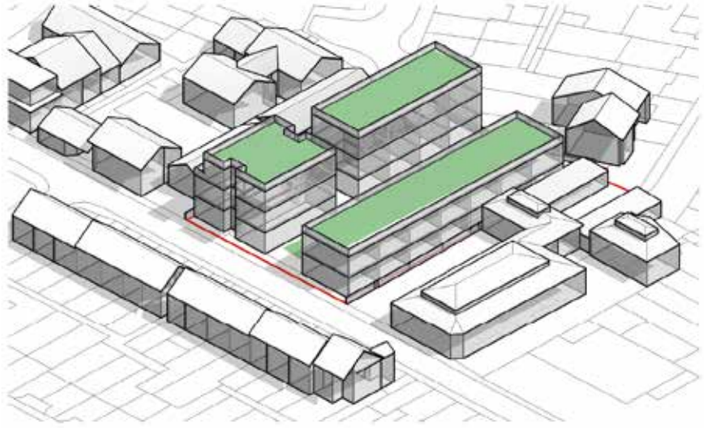


Ground Floor - Shell and Core

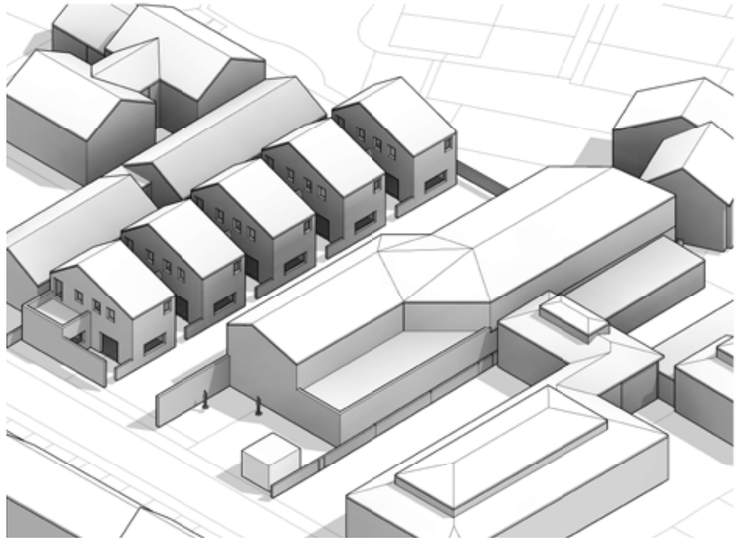
Ground Floor - Indicative Layout

07 — Option D2

07 Option D2
Introduction



Option D - Stage 1



Option D2 - Stage 2

Introduction

At stage 1 Option D represented a mixed use strategy for the site, the massing indicating the potential for a commercial block to the South and a series of terraced houses and flats to the North. Dividing the site in this way meant the development could be subdivided cleanly between residential and commercial.

Option D2

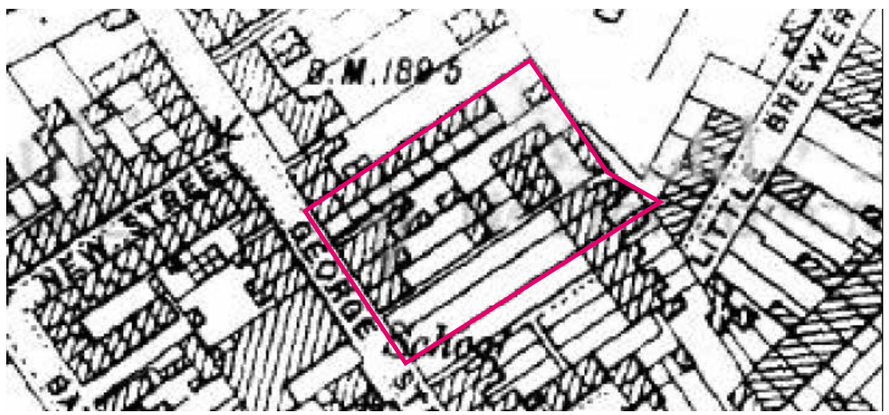
+ Option D2 development is split into two separate blocks, a larger office block and a residential development of a new central street access. There is the opportunity to introduce landscaping and external furniture into this area to allow it to become a beneficial and valuable space to the residential development
+ The commercial building is pulled back from the main street to provide a more welcoming approach onto the site and provide the opportunity for landscaping and parking at the street frontage
+ Car-parking is limited to 3no car parking spaces, attributed to accessible spaces and electric charging
+ Commercial development is an increase over the existing building but is reduced compared to the other options as a result of accommodating residential
+ Substation is relocated to South-West corner of site

07 Option D2
Design Development

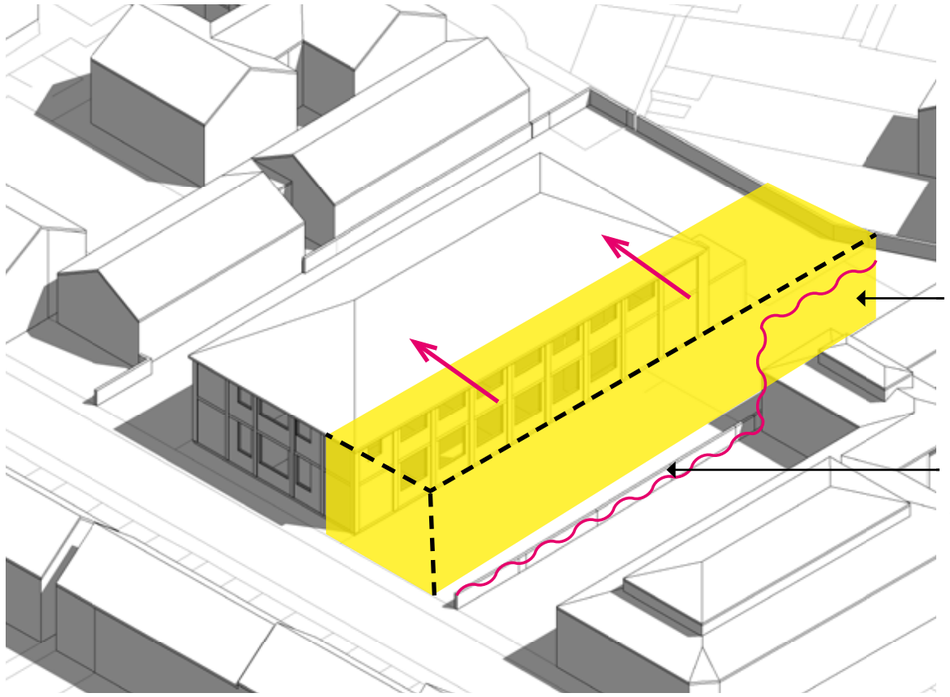
Option D1 illustrates the larger commercial building to the North of the site for Rights of Lights reasons. If the site is to be developed as mixed use the emphasis changes. Due to site restrictions any residential development split on the preferred axis up through the site is likely to be single aspect. For this reason locating the residential to the North boundary is a preferred solution providing the residential properties with South aspects.

The proposed residential solution is to provide a Mews street with individual housing, at this point this was considered the more appropriate density for the site. This arrangement also relates back to the historic arrangement of the site where a number of small properties in a similar arrangement can be seen on the North Boundary to the site.

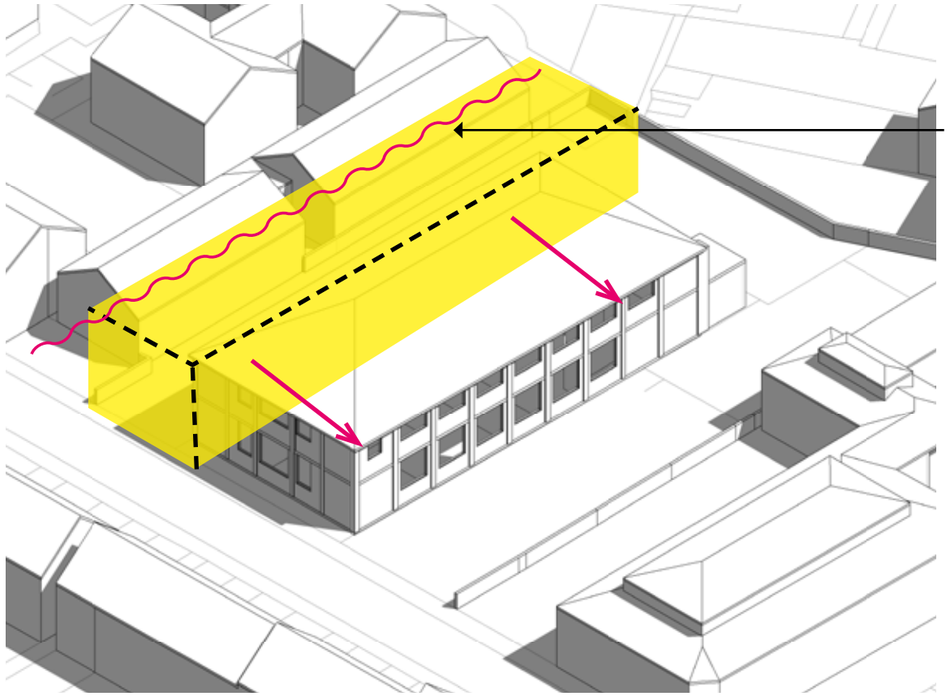
1876



1879

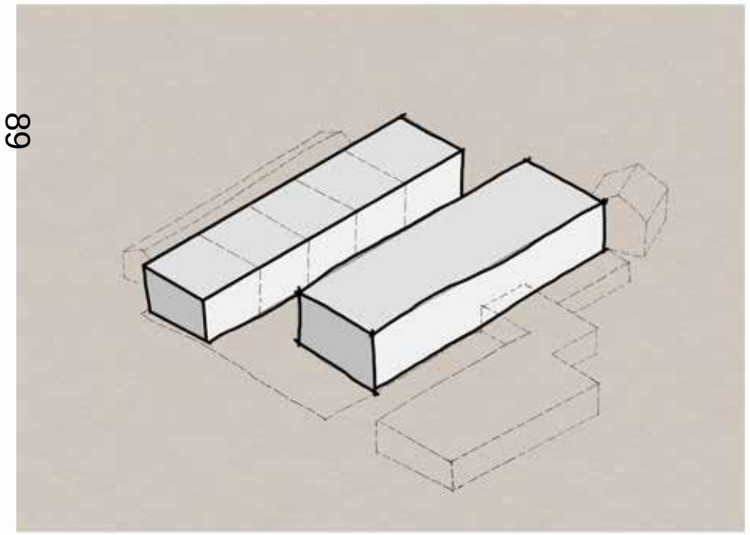


PREDOMINANTLY NORTH FACING SINGLE SIDED UNITS

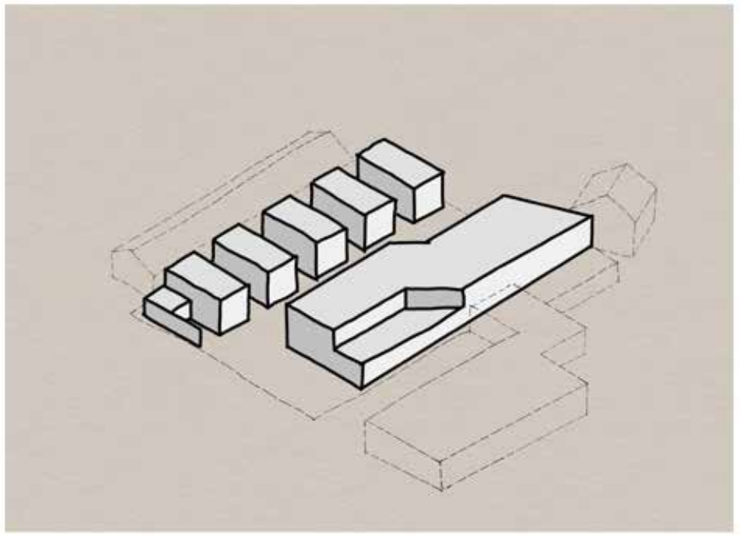


PREDOMINANTLY SOUTH FACING SINGLE SIDED UNITS

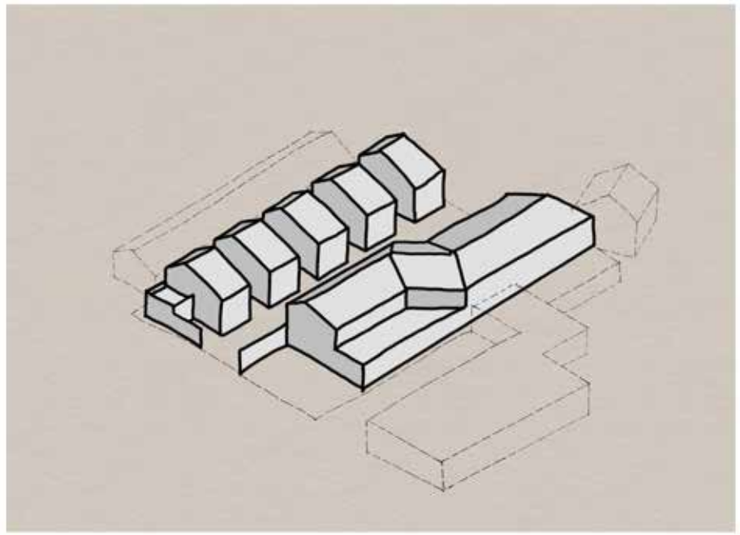
07 Option D2
Design Development



1. Initial Massing for Mixed Use Site Layout



2. Massing development to address residential typology and respond to initial Rights Of Light and Daylighting analysis



3. Massing development to develop architectural response to site

07 Option D2
Floor Plans

The opposite layouts illustrate a shell and core arrangement for the commercial building indicating Stair, WC and Plant areas. These would be subject to further design once a preferred option has been selected

Office arrangements are to be developed with Operator input.

The residential aspect is indicated as a mews street with 5no. 3 bedroom properties all with a South aspect. Should a mixed use scheme be taken forward the residential element would be further developed in terms of type and numbers of properties.

Key Areas (Commercial)

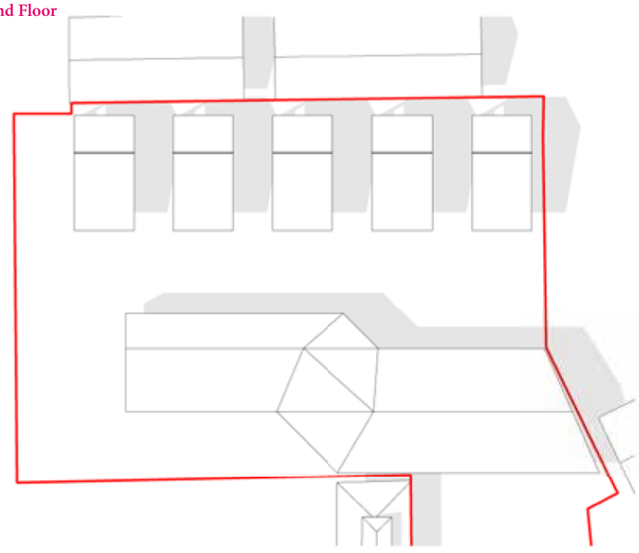
+ GIFA 971m² / 10,452 ft²

(Per Residential Unit, 5 total)

+ GIFA - 100m² / 1076 ft²
+ 3 Bedroom

Ground Floor

First Floor



Roof Plan

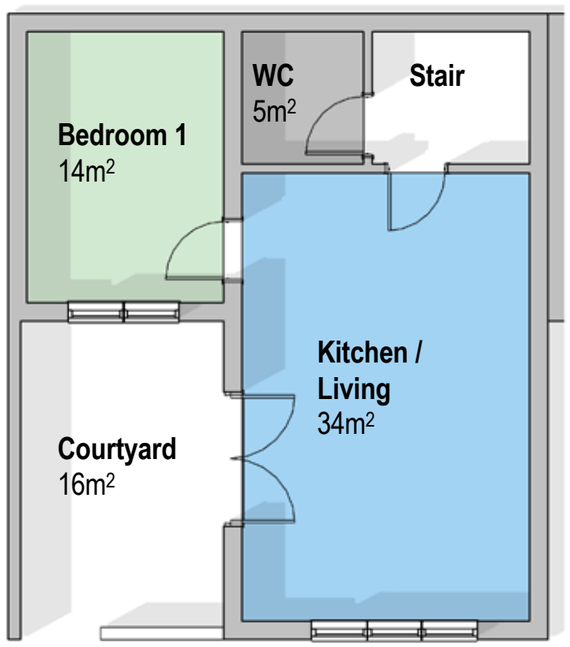
07 Option D2
Housing Floor Plan

The below indicates the typical house layout, based around a predominantly single aspect constraint. The house types would look to provide private external spaces with a small courtyard but also first floor terrace. This would be combined with access to the shared mews street which would be car free. This would be developed should the mixed use scheme be taken forward.

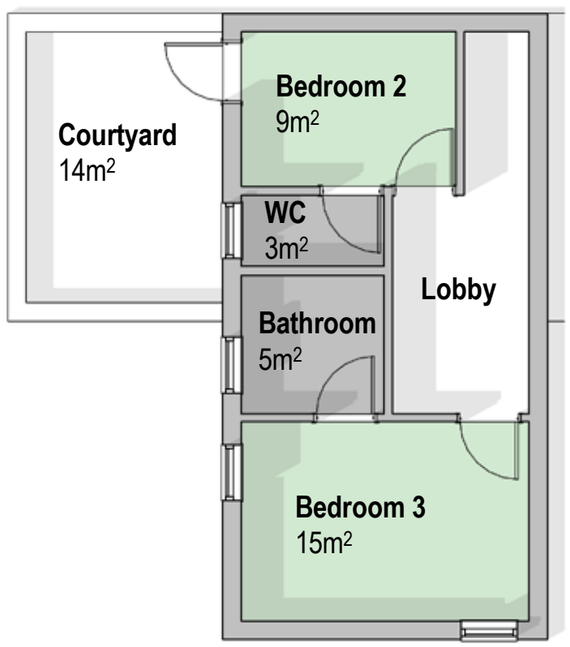
Key Areas

(Per Residential Unit, 5 total)

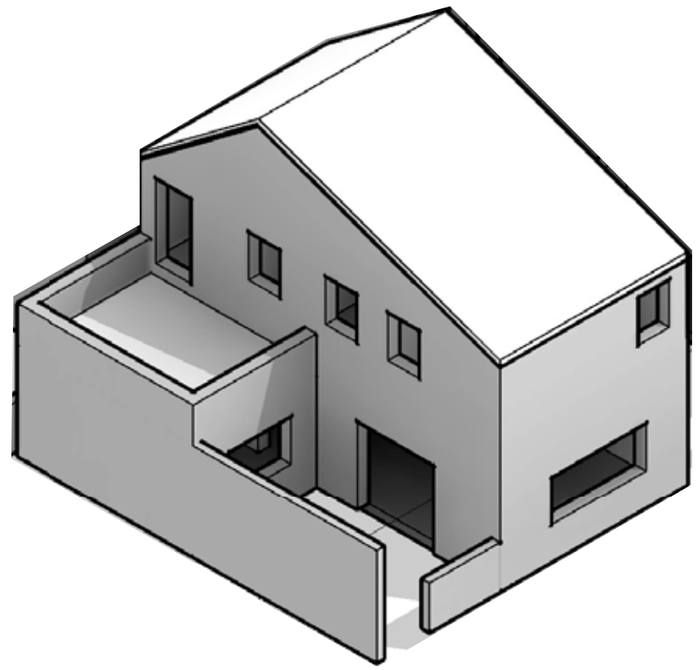
+ GIFA - 100m² / 1076 ft²
+ 3 Bedroom



Ground Floor Plan



First Floor Plan



08 Option D2
Rights of Light and Daylight

Rights Of Light

No infringements

Daylight Sunlight

VSC – Vertical Sky Component (the amount of daylight (sky visibility) reaching a window)

All pass

NSL – No sky line
(measure of how light is distributed around a room once the light (VSC) passes through the window)

All pass

APSH – Annual Probable Sunlight Hours (the amount of SUN light reaching a window)

All pass

Massing tested

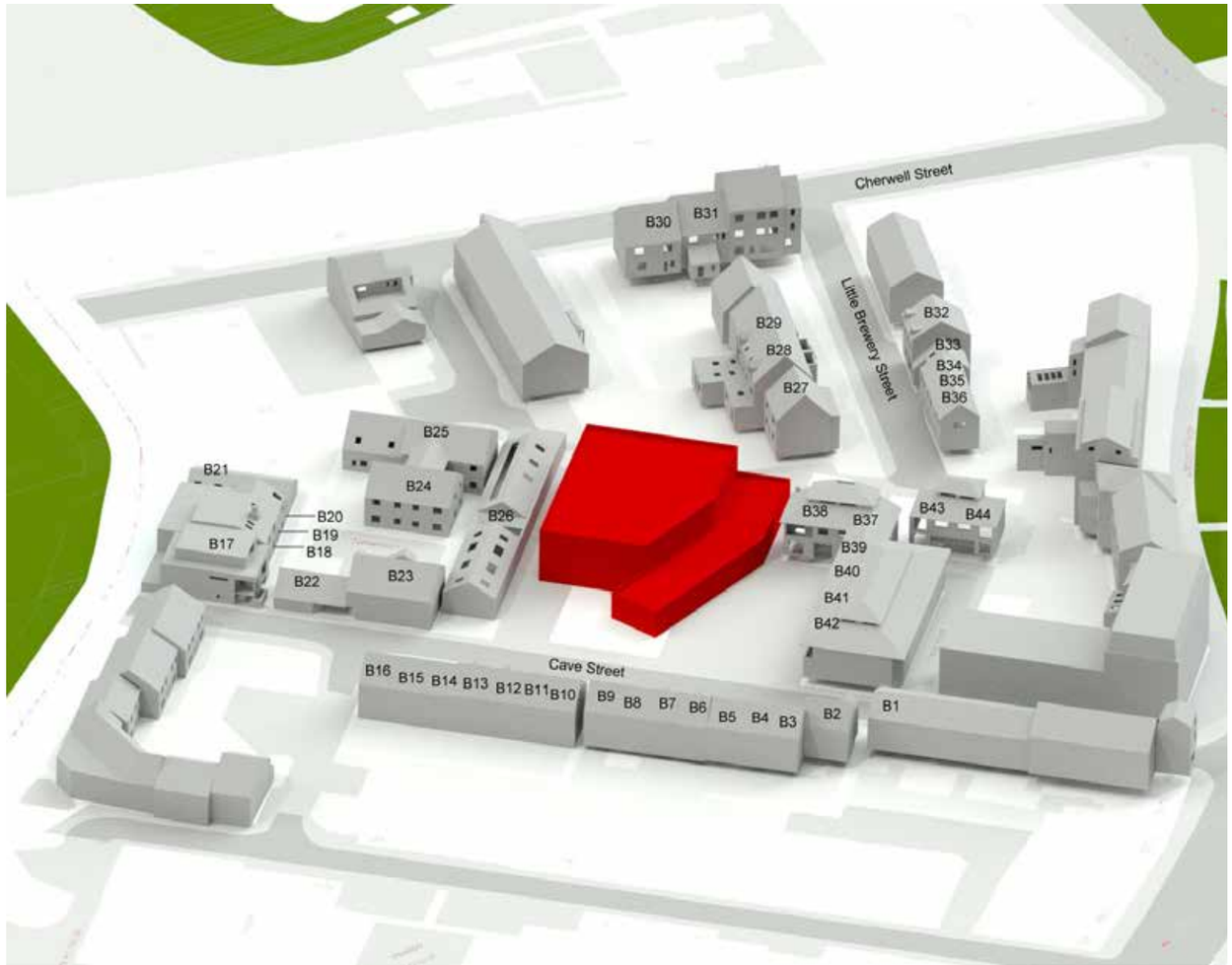


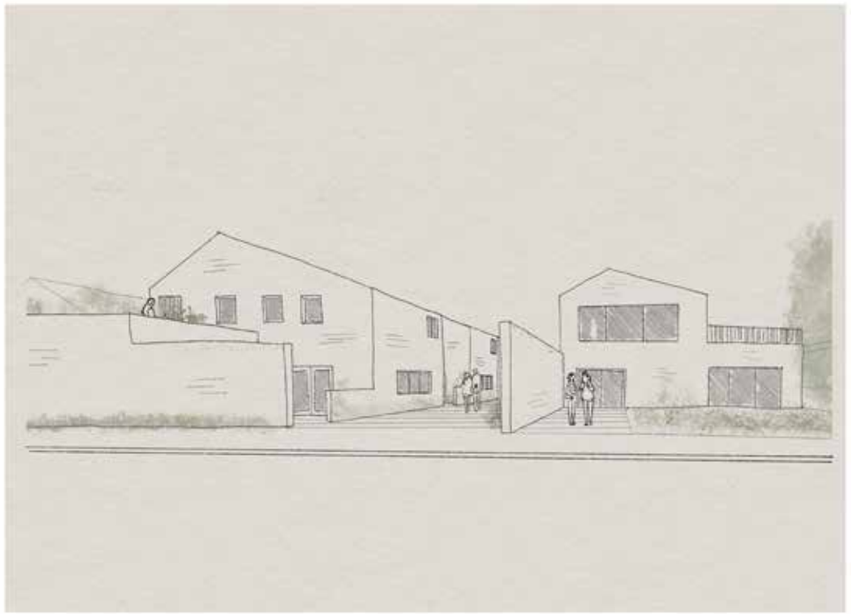
Diagram for property numbering only not to illustrate Option Massing

07 Option D2

Precedent Mews Development

Moray Mews (Peter Barber Architects)

07 Option D2
Sketch Views

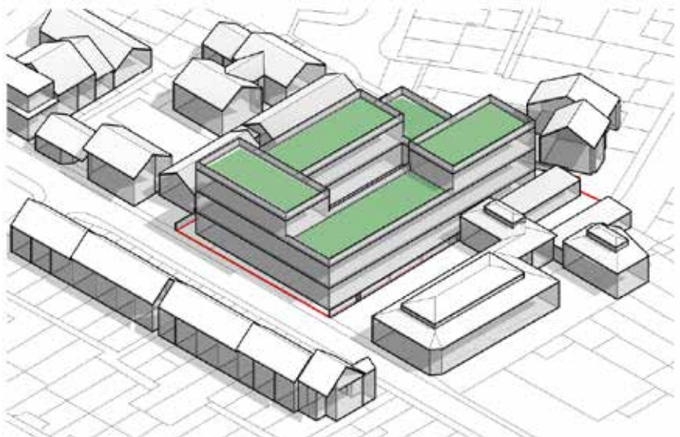


Sketch Perspective

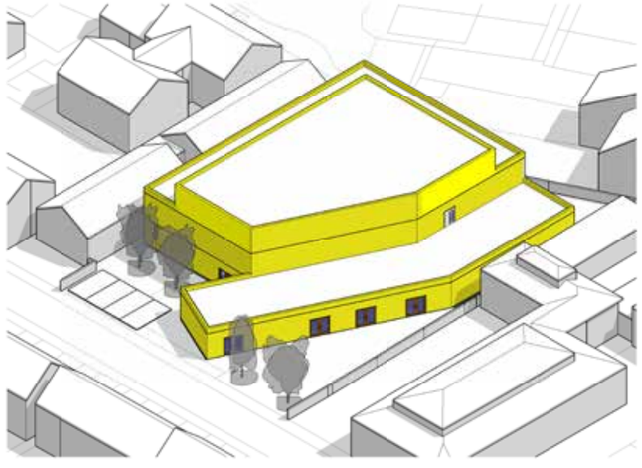
Sketch Axo

08 — Option G

08 Option G
Introduction



Option G - Stage 1



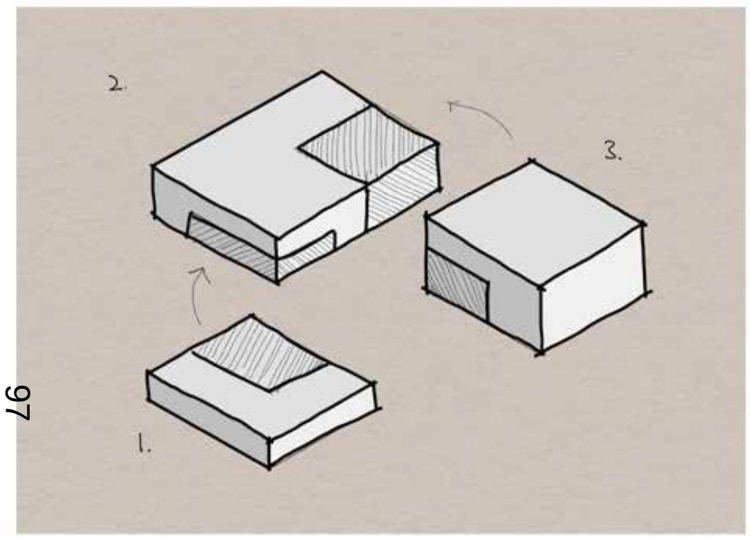
Option G - Start Stage 2

Introduction

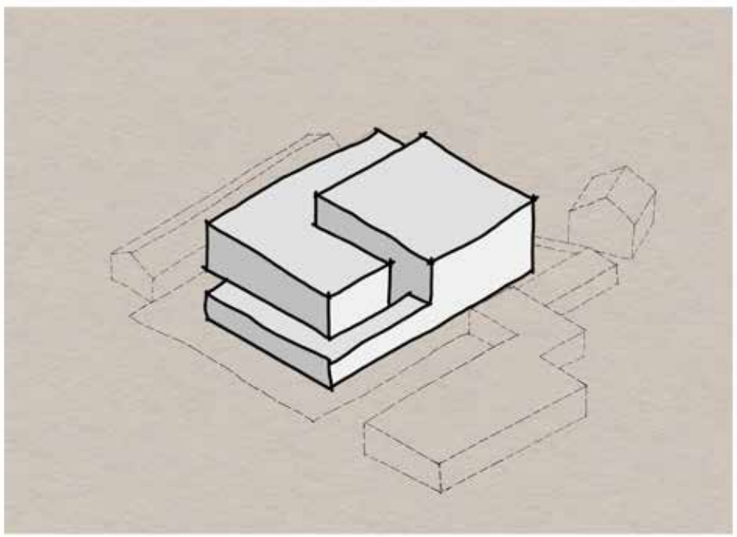
At stage 1 Option G represented a maximise commercial development strategy, increasing footprint and density as much as possible. At the start of Stage 2 this scheme was developed to respond to initial Rights Of Lights information which highlighted the boundaries as the higher risk areas and that the centre of the site has the greater opportunity for height.

+ Development is formed of one 'superblock'
+ The development if pulled back from the main street to reduce perceived massing, provide a more welcoming approach to the site and provide the opportunity for landscaping at the street frontage.
+ The front area to the site could be semi-public with a secure site boundary at the building line
+ The deep plan massing would be possible via a central glazed atrium providing natural daylight into the core of the building
+ Car-parking is limited to 4no car parking spaces, attributed to accessible spaces and electric charging
+ Main block has a good Form Factor while represents good energy efficiency in terms of massing.
+ Substation is relocated to South-West corner of site

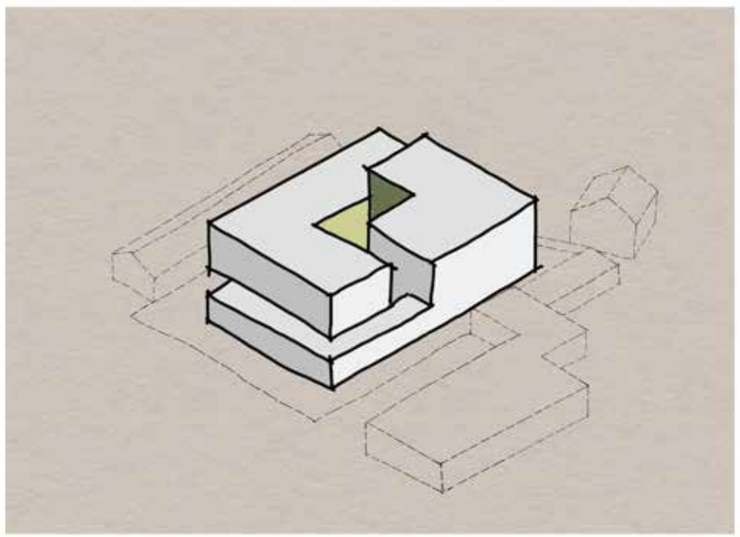
08 Option G
Design Development



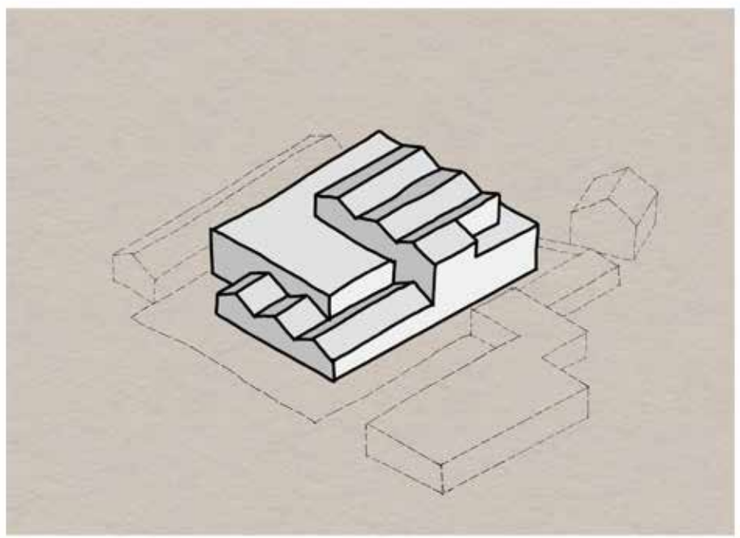
1. Components of massing responding to Rights Of Light constraints



2. Massing development of each component as a whole



3. Insertion of void/atrium to address daylighting on deep plan footprint

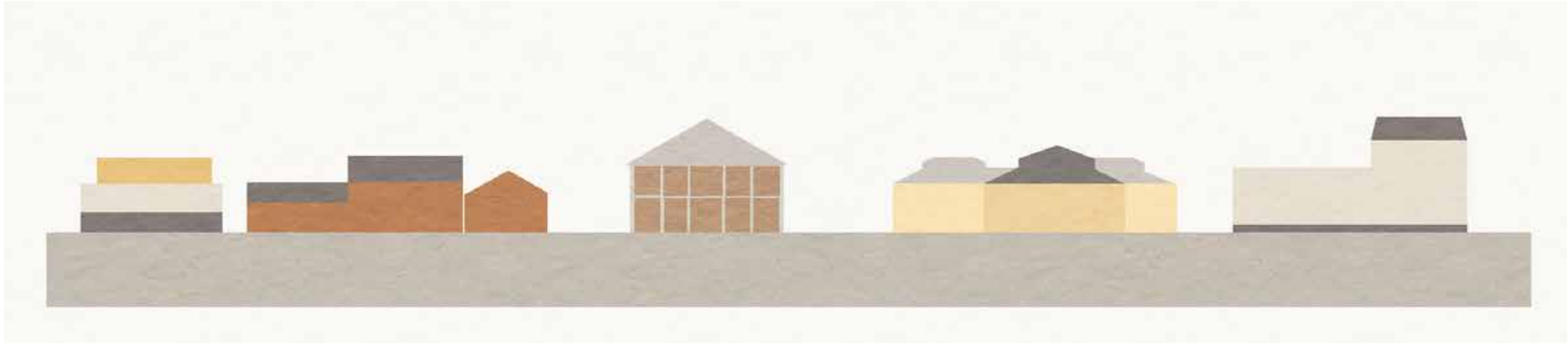


4. Massing development to respond to street context

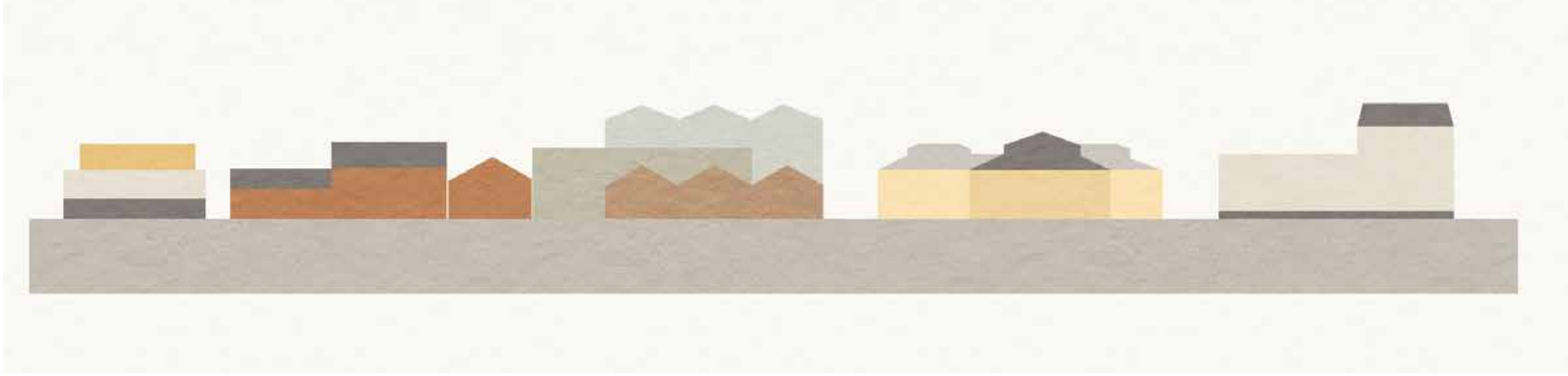
08 Option G
Elevation Study

Option G

+ Sympathetic to the surroundings by stepping back from the road
+ Draws on inspiration of the history of the area with the pitched roofs and warehouse/ workshop typology



Existing Street Elevation



Option G Street Elevation

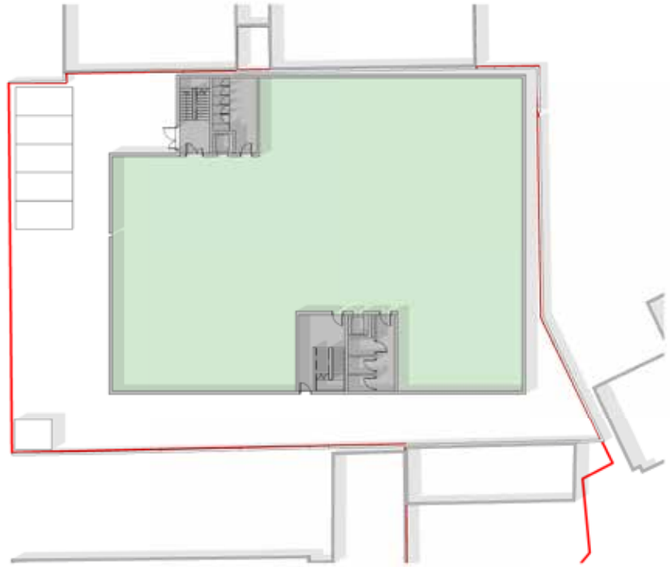
08 Option G
Floor Plans Shell and Core

The opposite layouts illustrate a shell and core arrangement indicating Stair, WC and Plant areas. These would be subject to further design once a preferred option has been selected

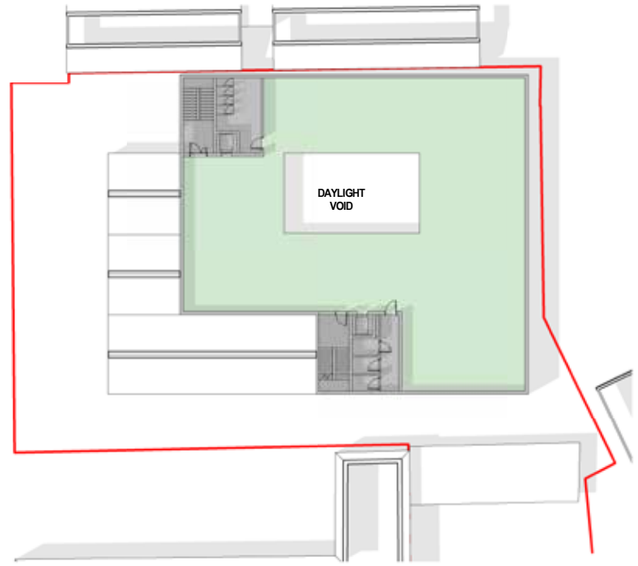
Office arrangements are to be developed with Operator input.

Key Areas

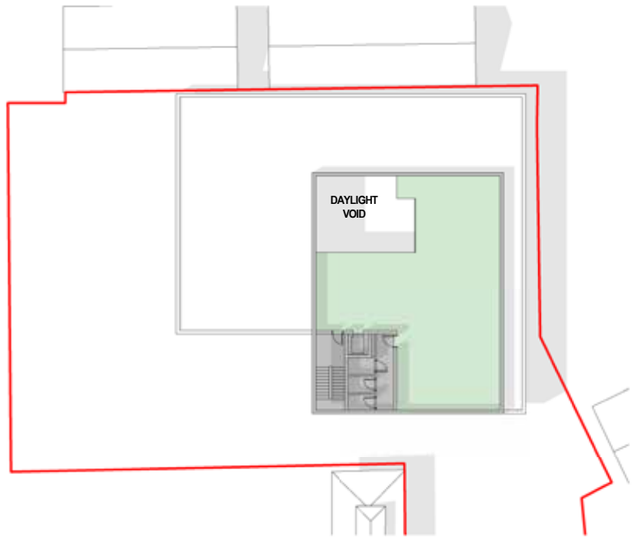
+ GIFA 1,910m² / 20,554 ft²



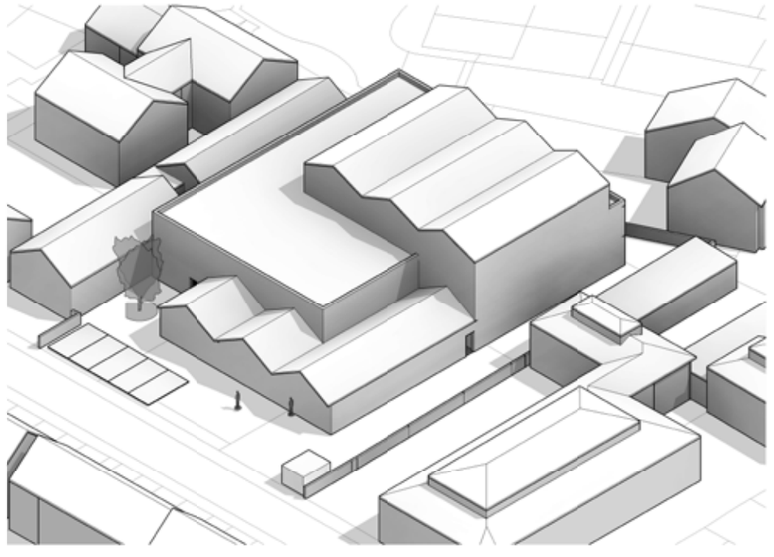
Ground Floor



First Floor



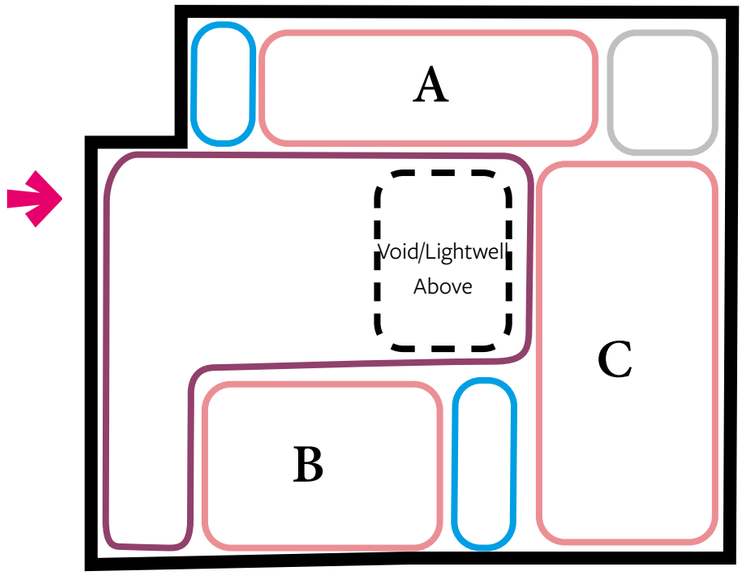
Second Floor



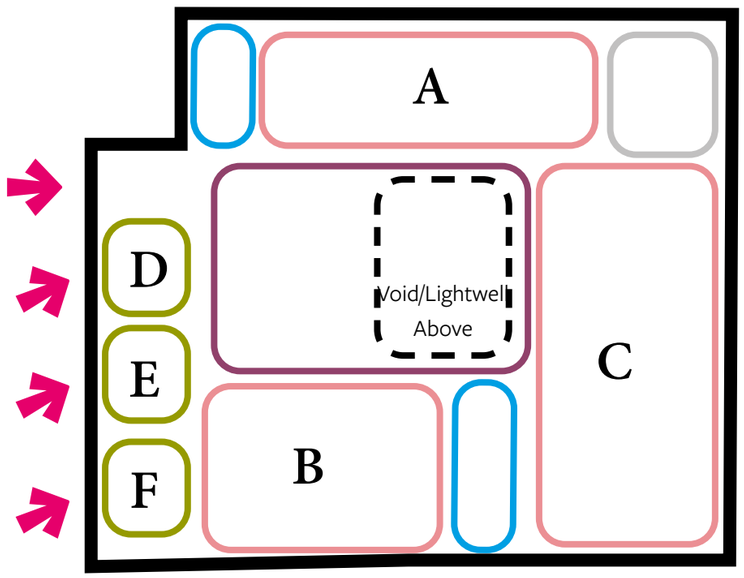
08 Option G

Internal Layout Strategies and Options

Office arrangements are to be developed with Operator input. The opposite diagrams indicate the flexibility and potential arrangements that could be considered as part of this development



INDIVIDUAL OFFICES WITH SHARED SPACES LAYOUT



INDIVIDUAL OFFICES WITH SHARED SPACES AND SELF-CONTAINED UNITS

OPEN PLAN OFFICE

- Single Organisation
- Split Organisations / Shared

INDIVIDUAL OFFICES

- Single Organisations

SELF CONTAINED UNITS

- Single Organisations

Workshops

SHARED SPACES

-Circulation, Social, flexible, meeting, Kitchen

PLANT

CORE

-Stairs, Lifts, WCs

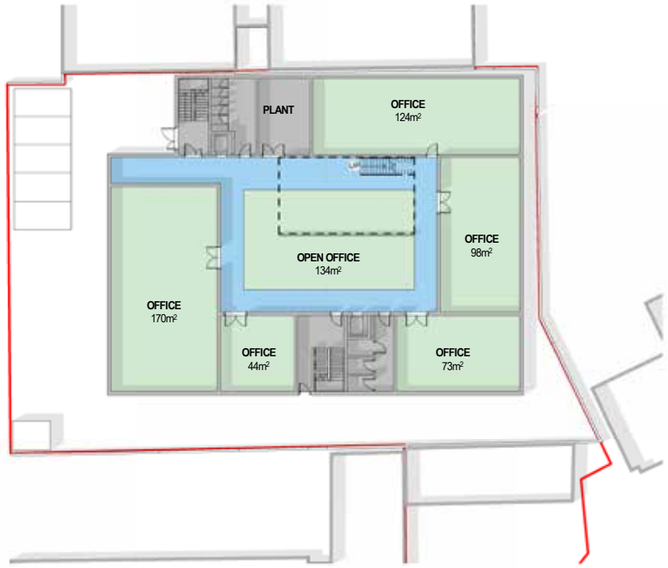
08 Option G
Indicative Office Layout

The opposite layouts illustrate an indicative developed arrangement of each floor.

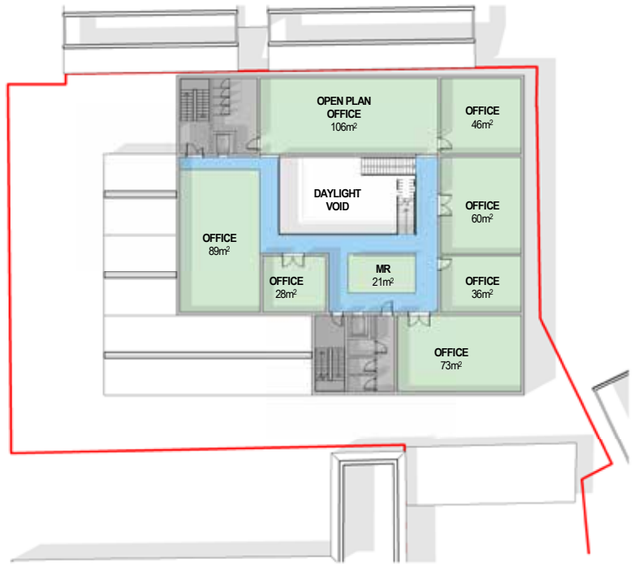
Office arrangements are to be developed with Operator input.

Key Areas

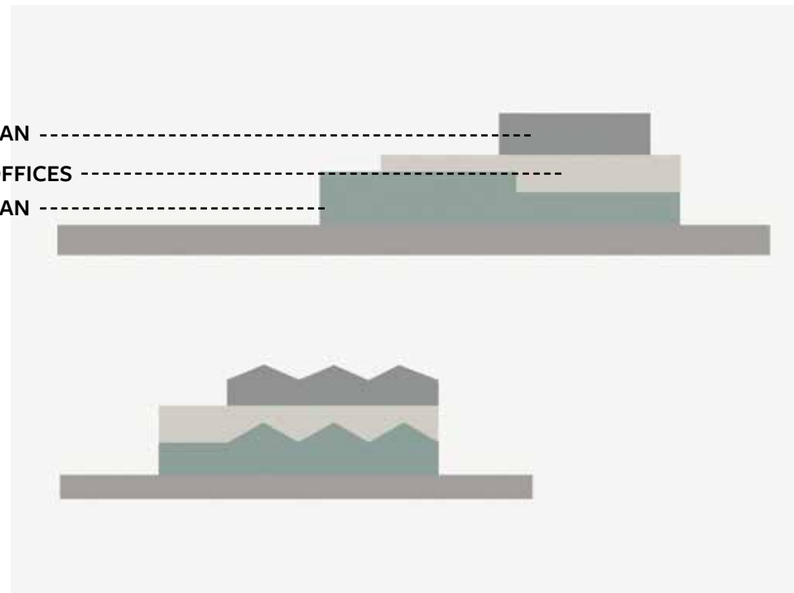
+ GIFA 1,910m² / 20,554 ft²
+ CIRCULATION 284m² / 3,057 ft²
+ SERVICE 300m² / 3,229 ft²
+ OFFICE AREA 1,323m² / 14,241 ft²



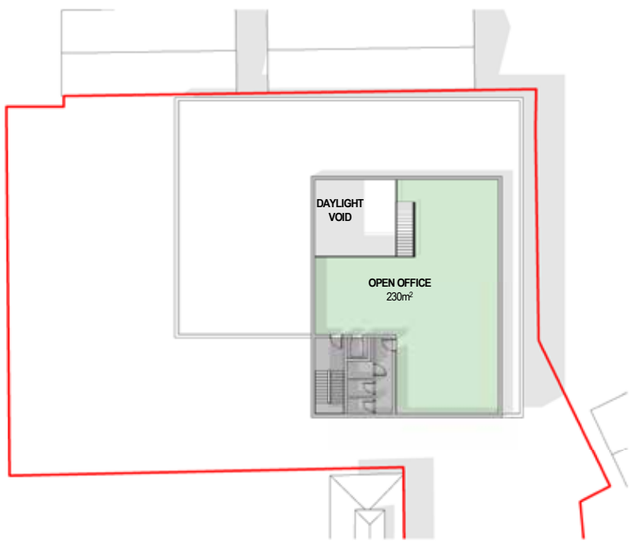
Ground Floor



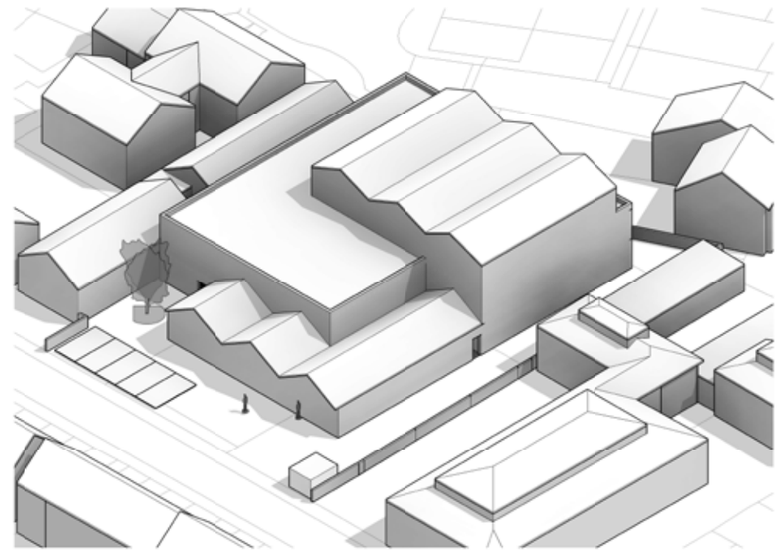
First Floor



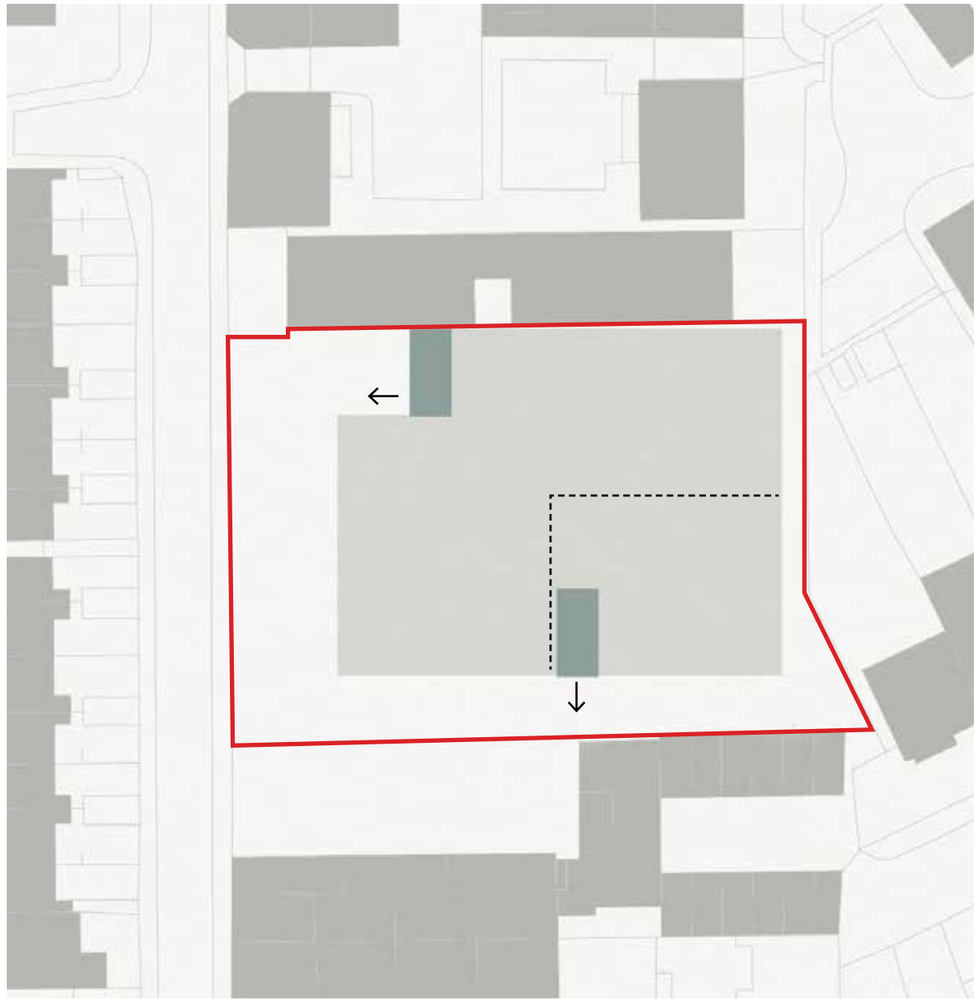
Indicative Section Layout Strategy



Second Floor



08 Option G
Fire Strategy



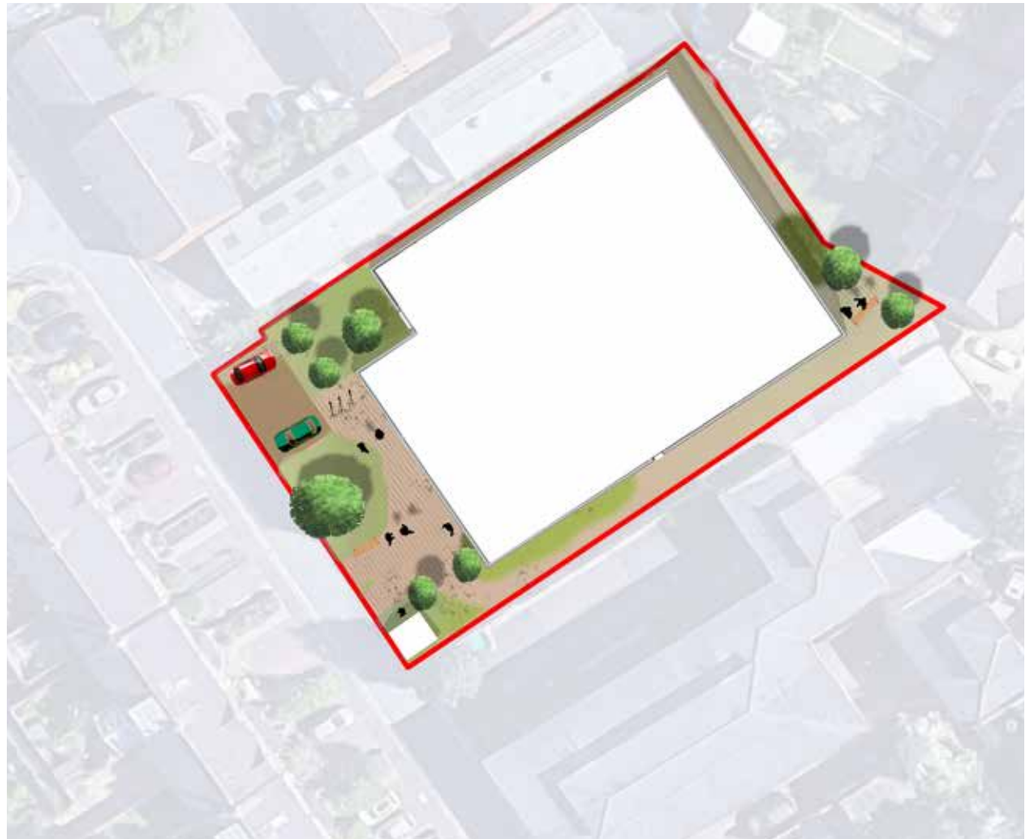
Option G

+ Two stair cores needed, with only one going to the third floor
+ More efficient use of the building as it is one form
+ Subject to development the building may require a fire riser due to limitations on perimeter access

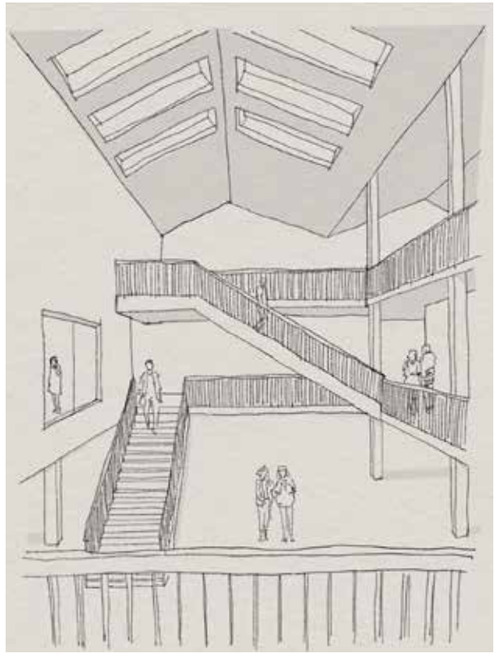
08 Option G
Landscaping and Perspectives

The illustrative landscape proposals indicate how the scheme can improve the overall landscape and ecology of the site, providing external space that is useful as an amenity for the occupants of the offices. External space is provided to the front which would be semi-public and a more private area to the rear.

The proposals indicate the reduced parking with 4no spaces to the front as well as relocated sub-station



Illustrative Landscape Proposal



Central Atrium Perspective

Street Entrance Perspective

08 Option G
Rights of Light and Daylight

Rights Of Light

No infringements

Daylight Sunlight

VSC – Vertical Sky Component (the amount of daylight (sky visibility) reaching a window)

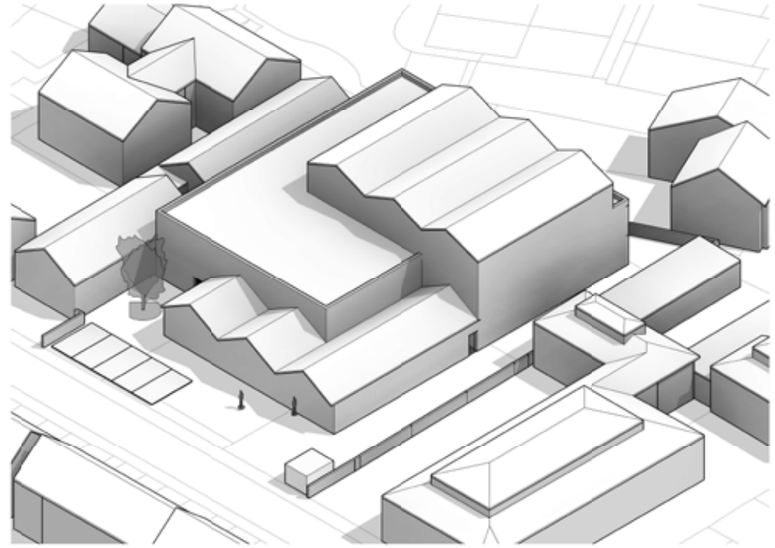
All pass

NSL – No sky line
(measure of how light is distributed around a room once the light (VSC) passes through the window)

All pass

APSH – Annual Probable Sunlight Hours (the amount of SUN light reaching a window)

All pass



Massing tested

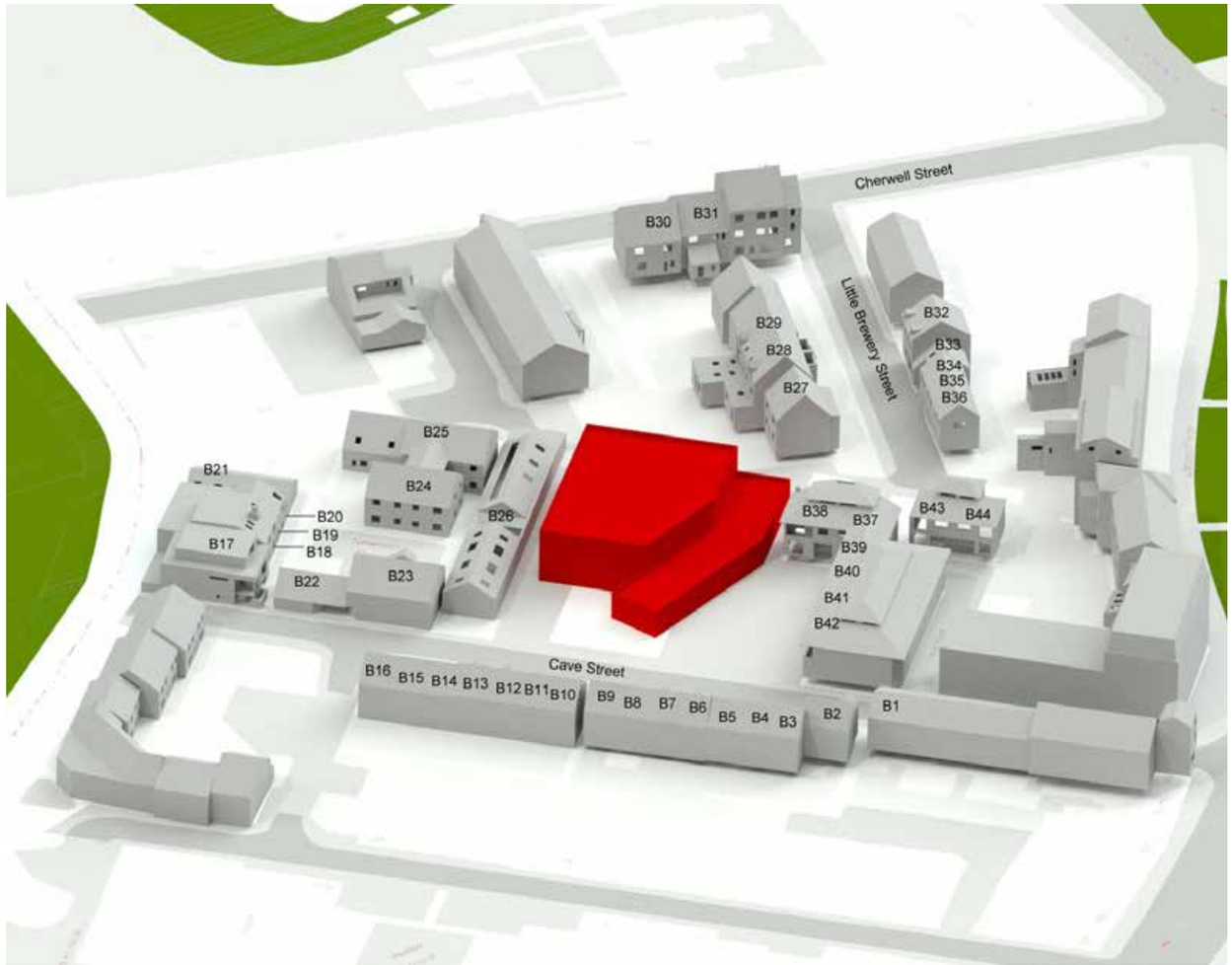


Diagram for property numbering only not to illustrate Option Massing

08 Option G
Precedent Schemes

Bicester Eco Centre (Passivhaus Plus Certified)

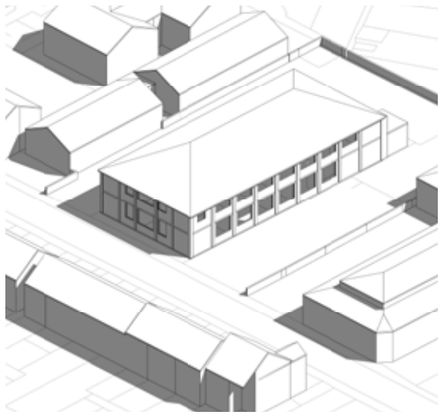
Gucci Hub, Italy

09 — Areas and Option Overview

09 Areas and Options Overview

Key areas

EXISTING | *PREVIOUS SCHEME* | *STAGE 2*



Existing Building

Key Areas

+ GIFA 889m² / 9569 ft²
+ CIRCULATION 202m² / 2174 ft²
+ SERVICE 45.5mm² / 489 ft²
+ OFFICE AREA - 602m² / 6480 ft²

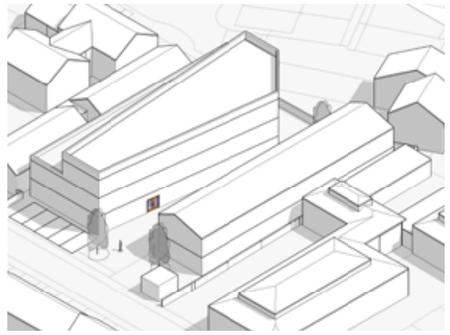
Option A

Previous scheme, extending existing building

Key Areas

+ GIFA 1,800m² / 19,375 ft² **(Estimated)**
+ CIRCULATION Not provided
+ SERVICE Not provided
+ OFFICE AREA 1,280m² / 13,777ft²

NOTE:
Circulation and service areas are not broken down in Option 3 Ridge Cave Street Stage 2 Report. Only Office area is provided as a specific figure. Option 3 also does not seem to allocate sufficient area to Plant.



Option D1

2 Commercial Buildings

Key Areas

+ GIFA 2,123m² / 22,852 ft²
+ CIRCULATION 176m²/1894ft²
+ SERVICE 335m² / 3,606 ft²
+ OFFICE AREA 1,474m² / 15,866 ft²
+ POTENTIAL NIA @ 75% 17,139 ft²

Option D1a

Key Areas

+ GIFA 2,035m² / 21,905 ft²
+ CIRCULATION 295m² / 3,175 ft²
+ SERVICE 258m² / 2,777 ft²
+ OFFICE AREA 1343m² / 14,456 ft²
+ POTENTIAL NIA @ 75% 16,429ft²

Option D2

Commercial and Residential

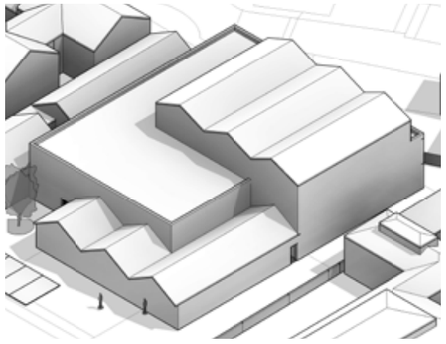
Key Areas Commercial

+ GIFA 971m² / 10,452 ft²
+ CIRCULATION Not broken down
+ SERVICE Not broken down
+ OFFICE AREA Not broken down
+ POTENTIAL NIA @ 80% 8,362 ft²

Key Areas

(Per Residential Unit, 5 total)

+ GIFA - 100m² / 1076 ft²
+ 3 Bedroom



Option G

Single Commercial Building

Key Areas

+ GIFA 1,910m² / 20,554 ft²
+ CIRCULATION 284m² / 3,057 ft²
+ SERVICE 300m² / 3,229 ft²
+ OFFICE AREA 1,323m² / 14,241 ft²
+ POTENTIAL NIA @ 77% 15,827 ft²

NOTE:
All areas are based on a Stage 2 level of detail. Layouts are subject to development and change, including but not limited to, operator input, further analysis of Rights of Light, development of Plant requirements and planning feedback.

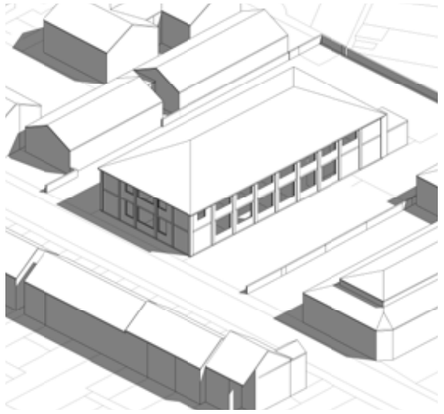
SERVICE AREAS include Plant, WCs and Stair Cores

OFFICE AREAS includes area which could alternatively be broken down and allocated to meeting rooms / shared facilities rather than offices. Office Area for Stage 2 options is based on the illustrative floor layouts in this report and it therefore subject to development around preferred arrangements, divisions and types of spaces

09 Areas and Options Overview

Key Considerations

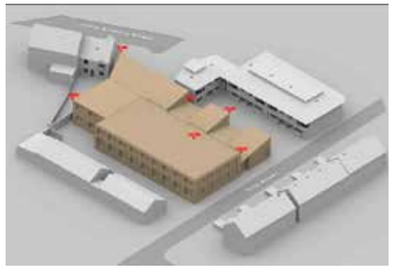
EXISTING



Existing Building

+ GIFA 889m²

PREVIOUS SCHEME

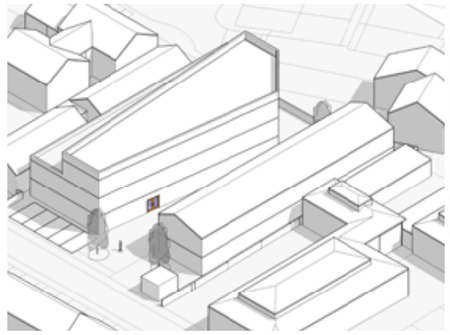


Option A

Previous scheme, extending existing building

+ GIFA 1,800m² (Estimated)
+ Previous scheme does not seem to have allocated sufficient space for plant which would reduce the lettable office area.
+ Layout provides high ratio of office to overall floor area but with compromises through narrow circulation and little opportunity for more flexible / shared spaces
+ Understood to have addressed Rights Of Light and Daylighting implications

STAGE 2



Option D1

2 Commercial Buildings

+ GIFA 2,123m²
+ Has Rights Of Light Infringements as well as minor and Major Daylighting infringements currently which could represent increased Planning Risk or a required drop in area to remove infringements.
+ Central street offers an interest and external space asset.

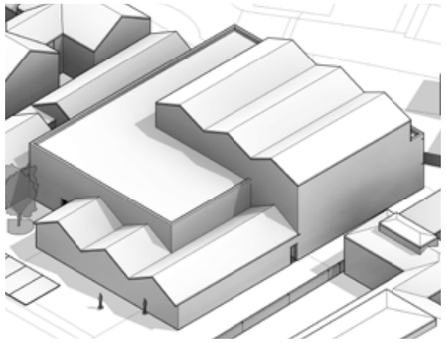
Option D1a (D1 with linked Atrium)

+ GIFA 2,035m²
+ Decreased area over D1 due to requirements for fire escape at perimeter points. Area could be increased subject to development of fire strategy.
+ Not analysed through Rights Of Lights but expected to have similar results to D1.

Option D2

Commercial and Residential

+ GIFA 971m² (Commercial)
+ Commercial development represents an increase over the existing building but less than the previous scheme, Option A.
+ Commercial area unlikely to be increased significantly without compromising the residential aspect
+ No Rights Of Light Infringements or Daylight infringements.



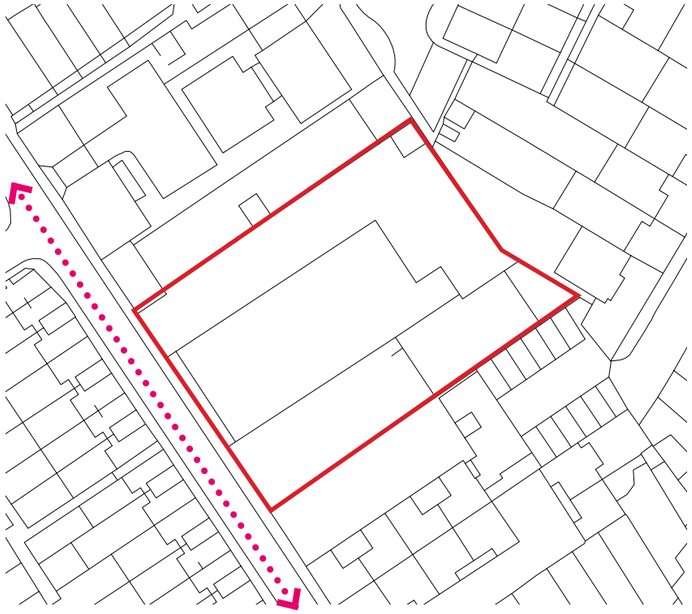
Option G

Single Commercial Building

+ GIFA 1,910m²
+ No Rights Of Light Infringements or Daylight infringements. This indicates that there could be further potential to increase area beyond current proposals.
+ GIFA includes for allowance of central atrium which would provide more interest and quality to the internal layouts

Addendum
Option D1A — Design Development

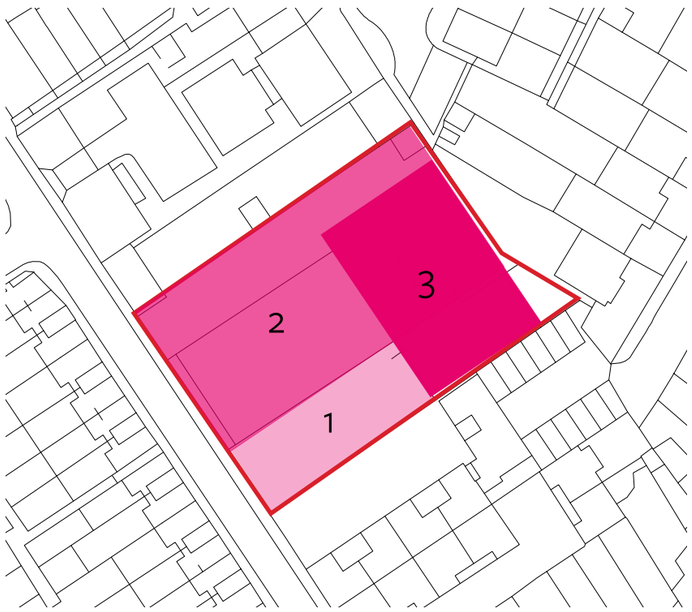
Design Development
Constraints



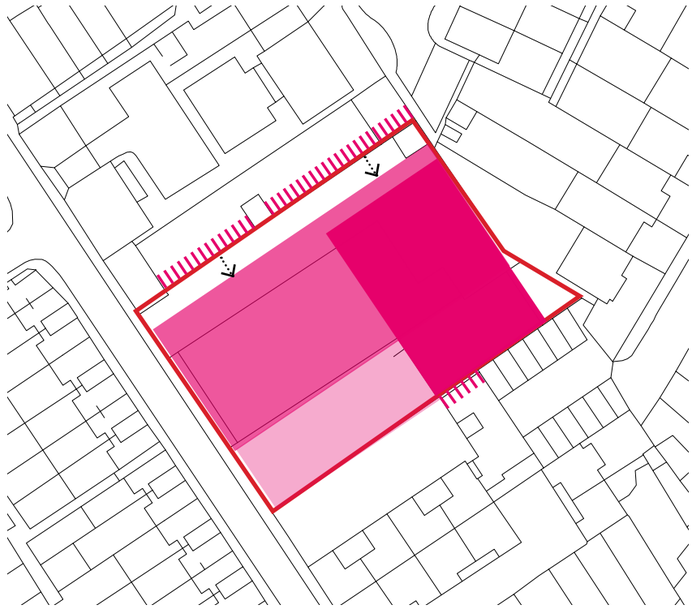
Access and Movement

Substation and Sewer Run

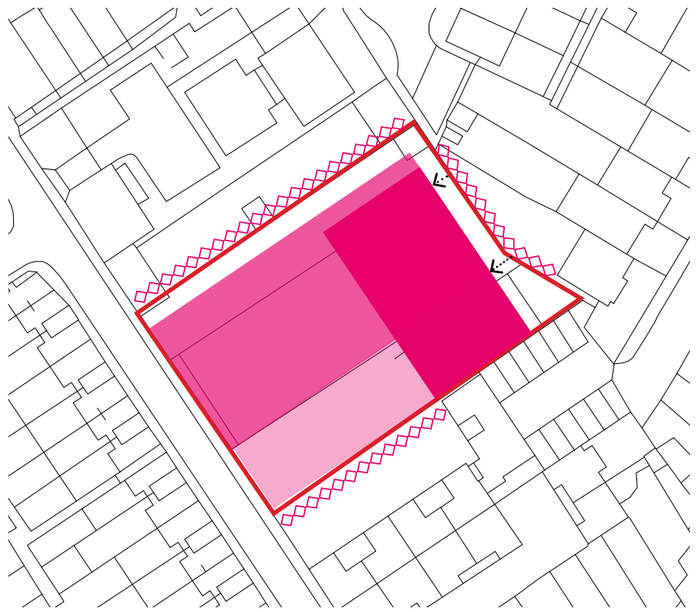
RoL and Daylighting Constraints



Storey Heights on RoL/daylighting Constraints



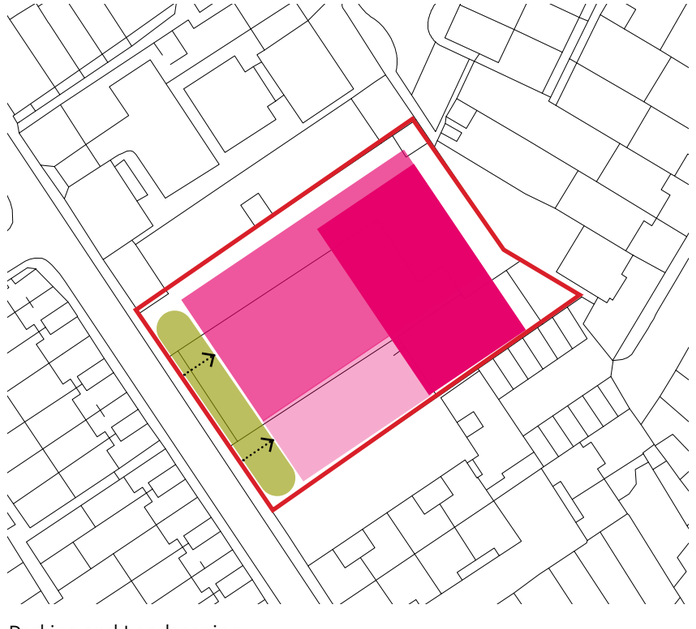
Party Walls - Southern Party Wall is blank gable



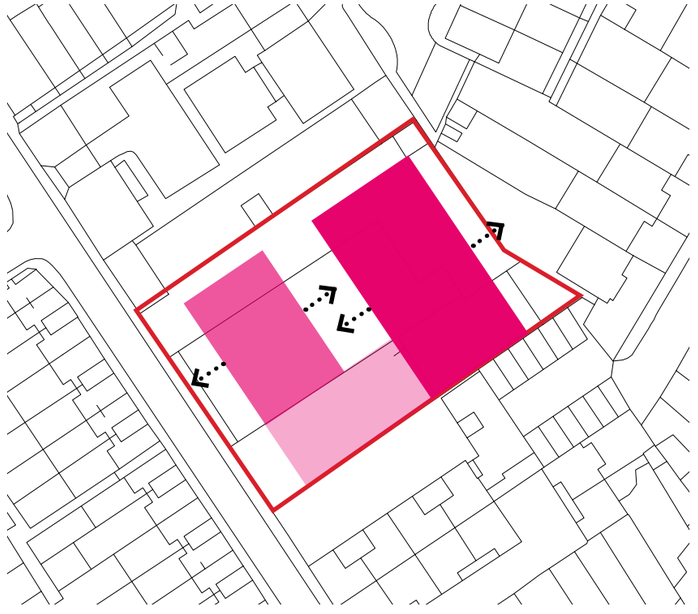
Overlooking Boundaries

Design Development
Form

LVIA?

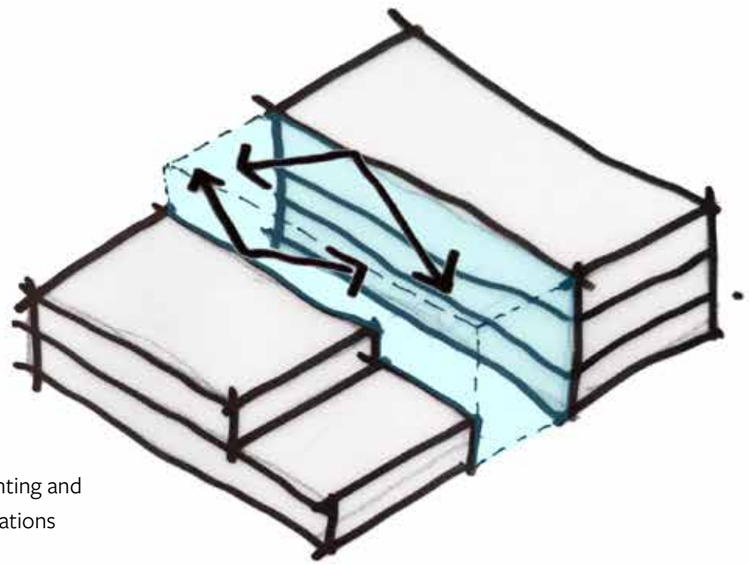


Parking and Landscaping



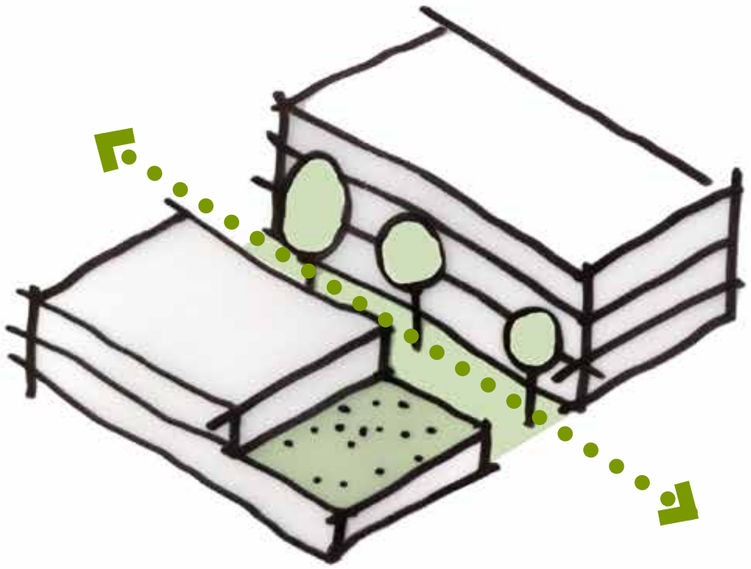
Daylighting

RoL Massing Response

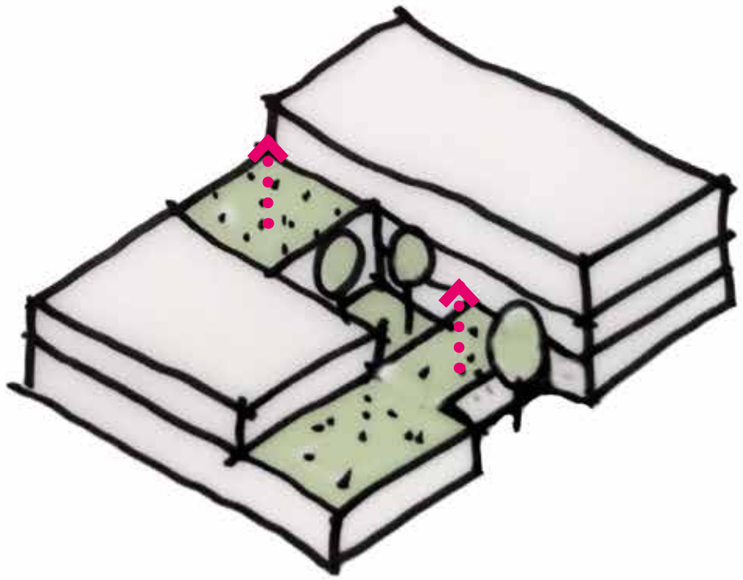


Daylighting and
Orientations

Design Development
Green Space



Connections to Nature



Delivering Area

Design Development
Rights of Light

Rights Of Light

Infringements to:

B2 – 7 Cave St, with compensation of circa £1000 plus fees.

The above is not a high figure in terms of Rights of Light compensation and indicate that the levels of light loss are relatively low. An insurance policy could be obtained to cover the risk.

Daylight Sunlight

VSC – Vertical Sky Component (the amount of daylight (sky visibility) reaching a window)

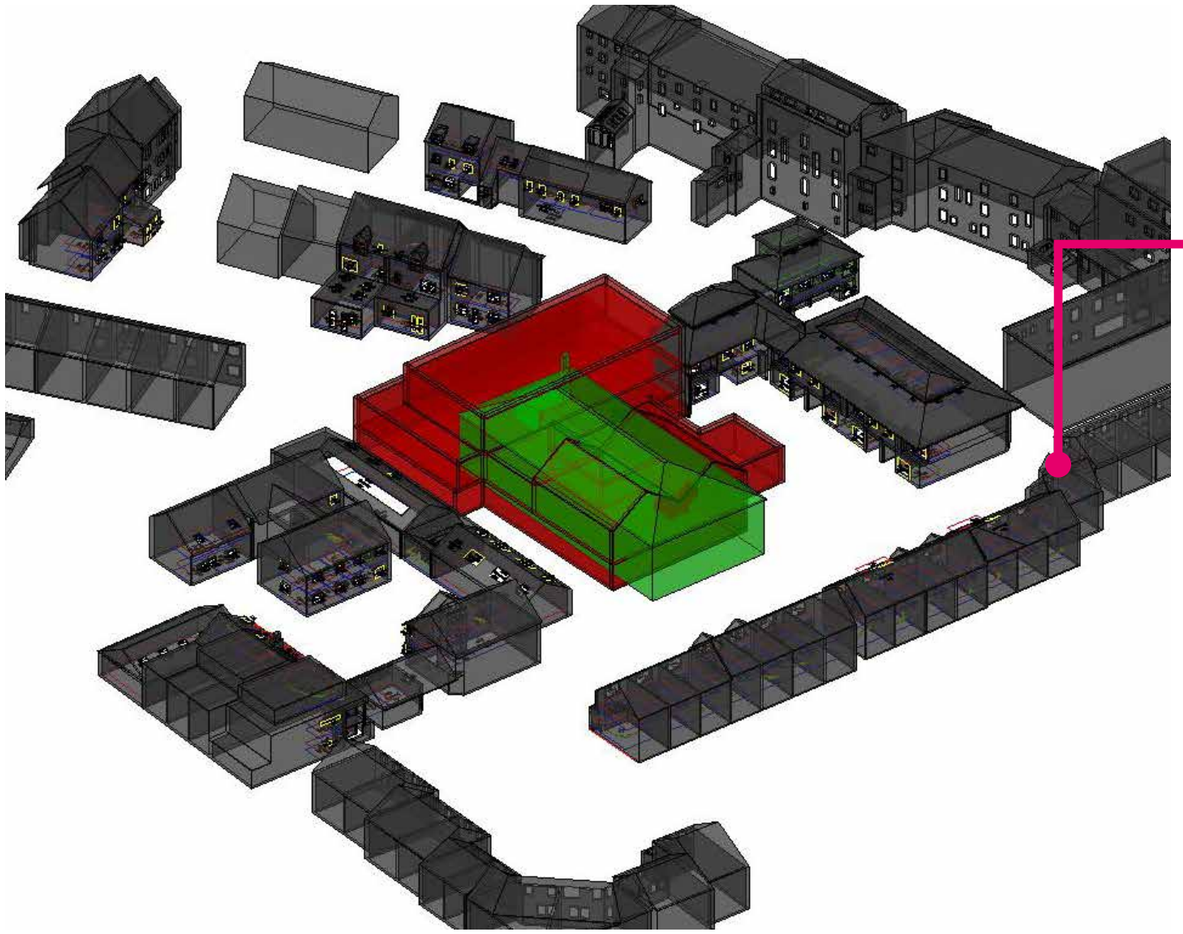
All pass

NSL – No sky line
(measure of how light is distributed around a room once the light (VSC) passes through the window)

All pass

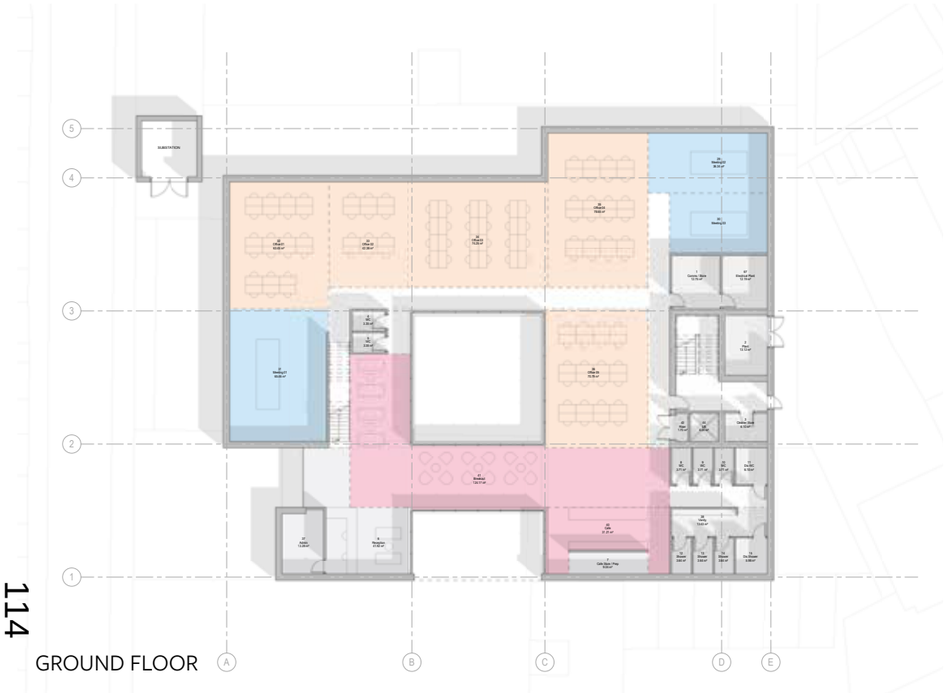
APSH – Annual Probable Sunlight Hours (the amount of SUN light reaching a window)

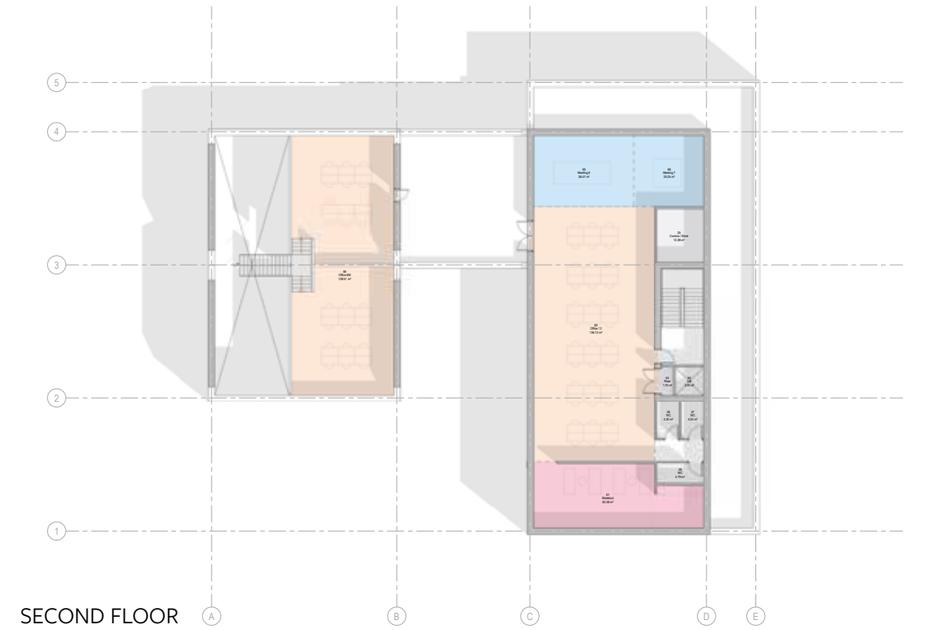
All pass



View from injured room B2 – R3 – W3. This landing space only receives 53% light/Sky currently, so even just a 1% reduction of its view to sky constitutes a ROL infringement.

Design Development
Areas & Layout





OFFICE

MEETING

BREAKOUT

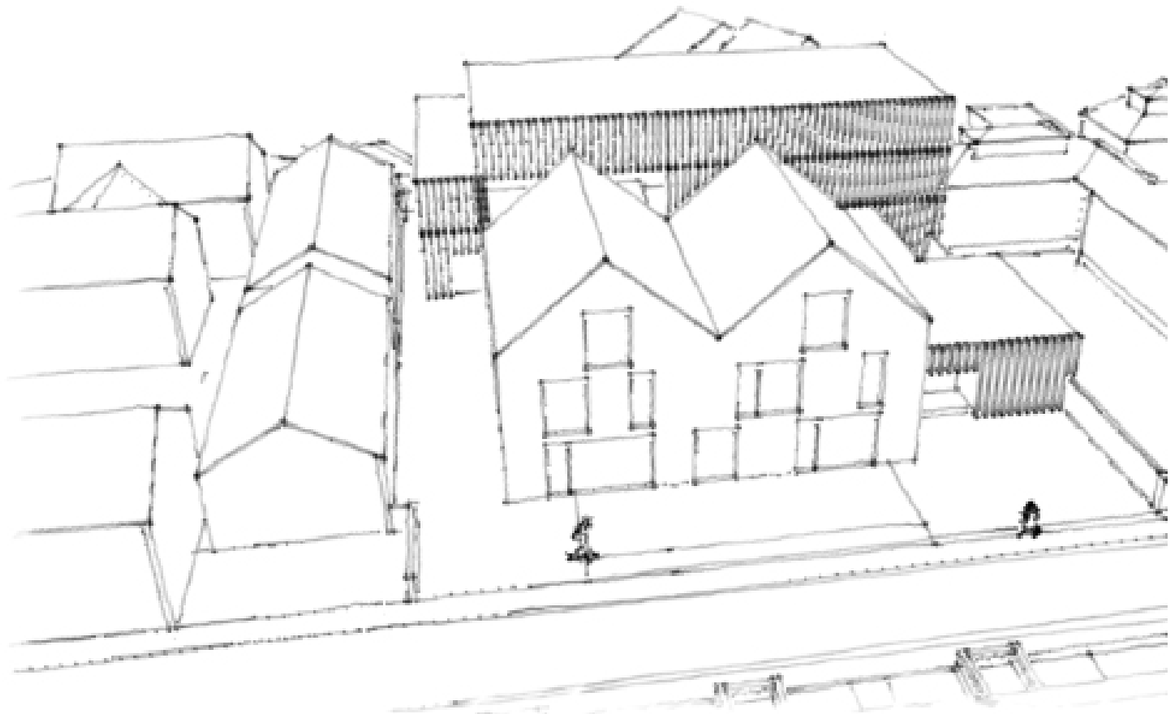
ANCILLARY

AREA BREAKDOWN

Level	GEA (m²)	GIA (m²)	NIA (m²)
Ground Floor	1017.68	931.37	659.66
First Floor	885.21	813.26	598.86
Second Floor	526.30	430.37	354.65
	2429.19	**2175**	**1613.17**

Design Development
Sketch Perspective Views

115



10 — Sustainability, Demolition & Phasing and Services Strategy

10 - Sustainability, Demolition & Phasing and Services Strategy
Sustainability, Engagement and Belonging

ADP tests projects against 15 criteria across Sustainability, Belonging and Engagement using our SBE Toolkit.

At a high level Stage 2 the toolkit is used to provide an initial understanding of the benefits and differences between projects

Sustainability

Across the sustainability criteria both options have the potential to score highly.

Option D as two different buildings would not be as naturally efficient from an energy perspective due to increased external fabric area however this can be addressed through the fabric design to not effect overall performance levels.

The main difference at this point would be that the central street between the two buildings provides a larger area for landscaping which would be a more positive benefit in terms of overall ecology and biodiversity value.

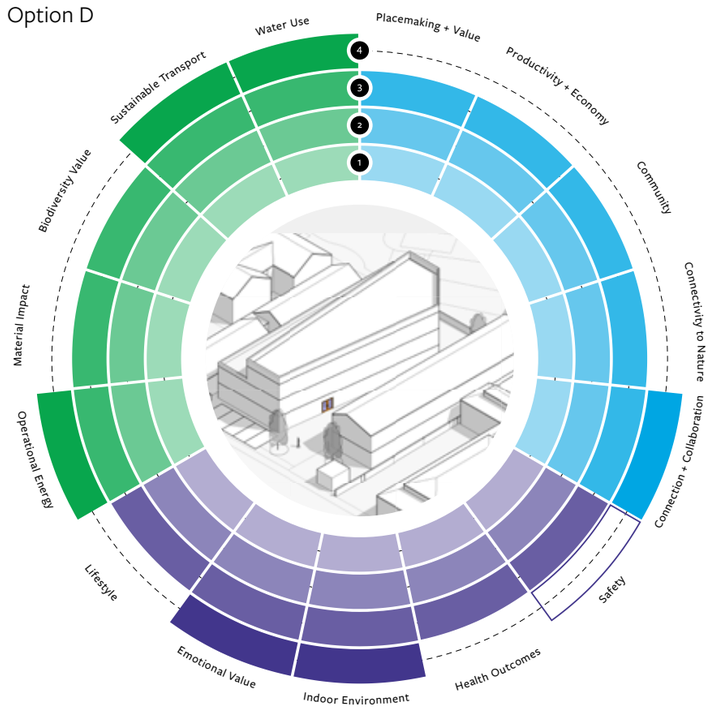
Belonging

Across the belonging criteria Option D also shows potential benefits over Option G due to the increased external space which would offer more benefits in terms of Placemaking, potential for a more flexible wider community use and connectivity to nature.

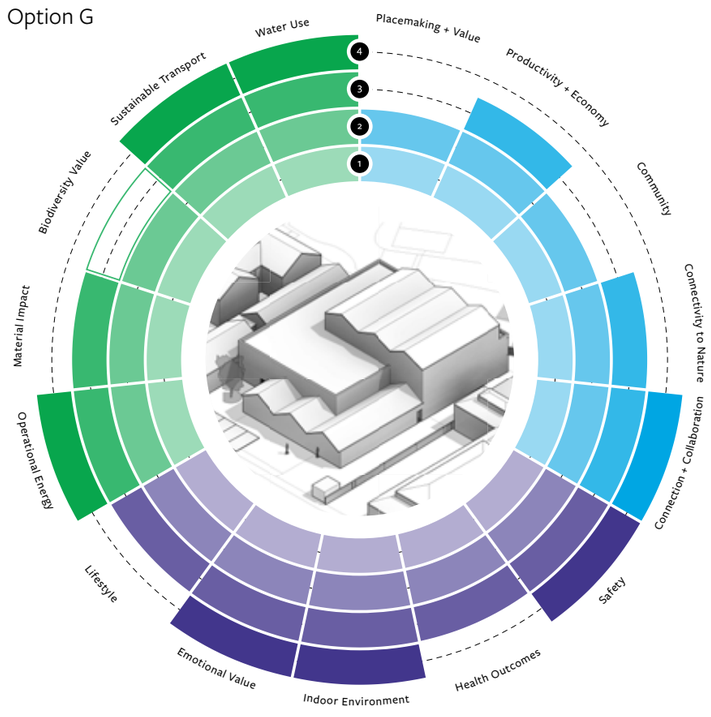
Engagement

Across the engagement criteria both options also have the potential to score high. In this instance the increased external area to Option D could potentially raise safety concerns in terms of access into this area either in or out of occupied hours. This could be addressed in various ways if this scheme was developed but at this level this is the main area where there is a difference between schemes.

Option D



Option G



10 - Sustainability, Demolition & Phasing and Services Strategy

Demolition and Re-use Strategy

In the context of climate change issues the demolition of buildings can be considered a negative thing to undertake. However due to limitations of the existing building in its current position and the extent of development proposed this is the current strategy, to address the implications of demolition the proposal is to undertake pre-demolition audits and feasibility studies to ascertain what materials can be reused within the new building. The ideal would be to re-purpose materials within a circular economy principle rather than downgrading and reuse.

It is accepted that this may involve increased costs with more specialist demolition, material storage and testing to establish suitability and this will form part of the viability for what is possible. However this is considered to be a positive process to undertake in terms of a more holistic sustainability and would provide a strong statement to the other high aspirations for sustainability within the scheme.

A pre-demolition Audit also forms part of the BREEAM assessment.

Some of the materials that may be considered for reuse are:

+ Existing Brick Facade, potential to reuse on external walls, either on the building or as part of any boundary or landscape features
+ Existing External Steel/Iron Staircases, re-purposed as new staircases
+ Roof Tiles, could be reused as roof tiles
+ Windows, could be used as internal dividers within offices

10 - Sustainability, Demolition & Phasing and Services Strategy

1. Will we be re-using site materials from the demolition?

   An audit has been undertaken to review the materials in the existing building to consider their re-use protential as part of circular economy principles. This audit will be in addition the the BREEAM Pre-demolition audit which will also identify re-use and recycling workstreams

2. Will the contract actively seek to prevent waste?

   BREEAM credits are being targetted for both construction and operational waste management and reduction

3. Are we including use of renewable energy such as wind, solar, alternative fuels

   The current strategy is looking to make use of Air Source Heat Pumps and PV panels

4. Are we promoting or making use of energy storage (batteries, thermal stores etc.)?

   At the moment energy storage has not been considered but can be looked at in the detail development as part of a budget and benefit review

5. Will we be incorporating Sustainable Urban Drainage Systems (SuDS) into the proposal.

   SuDS will be incroported into the design, this is likely to include the introduction of green spaces, porous paving and green roofs

MEP Report

(KJ Tait Stage 2 MEP report is available in the full version of this document)

11 — BREEAM

11 BREEAM
Stage 2 Overview

Executive Summary

The Cave Street regeneration option schemes all have the potential to achieve BREEAM Excellent with a good margin for safety within the overall score.

There is further potential to step up to BREEAM Outstanding, this would be dependent on meeting all the credits currently identified for review. The Outstanding rating could be considered as an aspirational target for re-evaluation once the design option is determined and developed further.

Introduction

The Building Research Establishment Environmental Assessment Method, BREEAM, is a

sustainability assessment and certification scheme first launched by the BRE in 1990 and now in use in over 78 countries. BREEAM sets standards for a range of environmental and sustainable criteria for building design, specification and construction through to post occupancy providing a robust assessment and certification system.

The Oxford Local Plan (2016-2036) requires new-build non-residential developments over 1000m2 to achieve a BREEAM Excellent rating. An Excellent rating requires a credit score of 70% or above, to ensure a margin of safety over the 70% a target of 76% is recommended. There are also specific minimum standards that have to be met for an Excellent rating.

BREEAM Assessment Schemes

Three options are being considered for the Cave Street redevelopment:

- G2 Commercial - one single building
- D1 Commercial - two separate buildings
- D2 Commercial and residential- one commercial building and separate residential

All of the proposed options are for new build and would be assessed against the BREEAM 2018 New Construction scheme.

Note - BREEAM does not cover new build residential other than multi-residential uses.

Assessment Routes

Within the BREEAM New Construction scheme there are variations for different functions and scope of the fit-out.

Commercial buildings categories - Office, Industrial & Retail

Scope of fit-out - Shell only, Shell & Core or Fully Fitted.

Current proposals are generally for offices but there is potential for makers' studios/workshops. There are various assessment routes for mixed used developments, the appropriate route will be determined based on the option selected, the number of buildings and the defined usage.

For the purposes of the BREEAM review it is assumed the buildings will be fully fitted.

Assessment Process

The BREEAM Assessment is undertaken in two stages –

- Interim Design Assessment
- Final Post Construction Assessment

The assessments are submitted to the BRE and undergo a QA process. The certificate is issued once any feedback is addressed.

Ideally the Interim assessment is submitted at the end of Stage 4 prior to work starting on site.

BREEAM Review

The Cave Street regeneration option schemes all have the potential to achieve BREEAM Excellent with a good margin for safety within the overall score.

Consideration could also be given to achieving an Outstanding rating. This would require a considerable commitment. Based on the current assessment all credits identified for review would have to be met and to meet the required 85% for Outstanding with a limited safety margin.

A high scoring Excellent rating is achievable with Outstanding as an aspirational target for further review as design progresses.

11 BREEAM
Stage 2 Overview

BREEAM Tracker and Credit Score

A BREEAM Tracker is provided which indicates the achievable baseline credits and the further credits for review.

The baseline credit score is 70.28% with a further 19.46% for review. The overall score with baseline plus review credits is 89.74%.

The following target is recommended:

+ BREEAM Excellent – 70% required + 6 credit margin, target 76%
+ BREEAM Outstanding – 85% required + 8 credit margin, target 93%

The Tracker also identifies the mandatory credits for both the Excellent and Outstanding rating all of which can be met.

The Tracker sets out each of the credits under the BREEAM categories, identifying responsibilities, actions and how the target score is met. It is used as a working tool and is updated throughout the project to monitor progress and identify actions for the team. Progress is highlighted through a traffic light system in the status column as follows:

+ Green: credit complete
+ Amber: credit achievable
+ Red: credit will be challenging to meet for either technical or cost reasons

The BREEAM 2018 New Construction scheme is divided into categories each of which has differing weightings:

+ Management
+ Health and Wellbeing
+ Energy
+ Transport
+ Water
+ Materials
+ Waste
+ Land Use and ecology
+ Pollution

An outline of the potential performance against each of the categories is provided below.

Management

Available credits - 21

Baseline credits -15

Baseline + review credits -20 + 1 exemplary credit

This category encourages the adoption of sustainable management practices in connection with design, construction, commissioning, handover, and aftercare. This ensures that robust sustainability objectives are set and followed through into the operation of the building.

The credits are assessed against management criteria irrespective of the design options.

Baseline

+ Establishing a project delivery process and consultation with the project team, including input of the design team, client & building occupier
+ Involvement of a BREEAM Accredited Professional
+ Contractor performance requirements including responsible construction management, monitoring site impacts and aftercare
+ Commissioning and seasonal commissioning

Review

+ Life cycle costing
+ Post Occupancy evaluation

Health and Wellbeing

Available credits - 18

Baseline credits -12 + 1 exemplary credit

Baseline + review credits -17 + 1 exemplary credit

This category encourages implementation of measures for the health, wellbeing and safety of building users. Issues within this category reward building design and specification decisions that create a healthy, safe and comfortable internal and external environment.

Measures to address include good daylighting, air quality, thermal comfort, acoustic performance, access to outdoor green space, safety, and security. The building design has a significant impact on the ability to meet the credit criteria, particularly for visual comfort and indoor air quality.

11 BREEAM
Stage 2 Overview

Assessment of daylighting performance and initial early stage dynamic thermal modelling should be undertaken during RIBA stage 2 to inform the design approach. To achieve the credits for review there will need to be a willingness to change layouts if required to secure the credits for daylight and view out.

Energy

Available credits - 23

Baseline credits -17

Baseline + review credits -21

This category encourages the specification and design of energy efficient building solutions, systems and equipment that support the sustainable use and management of energy during the building's operation.

A low energy and carbon strategy is required to deliver BREEAM Excellent using passive design principles to minimise energy use in the first instance. This includes; a robust thermal fabric, effective ventilation to minimise heat loss and minimise mechanical cooling, with glazing to enhance daylight, while limiting unwanted heat gains. Using this approach ensures that the inherent design is as efficient as possible.

An ambitious zero carbon strategy for regulated energy use would be required to maximise the credit score for energy performance particularly if Outstanding is targeted.

Operational energy should be reviewed by the project team as the design progresses to understand the energy required for the building in use. This will enable efficiencies to be achieved through building management and focus advice for the building occupants on saving energy. Extensive metering by end use will support monitoring and review of energy usage.

Transport

Available credits - 12

Baseline credits -7

No additional credits for review

This category encourages provision of and improved access to local amenities and to sustainable means of transport. The aim is to reward solutions that support reductions in car journeys and, therefore, congestion and CO_2 emissions over the life of the building.

Sustainable transport measures should be considered including provision of electric car charging points, car sharing scheme, cycle parking and facilities for cyclists.

A transport assessment and travel plan should be developed to encourage alternative sustainable transport and reduced car use.

Water

Available credits - 8

Baseline credits -6

Baseline + review credits -8

This category encourages sustainable water use in the operation of the building and its site. Issues in this section focus on identifying means of reducing potable water consumption (internal and external) over the lifetime of the building and minimising losses through leakage.

The Oxford Local Plan requires four credits to be achieved for water efficiency. Low water use sanitary ware to be selected and use of greywater or rainwater recycling to be considered to maximise the credit score for water consumption.

Materials

Available credits - 14

Baseline credits -8

Baseline + review credits -11 + 1 exemplary credit

This category encourages decisions which reduce the environmental and social impact of construction products used on a project. It takes a 'whole life cycle' approach to construction product impacts, encouraging consideration of impacts during manufacture, design, procurement, installation, in-use and end-of-life.

Material selection and resource efficiency will be driven by a number of environmental factors from; minimising embodied carbon, circular economy principles, specification of robust materials, and responsible sourcing.

The team have developed a sustainable procurement plan setting out the sustainable objectives for the project.

Ambitious targets to select products with Environmental Product Declarations (EPD) and for responsible sourcing and material efficiency will be required to achieve the credits for review.

11 BREEAM
Stage 2 Overview

Waste

Available credits - 11

Baseline credits -6

Baseline + review credits -9 + 1 exemplary credit

This section encourages the reduction of waste from construction and throughout the lifetime of the building. It rewards sustainable waste management, as well as waste reporting, reduction and diversion from landfill during construction, but also encourages sustainable practices during the building operation.

A pre- demolition plan should be carried out to maximise reuse of materials from the any proposed demolition works.

The design should include for future proofing, accommodating both potential changes in functional requirements and climate change to extend the useful life of the building. Consideration should be given to the building's end of life allowing for salvage of materials on deconstruction.

Adequate space should be provided in the building for operational waste and recyclable waste storage.

Land Use and Ecology

Available credits - 13

Baseline credits -12

Baseline + review credits -12 + 1 exemplary credit

This category encourages sustainable land use, habitat protection and creation, and improvement of long-term biodiversity for the building's site and surrounding land. Issues in this section relate to the reuse of brownfield sites or those of low ecological value, mitigation and enhancement of ecology, and long term biodiversity management.

Soft landscape including plant species beneficial to wildlife is highly valuable to create a development that is attractive, and supports good health and wellbeing for building users as well as enhancing biodiversity.

Landscaping can also provide surface water attenuation using green infrastructure, through use of green/ brown roofs and rain gardens, to contribute to the overall surface water attenuation strategy.

An Ecologist should be appointed to the ecological value of the site and to advise on measures for enhancement to promote biodiversity. As the site is currently primarily hard landscaping there is opportunity to significantly improve the bio-diversity of the site.

Pollution

Available credits - 12

Baseline credits -8

Baseline + review credits -9

This category addresses the prevention and control of pollution and surface water run-off associated with the building's location and use.

Issues in this section aim to reduce the building's impact on surrounding communities and environments arising from light pollution, noise, flooding and emissions to air, land and water.

Next steps

Once the preferred option has been selected the BREEAM assessment can be reviewed to determine the appropriate assessment route depending on the number of buildings to be assessed and designation of space usage.

A further BREEAM workshop will be held to determine the target credits.

Priority should be given to closing out the BREEAM Stage 2 requirements, particularly those that require input from specialist consultants, prior to moving onto Stage 3. Achieving the Stage 2 target credits and meeting the pre-requisite criteria is key to achieving the target score for BREEAM New Construction 2018.

12 — Structural and Civils Report

(this section is available in the full version of this document)

13— Programme

(this section is available in the full version of this document)

14— Next Steps

(this section is available in the full version of this document)

15— Appendicies

(appendices are available in the full version of this document)

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