



Merstham Former Library Site

Public Consultation

Presented by: Ethos Design + Architecture
July 2022

Carter Jonas

 **Raven** Housing Trust

ethos+

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Development

Introduction

1.0

1.0 INTRODUCTION

The Brief :

To sensitively develop the land.

To build affordable, sustainable dwellings.

To respect neighbouring residents or other community activities.

To deliver a well informed layout

To use a common house type.

The proposed accommodation:

14 no. affordable family houses, with associated parking and outdoor amenity space.

Accommodation Comprising of :

- 4 no. 2 bed / 4 person houses Shared Ownership
- 10 no. 3 bed/5 person houses Shared Ownership

The other key consultants in the design team are as follows:

Planning Consultant - Carter Jonas

Transport Consultant - SWECO

Landscape design - Enplan



2.2 New development close by. Portland Drive, Merstham.



- The examples of new development close by on this page and the next, illustrate how a reduced palette of materials using brick , timber weatherboarding and block paving can produce pleasing neighbourhood environments. Materials chosen will be in line with the Surrey Design Guide.
- The typology of form, roof pitch and window configuration all reflect the character of the existing domestic architecture in the area and provide a cue for the design of this project.

2.5.2 New Development close by

- Portland Drive is a scheme developed by Raven Housing Trust.

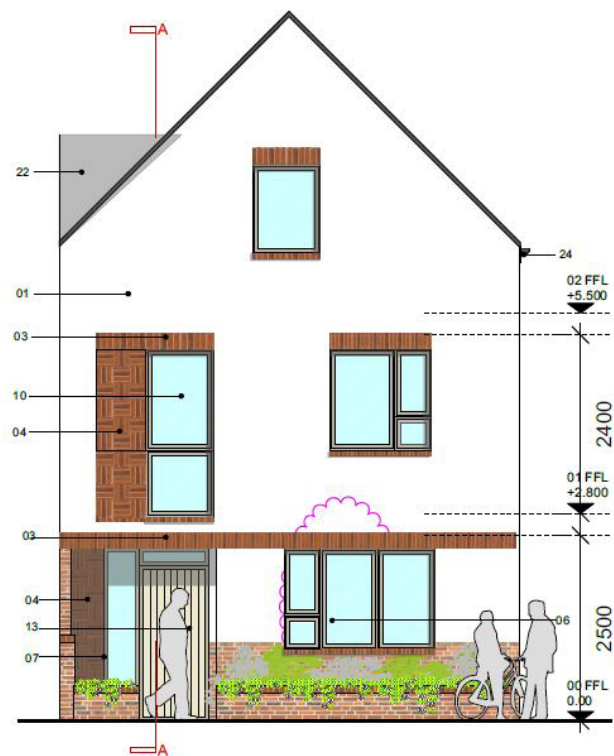


Fig. A: Portland Drive



Fig. B: Portland Drive



Fig. C Homesdale Avenue



Fig. D: Layout Plan - Portland Drive

Site Context And Analysis

2.0

2.1 Connectivity

The site is located close to a local neighbourhood centre and circa 10 minutes walk from Merstham railway station.

- Main Road
- Side Road
- Bus Stop
- The Site

The site is designated as having a Medium accessibility level in the local plan.

- Local neighbourhood centre
- Merstham Railway Station

Directly adjacent are large areas of public open space, including a well equipped recreation ground.

- New residential development nearby

The Site



2.3 The Site

- The former library building , a single storey brick structure, will be demolished.
- Existing access road serving the day centre and MC Football Club. can provide access to the new development.
- The topography of the site is flat.
- To the rear of the site is a scheduled monument (list UID 10105977), which is also designated as Metropolitan Green Belt.
- The site is not within a conservation area, and it is designated for residential in the local policy plan.



2.3.1 Site 1 - Internal Site Photos

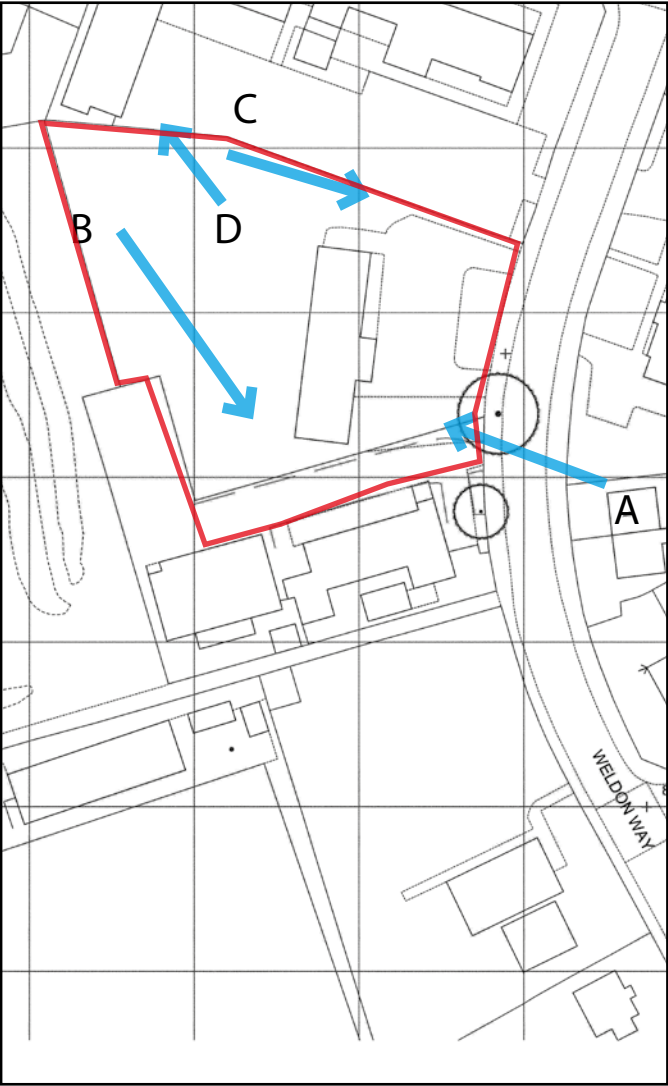


Fig. A: View of existing vehicle access



Fig. B: View within site



Fig. C: View within site



Fig. D: View towards back of Moat House site

2.3.2 Site 1 - External Site Photos

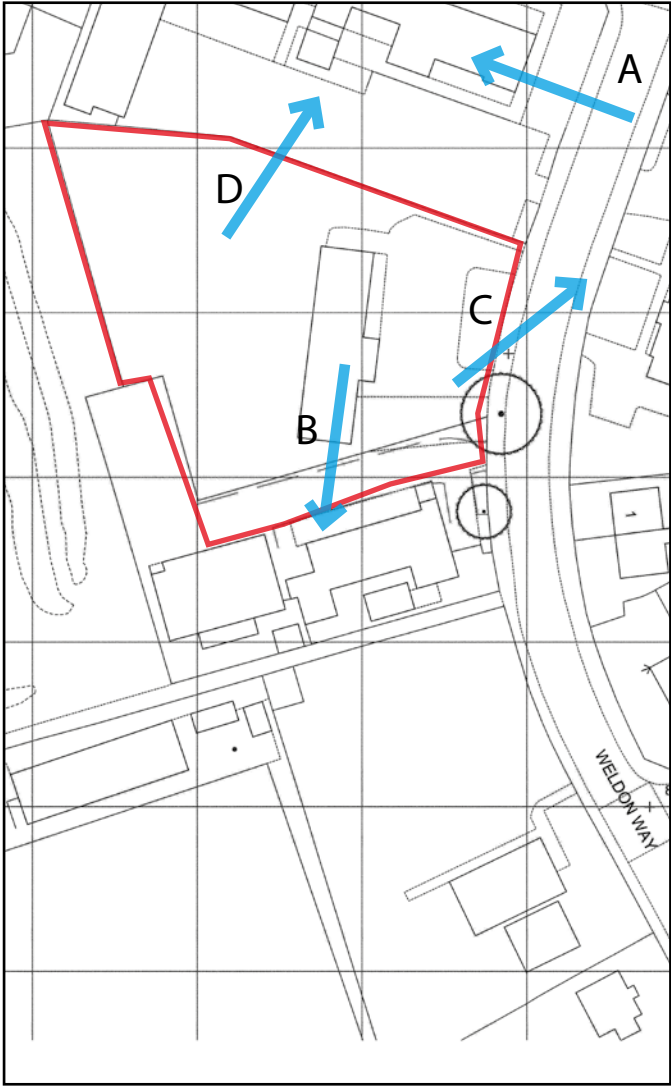


Fig. A: View of Moat House Surgery



Fig. B: View of Club House



Fig. C: View from site onto Weldon Way



Fig. D: View of Moat House

2.5 Surrounding area

2.5.1. Key Spaces.

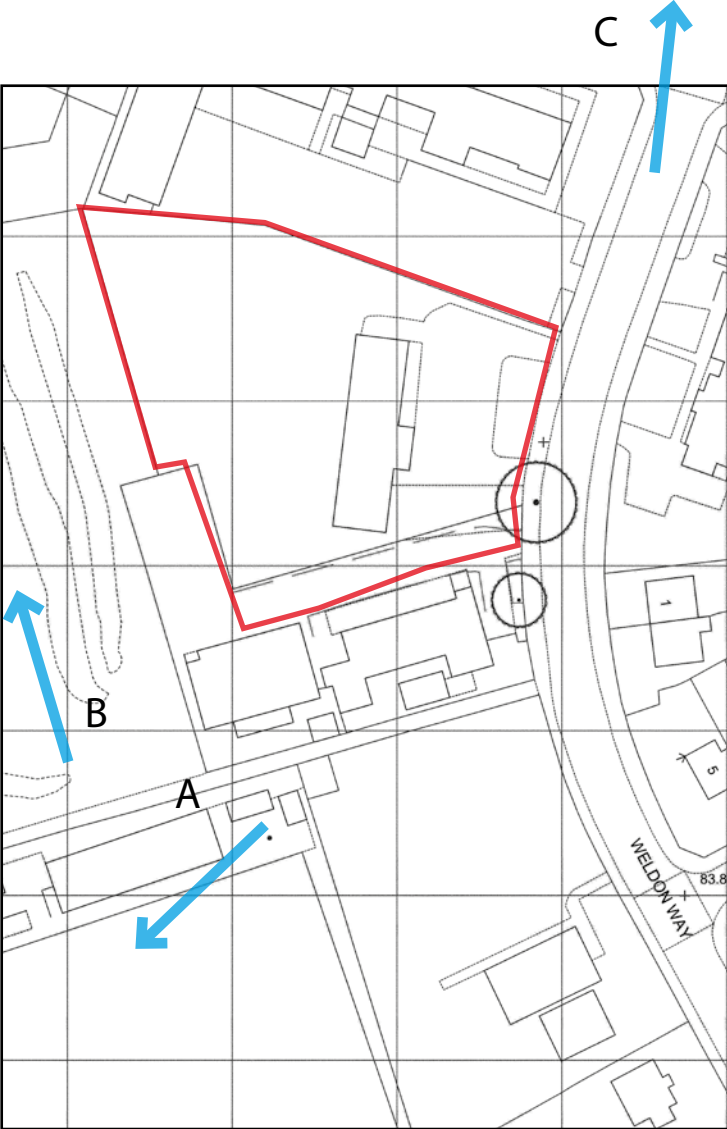


Fig. A: View of Merstham Football Club



Fig. B: View of Monument Park (MOL)



Fig. C: View of Local neighbourhood centre



Fig. D: View of recreation ground

Recreation ground

2.5 Surrounding area

2.5.2. Scheduled Monument.

<https://historicengland.org.uk/listing/the-list/list-entry/1015977>




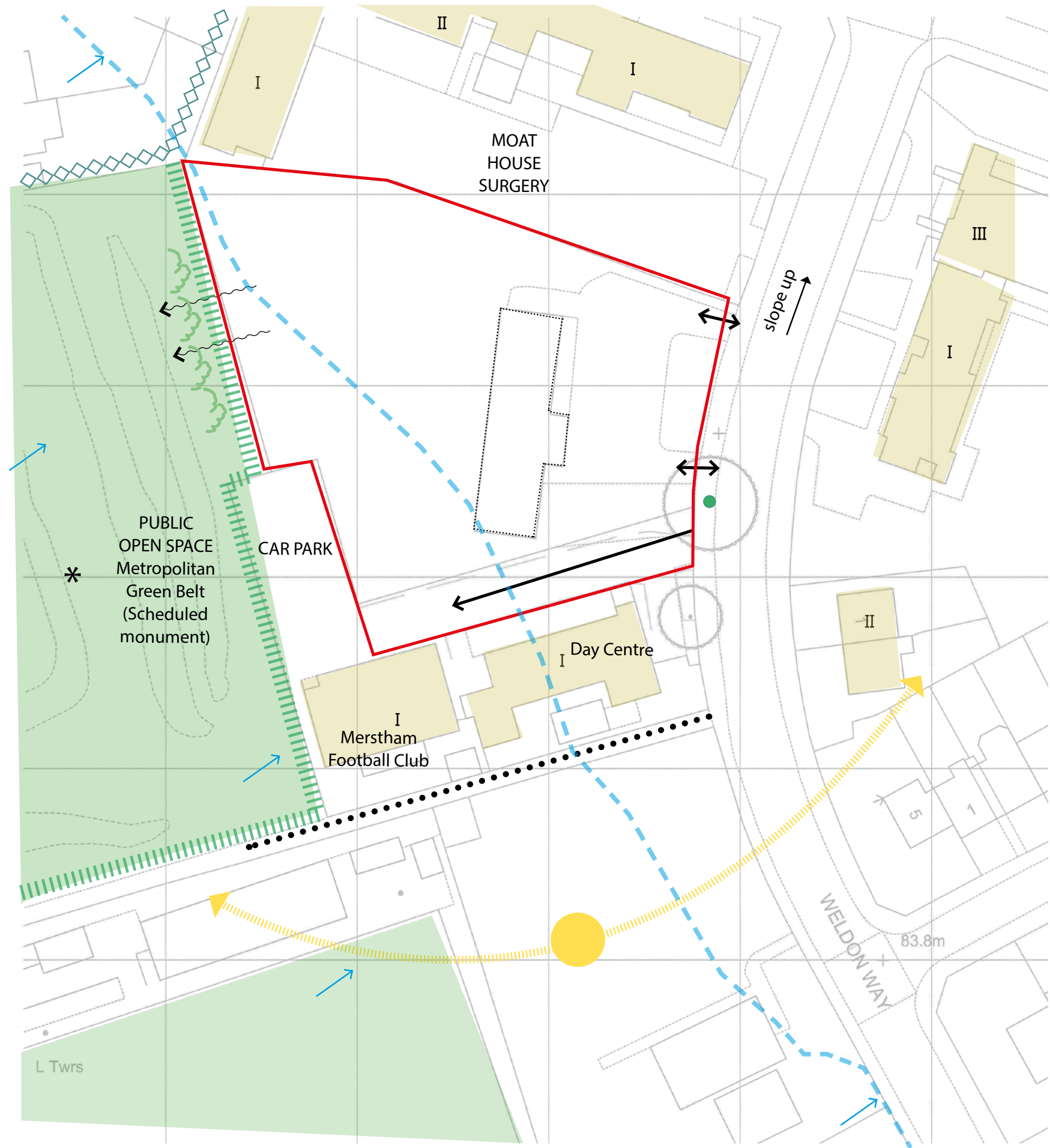
Fig. A: View 1

Site Evaluation

3.0

3.1 Opportunities and Constraints Plan

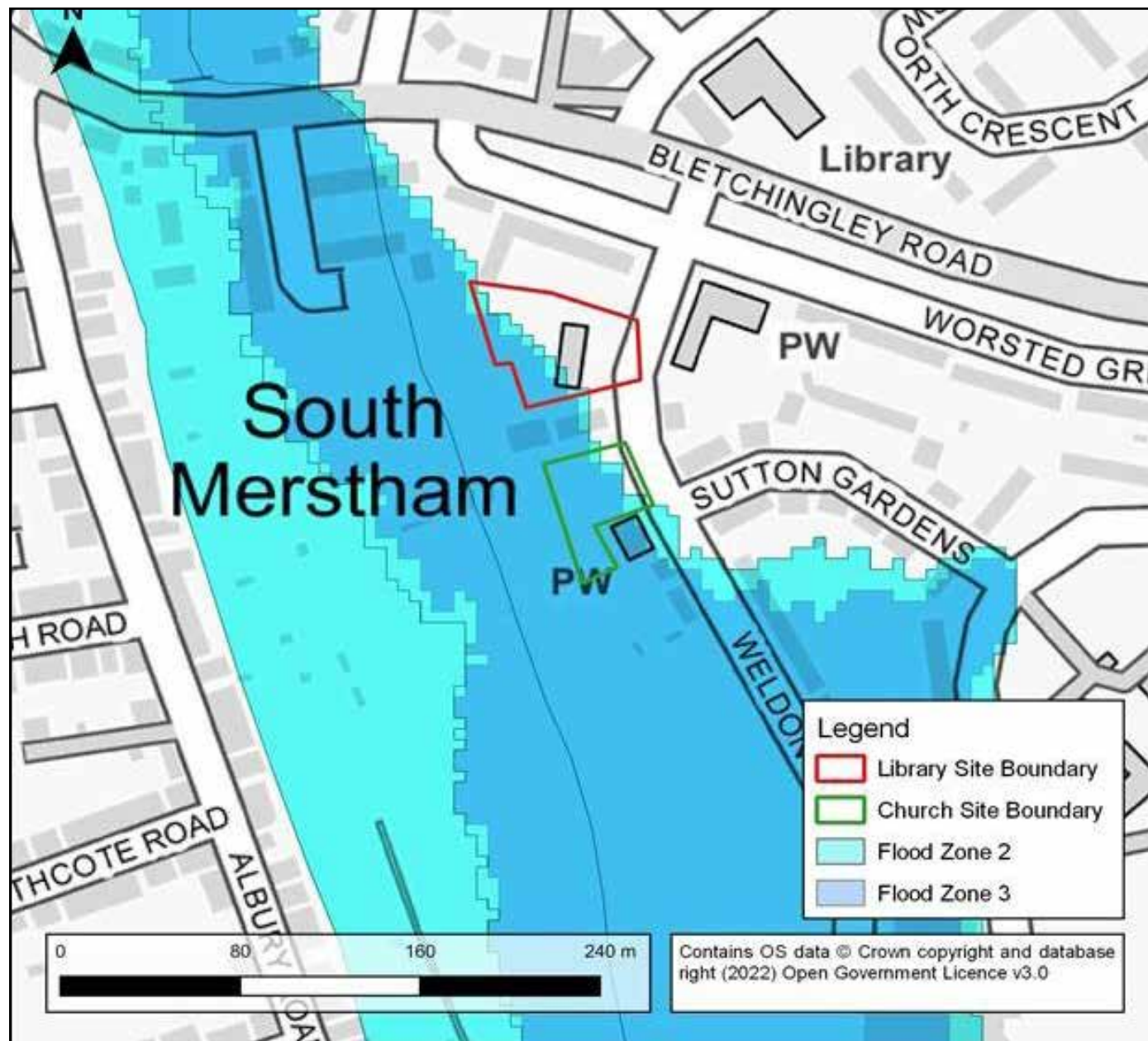
- Existing mature tree
 - Boundary to private back gardens
 - Boundary to public open space
 - Existing pavement cross-over
 - Existing vehicle access to car park and community use buildings
 - Potential for connection to parkland
 - Existing buildings
 - Existing Buildings to be demolished
 - Public footpath
 - Site Boundary
 - Denotes flood zones according to EA mapping - However, Local, detailed flood mapping has been undertaken and demonstrates the site is outside the flood zone - see next page and separate FRA report submitted with the application.
 - Scheduled Monument - Metropolitan Open Land.
 - Existing Buildings
- 



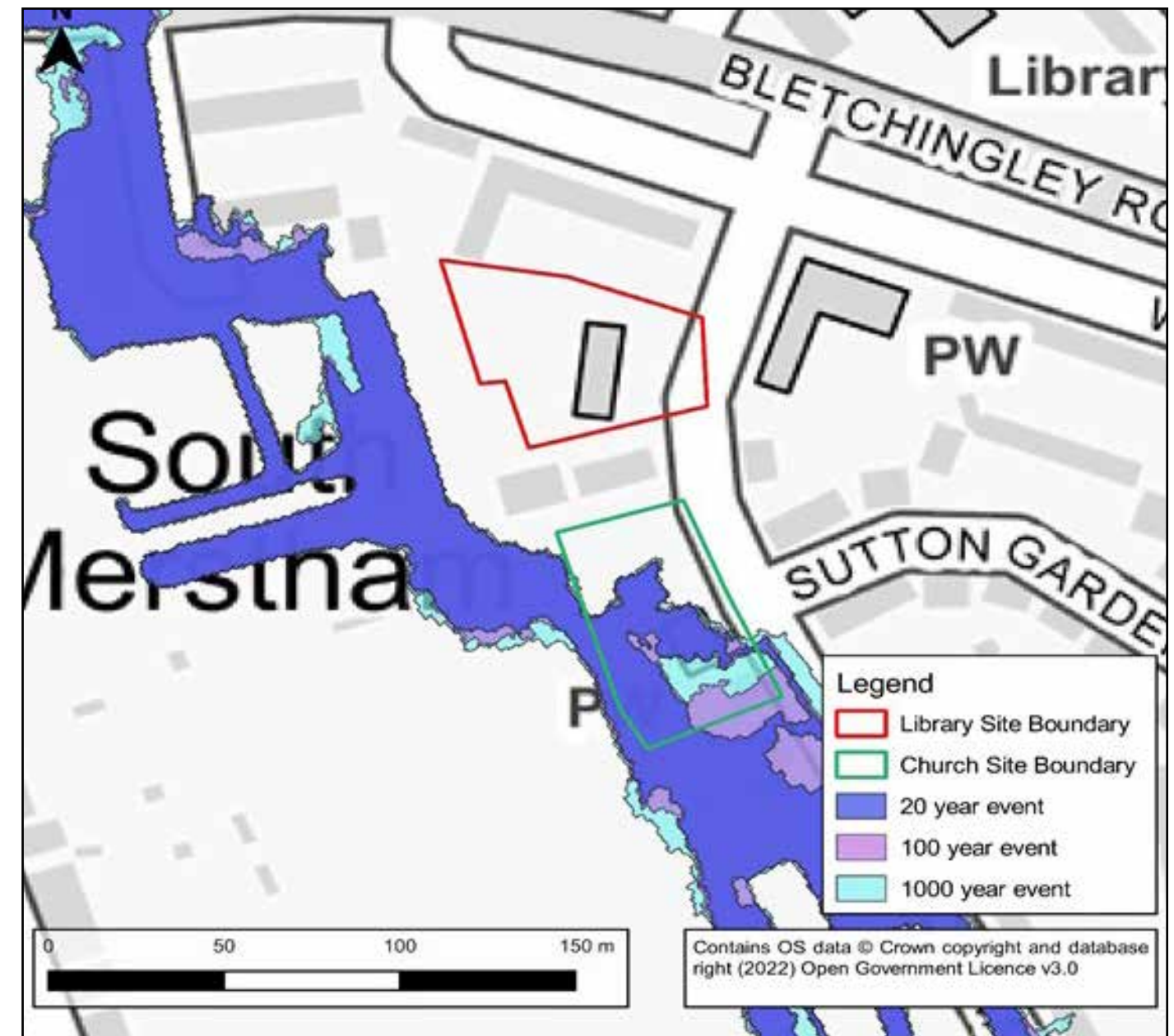
2.1 Flood Risk Assessment

Detailed local flood modelling has been undertaken to determine the status of the site in terms of flooding.

The results below show that the site is not in flood zone.





Existing EA flood mapping




Updated flood mapping after 2022 Hydraulic Modelling

- Former Library Site

-  Trees canopies.

 RPAs Root protection areas.

 Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

1 English Oak 14m height

4 English Oak 15m height

5 Beech 15m height



Development Proposals

4.0

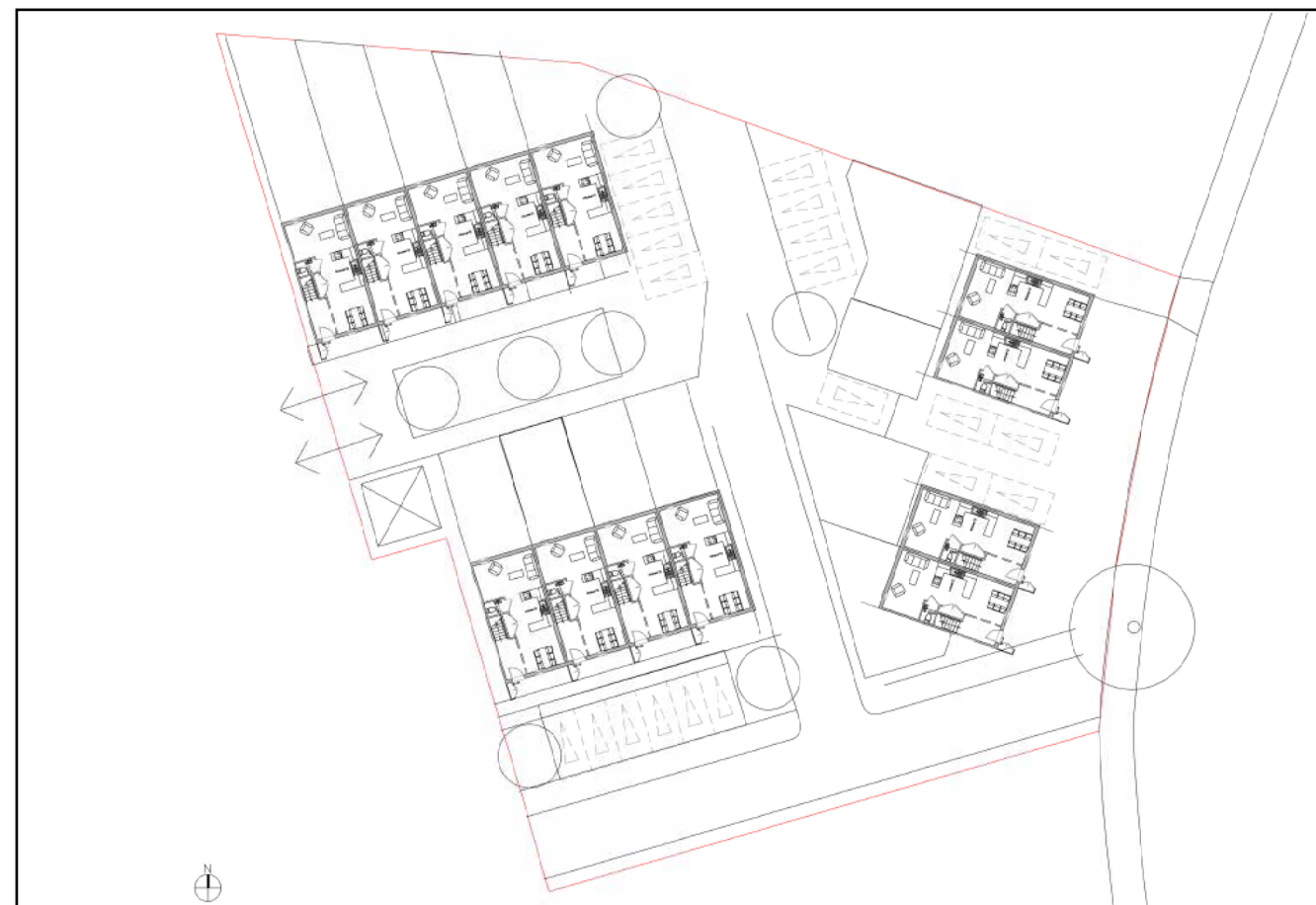
4.1.1 Site Layout Options explored

Previous site layouts investigated.

Option A - 13 units

Comments:

- Awkward rear garden spaces for semi-detached units
- Semi detached houses are less energy efficient than terraces.
- Terraced houses more cost effective to build.
- Permeability not preferred option with Raven - more difficult to manage security.



Option with semi detached homes facing Weldon Way and a green link to MOL land

Option B - 17 units

Comments:

- Raven have no need for flats on this site, family housing preferred.
- Over development of small site.



Option of mix of typologies with flats facing road

4.1.1 Site Layout submitted for Pre-Application Advice

Total 14 houses and 27 car parking spaces

4 no. 2 bed/4 person houses

10 no 3 bed/4person houses

Pre-App comments incorporated into design:

Add more soft landscaping to soften road areas.

Create buffer zone to the MOL area (ancient monument site) adjacent.

Block 1 terrace close to Weldon Way, can this be set back.



4.1.1 Proposed Site Layout

ACCOMMODATION:

- 4 no. 2 bed/4 person houses
82 sqm/882 sqft/unit
- 10 no 3 bed/4person houses
93.4 sqm/1005 sqft/unit

Total 14 houses
27 car parking spaces
of which 3 will be visitor spaces.

Key Design moves:

1. Existing access used
2. Active frontage
3. Communal parking provided to reduce the amount of sealed surfaces.
4. The rear parking overlooked by Block 3.
5. Passive surveillance is assured throughout.
6. Soft landscaping maximised to soften the hard landscaping.
7. All dwellings will have back gardens with rear access for secure bike storage.
8. The boundary treatments will be largely wire fencing and hedging, with new hedging where required.



4.1.2 Unit type ; area and tenure summary

Accommodation Schedule

Unit	plot	sqm	sqft	NDSS	Part M42
3b/5p	1	93.4	1005	Yes	Yes
3b/5p	2	93.4	1005	Yes	Yes
3b/5p	3	93.4	1005	Yes	Yes
3b/5p	4	93.4	1005	Yes	Yes
3b/5p	5	93.4	1005	Yes	Yes
2b/4p	6	82	882	Yes	Yes
2b/4p	7	82	882	Yes	Yes
2b/4p	8	82	882	Yes	Yes
2b/4p	9	82	882	Yes	Yes
3b/5p	10	93.4	1005	Yes	Yes
3b/5p	11	93.4	1005	Yes	Yes
3b/5p	12	93.4	1005	Yes	Yes
3b/5p	13	93.4	1005	Yes	Yes
3b/5p	14	93.4	1005	Yes	Yes
		1262	13579		



3 bed
2 bed

4.1.3 Site 1 - aerial view of proposal



4.1.4 Site 1 - street view of proposal
(Block 1)



4.1.5 Site 1 - view of Block 2



Detail Information

4.2 - Landscape Plan



LANDSCAPE KEY

PROPOSED BUILDING LINE

PROPOSED STORAGE SHED

PROPOSED TREES
To be selected from the following:
Acer campestre 'Streetwise'
Amelanchier lamarckii
Pinus catteriana 'Chanticleer'
Sizes: 10-16cm RB/C/G

EXISTING TREE

EXISTING HEDGE BOLSTERED WITH NATIVE HEDGEROW PLANTING

Crataegus monogyna (40%)
Prunus spinosa (15%)
Euonymus europaeus (10%)
Cornus sanguinea (5%)
Acer campestre (15%)
Viburnum opulus (5%)
Corylus avellana (10%)

DECORATIVE SHRUB PLANTING

Anthemis tinctoria 'Wargrave Variety'
Berberis thunbergii 'Atropurpurea'
Bergenia cordifolia
Brachyglottis 'Sunshine'
Calluna rosea 'brachytricha'
Ceanothus thyrsiflorus 'Tapestry'
Choisyia ternata 'Sundance'
Cistus purpureus
Cornus alba 'Elegantissima'
Cotoneaster conspicuus 'Decorus'
Enkianthus campanulatus
Erythronium 'Bowles Mauve'
Euonymus fortunei 'Emerald n Gold'
Hebe 'Midsummer beauty'
Heuchera 'Key Lime Pie'
Heuchera micrantha 'Purple Palace'
Lavandula angustifolia 'Hidcote'
Lonicera nida 'May green'
Micanthus sinensis
Nandina domestica 'Fire Power'
Nepeta x fassenii 'Walkers Low'
Olestra x haastii
Philadelphus 'Belle Etoile'
Philomus ruscifolia
Photinia x fraseri 'Red Robin'
Potentilla fruticosa 'Elizabeth'
Prunus laurocerasus 'Otto Luyken'
Prunus lusitanica
Rosa Gertrude Jekyll 'Austrobyrd'
Rosmarinus officinalis 'Miss Jessop'
Ruscobea fulgida var *subulanti*
Salvia nemorosa 'Caradocian'
Skimmia japonica 'Rubella'
Spiraea japonica 'Firelight'
Stachys byzantina 'Silver Carpet'
Stipa tenuissima
Symphoricarpos chenaultii 'Hancock'
Tellima grandiflora 'Purpurea'
Viburnum davidii
Vinca minor

PROPOSED NATIVE HEDGEROW PLANTING

To be seeded with:
Crataegus monogyna (40%)
Prunus spinosa (15%)
Euonymus europaeus (10%)
Cornus sanguinea (5%)
Acer campestre (15%)
Viburnum opulus (5%)
Corylus avellana (10%)

WILDFLOWER SEED MIX

To be seeded with:
Ermongale EM6 Meadow Mixture

CLIPPED HEDGEROW PLANTING

To be selected from the following:
Ilex crenata

TURF/ LAWN AREA

PARKING PAVING (PERMEABLE) WITH DEMARCATION

PEDESTRIAN PATHWAYS

SQUARE UNIT BLOCK PAVING TO REFUSE SPACES

RECTANGLE UNIT PAVING TO PRIVATE SPACE

TARMACADAM SURFACE

LAP PANEL FENCING TO GARDEN BOUNDARY

APPLICATION BOUNDARY

Sizes: 20-90cm CG/OG/Grade A

P04 13.07.2022 Extension of existing hedge DC
 P03 13.07.2022 Extension of existing hedge DC
 P02 06.07.2022 Addition of patios and general plan changes DC
 P01 Initial Issue

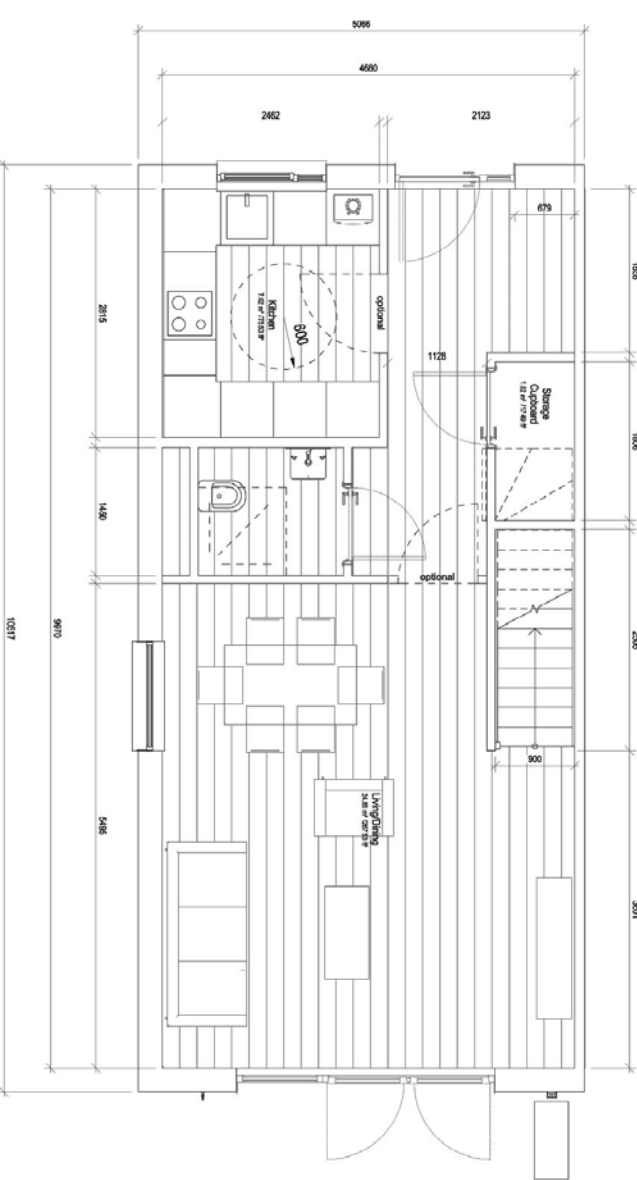
revision / date / description / drawn	
Gloucester House, 399 Silbury Boulevard, Milton Keynes, Buckinghamshire MK9 2AH T 01908 303701 W www.enplan.net	
client	
Raven Housing Trust	
project	scale
	1:200 @A1
Former Merstham Library	date
Weldon Way	-
title	drawn
	DC
General Arrangement	checked
-	LB
drawing number	revision
06-1082-301	P04
issue	
S3 - Suitable for Review & Comment	

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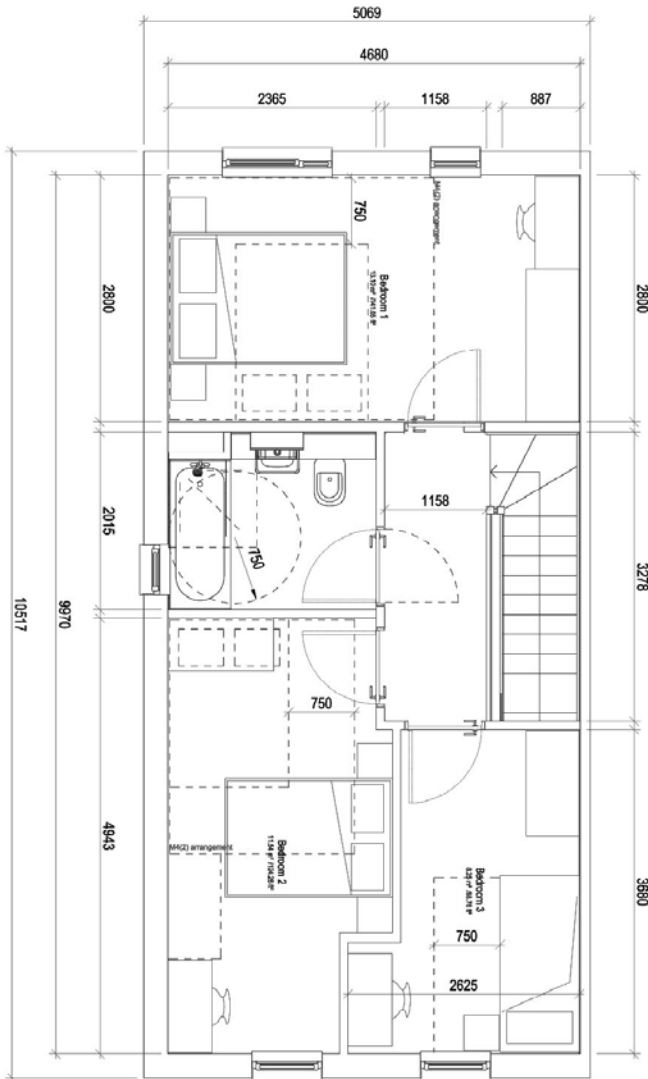
4.3 House types

4.3.1 - 3 Bed 5 Person

Total GIA 93.4 sqm/1005 sqft



Ground Floor Plan
Scale: 1:50



First Floor Plan
Scale: 1:50

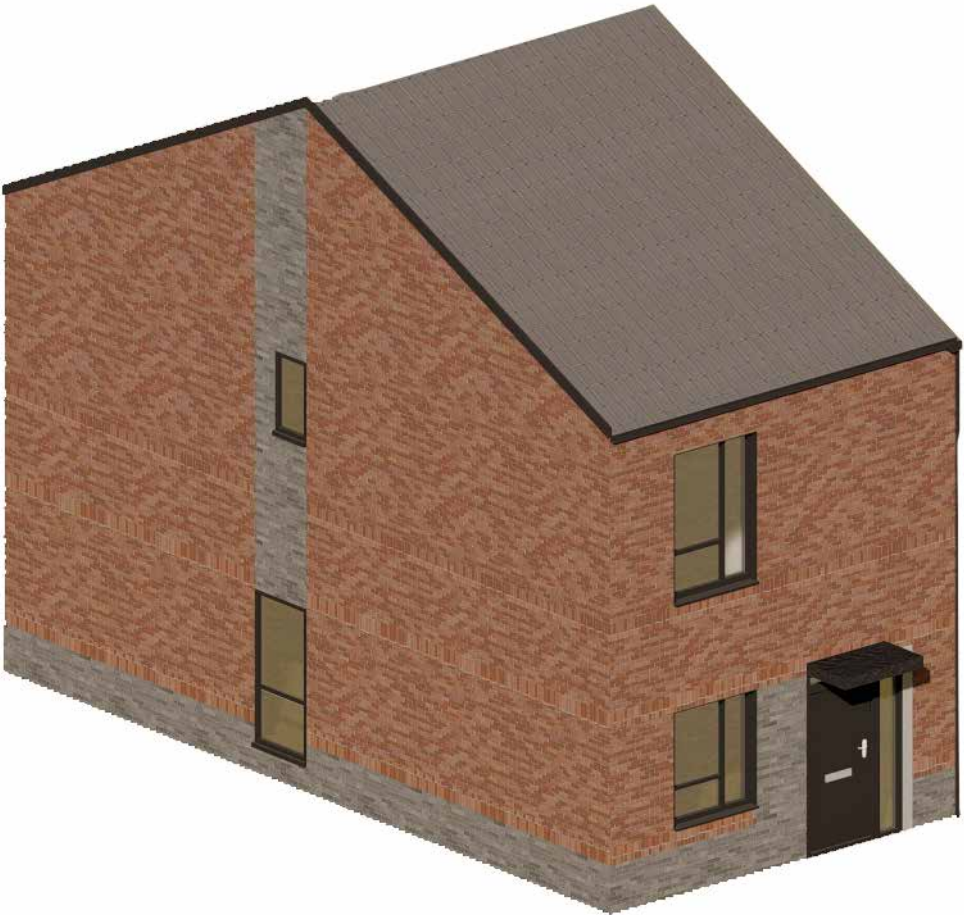


Fig. A: 3 Bed houses

4.3 Housetypes

4.3.2 - 2 Bed 4 Person

Total GIA 82 sqm/882 sqft

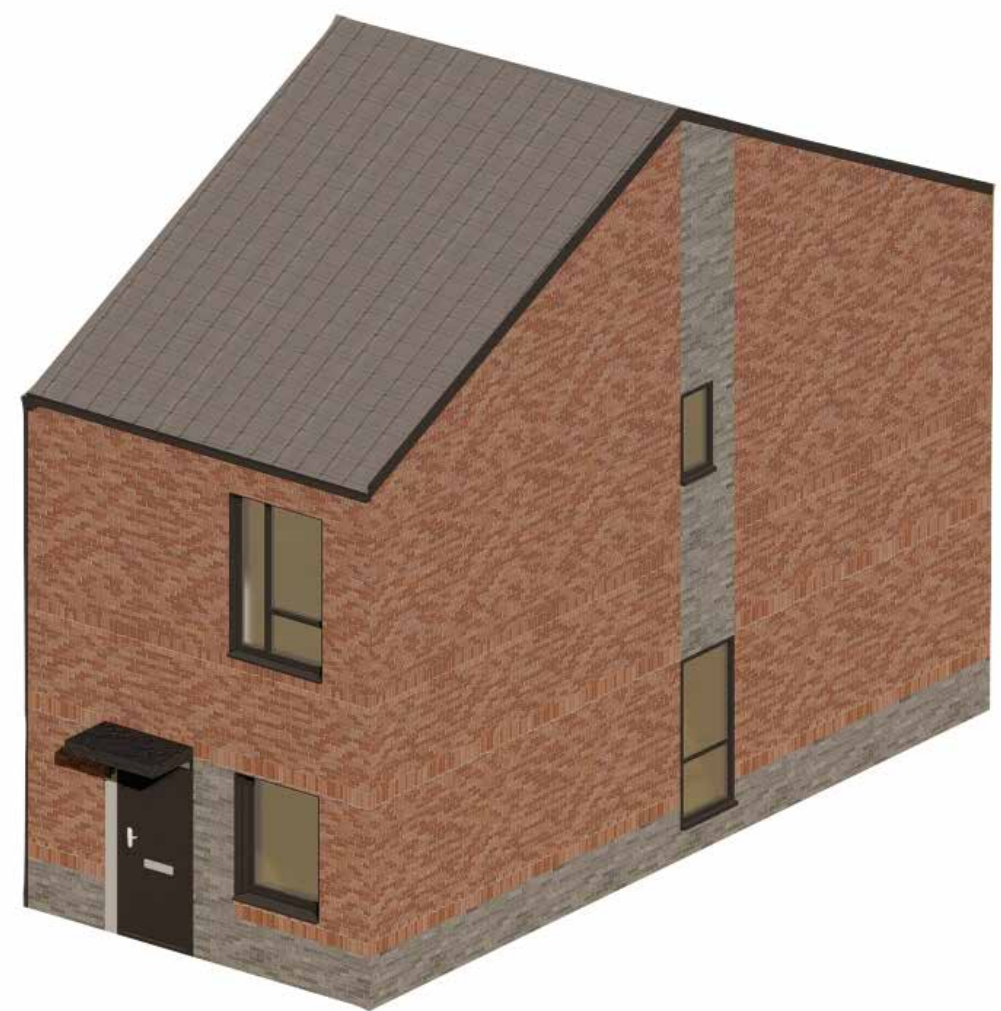
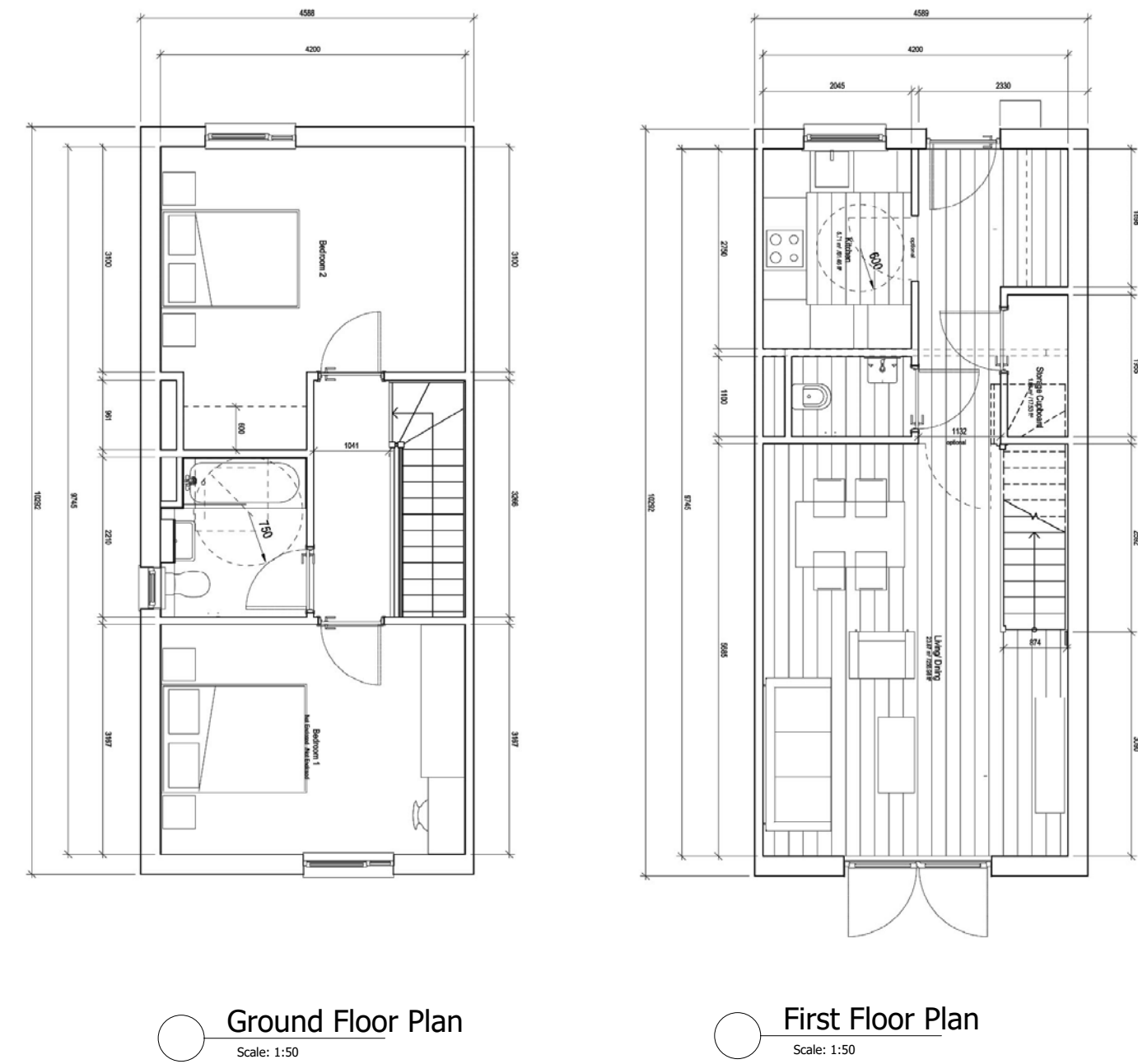
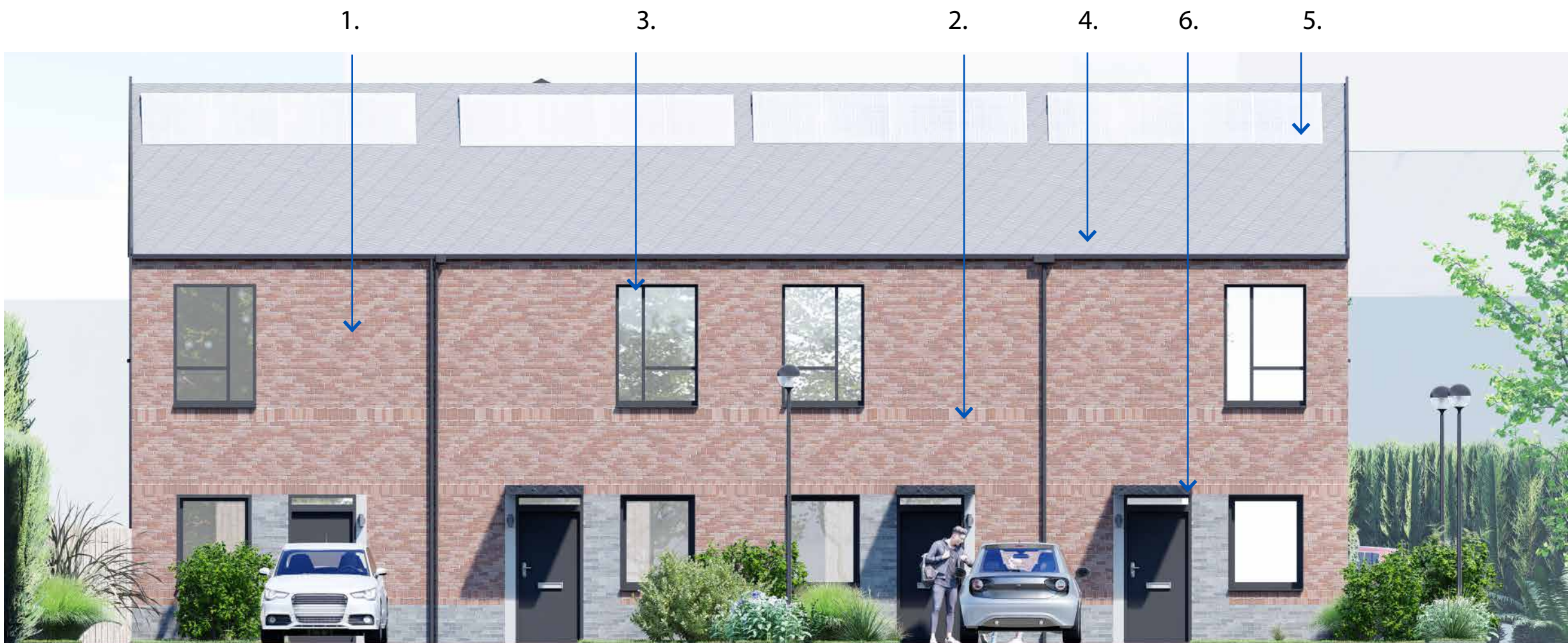


Fig. A: location of 2 Bed houses

4.3 House types

4.3.3 Block Elevations



- 1. Red multi with buff Roman brick
- 2. Soldier Course brick
- 3. Aluminium Windows
- 4. Concrete roof tiles
- 5. Solar Photovoltaic panels

4.4 Opportunities for the Sustainability Strategy.

Raven Housing Trust are aiming to use Modern Methods of Construction (MMC) and achieve low carbon development on all their sites going forward.



Lifting of volumetric modules



Other Volumetric projects

The proposals here are to use a volumetric supplier from their preferred supplier framework.

The homes will be made in a factory environment, and brought to site in two or three pieces.

Advantages of MMC:

- Minimal wastage.
- Reduced vehicle trips to site.
- Controlled detailing and workmanship.
- Shorter construction time on site.

Top Hat are the proposed suppliers of the

A TopHat home will save 61,828 kgCO₂ over the life of the house. This is a 55% saving of CO₂ compared to a traditional house, or a saving equivalent to living car free for over 30 years*.

*(61,828 kgCO₂ ÷ 2,000 kgCO₂ (average car consumption p.a.) = 30.9 years)

The actual embodied CO₂ in the TopHat home, when compared to a traditional home is 1/27th, being 729 kgCO₂ v 19,692 kgCO₂. This means that 1 traditional house has the same embodied carbon of 27 TopHat homes!*

*(19,692 kgCO₂ ÷ 729 kgCO₂ = 27)

The same TopHat home will also have all its lighting, heating and hot water delivered for less than £1.75/day, 40% less than average home consumption in England

4.6 Sustainability Strategy and low carbon.

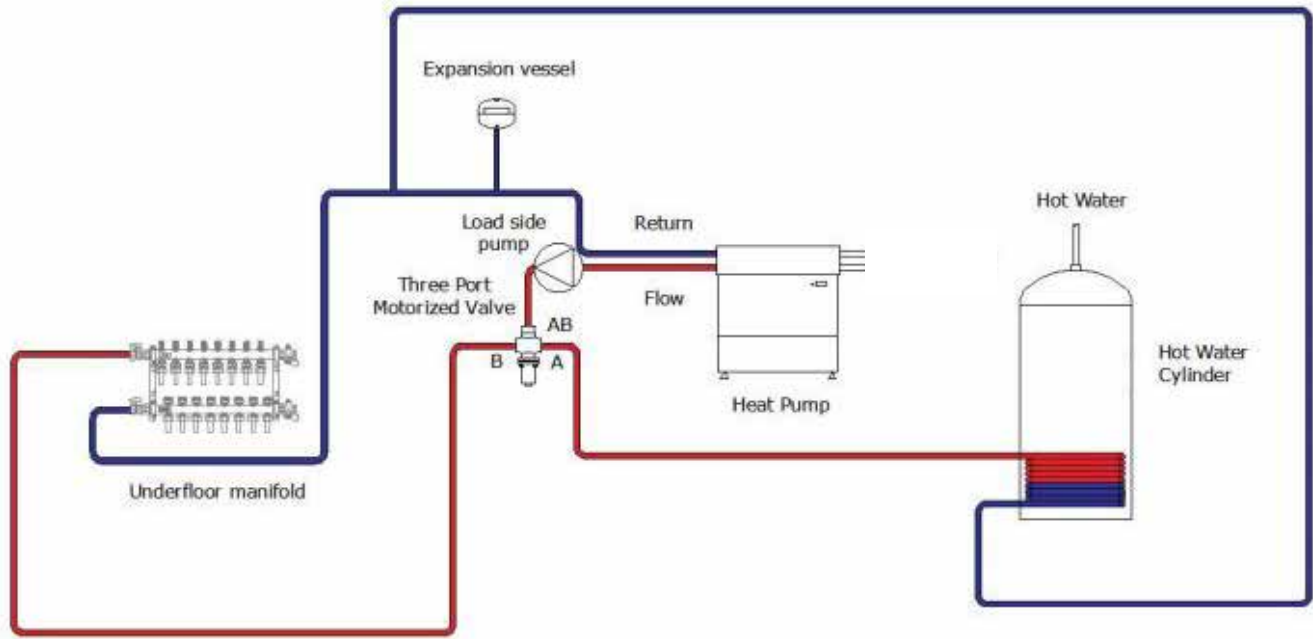
Once the homes achieve high levels of insulation, reduced cold bridges, and excellent airtightness, to lower the energy demand, then the target for low carbon is helped through efficient heating.

The heating / hot water proposal involves the installation of individual air source heat pumps for each home, supplemented in their energy use by the Photovoltaic panels (PV) on the roof.

A roof mounted PV array helps to meet the annual electrical demand from renewable energy.

Thus lowering the overall carbon emissions of the home.

Schematic of the heat pump system within the house



4.4 Refuse Storage and collection

The refuse storage and collection strategy has been agreed with the local authority refuse collection team.

The site is currently difficult to access, and collecting refuse from the MC football club and the Age Concern day centre currently involves reversing into the site. This is not considered acceptable by the refuse collection team.

The proposal allows the refuse vehicle to enter the site in forward gear, turn within the site and leave in forward gear.

Bins will be placed at collection points on collection day by residents to allow kerb side collection.



Plots 1 to 5 will have bins collected from the front on Weldon Way.

Refuse collection points for plots 6 to 14 on the access road.



Carter Jonas

