

Cambridge Investment Partnership The Meadows & Buchan Street **Committee Appendix**

6th December 2018 Rev_













Summary

Sidell Gibson have interrogated the new brief for The Meadows Hub and considered site layout options, with a focus on the community provision, considering 2 key objectives:

- Ensure that the current provision of services and activities at Meadows and Buchan Street is maintained within the consolidated environment.
- Consider opportunities to maximise housing provision across the sites. The site has been identified for redevelopment as part of a city wide programme of rebuilding sub standard and poorly utilised city owned sites for new affordable homes.

The Site Location map opposite illustrates the distance between the two sites, which is approximately 250m.



Site Locations

- 1. The Meadows 1 St Catharine's Road, Cambridge CB4 3XJ.
- 2. Buchan Street 6 Buchan Street, Cambridge CB4 2XF.









Existing Site Plan

The diagram on this page, illustrates the existing site of the Meadows Community Centre, Centre car park, and open space of the recreation ground.

An approximate site boundary is shown in red.



Site Location Plan















SidellGibson

	Areas Schedule Option 2h C
Project	The Meadows, 1 St Catharines Road, Kings Hedges, Cambridge CB4 3XJ.
Client	CIP
Date	15.11.2018
Revision	RevB
Project Stage	

Proposed Site Layout Option 2h C (no basement)

Proposed Site Layout Option 2h C - Estimated no. of residential units per block (to be confirmed)

0 4 0 4

5 0 3 3 8 0 16 8 12 8 14 8

Flats Block F

4 2 4 2 4 2 4 2 4 2 4 2

Flats Block E

Floor	
Ground	
1st	
2nd	
3rd	
4th	
Basement	

Total

	Block A I GEA		Block A		Block B I GEA		Block B II GIA	Flats E Total	Block C GEA		Block C II GIA		Block D I GEA		Block D I GIA	Н	Block E ub I GEA	Flats E Hi Tota	np	H	Block F ub GEA	Н	Block F ub I GIA	Commu Blo Total		Commun Blo Total	ck
m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2
248	2,668	181	1,948	275	2,963	200	2,152	248	2,669	181	1,948	537	5,785	tbc	tbc	178	1,920	161	1,733	178	1,920	161	1,733	1710	18,406	1583	17,042
205	2,207	140	1,503	232	2,502	159	1,706	205	2,207	140	1,507	537	5,785	442	4,758	332	3,574	276	2,969	400	4,306	334	3,591	NA	NA	NA	NA
119	1,283	82	882	232	2,502	159	1,706	205	2,207	140	1,507	537	5,785	442	4,758	537	5,785	442	4,758	537	5,785	442	4,758				
								205	2,207	140	1,507	537	5,785	442	4,758	537	5,785	442	4,758	537	5,785	442	4,758				
												537	5,785	442	4,758	537	5,785	442	4,758	537	5,785	442	4,758				
					•		·		·																	·	
572	6.158	403	4.332	740	7.966	517	5.564	863	9.289	601	6.469	2.687	28.923	tbc	tbc	2.123	22.847	1.763	18,975	2.191	23.579	1.821	19.597	1.710	18,406	1.583	17.042

Floor	
Ground	
1st	
2nd	
3rd	
4th	
Basement	
,	
Total	,

																								Cei	nunity ntre GEA	Comn Cer Tota	
m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2
																								1478	15,909	1360	14,641
						ļ		ļ										ļ									
		l				<u> </u>		<u> </u>								l		<u> </u>									
																								1,478	15,909	1,360	14,641

SK 181116 Meadows Proposed Site Layout Option 2h C (no Basement) Ground Floor TNP

Residential provision Internal flat GIA varies - minimum area is 50sqm per 1b2p flat and 70sqm per 2b4p flat

Area measurement notes
Figures do not include any additional external stores (bin, bikes, mobility scooter store) outside of the main building footprint, unless they share at least one wall with the main building blocks
Ground and 1st floor GEA figures for 'Flats Block E (Hub)', 'Flats Block E (Hub)', and 'Community Hub' - are measured to centre of line of internal separating wall between residential and community uses
GEA residential figures include balconies (GIA residential figures do not include balconies).
Hub GEA and GIA figures only include double height hub spaces at base level
Areas of the existing Community Centre building are based upon an approximate scaling of a historic plan drawing - issued as part of the project brief by CIP (11th May 2018)
Note that deck areas / communal root terraces at 1st floor level are not included

. These Areas have been measured off survey drawings supplied by others using the stated conventions> SGA cannot accept responsibility for the accuracy or otherwise of this information.

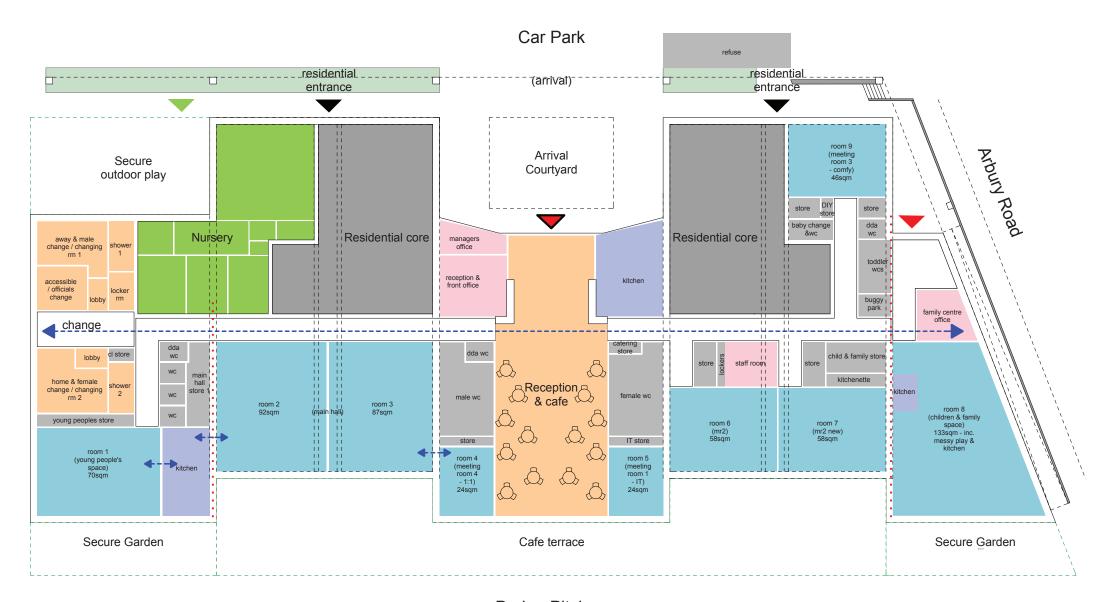
3 There is design development yet to take place which may affect the all measured areas.

Accommodation Schedule

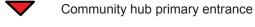
This table provides approximate GEA and GIA figures, as well as the approximate number and type of units (1b2p or 2b4p).







Park + Pitches



Community hub secondary entrances

Nursery entrance

Residential entrances

Community hub axis circulation

Possible secure lines to separate Young People's Centre & Children + Family Centre

Community Hub - Option A

The diagram opposite shows the layout of the hub in relation to the residential core elements. The layout is based upon the following principles:

- re-provide existing centre with additional facilities incorporated from Buchan Street
- enhance sports provision
- assess integration of new cultural + arts events
- more flexible space that can respond to future timetable and use changes
- improve visibility of the Hub and Hub entrance
- centralised main entrance with direct views to park
- Alternative entrances to nursery, C+F wing, changing, & youth wing, to allow independent operation when req.
- maintain a single level Hub for ease of access
- create simple circulation and natural surveillance
- make the most of park views from rentable rooms
- create external courtyards at entrances to front and for hub gardens to rear - a generous arrival courtyard announces the main entrance to the building.
- main double height halls (rooms 2/3 and 6/7) can be subdivided if required for greater flexibility

The proposed Hub GIA is approx 1,583sqm. The existing centre GIA is approx 1360sqm.





Residential Floor Plans

Blocks A & C

'The Cambridge Sustainable Housing Design Guide' from February 2017, states that 5% of the developments affordable units should be building regulation Part M Cat 3 accessible units (where developments propose 20+ units). The location of these units is to be determined, and this may affect proposed unit numbers.

The plan diagrams below (right) show the 6 unit per floor block developed for the 3No. 5 storey blocks (Blocks D, E & F).

The ground floor diagram of the 6 unit block illustrates areas for integrated ancillary accommodation for the residential use (bikes, bins, plant). The remaining area on the ground floor will be accommodated by the Hub, and by either additional parking or residential units (or incorporation of Part M Cat 3 flats) depending on further development of the site layout options.

The typical upper floor diagrams, show a mix of 2b4p flats and 1b2p flats.

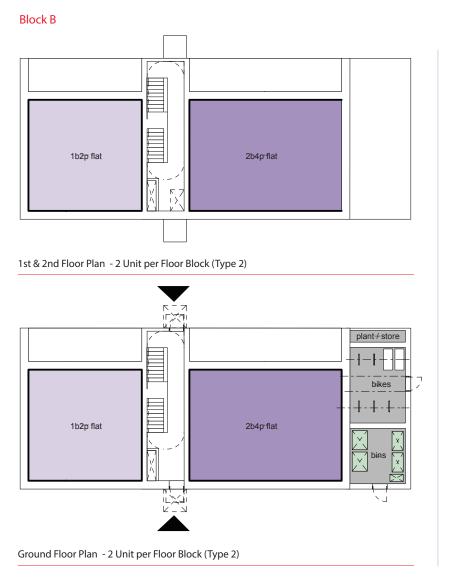
The plan diagrams below (left) show the two types of 2 unit per floor 3 or 4 storey blocks. These flats share 1 stair core per block. Each block is 3 or 4 storeys tall. Type 1 contains 2no 1b2p flats per floor. Type 2 contains 1no 1b2p flat and 1no 2b4p flat per floor.

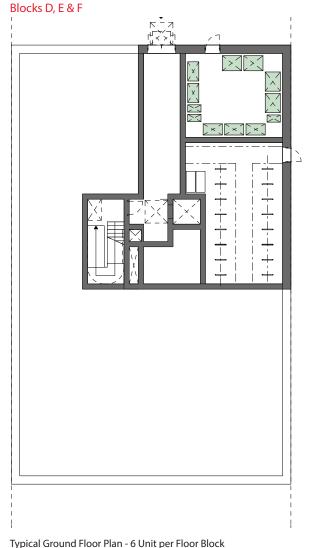
However, the site layout shows how one of these blocks (Block A - closest to the existing bungalow) will contain 1no 1b2p unit only on the 2nd floor to respond to the pre-application comments. Therefore, this block will contain 5 units in total.

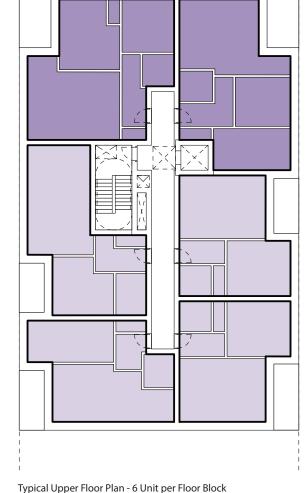
Where the block has a 4th storey (block C), a lift will need to be integrated.

1b2p flat 1b2p flat 1b2p flat 1b2p flat 1b2p flat 1b2p flat 1b2p flat

Ground Floor Plan - 2 Unit per Floor Block (Type 1)















Proposed Site Layout Option 2h A (no Basement) - Ground Floor Diagram

Landscape Play

We would look to enhance play/recreational activities through the following:

- improved trim trails and play equipment
- improved natural play
- formal sports provision

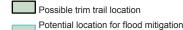
The examples on this page are precedents that may inform the design of the external spaces.

Flood mitigation

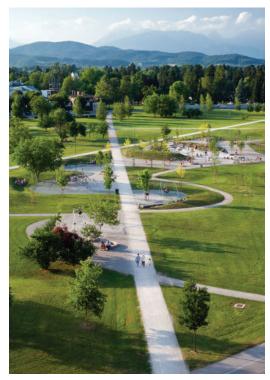
As part of a flood mitigation strategy, we would look to consider the following measures with the support of a flood risk assessor:

- Zones A & B (yellow zones on the plan above) could be used for flood attenuation, and possibly function as informal/natural play areas (see adjacent images)
- Improve pitch drainage with linear drains and soakaways
- Consider drainage attenuation for the relocated MUGA
- Consider underground attenuation below the car park if required
- Consider wildflower meadows





storage tanks
Possible swale locations
(size, depth, location tbc)























Buchan Street: Area Schedule

Areas Schedule Buchan Street, 6 Buchan Street, Cambridge CB4 2XF. **Project** Client CIP 16.11.2018 Date **Project Stage** Areas (51_1005-01_SK001 Rev_k)

Option 1 Proposed - Includes 3no. Housing First flats and 7no. 3bed Houses

	_	uses I GEA		uses al GIA		block I GEA		block al GIA		il/cafe I GEA		il/cafe II GIA	FI	ing 1st ats I GEA	FI	ing 1st ats Il GIA		munity I GEA		munity al GIA
Ground	422	4,542	336	3,617	282	3,035	244	2,626	171	1,841	148	1,593	112	1,206	90	969	NA	NA	NA	NA
1st	422	4,542	336	3,617	452	4,865	371	3,993	NA	NA	NA	NA	112	1,206	90	969	NA	NA	NA	NA
2nd	0	0	0	0	452	4,865	371	3,993	NA	NA	NA	NA	0	0	0	0	NA	NA	NA	NA
Total	844	9,085	672	7,233	1,186	12,766	986	10,613	171	1,841	148	1,593	224	2,411	180	1,938	0	0	0	0

Option 2 Proposed - Includes 9no. 3bed Houses (no housing first flats)

Houses Total GEA		Houses Total GIA		Flat block Total GE			block II GIA	Retail/cafe Total GEA		Retail/cafe Total GIA		Housing 1st Flats Total GEA		Housing 1st Flats Total GIA		Community Total GEA		Community Total GIA	
546	5,877	432	4,650	282	3,035	244	2,626	171	1,841	148	1,593	0	0	0	0	NA	NA	NA	NA
546	5,877	432	4,650	452	4,865	371	3,993	NA	NA	NA	NA	0	0	0	0	NA	NA	NA	NA
0	0	0	0	452	4,865	371	3,993	NA	NA	NA	NA	,	0	0	0	NA	NA	NA	NA
1,092	11,754	864	9,300	1,186	12,766	986	10,613	171	1,841	148	1,593	0	0	0	0	0	0	0	0

Existing

	uses ip) GEA		Houses 9x(3b5p) GIA		9x(3b5p) GIA		9x(3b5p) GIA		9x(3b5p) GIA		9x(3b5p) GIA		9x(3b5p) GIA		block GEA		block I GIA	Retail/c	afe GEA	Retail/d	cafe GIA	1	ats GEA		ats I GIA	Community Total GEA			nunity II GIA
m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2	m2	ft2										
NA	NA	NA	NA	NA	NA	NA	NA	278	2,992	246	2,648	NA	NA	NA	NA	749	8,062	693	7,459										
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA										
		1					,			,		1																	
NA	NA	NA	NA	NA	NA	NA	NA	278	2,992	246	2,648	NA	NA	NA	NA	749	8,062	693	7,459										

Reference Drawings:

Layout drawing 51_1005-01_SK001 Rev_H

Residential provision

6no. 1bed 2 person flats are proposed each 51, 51 and 55m2 GIA. Each flat has 1 cycle store allocated to it in the GFL store room.

4no. 2bed 4 person flats are proposed each 73 m2 GIA. Each flat has 2 cycle store allocated to it in the GFL store.

1no. 2bed 4 person flat for ADM4(3) wheelchair accessible is proposed at 96 m2 GIA. The flat has 2 cycle stores allocated to it in the GFL store.

Option 2

Total

Total

9no. 3bed 5 person houses are proposed each 96 m2 GIA. Each house has 3 cycle spaces allocated to it in garden shed.

Option 1

2no. 1bed 1 person 'Housing First' flats are proposed each 29 m2 GIA. The flats have 1 cycle store each allocated to it in the GFL store. 1no. 2bed 4 person 'Housing First' flats are proposed each 88 m2 GIA. The flats have 2 cycle stores each allocated to it in the GFL store. 7no. 3bed 5 person houses are proposed each 96 m2 GIA. Each house has 3 cycle spaces allocated to it in garden shed.

Please note that flat balconies are included in the GEA's and not in the GIA figures and equate to aprox.30m2 (5no. private balconies per floor).

General Notes:
1. The areas quoted are the likely areas of the building at this stage of the design. Calculations are based on the published RICS Guidance Notes, Code of measurement Practice: 6th Edition, Guidance in respect of measurement of Net* Internal Areas and decisions to be made on the basis of these predictions, whether as to the project viability, pre-letting, lease arrangements or the like, should include due allowance for the increases and decreases inherent in the design development and building process.

Net Internal: Gross External etc
2. These Areas have been measured off survey drawings supplied by other using the stated conventions> SGA cannot accept responsibility for the accuracy or otherwise of this information.

3 There is design development yet to take place which may affect the all measured areas.

Accommodation Schedule

The proposed layout shows two options. The following no. of units are accommodated within each option:

Option 1

Residential provision 21 dwellings

7no. 3bed 5 person houses

6no. 1bed 2 person flats.

4no. 2bed 4 person flats

1no. 2bed 4 person flat (ADM4(3) wheelchair accessible)

2no. 1bed 1 person flats – Housing First

1no. 2bed 4 person flats – Housing First

Option 2

Residential provision 20 dwellings

9no. 3bed 5 person houses

6no. 1bed 2 person flats.

4no. 2bed 4 person flats

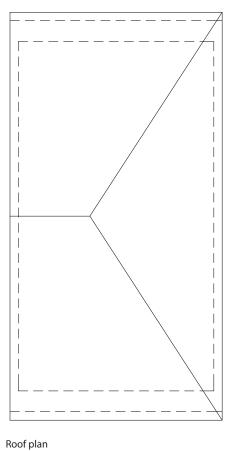
1no. 2bed 4 person flat (ADM4(3) wheelchair accessible)

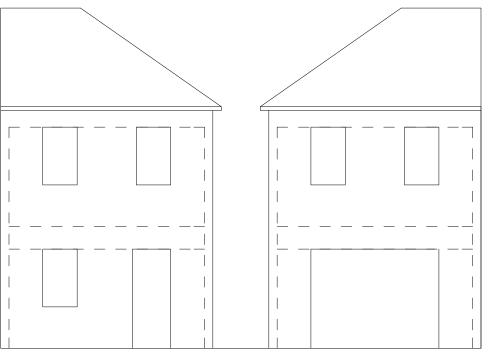
Front elevation



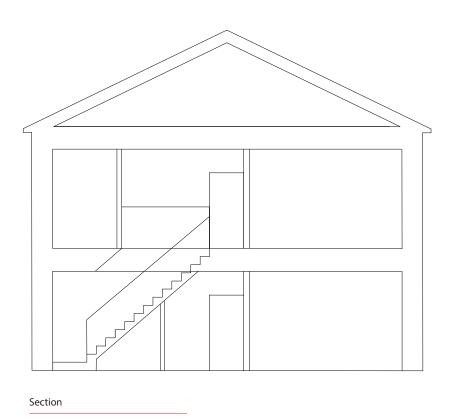










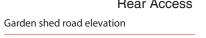


Road Access
Garden shed plan

Rear Access

Bike1

Bike2 Bike3

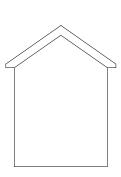


Typical Terrace House TYPE 3 General Arrangement (2 storey, 3 bedroom, 5 person) Total GIA 93m2) 1:100 scale @A3

- The proposal includes either 7no. or 9no terrace (3b 5p) houses, depending on further client review of Housing First inclusion.
- Parking one bay per house located at the front of the house accessed via a pavement crossover.
- Cycle parking (1 per bedroom) =3 total per house, housed securely and out of the elements in a rear garden enclosure some with access direct onto Callander Close.
- Bins housed securely and out of the elements in a rear garden enclosure some with access direct into Callander Close.
- Residual waste =1x1100L bins,
- Dry recycle waste =1x660L bins.
- Compost waste 380L = 1360L bins.
- As RECAP 2011 Guide Table 4.1
- Plan area of each house 58m2 GEA.
- Total GIA 96 m2

Garden Access

Bin



Garden shed side elevation

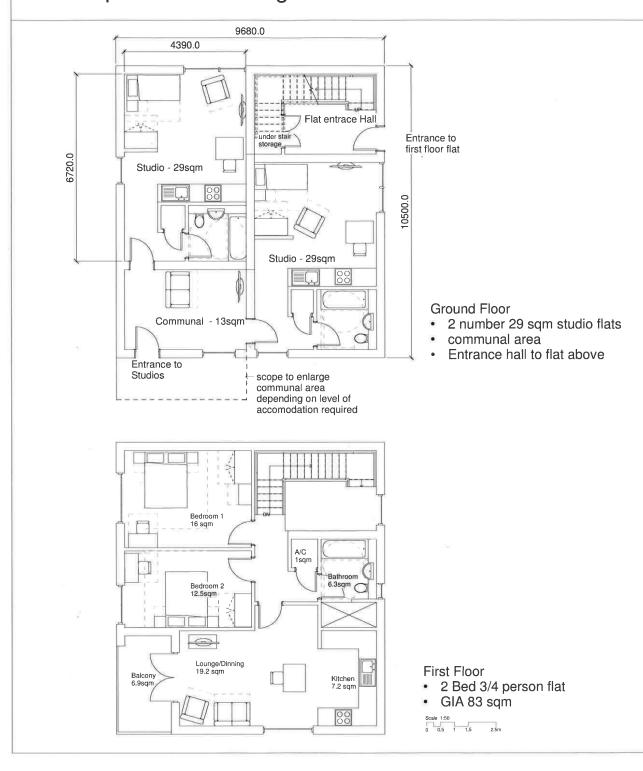




Concept Studio Housing with Caretaker flat above







Housing First block of flats;

- At the design team meeting on 18.09.18 Sidell Gibson were instructed to integrate a 'Housing First' type block of flats into the scheme, replacing two of the 9no. terrace houses.
- Please see adjacent example (ground floor and first floor)
 of a 2 storey flat block containing 2 studio flats at ground
 level and 1no. 2 b 3/4p flat at first floor by Saunders Boston
 Architects.
- The block plan dimensions are approximately 10m x 10m and it was decided that the block would be best located in place of terrace houses 6 and 7 on the largest double plot. We have located the provision (3 units) off the terrace house site road, with rear bike and bin blocks located off Callander Close as part of the 'garden shed' facade.

Parking

- 2no. Car parking bays for the housing first block (occupants). Located off the site feeder road.
- Cycle parking for 4 cycles (1 per bedroom) housed securely and out of the elements in a rear garden enclosure with access direct onto Callander Close.

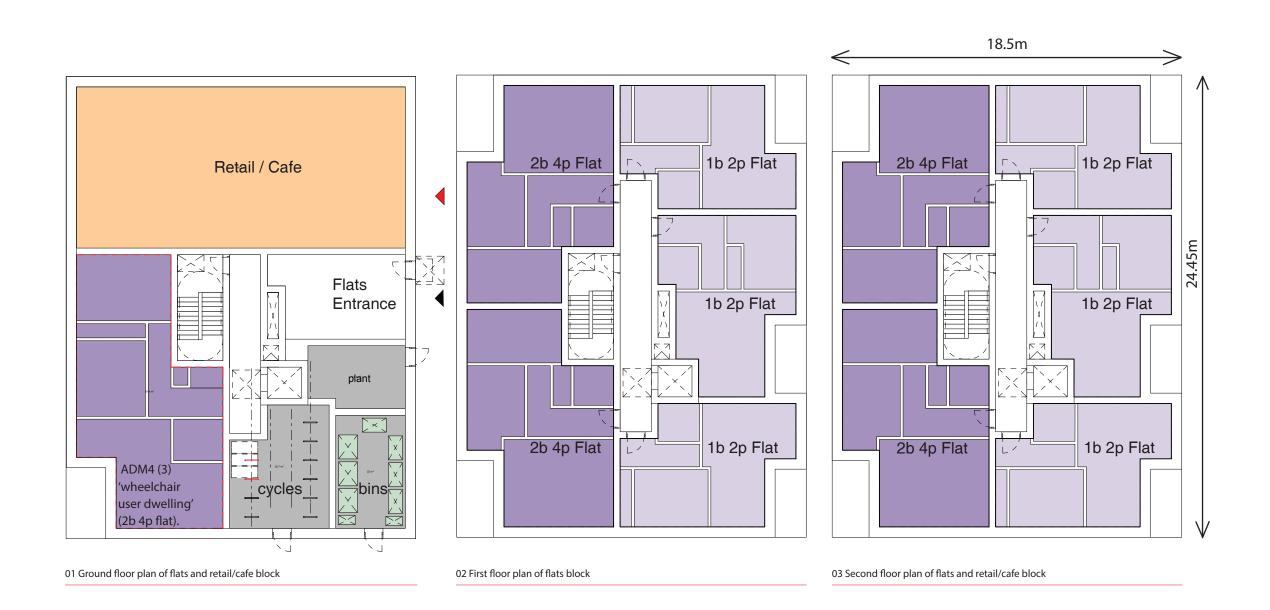
Bins

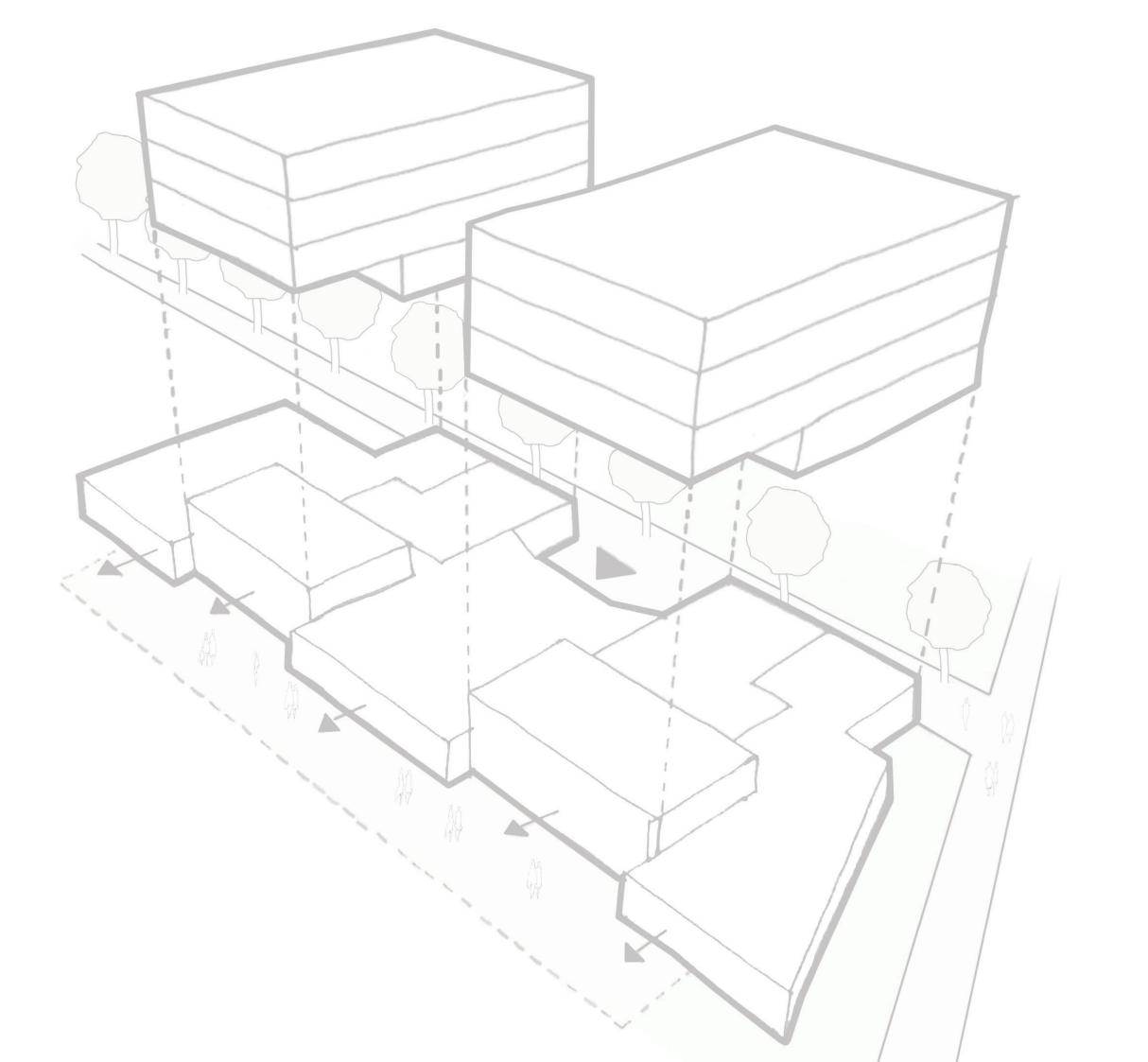
- Housed securely and out of the elements in a rear garden enclosure with access direct into Callander Close.
- Bins 1bed unit 340L and 440L for 2bed.
 Total for 6 units =2240L. Ratio 50:40:10.
- Residual waste1120L =1x1100L bins,
- Dry recycle waste 896L = 2x660L bins.
- Compost waste 224L = 1x360L bins.
- As RECAP 2011 Guide Table 4.1











SidellGibson Architecture Urban Design

Sidell Gibson

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