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1.0 Introduction

1.1 PURPOSE OF THE DOCUMENT

This report has been prepared by Saunders Architects on behalf of Reading Borough Council. This document accompanies an application for full planning permission for the redevelopment of the existing Arthur Hill Pool Site fronting Kings Road, with access from Norwood Road from the rear. The site is in a sustainable location within close proximity to the centre of Reading and within 50m of the District Centre of Cemetery Junction.

The following chapters set out the contextual analysis, design development narrative and current illustrative proposals for the proposed residential scheme. The site is approximately 0.26 acres. It is bounded by Kings Road to the South and Norwood Road to the North.

The site is predominantly surrounded by residential properties. To the North and West typically 2-4 storeys in height. The western boundary of the site neighbours a 7 storey residential block and is 3 storeys to the eastern side.

An appraisal of the relevant planning background and policies is to be issued with this document. This should be read in conjunction with the Planning and Heritage Statement as well as the supporting planning drawing set.

This document sets out a site strategy which addresses the challenges and opportunities of the site with a proposal for a desirable residential scheme which is benefited by both local amenities and good transport links into Reading town centre.

1.2 OVERVIEW OF THE BRIEF/ PROJECT DESCRIPTION

Arthur Hill Pool is the latest in a series of affordable housing schemes proposed by Reading Borough Council. Several other sites have received planning permission in recent months and demonstrate the Council's commitment to new-build affordable housing in the borough. The Arthur Hill Pool has been out of use for the past three years following the pool's closure. The Council has since endeavoured to find a suitable use for the site. It is allocated for residential development under Policy EF1 of the recently adopted Local Plan.

This document sets out how the Council and it's team propose to transform the site and, in the process, create much needed affordable housing for the key workers of Reading. While at the same time acknowledging the historical significance of the original swimming baths building.



FIG 01 - CGI OF PROPOSAL FROM KING'S ROAD

2.0 Site context

2.1 SITE LOCATION



FIG 02 - LOCATION: NATIONAL

Reading is a large, historic market town in Berkshire, South East England. It is in the Thames Valley at the confluence of the River Thames and River Kennet, and on both the Great Western Main Line railway and the M4 motorway. Reading is 70 miles east of Bristol and 50 miles west of London.



FIG 03 - LOCATION: REGIONAL

The nearest major town to Reading are Oxford and High Wycombe to the north, Bracknell and Maidenhead to the east, Basingstoke to the south and Newbury to the west. To the north and west of Reading respectively are two Areas of Outstanding Natural Beauty. The Chiltern Hills lie to the north, while the North Wessex Downs lie to the west.



FIG 04 - LOCATION: LOCAL

The site is located in the Newtown area of East Reading. The River Kennet and River Thames run to the North of the site converging near the Great Western Railway line. The site is located on Cemetery Junction with the Reading Old Cemetery and Palmer Park to the east. Reading College sits proudly just a few hundred yards along on King's Road towards the town centre. The Royal Berkshire Hospital is situated nearby off London Road to the South of the site.

2.2 SITE BOUNDARY AND AERIAL VIEW



FIG 05 - AERIAL WIDER CONTEXT - SOUTHERN VIEW

This wider aerial view gives a sense of the urban setting in which the site sits. Buildings along King's Road are of greater scale and height than those beyond the main route out of the town. Adjacent to the western site boundary, Crossway Point, a contemporary housing block that towers above all the other buildings in this vicinity.

To the rear of the site is a residential area containing buildings of varying styles and scales with terraced houses, town houses blocks of flats range from 2-3 storeys with pitched roofs. The nearest green space is accessed via the gateway to the Old Reading Cemetery, which leads to Palmer Park - a large popular amenity space for local people.



FIG 06 - AERIAL CLOSE-UP - SOUTHERN VIEW

The site boundary extends from King's Road at the front (south facing) to Norwood Road to the rear (north facing). The existing swimming pool building fills the majority of the site width. The pool flank walls (to be demolished) informs the extent of the proposed building footprint. A low level retaining wall forms the boundary to the adjoining sites to the east and west.

2.3 SITE PHOTOGRAPHS



FIG 07 - SITE PHOTOS KEY



VIEW 1



VIEW 2



VIEW 3



VIEW 4



VIEW 5



VIEW 6



VIEW 7



VIEW 8



VIEW 9



VIEW 10



VIEW 11



VIEW 12



VIEW 13



VIEW 14



VIEW 15

3.0 Site Analysis

3.1 SITE ANALYSIS

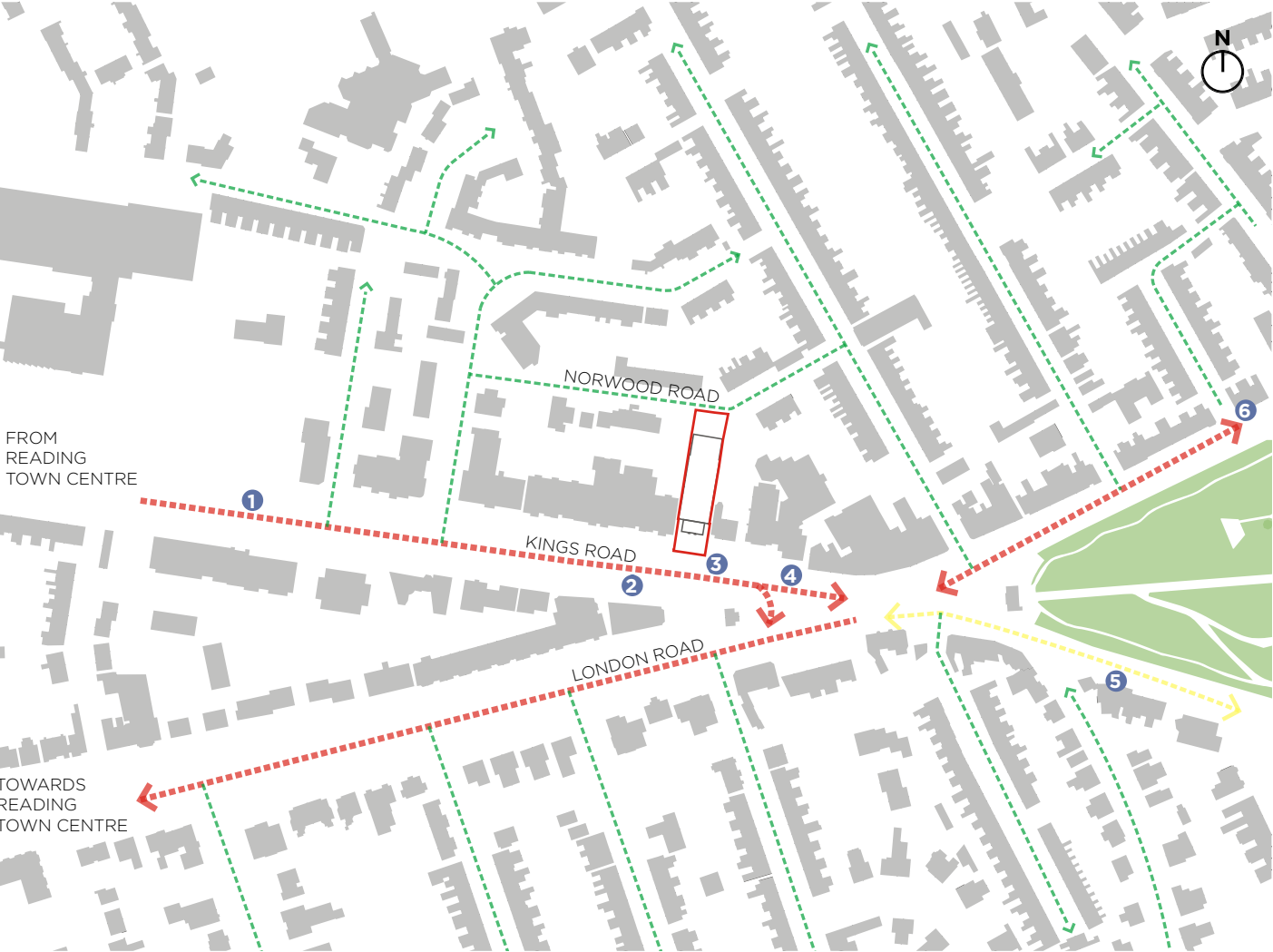


FIG 08 - VEHICULAR LINKS

The partial one-way road network meets at a confluence close to the site at 'Cemetery Junction'. This is where London Road and Kings Road cross. Traffic flows along the A329 (King's Road) in an easterly direction past Arthur Hill Pool. Both routes eventually link up with junctions for the M4 motorway. Immediately opposite the site, a bus lane runs and two lanes of traffic switches to three lanes. A bus lane is located on the opposite side of the road, running back to the town centre in a westerly direction.

KEY	
	SITE BOUNDARY
	PRIMARY ROUTE (ONE WAY)
	PRIMARY ROUTE
	SECONDARY ROUTE
	TERTIARY ROUTE
	BUS STOP

BUS STATION	
	WHITEKNIGHTS
	READING TOWN CENTRE
	HIGH WYCOMBE
	WOKINGHAM TOWN CENTRE
	BRACKNELL
	THAMES VALLEY PARK



FIG 09 - PEDESTRIAN AND CYCLE LINKS

Pedestrian crossing points across Kings Road are situated close to the site. Shops are easily accessible in the Cemetery Junction District are only 50m away and the green space at Palmer Park is in close proximity. Reading College and the Royal Berkshire Hospital are a short walk away while the University of Reading campus is 20 minutes away on foot – the site is ideally located to enable proposed key worker residents access to these facilities. Reading Train Station is also a 20 minute walk away via King's Road and Forbury Road. The cycle route along London Road is a traffic-free route. Along King's Road cyclists share the road with vehicular traffic. However, Norwood Road does link to Cumberland Road to the East which joins a pleasant cycleway along the River Kennet leading to the town centre.

KEY	
	SITE BOUNDARY
	PEDESTRIAN ROUTE
	ON-ROAD CYCLE ROUTE
	TRAFFIC-FREE CYCLE ROUTE



FIG 10 - LAND USE

The application site faces Kings Road, a main route into Reading along which there are a number of large scale buildings that are a mixture of commercial and blocks of flats. To the north of Kings road the area is predominantly residential terraced houses. To the east is Cemetery Junction District Centre containing a number of retail and commercial use buildings. Further west of the site the area is a mix of business use and educational facilities (Reading College). The closest major green space to the site is Palmer Park; which features play areas and an athletic stadium.

KEY	
	SITE BOUNDARY
	RESIDENTIAL
	RETAIL
	COMMERCIAL
	HOSPITALITY/LEISURE
	RELIGIOUS

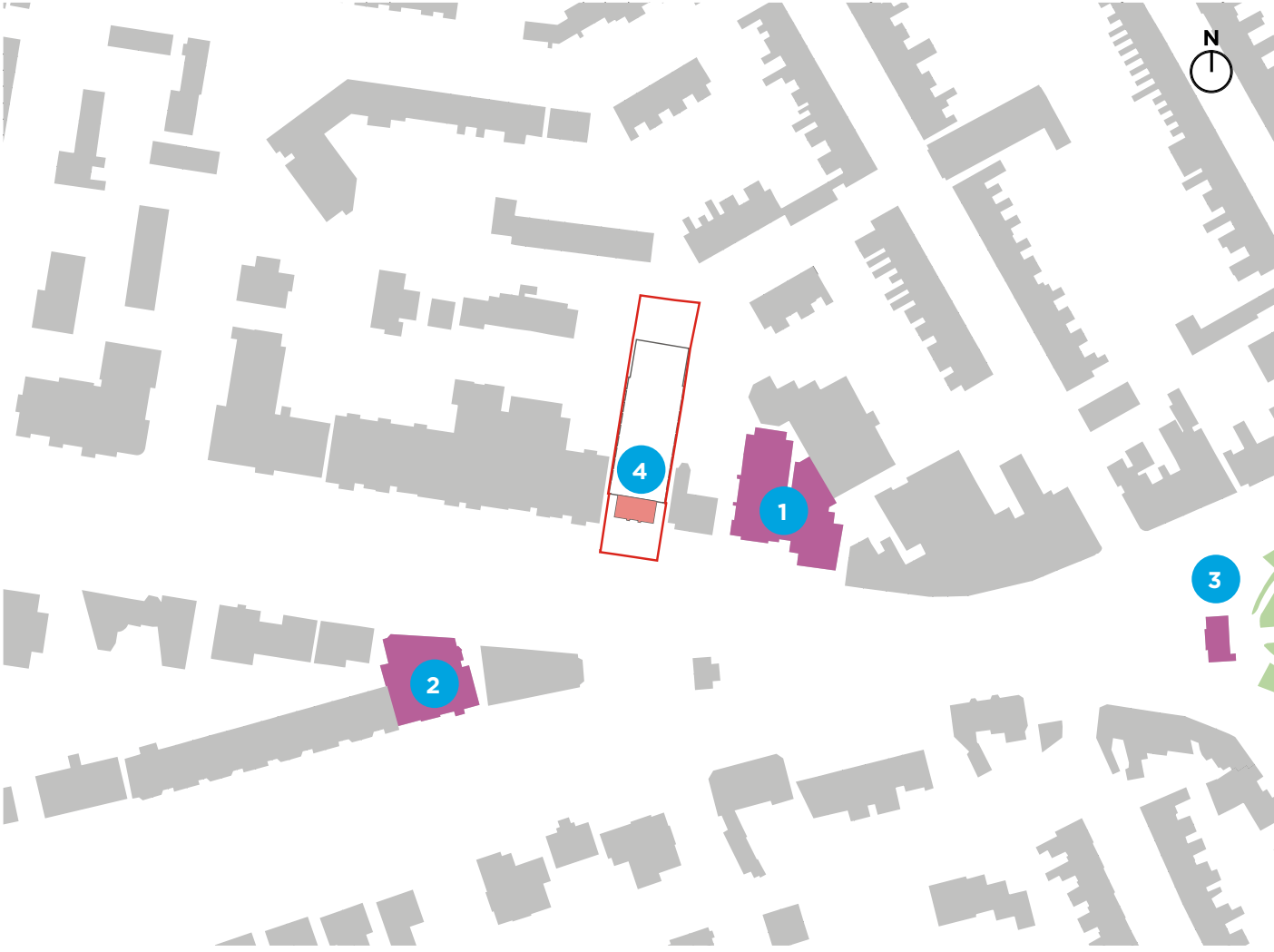


FIG 11 - KEY BUILDINGS

Within the application boundary the Arthur Hill Pool frontal building facing Kings Road is listed within the Reading locally important buildings and structures document due to the pleasing Italianate Style evoking townscape merit. The application site is not within a conservation area. However, there are three grade II listed buildings nearby: 1-Wycliffe Baptist Church, 2-Gladstone Club and 3-Entrance Lodges & Gates to Reading Old Cemetery. The site is separated from the Wycliffe Baptist Church by a large three storey building. It is separated from the Gladstone Club and the entrance loges & gates by Kings Road. The primary access for the Gladstone Club is off London Road, the rear of the Gladstone club facing Kings Road has been heavily altered.

KEY	
	SITE BOUNDARY
	GRADE II LISTED BUILDING
	LOCALLY IMPORTANT BUILDING

	Wycliffe Baptist Church
	Gladstone Club
	Entrance Lodges & Gates to Old Reading Cemetery
	Arthur Hill Pool

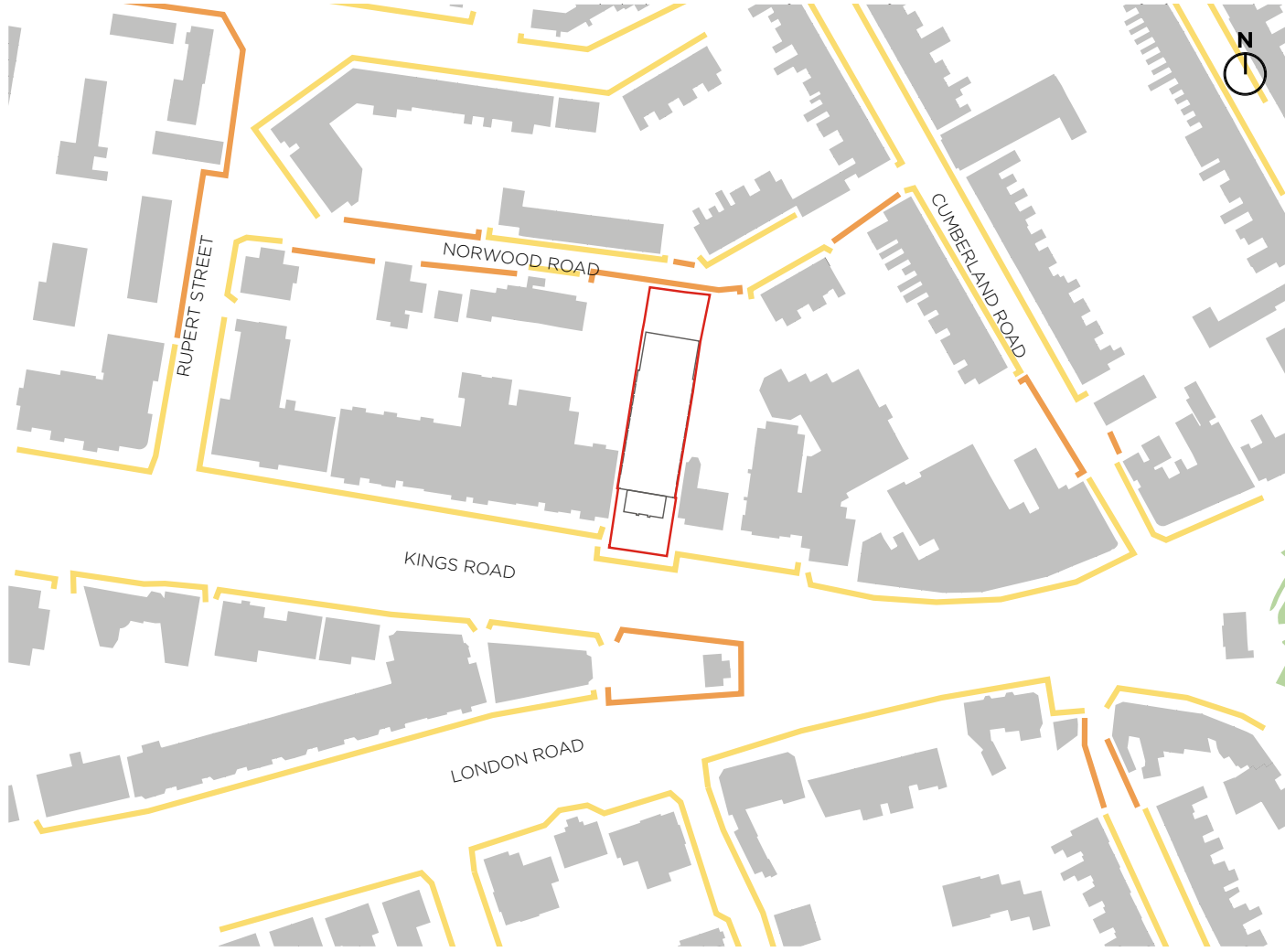


FIG 12 - FRONTAGES

There is generally active street frontage along both King's Road and London Road except for the few areas near the intersection of the highways. The open nature of this intersection makes views of the site prominent to onlookers. The rear of the site, along Norwood Road, is more fragmented and has more inactive frontage. Developing the site up to the building line will help to establish more pedestrian friendly space to the north of the site. Beyond the immediate site context there is an established pattern of residential development that activates the street frontage.

KEY	
—	SITE BOUNDARY
—	ACTIVE FRONTAGE
—	INACTIVE FRONTAGE



FIG 13 - BUILDING HEIGHTS

The building heights along both King's Road and London Road are typically in excess of 3-4 storeys. Directly adjacent to the west of the site boundary there is a 7 storey residential block. To the eastern boundary the site there is a 3 storey building which is neighboured by the 4 storey Wycliffe Baptist Church. The majority of properties located to the north of the site and Kings Road are typically 2-3 storeys in height.

KEY	
—	SITE BOUNDARY
—	1 STOREY
—	2 STOREYS
▨	2 STOREYS (TO DEMOLISHED)
—	3 STOREYS
—	4+ STOREYS

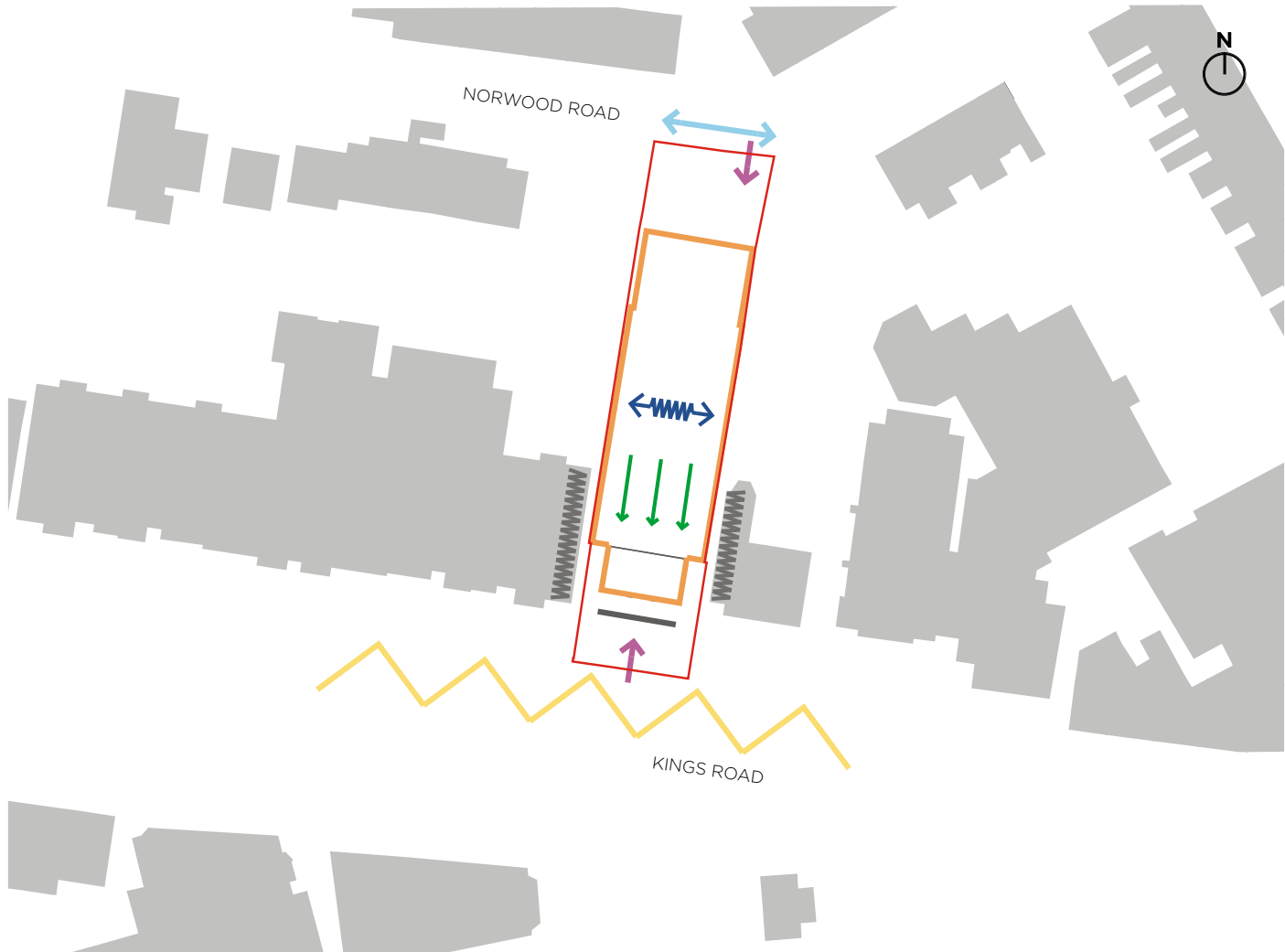


FIG 14 - CONSTRAINTS

The narrow width of the site is the principal constraint on this site. The existing pool building occupies the entire width of the site meaning that there is a lack of connectivity from north to south. The site levels differ from north to south which exacerbate the accessibility issues on the site. Noise emanates from King's Road which has three-four lanes of traffic passing opposite the front of the site. The inactive frontage at the rear of the site provides little definition on to Norwood Road.

KEY	
—	SITE BOUNDARY
—	SITE ENTRANCE
—	TRAFFIC NOISE
—	NARROW SITE WIDTH
—	NARROW INACTIVE FRONTAGE
—	SENSITIVE ELEVATION OF HERITAGE ASSET
—	FOOTPRINT OF EXISTING BUILDING
—	BUILDINGS IN CLOSE PROXIMITY
—	LEVEL CHANGE

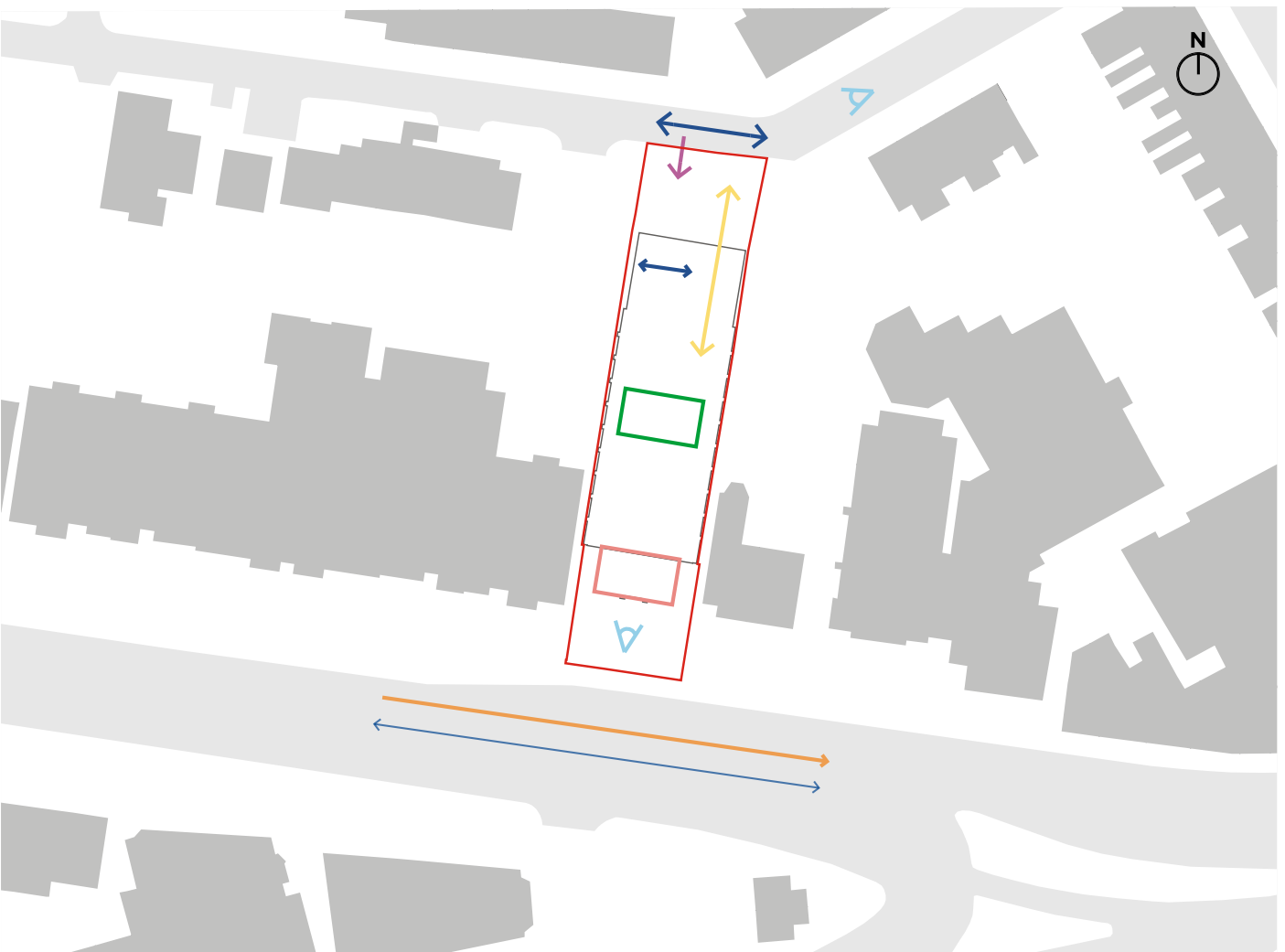


FIG 15 - OPPORTUNITIES

With removal of part of the existing building, there is an opportunity to improve access to the North and South of the site. The introduction of good quality amenity space would improve the setting. Retention and improvement of the locally important building frontage will ensure a characterful development that contributes to an appealing street frontage along King's Road. The building line should be addressed at Norwood Road to enhance the street. Utilising transport links into Reading Central Area is an opportunity afforded by the re-development of this site.

KEY	
—	SITE BOUNDARY
—	POSSIBLE NEW SITE ENTRANCE
—	MEWS RUNNING NORTH TO SOUTH
—	CREATE FRONTAGE TO NORWOOD ROAD
—	POTENTIAL AMENITY SPACE/ COURTYARD
—	RETAIN LOCALLY-LISTED HERITAGE ASSET
—	KEY VIEWS
—	SUFFICIENT WIDTH FOR ACCESS ROAD
—	ACCESS TO ROAD AND PUBLIC TRANSPORT
—	ON ROAD CYCLE ROUTE ON ROAD CYCLE ROUTE

3.2 HERITAGE AND HISTORIC MAPPING

The building was added to the councils list of locally important buildings and structures in April 2017 (ref LL9) with particular reference to the front part of the building. "The building has historical association with local philanthropist (through his coal business) Arthur Hill, J.P. was Mayor of the Borough of Reading from 1883-1887. The Arthur Hill Swimming Baths were completed in 1911 in his memory, by his children, as Hill died in 1909. The architect was C B Willcocks and the builder was Robert Curtis. The land was donated by Dr. Jamieson Hurry J.P., who married Hill's daughter and was responsible for the founding of West Reading Library (Grade II)(now Battle Library). Arthur Hill and Octavia Hill, half-sister of Arthur Hill and founder of the National Trust, attended the opening of the building. The building has played an influential role as part of the social well-being of the town by providing the first covered bathing facility in the town, instead of bathing in the Thames or the Kings Meadow Baths (which are open air). Also used by soldiers in wartime and for health reasons, canoe-clubs, and life-saving courses."

"It shows noteworthy quality of workmanship and materials in an ornate Victorian style: portico, original sash windows, bracketed eaves, decorative brickwork, stone window surrounds, original matching chimneys. Rear section of building has some further interest (arches and columns) but these are not fully revealed."

"Conrad Birdwood Willcocks was an architect from Caversham, who also worked on Fairmile Hospital, Cholsey (Listed Grade II). He also appears to have been involved in the design of All Saint's Hall (Downshire Square) (Grade II) and appears to have lectured in architecture."

The roof of the rear part of the buidling/ swimming pool has since been replaced and a rear extension containing a fitness studio was added in the 1980s.

The building was closed in December 2016 and has been vacant for the last 3.5 years. It is allocated for development under residential use under policy EF1 of the recently adopted local plan.

All of the specific elements referenced in the local listing - portico, original sash windows, bracketed eaves, decorative brickwork, stone window surrounds, original matching chimneys - refer principally to the frontage building. The flanks of the building are largely obscured by adjacent buildings, and the pool itself to the rear has a roof that is more modern. The rear of the building as viewed from Norwood Road is far less significant, including some modern extensions, and although the local listing does note some further interest, notably arches and columns, it clarifies that "these are not fully revealed." The roof of the rear part of the building/swimming has since been replaced.



FIG 16 - 1870
Vacant site within semi-rural setting



FIG 17 - 1890
Introduction of the tram network sees rapid development within 20 year time span north of King's Road.



FIG 18 - 1930
Memorial Baths now present following construction in 1911

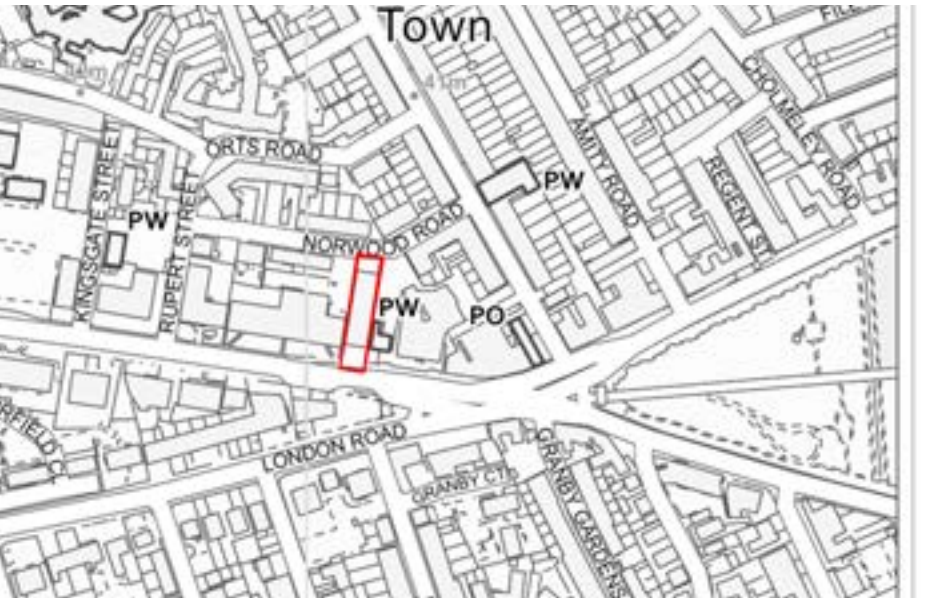


FIG 19 - CURRENT
Modern 1980s extension to the rear now visible

3.3 SURROUNDING CHARACTER ANALYSIS

Reading was traditionally known as the brick town. In the 17th century, one of the most important industries in Reading was brick and tile making. A number of different clays were used to introduce the variety of brick colours such as gault for light brick.

Reading has a strong heritage as a brick making town. We believe that brick is the appropriate material for the development and for residential homes, with properties of longevity, durability and humanity. We have explored various brick patterning techniques.

Textural banding and examples of corbelling can be seen locally. Some of the larger residences and public buildings have brickwork techniques such as diapering, the criss cross patterning of bricks, which differentiates them from their neighbours.

Traditional stretcher bond is most common around the site, however, flemish and stacked bond brickwork does feature in places. Some instances of polychromatic brickwork draw attention to entrances.

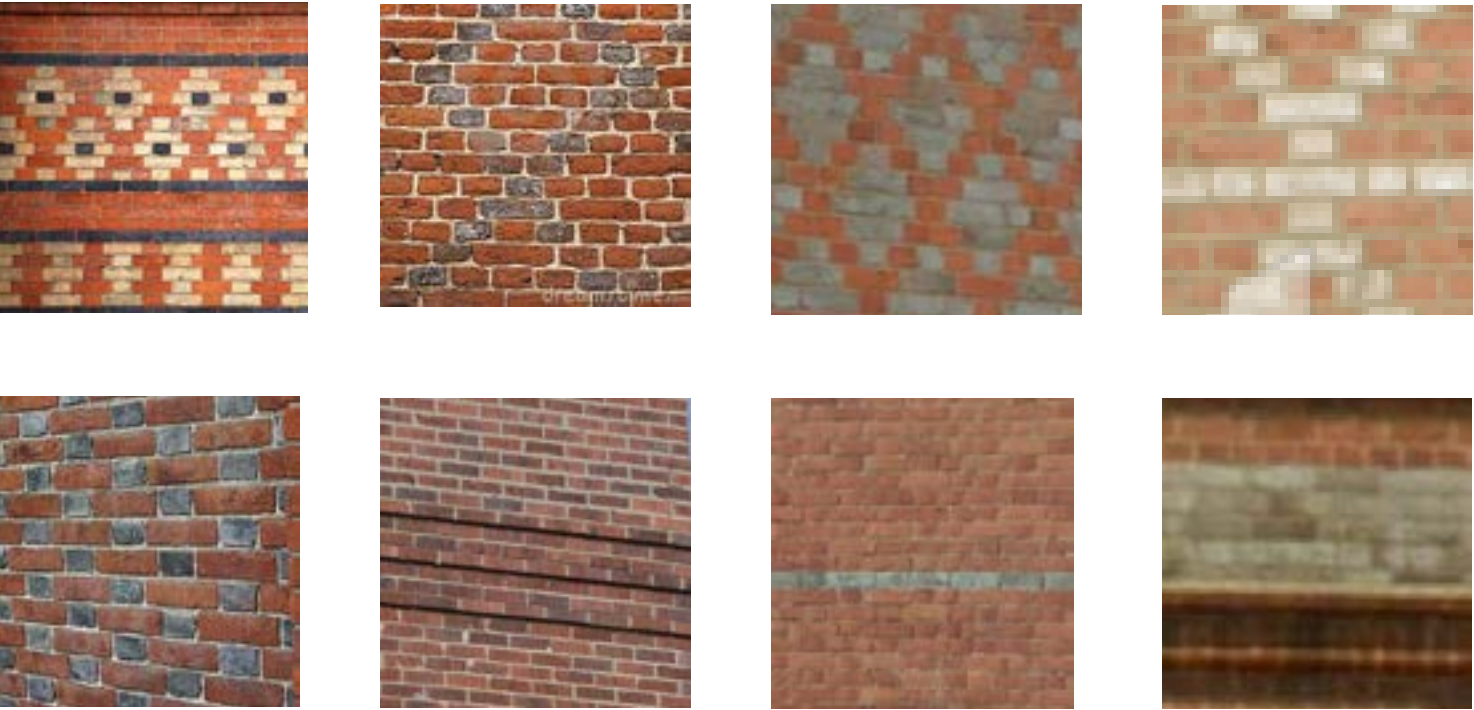


FIG 20 - SURROUNDING BUILDING BRICK DETAILS

4.0 Proposal

4.1 SITE LAYOUT

The site has been curated in such a way as to retain the architectural quality of the pool frontage and sense of nostalgia and memory associated with it. While delivering a scheme which offers good quality new housing in a distinctive, characterful setting. In simple terms, two new-build entities will supplement the retained building, replacing the unused shell of the pool and rear extension.

Block A/B

The Norwood Road block is L-shaped, spanning the width of site and engaging the street frontage. A passing area has been incorporated into Block A, facilitating the access of vehicles into the site. This access route is lined with parallel parking spaces along the western site boundary and accommodation down the eastern edge of the site. The entrance to the Block B dwellings is recessed, forming a pleasant social space in which the residents will be able to interact on arrival and departure. A newly-formed courtyard will create further opportunities for social interaction, enhanced by soft-landscaping features and specimen trees that frame the setting. Steps lead from this communal area up to the ground level apartments in the other new entity - Block C.

Block C

Block C will contain a further 6 dwellings, inhabiting the full width of the site. The stair core is positioned in the centre of the block optimising the level of solar access to the units. These dwellings have access to terraces which overlook the green space of the courtyard.

Block D

The entrance sequence from King's Road remains as it was when the swimming baths were in use. Communal entrance hall leads through to Block C accommodation and the communal amenity space beyond. The flat entrance is to the left, with the cycle store access located on the right-hand side. Storage areas make up the rest of the ground floor. Above, the 1B2P flat maximises use of the existing sash window openings. Roof space will be repaired and the chimney stacks retained to conserve the character of the frontage.

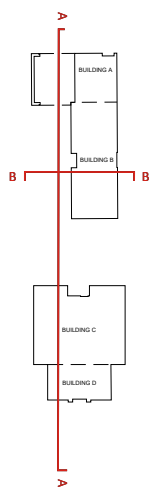


FIG 22 - SITE LAYOUT

4.2 SCALE AND MASSING

The site proposal comprises of 4 main blocks. Block A, B and C being the new built elements and Block D being the locally listed block facing Kings Road. To the North, Block A comprises of a three-storey apartment block, with ancillary cycle and refuge storage at ground floor and accommodation at both first and second floors.

Block C also comprises of a three-storey apartment block. In terms of scale and mass, the new building responds to the traditional proportions of Block D, defining the new building as a slightly taller and larger building set back behind the traditional 'portico' or entrance building, a role now fulfilled by the locally listed frontage. The building elevation of Block C takes its cue from the façade of the existing frontal building such as its windows taking on similar proportions to the original sash windows at the front. The arrival into block C is also celebrated with the entrance being slightly elevated from the road and marked with wide paved steps. Decorative detailing such as extruded brickwork and recessed windows adds visual interest to the façade, the shadows created by these articulations in the masonry adds to the decorative aesthetic of the frontal building. The roof form is kept to a simple pitch to compliment the hipped slate roof of original building. The more modern brick parapet and stone coping adds to the prominence and simplicity of the adjoining new element.



KEY PLAN



FIG 23 - SECTION A-A



SECTION B - B

FIG 24 - SECTION B-B

4.3. CHARACTER AND MATERIALITY

The specification of materials and choice of construction type has been considered from the earliest stages. There are a number of factors to consider in the selection process, including performance relating to Passivhaus, aesthetics, sustainability, cost and build-ability. A pallet of materials has been selected to build upon the idea of achieving the feel and quality of a traditional terraced street. The consistent use of a limited palette of high quality materials looks to tie the different housing typologies together into a coherent streetscape.

Brick
A traditional buff clay Brick is to be used, in a stretcher bond, with a white lime mortar, all flush pointed.

A variety of brickwork textures, using hit and miss bricks for balconies, and protruding headers create patterns and texture across the scheme.

- MATERIALS:**
- 1. Brick wienerberger**
Bronsgroen or equivalent as approved by client
 - 2. Brick wienerberger**
Con mosso or equivalent as approved by client
 - 3. Banding brick detail**
Brick to be confirmed
 - 4. Umbra brick detail**
Detail uses con mosso brick or equivalent as approved by client
 - 5. Forticrete roofing**
Minislate slate grey
Or equivalent as approved by client
 - 6. Metal balcony railing**
Finish and colour to be confirmed
 - 7. Metal cladding**
Finish and colour to be decided.
 - 8. U-pvc/ aluminium window frame**
Finish and colour to be confirmed.



FIG 25 - BLOCK A - NORTH ELEVATION

Roof
The roof tile to be colour matched and compliment the existing building roof tile on block D.

Rainwater goods
To be discretely located and colour matched to metal work used across the scheme.

Windows /Doors
Triple glazed windows with aluminium frames proposed for a high level of efficiency whilst maintaining a quality look and feel across the site.

Window and door reveals
Composite timber internally, aluminium externally. aluminium polyester powder coated to match colours of aluminium elsewhere

- MATERIALS:**
- 1. Brick**
Colour Matched To Existing Building
 - 2. Umbra Brick Detail**
Colour Matched To Existing Building
 - 3. Horizontal Corbel Brick Detail**
Colour Matched To Existing Building
 - 4. Forticrete Roofing**
Minislate Slate Grey
Or Equivalent As Approved By Client
 - 5. Metal Balcony Railing**
Finish And Colour To Be Confirmed
 - 6. Juliet Metal Balcony**
Finish And Colour To Be Confirmed
 - 7. Metal Cladding**
Finish And Colour To Be Decided.
 - 8. U-Pvc/ Aluminium Window Frame**
Colour White..



FIG 26 - BLOCK C - NORTH ELEVATION

4.4 AREA SCHEDULE AND UNIT TYPOLOGIES

The residential mix was established in response to the requirements and brief of Reading Borough Council and relevant planning policy.

KEY

- APARTMENTS TYPE 1
- APARTMENTS TYPE 2
- APARTMENTS TYPE 3
- APARTMENTS TYPE 4
- APARTMENTS TYPE 5 (DUPLEX)

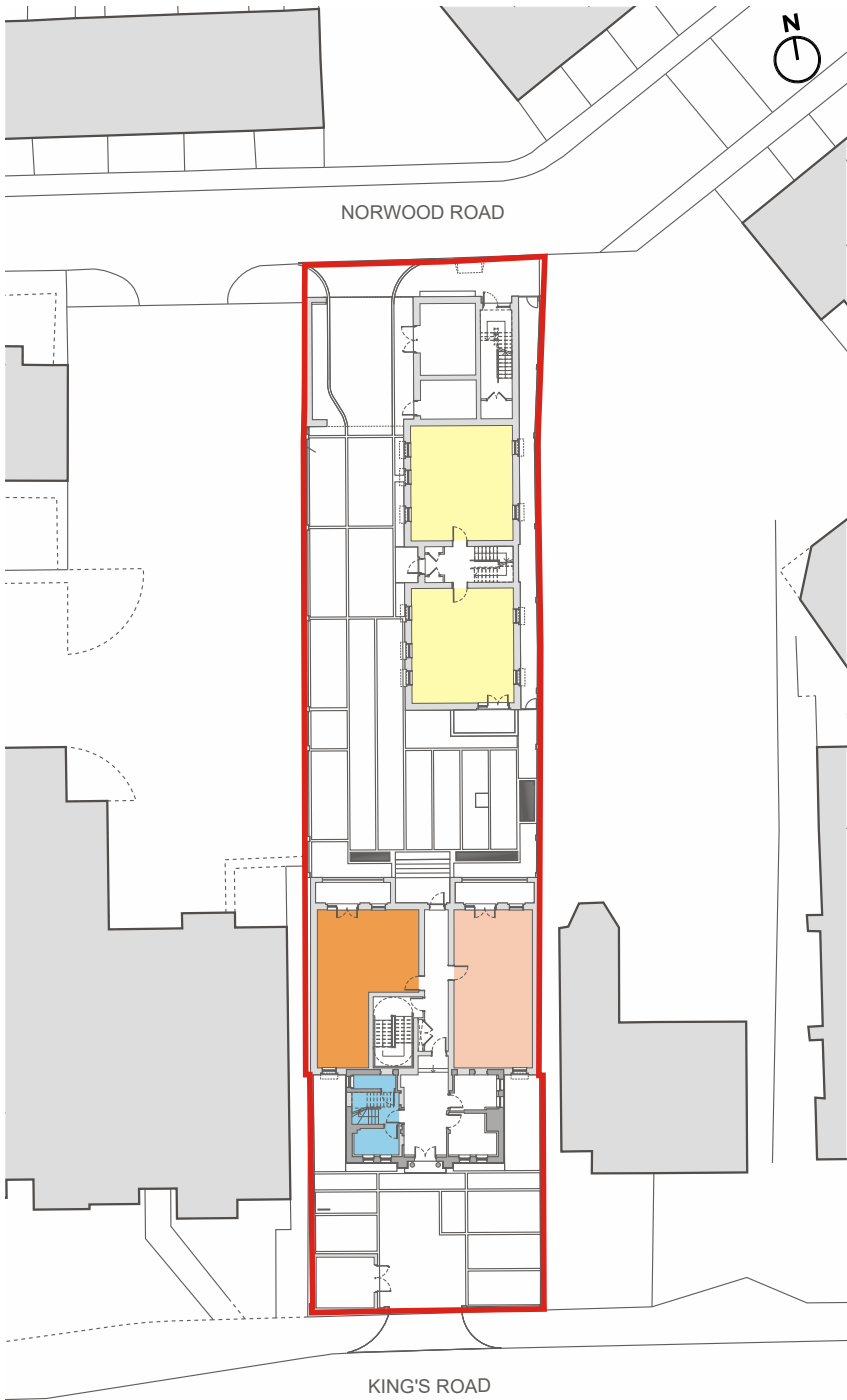


FIG 27 - GROUND FLOOR PLAN

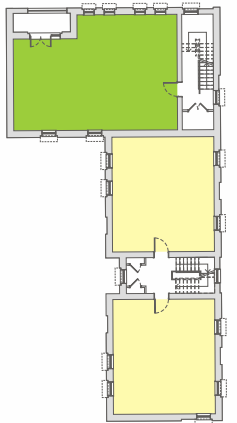


FIG 28 - FIRST FLOOR PLAN

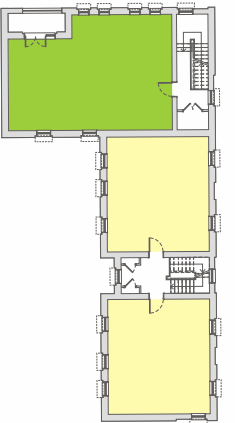


FIG 29 - SECOND FLOOR PLAN

4.4.1 FLAT TYPE 1 & 1.1

1 BED 2 PERSON
GIA 51.2 m²

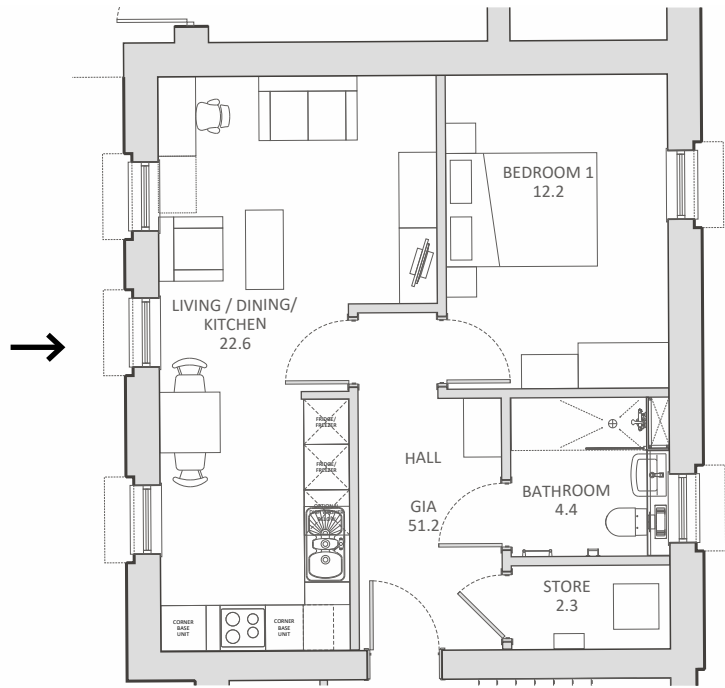
NOTE:
GROUND FLOOR LAYOUT INDICATED (FLAT TYPE 1.1).
FLAT TYPE 1 CONTAINS A BATH RATHER THAN A
SHOWER. (SEE FLOOR PLANS FOR HANDING AND
EXTERNAL WALL VARIATIONS)

COMPLIANCE SCHEDULE		
ROOM	REQUIREMENT (m ²)	ACHIEVED (m ²)
GIA	50	51.2
BEDROOM	12	12.2
L/D/K	23	22.6
BATHROOM	-	4.4
STORE	1.5	2.3
UTILITY	-	-

KEY PLAN:



GROUND FLOOR FIRST FLOOR SECOND FLOOR



- These Block B units front on to the access road.
- Combined living/kitchen/dining space is a bright, open space.
- Bedroom is oriented to the east for favourable morning sunlight.
- They have east and west facing façades, enjoying favourable west light in the living spaces in the evening.
- Residents have access to the communal courtyard amenity space.
- Units on the end of Block B have access to private amenity space at ground floor and views of the courtyard at first and second floor level.



FIG 30 - WEST ELEVATION

4.4.2 FLAT TYPE 2

2 BED 4 PERSON
GIA 76.1 m²

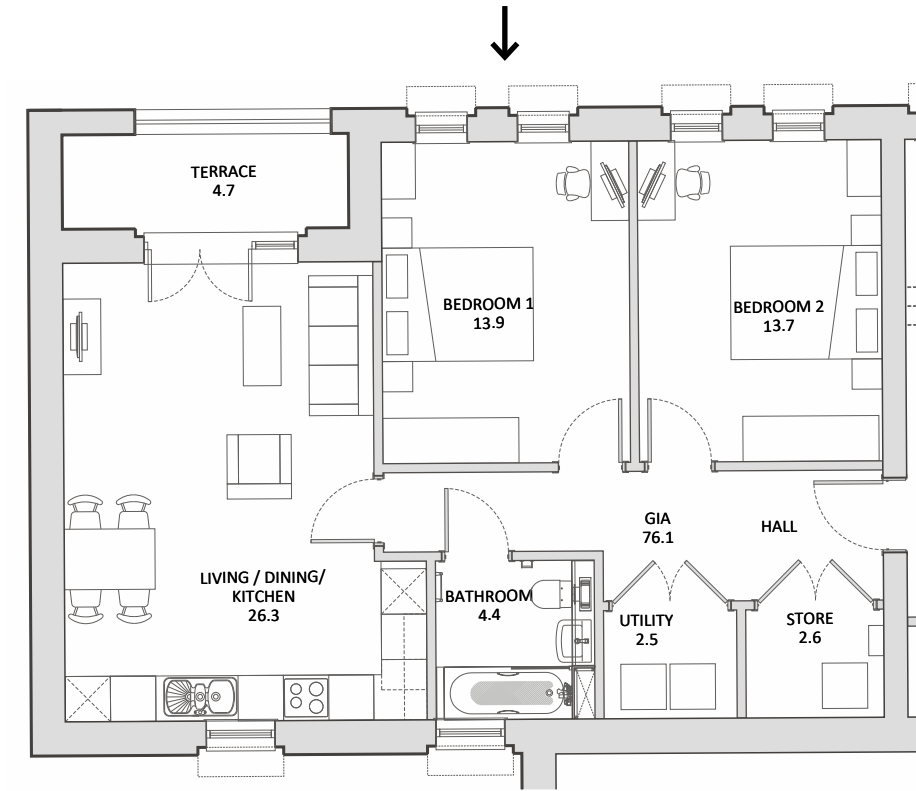
NOTE:
FIRST FLOOR LAYOUT INDICATED.

COMPLIANCE SCHEDULE		
ROOM	REQUIREMENT (m ²)	ACHIEVED (m ²)
GIA	70	76.1
BEDROOM 1	12	13.9
BEDROOM 2	12	13.7
L/D/K	27	26.3
BATHROOM	-	4.4
STORE	2.5	2.6
UTILITY	-	2.5

KEY PLAN:



GROUND FLOOR FIRST FLOOR SECOND FLOOR



- Units at first and second floor level, face on to Norwood Road.
- Dual aspect combined living space illuminated by south light.
- Access to private amenity space as the living room leads through to an inset terrace.
- Two generous double bedrooms that exceed the minimum space standards.
- Well served by utility and storage space.



FIG 31 - NORTH ELEVATION

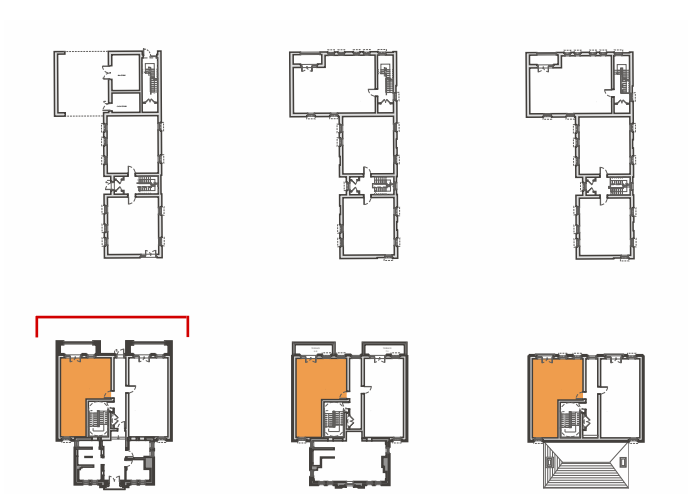
4.4.3 FLAT TYPE 3

1 BED 2 PERSON
GIA 53.5 m²

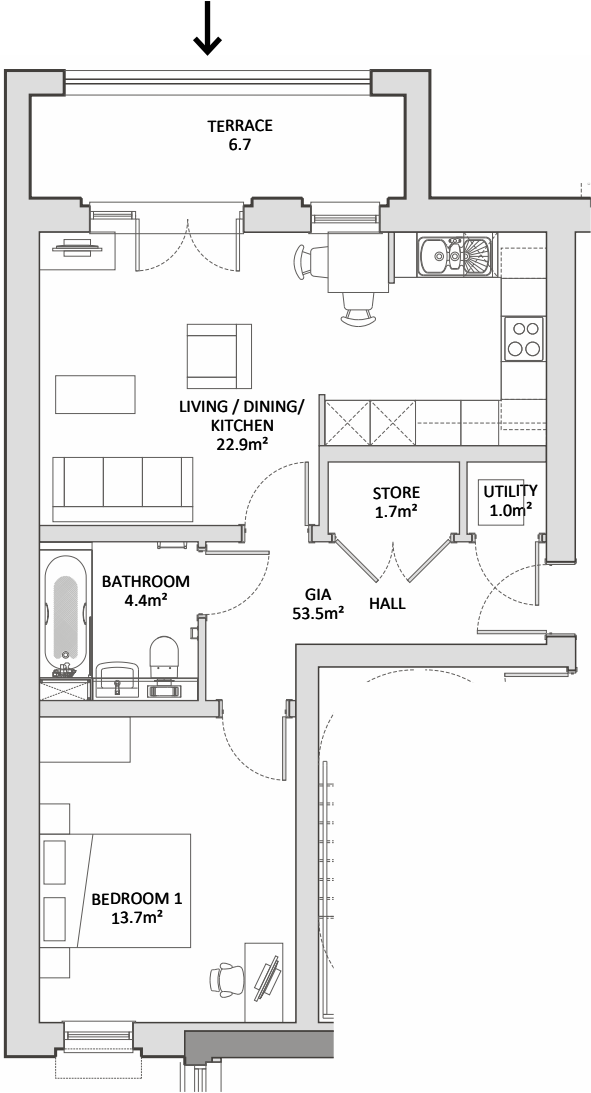
NOTE:
GROUND FLOOR LAYOUT INDICATED.
(SEE FLOOR PLANS FOR HANDING AND EXTERNAL WALL VARIATIONS)

COMPLIANCE SCHEDULE		
ROOM	REQUIREMENT (m ²)	ACHIEVED (m ²)
GIA	50	53.5
BEDROOM	12	13.7
L/D/K	23	22.9
BATHROOM	-	4.4
STORE	1.5	1.7
UTILITY	-	1.0

KEY PLAN:



GROUND FLOOR FIRST FLOOR SECOND FLOOR



- Block C units located adjacent to the western site boundary.
- Access to a covered, inset terrace at ground floor and private amenity space at first floor level also.
- Combination of dedicated storage and utility space.
- South-facing bedroom with views out on to King's Road.
- Combined living space with an aspect out to the landscaped courtyard.



FIG 32 - NORTH ELEVATION'

4.4.4 FLAT TYPE 4

1 BED 2 PERSON
GIA 54.2m²

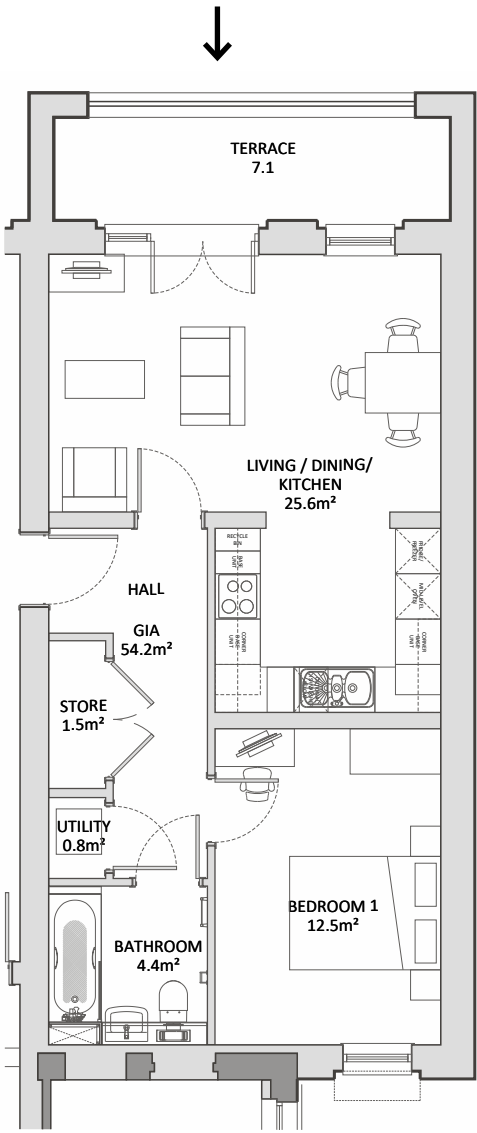
NOTE:
GROUND FLOOR LAYOUT INDICATED.
(SEE FLOOR PLANS FOR HANDING AND EXTERNAL
WALL VARIATIONS)

COMPLIANCE SCHEDULE		
ROOM	REQUIREMENT (m ²)	ACHIEVED (m ²)
GIA	50	54.2
BEDROOM	12	12.5
L/D/K	23	25.6
BATHROOM	-	4.4
STORE	1.5	1.5
UTILITY	-	0.8

KEY PLAN:



GROUND FLOOR FIRST FLOOR SECOND FLOOR



- Block C units located adjacent to the eastern site boundary.
- Ground floor access to covered inset terrace.
- First floor access to open terrace.
- Second floor access to juliet balcony/
- Combination of dedicated storage and utility space.
- South-facing bedroom with views out on to King's Road.
- Large combined living space with views directly out on to the landscaped courtyard.



FIG 33 - NORTH ELEVATION

4.4.5 FLAT TYPE 5

2 BED 3 PERSON
GIA 66.6 m²

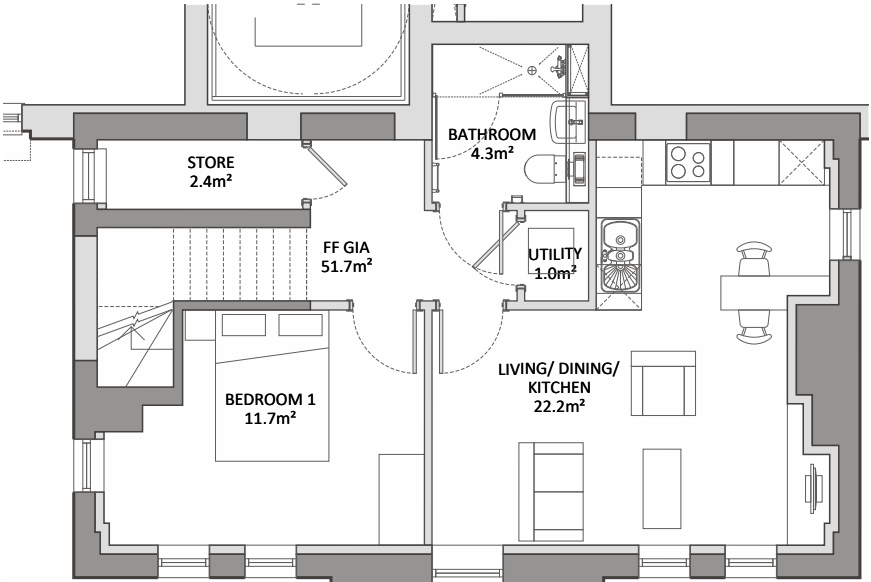
NOTE:
LAYOUT INDICATES RETAINED EXISTING BUILDING
INTERNAL ARRANGEMENT RECONFIGURED.

COMPLIANCE SCHEDULE		
ROOM	REQUIREMENT (m ²)	ACHIEVED (m ²)
GIA	50	66.6
BEDROOM 1	12	11.7
L/D/K	23	22.2
BATHROOM	-	4.3
STORE	2	5
UTILITY	-	1.0
STUDY	-	5.3

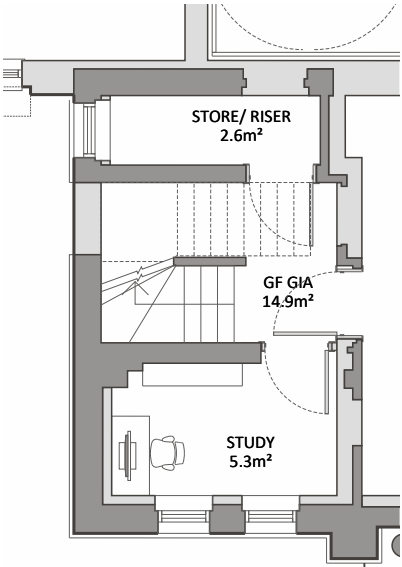
KEY PLAN:



GROUND FLOOR FIRST FLOOR SECOND FLOOR



FIRST FLOOR



GROUND FLOOR

- Flat entrance situated off the communal entrance to Block C/D.
- At ground floor, the hall opens into the study (formerly the swimming baths ticket office).
- Upstairs, space is re-configured to provide a combined living space, bedroom and shower room, all with access to south light.
- Bespoke nature of this unit will provide the occupants with a genuine connection to the history of the site.



FIG 34 - SOUTH ELEVATION

4.4.6 EXISTING BUILDING (BLOCK D) REPAIR / REMODELLING WORKS

As explained previously the local listing highlights the important features of the front building. These will be retained and repaired. The local listing does not mention anything inside. Much of the interior has been refurbished/ changes over time and so is of no historic merit. Notwithstanding this, we aim to preserve a number of features.

Interior building (Block D) repair / remodelling works will include;

- Retain the existing flooring within the entrance lobby.
- Retain internal wall panelling (where possible) either side of main entrance door. Block up hatch opening into existing ticket office but retain / restore the surrounding feature frame.
- Replace all internal doors to meet current building regulations. We propose to reinstate feature wall panelling where we replace / remove doors.
- We propose to retain the existing stair / handrails (where possible). Seal off stair down to basement.
- New doors proposed to both cleaners store and cycle store.

Exterior building repair work will include;

- Existing windows to be refurbished and upgraded to meet building regulations / Project specific energy specification. Any modifications to match existing character and style.
- Damaged brickwork to be repaired and re-pointed where required.
- Roof tiles repaired / replaced where damaged.
- Rainwater pipes and/ or guttering to be repaired / replaced where damaged - all to match existing.



FIG 35 - PROPOSED ELEVATIONS_BLOCK C & D_ NORTH AND SOUTH

4.4.7 ACCOMODATION SCHEDULE

8129_ARTHUR HILL POOL REGENERATION, READING								
Saunders Architecture + Urban Design			Revision P1	Date 02.07.20	Note Preliminary Issue	Initials SJC	ACCOMODATION SCHEDULE	
Block	Level	Plot Number	Flat Type Ref.	Accommodation			Amenity	
				1 Bed	2 Bed	GIA (sqm)	Outside Space	sqm
A	First	14	Flat Type 2	-	1	77.1	Balcony Terrace	4.8
A	Second	15	Flat Type 2	-	1	77.1	Balcony Terrace	4.8
SUBTOTALS				0	2	154.2		9.6
B	Ground	8	Flat Type 1.1	1	-	51.2	Terrace	6.1
B	Ground	9	Flat Type 1.1	1	-	51.2	-	-
B	First	10	Flat Type 1	1	-	51.2	-	-
B	First	11	Flat Type 1	1	-	51.2	-	-
B	Second	12	Flat Type 1	1	-	51.2	-	-
B	Second	13	Flat Type 1	1	-	51.2	-	-
SUBTOTALS				6	0	307.2		6.1
C	Ground	2	Flat Type 3	1	-	53.5	Balcony Terrace	6.7
C	Ground	3	Flat Type 4	1	-	54.2	Balcony Terrace	7.1
C	First	4	Flat Type 3	1	-	53.5	Balcony Terrace	6.7
C	First	5	Flat Type 4	1	-	54.2	Balcony Terrace	7.1
C	Second	6	Flat Type 3	1	-	53.5	-	-
C	Second	7	Flat Type 4	1	-	54.2	-	-
SUBTOTALS				6	0	323.1		27.6
D	Ground	1	Flat Type 5 (Duplex)	-	-	17.6	-	-
D	First	1	Flat Type 5 (Duplex)	1	-	49.9	-	-
SUBTOTALS				1	0	67.5		0
RESIDENTIAL TOTAL				13	2	852		43.3

4.5 LANDSCAPE STRATEGY

The development will be a new residential scheme on behalf of Reading Borough Council. The site occupies a former swimming pool, which ceased operation three years ago. The landscape design has been developed in response to the Client brief, the existing site constraints, the architectural design and associated building services strategy.

The design of elements of the scheme has been developed in coordination with HSP consulting. The development is intended to be a safe and welcoming residential area for future residents with adequate public amenity space. The landscape proposals are key to the developments integration into the wider residential context.

The diagram represents the key objectives for the landscape site plan, which can also be summarised as follows:

- To provide a central communal space within the development
- To reinforce the historical local street pattern to improve legibility
- To provide a safe and accessible environment.

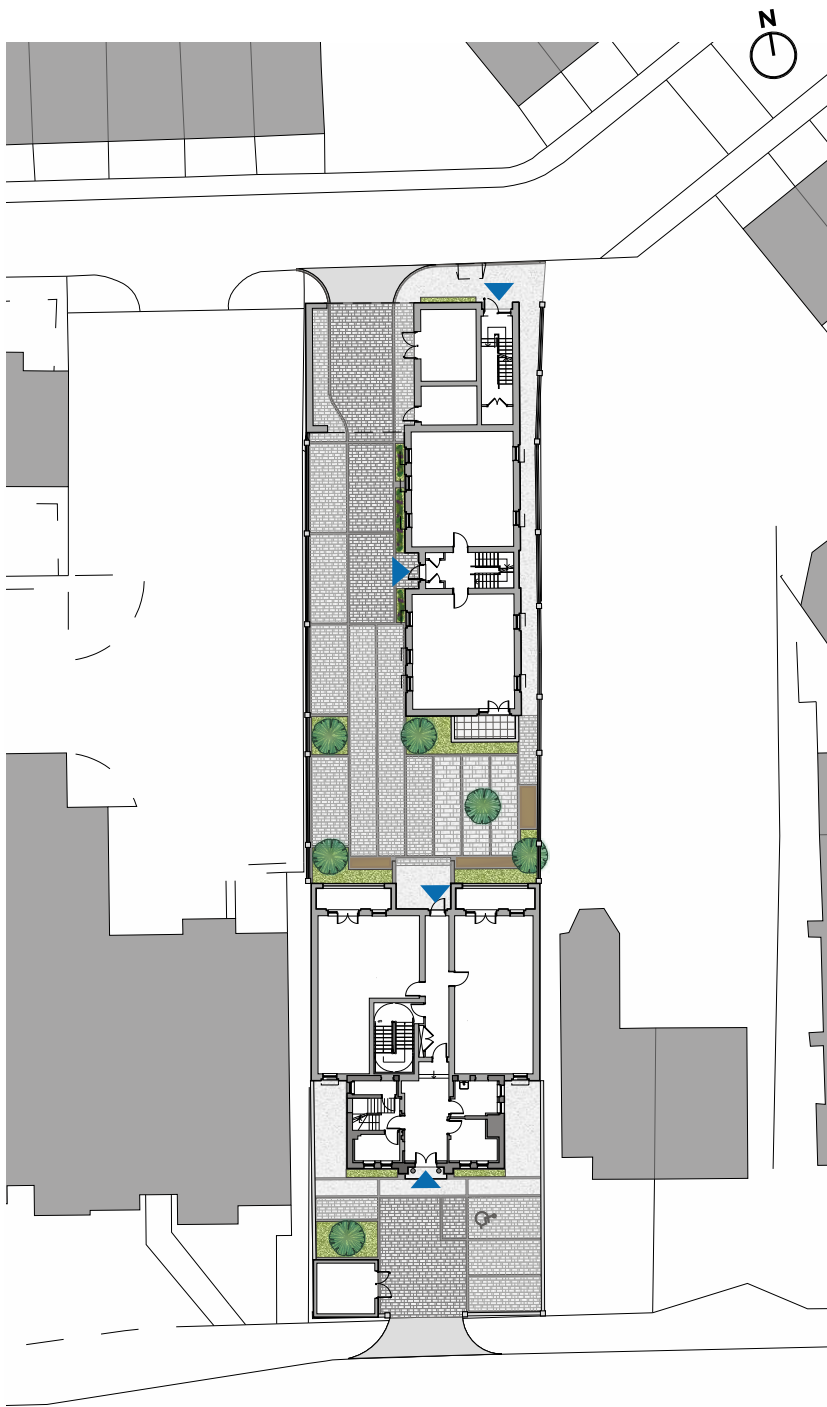


FIG 36 - - LANDSCAPE PLAN

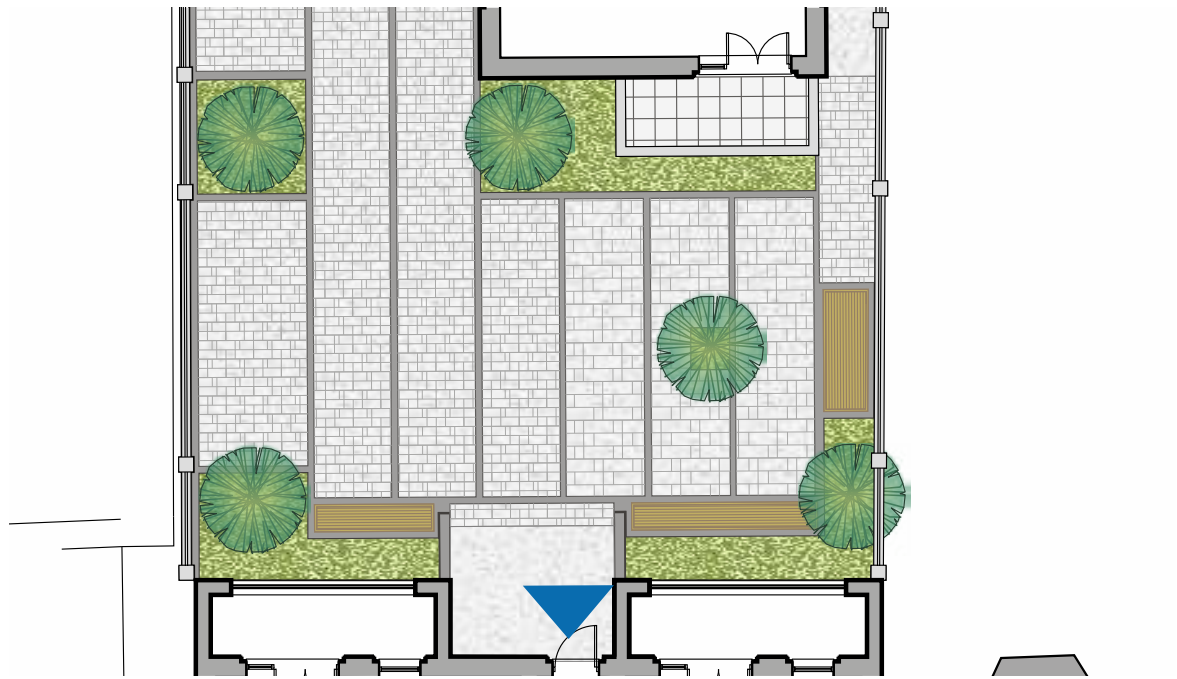


FIG 37 - REAR COURTYARD ACCESSED FROM NORWOOD ROAD

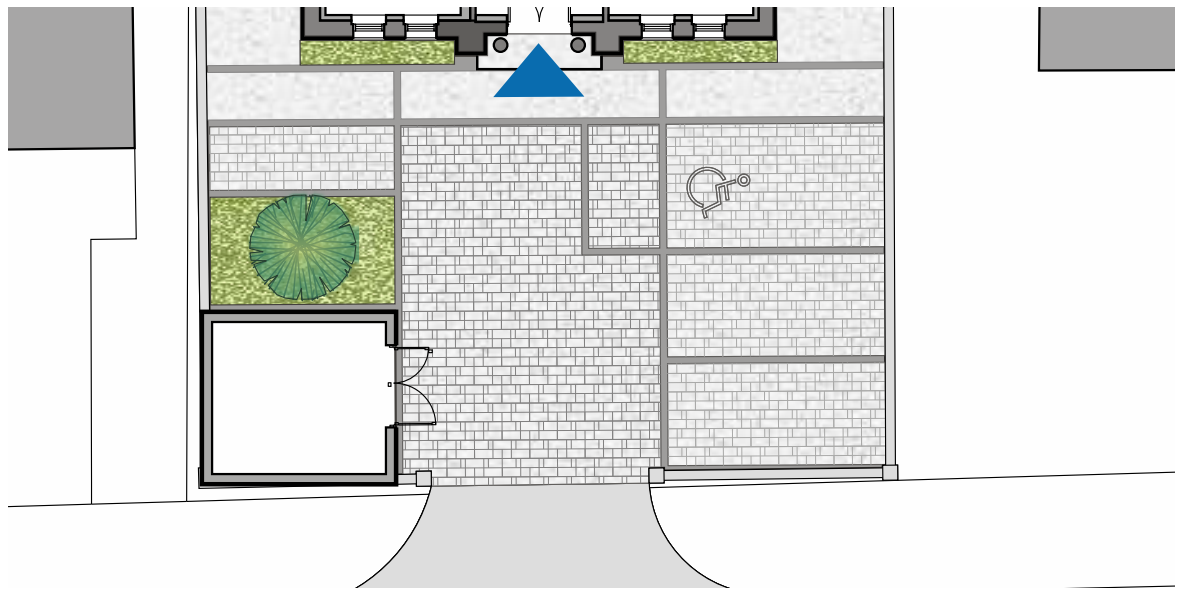


FIG 38 - ACCESS VIA KING'S ROAD

4.6 CAR PARKING

There is vehicular access from both Kings Road and Norwood Road. All parking provided are for use by the residents of the development.

To the front of the site facing King's Road, there are 2 standard parking bays, one wheelchair parking bay and 1 motorcycle space.

Access off Norwood Road allows for 3 parallel parking spaces running along the western site boundary with 1 space fitted with an active vehicle charging point. Refer to the supporting planning documents for parking bay dimensions.

4.7 CYCLE STORAGE

Bicycles will be stored securely and positioned conveniently for residents. For Block A and B, the cycle store is positioned next to the other ancillary space, with easy access to Norwood Road. The cycle store serving blocks C and D is located within the ground floor entrance of Block D.

4.8 REFUSE STORAGE/ COLLECTION

Two refuse stores are provided on site for resident use, one located internally to block A for use by residents within block A and B. The position of this bin store enables refuse collection from Norwood Road.

The second bin store is located to the the front of block D and is for use by residents within both block C and D. The positioning of this store has been specifically located to protect the existing building retained on site from unnesesary damage from the moevement of bins required.

PARKING SUMMMARY

STANDARD PARKING BAY	2
PARALLEL PARKING BAY	4
WHEELCHAIR PARKING BAY	1
MOTORCYCLE PARKING BAY	1

CYCLE SUMMMARY

BLOCK A + B	10
BLOCK C + D	7

KEY

—	SITE BOUNDARY
■	STANDARD PARKING BAY
■	WHEELCHAIR PARKING BAY
■	PARALLEL PARKING BAY
■	MOTORCYCLE BAY
■	CYCLE STORAGE AREA
■	BIN STORAGE AREA

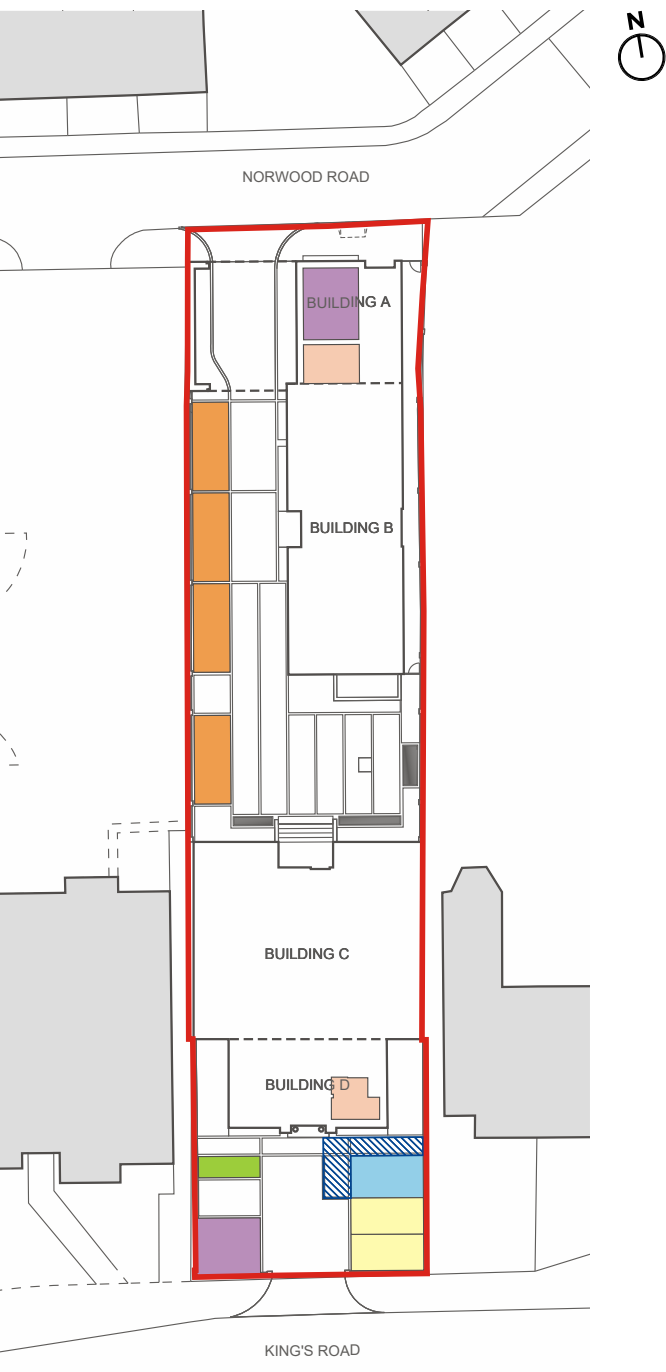


FIG 39 - PARKING PLAN

4.9.1 BOUNDARY CONDITIONS (SOUTH)

The treatment of site boundaries is intended to enhance the visual character whilst also providing increased privacy and maintaining a level of security. An existing low-level wall will be retained in part to the southern boundary of the site. These walls will be repaired and extended where facing on to King's Road, enabling signage to be added to the front of the development.



FIG 40 - KINGS ROAD ELEVATION

4.9.2 BOUNDARY CONDITIONS (NORTH)

The east and west boundary accessed of Norwood Road will have low level walls to 1.2m high with a timber fence above to the overall height of 1.8m. Full height brick piers will be present in the boundary wall at regular intervals offering support points for the timber fencing. In addition to the paving strategy, the location of the brick piers will help to bring clarity to the car parking layout in the courtyard.



FIG 41 - EAST ELEVATION



FIG 41 - EAST ELEVATION



FIG 42 - WEST ELEVATION



FIG 42 - WEST ELEVATION

5.0 Energy and sustainability

5.1 SUSTAINABILITY

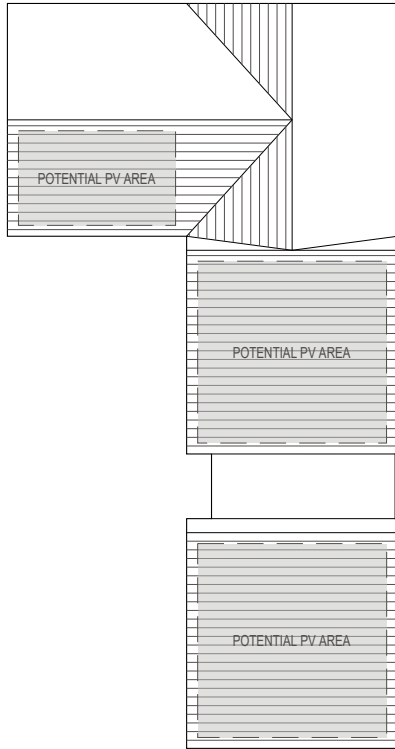
The focus with this scheme was how to minimise heating bills for residents, and thus lowering the carbon footprint of the whole scheme when in use.

Based on the proposed fabric enhancements and low zero heating technologies incorporated within the proposed design, the addition of PV panels on the roof of block A and B, could achieve or be very close to carbon neutral.

We discuss the benefits of energy efficient construction in the next section.

Energy and Carbon Dioxide Emissions

Fabric energy efficiency will be extremely high. Improved levels of insulation will mean low heating bills. (A household living in a 70m2 Passivhaus with gas heating could spend as little as £25 on space heating each year) LED (low energy / long life) lighting street lighting throughout. Whole house ventilation with heat recovery units to be used throughout. Internal cycle storage is provided for all residents.



Photovoltaic (PV)

Three potential areas for roof mounted PV panels have been identified on Block A and B on south-facing roofs as indicated on the diagram below. If opted for, this installation would reduce the amount of grid electricity used by the buildings.

Materiality

Materials with a low environmental impact will be used wherever possible, and timber will be sourced responsibly (no tropical hardwoods).

Surface Water Run-off

A full SUDS scheme has been designed as part of this application with allowable run-off rates as agreed with Thames Water as suitable for a brownfield site.



Waste

Storage of non-recyclable and recyclable waste to be considered with the detailed design of each dwelling. Minimising construction site waste to be considered

Health and well being

Good levels of daylighting, sound insulation and private amenity space.

Management

Home user guides will be provided for each home Contractor to be part of considerate contractors scheme

Transport

Good transport links can be found within close proximity to the site. Use of the neighbouring car club facilities can be found on Kings Road. Landscape and road design encourages pedestrian and cycle use over cars. An active car charging facility is provided on site.

5.2 PRINCIPLES FOR ENERGY EFFICIENT DESIGN

As part of its brief to the design team, Reading Borough Council has asked that the scheme achieves a high level of energy efficiency. ION Consulting Engineers, have been involved in modelling the scheme using IES software which provides full dynamic thermal analysis and is a CIBSE certified Level 5 approved Dynamic Simulation Modelling Software. Building Energy and Environmental Modelling and designs have evolved accordingly as engineers, architects and client have worked together on the scheme to a degree of detail that is unusual at planning application stage.

Thermal comfort

Our strategy is to provide a both thermally efficient and very comfortable buildings by concentrating on the building shape, window design and using high levels of insulation. There has also scrutiny on potential weak links in the building thermal envelope, known as 'cold bridges'. We have looked to reduce these where possible to ensure both thermal comfort and to minimise fuel bills.

Summer comfort

The IES software also assesses potential overheating determining whether brise soleils above window openings are required to provide solar shading during the summer months.

Effect of energy efficient fabric on design

Walls and roofs are packed with insulation and are therefore unconventionally thick. This has a noticeable effect on the overall site layout as simply speaking, one can fit less dwellings on any given site. The strategies of avoiding difficult cold bridge detailing and ensuring airtightness also has an effect on the overall design, as well as the details of insulation and material specifications.

Energy demand

The energy demand of the proposed buildings will be minimised through careful design of built form and the careful selection of services to meet operational requirements and ensure an energy efficient solution. The proposed buildings will utilise a NIBE F470 heat pump system which will provide heating, hot water, mechanical ventilation with heat recovery and night time cooling. The proposed design also incorporates external solar shading and natural ventilation via openable windows and doors as part of the overheating prevention strategy for summertime.

KEY::

- 1. Thermal insulation
- 2. Passive Windows
- 3. Adequate ventilation strategy
- 4. Airtightness
- 5. Thermal bridge reduced design



FIG 45 - BLOCK B SECTION

6.0 Accessibility

6.1 SPACE STANDARDS

These space standard requirements have been drawn from Reading Borough Council's own requirements document (unless marked).

6.2 NDSS

The Nationally Described Space Standards were introduced by the Government in 2015. This standard deals with internal space within new dwellings and is applicable across all tenures. The minimum gross internal floor areas applicable to this proposal are the 1-bed 2-person figure (50m²) and the 2-bed 4-person figure (70m²). The standard stipulates a series of technical requirements with which the proposal complies. Included within these technical requirements are the minimum area and width of bedrooms, and a recommended floor to ceiling height of 2.3m for 75% of the gross internal floor area. With particular reference to point F, in the requirements, there are no areas with a headroom of less than 1.5m, avoiding the need for any complex storage calculations.

- 1. HALLWAY**
Minimum 900mm wide
- 2. KITCHEN**
Travel distance between sink/cooker/refridgerator
- 3. KITCHEN**
Minimum 1200mm in front of units
- 4. BEDROOM**
Minimum 1.8m wall space for deskpace/bookshelf
- 5. BEDROOM**
1m clear space between bed and adjacent wall
- 6. DOUBLE BEDROOM (NDSS)**
Minimum floor area of 11.5sq.m
- 7. DOUBLE BEDROOM (NDSS)**
One to be minimum 2.75m wide
- 8. THRESHOLD (LTH)**
Level access over the threshold
- 9. INTERNAL DOORS (LTH)**
300mm leading edge of doors on pull side
- 10. BATHROOM (LTH)**
Designed to Lifetime Homes standards?

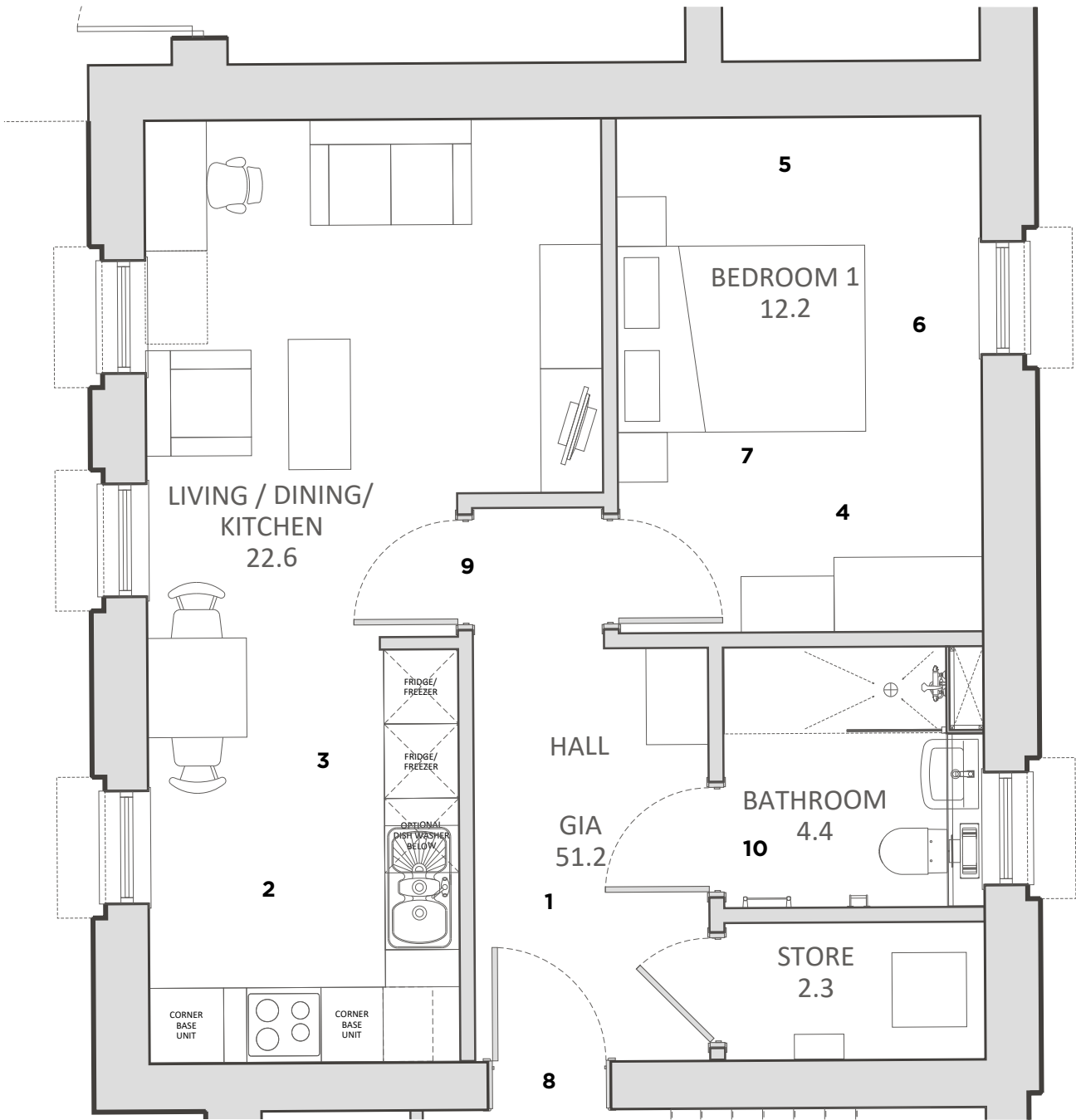


FIG 46 - FLAT TYPE 1

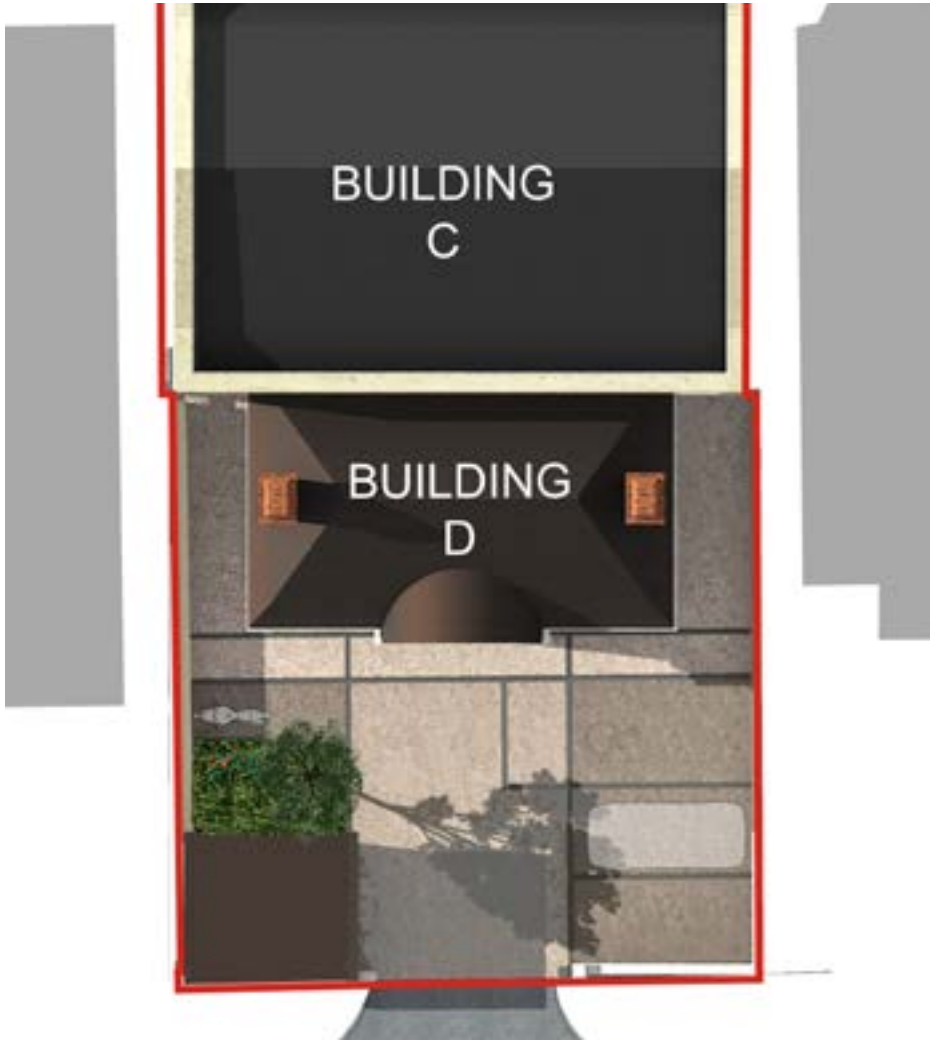
7.0 Landscape

7.1 DRAINAGE STRATEGY

The surface water design includes permeable paving, attenuation tank and hydro-brake manhole to limit the off-site discharge.

There is 416m² of permeable paving proposed across the site and 62m² of soft landscaping. A combination of permeable paving and soft landscaping accounting for 44% of the total site area will provide effective water management and improve water quality across the site. The use of permeable paving will assist in combating the current low risk surface water flooding. Due to the natural topography of the site falling from South to North an ACO drainage channel has been specified at the North entrance to ensure all surface water is retained on site.

In the case of the permeable paving within the hardstanding areas, the upper layers of the construction are proven to intercept and break down any possible contaminants from oil and fuel spillages through microbial action.



7.2 HARD LANDSCAPING FINISHES

The materials strategy selects paving which is both suited to its application, meets the standards for the RBC Highways, is easy to maintain and improves the visual amenity value of the entire scheme. The connecting surface between the site and the road will be set to match the existing road tarmac in line with the RBC Highways standards.

The overall strategy establishes a hierarchy of paving colours and sizes to define the vehicular, pedestrian and shared surfaces. To further emphasis the definition of the type of space a banding has been applied to each area change. The design for the shared surface amenity courtyard between Block B and Block C makes reference to the original Arthur Hill swimming pool lanes.

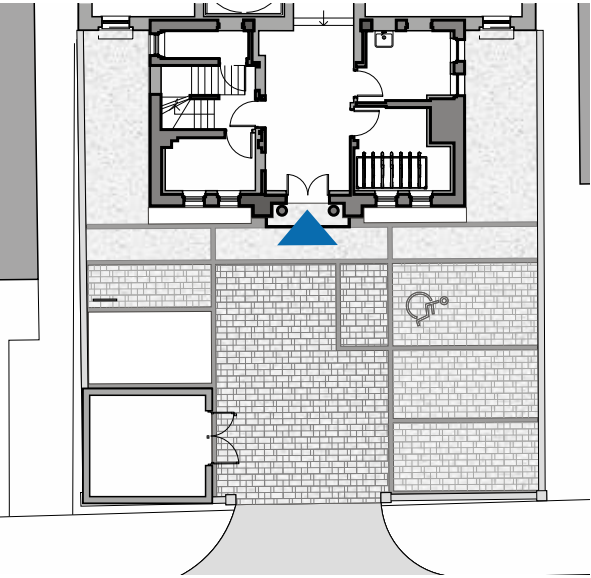


FIG 48 - FRONT COURT YARD ACCESSED VIA KINGS'S ROAD

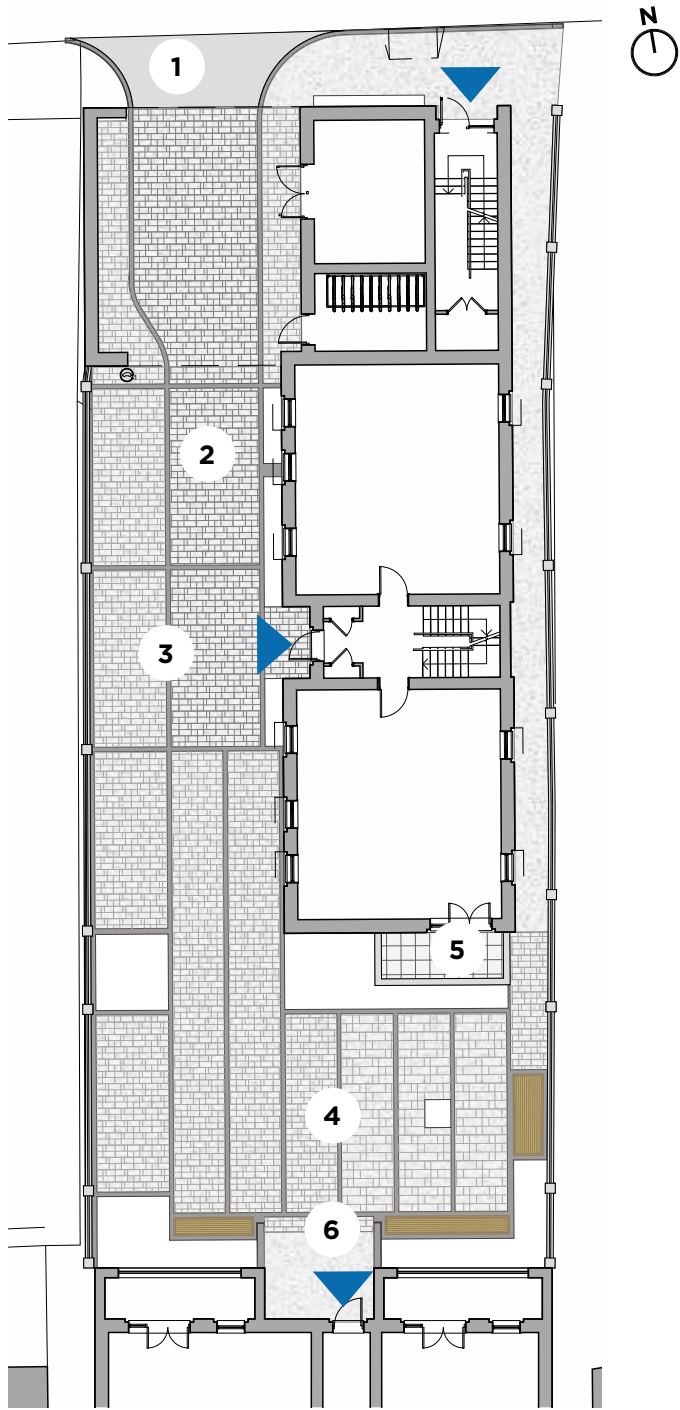
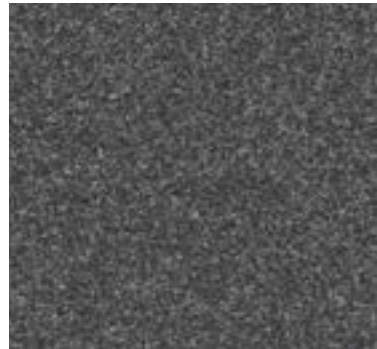


FIG 49 - REAR COURT YARD ACCESSED VIA NORWOOD ROAD



1. TARMAC ROADWAYS
TEXTURE TO MATCH
EXISTING ROAD



**2. MARSHALLS TEGULA
PAVING**
PENNANT GREY OR
EQUIVALENT AS APPROVED
BY CLIENT



**3. MARSHALLS TEGULA
PAVING**
CHARCOAL OR EQUIVALENT
AS APPROVED BY CLIENT



**4. MARSHALLS TEGULA
PAVING**
TRADITIONAL OR
EQUIVALENT AS APPROVED
BY CLIENT



**5. MARSHALLS
CONSERVATION TEXTURED
PAVING**
SILVER GREY OR
EQUIVALENT AS APPROVED
BY CLIENT



**6. MARSHALLS
CONSERVATION TEXTURED
KERB**
SILVER GREY OR
EQUIVALENT AS APPROVED
BY CLIENT

7.3 SOFT LANDSCAPING FINISHES

The main objective of the proposed soft landscape is to encourage a balance between the vehicular, pedestrian and shared amenity space. The design of proposed planting enhances the natural biodiversity within the site and has been positioned to create a buffer between the building the surrounding spaces. The trees proposed have been specifically located within the front and rear courtyards to enhance the dynamic of the external space and to provide additional privacy to the residents within the development.

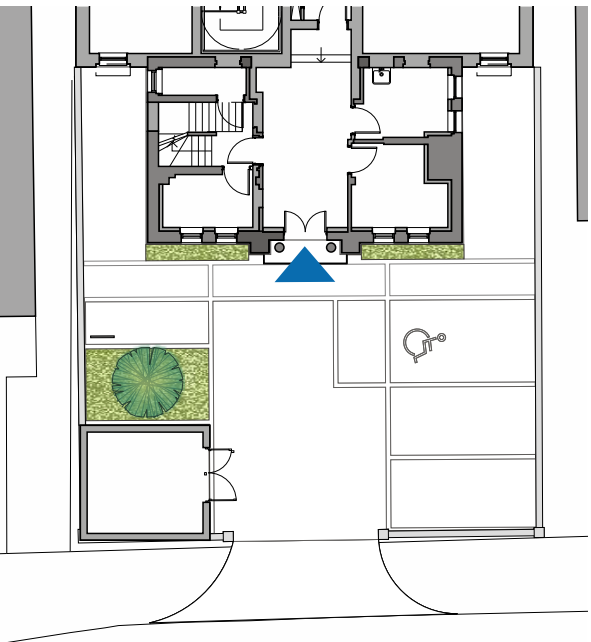


FIG 50 - FRONT COURT YARD ACCESSED VIA KINGS'S ROAD

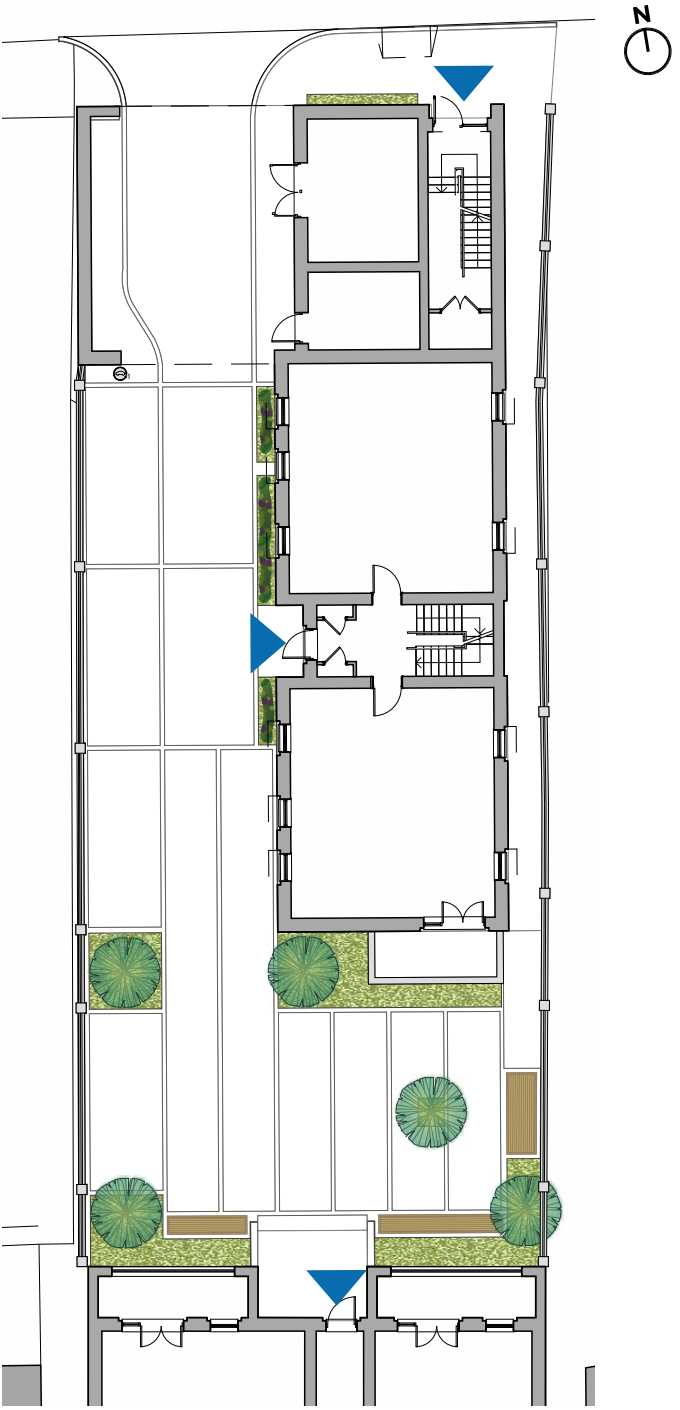


FIG 51 - REAR COURT YARD ACCESSED VIA NORWOOD ROAD



HEDGE
400MM APPROX. HEIGHT



CLIMBER PLANT
WIRE OR TIMBER TRELLIS
SYSTEM TO BE CONFIRMED
BY CLIENT



HERBACEOUS PLANTING MIX
EXACT MIX AND LOCATIONS
TO BE CONFIRMED



ORNAMENTAL GRASSES MIX
EXACT MIX AND LOCATIONS
TO BE CONFIRMED



STREET TREE
ACER CAMPESTRE
'STREETWISE' OR SIMILIAR



TREE PIT
PLANTED WITH HERBEROUS
AND ORNIMENTAL GRASS
MIX

7.4 BIO-DIVERSITY AND SUDS

SUDS

We will be making use of the public surface water sewer in Norwood Road, utilising the existing 150mm diameter on-site connection.

The design is based on attenuation discharge tanks and the use of permeable paving. This provides the level of attenuation we need (to be confirmed with Thames Water). The site does not lend itself to soakaways due to the tight constraints

ECOLOGY

Reading Borough Council commissioned Middlemarch Environmental Ltd to undertake a Preliminary Ecological Appraisal of the site.

A walkover survey was undertaken on the 13th May 2020 by the Principal Ecological Consultant. A small number of young scattered trees and some scattered scrub were present around the northern site boundary.

Four main recommendations were made:

R1: Biodiversity Enhancement e.g. planting of habitats which will be of value to wildlife or provision of nesting/roosting habitat, such as installation of nest boxes for species

R2: Site has high potential to support roosting bats. Good practice advises three emergence/re-entry surveys are carried out.

R3: Nesting Birds - Vegetation and building clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August).

R4: excavations or open pipework should be covered to prevent mammals becoming trapped during the works



FIG 55 - AXO FRONT COURTYARD VISUAL

7.5 REAR COURTYARD VISUAL



FIG 53 - AXO REAR COURTYARD VISUAL

8.0 Large visual of character areas



FIG 53 - BLOCK B - WEST ELEVATION



FIG 54 - BLOCK C - NORTH ELEVATION

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