



St Johns Thornham

CofE Primary School

Design and Access Statement

Revision 01
08.05.24

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1.0 INTRODUCTION

1.1 Introduction

St Johns School is a Church of England primary school located in Middleton and caters for students ages 4-11. It is currently a half form entry school with 105 students.

Due to increasing pupil intake numbers, the school needs to be expanded and requires a re-configuration of classrooms to maintain key stage curriculum group and classrooms to meet current space standards. As school is moving from half form entry to 1 form entry, the school will need to be large enough to accommodate a total of 210 students aged 4-11.

Additionally, if the proposed housing development that is to surround the school goes ahead, the school will need to expand by another form entry. It was felt prudent to plan for this future expansion. Although the school has been designed with the 2 form entry expansion in mind, this will not impact the robust design and overall efficiency of the school at 1 form entry.

1.2 Site Location

Address:

St Johns Primary School,
Thornham Lane,
Middleton,
Manchester
M24 2SB

St Johns Thornham primary school is located south of Castleton and North West of Oldham. It is a voluntry-aided maintained primary school currently within RMBC which is in the process of academisation to join The Cranmer Education Trust.

Vehicular access to the school is limited and uses a narrow and poorly made country road. There is a

car park on site currently with 9 spaces plus, there is ample parking along Thornham Lane. The turning circle in the school car park is crucial for parents and delivery trucks to turn back down the lane.

The school can also be accessed via public transport, with the closest bus stop being 0.5 miles away which is approximately a 15 minute walk. This route gives access to Shudehill, Middleton, Rochdale Bamford and Norden. There are frequent bus services that run to and from this bus stop. Additionally, the walk to Castleton town centre is approximately 30 minutes.

The site is currently bounded on all sides by open fields which include several ponds. Further to the south and east of the site lies the A627 motorways which also increase accessibility to the site.

Aerial View of the existing St Johns Thornham School
Image source: Google Maps



2.0 EXISTING SITE CONTEXT

2.1 Planning History

2.1 Planning History

The Rochdale Council Planning Record lists the following for St Johns Thornham Primary School:

06/D47961

Erection Of New School Hall Extension With Associated Parking And Play Areas
Fri 08 Sep 2006

07/D49690

Erection Of New School Hall Extension With Associated Parking And Play Areas
(Part Retrospective) - Resubmission D47961
Wed 08 Aug 2007

11/D54479

Demolition Of Existing Vestibule And Erection Of Replacement Conservatory
Extension To Rear Of Building
Wed 01 Jun 2011

09/D52497

Installation Of Two Entrance Canopies Including Roller Shutters
Thu 24 Sep 2009

15/00005/FUL

Installation of enquiry hatch to existing external wall with new external polycarbonate
canopy over
Mon 12 Jan 2015

16/01022/FUL

Erection of a single storey, flat roofed extension to form a secure lobby
space and additional office space including entrance canopy to front
Fri 19 Aug 2016

19/01450/FUL

Two single storey extensions to west and south west facing elevations
with raised entrance steps and a lift including the partial demolition
of existing front extension and installation of access ramp on south
facing elevation
Mon 13 Jan 2020

2.2 Existing Building

The existing school is predominantly single storey, however there is some provision on the first floor for staff accommodation. The original school building is identified as a non-designated heritage asset due to its age and architectural interests with the original part of the school dating back to 1841. The building has previously been extended to the west and north. Plus, in 2021, the school was also extended to the west again to accommodate an expansion to half form entry.

The school currently has a small MUGA (Multiuse games area) which is used for football and basket ball. Additionally, the school also has a climbing frame play area, astroturf and an expanse of grass which is used for football and sports days. The green playing areas are prone to waterlogging which limit use in winter and therefore this will need to be addressed.



Main entrance to the school



View of the school from the car park



Red brick and white render



Timber cladding used to the North East of the site

2.3 Existing School Grounds



Existing climbing frame area



Existing undersized hard play/MUGA



Existing Astroturf



Existing hard play

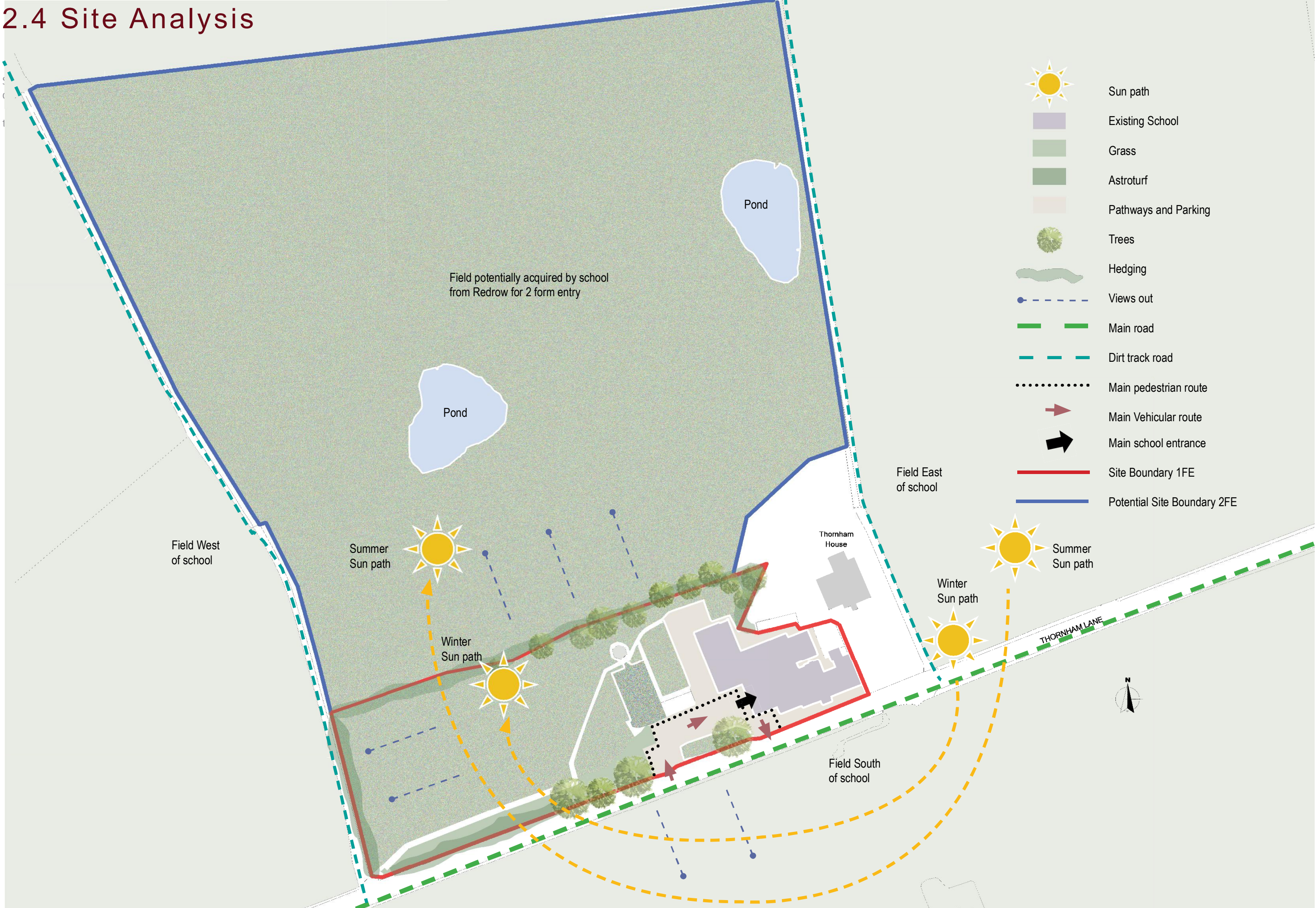


View of the grounds from the car park



Existing outdoor classroom and climbing area

2.4 Site Analysis



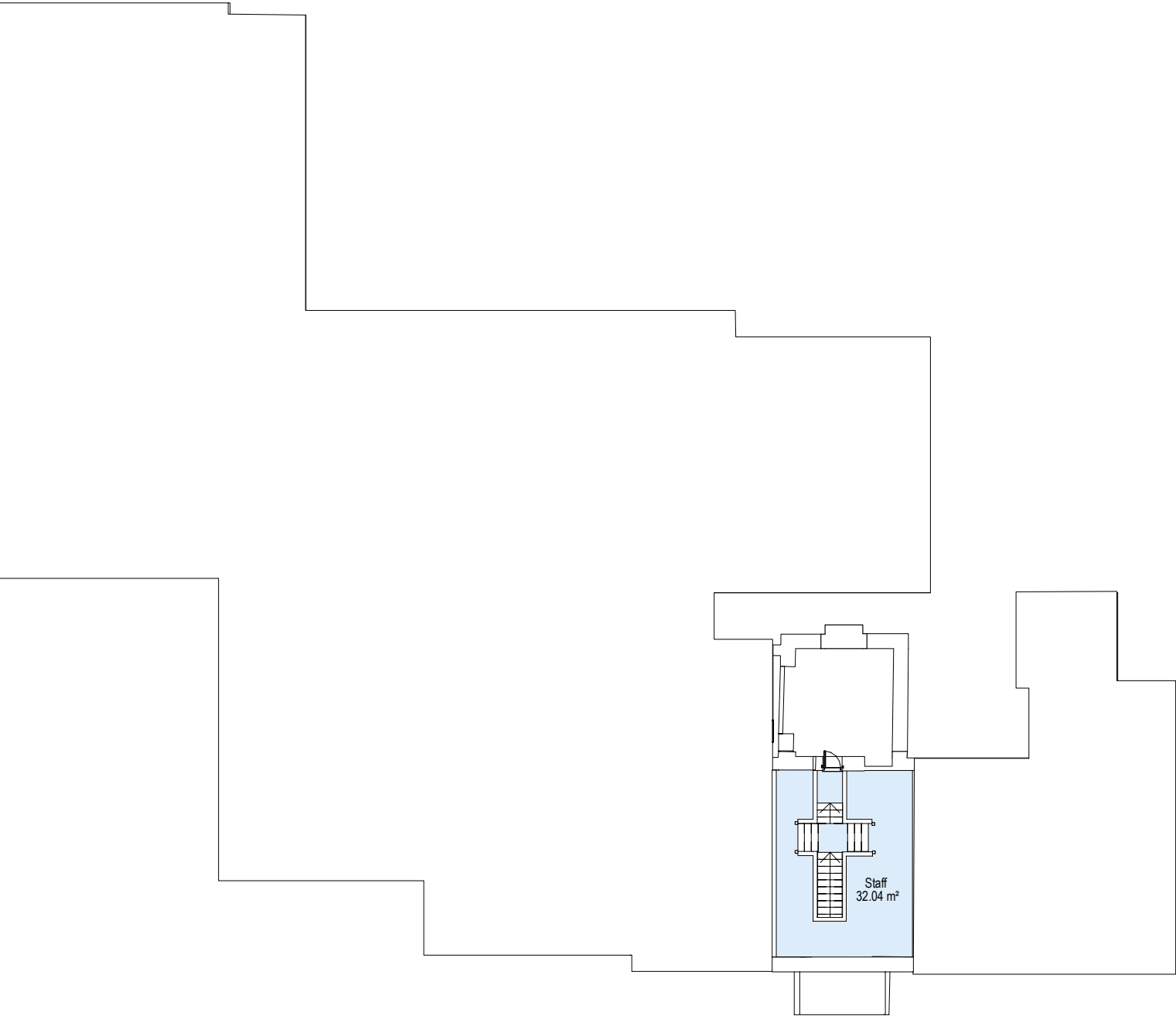
2.5 Existing Site Plan



2.6 Existing Building Plans - Ground

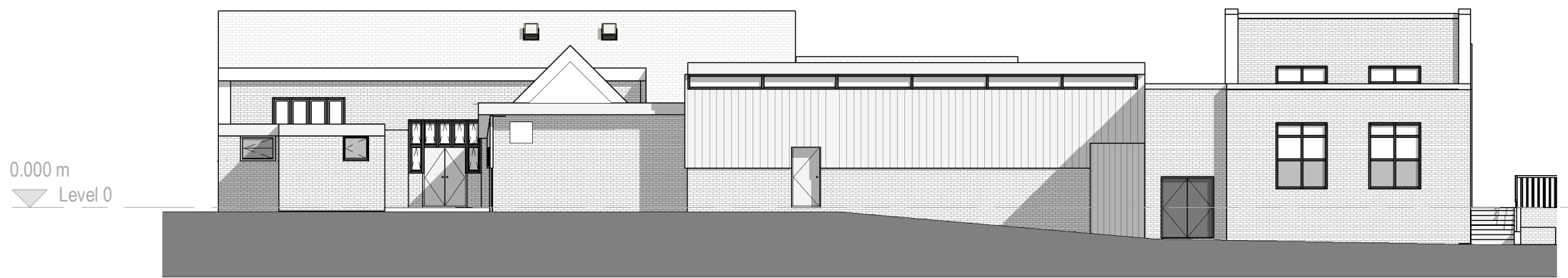


2.7 Existing Building Plans - First



- Circulation
- Classroom - KS2
- Classroom Early Years
- Classroom KS1
- Hall
- Kitchen
- Plant
- SEN
- Staff Areas
- Store
- Toilets

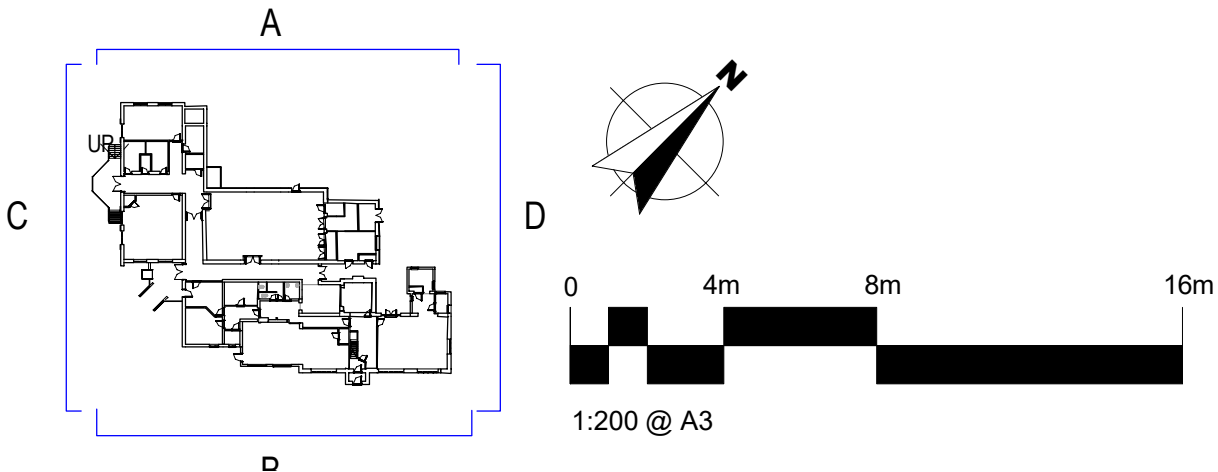
2.8 Proposed Building Elevations



Existing Elevation A



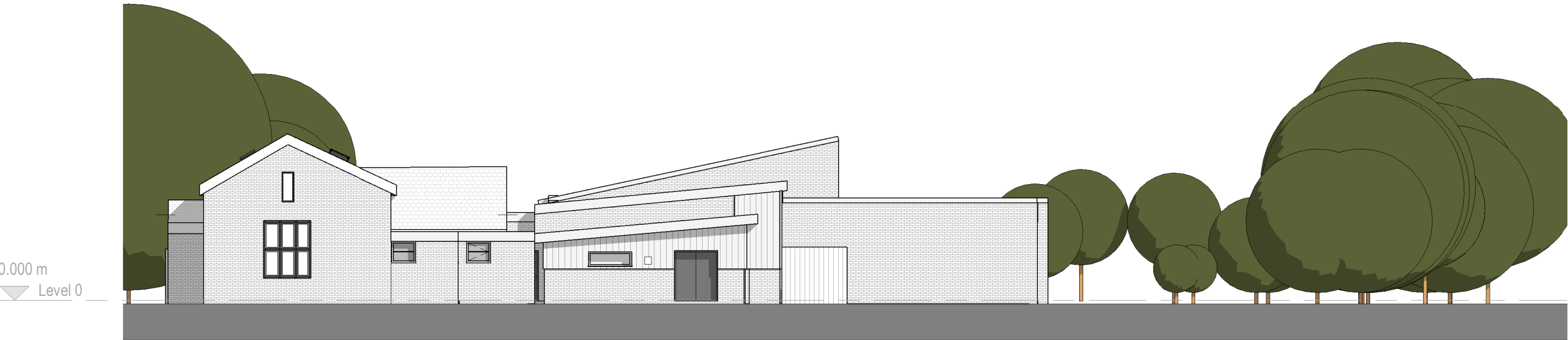
Existing Elevation B



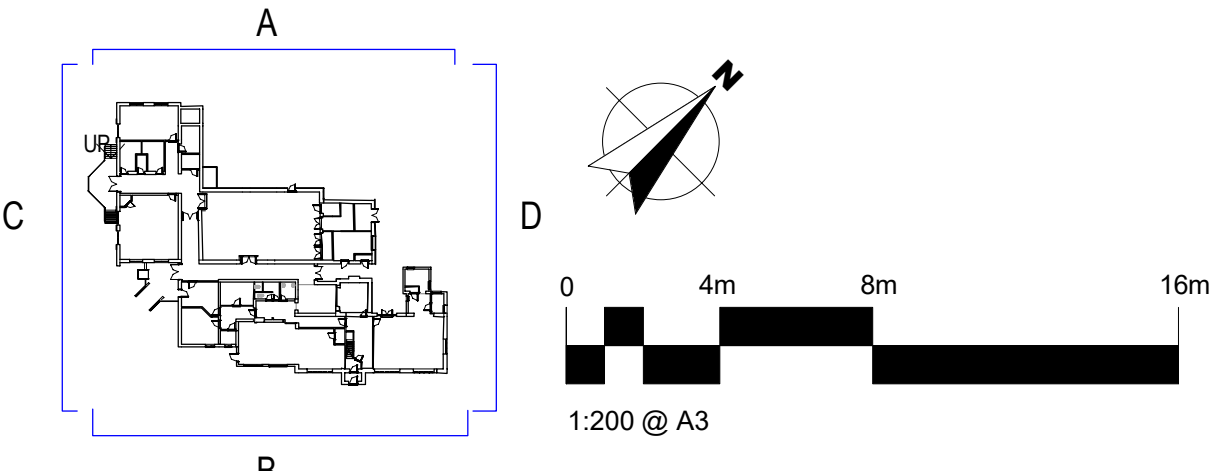
2.8 Existing Building Elevations



Existing Elevation C



Existing Elevation D



3.0 THE BRIEF AND DEVELOPMENT

3.1 The Brief

The brief set out by St Johns Thornham and the Cranmer Trust sets the following requirements:

Layout

- To increase the capacity of the school from 105 to 210 pupils
- To reconfigure the existing internal layouts where necessary to ensure maximum efficiency
- To consider the 2FE approach for 420 pupils and how this will follow the 1FE design.
- To ensure all other general spaces associated with 1FE and 2FE are to BB103 area guidance for schools recommendations in the proposal
- To ensure the design complies as far as reasonably practical, but is not limited to, all relevant building bulletins listed below.
- Access must be considered considering the steep level changes of the site.

Externals

- To consider the outdoor playing spaces in relation to the BB103 recommendations for 1FE. 2FE outdoor areas will rely on a future acquired field.
- To increase parking numbers without taking away playing space from the pupils and considering drop off and deliveries.
- Access must be considered throughout the site considering the steep level changes of the site

Appearance

- The new extension must be sympathetic to its surroundings and the existing school
- Similar materials should be considered to ensure continuity between existing and new

Building bulletins:

BB103 - Area guild lines for mainstream schools

BB100 - Fire safety design for schools

BB93 - Acoustic designs for schools

BB101 - Guidelines on ventilation, thermal comfort and indoor air quality in schools

4.0 THE PROPOSAL

4.1 The Proposal

4.1.1 Building Layout

<i>Proposed site area:</i>	7525m2
<i>Proposed Building Area Ground Floor</i>	390m2
<i>Proposed Building Area First Floor:</i>	345m2

The proposal will utilise the existing school configuration to ensure minimal disruption to the school and its pupils, with only two rooms changing use. This will therefore ensure the functionality of St Johns Thornham as a school, whilst works are ongoing. To the west of the site, a new two storey school extension will house the additional provisions for a 1FE school, including a new infant room, junior rooms, a food technology room, staff offices, library and toilet provisions. Clear circulation routes have been used with all rooms connected to a central hallway. A total of 2 windows, 1 double exit door and the external stair will be removed from the West facing elevations of the school for the new extension.

A large stairwell and lift zone is proposed centrally to the extension to ease access within the school and provide a central fire escape. A large curtain wall will be used here to flood the stairwells with light and views of the adjacent field to the North of the site. All classrooms have been placed on the north side to also utilise these views. On the ground floor, floor to ceiling windows are used with a door to access the play areas directly in front. Canopies to the outside the ground floor classrooms will allow pupils to access outdoor play area in all weather. A steel mesh escape stair will be provided on the new west elevation to ensure the safety of all pupils and staff from the first floor. Below this, a brick stair between the ground floor and the external ground will account for the steep level changes of the site.

4.1.2 Landscape and Site Layout

The proposal exceeds all BB103 targets for playing fields, apart from the 'Soft Outdoor PE' target. However, this was already undersized as existing, due to the size restrictions of the site. Additionally, the existing grass pitch is prone to flooding throughout the year, making it often unusable. To combat

this, a full sized MUGA is proposed to accommodate sport all year round. Overall, the proposal will increase the usable playing fields on the site. Other land has been reconfigured to ensure the outdoor area targets are met as per BB103. An amphitheatre will be created to provide pupils with an interesting seating and hard play area, whilst also accounting for the steep levels of the site. Additionally, an outdoor classroom and trim trail will encourage outdoor learning. The climbing frame area will be relocated to a large expanse of soft informal grass area to ensure pupils still have access to outdoor play equipment. Lastly, the mini soccer pitch is located next to the soft informal grass area so that the school can utilise a larger grassed area for sports days and other activities.

	<i>Recommended</i>	<i>Existing</i>	<i>Proposed</i>
<i>Soft outdoor PE</i>	4200m2	2330m2	1070m2
<i>Hard outdoor PE</i>	715m	260m2	715m2
<i>Soft informal/Social</i>	1020m2	655m2	1135m2
<i>Hard informal/Social</i>	410m2	290m2	430m2
<i>Habitat</i>	105m2	750m2	750m2

The existing car park will increase in size to accommodate the increase in staff numbers. Due to the limited size of the site, a double parking system will be adopted. 10% of parking will be accessible, and one EV charger will be provided. Sustainable travel is encouraged on site as 16 cycle spaces are included, 8 of which are covered under a shelter. A 2.4m fence will separate the car park from the school and will subsequently secure the school grounds.

4.1 The Proposal

4.1.3 Noise

Considerations to noise have been accounted for during the design phase. The construction method is SFS with a brick finish. Double glazing will also be used to reduce noise impact within and from the school. External plant has been kept to a minimum. Small air conditioning units will be wall hung from the new extension wall on the lower flat roof. Here they will be hidden behind a parapet wall and shielded by both the existing building and the new extension. This will keep plant noise levels to a minimum. Please see below table for plant noise levels

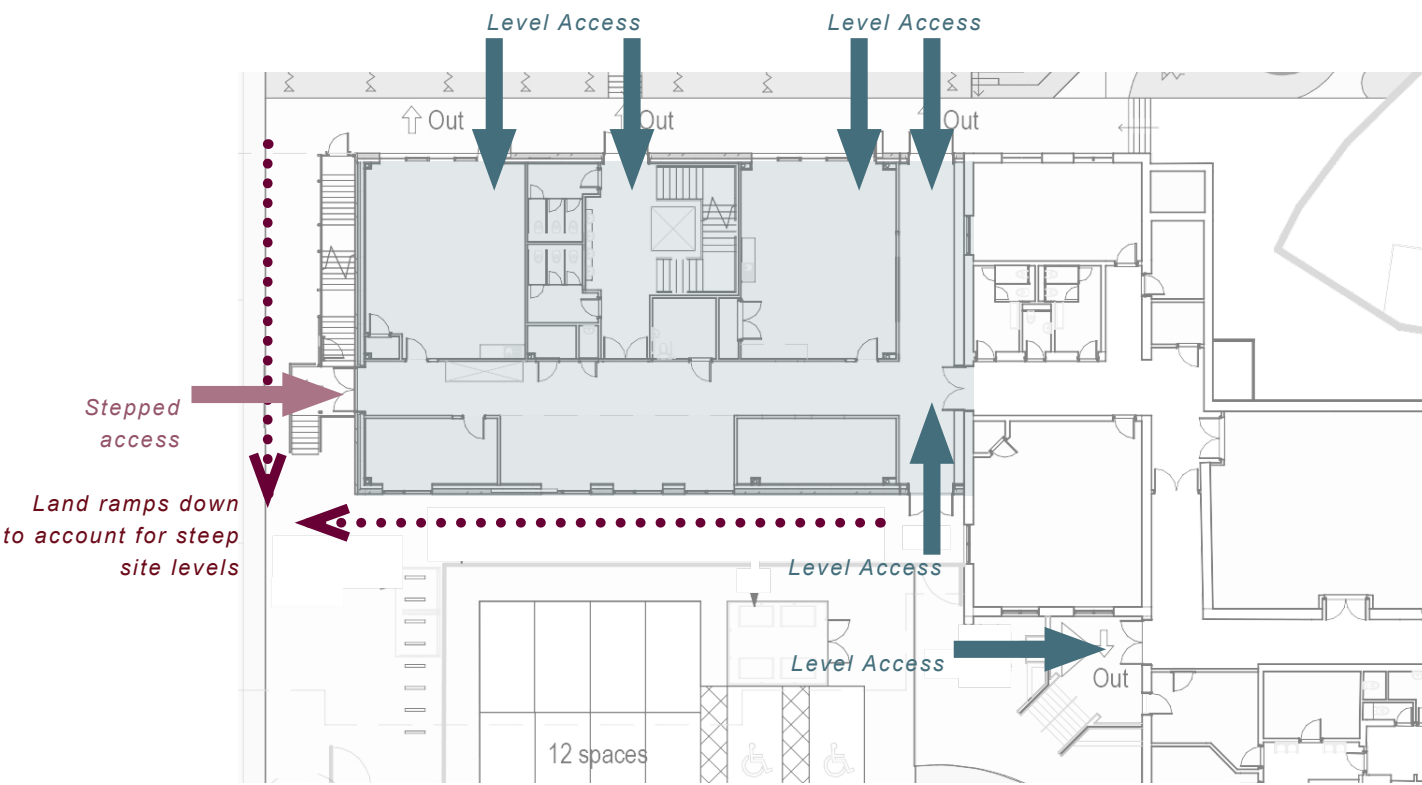
PUZ-ZM OUTDOOR UNITS		PUZ-ZM35VKA2	PUZ-ZM50VKA2	PUZ-ZM60VHA2	PUZ-ZM71VHA2	PUZ-ZM100VKA2	PUZ-ZM125VKA2	PUZ-ZM140VKA2
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	46 / 44	46 / 44	49 / 47	49 / 47	51 / 49	52 / 50	52 / 50
SOUND POWER LEVEL (dBA)	Cooling	65	65	67	67	69	70	70
WEIGHT (kg)		46	46	67	67	105	105	105
DIMENSIONS (mm)	Width x Depth x Height	809 x 300 x 630	809 x 300 x 630	950 x 330 + 25 x 943	950 x 330 + 25 x 943	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		Single	Single	Single	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	0.820 / 0.705	1.363 / 1.106	1.707 / 1.452	1.818 / 1.651	2.604 / 2.065	3.674 / 3.378	4.312 / 3.772
	Heating/Cooling (UK)	0.73 / 0.59	1.21 / 0.94	1.43 / 1.15	1.61 / 1.39	2.09 / 1.77	3.27 / 2.87	3.83 / 3.15
STARTING CURRENT (A)		4.3	4.3	5.3	5.3	10.7	13.2	13.2
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	3.89 / 3.51 [13.2]	6.05 / 5.00 [13.2]	7.39 / 6.31 [19.2]	7.79 / 7.06 [19.3]	11.25 / 8.97 [27.0]	15.77 / 14.53 [27.0]	18.41 / 15.88 [28.7]
FUSE RATING (BS88) - HRC (A)		16	16	25	25	32	32	40
MAINS CABLE No. CORES		3	3	3	3	3	3	3
MAX PIPE LENGTH (m)		50	50	55	55	100	100	100
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30	30
CHARGE REFRIGERANT (kg) / CO ₂ EQUIVALENT (t) - R32 (GWP 675) - 30m		2.00 / 1.35 (30m)	2.00 / 1.35 (30m)	2.80 / 1.89 (30m)	2.80 / 1.89 (30m)	3.60 / 2.43 (40m)	3.60 / 2.43 (40m)	3.60 / 2.43 (40m)
MAX ADDITIONAL REFRIGERANT (kg) / CO ₂ EQUIVALENT (t) - R32 (GWP 675)		0.30 / 0.20	0.30 / 0.20	0.80 / 0.54	0.80 / 0.54	2.40 / 1.62	2.40 / 1.62	2.40 / 1.62

SUZ-M OUTDOOR UNITS		N/A Multi-Split only	SUZ-M25VAR2	SUZ-M35VAR2	SUZ-M50VAR2	SUZ-M60VAR2
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	-	45 / 46	48 / 48	48 / 49	49 / 51
SOUND POWER LEVEL (dBA)	Cooling	-	59	59	64	65
WEIGHT (kg)		-	30	35	41	54
DIMENSIONS (mm)	Width x Depth x Height	-	800 x 285 x 550	800 x 285 x 550	800 x 285 x 714	840 x 330 x 880
ELECTRICAL SUPPLY		-	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz
PHASE		-	Single	Single	Single	Single
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	-	0.88 / 0.65	1.07 / 1.09	1.56 / 1.35	2.13 / 1.67
	Heating/Cooling (UK)	-	0.75 / 0.56	0.91 / 0.94	1.33 / 1.16	1.81 / 1.44
STARTING CURRENT (A)		-	3.7	5.0	8.0	9.3
SYSTEM RUNNING CURRENT (A)	Heating/Cooling [MAX]	-	3.7 / 3.0 [6.8]	5.0 / 4.1 [8.5]	8.0 / 7.1 [13.5]	9.3 / 8.4 [14.9]
FUSE RATING (BS88) - HRC (A)		-	10	10	20	20
MAINS CABLE No. CORES		-	3	3	3	3
MAX PIPE LENGTH (m)		-	20	20	30	30
MAX HEIGHT DIFFERENCE (m)		-	12	12	30	30
CHARGE REFRIGERANT (kg) / CO ₂ EQUIVALENT (t) - R32 (GWP 675)		-	0.65 / 0.44	0.90 / 0.61	1.20 / 0.81	1.25 / 0.84
MAX ADDITIONAL REFRIGERANT (kg) / CO ₂ EQUIVALENT (t) - R32 (GWP 675)		-	0.91 / 0.61	1.16 / 0.78	1.66 / 1.12	1.71 / 1.15

The new school extension is also proposed to the west of the existing school. This means it is away from Thornham house, which is the schools only immediate neighbour. Keeping the works to the West of the site, will minimise noise impact levels on Thornham house and the existing school. Aside from this, the school is surrounded by fields to the North, West and South and therefore do not pose a noise disturbance to other neighbours.

4.1.4 Accessibility

In order to keep level access throughout the building whilst accounting for the steep levels of the site, an external stair is proposed on the West elevation, instead of using steps within the building. Level access will be provided from all other external doors, including the classroom doors and the other corridor doors, ensuring there are multiple points of accessible entry. A lift will be provided within the school to ensure vertical accessibility The main school entrance lift will be maintained.



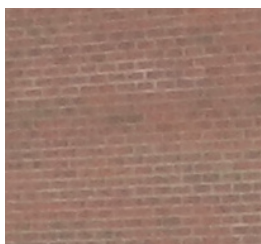
4.1 The Proposal

4.1.5 External Material

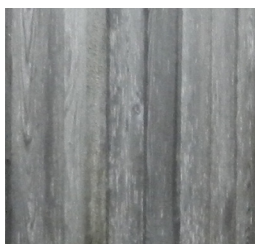
The proposed materials have been carefully considered to ensure they reflect the environment in which they sit. Consideration has also been given to the existing building and the relationship it will have to the new extension.

The existing school consists of red brick, timber cladding and white render. Through the design process, It was decided that white render did not truly reflect the agricultural setting of the school and therefore this material would not be used going forward. Red brick and timber were chosen as materials that would both represent the schools surroundings and complement the existing school. However, as the school has had problems with their existing timber cladding, namely discolouration and deterioration, cement particle board planks will be used instead for better maintenance. The colour chosen for the cement particle board will resemble timber. The roof will be finished with clay tiles where it pitches, and bitumen felt on the flat roof areas to match the existing

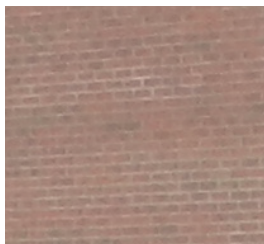
Existing Brick



Existing cladding
Discoloured



Proposed brick to
match existing

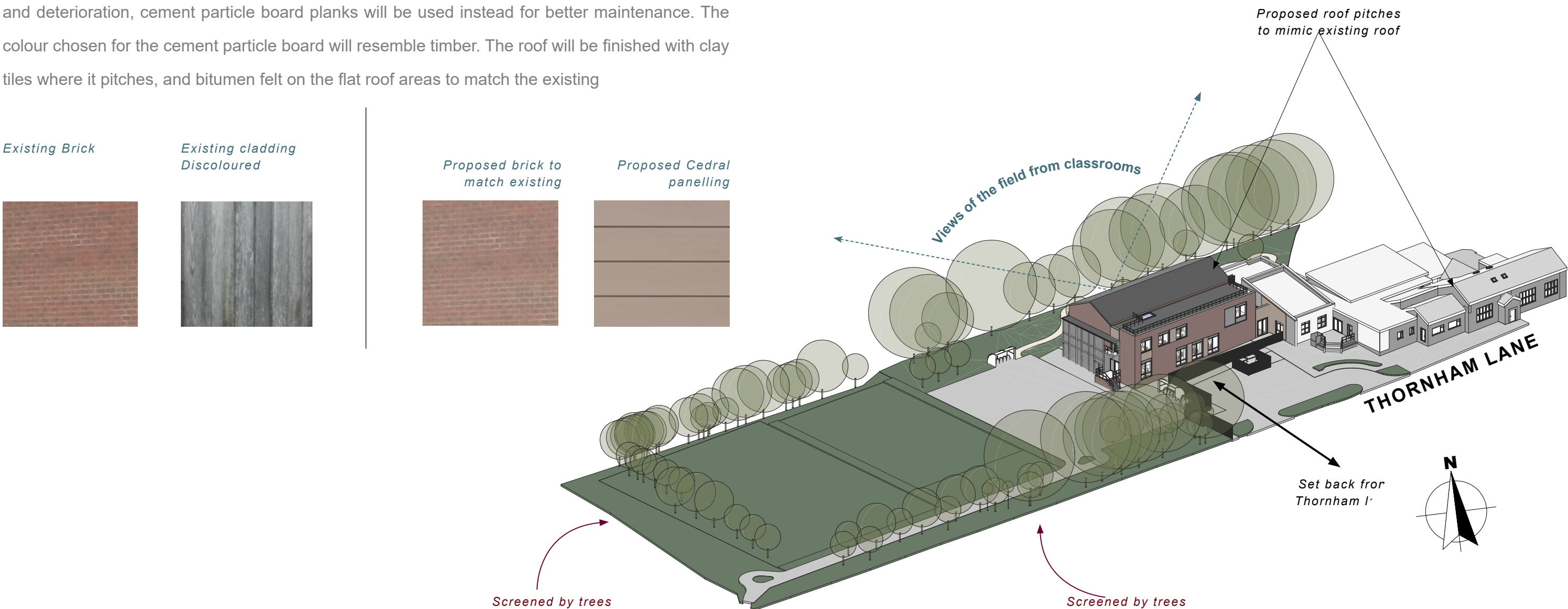


Proposed Cedar
panelling

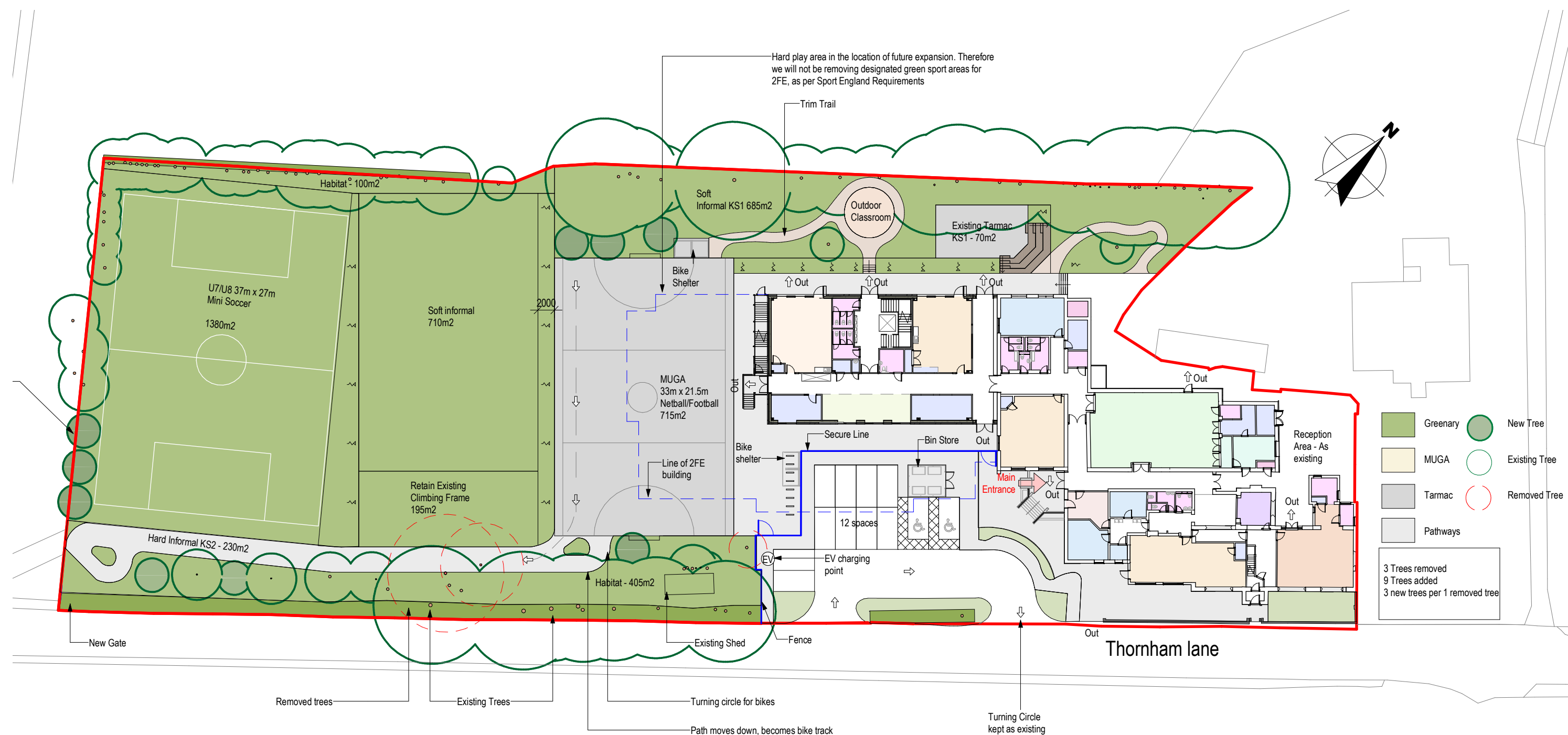


4.1.6 Future proofing

The current scheme is designed to take the school from 0.5 form entry to 1 form entry. However, due to the large housing development that will surround the site, there will be an appetite for the school to increase to a 2 form entry school in future. The school has therefore been designed to accommodate this future need.

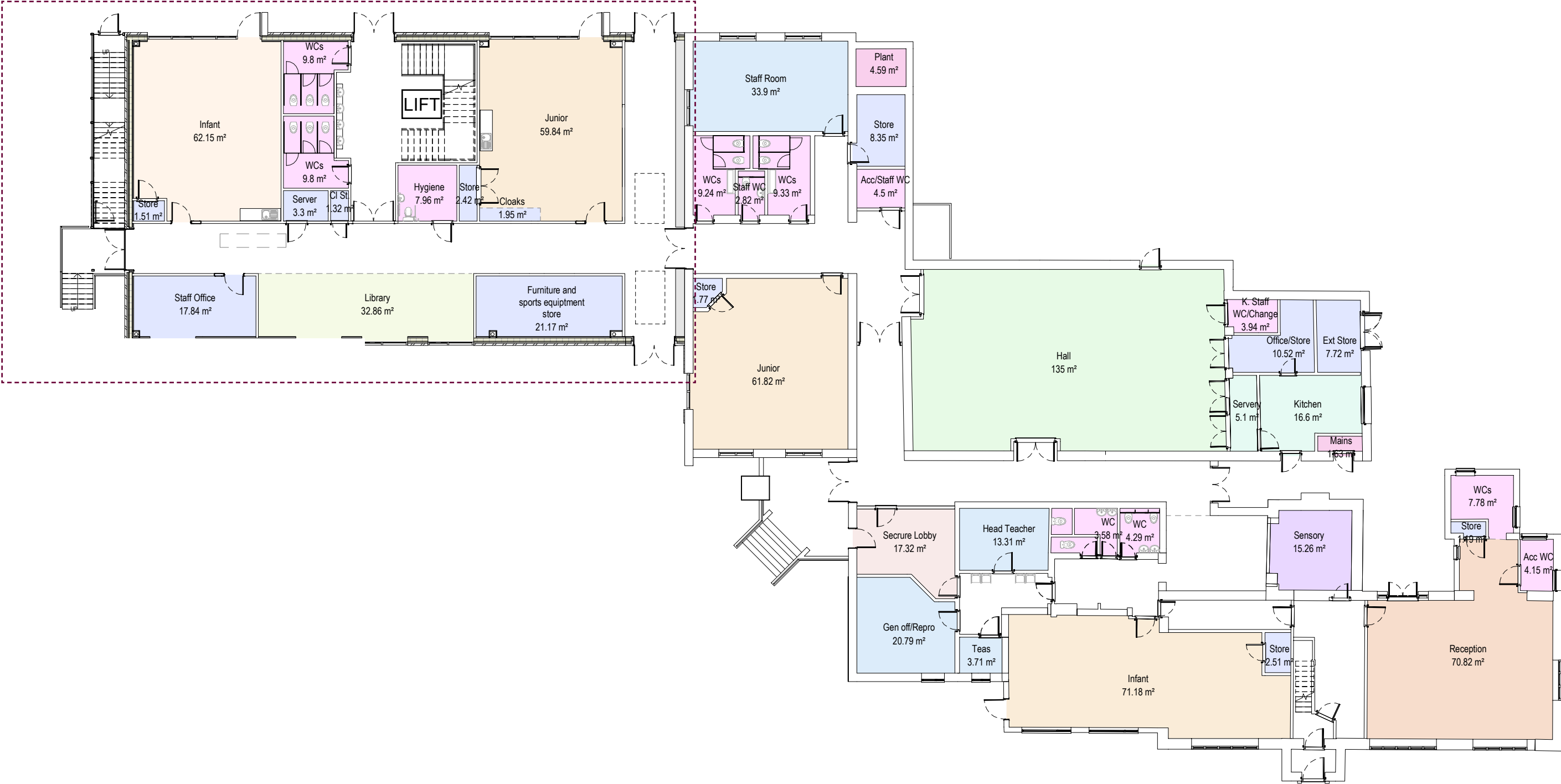


4.2 Proposed Site Plan



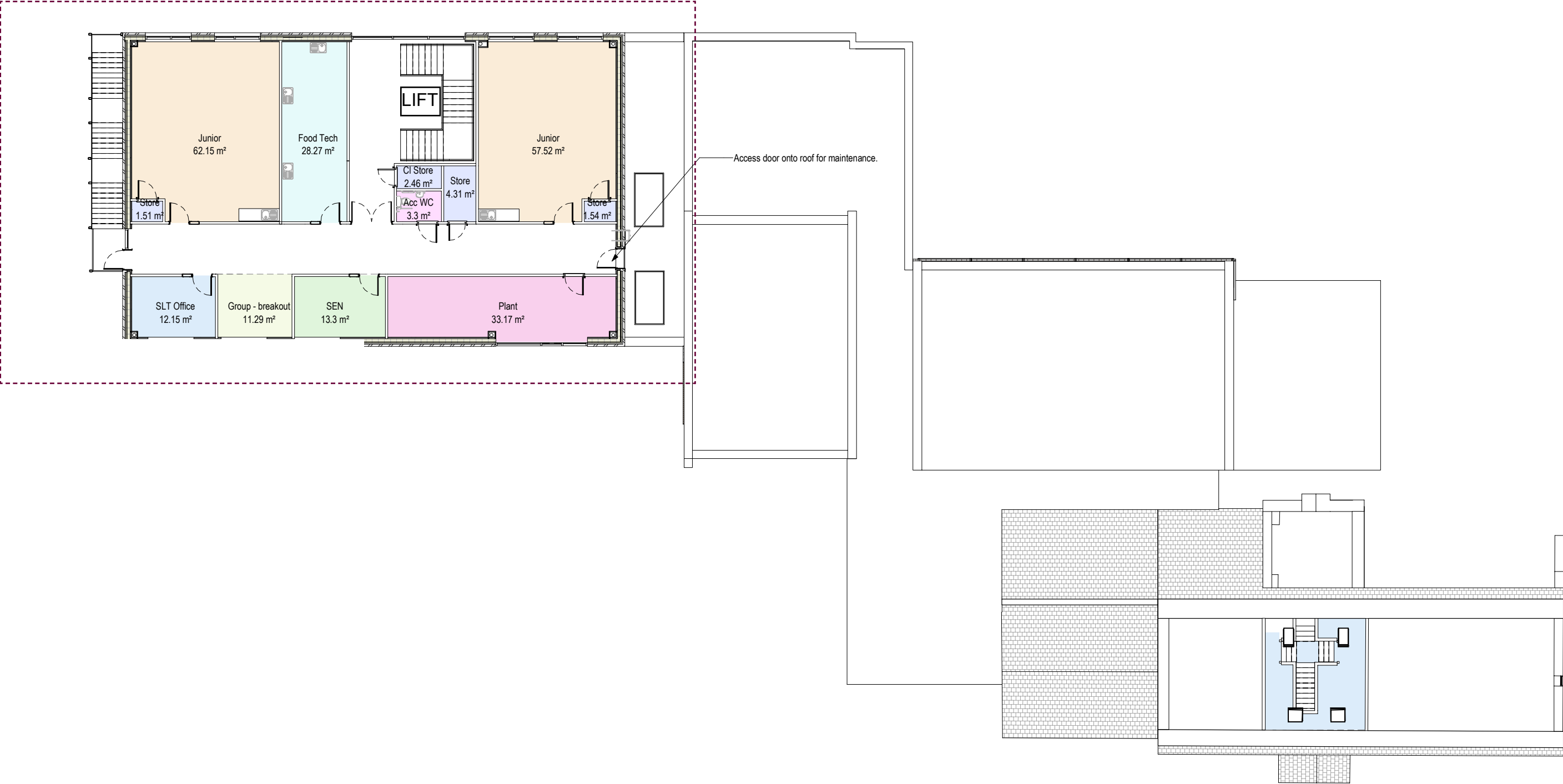
4.3 Proposed Ground Floor Plan

Proposal

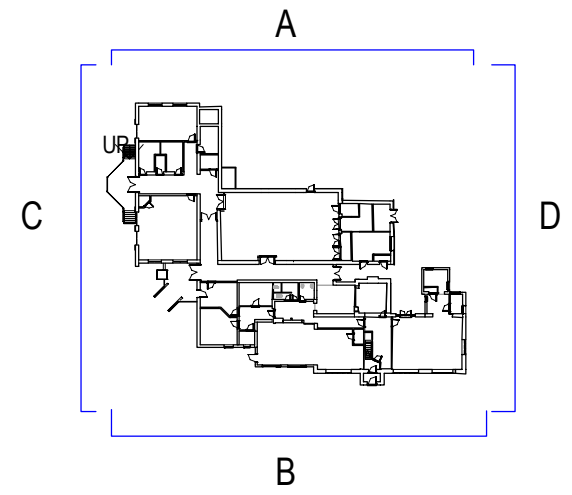


4.4 Proposed First Floor Plan

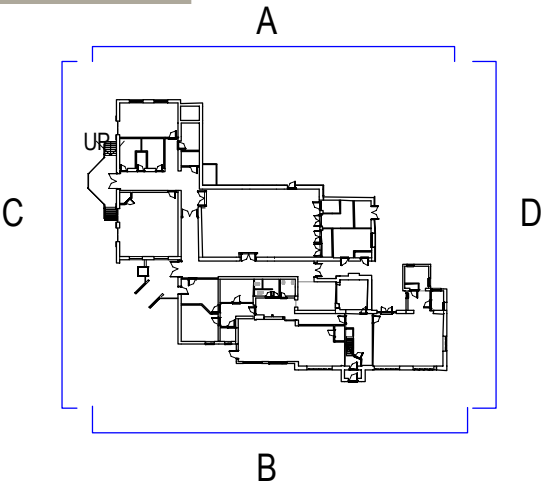
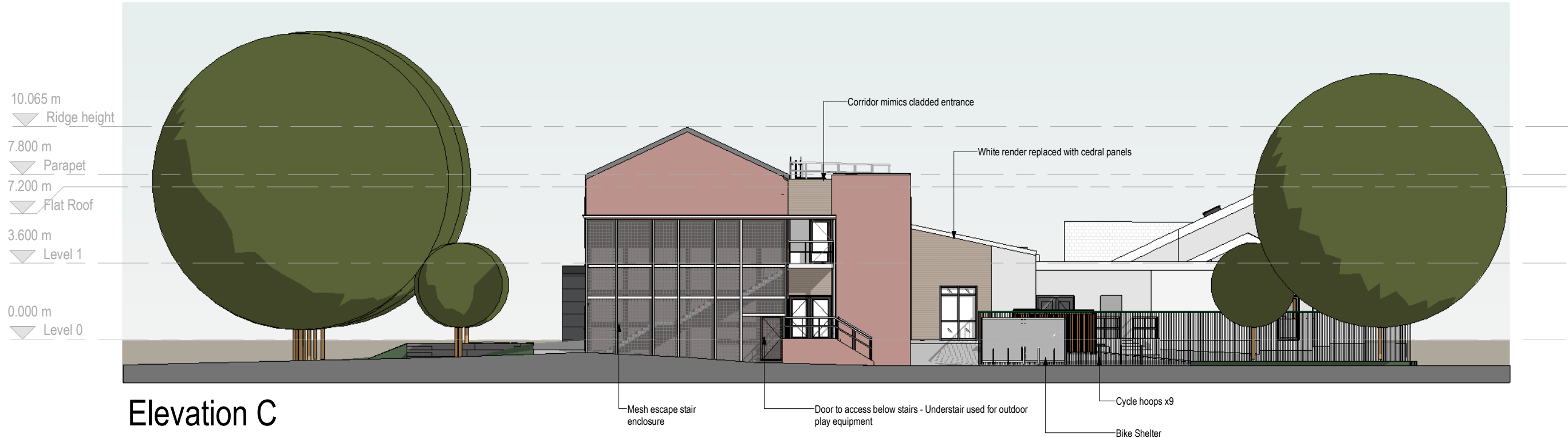
Proposal



4.5 Proposed Building Elevations



4.5 Proposed Building Elevations



5.0 SURVEYS

5.0 Surveys

5.1 *List of conducted Surveys and assessments*

- Topographical Survey
- Flood risk assessment
- Arboricultural Impact Assessment & Method Statement (April 2024)
- Biodiversity Net Gain Assessment
- Drainage investigations
- Travel Plan