

The Heights Primary School

Design & Access Statement



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00.0 Executive Summary

The Design and Access Statement has been prepared to provide background context and rationale for the design development of the proposed scheme on The Heights Primary School site. It is written in support of the detailed drawings and application for planning permission.

The proposal is for a 2072m², 2 storey school building to be located within the North - West corner of Mapledurham Playing Fields within a development site area of 1.23 acre.

The building will accommodate a 2 Form Entry Primary School for 350 pupils and 37 full time staff at full capacity.

The scheme provides 20 dedicated parking spaces, 2 of which are accessible parking bays. The scheme includes 10 spaces on metal cycle hoops, located near the entrance for staff. 24 bike spaces are also provided in the cycle pods (these can be used by adult and children's bikes) and 24 scooter spaces in the cycle pods.

A MUGA (Multi-Use Games Area), informal play area together with associated landscaping and boundary treatment are located to the south of the building.

The proposal represents a considered response to the site and its surroundings, addressing the need to provide a new local Primary School whilst taking into account the local community and surrounding context.

01.0 Location

The following section outlines The Heights Primary School site, make up, its location, context, local amenities and transport links. This forms the basis for the development of the existing and new building to provide accommodation for a fully functioning Primary School.

This section includes the following information:

- Site within Reading Borough
- Existing Site and Surrounding Areas
- Aerial Views of Site
- Photos of Existing Building
- Existing Site Use
- Public Transport and Traffic

01.1 Location

Proposed Site

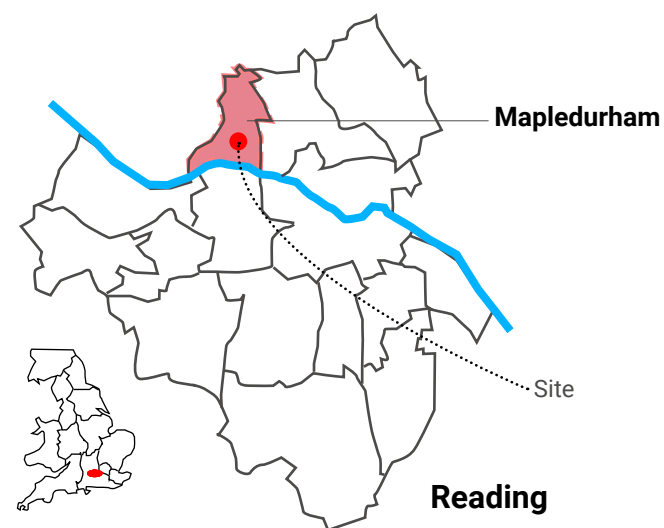
Site Address:

The Heights Primary School,
Mapledurham Playing Fields,
Upper Woodcote Road,
Reading, Berkshire,
RG4 7HA

Landscapes of Local Value

The School site is not situated within any of the Conservation areas or Landscapes with Local or National value.

Fig.1 Diagrammatic Map of Reading and its Wards



Key

- The Wards of Reading
- Green Parks
- Conservation Area
- The Site

The School site is under the jurisdiction of Reading Borough Council.

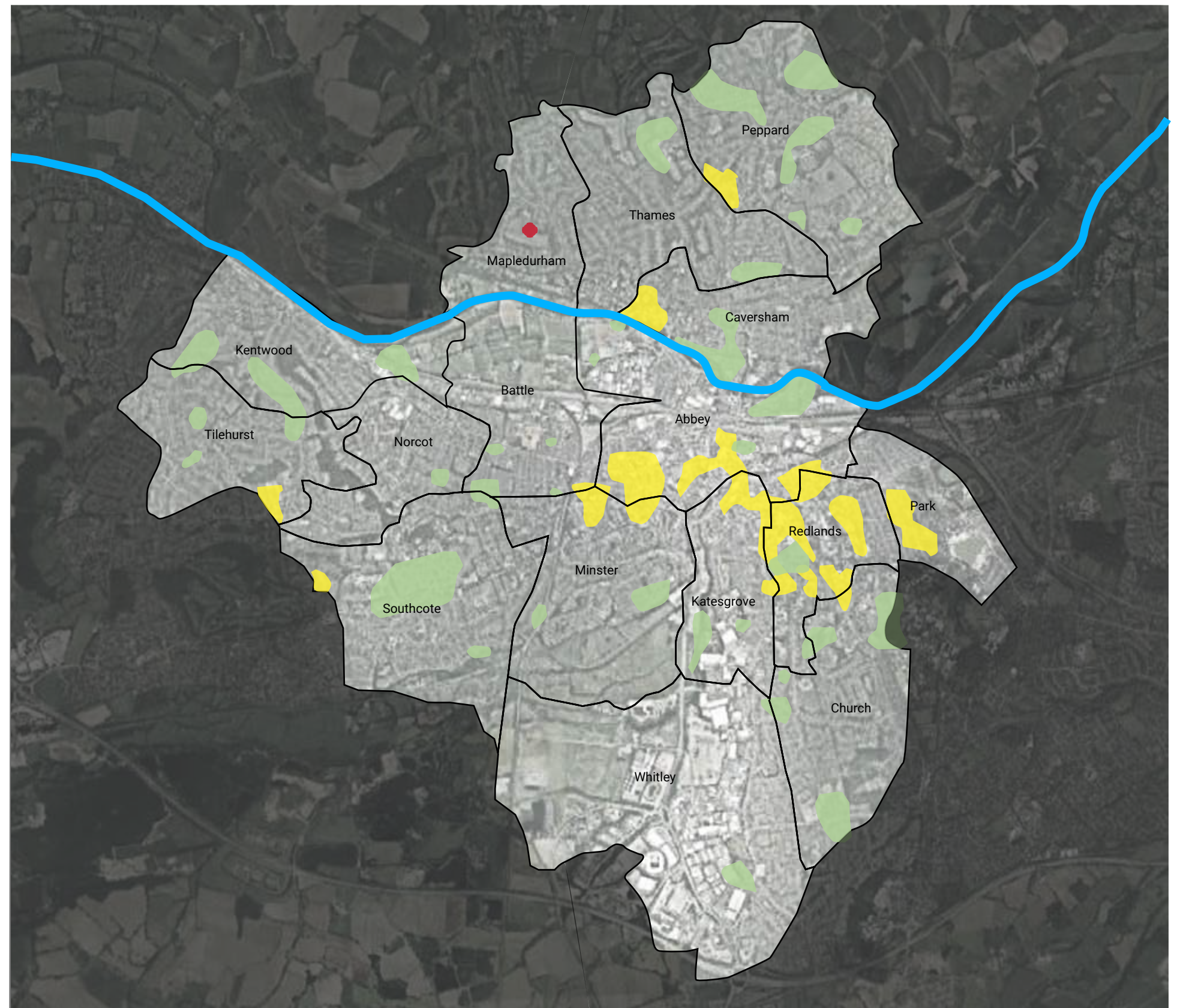


Fig.2 - Map of Reading

01.2 Location

Existing Site and Surroundings

Mapledurham Playing fields is located at the northern end of the Reading Borough in the Caversham area. The site boundary, outlined in red, sits to the south of the A4074 Upper Woodcote Road and is surrounded by residential areas to the north and west. To the east of the site is the existing pavilion building, car park and tennis courts.

The proposed Heights Primary School development, outlined in blue is located within the Mapledurham Playing Fields. The Site is relatively flat and forms a trapezium shape of about 1.23 acres (4977m²).

To the south of the Site is the large expanse of the playing fields with residential areas further south.

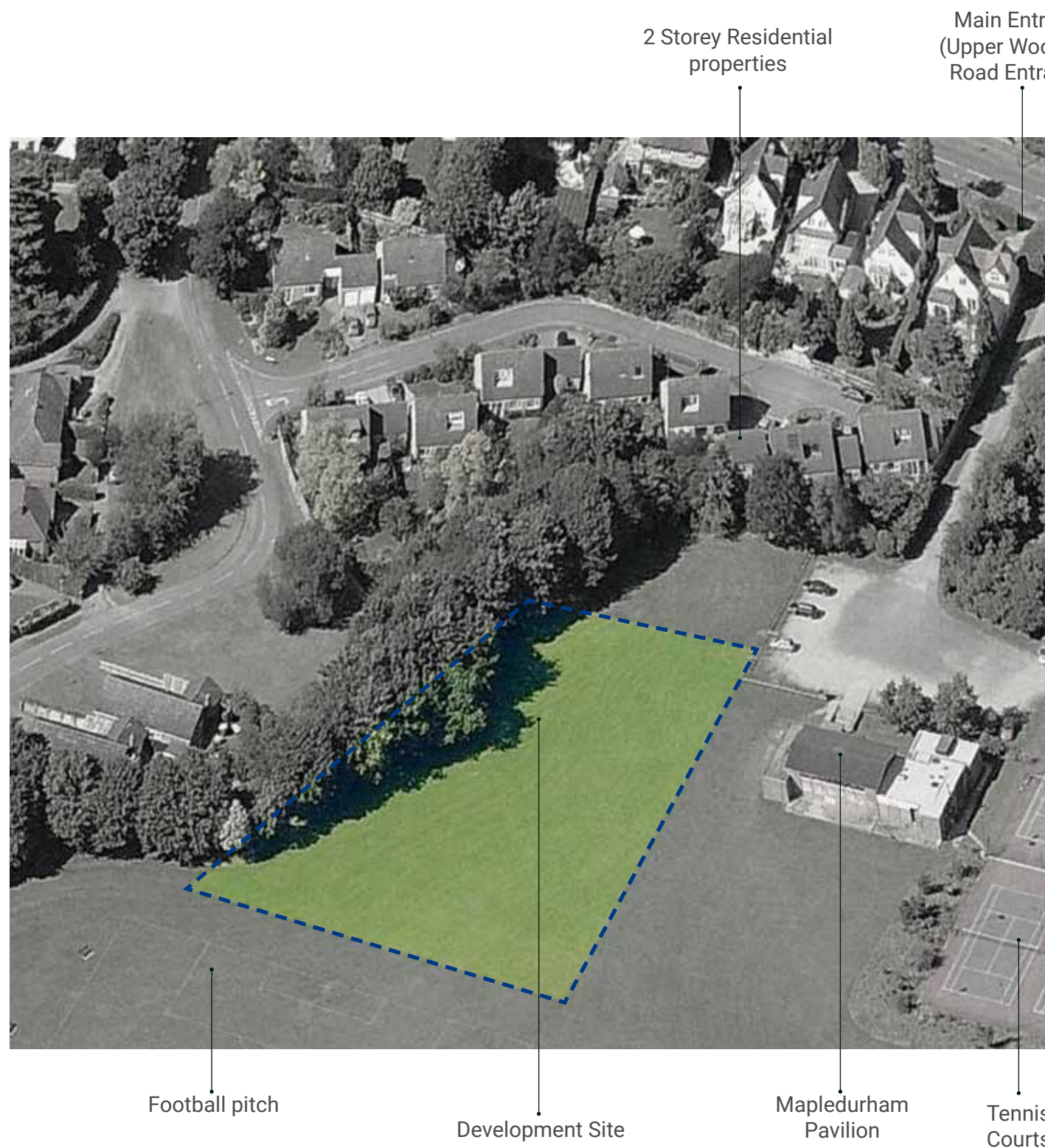
The site is bound by 1 to 2 storey residential properties and open amenity space.



- KEY
- Site boundary
 - Development Site boundary
 - Green Open Space
 - Sporting Facility
 - Residential
 - Football pitch
 - Bus stop
 - Two-way major road
 - Two-way secondary road
 - Sun path

01.3 Location

Aerial Views of Site



Birds eye view to the north of the development site



Birds eye view to the west of the development site

01.4 Location
Photos of Site



1. Panoramic image showing the Parking area, proposed site and football pitch



2. Image showing Existing Entrance, Drop off/Pick up zone and Parking



3. Image showing the existing Mapledurham Pavilion



4. Image showing the proposed site from the Football pitch

01.5 Location

Existing Site Use

The proposed School Site is located within the Mapledurham Playing Fields at the northern end of the Reading Borough in the Caversham area. The Site is south of the A4074 Upper Woodcote Road and surrounded by residential areas to the north and west with the playing fields pavilion building, car park and tennis courts to the east. To the south of the Site is the large expanse of the playing fields with residential areas further south. The Site is relatively flat and forms a trapezium shape of about 0.5 hectares, which is 4997m² or 1.23 Acres.

Existing Site Use

Below is a list a clubs and social groups who use the playing fields, the frequency of their use of the fields and the times of activities are also noted. It should be noted that these do not coincide with typical school drop off and collection times. (This information was gathered through the use of a questionnaire responded to by local clubs)

- Bridge Club: Thursday, 19:30- 22:30
- Caversham Trents Football Club: Saturday and Sunday, 9:00- 13:00, Monday- Thursday training and in the summer months Monday-Saturday. The Pavilion is used for social and presentation events.
- Escape Toddler Group: Monday and Thursday, 10:00-11:30 (term time), in the summer months outdoor play is utilised. Attendees use the car park.
- Friends of Mapledurham Playing Fields: 1/2 day part sessions, public bat watching in the summer months
- Soulball: Futsal sessions with Caversham and Trents Wednesday evening
- Volunteer Football Club: Sunday's 10:00-12:00 noon.
- Other events: Christmas fairs, Summer fetes etc.

Existing Site Access & Parking

The playing fields are accessed via two vehicular routes, a formal road leading to a car park accessed via Upper Woodcote Road and a gated unmade track to the south with access taken from Chazey Road. Pedestrian access is also provided via these two accesses with additional pedestrian access at the south eastern corner through a small area of woodland and along the western boundary of the playing fields.



KEY

- Site boundary
- Development boundary



EXISTING SITE PLAN

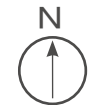
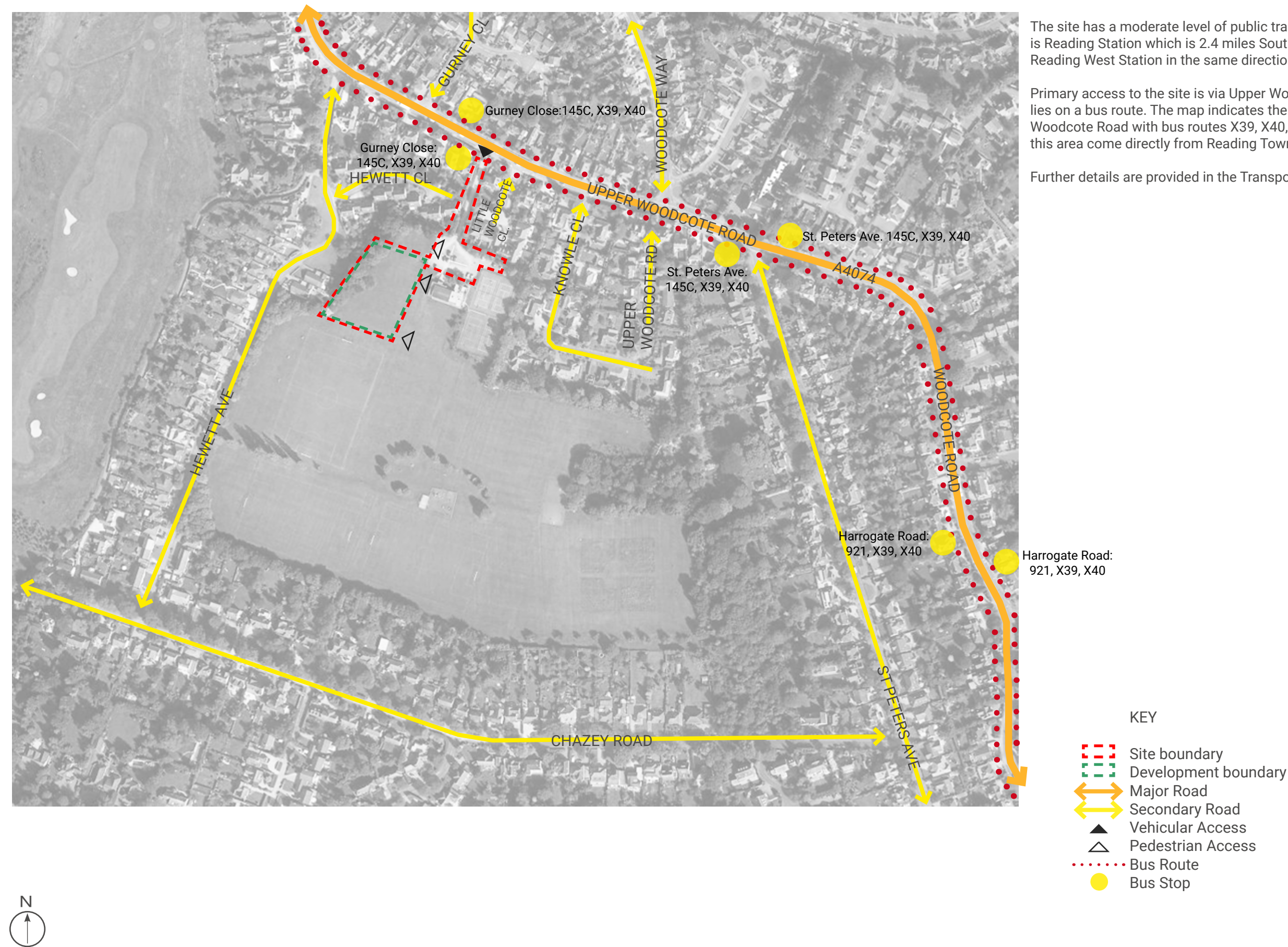
01.6 Location

Public Transport Links

The site has a moderate level of public transport. The closest train station is Reading Station which is 2.4 miles South Eastwards from the site and Reading West Station in the same direction which is 2.5 miles from the site.

Primary access to the site is via Upper Woodcote road (A4074) which also lies on a bus route. The map indicates the location of bus stops along Upper Woodcote Road with bus routes X39, X40, 921, 981 and Pink 22. All buses to this area come directly from Reading Town Centre.

Further details are provided in the Transport Assessment Report.



02.0 Use/Amount

Within this section, the use of the proposed scheme by the school and the community will be explained.

This section includes the following:

- School Vision/Brief
- Proposal Overview

02.1 School Vision

The Heights Primary School has a vision to achieve success by promoting individual responsibility and excellence. The schools mission statement is as follows:

"Our mission is to establish a new mainstream primary school for children and parents in the Caversham Heights and Mapledurham area of Reading. Building on established best practice, we aim to develop children for success in secondary school and beyond. We will care for each child in an inspirational, inclusive learning environment which guides them to fulfil their unique potential."

The school have highlighted the following key features as those that are important to parents:

1. To provide an inspirational mainstream primary school for local children within walking distance of the Caversham Heights and Mapledurham area.
2. To develop and prepare children for success in secondary school and beyond, establishing values that enable them to grow into confident individuals who act with thoughtfulness, care, respect and responsibility.
3. To provide a curriculum which focuses on development of the whole child, using a variety of integrated learning styles and experiences.
4. To set high standards and share best practice with 'outstanding' Ofsted rated local schools enabling established, passionate teachers to promote each child's individual talent.
5. To nurture and support academic, social, moral, intellectual, emotional and physical development.
6. To create a culture of equality and trust, fostering positive relationships and a cooperative mindset.
7. To be future-focused, equipping children with the necessary skills for social and economic success in our evolving technological world.
8. To promote compassionate behaviour, respecting the rights of others, acting in fairness, showing respect and dignity.
9. To provide a safe, accessible and healthy environment in which young minds can develop.
10. To share school facilities and promote productive working partnerships with parents and the wider community.

In summary the Key Values include Inspiration, Collaboration, Courage, Resilience, Empathy and Confidence



02.2 Amount

Proposed Site Plan

Size

The school is to provide a 2 Form Entry [2FE] Primary School for 350 pupils and 35 full time staff. The overall Gross Internal Area (GIA) for the whole school is 2082m².

Primary School	2 Form Entry
Pupil Number - (Full Capacity)	350
Staff Number - (Full Capacity)	35
Building Footprint	1201m²
Development Area	1.23 Acres
Site Ownership Area	1.23 Acres
MUGA Size	726m²
Soft Informal Area	1474m²
Parking Bays	20 (2 accessible parking bays)

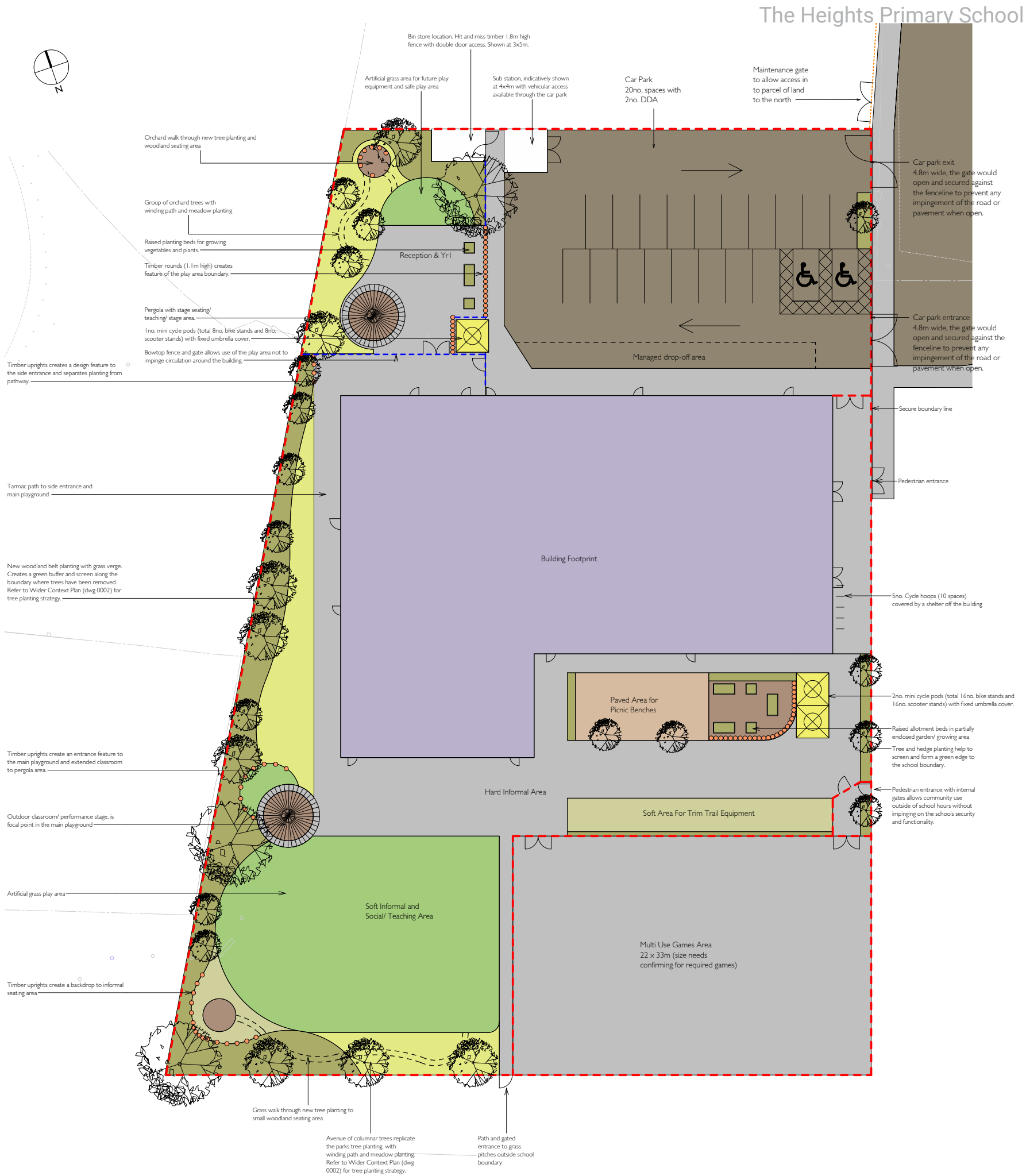
Parking

The number of parking and cycle bays are based on Reading Borough Structure Plan requirements. Thus the following Car, Cycle and scooter bays have been provided.

- 20 dedicated parking spaces, 2 of which are accessible parking bays.
- 10 cycle spaces on metal cycle hoops, located near the entrance for staff.
- 24 bike spaces are also provided in the cycle pods (these can be used by adult and children's bikes) 24 scooter spaces in the cycle pods.

Waste Management

The scheme proposes x 4 1100litre Eurobins (x2 Recycling + x2 General Waste)



02.3 Amount

Proposed Development & Access Arrangements

Access Improvements

To cater for the increased level of trips to and from the Site it is proposed to improve the existing site access junction with Upper Woodcote Road to provide a formal access junction with dedicated footways coming into the Site, widening the access road from 3.9m to 4.8m to facilitate two-way vehicle flows and rearrange the internal Playing Fields car park to improve vehicle and pedestrian circulation.

Car Parking

Please refer to the Upper Woodcote Road access junction, pedestrian crossing and access road improvements drawing within the Transport Assessment Report that includes improvements to the Playing Fields car park layout.

The rearranged car park layout can comfortably cater for 30 vehicles although ample space around the circulation route can accommodate more informal parking. Access to the new school Site is taken via the playing fields car park with a dedicated footway route through to the School to the pedestrian access on the eastern boundary of the Site.

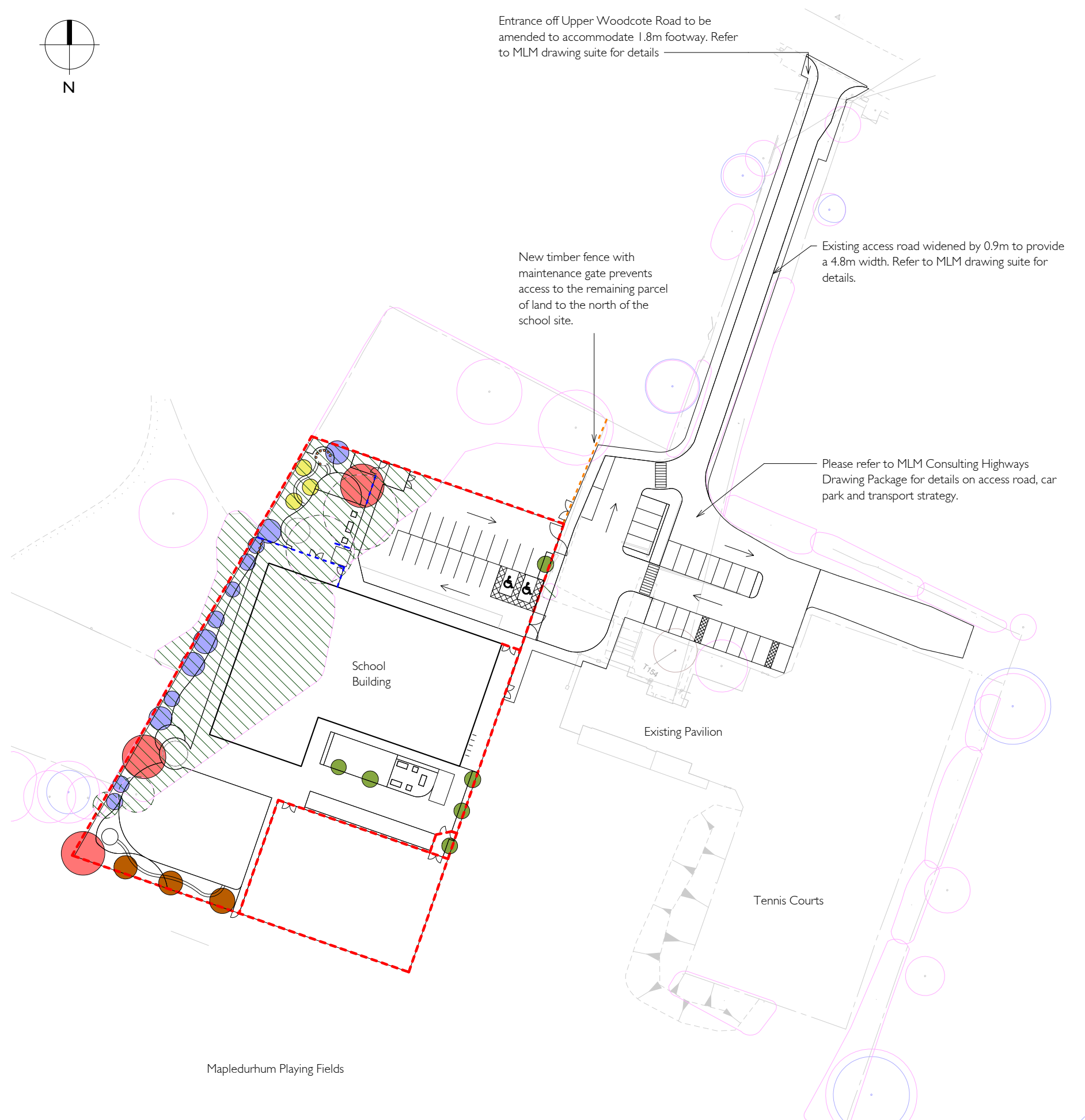
The proposed staff car park is located at the northern end of the school Site with separate in and out accesses to the Playing Fields car park. In order to improve the AM drop-off period it is proposed to operate a staff managed morning drop-off area within the staff car park for those parents happy to have their children quickly disembarked from parents vehicle. This has been proven very successful at other schools in reducing parking congestion which with the proposed layout can be promoted at this Site. This greatly improves the efficiency of vehicle movements through the Site rather than parents trying to find a space to park and then safely walk their younger children to the School gates. The remaining Playing Field car park would be used by other parents vehicles who do not want to use the quick on-site drop-off facility i.e. take their children to the school gates. Due to the nature of the afternoon collection period and difficult logistics of organising pupils for a similar quick collection facility, the school staff car park/drop-off area will be closed off and parents collecting by car will need to use the MPF car park or by other arranged collection points off site.

Pedestrian Access

The main pedestrian access to the School is located adjacent to the east side of the building with 2 other pedestrian accesses further south to the hard informal area and on the southern boundary of the Site onto the playing fields.

Delivery & Service Vehicles

Delivery and refuse vehicles will serve the school Site from the playing field car park area and will be able to enter and leave in forward gear. It is not expected that such vehicles will need to enter the staff car park area but special maintenance vehicles can do so but are likely to require arranged supervised management should they need to reverse in i.e. large rigid lorry for furniture delivery vehicle. Waste collection and deliveries are expected to be restricted between 09:00 to 15:00 to avoid the beginning and end of the school day.



03.0 Layout/Scale

This section includes the proposed floor plans of the scheme as well as building elevations and sections.

This section contains the following:

- Design and Accessibility
- Floor Plans
- Elevations
- Sections
- Daylighting and Ventilation

03.1

Layout

DESIGN AND ACCESSIBILITY

About the Design

The Heights Primary school is currently located on a temporary site at 82 Gosbrook Road, Caversham approximately 2km south east from the Site towards Reading town centre. As increasing demands for housing is not only a local but national pressure this will naturally lead to increasing demands for primary school places.

The current pupil roll of the existing school at Gosbrook Road is 168 pupils with 2 forms of entry with 25 pupils per class in Reception, Years 1 and 2 and 18 in Year 3 and has grown organically since the school opened in September 2014. The school currently has planning permission to continue at Gosbrook Road until July 2018 to accommodate 220 pupils although that site has limited space.

The proposed School Site is therefore required for the beginning of the 2018/2019 academic year to enable the school roll to continue to expand as the pupils move through the year groups to Year 6.

The proposed School Site will provide two forms of entry (max 30 pupils per class) from Reception Year through to Year 6.

Hours of Use

The school hosts a breakfast club from 07:30 with around 20 pupils attending. The school educational day starts at 08:45hrs and finishes at 15:30hrs and offer after school clubs running most days of the week with up to 40 children attending each day at 15:00 until 16:00. These clubs help alleviate congestion before and after the school day by removing pupil movements to/from the school at the busier start and end times of the formal school day. Staff generally finish work between 16:00 – 18:00.

The end of the school day tends to be busier than the start of the school day. This is due to vehicles waiting to pick up pupils that congregate at the end of the school day rather than be spread over a longer time period during drop-off before the school day starts.

Noise

Impact on noise levels will be minimal as the School pupils will be inside the building for most parts of the day. The proposed landscape strategy acknowledges the close proximity of residents to the north and west of the site by providing an improved green noise buffer between the school, the external playing areas and the surrounding houses.

Accessibility

The proposed scheme has been designed with a healthy and happy lifestyle in mind and encourages the use of the multiple bus routes to the site - a particular opportunity for staff to minimise car usage where possible. As the school will serve the local community, pupils will typically be travelling from the surrounding area so to encourage walking to the site, the entrance from Upper Woodcote Road will be modified to enhance a 1.8m footway.

Currently, the site is accessed via two vehicular routes, a formal road leading to a car park via Upper Woodcote Road and a gated unmade track to the south with access taken from Chazey Road. The entrance off Upper Woodcote Road to the Pavilion and tennis courts will be widened by 0.9m to provide a 4.8m width to the road. This will be sufficient in accommodating the new vehicle and traffic strategy.

The new school proposes 20 new parking spaces, 2 of these are compliant with the Equality Act 2010 and have been located nearest to the main entrance.

Cycling provisions have been designed into the scheme and included 10 cycle spaces on metal hoops, located near the entrance for staff, 24 bike spaces in cycle pods (these can be used by adult and children's bikes) and 24 scooter spaces in the cycle pods.

There is a dedicated drop off/pick up point within the school's car park, adjacent to the main entrance to the school building. A separate pedestrian drop off/pick up entrance gate is located further down to the east of the school building. A services route to the refuse point and plant room has been provided at the entrance of the school gated boundary. A second pedestrian entry point to the site is on the southern boundary onto the playing fields.

The school has one main secure entrance with direct access from the car park for visitors.

The school has 1 internal lift and 2 fire escape stair cores with direct access outside of the school building. Some classrooms have direct access to external play areas.



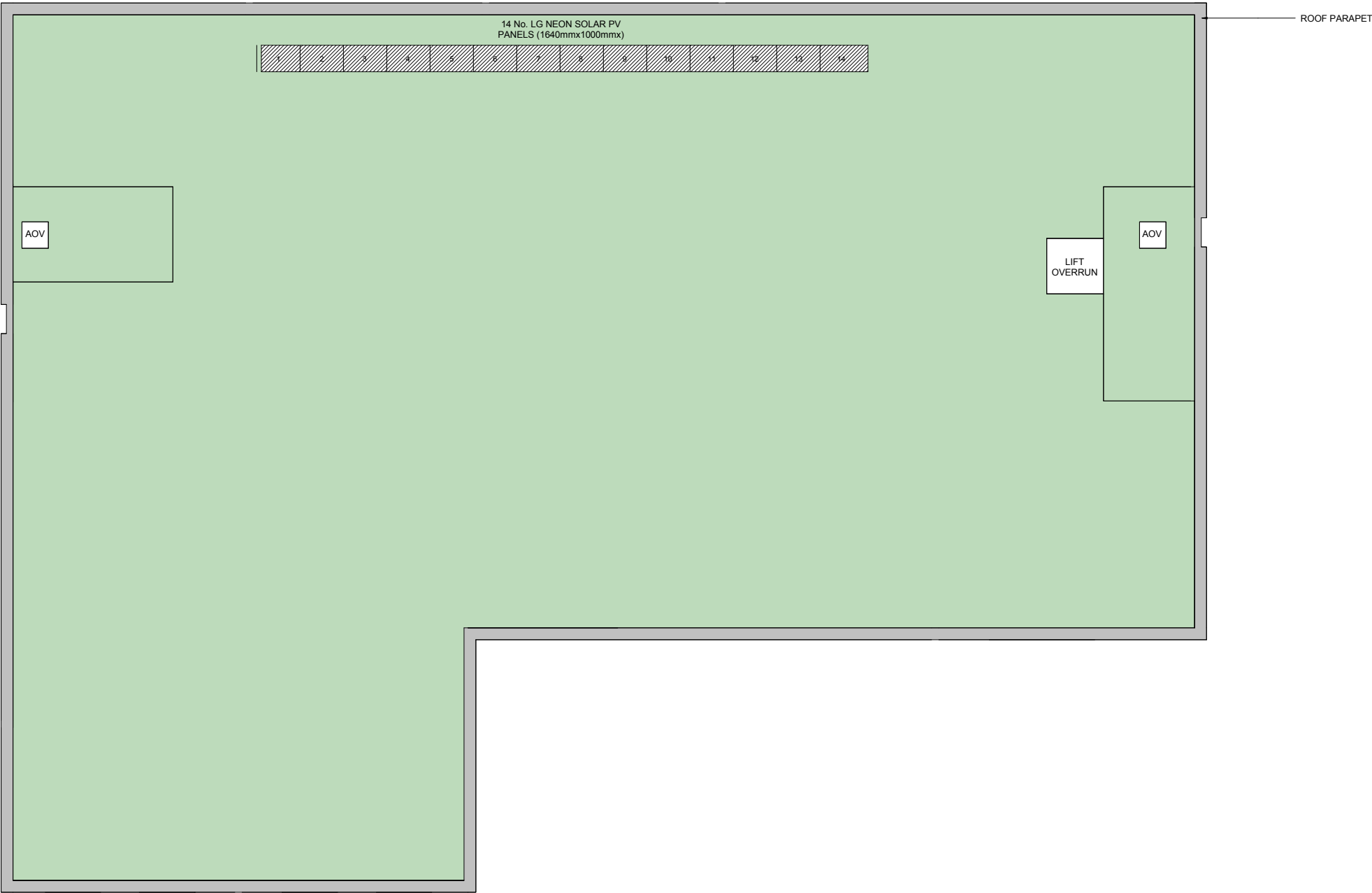
03.3

Layout

PROPOSED FIRST FLOOR PLAN



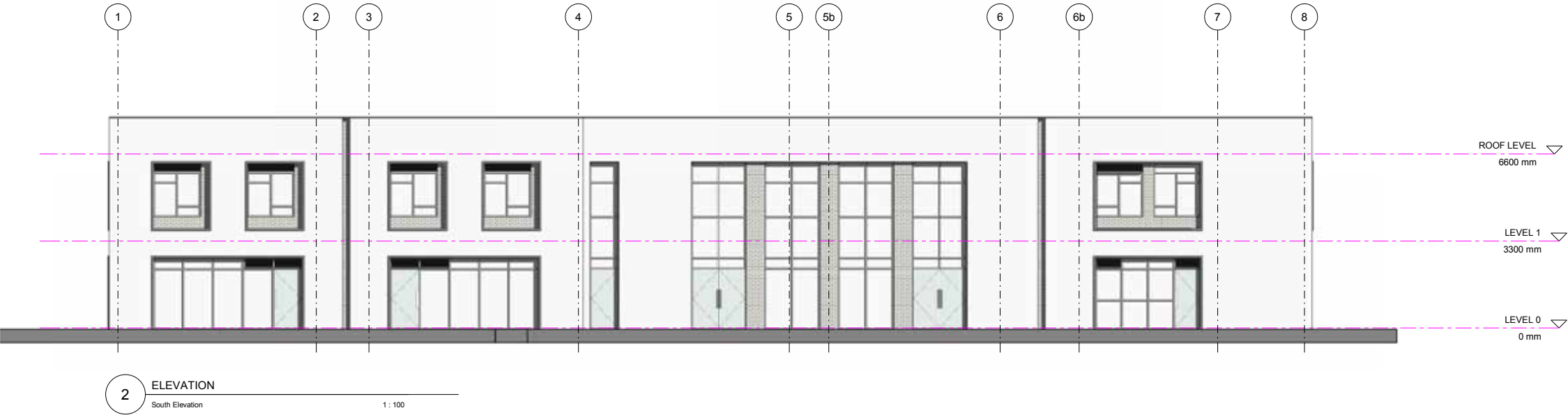
03.4 Layout
PROPOSED ROOF PLAN

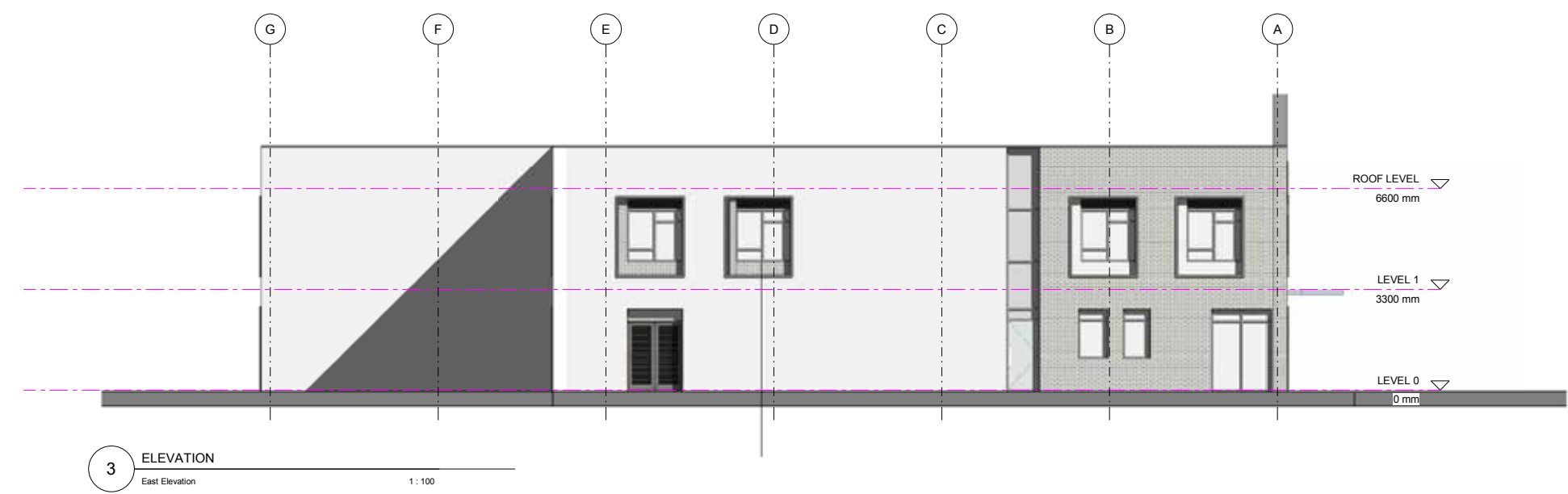


03.5

Layout

PROPOSED BUILDING ELEVATIONS

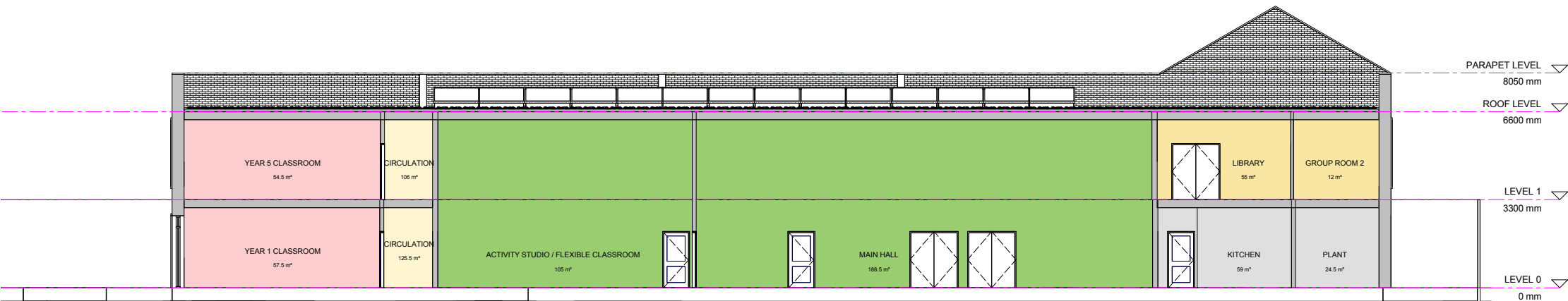




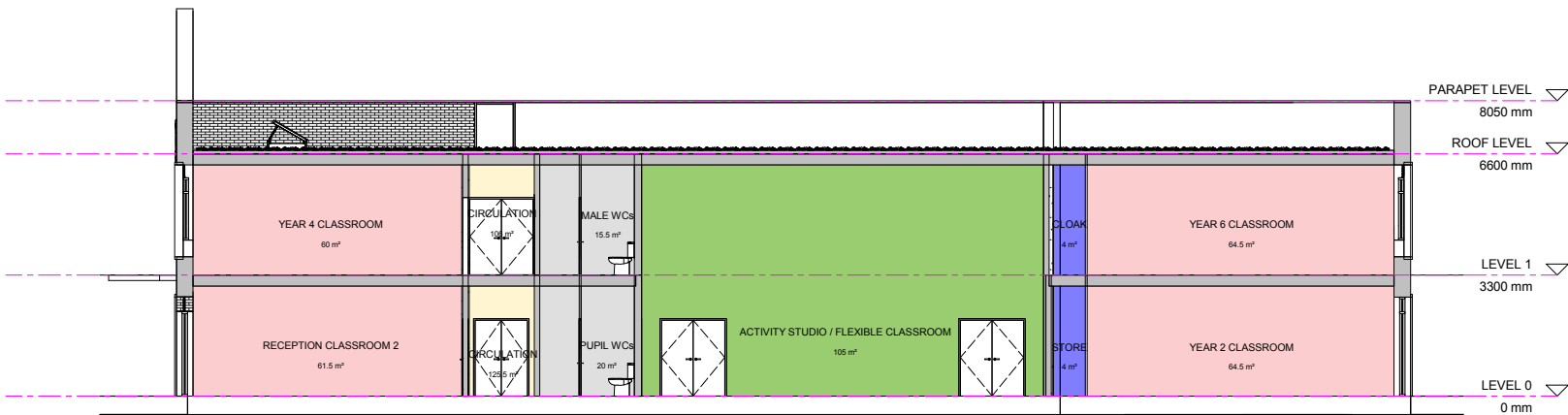
03.6

Layout

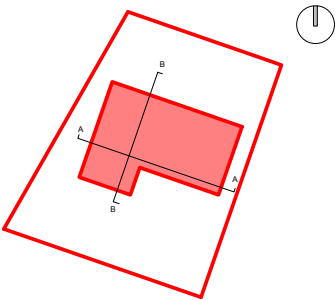
PROPOSED BUILDING SECTION



1 Section A-A 1 : 100



2 Section B-B 1 : 100



03.7

Layout

Daylighting and Ventilation

Daylighting Strategy

The building façades have been designed to comply with the EFA (Education Funding Agency) Day light design guide which suggests that the façade glazing should be at least 30% of the area of the rooms to the internal elevation where no external obstructions exist.

The proposed windows for the Primary school exceed the 30% mark; we have allowed for 40% of the classroom area to be glazed. This will provide sufficient natural daylight into each classroom.

Ventilation Strategy

High and low level openings provide sufficient ventilation which is more than the recommended 5% of the floor area. The opening of the windows mean draught can be reduced by directing the air flow above the occupied zone under windy conditions. The high level openings also provide a better solution for night/purge ventilation.

Both mechanical and passive ventilation [Hybrid Ventilation] is provided by a separate set of insulated ventilated louvres above the windows in line with the ceiling bulkheads for airflow to maintain consistent temperatures all year round.

A room ventilation unit will provide fresh air to the teaching rooms and main hall primarily when the outside temperature drops to the point when the internal loads are insufficient to heat the incoming air to a comfortable condition.

04.0 Appearance

The following section shows the overall look of the building in its surrounding context

This section includes the following information:

- Materials
- Landscaping
- Sustainability and Ecology
- Site Security- Secured by Design
- Management and Services

04.1 Appearance Materials

MATERIAL CHOICE

- The majority of the building will be brickwork and white render with contrasting infill panels
- Window frames to be PPC Aluminium
- School name signage to be brushed stainless steel on brickwork



04.2 Appearance

EXTERNAL VIEWS



AERIAL VIEW



MAIN ENTRANCE



VIEW FROM PLAYING FIELD

04.3 Appearance

MITIGATION TREE PLANTING

Mitigation Tree Planting

The scheme requires the clearance of a group of trees along the Site's western boundary. Within ADAS Tree Quality and Constraints Report (January 2016) the assessment classifies this group of trees (G147, T152, 151, 145 & 146) as Category C - Low quality.

Although these trees are not valued within the Tree Quality and Constraints Report this scheme recognises the visual value of this group of trees. This block of trees provide a green edge to the Mapledurham Playing Fields and a visual buffer between the playing field and Hewett Avenue.

To accommodate a new school and playground in this area the landscape design proposes to remove this group of low quality trees and replace with better quality, compensation tree planting.

Planting Strategy

The new planting looks to recreate a green buffer along the western boundary whilst introducing feature trees that will compliment the contextual character of the Mapledurham Playing Fields.

Boundary Treatment Strategy

To comply with Secure By Design the new school site will be enclosed and secured with 1.8m high welded mesh fence. This has been designed so that community use of the Multi-use Games Area can occur outside of school hours with separate access which does not impinge the security of the school site.

Elsewhere the grounds are divided in to play spaces with internal delineation fencing.



Fagus sylvatica 'Dawyck'



Liquidamber styraciflua

-  - Trees to be removed :
Refer to ADAS Tree Quality and Constraints Report (Jan 2016) for assessment details.
-  - Proposed small ornamental tree :
Chosen for neat canopies where space is limited and smart approach to the building is desired, (*Pyrus calleryana* 'Chanticleer')
-  - Proposed fastigate feature tree :
Chosen to replicate the columnar form of the Poplar trees within the wider park (*Fagus sylvatica* 'Dawyck')
-  - Proposed orchard trees :
Chosen for interest in the Reception and Yr1 playground (*Malus hupehensis*)
-  - Proposed large feature tree :
Chosen for its seasonal colour and canopy size (*Liquidamber styraciflua*)
-  - Proposed small/medium tree mix :
A variety of canopy sizes and growth rates chosen to recreate a green boundary to the Site with parkland qualities. (*Prunus sargentii*, *Betula ermanii*, *Sorbus torminalis*, *Pinus nigra* and *Acer platanoides* 'Emerald Queen')

-  - Boundary Fence : Secure by Design 1.8m high welded mesh fence
-  - Internal Fence : 1.1m high bowtop fencing
-  - Timber Fence : 1.1m high timber post and rail



Welded mesh black fence

05.0 Sustainability & Ecology

OVERVIEW

Sustainability Overview

The proposed schemes aims to achieve a BREEAM rating of Excellent

The proposed new development will incorporate the following mechanical and electrical elements that are highly energy efficient and will ensure that the development will emit less CO2.

- Low energy LED lighting utilized throughout
- Intelligent lighting control (utilizing absence detection, presence detection and daylight controls)
- Low energy EC fan motors on AHUs
- Variable speed drive fans on the main ventilation plant so that the fresh air ventilation ramps up and down to meet the building occupancy load.
- Variable speed drive controls on all heating pumps so that the pumps ramp up and down speed to meet the building heat load.
- BMS which monitors all energy usage within the building and warns of out of range energy usage.
- Natural ventilation in all classrooms designed to meet the requirements of the Facilities Output Specification as issued by the Education Funding Agency.

In addition, the school is being designed to the Facilities Output Specification as issued by the Education Funding Agency, which provides enhancements to the design of daylighting, acoustics, ventilation and heating over and above that of a typical new school.

Renewable Technology

A wide range of renewable energy technologies have been considered for the proposed development and a detailed appraisal of each technology is discussed in section 4 of this report. Solar Photovoltaic was considered the most suitable technology for the site and was capable of achieving the 20% CO2 reduction of the sites total energy use.

Ecology and Arboricultural Summery

Existing Tree Mitigation

An arboricultural survey has been carried out (January 2016) to the existing trees on the Mapledurham Playing Fields site. Along the site's western boundary is a cluster of trees that have been identified as low quality Category C trees.

The proposal recognises the value in this group of trees, as not only does it provide a continuous green edge to the site, but also provides a visual buffer between the playing field and Hewett Avenue.

To accommodate the need to reinstate the green edge and a new school and playground in this area, the landscape design proposes to remove this group of low quality trees and replace them with better quality, compensation trees.

06.0 Security

SECURED BY DESIGN

Secured by Design

As the site will share a main entrance drive with the existing Pavilion and tennis courts, to ensure a safe and secure school environment and to comply with Secured By Design guidelines, the new school site will be enclosed and secured with 1.8m high welded mesh fence.

A separate access will ensure that the communities use of the Multi-use Games Area can occur outside of school hours and that it will not impinge on the security of the school site.

Elsewhere the grounds are divided in to play spaces with internal delineation fencing:

Boundary Fence : Secure by Design 1.8m high welded mesh fence

Internal Fence : 1.1m high bowtop fencing

Timber Fence : 1.1m high timber post and rail

A new timber fence with maintenance gate prevents access to the remaining parcel of land to the north of the school site.

