



Alley's School Lodge Extension and Refurbishment

MAP Architecture

Design , Access and Heritage Statement - January 2024

Project Lead - MAP Architecture

Prepare on behalf of - Alley's School

Project Description - Caretakers Lodge Extension and Refurbishment

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Main School Site Aerial View

Site and Location

The site is located in the grounds of Alleyn's Main School Site in Dulwich, which sits between Hillsboro Road to the north and Townley Road to the southwest. The grounds consist of a large area of playing fields situated to the east of the main school buildings.

The School's Main Building, which dates back to 1887, has a grand Victorian main elevation, placed at the centre of a formal crescent that faces onto Townley Road.

The main entrance to the school is adjacent to this crescent, where the Caretakers Lodge Building acts as the first point of contact on arrival at the school. This is the site for this proposal, which seeks to extend and refurbish the lodge, to significantly improve the sense of arrival, security and safeguarding provision at this location.

The current lodge building, completed in the 1970s, is a recent addition. However, historically there was a building in this location, as shown on the pre 1900's plan below.

Dulwich Village Conservation Area is located to the south of the school grounds. This extends to include the crescent lawn area and the main school building. However the application site and the existing lodge are not within the conservation area.



Historic Map of Alleyn's Pre 1900



Existing Security Lodge

The existing lodge is a brick bungalow with a pitched slate roof. This building is the first point of contact that the students, teachers and visitors to Alleyn's have with the school. The 1450 pupils and 600 staff of Alleyn's arrive through this entrance every day.

The lodge was built as a caretakers lodge, but was converted into a welcome building over 10 years ago. It currently functions as the school security point where visitors sign in on arrival, with the security team and other administration offices located inside.

This application proposes to extend and renovate the existing security lodge to create a new secure reception and entrance to the school, aiming to address the following key issues:

- Security
- Safeguarding
- Welcome
- Street-scape
- Sustainability

The current arrival procedure at the school asks visitors to sign in with the security team located in an office to the front of the security lodge. This is done through an open window, where the visitor is then redirected onto the main reception currently located in the main school building. This current set up has a number of issues which are outlined on the following analysis pages.





Briefing and Consultation

Working with Alleyne's School, MAP Architecture has led a series of workshops to solidify, develop and record the initial project brief. Further workshops and presentations were then held as the design proposals were developed. This was to enable stakeholder input at key design stages.

During this consultation, MAP Architecture met with key stakeholders and committee groups within the School:

Key Stakeholders:

- Chief Operating Officer
- Head of Commercial and Community Activities
- Lead Receptionist and Team
- Premises Manager and Security Team
- Registrar and Admissions Team
- Estates Bursar
- Commissionaire

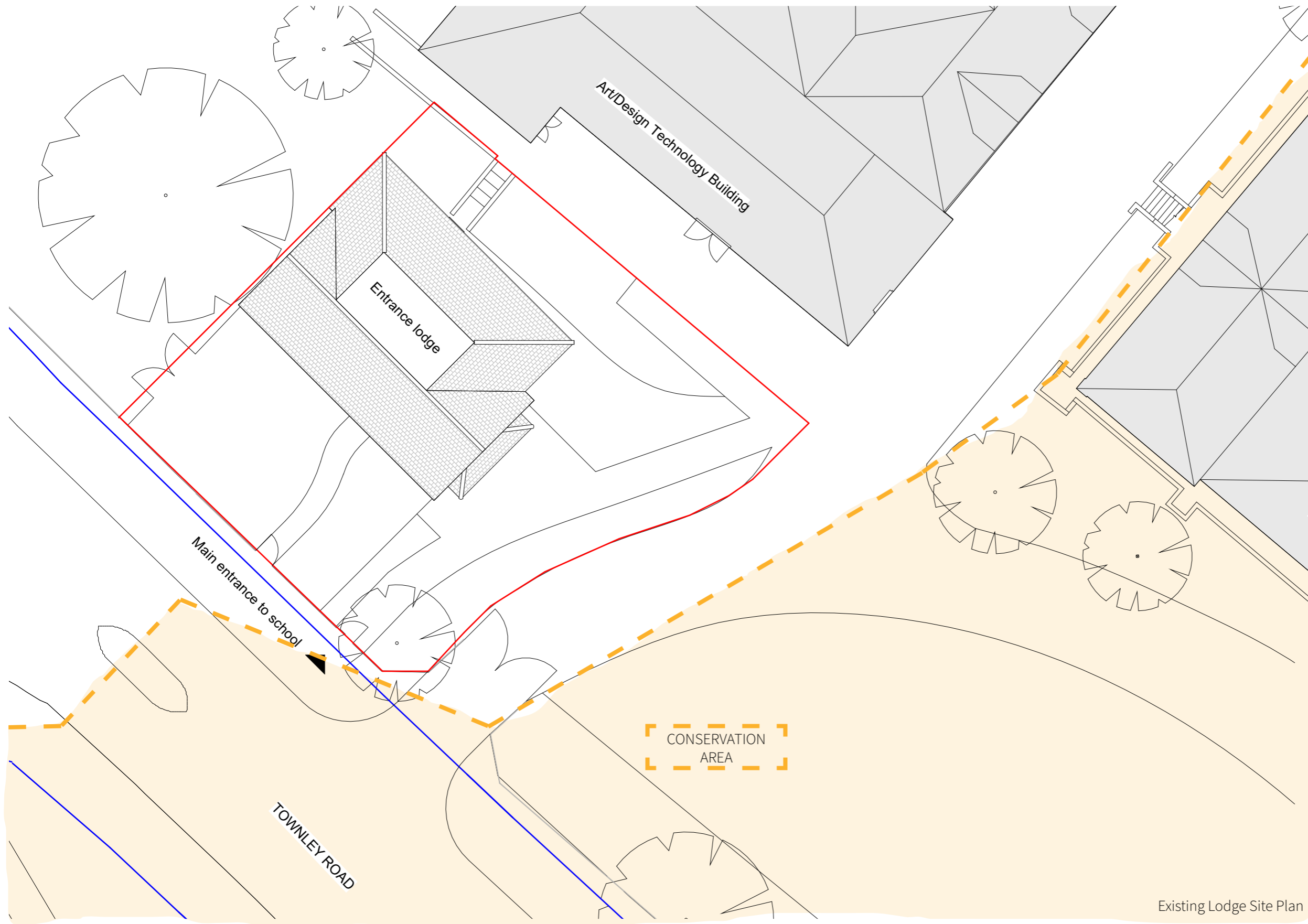
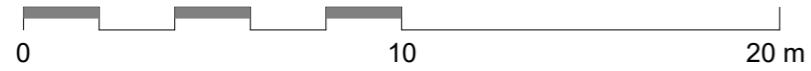
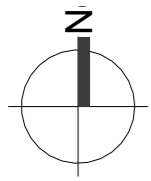
School Committees:

- Capital Projects Group
- School Development Sub-Committee
- School Finance and General Purposes

The analysis and design development on the following pages has been carried out using the feedback from the consultation sessions.

Key Consultation Dates with the School

- 28th November 2022 - MAP Workshops with key stakeholders
- 17th January 2023 - MAP Presentation and Feedback with Capital Projects Group
- 9th February 2023 - Presentation to School Development Sub-Committee (MAP not present)
- 8th March 2023 - MAP Presentation with key stakeholders, followed by drop in session
- 9th March 2023 - Presentation to School Finance and General Purposes Meeting (MAP not present)

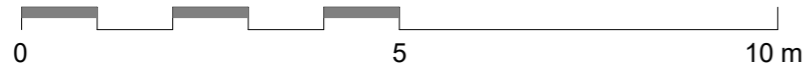
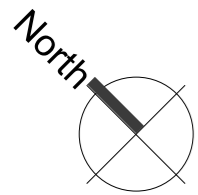


Existing Plans and Brief

The key brief objectives are as follows;

- Extension of security lodge to create new **welcoming** designated reception and waiting area
- Create a **secure** entrance to school that can be easily managed by security to ensure **safe guarding** of pupils and staff
- Redefine **street-scape** around entrance to create activated frontage and open green spaces
- Optimise **sustainable** materials, low carbon design and operations
- Reconfigure internal layout of lodge to provide better efficiency and **quality of work spaces**
- Provide improved visitor and staff facilities allowing full **accessibility** to all
- High quality, considered design to respect the adjacent conservation area and **heritage assets** of the school

Existing Lodge Site Plan



Existing Building Analysis

Feedback from the stakeholder consultation guided the following analysis of the existing building.

1. Arrival

- Visitors often have to wait in the rain while they sign in through a window, before being redirected to reception.
- No allowance for the public to enter lodge building to use WC facilities.
- No waiting area for visitors to school.
- Visual monitoring is the only way to control entry and exit from the school.
- Visibility from security desk across site entrance is poor.
- There is no provision for 'fringe' meetings where parents and/or pupils can be met privately before entering site, a vital part of safeguarding provision.

2. Security Office

- Server box located in here makes space overheat.
- CCTV monitors on view to visitors through window, should be in a private space.
- No meeting room/breakout area for security meetings.

3. Entrance

- Entrance to the rear connects to communal kitchen area, making this into a bit of a corridor.
- Large wasted area of circulation space.

4. Post Room

- Post Room is too small for number of deliveries.
- Currently combined with security eating facilities.

5. Communal Kitchen/Corridor

- Not suitable as private working space due to corridor.
- Nowhere to sit for lunch/breaks.

6. Registrar/Admissions Offices

- Inefficient use of space, a mix of open plan and private with flexibility would be preferred.
- No communal breakout space, or a space to host a meeting with a parent.
- No secure storage space for confidential info (also computers should be secure).

7. WC's

- Neither WC is fully accessible.
- No WC suitable for public use.
- No lobby to WC from kitchen.

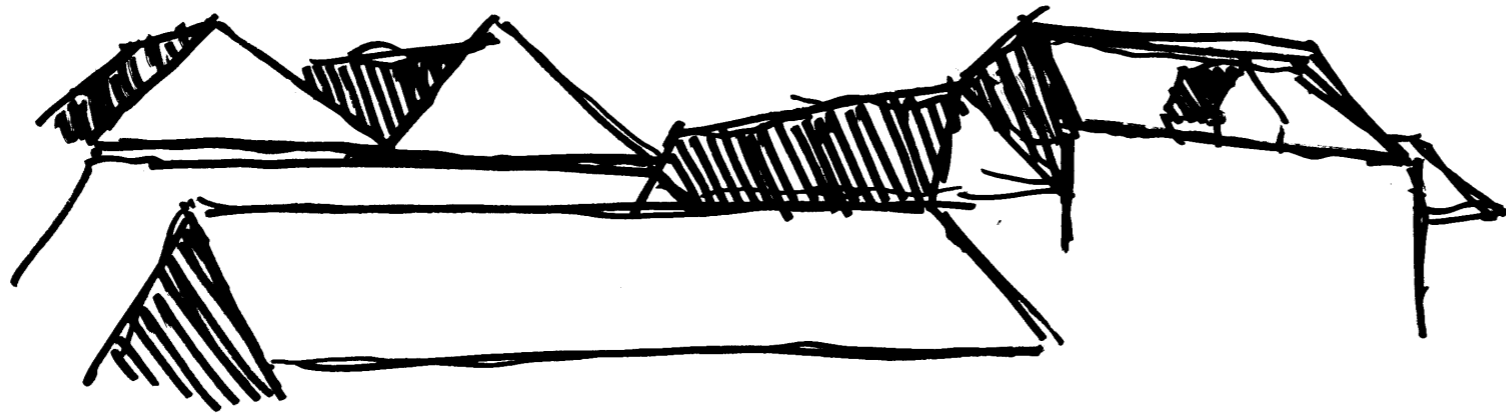
Existing Lodge Ground Floor Plan

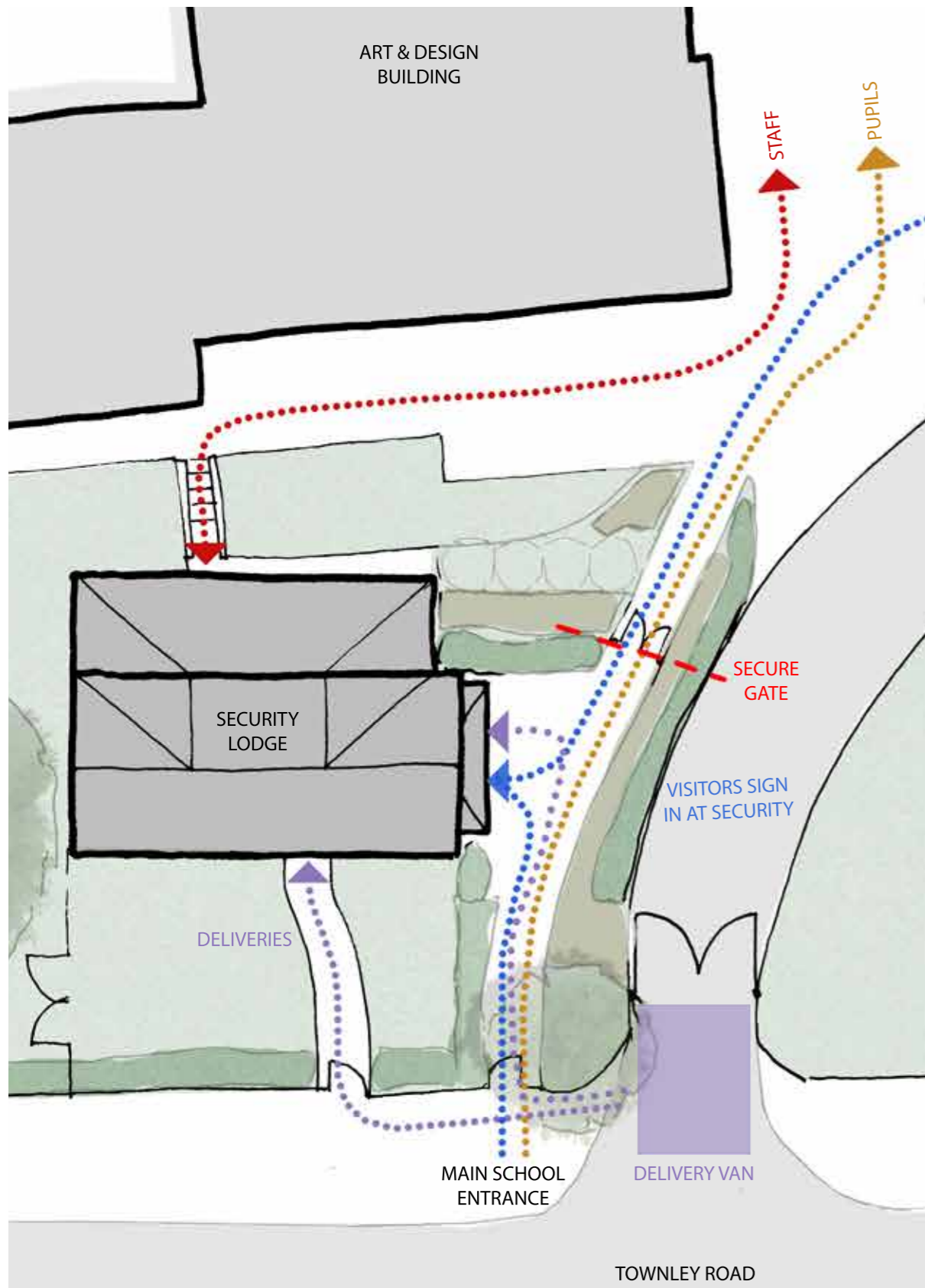
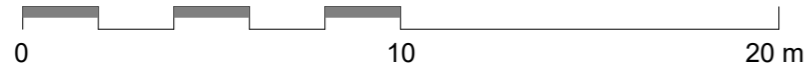
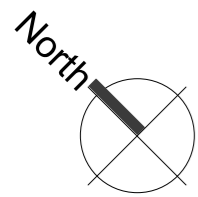
Contextual Analysis and Street-scape

The approach and view of the school buildings is seen from the street as a series of pitched tile roofs.

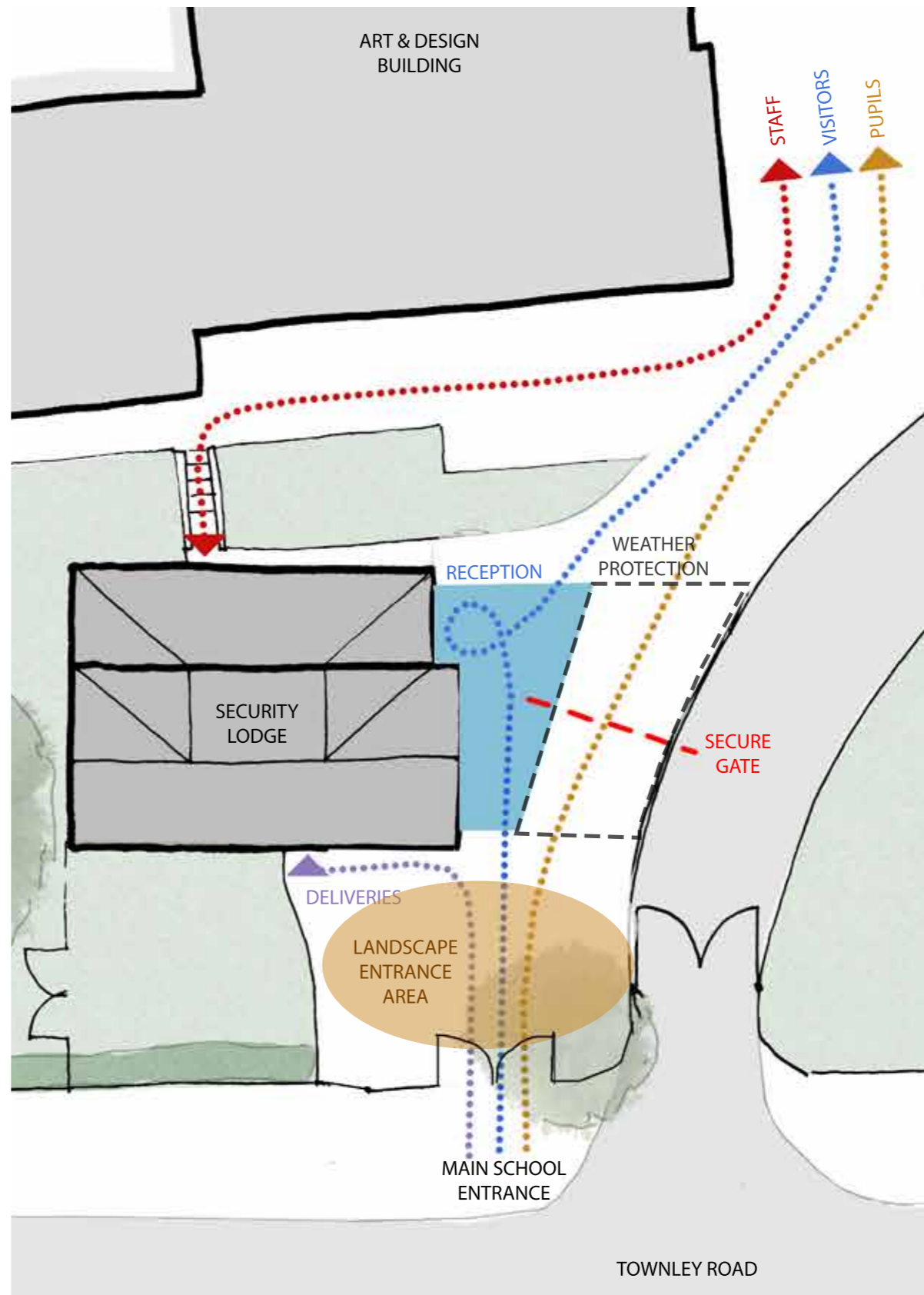
The current treatment of the street boundary is blocked by a thick hedge and fencing. The entry point, a single narrow gate, is hard to identify upon arrival.

The proposal aims to improve the legibility and accessibility of the entrance, by opening up the frontage, while still maintaining a secure entrance to the school.





Existing Massing and Circulation



Proposed Massing and Circulation

Site Strategy and Massing

Movement diagrams of the current arrival sequence on the site have been analysed in order to improve the security, efficiency and flow of people into the school.

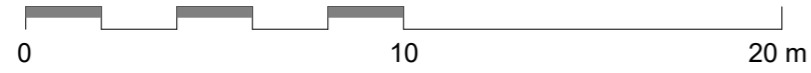
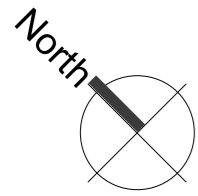
A number of massing options for the lodge extension were explored. The adjacent diagrams show the existing and proposed circulation and massing.

The proposal is to open up the space to the front of the existing lodge to create a landscaped entrance area and moment of arrival. A lightweight extension to the security lodge building would allow the reception to be relocated here. This would leave a generous route into the school adjacent to the extension, which would be covered by a weather protecting canopy. Secure access would be monitored by a wide secure gate.

Design Development

A number of options were explored in the development of the design. These were reviewed and commented on by key stakeholders. This process has aided the arrival at the final proposal.





Proposed Site and Landscaping

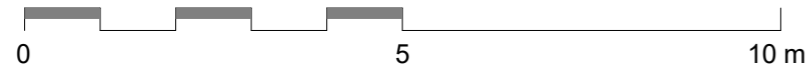
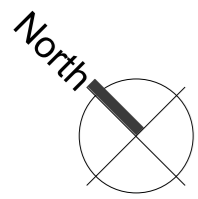
The proposal is for a lightweight timber frame extension to the existing security lodge.

The site strategy proposes to open up the existing entrance to the school, making it more accessible and welcoming. Bench seating and planting will create a space for parents and pupils to gather at drop off and pick up times.

A green roof will cover the proposed timber extension, and photovoltaic panels are proposed on the south facing security lodge roof.

Key Features:

- Open up entrance
- Welcome plaza
- Landscaping with bench seating
- Separate delivery window and drop off
- Bike parking
- South facing PV Panels
- New Reception Extension
- Weather Protected Walkway
- Green Roof



Proposed Ground Floor Plan

The extension to the lodge will provide a new welcoming reception and waiting area for visitors to the school.

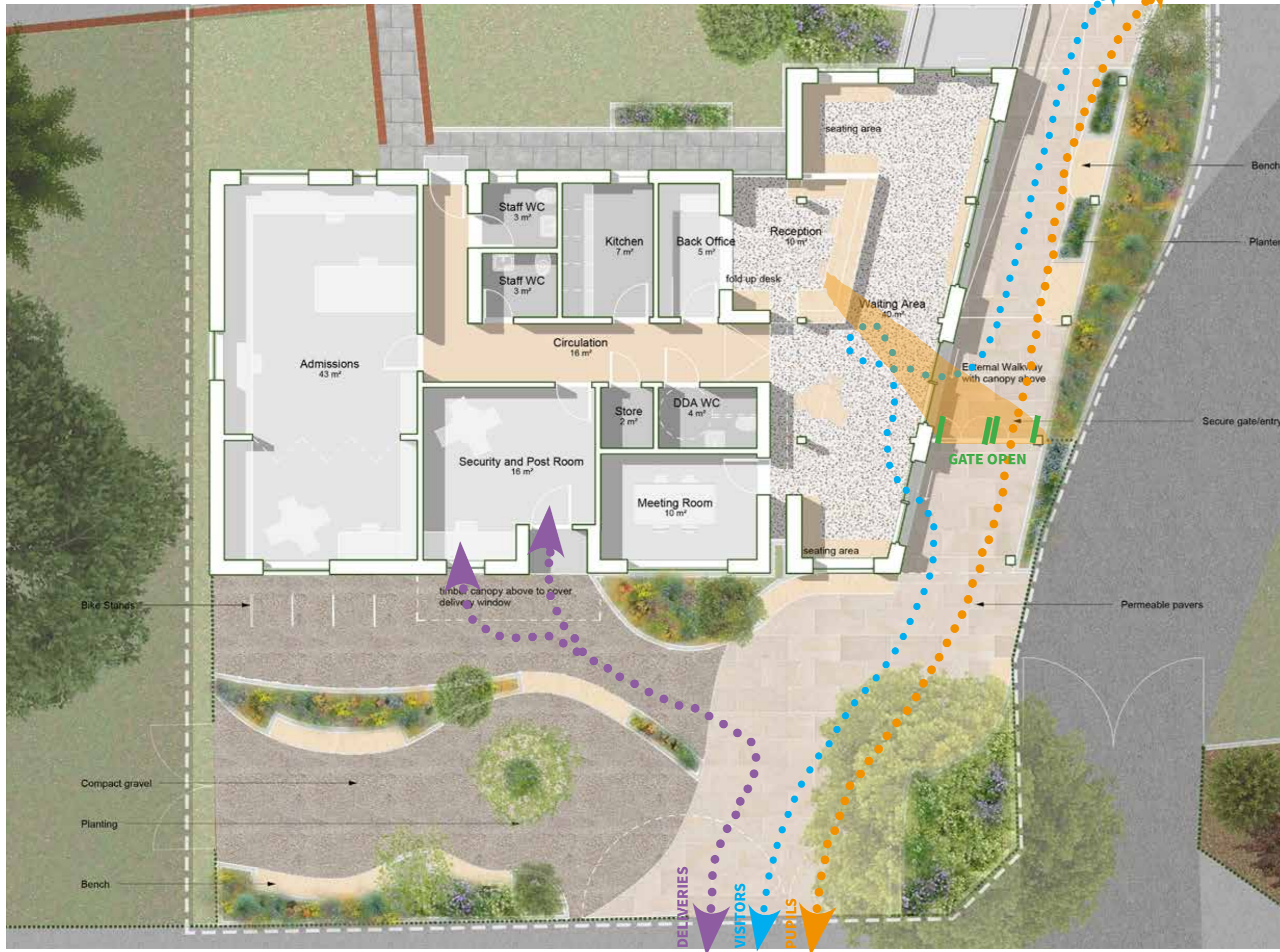
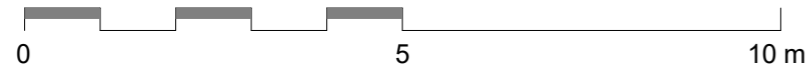
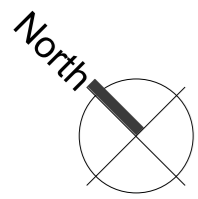
The space adjacent to the waiting area under the timber canopy is external, providing a sheltered walkway and entrance into the school through a secure gate.

The internal layout of the existing lodge has been reconfigured to provide more efficient use of space for the building users.

An additional accessible WC suitable for staff and public use is incorporated along with a designated kitchen and a meeting room.

Key Features:

- New Reception Extension
- Weather Protected Walkway
- Secure gate entry to school
- Welcoming waiting area
- Improved internal layout:
- Visitor Accessible WC
- Visitor Meeting Room
- Staff Kitchen
- Separate delivery entrance window and drop off



Secure Operation and Circulation

The extension will allow control over the circulation in and out of the school. When large numbers of pupils arrive, the gate will be open and they can pass through the covered walkway. This will be monitored by the security team and reception, along with duty teaching staff.

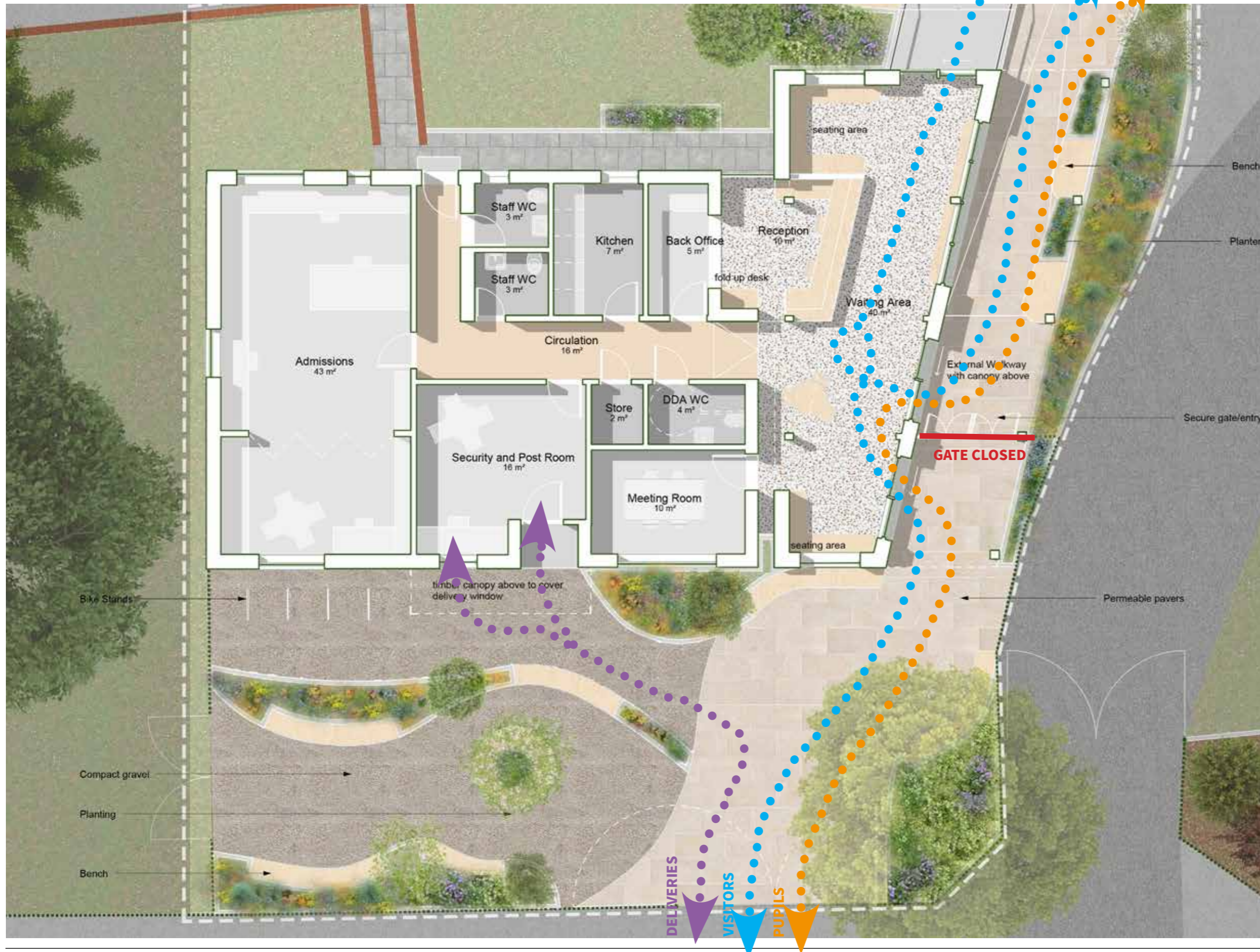
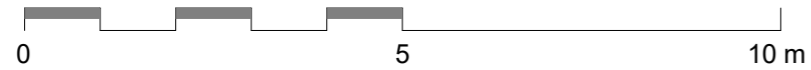
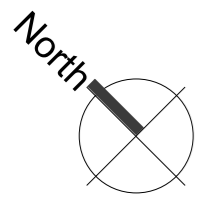
Visitors can simultaneously be signed in at reception.

Deliveries can be separately dealt with via the deliveries window and door to the post room.

The diagram adjacent shows how the extension and new gate would operate during school opening and closing times.

**DURING SCHOOL HOURS -
DROP OFF AND COLLECTION
(8-9am, 3-4pm)**

**GATE OPEN
RECEPTION OPEN
SECURITY OPEN**



Secure Operation and Circulation

During the day in school hours when fewer people will be entering or leaving the school, the gate will be closed and everyone will be directed through reception to sign in/out.

This will be the same for pupils and visitors.

Deliveries can be separately dealt with via the deliveries window and door to the post room.

The diagram adjacent shows how the extension and new gate would operate during the school day.

SCHOOL HOURS - DAY TIME (9am-3pm)

GATE CLOSED
RECEPTION OPEN
SECURITY OPEN



Suggested Entrance View



Timber Frame Front View



Timber Frame Side View



Timber Frame Rear View

Proposed Design Concept

The timber extension is to be constructed as a lightweight portal frame. This appears as a traditional form to the front, mirroring the shape of the existing lodge building.

Using a parabolic design, straight timber beams are positioned to create a curved roof form which opens up to the school to the rear.

This creates a dynamic roof structure from inside, and allows the reception and waiting area to have a strong connection to the rest of the school.

The timber structure will be covered with a green roof, blending in with the grassed lawn adjacent.

Key Features:

- Exposed timber frame
- Straight timber beams to create curved roof form
- Portal Frame structure
- Surprise of roof once inside
- Green roof

Proposed Elevations

Materials Key

1. Timber portal frame
2. Vertical timber cladding
3. Timber rafters between portal frame
4. Aluminium/timber composite sliding doors
5. Aluminium composite window
6. Fixed high level glazing
7. Photovoltaic panels on existing lodge roof
8. Green roof
9. Timber bench seating
10. Timber planter
11. Air Source Heat Pump



Front Elevation



5 9 5 2 4



Rear Elevation

Proposed Elevations

Materials Key

1. Timber portal frame
2. Vertical timber cladding
3. Timber rafters between portal frame
4. Aluminium/timber composite sliding doors
5. Aluminium composite window
6. Fixed high level glazing
7. Photovoltaic panels on existing lodge roof
8. Green roof
9. Timber bench seating
10. Timber planter
11. Air Source Heat Pump



Side Elevation



Drawing of Proposed Entrance Gate 1:20

Street-scape and Entrance

The proposal aims to open up the entrance to the school to create an activated frontage and open green spaces. The existing solid hedge along the street boundary will be removed to give a visual connection into the site and the new entrance plaza.

The existing single leaf gate will be replaced by a large double gate making the entrance more accessible.

The entrance gate will be marked by a timber portal frame structure that mirrors the form of the existing lodge and the proposed extension. The Alleyn's School crest is incorporated to the design, formally marking the main school entrance and creating a moment of arrival.



Street Elevation





External Suggestive Visual



Six Square House, Young Projects



Curved form from straight beams

Precedents

The following projects and images have been selected to give an example of the type of aesthetic that could be created.

- Portal Frame structure
- Straight timber members to create curved roof form
- Surprise of roof once inside
- Exposed timber interiors
- Weather protected transition space
- Pre-fab timber frame



Governors Island Welcome Centre, Office III



Lea Bridge Library, Studio Weave

Materials

The proposed material palette for the extension aims to compliment the existing lodge and the surrounding school buildings, while ensuring materials are robust, low maintenance and high quality. A key part of the design brief is to create a building with a low carbon footprint. This will be achieved using a timber frame and lightweight screw pile foundations.

The structure will be constructed from an exposed timber frame, and be clad in a light timber cladding. This will support a green roof.

Photovoltaic panels are proposed to be installed on the existing south facing lodge roof, to generate power for the building operation.

EXISTING PALETTE

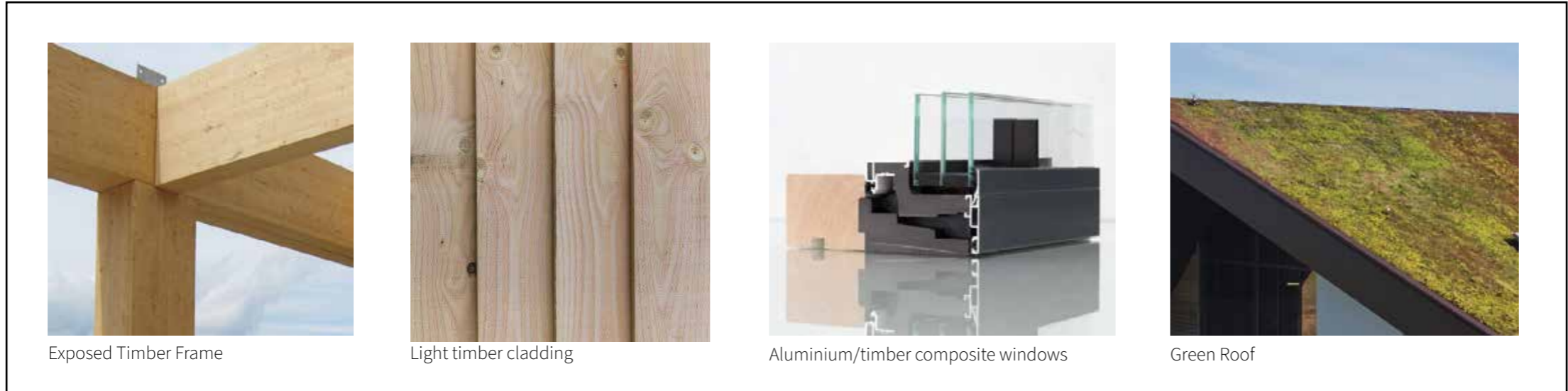


Soft Brown Brickwork

Dark Grey Tiled Roof

Red Tile Coping Details

PROPOSED PALETTE



Exposed Timber Frame

Light timber cladding

Aluminium/timber composite windows

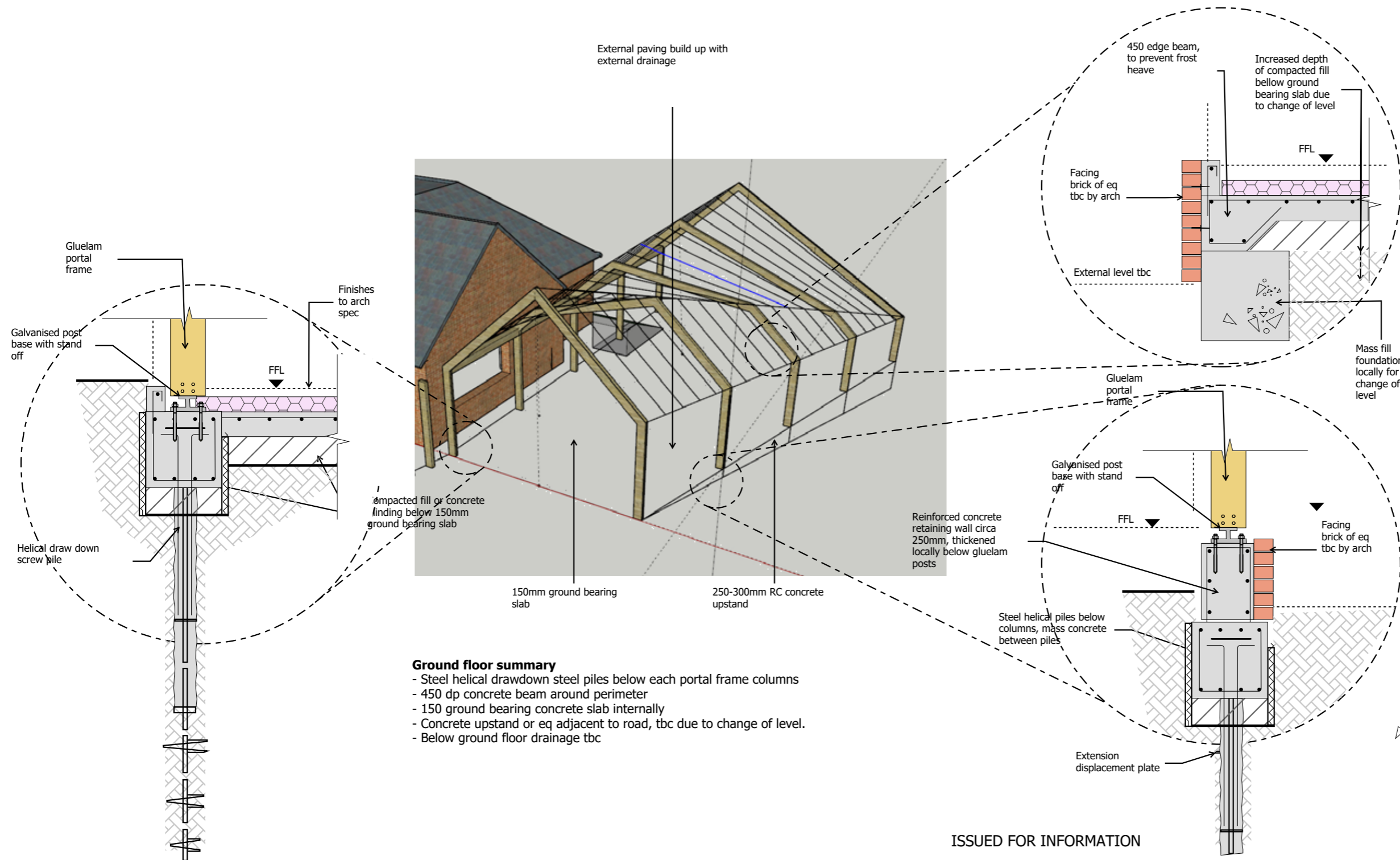
Green Roof

Structural Strategy

Working with a structural engineer, an initial structural strategy has been developed as part of the design process.

The timber frame will be made up of 5 portal frames, which will sit upon helical screw piles.

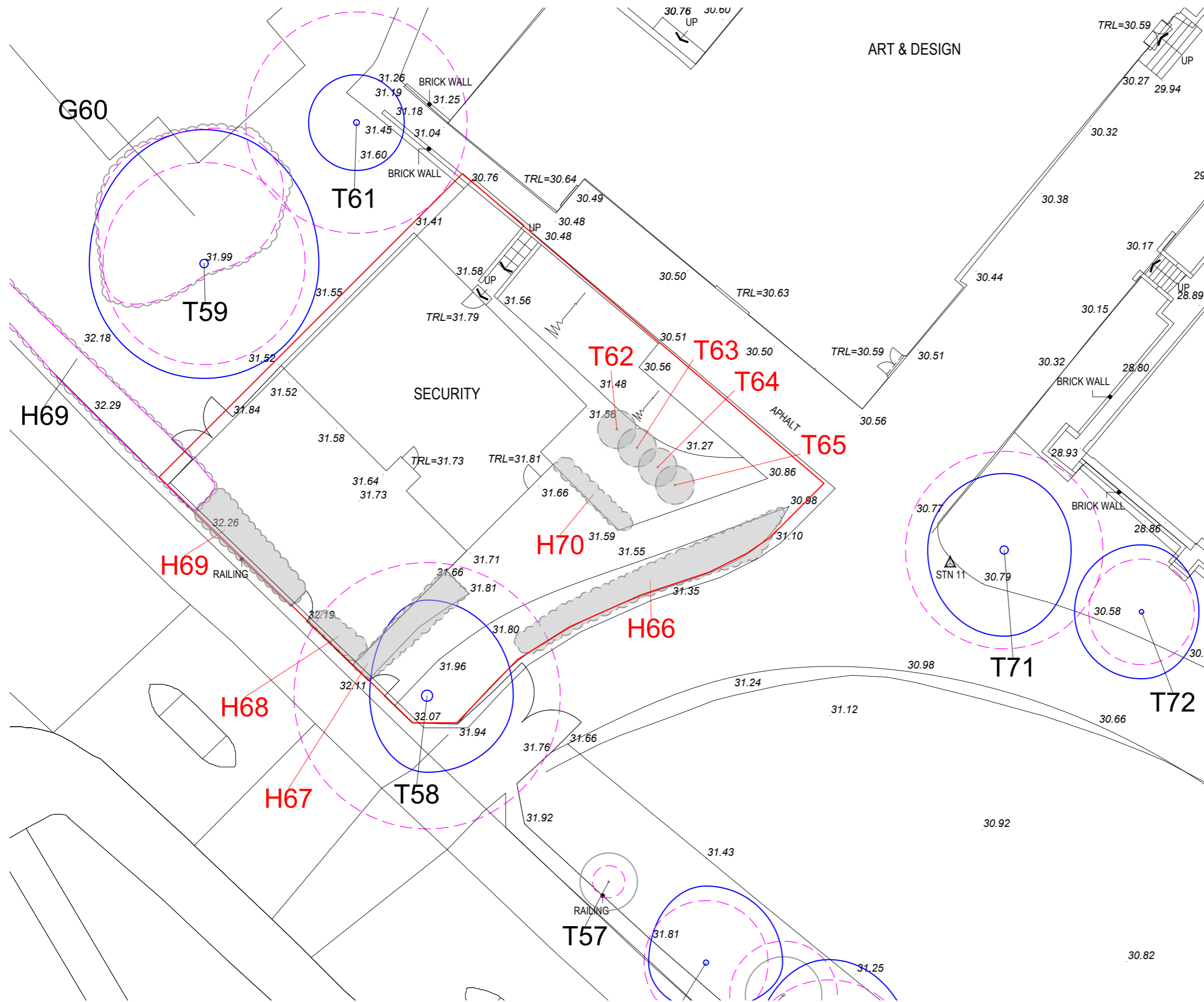
The proposal aims to have a lightweight impact on the ground, working to reduce the amount of concrete used in the construction.



Ground floor summary

- Steel helical drawdown steel piles below each portal frame columns
- 450 dp concrete beam around perimeter
- 150 ground bearing concrete slab internally
- Concrete upstand or eq adjacent to road, tbc due to change of level.
- Below ground floor drainage tbc

ISSUED FOR INFORMATION



ART & DESIGN

Arboriculture

An arboricultural survey and report has been completed to assess the impact of the proposal on the surrounding trees, and is included in the application.

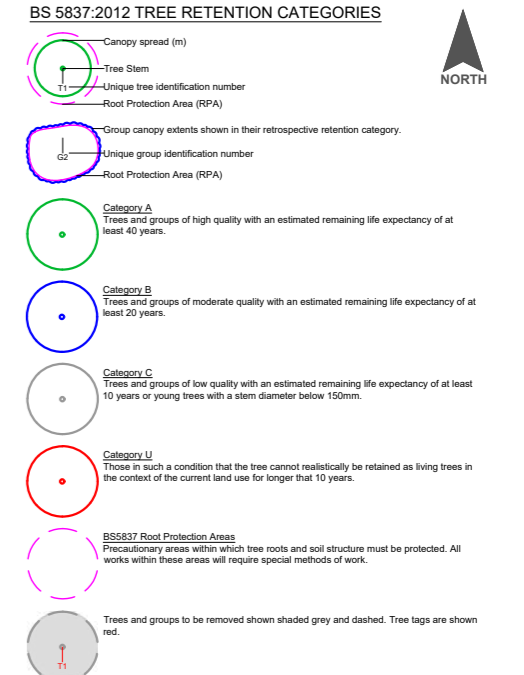
The proposal will require the removal of 4 no Category C small scale trees, and 5 no Category C Hedgerows.

The loss of this planting is unavoidable to realise the proposals, and is deemed acceptable as the loss is considered to have a low impact on the visual character of the site.

The proposed landscaping aims to replace the loss of the greenery and offer additional biodiverse planting across the site.

The only notable tree on site, T58 Common Lime, will not be adversely impacted by the proposal, and will be protected during the works.

The details of this are set out in the Arboricultural Report.



Type 1. Trees -



Clockwise from top left: Crataegus persimilis, Amelanchier lamarckii, Crataegus monogyna, Malus sylvestris. Image credits: Google

Type 2. Planting for Sunny Sites



Calamagrostis x acutiflora 'Karl Foerster', Sesleria autumnalis, Festuca amethystina. Image credits: Google



Eupatorium maculatum, Eryngium, Achillea millefolium. Image credits: Google

Type 3. Planting for Shade



Eurybia divaricata, Geranium 'Rozanne', Luzula nivea. Image credits: Google

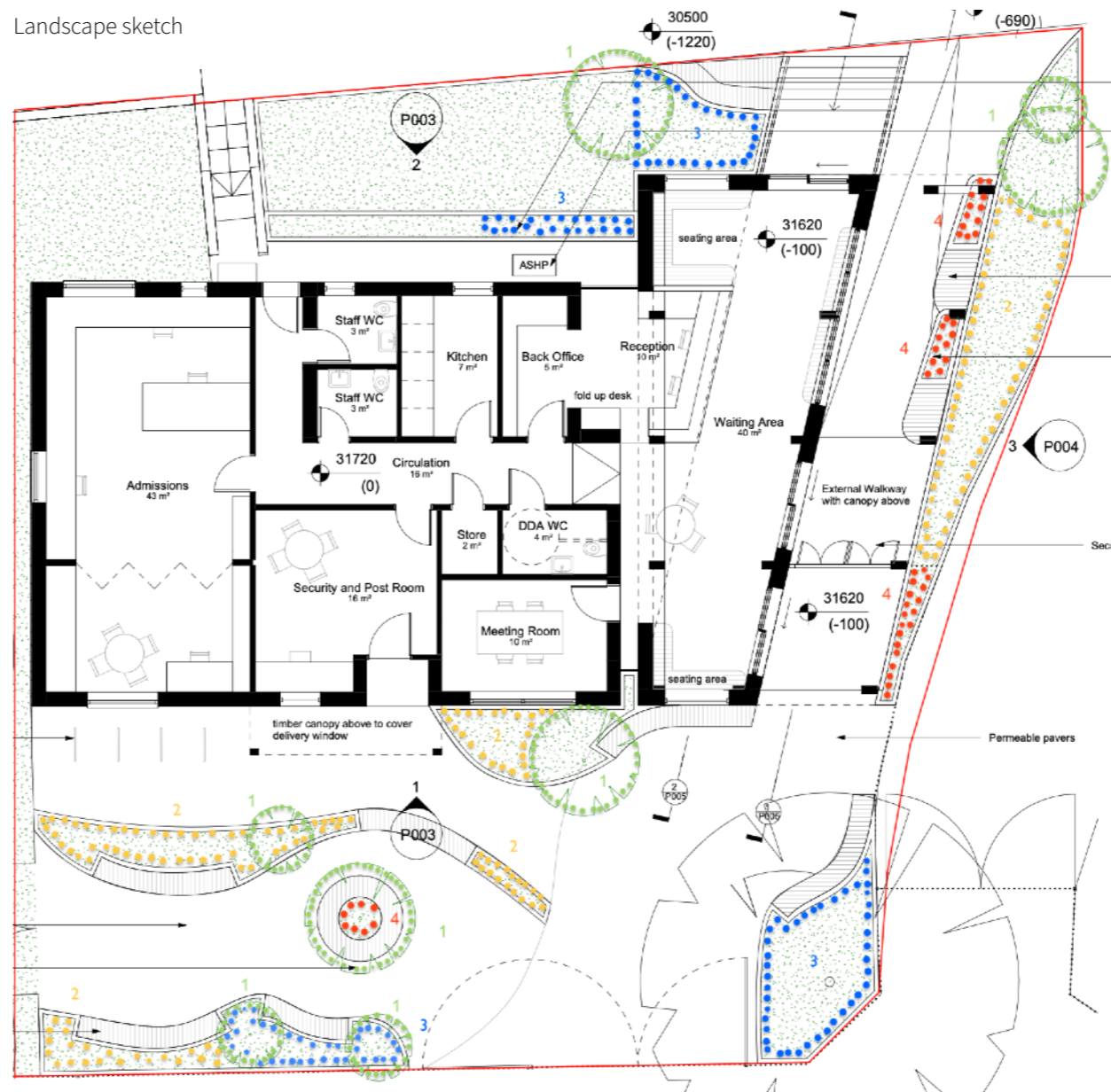
Type 4. Planting in Containers



Fragaria vesca, Salvia rosmarinus Prostrata Group, Salvia officinalis 'Purpurascens'. Image credits: Google



Landscape sketch



Planting location diagram

- ● ● 1. Trees - Small to medium height
- ● ● 2. Plant for Sunny Sites - Grasses and herbaceous perennials
- ● ● 3. Planting for Shade - Perennials, small shrubs, bulbs
- ● ● 4. Planting in Containers - Edibles and scented herbs of education and sensory purpose

Landscape - Planting

A landscape design and report has been included as part of the application.

The proposed landscaping aims to replace any loss of the greenery and offer additional biodiverse planting across the site. It has an open and naturalistic feel, bringing nature into the daily experience of school visitors with benefits to overall well-being and improved mental health.

There are four main types of planting proposed across the site, set out in the adjacent diagram and images. This brings a complexity of different layers - ground cover, canopy, middle height and diversity of plant species.

The scheme proposes high plant density for long-term land performance where the species interact in a dynamic and ecologically competitive system, bringing more value to biodiversity and less maintenance.

Pockets of fun such as edibles and sensory plants in planters throughout the site introduce educational value.

Tall see-through grasses and perennials such as Verbena bonariensis and Calamagrostis Karl Foerster will offer privacy to the reception building without blocking views of the street.

Landscape Materials

EXISTING EXTERNAL PALETTE



Light grey paving stones

Dark grey tarmac path

Grey timber fence

Black metal boundary fence

The proposed material palette for the hard landscaping aims to compliment the proposed lodge and the surrounding school buildings, while ensuring materials are robust, low maintenance and high quality.

A key part of the external design is to create a biodiverse, climate friendly landscape. The proposed materials for the hard landscaping will act as SuDs systems, using a mix of resin bound permeable surface and permeable paving slabs to ensure sustainable drainage.

The proposed benches and planters will be constructed in a light timber to match the proposed extension.

The existing black boundary fence will be retained, and only removed to replace with an large gate. The proposed new gate to the school grounds will also be in black metal to match existing.

PROPOSED EXTERNAL PALETTE

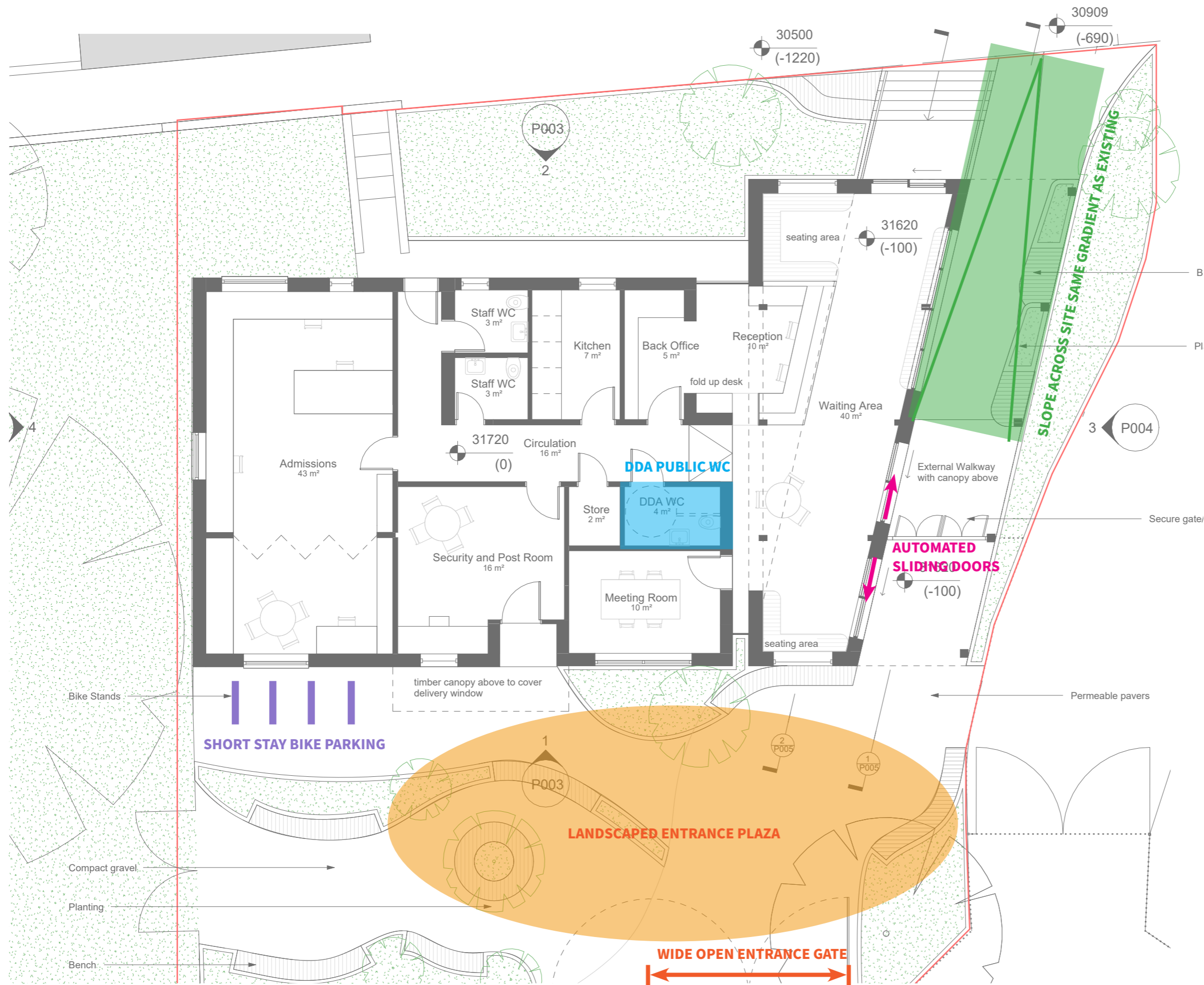


Resin bound permeable surface

Permeable Paving Slabs

Light timber benches and planters

Black metal boundary fence



Accessibility

The proposal will not have any impact on the nearby Townley Road. Based on this, and the pre-application feedback, no transport statement has been included in the application.

The proposal aims to improve the accessibility and legibility of the existing entrance to the school to all.

The proposed landscaped area to the front of the lodge makes the school more visible to all visitors, offering an entrance plaza to gather with bench seating, and incorporating a wider opening gate.

The new reception extension is fully accessible with automatic sliding doors and provides a new D.D.A compliant public WC facility.

There is an existing level change across the site as the ground slopes away to the rear. The covered walkway will slope down to the rear at the same gradient as the existing path.

Additional bike storage is provided to the front of the entrance lodge offering short stay visitors a place to park bicycles. Staff and pupils will continue to take their bikes through the secure gate and use the bicycle parking within the school grounds.



Delivery and Servicing

The red dashed line boundary of the proposal is a pedestrian only area, and the new gate is a pedestrian only entrance.

Vehicular delivery and servicing procedures are not impacted by the proposal and will remain as existing, where the vehicular entrance gate is used.



Sustainable Principles

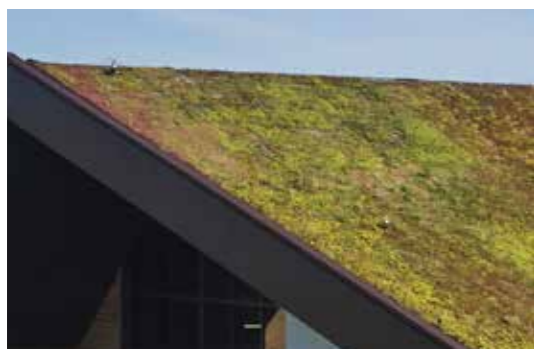
1. Passive Design High insulation and Airtightness



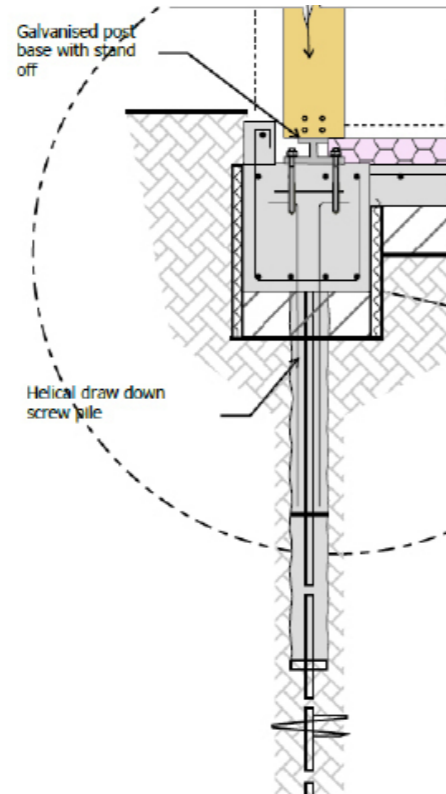
2. Natural low carbon materials: Timber frame and cladding



Renewable Energy



3. Low impact construction



Sustainable Principles of Design Approach

The proposed design has been developed with the aim of reducing the energy consumption, associated carbon emissions and environmental impact relating to the development. Working with Qoda Consultants, the energy performance of the proposal has been assessed through a number of options appraisals. The following energy strategy has been developed and has informed the design process. This is outlined further in the Energy Statement provided by Qoda:

1. Environmental Performance and Sustainable Technologies.

The environmental performance of the lodge extension is key to the proposals. All new and retrofit elements in the proposal will work to reduce heat loss and create a comfortable environment, including:

Passive Design

- Efficient passive design utilising high levels of insulation to minimise heat losses.
- Airtight construction to minimise heat losses via air infiltration.
- High performance triple glazed windows and doors to maximise solar gain and minimise heat loss.

Efficient Building Services

- Energy efficient building services and controls.
- Radiators and Under floor heating for space heating are served by an Air Source Heat Pump.
- Minimising distribution and storage losses from space heat and hot water systems

Renewable Energy

- The inclusion of low or zero carbon technology (LZCT) in the form of Air Source Heat Pumps for heating and Solar PV panels to generate electricity on site.
- Photovoltaic panels are proposed on the south facing pitched roof of the existing lodge. This is a prime location for generating energy for the building.
- An Air Source Heat Pump (ASHP) and upgrade to the existing boiler are proposed to improve energy efficiency.

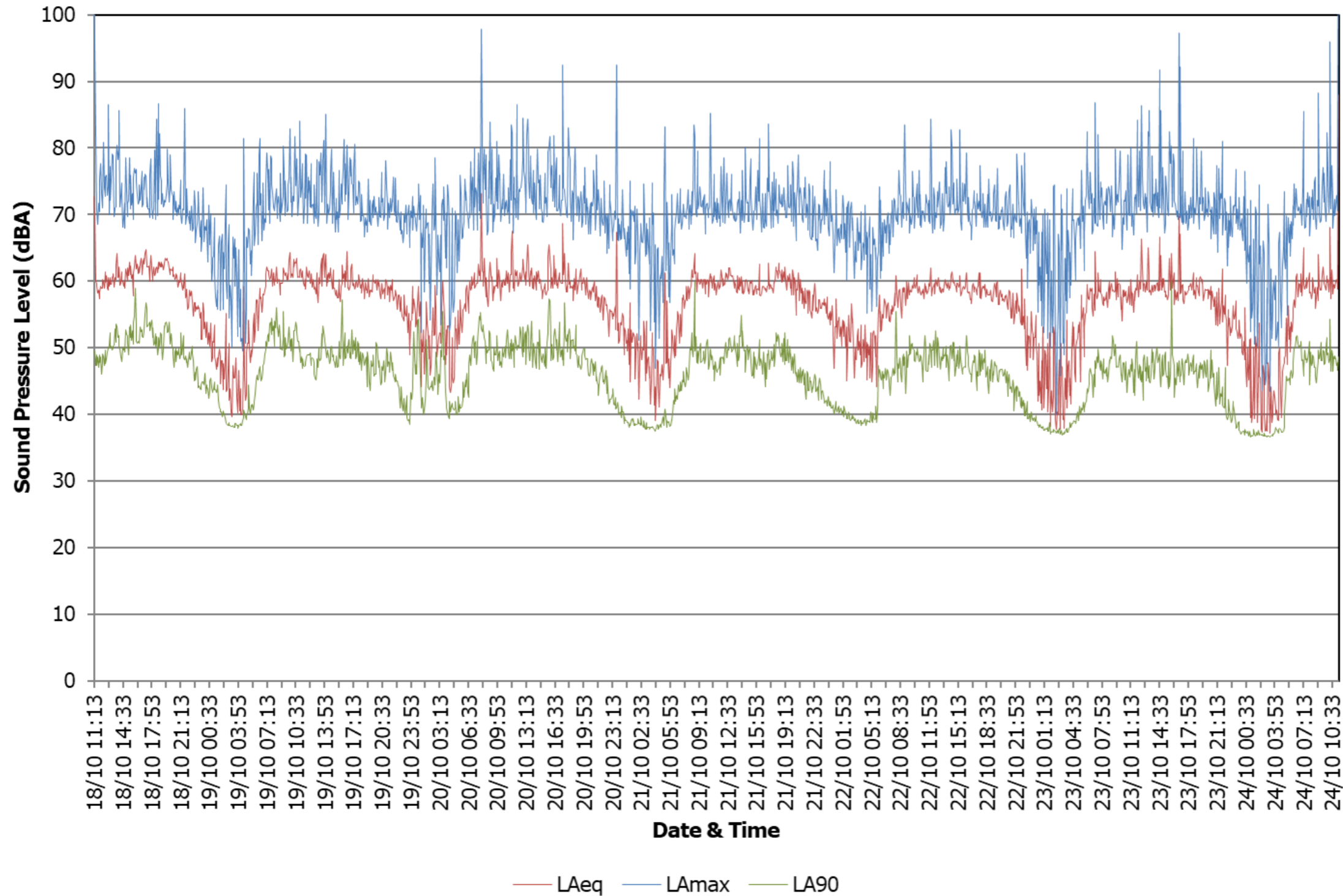
2. Sustainable Materials and Construction - Retrofit

The proposal aims to bring a new lease of life to the existing lodge, reusing the existing building with refurbishment and extension, rather than creating a whole new building. The materials for the proposed extension have been carefully selected for their sustainable properties. Timber frame construction is proposed for its properties for sequestering carbon when cultivated from well managed sustainable forests. Incorporating careful detailing also gives the opportunity for end of life reuse for the timber elements.

3. Low Impact Construction and Improved Biodiversity

A low impact approach to the construction aims to minimise disruption on site during the works and allow a light touch. Mini piles footings are proposed to support the timber extension, reducing the amount of carbon intensive concrete required and reducing damage to the surrounding habitats. Off site pre-fabrication for the timber frame elements will be utilised to reduce material wastage, and streamline the works on site. The proposed landscape features aim to improve biodiversity across the site, as well as a green roof to the new extension.

Environmental Noise Measurements - Alleyn's School Lodge 18th to 24th October 2023



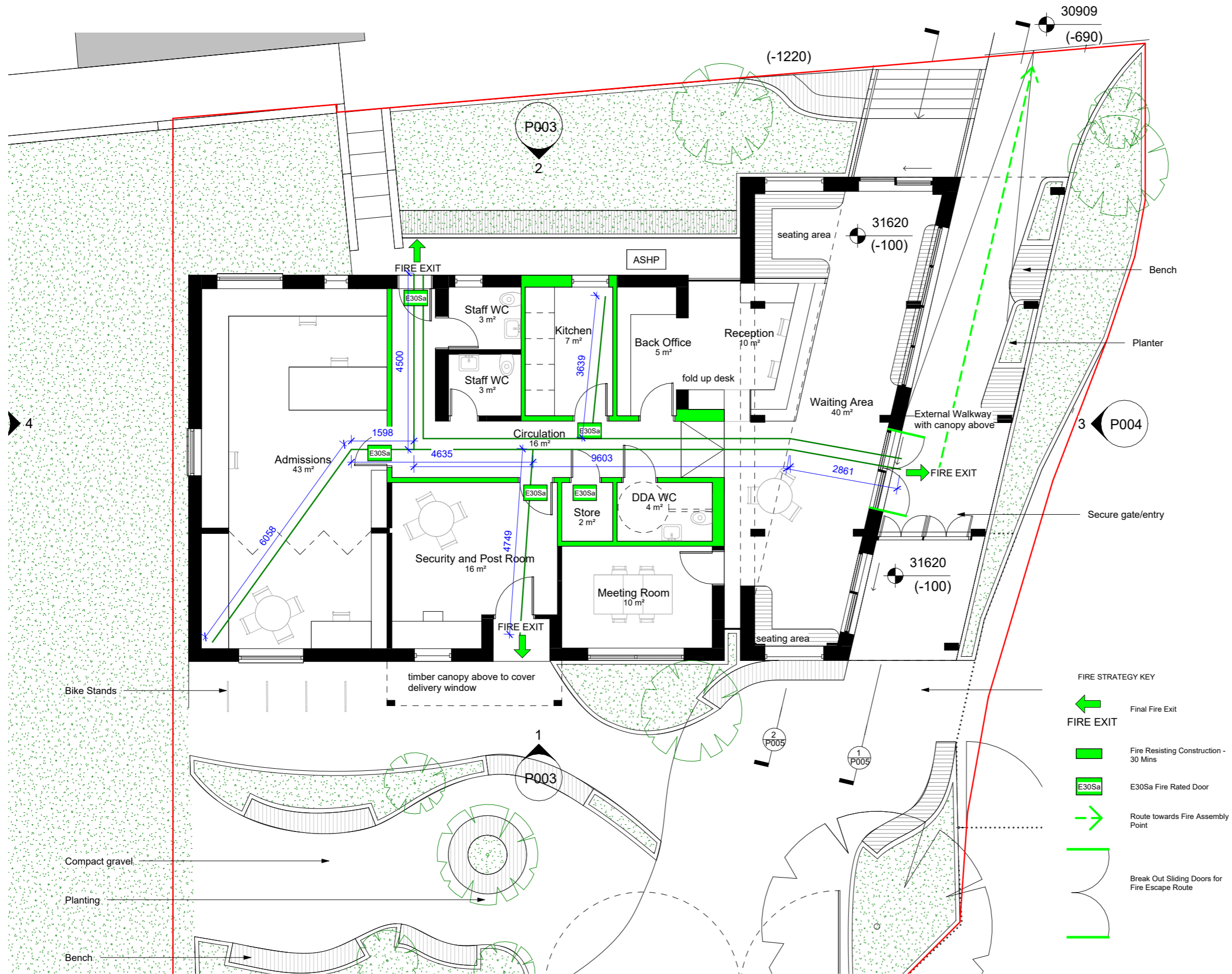
Noise Impact Assessment

Ambient noise monitoring was undertaken to assess the prevailing noise levels at the site. The report by 24 Acoustics included in the application addresses the control of noise break in from external sources with reference to BB93 'Acoustic Design of Schools'.

The report concluded that based on the measured noise levels, a natural or hybrid ventilation strategy that relies on open windows is acceptable.

The report also determines the limits of noise producing equipment applicable to new building services plant associated with the proposed scheme. The specification of such equipment will be in line with the recommendations in the report.





Fire Strategy

A fire report and strategy has been completed by Toga Fire, and included as part of the application.

The adjacent diagram explains the proposed fire strategy.

A 30 minute protected corridor will be created in the existing lodge building providing two directions of escape. However the second escape route to the rear, is only via stepped access, so the protected corridor will ensure accessible escape through the waiting room. A third fire exit is available through the security and post room.

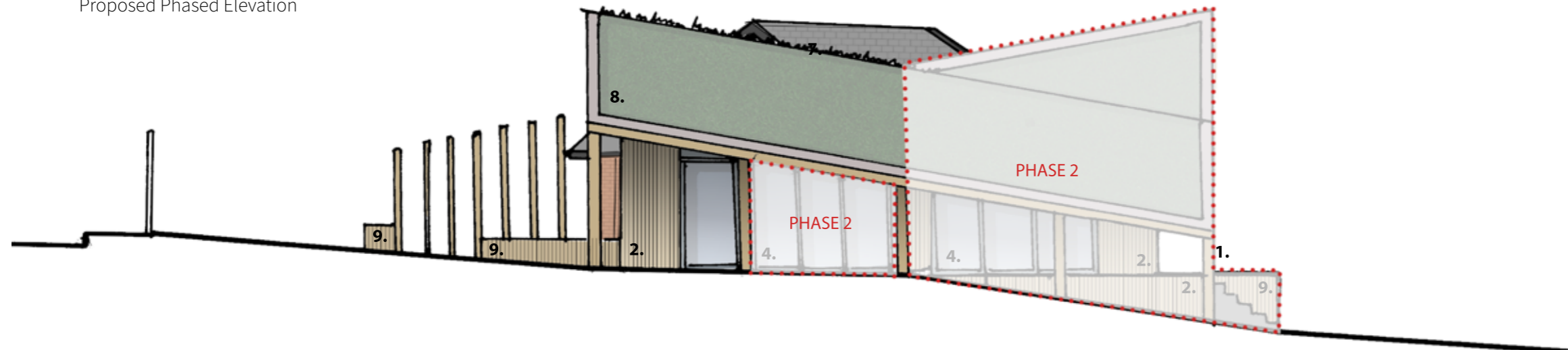
The Store and Kitchen areas will be enclosed to 30 minutes protection.

One main set of fire escape doors are highlighted from the new waiting area. Although there are two other exits from this space, the fire exit will have break out doors to allow escape in all scenarios. This exit directs into the school grounds towards the school assembly point located on the School Playing Fields by the Edward Alleyn Building, maintaining school grounds safe guarding, even in the event of a fire.

A suitable fire detection and alarm system, and escape lighting will be provided throughout.

Existing fire services will serve the new extension as they currently serve the lodge, with the nearest active fire hydrant located opposite the site on Townley Road.

Proposed Phased Elevation



Phased Construction

Given the volatile nature of inflation and particularly construction inflation, the School has asked for the Scheme to be deliverable either as one project, or over two phases. This is part of the School's prudent approach to project financing.

If delivered over two phases:

Phase 1 will see 50% of the canopy structure constructed, along with a minor extension to the security lodge. This phase will be undertaken as soon as possible, in order to address the security issues with the current entrance layout.

Phase 2 will see the remaining 50% of the canopy constructed, and the new internal envelope housing the new reception and waiting area.

PHASE 1



PHASE 1 Frame

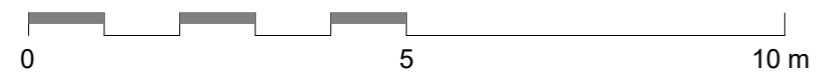
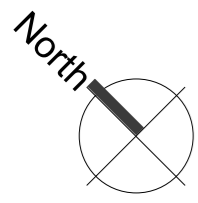


PHASE 2

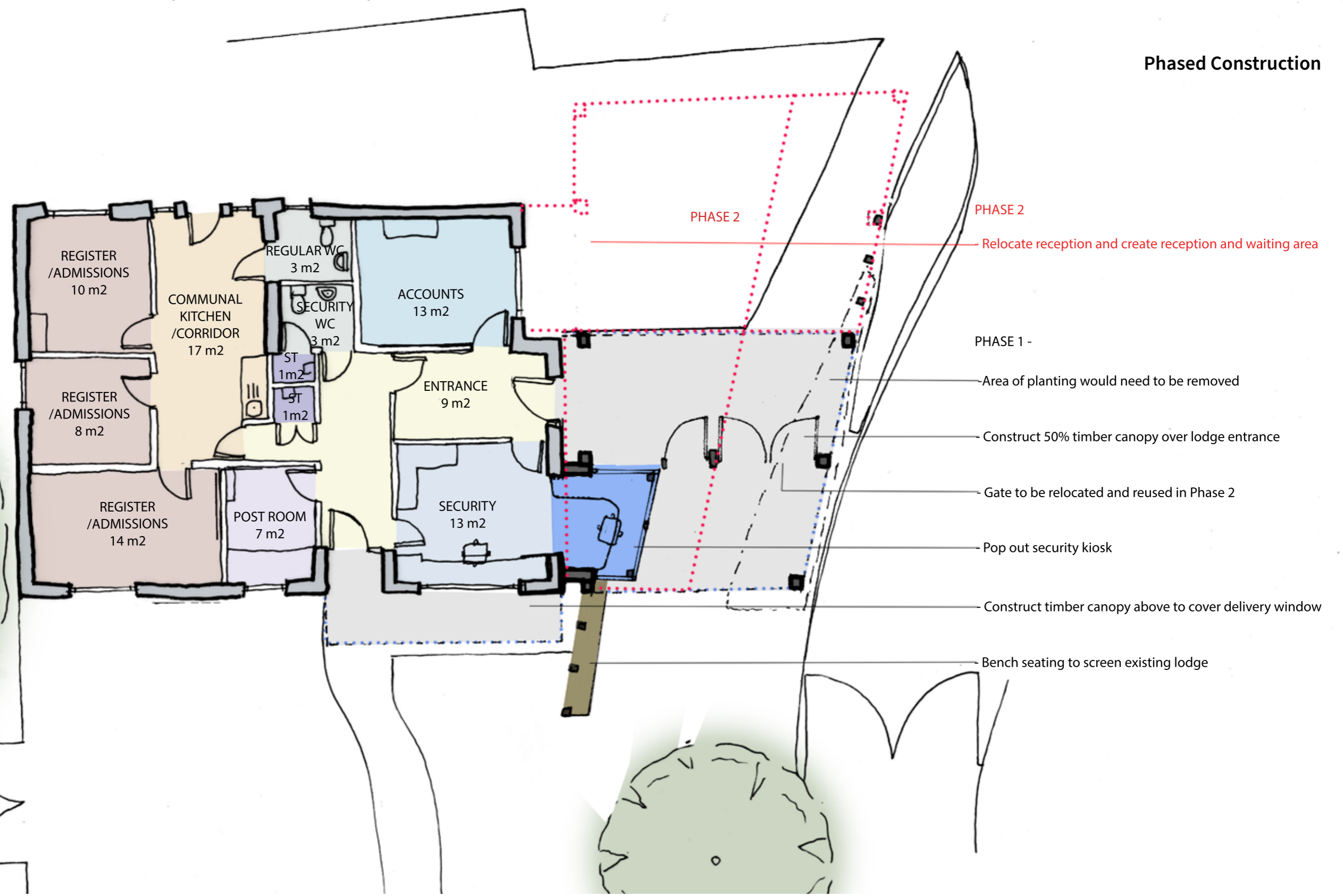


PHASE 2 Frame





Phased Construction





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