

## 4 / DESIGN PROPOSALS

### 4.3 / Site Masterplan

The proposed new buildings for the secondary school are located to the northeast corner of the site. The main Teaching Block and Sports Block are connected to provide access, servicing and footprint efficiencies. Car parking and visitor access is entirely to the east of the proposed building with pupil access via a pedestrian boulevard to the south of the building, allowing for mustering in the rear playground before and after school hours.

The informal playspace is situated to the immediate west of the school building with integrated external dining area. This space is linked to a MUGA, which has good access to the Sports Block changing rooms, and external table tennis area. The grass fields are located to the west of the proposed MUGA. The MUGA is a porous surface so is less invasive in the MOL than other hard surfaces.

This proposed arrangement, whilst deviating from the original Control Option, which comprised separated blocks, evolved from a thorough options study for the site and response to the local context. Providing the facilities required of an 1050 place secondary school whilst retaining a three storey height has meant that the proposed MUGA must be located outside of the enclosed MOL. Although this is hardstanding, the MUGA is for sports use and has an essential educational and community benefit.

The Comments received from the local authority planners at feasibility stage and during our pre-app meetings emphasised that development should wherever possible be restricted to the contained northeastern MOL. This response supports the proposed masterplan. During Pre-application studies the Local Planning Authority have identified the need for part of the site to be allocated as Public Open Space as a wider planning benefit to the community. This POS has been integrated within the proposed masterplan.



Proposed Illustrative Masterplan

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## 4.4 / Building Layout

The proposed new buildings for the secondary school are located to the Northeast of the proposed site. The teaching accommodation is arranged as a 'Superblock' design, with teaching spaces around the perimeter and dark/heart spaces in the centre. The Sports Block is connected to the Teaching Block and has been designed to be accessible from the Teaching Block or independently from external as required.

### School Grounds

Visitors and staff will enter the building via doors within an extensive glazed screen in the west facade of the main Teaching Block. A separate community entrance is provided to the western Sports Block, allowing community access out of hours without opening up the main school building.

Students will enter the site via a pedestrian gate from Hospital Bridge Road to the east of the site or via a pedestrian gate to the South from Heathfield recreation ground. There is an existing vehicle access gate utilised by Sempervirens Nursery on HBR. This application proposes the rearrangement of the site access in this location to provide inset fences and separate pedestrian and vehicle gates for the school independent of the nursery access. New safe crossing points to the site entrance are proposed and a dedicated cycle lane is provided into the school site. From the south, a new path will be proposed that takes pupils from Powder Mill Lane via paths through Heathfield recreation ground into the school site through a new access gate and path.

The site has been arranged as efficiently as possible to provide multiple play spaces supporting different characters and uses. Close to the school site, small seating and greenery areas are proposed to encourage calm, whilst further to the west more boisterous hard and soft sports pitches are proposed.

Step free access from the changing rooms to sports hall, pitches and MUGAs on the site will enable unrestricted access for disabled members of the school and community users.

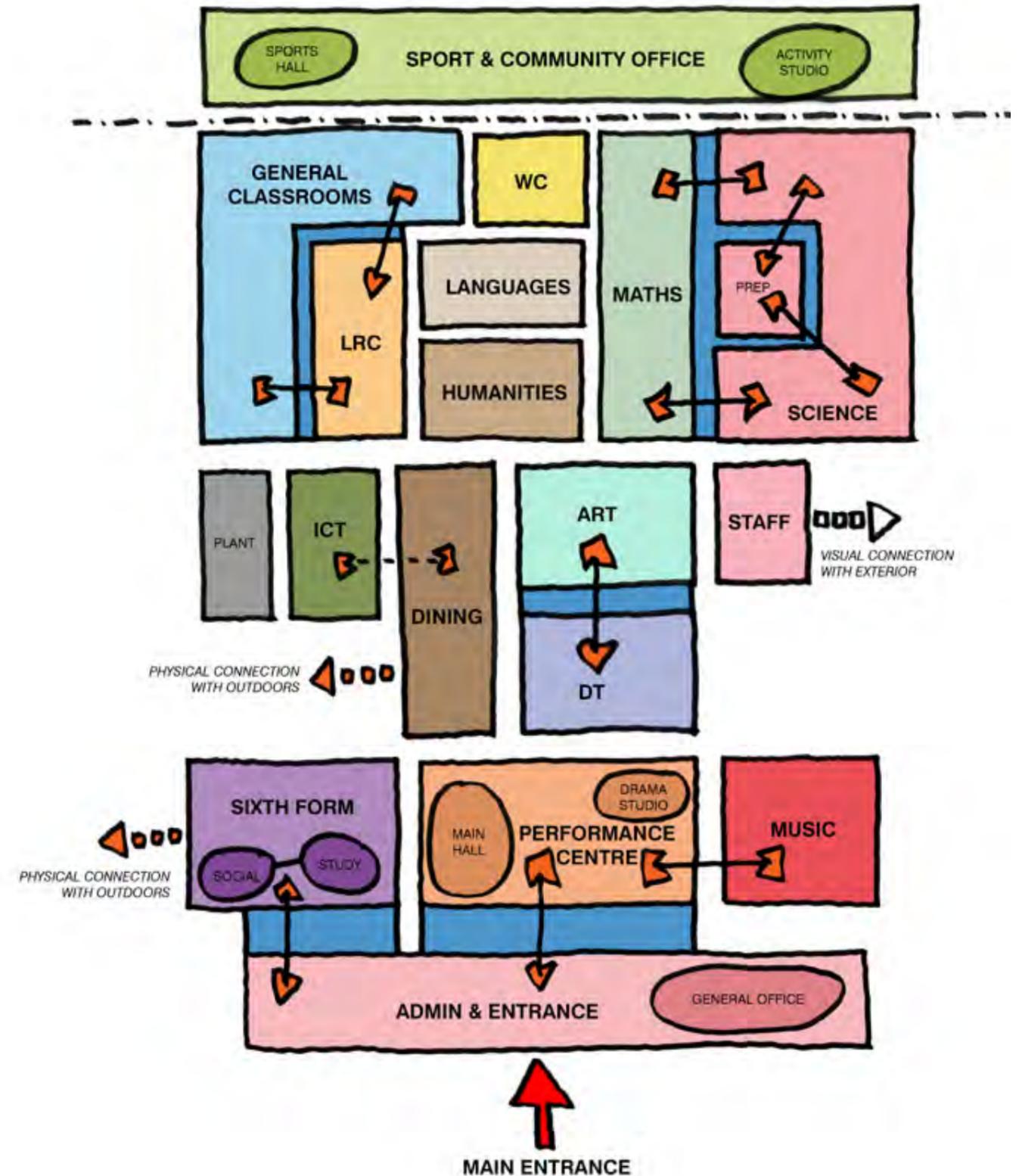
### Circulation

The circulation model for the school is based around an orbiting 'superblock' model, designed to minimise deadends and provide continuous movement. A central main stair is proposed, adjacent to the front entrance, to provide a direct, legible access point between floors. Four further access stairs are located at each building corner to distribute pupil flow throughout the building and alleviate circulation pressure. Corridors throughout are a minimum of 1.8m wide with width increased at key points such as in front of halls and around lockers.

Cross corridor doors will be required to maintain the fire compartmentation and these will be held-open electromagnetically. A passenger lift provides central access to all floors and areas of the building. The lift has been located to be as near the front door as possible.

The Teaching Block's straightforward layout will enable an intuitive understanding of how the building is organised, assisting way-finding for all building users, the central stairs providing a clear organising device. The dining area has been located in the heart of the school but, at the school's request, has not been positioned immediately by the front door, to provide a calmer atmosphere to visitors. This double height space further enhances organisational legibility, providing connections and views between floors.

Circulation within the Sports Block has been designed to support community and pupil use. Entrance doors to the sports building provide access from within or outside the school secure line which can be managed to allow community groups to utilise the facilities without opening the rest of the school.



Proposed Adjacency Concept Diagram

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## Teaching Accommodation

Room adjacencies respect the original brief as well as reflecting discussions with the School. The general teaching spaces have been located to provide curriculum clusters incorporating staff work bases and storage.

The highly serviced science rooms have been located on the top floor to allow for simple extraction through the roof to vent externally. These spaces are served from a large central science prep room, located at the heart of the science department. The maths department has been located adjacent to science to enable collaboration and mixing of ideas whilst supporting the school's STEM specialism.

ICT rooms have been dispersed around the Teaching Block to allow their use as resource to support the other curriculum bases. These spaces have been located to overlook the central dining space, providing an animated outlook whilst achieving borrowed daylight through the dining hall rooflights and eliminating glare.

Specialist teaching for art has been located on the first floor of the Teaching Block and has been positioned to provide a close connection with the ground floor Design Technology spaces via adjacent stairs.

Music teaching has been situated to function as a self contained department, incorporating practice rooms, classrooms and recording space. Locating the department to limit through traffic reduces disturbance of the subject and contains noise breakout.

## Learning Resource Areas

It was established during client engagement meetings that the school have a preference for multiple resource spaces distributed throughout the school rather than one large library space. These areas are central to the school's ethos and

provide flexible opportunities for pupil, staff or shared use. These spaces have been generally located at the end of corridors for visibility and supervision. The spaces will be fit out to suit the character of their associated department - the languages resource space will be library focussed whilst the ICT resource space will be more computer based.

A small SEN suite of rooms has been provided within the main Teaching Block adjacent to the languages department to aid collaboration.

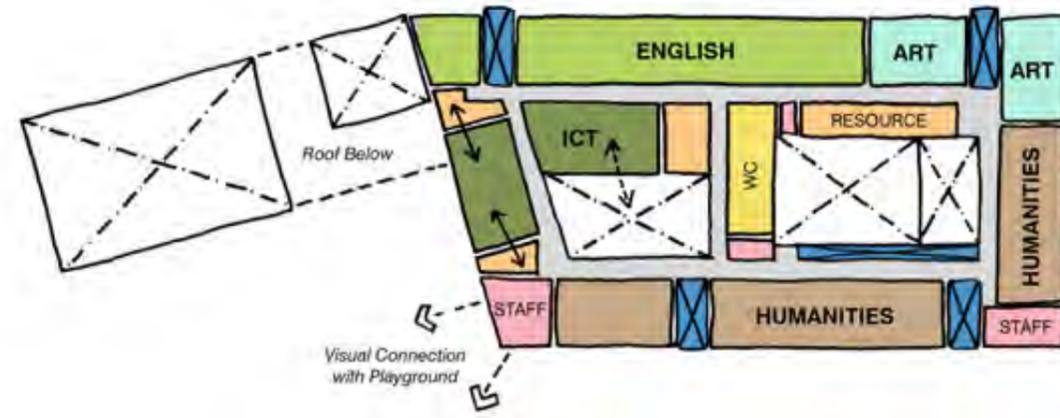
## Passive Supervision and Staff Areas

The building has been designed to support clear passive supervision through careful location of staff offices and provision of full height sidelight glazing to these spaces. Staff offices and work bases have been dispersed throughout the building and adjacent to stairs to encourage good pupil behaviour, with views over the outside play areas also provided to supervise external spaces. Senior leadership team offices have been distributed throughout the school blocks, which encourages staff to circulate through the buildings, further promoting passive supervision and preventing misbehaviour.

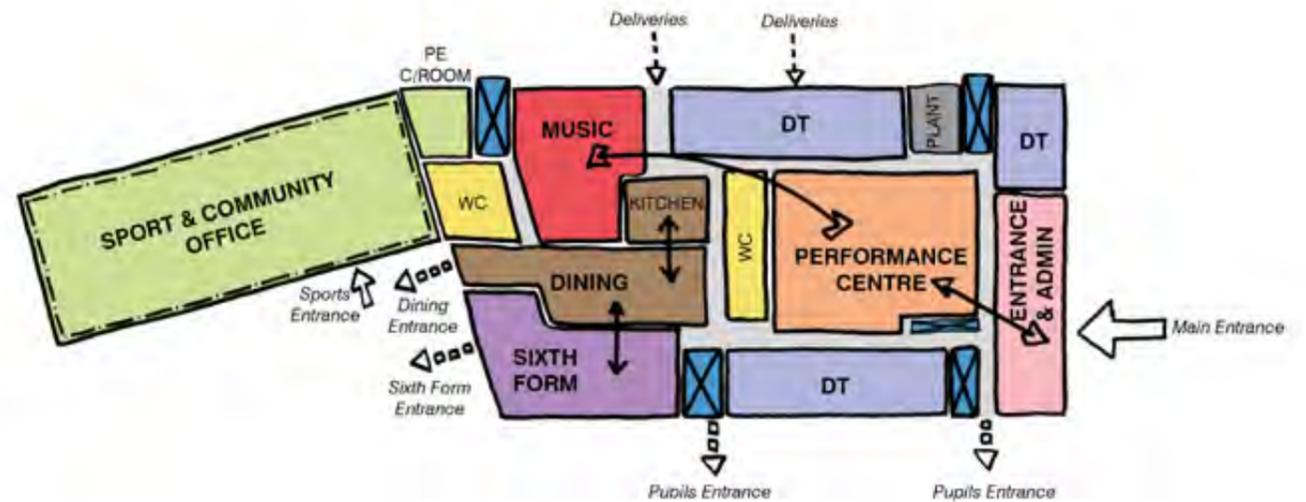
An administrative suite is provided on ground floor, adjacent to the main entrance, incorporating reprographics room and sick bay, supervised from the general office. The staff social room is located on the first floor, providing staff with a reasonably secluded space and offering views to the rear play space for further supervision.

## Ancillary Areas

Pupil WC blocks are located at the centre of each floor of the Teaching Block, each incorporating an accessible WC. The ground floor block is located adjacent to the hall and dining for assembly and events. More toilets are provided on the ground floor to reflect the higher numbers of pupils in this



Proposed First Floor Sketch Plan



Proposed Ground Floor Sketch Plan

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area. Further individual pupil WCs are dispersed throughout this block and the sports building to ensure all spaces are properly serviced. A kitchen layout has been developed to incorporate all of the operational and statutory requirements. The servery is also directly accessed from the main heart (dining) space. Part of the kitchen has been designed to be used independently of the main kitchen to allow for a small scale community offer. Changing facilities are located adjacent to the sports hall. Two separate accessible changing, shower and WC facilities are also provided.

### External Appearance

The proposed buildings are designed to sit sensitively within the MOL setting whilst being robust and low maintenance. A cohesive palette of brickwork and high quality metal cladding has been proposed throughout to link the buildings with recessed contrasting colour brickwork and alternately coloured metal cladding to break up the facades of the Teaching and Sports Blocks. The brickwork facade is a bespoke blend of bricks, colour and appearance selected to be in keeping with context and provide variation and texture.

### Interiors

The model for the school is a department based year group system, with general classrooms clustered to provide curriculum delivery. These classrooms are designed to be flexible and enable future changes to curriculum and teaching pedagogy. We have also worked with the School to propose arrangements of furniture and space adjacencies within each area of the building to suit particular curriculum needs. These arrangements will be developed further during the subsequent phases.

### Adaptability

We recognise that short-term flexibility and long-

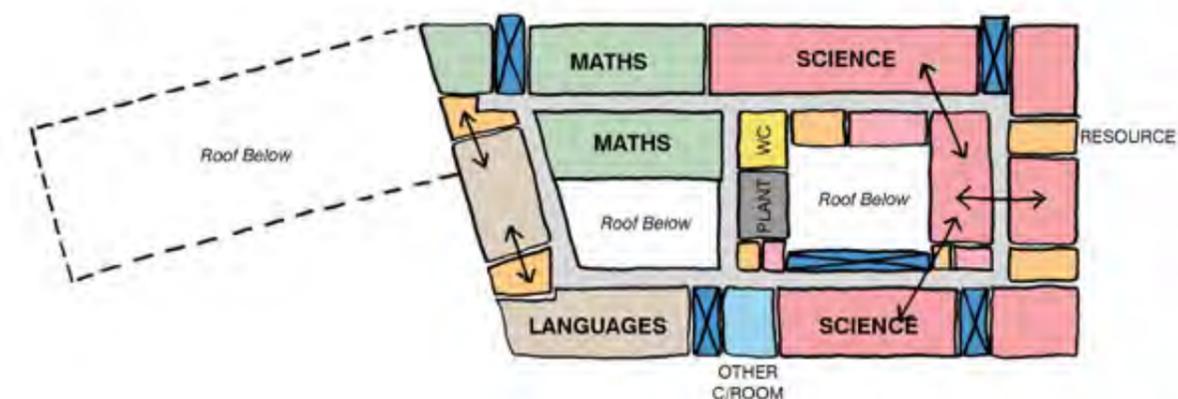
term adaptability are important to THS's learning environments to match developments and changes in approaches to learning and teaching. Our proposals support day-to-day flexibility in use and enable long-term adaptability.

The architectural, structural and M&E solutions are designed for maximum future adaptability, with the necessary exception of toilets and highly serviced areas. A steel framed structure allows flexibility as all of the partitions within can be reconfigured without affecting the structure of the building. Similarly, the services design comprises perimeter ventilation and electrical trunking to avoid restricting furniture locations and allow a variety of teaching styles.

### Design Quality

In addition to the designs responding to the proposed buildings' location within MOL, the design also enshrines the principles identified in the CABE guidelines for a well designed school. We have reviewed and tested our proposals against the following ten CABE points:

1. A high-quality design that inspires us to learn
2. A sustainable approach to design, construction and environmental servicing
3. Good use of the site, balancing the needs of pedestrians, cyclists and cars and enhancing the school's presence in the community
4. Buildings and grounds that are welcoming while providing adequate security
5. Good organisation of spaces in plan and section, easily legible and fully accessible
6. Internal spaces that are well proportioned, fit for purpose
7. Flexible design to allow for short and long term change of use
8. Good environmental conditions throughout including natural light and ventilation.
9. Well-designed external spaces offering a variety of different settings.
10. A simple palette of attractive materials, durable and easily maintained.



Proposed Second Floor Sketch Plan



Proposed Entrance Facade

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## Ground Floor Plan

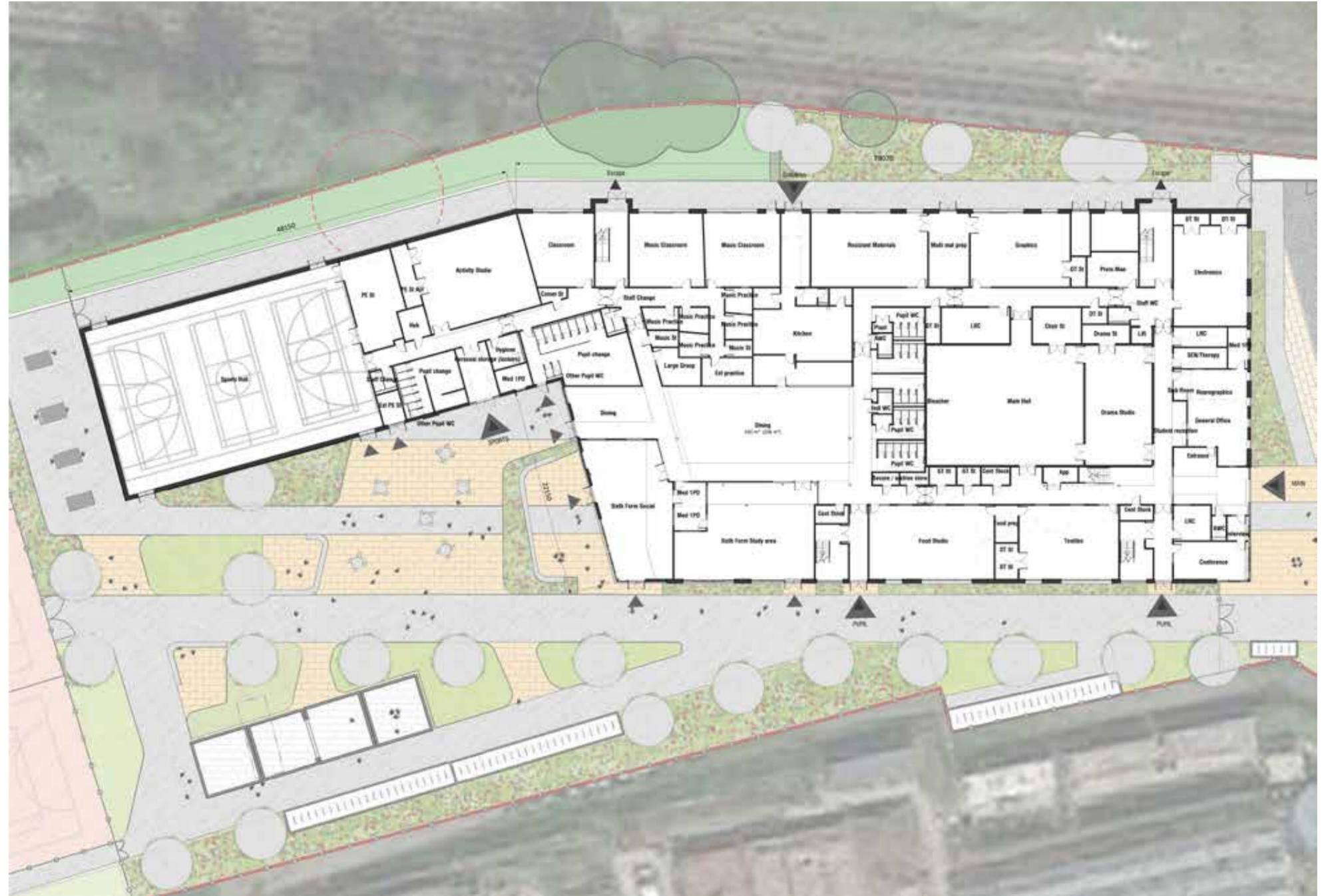
The Teaching Block contains the entrance sequence with all associated administration facilities, including reception desk, connected via secure door to general office, sick bay and reprographics. Leading from this space is the main hall and drama studio spaces which are prominent within the ground floor and have wide access to facilitate the flows of pupils into the space. The music department has been located to be near to the main hall, on ground floor, organised as an enclosed department to limit through traffic and prevent noise breakout.

Specialist technology and engineering spaces have been located around the main hall on ground floor. These rooms provide a visible example of the school's STEM specialism and act as a showcase for these subjects.

The rear centre of the ground floor comprises the dining social space within a double height space which leads to external dining. The Trust decided that the dining would act as the open centre of the school but should not be visible from the front entrance to provide a calmer entrance view.

The Trust require the sixth form social and study provision to be an enclosed 'hub', distinct from the main school accommodation but with visibility between spaces and supervised from a central office. The sixth form social is linked to a dedicated sixth form external play area. These design principles reflect the sixth formers' special position within the school cohort.

The Sports Block to the West contains two large changing rooms, accessible and staff changing in addition to staff office and storage facilities. The Sports Block has been designed to facilitate access from within the school and directly from the outside out of hours for community use, independently of the main school. A three court sports hall and activity studio are provided within this block.



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### First Floor Plan

The first floor of the Teaching Block consists mostly of general teaching classrooms, located around the perimeter to achieve optimum natural daylighting. Dining, main hall and drama studio are all multiple storey height rooms that occupy the centre of the plan at this level.

A central feature stair is provided that leads from ground to upper floors and provides a clear orientation point for building occupants. Four further stairs are proposed in each of the building's corners to distribute circulation traffic across the floor and promote efficient flow.

ICT and seminar rooms have been positioned to overlook the central dining void, benefitting from internal glazing and borrowed daylight from the overhead rooflights.

The art department has been positioned to be adjacent to the ground floor design technology rooms, directly accessible via adjacent stairs. The art department includes kiln room, storage and supporting staff spaces.

Resource areas are distributed between departments, with each having a specific character according to the associated specialism. The SEN resource area is located in the centre of the floor with good adjacency to the english department.

The location of offices has been carefully considered to provide passive supervision across the floor plate. Offices are distributed evenly throughout the plan to support this. The staff office is located in the southwest corner to provide a reasonably secluded space and to allow supervision of the rear play space. The headteacher's office is positioned to the southeast corner, easily accessed from the central open stairs and benefitting from visibility to the south. WCs are consistently located at the centre of the plan.



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## Second Floor Plan

The second floor of the main teaching building comprises science, maths and languages departments.

The location of science on the top floor is optimal due to the requirements for servicing and ventilation extract. The science rooms are served by one consolidated science prep space. The science department is identifiable as a separate department with doors located to enable its distinct identity.

Having the maths department adjacent to science is a specific school requirement to support their STEM ethos and provide opportunities for collaboration and shared knowledge across these departments.

Dropped lightwells are provided in the centre of the plan above the hall and dining spaces to provide rooflighting, daylight into corridors and to allow a hidden area for the location of rooftop plant.

A central area for staff offices and resource is provided that is easily accessible and provides good supervision of feature stairs and circulation spaces.



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View 01 | Dining Space



View 02 | Typical ICT Classroom



View 03 | Main Hall



View 4 | Sixth Form Study Space

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## 4.5 / Elevation Design

The elevations for Turing House have developed in consultation with the LBRuT Local Planning Authority, local residents and the Trust. The building is designed to reference its natural, MOL context and the surrounding residential vernacular. The arrangement of the elevations have been based on the following key principles:

- The building must refer to the natural and residential context
- Selection of materials is used to break up the massing of the building
- Restrained palette of materials to provide considered appearance.
- Highlight the main entrance, stairs and access points through design.
- Reflect aspects of the school's specific character and ethos.

### Materials

The building elevations utilise a palette of three materials, carefully selected and utilised in different positions to achieve identity, character and efficiency considerations.

- Brickwork is used throughout as a robust base to the building, providing a low maintenance and vandal resistant ground storey. To break up the building, the areas of brickwork are full height by the main entrance and facing the rear open MOL to give a high quality appearance. Areas of recessed, contrasting colour brickwork are proposed within the full height brick areas to add further intricacy and interest. The proposed brick has been established in consultation with the Local Authority as a bespoke brick blend reflecting the character of the local context.
- Metal Cladding is proposed at high level to the sports halls and to the south east corner of the Teaching Block which faces Sempervirens Nursery. This modern, high quality material refers to the school's STEM specialism and to its Alan Turing namesake. A mid brown colour has been selected to provide an earthy, natural hue to the building and to tone with the proposed brickwork. Feature vertical light 'straw' coloured stripes have been designed to provide character and interest to these elevations and reflect mathematical patterns.
- Render is proposed at high level to the north, rear elevation. This facade is less sensitive than the southern elevation. The render proposed to this area provides a contrasting material that breaks up the facade and reduces the perceived building mass to this elevation.



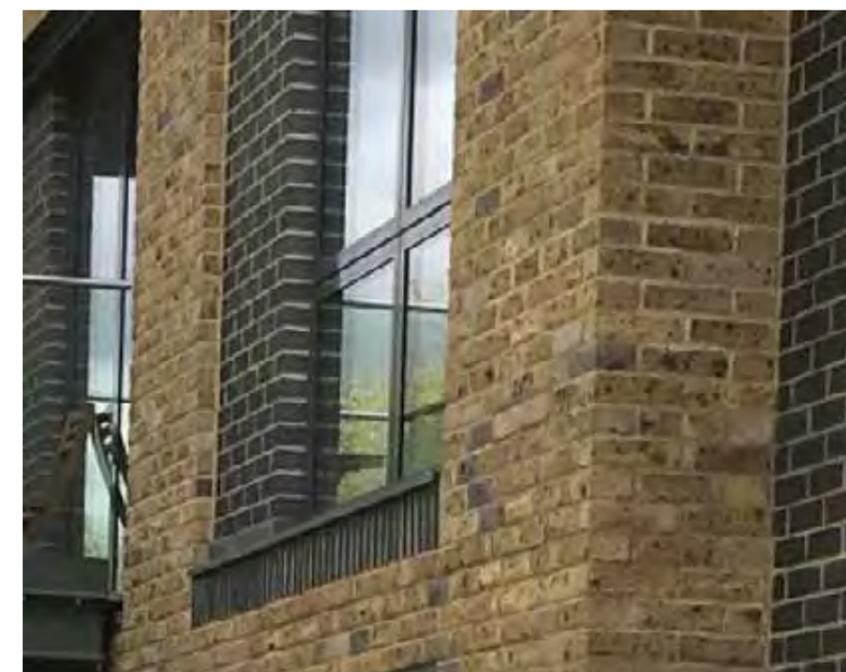
Immediate context, Open MOL



Immediate context, Residential Properties



Precedent Example - Brown Metal Cladding



Precedent Example - Marine Blend Brickwork

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### Identity

The elevation design and material selection is intended to give the building a strong character that reflects the specific school ethos and reinforces the school's identity.

The building has been designed to give a modern, contemporary appearance whilst also reflecting the natural context. Strained wire climbing plant support systems have been proposed around the building at key facades to soften the appearance from open MOL and HBR. This will also reinforce the school's sustainable, environmental identity and encourage considerate pupil behaviour. The metal cladding colours proposed communicate natural, earthy qualities and the masonry brickwork is a natural, crafted material in keeping with the sensitive MOL context.

The extensive areas of brickwork and metal cladding proposed contribute to a 'grown up' elevation design which give the building a smart, considered appearance.

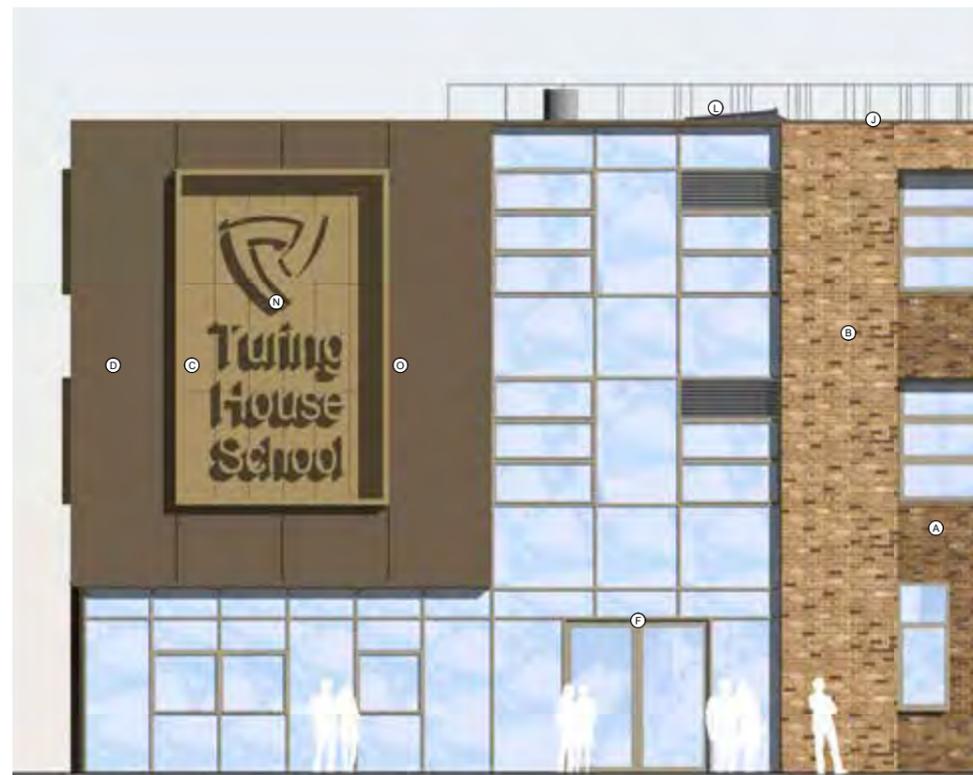
### Impression

The proposed elevations have been designed to give a visually interesting, modern and dynamic impression to visitors and pupils.

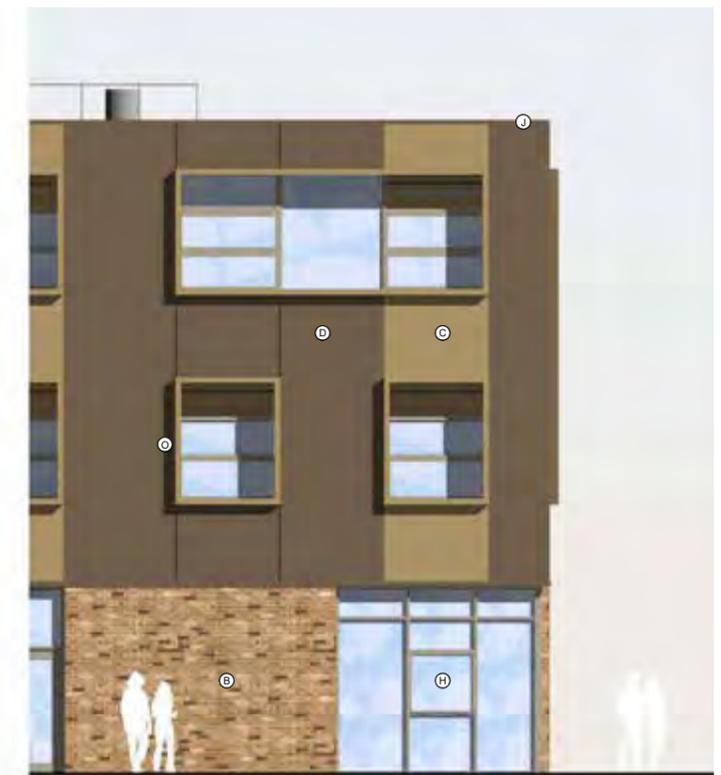
Feature signage has been proposed to the main entrance facade to give a subtle but distinctive presence for the school on Hospital Bridge Road. This motif is echoed on the staircore access points and sports centre entrance to support clear navigation around the building.

Extensive areas of curtain walling are proposed to the most prominent corner of the school, wrapping around the building and continuing vertically above the main entrance doors. This glazing breaks up the building on the entrance facade and provides views into key school spaces whilst strongly identifying the main access point.

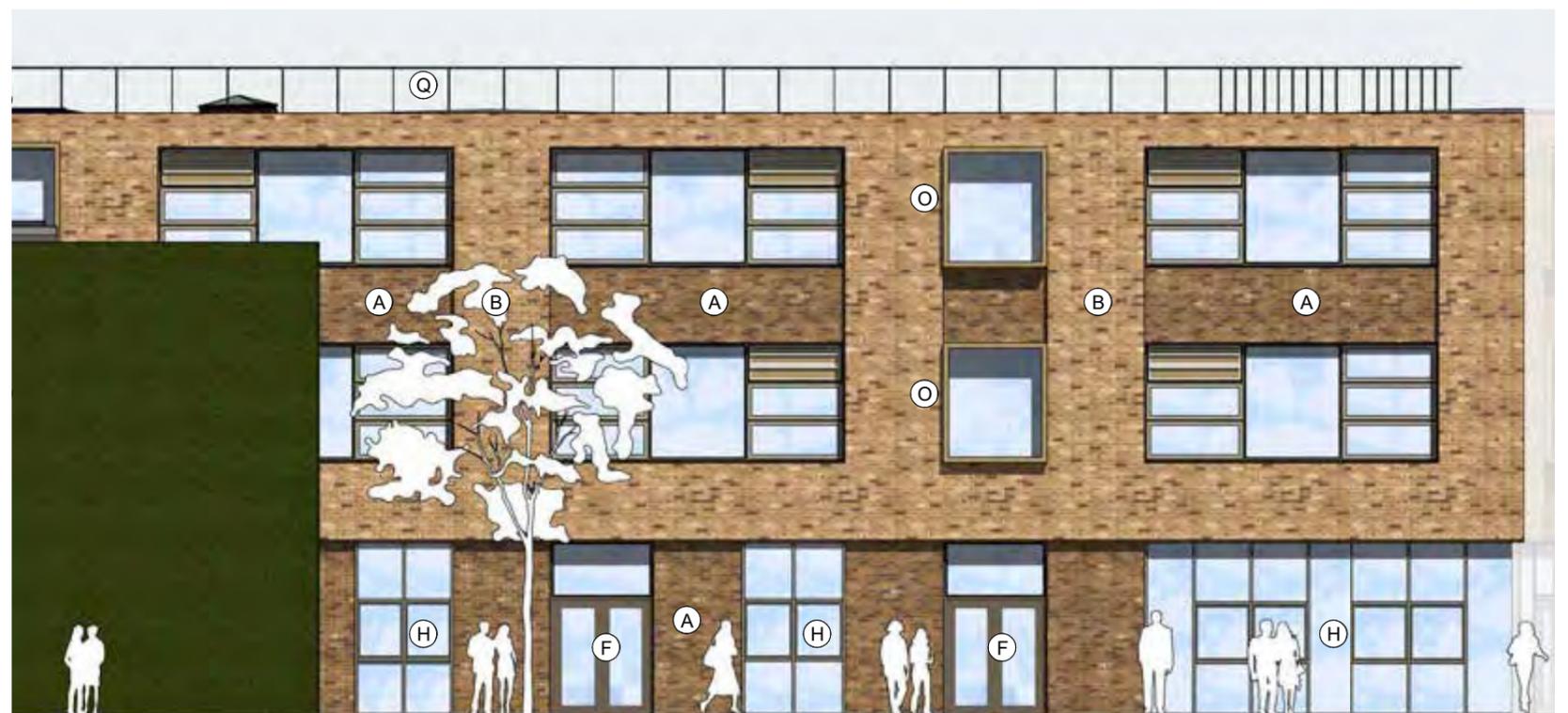
The overall impression of the elevations is of a unified, restrained and considered building that is modern and grown up whilst also providing opportunity for sustainable design, greening of the building, texture and variation across the facades.



Detailed Elevation - Main Entrance



Detailed Elevation - Metal Cladding



Detailed Elevation - Brickwork, Glazing and Climbing Plant Walls

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Teaching Block South Elevation

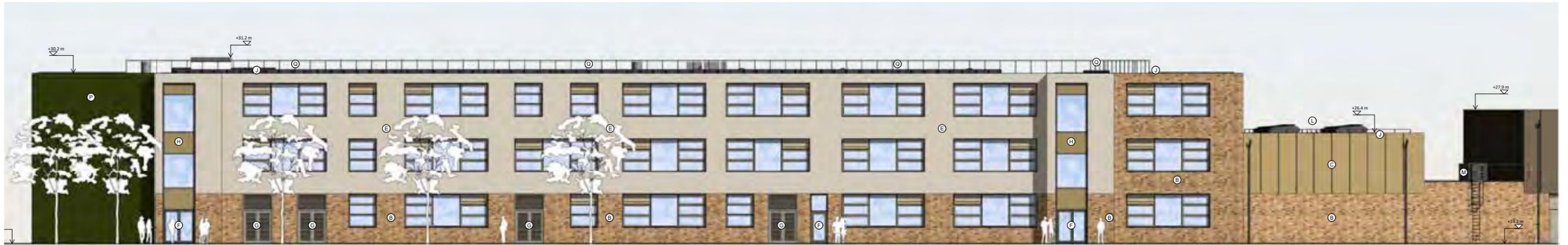


Main Entrance East Elevation



Sports Hall South Elevation

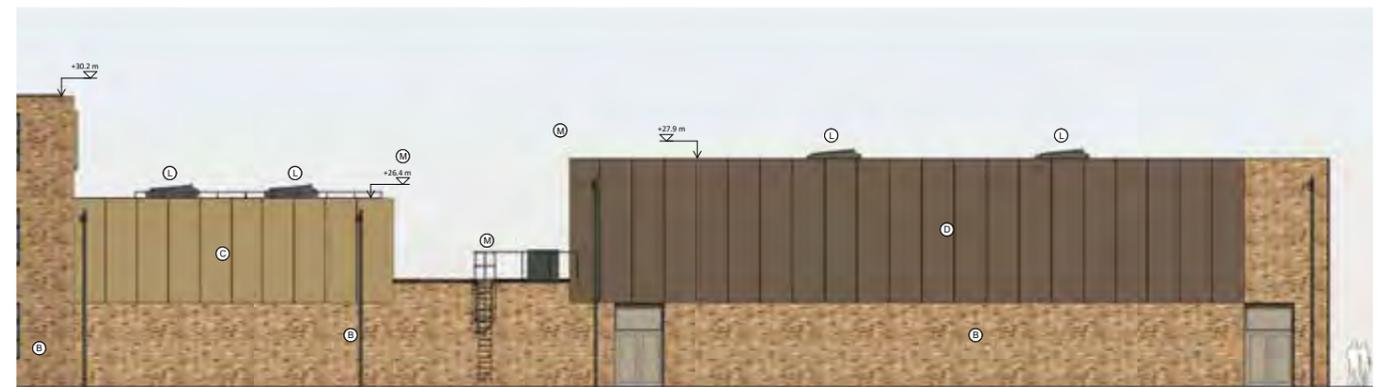
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Teaching Block North (Rear) Elevation



Sports Hall West Elevation



Sports Hall North (Rear) Elevation

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Main Entrance corner view

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Rear of building and playground

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## 4.6 / Crime Prevention & Safer Places

### Site Safety and Security

The development has been designed to create a clear distinction between publicly accessible and secure spaces.

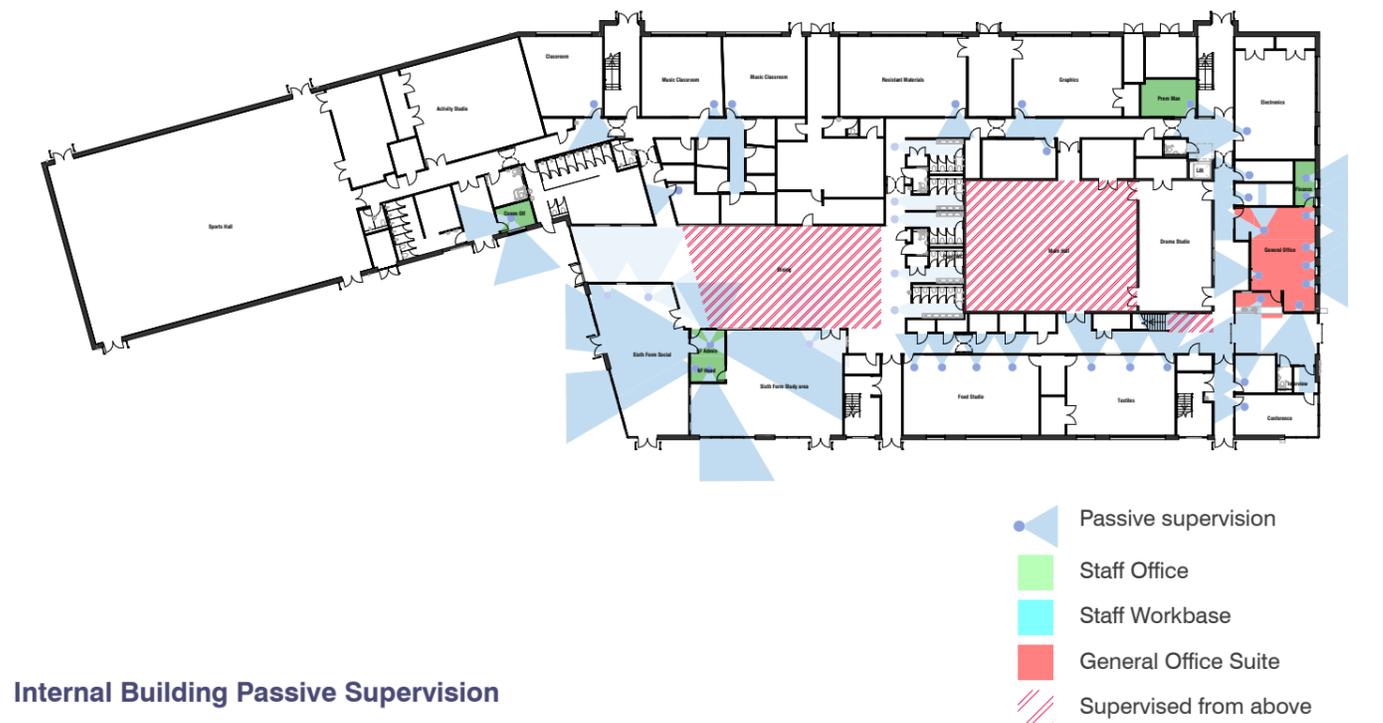
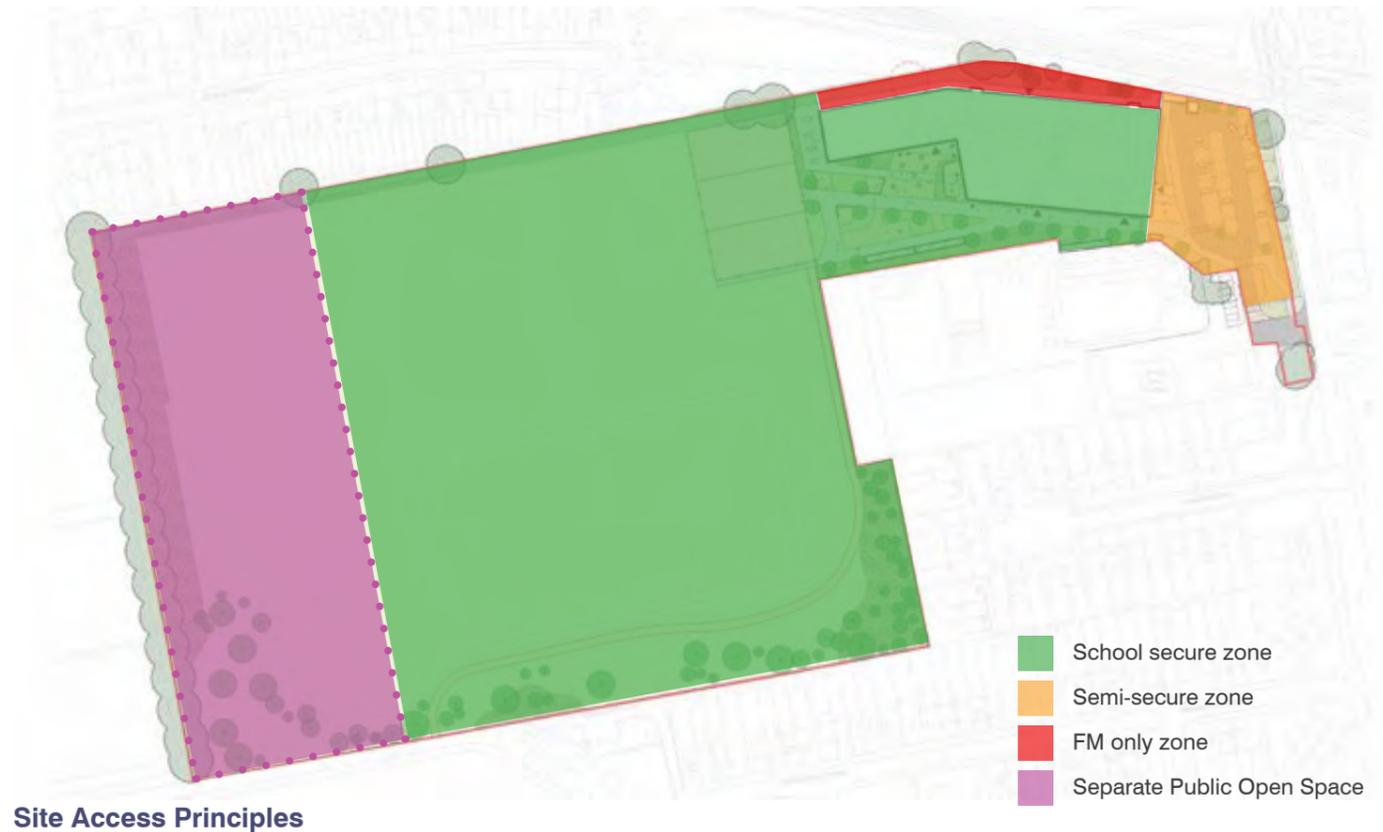
The forecourt area to the east of the school building is accessed via separated external pedestrian and vehicle gates and is securable outside of school hours. The school is contained within a second fence line and is secure. The site plan has been designed so that the building forms the majority of the school secure line, reducing the need for fencing and giving a positive, welcoming appearance. The service area to the north (rear) is accessed via a secure gate and is restricted so pupils cannot enter. Facilities management areas are securely separated and the cycle storage area is surveilled and within the school secure boundary so is not accessible for opportunistic thieves.

We have maximised the site area available for safe and secure school use, segregating parking from cycle and pedestrian routes into the school. With all external play, sport and social areas behind secure lines, provided either by the building itself or by a fence line, pupils can both feel and be safe. Occupied spaces have been provided throughout the school to enable passive supervision of internal and external areas ensuring a safe environment without the sense of overt control.

The entire site boundary is clearly defined using a fence, wall or other effective barrier against intrusion. Additional fencing is provided to the MUGA which has been extended to allow the segregation of the playing fields for containment of pupils as required. The playgrounds are located behind the secure line to reduce opportunities for crime and anti-social behaviour.

### Site Access

There are two separated site entrances for vehicles or pedestrians located in close proximity to aide mutual supervision. Staff, pupils and visitors will access the site from the main entrances on Hospital Bridge Road or via an additional pedestrian access from Heathfield Recreation Ground. Passive supervision of the main access is provided via the General Office, Headteacher's Office and school reception. The Heathfield Recreation entrance will be managed and staffed by the school to ensure supervision and access only during the start and end of the school day.



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Servicing will be accommodated within the site car park, accessed via Hospital Bridge Road. An occupied room has been provided within the school to provide passive supervision of the service entrance.

Vehicle and pedestrian access beyond the school entrance area and car park into the rest of the school grounds will be restricted by the building line, monitored gates and fencelines.

At the beginning of the day, pupils will enter the rear playground via a gate to the south of the Teaching Block and muster in the rear playground prior to entering the school. Visitors will enter the school via the school reception within the new Teaching Block. Access beyond the secure lobby is via reception control only.

### Community and Out of Hours Use

The shared use of parts of the school site and buildings by the local community has been considered in the light of the security risks that this might present. Community access to the sports hall is possible direct from external and does not require travel through educational areas or opening up of the rest of the school. Zoning of the accommodation has been carefully considered to maximise the potential for wider community use.

The main hall and activity studio are accessible for performance, events and community groups without opening the rest of the school as a reduced community zone.

Part of the school's kitchen has been designed to be operable separately from the main kitchen, allowing for a small scale community catering facility.

### Further Engagement

A key point in maintaining a safe and secure environment at the school is an effective management process; a further series of meetings with the school are to be organised to initiate a dialogue on this matter.



- No Community Access
- Community Access - Performance
- Community Access - Dining and Social
- Community Access - Sports
- Visitor Zone - Semi-public Lobby

### Community Access Strategy



- 1.8m Weldmesh Perimeter Fence
- 2.4m Weldmesh Perimeter Fence
- 3m Weldmesh Sports Fence
- 2.4m Closeboard Timber Fence

### Boundary Treatment Strategy