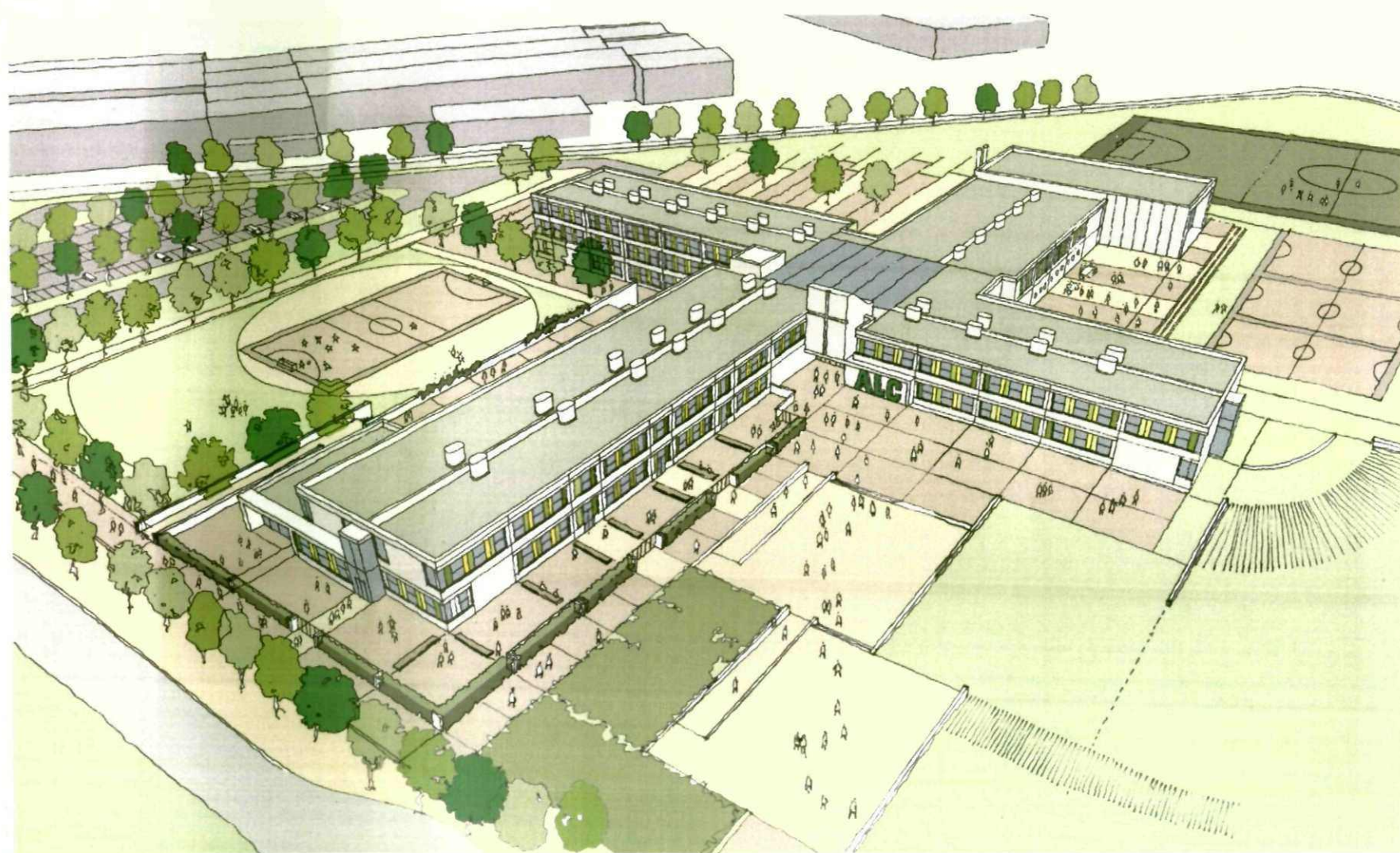




Joint Church of England and Roman Catholic ALC Planning Submission

Design and Access Statement

Prepared on behalf of

July 2010

BP4L_MIC_AHM_RP_011 P02



Prepared by:

Allford Hall Monaghan Morris
2nd Floor, Block C, Morlands
5 - 23 Old Street
London EC1V 9HL

T: 020 7251 5261
F: 020 7251 5123
www.ahmm.co.uk

Landscape:

Plincke
Studio 1.22
Waulk Mill
Bengal Street
Manchester M4 6LN

T: 0161 237 9223
www.plincke.com

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1.00 Introduction

1.01 Scope of Application

Outline planning permission for the development of the new St. Michaels Joint Learning Centre (JLC) referred to as the school in this report was received from Barnsley Metropolitan Borough Council Planning and Transportation Service on 17th December 2009 (Application No. 2009/1368).

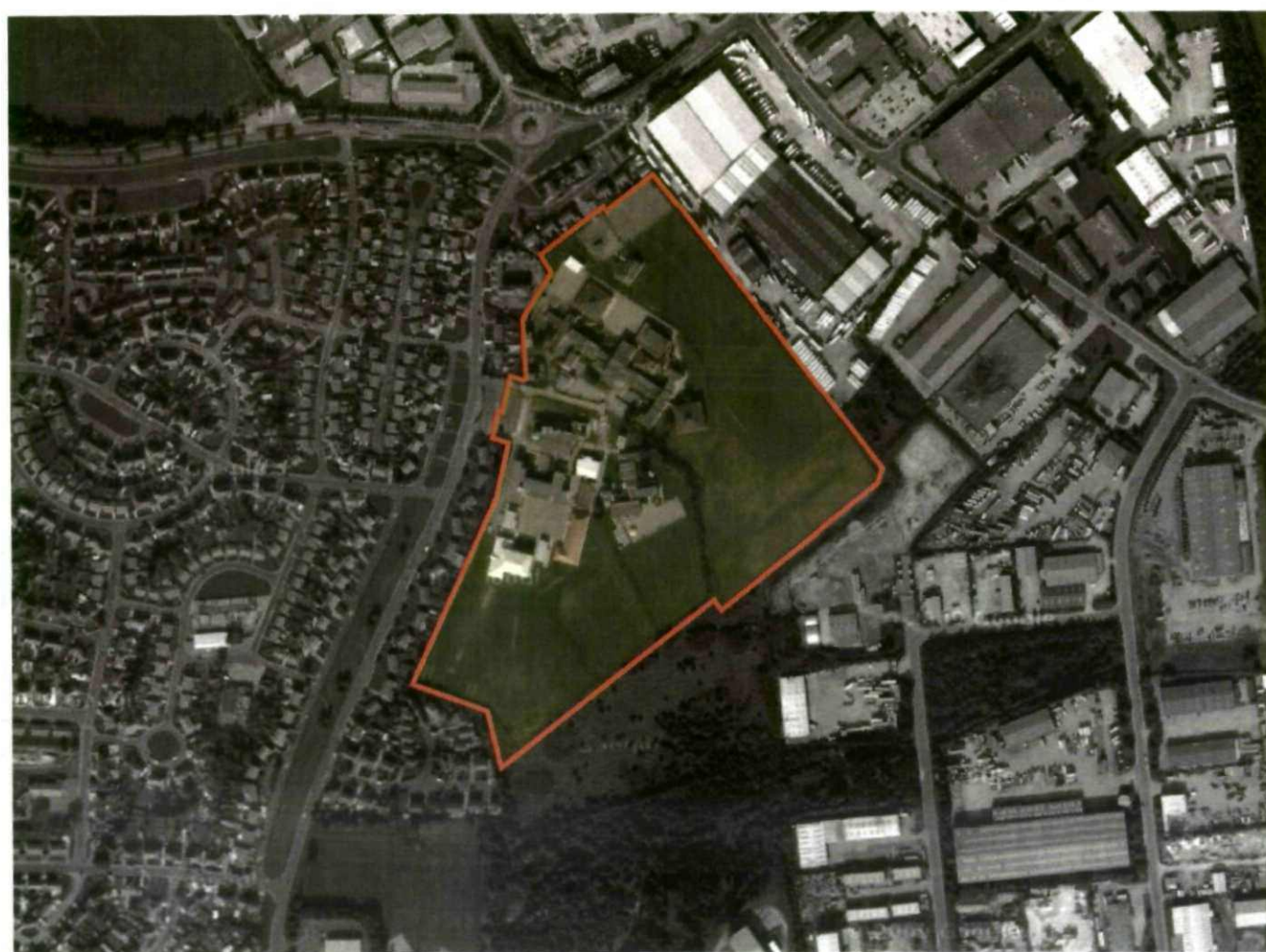
The approval was subject to compliance with a number of conditions listed in this consent document. The drawings listed in the appendix at the end of this report seek to discharge these conditions.



Planning Application Site



Catchment Area



Site in Context

2.00 Site Information

2.01 Site History

Historical Background

The predominant land use of the site remained agricultural in use until the development of St. Michael's, St. Helen's and St. Dominic's school during the third quarter of the 20th century.

There is no evidence of development within the site with the exception of a single building shown in 1966. St. Michael's, St. Helen's and St. Dominic's school had been constructed by 1974. The schools comprise large, irregular blocks with St. Michael's and St. Helen's also possessing several subsidiary buildings. A small number of detached houses had been constructed within the site by 1984. Little further change took place within the site with the exception of two large brick buildings that were constructed at the south of St. Michael's in the early 21st century. St. Helen's had been renamed Edward Sheerien School by that period.

The majority of the proposed works will take place within previously developed areas, although the creation of new sports pitches at the east of the site may impact on previously undeveloped areas.

Archeological Desk Top Survey

The proposal area appears to have been in agricultural use during medieval period, when it may have formed part of the lands attached to St. Helen's Chapel, a 'resting or retiring house' associated with Monk Bretton Priory. While pre-medieval activity in the immediate vicinity of the proposal area cannot be demonstrated. It is possible that the chapel succeeded an earlier site associated with the British ('Celtic') goddess, Elen. The proposal area formed part of the Wortley estate from the 16th century and remained in agricultural use until the development within the exception of a single building shown in 1966. There is no evidence of development within the site prior to the construction of the school. Although previously unknown archaeological deposits cannot be ruled out, the current evidence suggests that the potential for such remains is generally low.

2.02 Site Description

Local setting and community context;

Local Setting

The School is located approximately two and a half miles to the North East of Barnsley on the boundary of the St. Helens and Monk Bretton Wards of Barnsley between the areas of Athersley, Smithies and Monk Bretton.

With the exception of the Smithies these are some of the most deprived Wards in Barnsley, with high unemployment, low car ownership and high levels of child poverty. The workforce is dominated by manual workers, both skilled and unskilled, with limited opportunities for work within the immediate area. Barnsley town centre is the main source of non-manual employment.

Community Context

The School will primarily serve Catholic and Church of England communities across Barnsley attracting pupils from the whole of this area as well as the immediate locality. The School will act both as a focus for strengthening the Christian family within Barnsley and as a focus for the delivery of pastoral care to its pupils, their families and the wider Christian community.

Existing facilities and estate

The site is presently occupied by three existing Schools; St Michaels Catholic and Church Of England High School, St. Dominic's Catholic Primary School and The Edward Sheerien School. The latter school is to be demolished as part of the scope of works for the construction (and relocation) of the Carlton Arc School elsewhere in Barnsley. St Michael's and St Dominic's will continue to operate on site during the construction of the new School. Finally, these existing school buildings will be demolished on the completion of the new School. At this stage St Michaels and St Dominic's will merge with Holy Cross Deanery School to form the new Advanced Learning Centre (ALC), yet to be named.

The 10.6 hectare site is roughly triangular in shape measuring 540m (from North to South) by 347m (from East to West) at the widest points. The site falls steeply from the apex of the triangle at the South to the base of the triangle in the North.

The site is bounded to the West by a large low density housing estate comprising mostly two storey semi detached houses in public ownership. The houses immediately adjacent to the site boundary to the South of the site entrance are single storey and face onto Carlton Road from where the site is entered. To the North of the site is a distribution centre comprising a large featureless warehouses painted light blue. These are inoffensive and do not detract from the character of the site. To the East is low rolling moorland. Much of this land was originally the site of the now defunct Barnsley coal field and has now been re-graded and planted. Some of this land is now partly designated for light industrial use.



Aerial photograph of the site

Key

- | | | |
|---------------------------|----------------------------|---------------------------------|
| 01 Carlton Road Road | 06 Surrounding housing | 11 Car Park |
| 02 St Michaels School | 07 New housing development | 12 Blakeley Close |
| 03 St Do minics School | 08 Light Industrial Units | 13 Surrounding Industrial Units |
| 04 Edward Sherinen School | 09 Current playing fields | |
| 05 Adjacent Bungalows | 10 Main Site Entrance | |



Aerial view of site looking North

Key

- | | | |
|---------------------------|----------------------------|---------------------------------|
| 01 Carlton Road Road | 06 Surrounding housing | 11 Car Park |
| 02 St Michaels School | 07 New housing development | 12 Blakeley Close |
| 03 St Dominics School | 08 Light Industrial Units | 13 Surrounding Industrial Units |
| 04 Edward Sherinen School | 09 Current playing fields | |
| 05 Adjacent Bungalows | 10 Main Site Entrance | |

2.04 Site Context

Planning and infrastructure issues

Outline planning permission for the development of the new School was received on 17th December 2009. The permission lists a number of reserved matters that must be approved by the Local Planning Authority before construction commences. Informal discussions have been held with the Authority and the design proposals well received, particularly the massing of the building and the manner in which it sits within the landscape.

Access to the site by both Pedestrians and vehicles will be from the existing site entrance on Carlton Road with a secondary access strictly for the use of emergency vehicles from Blakeley Close. Potential conflict between pedestrians and vehicles has been minimised by the provision of a service road to the North of the site entrance frontage. The existing traffic island and drop off has been abandoned and the pedestrian domain extended from within the site to the public footpath on Carlton Road. On entering this site, pedestrians will now be able to walk directly to the main School entrance without crossing the service road. This will require the existing public bus lay by and shelter to be re-positioned. Cyclist will enter the site via the service road and will store their bicycles in the racks to the West of the primary play area.

The service road provides access for service vehicles, School coaches, staff and visitor parking. No drop off or collection points are provided within the boundary of the site.

There is an existing electrical substation immediately to the North of the site entrance towards the South-West corner of the West wing. The substation is to be retained as it serves not only the existing School building but also the adjacent housing estate. Landscape will be used to screen the substation and to reduce its impact.



1. Entrance to current Youth Centre



2. Secondary Entrance from Blakeley Close



3. View from south of site



4a Light Industrial Unit to North of Site



4b. Light Industrial Unit to North of Site



1 Carlton Road looking north towards school entrance



2. Carlton Road looking South towards school entrance

2.04 Site Context

Carlton Road

Carlton Road runs North-South. The street has a wide central green verge with traffic running in two directions on both carriageways either side. The footpaths to the eastern side of Carlton Road that fronts onto the entrance to the current schools have footpaths that vary in width from 1.5m to 2.5m.

The road is characterised by two-storey residential terrace houses to the west of Carlton Road and Bungalows to the side that is closest to the site boundary. The materials used in the properties on both sides of School Road are a random mix of brick, and render with tiled roofs.

The residential properties that back onto the school site along its Western edge feature gardens with the East face of the residential buildings ranging from 12 to 20m from the site boundary.

Current Schools

Carlton Road is the only frontage to the School site running for around 90m on a gentle arc. Currently a bus stop is located here facing the road, and a lay-by that is set back, which allows access into both St Michaels and Edward Sheerien schools. St Dominics school has access through the Edward Sheerien service road. All school gates and boundary fences are situated to the back of the lay-by and along the access roads. The current access scenario is very complicated and does conflict with public routes into the existing buildings.

The existing trees to School Road located on the School site are varied in quality and maturity, but contribute to the streetscape.

Light Industrial unit to North of Site

There is a light industrial facility to the north of the site. However as the land falls in this area the visual impact of this is minimised and noise levels produced from the unit are relatively low.

3. School access road frontage

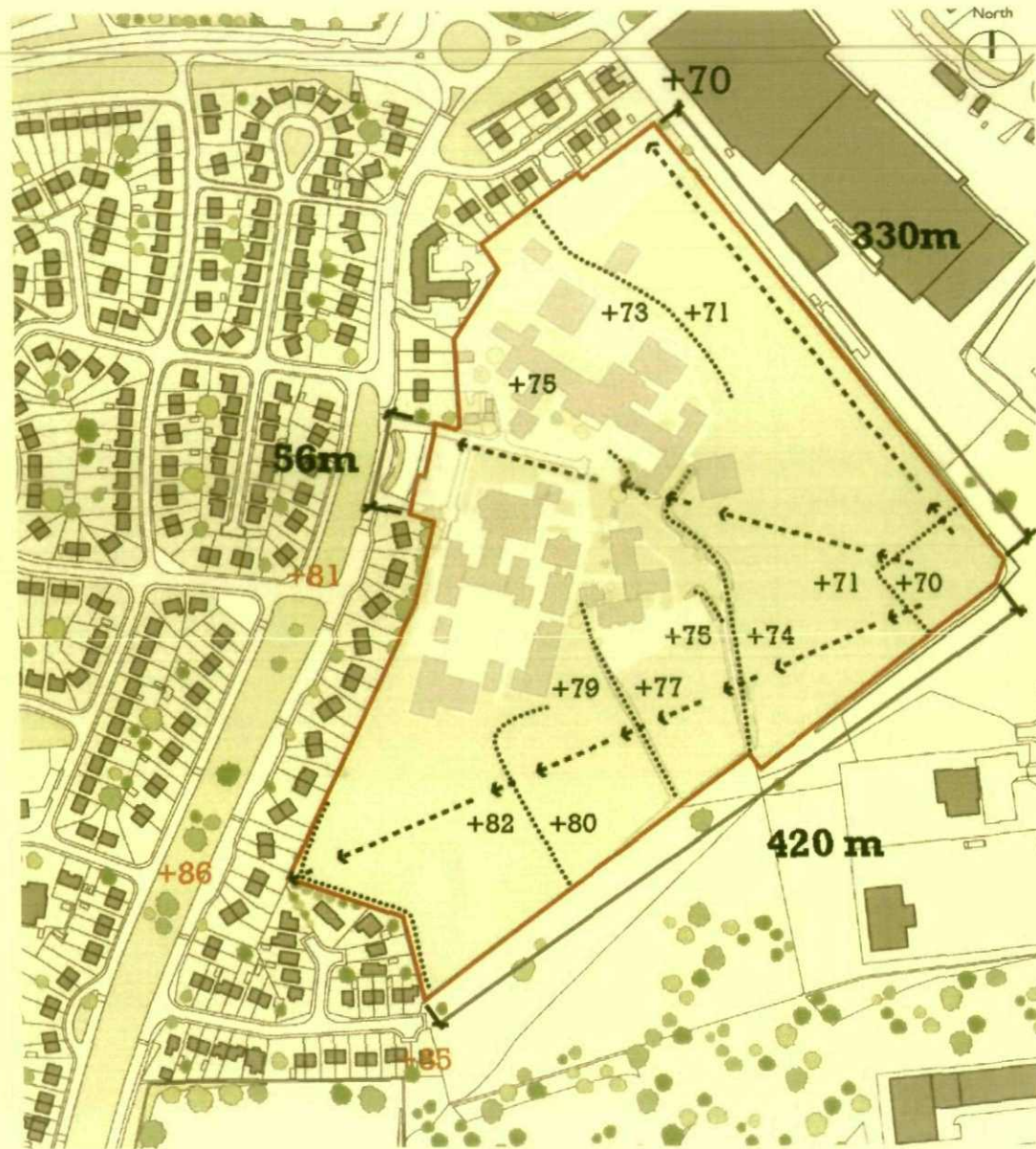


4. School Entrance Frontage from Central Grass Verge



Key

2.05 Site Analysis



Topography

The site falls steeply by 13m from the South to the North in a series of stepped terraces. These have been previously shaped to accommodate the sports pitches. The three existing schools sit in the centre of the site on a further series of artificially formed terraces. This has resulted in an exaggerated change in levels in the area of site chosen for the construction of the School. The siting of the School in this area is unavoidable for two reasons described elsewhere.

The levels on the vicinity of the School are therefore complex and require careful consideration. Of particular importance is the change of level of 4.5m between the entrance to the site and the entrance to the School.



Sun Paths, and Views

The proposals maximise views in all directions from teaching and other spaces. Rooms on the South side of the building enjoy long distance views across the School playing field towards the moorland countryside beyond. Additionally, the art facilities in the Art/Design and Engineering Faculty face North West.

The elevations facing South, East and West require solar protection either by means of external solar shading or high performance solar glass. (See sun path analysis diagram showing facades which require solar protection).

Access

All access to the school site is currently off limited frontage to Carlton Road. There is an access road from Blakely Close but this is only used by the Current Youth centre and not the Schools. There are conflicts between vehicle and pedestrian traffic on Carlton road during the peak periods at the beginning and end of the school day. These conflicts arise from the width of lay-by offset from Carlton Road as well as the restricted width of footpath in front of the school. There are also conflicts between the various vehicle and pedestrian access points into the school site. In particular there are vehicle crossovers at both ends of the site frontage.

Within the site, vehicle movements and zones are not distinct from pedestrian areas with large areas of bitumen used for ad-hoc vehicle parking and servicing directly into a number of buildings on the site. This is a major contributor to poor amenity to the external spaces around the existing buildings.

Contamination

The only prior site use as open fields it is anticipated that the risk of contamination on site is low. This risk assessment is outlined in The Combined Phase 1 and 2 Geo-Environmental Review and Site Investigation Report site Investigation commissioned by LBBD for the site in 2008.

Ecology

Whilst the current school site supports a limited range of habitats, the existing boundary trees and shrubs provide some visual amenity to the wider residential and parkland context, which the proposals seek to retain and protect.

The school site itself does not contain any other areas considered to be of high nature conservation value, however, proposals will consider any opportunities that existing fauna and nesting birds may be using the site and proposals taken to consider their protection if discovered, and mitigation of the developments impact.



1. Main School Building Frontage



2. Playground Space



4. Undulating Landscape to Rear



5. Rear of Classrooms

2.06 Existing Buildings

The site is presently occupied by three separate schools constructed in the post war years in multiple phases in a seemingly random fashion. The existing buildings are unsuitable for delivery of the modern curriculum and transformation agenda. None of the buildings are listed or have any historical value, nor is the site part of any designated conservation area.

There are a number of memorial items located at all three existing schools. These will be transferred to the new School and integrated in the landscape design. Design proposals for this will be developed in Phase 2.



3.00 Site Use

3.01 Joint ALC

The school's curriculum demands

The new Advanced Learning Centre is an all through school providing education for pupils from the age of 3 – 16 (1086 pupils) with the further provision of post 16 courses (73 pupils). The School comprises a Nursery for the FTE pupils delivered in two form entry, and a secondary element of 700 pupils delivered in full forms of entry.

The curriculum will be designed to extend and develop the talents of the pupils academically and socially within a Christian context. The School will retain its Specialist Service College status, however the specialism is considered as another aspect of the School rather than a defining personality.

Organisation

The School is organised as a gradual progression from nursery to primary to secondary provision. This is represented by the progression of learning styles rather than the split based on the traditional primary and secondary model. In response to this the barrier between Years 5 and 6 to the remainder of the school is purposely blurred.

The planning of the School recognises that in the early primary years pupils will spend the majority of their time within their learning base with 20% of their time spent in more specialist accommodation.

As pupils progress through the School, access to specialist accommodation will gradually increase with Years 10 and 11 spending perhaps 60% of the curriculum in these faculties. The layout of the building recognises these demands and is arranged to allow transfer between class bases and specialist accommodation with ease.

Students

The student numbers consist of 26 FTE nursery, 360 Primary, a 700 student secondary and 73 +16 students .

Staff

The projected full time and part time staff numbers on site will be 125

3.02 Proposed Accommodation

The layout of the building is inherently flexible. The class bases, specialist accommodation and other areas may be easily re-allocated to different uses in response to future organisational changes.

The new building will accommodate teaching spaces for a number of subject areas based on the school's current departmental organisation model. The subjects taught within the new building will include:

North Wing (3 Storey)

Lower Ground Floor

- Faculty of Art, Design and Engineering
- PRU

Upper Ground Floor

- Dining Area
- Kitchen and Servery
- Faculty of Life Style (Catering and Food Technology)
- SEN
- Staff Room

First Floor

- Faculty of Science

South Wing (2 Storey)

Upper Ground Floor

- Administration
- Head Teacher
- Adult Learning
- Wellbeing
- Faculty of Humanities

First Floor

- Secondary Class Bases

East Wing (1 and 2 storeys)

Upper Ground Floor

- Performance Hall
- Drama Studio
- Sports Hall and Store
- Changing

First Floor

- Faculty of Lifestyle (Music, Business, IT and Media Studies)
- Fitness Suite

West Wing (1 and 2 Storey)

Upper Ground Floor

- Nursery
- Primary Class Bases
- Primary Halls

First Floor

- Secondary Class Bases

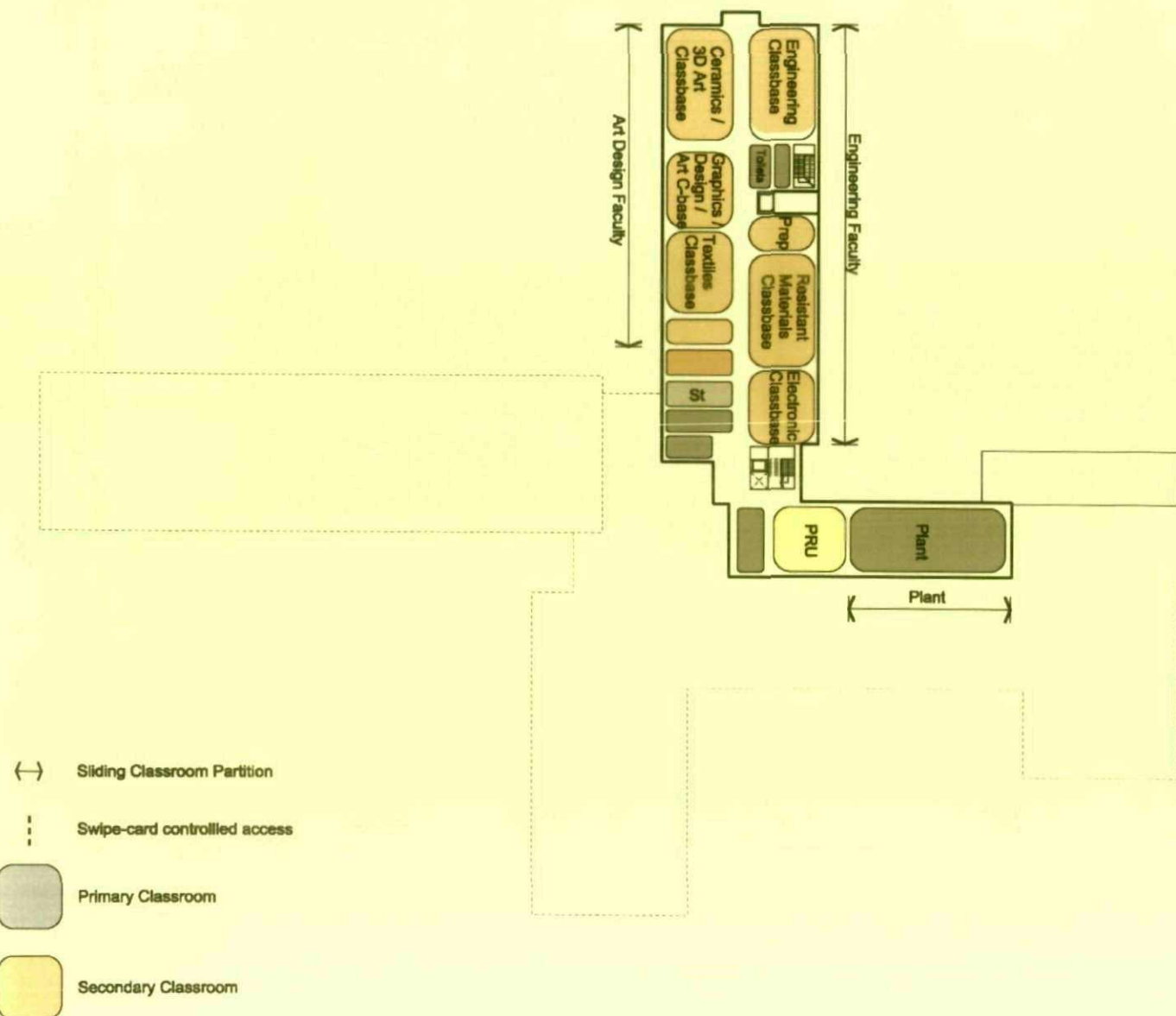
Heart Space (2 Storey)

Upper Ground Floor

- Entrance
- Reception
- Learning Resource Centre

First Floor

- Learning Resource Centre
- Reflection Space



I. Lower Ground Floor Organisational Diagram

The SEN and inclusion policy

As a means of meeting a variety of educational needs, a large student support facility comprising SEN, Wellbeing and Adult Learning Group under the heading of the Student and Family Centre is provided. In line with the School's requirements, these facilities are centrally located on the upper ground floor with direct access from the Heart Space. This location will allow controlled access by members of the community while restricting unauthorised access to the remainder of the School

SEN

The SEN facilities are located in the North wing in a highly visible location opposite the dining area and readily accessible from the Heart Space. Privacy is retained by arranging the accommodation in a self contained suite. This arrangement includes the SEN therapy room which will be used mostly by primary pupils. In Stage 2 there will be an opportunity to consider whether this room should be relocated with the remainder of the primary accommodation

Wellbeing Facility

The Wellbeing Facility has been developed to provide an office base and interview rooms for visiting authorities and agencies. It is co-located with the Adult Learning Facility and with the School's administration accommodation. It is also readily accessible from the Heart Space where it is easily reached by visiting professionals throughout the day.

The Wellbeing Conference Room is located within the Heart Space and is used for meetings and case conferences between the School, outside agencies and parents. It also provides an isolated quiet area when required.

Adult Learning

The Adult Learning area is located immediately adjacent to the main entrance of the School. Access will be supervised from the reception desk which all visitors either entering or leaving the area must pass.

Pupil Referral Unit (PRU)

The PRU facilities are separate from the rest of the School with discrete access at the lower ground floor at the rear of the building. However, the PRU facilities are near to the faculty of Art/Design and Engineering whose activities the pupils in the unit will observe and therefore may be encouraged to rejoin the mainstream School population.

The PRU also has direct access by staircase to the Heart Space and the rest of the School facilities on the upper floors.

Sports

The school currently offers all of the main spaces of the sports centre for managed community use after school during the week as well as on the weekend. The existing sports facilities will be supplemented by an All Weather Pitch and Multi-use Games Area which will also be available for community use. The community use of these will be managed from the current sports centre office and a register will be maintained of those using the site wide sports facilities.

Broader Educational and Behavioural Standards

The School enjoys a unique and privileged position founded on its *Christian faith and values*. This will naturally lead to an environment in which high standards of learning and behaviour are expected. Spirituality is reflected in the design of the School which is well planned and logically organised. It is light and airy and has a natural calmness. Daylight penetrates all parts of the building and teaching spaces and corridors enjoy views of the surrounding landscape and countryside.

The Heart Space acts as the social and spiritual centre of the building encouraging interaction between pupils and instilling a sense of belonging to the wider School community.

Passive surveillance through glazed walls in corridors and by dispersal of staff bases reduces the opportunity for bullying. Similarly, toilets are arranged in small groups and open directly onto the corridor.

3.03 Community Use

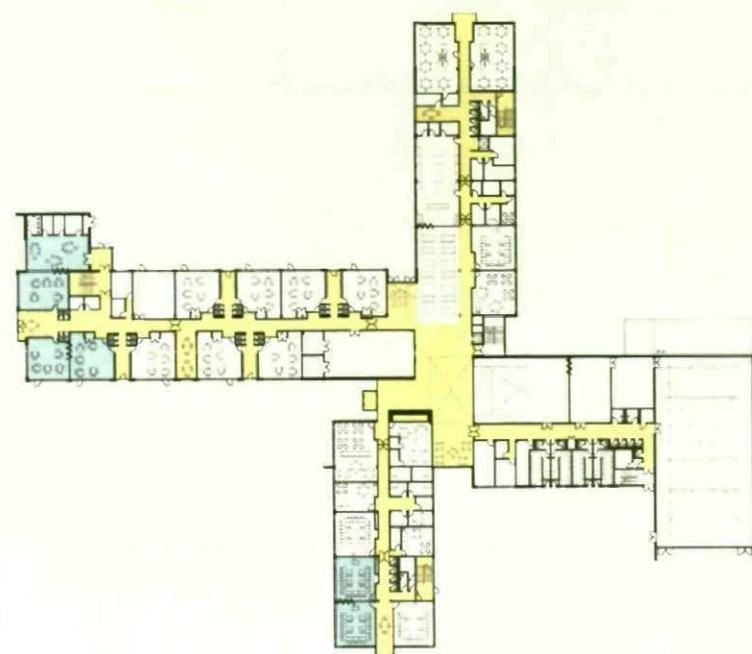
School

The School has wishes to be a focal point for transforming learning in the community and sees this as key to raising the attainment of the pupils. In design terms, this has led to the inclusion of a Student and Family Centre providing facilities for SEN, Wellbeing and Adult Learning. Other facilities within the School will be used to engage with parents and encourage opportunities for parental learning.

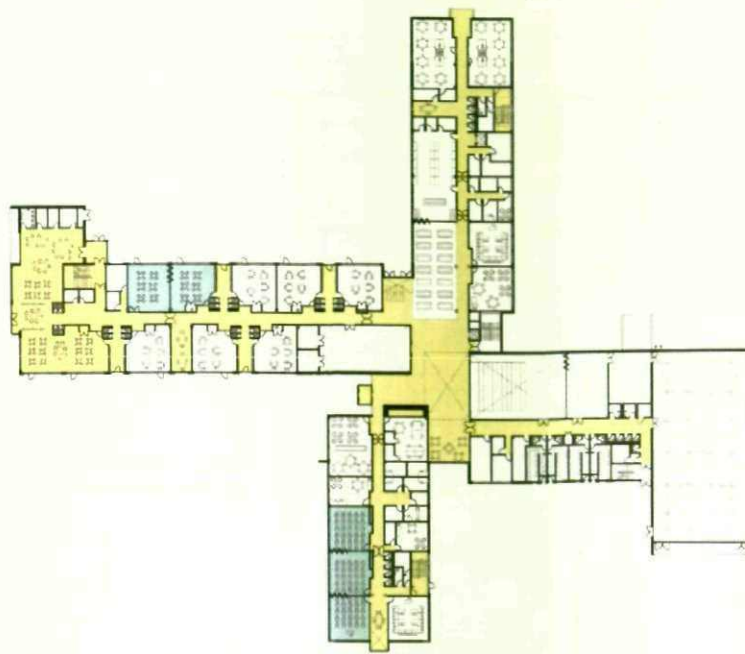
Access

Access to community facilities will be through the main entrance shared with pupils, staff and visitors. The entrance leads directly to the Heart Space from where such facilities as the Performance Hall, Dining Area and Learning Resources Centre are reached. Access to these areas for community use is required throughout the day, and some weekends and evenings. Access to indoor and outdoor sport facilities is via the main entrance although, should this policy change, a secondary access is provided adjacent to the Sports Hall.

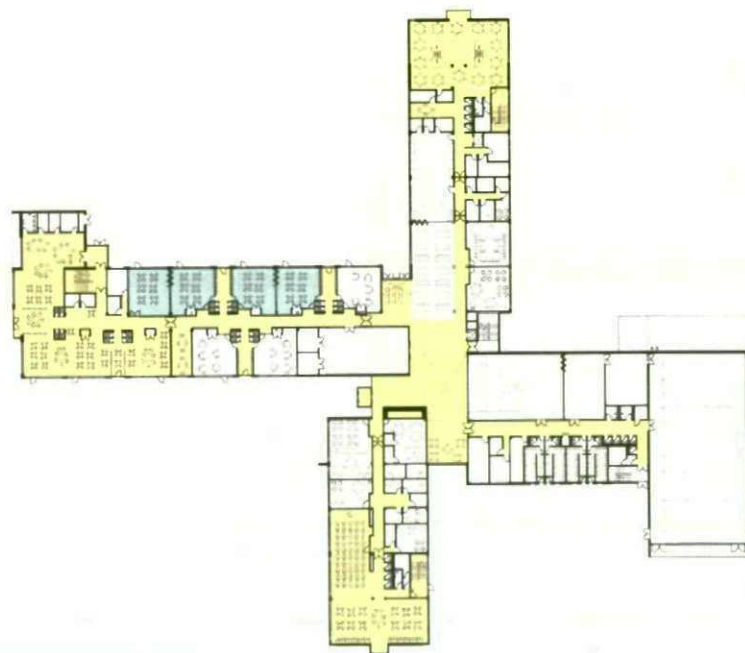
3.04 Transformation



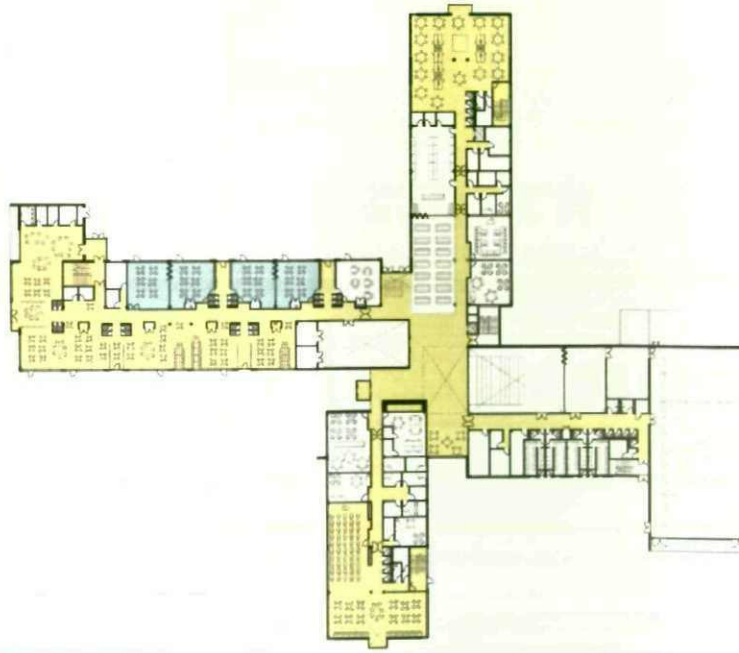
01 GROUND FLOOR STAGE 01



02 GROUND FLOOR STAGE 02



03 GROUND FLOOR STAGE 03



04 GROUND FLOOR STAGE 04



Flexibility to Expand or Decrease Faculties

The standard class base has been designed to facilitate the teaching of any subject. Faculties will therefore be able to exchange one or more class bases leading to a more flexible and efficient use of teaching spaces.

Class bases are generally square in plan and allow different furniture layouts in response to varying learning and teaching styles. The class bases are also capable of adaptation in response to long term changes arising, from development in the curriculum and teaching styles. (Refer to diagrams illustrating different furniture layouts).

Inter-department Flexibility

In both the Primary and Secondary areas there are a number of locations where folding/sliding partitions allow transformation of teaching spaces into larger units. In the Primary area this will blur the distinction between early year teaching groups. In the Secondary area there will be an opportunity to create a set of spaces that can combine to provide lessons for 60 and 90 students. (Refer to the diagrams illustrating the transformational use of classrooms).

The plan form of the School and the method of construction have been developed to accept change, and to allow for different departmental and organisational structures to be accommodated. This approach extends the useful life of the building and avoids inbuilt obsolescence.

The partitions between rooms are generally non-load bearing and may be demolished and reconstructed without affecting the structure of the buildings. The structure is constructed on a 7.8 x 7.8m grid which is further subdivided into a 2.6m x 2.6m planning grid. The façade system will accept partitions on this spacing allowing rooms size to vary.

The design of the mechanical and electrical installations is inherently flexible. Services distribution is at high level down the centre of each corridor and may be easily adopted to serve new arrangements.

The ICT network runs in the floor screed with floor boxes set at regular intervals. This arrangement is unaffected by changes in room layouts and therefore accommodates alternative plan arrangements as necessary.

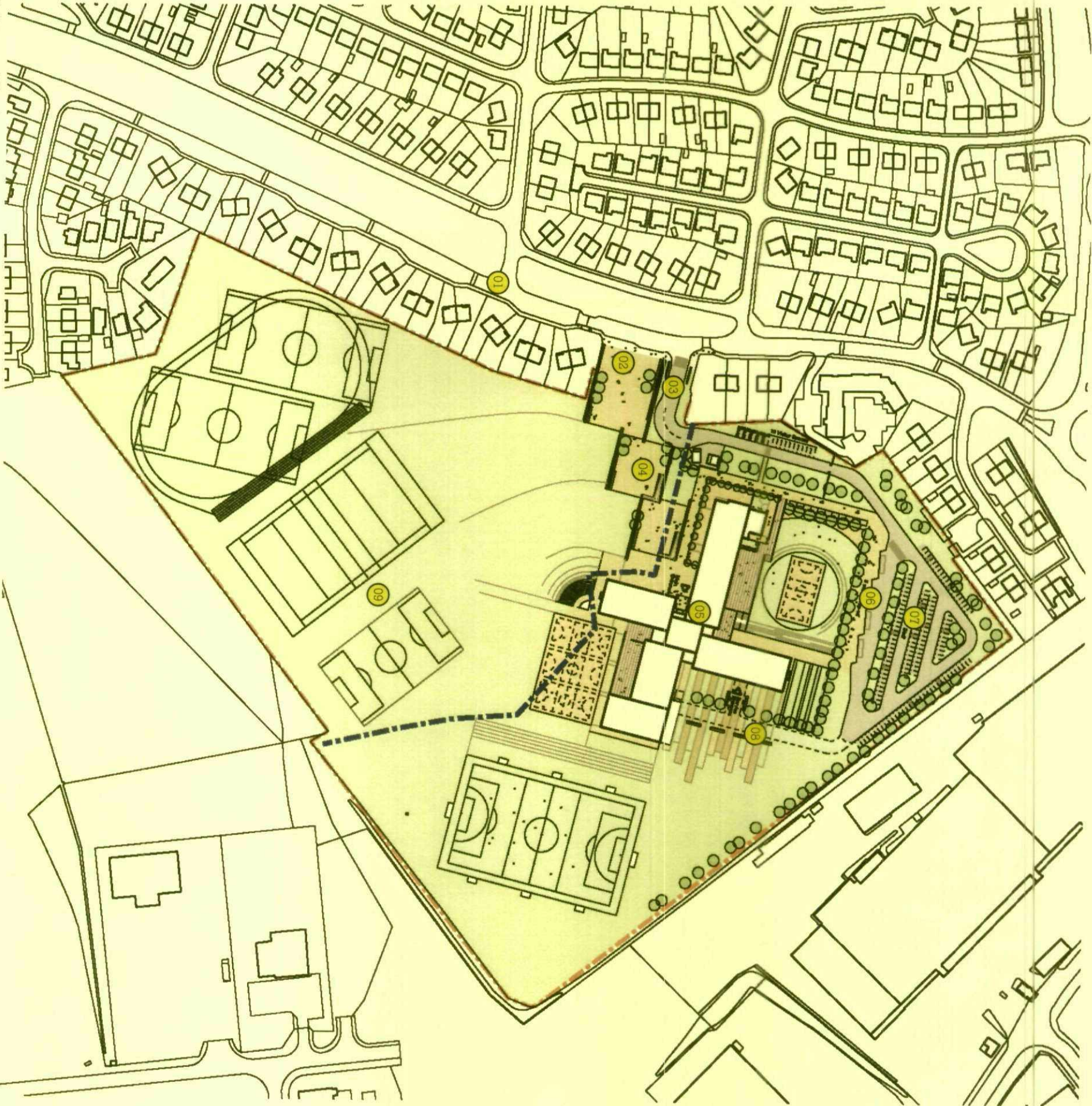
4.00 Design Proposal

4.01 The Scheme

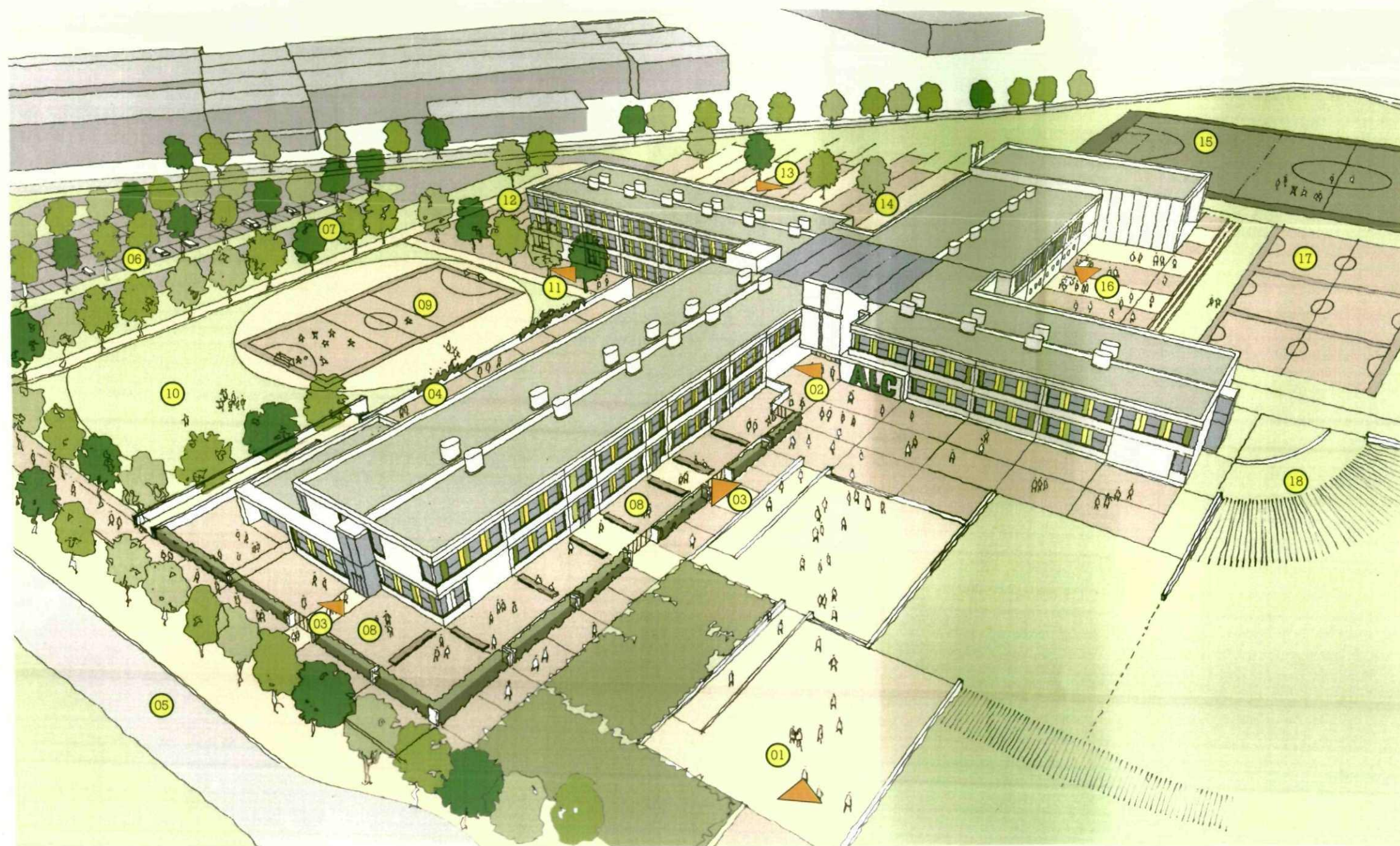


1. Existing Siteplan

- Key
- 01 Carlton Road
 - 02 Public Entrance
 - 03 Vehicular Entrance
 - 04 Public entrance Steps
 - 05 School Building
 - 06 Coach Drop off point
 - 07 Staff / Visitor Car Parking
 - 08 Service Route
 - 09 Playing Fields



2. Proposed Siteplan



3. Proposed Aerial view from the South-West

Key

- | | |
|--|--------------------------------|
| 01 Public Approach | 09 Primary MUGA |
| 02 Main School Entrance | 10 Primary Soft Play |
| 03 Primary School Alternative Entrance | 11 Access to Art / Engineering |
| 04 Nursery Entrance | 12 Allotments |
| 05 New road to car park | 13 Delivery entrance |
| 06 Staff Visitor Car Park | 14 Service Yard / Entrance |
| 07 Coach Drop-off | 15 ALL Weather Pitch |
| 08 Primary Play | 16 Sports deck |
| | 17 Secondary MUGA |
| | 18 Outdoor Amphitheatre |

4.01 The Scheme

The outline planning consent is based on the premise of a two storey building. We have accepted this constraint except where the ground level falls away to the North of the site where a third storey is added at lower ground floor level. In all cases, the roof level remains level over the entire footprint, excepting the Nursery extension which is single storey, and the Sports Hall where the height of the roof is slightly higher than general roof level.

The importance of maintaining a strong presence for the School when it is approached from Carlton Road is recognised. Within the constraints of the hoarding line dividing the construction site from the retained Schools, the School has been located as close as possible to the road and to the site entrance. (Refer to diagram illustrating the construction site, the existing buildings and the site hoardings).

The overall mass of the School has been reduced by arranging the floor plan of the building into four wings radiating from a central hub. The School has been set at the optimum level in order to minimise cut and fill. The East and West wings run parallel with the contours with the North and South wings set perpendicularly to them.

When viewed from the playing fields to the South, the building has a strong horizontal emphasis echoing the steps in the landscape and the horizontality of the surrounding countryside.

4.02 Design Key Themes

Key Drivers

The design of the Joint Advanced Learning Centre (ALC), referred to as the School in this report, has developed as a response to the Output Specification brief. Our understanding of this and the School's vision and ethos has evolved through a series of Engagement Meetings. We have found these meetings extremely productive, informative and positive. Through these meetings we believe that the proposed design closely captures the vision, ethos and aspiration of the school. The following extract from the Output Specification captures this vision and is the key driver underlining our design response:

"This unique all through faith school will transform learning, raise standards and represent a step change in raising aspirations and achievement for all members of our community"

Heart and Reflection Spaces

The Heart Space is pivotal to the design concept of the school and forms the fulcrum from where the four accommodation wings radiate. The Heart Space is the social hub of the School and it is through here that all pupils, staff and visiting members of the community pass when entering the building.

The Reflection Space symbolises the Christian faith of the School. It opens onto the Heart Space and its articulated external form acts as a focus marking the entrance to the School.

Adjacencies and Building Plan

We have discussed the adjacencies at length at the Engagement Meetings and believe that the faculties and other accommodation are now arranged in an efficient and economical plan with the optimum connectivity between each part of the School. Way-finding is intuitive and travel distances minimised.

The building plan is logical and reflects the all through character of the school allowing faculties to interact and merge where necessary while still retaining their individual character.

Design and Building Form

We have aspired to design an inspirational modern building that meets the needs of today yet symbolises the future. Our design has evolved through an analytical approach and understanding of the brief, context and constraints.

The configuration of the building with its four wings reduces the apparent mass of the building giving it an intimate and an inviting feel. Daylight will penetrate the building and all teaching and associated spaces will have direct external views of the landscape and countryside. We believe that this will create a constructive learning environment that reflects the spirituality of the School.

Landscape

The surrounding topography and landscape has been a major influence in the design of the School. Firstly, the horizontality of the building reflects the open panorama of the landscape, while the change in building section from this to three storey respond to the changes in level.

The building form defines four external spaces that connect the building to the landscape. Each of these spaces has its own distinct character.

Flexibility

The building is designed to be inherently flexible with the ability to respond to changes in the curriculum and to different organisational concepts. This will extend the life of the building making it an important asset in the Authority's portfolio.

Sustainability

We believe it is our responsibility to design a sustainable building that provides good comfort conditions and is beneficial to learning. Both the provision of good natural daylight and natural ventilation are key to this aim.

The design follows the principles of best practice such as using the thermal mass of the building to aid natural cooling and heating. Bio-mass is used to fuel the heating system and wind turbines generate on-site power.

Graphics

We believe that there is an opportunity for graphics to reinforce the identity and branding of the school. These will aid way finding, however, there are large areas of wall throughout the school on which it would be appropriate to display images and text.

Site Planning

Great care has been taken to maintain the presence of the School when viewed from the site entrance on Carlton Road. A strategy for segregating pedestrian and vehicular circulation has been developed as a means of improving safety.

The building sits comfortably on the site with discreet servicing and car parking located out of the view of the School entrance.

Single Building

The school's current accommodation is spread over a number of disparate buildings – this creates management issues during transition periods between lessons and results in a fragmented identity for the school. The new design consolidates all new accommodation within a single building to create a strong presence within the site and local community. In addition, the co-location of all new subject area accommodation within a single building:

- Offers the potential for sharing of resources between subject areas;
- Facilitates future flexibility to easily shrink and expand subject area provisions as required;
- Reduces transition periods between different subjects also allowing for efficient supervision; and
- Provides opportunities for future project orientated learning across subject areas.

4.03 Phasing

The location of the existing schools are a major constraint on siting the new accommodation. The existing schools will be in operation for the duration of the construction phase. In order to maximise the project funding, the aim is to minimise temporary decant accommodation and to reduce the main building construction to a single phase. The single phase of construction also minimises disruption to the existing pupils. This constraint creates an available build area that requires only minimal initial demolition to enable the construction of the new building. Once the new building is constructed, the schools will decant into the new accommodation whilst the existing buildings are demolished and the remaining site is landscaped.

It is envisaged that the schools will utilise the existing sports facilities during the main construction phase.

Site Access

Access to the site during construction will be from Carlton Road



1. Existing school grounds



2. Decant from Edward Sheerien School



3. Demolition of Edward Sheerien School



4. Area of site available to build on



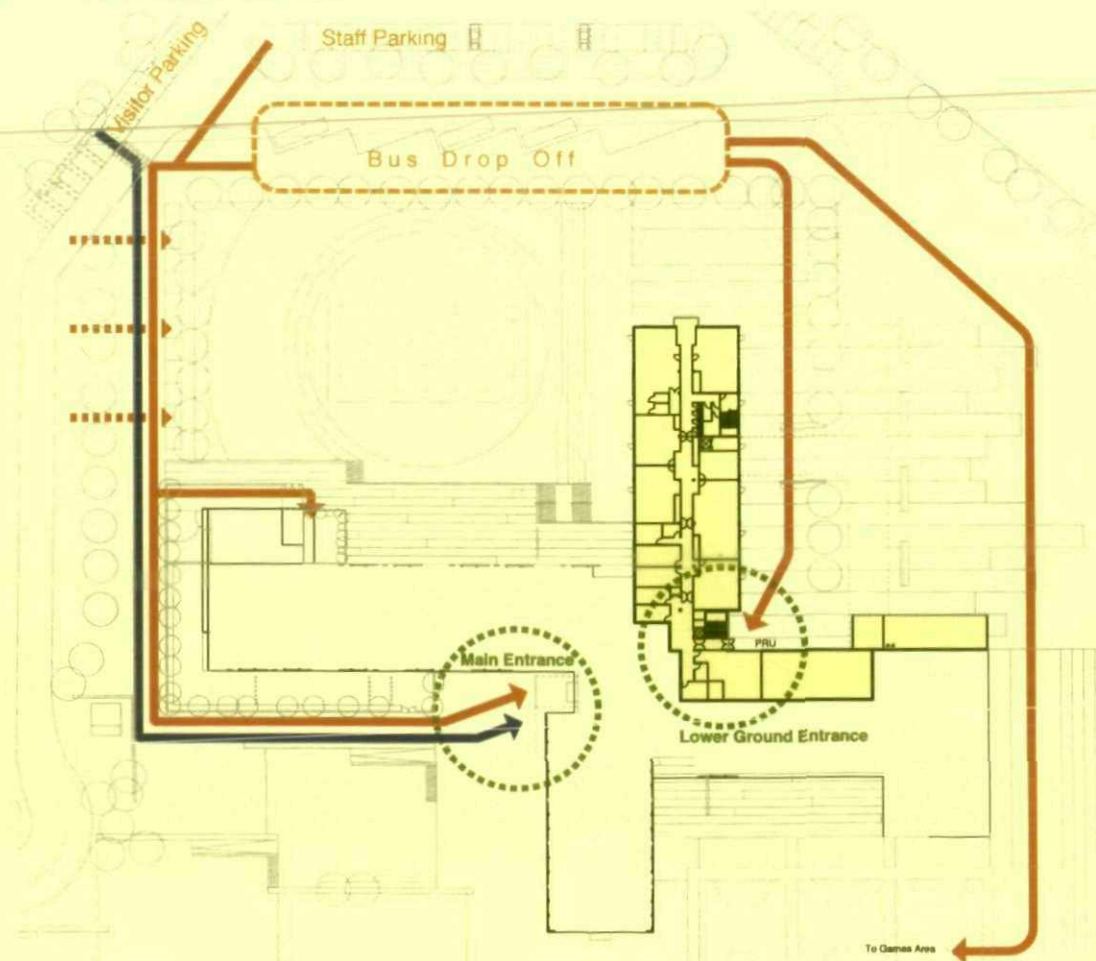
5. Site constraints dictate North of site best location for new school building



6. New Landscape & School Entrance

5.00 Access

5.01 Pedestrian Access



Lower Ground Pedestrian Access

Main Entrance Entrances

Approaches and routes in
The main pedestrian and vehicular entrance to the ALC is from Carlton Road which also provides access to the adjacent housing estate. Secondary access for the use of emergency vehicles is from Blakely Close.

There is a clear separation between pedestrian and vehicular access points within the 50m wide site frontage facing onto Carlton Road.

The main entrance to the ALC is clearly visible from the site entrance to which it is connected by a series of stepped terraces and ramps.

A service road leads to the staff parking area and the service area at the rear of the ALC.

Visitor Access

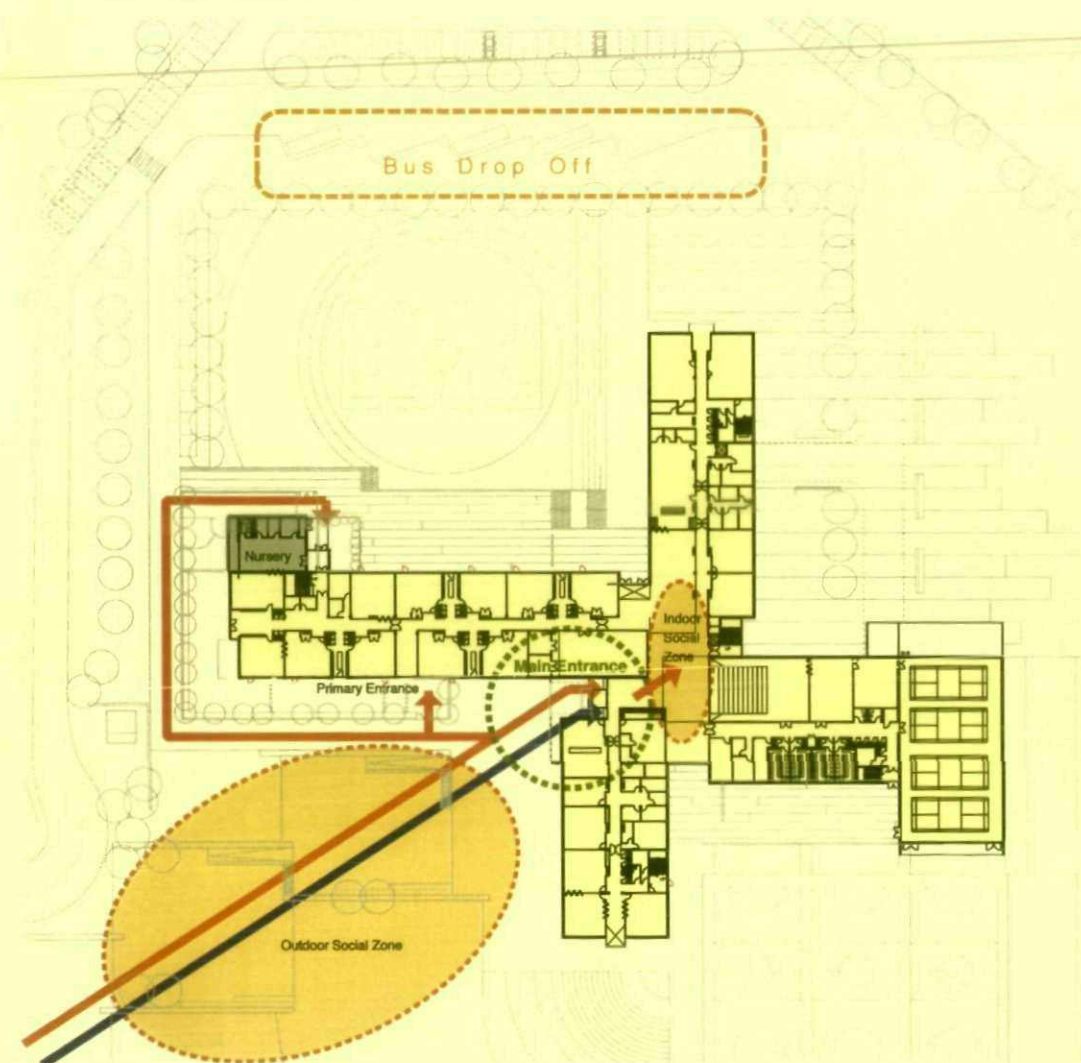
Visitor access during school hours will be via a dedicated pedestrian footpath running along the car parks northern edge to a controlled access gate adjacent to the main building entrance. The car park and Piazza space are separated by a fence and evergreen hedge providing an attractive but secure screen.

Secondary Access

Two restricted pedestrian accesses that will be managed by the school and will not be used for general site access are also proposed:

- An access in the east to Old Dagenham Park to allow students into this green space as part of school lessons
- An access in the north to William Ford Junior School to allow their students into facilities in the proposed development.

5.02 Cycle Access



Upper Ground Pedestrian Access

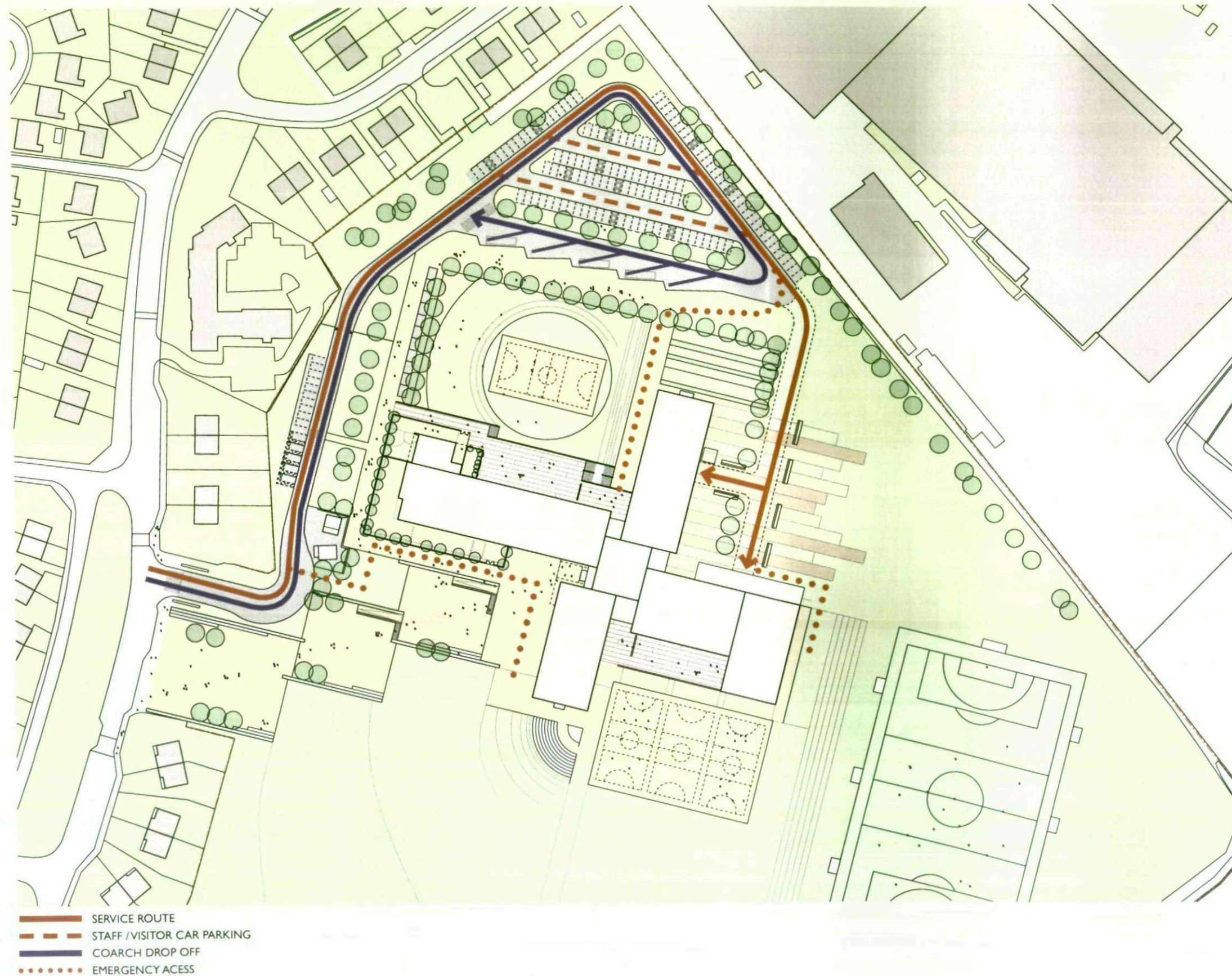
Cycle Access

Cycle access to the site is through the main entrance which is connected to the Cycle Parking Facilities by a wide 8m shared route.

Key

- Pupils + Staff Zones
- Administration and Adult Learning
- Nursery Zone
- Entrances
- ICT Hot Spots
- Lockers
- Cycle
- Pupils + Teachers
- Community

5.03 Vehicle Access



5.04 Servicing + Emergency Access

Vehicle Entrance

The existing vehicle entrance will be adopted as the main vehicle entry point through an access controlled gate on the main route to the staff/visitor car park

The location and design of the car parking and service area has been specifically laid out to avoid cross-overs between vehicle and pedestrian movements on site.

Coach Drop-off

Secure, covered cycle storage is provided adjacent to the primary play area within the line of the security fence. The store is visible from the school building and away from the public area in front of the building.

Staff and Visitor Car Parking

The ALC has 125 staff car parking spaces, 10 visitor parking spaces and 5 bays for accessible parking. No parent drop-off area is provided within the site boundary.

The visitor parking spaces and accessible parking bays are located outside the security fence but within a reasonable travel distant to the entrance of the ALC.

Safe crossing points are provided where access to the parking zone crosses over vehicular routes. There will be dropped kerbs, tactile blister paving and a clear change in surface material across the vehicle routes. Disability spaces will be marked out in accordance with BS8300 Fig 3. Access from these accessible bays to the main entrance is smooth and at a gradient of no more than 1:21.

Staff and Visitor Motorcycle Parking

Five motorcycle parking spaces will be provided in the car park, which will include ground anchors to allow motorcycles to be securely locked.

Service Area

The proposed design will accommodate two 10m length rigid lorries in a loading bay located at the south of the school, adjacent to the catering and facilities management areas. The loading bay will be located at the end of the new service road and feature a hammerhead turning area. It will be accessed from Carlton Road. The capacity requirements for delivery vehicles have been designed to accommodate the following vehicle types refuse collection vehicles, biomass delivery vehicles, catering delivery vehicles, and supply delivery vehicles.

The service area has direct access into the catering and facilities management areas in the building and is secured from the visitor carpark and student areas.

Emergency Access Routes

Vehicle swept path testing has been undertaken to demonstrate that clear access routes to existing buildings and extended facilities, have been provided for fire appliances and hence also for smaller vehicles including emergency ambulances.

5.05 Entrances

Site Entrance

The main pedestrian entrance is from series of landscaped plateaus which are setback from the site boundary from Carlton Road.

Site Circulation

All approaches to the buildings and circulation routes within the site will be wheelchair accessible. This will be achieved with appropriate ramps and Part M compliant stairs to deal with level changes.

Site Levels

Levels across the site on external circulation routes are designed such that no external surfaces are graded steeper than 1 in 20.

Main Entrance to Building

All pupils, staff, visitors and members of the community enter the ALC via the main entrance. This is clearly marked by the articulated shape of the Reflection Space which sits above the entrance at first floor level. The landscaped terracing leading from the site entrance to the entrance of the ALC has been carefully considered to accommodate the change in level and to make the route intuitive and welcoming.

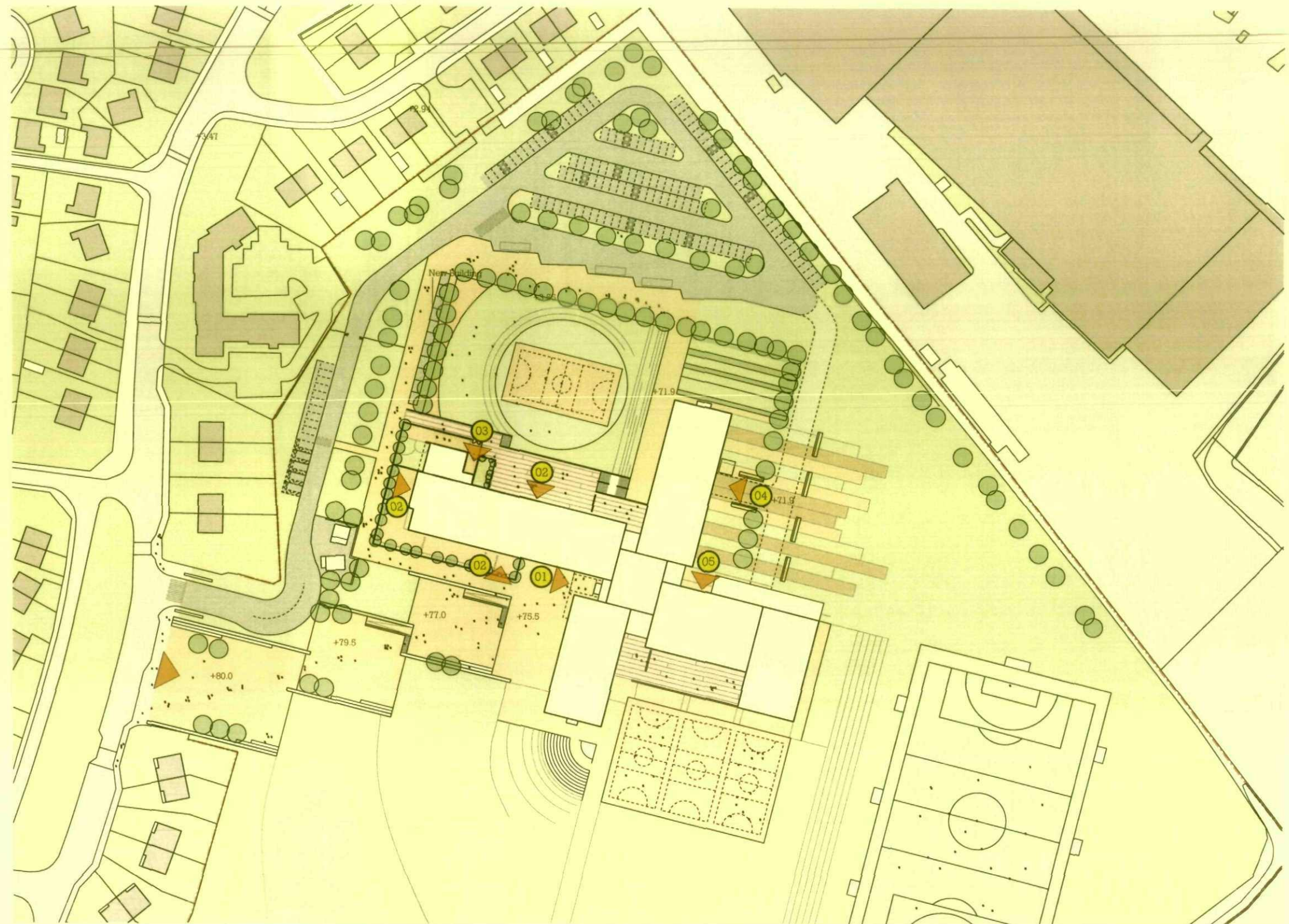
A draft lobby is provided at the entrance leading directly to the entrance desk in the reception area.

There are a number of secondary entrance points to the main building. The northern end of the new building has two entrances to provide access to the rear of the sports building as well as to the landscaped boardwalk.

The dining space has a number of access points to allow for over spill for external dining in the warmer months. The dining space will be configured to maintain a route through the space to provide clear access for students who want to access the boardwalk without interfering with the operation of the dining.

Reception

The reception area and desk is located at the edge of the Heart Space and is reached immediately on entering the building. The Heart Space is a dramatic double height space and acts as the social fulcrum of the ALC. The reception desk has an uninterrupted view of the entrance and Heart Space, enabling passive supervision of these areas. The reception desk also provides space for student services reception and control of members of the community attending the Adult Learning Facilities.



- 01 Main Entrance
- 02 Entrance to Primary Class Bases
- 03 Entrance to Nursery
- 04 Delivery entrance
- 05 Service Entrance



5.06 Community Use

Access

Community access to the site will be managed through a series of lines of containment and security. The first line of security is the site boundary with an access controlled gate to both the vehicle and pedestrian entries.

Access through the visitor car park to the remainder of the school site is controlled by another line of security separating the carpark from the piazza and service yard.

Once access has been gained to the open piazza a further line of security will prevent access to the rear of the site without passing through the managed offices in either the new building or existing sports building.

Access to the rear of the site to the all-weather pitch will be on a managed basis with a register kept of all persons using this facility.

Secondary Entrances

There is a secondary entrance to the end of the West wing providing 'early years' access to the primary accommodation. Additionally, external access is provided to each year group for parents to deliver and collect pupils directly to their respective classbases.

A further entrance at the intersection of the North and East wings provides discreet access to the Pupil Referral Unit at lower ground floor level.

Doors

All entrance doors will either be automated or will provide 1000mm clear openings with closures meeting the requirement of Building Regulations ADM. Where doors are automated visual warning will be provided in accordance with B8300. Glass will be manifested as required by Building Regulation ADM + N.

Reception Area and Desks will be designed in accordance with the requirements of Building Regulations Part M and BS8300 and will provide for pupils & visitors both standing and seating including wheelchair users). The reception desk or counter will have a working surface at two heights; between 950mm and 1100mm to accommodate people who are standing and 760mm to accommodate wheelchair users..

External Works

The existing palisade fence surrounding the site will be retained. It will be overhauled and repaired as necessary.

The front area of the site between the site entrance and the school will remain in the public domain. It will be secured by a combination of 1.8m high walls (cutting across the contours), a 1.8m high weld mesh fence, and the face of the building. Where the fence forms the boundary to the primary play area it will be faced by a densely planted hedge.

Access to the area of site beyond the line of the security fence will be controlled by a gated access point. The staff car park and general service area will be reached via this gate.

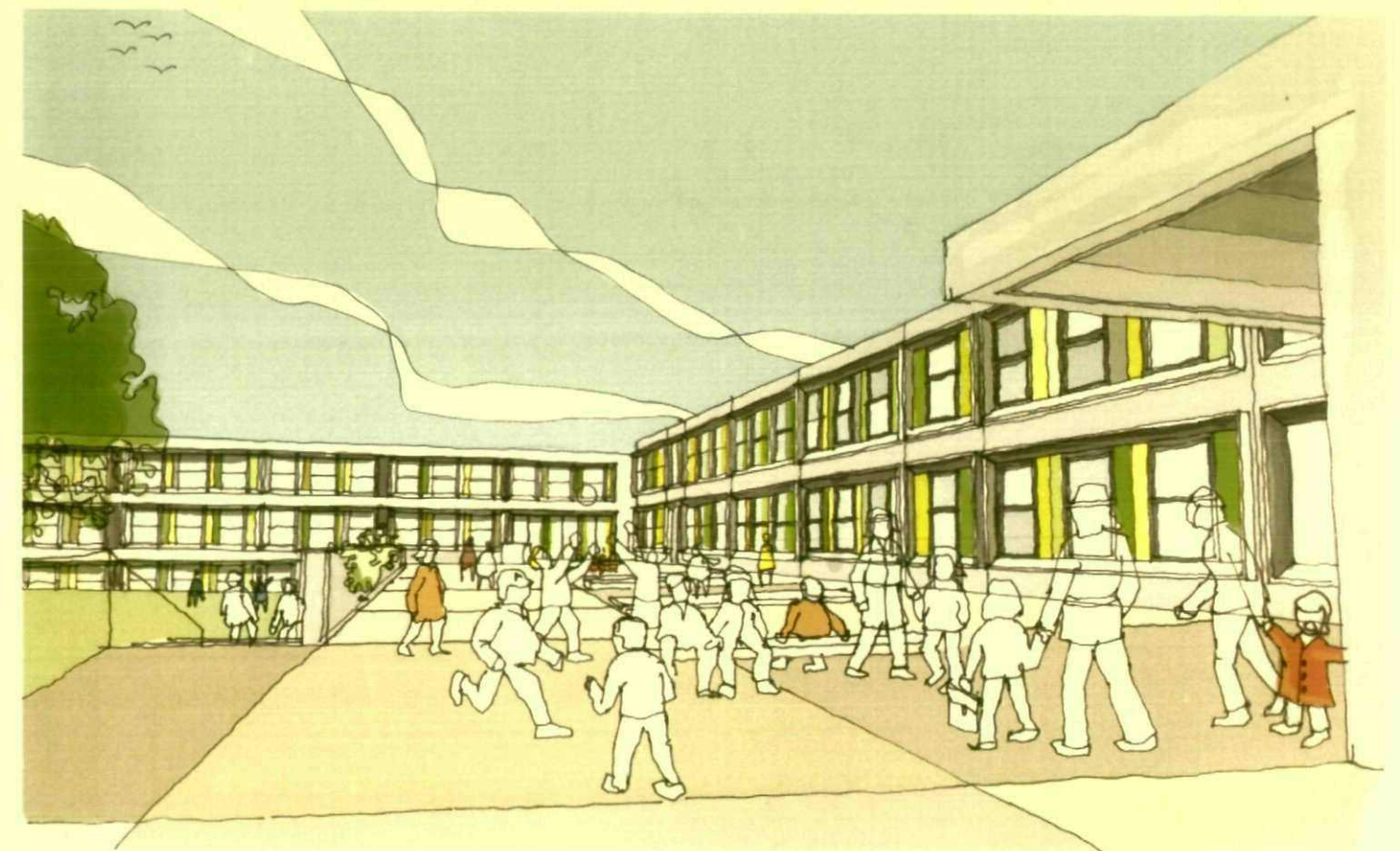
A secondary 1.2m weld mesh fence will be provided around the primary play area to prevent children from leaving this designed area.

The new buildings will be constructed in compliance with Building Regulations Approved Documents M and BS8300 so that the School may embrace the requirements of DDA95+2005 and SENDA2001.

The new school is designed to be totally accessible throughout with consideration given to all aspects of inclusion including recognising the role played by an increasing number of student support initiatives that allow teaching to take place within the main school areas promoting student esteem, social skills and educational achievements. Circulation spaces, teaching bases, breakout and resource areas are designed with this in mind.



1. Aerial View of West Wing, Primary Learning Deck



2. Perspective View of West Wing, Primary Learning Deck

6.00 Landscape Design

6.01 Introduction

In order to comply with national guidelines, meet the requirements of the BMBC Building Schools programme the landscape proposals have been developed with reference to published guidance such as the DCF5 Building Bulletins, which relate to the external environment:

BB102: Designing for Disabled Children and Children with Special Educational Needs

BB85: School Grounds. A Guide to Good Practice

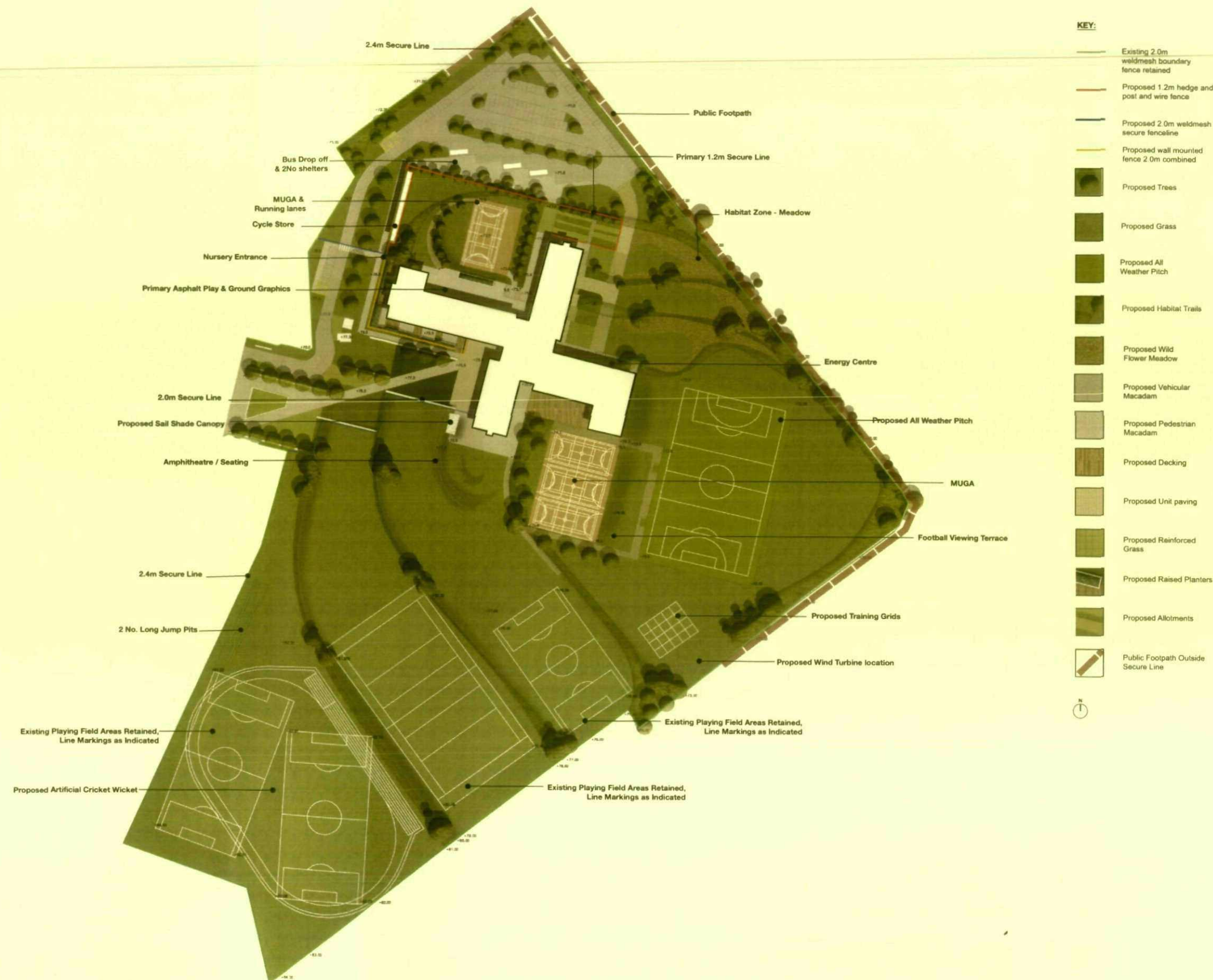
BB95: Schools for the Future. Designs for Learning Communities

BB98: Briefing Framework for Secondary School Projects

These principles have been integrated to reflect the specialisms and priorities of the school, and have been developed through close engagement with senior school staff and governors.

In addition we have considered the relevant Sport England guidance to inform the sports provision so as to optimise the solution for Winter and Summer games within the constraints of the site. This provides quality facilities helping to encourage use in the curriculum and by the community. The aim is to create a framework for dynamic educational environment that responds to the school's ethos and specialisms and can evolve over time. This is underpinned by the need to create an attractive and safe landscape that provides sheltered spaces and is fully accessible to all users.

The master plan embraces the principles promoted by the 'Learning Through Landscapes' initiative, recognising the whole school environment as a valued teaching asset that plays an important role in supporting the key stage curriculum.



Landscape Provision

Item	BB98 Min. area recommendations	Actual Provision
No of Students = 1093	-	-
Likely Site Area	64,380 sqm	107,800 sqm
Area for Sport (Playing Fields and Ball Courts)	43,455 sqm	70,000 sqm
Soft Informal and Social	4,333 sqm	6,100 sqm
Games Courts [Hard Surfaced]	3,386 sqm	3,386 sqm
Hard Informal and Social	2,440 sqm	2,430 sqm
Habitat	1,493 sqm	10,990 sqm
Buildings and Access [approx.]	N/A	12,130 sqm
Float	9,273 sqm	2,770 sqm

Landscape Philosophy

The landscape setting for the new school plays an important role in providing an attractive backdrop for educational activities, play and social interaction together with providing the first visual impression to visitors.

The proposed scheme pays due attention to the principles set out in the 'Learning Through Landscapes' initiative, providing spaces beneficial to the intellectual and social development of learners. An attractive outdoor environment is proven to have a beneficial effect on the wellbeing of staff and students, and can help support differing learning styles that may not be appropriate indoors.

A strategic approach to the outdoor spaces has been developed beginning at the site boundary with a welcoming approach reaching out from the building entrance to Carlton Road. This is expressed in a series of grass plateaux stepping down from the road entrance toward the building. In the spaces immediately outside the school it will be possible to express the schools specialism of creativity with student/project work integrated into the plaza area. Good internal/external adjacencies support use of the outside spaces, these are positioned along the main edges of the building linking into the internal uses, providing ready access and good natural surveillance. Beyond these spaces are opportunities for wider social learning again with good natural surveillance, increasing in scale as the spaces are offset from the building.

Furthest away from the building are the larger scale sport spaces linking through to the natural habitat beyond, again these are arranged with the smaller scale more intensively used facilities closer to the building.

This approach creates a variety of active and passive outdoor facilities for all key stage groups, as well as open spaces used for outdoor teaching. Natural habitat areas for wildlife development are brought from the site edge across the playing fields along the sports field plateaux linking through to the plaza area and the building providing excellent opportunities for environmental learning.

The whole school site has been designed site as an educational resource, incorporating flexibility for future change teacher and student development, seeking to exploit the natural characteristics wherever possible.

Landscape Concept

The proposed site is currently used by several schools, all existing school buildings are to be demolished and replaced with a new combined school building providing facilities for children from nursery stage through to 16+.

The current landform is largely manmade with the existing building constructed of made ground and the existing sport fields being heavily terraced. The site is bounded on the west by residential development of a low density including a high percentage of bungalows, this is currently the orientation of the main entrance. To the north light industry is located along the school edge and to the south and east this is separated from the school by rough open grassland. The soft external spaces around the school are predominantly mown grassland.

The site wide landscape strategy is to increase the biodiversity and to create new habitats in line with the local Biodiversity Action Plan and linking these elements into the educational curriculum. Additionally this may help to modify the microclimate making the experience of being outdoors more pleasant, helping to encourage outdoor use. This strategy is realised through a series of 'ribbons' of planting and differently managed grasses and herbaceous plants which wind through the landscape from the perimeter of the site linking through elements in the wider site through smaller scale space adjacent to the building. These landscape ribbons tie into the landform linking the terraces and landform to the planting and ecology.

Planting will be of a native woodland type reflecting the local Biodiversity Action Plan and the local landscape context of low density residential and semi open space with natural regeneration. Nearer to the school building more formal and smaller scale planting will be incorporated to create a more visually stimulating environment.

The site wide planting concept will be to create three zones round the building coupling the school academic year with the seasons. The first zone will be the approach from the roundabout up to the school front door, which will focus on plant species, which are of particular interest in the winter season, welcoming new pupils and returning pupils alike. The second zone will be the area in close proximity to the building, which will focus on plants of interest in the spring term encouraging outdoor use of the spaces close to the building when weather improves slightly. Lastly beyond these two zones in the summer term planting will highlight species of particular interest in the summer months when weather is more likely to encourage pupils and staff into the wider landscape.

All playing field areas are mainly existing grass pitches that will be maintained areas of grass pitch will be increased on some of the existing plateaux to facilitate a rugby pitch. A new All Weather Pitch will be provided.

6.02 Description of External Spaces

Main Entrance Plaza and Access Route

Entry to the building edge and front door will be open 24 hours a day with the secure line pulled back to create a welcoming entrance to the local community and school users, so that the building façade along this edge will act as the secure line.

A strong geometric arrangement of terraces step down from the back of the street entrance representative of the existing heavily man made land form, creating an open clearly legible route to the front entrance for pedestrians.

Vehicles will enter immediately to the north of these terraces but with clear separation. Treatment of these terraces will be as soft landscape grass parterres with path route leading diagonally across the terraces stepping down in three levels, edges reinforced with low wall / seating elements hedging and tree planting. Tree planting will also help to filter views overlooking into the Primary School external space

Nursery External Play Areas

There are two external play spaces for nursery children immediately adjacent to the class space these are enclosed to provide a safe and secure environment for the most vulnerable children.

Primary External Play areas

Primary external play is split into two areas both located immediately adjacent to the teaching spaces but either side of the primary wing. The southern area comprises of compact quiet contemplative spaces with raised planters and coloured surfacing. The northern edge includes a space for passive informal play. Below this area is a grass lawn for social play & learning creating a setting for the MUGA Primary hard games court.

Technology Gardens

Outdoor space is provided for the Secondary school children around the other three wings of the building. On the northern edge there is a shared growing area or allotment space for children to carry out growing activities including raised beds to include disabled pupils to take part in growing activities. A low hedge protects this area. A technology garden space is located against the technology wing with areas of hard standing to allow large or messy projects to take place out doors.

Sports Complex and Games Courts

Accessible routes are provided to all sporting facilities, artificial surfaced spaces for team games are located close to the building to provide easy access to the most heavily used facilities.

MUGA surfacing will be porous tarmac to provide a good playing surface for tennis. They will be line marked for tennis, basketball & netball.

Performance Space

Along the southern wing of the building is located an amphitheatre space with large seat steps which can be used as a performance space or for outdoor presentations. This space is designed to be flexible with the seat steps blending into the landform and merging to grass banks. This allows for regular use of the feature for smaller groups and can accommodate larger groups on a more infrequent basis. With a terraced lawn at the top of the amphitheatre there is also the possibility of occasional large community or whole school groups.

Outdoor Dining

Large hard surfaced spaces adjacent to the internal dining area allow for dining to break out into the outdoor space with fixed furniture arranged.

Habitat Zone

Habitat planting is a component of the green ribbons planting, providing mini wildlife corridors leading to the building.

Sports Complex and Games Courts

The existing Landform is to remain with minor areas of remodelling to the middle plateaux to accommodate a new rugby pitch. The lower end of the site will be levelled to create a new plateau for the new All Weather Pitch. MUGA's with fences will be provided with an open porous tarmac surface to create a high quality play surface for tennis, basketball, netball and 5-a-side football. A '3G' All Weather surface football pitch will be provided as part of the works it is expected that these facilities will be available for use by the community. The new areas of grass playing fields will have the team games areas and appropriate margin drained.

A list of the facilities provided is scheduled below

- 1 nr. 3G All Weather senior football Pitch with 4m high perimeter fencing and floodlighting
- 2 nr. Grass senior sized football pitches
- 1 nr. Grass senior size rugby pitch
- 1 nr 400m grass running track
- 1 nr. Junior grass pitch
- 1 nr. Cricket pitch with artificial wicket
- Training grids
- 4 nr. MUGA's to accommodate 4 tennis, 4 netball, 4 basketball, 4 5-a-side courts

Drainage will be provided to the areas of new pitch.

Social Spaces

Nursery, Primary and Secondary play areas are all segregated to minimise intimidation but with visual links so that spaces are not isolated or unconnected. Social areas are designed to accommodate active play and quiet seating areas. The nursery is equipped with a small outdoor area hard surfaced to maximise use immediately outside the building with separate entrance for nursery pupils.



Landscape will use existing mounds on site
Indicative



Edges defined by planting and seating
Indicative



Mixture of hard landscape, seating and planting
Indicative



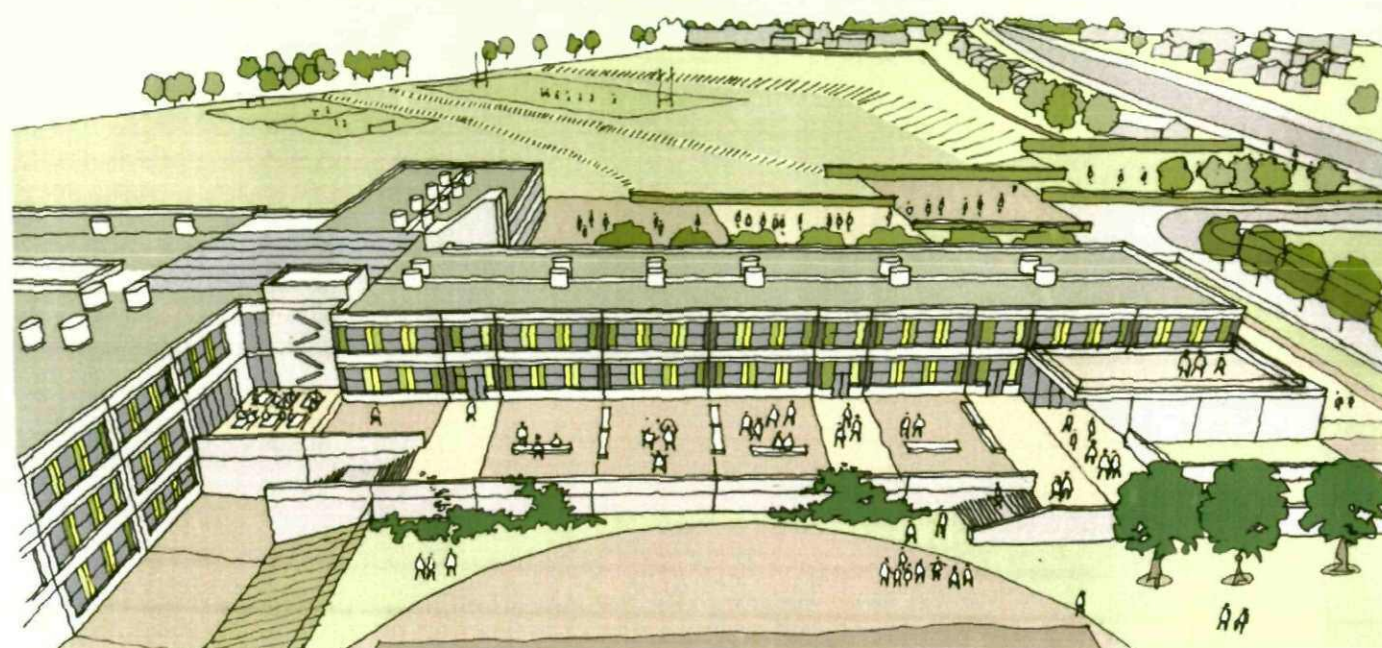
Allotment space to north of building
Indicative



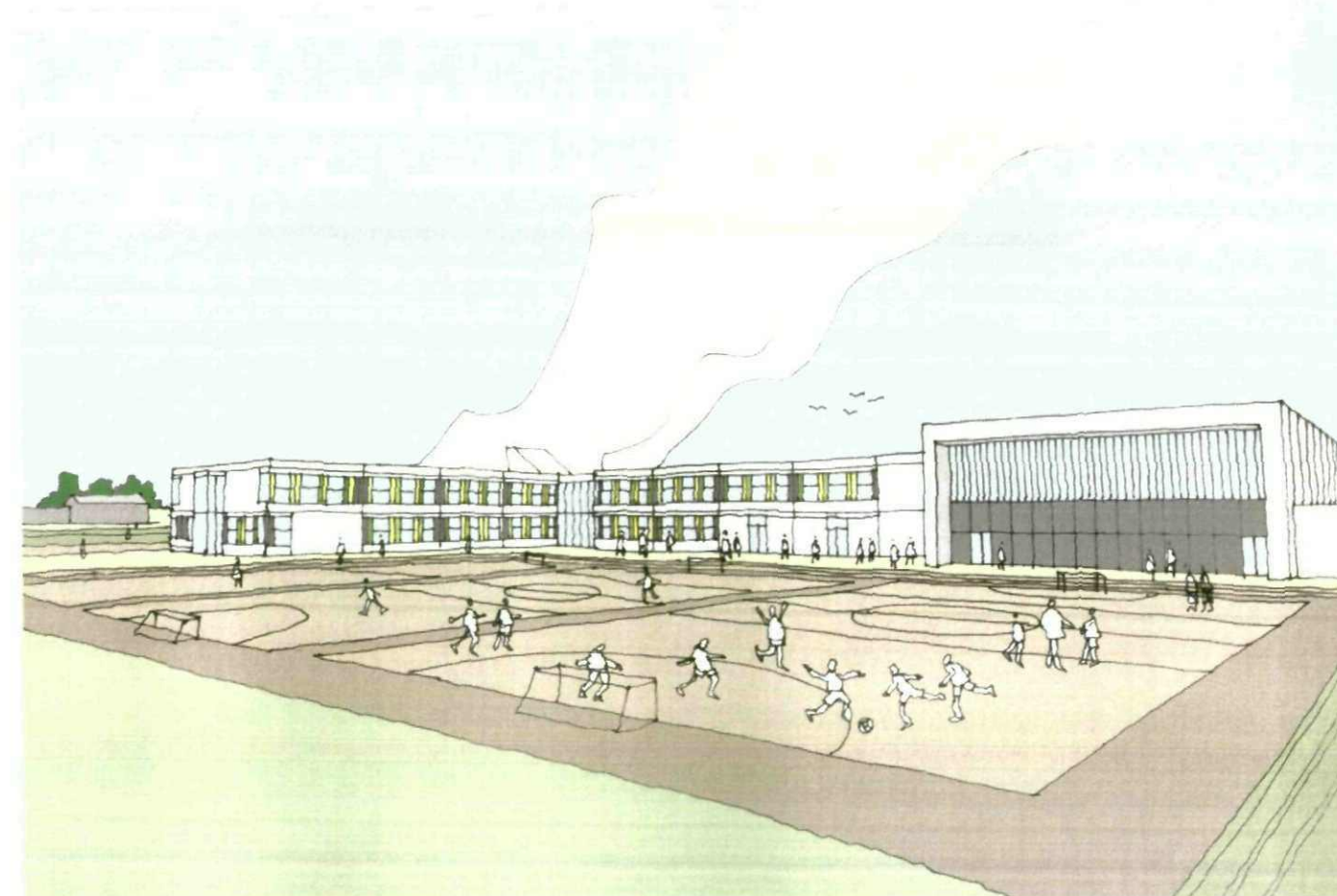
Outdoor Teaching Amphitheatre
Indicative



Covered External Teaching Space
Indicative



1. Aerial View of West Wing, Primary Learning Deck



2. View of Secondary MUGA and Main Sports Hall

6.04 Key External Spaces

The primary space is provided with two areas either side of the primary wing. Facing towards the south is some sheltered outdoor space with raised planting beds for seating and to create a soft edge and partial screen to the secure line edge bounding this area. To the north there is a raised space with an area of planting. Below the landscape becomes softer with a larger sheltered garden area with hard surfaced MUGA.

The Secondary spaces have a variety of hard surfaced areas with timber decking to some areas. Along the southern wing of the building is located an amphitheatre space with large grassed seat steps which can be used as a performance space or for outdoor presentations. This space is designed to be flexible with the seat steps blending into the landform and merging to grass banks. This allows for regular use of the feature for smaller groups and can accommodate larger groups on a more infrequent basis. With a terraced lawn at the top of the amphitheatre there is also the possibility of occasional large community or whole school groups.

As part of the specialised learning spaces there is an area for larger scale technology or engineering activities to place outside along the northern wing. At the end of this wing there is also a protected area for pupil horticulture, which may be shared by the Primary and Secondary pupils

Habitat Zone and Woodland Planting

Habitat areas will be in accordance with the local Biodiversity action plan and complement the parkland setting and scale of the local landscape. Habitat planting is a component of the green ribbons planting, providing mini wildlife corridors leading to the building.

Planning and Community Issues

A generously spaced and welcoming community entrance is provided with a clear legible route direct to the school's front door. Along this space are provided informal rest and seating places. The lawn area is terraced creating a space where community and school related activities could take place such as open days or themed fetes. Access to sport facilities will be managed by access through the building main entrance.

Disabled drop-off some disabled parking is located immediately next to the plaza providing easy access to less mobile visitors.

Hard Material palette

The landscape masterplan illustrates the site layout and key elements of the scheme in terms of materiality and soft landscape provision. Hard and soft landscape materials have been selected to provide interest and longevity. The materials and species will be robust and easily maintained to ensure the success of the scheme into the future. Hard surface materials will be mainly macadam with areas of surface graphics to enliven. Some areas will incorporate coloured chippings to help define main routes. Highlight paving will be included at the main entrance.

Site furniture will be robust and of a scale and size appropriate for the location. Materials will be predominantly natural with benches and tables fabricated from timber sourced from FSC suppliers. Seating units will link in with other landscape elements where possible such as the level changes around the amphitheatre space.

Trees and Soft Landscaping

The landscape scheme has been developed to retain as much of the existing tree cover on site as possible to provide a mature landscape wherever possible. The retained trees will be invaluable as part of the landscape context surrounding the school and will assist with providing an attractive setting for the school from the opening. The existing mature landscape will have a high habitat value and this can be enhanced through future management.

Planting within the site has been designed to link the larger scale open spaces through to smaller scale open spaces around the building, linking the building into its context and creating pleasant outdoor spaces within close proximity.

Public Footpaths

The Public footpath that currently runs around the northeastern edge will be retained, this lies beyond the school's secure line.

6.04 Planting Strategy

Land Use and Ecology

The design team has appointed a fully qualified ecologist to ensure: Existing ecological features found to be present on the site are protected where possible and to provide additional habitats for local species known to exist in the area

Construction activities have minimal impact on any ecological features present on site with all retained vegetation protected in accordance with BS 5837.

The design philosophy incorporates measures that enhance the ecological value of the site.

Compliance with LE3-LE6 of the BREEAM School calculator

A Phase I Habitat survey has been carried out on site and throughout the coming design stages, advice will be sought from the consultant ecologist to ensure sound ecological principles are encompassed within the scheme.

As a preface, the design team carried out a review of the local Biodiversity Action Plan during the Stage 1 process to assess what ecological elements could be included. Some of the priority habitats referenced within the BAP have been highlighted for incorporation within the landscape scheme as follows.

Species Rich Hedgerow – The design incorporates opportunities for inclusion of hedgerows linking in with the plateau edges of the sport fields and for some perimeter and internal boundaries particularly the Primary boundary.

Lowland Grassland – The proposed maintenance strategy for the under story of habitat areas and marginal grass areas shall allow for provision of species rich grassland to be incorporated. This will also provide a good visual link between the parkland and the school landscape.

The intention is that the above strategy will be developed throughout Stage 2 in conjunction with the ecologist. This will ensure that the intentions are carried through into the detail to gain maximum value from the proposed habitats.

An ecology report will be produced to include the following:

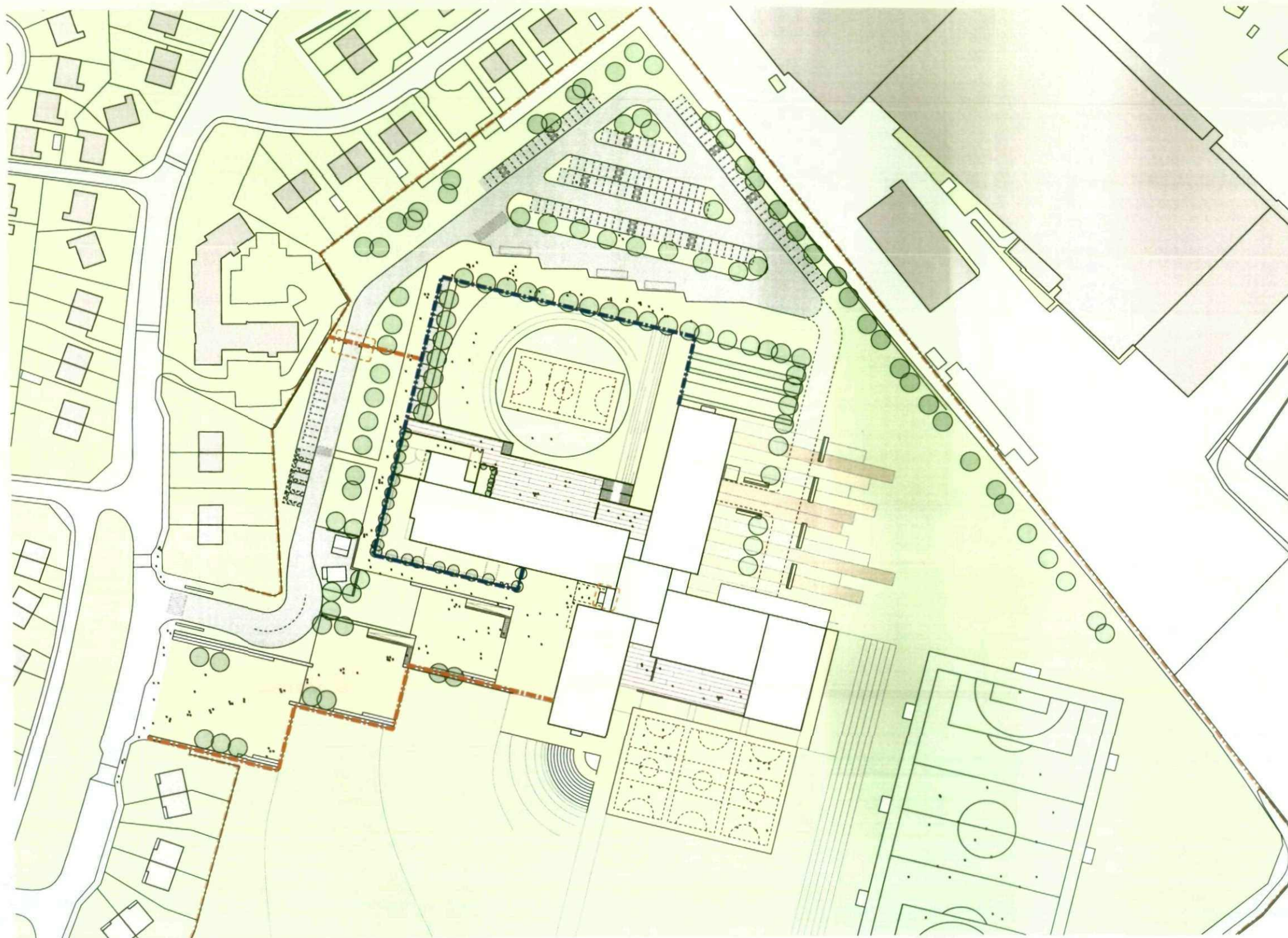
Assessment of the ecological value of the site through the application of the BREEAM ecology calculator and in relation to the Barnsley Biodiversity Action Plan

Assessment of the measures adopted by the principal contractor to preserve and protect existing ecological features

Identify measures to enhance the ecological value of the site in accordance with the BREEAM School 2006

A 5-year maintenance and development strategy to protect and enhance the ecological value of the site. This will include feedback from any local wildlife groups.

The management and development of the ecology of the site can be a useful learning tool for pupils. It is intended that input into habitat management can be linked to ecology learning for the pupils where practical results can be analysed as part of the science and maths curriculum.



I. Security Strategy Diagram

 Key security points

Perimeter secure line

Primary School secure line

6.05 Security

The scheme has been designed with reference to the 'Secured by Design - Schools' Guidelines 2004.

Perimeter

The whole site perimeter is fenced as described under 6.02 and in a number of areas is being upgraded in terms of height. Access points have been kept to minimum based around the school's planned usage of the site. Access through the perimeter is either electronically controlled by school staff or permanently locked and openable by staff only. The design features a second line of containment with a secure hedge separating the visitor carpark and access route from the student and servicing areas.

Surveillance

The site has been laid out efficiently to minimise the distance between building and ensure that the areas between the new and existing buildings can be supervised. In particular the administration areas of the new building have views over the approach to the building.

External Lighting

Lighting can make the other security components more effective during the hours of darkness. By applying light at strategic locations (i.e. site fences, entrance gate, and building entrances) it can act as a deterrent because it removes the cover of darkness. Lighting can also assist post-detection of intruders when CCTV is part of the on site security strategy.

The lighting of areas where cameras are active, such as building entrances, fire escapes and the site's perimeter, should facilitate these cameras to record good images. The (local) light level required for intruders to be revealed and identified depends on the camera specification (generally up to 10 lux).

CCTV

The CCTV system will be supported by passive surveillance and the external lighting strategy and will focus on key areas around the site as identified on adjacent diagram.

Building Shell

Rainwater pipes are located internally and in addition the frames formed around the external windows are raked to minimise the risk of the facade being climbed.

Building Entrance

Entry to the new building is through a secure 'airlock' that allows for visitors to be processed before being provided access to the rest of the building. A meeting room is accessible from the airlock for interviews where restricting access to rest of the building is desired.

7.00 Appearance

7.01 Elevational Strategy

Massing

The massing of the building a predominantly two storey with three storeys to the north of the site where the landscape naturally slopes downwards. The massing id then broken down with the introduction of Special features that comprise of entrance canopies, Double height curtain wall glazing and internal forms expressed externally

Due to the form of the building the elevations provide interesting backdrops to different social outdoor areas of soft and hard landscape. Each elevation relates to the activities both behind and in front of the facade, also adjusting to issues of solar gain and internal daylight factors.

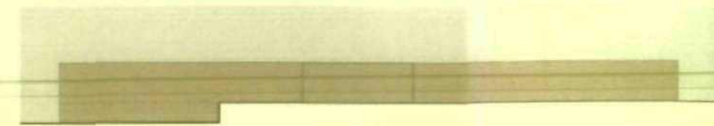
Horizontal Expression

It is important the internal teaching spaces of the school are of high amenity and benefit from both good natural daylight and views out across the landscaped areas of the site. To achieve this the windows on all facades of the building are arranged in a horizontal band across each level of the building.

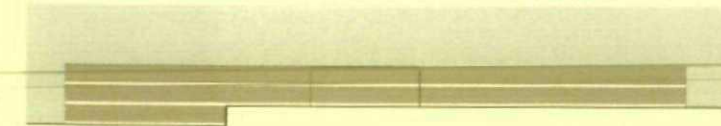
Proportion and Relief

The elevation is comprised of a series of 7.8m x 3.6m panels. Each panel contains a careful composition of generous windows, Vertical ventilation panels with an expanded metal mesh for security and health and safety reasons.

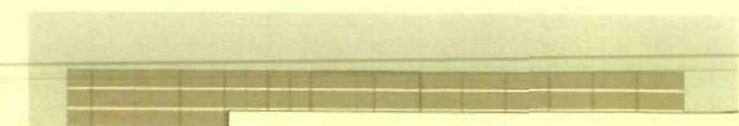
The glazing and vent panels are set within a profiled frame that is proud of the facade line of the building. This profile provides depth to the elevations and supports the horizontal expression of the building. The profiles also serve to house the vertical solar shading located to the west facades.



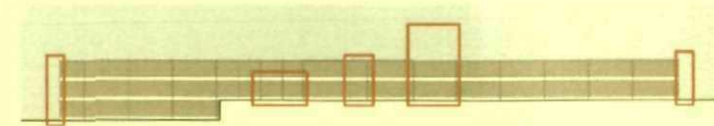
1. Basic Massing



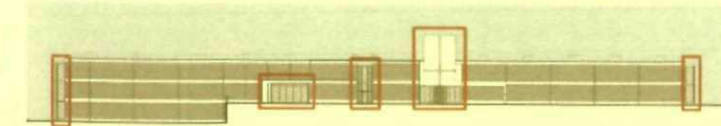
2. Horizontal Building Layers



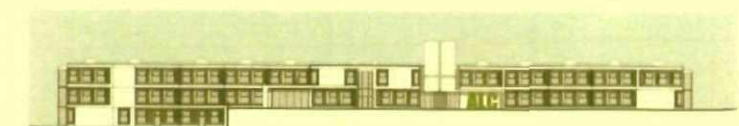
3. Vertical Breaks in Facade



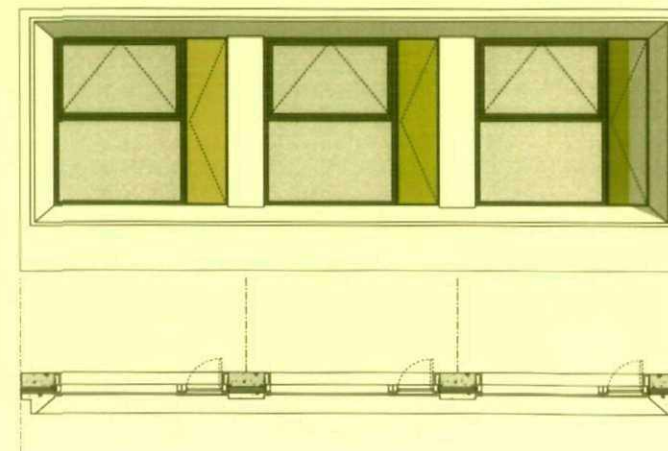
4. Location of Special Features



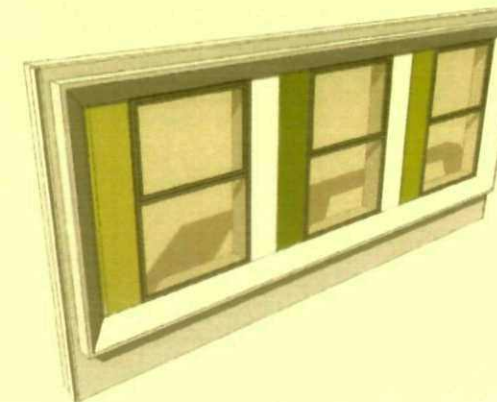
5. Special Features Comprising of Entrances and Glazed Openings



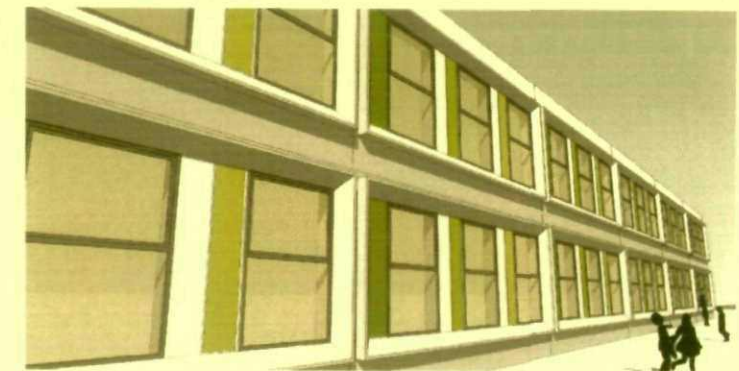
6. Cladding System Wraps Around the Facade



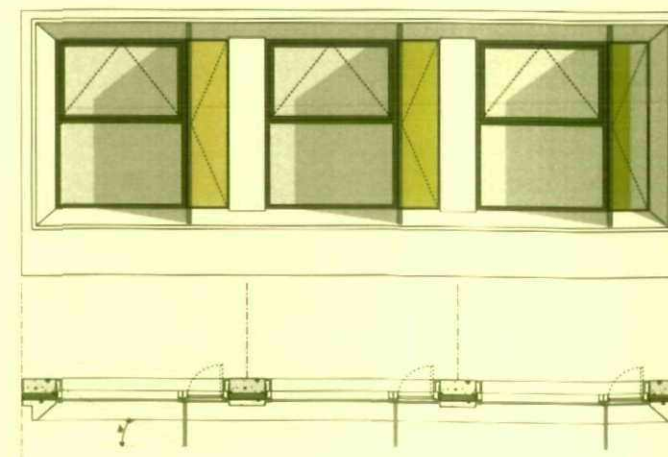
7a. Facade Panel Detail



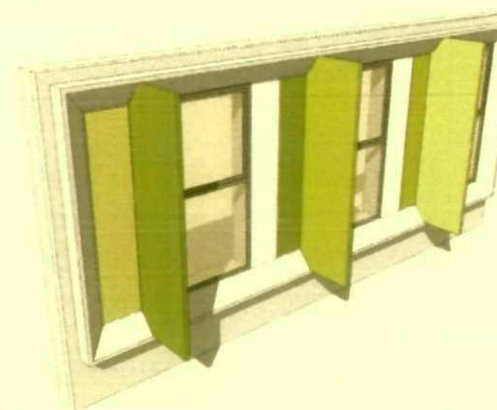
7b. Facade Panel Detail



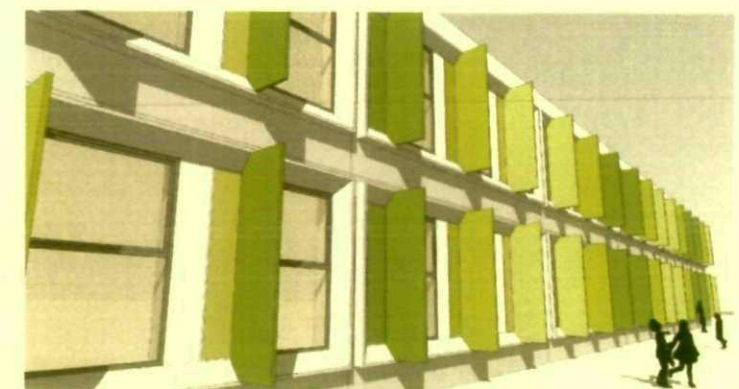
7c. Standard Elevation Treatment



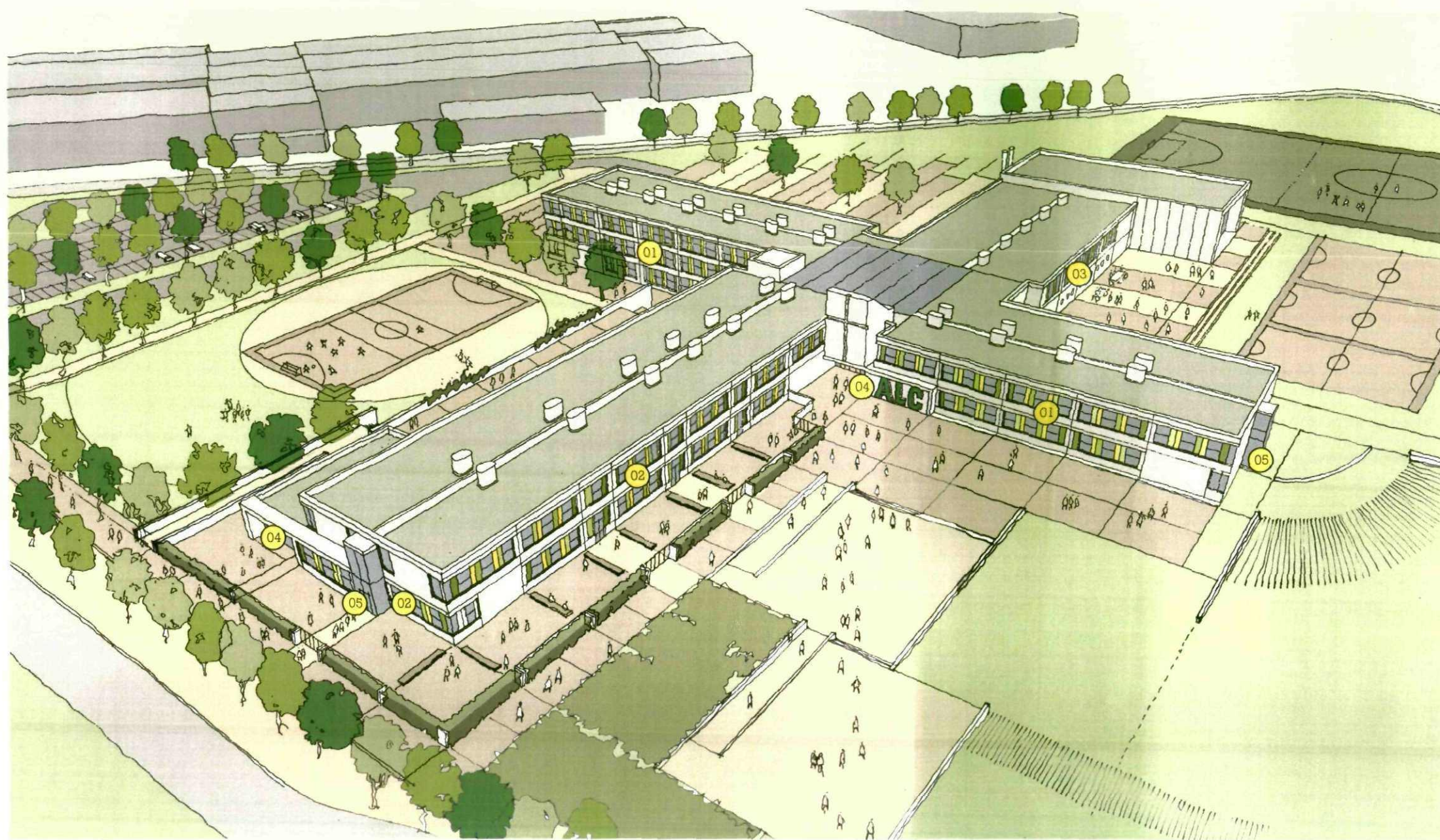
8a. Facade Panel Detail



8b. Facade Panel



8c. West Elevation Treatment



Building Overview with Types of Facade

- 01 Facade Panel with Profile and Vertical Solar Shading Fins
- 02 Facade Panel with Profile and Potential Lightweight Shading Canopies to Primary Play Spaces
- 03 Cladding System / STC Render
- 04 Special Entrance Feature
- 05 Curtain Walling glazing

2. East Elevation

01

External Walls

Precast panelised concrete insulated façade system incorporating architectural facing concrete and load-bearing inner leaf. The architectural concrete will comprise of a light aggregate and be lightly sandblasted to give the appearance of natural stone.

02

Windows

Double-glazed, fixed windows pre-assembled in facade panels, to achieve a maximum U-value of 1.76 W/m²K. External frame to have polyester powder coated finish, internal timber frame to be finished with clear lacquer or paint.

03

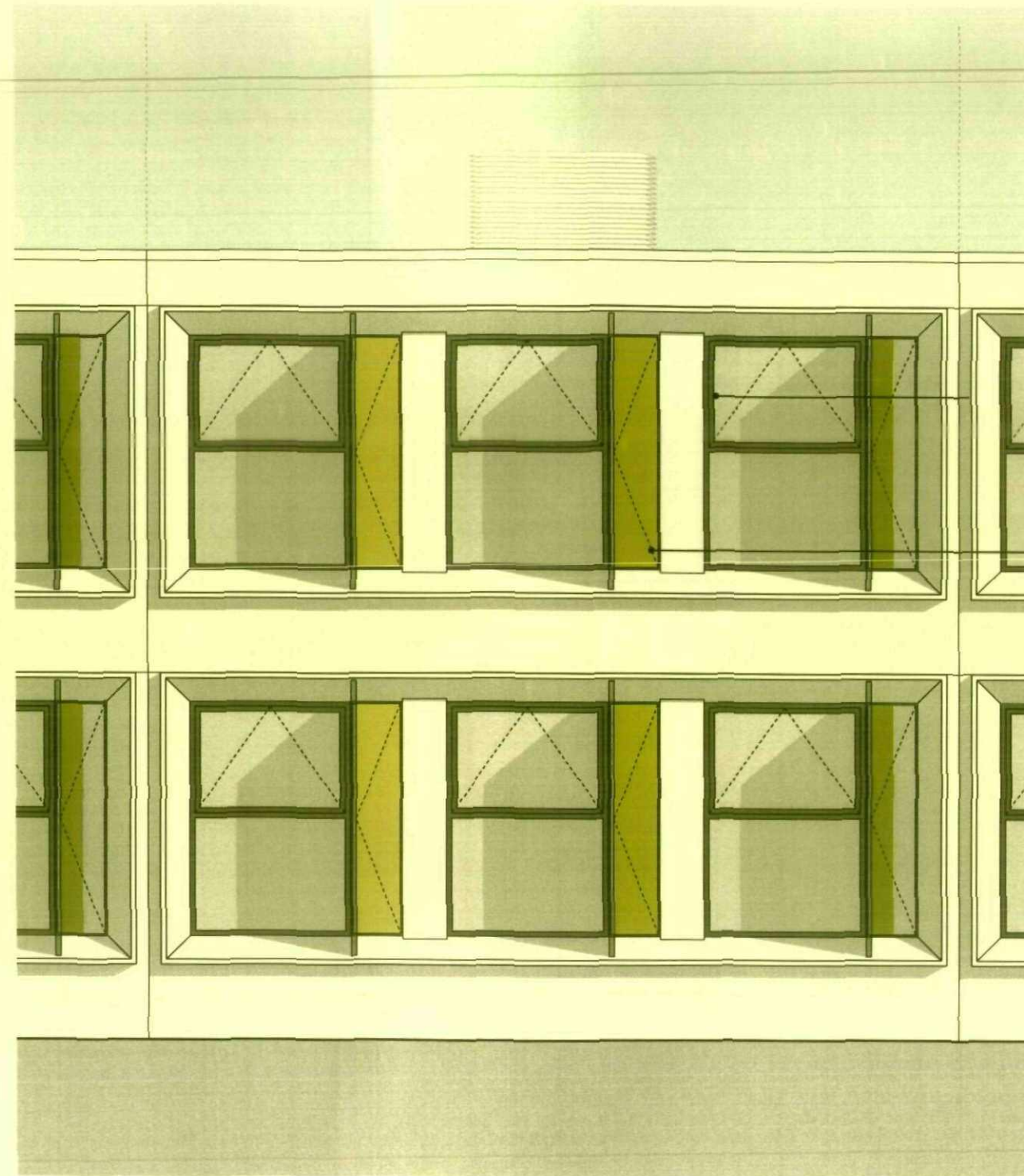
Ventilation Panels

Inward-opening window assembly. These opening vents mitigate against summer overheating and can be manually operated by the staff as required.

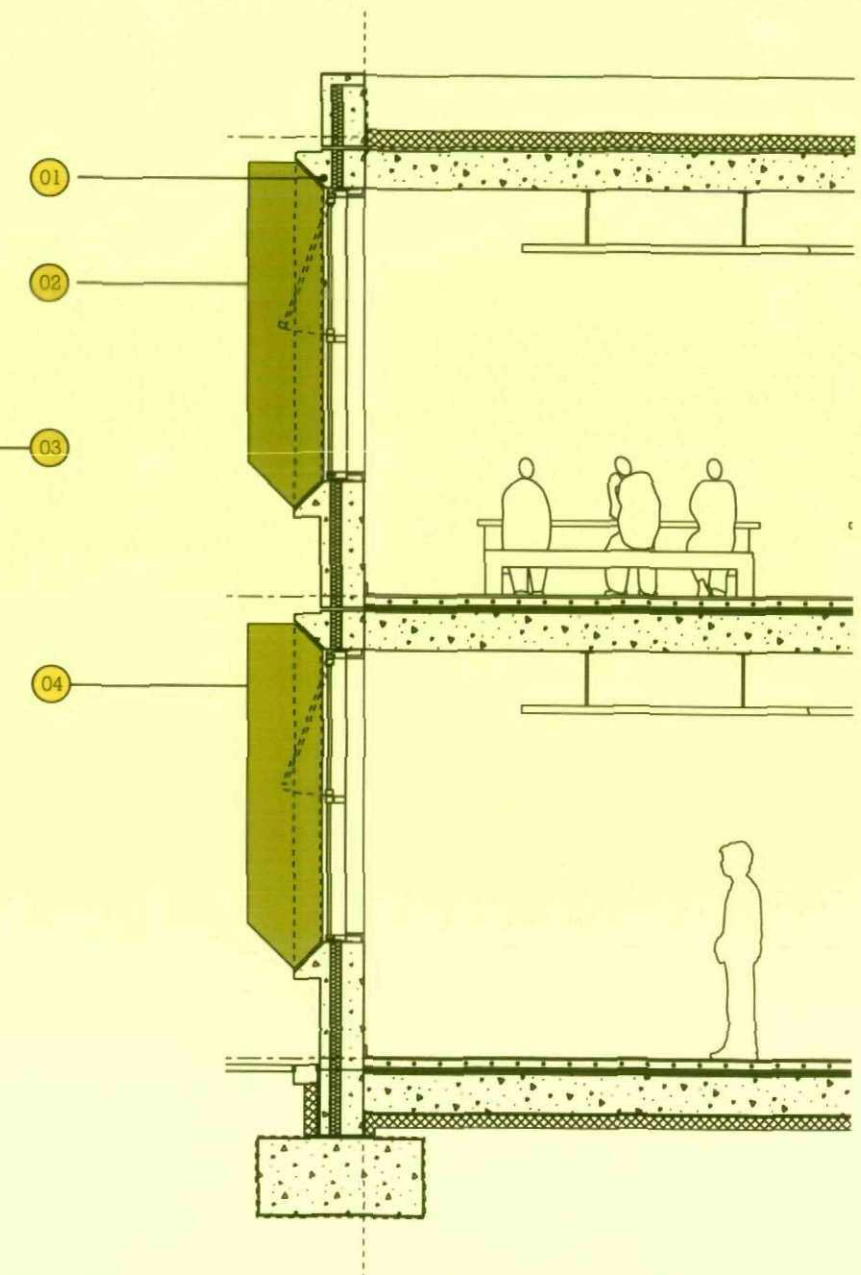
04

Solar Shading Fins

Coloured external vertical shading fins fixed to concrete façade panels to prevent solar gain at peak times of the year.



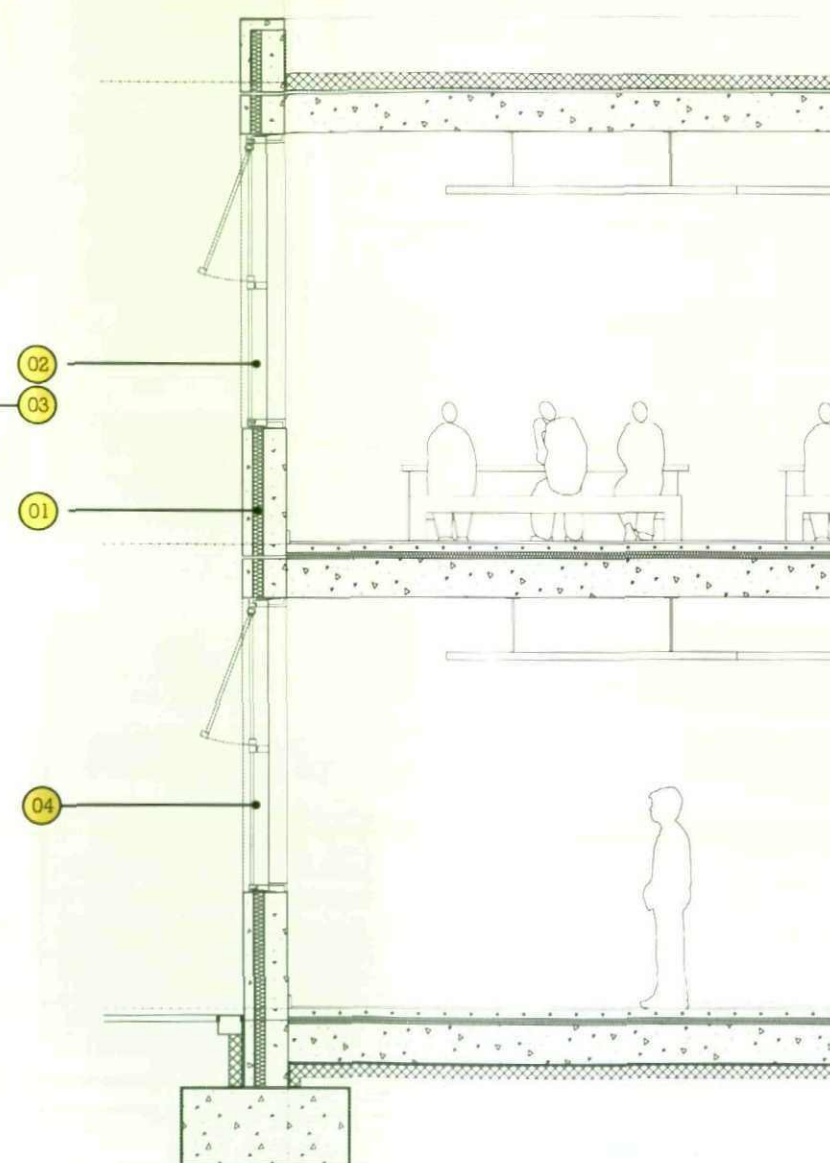
1. Bay Elevation of West Facade



2. Section Detail of West Facade



1. Bay Elevation of East Facade



2. Section Detail of East Facade

7.01 Elevational Strategy, North, East and South Facades

01

External Walls

Precast panelised concrete insulated façade system incorporating architectural facing concrete and load-bearing inner leaf. The architectural concrete will comprise of a light aggregate and be lightly sandblasted to give the appearance of natural stone.

02

Windows

Double-glazed, fixed windows pre-assembled in facade panels, to achieve a maximum U-value of 1.76 W/m²K. External frame to have polyester powder coated finish, internal timber frame to be finished with clear lacquer or paint.

03

Ventilation Panels

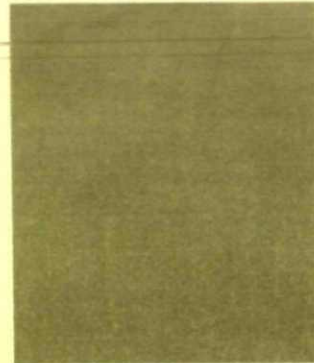
Inward-opening window assembly. These opening vents mitigate against summer overheating and can be manually operated by the staff as required.

04

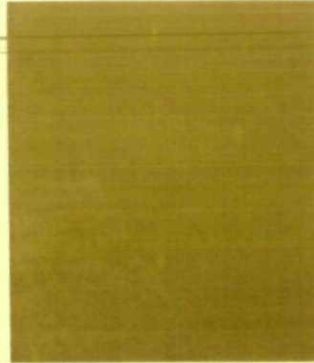
Solar Shading

Solar control glazing provided to prevent solar gain at peak times of the year.

SURFACE TREATMENTS



Grey Granite Macadam



Buff Macadam



Concrete Paving Blocks



Synthetic Surface to AWP



Hazard Warning Paving

WALLS



Concrete Steps and Walls

KERBS AND EDGINGS



Concrete Road Kerb



Concrete Seating Edge

FURNITURE



Bollards



Litter Bins



Bench



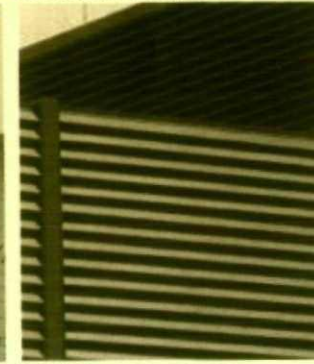
Dining Bench and Table

FURNITURE



Cycle Stand

FENCES AND RAILINGS



1.8M High Louvred Screen Fencing

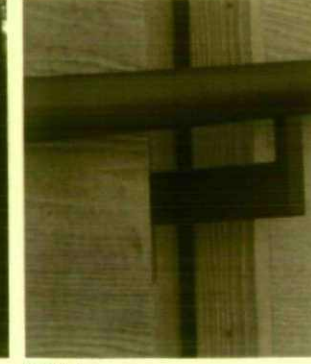


2.4 M High Fencing



1.2 M High Fencing

BESPOKE METAL WORK



Hand Rail



Main Entrance Gate Mesh Type and Signage

LANDSCAPE

ET

The design and layout of the ground finish seeks to respond to the architectural proposals whilst also providing a clean, uncluttered and formal entrance space. A combination of concrete slabs and blocks which provide a high quality and durable finish will be used in colours which are sympathetic to the building whilst remaining warm, welcoming, low in maintenance and able to accommodate both pedestrian traffic and the occasional light maintenance vehicle.

Boardwalk

Designed as a building breakout area for dining, informal social activity and external learning, the promenade seeks to have a tactile and pleasant quality. Material finishes are designed to reflect this use, both of which also seek to expose the natural colours and grains of gravel and paving slabs with incorporated natural aggregates, to give a warm and tactile feel. Steps down to the sports pitches would be constructed using a durable pre-cast concrete block designed to DDA and Building Regulation compliance.

Parking areas and roadways

Macadam surface finishes are designed to be durable and hardwearing to reduce the requirement for any on-going maintenance.

External learning environments

A range of sensitively chosen coloured tarmacs (warm greys, light buffs etc.) are being considered due to their softer feel and durable nature, as well as some cost benefits. The same surface treatment is also being considered for other external circulation space, in order that a seamless external surface can be achieved throughout the landscape to aid in clear navigation and way finding.

Outdoor amphitheatre & Lawn Area

A series of pre-cast concrete units would form the seating edges to the terraced area at the end of the Piazza. Lawn areas separate the terraces to provide a softer visual quality and would be formed into a series of mounds using site won material to add visual interest and an element of play to this soft social informal space.

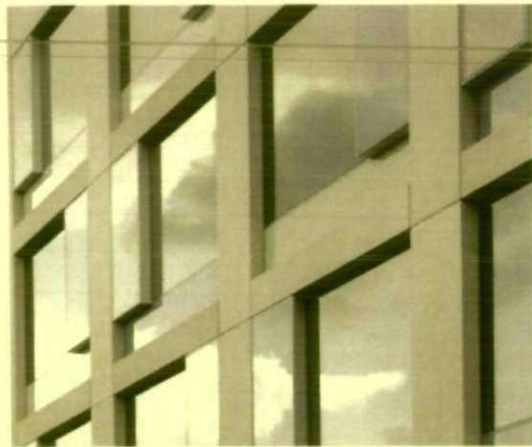
External furniture

External seating has been chosen which is of a scale and quality to accommodate large groups for informal learning activity whilst also being able to support more informal social activity. Material choices consider longevity and maintenance issues, whilst materials finish and colour will reflect wider site strategies on colour palettes. All furniture will be fixed and consider ease of maintenance. Bins will be carefully placed to consider building entrances and external seating areas whilst being minimal in design so as not to attract attention. All signage will be developed within a wider site branding and way finding strategy. Work benches and tables to external project yards would be sustainably sourced and durable timber and steel frame type, large enough to accommodate small pupil groups and flexible enough to support a range of activities.

8.00 Resources

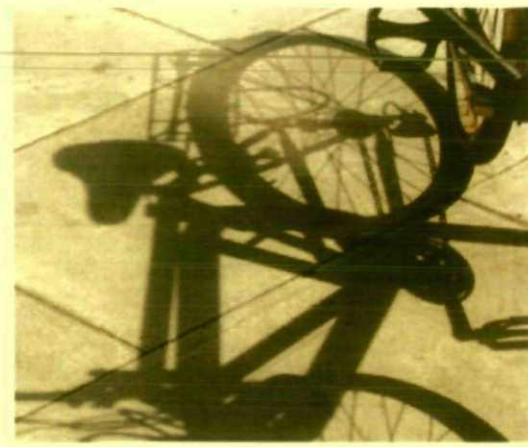
8.01 Sustainability Strategy

Efficient Envelope



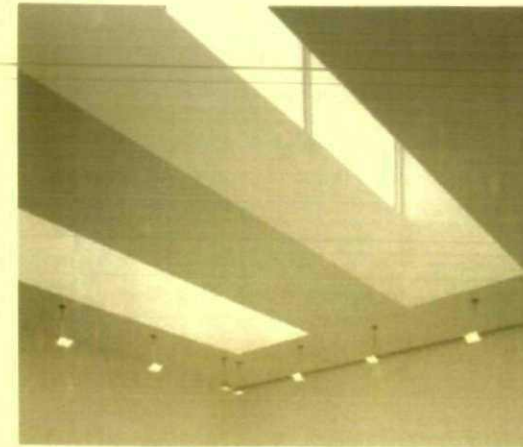
- 01 Insulated facade with a Thermal performance improved by 20% and air leakage reduced by 65% compared with current Building Regulations

Transport



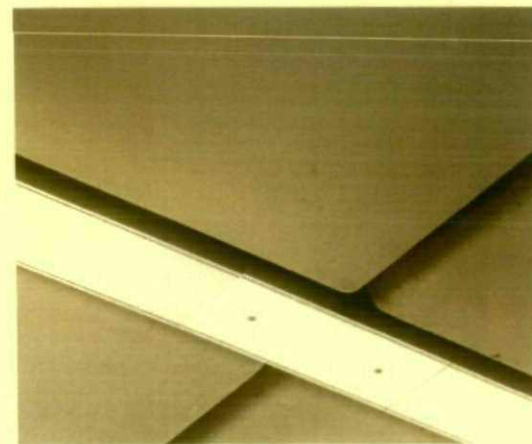
- 04 Secure cycle parking is provided on site

Daylight



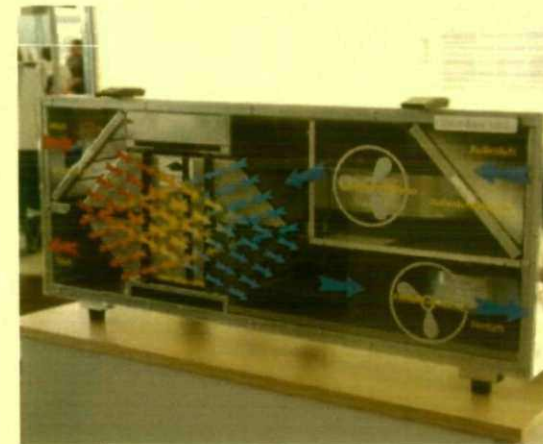
- 07 Skylights provide light to heart space

Thermal Mass



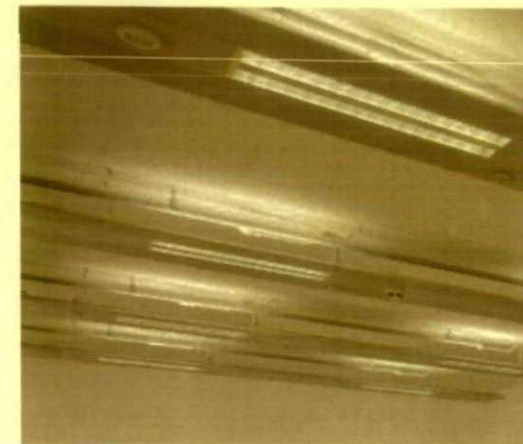
- 02 Exposed concrete soffit provides thermal mass and passive temperature control

Heat Recovery



- 05 Highly efficient central plant with heat recovery, providing mixed mode fresh air ventilation all year round

Services



- 08 Adaptable multi service raft for energy efficient lighting and acoustics

Learning Spaces



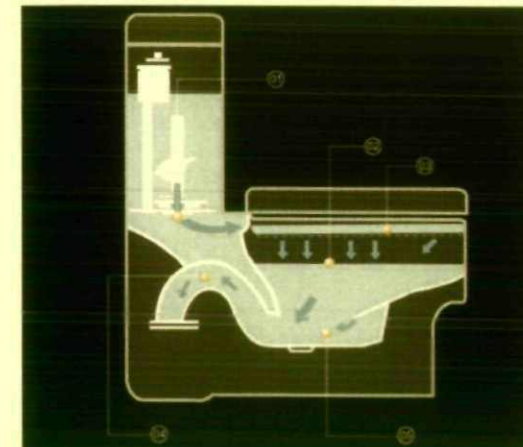
- 03 Classroom depth of 7.65m and height of 3.3m allows optimum balance for natural ventilation, daylighting and learning space proportions

Biomass

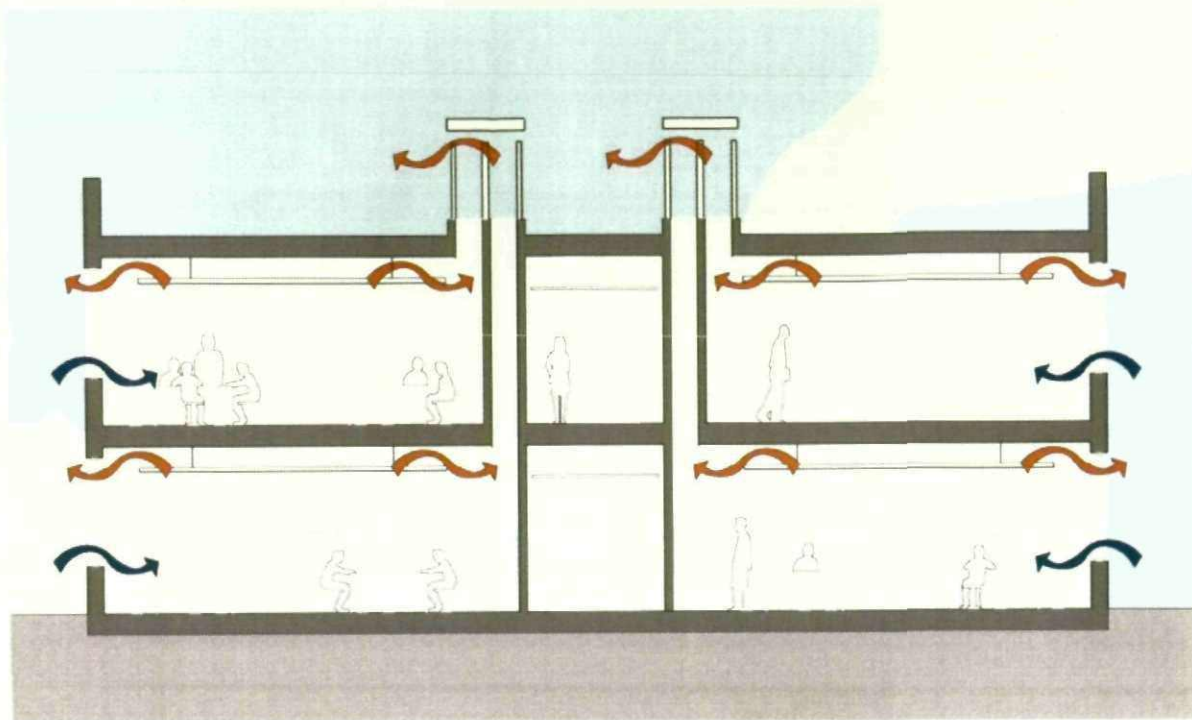


- 06 A high performance bio-mass boiler is provided within a dedicated Energy Centre on site

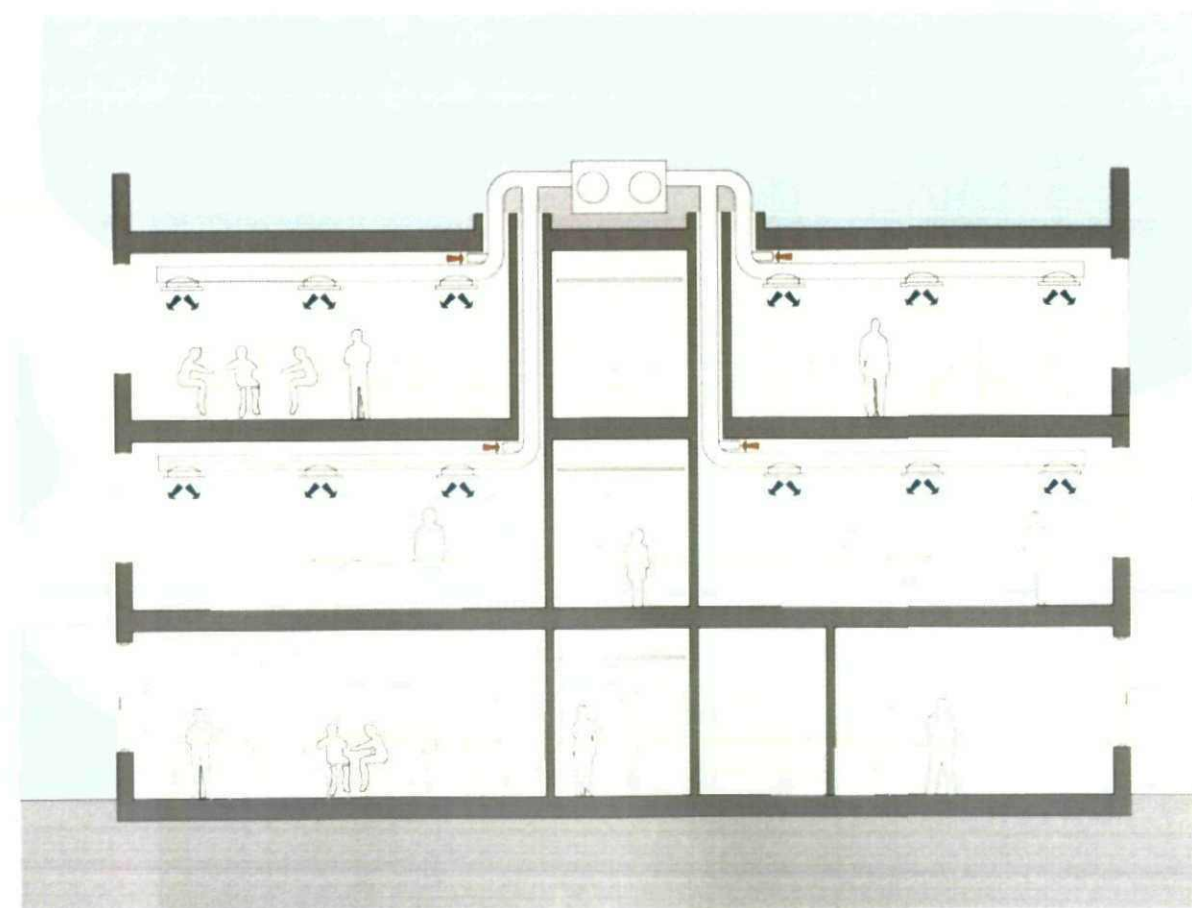
Water



- 09 Low water sanitary fittings will minimise the demand placed on existing water resources in the area.



1. Natural Ventilation to classrooms



2. Mechanical Ventilation to Labs and catering space

The sustainability strategy for the new building and landscape achieves the following targets:

BREEAM

'Very Good' rating for the site and new building

Reduced Carbon

Target operational consumption of 27 Kg CO₂/sqm/year

Renewable Energy

Reduce CO₂ emissions by 20% with biomass boiler

To achieve these targets a range of technologies have been deployed including:

- High performance building envelope with solar control
- Mixed Mode Ventilation with heat recovery
- Thermal Mass
- Efficient services
- Rainwater harvesting and attenuation

Refer to the site-wide and building strategies diagrams below for details of the technologies used and their location with the scheme.

8.01 Sustainability Strategy

In addition to achieving specific sustainability targets identified for the project a number of other factors that support a wider view of sustainable development have been considered.

Building as a Learning Resource

The School intends to use the technology included in the building as a learning aid for the curriculum when teaching about the environment.

Flexibility

The building has been designed to be flexible allowing for future adaptation to suit changes in use patterns and requirements.

Waste Reduction

Minimising waste has been considered in the design and construction process. Importantly a considerable portion of the building fabric will be manufactured off-site to minimise the impact on site during construction as well as reduce material waste.

8.02 Waste Management

Waste Paper

There will be an appropriate number of recycling bins for waste paper, strategically placed around the School. We recommend that a bin in place in office administration, the hub, reprographic area plus areas where there is a high use of computers which use paper. Recycling bins will be emptied once a week by the FM Services Team and decanted to the service yard. We intend to use colour coded bags (green) for waste paper to make it easier for staff to differentiate. Full bags will be regularly collected and made ready for transportation to the nearest Recycling and Processing Facility. After processing, sorted and baled paper will be sent to paper mills for recycling and redistribution.

Cardboard

Separate collection will be undertaken for cardboard. It is expected that the majority of the cardboard will be generated by the main office and ICT department. Cardboard should be left by the waste bin and it will be removed either by the cleaning team or caretakers, depending on the time of day. It will be decanted to the service yard ready for collection by and transportation to the nearest Recycling and Processing Facility.

Hazardous Waste

All hazardous waste will be disposed in accordance with both the WEEE Regulations and the Hazard Waste regulations.

Fluorescent tubes and batteries are also classified as hazardous waste and will be disposed of by Veolia Environmental Service, our licensed waste remover. Small quantities of these will be collected at any one time and will be stored until there is sufficient quantity for removal.

Clinical Waste

We will provide a container as per the room data sheets for the removal of clinical/medical waste. The position of this will be agreed with the School during the mobilisation phase. Sharps bins will also be supplied for the safe disposal of syringes etc. These will be emptied on a monthly basis and on a weekly basis in high use area identified by Lonsdale.

IT Equipment

The ICT Contractor will be responsible for the recycling and safe disposal of ICT equipment. The intention is to promote initiatives such as the re-use of equipment within the community, for example:

- Refurbished ICT equipment may be issued to students for home use.
- Refurbished equipment may be passed onto some local charities.
- When equipment has reached end of life, The ICT providers will ensure its safe disposal in line with WEEE regulations.

Trade Waste Collection

Trade waste, e.g. pallets, fridges, will be collected on specific days (notified at the time of contract commencement) and will be transported to licensed landfill sites and transfer stations for disposal.

Collections of trade waste and general waste will take place at times which do not disturb the curriculum activities within the school.

Removal of Waste from Site

We will put in place a sub contract for the disposal of waste produced by the School. It is expected that this will be in place four weeks before commencement. This will include the disposal of general waste, workshop waste, kitchen waste, waste paper, cardboard, confidential waste, clinical and feminine hygiene, trade and hazardous waste, and chemicals. For Health & Safety reasons in respect of chemicals we need to be given full details of the chemical to be disposed. IT equipment will be disposed of by the ICT provider.

This service will be provided by a specialist service partner and will include twice weekly visits for removal of general waste. Frequency of collection of other types of waste will be dependant on the volumes produced. In our designs, we have made provision for recycling and confidential waste storage. Collections will be made on an adhoc basis depending on volumes. The frequency of collection will be monitored and reviewed on a regular basis; this is likely to increase as commitment to recycling improves through the various educational schemes that we will help to launch in the School. For example, the school could identify 'waste champions' who encourage users to reduce paper waste. We would help put up notices, ie "Please consider the environment before printing" in areas where there are printer, etc. We will monitor and provide the school with information on waste collected and show how initiatives have impacted on the levels of waste collected. We can invite our approved supplier to give a talk to students on waste explaining what happens to waste, impact on carbon footprint.

Waste Enclosure

Waste will be gathered into Eurobins located in a secure and screened enclosure within the service yard prior to collection. The enclosure it has been sized to accommodate 17 x 1100l and 4 x 250l Eurobins.

Waste Transfer Note

We will maintain accurate documentation for each stage of the disposal process to comply with legislation. The Environmental Protection Act (Duty of Care) 1991 requires the person transferring the waste, and the person to whom it is transferred, to complete and sign a Waste Transfer Note containing specific information regarding the waste. Both parties to the transfer are required to keep copies of the written description and transfer within secure storage for a period of two years. We will ensure the Waste Transfer Note is prepared and a copy kept on site for inspection.

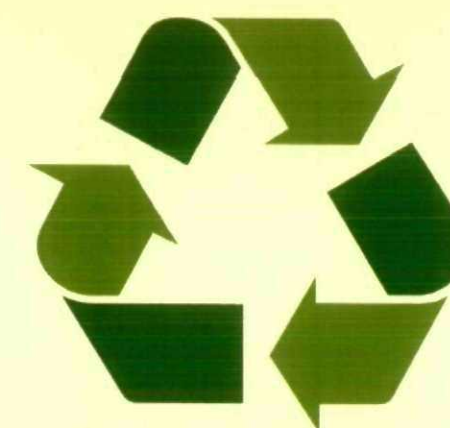
In the case of weekly or daily collections of waste or the removal of a large volume of waste by multiple lorry trips, a single Annual Transfer Note can be drawn up. This will be used to cover multiple consignments of waste transferred at the same time or over a period not exceeding a year - provided the description and all the other details on the transfer note are the same for all consignments.

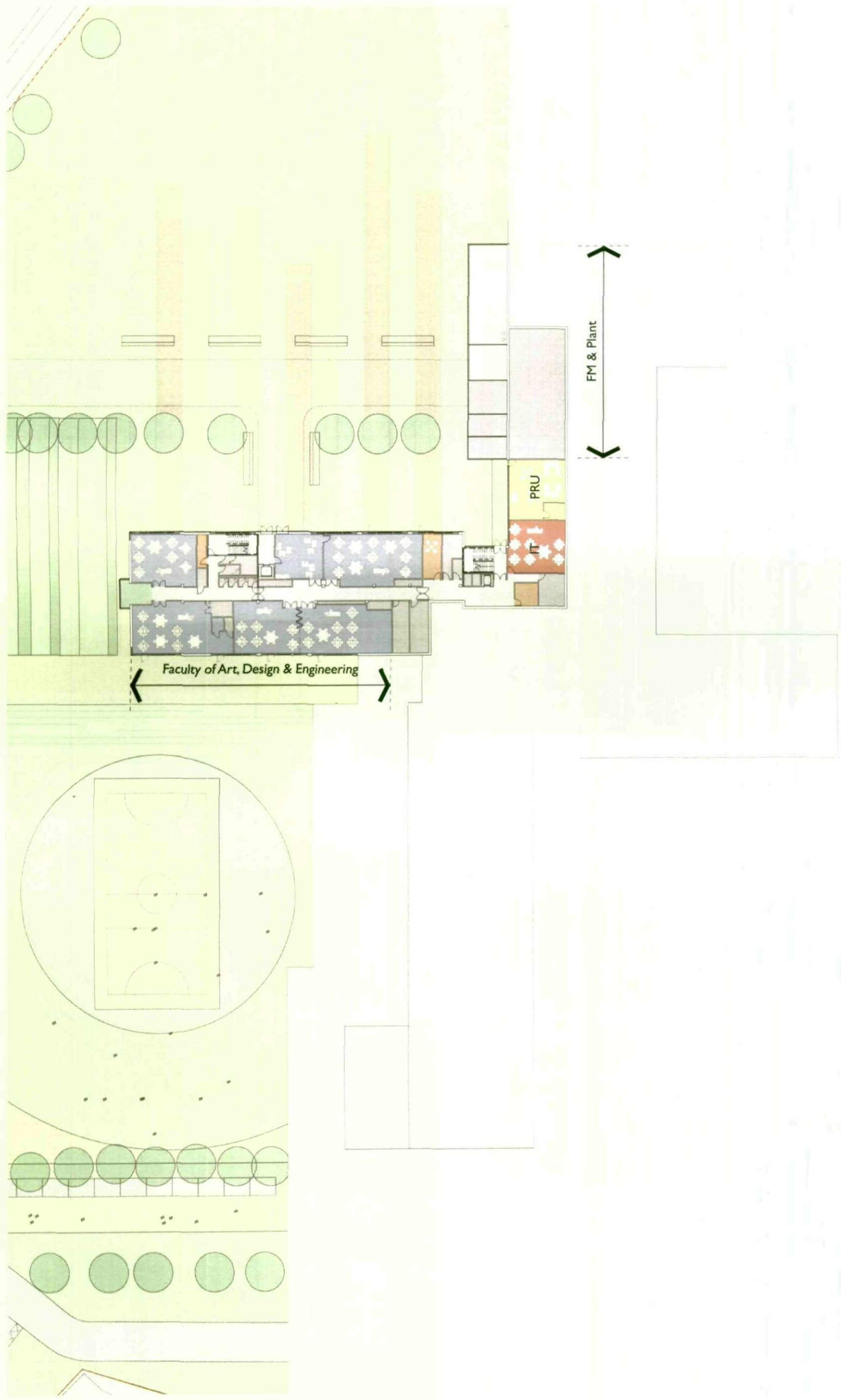
Recycling Initiatives

We will actively encourage recycling to help the School achieve the latest government guidelines and regulations, using our collective knowledge and experience to develop and refine existing initiatives to suit the specific site and operational environment. We will also comply with any existing green initiatives employed by the Authority and the School and will focus on bringing about change and the introduction of viable ideas which will make an impact on recycling results e.g. through curriculum engagement and development to the current methodology.

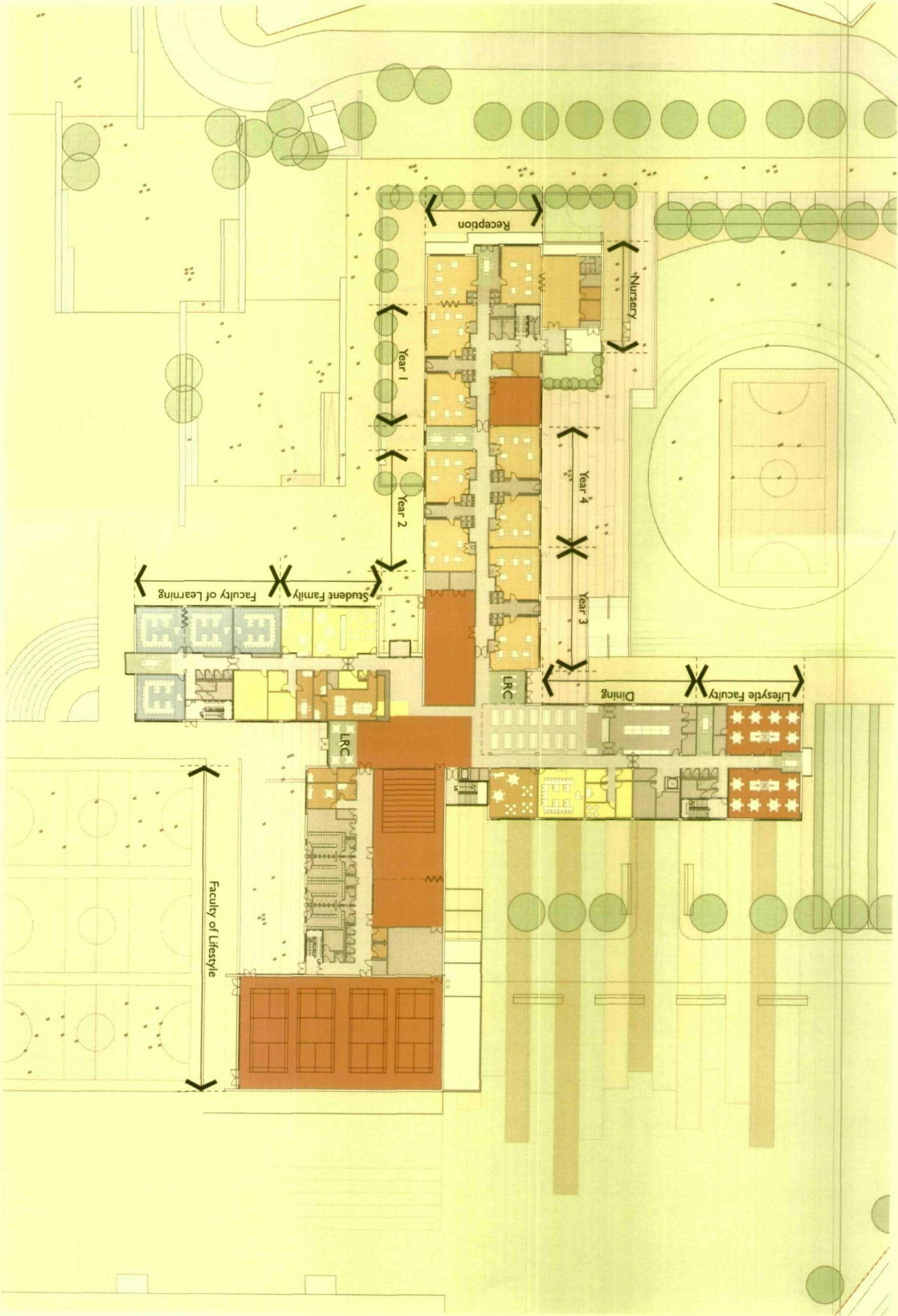
On an ongoing basis the waste management plans will be evaluated for value, viability and cost-efficiency prior to trial and full implementation. The following are some of the areas to be considered:

- Options for using residual woodchip ash from the biomass plant, e.g. removal by specialist contractor for re-use as sustainable peat-free compost product.
- Agree recycling points within the School environs, with associated colour-coded bins and signage to encourage segregation at source.
- Segregation and collection of waste food from catering operations to be composited.
- Engage with the School through the curriculum, eg holding design of poster competitions and educational campaigns.
- Plastic, Toner Cartridges and Polystyrene are also areas where we can jointly make a difference to the environment.
- Chewing Gum Boards, which then gets recycled into road surface material.
- IT Equipment to local charities.

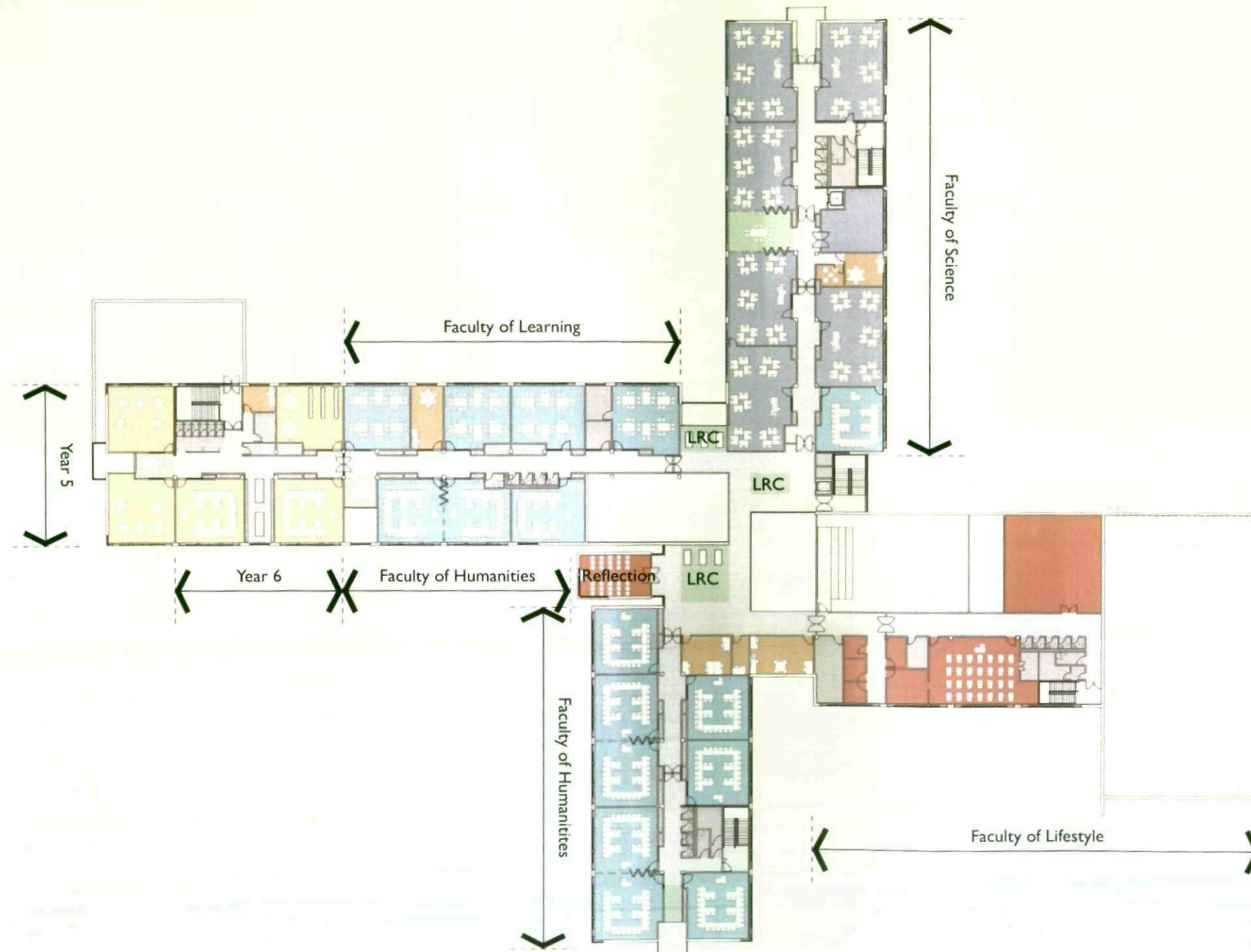




Upper Ground Floor



First Floor Plan



9.00 Internals

9.01 Access For All

Vertical Movement

Vertical movement is provided by five staircases. The main staircase is located in the Heart Space, diagonally opposite the main entrance, with an additional staircase provided towards the end of each of the four wings. All staircases are part of the fire escape strategy and discharge directly to outside at either lower or upper ground floor.

Lifts

There is one passenger lift adjacent to the main staircase in the Heart Space. The lift has a single entrance and has a minimum car dimension of 1500mm wide x 1500mm deep. This will accommodate one user of a manual or electrically powered wheelchair, and one accompanying person.

WCs

WCs for both pupils and staff are dispersed throughout the ALC. Their minimum dimensions are 1400mm wide x 1350mm deep. These toilets incorporate both a WC pan and a basin. WCs open directly off corridors and thus reduce the opportunities for bullying.

Accessible WCs

Accessible WCs for both pupils and staff are dispersed throughout the ALC to meet the requirements of Building Regulation Part M and BS8300.

Hygiene Room

One Hygiene room for wheelchair users with disabilities (21m²) is provided in the north wing at the upper ground floor next to the medical rest room and to the SEN accommodation.

FF&E

The needs of pupils with visual and hearing impairments have been considered as well as those with physical disabilities. At least one adjustable multi-bench or table will be provided in each area to allow disabled pupils to carry out general and practical work as identified in the FF&E schedule. This aspect of the project will be developed in further detail in Stage 2.

Flexible Learning Spaces

The teaching spaces of the school are arranged around the perimeter of the building on the upper levels to ensure that all benefit from good natural light and views over the site. Classrooms have been grouped into subject areas as agreed with the school over a number of engagements. These runs of teaching spaces have been maximised to create a flexible solution where subject areas could expand and contract as curriculum demands change over time. Opportunities for creating direct links between teaching spaces have been investigated with the school.

9.02 Furniture and Fittings

The current floor plans show indicative furniture layouts for illustrative purposes. During Stage 2 these will be developed in conjunction with the School.

We understand the importance of providing furniture and fittings which are both robust and cost effective, and that also offer flexible solutions for learning environments: meeting the current and future needs of the School community.

An Integrated Approach

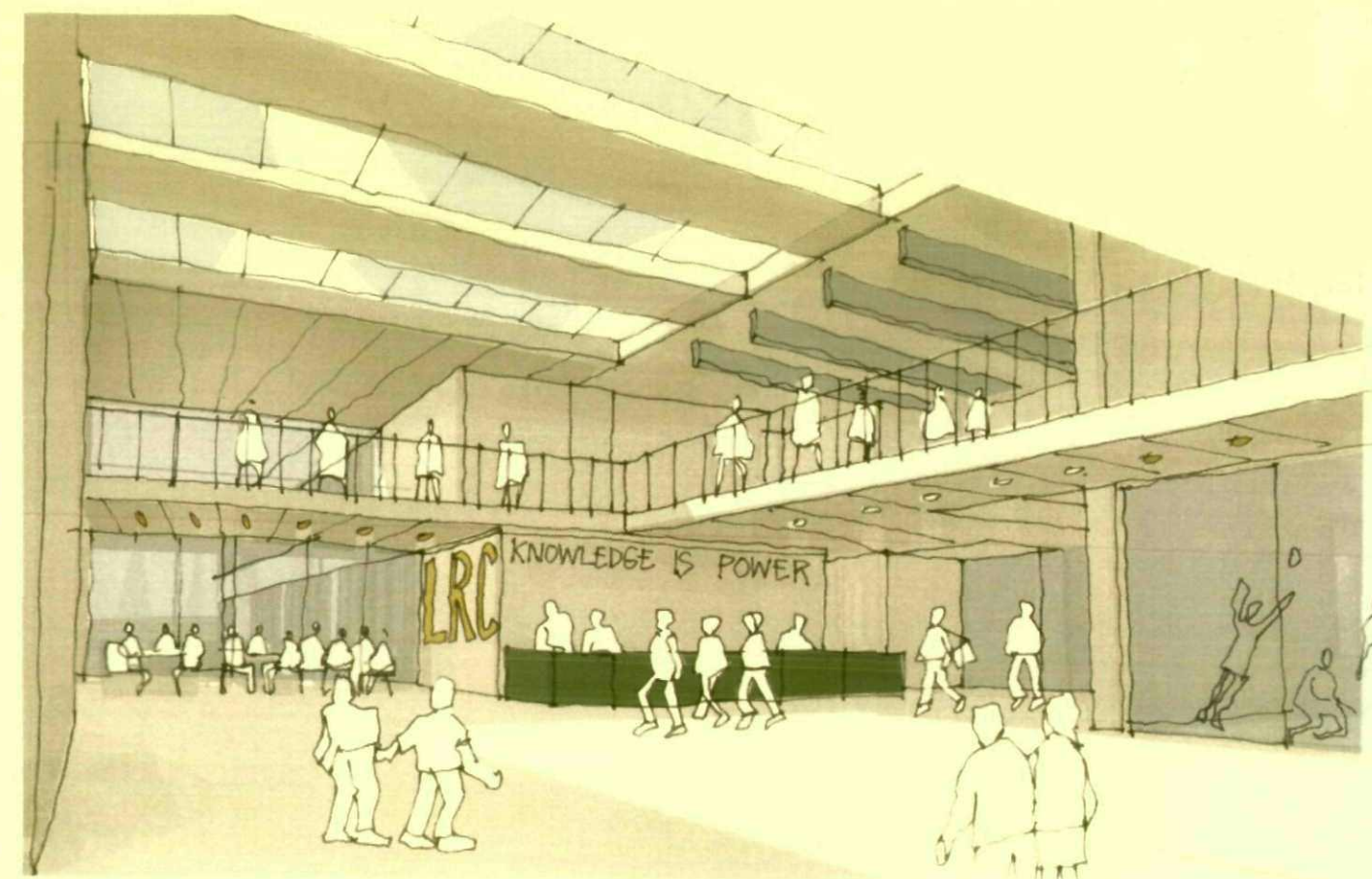
Our approach acknowledges that furniture can be key to the delivery of effective flexible spaces, and more importantly, that it will play a vital role in facilitating good teaching and learning. Our approach to specifying the FF&E will take the following approach:

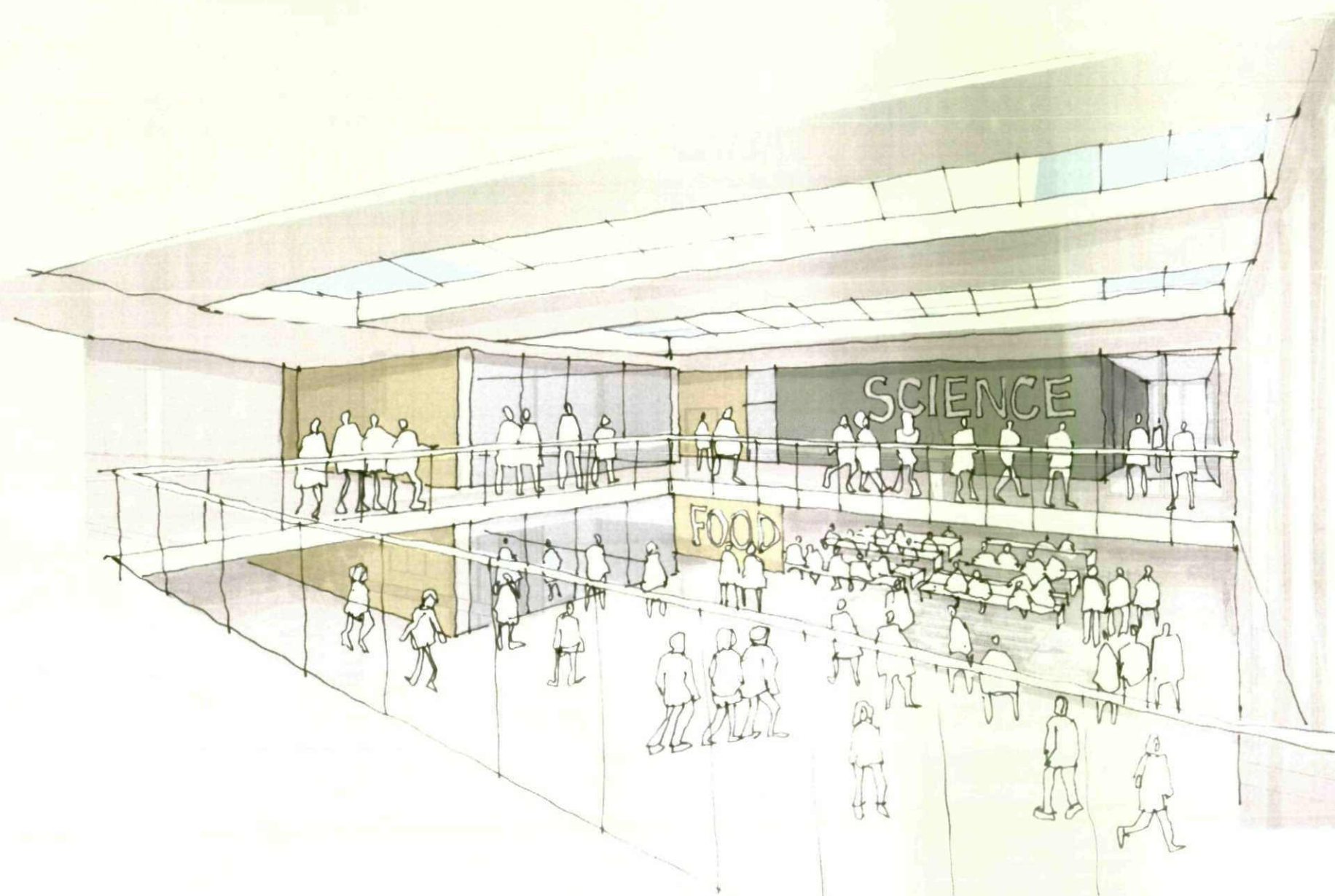
- To scrutinise the educational model being developed by our team.
- To take inspiration from our worldwide research and partners experience
- To create spatial layouts of furniture that would facilitate each element of this learning model.
- Map these furniture configurations onto the emerging architectural plans
- Work with our educational team to test these layouts
- To review layouts with the School engagement team through a series of workshops
- Work with manufacturers to ensure that we can source product that is robust, suitable in size, aspirational and affordable

Supporting Transformation

All of our design solutions will take into account some fundamental principles:

- The need for furniture and fittings to accommodate the various sizes of pupils and visitors; where possible, furniture itself being adjustable in height, so that pupils of differing statures and those with disabilities can be accommodated.
- The need for the furniture and fittings to be in full support of, and proportionate to, the designed spaces.
- The ability of the FF&E strategy to contribute to the building's total accessibility
- The specific needs of specialised teaching spaces
- Durability and affordability
- How the product can contribute to the sustainability agenda of the learning centres and procurement strategy





9.03 ICT

The ICT installation is integral to the proposals particularly in regard to providing a robust and flexible system which meets the Schools requirements for the foreseeable future.

The main equipment room (MER) is located on the lower ground floor and is connected directly to the secondary equipment room (SER) on the first floor. This arrangement minimises the number of equipment rooms whilst providing a system that reaches all parts of the school.

The MER serves the entire lower and upper ground floors with the exception of the West Wing which is served by the SER, as is the entire first floor.

A spine of data and power will run from both the MER and SER at high level in the corridors from where they will either rise or fall to serve each floor.

The floor screed provided throughout the School contain a grid of floor boxes for power and ICT connections by computer equipment. This arrangement allows connection to the ICT system both now and in the future with maximum flexibility.

9.04 FM (Cleaning and Maintenance)

The FM facilities are distributed throughout the school with the FM Manager, Caretaker and associated stores located at lower ground floor where they have direct access to the external service area, and the central staircase and lift.

Small cleaner's cupboards are provided in each wing, and on every floor, adjacent to the escape staircases.

9.05 Circulation and stairs

The School is arranged as a two storey and partially three storey building radiating from a central hub or Heart Space to which the entrance of the building leads.

Each wing is connected directly to the Heart Space and has a central corridor serving accommodation on either side. This is an extremely efficient arrangement and minimises pupil travel distances within the building. Care has been taken to provide windows at the end of each corridor providing light and ventilation to an otherwise internal space. Corridors are also lit by borrowed light through glazed partitions in the corridor walls.

Where possible, break-out spaces are used to reduce the apparent length of the corridor. The corridor walls are also modulated for this purpose. In all cases corridor widths are generous and allow pupils to pass in both directions with ease.

A central staircase directly opposite the School entrance connects all levels. Passive surveillance is offered by the staff room located immediately adjacent to the staircase. An accessible lift is provided immediately adjacent to the staircase. Further staircases are situated towards the end of each wing. These allow vertical circulation between floors without returning to the Heart Space. Staircases also act as fire escapes and discharge directly to the open air.

9.06 Way Finding and Graphics

The contractor and design team understand that the branding and way-finding within the new ALC will play a vital part in their success, particularly in relation to its use by the wider community.

The contractor and design team have proposed to design their signage in accordance with the JMU good signage guidelines, this best practice guideline ensures that signage is simple, unambiguous & has the most acceptable font style, size & colour which will assist the partially sighted person as well as the dyslexic. Colour can be seen from longer distances than other graphic elements. In signage, differentiation is the first and foremost role of colour. Colour contrast between a signboard and its background gives the sign its target value; the ease with which the sign is spotted. Signs must be noticed to have practical value.

The contractor and design team are also focused on clear way finding strategy especially in a school of such expanse & complexity of levels. Our experience indicates that the heart space together with other principal corridors benefit from colour coding. This principle & best practice of contrasting colours will be designed using the Rainbow Project study which has resulted in combinations of colour & texture, enabling partially sighted & aged people to easily distinguish between doors & surrounds, Lifts entrances, Floors & walls together with other features likely to cause visual identification problems.

Drawing Number	Title	Scale
BP4L_MIC_AHM_DR_04_BW_LL_001	Proposed Site wide plan	1:1000
BP4L_MIC_AHM_DR_90_BW_LL_001	Proposed Site Demolition Plan	1:1000
BP4L_MIC_AHM_DR_04_BW_-01_010	Proposed Lower ground floor plan	1:200
BP4L_MIC_AHM_DR_04_BW_00_011	Proposed Upper ground floor plan	1:200
BP4L_MIC_AHM_DR_04_BW_01_012	Proposed First floor plan	1:200
BP4L_MIC_AHM_DR_04_BW_RF_013	Proposed Roof plan	1:200
BP4L_MIC_AHM_DR_05_BW_LL_001	Proposed North Elevation	1:200
BP4L_MIC_AHM_DR_05_BW_LL_002	Proposed South Elevation	1:200
BP4L_MIC_AHM_DR_05_BW_LL_003	Proposed East Elevation	1:200
BP4L_MIC_AHM_DR_05_BW_LL_004	Proposed West Elevation	1:200

Joint Church of England and Roman Catholic ALC Planning Submission

Design and Access Statement

Prepared on behalf of

July 2010

