



Cyngor Bwrdeistref Sirol
MERTHYR TYDFIL
County Borough Council

Ysgolion yr 21ain Ganrif 21st Century Schools

Blessed Carlo Acutis Catholic School,
Bishop Hedley School Site.
Design and Access Statement



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01

Summary of the Proposal

Summary of the Proposal

This Design and Access Statement has been prepared in support of a full planning application for the redevelopment of the Bishop Hedley Catholic High school site, together with an area of the Galon Uchaf Park site known as 'Plateau 2', and Gwaunfarren Primary School site, submitted on behalf of Merthyr Tydfil County Borough Council (MTCBC). This follows a PAC application submitted to the Council in February 2023.

The proposal is to create a new all-through 3 to 16 school to replace the existing St Aloysius RC Primary School, the Federation of St Illtyd's RC and St Mary's RC Primary Schools and Bishop Hedley High School. The proposed development includes the demolition of the existing Bishop Hedley school buildings, the construction of a new all-through school building, the extension to and the remodelling of an existing sports building together with the associated external works for pupil learning and recreation, sports pitches, vehicle access, highways improvements, parking and drop off.

The proposed new-build all-through school will accommodate a 525-pupil place primary school with a 100 full time equivalent pupil place nursery and a 600 pupil (4 form entry) secondary school with community use.

Summary of Proposals

- The proposal is to demolish all existing buildings on the Bishop Hedley School site with the exception of the existing sports hall.
- The construction of a new two, three and four storey building to incorporate a nursery, primary phase, secondary phase all through school with community use.
- The extension of the existing sports hall to form changing room and classroom accommodation and the remodelling and over-cladding of the external building envelope of the sports hall.
- The construction of a new sports pitch on 'Plateau 1' of Galon Uchaf Park with associated pedestrian and emergency vehicle access.
- The construction of new sports pitches and spaces for outdoor learning and recreation for school pupils on the Bishop Hedley School site.
- Improvements to an existing pedestrian underpass with new passenger lift to improve accessibility.
- New vehicle access routes from the highway, parking and drop off areas.
- Highways improvements to Galon Uchaf Road and Gwaunfarren Road.







02

Brief and Vision

Initial Project Brief

Merthyr Tydfil County Borough Council (MTCBC) proposes to establish a new VA Catholic 3-16 all through school on the Bishop Hedley School site Gwaunfarren Road, Merthyr Tydfil, as part of their 21st Century Schools development programme.

The Authority has undertaken a statutory consultation process in line with Welsh Government School Organisation Code. The existing St Aloysius RC Primary School, the Federation of St Illtyd's RC and St Mary's RC Primary Schools and Bishop Hedley High School will be discontinued.

The proposed new all through school will accommodate a 525-pupil place primary school with 100 full time equivalent pupil place nursery, and a 600 pupil (4 form entry) secondary school.

The new 3-16 VA Catholic School is to be designed to deliver the Welsh Government's new Curriculum for Wales and the design proposals are to consider use outside of school hours, allowing the school to act as a supportive hub of the local community.

The selection of the Bishop Hedley School site followed an extensive consultation with councillors and with the local community.

BREEAM Excellent and net zero carbon in operation as defined by UKGBC.

Delivering the digital strategy

**Supporting health
and well-being**

**Ensuring success
for every child**

**To address the educational requirements of
the Welsh Curriculum**

**Maximising outdoor play
and green space**

*Improving attainment and
progression*

Raising standards

Ysgolion yr 21ain Ganrif
21st Century Schools



The Vision

Sue Walker - Chief Education Officer for Merthyr tydfil County Borough Council set out the vision for the new school:

"A new 3-16 school for a new 3-16 project. The school has to embody that – it has to be a truly 3-16 through school for more than one reason – this school is a faith school, that is intrinsic in its culture and ethos, to open a school that supports the journey of faith for children and their families from 3-16 has to be built in from the beginning. A chapel where children and the community can come to worship, to learn and enjoy what faith can offer them must be part of the school without question. This is a school that is being built in partnership with the archdiocese, ultimately this school will be a Voluntary Aided School and it is important that this aspect is interwoven throughout.

This is not a primary and secondary school in one building it must allow for the 3-16 philosophy to be realised wherever possible. There must be learning areas that can be shared by children and young people of all ages ... it does go without saying though that 'break-time' areas need to be separate for the different age groups. For 3-11 pupils especially there must be the opportunity for outdoor learning, classes should open out to the outdoors so learning opportunities are fluid and move from indoors to outdoors seamlessly.

Areas for independent learning for older children need to be built in ... the skill of independent learning must be fostered and developed. This could be simply through the inclusion of a fit for purpose library which again could be a shared area. All classrooms must be fit for the 21st Century ...but the use of technology as a normal everyday tool needs to be recognised in all areas.

I mentioned earlier the importance of the faith element ... this will be a community faith school, it will support the community of its learners, but it will also support the local community, There must be the opportunity for the community to use the facilities after school and on weekends, however this must be carefully planned and the areas for community use must be able to be secured separately from the main body of the school, This also gives the opportunity for some community use during the school day such as childcare, toddler groups etc.

This is an exciting time for not only the education community in Merthyr Tydfil but also for the parishes that will be served by this new build and I am looking forward to continuing the journey with you and hopefully getting to one of these meetings in the future!

Classes should open to outdoors so opportunities are fluid and move from indoors to outdoors seamlessly

A truly 3-16 through school

Independent learning for older children
Opportunity for community use during the school day learning

Community use to be secured separately

Learning areas that can be shared between different age groups

Break times to be separate from different age groups

Child care, toddler groups

Supports the journey of faith

Use of technology

To support the local community learning

Partnership with archdiocese

For 3-11 pupils especially there must be opportunities for outdoor learning

3-16 Philosophy

A chapel where children and the community can come together to worship

A faith school that is intrinsic to its culture

2.2. Strategic Context

Delivery of the Council's 21st Century Schools Band B Strategic Outline Programme (SOP) forms part of the Learning Department's strategic priorities and is critical for the delivery of the long term desired strategic outcomes;

- School places that meet the needs of the local population
- School buildings are fit for purpose well maintained and provide good teaching and learning environments suitable for 21st century learning, the new curriculum and beyond in support of providing high quality education infrastructure that enables school leaders, teachers and learners to raise standards of education across all key stages and improve pupils emotional and physical health and wellbeing in line with 'Education in Wales – Our National Mission'.

The 21st Century Schools Band B SOP is also a key part of the new overarching (draft) strategy for MTCBC's Learning Department – 'Raising Aspirations, Raising Standards (RARS) Strategy 2020-2025' - 'Success for every child'.

The delivery of the Band B programme is a specific Commitment to Action in support of one of the RARS strategic goals - Developing the Environment for Learning and it has scope to help deliver other Commitments to Action to realise this strategic goal:

Strategic Goal: Developing the Environment for Learning

- Deliver the Band B 21st Century Schools programme and develop and seek commitment to a **long-term plan for future estate improvements**
- Ensure the Council's **Digital Strategy** supports the requirements of the Curriculum for Wales building and acting upon the knowledge of where there is most digital exclusion
- Provide greater opportunities for **learning outside the classroom**

Strategic Goal: 'Supporting Learners Health & Wellbeing'

Commitments to Action the Band B Programme can contribute towards:

- Improving the engagement of schools in both the **Healthy Schools** offer and **Active Merthyr** thus improving opportunities for children and young people to be active and healthy

- Provide more opportunities for children, young people and their families to be more physically active through a range of partnerships both locally and further afield
- Maximise the opportunities for children to **access outdoor play** through ensuring there are **safe outdoor, green spaces**

Strategic Goal: Improving Achievement and Progression

Commitments to Action the Band B Programme can contribute towards:

- Ensuring that all education settings are equipped to develop an innovative curriculum that can be adapted and delivered outside of settings should the need arise.
- Ensuring that all education settings are equipped to implement the **Curriculum for Wales** as it is introduced.
- Ensuring that all education settings are equipped to implement the **ALNET Act** as it is introduced.



'Success for every child'

Raising Aspirations and Raising Standards

Improving educational outcomes in Merthyr Tydfil County Borough 2020-2025

School Specific Brief - Accommodation Required

The Department for Education and Skills documents Building Bulletin 98 (BB98) and Building Bulletin 99 (BB99) form the area standards adopted for the development of the new school.

During the briefing process, a curriculum analysis was prepared and a schedule of accommodation was developed with MTCBC and the stakeholder team to capture the number, type and sizes of space required for the new school building, using BB99 and BB98 as a framework.

The development of the Schedule of Area generated a *target* gross internal floor area (GIFA) of 8893 sq m

Key Elements of the Brief

A detailed brief for the new school was developed through a series of engagement meetings with MTCBC and the project stakeholders for the development of the new school.

An online survey 'Human Centred Design' was carried out to consult with the wider stakeholders including staff, pupils and parents.

The following key objectives were established from the briefing process to inform the design:

- One school - the building must reflect the all through 3-16 ethos and appear as a **single school building**
- **A chapel at the heart of the school** - to be accessible for all pupils and the community and to be located at ground floor
- **Separate entrances for nursery, primary and secondary phases**
- **A single, shared visitor reception**
- Site and building zoning with **secure lines between primary and secondary phases** for safeguarding
- **Shared learning areas** - spaces for children from across age groups to come together, for transition, in line with the all through school 3-16 ethos
- **Community Facilities** - to include the chapel and sports facilities and a designated community room to be separately zoned from the school
- Primary phase location to allow **direct access to outdoor learning from all KS1 classrooms**
- **Nursery to be integrated with Primary**
- **Primary play areas to located away from secondary phase teaching areas** for acoustic separation
- **Shared primary and secondary phase staff areas** to promote communication across the school
- **Single, shared catering kitchen** to serve both primary and secondary dining whilst maintaining separate zoning between phases
- **Fully secured site** with fencing and gates to perimeter
- **On site parent parking and drop off, community parking areas and bus drop off** with the requirement that no buses should reverse on the site
- **BREEAM Excellent** is to be achieved
- The school building should adopt a **net zero carbon in operation strategy**
- The site area is to include Phase 1 and Phase 2 area of the site, extended to **incorporate the pitch area shared with Gwaunfarren Primary School**

- Initially, the brief required the whole development to be accommodated within the Bishop Hedley site. This was extended to include an area of Galon Uchaf Park (plateau 2) to accommodate a sports pitch. Otherwise, all buildings are to be accommodated within the Bishop Hedley school site.
- The sports hall and its associated accommodation may be separated from the school buildings
- **Some buildings are to be retained for decant** during construction of new building
- **Retention of the existing sports hall building** is to be considered
- **Road crossing to be minimised**
- **Building massing is to be economic and simple in form** to achieve the net zero aspirations.

Findings from the Human Centred Design survey:

- Strong views that the chapel should be dedicated to worship, however, feedback also showed that people would be happy for it to be multifunctional e.g. for assemblies, after school clubs etc.
- There is an opportunity for the community to use the school for events
- Current outdoor learning opportunities are low but the primary school respondents in particular said that they would like to teach outdoors
- Outdoor space was considered important for health and wellbeing
- secondary staff thought outdoor space was the most useful space for pupil activities requiring interaction
- Parents' views were split over the mixing of age groups with concerns over safeguarding but recognition of the benefits of integration
- Primary phase respondents thought that reflecting the stage in the identity of the building is important

Landscape Brief

The brief requires the landscape design to support Merthyr Tydfil County Borough Council's commitment to establishing modern, high quality learning environments that meet the school's aspirations and to comply with the following guidance/legislation/rating:

- Schedule 3 of the Flood and Water Management Act 2010
- CIRIA C753 The SuDS Manual design guidance.
- Building Bulletin 98 + 99
- BREEAM - 'Excellence' rating to be achieved

Specific briefing requirements include:

- Small congregation areas for waiting
- Entrance Courtyard
- Provide Native tree planting
- Forest School/outdoor Learning
- To provide a stimulating environment increasing students' physical, mental and social health.
- Outdoor learning and access to nature can also decrease stress levels of students and teachers

Other elements to be incorporated across the site:

- Suds Rain Gardens
- Habitat areas
- Allotment / Growing areas
- Orchard
- Amphitheatre
- Boulder garden
- Bird Hide
- Forest Garden Play
- **Memorial Garden**

PARKING

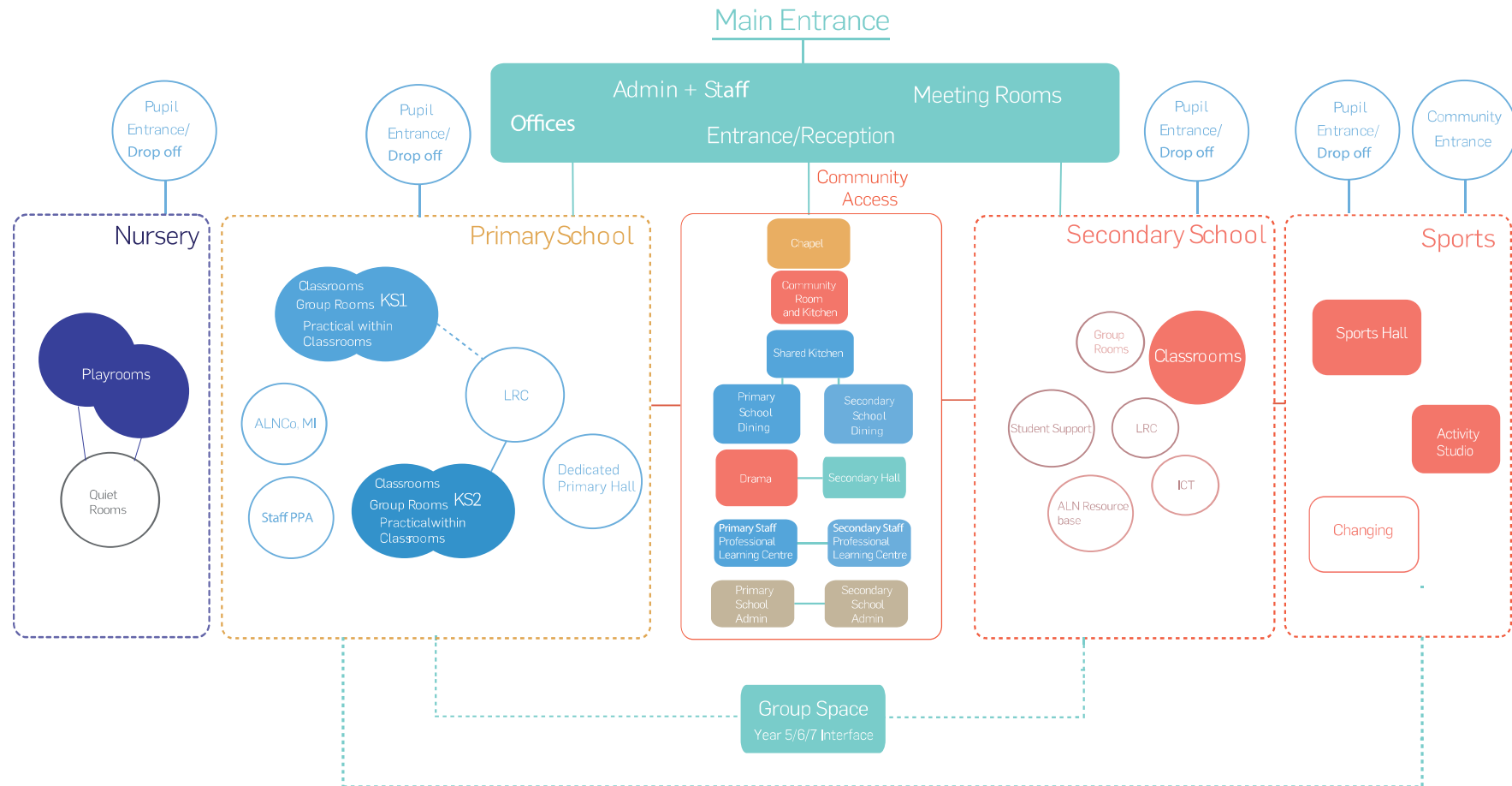
- 120 Car parking bays
- 30 Drop off spaces
- 7 Bus spaces
- 8 Accessible spaces
- 133 Cycle spaces across the site

SPORTS PITCHES

- Rugby (114 X 70m) with additional 7m run off
- 3G Pitch (91.44 X 54.864) additional 3m run off
- 3 X MUGA
- The community pitch will meet the minimum size required by the South Wales FA 91.44 X 54.84m and an additional 3m run off.

Brief - Adjacencies

This diagram captures the key adjacencies for the spatial arrangement of the school.







03

The Site

Overview

This section provides an overview of the site constraints that inform the design proposals.

3.1.1. The Existing Site

The Bishop Hedley School site is located to the north of Merthyr Tydfil town centre. The site is surrounded by the residential areas of Pen-y-Darren and Galon-Uchaf, which are typically made up of two and three storey semi-detached and terraced housing developments.

The site is divided into two parts; Phase 1 and Phase 2 which are separated by Gwaunfarren Road, with Phase 1 of the site to the south of the road, and Phase 2 to the north.

The Phase 2 site is bordered by Galon Uchaf Road, identified as a steep road with blind bends and where vehicles tend to speed. Galon Uchaf Park is to the west and an area of allotments to the east, separated from the site by an area of dense vegetation.

To the south-west of the Phase 1 is Gwaunfarren Primary School which is accessed from Alexandra Avenue. The south and east of the Phase 1 site is surrounded by residential gardens and a vehicular access road which runs along the eastern perimeter.

The existing Landscape character and site surroundings can be described as mixed residential, lying within a semi-rural location characterised by two storey, largely brick built dwellings and large areas of open green space and mature vegetation with distant views of rising hills to the south.

The site interior comprises existing educational and sport related buildings of varying heights, up to 4 storeys and predominantly of brick, which fall down a steeply sloping and undulating site. Boundaries are formed by mature belts of vegetation and hedgerows with site neighbours to the north south and west comprising of residential dwellings and a large area dedicated to allotments to the east.

The area lies within the Landscape character area NLCA37 South Wales Valleys.



Context photo of existing site location within Merthyr Tydfil



Drone photograph of existing site



Site plan of existing site

Site Photos - Overview

- A. Both phases drone overview
- B. Phase 2 drone overview
- C. Phase 1 drone overview
- D. Looking south from Phase 1 at retaining wall boundary to neighboring properties
- E. Looking east from Phase 1 towards neighboring properties and access road
- F. Looking south from Phase 2 with road tunnel in foreground
- G. Looking west from Phase 1 at retaining wall boundary to neighboring properties
- H. Looking north as Phase 1 eastern boundary
- I. Entrance to the road tunnel connecting the two phases
- J. Looking south, from the access road on the eastern boundary of Phase 1
- K. Access road along eastern boundary of Phase 1
- L. Looking north at the 4 storey element of the Phase 1 buildings
- M. Looking east along the southern elevation of the phase 02 buildings
- N. Looking at the north elevation of the sports hall on Phase 1
- O. Looking east from the western edge of Phase 1 towards the Phase 1 buildings
- P. Looking east along the north elevation of Phase 1 buildings at exit from the road tunnel
- Q. Looking north at Phase 2 buildings from main entrance off Galon Uchaf Road
- R. Looking down at courtyard in Phase 1 buildings







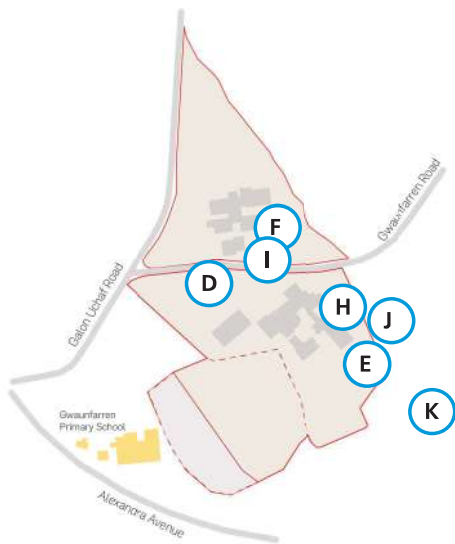
Site Photos - Overview

- S. Both phases drone overview including Plateau 1 and southern edge of Plateau 2 Galon Uchaf Park
- T. View from north of Galon Uchaf Park looking forwards Plateaux 1 and 2
- U. View from south of Plateau 1 looking towards Plateau 2





Site Photos - Green Space & Boundaries





G



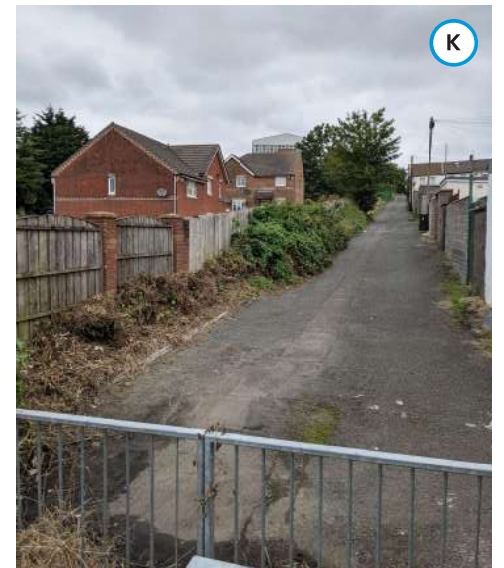
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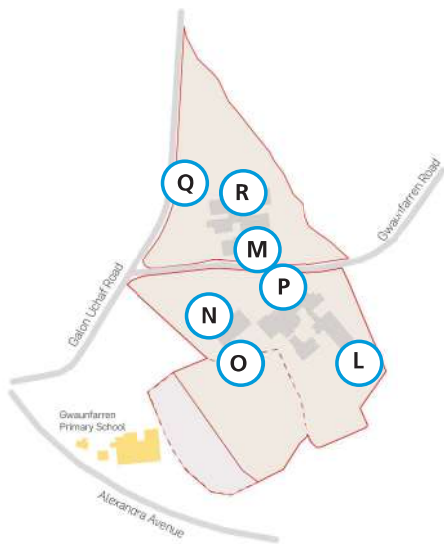


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K

Site Photos - Existing buildings





Site Constraints & Opportunities

Opportunities

- O1. Level changes across the site, allow long attractive views of hills and valleys to the south.
- O2. There is potential to re-use or adapt the existing plateaux to minimise groundworks.
- O3. The intersection of Galon Uchaf Road and Gwaunfarren Road provides a natural frontage to the school generating a sense of arrival.
- O4. Whilst the topography is a constraint to achieving level access, it could also be used positively to maximise the views.
- O5. The extent of road adjacent to the site gives provides a number of options for access with the potential for separate entrances for parking/ drop off and for service access.
- O6. The access lane to the east of the Phase 2 could provide a route for contractors during construction, minimising disruption to the road network.
- O7. The Gwaunfarren Primary School pitches, which form the southern portion of Phase 01 are already relatively level and open.
- O8. The existing school buildings provide an opportunity for temporary accommodation until the new school is completed.
- O9. The buildings provide an opportunity for decant during construction
- O10. The site is already served by main utilities

Constraints

- C1. The site is divided in two by Gwaunfarren Road - requiring a safe road crossing.
- C2. There are multiple and complex site levels, limiting potential for a single level school and access into the site.
- C3. The southern, eastern and western boundaries of Phase 1 are next to private houses and garden. Building too close to these may generate overlooking issues.
- C4. There is a significant retaining wall and level drop to houses on Gwaunfarren Close.
- C5. Galon Uchaf Road, is notorious for traffic speeding and has 'blind' bends.
- C6. The triangular geometry of Phase 2 restricts layout planning e.g. for sports pitches.
- C7. Close proximity of a new building to the Gwaunfarren School and to neighbouring housing could generate conflict including acoustic, security, overlooking and visual impacts.
- C8. Existing banks and slopes on the site are shaped around the existing buildings.
- C9. Mining features will require a stand off zone. (See Appendices for the Civil Engineering report).
- C10. The location of the existing buildings limits space for the construction of new buildings on the site, if they are to be used for temporary accommodation.
- C11. There is a water course and vegetation to the west of the Phase 1 site
- C12. The existing water main to the east of Phase 1 will require a stand off zone or diversion. (See Appendices for MEP report)



Boundary Conditions

The boundary conditions of the site vary significantly. The perimeter areas may be most suitable for external areas such as habitat, soft informal play or external 'float' to form a buffer between the school buildings and the neighboring properties.

The retaining wall to the boundary between Gwaunfarren Gardens and the Phase 1 site, which is formed by a retaining wall, is likely to require a stand-off distance to avoid overlooking of properties and creating additional structural load on the wall.

Boundaries that are immediately next to private gardens may require some form of acoustic treatment and visual screening.

Galon Uchaf Road is a potential noise source and developing classrooms in its vicinity will require a background noise level survey and an acoustic assessment with the possible introduction of acoustic attenuation.

Pavements to the perimeter of the Phase 2 site are discontinuous. Increasing pavement areas will reduce the site area.

The hardstanding to the south of the Phase 1 buildings is significantly higher than the neighbouring properties. Development here may be considered to be over-bearing on the properties and therefore contentious in planning terms.

Plateau 2 in Galon Uchaf Park has open boundaries to the rest of the park, other than to the backs of the houses on Galon Uchaf Road, which various fence and wall boundary treatments.

-  Retaining wall at boundary
-  Stand-off zone may be necessary in vicinity of existing retaining wall (to be confirmed by structural/civil engineers)
-  Boundary onto private gardens
-  Acoustic treatment may be required at boundary (To be confirmed by acoustician)
-  Boundary onto shared allotment gardens (With watercourse running along boundary)
-  Pavement existing at boundary
-  No pavement at boundary (site area may need to be used to provide pavement)
-  Boundary to adjacent Gwaunfarren Primary School
-  Sensitive boundary any buildings here may visually impact neighbours.
-  Boundary onto public access road
-  Public Bus stop at boundary



Site levels

The most prominent character of the site is the level change which varies from +274.89 to +240.48, a change of approximately 35m across the site.

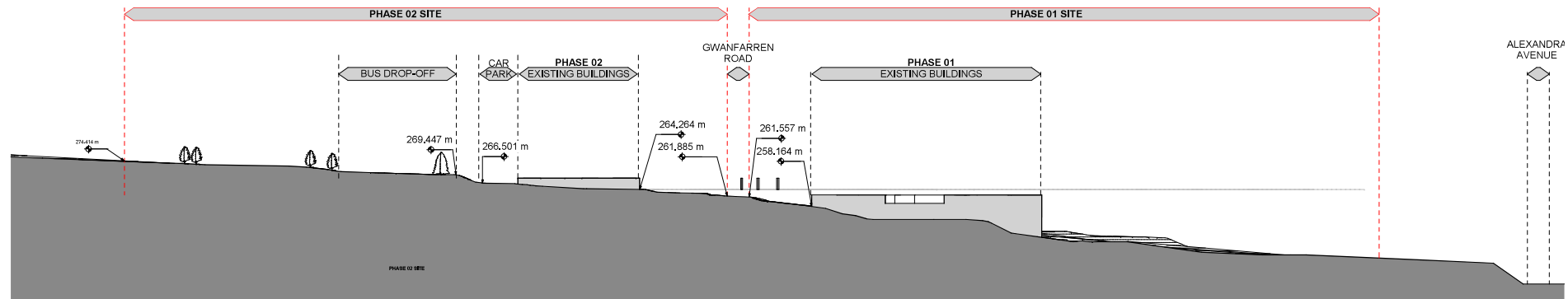
This has been dealt with, in the existing school development, by introducing various banked slopes to the north of buildings and creating plateaux for hard standing areas such as parking and hard-play areas.



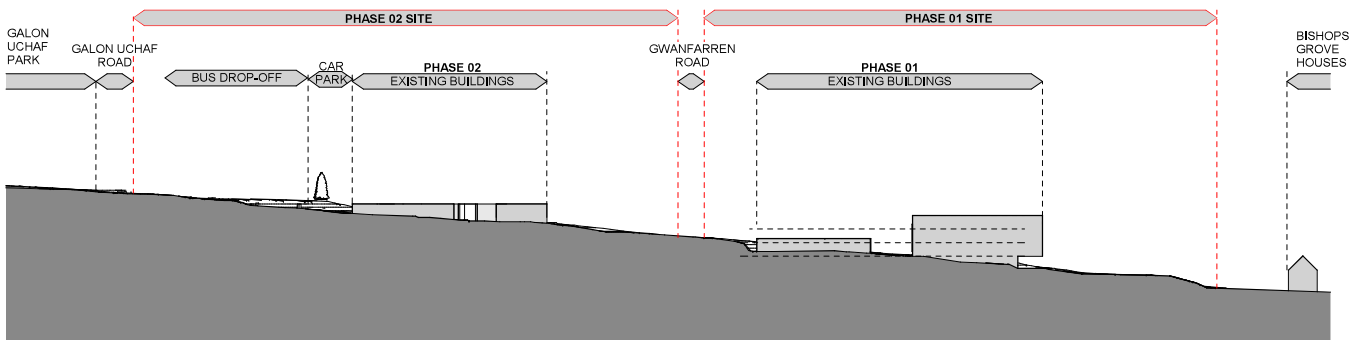
3D View of Site Levels



Existing Site Sections



1 Section 12
Scale: 1:500



2 Section 13
Scale: 1:500

Access & Movement

The Bishop Hedley site currently has two primary vehicle access points; for Phase 1, this is from the north via Gwaunfarren Road and for Phase 2, this is from the west via Galon Uchaf Road. Each phase also has secondary access points; Phase 2 from the south via Gwaunfarren Road and Phase 1 via the access road to the east of the site.

Buses currently drop-off students within the Phase 2 site via the Galon Uchaf Road access point and visitors and deliveries access the Phase 1 site via the Gwaunfarren Road access point. There is also parking adjacent to each of these entrances. There are a number of public bus stops also in close proximity to the site.

Plateaux 1 and 2 of the Galon Uchaf site are accessed on foot via a set of steps to the south and by a vehicle.

'Danger Hill'

Galon Uchaf Road forming the western boundary of Phase 2 is known locally as 'Danger Hill' due to the speed of traffic and a number of blind bends. The safety of this road for use by students approaching the school has been a concern raised through the public consultation process. It is therefore suggested that primary access to both phases should be from Gwaunfarren Road.

-  Bus stops
-  Pavements
-  Primary site access & egress points
-  Secondary site access & egress points
-  Car park
-  School bus pick-up & drop-off
-  Primary vehicular route
-  Secondary vehicular route
-  Pedestrian crossing
-  Pedestrian tunnel
-  Pedestrian footpath (RoW status to be confirmed as currently overgrown and does not appear to be used)



Existing buildings within the site

The existing school buildings date from 1967. They comprise a variety of building forms, storey heights and construction types including facing brick, curtain walling and metal sheet cladding.

The buildings and their associated hardstandings are located in clusters of blocks on a series of plateaux formed within the sloping site.

They are located in two principal zones within the site; one the Phase 1 site and one the Phase 2 site with a separate sports hall building on the Phase 1 site.

The buildings on the Phase 1 site are larger and they provide the majority of teaching accommodation. The storey height extends to four storeys for the main teaching block including an open undercroft area. The remaining building blocks are generally single and two storey. The blocks are interlinked with each other and step over multiple levels.

As these buildings are set at the upper levels of Phase 1, they are highly visible when viewed from the approach to the site from the A4012.

The sports hall building is of a steel portal frame construction with facing brick cladding and a metal profiled sheet roof.

The Phase 2 buildings are generally single and two storey with flat roofs and a mixture of facing brick and curtain walling with spandrel panels.

The main buildings are considered generally to be in poor condition, beyond economic repair with very limited potential to deliver current standards such as the net zero strategy or accessibility requirements.

Key

- 1 Phase 1 buildings
- 2 Phase 2 buildings
- 3 Sports Hall





Buildings around the site

There are no buildings directly bordering the Phase 1 site although there are several detached and terraced houses facing the northern part of the site on Galon Uchaf Road. These are generally of two storey and of varying styles.

Phase 2 site is surrounded by buildings on three of the sides.

Gwaunfarren Primary School lies to the south Phase 2 site overlooking the adjacent playing field. This is of a 1960s CLASP style construction with flat roofs and timber panelling and curtain wall facades.

The houses on Billingham Crescent are two storey with pitched tiled roofs and facing brick construction. Billingham Crescent is set at a significantly lower level than the Phase 2 site. The immediate neighbouring properties facing a large retaining wall.

The houses to the east and south of the site of the Phase 1 site back onto the site. These are two storey terraced properties of a traditional style.

Bishops Grove backs onto the southern boundary of the Phase 1 site. The houses are detached, two storey and of brick and pitched tiled roof construction. Some of the buildings have been extended to be very close to the boundary.

Key

- 1 Gwaunfarren Primary School
- 2 Houses on Gwaunfarren Grove
- 3 Houses on Billingham Crescent
- 4 Houses on Fronwen Terrace, Cyres Street and Seward Street
- 5 Houses on Galon Uchaf Road



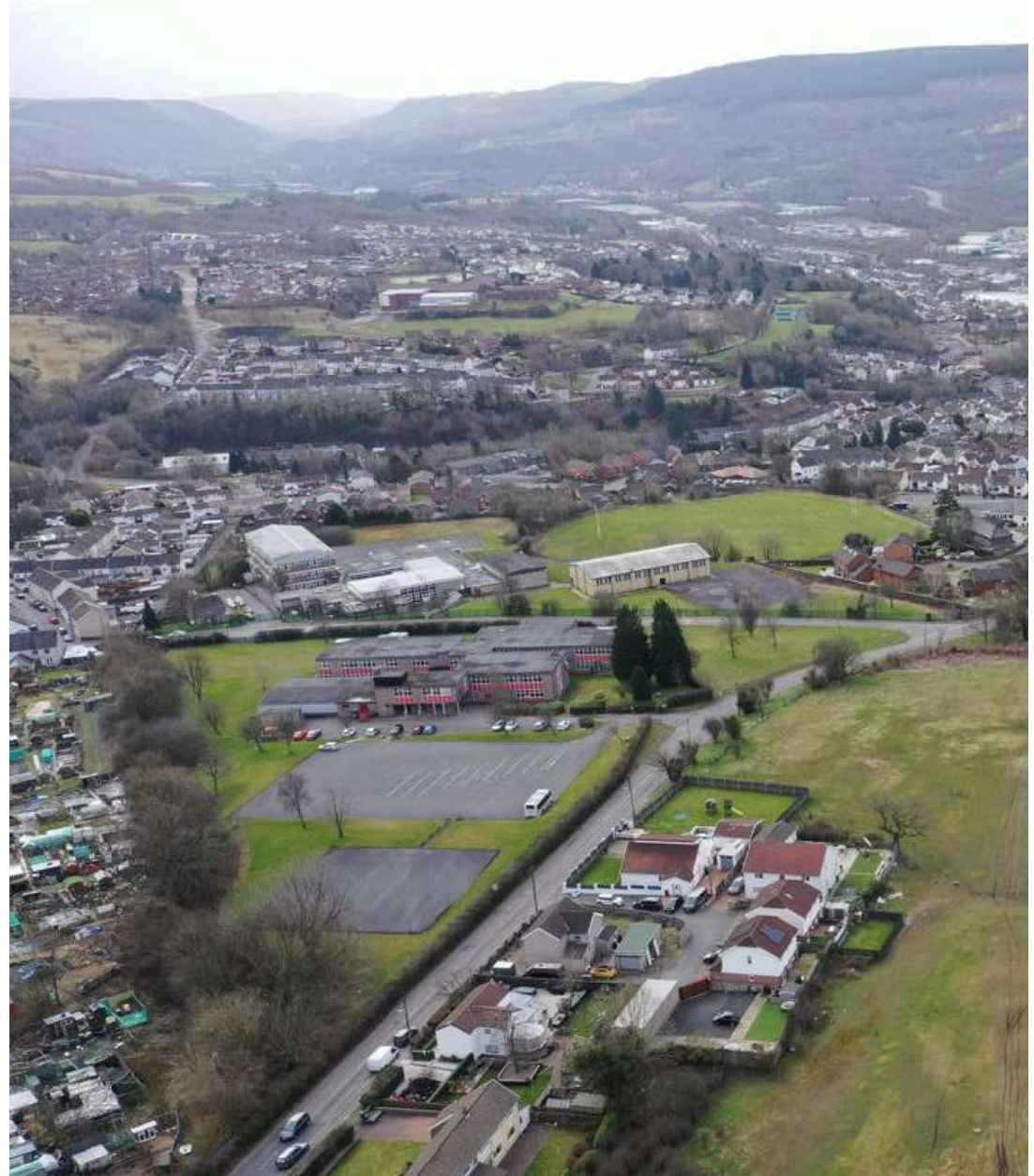


Views in and out of the site

The site is located on rising ground falling north to south with a level change of around 35m in total and east to west of around 5m. As such it possesses various degrees of visibility from both within the site outwards and into the site from its neighbours.

The site is set within a largely residential / rural environment with long range views from the interior of the site to the south, towards the valleys and hills. These increase the further north up the site and help to cement the sites sense of place and connection to the Valleys. Views to the north and east from within the site are largely obscured by a line of mature vegetation, which runs along this boundary. These views will become more open during the winter months when trees are out of leaf. Beyond this eastern boundary lies a large community allotment area. The western boundary has a mature hedgerow of around 1.2m height which largely obscures Gallon Uchaff road and the properties behind it.

Views into the site from the surroundings from adjacent residential properties and footpaths are largely obscured by this boundary vegetation though it is expected long range views from the south to the site would be visible and some intermittent views of the site through intervening vegetation would be experienced by some of the nearby houses. Long range views from the south into the site would be seen within the context of the surrounding residential properties and mature vegetation which occupies the south, north and west of the site.



Photograph illustrating general site context and proximity to the hills which lie to the south



View looking south down Galon Uchad Rd. looking towards hills



View looking north up Galon Uchad Rd. towards main entrance



View along Gwaunfarren Rd. along layby



Junction of Galon Uchad Rd. and Gwaunfarren Rd. looking



View of allotments along eastern boundary



Existing site interior view of undulating landform

Existing trees and vegetation

There are a number of mature trees across the site, particularly along the eastern boundary adjacent to the allotments. There are also blocks of woodland within the southern part of the site, with sporadic trees also lying within the site interior and along Gwanfarron Rd. A mature hedge lines Gallon Uchaff Rd north to south.

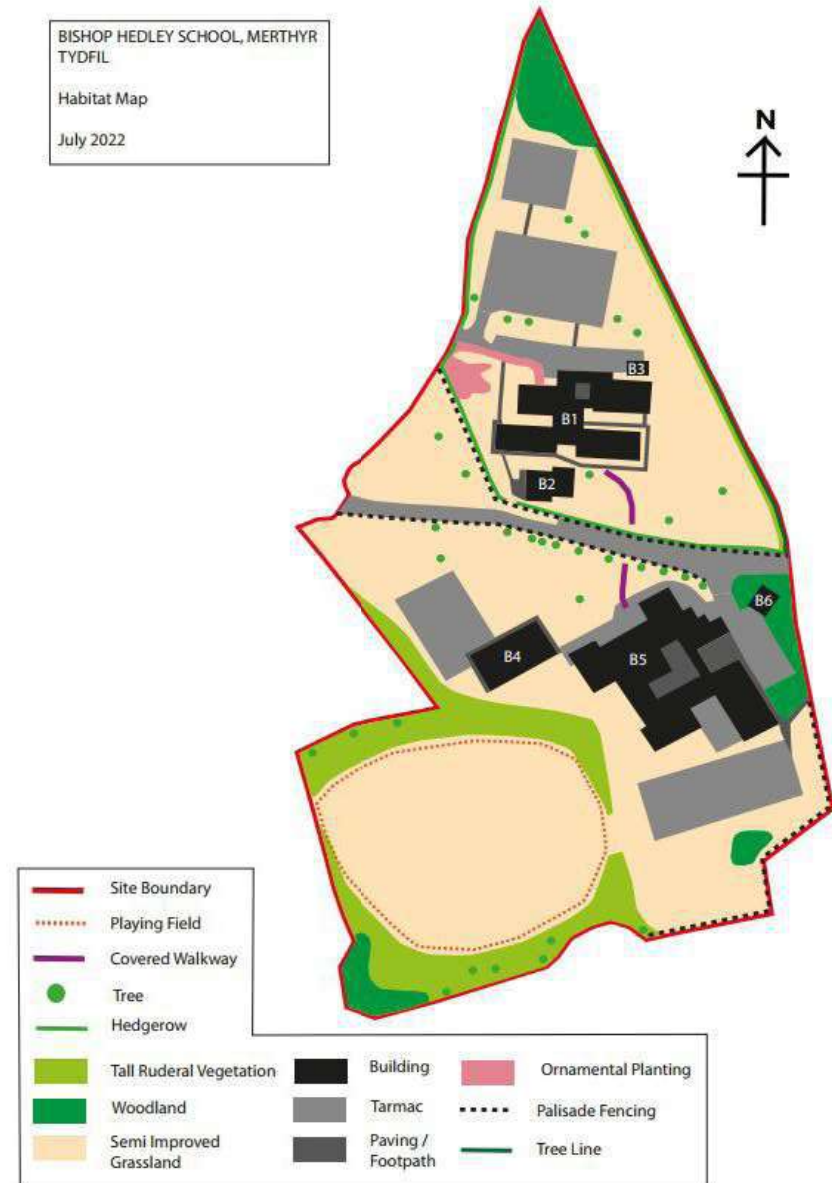
Full Details of vegetation and ecology are provided in a comprehensive Tree survey and the preliminary ecological assessment and bat survey.

The habitats found on the site largely comprise of semi improved grassland, tall ruderal vegetation, hedgerows and some woodland and ornamental planting.

There are a number of mature trees and scrub across the site with around 7 species comprising Blackthorn, Willow, Hawthorn, Field Maple, Hazel, Bramble and Ash.

Thirty species of herbaceous plants were recorded including Yarrow, Birds foot trefoil, Sweet Cicely, Coltsfoot and Creeping buttercup along with less desirable and more invasive species such as Hogweed, Bindweed and Rosebay willow.

Appendix 3– Site Habitat Map





Geo-technical & Ground conditions

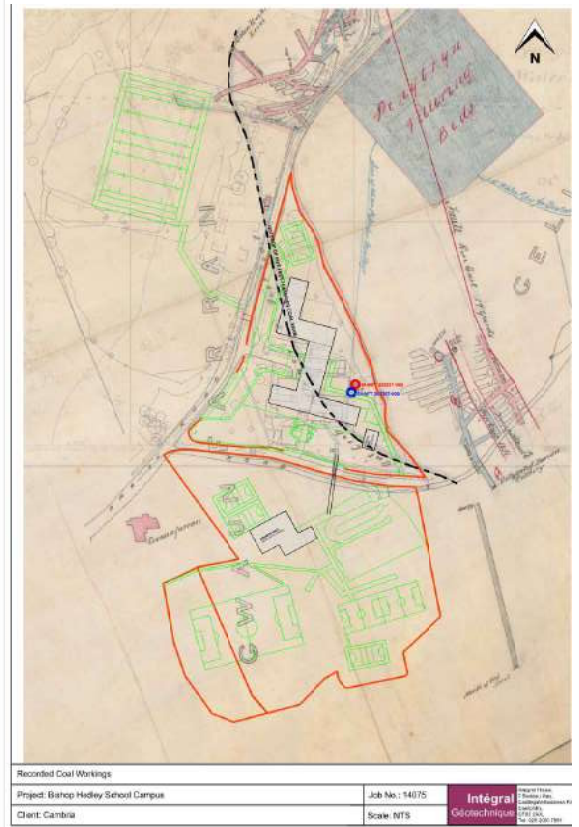
The site is located in an area of historic mining for both coal and iron ore.

The map to the left is an extract from the report received from the coal authority showing the known locations of two mining shafts on Phase 2

Two intrusive surveys have been carried out. No voids have been found so at this stage there appears to be no requirement for grouting.

A third intrusive survey, in the location of the existing building, will be carried out following their demolition.

For further information, please refer to coal mining risk assessment and geotechnical report within the PAC report.



Utilities

There are a limited number of utilities running across the site, those of greatest concern are the water mains running across the eastern edge of Phase 2 and east to west across the middle of Phase 2. DCWW have confirmed the inner water main is a redundant main which is being abandoned and removed as part of the works. The water main which runs along the eastern edge is a strategic asset of DCWW which is to remain and requires an easement zone either side. The easement zone required has fed into the site constraints considered as part of the external plant strategy.

- WATER MAIN
- ▲ WATER CONNECTION POINT FROM ROAD
- GAS
- ▲ GAS CONNECTION POINT FROM ROAD
- - - DATA LINE (BT)
- ▲ DATA LINE (BT) CONNECTION POINT FROM ROAD
- UNKNOWN SERVICE ROUTE IDENTIFIED



Relevant Planning Policies

Planning Policy Overview

1.1 Section 38 of the Planning and Compulsory Purchase Act 2004 requires that in determining a planning application the determination must be in accordance with the Development Plan unless material considerations indicate otherwise.

1.2 The Development Plan for the area comprises the Yrthyr Tydfil Replacement Local Development Plan (LDP) 2016 - 2031 which was formally adopted by Council on 29th January 2020.

National Planning Policy

Planning Policy Wales (Edition 11) 2021

1.3 National Planning Policy is contained within the 11th edition of Planning Policy Wales (PPW), published by the Welsh Government in February 2021. PPW is supported by 20 topic-based Technical Advice Notes (TANs), which are also relevant.

1.4 PPW is the Welsh Government's principal planning policy document, with the primary objective of ensuring that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales, as required by the Planning (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation.

1.5 PPW and the National Development Framework (NDF) set out how the planning system at a national, regional and local level can assist in delivering these requirements through Strategic Development Plans (SDPs) and Local Development Plan (LDPs).

1.6 They identify the importance of education for economic, social and sustainability of Wales (para 3.61) and that they are well placed to support active and social linkages (Chapter 4). Appropriate education infrastructure is also identified as being essential for a 'Productive and Enterprising Wales' (Chapter 5).

Well-being & Future Generations (Wales) Act 2015

1.7 The Well-Being and Future Generations (Wales) Act (WBFGE) 2015 requires bodies in Wales to think about the long-term impact of their decisions, to work better with people, communities and each other, and to prevent persistent problems such as poverty, health inequalities and climate change.

1.8 To ensure we all work towards the same purpose, the Act puts in place seven well-being goals which public bodies are required to work towards achieving. The Act is a material consideration in planning terms and therefore its goals are considered relevant to this proposal. These are as follows:

- A prosperous Wales;
- A resilient Wales;
- A healthier Wales;
- A more equal Wales;
- A Wales of cohesive communities;
- A Wales of vibrant culture and Welsh Language;
- A globally responsible Wales.

1.9 Education is a key component which influences all of the above goals. The importance of providing high quality education within inspiring and well-considered settings should not be under-estimated in terms of its significance to the well-being of our future generations should not

Technical Advice Notes

1.10 Planning Policy Wales is supplemented by a series of 21 topic based Technical Advice Notes (TANs) which provide practical guidance relating to various forms of development and the role of the planning system in dealing with the determination of planning applications. The following TANs are considered relevant to this application:

- TAN 11 –Noise (1997);
- TAN 12 –Design (2016);
- TAN 16 –Sport, Recreation & Open Space (2009);
- TAN 18 –Transport (2007).

The Development Plan

Merthyr Tydfil Replacement Local Development Plan (LDP) 2016 - 2031

1.11 The statutory development plan for the purpose of Section 38 (6) of the Planning and Compulsory Purchase Act 2004 is the Merthyr Tydfil Replacement Local Development Plan which was adopted in January 2020.

1.12 The Proposals Map identifies the school as being within the Settlement Limits, and highlights it as falling within a Heat Priority Area, however does not designate the land for any particular use.

1.13 It is considered that the proposed development will assist in achieving the objectives set out within the LDP Strategy. These include the following:

- LDP Objective 4 Regeneration: To promote the suitable reuse of previously developed land and the continued regeneration of local communities.
- LDP Objective 5 Infrastructure: To ensure that community infrastructure and open space supports the regeneration of local communities.
- LDP Objective 6 Sustainable Design: To promote high quality, sustainable and inclusive design and support measures, which mitigate the predicted effects of climate change.
- LDP Objective 7 Transport: To support an integrated transport system, promote active travel and ensure new developments are accessible by walking, cycling and public transport links.
- LDP Objective 8 Community Facilities: To support existing community facilities and suitable community led development.
- LDP Objective 10 Biodiversity: To improve ecosystem resilience and connectivity which support habitats and species of principle importance.

1.14 The following Local Development Plan policies contained within the LDP are considered to be of relevance to this application.

1.15 From a high level strategic perspective, Policy SW4 states that development will be encouraged within settlement boundaries (as proposed by this development) to encourage development within urban areas, support the re-use of previously developed land, and to protect and support the functioning of our rural economy and the countryside.

1.16 Policy SW10 highlights that development proposals that improve the quality, quantity or access to open space will generally be supported. The policy also seeks to protect existing open space Simon by setting out criteria that would need to be met to justify any loss. These include: an assessment of the quantum of space in the area, whether other areas can be enhanced to compensate for the loss resulting from redevelopment.

1.17 Policy SW11 states that development must contribute to the creation of attractive and sustainable places through high quality, sustainable and inclusive design. Where appropriate, the development will be required to comply with a set of requirements, such as to be appropriate to its local context in terms of scale, height, massing, elevational treatment, materials and detailing, layout, form, mix and density.

1.18 Policy SW12 articulates that development that encourages a modal shift towards sustainable transport will be supported, including the enhancement of pedestrian, cycle, rail and bus facilities, in addition to any necessary road improvements. Development proposals will be expected to demonstrate how they reduce the need to travel and encourage the use of sustainable transport.

1.19 Policy SW13 confirms that the provision of new and enhanced community facilities will be supported subject to satisfying other relevant LDP policies.

1.20 Policy EnW4 requires that development proposals demonstrate that they will not result in an unacceptable impact on people, residential amenity, property and / or the natural environment from issues such as pollution, contamination and noise.

1.21 Policy EnW5 states that development proposals will be permitted where it can be satisfactorily demonstrated that it would not cause unacceptable harm to the character and quality of the landscape setting of the County Borough.

1.22 Given the site's location within a heat priority area, Policy EcW9 will need to be considered. This policy states major development will be expected to incorporate, where viable and technically feasible, infrastructure for district heating and to connect to existing systems where available.

Supplementary Planning Guidance

1.23 The following Supplementary Planning Guidance (SPG) are considered relevant to this development proposal:

- Planning Obligations SPG
- Sustainable Design SPG
- Nature and Development SPG





04

Interpretation

Interpretive Diagram

- Complex site levels with steep slopes and multiple plateaux will require careful consideration of building and sports pitch positions to achieve the spatial adjacencies of the brief while minimising earthworks
- There is scope to use the different plateaux for separating the different components of the school - nursery, primary, secondary etc
- Buildings should be developed away from the tree belt and watercourse to the east and away from neighbouring residential development
- Long views could be captured from the building and areas of landscape
- Buildings should avoid drainage easement zones
- Phase 1 buildings offer greater floor space for school to occupy for decant during construction
- Access to Phase 1 site is restricted by the steep slopes to the north of the site to Gwaunfarren Road and by neighbouring development on all other sides
- Phase 2 site provides a greater extent of frontage for vehicle access
- Gradients on Galon Uchaf Road will restrict locations for access points







05

Design Development

Feasibility Concept Option 3A4

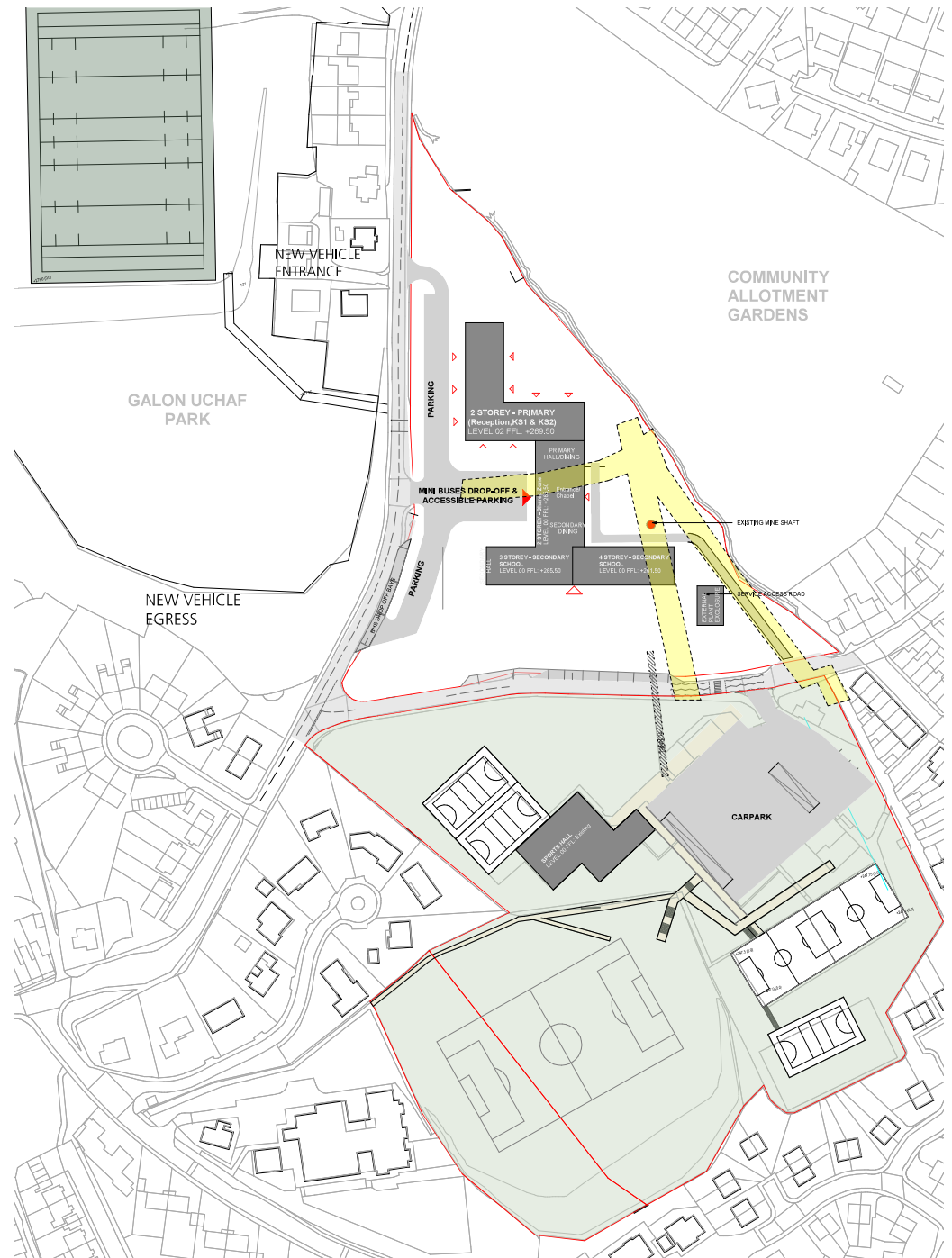
A comprehensive feasibility study was carried out on the Bishop Hedley School site looking at a broad range of options to test the site's suitability to meet the brief.

Extent of site

The options analysis demonstrated that the Bishop Hedley school site could not support all external spaces recommended for a school of this size. In particular, the rugby pitch could only fit on Phase 1 site without incorporating significant retaining structures.

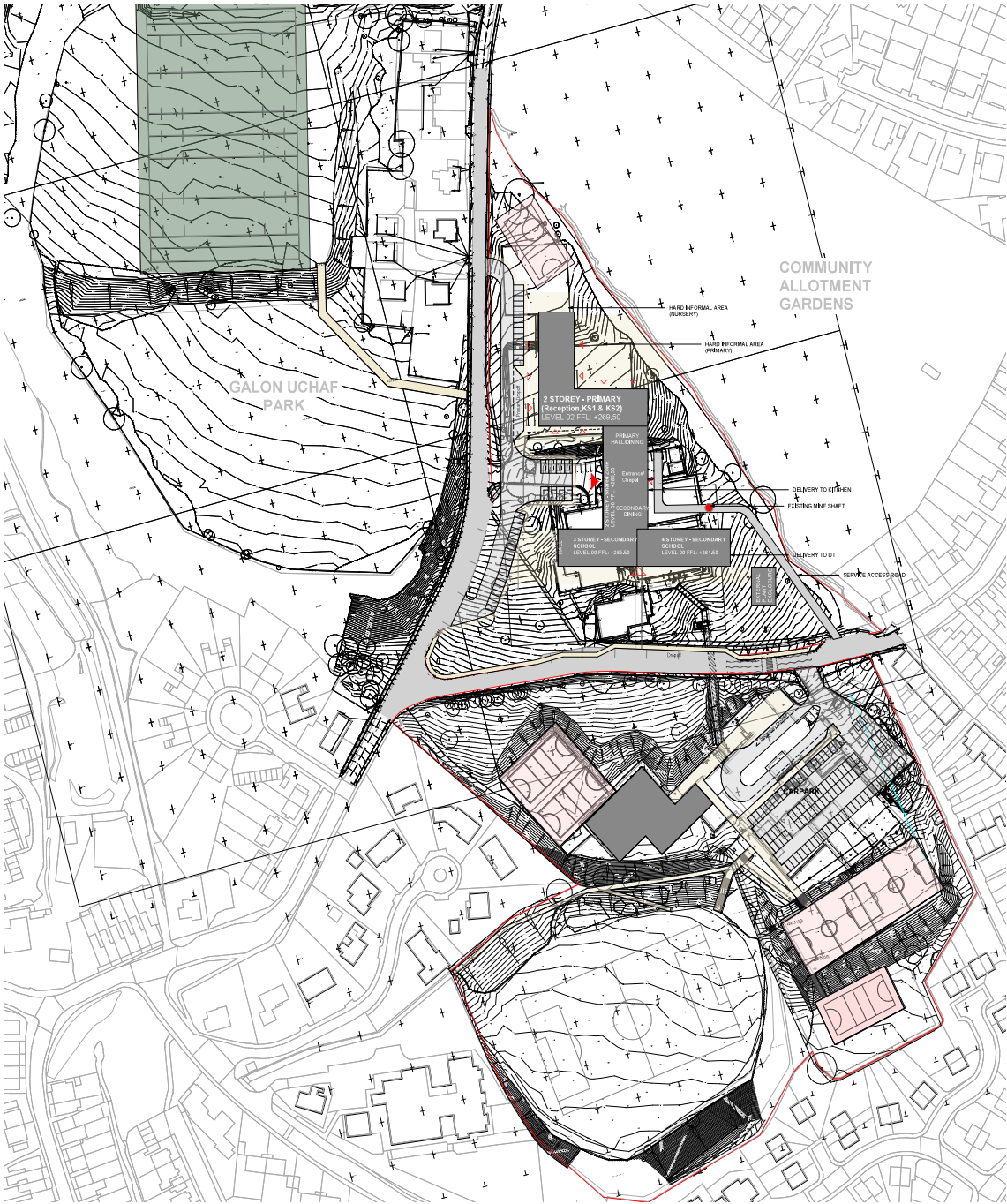
At this stage, the available site area was extended to include an area of the neighbouring Galon Uchaf Park, 'Plateau 2'.

A preferred option, 'Option 3A4' was identified for further development.



Option 3A4 - Use of Topography

Detailed testing of the building footprint and cut and fill analysis confirmed that Option 3A4 would optimise the use of the existing topography, minimising the significant earthworks and retaining walls.



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	Nursery BB99 (sq m)	Primary BB99 (sq m)	Secondary BB98 (sq m)	Total Guide (sq m)	Option 3A - Preferred Option (sq m)	Difference
Sports pitches	0	10,500	31,000	40,500	22,821	-17,679
Soft informal	250	2,113	2,300	4,663	4665	2
Games courts	0	1,650	1,800	3,450	3,071	-379
Hard informal	150	1,188	1,300	2,638	3204	566
Habitat	100	725	800	1,625	2325	700
Flood	500	2,625	4,000	7,125	23849	16,724
				60,001	59,935	-66
Hardstandings					9177	

The conclusion of the optioneering process established the following principles :

Site Levels

- Location of buildings and sports pitches on established site plateaux, where possible. The building location and levels were agreed across the project team to minimise groundworks, imposing retaining walls and cut and fill.

Site Zoning

- Development of the Phase 2 (northern) site for the main school building
- Development of the Phase 2 (southern) site for sports pitches and the sports hall.
- Use of Plateau 2, Galon Uchaf site for rugby pitch
- The use of Plateau 2 for the new school building allows Phase 1 existing buildings to remain occupied during construction of the new school building for decant
- Development of the building footprints to avoid known mining features
- Development of the building footprints to avoid services easements where services are live
- Location of new buildings away from neighbouring residential development

Building Zoning

- Secondary phase located to south of Phase 2 site to allow connection to sport
- Primary phase located to north of Phase 2 site to make use of the relatively level site plateau and to allow direct access from all ground floor classrooms to outdoor learning and play. This area could provide sufficient internal and external space to support the Primary phase brief ensuring that the younger children can remain within this area to minimise road crossing. Through the briefing process, it was established that the Primary phase would only occasionally use the sports hall and to do so, they would be fully escorted, and supervised.
- A central connecting zone, located between the Primary and Secondary phases, could provide a shared visitors' entrance reception, staff areas, catering kitchen and chapel.

Parking and Drop off

- A new one way vehicle ingress and egress with parking areas to the north and south and with a generous stacking length to help avoid congestion on Galon Uchaf Road
- Nursery and primary phase drop off and parking to the north
- Accessible parking and minibus drop off near the visitors' entrance
- Parent drop off on Gwaunfarren Road with bus drop off and turning within the Phase 1 site
- Staff, community and additional parent parking on the Phase 1 site using the plateau generated by the footprint of the existing buildings
- New vehicle entrance for a service road on the Phase 2 site for kitchen deliveries, DT deliveries, service access to the external compound and the collection of waste and recycling

Sports Provision

- Rugby pitch, as the largest sports pitch area required, located on Plateau 2, Galon Uchaf site to avoid extensive groundworks to form the level area required. This would be accessed via a new road crossing on Galon Uchaf Road and a new accessible entrance path to Plateau 2.
- Use of Gwaunfarren Primary School grass pitch area for a football pitch. It is understood that this field would continue to be used on occasion by the neighbouring primary school for sports days.
- Two new 3G pitches located on the existing hardstanding to the south of the Phase 2 buildings on an existing plateau to minimise groundworks
- Retention of the existing sports hall (extent of refurbishment to be confirmed) and extension to provide the activity studio, changing rooms and PE classrooms.
- Two MUGAs provided on the existing hardstanding next to the sports hall, a further MUGA located to the south of the Phase 1 site.
- One MUGA located to the north of the Primary phase

This aerial site plan for Bishop Hedley illustrates the proposed development phases and existing site features. The plan is bounded by Galon Uchaf Road to the west, Alexandra Avenue to the south, and Penryn Village to the east. Key elements include:

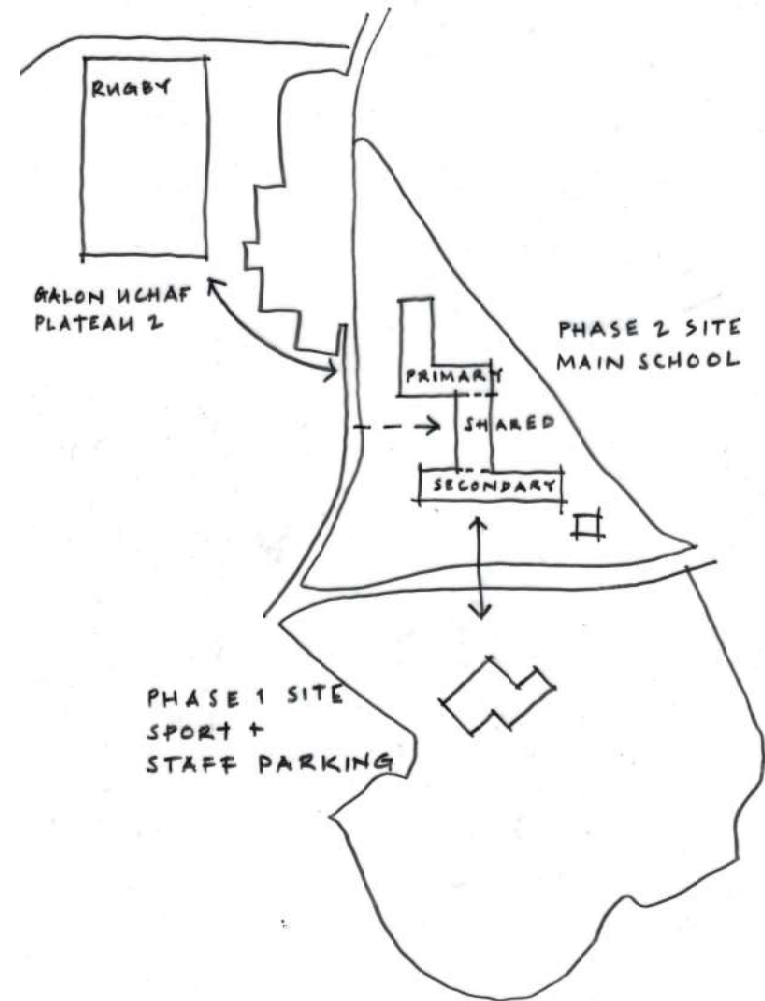
- Phase 2 Development:** Located in the northern area, this phase includes a new building to maintain distance from the boundary, existing tree belt and watercourse, and a largest plateau potential for building. It also shows existing Phase 2 buildings with smaller floor areas for re-use or decant, and a potential to retain and improve a tunnel.
- Phase 1 Development:** Situated in the southern area, this phase includes existing Phase 1 buildings (larger area for re-use or decant but poor condition), existing sports hall (potential for re-use or decant), and existing plateaux potential for sports building. It also shows a prominent corner and steep slopes limiting vehicle access.
- Existing Features:** The plan identifies existing Phase 2 buildings, existing Phase 1 buildings, existing sports hall, existing vehicle entrance, existing bus stop, and existing vehicle access.
- Surrounding Context:** The site is adjacent to Community Allotment Gardens to the north, Seward Street to the east, and Bishop's Grove to the south. It also shows steep slopes and trees to the northern area of the site, and a potential for off-site sports pitches.
- Access and Views:** The plan highlights long views from the site, a vehicle egress point, and steep slopes that compromise access for any new building and close to neighbouring houses.

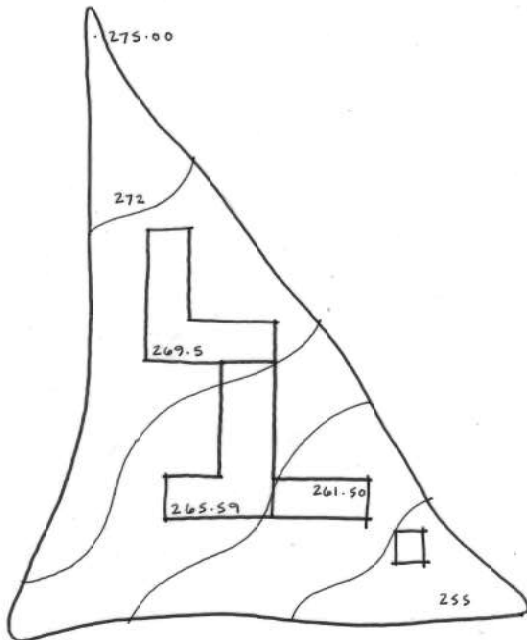
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Concept Sketches

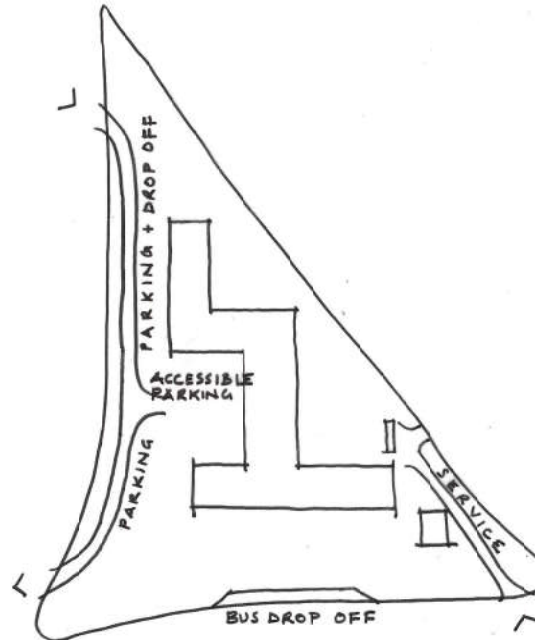
Main School Building Concept Diagrams

1. Primary wing, shared wing and secondary wings placed on main site plateaux. Shared wing connects the two.
2. One way vehicle access with ingress and egress placed at locations to suit gradients of Galon Uchaf Road central access route to main visitors' reception
3. Shared central wing creates central heart space, intersections create secondary and primary heart spaces
4. Central visitors' reception leads into the large communal spaces of the shared wing. Chapel creates focal point at building entrance, linked to entrance courtyard. Shared kitchen serving secondary and primary dining spaces.
5. Central visitors entrance
Perimeter entrances to primary to allow direct access into ground floor classrooms
Main secondary entrance to link to arrival and access to Phase 1 site
Kitchen access to rear of share wing to segregate from main circulation
Direct access to secondary hall and drama for break out and community use
6. Large perimeter area to primary for outdoor learning and access to play
Levels create arrange of distinct external spaces

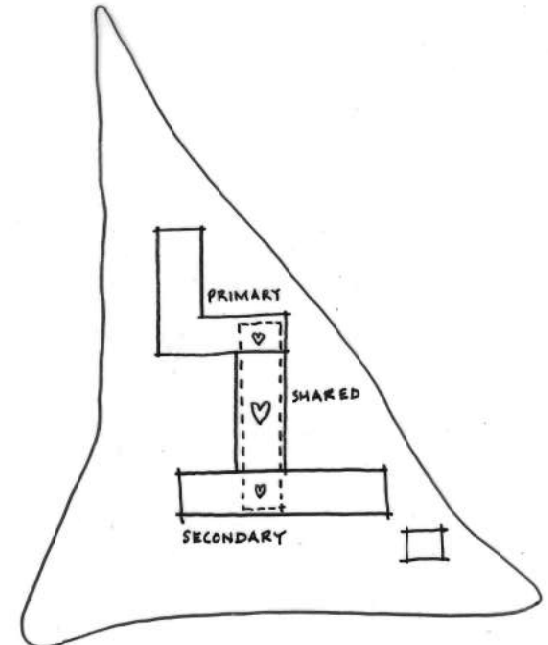




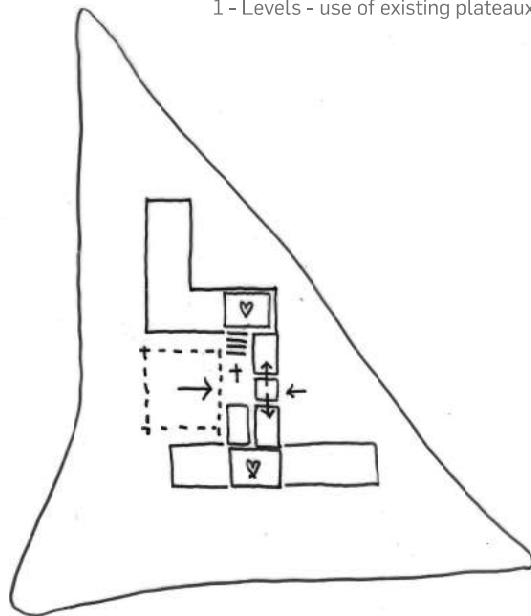
1 - Levels - use of existing plateaux



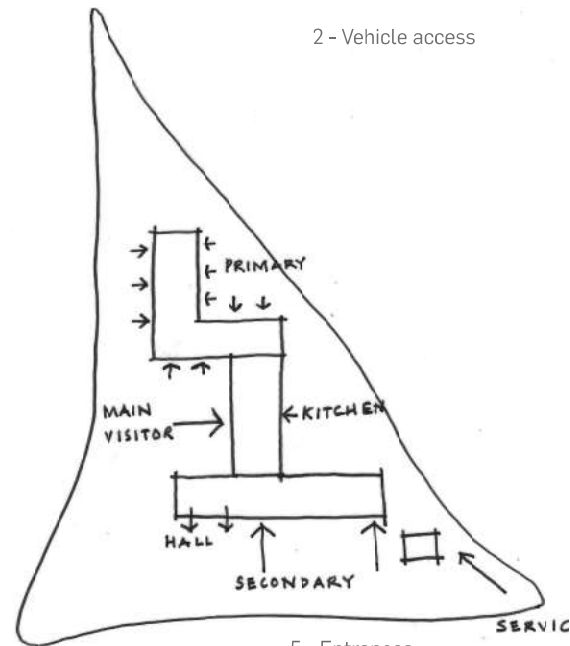
2 - Vehicle access



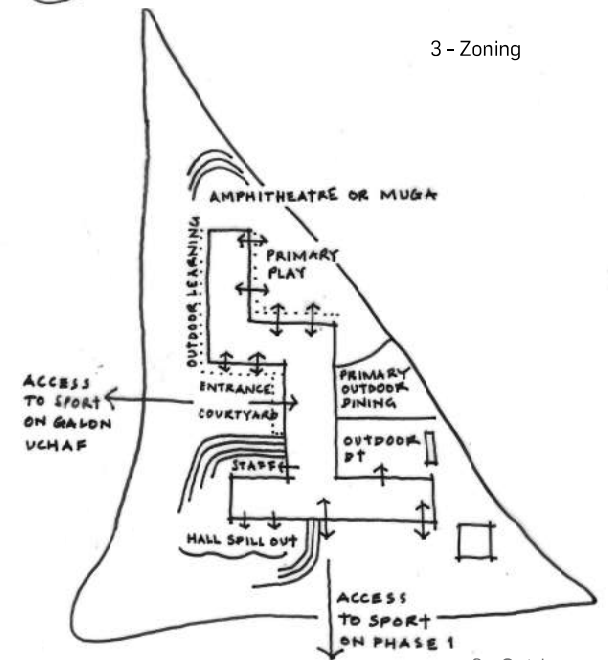
3 - Zoning



4 - Shared wing - heart space



5 - Entrances



6 - Outdoor space

Concept Layout - Main Building

Level 00

Secondary Wing

- The secondary phase teaching areas span across the southerly wing of the main school building. Level 00 forms the eastern end of the wing, reflecting the lower site levels in the south-eastern corner of the Phase 1 site. This accommodates the Design Technology areas which will require external access for deliveries and for outdoor teaching, for example, for construction learning.
- Level 00 has been arranged to accommodate Food Technology, Design Technology and one of the IT classrooms which may also form a shared working area for DT and Art. The Level 00 location allows access for deliveries to both DT and Food Technology.
- The ground floor location allows view in to provide an 'active' frontage with practical activities and the opportunity to showcase work.
- The main plant area is located here to be near the service access route to the site.

Level 01

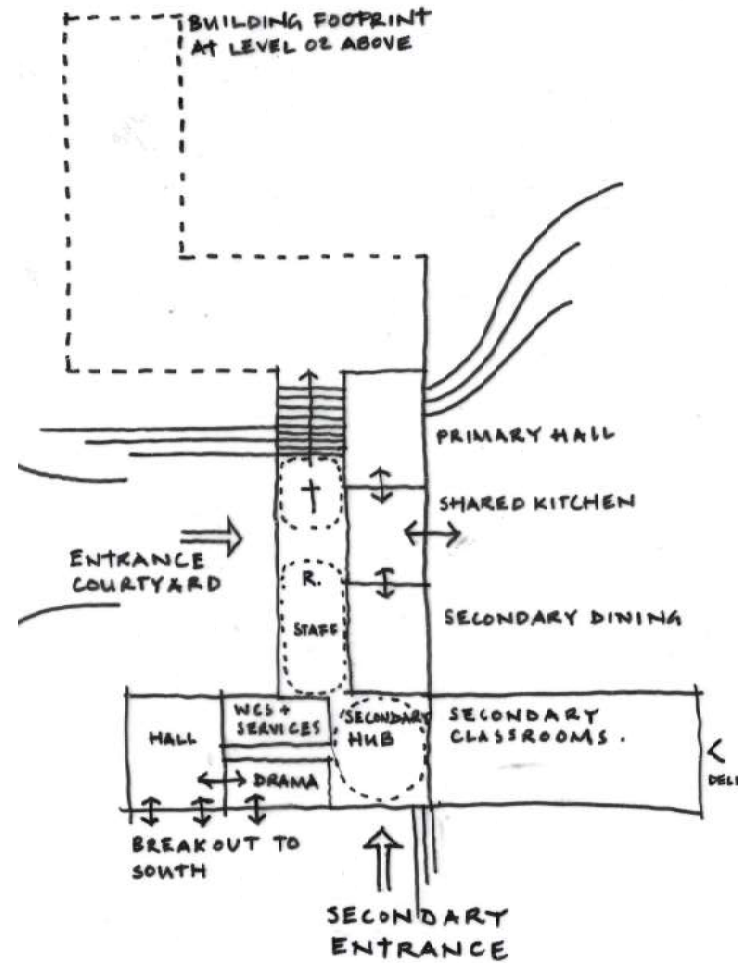
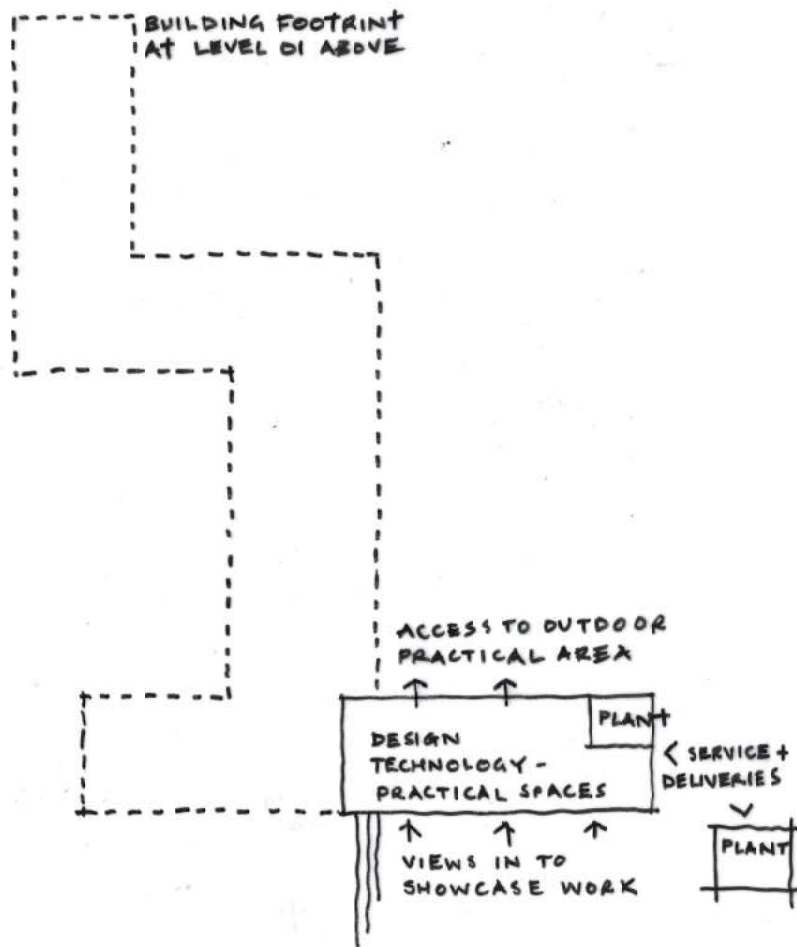
Secondary Wing

- The main Secondary phase wing continues at Level 01 with a wing of flexible classrooms.
- The western end of the wing forms the double height spaces for the secondary hall and drama spaces. These are located together to allow this wing to be zoned separately for community use, with direct access to the south facing terrace from both the hall and the drama spaces.
- The central area between the secondary wing and the shared wing forms a central hub space - an open LRC and ALN space. This area is envisaged as an open, central hub for the Secondary phase which extends vertically through all floors of the building.

Shared Wing

- At Level 01 the secondary phase meets the primary phase areas in the 'shared' wing which accommodates a number of centralised, shared facilities.
- A centralised catering kitchen was a key requirement of the brief. This has been provided at the centre of the shared wing with a servery either side to serve both the primary hall and the secondary dining hall.
- The primary areas of the shared wing are located to the north of the central kitchen and community room.. A Hellerup stair area formal and informal learning, assembly and presentations links the primary hall area to the main primary phase wing at Level 02.
- The Hellerup stair area uses the change in site level to leads up into the the main Primary phase area at Level 02 Separation is maintained between the Primary and Secondary phases with doors placed either side of the central kitchen and community room areas.

Concept Layout - Main Building



Concept Layout - Main Building

Level 02

Secondary Wing

- The main secondary phase wing provides a series of flexible classrooms at the eastern end.
- The upper levels of the secondary hall and drama are placed at the western end.
- WCs and services are placed in a corner location where daylighting isn't required.
- The hub space with IT and learning resource area is located at the intersection of the secondary and shared wings mirroring the principle set at floor below.

Shared Wing

- The staff areas are placed centrally between the primary and secondary phase to promote communications across the all through school and to allow views out to the east and west over the school grounds for good surveillance.
- The upper level of the double height secondary dining hall is placed to the south and the upper level of the primary hall space is to the north. The primary hall has direct access to outdoor dining.

Primary Wing

- The primary wing is placed on the largest plateau, benefitting from relatively level area of the site to create level access between classrooms, outdoor teaching and play. KS1 children will all arrive directly into their classrooms.
- The nursery is located to the south west nearest to the drop off areas and in a dedicated zone with its own outdoor space.

Level 03

Secondary Wing

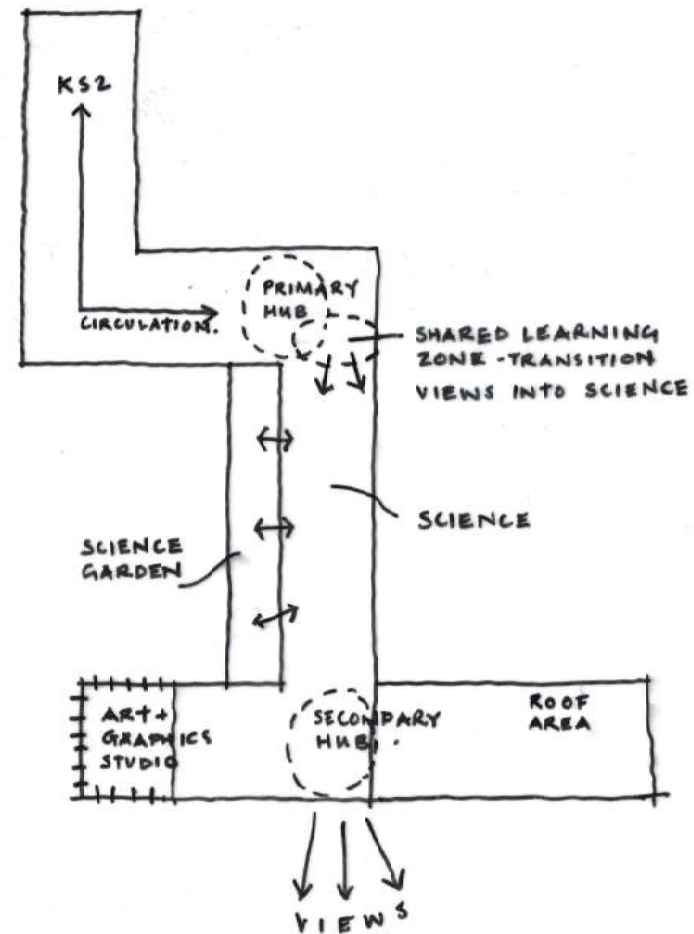
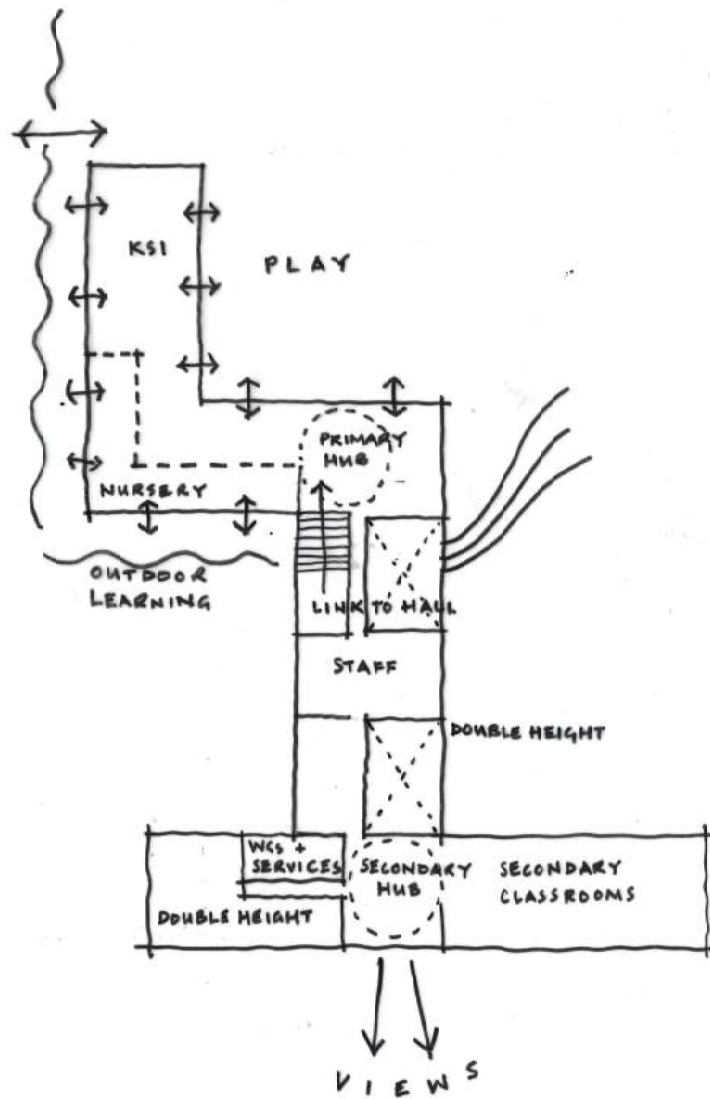
- The main secondary phase wing steps down from east to west, forming a roof area
- The western wing accommodates arts spaces, combining graphics and art as a large single studio space. This is located in a prominent position on the school frontage, providing an opportunity to articulate the building form and to provide a backdrop for signage. Its position at the top of the building allows long views over the landscape and high levels of daylight.

Shared Wing

- The large spaces of science are placed in the shared wing at Level 03. The floor plate is set back from the main western facade to form an outdoor teaching terrace, for science

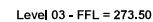
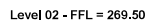
Primary Wing

- The shared wing connects with the primary wing at its upper level, this accommodates the KS2 children.
- The primary hub is formed by the activity studio, primary phase learning resource space and a shared space for year 7 intervention. This is positioned to be nearer science as an interesting and visual introduction to the secondary phase.



65





Building - Internal Organisation

Level 03

- 1. Primary phase - KS2
- 2. Secondary phase - Science
- 3. iT hub/LRC hub
- 4. Art and Graphics
- 5. Shared learning area - Primary and Secondary
- 17. Secondary classrooms

Level 02

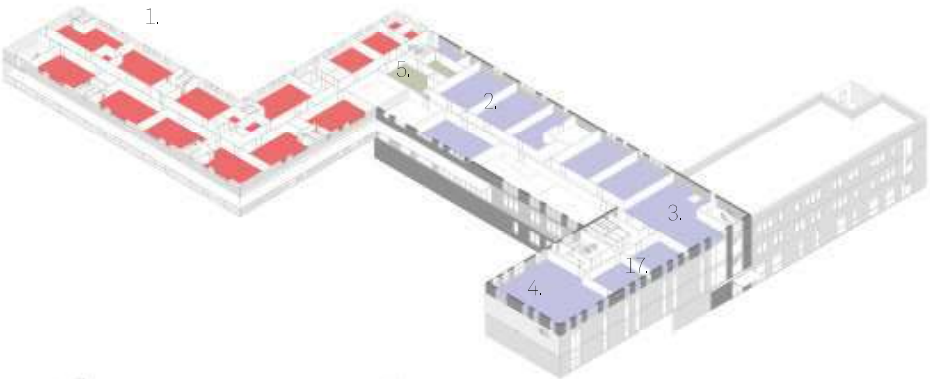
- 6. Primary phase - KS1
- 7. Nursery
- 8. Entrance reception and main office
- 9. Senior Management Team
- 10. Primary studio
- 17. Secondary classrooms
- 3. iT hub/LRC hub

Level 01

- 11. Primary hall
- 12. Shared catering kitchen and serveries
- 13. Staff professional learning
- 14. Hellerup stair area
- 15. Secondary hall
- 16. Drama
- 17. Secondary Classrooms

Level 00

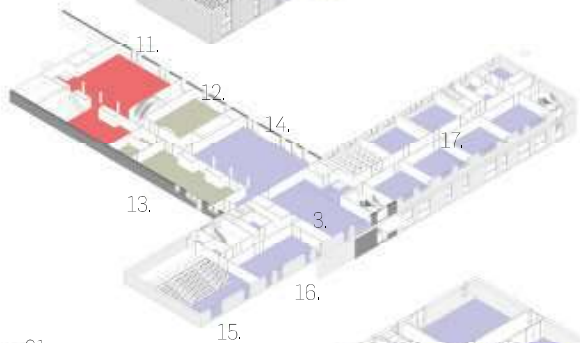
- 18. Food Technology and DT
- 19. Secondaryphase entrances
- 20. Service lift for kitchen



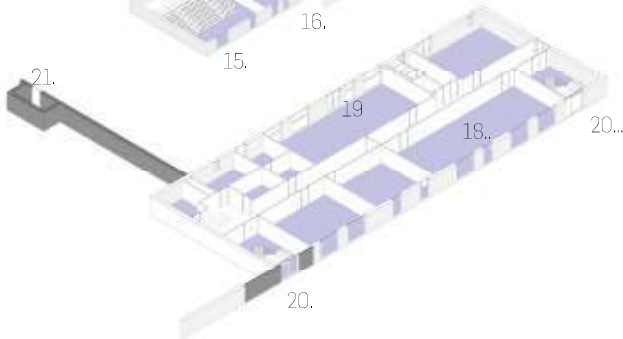
Level 03



Level 02



Level 01



Level 00

Concept Layout - Sports Hall

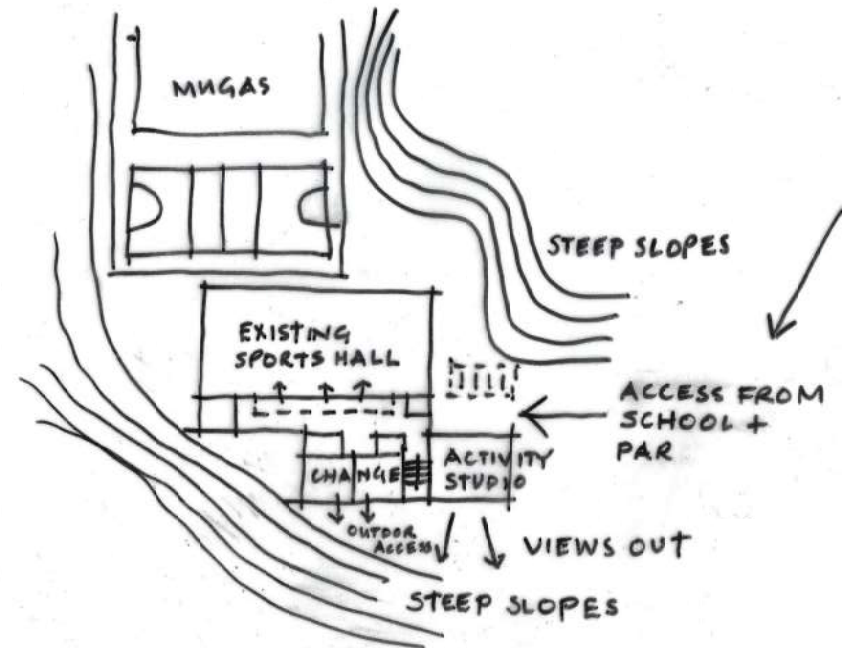
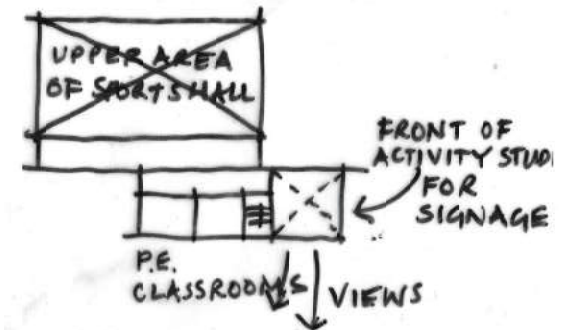
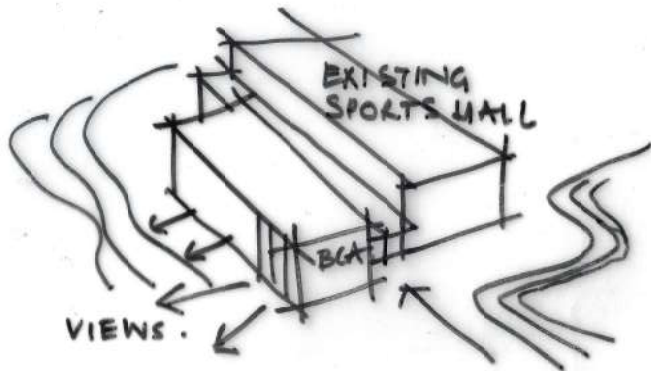
Option 3A5

Level 00

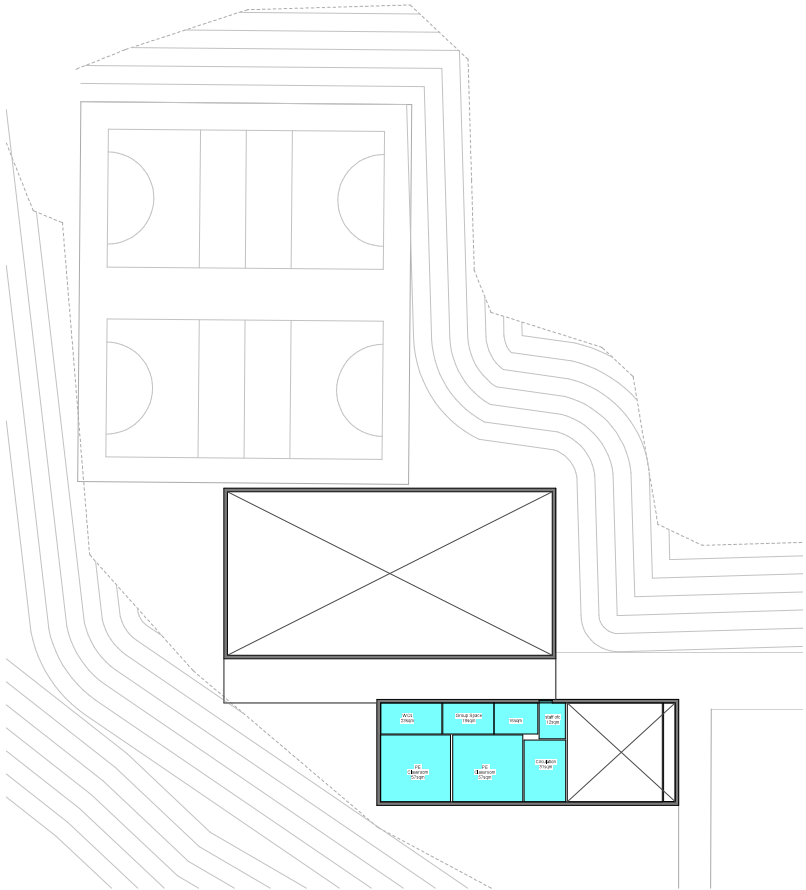
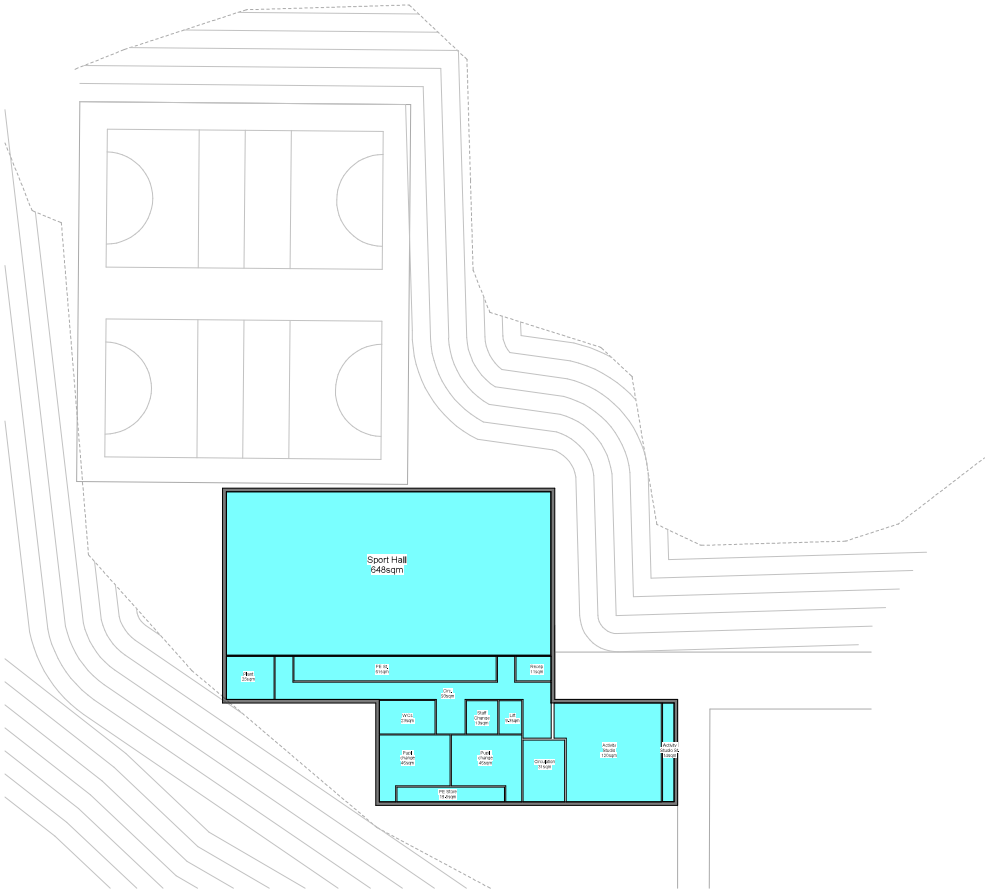
- The existing sports hall is retained with potential for visual and technical performance improvement through re-cladding.
- The steep slopes around the sports hall restrict areas for extending the footprint. The area to the south east forms a relatively level plateau for extension.
- The concept is to construct a simple, two storey rectangular wing to provide additional accommodation linked to the sports hall by a single storey circulation spine.
- The new rectangular wing accommodates changing rooms and a double height activity studio at ground floor.
- The circulation spine accommodates an entrance reception, linear shaped sports storage for easy access from inside the sports hall and a plant room.

Level 01

- Two new classrooms are formed at first floor with widened circulation forming group space.



Layout Development - Sports Hall



Site Layout Development

• S

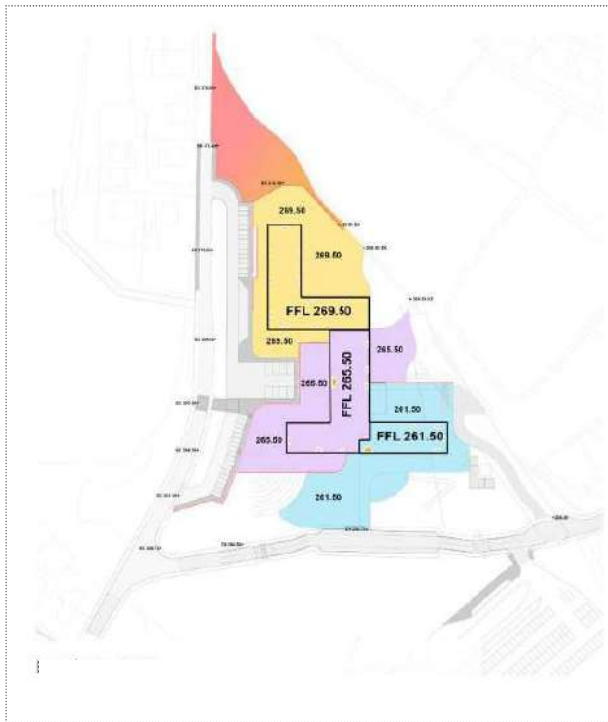
Once a framework had been set to fix the building footprint and the key associated spaces on the site, numerous sketch plans and options were developed to explore the optimum locations for parking, drop zones, access and entrances.

These were developed between the design team and contractor and discussed with the School and Local authority including highways, planning and landscape officers to ensure they addressed the key issues around safety, visibility, security, views impacts and best fit to a complex site with challenging levels. The designs also considered cost, buildability and sustainability needs.

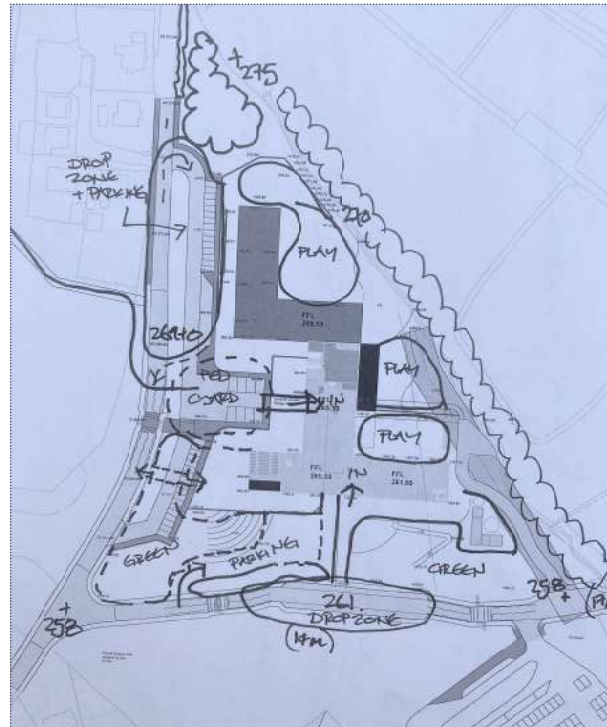
Much work was done to ensure that the building sat as comfortably within a sloping site as it could, with bespoke external spaces serving each school component which would be easily accessible and useful. The design has eliminated the need for extensive and a potentially oppressive series of retaining walls around the site and has skillfully managed to incorporate them into the grounds design to help define key areas and provide safe secure and attractive changes in level which enhance rather than detract from the external spaces. The plans arising from these discussions represent a solution which takes account of all of the above challenges to provide a welcoming and distinctive environment which is conducive to learning and serves the important everyday functioning of the a complex school environment, around the needs for access, maintenance, servicing and emergency scenarios.

Consultations remain ongoing with the school to develop the detailed arrangements to external spaces to best accommodate their requirements. This will ensure these spaces are attractive useful and viable for long term teaching, recreational and social needs.

Site-wide Optioneering



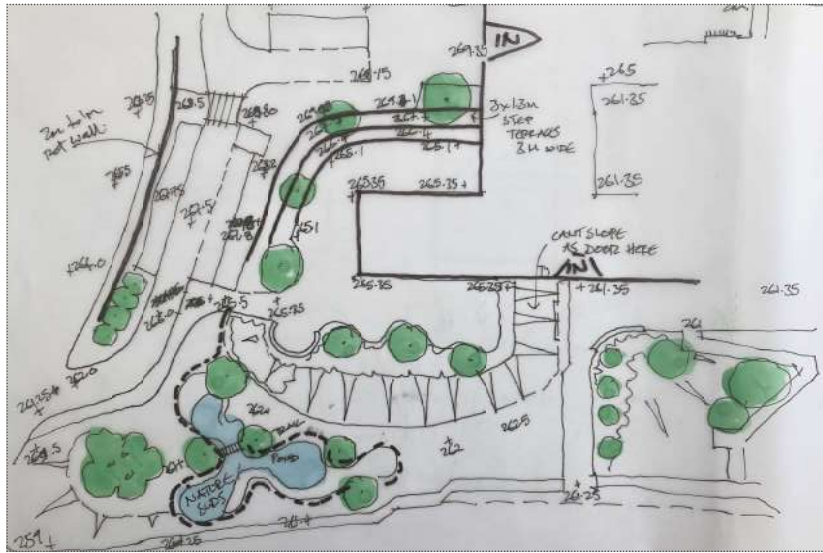
LEVELS STRATEGY DEVELOPMENT



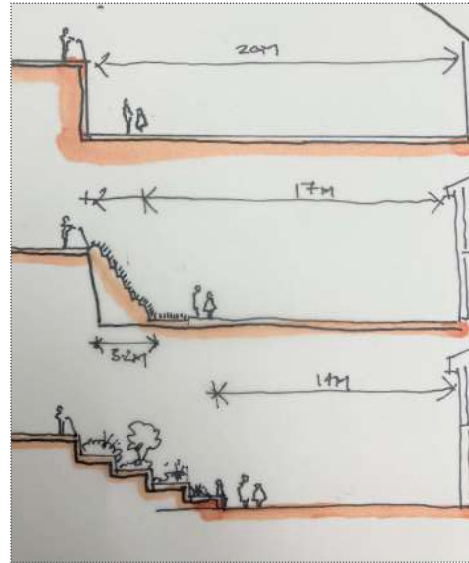
SITE ZONING SKETCH



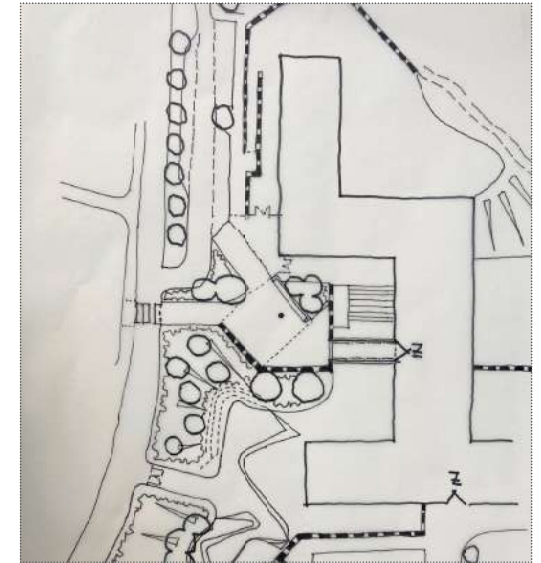
SITE LEVELS / RETAINING WALLS OPTIONS



SITE LAYOUT / SUD'S OPTIONS SKETCH



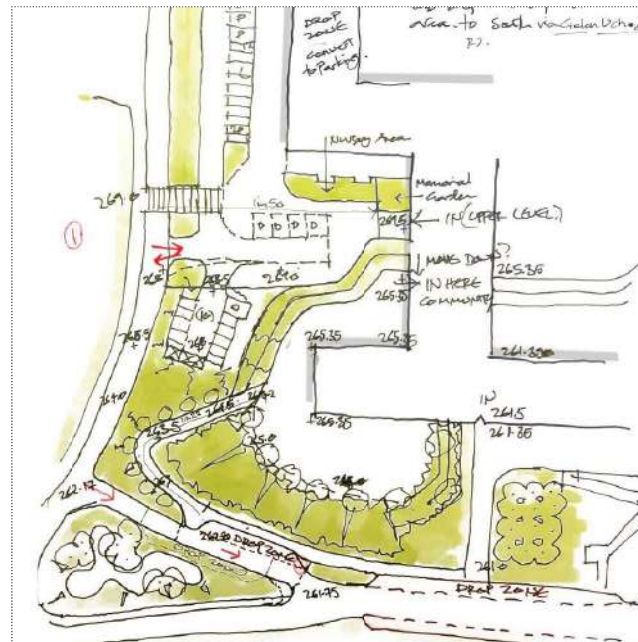
RETAINING / LEVELS OPTIONS SKETCH



SITE LAYOUT DEVELOPMENT SKETCH



SITE LAYOUT DEVELOPMENT



ACCESS / PARKING & DROP ZONE OPTIONS

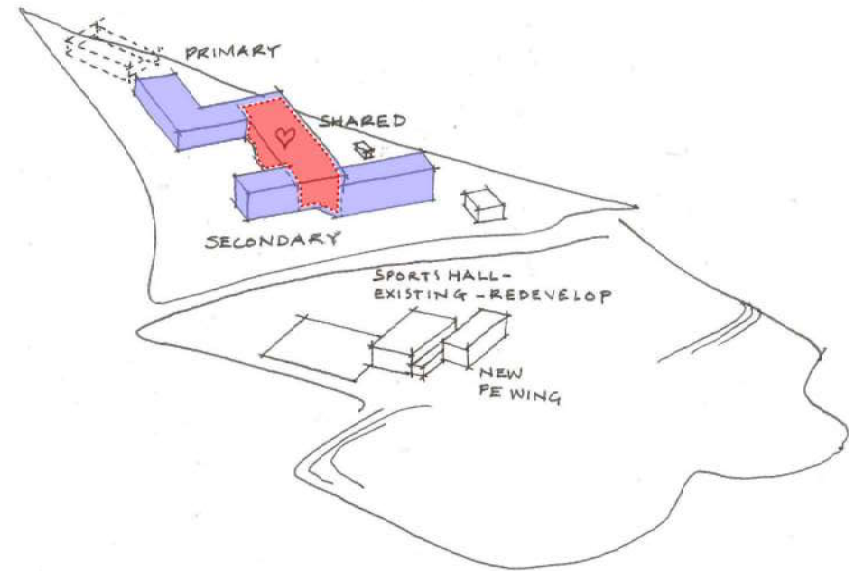


CAR PARKING / DROP OFF OPTIONS

Elevation Development - Main Building

Elevation Concept

- The concept for the external appearance of the school reflects the organisation of the primary, secondary and shared components within the main school building each with their own identity.
- The primary and secondary phases form two distinct wings with a central connecting wing containing large communal and shared spaces forming the 'heart space of the school'.
- Where the shared wing intersects the primary and secondary wings - the identity of the shared wing is carried through.
- The identity of the shared wing is determined by the requirement for large communal spaces with taller windows and good visual connections across the spaces.
- The identities of primary and secondary phase wings contrast with this reflecting the requirement for classrooms and quiet learning space.
- Contrasting materials, scale and proportions are used in the elevational design to express the distinctions between the wings.



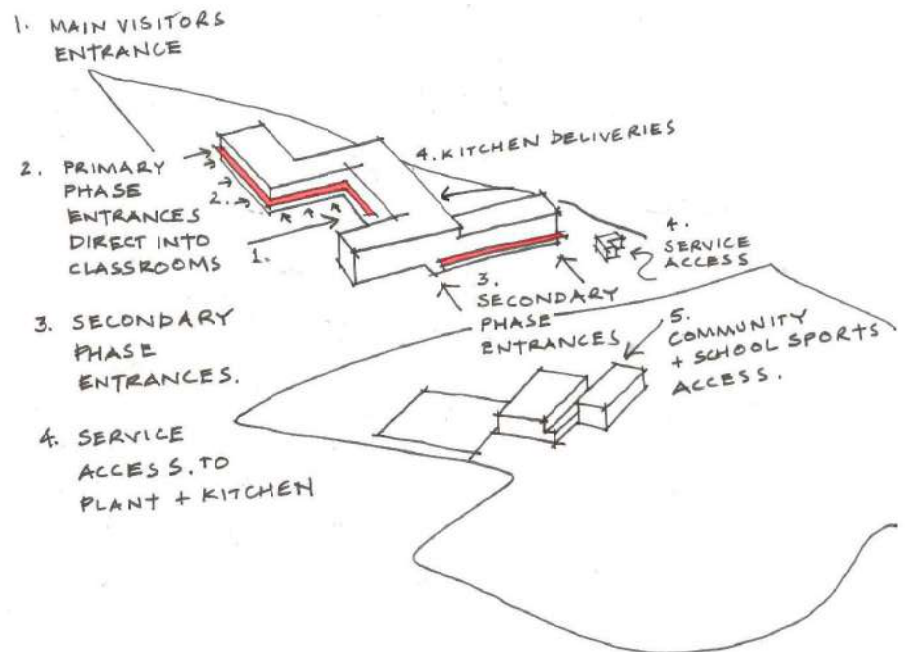
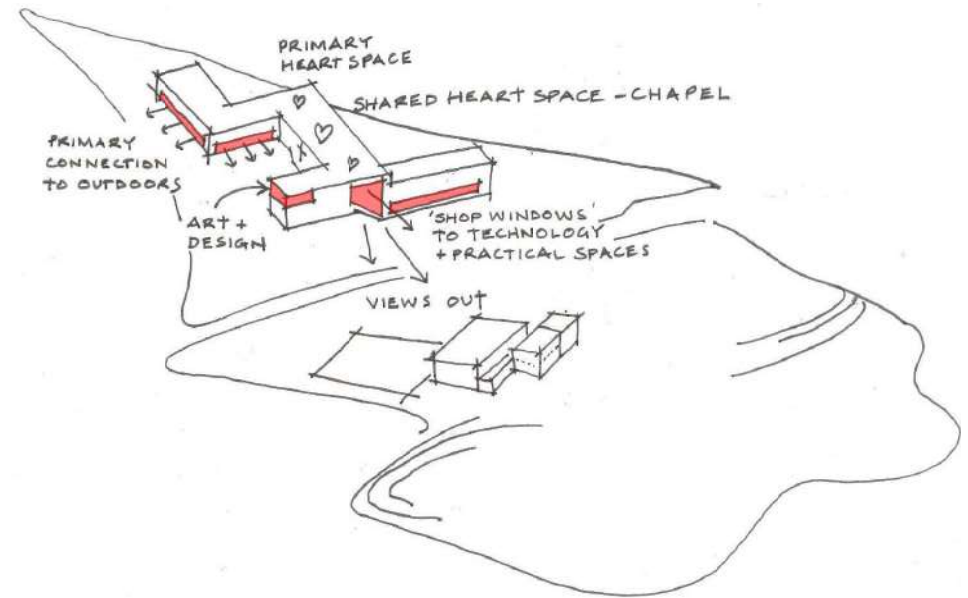
Elevation Development - Main Building

Elevation Concept - Materials

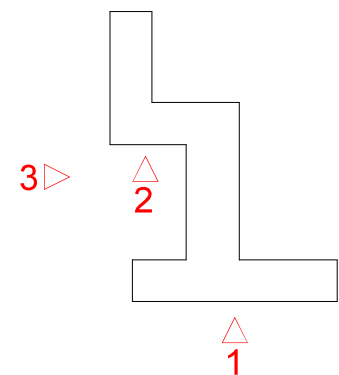
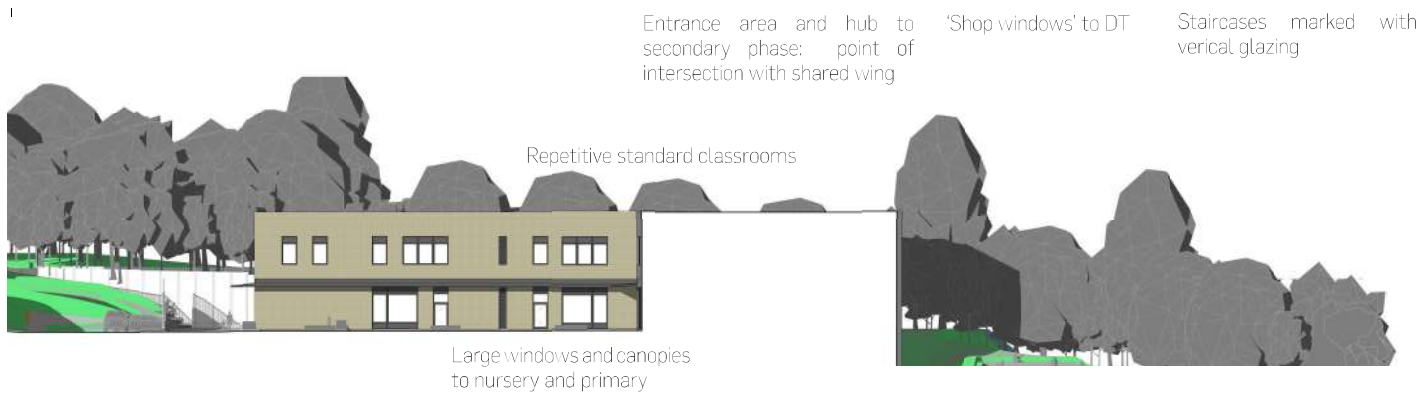
- The primary and secondary wings are predominantly facing brick contrasting with the shared wing which is predominantly powder coated aluminium.
- Use is made of contrasting materials to reflect each element and to express the interconnections between the different wings.
- The contrasting materials are also used to visually breaking up the scale of each building blocks, for example by continuing the aluminium cladding across the top floor of the secondary wing.

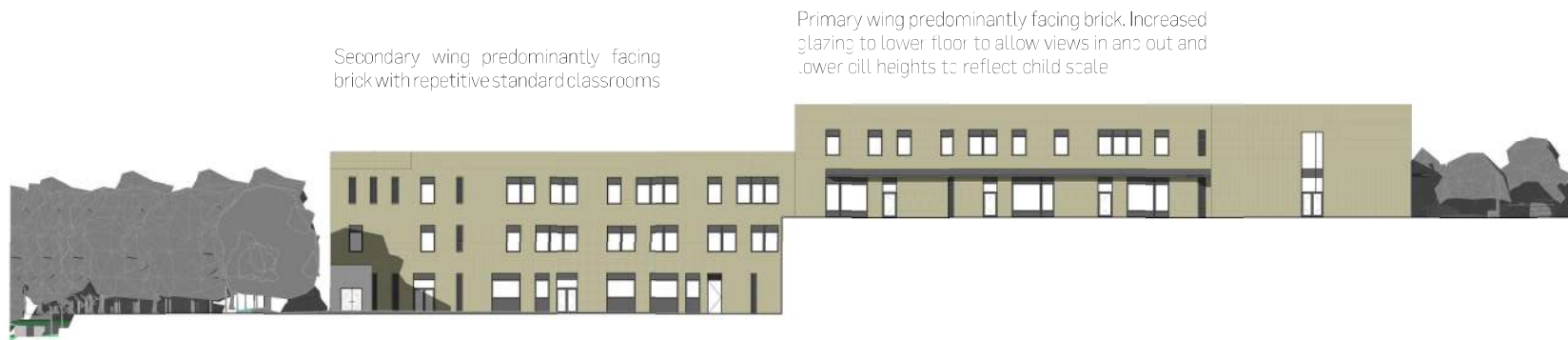
Elevation Concept - Key Areas

- The primary and secondary wing elevations are driven primarily by the repetition of classrooms and their particular glazing requirements derived from the environmental performance.
- The ground floor primary phase requires good visual connections between classrooms and the outdoor teaching zones with large areas of glazing allowing good supervision and low sill heights to reflect child scale.
- Within the secondary phase, the practical technology spaces at ground floor provide 'shop windows' to showcase work and the practical activities inside.
- The hub area of the secondary phase incorporates a larger area for glazing to help bring daylight into the hub space, to allow views out and to mark the main entrance point for secondary pupils.
- The art and design studio will be highly visible from Galon Uchaf Road and Gwaunfarren Road - this is identified as a prominent feature with increased areas of glazing for capturing views and bringing plenty of daylight.
- The main entrances into the buildings are marked by weather canopies which help to articulate the building forms, connecting the wings together with a horizontal emphasis.
- The double height hall spaces all have tall windows.
- Weather canopies to the ground floor primary and nursery classrooms extend across the shared wing to form the main entrance canopy. In the secondary wing, a canopy marks the main entrance position.
- The elevations on the following pages illustrate these strategies.

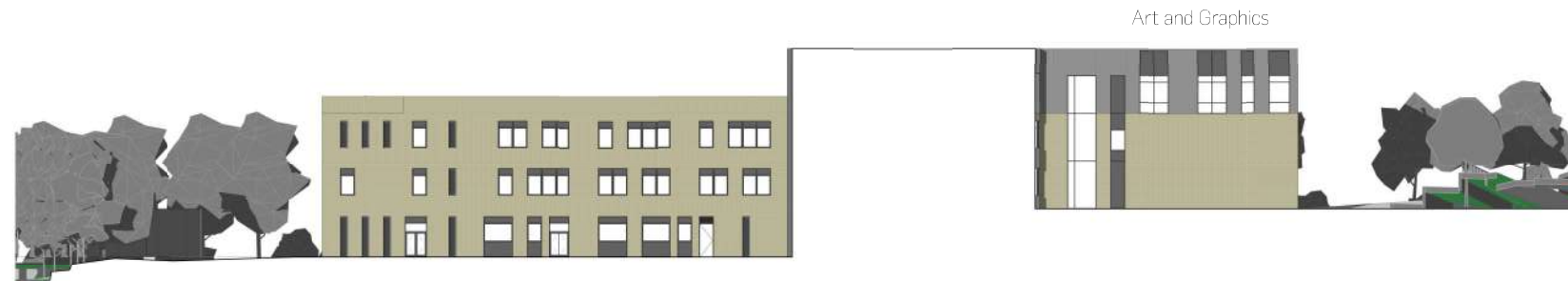
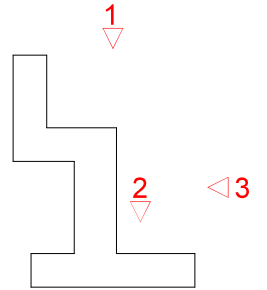


Elevation Development - Main Building

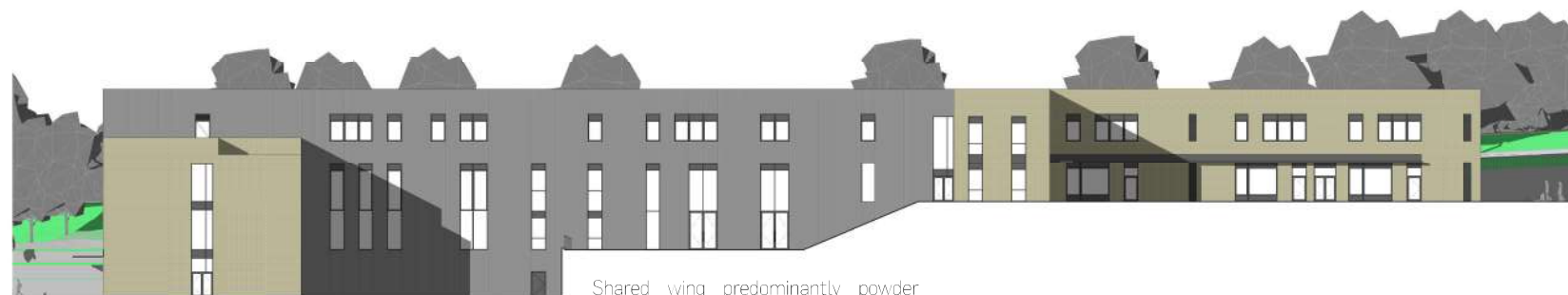




1 - North elevation - Secondary phase to left, Primary phase to right



2- North elevation - Secondary phase

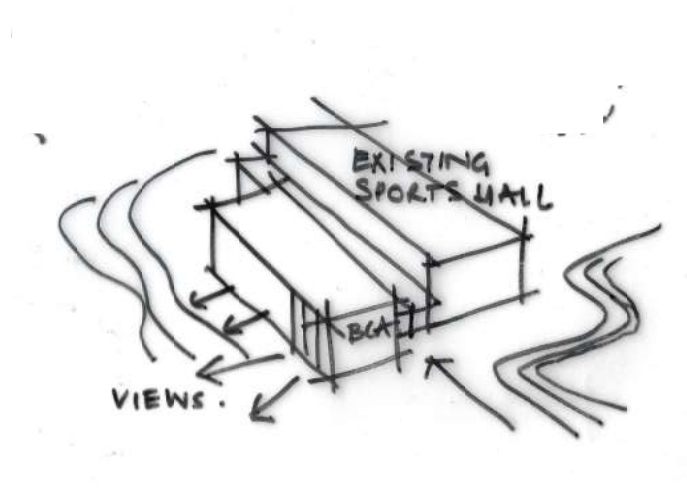


3- East elevation

Elevation Development - Sports Building

Elevation Concept

- The concept for the external appearance of the sports building is to express the three separate elements of the sports hall, the new changing/teaching wing and the connecting circulation spine whilst adopting a similar architectural language to the main building.
- The primary material proposed is facing brick as the building will be adjacent to sports use.
- Initially, the proposal was to retain the sports hall as an existing element. Subsequently, this was changed to allow for a new external envelope retaining as much of the existing fabric as possible to address the embodied carbon net zero brief.
- The proposal is to re-roof and re-clad the existing sports hall and to extend the external walls to form a 1100mm high parapet to provide safe maintenance access to the roof.
- The sports hall will be re-clad with facing brick as it is vulnerable to impact.
- The two storey changing and teaching block is also predominantly brick.
- The proposal for the central circulation spine is to clad it in powder coated aluminium in contrast to its neighbouring elements.
- The fenestration design reflects the principles of the main building adopting the same window proportions for classrooms and tall windows in the double height activity studio.



Main Building Layout Development

The building layouts have continued to evolve with the developing building services, acoustic and fire strategies and further general refinement through consultation with the school.

The development of the site levels strategy has also influenced the internal layouts.

The final layouts are illustrated in Section 5 of this report.

Building Services

The building and site layouts have been developed to provide the plant space required for the MEP strategy. These include service risers, mechanical and electrical plant rooms and comms rooms.

The brief includes a requirement for net zero carbon in operation. Air source heat pumps (ASHP) and PVs have been proposed by the MEP engineer to deliver the required on-site renewables. The new roof areas provide space for the location of PVs. They are to be provided with permanent access and edge protection for maintenance of the PVs.

Three areas have been identified for the ASHP enclosures to suit the different building zones with an enclosure integrated into Level 03 in the Secondary phase, a free standing enclosure located on top of the Primary phase external area and a roof mounted enclosure to the sports hall building.

Fire Strategy

The fire strategy requirements discussed to date have been overlaid and minor adjustments have been made, for example, circulation areas now include doors to provide the required travel distances.

Development of the primary phase wing

External PE storage provisions have been incorporated into the northern end of the primary wing to be accessible from the play area.

A corridor has been introduced from the ground floor primary corridor to lead directly to the play area.

Development of the 'shared' wing

The development of the external levels strategy, with the elevation of the main entrance courtyard, has led to the visitors' entrance and office being placed at Level 02 adjacent to the staff/professional learning areas.

The chapel has been relocated to form a focal point at the entrance area. The senior management team area has been reviewed to provide equal sized offices for the Executive Head and Heads of Primary and Secondary phases, a central meeting room and space for services risers.

The primary hall area has been revised to incorporate the adjacent circulation area. The Hellerup stair area has been reconfigured to combine it with the primary activity studio as a single space connected to the primary hall.

The community room has been located with the chapel to allow the spaces to open up to each other to create a single large space for community use. These have been placed centrally within the school and opposite the entrance reception for access from across the school and the community.

The science area has been developed to incorporate the feedback from the incoming Head of Science and layout of the laboratories.

The area between science and the primary phase area has been developed further to provide an LRC or group space which may be used by the Primary or Secondary phases.

The kitchen area has been developed to incorporate a lift and an undercroft area at level 00 incorporated into the building to form a refuse store.

Development of the secondary phase wing

The review of the external levels to the south of the secondary wing has generated a level access route from the vehicle drop off area. The stair now extends to Level 00.

The technology spaces have been adjusted to place DT to the rear of the wing to open into an external area to the north for practical learning.

The secondary hub area has been reviewed to incorporate a triple height void, helping to connect the hub spaces at each level and bringing daylight into the internal areas.

The hall and drama spaces have been reconfigured to allow a single space to be formed to suit performances.

The wing has been adjusted to allow one of the staircases to be removed.

The art and graphics area external walls have been recessed to accentuate this element as a focal point on the external form of the building.

The staff areas have been reviewed and zoned to the south of the main visitors' entrance.

The ALN area has been reorganised to allow external access.

Site Levels Development

Site Levels

- The building levels and location work as closely as possible to the existing site levels, with the building stepping up the site from south to north, and across the site from east to west.
- Further investigation of site levels has taken place to develop the areas of landscape around the buildings, to optimise the relationship between indoor and outdoor space.
- The existing site levels across the secondary phase wing bank sharply from east to west and the building is stepped to reflect this. The central entrance to the south of the main building, has been moved from the LRC area at Level 01 to the staircase position at Level 00 to reduce the gradient of the paths leading up to the school from Gwaunfarren Road. A series of stepped walls has been introduced to retain the bank and to clearly mark the route in to the school.
- The external area to the western wing of the Secondary phase forms a level platform for outdoor spill out space from the Hall and Drama studio forming a south facing terrace which will allow long views across the Phase 1 site.
- The levels within the courtyard area to the west, leading to the main visitors' entrance, have been adjusted to form a level entrance route into Level 02. This reduces the length of ramp required to form an accessible route into Level 01. The adjustment in levels increases the extent of the courtyard at Level 01 and the outdoor space for the nursery. This measure also provides a dedicated area immediately outside for the memorial garden, with
- The feasibility scheme established that the use of the northern plateau could generate level access around the perimeter of the primary phase. This principle has been retained with the ground floor set at Level 02 allowing access to outdoor covered teaching areas from each ground floor classroom.
- The placement of the primary phase building on the northern plateau forms a level courtyard within the L shaped form of the building. This provides a level hard and soft play area shared between KS1 and KS2.
- The site levels fall significantly between the Primary phase and the central shared wing with the building stepping back down to Level 01 where the Primary hall is located. The lower level forms an outdoor dining space accessed from the hall.
- A further drop in level, back down to Level 00, requires a retaining wall running from west to east. This provides a natural separation between the primary and secondary phase dining areas. The area at Level 00 generates an outdoor space associated with Design Technology.
- The external space behind the secondary phase eastern wing forms space associated with Design Technology for outdoor project work.
- The feasibility scheme proposal to utilise the existing plateaux on the Phase 1 southern site is retained. The location of the existing sports hall is retained and extended to provide changing rooms, the activity studio and PE classrooms, within the same site plateau.
- The undercroft created by the drop in ground levels in the shared wing area allows space for the bin store with direct access from the kitchen via a lift arrangement.

Initial Planning Feedback - Layout Development

Following the development of the initial concept with MTCBC and school representatives, the project team was provided with the opportunity to meet with the planning officer in order to receive some initial informal feedback on the proposals.

Key discussion points from the meeting 19.07.2022:

- Need to look at the sense of arrival at the school – concern that the car parking at the front of the building and main visitor entrance set back.
- Energy Centre – visual impact of the building being located in front of one of the principal elevations of the school and within the street scene to be considered. Also concern about noise and impact on amenity of the adjoining residents. Consideration to be given to incorporating some of the plant within the building or roof. This element needs to be reviewed in greater detail – can be done through pre-app.
- Intensification of the use of sports pitches – need to look at how the sports pitches are used and what the likely impacts will be – noise and lighting particularly.
- Design – accepting that this element is in progress, but the design of the buildings will be important in this location.
- Northern Pitch – concern about its location at the vehicular entrance to the school. Does it need to be there?
- Pre-App – Happy to have an on-going discussion as the scheme develops and specific meetings to discuss detailed elements e.g. design.
- Schedule of documents – happy with what has been set out. No need for a visual assessment, can be dealt with in the DAS but wants visuals showing a comparison between the existing and proposed. Need to ensure that sections extend beyond the site boundary to incorporate surroundings dwellings. Include
- Whilst there is no specific policy requirement, it would be helpful to see EV's installed.
- Noise from deliveries into the service yard needs to be looked at.

Following the meeting the Project Team agreed the following actions would be reviewed,

- Review the Energy Centre – what does this look like visually in the context of the school building and in the streetscene, whether there's opportunity to minimise the plan with the enclosure and incorporate into the roof

The requirement for net zero carbon generates a significant area of MEP plant. The scheme has been developed to reduce the size and impact of the energy centre and other external structures. The air source heat pumps to both the Primary and Secondary elements have been relocated on to the roof and the overall massing considered accordingly. The design has tucked the energy centre into the land form and with supplementary screen planting will make them much less visually prominent when viewed from Gwaunfarren Road.

Look at the arrival to the site – car parking and the sports pitch at the northern end

The sports pitch to the north of the Primary element has been removed and replaced with an amphitheatre set within the landscaped slopes.

Extensive reviews of the access, parking and landscape options have been carried out with a number of stakeholders, including representatives of the Highways team. We understand that the latest proposals consider the best balance of safety, visual impact and accessibility.

- Identify where lighting is needed for sports pitches and assess likely impacts

This remains under consideration during the development of the project, currently only one of the pitches is proposed to be flood lit on the Phase 1 site in the south east corner. This will be screened by planting.

- Noise – both from energy centre, intensification in the use of the sports pitches and deliveries.

The Design Team has continued to consult the Acoustician during design development. The air-source heat pumps represent the most significant impact to noise breakout from plant. As preferred during the July review, these elements have been relocated to the roofs of the main building, taking into account recommended distances from adjacent residential properties as well as building users.

- Liaise with Councils Ecologist

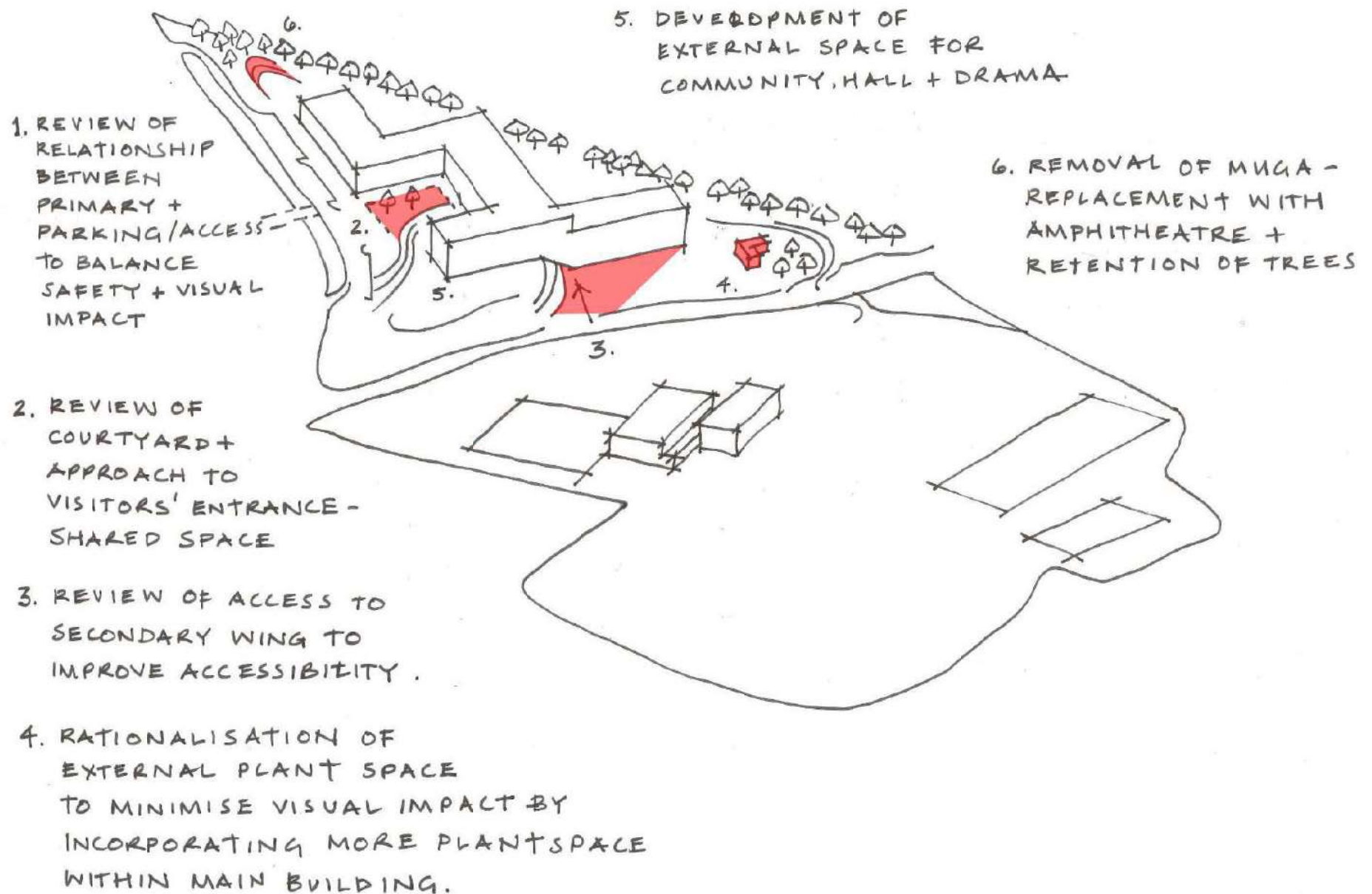
The Design Team have been liaising with MTCBC's ecologist and landscape architect and their requirements around tree and hedge replacement and species selection will inform the detailed Landscape proposals

- Provide a design pack to review in more detail

Further details were submitted to MTCBC on 16.11.22 providing an updated design pack including narrative on the development of the design proposals.

- Look at including EV charging facilities

The provision of EV charging facilities was reviewed in detail with representatives of the Highways team and proposals incorporated within the scheme



Stakeholder consultation feedback - how this has been incorporated into the design

The initial school specific brief was developed through a series of consultations with the school. The key requirements are set out earlier in this document. These principles were used to generate the spaces required and the adjacencies.

Consultations have continued through the development of the design to refine the requirements for the internal and external spaces.

Key feedback from the School is set out below followed by how these requirements have been incorporated into the design:

One school and separation between age groups

- The initial brief set this requirement and this principle has permeated consultation discussions and the development of all key areas of design and it would be managed in the operation of the school.

The concept of the separate wings sets this principle. The development of the shared wing and its intersection with the primary and secondary wings controls access as and when required.

Chapel and Community Room

- The relationship of the chapel and the community room was discussed extensively. The school's requirement was for the community room to be located on the same level as the main visitors' entrance. The chapel was required to be available for community use, although the primary function was for the school.

Numerous options were developed to position the chapel and the community room. The final agreed solution was to colocate both rooms within the shared wing, at entrance level and immediately opposite the reception. This could provide easy access for the whole school and community and its central location could provide a symbolic focal point.

Secondary Hall

- Meetings were held with the school including the Head of Drama to look at how the hall and drama spaces would work together.
- Bleacher seating and movable staging was requested.

Options were produced for different layouts of bleacher seating and the relationship of the drama studio to the hall was reviewed. This resulted in the rotation of the hall to allow the drama space open up to the hall to create a larger space for performances.

WCs

- Discussions have been held with the school to balance inclusion, community use, safeguarding and anti social behaviour

A flexible approach to provision was adopted to meet the current needs of the school and community use, allowing for ease of any future allocation or provision.

Access to Play

- A request was made to incorporate a corridor between the ground floor central corridor and the primary play area separating KS1 and KS2.

The ground floor classrooms were adjusted to introduce a corridor

Dining space

- The kitchen and dining areas were discussed with representatives from MTCBC catering and the school.

Principles discussed included providing a single, centrally located dual functioning kitchen,

Additional Learning Needs

- Meetings with MTCBC ALN representatives and the school
- The secondary phase ALN space could be located within the heart of the school with the learning resource areas to allow integration with the rest of the school with access to quiet group room space.
- Direct external access was required to provide decompression space.
- The position of primary ALN next to the learning resource area was agreed. An external ALN space was requested.

The secondary ALN area has been repositioned towards the daylight area within the central hub to the secondary phase. The office was integrated into the adjacent space and access through to the south facing terrace was formed. The landscape scheme will be developed to provide an enclosure. An external primary ALN space was also developed into the landscape scheme and into the roof garden area,

Landscape

- A detailed presentation was held with the School on Friday Feb 3rd 2023. Suggestions included
- Cycle parking provision to the south site. - integrated
- School want to bring an existing outdoor learning cabin from one of the other sites - integrated
- Explore a forest trail through the woodland at the back of the amphitheatre. - integrated
- South side fencing to largely be retained. - integrated
- ALN gardens require gated access. - integrated
- Painted lines for nursery and primary to be scooter road lines - integrated
- Construction area to be concrete base with drainage to delineate area tracking. - integrated
- Provision to build small walls for bricklaying classes - integrated
- Woodland around the 3G and MUGA pitches - integrated