PROPOSED AMALGAMATION OF LLANFABON INFANT AND LLANCAEACH JUNIOR SCHOOLS TO FORM PRIMARY SCHOOL FACILITY @ LLANFABON INFANT SCHOOL SITE

DESIGN AND ACCESS STATEMENT

NOVEMBER 2022

CAERPHILLY COUNTY BOROUGH COUNCIL
CYNGOR BWRDEISTREF SIROL CAERFFILI

Cymunedau Dysgu Cynaliadwy
Sustainable Communities for Learning

Llywodraeth Cymru
Welsh Government

INDEX

1.0 Introduction

1.1 Scope and Purpose of the Document
1.2 Site Location and Context
1.3 Flood Risk
1.4 Social and Economic Context
1.5 The Proposal

2.0 Policy

2.1 Pre-application Advice
2.2 Local Development Plan Policy

3.0 Consultation

4.0 Existing Site and Context

4.1 Site Analysis
4.2 Opportunities and Constraints

5.0 Design

5.1 Site Layout
5.2 Layout and Scale
5.3 Design Development
5.4 Appearance
5.5 Scheme in Context with Existing School
5.6 Material Palette

6.0 Landscape & Ecology

7.0 Community Safety

8.0 Environmental Sustainability

8.1 Building Standards
8.2 Ecological and Landscape Integration
8.3 Noise Pollution
8.4 Light Pollution
8.5 Air Quality
8.6 SuDs Development and Drainage Strategy
8.7 Foul Water Discharge
8.8 Construction Waste

9.0 Movement to, from and within the development

9.1 Access

10.0 Conclusions

11.0 INDEX OF APPENDICES

A Drawings
B Landscape Proposals
C Ecology

1.0 INTRODUCTION

This document outlines the strategy for the amalgamation of Llanfabon Infants and Llancaeach Juniors Schools in Nelson as part of the Welsh Government's Sustainable Communities for Learning Programme (formerly known as 21st Century Schools and Colleges Programme). The project involves extending and partially refurbishing the existing Llanfabon Infants school building to provide a 275 place primary school with an additional 40 nursery places, to include community use of the facility, and a standalone Childcare unit within the school grounds. An adjacent unoccupied brownfield site owned by Caerphilly County Borough Council will be merged with the current site to accommodate the additional parking required for the new size school, which will involve the diversion of a public footpath and the relocation of the main entrance gate by stopping up of a length of adopted road immediately outside the existing site entrance. The existing twin demountable building currently housing the nursery will be demolished with the nursery facility being accommodated within the existing building.

Llancaeach Junior School (Key Stage 2: 7-11years) and Llanfabon Infants School (Foundation Phase & Key Stage 1: 3-7 years) are currently operating over two separate sites within 0.5 miles distance of each other within the Caerphilly West, Nelson area. Llanfabon Infants School is the feeder school for Llancaeach Junior School subject to parental preference.

The most recent Estyn inspection reports for Llancaeach Junior School (2018) and Llanfabon Infants School (2019), acknowledge that pupils make good progress and see themselves as confident and capable learners. The reports reflect that both schools create a caring environment where the pupils feel valued, safe and happy, these being notable features that encourage pupils to develop positive attitudes to learning.

Developing an all-through primary school provision in the Nelson area will build upon the strengths of each separate infant and junior school to ensure that experiences are further enhanced, enabling even higher standards of education to be provided. It will enable a whole school view of and consistent approach to learning and teaching, curriculum delivery and achievement, through a single vision with consistent ethos to benefit pupils, staff and parents/carers.

Within a primary school, all children - younger and older - have opportunities to share the outcomes of their learning and develop an enhanced understanding of the range of personal achievement across the key stages. A primary school provides an environment where children can work and play together over a longer period of time developing a greater understanding and appreciation of one another's diverse strengths, skills and personalities. This has been shown to have a positive impact on social skills, problem solving and relationship development between all members of the community.

Staff will play an integral part in the benefits outlined above. Amalgamation can provide specific benefits for staff, both individually and as a team. Fundamental to this is the chance to gain a broader and deeper understanding of how to support and challenge children's levels of understanding, skills and knowledge across key stages. In addition, a larger staffing structure helps to build in succession planning and therefore helps in retaining good teachers so that they can further their careers within the school and gives more opportunities to offer specialist teaching.

The Band B project will look to amalgamate both schools to deliver integrated primary education from a single location. Developing primary school provision will build upon the strengths of each separate infant and junior school to ensure that experiences are enhanced, enabling even higher standards of education to be provided that will benefit the wellbeing of children who can work, play and grow together in a familiar and safe environment over a longer period of time.

CURRENT SITUATION

Llancaeach Junior School

Figure 1.0 - Google Earth Image NTS

The site of Llancaeach Junior school opened in 1909 and occupies a total area of approximately 0.67 Hectares which accommodates 3 structures and limited outdoor play areas. The school building has a gross internal area of 1479 m^2 and has a condition rating of C+ under the Faithful and Gould methodology.

The site is enclosed on all sides with current access to the school from a side street leading from the main B4255 which runs through the village. This provides access and parking issues as many parents utilise a local car park for pick up and drop off which means crossing the road. The school also has residential/business properties adjacent to the curtilage of the school which limits the site from further expansion.

The site currently has capacity for 188 pupils with the current roll indicating 138 pupils of which 84.17% are from within the catchment area.

Llanfabon Infants School

Figure 2.0 - Google Earth Image NTS

The site of Llanfabon Infant School was formally opened in July 1992 and occupies a total area of approximately 1.0 Hectare which accommodates 3 structures and outdoor play areas. The school building has a gross internal area of 1186 m^2 and has a condition rating of C+ under the Faithful and Gould methodology.

The existing site configuration lends itself to development, with good access roads and space to build, with minimal disruption, to accommodate the full cohort and projected primary provision. It is envisaged that the existing Llanfabon Infants School building would receive investment as part of this proposal for internal reconfiguration to create size-compliant classrooms and ensure smooth transition into the proposed new building which would accommodate 2 infant classes as well as the Junior cohort.

The local Community Centre and a piece of redundant brownfield land in ownership of the Local Authority borders the North of the school perimeter and it is the intention of the Authority as part of this proposal to utilise the brownfield land as part of a wider campus to encompass improved parking and drop off facilities. To the East, South and West are residential properties.

The site currently has capacity for 120 pupils with the current roll indicating 107 pupils of which 85.45% are from within the catchment area.

Whilst both locations have initially been considered as host sites for the new primary provision, due to the age, building type, limited access and reconfiguration options available for the existing Llancaeach Junior School location, as well as the limited outdoor play space and proximity to a busy road through the village of Nelson with no parking or drop-off options that can be developed within the curtilage of the school has been discounted. Therefore, Llanfabon Infants School site has been identified as the preferred development location.

Llanfabon Infants School is less than 0.5 miles of the Junior school. It is a newer style building and has a number of options available for internal and external reconfiguration and expansion, including the removal of the nursery and modular building as part of current plans to improve childcare provision on site, and the potential to increase the curtilage of the school site. The existing Llanfabon Infants School building is to receive investment as part of this proposal for internal reconfiguration to create size-compliant classrooms and ensure smooth transition into the proposed new building which would accommodate 2 infant classes as well as the Junior cohort.

The aims of the development and the Sustainable Communities for Learning Programme are to provide:

- Raised standards and improve the quality of learning environment to create a fit for purpose 21st Century school;
- Learning environment for children and young people in Wales that will enable the implementation of strategies for school improvement and better educational outcomes;
- Reduce inequalities in achievement between advantaged and disadvantaged areas, groups and individuals;
- A sustainable education system through better use of resources to improve the efficiency and cost-effectiveness of the education estate which will enhance local public service provision;
- A 21st Century Schools Standard for all schools in Wales which reduces recurrent cost, energy consumption and carbon emissions.

The identified priorities of the Band B programme are to :-

- Reduce the number of poor condition schools
- Ensure that we have the right size schools in the right location
- Provide enough places to deliver Welsh and English medium education
- Ensure the effective and efficient use of the educational estate

The Sustainable Communities for Learning Programme (formerly known as the 21st Century Schools Programme) is a major long-term investment programme jointly funded by the Welsh Government and the Local Authority.

The first phase of the programme, Band A, ran from 2014 to March 2019. This was around a £56.5 million pound investment for educational and community use which included:

- Islwyn High School
- Ysgol Gwmraeg Cwm Rhymney Y Gwyndy Campus
- Idris Davies School 3-18
- Trinity Fields Schools improvements

The second part of the funding - Band B, started in April 2019 and in the 21st Century Schools document the focus areas were to reduce the number of poor conditions in schools and to ensure the size of school is correct for the area and in the right location, that can also be utilised by the community. Its aim is to provide adequate places for both Welsh and English medium education and reduce surplus spaces. Phase 1 of Band B includes a new Welsh Medium Primary School, Ysgol Gymraeg Cwm Gwyddon on the site of the former Cwmcarn High School, together with a large extension at Trinity Fields School, Ystrad Mynach. Phase 2 of Band B includes this investment together with a new Plasyfelin Primary School located on the site of the existing school in Caerphilly, and a pupil referral unit for vulnerable pupils on the former Pontllanfraith Comprehensive School site in Pontllanfraith.

The proposals were prioritised based on a number of factors, including building condition, projected pupil numbers, local and national drivers. However, delivery of the curriculum remains at the core and it has been identified that the new Primary School through the amalgamation of Llancaeach Junior School and Llanfabon Infants School will provide continuity and progression in learning in the delivery of the curriculum in a continuous and coherent way.

The proposal is to:

- Create a new Primary School facility which will provide approx. 2402m², of accommodation and a 126m² standalone Childcare unit. The overall GIA for the development is therefore 2528m². It includes a 40 place Nursery, and will also have up to date ICT facilities, external hard and soft play areas. The Childcare unit is funded separately from the Primary School via the Welsh Government's Childcare Grant.
- The project will also consider the desire for community use of the building, which forms part of the Sustainable Communities for Learning requirement of the grant funding. The building layout will seek to facilitate safe partial opening of the school, which would include the hall.

1.1 Scope and Purpose of the Document

The purpose of this Design and Access Statement is to explain the process that has led to the concept of the design and how the development satisfies the criteria within the Local Development Plan.

Technical Advice Note 12 sets out the requirements for a Design and Access Statement in Wales. This includes understanding the site and its context and achieving the following objectives of good design:

- Environmental sustainability
- Movement
- Access
- Appearance and character
- Community safety

1.2 Site Location and Context

Figure 3.0 - Location Plan NTS - Llanfabon and Llancaeach Schools and Conservation Area

The site which forms the subject of this application lies within the village of Nelson, near Trelewis, to the west of the Caerphilly County Borough boundary. The two school sites are highlighted in green with the application site shown outlined in purple and the Llancaeach School site shown outlined in blue indicating their relationship to each other.

The application site (Green outlined in purple) is formed by the Llanfabon Infants school occupying the Southern part with the area to the North currently a derelict over grown brownfield site which is to be combined with the school site.

The Nelson Conservation area (highlighted in pink) sits to the North East of the site but doesn't bound it.

The site is generally flat with banking down to the eastern and southern boundaries with extensive tree cover at the site boundaries.

At the North West corner of the site sits Nelson Community Centre with residential properties to the North. To the East and South of the site are residential properties which sit at a lower level than the application site. The Eastern boundary is separated from the rear gardens of the residential properties by a public footpath. Bounding the west of the site is a vacant area of land which is predominately overgrown with residential properties further to the West. The site is accessed from the South via the A472 and then Ffordd Trawsgae (Crossfield Road) and from the North via Bryncelyn and then Bryncelyn Court.

The surrounding vernacular is predominantly two storey residential dwellings with BISF, steel framed, housing to the West, and typical modern development brick housing to the East and South. To the North is the Nelson Community Centre which is a single storey, render faced building, with a main barrel roof and peripheral flat roofs.

The main school building, built circa 1990, is single storey with buff facing brick, artificial slate pitched roofs , timber windows/screens and feature steelwork to gables. The nursery provision is currently housed within 2 prefabricated buildings to the West of the school site. The parking and play surfaces are predominantly tarmacadam with extensive soft landscaping to the periphery of the site acting as screening to the surrounding properties.

The brownfield site at the North of the application site has some hardstanding areas in its centre but is predominately overgrown scrubland to the periphery again acting as screening to the surrounding properties.

Figure 4 - Google Earth Image of Llanfabon School—NTS

Figure 5 - BISF Housing to West of Site

Figure 6 - Nelson Community Centre

Figure 7 - Modern housing development to South and West of Site

Figure 8 - Existing prefabricated building for demolition

Figure 9 - Existing prefabricated building for demolition

Figure 10 - Partial West Elevation of Main Building

Figure 11 - View of Hall from playground

Figure 12 - Entrance of Main Building

Figure 13 - View of Site Entrance

Figure 14 - Partial North Elevation

1.3 Flood Risk

The site is approximately 154m above ordinance datum and sits within Zone A of the Natural Resources Wales Flood Risk Map. Natural Resources Wales online Flood Risk Assessment Wales Map shows that the proposed development site is not in a location considered to be at risk of flooding.

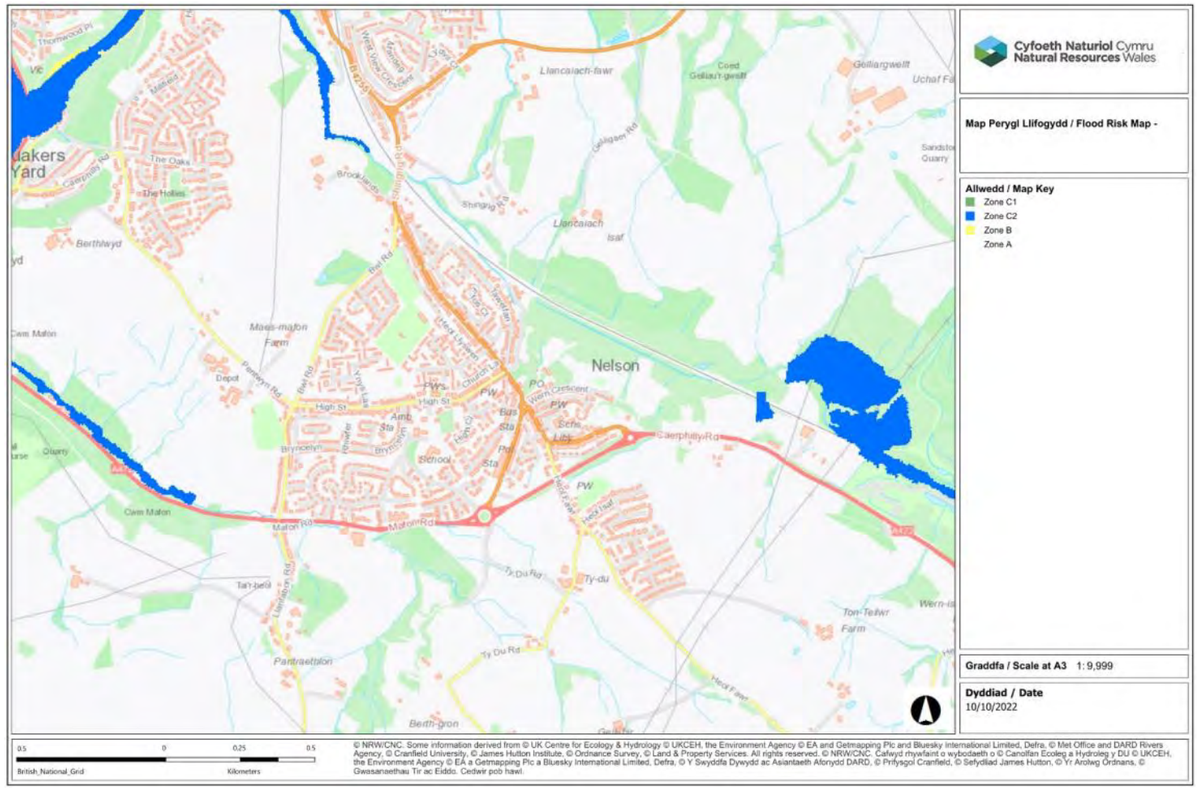


Figure 15 - Extract of Natural Resources Wales online Flood Zone Wales Map

Figure 16 - Extract of Natural Resources Wales online Flood Risk Assessment Wales Map

1.4 Social and Economic Context

This project was identified within CCBC's 21st Century Schools SOP update submitted in July 2017. The project provides a good fit with the objectives of the Band B programme and the key drivers set out in the Council's corporate plan. The case for change identified the need for a new Primary School through the amalgamation of Llancaeach Junior School and Llanfabon Infants School to provide continuity and progression in learning in the delivery of the curriculum in a continuous and coherent way. The proposal will also meet the demand for places and reduce the number of poor condition schools in the borough.

The following is an extract from the CCBC Strategic Outline Case / Outline Business Case:-

> "….*Every school must provide a curriculum which is broad and balanced in content and relevant to all learners' needs. The child's learning journey should be seamless throughout their time in school, building on experiences, skills, knowledge and understanding as they progress.*
>
> *A primary school is in a stronger position to plan for both continuity and progression in learning, delivering the curriculum in a continuous and coherent way from the Foundation Stage through to the end of Key Stage 2. The Band B project will look to amalgamate both schools to deliver integrated primary education from a single location. Developing primary school provision will build upon the strengths of each separate infant and junior school to ensure that experiences are enhanced, enabling even higher standards of education to be provided that will benefit the wellbeing of children who can work, play and grow together in a familiar and safe environment over a longer period of time.*
>
> *The proposal seeks to accommodate pupils between the ages of 3-11 years within the catchment area through a new fit for purpose, state of the art extension to the existing Llanfabon Infants School. The resultant new combined primary provision will provide accommodation for approximately 275 pupils plus 40 nursery places and ensure equality of access by promoting and supporting the development and delivery of inclusive education through delivery of the full curriculum to pupils in a modern, safe and inspiring learning environment….."*

1.5 The Proposal

The proposal is to amalgamate Llancaeach Junior School and Llanfabon Infants School to create a new Primary School provision on the existing infants school site for those aged 3 - 11 years, with the addition of a standalone Childcare Unit for 2 - 3 year olds.

The application is a full planning application to provide a new extension to accommodate Key Stage 2 pupils (Junior age 7-11), along with a partial refurbishment of the existing Infants School (Foundation Phase and Key Stage 1 pupils, 3-7) to accommodate 275 pupils plus 40 nursery places. The childcare unit will accommodate 24 pupils. These numbers are derived from current pupil numbers and through pupil number projections carried out by Caerphilly CBC education department.

Remodelling of the existing play areas is also proposed in order to facilitate the increased capacity of the school, and an unused parcel of land adjacent the Nelson Community Centre, will be utilised as car parking for the development, as the current car park will be lost with the construction of the extension.

Once the buildings are complete the existing prefabricated buildings which currently house the nursery facility will be demolished.

The proposed site layout in Figure 17 below shows the location of the various elements of the project.

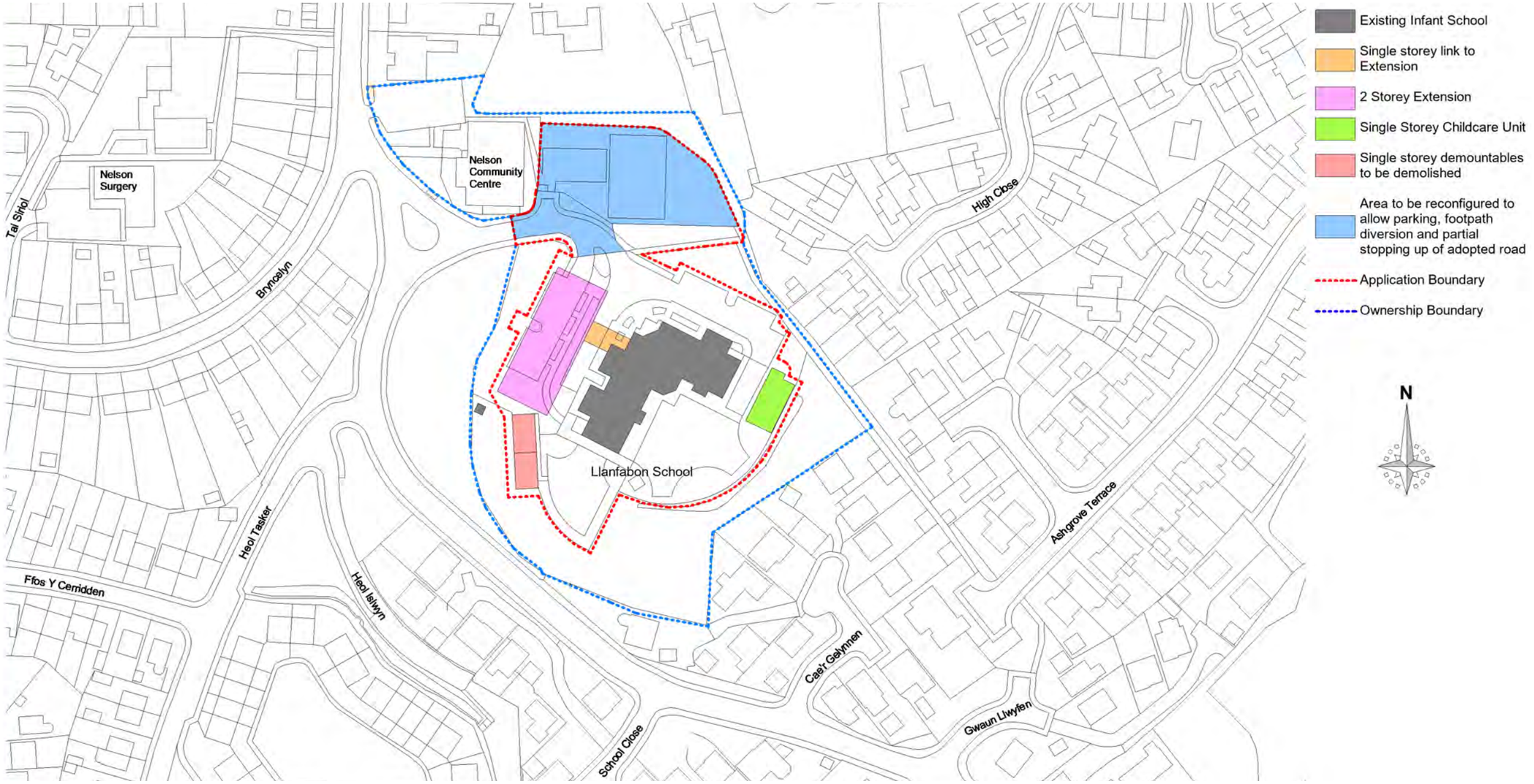


Figure 17 - Site Plan Concept

2.0 POLICY

The Caerphilly County Borough Council Local Development Plan up to 2012, identifies a number of policies that are relevant to the proposed development. In addition, the LDP refers to Technical advice notes that have been referenced for this report. The site lies within the Northern Connections Corridor of the LDP, illustrated on the map below.

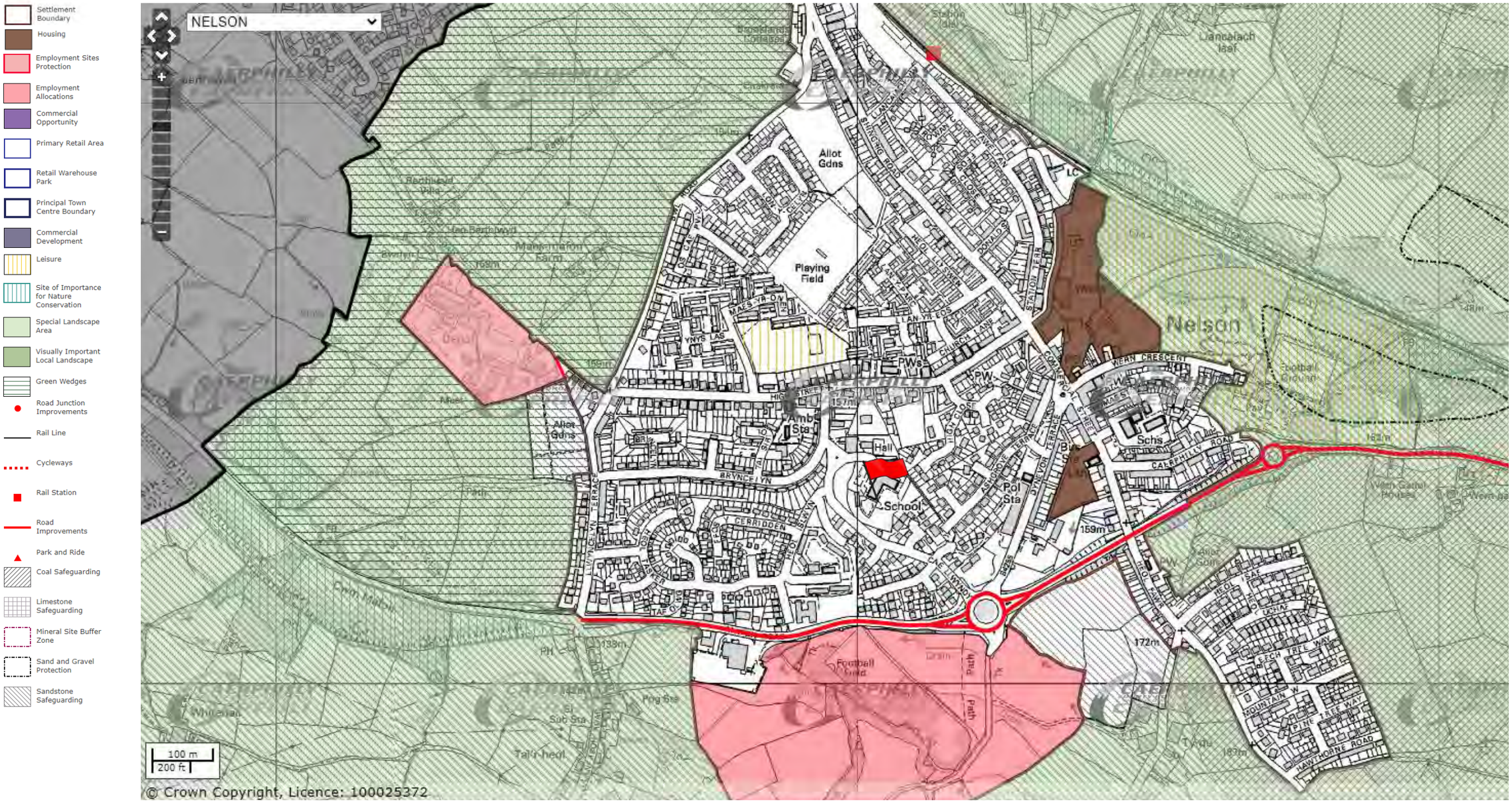


Figure 18 - Extract of CCBC LDP proposals plan

2.1 Pre-Application Guidance

Pre-application advice was sought from Caerphilly County Borough Council's Planning Section and a response was received on 20th October 2022. The response is appended in full, as part of the Planning Application, however a precis of the Council's planning policies for the site, including information on whether the scheme complies, or could comply with the policies is outlined below.

2.2 Local Development Plan Strategy Policies

SP2 Development proposals in the Northern Connections Corridor

SP2 requires development proposals to promote sustainable development. Specifically proposals in this area should: focus significant development on both brownfield and greenfield sites that have regard for the social and economic functions of the area; reduce car borne trips by promoting more sustainable modes of travel; make the most efficient use of existing infrastructure; and protect the natural heritage from inappropriate forms of development.

The proposed extension and childcare unit are located within the grounds of the existing school, and the proposed car park area, within the boundaries of a formerly developed site so we consider them to be brownfield sites. Both Llancaeach and Llanfabon schools are located within the boundaries of Nelson and as such it is not envisaged that the school amalgamation would lead to an increase of car travel within the boundaries of Nelson, and would hopefully, reduce it as parents who have children attending both the junior and infants schools would only need to access the one site. The site is close to bus stops and National Cycle Network Route 47 passes close to the site, with cycle parking and EV charging points being proposed in line with Caerphilly parking standards. The site has an established educational use and the amalgamation of the two schools with the introduction of the 2 storey extension at the Llanfabon site introduces a higher density of development which represents a more efficient use of land without leading to over development of the site.

SP4 - Settlement Strategy

SP4 defines the settlement hierarchy for towns and villages across the county borough and identifies those areas where development would be supported and enhanced based on the specified role and function of a particular area. The Strategy seeks to concentrate new development to respond appropriately to the economic, social and environmental needs of individual settlements and thus settlement boundaries are identified accordingly to indicate the potential areas where development is likely to be permitted.

The development site is within walking distance of Nelson Local centre, a designated service, employment, retail and population centre. The proposed development in this location should therefore accord with this function together with serving the local and wider community.

SP5 - Settlement Boundaries

SP5 promotes resource efficient settlements, indicating where growth will be permitted through the delineation of settlement boundaries. Settlement boundaries define the area within which development would, in principle, be allowed, taking account of all relevant planning policy and material planning considerations.

This site is within the settlement boundary within which development is normally permitted subject to the requirements of other relevant LDP policies and material planning considerations. The LDP Proposals Map indicates that the site is not covered by any allocations or designations.

SP6 - Place Making

SP6 requires development proposals to contribute to the creation of sustainable places by having full regard to the context of the local, natural, historic and built environment and its special features. The visual appearance of the proposed development, its scale and its relationship to its surroundings and context are material planning considerations.

A thorough site and context analysis which is essential in achieving good design and placemaking principles is included in Sections 4 and 5 of this Design and Access Statement.

2.3 Local Development Plan Countrywide Policies

CW2 - Amenity

CW2 states that development proposals must ensure that the proposal would not result in over-development of the site and/or its surroundings. Furthermore, the policy indicates that the proposed use would need to be compatible with the surrounding land uses and not constrain the development of neighbouring sites for their allocated use.

The planning guidance indicates that in respect of residential amenity, it is not considered that the proposed two storey or single storey buildings would have an unacceptable impact on the residential amenity of the surrounding properties by means of overlooking, over shadowing or over bearing, given the extent of the separation distances and existing boundary screening. Similarly it is considered that the extent of natural boundary screening between the proposed new car park to the north of the site and adjoining neighbouring properties would be sufficient to prevent any unacceptable impacts on neighbouring residential amenity. It is also considered that the impact of the proposed marked play areas on surrounding residential properties would be similar to that of a standard hard play area provided that it is only used in conjunction with the existing school, as proposed, and is only utilised during the school day and immediately after school.

CW3 - Design Considerations: Highways

CW3 states that development proposals must meet a number of highways requirements including car parking and access.

Parking is discussed within the LDP 5 section. With regard to highways requirements it is proposed that the development will utilise the existing vehicle access to Llanfabon Infant School, and a Transport Assessment has been commissioned along with a Travel Plan to further inform the design with regard to the proposed developments impact on the surrounding highway and evaluate alternative modes of transport such as Active Travel. The existing access will be amended so that the car park is enclosed within the school boundary and to achieve this a public footpath will be diverted around the periphery of the new car park to maintain the security of the school site.

CW6 - Trees, Woodland and Hedgerow Protection

CW6 states that development proposals on sites containing trees, woodlands and hedgerows, or which are bordered by one of more such trees or hedgerows, will only be permitted provided that:

A Where arboricultural surveys are required, they are submitted and approved, including any mitigation, compensation or management requirements, as part of the planning application.

B Root systems will be retained and adequately protected for the duration of all development activity on site.

C Development proposals have made all reasonable efforts to retain, protect and integrate trees, woodlands or hedgerows within the development site.

D Where trees, woodlands or hedgerows are removed, suitable replacements are provided where appropriate.

A Tree Survey, Categorisation & Constraints Report, along with a Tree Constraints Plan in line with BS 5837:2012 have been prepared to accompany this document. The proposed layout has been designed to minimise the loss of existing trees and hedgerows.

An Arboricultural Implications Assessment, Tree Removal & Retention Plan, Arboricultural Method Statement and Tree Protection Plan have also been commissioned and will be agreed with the Councils Tree Officers as part of the planning process.

CW15 - General Location Constraints

CW15 states development proposals will not be permitted if they prejudice the implementation of wider comprehensive redevelopment or constrain the development of any adjacent site for its allocated land-use.

An Acoustic Survey of the site will be undertaken to ensure that the new school building meets the statutory requirements of BB93: acoustic design of schools - performance standards, which will minimize the developments acoustic impact on surrounding sites.

It is considered that the proposed development is compliant with this policy and it accords with the role and function of the settlement of Nelson.

2.4 Local Development Plan Supplementary Planning Guidance (SPG)

LDP4 - Trees and Development

LDP4 seeks to ensure that trees are adequately addressed throughout the development process by seeking the protection and integration of trees into the design of new development from an early stage in the development process. It provides greater guidance on how CW6 will be implemented, and provides guidance in terms of Criterion G of Policy SP6 insofar as it relates to the incorporation of natural features within new development.

The protection of existing trees is discussed within CW6 above, and the implementation of proposed trees, for both mitigation for existing tree loss, and enhancement of the biodiversity of the site is indicated within the landscaping proposals.

LDP - 5 Car parking Standards.

The application of parking standards enables a transparent and consistent approach to the provision of parking facilities associated with new development and change of use. LDP5 identifies how the CSS - Wales Parking Standards 2014 will be applied across Caerphilly County Borough.

The parking numbers have been based on the LDP 5 Car Parking Standards which require 1 space per member of teaching staff, 1 space per non-teaching staff, 1 space per 30 pupils visitor spaces, bus parking as required (not applicable in this scheme) and 1 commercial vehicle space. The 275 pupils with 40 nursery spaces, 20 childcare spaces and approx 46 staff equates to 55 spaces as shown on the proposed site plan, along with 3 motorcycle spaces. Of these 55 spaces, 3 spaces are designated accessible spaces (5% of the total), 6 are designated as EV charging points for electrical vehicle parking (10% of total) and 3 spaces are allocated as car sharing spaces. We have also provided 30 covered cycle spaces in accordance with LDP 5.

2.5 Future Wales - The National Plan 2040 (February 2021) Policies

Policy 12 - Regional Connectivity

In urban areas, to support sustainable growth and regeneration, Welsh Government priorities are improving and integrating active travel and public transport. In rural areas Welsh Government priorities are supporting the uptake of ultra-low emission vehicles and diversifying and sustaining local bus services. The Welsh Government will work with Transport for Wales, local authorities, operators and partners to deliver the following measures to improve regional connectivity:

- Active Travel - Prioritising walking and cycling for all local travel. We will support the implementation of the Active Travel Act to create comprehensive networks of local walking and cycling routes that connect places that people need to get to for everyday purposes.
- Ultra-Low Emission Vehicles - Support the roll-out of suitable fuelling infrastructure to facilitate the adoption of ultra-low emission vehicles, particularly in rural areas. Active travel must be an essential and integral component of all new developments, large and small. Planning authorities must act to reduce levels of car parking in urban areas, including supporting car-free developments in accessible locations and developments with car parking spaces that allow them to be converted to other uses over time. Where car parking is provided for new non-residential development, planning authorities should seek a minimum of 10% of car parking spaces to have electric vehicle charging points.

The development site is located within close proximity of the centre of Nelson and is served by local bus routes. 6 EV charging points will be provided with equates to 10% of the parking provision as required by both this policy and CCBC LDP 5.

Policy 13 - Supporting Digital Communications

The Welsh Government supports the provision of digital communications infrastructure and services across Wales. Planning authorities must engage with digital infrastructure providers to identify the future needs of their area and set out policies in Strategic and Local Development Plans to help deliver this. New developments should include the provision of Gigabit capable broadband infrastructure from the outset.

Gigabit infrastructure will be provided within the development with a duct to the boundary at the site entrance for when Gigabit broadband becomes available in the Nelson area.

3.0 Education Consultation.

A formal public consultation on the Educational proposals, following the Welsh Government guidelines as set out in the School Organization Code 2018, commenced on 20th October 2021 and ran until 1st December 2021. 90.91% of the Consultee responses were in support of the development proposals.

The following groups were consulted as part of this process:

- Pupils and Pupil Councils of schools directly or likely to be affected by the proposal;
- Headteacher, staff and governing bodies of schools directly or likely to be affected by the proposal;
- Parents, prospective parents, guardians and carers of schools directly or likely to be affected by the proposal;
- Directors of Education for Neighbouring Authorities;
- Teaching and Support Staff Associations;
- Welsh Ministers;
- Assembly Members and Members of Parliament representing the area served of schools directly or likely to be affected by the proposal;
- Local CCBC Members;
- Local Town and Community Councils;
- Estyn;
- Parent Network;
- Diocesan Directors / Boards of Education;
- Gwent and South Wales Police and Crime Commissioners;
- Early Years Development and Childcare Partnership;
- Welsh Education Forum;
- South East Wales Consortium (EAS);
- South East Wales Transport Alliance (SEWTA);
- Mudiad Meithrin, Menter Iaith and voluntary nursery providers;
- All headteachers in the Caerphilly County Council Borough.

3.1 Anticipated Advantages of Scheme

In providing the new Primary School facility a number of advantages were anticipated:

- Provides conditions that will enable a broader and more diverse curriculum to be developed, to better meet the needs of the school's young people and in ways that will be viable and sustainable over the longer term.
- Promotes transition between key stages.
- Provides a more appropriate education in relation to pupils' ability levels, as staff can contribute to policies and practices in every area across the age range, especially in encouraging able and talented pupils, and supporting those who need additional help.
- Create a school of a sustainable size for its catchment areas by removing surplus capacity, providing greater educational and financial stability.
- Broadens the range of extra-curricular and out-of-school activities and develop them in ways that are sustainable over the longer term.
- Gives the community the opportunity to make use of the resources and facilities.
- Draws from a wider range of expertise and experiences across the sectors, to develop pupil's learning experiences.
- Offers more opportunities for continuing professional development.
- Pre-school facilities can be enhanced, by the provision of a Childcare facility which is integrated into the main school.

3.2 Consultation Responses:

These concerns and responses were taken from the Consultation Report:

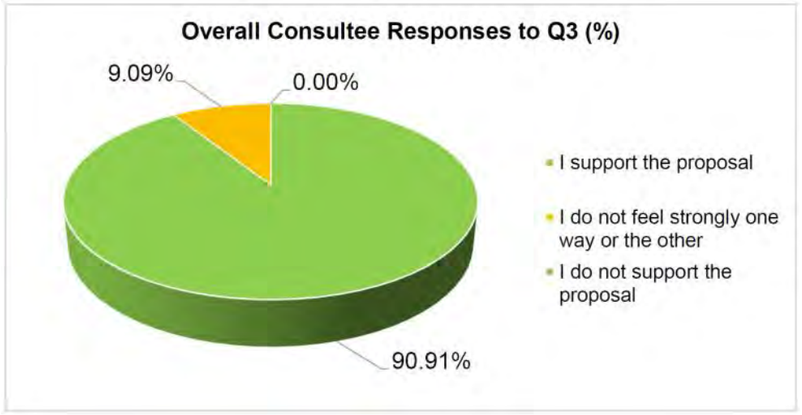


Figure 19 - Overall Consultee Responses

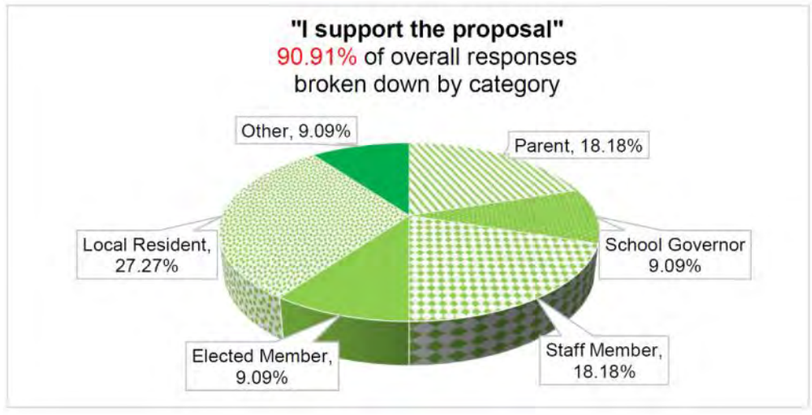


Figure 20 - Overall Consultee Responses by Category

Of the responses returned, 10 support the proposal, 0 do not support the proposal, 1 either didn't feel strongly either way or failed to select an option. That equates to 90.91% in support, 0% opposed with the remaining 9.09% either providing a neutral response or no comment.

Table 5: Summary of Response Themes

Theme	Overview	Number of Mentions
Advantages of a single combined Primary school	One point of contact for parents	2
	Bringing inset days, start and finish times into line	1
	Improved Pupil wellbeing linked to attending one school for longer period	3
	More opportunities for staff	1
	Building and Location related issues linked to Llancaeach Junior School	1
	Enhanced Outdoor Space	2
Community and Intergenerational facilities	Use of wider site facilities for community groups	2
	Wraparound Childcare Provision on site	1
Traffic Management	Parking concerns at Llanfabon Infants School site and call for better drop off zone	2
	Increased traffic flow at proposed site	2
Construction process and potential impact	Impact of new building on neighbouring properties	1

Figure 21 - Table of Response Themes

Advantages of a single combined Primary School: The Council appreciates the level of support shown from consultees in relation to this proposal and the general consensus that the amalgamation of Llancaeach Junior School and Llanfabon Infants School will benefit pupils, their families, and the wider community.

As outlined in the Consultation Document, a single Primary School provision can bring many benefits from an academic, social and practical perspective, enabling a greater sense of community for all.

The design of the new building adjacent to the existing Llanfabon Infants School building, will include a 2 story build, mirroring other Primary Schools within the Educational Estates across Caerphilly. It will be located away from neighbouring properties maximising the existing school site configuration and ensuring out door space can be accommodated.

Community and Intergenerational facilities: It is a pre-requisite of Welsh Government funding that Councils optimise the use of infrastructure and resources to enable flexibility for space and facilities to be made available as community assets. Whilst the internal design of the proposed extension is yet to be finalised, subject to Cabinet approval to progress, the Council will work closely with School Staff and local residents to understand need and how this may be accommodated on a booking basis.

Childcare provision is being considered as part of a separate funding proposal through the Welsh Government's Childcare Grant.

Traffic Management: This proposal will be subject to a full planning application process and a wide range of consultees will be invited to comment, including the Highways Department.

As part of any development, the Council is committed to providing safe, efficient and effective traffic management. As a highway authority, we have a duty to manage the road network to ensure, as far as possible, the safe and convenient movement of traffic, which includes pedestrians and other vulnerable road users. The planning and design of the facility will establish safer routes with designated pick up and drop off points, including car parking which should alleviate congestion.

Construction process and potential impact: The developments on site will be designed and orientated in such a way as to minimise impact to any neighbouring residential properties.

The proposal will be subject to a full planning application process led by our experienced Building Consultancy Team and subject to building regulation requirements relating to a number of factors such as dust, noise etc.

Reasonable Alternatives Identified: As outlined in the Consultation Document, the proposal under consideration is to amalgamate Llancaeach Junior School and Llanfabon Infants School to create a new Primary School provision situated on the existing Llanfabon Infants School site. This was the preferred option as identified through the options appraisal process and scored against the critical success factors of Strategic fit, Educational fit, Accessibility, Financial fit and Environmental impact.

Through the consultation process and the comments returned, there has been an acknowledgement of the need to invest in a new Primary school.

Following the consultation period, the Council is required to carry out a further assessment for the proposal. The purpose of this further assessment is to take account of any further information that has come forward through the consultation or otherwise.

No reasonable alternatives have been highlighted as a result of the Consultation Process.

3.3 Recommendation:

In reviewing the proposal to take account of further information that has come forward through the consultation and in consideration of the likely impact on quality and standards in education, the community and travelling arrangements, it is the recommendation of this report that the proposal is progressed as outlined in the Consultation Document, namely:

Amalgamate Llancaeach Junior School and Llanfabon Infants School to create a new Primary School provision on the existing infants school site.

3.4 Planning Pre-Application Consultation

As a result of the recommendation above, the project information has been brought up to Planning Stage and presented as part of the Pre-Planning Consultation process. The requirement to undertake pre-consultation applies to all planning applications for ‘major’ development (full or outline as defined in article 2 of the Town and County Planning Development Management Procedure (Wales) Order 2012). This consultation process represents an opportunity for people to learn about the proposal and make comments that will be recorded and summarised in a consultation report.

4.0 EXISTING SITE AND CONTEXT

The site is located within the Bryncelyn area of the village of Nelson, near Trelewis, to the west of the Caerphilly County Borough boundary. The entire site is approx. 1.35 Hectares and owned by Caerphilly County Borough Council, however, the application area is 0.9 Hectares. The existing Llanfabon Infants school occupies the main part of the site to the South, with the North currently a neglected, over grown, brownfield parcel of land which when combined with the school land forms the application site. The site is generally flat with banking down to the eastern and southern boundaries with extensive tree cover at the site boundaries.

To the North of the site is Nelson Community Centre and residential properties. To the East and South of the site are residential properties which sit at a lower level than the application site and the Eastern boundary is separated from the rear gardens of the residential properties by a public footpath. Bounding the west of the site is a vacant area of land which is predominately overgrown with residential properties further to the West. The Nelson Conservation area sits to the North East of the site but doesn't bound it. The site is accessed from the South via the A472 and then Ffordd Trawsgae (Crossfield Road) and from the North via Bryncelyn and then Bryncelyn Court.

Llanfabon Infants school was originally located on an adjacent site within the Nelson Conservation area to the North East of the current site, with the school in its current form being built in 1991. The current site was originally occupied by single storey dwellings which were demolished in the early 1980's. The current building is single storey with a pitched overhanging roof in artificial slate covering and exposed feature steelwork to gables. The external walls are facing brickwork with stained timber windows, screens and doors. Feature circular windows are formed within square precast concrete surrounds.

Two prefabricated buildings, coupled together, have been added to the rear of the school since it opened to house the nursery facility. The external materials for these consist of rendered wall panels, mineral felt flat roofing with uPVC/aluminium windows and uPVC/timber doors.

The site is characterised by a central open space housing the school, it's play areas and parking, with a boundary perimeter mainly of trees and hedgerows. The area the school, car parking and play areas occupy is relatively flat with the site sloping down from this central flat area to the boundary to the East and South, with the abutting residential sites sitting at least a storey lower than the school plateau.

A ground investigation report has been commissioned from Tetra Tech, however, it is not available as the time of this draft as monitoring is ongoing, but will be available at the time of the planning application. This will be used to inform the foundation design as well as the SAB application.

Figure 22 - External view of site from the South

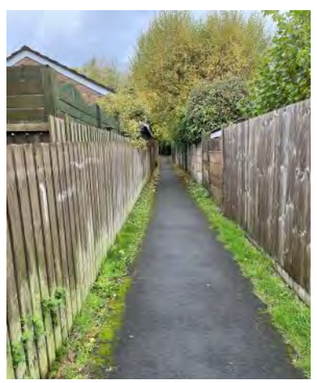
Figure 23 - External view of site from the West

Figure 24 - View inside site looking East showing adjacent residential sitting at lower level.

Figure 25 - View inside site looking West

Figure 26 - View inside site looking North

Figure 27 - Site Access



Figures 28 & 29 - Public footpath to East of site

4.1 Site Analysis

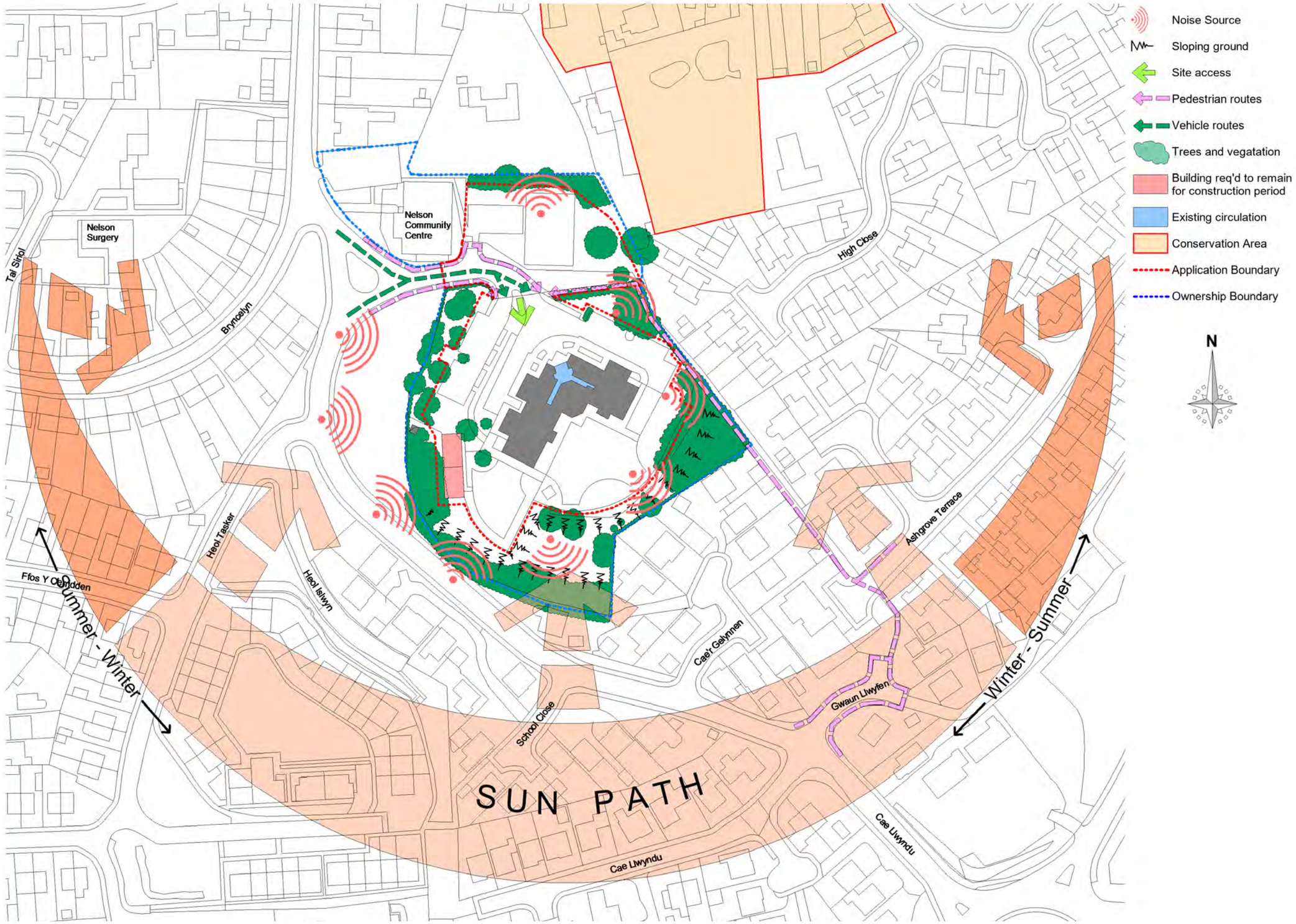


Figure 30 - Site Analysis.

4.2 Opportunities and Constraints

The above figure 30 illustrates the context of the site and the immediate surrounding areas.

Opportunities

- There is an established educational use for the site.
- The access road provides access to just the school site and vacant land to the north of the school site, giving the opportunity to stop up part of this adopted road to allow the school gates to be moved out to provide a single line of security to both sites when they are combined.
- There are already safe routes to school.
- Opportunity for communal use of the new hall if located correctly on site.
- A standalone Childcare unit, correctly located on site, facilitates its operation independently of the school.
- Opportunity to make more efficient use of the land whilst avoiding overdevelopment.
- The site is already well screened from the surrounding area.
- Opportunity to bring back into use a neglected, overgrown brownfield site.
- The creation of a modern fit for purpose educational facility.
- Existing dilapidated building stock is replaced and the associated maintenance and risks are removed.
- Enhance the existing landscaping and ecology where possible.

Constraints

- The site is enclosed on four sides, limiting access for construction traffic to the existing vehicular access. Careful and well planned traffic management will need to be implemented to limit disruption to school operation, local residents, and surrounding facilities.
- Only the developed area of the site is “flat”, with the south and west soft landscaped areas banked down to the boundaries.
- Existing residential properties to the East and South abut the school boundary and are at a lower level than the school, so will need to be considered in terms of noise, overlooking, rights to light, etc.
- The existing school was designed with minimal internal circulation, thereby severely restricting where an extension can connect on, whilst minimising internal re-organisation of the existing school.
- Communal use of the school hall facilities will require out of school hours access so will need easy access.
- The existing nursery buildings are required to stay operational until the extension is built and the refurbishment of the existing infant school is complete.
- Extensive existing landscaping/ecology around the site which will need to be preserved as much as possible.
- A standalone Childcare unit is also required on the site which will need to be constructed whilst the existing school is operational.
- The construction process will need to be phased. The extension will need to be built, then the infants will decant into the extension allowing refurbishment of existing infants school. Following the refurbishment the infants will move back into existing school building, as will the nursery pupils. The Juniors from Llancaeach School moving into extension, allowing nursery buildings to be demolished.
- Careful management of on site circulation and material storage will be required to ensure safety during school hours.
- When the two parcels of land are joined a public footpath would still divide them so this will need to be diverted around the northern parcel of land.
- Additional play space required for increased number of pupils.

5.0 DESIGN

5.1 Site Layout

Figure 31 - Proposed site layout NTS

The entire site area is circa 1.35 Ha, with the proposed development area being circa 0.9 Ha. The existing building is 1007m^2 with the nursery 172m^2. The extension/link being 1388m^2 and the childcare unit is 125m^2.

The extension is to located to the west of the site, on the existing car park, minimising it's impact on the existing landscape and trees. Although the nursery buildings will be demolished these can't be removed until the extension and refurbishment works have been completed. The childcare unit is located to the east of the site on a current area of grassland. The nursery classes will relocate into the refurbished building.

The orientation of the extension and the childcare unit is driven by their relationship to the existing building, and the constraints of the site. The extension is two storey to maximise available external play space, with infants on the ground floor and juniors being located on the first floor. The hall, which will also have community use, is located at the front of the extension, nearest the access road to provide convenient access outside school hours.

Accessible parking is provided adjacent the school entrance with 6No EV charging spaces opposite these. 3No car share spaces are also located in this vicinity. As the extension occupies the existing car parking new visitor and staff parking is provided within the formerly vacant land to the north. Motorcycle parking, cycle parking, refuse store and delivery bay are located adjacent the hall.

To facilitate security of the site the existing adopted road, which serves just the school site and the vacant parcel of land, will have a section stopped up to allow the school gates to move further along the road and provide a secure line to the amalgamated site. To maintain security the existing public footpath which currently runs between the 2 sites will be diverted around the periphery of the car park. A new pedestrian gate will be provided at the school East boundary where the path currently turns through 90^o to maintain the current pedestrian access route from the East.

Wherever possible existing trees and landscaped areas are to be kept with the layout adjusted in areas to allow this. New fencing to match the existing will be required around the parking area. Additional galvanised hoop-top fencing and gates, to match existing, are proposed to divide the play areas and the childcare unit.

5.2 Layout and Scale

This section should be read in conjunction with the drawings and documents submitted as part of the application.

In developing the design, a number of options were considered before arriving at the submitted proposals.

The primary elements of these alternatives were:

- The siting of the proposed buildings;
- The form and layout of the building;
- Architectural treatments of the elevations;
- Proposed materials.

The design philosophy for the new extension is to provide the new facility with a homogenous appearance whilst instilling an identity as a 21st Century learning facility. The decisions on where to locate the building on the site are discussed within the following section 5.3.

Key Design Aspects:-

- Retain existing access, making improvements where possible including safe pedestrian routes.
- Provide an amalgamated infant and junior school with improved facilities.
- Community access to the hall.
- Incorporation of adjacent brownfield site to form required additional parking spaces.
- The childcare facility to be able to operate independently of the school.

The existing entrance to the infant school is to be maintained as the primary entrance to both the existing building and extension. The plan form of the building allows for the teaching areas to be secured, allowing community access to the hall and toilet facilities for use of the building outside school hours, and the double doors within the single storey link building to be utilised as the entrance during these hours.

The classrooms are arranged off the corridors in pairs, where possible, with access to cloakrooms between, and in the case of infant classes, on the ground floor, cloakrooms and toilets. The ground floor classrooms have direct access to external hard and soft play areas as well as external teaching spaces. Classrooms will maximise the use of natural daylight.

The single storey link building provides both a physical access link and a link in scale between the existing building and the proposed extension.

Figure 32 - Proposed floor layout NTS

5.3 Design Development

Options for Extension location:-

The plan below figure 33 Indicates the 4 locations that were considered for the extension.

Figure 33 - Proposed extension possible locations NTS

Location A Benefits:-

- Occupying part of the site already developed.
- Connecting the extension to the existing building requires minimal reconfiguration to the existing internals.
- Buildings act as protective buffer to the play areas.
- Extension has minimal impact on existing building in terms of daylight and sunlight reduction.
- Access for community/after hours use to the hall is direct as hall located at front of site.

Location A Disbenefits:-

- Site loses its existing car parking.
- Service access to the kitchen is compromised.
- Building line now closer to the houses on Bryncelyn, however, existing site boundary is heavily screened.

Location B Benefits:-

- Occupying part of the site already developed.
- Extension located behind the existing building and not so obtrusive.
- Access to the existing building service areas maintained.

Location B Disbenefits:-

- Ability to connect the extension to the existing building is difficult due to lack of internal circulation and would require extensive modelling of the interior of the existing building.
- Available space to house extension very restricted due to nursery buildings having to remain until end of construction period and sloping ground to boundary, so likely to be 3 storey.
- Access for community/out of hours use to the hall not convenient as would have to walk to rear of site.
- Building line nearer the properties to the southern boundary and could create potential overlooking issue, especially with the southern and eastern neighbouring properties being at a lower level.
- Extension would divide the play areas on site and new play area on existing car park would be adjacent the service areas of the existing building.

Location C Benefits:-

- Partially occupying a part of the site already developed.
- Buildings act as protective buffer to the play areas.
- Access to the existing building service areas maintained.

Location C Disbenefits:-

- Ability to connect the extension to the existing building is difficult due to lack of internal circulation and would require extensive modelling of the interior of the existing building.
- Extension would require extensive tree demolition/thinning.
- Access for community/out of hours use to the hall not convenient as would have to walk right across the site.
- Building line nearer the properties to the eastern boundary and could create potential overlooking issue, especially with these neighbouring properties being at a lower level.

Location D Benefits:-

- Building does not effect existing site.

Location D Disbenefits:-

- Building is divorced from existing building and does not achieve the desired intention of amalgamating the 2 schools.

Options for Childcare location:-

The plan below figure 34 Indicates the 4 locations that were considered for the single storey childcare unit.

Figure 34 - Proposed childcare possible locations NTS

Option A Benefits:-

- Access to building for child drop off and pick up achievable without disruption to rest of school.
- Building would be on previously developed part of site.

Option A Disbenefits:-

- Loss of some of car park and car park access compromised.
- Compromises location of the school extension.

Option B Benefits:-

- Scenic location of site for learning etc.
- No loss of green area used on sports day.

Option B Disbenefits:-

- Possible impact of unit on properties to southern and eastern boundaries.
- Location at lower level than the main school site so disposal of drainage potential issue and may require pumping
- Not a convenient location for child drop off and pick up.
- Elongated route from front of school to proposed location which would involve changes in level. Path would require additional lighting with potential compromise to ecology.
- Loss of green area to accommodate building.

Option C Benefits:-

- Access to building for child drop off and pick up achievable without disruption to rest of school.

Option C Disbenefits:-

- School loses some green play area which is currently used for sports day.
- Proximity of stand of trees.

Option D Benefits:-

- Access to building for child drop off and pick up achievable without disruption to rest of school.

Option D Disbenefits:-

- Building will share the site location with school new parking.
- Will require demolition of existing trees to accommodate school parking as well on site.
- Childcare unit not integrated into the school site.

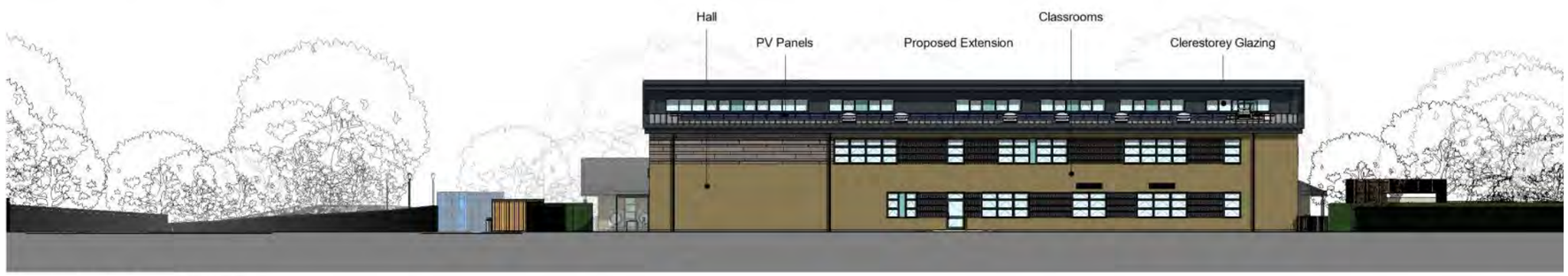
Following due consideration of the above options location A for the extension, and Location C for the childcare unit were chosen as the most suitable.

5.4 Appearance

Proposed East Elevation:- nts

Proposed North Elevation:- nts

Proposed South Elevation:- nts



Proposed West Elevation:- nts

Figure 35 - Proposed Elevations NTS

- Aesthetically, the extension and childcare unit utilise a combination of traditional and modern materials to create a vibrant and attractive facility for both pupils and the wider community.
- The smaller childcare unit takes it cues from the existing school building in terms of both form and materials. It is single storey with hipped roofs with the entrance defined by a projecting gable with steel support structure. Materials are brick work for the walls and artificial slate for the roof, to match the existing building, with aluminium powder coated windows and doors punctuating the façade.
- The extension, is two storey to accommodate both the double height hall and the required number of additional classrooms, whilst minimising the footprint of the building. The link to the existing building is single storey.
- Both buildings use materials which will complement the local vernacular, and existing school. They use a mix of traditional materials, such as brickwork and cladding, alongside modern materials, such as the standing seam roof. Where possible, sustainable and natural materials will be utilised. This will complement the natural environment and aesthetics of the area whilst still giving the new buildings a contemporary feel and help to define the development as a 21st century learning facility.
- The design of the new facilities will allow an attractive and fit-for-purpose building that will utilise sustainable sources of materials and preserve the best traditions of architecture and local building and which are efficient in energy and resources.
- The expanse of brickwork is broken up with panels of profiled bricks in a complementary colour, whilst the single storey link, and high level to the hall, feature cladding panels.

- Windows and screens are colour powder coated aluminium punctuating the brickwork areas. Doors are aluminium powder coated to match windows. Large glazed aluminium curtain walling panels break up the mass of the building and flood the classrooms and hall with light. Clerestory glazing at high level above the central corridor provides both natural light and ventilation to the central corridor and hall. The standing seam anti-glare roof adds a contemporary feel whilst providing a practical solution to allow a relatively low pitch to the building and reduce the ridge height.
- The enclosures outside of the building to house the sprinkler tanks and bin store are clad in timber to give a lighter feel to the large volumes.
- Refer to section 5.6 for the materials palette.

5.5 Scale in Context with Existing School

East Elevation

North Elevation

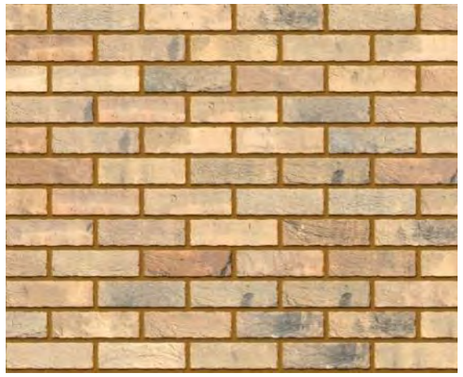
South Elevation

West Elevation

Figure 36 - Proposed Elevations In Context to Existing Building - NTS

- Roof pitches are similar to the existing building, with the extension volume stepping down towards the boundary.
- The single storey access link provides both physical access and also a step in scale between the existing building and the extension.
- The ridge of the extension is at a similar height to the existing buildings hall ridge.

5.6 Materials Palette



Brickwork - Buff Multi laid half lap stretcher bond with brown mortar to match existing building

Feature brickwork - Ibstock Umbra sawtooth laid half lap stretcher bond - Staffordshire Slate Blue smooth

Below DPC brickwork - Staffordshire Blue engineering brick laid half lap stretcher bond

Ceramic Oak

Slate Oak

Rhinestone Oak

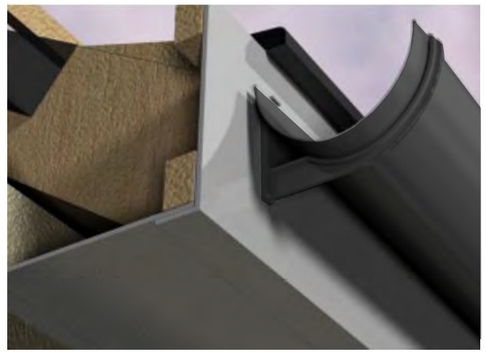
Caramel Oak

Rockpanel Woods Cladding various lengths and widths

Windows, External Doors - Aluminium - colour Anthracite (RAL 7016). Window infill panels RAL 6027

Roof to Childcare unit and Link - Cedral Rivendale fibre cement slates blue/black to match existing building, with Cedral fibre cement duo pitch ridge and hip to match

Roof to Extension - metal standing seam roof colour Matt RAL 9007 Orion Grey



Soffits and Facias to Childcare Unit - Aluminium - White (RAL 9010), Aluminium rainwater goods (RAL 7016)

Soffits and Facias to Extension - Aluminium - Anthracite (RAL 7016), Aluminium rainwater goods (RAL 7016)

6.0 ECOLOGY AND LANDSCAPE

6.1 Ecological Survey

Wildwood Ecology were commissioned by Caerphilly County Borough Council to undertake an Ecological Impact Assessment (EcIA) for the application site. A copy of the report is included as part of the PAC information. All information here is taken directly from the Ecological Impact Assessment Report, reference WWE22087 EcIA Draft - dated 17/10/2022.

6.2 Summary

Purpose	• Wildwood Ecology was commissioned by Caerphilly County Borough Council (the client) to undertake an Ecological Impact Assessment (EcIA) for Llanfabon and Llancaeach Junior School Amalgamation.
Methodology	• A PRA was undertaken consisting of a desk study and field survey undertaken in June 2022 following best practice in line with the Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edn (Collins 2016). • A PEA was undertaken consisting of a desk study and field survey undertaken in June 2022 following the Chartered Institute of Ecology and Environmental Management (CIEEM) Preliminary Ecological Appraisal (2013) guidelines and standard Phase 1 Habitat Survey protocol (JNCC, 2010). • Two dusk bat surveys were undertaken in July and August 2022, following best practice in line with the Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edn (Collins 2016).
Key Issues	• During the PRA, the main school building was found to have moderate suitability for bats, and the nursery building was found to have only low suitability for bats. • No bats emerged from the main school building, or nursery building during the dusk emergence surveys. • There were moderate levels of foraging and commuting activity by common and soprano pipistrelles around the site. The hedgerow and vegetation to the south and west were being used by foraging and commuting bats during the surveys. Bats were also observed foraging/commuting by the woodland area to the north.
Recommendations	• Since no bats, or signs of bats were observed within the main school building and nursery, a European Protected Species License (EPSL) for bats will not be required. However, if, in the unlikely event that a bat is found during the works, all works must cease, and an EPSL for bats must be obtained in order for the works to be legally undertaken. • Works should be undertaken in daylight hours only to avoid light disturbance on nocturnal species such as bats and hedgehogs. • If new lighting is installed, a lighting plan demonstrating consideration for bats with dark flight lines maintained and any exterior lighting proposed post-development would not have detrimental effect on commuting bats along nearby habitat. Introduced external lighting on the new build extension should not fragment bat foraging/commuting corridors by light spilling over onto the hedgerow to the south and west of the site (see section 5 for suggestions on how to achieve this). • A bat box should be installed either on the building, or on a suitable tree within the site to enhance roosting opportunities for bats within the local area. • Precautionary working methods during any vegetation clearance should be followed to avoid adverse impacts upon hedgehogs, reptiles, and amphibians (see section 5 for details of
Conclusions	• Providing that the recommendations outlined within this report are successfully implemented, it should be possible for the proposed development to proceed and for there to be no long-term impacts upon the key protected species present at the site. • This ecological report will remain valid for a period of 18 months from the date of the last survey – i.e. until February 2024.

6.3 Protected Species

Recommendations regarding protected species are shown in the table below:

Species	Recommendations

Bats	• No further surveys will be required as the dusk emergence surveys that were carried out did not identify any bats roosting within the building. Therefore, a European protected species licence from Natural Resources Wales will not be required for the works to proceed.
	• The vegetation to the west of the site should remain unlit. A lighting plan should be put in place to ensure there is no light spill. Suggestions for achieving this and for mitigating the light impact on bats are outlined in Guidance Note 08/18 - Bats and artificial lighting in the UK; Bats and the built environment series' (The Bat Conservation Trust, BCT, and the Institution of Lighting Professionals, ILP). These include:
	  • All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used.
	  • LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
	  • A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component.
	  • Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).
	  • Internal luminaires can be recessed (rather than choosing a pendant fitting) where installed in proximity to windows to reduce glare and light spill.
	  • The use of specialist bollard or low-level downward directional luminaires to retain darkness above can be considered. However, this often comes at a cost of unacceptable glare, poor illumination efficiency, a high upward light component and poor facial recognition, and their use should only be as directed by a lighting professional.
	  • Column heights should be carefully considered to minimise light spill.
	  • Only luminaires with an upward light ratio of 0% and with good optical control should be used – See ILP Guidance for the Reduction of Obtrusive Light.
	  • Luminaires should always be mounted on the horizontal, i.e., no upward tilt.
	  • Any external security lighting should be set on motion- sensors and short (1min) timers.
	  • As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.
	• A bat box should be installed on the building or on a suitable tree onsite to enhance roosting opportunities for bats within the area.

Nesting Birds	• If buildings / habitats suitable for nesting birds are to be removed, then any building works / vegetation clearance will take place outside of the bird nesting season. In the event that clearance work has to be undertaken during the nesting season (generally from 1st March until 31st August, although birds are known to nest outside of these dates in suitable conditions), a nesting bird check will be required and must be carried out by a suitably qualified person. Any active nests identified should be protected until the young have fledged Where a Schedule 1 species (as defined by the Wildlife and Countryside Act - http://www.jncc.gov.uk/page-3614 is involved, compensation for impacts, e.g., loss of nesting sites, should be devised and implemented. • A bird box should be installed on a suitable tree within the site to compensate for the loss of nesting habitat.
Amphibians and reptiles	Precautionary working methods should be followed during any vegetation clearance. This includes the following: • The vegetation clearance will be undertaken in a two staged cut through the use of handheld tools (e.g. handheld strimmers, brush cutters). • The first cut will be down to approximately 150mm. • The arisings will be carefully raked off and removed from site. • The vegetation can then be cut down to ground level. • The vegetation should be kept short for the duration of the works to ensure reptiles do not enter the site.
Hedgehog	Precautionary working methods should be followed and will includethe following: • Ensure all excavations are covered overnight to ensure no animals get trapped. If this is not possible, place a ramp type structure in the excavation to allow them to escape. • All chemicals, fuel, and materials are to be securely stored (locked cabinet/container) to prevent animal access.

6.4 Biodiversity Enhancements

- Where possible the existing onsite habitat will be retained to ensure that species are not adversely affected by the development. Native species of local provenance will be used for any new planting on the site to support The Action Plan for Pollinators in Wales, 2013 (http://gov.wales/docs/desh/publications/130723pollinator-action-plan-en.pdf).
- Bird nesting boxes and bat roosting boxes (over and above that required for mitigation on this site) should be incorporated within any newly constructed building and boundary features. Bird and bat boxes could also be introduced to any woodland habitat. A range of types should be used in order to cover a variety of species. Many designs are available and Wildwood would initially recommend the following sites:
    - Bats:-
      https://www.nhbs.com/beaumaris-woodstone-bat-box
    - House Sparrow:-
      http://www.nhbs.com/1sp_schwegler_sparrow_terrace_tefno_174850.html
    - General open fronted:-
      http://www.nhbs.com/2hw_schwegler_nest_box_tefno_177926.html (suitable for redstart, thrushes, flycatchers).

6.5 Overall Conclusion

- Providing that the recommendations outlined within this report are successfully implemented, it should be possible for the proposed development to proceed and for there to be no long-term impacts upon the key protected species present at the site.

6.6 Landscape

CCBC has appointed Haire Landscape Consultants Ltd to provide landscaping advice and design for the project. The design will integrate with the sustainable drainage proposals by Bradley associates and take consideration of the recommendations of the project ecologist. Refer to Appendix B for an initial sketch of the landscape proposal strategy.

7.0 COMMUNITY SAFETY

The safety of pupils, staff, visitors to the site and the surrounding community is a fundamental consideration of the LEA in the design, layout, and operation of educational facilities.

Consultation has been undertaken with the Gwent Police Designing Out Crimes Officer (DOCO), however no response has yet been received. Recommendations received will be implemented in the design where considered appropriate. It is also intended that the building will be designed in accordance with the principals of Secured By Design (SBD) New Schools 2014 guidance. This aims to reduce crime in the built environment and improve safety standards.

From past consultations the DOCO has provided recommendations on the areas below:-

- Perimeter Security;
- CCTV and access control;
- Doors and windows design;
- Lighting;
- Signage;
- Defensive planting and landscaping considerations;
- Sprinkler system;
- Vehicular parking areas and access;
- Motorcycle and bicycle parking.

Within the design the following considerations have been made:

The extension and childcare unit are located within the boundary of the existing infant school so the existing palisade fencing will be utilised to the perimeter. Where the area of ground to the north is to be incorporated, and the public footpath diverted, new weld mesh security fencing will be installed. New pedestrian and vehicle gates will be installed where the site entrance has been moved forward, and new

pedestrian gate off the public footpath at the diversion point. Inside the boundary bow top metal fencing circa 1000mm high will be installed around play areas.

Deliveries will be routed via the existing site access to the delivery space outside the school hall, and the bin store.

Motorcycle parking is also accommodated close to the main entrance to the building with passive supervision.

Additional signage noting site rules and speed limits (5 mph) will be used throughout the site vehicle areas.

The staff parking within the boundary will be made available for “out of hours” community parking.

Signage: the building and outside facilities will be clearly signposted.

Community Access: The hall and adjacent toilets will be open and accessible without the opening the main building. The community access lobby is secure from the rest of the building with access control on the inner doors.

Troublesome meeting spaces have been designed out where possible, with outside social areas well overlooked by the school classrooms and activities.

In addition the following will be included:

Windows and doors will be to Secured By Design standards.

A centrally monitored CCTV and intruder alarm system will be installed.

A category L2 fire alarm system will be installed. The system will include a main fire alarm panel, smoke detectors, sounders and beacons in all rooms and integral emergency lighting as part of the overall lighting design.

A “property safety” standard sprinkler system will be installed to BS EN 12845:2015

The external lighting strategy will be designed in compliance with Table 1 (and its accompanying notes) of the ILP Guidance Note GN01/21, The Reduction of Obtrusive Light, 2021.

8.0 ENVIRONMENTAL SUSTAINIBILITY

8.1 Sustainability

Caerphilly County Borough Council has a commitment to sustainability and the environment. The following measures are proposed to be incorporated into the design of the scheme:

The extension will achieve a BREEAM “Very Good” rating with “Excellent” for Energy credits (ENE01);

The extension and childcare unit shall achieve an EPC rating of A;

Site surface water drainage will be limited to site run-off rates agreed with CCBC Drainage Section;

PV panel array applied to the roof are West facing;

Natural ventilation system;

A or A+ rated materials in accordance with BRE Green Guide to Specification;

The new extension will be constructed to exceed current building regulations standards and with enhanced thermal insulation to achieve a minimum 10% improvement on the stated standards for conservation of fuel and power. A Simplified Building Energy Model has been commissioned in support of this approach and will be included within the Building Regulations submission in due course.

8.2 Ecological and Landscape Integration

In order to fulfil statutory duties, to identify, protect, conserve and enhance European protected species and other biodiversity on site, Caerphilly CBC has had an Ecology survey carried out for the site. This enabled the site development and building design to be fully informed by ecological survey data and sympathetic to biodiversity which may be present. This survey and its recommendations and conclusions are discussed in Section 6 of this document.

8.3 Noise Pollution

CCBC has appointed Hepworth Acoustics to provide an acoustic report in line with Building Bulletin 93: acoustic design of schools — performance standards. The report has not been finalised yet but will cover the following:-

Noise surveys for the site;

Advice on external building fabric;

Advice on internal noise transfer;

Atmospheric plant noise limits will be set in accordance with BREEAM Pol 05 based on measured background sound levels. These limits shall be confirmed acceptable with the Local Planning Authority/ Environmental Health Officer prior to orders being placed.

8.4 Light Pollution

With regards to light pollution, proposals will be submitted to the Local Planning Authority for consideration. The external lighting strategy will be designed in compliance with Table 1 (and its accompanying notes) of the ILP Guidance Note GN01/21, The Reduction of Obtrusive Light, 2021.

8.5 Air Quality

Other than for general heating and ventilation requirements, no fumes will be generated by any processes within the building. Wherever possible natural ventilation strategies will be implemented to further enhance the developments sustainability credentials.

8.6 SuDs Development and Drainage Strategy

In compliance with the Statutory National Standards for Sustainable Drainage Systems (SuDS) for Wales, the design for project will include a sustainable drainage system and a full application will be submitted to the SuDS Approving Body (SAB) for approval. CCBC have appointed Bradley Associates to undertake this.

8.7 Foul Water Discharge

The existing buildings connect into the onsite private sewer which in turn connects into a public sewer crossing the site at the Eastern boundary. Whilst there is an increase in facilities, we do not anticipate any issues associated with a connection into the existing system.

8.8 Construction Waste

As part of the project requirements the Contractor will be required to construct the building to ensure that a minimum of 15% of total material used in construction, by value, derives from reused and recycled content. The Contractor will use the WRAP Net Waste Tool (www.wrap.org.uk/nwtool) to quantify this, in accordance with Welsh Assembly Government funding requirements, and submit a final report verifying the final achieved recycled percentage.

9.0 MOVEMENT TO, FROM AND WITHIN THE DEVELOPMENT

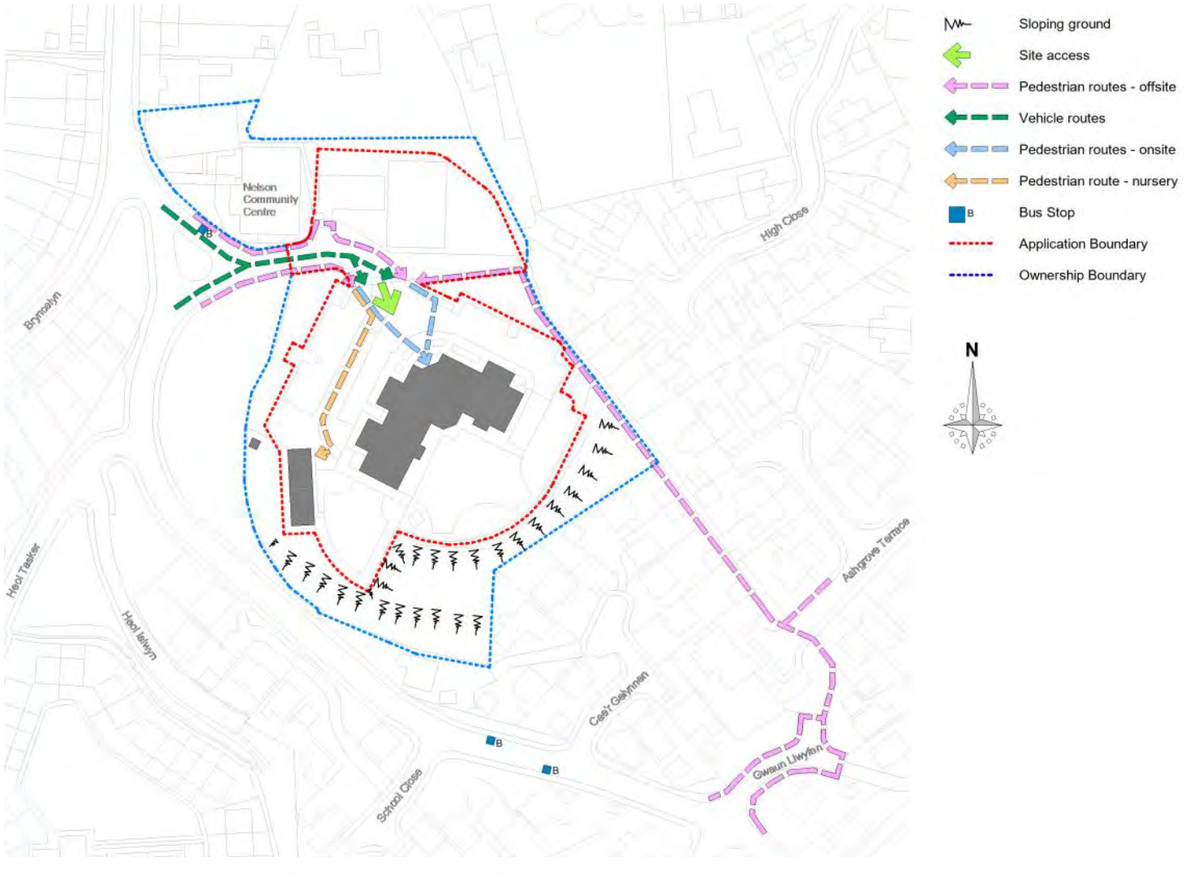


Figure 37 - Existing Site Movements NTS

- The existing school is accessed off Bryncelyn by both vehicles and pedestrians, with bus routes on Bryncelyn and Ffordd Trawsgae, which have links to the wider conurbations of Ystrad Mynach and Caerphilly.
- There is an established vehicle access to an internal parking area, which is to the west and north of the existing building.
- The pedestrian routes within the site are relatively flat with an established safe pedestrian route through the school grounds to the existing nursery.

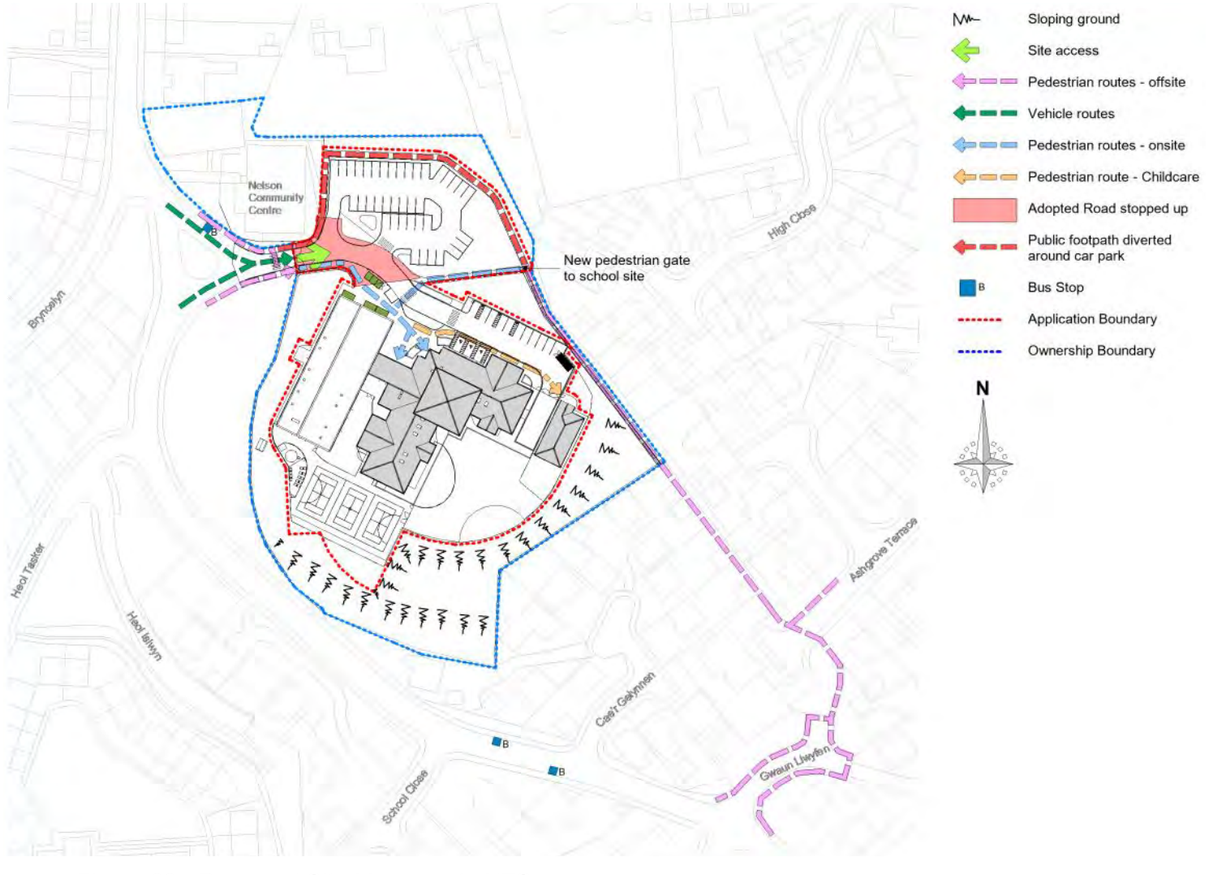


Figure 38 - Proposed Site Movements NTS

- Part of the existing adopted road is to be stopped up, at the existing site entrance, to allow the new parking site and the existing school site to be amalgamated by moving the school access gates further towards Bryncelyn. To facilitate this the existing public footpath will also be diverted around the new parking area to maintain the school site security.
- A new pedestrian gate will be provided to the east of the site, at the point the existing public footpath is diverted, in order to maintain the existing pedestrian access route from the south of the site.
- By allocating the majority of parking to the North vehicle movements to the perimeter of the school buildings are reduced, increasing pedestrian safety within the site.
- Accessible parking is provided in close proximity to the building entrances.
- Dedicated crossing points are to be provided, both at the site entrance and within the site, with drop kerbs and tactile paving as necessary.

9.1 Access

A fundamental requirement of the Sustainable Communities for Learning Programme is that facilities are made fully accessible for all users. External areas are required to conform to accessibility standards in terms of ramps, paths, and levels. Internal areas similarly must meet building control regulations in this respect. The proposed development will ensure equality of access regardless of physical or mental impairment.

The proposed building will be fully accessible for wheelchair and ambulant disabled in compliance with the DDA (Disability Discrimination Act 2005) and Approved document M of the Building Regulations. To ensure any specific needs of the learners are met, circulation and access standards exceed those required by current legislation.

Doors will be marked with visual signage for users to distinguish between the rooms functions. Floors will be matt finish with soft, non slip surfaces. Taps will be sensor operated with thermostatic mixer valves set to an appropriate temperature. Toilets will have contrasting coloured seats and safety hand railings where appropriate. Doors will have matching ironmongery which is easy to open and grip.

Corridors will have level floors and be wide enough for wheelchair users to pass by each other.

The existing on site parking will be adapted and 3 accessible spaces provided adjacent the building entrance. Which will allow wheelchair users to transfer between their cars and their chairs plus space to access equipment in the vehicles boots. If there are members of staff who are disabled drivers and who need a transfer zone, bays will be allocated on as needed basis.

Doors will generally have a minimum clear opening width of at least 850mm for internal doors and 1000mm for entrance doors. Generally all doors to classrooms, toilets etc have a structural opening of 1010mm allowing a door with a 926mm opening leaf to be used. All doors will have a clear zone at least 300mm from any side wall so that a wheelchair user can reach them. Cross corridor doors will be on hold open devices and will only shut in the event of the fire alarm being activated.

All doors to accessible toilets will open out of the room to allow for ease of access by the user but also to allow an assistant access in case of an emergency.

All door opening pressures will not be greater than 30 Newtons. External doors will have thresholds less than 15mm high. Door handles will be lever arm type so that they are easy to grip and operate.

Accessible toilet facilities, for independent use, serving staff and learners will be to Part M: 2015 of the building regulations, with WC pan, wash hand basin and support rails. Each WC will have an audible and visible assistance alarm, activated by a red pull cord that hangs down within 100mm of the floor.

Staircases have been designed to comply with Parts K: 2013 and M: 2015 of the building regulations. This will include handrails on both sides of the stairs, 900mm and 600mm above the flights and 1100mm and 600mm from landing levels, they will project past the last flight by 300mm. Furthermore fire escape staircases comply with Part B of the building regulations: Fire Safety and BB100.

Tonal differences between floors, walls, doors and furniture will be provided in all areas which will ensure that there are clear visual differentiations that can identify surfaces and doors. Surfaces will be matt finish rather than glossy to avoid glare or confusing reflections. Circulation Routes will be kept clear of obstacles and hazards.

Any necessary signs, particularly around the entrance area will be provided with initial capital letters followed by lower case letters and will be bilingual. The use of capital and lower case text give words shape, which can be read more readily by people with vision or cognitive impairments.

10.0 CONCLUSIONS

This report, based on a detailed appraisal of the site and its surrounding areas, has identified that the development would fit within its surroundings and can be supported by existing site access and modes of public transport currently in place.

The demountable classrooms currently housing the nursery, which will be demolished after construction of the extension and refurbishment of the existing school building, holds no architectural or historic merit and does not make a contribution to the surrounding area. The new extension and childcare unit will make a positive contribution to the site enhancing its appearance and vibrancy for the learners at the school.

The materials for the new building have been chosen to reflect aspects of the existing main building and other buildings on site, whilst also providing a modern feel to the buildings appearance.

The scale and location of the building is considered appropriate to the site and its surrounding, with minimal views of the new building from outside of the site curtilage.

The new classroom building and childcare facilities will improve the services offered by the school for the benefit of the staff and pupils whilst having minimal impact on its immediate surroundings and environment.

New landscaping will enhance the existing biodiversity and ecology of the site as well as providing additional outdoor educational spaces.

11.0 INDEX OF APPENDICES

Appendix A - List of Submitted Drawings

Appendix B - Landscape Proposals

Haire Landscape Consultants Ltd - Sketch proposals dated November 2022.

Appendix C - Ecology

Wildwood Ecology. - Ecological Impact Assessment Report, reference WWE22087 EcIA Draft - dated 17/10/2022.

APPENDIX A - DRAWINGS

4660 P01 Location Plan and Existing Site Plan

4660 P02 Existing Floor Plans

4660 P03 Existing Elevations

4760 P04 Topographical Survey

4660 P05 Proposed Site Plan

4660 P06 Proposed Floor Layouts

4660 P07 Proposed Elevations - Site

4660 P08 Proposed Elevations - Extension

4660 P09 Proposed Elevations - Childcare

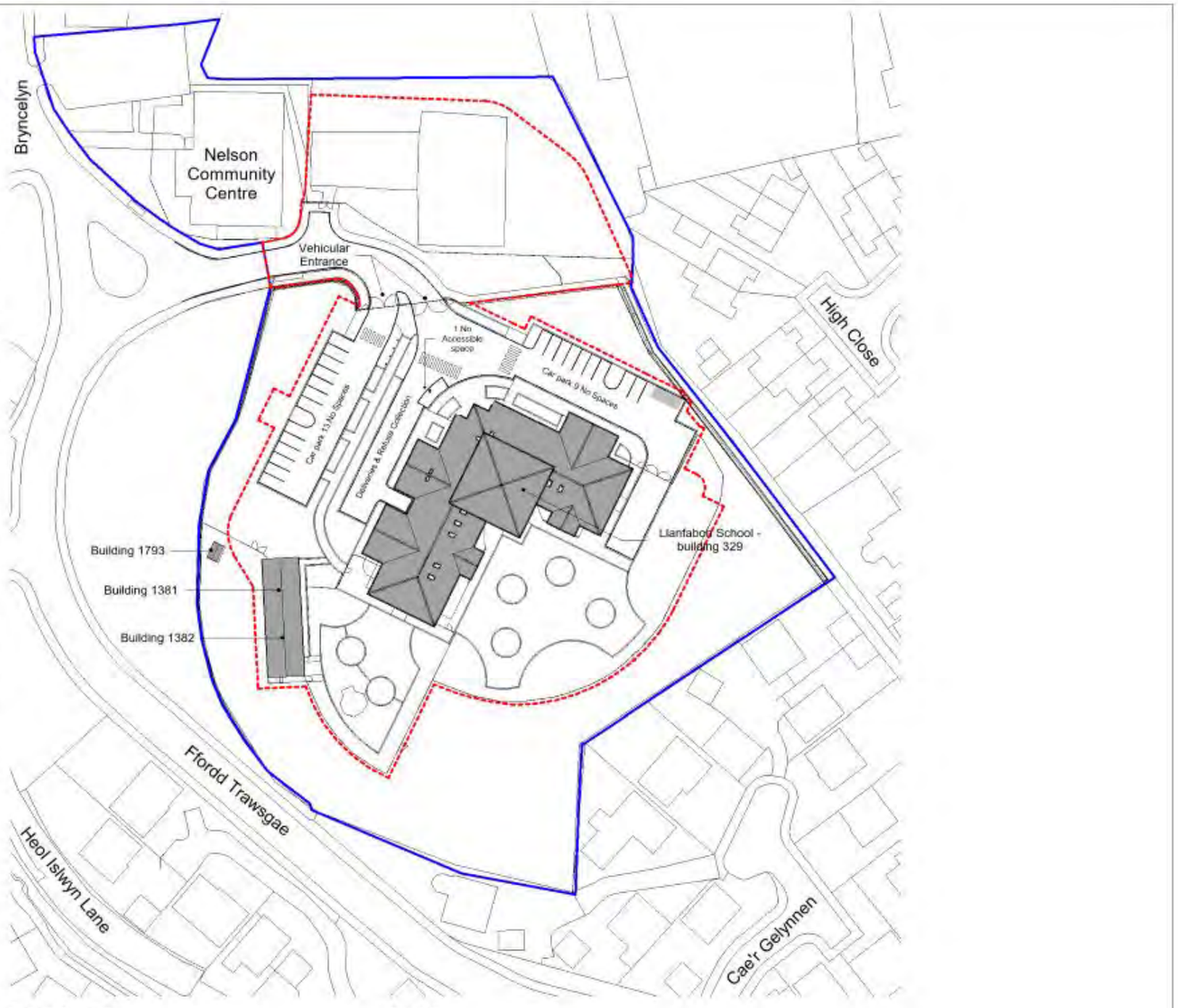
4660 P10 Proposed Roof Plan

4660 P11 Tree Constraints and Demolition

4660 P12 Proposed Visualisations

Location Plan
1 : 1250

Scale 1 : 1250
0 25 62.5 125 m



Existing Site Plan
1 : 500

Scale 1 : 500
0 10 25 50 m

Application Boundary
Ownership Boundary

Delwedd Google Earth o'r safle yn ei chyd-destun

N

School Entrance - Building 329

Buildings 1381 (on right) & 1382 (on left)

Buildings 1381 (on left) & 1793 (on right)

Cymunedau Dysgu Cynaliadwy
Sustainable Communities for Learning

CAERPHILLY
CAERFFILI

Llywodraeth Cymru
Welsh Government

Preliminary ☒ Planning ☐

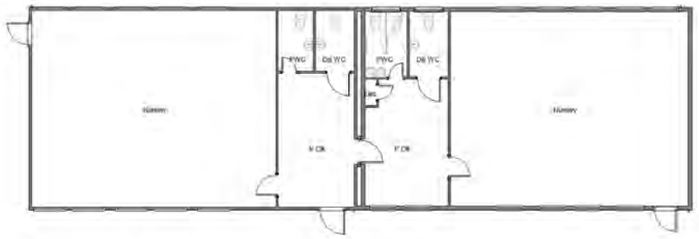
Llanfabon and Llancaeach Amalgamation
Llanfabon Infants School, Bryncelyn Avenue, Nelson, Treharris. CF46 6HL

Location Plan & Existing Site Plan

date	scale	drawn	checked
29/11/22	As indicated	CY	JCH

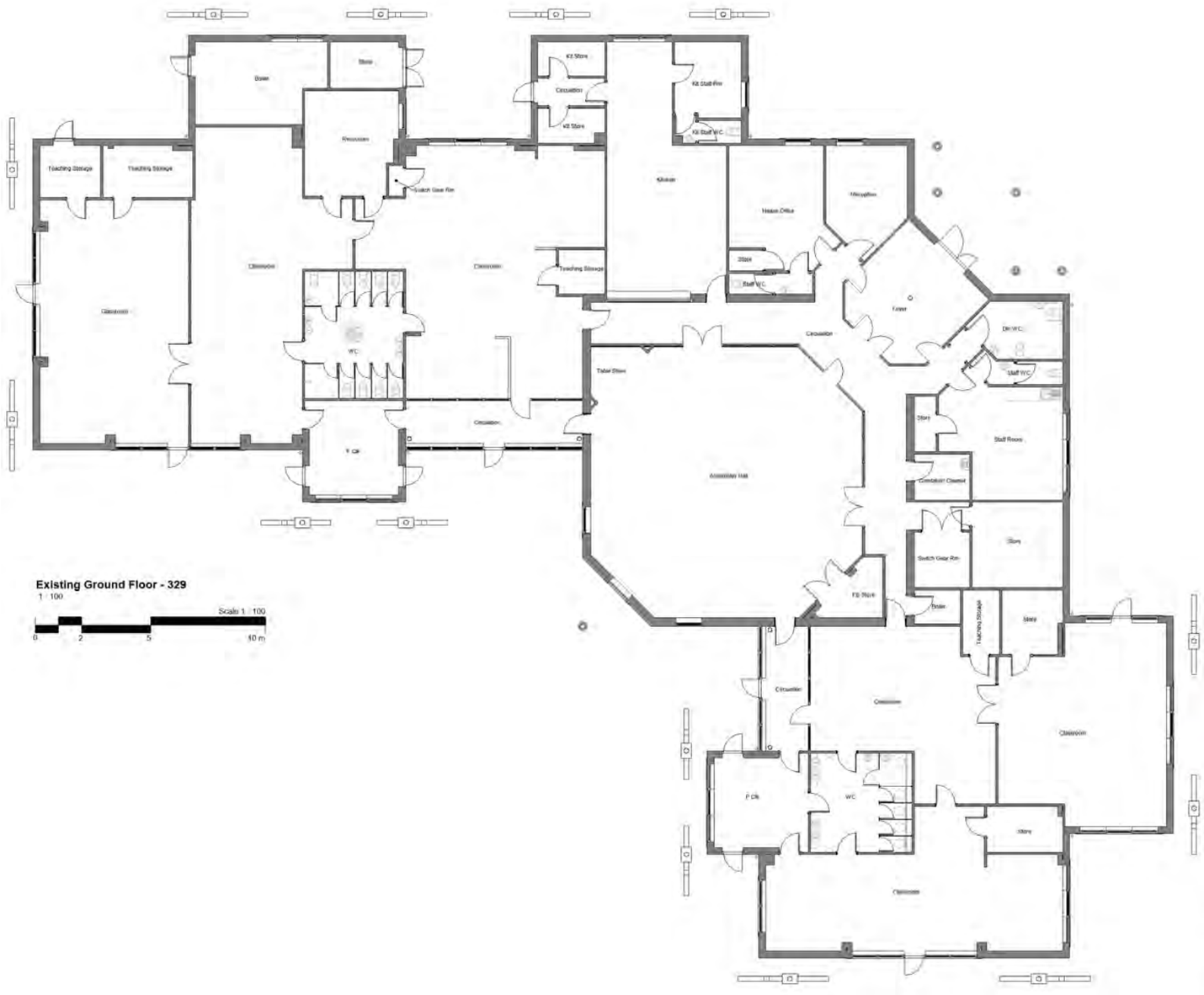
project no. 4660 | drawing no. P01 | rev

SHEET SIZE: A1



Existing Nursery - 1381 & 1382
1 100

Existing Store - 1793
1 100



Existing Ground Floor - 329
1 : 100

Scale 1 : 100
0 2 5 10 m

rev date amendment drawn chckd

Cymuned au Dysgu Cynaliadwy
Sustainable Communities for Learning

CAERPHILLY COUNTY BOROUGH COUNCIL
CAERFFILI

Llywodraeth Cymru
Welsh Government

Building Consultancy:
Ty Penallta, Tredomen Park, Ystrad Mynach, Hengoed, CF82 7PG
Tel: 01443 815588
Head of Land and Property Services: Ben Winstanley MRICS

drawing status:
Preliminary ☒ Planning ☐

project title:
Llanfabon and Llancaeach Amalgamation
Llanfabon Infants School, Bryncelyn Avenue, Nelson, Treharris, CF46 6HL

drawing title:
Existing Floor Plans

date	scale	drawn	checked
29/11/22	1 : 100	CY	JCH

project no.	drawing no.	rev.
4660	P02	

SHEET SIZE: A1

Existing East Elevation
1 : 200

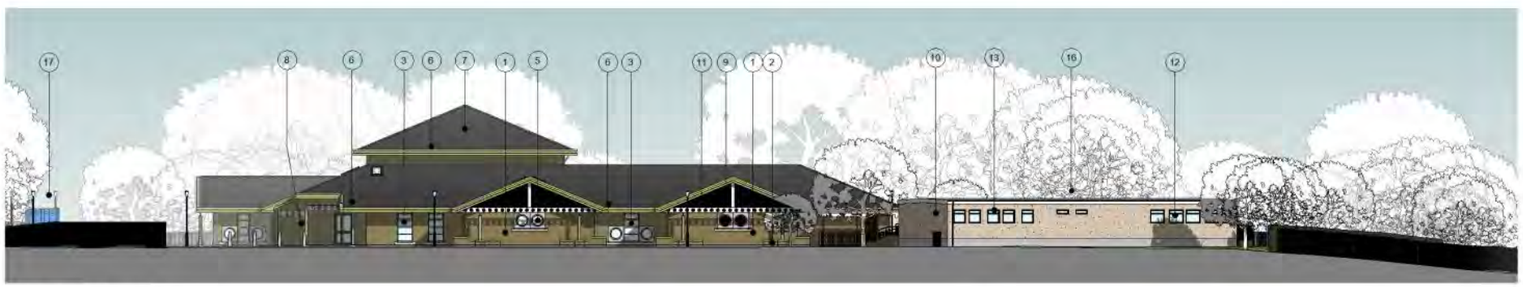
Existing North Elevation
1 : 200

Materials Key:-

1 Buff multi brick with brown mortar
2 Staffordshire blue bricks below DPC
3 Timber stained windows/screens/doors with precast concrete cills
4 Timber rooflights
5 Timber bullnose windows in precast concrete surround
6 Aluminium gutters and downpipes - olive green
7 Artificial slate roof
8 Feature steel work - dark green
9 Feature steel work - white
10 Beige render
11 Metal louvres - white
12 Aluminium Windows - sliver
13 uPVC windows
14 Timber doors
15 uPVC door - white
16 Felt roof with white uPVC facia and black rainwater goods
17 Metal shipping container - blue

Scale 1 : 200
0 4 10 20 m

Existing South Elevation
1 : 200



Existing West Elevation
1 : 200

SHEET SIZE: A1

rev	date	amendment	drawn	chckd

Cymunedau Dysgu Cynaliadwy
Sustainable Communities for Learning
CAERPHILLY
CAERFFILI
Llywodraeth Cymru
Welsh Government

Building Consultancy,
Ty Penallta, Tredomen Park, Ystrad Mynach, Hengoed. CF82 7PG
Tel: 01443 815588
Head of Land and Property Services: Ben Winstanley MRICS

drawing status
Preliminary ☒ Planning ☐

project title
Llanfabon and Llancaeach Amalgamation
Llanfabon Infants School, Bryncelyn Avenue, Nelson, Treharris, CF46 6HL

drawing title
Existing Elevations

date	scale	drawn	checked
25/11/22	1 : 200	CY	JCH

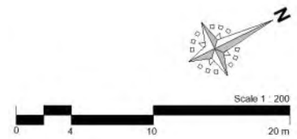
project no	drawing no	rev.
4660	P03	


N
Llanfabon Infants School
Topographical Survey
1 : 250
SHEET SIZE: A0
Cymuned Dysgu Cynaliadwy
Sustainable Communities for Learning
CAERFFILI CAERPHILLY
Llywodraeth Cymru
Welsh Government
Preliminary
Planning
Llanfabon and Llancaeach Amalgamation
Llanfabon Infants School, Bryncelyn Avenue, Nelson, Treharris, CF46 6HL
Topographical Survey
4660
P04

Bryncelyn
Heol Tasker
Heol Islwyn Lane
Ffordd Trawsgae
Clos Yr Ysgol
Cae'r Gelynnen
High Close
Nelson Community Centre
Possible demarcation of junction required
New crossing point
Site Entrance Gates relocated
Public footpath diverted around edge of site
Public footpath diverted around edge of site
Public footpath diverted around edge of site
New pedestrian gate from public footpath
Car parking 39 spaces - Staff and Visitor
Infant Hardplay
Junior Hardplay
Softplay
Nursery Hardplay
Infant Hardplay
Softplay
Childcare Hardplay
Single Storey Childcare Unit
Key:-
Two Storey Extension
Existing Single Storey Infant School
Single Storey Link to Extension
Single Storey Childcare Unit
Llywodraeth Cymru
Welsh Government
Preliminary
Planning
Llanfabon and Llancaeach Amalgamation
Llanfabon Infants School, Bryncelyn Avenue, Nelson, Treharris, CF46 6HL
Proposed Site Plan
4660
P05
SHEET SIZE: A0

Floor Areas GIA

Extension Ground Floor	763.47 m²
Extension First Floor	565.54 m²
Ground Floor Link	57.82 m²
	1386.83 m²
Existing Ground Floor	1007.52 m²
	1007.52 m²
Childcare	125.02 m²
	125.02 m²



Departments

- Assembley & Sports Hall
- Childcare
- Circulation
- Cloaks
- Infant Class
- IT Suite / Library
- Kitchen
- Learning Resource Areas
- Lift
- Medical
- Nursery
- Plant
- Staff and Administration Areas
- Storage
- Toilets

Departments

- Assembley & Sports Hall
- Circulation
- Cloaks
- Junior Classroom
- Learning Resource Areas
- Lift
- Plant
- Storage
- Toilets

rev	date	amendment	drawn	chckd

Cymunedau Dysgu Cynaliadwy
Sustainable Communities for Learning
CAERFFILI
Llywodraeth Cymru
Welsh Government

Building Consultancy,
Ty Penallta, Tredomen Park, Ystrad Mynach, Hengoed. CF82 7PG
Tel: 01443 815588
Head of Land and Property Services: Ben Winstanley MRICS

drawing status
Preliminary ☒ Planning ☐

project title
Llanfabon and Llancaeach Amalgamation
Llanfabon Infants School, Bryncelyn Avenue, Nelson, Treharris, CF46 6HL

drawing title
Proposed Floor Layouts

date	scale	drawn	checked
29/11/22	1 : 200	CY	JCH

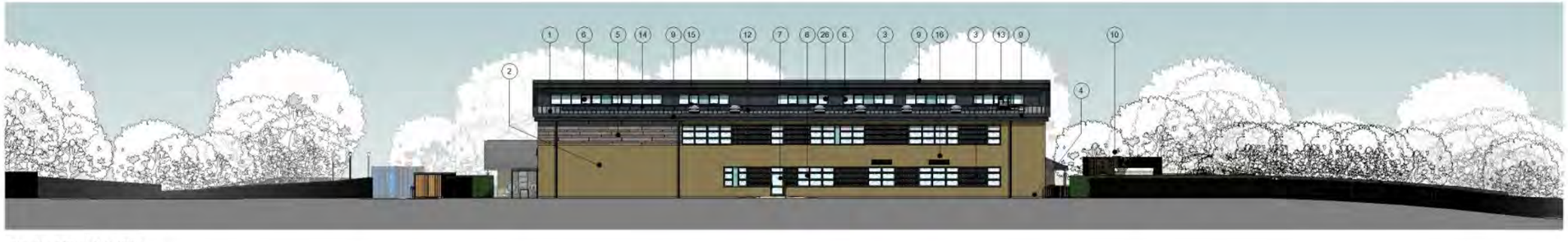
project no.	drawing no.	rev.
4660	P06	

SHEET SIZE: A1

Proposed East Elevation
1 : 200

Proposed North Elevation
1 : 200

Proposed South Elevation
1 : 200



Proposed West Elevation
1 : 200

Materials Key:-

1 Aluminium Standing Seam Roof and Fascia. Anti-Glare - colour Grey
2 Buffstone multi brick with brown mortar to match existing building
3 Ibstock Kevington Umbra sawtooth brick feature panel - colour Staffordshire Slate Blue smooth with dark grey mortar
4 Staffordshire blue bricks below DPC with dark grey mortar and surround to new circular windows
5 Rockpanel Woods, matt finish, various widths and lengths. Colours Ceramic Oak, Slate Oak, Rhinestone Oak, and Caramel Oak
6 Aluminium Windows - ppc Colour RAL 7016
7 Aluminium Doors - ppc Colour RAL 7016
8 Aluminium Doors - ppc Colour RAL 7036
9 Aluminium Downpipes/gutters/fascias - ppc RAL 7016
10 Planed red cedar slats on framework to screen sprinkler tank
11 Glazed gullwing Canopy - glass roof
12 Photovoltaic Panels
13 Roof Access Hatch
14 Mansafe system and walkway
15 Classroom Ventilation Cowl
16 Ventilation Louvres - RAL 7016
17 Fabric Freestanding Sail Canopy - various colours
18 Existing artificial slate roof
19 Existing buff multi brickwork
20 Existing aluminium gutters and facias resprayed RAL 7016
21 Existing steel columns and rain water pipes resprayed RAL 7016
22 Existing stained timber windows/screens/doors
23 Artificial slate roof to match existing building
24 White uPVC facias with aluminium gutters and downpipes - RAL 7016
25 Existing Rooflights
26 Smooth cladding panels to Clerestory RAL 7016
27 Feature steelwork - RAL 7016

Scale 1 : 200
0 4 10 20 m

rev	date	amendment	drawn	chckd

Cymunedau Dysgu Cynaliadwy
Sustainable Communities for Learning
CAERPHILLY COUNTY BOROUGH COUNCIL / CAERFFILI
Llywodraeth Cymru
Welsh Government

Building Consultancy,
Ty Penallta, Tredomen Park, Ystrad Mynach, Hengoed, CF82 7PG
Tel: 01443 815588
Head of Land and Property Services: Ben Winstanley MRICS

drawing status
Preliminary ☒ Planning ☐

project title:
Llanfabon and Llancaeach Amalgamation
Llanfabon Infants School, Bryncelyn Avenue, Nelson, Treharris, CF46 6HL

drawing title:
Proposed Elevations - Site

date	scale	drawn	checked
25/11/22	1 : 200	CY	JCH

project no	drawing no	rev.
4660	P07	

SHEET SIZE: A1

Proposed East Elevation
1 : 100

Proposed North Elevation
1 : 100

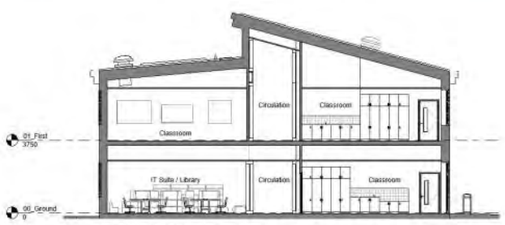
Proposed South Elevation
1 : 100

Proposed West Elevation
1 : 100

Materials Key:-

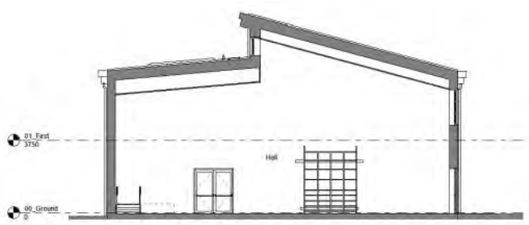
1 Aluminium Standing Seam Roof and Fascia; Anti-Glare - colour Grey
2 Buffstone multi brick with brown mortar to match existing building
3 Ibstock Kevington Umbra sawtooth brick feature panel - colour Staffordshire Slate Blue smooth with dark grey mortar
4 Staffordshire blue bricks below DPC with dark grey mortar and surround to new circular windows
5 Rockpanel Woods; matt finish, various widths and lengths Colours Ceramic Oak, Slate Oak, Rhinestone Oak, and Caramel Oak
6 Aluminium Windows - ppc Colour RAL 7016
7 Aluminium Doors - ppc Colour RAL 7016
8 Aluminium Doors - ppc Colour RAL 7036
9 Aluminium Downpipes/gutters/fascias - ppc RAL 7016
12 Photovoltaic Panels
13 Roof Access Hatch
14 Mansafe system and walkway
15 Classroom Ventilation Cowl
16 Ventilation Louvres - RAL 7016
17 Fabric Freestanding Sail Canopy - various colours
18 Existing artificial slate roof
19 Existing buff multi brickwork
20 Existing aluminium gutters and fascias resprayed RAL 7016
21 Existing steel columns and rain water pipes resprayed RAL 7016
22 Existing stained timber windows/screens/doors
23 Artificial slate roof to match existing building
25 Existing Rooflights
26 Smooth cladding panels to Clerestory RAL 7016

Scale 1 : 100
0 2 5 10 m



Typical Section Through Classroom
1 : 100

Typical Section Trough Cloakrooms
1 : 100



Typical Section Through Hall
1 : 100

Typical Section Through Link
1 : 100

Cymuned yn Dysgu Cynaliadwy
Sustainable Communities for Learning
CAERPHILLY
CAERFFILI
Llywodraeth Cymru
Welsh Government

Building Consultancy:
Ty Penallta, Tredomen Park, Ystrad Mynach, Hengoed, CF82 7PG
Tel: 01443 815588
Head of Land and Property Services: Ben Winstanley MRICS

drawing status
Preliminary ☒ Planning ☐

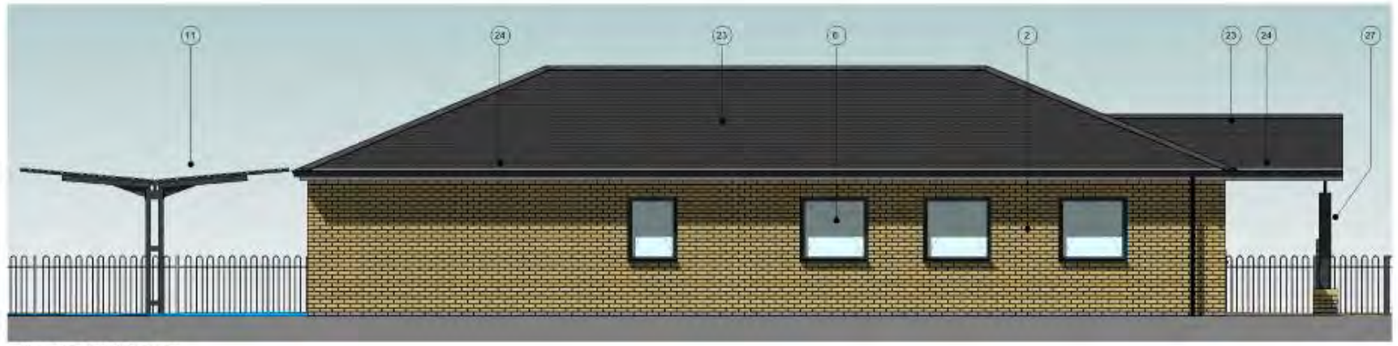
project title
Llanfabon and Llancaeach Amalgamation
Llanfabon Infants School, Bryncelyn Avenue, Nelson, Treharris, CF46 6HL

drawing title
Proposed Elevations - Extension

date	scale	drawn	checked
09/11/22	1 : 100	CY	ICH

project no. 4660 | drawing no. P08 | rev.

SHEET SIZE: A0



Proposed East Elevation
1 : 50

View of entrance

Proposed North Elevation
1 : 50

Typical Section Through Classroom
1 : 50

View of Childcare from playground

Proposed South Elevation
1 : 50

Typical Section Through Toilets
1 : 50

Proposed West Elevation
1 : 50

Materials Key:-

2 Buffstone multi brick with brown mortar to match existing building
4 Staffordshire blue bricks below DPC with dark grey mortar and surround to new circular windows
6 Aluminium Windows - ppc Colour RAL 7016
7 Aluminium Doors - ppc Colour RAL 7016
8 Aluminium Doors - ppc Colour RAL 7036
11 Glazed gullwing Canopy - glass roof
23 Artificial slate roof to match existing building
24 White uPVC facias with aluminium gutters and downpipes - RAL 7016
27 Feature steelwork - RAL 7016

Scale 1 : 50
0 1 2.5 5 m

rev | date | amendment | drawn / chkd

Cymunedau Dysgu Cynaliadwy
Sustainable Communities for Learning

CAERPHILLY CAERFFILI

Llywodraeth Cymru
Welsh Government

Building Consultancy
Ty Penallta, Tredomen Park, Ystrad Mynach, Hengoed, CF82 7PG
Tel: 01443 815588
Head of Land and Property Services: Rob Wimbleton MRICS

drawing status
Preliminary ☒ Planning ☐

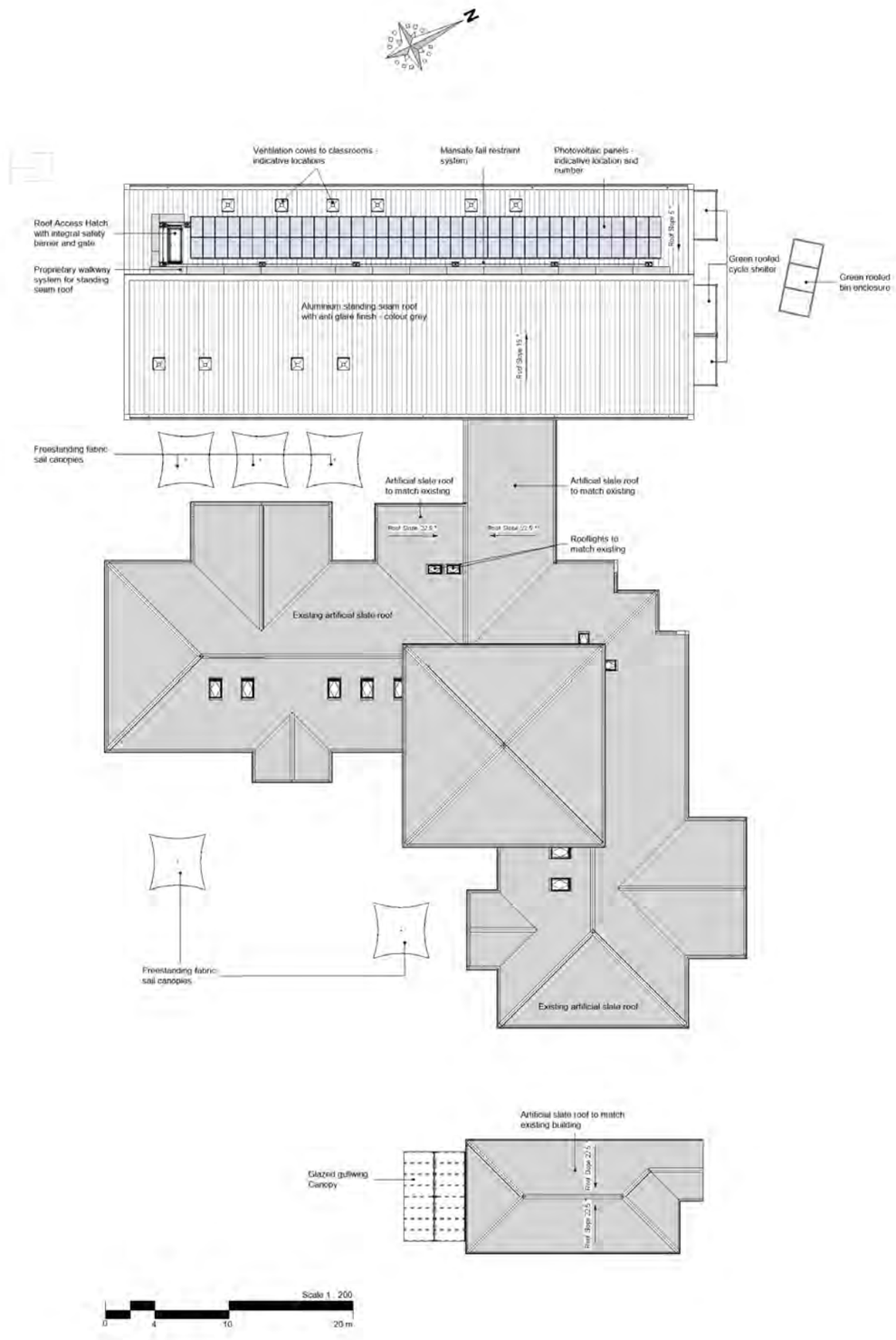
project title
Llanfabon and Llancaeach Amalgamation
Llanfabon Infants School, Bryncelyn Avenue, Nelson, Treharris, CF46 6HL

drawing title
Proposed Elevations - Childcare

date	scale	drawn	checked
29/11/22	1 : 50	CY	JCH

project no.	drawing no.	rev
4660	P09	

SHEET SIZE: A1



SHEET SIZE: A1

rev	date	amendment	drawn	chckd

Cymuned au Dysgu Cynaliadwy
Sustainable Communities for Learning

CAERPHILLY
CAERFFILI

Llywodraeth Cymru
Welsh Government

Building Consultancy:

Ty Penallta, Tredomen Park, Ystrad Mynach, Hengoed, CF82 7PG
Tel: 01443 815588

Head of Land and Property Services: Ben Winstanley MRICS

drawing status:

Preliminary ☒ Planning ☐

project title:

Llanfabon and Llancaeach Amalgamation
Llanfabon Infants School, Bryncelyn Avenue, Nelson, Treharris, CF46 6HL

drawing title:

Proposed Roof Plan

date	scale	drawn	checked
29/11/22	1 : 200	CY	JCH

project no.	drawing no.	rev.
4660	P10	

Tree information derived from Tree Survey, Categorisation & Constraints Report, and Tree Constraints plan commissioned from Steve Ambler & Sons

Ref:-	Tree Tag	Species	Effective Diameter (mm)	Remaining Contribution (years)	Retention Category	RPA Area	RPA Radius
G1	NA	Silver birch, ash, sycamore, white willow, horse chestnut, field maple, elder, hazel, bird cherry, whitebeam, apple, common alder, holly, Norway maple	325	40+	B2,3	48	3.9
G2	NA	Field maple, whitebeam, sycamore, wild cherry, hawthorn	375	40+	B2,3	64	4.5
G3	NA	Ash with evergreen ornamental shrubs	100	20-40	C2	5	1.2
G4	1869-1870	"Field Maple (Acer campestre)"	240	20-40	C2	25	2.8
G5	1875 1877 1878	"Rowan (Sorbus aucuparia) Field Maple (Acer campestre) Cultivar Apple (Malus domestica)"	400	10-20	B2	72	4.8
G6	N/A	"Oak (Quercus sp.) Cultivar Apple (Malus domestica)"	200	20-40	C2,3	18	2.4
G7	1887-1888	"Cultivar Apple (Malus domestica) Sycamore (Acer pseudoplatanus)"	460	50	B2,3	17	5.5
W1	1889-190	"Silver Birch (Betula pendula) Crack Willow(Salix fragilis) Whitebeam (Sorbus aria) Sycamore (Acer pseudoplatanus) Wild Cherry (Prunus avium) Common Ash (Fraxinus excelsior)"	400	40+	B2	72	4.8
W2	N/A	"Silver Birch (Betula pendula) Goat Willow (Salix caprea) Crack Willow (Salix fragilis)"	100	20-40	C2	5	1.2
W3	1893-1894	"Pedunculate Oak (Quercus robur) Hazel (Corylus avellana) Common Holly (Ilex aquifolium)"	200	20-40	B2	18	2.4
H1	NA	Hawthorn, holly, hazel, field maple, white willow	125	40+	B2,3	7	1.5
H2 H3	NA	White willow, hazel, goat willow, field maple, blackthorn, holly, dog rose	250	20-40	B2,3	28	3
H4	1881-1882	"Crack Willow (Salix fragilis) Field Maple (Acer campestre) Hazel (Corylus avellana)"	200	10-20	B2	18	2.4
H5	1883-1884	"Field Maple (Acer campestre) Crack Willow (Salix fragilis) Common Hawthorn (Crataegus monogyna)"	200	20-40	C2	18	2.4
T1	NA	Downy birch	150	20-40	C2,3	10	1.8
T2	346	Ash	400	20-40	B2,3	72	4.8
T3	347	Wild cherry	450	<10	U	0	0
T4	348	Ash	450	<10	U	0	0
T5	NA	Wild cherry	400	20-40	B2	72	4.8
T6	349	White willow	150	10-20	C2	10	1.8
T7	NA	Ash	225	20-40	C2	22	2.7
T8	1864	"Whitebeam (Sorbus aria)"	390	<10	B2	69	4.7
T9	1865	"Sycamore (Acer pseudoplatanus)"	420	40+	B2	79	5
T10	1866	"Common Hawthorn (Crataegus monogyna)"	210	10-20	C2	20	2.5
T11	1867	"Whitebeam (Sorbus aria)"	250	20-40	B2	28	3
T12	1868	"Wild Cherry (Prunus avium)"	220	20-40	B2	21	2.6
T13	1871	"Field Maple (Acer campestre)"	200	<10	C2	18	2.4
T14	1872	"Field Maple (Acer campestre)"	280	10-20	C2	36	3.4
T15	1872	"Field Maple (Acer campestre)"	320	20-40	C2	45	3.8
T16	1876	"Wild Cherry (Prunus avium)"	500	40+	B2	113	6
T17	1879	"Sycamore (Acer pseudoplatanus)"	390	40+	C2	69	4.7
T18	1880	"Cultivar Apple (Malus domestica)"	210	20-40	C2	20	2.5
T19	1885	"Bird Cherry (Prunus padus)"	170	20-40	C2	13	2
T20	1886	"Goat Willow (Salix caprea)"	280	20-40	C2	36	3.4
T21	1891	"Field Maple (Acer campestre)"	400	20-40	B	72	4.8
T22	1892	"Wild Cherry (Prunus avium)"	330	50	B2	50	4
T23	1895	"Pedunculate Oak (Quercus robur)"	510	40+	B2	117	6.1
T24	1896	"Pedunculate Oak (Quercus robur)"	0	40+	U	0	0
T25	1897	"Goat Willow (Salix caprea)"	560	20-40	C2	141	6.7
T26	N/A	"Pedunculate Oak (Quercus robur)"	500	20-40	B2	113	6
T27	N/A	"Common Beech (Fagus sylvatica)"	800	20-40	B2	290	9.6
T28	N/A	"Silver Birch (Betula pendula)"	300	10-20	C2	41	3.6
T29	1898	"Rhus (Rhus spp.)"	75	20-40	C	3	1
T30	1873	Field Maple (Acer Campestre)	400	20-40	C	72	4.8

Key

Trees to be considered for retention

- A – High
- B - Moderate
- C - Low
- Root Protection Area

Trees unsuitable for retention

- U - Fell

Tree Key

Crown Spread.
Measured in North, South, East and West side of tree.

T1 Tree number
(T - Individual Tree, G - Group, A - Tree area, W - Woodland, H - Hedgerow)

Root Protection Area (RPA)
A root design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.

Trees that need to be removed due to development - T10, 11, 12, 16, 17,18, 19, 29, 30

Groups G5 & G1 also need to be reviewed

New Buildings

Existing Buildings

Existing Buildings to be demolished

Scale 1 : 200

0 4 10 20 m

rev	date	amendment	drawn	checked

Cymraeg Dysgu Cymraeg
Sustainable Communities For Learning

CAERPHILLY COUNTY BOROUGH COUNCIL
CYNGOR BWRDEISTREF SIROL CAERFFILI

Llywodraeth Cymru
Welsh Government

Building Consultancy,
Ty Penallta, Tredomen Park, Ystrad Mynach, Hengoed, CF82 7PG
Tel: 01443 815588

Head of Land and Property Services: Ben Winstanley MRICS

drawing status
Preliminary ☒ Planning ☐

project title
Llanfabon and Llancaeach Amalgamation
Llanfabon Infants School, Bryncelyn Avenue, Nelson, Treharris, CF46 6HL

drawing title
Tree Constraints and Demolition

date	scale	drawn	checked
29/11/22	1: 200	CY	JOH

project no.	drawing no.	rev
4660	P11	

SHEET SIZE: A0

View of extension from playground

View of childcare from playground

View of entrance towards hall

View of entrance towards existing building

View of Childcare

View of childcare from playground

SHEET SIZE: A1

rev	date	amendment	drawn	checked

Cymunedau Dysgu Cynaliadwy
Sustainable Communities for Learning

CAERPHILLY COUNTY BOROUGH COUNCIL
CAERFFILI

Llywodraeth Cymru
Welsh Government

Building Consultancy,

Ty Penallta, Tredomen Park, Ystrad Mynach, Hengoed, CF82 7PG
Tel: 01443 815588

Head of Land and Property Services: Ben Winstanley MRICS

drawing status
Preliminary ☒ Planning ☐

project title
Llanfabon and Llancaeach Amalgamation
Llanfabon Infants School, Bryncelyn Avenue, Nelson, Treharris, CF46 6HL

drawing title
Proposed Visualisations

date	scale	drawn	checked
25/11/22	1 : 1	CY	JCH

project no.	drawing no.	rev
4660	P12	

APPENDIX B - LANDSCAPE PROPOSALS

Haire Landscape Consultants Nov 2022

APPENDIX C - ECOLOGY

Wildwood Ecology

ISSUING OFFICE:
The Lodge
Caerphilly Business Park
Van Road
Caerphilly
CF83 3GG

T: 029 2002 2320
E: info@wildwoodecology.com
W: www.wildwoodecology.com

CIEEM REGISTERED PRACTICE 2020-2021

Certified B Corporation

ECOLOGICAL IMPACT ASSESSMENT REPORT

LLANFABON AND LLANCAEACH JUNIOR SCHOOL AMALGAMATION

CAERPHILLY COUNTY BOROUGH COUNCIL

DOCUMENT REF: WWE22087 ECIA DRAFT | 17/10/2022

Director: Richard Dodd, BSc (Hons), CEcol, MCIEEM
Wildwood Ecology Limited. Registered in England & Wales, Company No. 6646654 VAT No. 938019610
Registered Office: Queen Anne House, 66 Cricklade Street, Cirencester, Gloucestershire, GL7 1JN

Client:	Caerphilly County Borough Council
Site/Job:	Llanfabon and Llancaeach Junior School Amalgamation
Report title:	Ecological Impact Assessment Report
Report reference:	WWE22087 EcIA DRAFT

Grid Reference:	ST 11043 95342
Survey date(s):	Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA): 09/06/22. Dusk emergence surveys: 26/07/2022, 10/08/2022.
Surveyed by:	Maddie Anderson, Jenny O'Neill, Amy Williams Schwartz, Jack McCormack.

VERSIONING AND QUALITY ASSURANCE

Status	Date	Author(s)	Reviewed by	Approved by
Draft	17/10/2022	Maddie Anderson Assistant Ecologist	Peter Hacker ACIEEM Senior Ecologist	P. Hacker

DISCLAIMER

This document has been prepared by Wildwood Ecology Limited for Caerphilly County Borough Council solely as an Ecological Impact Assessment Report. Wildwood Ecology Limited accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

The evidence which we have prepared and provided is true and has been prepared and provided in accordance with the guidance of The Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

SUMMARY

Purpose	• Wildwood Ecology was commissioned by Caerphilly County Borough Council (the client) to undertake an Ecological Impact Assessment (EcIA) for Llanfabon and Llancaeach Junior School Amalgamation. • The site is the subject of a planning application to amalgamate two schools, the existing infants already on site and the existing junior school on a different site to form a primary school.
Methodology	• A PRA was undertaken consisting of a desk study and field survey undertaken in June 2022 following best practice in line with the Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edn (Collins 2016). • A PEA was undertaken consisting of a desk study and field survey undertaken in June 2022 following the Chartered Institute of Ecology and Environmental Management (CIEEM) Preliminary Ecological Appraisal (2013) guidelines and standard Phase 1 Habitat Survey protocol (JNCC, 2010). • Two dusk bat surveys were undertaken in July and August 2022, following best practice in line with the Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edn (Collins 2016).
Key issues	• During the PRA, the main school building was found to have moderate suitability for bats, and the nursery building was found to have only low suitability for bats. • No bats emerged from the main school building, or nursery building during the dusk emergence surveys. • There were moderate levels of foraging and commuting activity by common and soprano pipistrelles around the site. The hedgerow and vegetation to the south and west were being used by foraging and commuting bats during the surveys. Bats were also observed foraging/commuting by the woodland area to the north. • Birds are known to nest within the ventilation holes under the extended roof at the main entrance to the school building.
Recommendations	• Since no bats, or signs of bats were observed within the main school building and nursery, a European Protected Species Licence (EPSL) for bats will not be required. However, if, in the unlikely event that a bat is found during the works, all works must cease, and an EPSL for bats must be obtained in order for the works to be legally undertaken. • Works should be undertaken in daylight hours only to avoid light disturbance on nocturnal species such as bats and hedgehogs. • If new lighting is installed, a lighting plan demonstrating consideration for bats with dark flight lines maintained and any exterior lighting proposed post-development would not have detrimental effect on commuting bats along nearby habitat. Introduced external lighting on the new build extension should not fragment bat foraging/commuting corridors by light spilling over onto the hedgerow to the south and west of the site (see section 5 for suggestions on how to achieve this). • A bat box should be installed either on the building, or on a suitable tree within the site to enhance roosting opportunities for bats within the local area. • A bird box should be installed as compensation on a suitable tree within the site. • Precautionary working methods during any vegetation clearance should be followed to avoid adverse impacts upon hedgehogs, reptiles, and amphibians (see section 5 for details of working methods).

Conclusions	• Providing that the recommendations outlined within this report are successfully implemented, it should be possible for the proposed development to proceed and for there to be no long-term impacts upon the key protected species present at the site. • This ecological report will remain valid for a period of 18 months from the date of the last survey – i.e. until February 2024.

CONTENTS

Summary iii
List of figures v
List of tables vi

1 Introduction 1
2 Methodology 3
3 Results 7
4 Interpretation and Assessment 20
5 Conclusions and Recommendations 25
6 References 28
APPENDIX I: PEA Plan 29
APPENDIX II: Survey Images 30
APPENDIX III: Activity survey plan 34
APPENDIX IV: Area of roof that will be affected 35
APPENDIX V: Species list 36
APPENDIX VI: Planning policy and legislation 38

List of figures

Figure 1 – Aerial image of the site (red line shows the site boundary). Image used under licence (©2021 Google). Imagery date 20/07/2021. 1
Figure 2 – Site plan showing locations of the buildings. Building A is the main school building, and building B is the nursery building. Image used under licence (©2021 Google). Imagery date 20/07/2021. 17
Figure 3 – Radiance levels modelled at the site (VIIRS 2021 data, https://www.lightpollutionmap.info/ - accessed August 2022. 18
Figure 4 – Red line indicates the site boundary, and yellow pins indicate the location of ponds within the vicinity of the site. 23
Figure 5 – Access road into the site. 30
Figure 6 – Car parking area at the west of the site. 30
Figure 7 – Well-managed amenity grassland at the east of the site. 30
Figure 8 – Scattered trees at the south east of the site. 30
Figure 9 – Native species-rich hedgerow at the east of the site. 30
Figure 10 – Areas of tall ruderal and scrub at the site of the site that may provide cover for reptiles. 30
Figure 11 - Hardstanding with tall ruderal edges at the east of the site. 31
Figure 12 - Hardstanding areas bounded by amenity grassland to the east of the site. 31
Figure 13 - Native species-rich hedgerow at the south of the site. 31
Figure 14 - Area of semi-improved grassland within the land at the northern area of the site. 31
Figure 15 - Hardstanding area to the north of the site, bounded by a hedge with trees. 31
Figure 16 - Scrub habitat surrounding the hardstanding areas to the north of the site. 31

Figure 17 – Main entrance to the school at the north western corner of the building. 32
Figure 18 – Ventilation holes under the roof at the main entrance to the building. 32
Figure 19 – Western aspect of the building (area of roof to be affected by the works). 32
Figure 20 – Visible loft space at the west of the building. 32
Figure 21 – Gaps under metal fascias and soffits. 32
Figure 22 – Gap between the nursery building. 32
Figure 23 – Southern aspect of the nursery building. 33
Figure 24 – Gaps between flat roof and wall of the nursery. 33
Figure 25 – Blue arrows indicate flight paths observed during the surveys, and yellow stars indicate the location of surveyors during the surveys. 34
Figure 26 – The pink shading indicates the area of roof where alterations will be required in order to form a link to the new extension that will extend further west. 35

List of tables

Table 1 – Sources of biodiversity and ecological records. 3
Table 2 – Summary of guidelines for assessing the potential suitability of proposed development sites for bats (from Collins 2016). 5
Table 3 – Surveyor information 6
Table 4 – Summary of designated sites in range of the site. 7
Table 5 – Priority and protected species records found in the vicinity of the site. 9
Table 6 – Summary of survey timing and conditions during surveys. 14
Table 7 – Habitats and linear features present on site. 14
Table 8 – Onsite building information. 16
Table 9 – PRA results. 17
Table 10 – Bat survey results. SS±xx refers to the time in minutes before/after sunset. 19
Table 11 – Recommendations. 25

1 INTRODUCTION

1.1 Wildwood Ecology was commissioned by Caerphilly County Borough Council (the client) to undertake an Ecological Impact Assessment (EcIA) at Llanfabon and Llancaeach Junior School Amalgamation (the site) centred at grid reference ST 11043 95342.

1.2 A PEA/PRA for bats and nesting birds was undertaken at the site on the 09/06/2022. This found the main school building affected by the development to have moderate bat roost suitability, and the nursery building to have low bat roost suitability. Further bat activity surveys (x2 surveys on the main school building and 1x survey on the nursery building) were therefore recommended. The dusk emergence surveys were undertaken on the 26/07/2022 and 10/08/2022.

Site description

1.3 The site lies to the south-west of Nelson, a village in the county borough of Caerphilly.

1.4 The aerial image of the site (Figure 1) shows the site to consist of buildings, hardstanding, grassland, and scattered trees.

1.5 The wider site consists of the built-up village of Nelson, which is surrounded by a mosaic of grassland fields and tree lines.

Figure 1 – Aerial image of the site (red line shows the site boundary). Image used under licence (©2021 Google). Imagery date 20/07/2021.

Proposed development

1.6 The site is the subject of a planning application to amalgamate two schools (the existing infants already on site and the existing junior school on a different site) to form a primary school. The scheme involves the following: construction of a two-storey extension to house 7 classrooms plus ancillary support spaces; the existing twin demountable currently housing the nursery, to the south west of the site, is to be demolished; the existing infants school will be refurbished internally and will require some alterations to the roof to form the link corridor to the extension; and the area of waste/overgrown land to the north of the site will be developed into a car park, and during construction will likely be the site compound for the contractor.

Purpose of this report

1.7 This report aims where possible to provide sufficient information for the local planning authority to fully assess the potential ecological impacts of the proposed development, or alternatively, to identify what further information is required to fully inform the scheme.

1.8 The results of the EcIA have been used to establish the need for, and extent of, any mitigation or compensation measures required as part of the proposed development.

2 METHODOLOGY

Desk study

2.1 A biodiversity desk study was undertaken in relation to the site in June 2022. The sources consulted and the type of information obtained are summarised in Table 1.

Table 1 – Sources of biodiversity and ecological records.

Source	Information requested (search buffer from site centre/boundary)
South East Wales Biodiversity Records Centre (SEWBReC)	• Protected and priority species (2km) • Sites of local importance/designation (1km)
Multi-Agency Geographic Information for the Countryside (MAGIC)[1]	• International statutory designations (5km) • National statutory designations (2km)

2.2 The search buffers are considered to be sufficient to cover the potential zone of influence (ZoI[2]) of the proposed development.

2.3 The impact of the proposed development on the biological integrity of any nearby designated protected sites has been fully considered.

2.4 No previous survey information was available for the site itself.

Field surveys

PEA

2.5 A field survey was undertaken on 09 June 2022.

2.6 All habitats present within the site with the potential to support rare, protected, or otherwise notable species of flora or fauna (together with any direct signs) were noted.

2.7 In the context of this report, rare, protected, or otherwise notable species of flora or fauna were those considered to meet any of the following criteria:

- Species protected by legislation (see Appendix VI);
- UK Post 2010 UK Biodiversity Framework priority species or Local Biodiversity Action Plan (LBAP) species;
- Nationally rare or nationally scarce species;
- Species of Conservation Concern (e.g. JNCC Red List, RSPB/BTO Red or Amber Lists).

2.8 A PEA habitat map was drawn up incorporating target notes used to highlight features of particular ecological interest (see Appendix I).

2.9 The Wildlife and Countryside Act (1981) as amended, makes it an offence to release or allow to escape into the wild any animal, plant or micro-organism not ordinarily resident in the UK (as listed in Schedule 9 of the Act). Plant species listed in Schedule 9 were searched for during the survey. Examples include species such as Japanese knotweed (*Fallopia japonica*) and Himalayan balsam (*Impatiens glandulifera*).

[1] http://magic.defra.gov.uk/MagicMap.aspx
[2] ZoI definition – 'the areas/resources that may be affected by the biophysical changes caused by activities associated with a project' (CIEEM, 2018).

PRA

2.10 A field survey was undertaken on 09 June 2022.

2.11 An assessment of the school building and nursery building was undertaken in accordance with the latest published best practice guidance (Collins, 2016).

2.12 The buildings were externally and internally inspected for bats and their signs with the aid of high-powered lamps and close-focussing binoculars.

2.13 The suitability of the buildings to accommodate bats was assessed, along with a systematic search for signs of bats (e.g. droppings, moth wings, scratch marks, staining, etc.) or actual bats that were present. Particular attention was paid to the roof areas, with searches for any crevices or gaps in walls, gaps between beams and joists, droppings stuck to the walls, floors or other surfaces, or feeding remains below beams, in addition to a number of other factors and signs indicative of a bat roost.

2.14 In addition, the buildings were classified according to its suitability for bats, based on the presence of features within the structure and / or landscape (see Table 2).

Table 2 – Summary of guidelines for assessing the potential suitability of proposed development sites for bats (from Collins 2016).

Suitability	Description of building, tree, or structure	Number of activity survey visits required[3]
Negligible	Negligible habitat features on site likely to be used by roosting bats.	None
Low (nursery building)	A structure or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, potential roost sites not suitable for larger numbers or regular use (i.e. maternity or hibernation).	One
Moderate (main school building)	A structure or tree with one or more potential roost sites that could be used by bats, but unlikely to support a roost of high conservation status.	Two
High	A structure or tree with one or more potential roost sites obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time.	Three
Confirmed roost	Evidence of bats or use by bats found.	Minimum of two – to characterise the roost

Bat surveys (dusk emergence)

2.15 Two bat surveys (dusk emergence surveys – 26/07/2022 and 10/08/2022) were undertaken on the main school building with two surveyors.

2.16 One bat survey (dusk emergence survey – 26/07/2022) was undertaken on the nursery building with two surveyors.

2.17 The dusk emergence surveys commenced approximately 15 minutes before the time of local sunset (source www.sunrisesunsetmap.com) and continued for approximately 1.5 hours after sunset.

2.18 Surveyors were equipped with broadband bat detectors (Elekon BatScanner Stereo).

2.19 Note was made of all bat activity recorded including (where appropriate) roost access points, species, time of re-entry, direction of flight, behaviour (foraging or commuting) and use of landscape features. Minimal lighting was used during the surveys as this can alter the behaviour of the bats emerging from or entering a roost or foraging or commuting over a site.

[3] To provide confidence that bats are absent from the structure

Surveyor information

2.20 The surveys were led by Maddie Anderson, assisted by Amy Williams Schwartz, Jenny O'Neill, and Jack McCormack. See Table 3 for further information.

Table 3 – Surveyor information

Surveyor	Licences	Ecological experience
Amy Williams Schwartz PhD, MSc, B.Sc. (Hons), ACIEEM Ecologist	Bat GCN	Experienced in surveying for a wide range of protected species including great crested newt, reptiles, and bats within a consultancy and volunteer capacity. PhD thesis on wildlife/road interactions in the UK, and experienced in performing academic ecological research projects, as well as species identification.
Jenny O'Neill B.Sc. (Hons) Assistant Ecologist Qualifying CIEEM	-	Holds a 2:1 honours degree in Ecology. Has field experience through academic and professional training. Experience in undertaking protected species surveys including reptiles, bats, and hazel dormouse from 3 years of seasonal work.
Maddie Anderson M.Sc., B.Sc. (Hons) Assistant Ecologist	-	Holds a 2:1 honours degree in Biology and a Masters in Environmental Biology: Conservation & Resource Management. Experience in undertaking bat surveys and assisting in other protected species surveys gained through working with Wildwood Ecology.
Jack McCormack Seasonal Assistant Ecologist	-	Holds a 1st class honours degree in Zoology and a Masters of Research in Biosciences. Experience in undertaking bat surveys and assisting in other protected species surveys gained through working with Wildwood Ecology.

Limitations and assumptions

2.21 Many species of bat in the UK are crevice dwelling, and bats or signs of bats can be difficult to find within a building. In addition, there may be areas that are inaccessible to the surveyor.

2.22 Only the area of roof space to the west of the building could be observed due to suspended ceilings throughout the building. Internal access into the loft space was not possible. Only the loft space at the west elevation of the building was investigated during the PRA using a ladder and a torch.

2.23 No other limitations were encountered, or assumptions made, and it is considered that, with the access gained and recording undertaken, an accurate assessment of the site's ecological value was made.

3 RESULTS

Desk study

Designated sites (statutory)

3.1 There were no international statutory designations within 5km of the site and one national statutory designation within 2km (see Table 4). The closest statutory designated site, Nelson Bog, was approximately 700m northeast from site.

3.2 There are no protected areas (SSSIs or SACs) designated for their bat populations within 10km of the site.

Designated sites (non-statutory)

3.3 There were six international non-statutory designations within 1km of the site (see Table 4). The closest non-statutory designated site, Wern Woodland, was approximately 520m northeast from site.

Table 4 – Summary of designated sites in range of the site.

Site name	Designation	Description / key reason for designation	Distance & direction
Nelson Bog	Site of Special Scientific Interest (SSSI)	Nelson bog has two special features which are species-rich bog and swampland. As well as swamp and bog, Nelson bog has other habitats that contribute to the special wildlife interest including semi-natural broadleaved woodland, acid grassland, and scrub. The diversity of habitat in turn support a wide range of species.	700m NE
Wern Woodland, Nelson	Site of Importance for Nature Conservation (SINC)	This is an area of wet woodland where the canopy is mainly formed by willow and alder in the wet areas, with a few drier areas dominated by oak and hawthorn. The western part of the site includes an area of damp semi-improved grassland. The site contains other habitats consisting of semi-improved neutral grassland and scrub adjacent to a railway and cycle path. The site is likely to support a high diversity of invertebrates, foraging and roosting bats, and the woodland margins and grassland are likely to support reptiles.	520m NE
Cwm Afon Railway Line, West of Nelson	SINC	A disused railway embankment runs the whole length of the site, supporting semi-improved acid grassland with at least 12 indicator species, and localised patches of rocks and scrub. Other habitats included within the site consist of woodland, and species-rich marshy grassland/flush vegetation with at least seven indicator species. The site provides foraging habitat for bats, as well as roosting potential within some trees. Other species that utilise the site	620m W

		include reptiles, grassland fungi and invertebrates.	
Brooklands Marsh, North of Nelson	SINC	The qualifying feature of this site is semi-natural wet woodland (in an early stage of development). The stream and adjacent trees within the site are likely to be used by foraging and possibly roosting bat. The area may also provide resting sites for otters. The site most likely supports a high diversity of invertebrates due to the mix of habitat types, and the grassland area is likely to support reptiles.	880m N
Llancaiach-Fawr Meadows, Llancaiach	SINC	The Nant Caeach stream runs through a steep-sided woodland valley that forms the western boundary of the site. The woodland canopy comprises mainly oak and beech. The remainder of the site includes a mix of scrub and semi-improved neutral and acid grassland fields, formed partly over colliery spoil. The site is likely to support a high diversity of invertebrates, reptiles, foraging and roosting bats, and the grassland areas may support waxcap fungi.	915m N
Nant Caeach	SINC	This is a stream course that forms a confluence with the Afon Taf Bargoed. The stream follows an unmodified course and includes natural physical features such as meanders, small waterfalls, pools, and riffles.	915m N
Cwm Afon, West of Nelson	SINC	This is a field of semi-improved acid grassland and marshy grassland/flush vegetation with at least 12 indicator species. The site also provides foraging/roosting habitat for bats. The grassland is also likely to be used by reptiles. The site has potential to support a high density of invertebrates, potentially including rare species such as the small pearl-bordered fritillary.	950m W

Protected species

3.4 Table 5 summarises the priority and protected species records found within the local area.

Table 5 – Priority and protected species records found in the vicinity of the site.

Protected & priority		# of records (# species)			Further information (from site)
Groups	Species	Onsite	<500m	>500m	
Bats	Common pipistrelle	-	9	52	Closest record: foraging/commuting activity within garden to the north 70m from site (2021). Closest roost: 400m from site (3 records, all from 2007) with more than seven bats seen.
	Nathusius' pipistrelle	-	1	1	Closest record: adult seen commuting across garden to the north 100m from site (2019). Closest roost: N/A.
	Soprano pipistrelle	-	5	40	Closest record: foraging/commuting activity in garden to the north 80m from site (2021). Closest roost: possible roost 1.53km from site (2019) where a bat was picked up for bat care.
	Brown long-eared bat	-	2	7	Closest record: 90m from site (2017) recorded on a batlogger within a garden to the north of Llanfabon Infants school. Closest roost: 920m from site (2 records, both from 2009) identified roosting within a barn during a dusk survey.
	Natterer's bat	-	1	8	Closest record: 400m from site (2007). No further information. Closest roost: 1.98km from site (2013). No further information.
	Noctule	-	2	9	Closest record: 90m from site (2017) recorded on a bat logger in a garden to the north. Closest roost: N/A.
	Serotine	-	1	0	Record is 90m from site (2017) detected on a bat logger in a garden to the north.
	Daubenton's Bat	-	0	4	Closest record: foraging/commuting activity 1.6km from site (2004-2005). Closest roost: N/A.
	Unidentified *Myotis*	-	0	2	Closest record: commuting activity 85m from site (2017). Closest roost: N/A.
	Unidentified pipistrelle	-	4	6	Closest record: foraging over a garden to the north 80m from site (2019). Closest roost: maternity roost within attic, 40+ individuals 270m SW from site (2016).
	TOTALS	-	*25(7)*	*129(8)*	
Mammals *(excluding bats)*	European otter	-	2	26	Closest record is 2x spraints found on the end of a concrete bolster within a stream 300m SW from site (2021).
	European badger	-	0	10	Closest record is a badger latrine 730m from site (2017).
	Hazel dormouse	-	0	1	The record is for a nest 610m from site (2019).
	European water vole	-	0	8	Closest record is for a live sighting at Nelson bog 1.23km from site (1997).
	West European hedgehog	-	9	18	Closest record is 90m from site (2019) where a hedgehog was bothered by a dog to the north of Llanfabon Infants school.
	Other mammal species	-	*3(3)*	*14(4)*	Three records for American mink. The closest record is for prints 325m from site (2020).

Protected & priority		# of records (# species)			Further information (from site)
Groups	Species	Onsite	<500m	>500m	
					Seven records for brown hare. The closest record is 1.28km from site (1976). One record for ferret. The record is 420m from site (2010). One record for pine martin. The record is 230m from site (1997). Three records for polecat. The closest record is 550m from site (2008). One record for weasel. The record is 1.44km from site (1984).
	TOTALS	-	*14(5)*	*77(9)*	
Amphibians	Common toad	-	1	19	Closest record is 480m from site (2 records between 1968 and 2003).
	Common frog	-	3	28	Closest record is 85m from site (4 records between 2017 and 2021).
	Great crested newt	-	0	20	Closest record is 1.44km from site (1984).
	Palmate newt	-	0	17	Closest record is 580m from site (2007).
	Smooth newt	-	0	3	Closest record is 1.28km from site (1976).
	TOTALS	-	*4(2)*	*87(5)*	
Reptile	Common lizard	-	0	1	The record is 1.7km from site (2007).
	Slow worm	-	1	9	Closest record is 85m from site (2018) within a garden to the north.
	Adder	-	0	2	Closest record is 1.67km from site (2019).
	TOTALS	-	*1(1)*	*12(3)*	
Birds	Schedule 1	-	*27(9)*	*95(16)*	Schedule 1 species <500m from site: brambling, fieldfare, goshawk, green sandpiper, king fisher, peregrine, red kite,

Protected & priority		# of records (# species)			Further information (from site)
Groups	Species	Onsite	<500m	>500m	
	Non-schedule 1	-	*105(29)*	*700(55)*	redwing, Western barn owl. Schedule 1 species >500m from site: brambling, cetti's warbler, Eurasian bittern, fieldfare, goshawk, green sandpiper, hobby, kingfisher, merlin, peregrine, red crossbill, red kite, redwing, Western barn owl, Western osprey, woodlark. Non-schedule 1 species: black-headed gull, buzzard, Canada goose, common house martin, common reed bunting, common sandpiper, cormorant, cuckoo, curlew, dipper, dunnock, Eurasian bullfinch, Eurasian coot, Eurasian skylark, European green woodpecker, European herring gull, European pied flycatcher, goldcrest, grasshopper warbler, greenfinch, grey heron, grey partridge, grey wagtail, hawfinch, house sparrow, kestrel, lapwing, lesser black-backed gull, lesser redpoll, lesser spotted woodpecker, lesser whitethroat, linnet, little owl, long-tailed tit, mallard, marsh tit, meadow pipit, mistle thrush, Northern bobwhite, redstart, sand martin, snipe, song thrush, spotted flycatcher, starling, swallow, swift, teal, tree pipit, wheatear, whinchat, whitethroat, willow tit, willow warbler, wood warbler, woodcock, yellowhammer.

Protected & priority		# of records (# species)			Further information (from site)
Groups	Species	Onsite	<500m	>500m	
Invertebrates	Totals:	-	*6(4)*	*109*	Category 1 species <500m from site: cinnabar, knot gross, wall, white ermine. Category 1 species >500m from site: August thorn, blood-vein, brindled beauty, broom moth, brown-banded carder-bee, buff ermine, centre-barred sallow, cinnabar, dark-barred twin-spot carpet, dingy skipper, dot moth, dusky thorn, ear moth, flounced chestnut, garden tiger, ghost moth, grayling, green-brindled crescent, hedge rustic, knot grass, marsh fritillary, oblique carpet, rosy rustic, rustic, sallow, shoulder-striped wainscot, small blue, small heath, small pearl-bordered fritillary, small phoenix, small square-spot, streak, wall, white ermine, white-letter hairstreak.
Plants	see further info	-	*3(2)*	*46(3)*	Category 1 species <500m from site: tubular water-dropwort, bluebell. Category 1 species >500m from site: bluebell, Deptford pink, chamomile.
Fish	see further info	-	*1(1)*	*7(3)*	Category 1 species <500m from site: brown/sea trout. Category 1 species >500m from site: European eel, brown/sea trout, Atlantic salmon.

Field surveys

Timing and conditions

3.5 The survey timings and prevailing weather conditions during the PEA/PRA and bat activity surveys can be seen in Table 6.

Table 6 – Summary of survey timing and conditions during surveys.

Date	Type	Conditions			
		Temp [°C]	Cloud cover [Oktas]	Wind speed [Beaufort]	Rain
09/06/222	PEA/PRA	16	7	2	nil

Date	Type	Survey Timing			Conditions			
		Start	End	Sunset	Temp [°C]	Cloud Cover [Oktas]	Wind Speed [Beaufort]	Rain
26/07/2022	Dusk emergence	20:56	22:41	21:11	*Start: 16 End: 14*	*Start: 0 End: 0*	*Start: 1 End: 1*	nil
10/08/22	Dusk emergence	20:30	22:15	20:45	*Start: 26 End: 20*	*Start: 0 End: 0*	*Start: 0 End: 0*	nil

3.6 The distribution and extent of habitats observed within the site is illustrated in the PEA plan (see Appendix I). An accompanying species list (including scientific names) can be found in Appendix V.

3.7 The habitats present onsite are described in detail in Table 7 using the standard Phase 1 survey habitat classification hierarchical alphanumeric reference codes (JNCC, 2010).

3.8 Please also refer to Table 7 for a list and description of the onsite target notes. The positions for these target notes are highlighted in the PEA plan in Appendix I.

3.9 The site was classified according to the following habitat types: semi-natural broad-leaved woodland, scrub, scattered broad-leaved trees, semi-improved grassland, tall ruderal, amenity grassland, native species-rich hedgerow, hedge with trees, soft landscaping, buildings, path, and hardstanding.

Table 7 – Habitats and linear features present on site.

Habitat type / Linear feature	Species present
A1.1.1 Semi-natural, broad-leaved woodland There was a small area of woodland adjacent to the east of the school building. The woodland area extended further north outside of the school boundary.	Tree species: field maple, blackthorn, horse chestnut, alder, ash, sycamore, birch, hazel, hawthorn. Understory: cleavers, cock's foot, broad-leaved dock, herb Robert, bramble, dandelion, hazel saplings, germander speedwell, ash saplings, nettle, fern, field maple saplings.
A2.1 Scrub (dense/continuous) Dense scrub was located immediately north and east of the hardstanding areas to the north of the site.	Buddleia, bramble, hawkbit, creeping buttercup, vetch, bracken.

A3.1 Broad-leaved, parkland and scattered trees Various broad-leaved tree species were scattered throughout the school grounds.	Field maple, cherry, whitebeam, willow sp., sycamore, birch.
B6 Poor semi-improved grassland There was a small area of this habitat type located immediately south west of the hardstanding areas to the north of the site.	Cleavers, creeping buttercup, dandelion, vetch, Yorkshire fog, false oat grass, cocks foot, ribwort plantain.
C3.1 Tall ruderal There were small patches of this habitat type scattered throughout the school grounds.	Broad-leaved willowherb, dandelion, vetch, ivy, buttercup, sycamore saplings, ash saplings.
J1.2 Amenity grassland Much of the site was comprised of this habitat type. The amenity grassland extends from the north west of the school grounds, to the south behind the school building and to the east.	Daisy, creeping buttercup, clover, ribwort plantain.
J2.1.1 Native species-rich, intact hedge Hedgerow extended from the south west of the site boundary to the east.	Hawthorn, willow sp., self heal, field maple, dog rose, nettle, bramble.
J2.3.1 Native species-rich, hedge and trees Semi-mature and mature trees were located along the north and eastern boundary of the hardstanding areas to the north.	Blackthorn, oak, holly, hazel, willow sp., smooth sumac.
J3.6 Buildings The main school building (TN#1) was located centrally within the site, and the nursery building (TN#2) was located to the south west of the main school building.	
J5 Other habitat	Smooth sumac, dog rose.

There were areas of soft landscaping along the north east boundary of the school building. Strips of soft landscaping were located within the car parking area at the south west.	

Invasive species

3.10 No stands of invasive species were identified onsite.

Onsite fauna

3.11 The presence of the following species were observed or detected around the site during the survey: pigeon, blackbird, robin, carrion crow.

PRA

3.12 A description of the buildings inspected during the PRA can be seen in Table 8.

Table 8 – Onsite building information.

Building reference	Building type	Description	Development plans
A	Llanfabon Infants School	Single storey brick-built building with metal fascia and soffits, and a vaulted ceiling middle section with no loft space.	Alterations to the roof at the southwest to form the link corridor to the extension of the new part of the building.
B	Llanfabon nursery building	Single storey flat roofed demountable building with metal gutters, and wood panels with pebble dash render.	Demolition

3.13 The results of the PRA can be seen in Table 9.

Table 9 – PRA results.

Building reference	Use by bats	Use by birds	Bat signs and internal and external Potential Roost Features (PRFs) & access points
A	Moderate	Confirmed	Small gaps between walls and soffits, lifted roofing felt, ventilation holes provide access for birds. The caretaker stated that nesting birds have been observed nesting within the holes.
B	Low	No	Gaps under edge of the flat roof, a large gap where two sections of the building are joined at the middle.

Figure 2 – Site plan showing locations of the buildings. Building A is the main school building, and building B is the nursery building. Image used under licence (©2021 Google). Imagery date 20/07/2021.

Links to surrounding habitat

3.14 The site is located in a semi-urban location surrounded by residential properties and their associated gardens, as well as access roads that are illuminated at night, with moderate radiance levels.

3.15 The site is within an area with a radiance of 6.30 x 10-9 W/cm2 x sr (www.lightpollutionmap.info).

Figure 3 – Radiance levels modelled at the site (VIIRS 2021 data, https://www.lightpollutionmap.info/ - accessed August 2022.

Bat surveys (dusk emergence)

3.16 The results of the bat surveys (dusk emergence) are summarised in Table 10.

Table 10 – Bat survey results. SS±xx refers to the time in minutes before/after sunset.

Survey type and date	Roosts and activity/points of particular interest	General observations
Dusk emergence (Main school building) 26/07/2022	o First bats observed at SS+22 soprano pipistrelle heard not seen (HNS). o Species observed/detected during the survey include soprano and common pipistrelle.	o Low activity overall within the site. o Bats were observed foraging/commuting at the woodland area to the north of the site. o Bats were observed commuting north to west and west to north across area of hardstanding at the north west of the site. o No emergences were observed.
Dusk emergence (Nursery building) 26/07/2022	o First bat observed at SS+17 common pipistrelle HNS. o Species observed/detected during the survey include soprano and common pipistrelle.	o Moderate activity overall surrounding the building. o Bats were observed foraging along the hedgerow to the south and west of the nursery. o The area was illuminated by a security light at the north east corner of the nursery building above the door. o No emergences were observed.
Dusk emergence (Main school building) 10/08/2022	o First bats observed at SS+19 soprano pipistrelle HNS. o Species observed/detected during the survey include common and soprano pipistrelle, and noctule.	o Low activity overall within the site. o Bats observed foraging by trees to the north. o Bats observed commuting across the car park to the west of the site, towards trees at the north. o No emergences were observed.

3.17 Bat flight lines in and around the site can be seen in Appendix III.

4 INTERPRETATION AND ASSESSMENT

4.1 The following interpretation and assessment is provided to ensure full compliance with legislation and both local and national planning policy (see Appendix VI).

Designated sites

4.1 There were no international statutory designations within 5km of the site and one national statutory designations within 2km (see Table 4). The closest statutory designated site, Nelson Bog, was approximately 700m northeast from site.

4.2 There are no protected areas (SSSIs or SACs) designated for their bat populations within 10km of the site.

4.3 There were six international non-statutory designations within 1km of the site (see Table 4). The closest non-statutory designated site, Wern Woodland, was approximately 520m northeast from site.

4.4 Given the scale of the proposed development, and the lack of likely impacts beyond the site boundary, the nearby designated sites are sufficiently well separated so that no impacts on their designated features are anticipated as a result of the works.

Priority and protected habitats

4.5 The following priority habitats (as listed in Section 7 of the Environment (Wales) Act 2016) were present onsite: broad-leaved woodland, and native species-rich hedgerow.

Semi-natural broad-leaved woodland

4.6 The woodland provides structural diversity to the site. It is likely to provide foraging opportunities for local bat populations and may support nesting birds and other wildlife. It is comprised of mature and semi-mature trees and is not easily replaceable in the short to medium future. It is therefore considered to have **local ecological importance.**

Amenity grassland

4.7 The amenity grassland onsite was well-managed, and the vegetation kept short. The flowering plant species are common for this habitat type, and the habitat is well represented within the surrounding area. Therefore, the amenity grassland is considered to be of **site ecological importance.**

Semi-improved grassland

4.8 The grassland to the north of the site was unmanaged and the vegetation left to grow tall. The flowering plant species are common for this habitat types and provide opportunities for invertebrates and possibly reptiles. Therefore, the semi-improved grassland is considered to be of **site ecological importance.**

Native species-rich hedgerow

4.9 The hedgerow provides structural diversity and connectivity throughout the site, as well as a foraging and shelter resource for wildlife. Therefore, the hedgerow on site is considered to be of **local ecological importance.**

Scattered broad-leaved trees

4.10 The trees onsite provide structural diversity to the site and may provide foraging and nesting opportunities for birds and other wildlife. The species identified onsite are common species and widespread and not in decline. Therefore the scattered trees are considered to be of **site ecological importance.**

Scrub and tall ruderal

4.11 These habitats contribute to the habitat diversity of the site and may provide foraging and shelter opportunities to wildlife. They are therefore considered to have **site ecological importance.**

Soft landscaping

4.12 The areas of soft landscaping may provide foraging resources for invertebrates, as well as shelter for other wildlife. The soft landscaping is considered to be of **site ecological importance.**

Hardstanding and paths

4.13 These areas do not have any features that could support any protected and notable species. Therefore, they are of **negligible ecological importance.**

Priority and protected species

Bats

PRA

4.14 The local records search returned 154 records for bat species in the vicinity of the site (see Table 5). Of the 154 records, 25 of the records were less than 500m from site, species of which include common pipistrelle, soprano pipistrelle, nathusius' pipistrelle, brown-long eared bat, natterer's bat, noctule, and serotine.

4.15 No potential roosting features (PRFs) were noted on trees within the vicinity of the proposed development.

4.16 PRFs noted within the main school building included small gaps between the wall and the soffits, ventilation holes underneath the main entrance to the building, and lifted roofing felt. It is unlikely that bats would access the building via the ventilation holes as the surface is metal, and too smooth for bats to cling to.

4.17 PRFs noted within the nursery building included gaps under the edge of the flat roof, and a large gap where two sections of the building are joined at the middle.

4.1 The area of roof space to the west was observed, however internal access was not possible due to a suspended ceiling. No evidence of roosting bats was noted.

4.2 The moderate suitability of the main school building, and low suitability of the nursery building, together with the local records for bat species in the vicinity of the site means there may be a negative impact on bat species as a result of the proposed development.

Bat activity surveys (dusk emergence)

4.3 The bat surveys carried out found that no bats were roosting within the main school building and nursery building. Species observed/detected during the surveys include common pipistrelle, soprano pipistrelle, and noctule.

4.4 Bats were observed commuting across the car parking area at the west of the site, towards the area of woodland and trees at the north. Bats were also observed foraging/commuting along the hedgerow to the south and west of the nursery building.

4.5 In the absence of mitigation, there will be a negative impact on foraging and commuting bats as a result of additional lighting due to the proposed development of the site.

Nesting birds

4.6 The local records search returned 122 records for schedule 1 nesting bird species in the vicinity of the site (see Table 5). Of the 122 records, 27 records were less than 500m from site. The local records search returned 805 records for non-schedule 1 bird species in the vicinity of the site.

4.7 No nesting birds were noted during the survey. However, the caretaker stated that birds have been seen to nest within the air ventilation holes under the main entrance to the school building (see Figure 18).

4.8 Bird species observed during the bat activity surveys included: jackdaw, swift, green woodpecker, blackbird, wren, carrion crow, swallow, sparrowhawk, magpie, woodpigeon, and robin.

4.9 The hedgerow, scrub and woodland area to the east provide suitable habitat for nesting birds.

4.10 There may be a negative impact on nesting bird species as a result of the proposed development.

Reptiles

4.11 The local records search returned 13 records for reptiles in the vicinity of the site (see Table 5). Of the 13 records, 1 record was less than 500m from site. This record is for a slow worm located 85m from the site (2018) within a garden to the north.

4.12 At the time of the survey, the grassland within the school grounds was mowed short and therefore unsuitable to provide cover for reptiles. However, there were small patches of tall ruderal located to the south of the site which could provide cover for reptiles.

4.13 The area of semi-improved grassland located adjacent to the hardstanding area to the north is more suitable to support reptiles. Areas of scrub to the north and east of the hardstanding at the north may also provide suitable habitat for reptiles.

4.14 There may be a negative impact on reptiles during vegetation clearance of the area of land to the north of the site and tall ruderal areas within the school grounds to the south if precautionary working methods are not followed during vegetation clearance.

Hedgehog

4.15 The local records search returned 27 records for hedgehog in the vicinity of the site (see Table 5). The closest record was 90m from site (2019).

4.16 Suitable habitats for hedgehogs are present onsite including woodland edges, scrub, and hedgerows.

4.17 The site is also located in a suburban area where it is common for hedgehogs to be found. Gardens within the surrounding residential areas may provide suitable habitat for hedgehogs so it is possible that hedgehogs could use habitats onsite or commute through the site.

4.18 There may be a negative impact on hedgehogs during vegetation clearance if precautionary working methods are not followed.

Common dormouse

4.19 The local record search returned only one record for dormouse in the vicinity of the site (see Table 5). The record is for a nest located 610m from the site in 2019. The record is located further west within fields and has no direct connectivity to the site due to unsuitable habitat (housing and roads) laying between the record and the site.

4.1 Hawthorn and bramble were noted within the hedgerow and scrub areas, both of which provide a suitable food source for dormice.

4.2 The hedgerows and scrub habitat onsite may provide suitable foraging and nesting habitat for dormouse, however, the vegetation onsite is isolated from the wider landscape and surrounded by residential areas and minor roads.

4.3 It is therefore unlikely that dormouse would be present onsite due to no connectivity within the wider landscape and the small areas of habitats present onsite.

4.4 There will not be a negative impact on dormouse as a result of the proposed development.

Great crested newt and other amphibians

4.5 The local records search returned 20 records for great crested newt within the wider landscape. All of these records are greater than 500m from the site. The closest record is 1.44km from the site in 1984. Records for common toad, common frog, palmate newt, and smooth newt were also returned.

4.6 Although there is suitable terrestrial habitat onsite for great crested newt and other amphibians, there is no standing water onsite, and it is unlikely that amphibians would commute through the site.

4.7 There are two ponds within 500m of the site (see Figure 4). However, these ponds are isolated from the site due to roads, and residential areas. It is likely that great crested newt, and other amphibians if present within these ponds, are using the habitat further south from the site.

4.8 There may be a negative impact on common amphibian species in their terrestrial phase if precautionary working methods are not followed during vegetation clearance.

Figure 4 – Red line indicates the site boundary, and yellow pins indicate the location of ponds within the vicinity of the site.

Otter

4.9 The local records search returned 28 records for otter in the vicinity of the site (see Table 5). Of the 28 records, two records were returned within 500m of the site. The closest record is for spraints found within a stream 300m southwest of the site in 2021.

4.10 There are no suitable habitats onsite that would support otters, it is not expected that otters would commute or forage.

4.11 There will not be a negative impact on otter as a result of the proposed development.

Badger

4.12 The local records search returned 10 records for badger in the vicinity of the site (see Table 5). All of the records were greater than 500m from site. The closest record is for a latrine found 730m from the site in 2017.

4.13 An area of woodland is present to the east of the site which could provide suitable habitat for badgers. However, it is small in size, not connected to any surrounding suitable habitats, and enclosed by metal fencing which prevents access.

4.14 There will not be a negative impact on badgers as a result of the proposed development.

Invertebrates

4.15 The local records search returned 6 records for 4 species of category 1 invertebrates within 500m of the site. Species include cinnabar, knot grass, wall, and white ermine. 109 records for 35 species were returned within the search greater than 500m from site.

4.1 Suitable habitats onsite for invertebrates include hedgerow, scrub, soft landscaping, and woodland.

4.2 The habitats onsite are common throughout the surrounding landscape, and it is not considered likely that the development will significantly impact local invertebrate populations.

4.3 There is unlikely to be a negative impact on invertebrate species as a result of the proposed development. As the habitat of importance to invertebrates will be retained, there is unlikely to be a negative impact as a result of the proposed development.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Wildwood Ecology was commissioned by Caerphilly County Borough Council (the client) to undertake an ecological impact assessment (EcIA) for bats and nesting birds at Llanfabon and Llancaeach Junior School Amalgamation.

5.2 The site is the subject of a planning application to amalgamate two schools (the existing infants already on site and the existing junior school on a different site) to form a primary school. The scheme involves the following: construction of a two-storey extension to house 7 classrooms plus ancillary support spaces; the existing twin demountable currently housing the nursery, to the south west of the site, is to be demolished; the existing infants school will be refurbished internally and will require some alterations to the roof to form the link corridor to the extension; and the area of waste/overgrown land to the north of the site will be developed into a car park, and during construction will likely be the site compound for the contractor.

Designated sites

5.3 Designated sites in the vicinity of the site (see Table 4) are sufficiently well separated so that no impacts on their designated features are anticipated as a result of the proposed development.

Protected species

5.4 Recommendations regarding protected species are shown in Table 11.

Table 11 – Recommendations.

Species	Recommendations
Bats	• No further surveys will be required as the dusk emergence surveys that were carried out did not identify any bats roosting within the building. Therefore, a European protected species licence from Natural Resources Wales will not be required for the works to proceed. • The vegetation to the west of the site should remain unlit. A lighting plan should be put in place to ensure there is no light spill. Suggestions for achieving this and for mitigating the light impact on bats are outlined in Guidance Note 08/18 - 'Bats and artificial lighting in the UK; Bats and the built environment series' (The Bat Conservation Trust, BCT, and the Institution of Lighting Professionals, ILP). These include: • All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used. • LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability. • A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component. • Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012). • Internal luminaires can be recessed (rather than choosing a pendant fitting) where installed in proximity to windows to reduce glare and light spill. • The use of specialist bollard or low-level downward directional luminaires to retain darkness above can be considered. However, this often comes at a cost of unacceptable glare, poor illumination efficiency, a high upward light component and poor facial recognition, and their use should only be as directed by a lighting professional. • Column heights should be carefully considered to minimise light spill. • Only luminaires with an upward light ratio of 0% and with good optical control should be used – See ILP Guidance for the Reduction of Obtrusive Light. • Luminaires should always be mounted on the horizontal, i.e., no upward tilt. • Any external security lighting should be set on motion-sensors and short (1min) timers. • As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. • A bat box should be installed on the building or on a suitable tree onsite to enhance roosting opportunities for bats within the area.
Nesting birds	• If buildings / habitats suitable for nesting birds are to be removed, then any building works / vegetation clearance will take place outside of the bird nesting season. In the event that clearance work has to be undertaken during the nesting season (generally from 1st March until 31st August, although birds are known to nest outside of these dates in suitable conditions), a nesting bird check will be required and must be carried out by a suitably qualified person. Any active nests identified should be protected until the young have fledged. Where a Schedule 1 species (as defined in the Wildlife and Countryside Act – http://www.jncc.gov.uk/page-3614 is involved, compensation for impacts, e.g., loss of nesting sites, should be devised and implemented. • A bird box should be installed on a suitable tree within the site to compensate for the loss of nesting habitat.
Amphibians and reptiles	Precautionary working methods should be followed during any vegetation clearance. This includes the following: • The vegetation clearance will be undertaken in a two staged cut through the use of handheld tools (e.g. handheld strimmers, brush cutters). • The first cut will be down to approximately 150mm. • The arisings will be carefully raked off and removed from site. • The vegetation can then be cut down to ground level. • The vegetation should be kept short for the duration of the works to ensure reptiles do not enter the site.

Caerphilly County Borough Council Llanfabon and Llancaeach Junior School Amalgamation
WWE22087 EcIA DRAFT Ecological Impact Assessment Report

Hedgehog	Precautionary working methods should be followed and will include the following: • Ensure all excavations are covered overnight to ensure no animals get trapped. If this is not possible, place a ramp type structure in the excavation to allow them to escape. • All chemicals, fuel, and materials are to be securely stored (locked cabinet/container) to prevent animal access. • A two-staged vegetation cut should be carried out (see amphibians and reptiles above).

Biodiversity enhancement

5.5 Local Authorities have a duty (known as the 'Biodiversity and resilience of ecosystems duty') under the Environment (Wales) Act 2016 to seek to maintain **and enhance** biodiversity in the exercise of their functions.

5.6 Where possible the existing onsite habitat will be retained to ensure that species are not adversely affected by the development. Native species of local provenance will be used for any new planting on the site to support The Action Plan for Pollinators in Wales, 2013 (http://gov.wales/docs/desh/publications/130723pollinator-action-plan-en.pdf).

5.7 Bird nesting boxes and bat roosting boxes (over and above that required for mitigation on this site) should be incorporated within any newly constructed buildings and boundary features. Bird and bat boxes could also be introduced to any woodland habitat. A range of types should be used in order to cover a variety of species. Many designs are available and we would initially recommend the following for this site:

- Bats – https://www.nhbs.com/beaumaris-woodstone-bat-box
- House Sparrow - http://www.nhbs.com/1sp_schwegler_sparrow_terrace_tefno_174850.html
- General open fronted - http://www.nhbs.com/2hw_schwegler_nest_box_tefno_177926.html (suitable for redstart, thrushes, flycatchers).

Overall conclusion

5.8 Providing that the recommendations outlined within this report are successfully implemented, it should be possible for the proposed development to proceed and for there to be no long-term impacts upon the key protected species present at the site.

This ecological report will remain valid for a period of 18 months from the date of the last survey – i.e. until February 2024. Further surveys may be required to update the site information if planning is not obtained, or works do not commence within that time period.

6 REFERENCES

Bat Conservation Trust and the Institution of Lighting Professionals (2018) Bats and artificial lighting in the UK; *Bats and the Built Environment* series (Guidance Note 08/18), The Bat Conservation Trust, London.

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

Collins, J. (ed.) (2016) Bat surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

Institute for Environmental Assessment (1995). Guidelines for Baseline Ecological Assessment. E & FN Spon, Hong Kong.

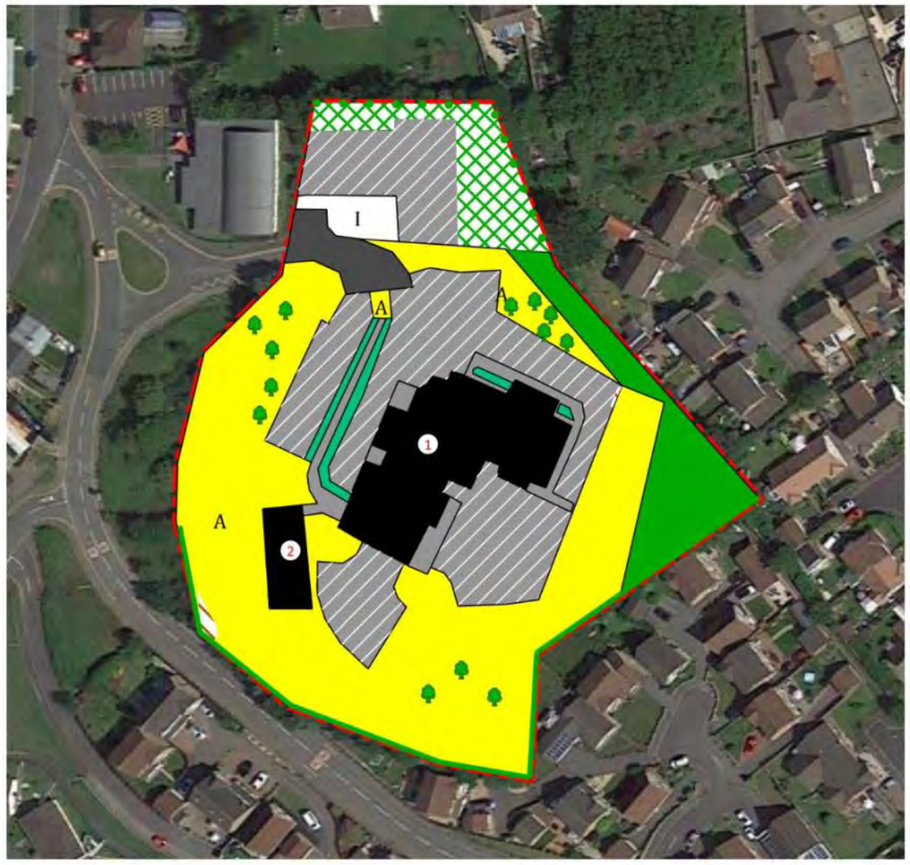
Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey; A technique for environmental audit. Reprinted by JNCC, Peterborough.

Mitchell-Jones, A.J, & McLeish, A.P. Ed., (2004) 3rd Edition Bat Workers' Manual. Joint Nature Conservation Committee, Peterborough.

Mitchell-Jones, A.J. (2004) Bat Mitigation Guidelines. Natural England, Peterborough.

Rowse E.G., Lewanzik D., Stone E.L., Harris S., Jones G. (2016) Dark Matters: The Effects of Artificial Lighting on Bats. In: Voigt C., Kingston T. (eds) Bats in the Anthropocene: Conservation of Bats in a Changing World. Springer, Cham

APPENDIX I: PEA PLAN



Target note	Description
1	School building that will be affected during the works.
2	Nursery building to be demolished.

Key

Site boundary

Habitat codes

A.1.1 Broad-leaved woodland, semi-natural

A.2.1 Scrub, dense/continuous

I B.4 Improved grassland

C.3.1 Tall ruderal

A J.1.2 Amenity grassland

J.3.6 Buildings

Soft landscaping

Hard standing

Road

Path

Trees

Broad-leaved scattered tree

Linear features

Intact hedgerow, native species-rich

Hedge with trees, native species-rich

APPENDIX II: SURVEY IMAGES

Figure 5 – Access road into the site.

Figure 6 – Car parking area at the west of the site.

Figure 7 – Well-managed amenity grassland at the east of the site.

Figure 8 – Scattered trees at the south east of the site.

Figure 9 – Native species-rich hedgerow at the east of the site.

Figure 10 – Areas of tall ruderal and scrub at the site of the site that may provide cover for reptiles.

Figure 11 - Hardstanding with tall ruderal edges at the east of the site.

Figure 12 - Hardstanding areas bounded by amenity grassland to the east of the site.

Figure 13 - Native species-rich hedgerow at the south of the site.

Figure 14 - Area of semi-improved grassland within the land at the northern area of the site.

Figure 15 - Hardstanding area to the north of the site, bounded by a hedge with trees.

Figure 16 - Scrub habitat surrounding the hardstanding areas to the north of the site.

Figure 17 – Main entrance to the school at the north western corner of the building.

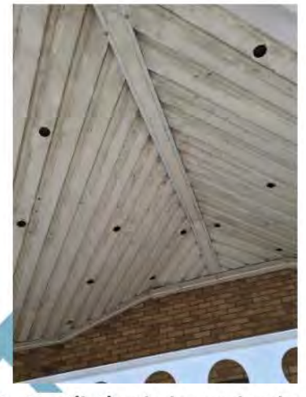


Figure 18 – Ventilation holes under the roof at the main entrance to the building.

Figure 19 – Western aspect of the building (area of roof to be affected by the works).

Figure 20 – Visible loft space at the west of the building.

Figure 21 – Gaps under metal fascias and soffits.

Figure 22 – Gap between the nursery building.

Figure 23 – Southern aspect of the nursery building.

Figure 24 – Gaps between flat roof and wall of the nursery.

APPENDIX III:ACTIVITY SURVEY PLAN

Figure 25 – Blue arrows indicate flight paths observed during the surveys, and yellow stars indicate the location of surveyors during the surveys.

APPENDIX IV: AREA OF ROOF THAT WILL BE AFFECTED

Figure 26 – The pink shading indicates the area of roof where alterations will be required in order to form a link to the new extension that will extend further west.

APPENDIX V: SPECIES LIST

To be submitted to the appropriate Local Records Centre

Site Name: Llanfabon and Llancaeach Junior School Amalgamation **Provided by:** Wildwood Ecology

Grid ref: ST 11043 95342 **Verified by:** Maddie Anderson

Common name	Scientific Name (if known)	Number	Comment
FLORA			
Alder	*Alnus glutinosa*		
Ash	*Fraxinus excelsior*		
Birch sp.	*Betula*		
Blackthorn	*Prunus spinosa*		
Bramble	*Rubus fruticosus*		
Broad leaved dock	*Rumex obtusifolius*		
Buddleia	*Buddleja*		
Cherry	*Prunus avium*		
Cleavers	*Galium aparine*		
Cocks foot	*Dactylis glomerata*		
Common self-heal	*Prunella vulgaris*		
Common yarrow	*Achillea millefolium*		
Creeping buttercup	*Ranunculus repens*		
Daisy	*Bellis perennis*		
Dandelion	*Taraxacum officinale*		
False oat grass	*Arrenatherum elatius*		
Field maple	*Acer campestre*		
Germander speedwell	*Veronica chamaedrys*		
Hawthorn	*Crataegus mongyna*		
Hazel	*Corylus avellana*		
Herb Robert	*Geranium robertianum*		
Horse chestnut	*Aesculus hippocastanum*		
Horsetail sp.	*Equisetum*		
Ivy	*Hedera helix*		
Meadow buttercup	*Ranunculus acris*		
Nettle	*Urtica dioicia*		
Oxeye daisy	*Leucanthemum vulgare*		
Ragwort	*Jacobaea vulgaris*		
Ribwort plantain	*Plantago lanceolata*		
Rosebay willowherb	*Chamaenerion angustifolium*		
Rough hawksbeard	*Crepis biennis*		
Smooth sumac	*Rhus glabra*		
Sycamore	*Acer pseudoplatanus*		
Vetch sp.	*Vicia*		

White clover	*Trifolium repens*		
Willow sp.	*Salix*		
Yorkshire fog	*Holcus lanatus*		
FAUNA			
Blackbird	*Turdus merula*		Observed during PEA/PRA.
Carrion crow	*Corvus corone*		Observed during bat surveys.
Common pipistrelle	*Pipistrellus pipistreulls*		Observed during bat surveys.
Green woodpecker	*Picus viridis*		Observed during bat surveys.
House sparrow	*Passer domesticus*		Observed during bat surveys.
Jackdaw	*Corvus monedula*		Observed during bat surveys.
Noctule	*Nyctalus noctula*		Observed during bat surveys.
Robin	*Erithacus rubecula*		Observed during PEA/PRA.
Soprano pipistrelle	*Pipistrellus pygmaeus*		Observed during bat surveys.
Sparrowhawk	*Accipiter nisus*		Observed during bat surveys.
Swallow	*Hirundinidae*		Observed during bat surveys.
Swift	*Apodidae*		Observed during bat surveys.
Wood Pigeon	*Columba palumbus*		Observed during PEA/PRA.
Wren	*Troglodytes troglodytes*		Observed during bat surveys.

APPENDIX VI:PLANNING POLICY AND LEGISLATION

The following local and national planning policy and both primary and European legislation relating to nature conservation and biodiversity status are considered of relevance to the current proposal.

Planning and biodiversity

Local Authorities have a requirement to consider biodiversity and geological conservation issues when determining planning applications under the following planning policies.

Planning Policy Wales (2021) and Technical Advice Note 5 (2009)

Planning Policy Wales (Edition 11, February 2021) sets out the land use planning policies of the Welsh Government, integrating fully with the Environment (Wales) Act 2016. The advice contained within Planning Policy Wales (PPW) is supplemented for some subjects by Technical Advice Notes (TAN's).

TAN 5 (Welsh Government, 2009) specifically provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. The TAN provides advice for local planning authorities on the key principles of positive planning for nature conservation; nature conservation and Local Development Plans; nature conservation in development management procedures; development affecting protected internationally and nationally designated sites and habitats; and development affecting protected and priority habitats and species.

Under Section 2.4 within the TAN 5, 'when deciding planning applications that may affect nature conservation local planning authorities should':

- Pay particular attention to the principles of sustainable development, including respect for environmental limits, applying the precautionary principle, using scientific knowledge to aid decision making and taking account of the full range of costs and benefits in a long term perspective;
- Contribute to the protection and improvement of the environment, so as to improve the quality of life and protect local and global ecosystems, seeking to avoid irreversible harmful effects on the natural environment;
- Promote the conservation and enhancement of statutorily designated areas and undeveloped coast;
- Ensure that appropriate weight is attached to designated sites of international, national and local importance;
- Protect wildlife and natural features in the wider environment, with appropriate weight attached to priority habitats and species in Biodiversity Action Plans;
- Ensure that all material considerations are taken into account and decisions are informed by adequate information about the potential effects of development on nature conservation;
- Ensure that the range and population of protected species is sustained;
- Adopt a step-wise approach to avoid harm to nature conservation, minimise unavoidable harm by mitigation measures, offset residual harm by compensation measures and look for new opportunities to enhance nature conservation; where there may be significant harmful effects local planning authorities will need to be satisfied that any reasonable alternative sites that would result in less or no harm have been fully considered;

Legislation and biodiversity

Certain species of animals and plants found in the wild in the UK are legally protected from being harmed or disturbed. These species are listed in the Wildlife and Countryside Act 1981 (as amended) or are named as European Protected Species (EPS) in the Conservation of Habitats and Species Regulations 2017 (as amended). These two main pieces of legislation have been consulted when writing this report and are therefore described in detail within this section.

Other relevant legislation and policy documents that have been consulted include – The Environment (Wales) Act 2016; The Countryside and Rights of Way Act 2000; The Hedgerow Regulations 1997; Biodiversity Action Plans, both UK-wide (UKBAP) and Local plans (LBAPs), and The National Planning Policy Framework (NPPF).

There is also legislation that legally protects certain animals - for example, the Protection of Badgers Act (1992) protects badgers and their setts, and the Deer Act (1991) places restrictions on actions that can be taken against deer species.

Environment (Wales) Act 2016

Section 6 of the Act places a duty on public authorities to 'seek to maintain and enhance biodiversity' so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to 'promote the resilience of ecosystems'. The duty replaces the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, and applies to those authorities that fell within the previous duty.

Public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience.

Section 7 replaces the duty in section 42 of the NERC Act 2006. The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales.

The Welsh Ministers must also take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and encourage others to take such steps.

Wildlife & Countryside Act 1981 (as amended)

The Wildlife & Countryside Act 1981 (as amended) [WCA] is the primary legislation for England and Wales for the protection of flora, fauna and the countryside. Part I within the Act deals with the protection of wildlife.

Most European Protected Species offences are now covered under the Conservation of Habitats and Species Regulations (see below), but some 'intentional' acts are still covered under the WCA, such as obstructing access to a bat roost.

The WCA prohibits the release to the wild of non-native animal species listed on Schedule 9 (e.g. Signal Crayfish and American Mink). It also prohibits planting in the wild of plants listed in Schedule 9 (e.g. Japanese Knotweed and Rhododendron ponticum) or otherwise deliberately causing them to grow in the wild. This is to prevent the release of invasive non-native species that could threaten our native wildlife.

The provisions relating to animals in the Act only apply to 'wild animals'; these are defined as those that are living wild or were living wild before being captured or killed. It does not apply to captive bred animals being held in captivity.

There are 'defences' provided by the WCA. These are cases where acts that would otherwise be prohibited by the legislation are permitted, such as the incidental result of a lawful operation which could not be reasonable avoided, or actions within the living areas of a dwelling house.

Licensing: certain prohibited actions under the Wildlife and Countryside Act may be undertaken under licence by the proper authority. For example scientific study that requires capturing or disturbing protected animals can be allowed by obtaining a licence – e.g. bat surveys.

Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) (which are the principal means by which the EC Habitats Directive is transposed in England and Wales) update the legislation and consolidate all the many amendments which have been made to the Regulations since they were first made in 1994.

These regulations provide for the:

- protection of European Protected Species [EPS] (animals and plants listed in Annex IV Habitats Directive which are resident in the wild in Great Britain) including bats, dormice, great crested newts, and otters;
- designation and protection of domestic and European Sites - e.g. Site of Special Scientific Interest [SSSI] and Special Area of Conservation [SAC]; and
- adaptation of planning controls for the protection of such sites and species.

Public bodies (including the Local Planning Authority) have a duty to have regard to the requirements of the Habitats Directive in exercising their function – i.e. when determining a planning application.

There is no defence that an act was the incidental and unavoidable result of a lawful activity.

Licensing: it is possible for actions which would otherwise be an offence under the Regulations to be undertaken under licence issued by the proper authority. For example, where a European Protected Species has been identified and the development risks deliberately affecting an EPS, then a 'development licence' may be required.

Species protection

The following protected species information is relevant to this report. Legislation is only discussed in relation to planning and development; other offences may exist.

Bats

All British bats are classed as European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017 (as amended), making it an offence inter alia to:

- Deliberately kill, injure or capture a bat;
- Deliberately disturb bats;
- Damage or destroy a breeding site or resting place of a bat.

In addition, all British bats are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:

- Obstruct access to any structure or place which any bat uses for shelter or protection; or
- Disturb any bat while occupying a structure or place which it uses for that purpose.

If proposed development work is likely to destroy or disturb bats or their roosts, then a licence will need to be obtained from Natural Resources Wales, which would be subject to appropriate measures to safeguard bats.

Birds

In the UK, the provisions of the Birds Directive are implemented through the Wildlife & Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2017 (as amended). All wild birds, their nests and eggs are protected it an offence to:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any such bird whilst it is in use or being built; or
- take or destroying an egg of any such wild bird.

The law covers all species of wild birds including common, pest or opportunistic species.

Special protection against disturbance during the breeding season is also afforded to those species listed on Schedule 1 of the Act.