

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)



**Replacement new build of Bishop Headley
RC Highschool
Blessed Carlo Acutis Catholic School,
Merthyr Tydfil**

Rev 1

Planning Conditions CEMP
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1.0 INTRODUCTION

Willmott Dixon (the Applicant) is making a planning application for the construction of the new Blessed Carlo Acutis Catholic School on behalf of Merthyr Tydfil County Borough Council.

The project will initially involve formation of a temporary car park, demolition of the existing school and construction of a new 9000m² (approx.) through school catering for ages 3-16. The school will comprise of a 2-storey new primary school with nursery provision as well as a 3-storey secondary school. The school will be linked by shared facilities including canteen, hall and office space.

The project is to be delivered on an operational school site and due to the dispersed nature of the various development across the site will be delivered in a phased manner,

Construction is anticipated to start in November 2023 with the school taking occupation of the new building September 2026.

The site is located in the residential area of Penybryn to the north of Merthyr Town Centre. Due to the nature and size of the site it neighbours a range of properties at various stages during each phase of the programme. Therefore, consideration will need to be given to minimising the impact of the project on local residents

There is an open watercourse skirting the eastern boundary of phase 2 and in phase 1 there are areas of knotweed that will need treating or translocating.

Purpose and Scope of the Outline CEMP

Purpose

The aim of this CEMP is to provide an overarching and strategic framework for the management of environmental effects and the implementation of measures prior to, and during, the construction phase of the Proposed Development. This framework will be implemented by the construction contractor appointed to the project, to minimise and mitigate actual and potential environmental effects associated with the construction of the Proposed Development.

Prior to the commencement of any activities on site, this CEMP will be updated into a Final CEMP by the appointed contractor pursuant to any planning condition and will be agreed with the LA planning department (MTCBC) and the relevant SABS authority.

Willmott Dixon and all their appointed supply chain partners will be required to comply with the requirements of the approved Final CEMP.

This document is considered a 'living' document. As such, the document will be subject to regular reviews and updates to reflect the actual activities associated with the demolition and construction works, particularly where they change throughout the works. This will be the responsibility of Willmott Dixon.

Scope

This CEMP details the specific obligations on the Contractor when undertaking the works; to provide the specific measures to be used during the construction and associated enabling and infrastructure works; and the specific details of the control measures for each environmental issue.

Environmental Elements

The following Environmental Elements have been included within this CEMP:

- ✓ Transport;
- ✓ Waste.
- ✓ Noise and Vibration;
- ✓ Air Quality
- ✓ Ground conditions;
- ✓ Ecology;
- ✓ Surface and Groundwater;

Project Specific Environmental Controls

Customer Issued Construction Targets

- The contractor will be required to measure its performance against the following minimum Environmental Targets for Construction.
- Site to register with the Considerate Constructors Scheme and target minimum score of 35 out of 50.
- Target zero pollution incidents by following this plan.
- Measure Energy use as follows:
 - Fuel in litres bottled Gas/LPG (in Kg)
 - Target maximum CO₂ emissions of 10,000 Kg /£1 million.
 - Target maximum water use of 70 m³ /£1 million.
 - Target maximum Construction (skip) waste production 100m³ /£1 million (31 tonnes/£1 million)
- Waste to be segregated for recycling on site.
- Target to divert at least 95 % of all waste removed from site away from landfill.
- All Timber is to be from sustainable and legal sources, such as FSC, PEFC or Gib

2.THE FINAL CEMP

Principal Contractor Requirements

In this section Willmott Dixon will identify how compliance with the requirements of Merthyr Tydfil County Borough Council Replacement Local Development Plan will be achieved.

There is a large body of environmental and safety requirements relevant to construction projects, in the form of primary legislation (Acts of Parliament), secondary legislation (Statutory Instruments, including Regulations and Orders) and statutory guidance and Codes of Practice. The Contractor will be responsible for identifying new legislation and regulation and complying with all prevailing legislation at the time of construction including any requirements under Health and Safety regulations.

In addition to the environmental requirements described, the Contractor will be responsible for obtaining licences from the Merthyr Tydfil County Borough Council before erecting any scaffolding, hoardings, gantries, temporary crossings or fences or depositing a skip on the highway.

Document Control

The CEMP will be held and maintained electronically, with the latest revisions identified with a document reference.

Site Management – Roles and Responsibilities

An outline of the anticipated key roles and responsibilities are listed overleaf in Table 1.

Table 1 Summary of Anticipated Key Roles and Responsibilities relating to the Implementation of the CEMP

Role	Key Responsibilities
Merthyr Tydfil County Borough Council (and any representatives)	Responsibility for appointment / allocation of the Principal Contractor, Project Manager and Environmental Manager.
Principal Contractor (Willmott Dixon)	Responsibility for the enabling and construction activities and holds overall responsibility for the activities on site and implementation of the Final CEMP. Responsibilities include: ▪ Ensuring that the works are carried out in accordance with the Final CEMP and contract documentation, including the implementation of mitigation and management measures, environmental monitoring, environmental auditing, and other matters covered in this CEMP; ▪ Ensuring the appointed contractors / subcontractors are appropriately qualified and competent; ▪ Ensure environmental awareness training for all workers, including an induction for all site workers / contractors which includes environmental elements pertaining to the implementation of the Final CEMP; ▪ Monitor the performance of contractors / sub-contractors and provide direction as necessary; ▪ Liaise regularly with the Environmental Manager; ▪ Complete a quarterly audit of the Final CEMP and report findings, with follow up on identified actions as required; and ▪ Undertaking corrective actions in the event of breaches of the CEMP or applicable environmental legislation. ▪ Ensuring that resources are appropriately allocated to allow for the inclusion of the actions included in the Final CEMP for the duration of the project. ▪ Responsible for the actions of management of contractors / sub-contractors associated with the enabling and construction works and ensuring that they appropriately comply with the requirements of the Final CEMP and applicable environmental legislation.
Contractors Environmental Manager	Co-ordinate monitoring and reporting of the Final CEMP implementation, through liaison with the Principal Contractor and other parties as appropriate, to ensure that the works are implemented in accord with the commitments in the Final CEMP. Responsibilities include: ▪ Undertake environmental monitoring and reporting as specified in the Final CEMP; ▪ Undertaking environmental audits in conjunction with the Principal Contractor as specified in the Final CEMP. Reporting of audit findings is to occur on a quarterly basis. ▪ Regularly review the Final CEMP to ensure it accurately reflects the enabling and construction works occurring on site, at a frequency of no less than six months (unless significant changes to the enabling and construction methodology occurs); ▪ Ensure that all relevant environmental consents, licences, permits etc. are in place prior to the commencement of the relevant works. Ensure the requirements of these permits are included in the Final CEMP and are adhered to; ▪ Act as the first point of contact for environmental issues associated with the Proposed Development; ▪ Undertake environmental training (including toolbox talks) as required, to ensure that enabling and construction staff are aware of the environmental

	requirements; ▪ Ensure that the objectives of the Final CEMP are being achieved and that are not contrary to any relevant legal requirements; ▪ Engage with the Principal Contractor on environmental issues identified during the enabling and construction works, and issue Corrective Notices where required. Follow-up on such notices is to be undertaken in conjunction with the Principal Contractor to ensure non-compliances have been appropriately rectified.
Client Appointed Environmental Consultant	Advise Client on environmental related matters as requested.
Contractor(s) / Sub- Contractor(s)	▪ Work to agreed plans, methods and procedures to minimise environmental impacts; ▪ Commit to undertaking works associated with the Project in accordance with the Final CEMP; ▪ Undertake the site induction training (which is to include an environmental management element); ▪ Report all environmental incidents immediately to their line manager; and ▪ Monitor the workplace for potential environmental risks and alert their line manager if any are observed.

Key Contacts

The contractor will provide a contacts directory for the construction phase

Table 2 Key Project Contacts

Role	Name	Contact Details
Merthyr Tydfil County Borough Council	Chris Jones	Chris.Jones3@merthyr.gov.uk 07725 938440
Principal Construction Contractor	Willmott Dixon Construction	Rhodri.Bowen@willmott Dixon.co.uk 07970974978
Structural Engineer	Cambrian	k.house@cambria.co.uk
Environmental Consultant	Ecological Services Ltd	ash@ecologicalservices.wales
Operations Manager	Rhodri Bowen	Rhodri.Bowen@willmott Dixon.co.uk 07970974978
Senior Build Manager	Martin James	martin.james@willmott Dixon.co.uk 07976380318
Environmental Manager	Lauren Higgins	lauren.higgins@willmott Dixon.co.uk
Health and Safety Officer	Dave Randall	Dave.randall@willmott Dixon.co.uk
Community & Social Value Manager	Nicola Millard	nicola.millard@willmott Dixon.co.uk

3.0 FRAMEWORK AND ADMINISTRATION

Public Liaison

Willmott Dixon shall provide Merthyr Tydfil County Borough Council Replacement Local Development Team with a full programme of key activities for the development before it starts.

The specific measures to be implemented by the Contractor will include:

Willmott Dixon shall liaise with Merthyr Tydfil County Borough Council Replacement Local Development Team on a regular basis, agreeing routine arrangements for each site's activities and ensuring compliance.

Willmott Dixon will be responsible for establishing and maintaining contact with Merthyr Tydfil County Borough Council and local residents; keeping them informed of construction matters likely to affect them.

This liaison will include the regular and frequent distribution of Newsletters and attendance at meetings at the request of Merthyr Tydfil County Borough Council with representatives of local businesses and residents' groups. (See under community relations below).

Willmott Dixon will provide an information and reporting telephone 'Hot Line' staffed throughout working hours. Information on this facility shall be prominently displayed on site hoardings. Willmott Dixon's nominated persons will attend monthly reviews with Merthyr Tydfil County Borough Council Replacement Local Development Team, or otherwise as requested.

Willmott Dixon will facilitate Merthyr Tydfil County Borough Council Replacement Local Development Team or their representatives to undertake regular planned inspections of the site to check compliance and associated records.

Willmott Dixon will provide Merthyr Tydfil County Borough Council with full programmes, providing details on the nature and timing of the main site activities. The contents of these programmes are specified in the following section.

Community Liaison

Contact with neighbours and the general public throughout the construction programme will be proactively maintained, with regular update meetings and the issuing of a brief news sheet on progress. Update sheets will be maintained on site hoardings.

Willmott Dixon will nominate community relations personnel, who will be focussed on engaging with the local community. Willmott Dixon will ensure that occupiers of nearby properties and residents are informed in advance of works taking place, including the estimated duration. Willmott Dixon will inform local businesses and residents likely to be affected by such activities at least 14 days prior to undertaking the works, as well as applying for the appropriate permits and licences, e.g. vehicle crossovers or parking bay suspension.

Neighbour and Public Relations Strategy

To successfully develop and implement a 'Neighbour and Public Relations Strategy', the following actions will be undertaken:

Initial Contact: Once full planning permission has been obtained and contractors have been appointed, formal contact will be established with the nearest neighbours and those who could potentially be

affected by the development and construction works; and

Contact during Works Period: A single point of contact for neighbour and public relations will be established, with a senior member of the project staff nominated for the role. Contact details for this single point of contact will be displayed on the site hoarding. Outside normal working hours, site security will act as the main point of contact via a dedicated phone number. Security will alert the staff contact if necessary (available 24 hours). Should there be any complaints, these will be logged, fully investigated and reported to the relevant department within Merthyr Tydfil County Borough Council as soon as possible. The complainant will be informed as to what action has been taken.

Willmott Dixon will monitor and report through online portal - MiProject

Emergency Incident Communication

In the case of work required in response to an emergency, Merthyr Tydfil County Borough Council and all neighbours will be advised as soon as reasonably practicable that emergency work is taking place. Potentially affected occupiers will also be notified of the 'hotline' number, which will operate during working hours.

Construction Staff and Training

All site construction staff to be made aware of the requirements of the CEMP and will be made responsible for its implementation. Regular training is to be implemented where deemed appropriate, and in response to non-compliance incidents.

Health and Safety

The Principal Contractor will prepare and implement a project Specific Health and Safety Plan.

This Plan is to be provided to and agreed with Merthyr Tydfil County Borough Council (and other relevant parties as required)

Environmental Risk Assessment Matrix & Aspects and Impacts

Environmental risk is assessed using the Assessing Risk Profile procedure and completing MiRisk. Individual environmental aspects and their significance are identified, along with appropriate mitigating actions. Those activities that remain after preconstruction mitigation, and that have a HIGH residual risk, should be discussed further and appropriate management should be considered, with specific RAMS for these activities to cover health, safety and environmental impact mitigations. The MiRisk Risk initial review summary for the start of the project may be held in this section or shown on request by the project team to stakeholder on request.

4.0 PROJECT OUTLINE

The Site

The proposed works are located at Blessed Carlo Acutis Catholic School, Gwaunfarren Road, Penydarren, Merthyr Tydfil.

Overview of the Proposed Development

The building will be comprised of a structural steel frame that bears of concrete pad foundations. The site falls from north to south therefore there will be a significant earthworks exercise in the early stages of the programme which will include the construction of a 60l/m 4m high RC retaining wall.

The façade finish will be a SFS inner skin with brickwork and cladding finish to each elevation of the façade. This will be supplemented with punched windows/curtain walling. The slabs and roof will be composite deck with a hot melt inverted roof system. Internal partitions will be drywall/plasterboard. Externally there is a range of hard and soft landscaping. Intertwined in that will be a sustainable drainage system with a range of different features to comply with SAB/WAG requirements. New planting is incorporated into the design.

Project Programme

The overall construction programme is expected to be of the order of 167 weeks. An indicative summary programme appears below for guidance only.

Workstage	Indicative Program
Overall duration:	167 calendar weeks
Main School building:	124 calendar weeks (Section 1)
Sports Hall & External works:	43 calendar weeks (Section 2)
SOS:	27th November 2023
Handover Main building:	13th April 2026
Handover externals:	4th February 2027

Willmott Dixon is to provide the Merthyr Tydfil County Borough Council with a full programme. This will include:

- ✓ Detailed method statement for works and activities affecting highway access
- ✓ Detailed method statements and Merthyr Tydfil County Borough Council approvals for alterations to the highway
- ✓ Detailed method statements for construction and civil engineering in line with the principle identified in this report
- ✓ Details of site traffic movements showing the projected number of vehicles; what is being delivered, when peaks in activities occur, traffic marshalling arrangements.
- ✓ Routes to site for deliveries.
- ✓ Willmott Dixon will agree detailed schedules of work with the Inspectors acting on behalf of Merthyr Tydfil County Borough Council prior to commencement of development to assess the potential for nuisance.

5.0 DEMOLITION AND CONSTRUCTION OVERVIEW

The project will initially involve formation of a temporary car park, demolition of the existing school and construction of a new 9000m² (approx.) through school catering for ages 3-16. The school will comprise of a 2-storey new primary school with nursery provision as well as a 3-storey secondary school. The school will be linked by shared facilities including canteen, hall and office space.

The Proposal

The development at Blessed Carlo Acutis Catholic school is for the replacement new build which will comprise of 525 full time primary school places, 63 full time equivalent nursery places and 600 secondary school places.

The project is a split site with the northern portion consisting of the main teaching accommodation block which is set out in an L shape across multiple levels to mirror the challenging existing site topography. The southern portion of the site consists of the refurbishment and extension of an existing 4 court sports hall, main school carpark and 3G / sports pitch provision.

CEMP for all the works covering the following key activities:

- Pre-construction Planning
- Site establishment
- Demolition of existing school
- Construction of new through school
- Associated hard and soft landscaping.

Pre-construction Planning

Prior to commencement of works on site a period of pre- construction planning and activities are required to ensure works can commence: These will include but are not restricted to

Production of a detailed CEMP including:

- Neighbour liaison before the commencement on site to explain the nature of works.
- Liaison with the project teams of potentially ongoing local developments to agree shared and combined logistics issues.
- Further site investigations to inform the design.

Site Establishment / Construction

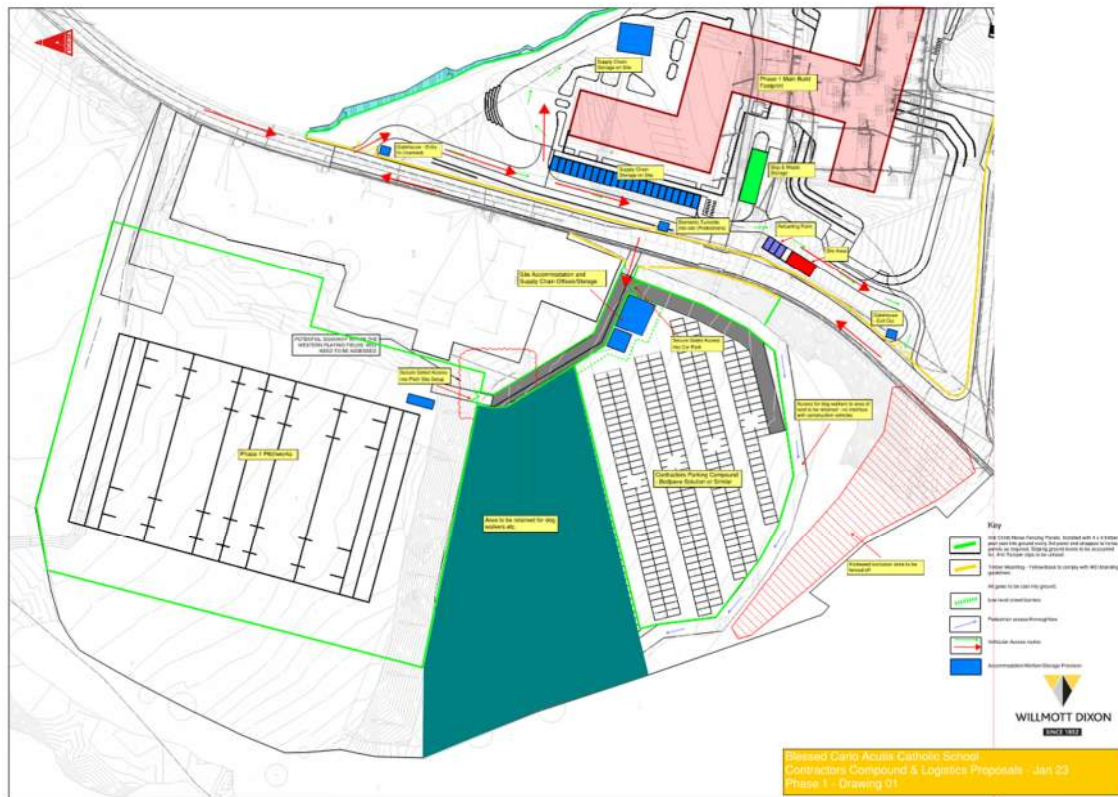
The first site activity will be to establish the areas as a construction site before works commence, securing the site with a mix of hoarding, Heras type fencing along with vehicle and pedestrian gates. Initial works will involve the formation of the contractors compound and carparking off Galon Uchaf Road to provide welfare facilities for our site team and Supply Chain Partners and to remove the risk of parking along nearby roads, in addition to these works we are looking to carry out the highways works along Gwaunfarran road to create the new bus bays.

The construction site area will be made safe and secure prior to works commencing, with the use of secure and well maintained, 2.4m high fencing and screening where required.

Temporary hoardings or Heras fences will be provided on short term boundaries for highway works. Secure access points with wheel cleaning facilities (if required) will be established at the site access and egress gate. A pedestrian access point will be located close to the main vehicular access gates with separate pedestrian gate and footpath provided.

All vehicles entering and leaving the site will be controlled by a dedicated gateman. Appropriate safety/warning signage will be placed to warn and direct persons accessing or passing the site of the dedicated site entrances – signage will also be placed in advance of the entrance to ensure delivery vehicles are directed to the appropriate

A designated works entrance and exit off Galon Uchaf Road will service the construction site for the duration of the project. As the works progress we will be looking to introduce a one way system for all vehicles on site. At all time vehicles will leave the site forward facing or have designated trained highway banksman.



The construction site office and associated welfare facilities for the workforce will be in temporary cabins inside the construction boundary fence off Galon Uchaf Road

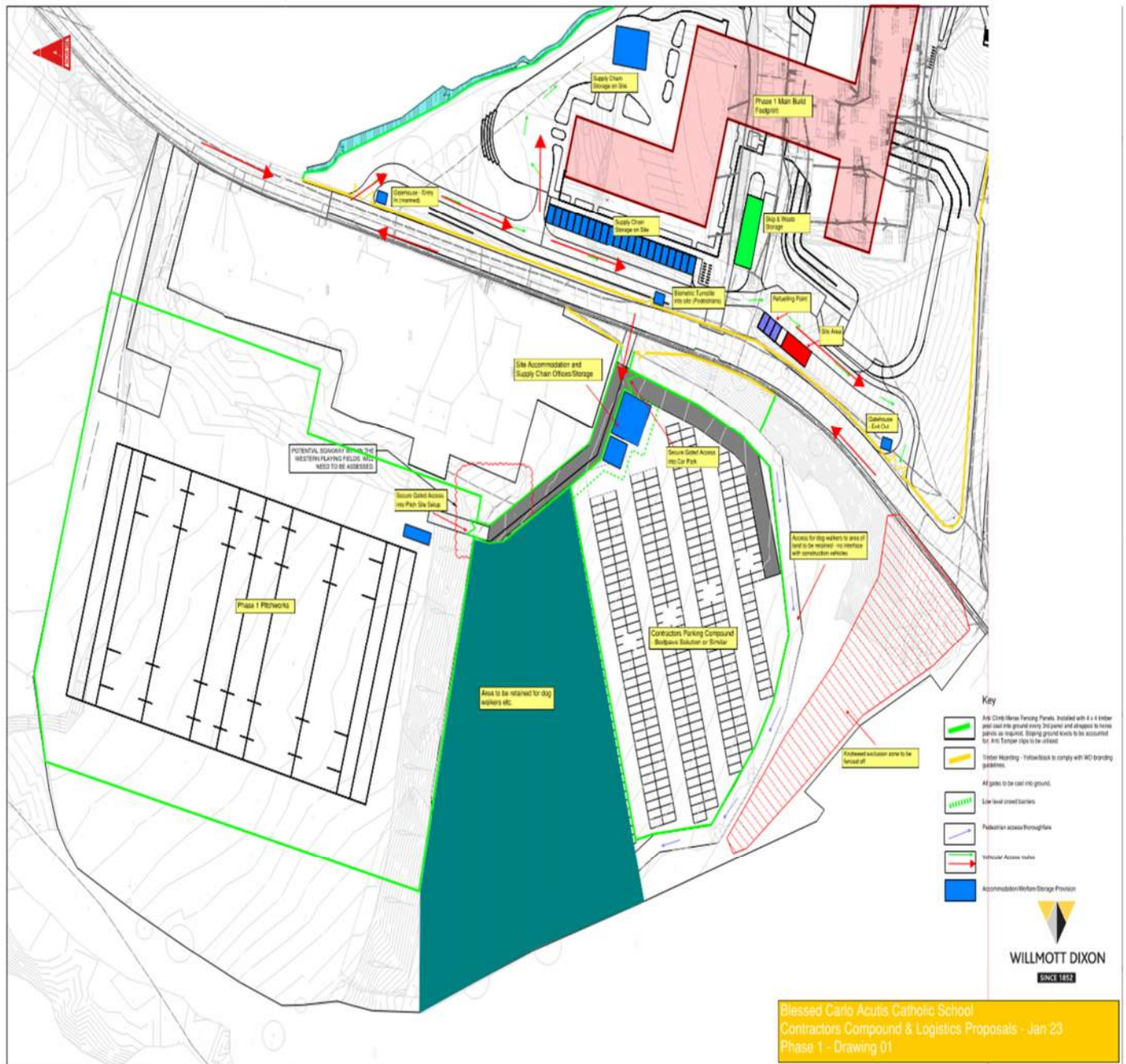
Willmott Dixon shall ensure artificial lighting is appropriately positioned by ensuring any floodlights are angled downwards and the lighting design for the construction site ensures that lights do not shine directly into adjacent properties. All lighting, except emergency egress lighting will be controlled with timers to ensure that the flood lighting is turned off when not required after site hours, except for localised areas to provide safe access by security personnel.

Specific Site Establishment activities will include:

- ✓ Installation of new temporary site vehicle access from Galon Uchaf Road and Gwaunfarren Road to afford direct access for heavy site construction vehicles from the highway onto the site.
- ✓ Establishment of site security provisions to ensure that the site is protected against unauthorised or unlawful entry and potential theft from site.
- ✓ Wheel cleaning facilities (if required) will be established at the site access and egress gate.
- ✓ Fencing will be 2.4m high, with clear pedestrian warning signs and the required notices of --Contractors Contact details. Lighting to be provided as required for pedestrians
- ✓ Vehicle and pedestrian access to the works will be via separate entrances controlled by fully trained gatemen and traffic marshals.
- ✓ Installation of site temporary electrics, lighting, water and fire alarms. Where possible the site will operate from connections to the permanent utility supplies rather than generators.
- ✓ Establish construction site office and associated welfare facilities for the workforce in temporary cabins located inside the construction boundary hoardings.

- ✓ Establish safe means of access around the site perimeter for pedestrians using dedicated footpaths.

Site Set Up & Security

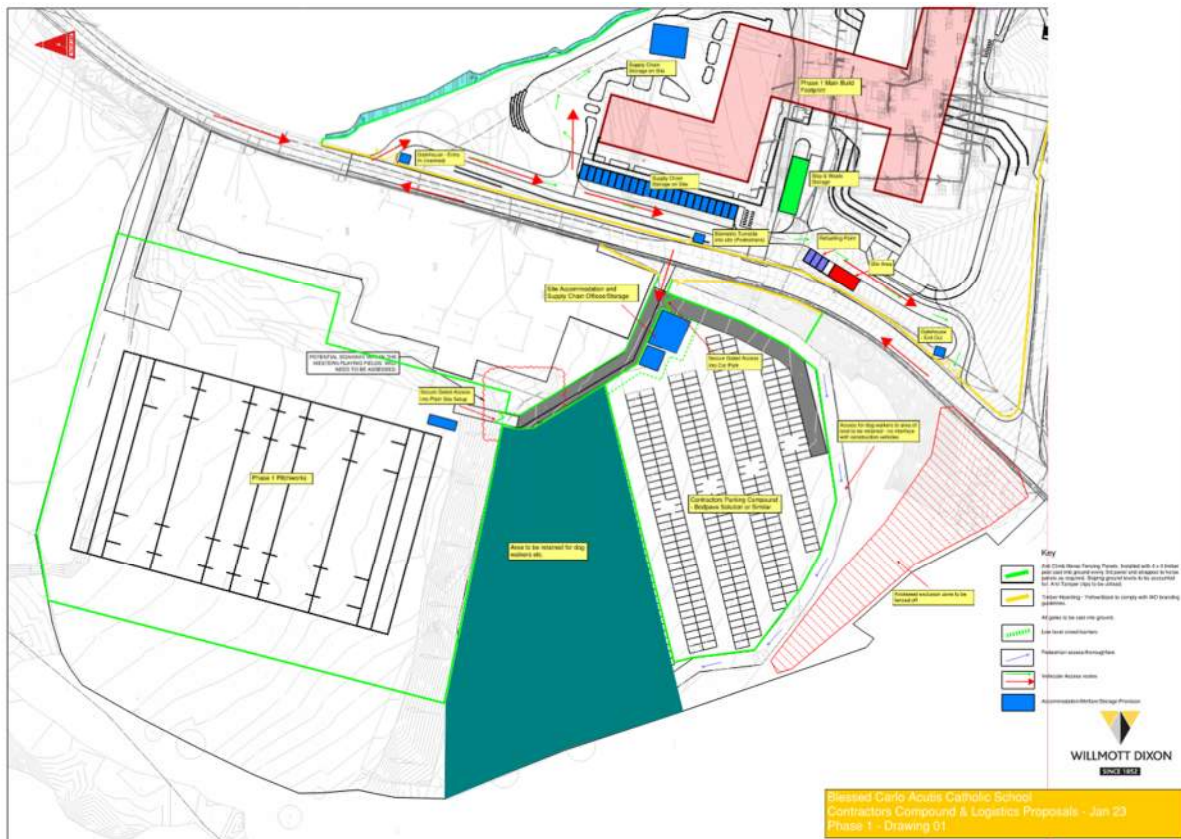


The site will be secured with a combination of heras and hoarding along with secured pedestrian and vehicle gates, with access gates being monitored by a gateman.

CCTV System will be installed for the duration of the project which will be linked to a manned security centre with the use of PIR's all activations will be monitored and reported to site team.

Public walkway to be maintained during works for dogwalkers to access the Greeny and adjoining fields.

Segregation



With the site being secured there will be no unauthorised access from the general public.

Site operatives are to utilise the dedicated pedestrian gates rather than use the vehicle gates.

Site operatives are to be informed through site inductions and updates of the designated pedestrian routes on a regular basis as the site progresses.

Site Establishment

There will be ample room for site accommodation to be erected inside the site boundary without interfering with new construction.

Demolition

Demolition will be carried out by Willmott Dixon SCP's following the asbestos removal works, it is assumed all services isolations, suitable termination and contamination has been dealt with by MTCBC.

New Building

Construction of the new teaching block can commence with the minimum of enabling works and once demolition works have been completed.

On completion of asbestos removal works then demolition the substructure works will commence. The structure of the new building will be steel framed, supported on pad and ring beam foundations.

The steel frame erection works will be carried out using a mobile /crane for steel erection, with concrete elements cast using mobile pumps and ready mixed concrete deliveries.

External façade works is a combination of masonry and cladding and will be constructed using traditional scaffold and/or MEWPS depending on the elevation and façade treatment.

Once watertight the internal fitting out will proceed to include mechanical, electrical and internal partitions works.

Close Out, Landscaping and Other External Works

Hard and soft landscaping will be programmed to suit the sequence of occupation.

6.0 THE CONSTRUCTION SITE

This section outlines the requirements relating to site management practices, ranging from the location of accommodation and equipment to the operation of equipment on site. It outlines procedures that should be implemented during site operations. These relate to working hours, site layout & appearance, and good housekeeping.

Representatives from the Willmott Dixon and Merthyr Tydfil County Borough Council should regularly inspect the construction site to ensure that these procedures are followed.

The specific measures to be implemented by the Contractors will include:

6.1 Working hours

Working Hours will be as directed by the Planning Consent (Condition 15) and are as follows:

Construction Hours:

- 07:30 to 18:00hrs Monday to Friday (no noisy construction activities before 08:00hrs) and
- 07:30hrs to 14:00hrs on Saturday.
- No work is to be carried out on Sundays or Bank Holidays. These to be reviewed on receipt of planning conditions.

Site Delivery Times:

- 09:00 to 15:00 and 16:00 to 18:00 Monday to Friday
- 08:00 and 14:00 Saturday
- Delivery Restrictions to be formalised with school. No deliveries between the hours of 08:00 & 08:30 and 14:45 and 15:30 reducing traffic and congestion.

Local Authority's Environmental Health Officer informed of all upcoming activities that may impact on the local residents. The Willmott Dixon is to advise the Local Authority's Environmental Health Officer in advance of any construction activities that may happen outside the site working hours noted above for example, slab pours where operatives might work late to finish the slab finish.

6.2 Good housekeeping

The Contractors will:

- ensure considerate site behaviour of the Contractors' staff;
- ensure the noise from lorry reversing alarms and the like are kept to minimum levels;
- prohibit open fires;
- ensure that appropriate provisions for dust control and road cleanliness are implemented;
- remove rubbish at frequent intervals, leaving the site clean and tidy;
- maintain toilet facilities and other welfare facilities for its staff;
- remove food waste;
- prevent vermin and other infestations; and
- undertake all loading and unloading of vehicles inside the secure boundary.

6.3 Public information

The site gate or hoardings will display all necessary health & safety material, along with contact details for members of the site team.

6.4 Security

The Contractor will ensure that the site is secure and will prevent unauthorised entry to or exit from the site. Site gates will be closed and locked when there is no site presence.

Alarms will incorporate an appropriate cut-out period. Access and egress will be via controlled security gates.

Monitored CCTV will be utilised during the construction works

6.5 Hoardings, site layout and facilities

The construction site will be completely secure to deter public access. It is intended to provide protection from noise and dust through the erection of encapsulating scaffolds, climbing screens and physical barriers as appropriate to the task.

Site welfare arrangements will be established inside the site boundaries, together with a site office space.

6.6 Emergency planning and response

The Contractor will develop a plan for emergencies to incorporate:

- Emergency procedures including emergency pollution control to enable a quick response.
- Emergency phone numbers and the method of notifying Merthyr Tydfil County Borough Council and statutory authorities. Contact numbers for the key staff of the Contractor will also be included.
- Willmott Dixon will display a 'contact board' on the hoarding identifying key personnel with contact addresses and telephone numbers, so that members of the public know who to contact in the event of a report or query.
- Site Fire plan and management controls to prevent fires.
- A plan to reduce fire risk and potential fire load during construction, operation and subsequently during maintenance or repair. The project will comply with any third- party requirements as may be appropriate.

Willmott Dixon will monitor and report through online portal - MiProject

6.7 Considerate Constructors Scheme

The site will be registered with the 'Considerate Constructors Scheme' and target minimum score of 40 out of 50. The Considerate Constructors Scheme (CCS) is a national initiative, set up by the construction industry, to improve its image. This project will be registered with CCS and will be independently monitored to assess the contractors performance against the five point Code of Considerate Practice which includes the categories Appearance, Community, Environment, Safety and Workforce.

This scheme ensures that contractors carry out their operations in a safe and considerate manner with due regard to neighbours, passing pedestrians and road users.

Willmott Dixon are associate partner members of the 'Considerate Constructors Scheme'.

Willmott Dixon will monitor and report through online portal - MiProject

6.8 Weekly Inspections

The project team will complete weekly inspections on the company's systems, using the checklists to ensure all operational risk controls are maintained, or if observations made that these need reinstating, to record corrective actions taken with images before/after, as well as any mitigation actions needed by the site team, such as briefings or toolbox talks.

Items will include, but not limited to plant & machinery; bunds; fencing and security; fuel and COSHH storage.

6.9 Environmental Awareness and Training

The project will require specific roles, toolbox talks and training, dependent on the works occurring on site and the Mi|Risk profile assessment.

6.10 Specific Roles

In reference with the Mi|Risk summary, the following specific roles will be required on this project and the project's construction team will appoint Competent persons (e.g. SEATS or equivalent)

Role	Designated Person
Carbon Co-ordinator	Martin James
Biodiversity Co-ordinator	Martin James
Community Co-ordinator	Nicola Millard
Waste Co-ordinator	Martin James
Timber / Materials Co-ordinator	Martin James

6.11 Environmental Communication

Refer to RMS-RM-064 Communications procedures for responsibilities when communicating information internally and externally, or capturing observations, incidents and accidents (RMS-PR-002), engaging with our people (RMS-PR-003) and any external interested party.

6.12 Environmental Observations & Incidents (Mi|SHE)

Any environmental observations and incidents, such as spillages, adverse effects on wildlife or significant dust emissions, must be recorded on Mi|Project within 24 hours of occurrence. Actions taken on observation/discovery of potential impact or following an incident, and to prevent a reoccurrence, should also be recorded and closed out as soon as practicable. Response will be to **STOP – CONTAIN – NOTIFY – CLEAN-UP**, following SEPPA procedures RMS-PR-005 and using the SEPPA Plan RMS-PL-023.

Observations (Level 4) and Minor incidents (Level 3) are important learning opportunities and all reporting will help continued improvements and trending, using Mi|SHE via Mi|Project.

6.13 Enforcement Authority Visits (Mi|Project)

Environmental visits from enforcement authorities (e.g. Environment Agency or Local Authority) must be recorded on Mi|SHE via Mi|Project, along with corresponding actions. Actions required following the visit must be closed out as soon as practicable.

Any communications from regulatory bodies regarding complaints about the site or possible enforcement action should be copied to the Environment Manager, who can then offer support and guidance as needed. Use the Reference document to prepare for when an inspector calls.

6.14 Comments, Complements & Complaints (Mi|Project)

All communication with neighbours or the general public must be recorded on Mi|SHE Communications Registration via Mi|Project, whether positive or negative, and any corresponding actions closed out as soon as practicable. This may include complaints, comments, compliments and regular letter drops.

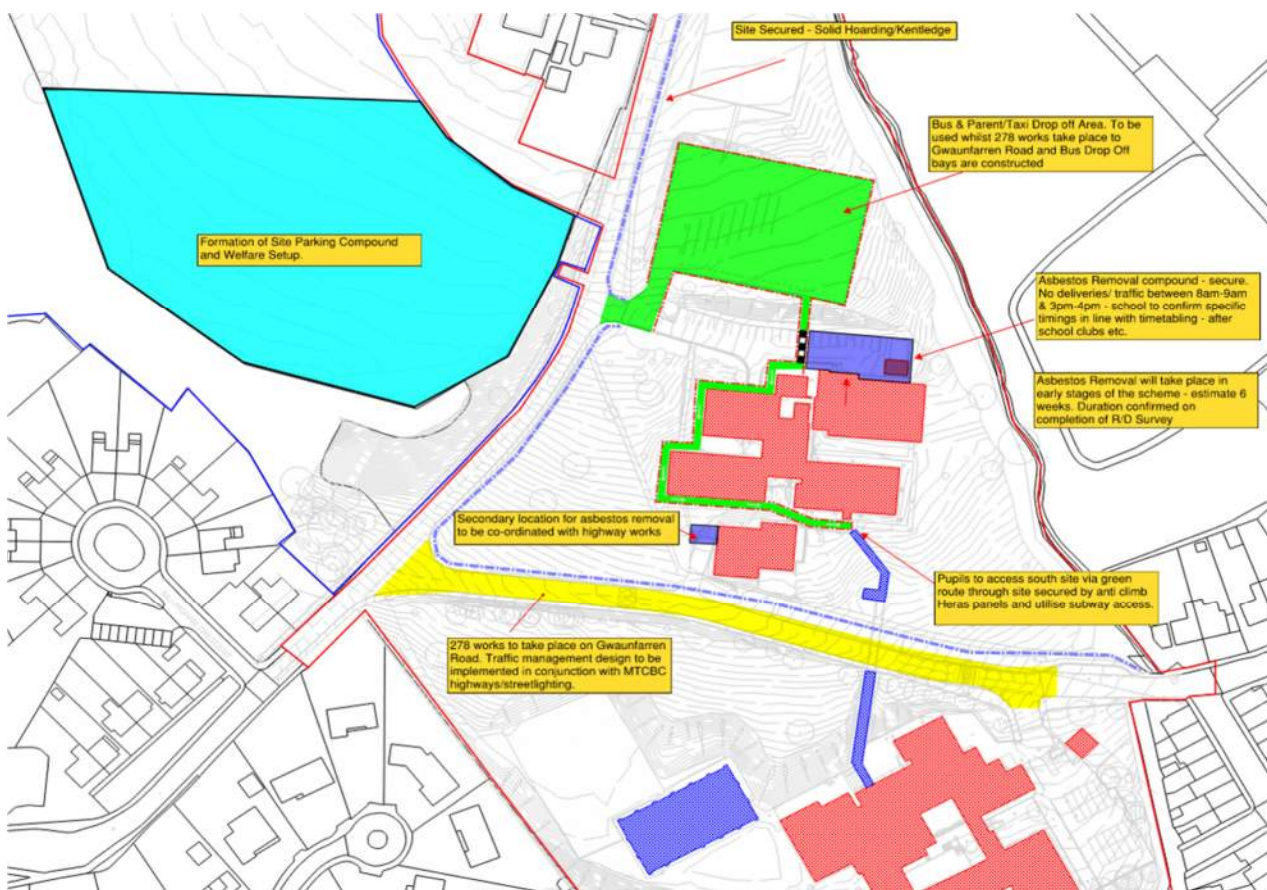
It is essential that positive management action is demonstrated, with continued improvement and learning from each event, as assurance and mitigation of regulatory intervention. The information recorded is an important tool to manage the site's relationship with the local community, as well as evidence for the project's Considerate Construction (CC Scheme). The communication information recorded on Mi|SHE (in Mi|Project) replicates the CCS log, therefore it is sufficient evidence to present to the CCS Monitor.

7.0 SITE LOGISTICS

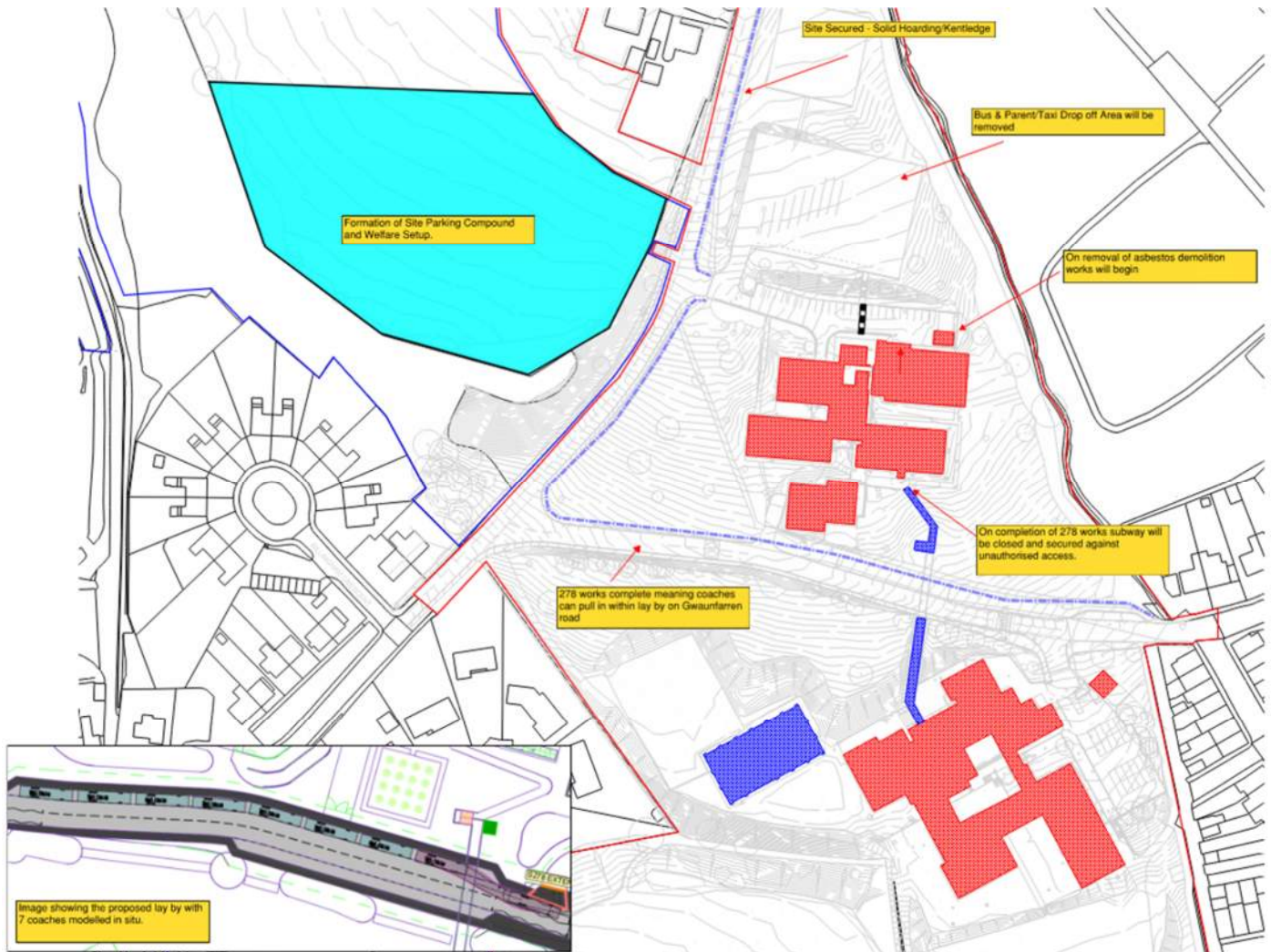
The efficient management of the site logistics will be vital to the success of the project. A key strategy of logistics for a construction project is to ensure that the products and materials arrive on site at the time and in the quantities that are required.

The Contractor will produce phasing and site logistics plan for the site that for the following phases of the works incorporates the following key features:

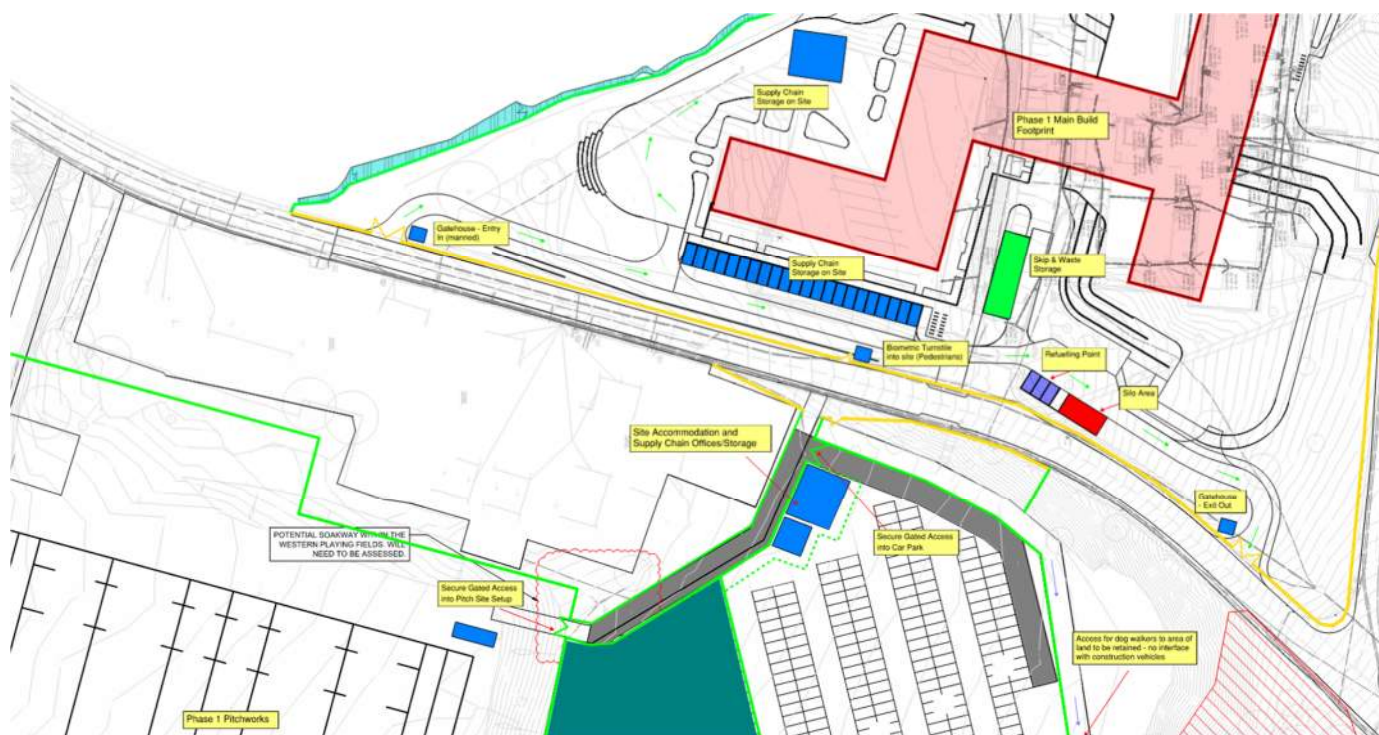
Site Logistics and Phasing – Section 1 – Pre-demolition



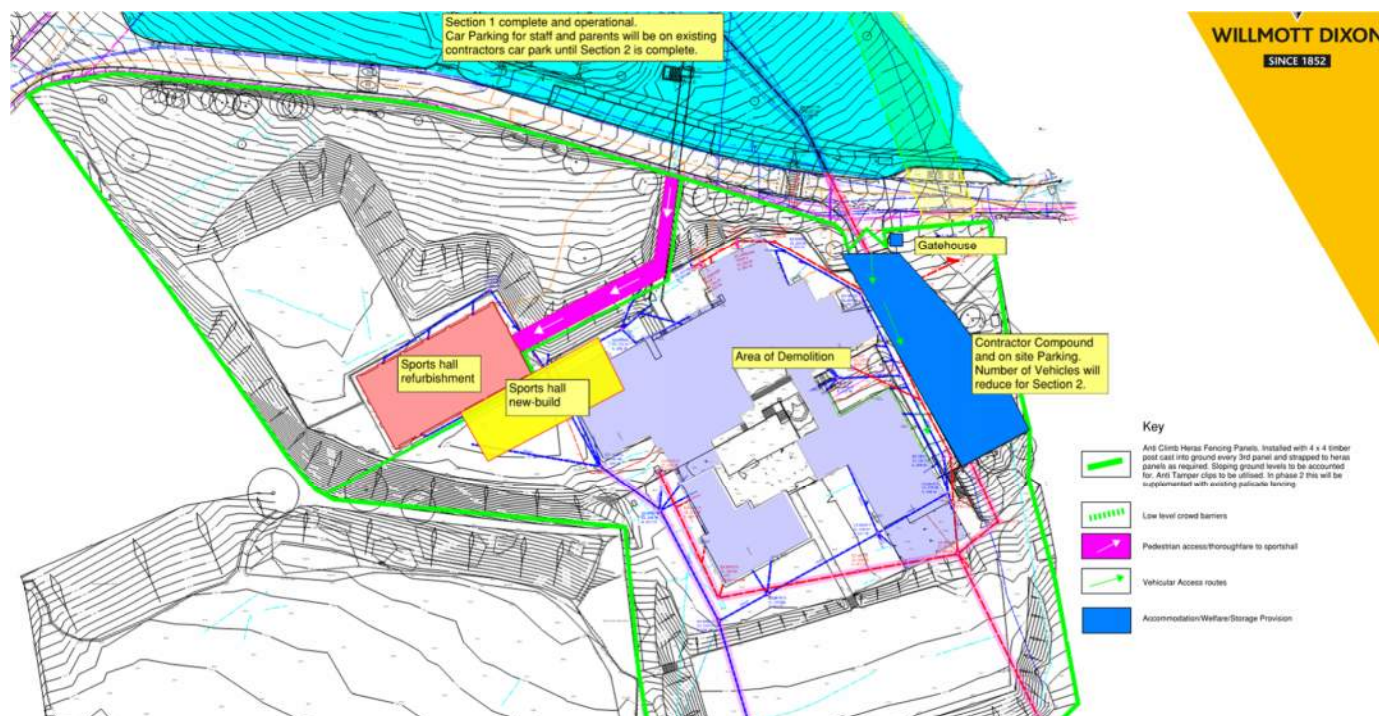
Site Logistics and Phasing – Section 1 – Post Demolition



Site Logistics and Phasing – Section 1 – Main Building



Site Logistics and Phasing – Section 2



8.0 TRAFFIC MANAGEMENT

This section highlights the measures by which the Contractors will avoid nuisance to the public that may arise from increases in traffic flows and temporary rearrangements of the road network associated with the construction works. Measures have been considered in relation to access routes, site access, marking of lorries, timing of movements, environmental standards, vehicle registration and parking.

Willmott Dixon will maintain existing external public access routes and rights-of-way during construction. Any operations requiring vehicle manoeuvring or interruptions to the footway will be planned, notified and controlled.

Access routes

The site has good access links to main arterial roads. All deliveries will access the site via Gwaunfarren Rd or Galon Uchaf Rd. Wagons will exit the site facing forwards and will be banked by a member of our site team until on the highway.

Deliveries will be scheduled to arrive 'just-in-time' defined by clear 'Go' and 'No-Go' periods as agreed with the school. At no point will vehicles be allowed to move when there are flows of either pupils or pedestrians. Members of the public will have priority at all times.

Willmott Dixon will use designated construction traffic routes for deliveries to the site and removal of waste etc. Due to the dispersed nature of the works across the site it is anticipated that all of the sites existing vehicular access points will be used for construction access at different periods during the construction programme.

A movement embargo period will be discussed and put in place for vehicles around school drop off and pick up including the arrival for Breakfast Club.

Parking

The logistic plans throughout the phases of the project indicate the location of parking spaces allocated to construction personnel and school staff.

Secure gates and wheel cleaning facilities will be established at the construction compound gates. Pedestrian access gates will be located close to the main vehicular access gates with separate pedestrian gates and footpaths provided.

To minimise the likelihood of congestion during the construction period, strict monitoring and control of vehicles entering and egressing the sites will be implemented. Construction deliveries will be carefully planned with delivery times agreed with each sub-contractor and supplier using a booking system. Delivery schedules will be produced in order to look at the profiles of up and coming deliveries, and to regulate deliveries and eliminate bottle necks.

Anti-Idling

Air pollution such as diesel particulates, Carbon Monoxide, particularly ground-level NOx, is an immediate and ongoing concern. The documented impacts on health, economic growth, and quality of life are of great concern. Vehicle and plant exhaust emissions from idling vehicles contributes significantly to air pollution.

This policy has been developed to meet obligations to protect air quality by reducing the environmental impact of our operations in relation to engine idling. This in turn will greatly improve the fuel efficiency of our operations, reduce fuel costs and ensure we avoid the increasing fines and penalties associated with engine idling including Section 42 of the Road Traffic Act 1988.

The site team members responsible for the anti-idling policy are:

Rhodri Bowen – Senior Ops manager – rhodri.bowen@willmottdixon.co.uk (07970 974978)
Martin James - Senior Build Manager – martin.james@willmottdixon.co.uk (07976 380318)
Mal Richards – Senior Build Manager – mal.richards@willmottdixon.co.uk (07970 985780)

Their role includes monitoring compliance and addressing any concerns raised by stakeholders.

Vehicles & Transport

The driver of any vehicle belonging to the business, employees, sub-contractors and customers are encouraged to turn the engine off when a vehicle is stationary for more than 30 seconds, except when in traffic.

The policy of turning the engine off when stopped does not apply for the periods during which idling is necessary under the following circumstances:

1. To provide for the safety of vehicle occupants, such as extreme cold conditions (e.g. to run the air heaters).
2. When a driver is conducting a daily driver walkaround check of a vehicle which requires the engine to be idling to check for excessive smoke, to build up air pressure and to check for air/liquid leaks and dash faults.
3. To use lifting/auxiliary equipment powered by the engine for the loading and unloading of products or goods.
4. When stopped in traffic.
5. When unforeseen traffic, safety, or emergency situations arise.

With the exception of exemption 4, if in equipment can be run from the battery alone i.e. tail lifts, drivers must refrain from idling unless there is a significant concern of draining the battery.

Construction Plant

All plant is to be switched off when not in use. Plant sat idling in 'Eco' or 'Sleep' mode still consumes approximately 4 litres of diesel per hour which can contribute significantly to GHG emissions, increase costs and reduce engine efficiency.

Operatives are encouraged to utilise telematics wherever possible to allow targeted reduction plant across construction operations.

9.0 SITE WASTE MANAGEMENT

Willmott Dixon will use working methods that minimise waste. Any waste arising from the site will be properly categorised and dealt with in accordance with appropriate legislation.

Opportunities for re-using or recycling construction or demolition waste should be explored and implemented.

Willmott Dixon will carry out the works in such a way that, as far as is reasonably practicable, the amount of spoil and waste (including groundwater, production water and run-off) to be disposed of is minimised.

The disposal of all waste or other materials removed from the Site will be in accordance with the requirements of the Environment Agency, Control of Pollution Act (COPA), 1974, Environment Act 1995, Special Waste Regulations 1996, Duty of Care Regulations 1991 and the Waste Management Regulations 2011.

All skips and waste streams shall be stored within the site boundary line and not in the contractors parking & material storage. Please refer to logistics layout.

In general, and in accordance with the principles of the UK Government's 'Waste Strategy 2010', a principal aim during demolition and construction will be to reduce the amount of waste generated and exported from the Development site.

This approach complies with the waste hierarchy whereby the intention is first to minimise, then to treat at source or compact and, finally, to dispose of off-site as necessary. All relevant Contractors will be required to investigate opportunities to minimise and reduce waste generation, such as:

Agreements with material suppliers to reduce the amount of packaging or to participate in a packaging take-back scheme.

Implementation of a 'just-in-time' material delivery system to avoid materials being stockpiled, which increases the risk of their damage and disposal as waste.

Attention to material quantity requirements to avoid over-ordering and generation of waste materials.

Re-use of materials wherever feasible (e.g. re-use of crushed concrete from hard standings for the piling platform; re-use of excavated soil for landscaping).

The Government has set broad targets of the use of reclaimed aggregate, and in keeping with best practice, Contractors will be required to maximise the proportion of materials recycled.

Segregation of waste at source.

9.1 REUSE OF MATERIALS

Materials Reuse Records

Materials can be reused on- or off-site, as long as used for the purpose of original intent, or through use of the relevant regulatory agreed protocol and code of practice. Records of material reuse must be kept on MiProject, with evidence for regulatory assurance held in the PEP files, as well as to demonstrate positive efforts taken to avoid waste creation.

Records will summarise materials provided to exchange/reuse networks, charitable and community groups, and reuse with other WD projects, as well as waste recycling with supplier takeback scheme use. Materials reused on or off site from demolition and excavation processing, if designated as product with supporting evidence by use of aggregate QP, DoWCoP or waste exemption.

9.2 MATERIAL MANAGEMENT PLAN (MMP)

Any waste arising from the site will be properly categorised and dealt with in accordance with appropriate legislation. WDC will carry out the works in such a way that, as far as is reasonably practicable, the amount of spoil and waste (including groundwater, production water and run-off) to be disposed of is minimised.

The following opportunities for materials reuse has been identified on this project at Pre-Construction. These include the generation of materials on site and/or the import of processed aggregates.

9.3 WRAP QUALITY PROTOCOL

WRAP Quality Protocols set out steps that must be taken for waste to become a non-waste product or material that can be either reused by business or industry, or supplied into other markets, enabling recovered products to be used without the need for waste regulation controls. The Quality Protocol for the production of aggregates from inert waste details a formalised quality control procedure for the production of aggregates from inert waste.

9.4 WASTE DUTY OF CARE REGISTRATIONS, PERMITS, EXEMPTIONS AND VALIDATION CHECKS

Waste Carriers

All waste removal companies, including project supply chain partners removing their own waste from site, **must be** registered waste carriers. Copies of their Waste Carrier Registration Certificates **must be** obtained and filed within this section of the plan.

Permits and Exemptions

The Environmental Permitting Regulations require that a premise receiving / treating waste must either hold an *Environmental Permit* or *be registered exempt* from permitting requirements. Copies of such documentation, along with details of permitted waste types, must be requested from construction/demolition/excavation waste service providers, prior to any waste being removed from site (i.e. PRIOR to the use of their services being made). The Duty of Care Schedule must be completed PRIOR to any materials being moved from site.

The full permit document will be checked as recorded on the Waste Portal, or if not available, to be held on file (**not just front cover**). The landfill diversion percentage will be stated in the Duty of Care Schedule, with supporting evidence held on file (or provided on the Waste Portal).

Validation Checks

All Waste Carrier Registrations, Environmental Permits and Waste Exemptions will be checked using the Waste Portal, and to ensure the waste service provider remains valid, by visiting the environmental [Public Register](#) and following the steps in procedure RMS-PR-069 Waste Carrier and Permit Checks. Duty of Care Audits will be carried out before the project uses waste contractors or destination sites. For any waste removed from site which is considered as high risk and/or where the project team has suspicions that it is not being handled in compliance with the Duty of Care (e.g. large quantities of soil/stone or hazardous waste), confirmation of acceptance of the waste at the proposed destination must be gained to ensure compliance. Where there is '*due cause for concern*', excavation or waste lorries should be tracked (paper trail with supporting evidence to be held on the waste portal or PEP) to ensure they are taking the waste(s) to the correct destination.

DoWCoP (CL:aire) confirmation for Materials removal for reuse on another site

Soil and stone being removed to a Receptor DoWCoP site (CL:aire) for reuse **must be** designated as a material, by the Receiving site's Qualified Person **BEFORE** any soil/stone material is removed from site. The QP **must register** your site as a 'donor' site, within their MMP BEFORE any material is removed. No material is to leave site **until confirmation** has been received from the QP that CL:aire and the Environment Agency has approved the registration. Refer to Section 10.3.

9.5 SITE WASTE DATA

The Building Manager must ensure that all waste materials leaving site, including those managed by supply chain partners, are recorded on MiProject SED, having checked WTN's against approved destination sites to ensure that only approved sites are used. Use the Waste Card checklist RMS-RE-009 and reference the correct Waste Description for the EWC code used, as well as the Waste Stream Skip standard void guide RMS-RE-010.

9.6 WASTE TRANSFER DOCUMENTS

There are two types of documentation controlling the transfer of wastes from our sites: **Waste Transfer Notes** (for non-hazardous wastes) and **Hazardous Waste Consignment Notes** (for hazardous wastes). Mixed waste loads will be supported by the Waste Data Entry slip RMS-FM-031, with evidence of waste stream percentage and skip voidage using RMS-RE-010. **NOTE:** Copies of all *Waste Transfer Notes* must be kept for **at least two years** and *Hazardous Waste Consignment Notes* for **three years**. They should be readily available upon demand for inspection by the Environment Agency, Natural Resources Wales or Local Authority.

10.0 Nuisance Prevention

The following measures are to be implemented to reduce the nuisance to neighbours, and to ensure they have an appropriate amount of involvement with the project:

Notwithstanding this, Willmott Dixon will discuss in detail and agree the proposed noise and vibration control measures with the Local Authority and supply chain partners

Noise Control Measures

Best Practicable Means

Best Practicable Means (BPM) of noise control will be applied during construction works to minimise noise (including vibration) at neighbouring residential properties and other sensitive receptors arising from construction activities.

The general principles of noise management are given below: Control at source:

- Equipment – noise emissions limits for equipment brought to site.
- Equipment – method of directly controlling noise e.g. by retrofitting controls to plant and machinery.
- Equipment - indirect method of controlling noise e.g. acoustic screens.
- Equipment - indirect method of controlling noise e.g. benefits and practicality of using alternative construction methodology to achieve the objective as opposed to more conventional but noisier techniques; selection of quieter tools/machines; application of quieter processes.

Control across site by:

- Administrative and legislative control,
- Control of working hours,
- Control of delivery areas and times,
- Careful choice of compound location,
- Physically screening site,
- Control of noise via Contract specification of limits,
- Noise Monitoring, to check compliance with noise level limits, cessation of works until alternative method is found.

Many of the activities which generate noise can be mitigated to some degree by careful operation of machinery and use of tools. This will be developed and addressed by task specific RAMS, toolbox talks and site inductions.

- HGV and site vehicles will be equipped with broadband, non-tonal reversing alarms;
- Compressor, generator and engine compartment doors will be kept closed and plant turned off when not in use;
- All pneumatic tools will be fitted with silencers/mufflers.
- Care would be taken when unloading vehicles to avoid unnecessary noise.
- Restrict the number of plant items in use at any one time;
- Plant maintenance operations will be undertaken at distance from noise-sensitive receptors.
- Reduce the speed of vehicle movements.

- Ensure that operations are designed to be undertaken with any directional noise emissions pointing away from noise- sensitive receptors.
- When replacing older plant, ensure that the quietest plant available is considered.
- Drop heights will be minimised when loading vehicles with rubble.
- Vehicles should be prohibited from waiting within the site with their engines running or alternatively, located in waiting areas away from sensitive receptors.
- Local hoarding, screens or barriers should be erected to shield particularly noisy activities.
- Temporary noise screens will be used to reduce noise from particularly noisy activities and the height of perimeter hoarding will be extended where this would assist in reducing noise disturbance at sensitive receptors; and
- Hours of operation should be strictly enforced and any deviations other than those previously identified will be with the consent of the local authority;
- Vehicles, plant and equipment will undergo regular servicing and maintenance to prevent irregular noise levels;
- The location of stationary plant in areas which will have a minimized impact on occupied residential and commercial properties, where feasible;
- Static plant, when in operation, is to be sound attenuated using methods based on the guidance and advice in the BS 5228, where practical;

Preference for electrically powered plant, to mechanically powered alternatives, where practical;

Construction Traffic

Willmott Dixon will incorporate the following measures into the scheme to avoid noise related impacts from construction traffic:

- There will be a project specific delivery management route that will be established. This will link the adjacent A465 Heads of the Valley Road and the primary roads to the site.
- All deliveries and egress routes from the site will follow this plan, with the contents being communicated at pre-contract meetings and within all sub-contract orders.
- Vehicles will not wait or queue up with engines running on the site or the public highway;
- Vehicles will be properly maintained to comply with noise emissions standards;
- All construction traffic including deliveries to site and the removal of plant from site will only take place during these site working hours listed above; and
- Design and routing of access routes will minimise vehicle noise and the need to perform reversing manoeuvres.

Preventing mud on the roads:

Site haul roads will be well constructed of clean stone to prevent the carrying of deleterious material onto adjacent roads and will be regularly swept to keep dust to a minimum. A road sweeper will be employed to keep all roadways on and adjacent to the site clear of mud and debris as required. This may be daily dependent upon weather conditions.

A buffer zone for groundworks will be created within site to reduce the risk and likelihood of mud on the road.

If required, the ground works will also have a dedicated self-contained wheel wash facility which will be located at least 10m from any surface water drain or Field ditches. The wheel wash will collect any runoff within a sump with the solids removed regularly and water recycled and reused where possible. This will be positioned within the buffer/clean stone hard-standing zone.

A land drain will also be formed around the perimeter of the works in order to prevent any surface run-off escaping the site boundary. The drains will be protected with clean stone and cleaned out if required prior to handover. Any excess material will be removed from site via a waste skip.

Vibration control

Vibration is a particular risk during the excavation stages. The measures taken to reduce the acoustics of this operations will also assist in mitigating the effects of vibration on neighbours and their property.

These will be further developed through the appointment of the groundworks contractor for task specific RAMS.

11.0 AIR QUALITY

Willmott Dixon will, as far as reasonably practical, seek to control and limit emissions to the atmosphere in terms of gaseous and particulate pollutants from tools and equipment used on site and dust from construction activities.

Throughout the project, the Contractor will ensure the following:

Where potential dust producing activities are taking place physical screens will remain in position. This will include enabling, excavation and structural works.

- There is no burning of waste materials on site.
 - All dust control equipment is maintained in good condition and record maintenance activities.
 - Site hoarding, barriers and scaffolding are kept clean.
 - Loading of material into lorries within designated loading area, inside the site boundary.
 - All vehicles carrying loose or potentially dusty material to or from the site are fully sheeted.
 - Minimise the amount of demolished or excavated material held on site.
 - Sheet, seal or damp down stockpiles and skips of material held at site, where required.
 - Avoid double handling of material wherever reasonably practicable.
 - Ensure water suppression is used during breakout of hard- standings and piling platform operations.
 - Use enclosed rubble chutes and conveyors where reasonably practicable or use water to suppress dust emissions from such equipment.
 - Sheet or otherwise enclose loaded bins and skips
 - Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
 - Use prefabrication of goods and materials to reduce the need for grinding, sawing and cutting on site wherever reasonably practicable.
 - Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction.
 - The engines of all vehicles delivering to site are not left running unnecessarily to prevent exhaust.
 - That conveyor equipment will be well maintained, with regular servicing and maintenance carried out.
 - The Contractor will ensure that dust monitoring will be carried out during potential dust producing activities. The assessment will look at the dust raising potential of construction activities proximity to potential receptors and the duration of construction activities at each location.
-

12.0 GROUND CONDITIONS

Full Site Investigation completed by Integral Geotechnique in Oct 2022:

Section 7: Ground Conditions

The ground conditions encountered beneath the site typically comprised a variable thickness of made ground/re-worked ground, as a result of the terracing/profiling of the site for the existing school development, over in situ glacial till deposits.

Bedrock was not encountered during the site investigation works.

In areas of soft landscaping, topsoil was encountered to typically 0.1/0.4m depth. In areas of hardstanding, a surface layer of tarmac/bituminous material was present to typically 0.1m over a layer of subbase.

The topsoil/hardstanding (tarmac/subbase) was typically underlain by made ground/reworked ground to between 0.5m and 4.0m below existing ground level. Locally the base of the made ground/reworked ground could not be proven due to obstructions. The variable thickness of made ground/re-worked ground is considered to represent the previous cut and fill earthworks undertaken to create development plateaux for the school buildings, car parking areas and playing fields.

The reworked made ground materials comprised natural materials that had been cut and placed as fill. Locally, made ground containing anthropogenic materials such as slag, concrete, plastic, glass and wood were present overlying the reworked made ground materials.

In situ natural glacial till soils were encountered from typically between 0.5/4.0m and proven to >2.0/>4.8m depth. Locally, the made ground/reworked materials were absent and the topsoil was underlain directly by in situ natural glacial soils from 0.2/0.4m depth.

All trial pits remained stable throughout the excavation. Local instability was observed to be associated with cobble and boulder removal. Some instability was noted within the windowless sample holes specifically within the granular made ground deposits.

It should be noted that the more detailed location and depth specific ground conditions observed during the intrusive site investigation can be found in the trial pit and windowless sample hole logs presented in Appendices E and F respectively.

See Section 7, page 36 – 44 of report for full breakdown.

Section 7.6 Groundwater:

A summary of the groundwater strikes encountered during the intrusive site investigation works is summarised below in Table 10.

Table 10: Summary of Groundwater Strikes		
TP/BH	Depth to groundwater strike below ground level (m)	Water Strike Type
SA205	1.8	Minor Seepage
SA212	2.0	Minor Seepage
WS174	4.5	Standing in borehole (after drilling)
WS176	3.0	Standing in borehole (after drilling)
WS179	1.3	Standing in borehole (after drilling)

Within the underlying clay soils, minor groundwater seepages were encountered at variable depths. A water strike was noted within WS176 immediately after drilling within the peaty/organic made ground. The water strike noted within WS179 was recorded within the reworked clay material. This is likely indicative of a perched water body/pocket held within the cohesive soils.

The groundwater conditions are based on observations made at the time of the fieldwork. It should be noted that groundwater levels may vary due to seasonal and other effects.

Section 8: Contamination

The results of the laboratory testing indicate that the majority of the analysed chemical elements or compounds are present at concentrations below the appropriate thresholds. However, the initial screening indicates exceedances of beryllium and several PAH compounds.

Beryllium was detected at elevated concentrations in 6 out of the 16 made ground samples and detected at concentrations between 2.0mg/kg and 6.7mg/kg, elevated above the adopted threshold of 1.7mg/kg (S4UL 1% SOM).

Benzo(a)pyrene was detected at elevated concentrations in two made ground samples and detected at concentrations of 7.6mg/kg and 4.2mg/kg, elevated above the adopted threshold of 3.2mg/kg (S4UL 1% SOM).

Benzo(b)fluoranthene was detected at elevated concentrations in two made ground samples and detected at concentration of 9.1mg/kg and 6.9mg/kg, elevated above the adopted threshold of 3.9mg/kg (S4UL 1% SOM).

Dibenzo(ah)anthracene was detected at elevated concentrations in 5 out of the 16 made ground samples and detected at concentration between 0.32mg/kg and 1.1mg/kg, elevated above the adopted threshold of 0.31mg/kg (S4UL 1% SOM).

Asbestos was not detected with the screened samples.

See Section 8, page 45 – 48 of report for full breakdown.

13.0 WATER POLLUTION PREVENTION MANAGEMENT

This section sets out the requirements on the Contractor for managing the environmental impacts of constructing the development, associated with water pollution management.

The contractor will prepare a detailed Surface Water Management Plan and Sediment Control Plan, which will minimise discharge of potentially polluted site water to nearby drains and overland flow routes;

No polluted water is to be discharged from the site;

Willmott Dixon shall put measures in place to ensure there are no pollution incidents including

- Oil and liquid chemicals are to be stored and handled as described within our Risk Management System procedures.
- A Site Incident Response Plan will be produced where quantities exceed 200ltrs.
- All static plant must have drip trays. Drip trays are to be placed under mobile plant when parked up at the end of the shift. All leaks are to be reported for immediate action.
- No wastewater is to be pumped to any Controlled Waters or Surface Water Drains without formal consent obtained. Clean surface water run-off will be directed within the confines of the site and not permitted to discharge to adjacent watercourse.
- If required, a trade effluent consent will be obtained from local sewerage provider to utilise the existing foul system to discharge of treated concrete washout waters from the construction activities.
- A concrete washout area will be created >10m away from drains and gullies, where wagons are permitted to wash out. This is done using a concrete washout system (such as blue rise) along with the washout bags which are used to catch and neutralise any water from washing out. The self-dosing bags separate the solids, automatically reducing the pH of the water.
- Treatment of concrete wash waters will not be located within groundwater source protection zone 1; is not within 12.5m of the top of a watercourse bank(stream) and 7m from the top of the bank of ditches/drains. In the event of a pollution incident (including pollution to ground) with water entering the stream as a result of site activities, then the NRW incident line 03000 653000 is to be contacted immediately.
- The Pollution Prevention guidelines, and in particular GPP5 and PPG6 will be utilised and incorporated.

Sediment and erosion controls are to be regularly inspected to ensure sufficient capacity.

Wheel washes or wheel cleaning areas are to be implemented on site.

Drainage of surface runoff and de-watering effluents to settling tanks to remove suspended solids prior to discharge to sewer or removal by a suitably licenced waste operator.

Storage of chemicals and hazardous materials within bunded areas, with adequate capacity (of 110%). Bunded areas are to be regularly inspected to ensure that sufficient capacity is available; and

Prevention of spills and leaks through the use of spill kits located across site, and incident response training aka spill drill completed every 6 months.

14.0 ECOLOGICAL MANAGEMENT PLAN (EMP)

14.1 PROTECTION MEASURES FOR ALL RETAINED HABITATS DURING CONSTRUCTION

Preliminary Ecological Assessment & Bat Survey completed by Ecological Services Ltd on 2nd November 2022.

Recommendations and Mitigation:

It is anticipated that at least some of the habitat currently found within the site boundary will be retained. as part of any development proposals. In particular the tree line to the northeast of the site and the small woodland area to the over north of the site.

Broad recommendations are made below to help inform the design process. Once the development proposals are progressed and the considerations to development within the site are addressed, further ecological input may be required. The general recommendations are:

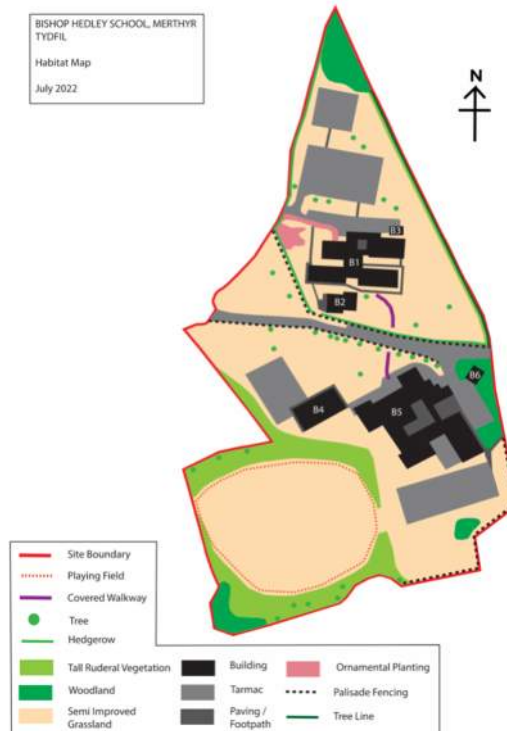
- Building 1 is a confirmed bat roosting location for a small number of Common Pipistrelle bats. Prior to any demolition works commencing to this building a development licence from Natural Resources Wales (NRW) must be gained. A bat licence can only be sought once planning consent has been granted and any relevant ecological conditions discharged. A bat licence can take at least 40 days to be granted from the application being submitted.
- Bat activity surveys of Buildings 4, 5 and 6 will be required prior to any demolition works being undertaken to the structures. Should evidence of roosting bat use of the buildings be found a development licence from NRW will be required prior to the buildings being demolished. Appropriate mitigation for the loss of any bat roost will be required.
- The tree line, hedgerow and buildings within the site boundary have potential for use by nesting birds. Any vegetation removal or building works must be completed outside of the bird nesting season of March to August inclusive. If this is not achievable an ecologist must inspect any trees or ground vegetation with the potential for birds to be present for active birds' nests prior to removal works beginning. If an active nest is identified, a buffer zone of 5m around the nest must be observed until the chicks have fledged. Only then can the vegetation be removed. Greater buffer zones around nests may be required depending on the species and habitat the nest is within.
- The trees must be retained where possible as they provide shelter and food for birds and small mammals. The hedgerows also provide commuting routes for small mammals and reptiles. Any retained trees and hedgerows should also be subject of RPZs, see above.
- Any tree loss within the site boundary must be compensated for with tree planting in future development proposals. It is recommended that for every tree lost at least 2 trees are planted to replace it.
- A detailed ground based visual assessment of all trees proposed for removal to ascertain their use by roosting bats will be required. Should any tree be found to have above moderate potential for use by roosting bats further detailed surveys such as climbing surveys to full inspect any suitable feature will be required. The optimal survey window for bat tree assessment work is the winter when leaves are not on the trees.
- The tree line, hedgerows, wooded areas and tall ruderal vegetation have the potential to support use by common reptiles. Any impacts to these habitat types will require a reptile mitigation strategy to be agreed and implemented as part of the development works. The reptile mitigation strategy will require careful timing of the works and species deterrent measures to encourage reptiles out of the construction footprint.
- Careful consideration must be given to the use of lighting within the developed site, as this can adversely affect activity by a variety of fauna, particularly foraging bats, nesting birds and invertebrates. Light spillage into adjacent semi-natural habitats must be avoided and brightness kept to the lowest permissible level in the areas adjacent to such habitats.

- All lighting must meet recommendations in the BCT Guidance Note 08/18 Bats and artificial lighting in the UK document <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

The Environment Act (Wales) 2016 places a duty on competent authorities such as Merthyr Tydfil County Borough Council to conserve and enhance biodiversity. The below bullet points are some simple measures that could be achieved to enhance the biodiversity of the site:

- The provision of bird boxes of varying design in suitable locations within the development site. These could include integrated boxes built into buildings as well as small and large holed boxes on the mature trees retained during works.
- The provision of bat boxes in suitable locations within the development site. These could include integrated boxes built into any new buildings or the provision of a bat loft or bat roosting features within a building on site.
- The use of native species within the soft landscaping works on the site. Suitable long-term management of soft landscaping also helps ensure spaces are useful to wildlife. Hedgerow and tree planting create habitat for wildlife and an attractive space for people.
- All fencing around the site will be hedgehog friendly in design. A friendly design is considered to allow passage of small animals across the site. It should provide either a continuous gap between the bottom of the fence and ground of approximately 13cm or 13cm by 13cm gaps cut every 3m along fencing.
- The creation of green corridors around the periphery of the development site must be considered. Green corridors could be achieved by a variation in the management of the grassland on site to create longer and shorter vegetation. Connectivity to adjacent areas of natural habitat would be welcome to help prevent habitat fragmentation.
- Less intensive mowing of some grassland areas across the site would encourage more species diversity within the sward benefiting a range of small animals and invertebrates. Long term habitat management to benefit wildlife within the site would help improve biodiversity levels.
- Collecting grass cuttings when grassland on site is mown and creating compost frames within the site boundary would help improve biodiversity levels. The removal of grass cuttings would reduce soil enrichment of the grassland areas allowing a greater diversity of plant species to establish. Creating compost frames or heaps for the cuttings would provide habitat for reptiles to use.

Appendix 3– Site Habitat Map



Bat and Tree Survey Report completed by Ecological Services Ltd in September 2023.

Conclusions and Recommendations

Survey work has been undertaken to establish the presence or likely absence of roosting bats within all trees and tree groups listed for removal at Bishop Hedley Catholic School. The proposed development works within the site boundary will result in the loss of trees and tree groups to make way for the demolition and erection of new school buildings and sports facilities. Based on the Arboricultural Impact Assessment dated 08th February 2023 it would appear that the following Hedgerows, Trees and Tree Groups will need removing to make way for the new buildings and sports facilities;

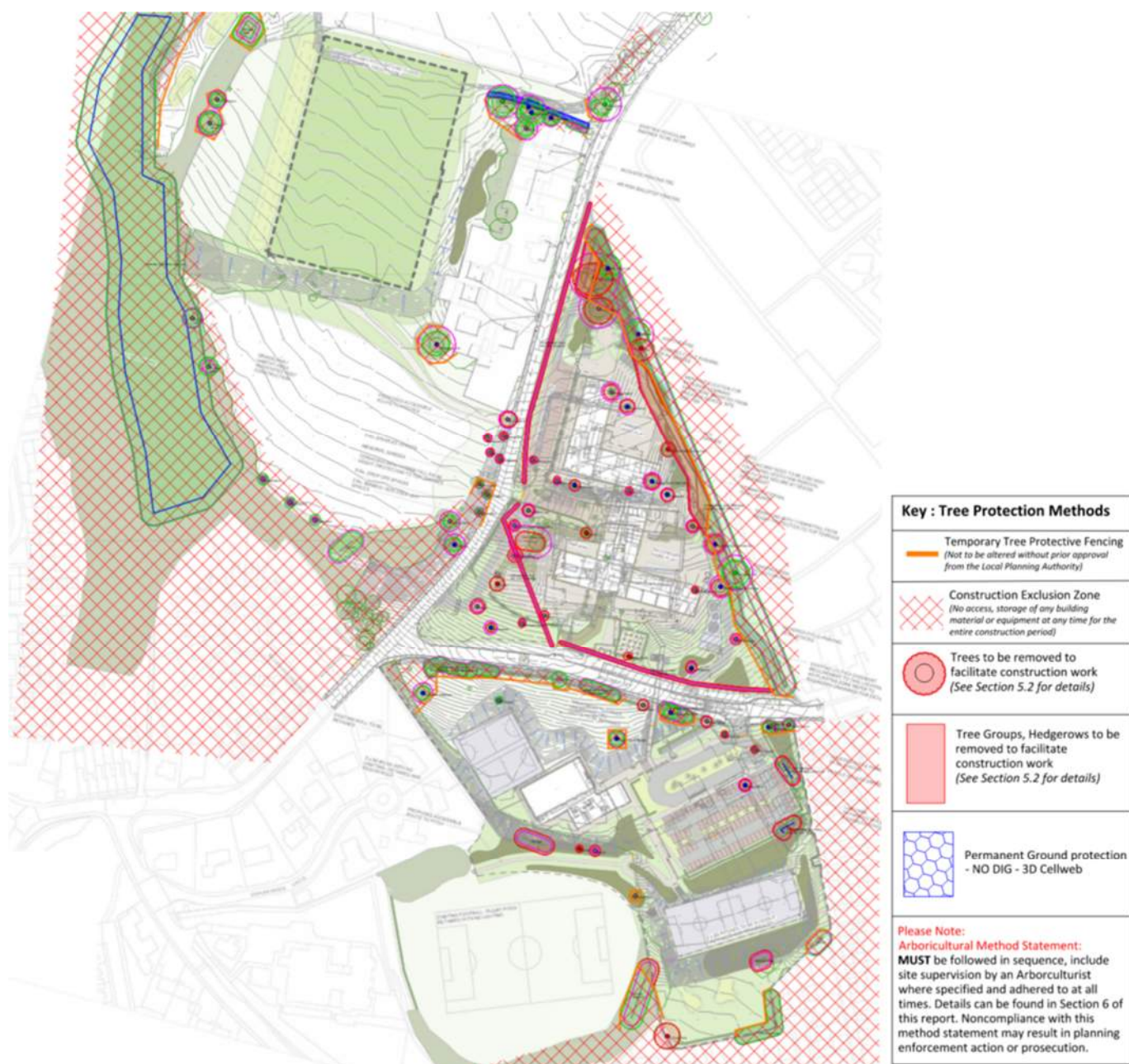
- Hedgerows - H13, H30 and H31 were found to be negligible for roosting use by bats owing to that they are well manicured and appeared to be recently pruned. These Hedgerows can be removed with no further consideration to bat roosting.
- Trees and tree groups - T1, T2, T3, T4, T5, T6, T14, T16, T17, T18, T19, T21, T25 (already felled), T26, T27, T32, T33, T34, T35, T36, T38, T40, T41, T45, T48, T55, T56, T64, T67, T68, G15, G50 (already felled) and G62 were found to have negligible potential for roosting use by bats. These trees and tree groups can be removed with no further consideration to bat roosting.
- Trees and tree groups - T11, G10, G20, G47 and G57 were found to have low potential for roosting use by bats. These trees will be removed preferably in September/October to avoid maternity and hibernation seasons, under a precautionary soft fell methodology. This is where tree limbs are cut and left grounded overnight to allow any bats to make their way out.
- Tree T7 was found to have moderate potential for roosting use by bats. Further consideration for bat use of T7 will be required as part of any future arboricultural works. Whilst roosting use of moderate category trees by bats has not been confirmed, T7 contained features that bats could use. Given the transitory nature of bats the probability of finding them within a tree is limited unless year round surveys are undertaken. As a precaution, when trees with suitable bat roosting features are identified but roosting use is not confirmed mitigation measures are still required.

The below recommendations are made for T7:

- Moderate bat roost trees must be felled during the winter when bats are least likely to be present.
 - All moderate bat roost trees must be felled in sections and lowered to the ground using ropes. The sections will then be inspected for the presence of bats using an endoscope by a licenced bat ecologist.
 - If bats or evidence of bat use is found within any tree proposed for removal or reduction all work must cease. NRW will be contacted for advice on how to proceed. Their advice is likely to include that a development licence from NRW is sought prior to the trees being felled.
-

14.2 PLANTING PLANS: AREAS OF ONSITE HABITATS TO BE RETAINED, PROTECTED AND ENHANCED

Landscaping General Arrangement



Landscape Planting Plan – North Side



Landscape Planting Plan – South Side



Landscape Planting Plan – West Side (Rugby Pitch)



Ecological Impact Assessment completed by Ecological Services Ltd on 5th September 2023.

Section 5: Enhancement Measures

The Environment Act (Wales) 2016 places a duty on competent authorities to ensure biodiversity is not only conserved but enhanced. The proposed development works create potential features that can be improved for the benefit of biodiversity.

5.1 Provision of Bat Roosting Opportunities

A total of 7 integrated bat boxes Ibstock Enclosed Bat Box B (or similar design) will be provided within the new development. All boxes will be built into the walls no lower than eaves level of the building with the access gap left open for use and will be located as follows: -

- Main Building, East Elevation, Secondary Wing x 1
- Main Building, South Elevation, Primary Classrooms x 1
- Sports Building, Planning Elevation 1 (southern aspect) x 2
- Sports Building, Planning Elevation 3 (south west aspect) x 2
- Sports Building, Planning Elevation 5 (south aspect) x 1

No external lighting will be placed within 2m of any bat box. Photographic evidence of the boxes will be sent to the local planning authority ecologist once completed. Types of bat boxes can be found in Appendix 3 and the approximate location each box can be found in Appendix 1.

5.2 Provision of Bird Nesting Opportunities

Twelve integrated bird boxes will be provided within the new development. All bird boxes will be integrated into the walls at eaves level (a minimum height of 3m above ground level, swift boxes are ideally located 5m above ground level). The following bird boxes will be installed at least 3m from ground level: -

- 3 x Terraced Sparrow Box - Custom Facing Brick (or similar design) - Main Building, East Elevation, Primary Wing
- 2x Terraced Sparrow Box - Custom Facing Brick (or similar design) - Main Building, North Elevation 1, Primary Wing
- 3 x Starling Box - Smooth Brick (or similar design) - Main Building - North Elevation 2, Secondary Wing
- 4 x Swift Box (or similar design) - Custom Brick - Sports Building, Planning Elevation 2 (east aspect)

Photographic evidence of the boxes will be sent to the local planning authority ecologist once completed. Types of bird boxes can be found in Appendix 2 and the approximate location each box can be found in Appendix 3.

5.3 Habitat Enhancements

Soft Landscape Proposals have been provided for the site and cover all areas of the site. New habitats to be created include tree planting, native hedgerow, native woodland with understory planting, shrubs, SUDS areas, 2 x wildflower mixes to include 'Pollinators Paradise' within the orchard area and a meadow mix to SUDS Scrapes. A suitably worded planning condition will be added to any planning consent the Local Planning Authority is minded to grant requesting a Landscape and Ecological Management Plan for the site is agreed.

The majority of species used will be native species and of local provenance (at least Welsh). Tree species planted as standalone specimens, approximately 82 in the north of the site and 18 in the south of the site to include field maple (*Acer campestre* 'Streetwise'), silver birch (*Betula pendula*), rowan (*Sorbus aucuparia*), bird cherry (*Prunus avium*) and lime (*Tilia x europaeus*) and Scots pine (*Pinus sylvestris*).

Four woodland areas are to be planted in the north of the site and six woodland areas in the southern half of the site is to include hornbeam, beech (*Fagus sylvatica*), bird cherry, English oak (*Quercus robur*) and rowan with an understory mix to include hazel (*Corylus avellana*), hawthorn (*Crataegus monogyna*), holly (*Ilex aquifolium*), wild privet (*Ligustrum vulgare*) blackthorn (*Prunus spinosa*), dog rose (*Rosa canina*), elder (*Sambucus nigra*) and guelder rose (*Viburnum opulus*).

Rain gardens and SUDS areas are to be planted up in the southern half of the site around the car park and in the north and within the amenity grassland in the south. Two mixes of planting within the rain gardens and SUDS areas will increase biodiversity for a wide range of invertebrate species, as will the two mixes of wildflower areas.

Areas of shrub planting will be incorporated into the northern half of the site around the buildings and car parking areas. Amenity grassland and sports mix grass will be planted in areas of high usage.

A full list of proposed species and an indicative plan of the soft landscaping can be found in Landscape General Arrangement, drawing number BCA-ATK-XX-XX-DR-LA-423001, Rev P04, dated 16/02/2023 and Site Wide Planting Plan, drawing number 5202184-ATK-XX-DR-LA-423013, Rev P01, dated 16/02/2023 both issued by Willmott Dixon Construction Ltd.

A management plan for the site will be produced but is currently unavailable. On-going management of the site, past the landscape management period of 5 years post landscaping creation, will be required to ensure the habitats within the development site are managed to benefit wildlife. The school and whomsoever undertakes the onsite grounds management will be required to implement management techniques that benefit wildlife. General recommendations to be included with a site habitat management plan are below:

- All hedgerow will be cut once every 2 years between the months of November to February inclusive. Ideally different sections of hedgerow will be cut in different years to create diversity in its structure. Every 10 years the hedgerow will be laid to ensure structural integrity of the feature is maintained.
- The grassland mowing regime will be diversified to create longer and shorter vegetation. Ideally around 25% of the grassland habitat on site will be cut once each year during late summer with all cuttings collected and removed from site or to an agreed compost location. It is recognised that the remaining grassland will require intensive cutting for use by pupils.

5.4 Fencing

Any close board or mesh fencing within the site boundary will incorporate features to ensure it is wildlife friendly. Such fencing will have either:

- a 13cm by 13cm gap cut at ground level every 2m or;
- a continuous gap of 13cm from the base of the fence and ground along the entire fence line. Any mesh fencing must have a continuous gap of 13cm from the base of the fence and ground along the entire fence line.

14.3 REPTILE MITIGATION STRATEGY

Submitted in separate document **2023-10 CEMP Reptile MS – BCA School (003)** by Ecological Services Ltd.

14.4 BAT METHOD STATEMENT

A separate Bat Method Statement has been completed to support the discharge of condition 18. The Bat method statement will then be used for any future bat licence application made to Natural Resource Wales (NRW).

NRW Bat Development Licence Application: Method Statement: 24th October 2023

B.1. Background to activity/development

This method statement and future bat licence application will cover Building 1 only.

Bat activity surveys have been completed on all buildings within the overall site boundary. Bat activity has only been confirmed within B1. Despite Night Vision Aids (NVAs) not being used during activity surveys, a sufficient number of bat surveyors were used to cover all elevations of the buildings. A limited amount of bat activity was noted during the activity surveys and the lack of roosting use of the buildings reflects the overall low levels of bat activity within the area.

Given the tight building programme the phasing of work to avoid building demolition during the winter months cannot be achieved. Given the limited hibernation potential of the buildings it is not considered sufficiently likely that hibernating bats will be found to restrict winter works. The buildings are all poorly insulated and when central heating is put on the buildings are likely to warm up and leak heat.

As a precaution a toolbox talk will be provided to all contractors as part of any site induction pack. The toolbox talk will cover where bats may be found and what to do if bats are found at any time during works. This will cover the winter working period as well.

Southern Site Buildings

Three buildings are present in the southern half of the development site - The Sports Hall (B4), Main School Building (B5) and the Caretakers Building (B6). These buildings were surveyed in 2023 and found to have no roosting bats present. The buildings are not scheduled to be demolished until 2026 and therefore it has been agreed these buildings will be subject to bat activity surveys between May - September of 2025 using NVAs. If bats are found to be roosting within any of these buildings during the updated bat activity surveys, appropriate mitigation and compensation measures will be implemented. This will include the demolition of the buildings under a development licence from NRW.

E. Works to be undertaken

The on site supervision work within this bat method statement covers Building B1 only. Buildings B4, B5 and B6 will be subject to additional survey work in 2025. If any additional bat roosting use of these buildings is confirmed a bat licence will be sought from NRW prior to any any site building demolition work commencing in the southern half of the site.

All site workers involved with building or tree removal will be given a toolbox talk. Information on bats will be included within all site induction packs provided by the lead contractors (Willmott Dixon). Information provided will include the legal protection afforded to bats, the fact that a bat licence from NRW is active for Building B1, where bats are likely to be present and what to do if bats are found during works. **A specific toolbox talk will be provided which covers Building B1 prior to any external demolition works commencing to this building.** The toolbox talk will cover the legal protection afforded to bats, the likely features to be used by bats, working methods around bats and what to do if bats are found during the works.

The licensed ecologist will supervise the soft strip of all the suitable bat roosting features along the northern elevation of Building B1. This will include the hand removal or barge boards, fascias and the rolled roofing material at the edges of the roof line / walls. Access to these features will be provided using a MEWP or scaffold. The main contractor will have the obligation to cost for and programme in the provision of access to the roof line along the northern elevation of B1. Once all potential roosting features along the northern elevation of B1 have been dismantled by hand the contractors will be left to work unsupervised. The building will be demolished using machinery.

If bats are found during supervised periods of the roofing works, the licensed ecologist will identify the species found and an assessment will be carried out to ensure it is not injured and in good health. The bat will then be placed, by the ecologist, into a safe holding unit which complies with animal welfare standards. The bat will then be released at an appropriate time of day. If bats are found during unsupervised periods of work, all work in the area will cease. The licensed ecologist will be contacted for advice on what to do. If required the ecologist will attend site and take the bat into care if weather conditions are not suitable or its release on the same day.

If bats are found to be present in Building B2 and B3 during unsupervised periods of work all work will cease and the supervising ecologist will be contacted for advice on how to proceed. This advice is likely to entail that a development licence from NRW is sought to cover the remaining works to the building.

The licence holder will liaise with the licenced ecologist when the new school building is being created. A total of 10 bat boxes will be provided within the new school building. **A total of 7 integrated bat boxes Istock Enclosed Bat Box B (or similar design) will be provided within the new development.** All boxes will be built into the walls no lower than eaves level of the building with the access gap left open for use and will be located as follows: -

- Main Building, East Elevation, Secondary Wing x 1
- Main Building, South Elevation, Primary Classrooms x 1
- Sports Building, Planning Elevation 1 (southern aspect) x 2
- Sports Building, Planning Elevation 3 (south west aspect) x 2
- Sports Building, Planning Elevation 5 (south aspect) x 1

Three Schwegler 1WI bat boxes (or a similar design) will be fitted to the external walls of the main school building on the north elevation of the secondary wing. All boxes will be built into the walls no lower than eaves level of the building with the access gap left open for use. The supervising ecologist must inspect all bat boxes to make sure they are fitted correctly and suitable for bat roosting use. Photographs and confirmation of correct fitting will be submitted to NRW as part of the end of licence report forms for the bat licence.

14.5 PROGRAMME OF WORKS

The plans seek a phased demolition of the school buildings, with the buildings to the north of Gwaunfarren Road being demolished first and a new school building complex created in the grounds. Works to the southern half of the school site will then commence.

NRW Bat Development Licence Application: Method Statement: 24th October 2023

G. Timetable of Works

* The timings provided within this section are subject to change. They depend on the discharge of planning conditions and when a bat licence application can be made to NRW. *

Timing of Work	Details of Work to be undertaken
October 2023	Tree removal and vegetation clearance work to be undertaken. All site workers involved with building or tree removal will be given a toolbox talk. Information on bats will be included within all site induction packs provided by the lead contractors (Wilmot Dixon). Information provided will include the legal protection afforded to bats, the fact that a bat licence from NRW is active for Building B1, where bats are likely to be present and what to do if bats are found during works.

November 2023 - May 2024	Toolbox talk covering all aspects of work under licence to be given to contractors. Demolition of B1 anticipated during this time. Ecologist to liaise with site foreman and licence holder over all demolition works to B1. hand removal or barge boards, fascias and the rolled roofing material at the edges of the roof line / walls. Access to these features will be provided using a MEWP or scaffold. Ecologist will be on site to supervise all removal works at eaves/roof level are undertaken along the north elevation of B1 until they are happy it is unlikely that bats will be encountered. Written confirmation will be given to the licence holder and foreman once roof works that potentially impact on bats are completed.
Summer 2024 - Summer 2025	Construction of new school building
01/06/2025	All works affecting bats and bat mitigation are to be completed in the northern half of the site
2026	Monitoring visit. One activity survey during the core maternity season, between May and August inclusive
2027	Monitoring visit. One activity survey during the core maternity season, between May and August inclusive

14.6 ECOLOGICAL SUPERVISION

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REFERENCES

The contractor shall comply with all relevant legislation, standards, codes of practice, and guidance for the works being carried out including (but not exclusive to) those listed in this section.

Legislation

- The Explosives Regulations 2014
- Clean Air Act 1993
- Public Health Act 1961
- Health and Safety at Work, etc. Act 1974
- Control of Pollution Act 1974
- Control of Pollution (Amendment) Act 1989
- Environmental Protection Act 1990
- New Roads and Street Works Act 1991
- Lifting Operations and Lifting Equipment Regulations 1998
- Special Waste Regulations 1996
- Control of Lead at Work Regulations 2002
- Control of Asbestos Regulations 2012
- Ionising Radiations Regulations 2017
- Electricity at Work Regulations 1989
- Control of Noise at Work Regulations 2005
- Controlled Waste (Registration of Carriers & Seizure of Vehicles) Regulations 1991
- Environmental Protection (Duty of Care) Regulations 1991
- Management of Health & Safety at Work Regulations 1999
- Provision & Use of Work Equipment Regulations 1998
- Personal Protective Equipment at Work Regulations 1992
- Construction (Design & Management) Regulations 2015
- Control of Substances Hazardous to Health Regulations 2002
- Work at Height Regulations 2005
- Dangerous Substances and Explosive Atmosphere Regulations 2002
- Manufacture and Storage of Explosives Regulations 2005

British Standards

- BS 5228 Code of Practice for noise control on construction and open sites
- BS 5607 Code of Practice for safe use of explosives in the construction industry
- BS 6187 Code of Practice for demolition
- BS 7121 Safe use of cranes

Guidance

- HSE Guidance booklets:
- HSG 47 Avoiding danger from underground services
- L21 Management of health and safety at work
- L101 Safe work in confined spaces

HSE Guidance Notes

- GS 6 Avoidance of danger from overhead electric lines
- CS 15 The cleaning and gas freeing of tanks containing flammable residues
- EH 40 Occupational exposure limits (revised annually)

HSE Construction Information Sheet

- No.45 Establishing exclusion zones when using explosives in demolition.

Asbestos Removal

Legislation

- The Health and Safety at Work etc. Act 1974
 - The Control of Pollution Act 1974
 - The Special Waste Regulations 1996
 - The Personal Protective Equipment at Work Regulations 1992 (as amended)
 - The Control of Asbestos Regulations 2012
 - Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009
 - The Construction (Design and Management) Regulations 2015
-