


# ***CONSTRUCTION MANAGEMENT PLAN***

**(Incorporating Construction Method Statement and Environmental Management Plan)**



**Williams Homes (Bala) Ltd**

<b>Project/Contract</b>	<p>The development alongside Tir Tai / Clwyd Alyn Housing Association to build 28nr new residential dwellings at Maes Merddyn, known as Land off A4080, in Brynseincyn Anglesey. The site consists of the following dwellings:</p> <ul style="list-style-type: none"> <li>• 6no. 2P1B Flats (Open Market),</li> <li>• 2no. 2P1B Flats (1 Open Market and 1 Affordable),</li> <li>• 11no. 4P2B Houses (Affordable),</li> <li>• 2no. 4P2B Houses (Open Market)</li> <li>• 5no. 5P3B Houses,</li> <li>• 2no. 7P4B Houses.</li> <li>•</li> </ul>
<b>Contractor details</b>	<p>Williams Homes (Bala) Limited Unit 18/19 Enterprise Park Bala Gwynedd LL23 7NL</p>
<b>Client details</b>	Clwyd Alyn
<b>Site Address</b>	<p>Land off the A4080,  Maes Merddyn  Brynseincyn  Anglesey</p>
<b>Project Start Date</b>	TBC
<b>Expected Duration</b>	80 weeks
<b>Projected Completion Date</b>	TBC

	<b>Name</b>	<b>Title</b>	<b>Signature</b>	<b>Date</b>
<b>Document Author</b>	Nathan Allin	Health and Safety Manager		25.11.2024
<b>Authorised by</b>	Tony Hughes	Commercial Director	<i>T. Hughes</i>	25.11.2024
<b>Authorised by (for Client)</b>				

## TABLE OF CONTENTS

1	Description of Works	4
2	Contractor details	6
3	Environmental Policy	7
	<u>Site Specific Issues</u>	
3.1	Traffic Management	8
3.2	Erosion and Sediment Control	9
3.3	Water Quality	10
3.4	Air Quality	11
3.5	Noise	13
3.6	Hazardous Substances	14
3.7	Contaminated Soil	16
3.8	Acid Sulphate Soil	17
3.9	Waste Management	17
3.10	Flora and Fauna	18
3.11	Biodiversity Management	20
3.12	Cultural Heritage	21
3.13	Vibration	21

## APPENDICES

1. Initial Site Layout

# 1 Description of Works

Williams Homes (Bala) Ltd are proposing the development alongside Tir Tai / Clwyd Alyn Housing Association to build 28nr new residential dwellings at Maes Merddyn, known as Land off A4080, in Brynsiencyn Anglesey. The site consists of the following dwellings:

- 6no. 2P1B Flats (Open Market),
- 2no. 2P1B Flats (1 Open Market and 1 Affordable),
- 11no. 4P2B Houses (Affordable),
- 2no. 4P2B Houses (Open Market)
- 5no. 5P3B Houses,
- 2no. 7P4B Houses.

Access to the site is off the A4080, the development of the site will include the provision of Public Open Space, development of the site infrastructure, SUDS, services and roads.

We shall begin with setting up a compound and welfare area within the site boundaries with site fencing installed to the site perimeter. Viewing points shall be provided in locations along the perimeter for locals to observe the progress of the build, whilst notice boards will be provided for local resident information on the project throughout.

The project will be divided into several construction phases. These phases will be further broken down in smaller sections for Civils, Timber Frame Erection and Mechanical & Electrical.

Prior to construction, we shall undertake archaeological and ecological investigations, carrying out the requirements of the reports issued prior to beginning the construction phase.

The following documents shall be followed whilst planning the works:

- Preliminary Ecological Appraisal – carried out by Enfys Ecology Ltd
- Green Infrastructure Statement – carried out by Enfys Ecology Ltd
- Preliminary Tree Assessment - carried out by West Coast Arboriculture & Land Planning Ltd
- Arboricultural Planning Assessment – carried out by West Coast Arboriculture & Land Planning Ltd
- Groundsure review with Full Planning – carried out by InfoTrack
- Design and Access Statement – carried out by Saer Architects

Ecological watching briefs shall be conducted as required by the project to allow the works to progress.

We intend to begin the project by carrying out the demolition of the existing buildings and the removal of the trees scheduled to be removed from site. Once the demolition has been carried out we would process with the reduce level excavating the roads into site with formation levels being achieved. Topsoil to be stored for reuse as required for the project. Excavations for services and drainage will also be made at this time. Traffic shall be directed to site by appropriate signage and pre-delivery instructions.

Following the installation of the site infrastructure, services and foundations the timber frame and associated scaffolding will be erected to allow roof installation, timber frame facing and window installation.

Internal services and finishing shall commence as the timber frame erection progresses sufficiently. External hard and soft landscaping will commence once sufficient progress has been made to the build.

We plan to use 360 excavators (above and below 10 tonne), forward tipping dumpers, a telescopic handler and ride on rollers to complete the required ground preparation, construction and finishing works. Standard joinery powered and non-powered joinery tools will be used during the timber frame and roof installation. Powered and non-powered tools will be used by ground workers, plumbers, electricians, plasterers, painters, decorators and landscapers involved in the project.

Early engagement with the local school shall be sought to allow development of the traffic management plan, viewing locations and educational opportunities.

Deliveries shall be booked between peak traffic flow times in the morning and late afternoon, to be assessed during the project to take into account local patterns, via consultation with the school set delivery free times will be agreed. The loading and unloading area shall be allocated on site with a designated laydown provided.

Parking for site personnel shall be provided on site, with vehicle sharing from our head office and regional locations

A project plan will be developed and available in the site manager's office detailing the works programme.

## 2 Contractor Details

Information regarding the contractor and relevant contacts.

Name	Position	Contact Number(s)	Email
Tony Hughes	Commercial Director Williams Homes (Bala) Ltd	01678 521 781	<a href="mailto:tony@williams-homes.co.uk">tony@williams-homes.co.uk</a>
Nathan Allin	Health and Safety Manager Williams Homes (Bala) Ltd	01678 521 781	<a href="mailto:nathan@williams-homes.co.uk">nathan@williams-homes.co.uk</a>

### 3 Environment Policy

In the **Design, Manufacture and Construction of Timber Framed Structures and General Contracting and Construction for Domestic and Commercial Clients**, Williams Homes (Bala) Limited objective is to ensure that activities carried out either on site or at our premises do not have a negative impact on the environment. All employees are required to act with care and consideration, embracing the responsibility for protection & enhancement of the environment. We address environmental issues as an integral part of our management processes.

#### Williams Homes (Bala) Limited Are Committed to:

- Setting and reviewing annual environmental objectives & targets
- Protect the environment, including prevention of pollution
- Satisfy our compliance obligations
- Continually improve the environmental management system & enhance our environmental performance

#### Legal Compliance & Environmental Management System

Williams Homes (Bala) Limited is committed to the application of its Environmental Management System (EMS) that incorporates the requirements of ISO 14001:2015. The objectives include continual improvement, prevention of pollution, compliance with national and local environmental legislation and any specific requirements of Contracts. The EMS forms part of our Integrated Management System (IMS) and is subject to regular review. Key aspects of the environmental performance are regularly monitored & results are reported to all interested parties.

#### Awareness & Training

The Company is committed to ensuring that all its directly employed personnel, subcontractors and suppliers are made fully aware of its environmental policy and the environmental targets and objectives that the Company sets. Appropriate environmental training is given to staff to ensure that the Company remains legally compliant and that all persons working on behalf of the Company actively protect and enhance the environment and prevent pollution.

#### Enhancement and Minimisation of Impacts

The company is fully committed to protecting & enhancing the environment & preventing pollution in all areas of its operation. Where works unavoidably intrude on the environment, reasonable care is taken to identify the issues & implement control measures to minimise their impact.

#### Sustainability, Resource Management and Waste

Williams Homes (Bala) Limited is committed to sustainable construction and therefore careful attention is given to design as well as choice of construction methods and materials. Emphasis is placed on minimising energy use, waste and pollution, whilst maximising re-use and recycling wherever possible. Where re-use and recycling are not possible, due care will be exercised in respect of waste disposal to ensure legal compliance and protection of the environment from harmful waste.

#### Sub-Contractors

Williams Homes (Bala) Limited will work with its Clients and any Sub-contractors to develop joint standards, improve practices and processes, and respect for the environment.

Copies of our Roles, Responsibilities & Authorities, Processes and ISO 14001 Certificate can be forwarded to interested parties on request.

## Site Specific Issues

Engagement with the appropriate bodies and regulatory bodies shall be sought prior to and during construction to ensure works within the following subsections are complete in accordance with legislation, industry best practice and licensing requirements.

### 3.1 Traffic Management

Site related traffic shall be pre planned and coordinated outside of peak times to ensure disruption to the local area is minimised. Site opening hours to be 8.00am – 6pm Monday to Friday, 8.00am to 12pm Saturday. Out of stated hours working by agreement with all affected parties. Deliveries shall be coordinated outside of the peak traffic times for local workers and schools, Ysgol Gynradd Brynsiencyn. On site parking shall be provided throughout the development of the site (once site established).

Objective	To manage construction activities with the potential to cause disruption to the local road networks		
	Requirements	Responsibility	Timing
Actions	Early engagement with Ysgol Gynradd Brynsiencyn to identify key times to avoid deliveries	Community Engagement Officer	Prior to construction commencing
	Mail drop the local area providing contact details of WHB staff.	Site Manager	Prior to construction commencing
	Advise suppliers of the delivery times and routes to be taken.	Procurement manager Site Manager	Prior to and throughout the construction works
	Traffic management plan to be developed and displayed on site	SHEQ Manager	Prior to and throughout the construction works
	Signage displayed along the route highlighting construction works	Site Manager	Prior to and throughout the construction works
	Slow signage to be developed with Ysgol Gynradd Brynsiencyn to encourage lower speeds	Community engagement officer	Prior to project start



	Development roads to be used as traffic routes for plant and equipment throughout build	Site Manager	Throughout the construction phase
<b>Performance Indicators</b>	No mud/dirt visible on public roads due to construction works	Site Manager	Throughout construction works
	No complaints from the residents and school	Site Manager	Throughout construction works
<b>Monitoring</b>	Daily visual inspections of works site and all erosion and sediment controls	Site Manager	Throughout construction works
	Ensure stockpiles are sealed to prevent run off	Site Manager	Throughout construction works
<b>Reporting</b>	Reporting concerns to site manager	All staff	Throughout construction works
<b>Corrective Actions</b>	Corrective actions raised and a clear implementation time frame given	Site Manager SHEQ Manager	Throughout construction works

### 3.2 Erosion and Sediment Control

The site is located off the A4080 in Brynsiencyn and we intend to cause minimal disturbance of the site and ground. It is our intention to excavate the site to allow our works to proceed only to the level we require for foundations and service installation.

During the works WHB will ensure that material is stockpiled on site on a location away from the surface water drains and watercourses at the Northeast and Southwest of the site and will allow for reuse later in the project. The material that cannot be reused on site will be stockpiled, collected and taken for reuse where possible or taken to a waste transfer station. WHB shall ensure that the carriageway is maintained free from our site related debris, utilising a telehandler and road sweeper if required.

<b>Objective</b>	To manage construction activities with the potential to cause erosion and the release of sediment.		
	<b>Requirements</b>	<b>Responsibility</b>	<b>Timing</b>
<b>Actions</b>	Mail drop the local area providing contact details of WHB staff.	Site Manager	Prior to construction commencing
	Maintain the clean hard standing site entrance for clean access egress area	Site Manager	Prior to and throughout the construction works

<b>Performance Indicators</b>	No mud/dirt visible on public roads due to construction works	Site Manager	Throughout construction works
	Zero pollution incidents to the local watercourse	Site Manager	Throughout construction works
	95% Waste diverted from landfill	Site Manager	Throughout construction works
<b>Monitoring</b>	Daily visual inspections of works site and all erosion and sediment controls	Site Manager	Throughout construction works
	Ensure stockpiles are sealed to prevent run off	Site Manager	Throughout construction works
<b>Reporting</b>	Reporting concerns to site manager	All staff	Throughout construction works
<b>Corrective Actions</b>	Corrective actions raised and a clear implementation time frame given	Site Manager SHEQ Manager	Throughout construction works

### 3.3 Water Quality

Due to the nature of timber frame construction the impact upon the water quality is minimised due to the lower depth of dig needed for the concrete raft. All our hazardous substances shall be stored in a secure container or inside a bunded tank, drip trays will be supplied for hazardous substance containers to be placed upon and used under plant as required. These locations shall be a minimum of 10m away from the watercourse to the Northeast and Southwest of the development, preferably 30m clearance. Waste receptacles will be complete and checked for leaks daily. Stockpiles shall be sealed and damped down as required, whilst it will be ensured that any runoff does not migrate to the surface water drainage and watercourse nearby. Consideration will be given to the collection of rainwater to reuse within the dust suppression systems adopted on site, weather and roof space dependant.

<b>Objective</b>	To appropriately manage stormwater and groundwater quality during construction activities		
	<b>Requirements</b>	<b>Responsibility</b>	<b>Timing</b>
<b>Actions</b>	Site welfare set up on site in a single location for the duration of the build	WHB	Prior to construction commencing
	Portable toilet provided	WHB	
	Concrete wash out area provided.	Site manager	As required during the construction phase

	Skill kit and socks available to protect surface water drain in event of emergency	WHB Site manager All Staff	Throughout the construction phase
	Daily water quality check to be completed and recorded	Site Manager	Throughout construction works
<b>Performance Indicators</b>	No untreated/dirty surface water leaving site	Site Manager	Throughout construction works
	No pollution incidents to the watercourse during construction	Site Manager	Throughout construction works
<b>Monitoring</b>	Water quality monitored during the project.	All staff	Throughout construction works
<b>Reporting</b>	Report concerns to site manager	All staff	Throughout construction works
<b>Corrective Actions</b>	Corrective actions raised and a clear implementation time frame given	Site Manager SHEQ Manager	Throughout construction works

### 3.4 Air Quality

This section of the CEMP shall also be referenced individually as the Dust Management Plan for the development.

Dust mitigation working practices shall be adopted during the works to cause as little dust disturbance to site personnel and others.

Dust emissions resulting from the works are kept to a minimum by adopting the following control methods:

Source – Pathway – Receptor:

We shall look to avoid detrimental emissions to air throughout the project, we will aim to control emissions to air firstly at source, then along the pathway and finally at the receptor.

- Creation of dusts shall be avoided where possible by planning works in a manner that do not create dust,
- Emissions to air from plant and machinery shall be reduced by efficient use, good maintenance and through the selection of plant. Where possible the machines used on site shall be fitted with systems that reduce SO<sub>x</sub> and NO<sub>x</sub> emissions, such as AdBlue systems and DPFs.
- Site plant and equipment shall operate a 'turn off when not in use' policy to mitigate any unnecessary emissions to air.
- A mains connection for the welfare on site shall be sought early in the project to minimise the use of a site generator

- Existing road to be kept clean and telescopic handler with road sweeping attachment to be available on site for road cleaning,
- Haul roads to be set up to base level as soon as is reasonably practicable during the build to minimise dust creation throughout,
- Dust shall be suppressed where necessary by damping down using a fine water spray – a water supply shall be maintained at all times;
- Debris netting and misting to be utilised during the demolition phase,
- As far as possible, the site layout will be designed to ensure that storage of potentially dusty materials is as far away from the adjacent residential properties as possible;
- We shall maximise efficiency of delivery and collections to and from the site to reduce the overall number of site visits by transport vehicles,
- Handling of potentially dusty material will be kept to a minimum;
- Wagons will be sheeted over; and
- Affected roadways will be regularly swept as required.
- There shall be no burning on site

Objective	To manage construction activities with the potential to impact on air quality		
	Requirements	Responsibility	Timing
Actions	Water bottles/misters will be used for dust suppression	All staff	Throughout construction works
	On tool extraction used	All staff	Throughout construction works
	Vacuum available on site as required	Site Manager	As required during the construction works
	Stockpiles sealed and damped down if needed	All staff	Throughout the construction works
	Energy efficient plant selection where appropriate to minimise emissions to air	All staff	Throughout the construction works
	Efficient and maximised delivery and collection planning for site transport	Transport Manager All staff	Throughout the construction works
Performance Indicators	No complaints regarding dust from workers/neighbours/community members	Site Manager	Throughout construction works
	Safety inspections do not highlight dust issues	WHB	Throughout construction works
	Site management walk rounds highlight no dust problems	Site Manager Safety Advisor SHEQ Manager	Throughout construction works
Monitoring	Daily inspections to consider the dust created by our works and effectiveness of our suppression systems	Site Manager	Throughout construction works
Reporting	Report concerns to site manager.	All staff	Throughout construction works

<b>Corrective Actions</b>	Works to stop if excessive dust is being produced. Work to recommence only when suitable and sufficient suppression has been put into place.	SHEQ Manager Site Manager	Throughout construction works
	Corrective actions and implementation time frame	Site Manager	Throughout construction works

### 3.5 Noise

Two aspects of noise that will be taken into account are:

- Any noise in the workplace, which can affect the health of workers; and
- Noise which constitutes a nuisance to the general public in the vicinity of the work premises or site, this specifically includes the adjacent residential accommodation.

All necessary measures shall be taken to keep noise levels and the exposure of all persons, to the absolute possible minimum, which where practicable will not exceed permitted exposure levels.

Noise will be kept to a minimum by ensuring all plant on the project is serviced in compliance with the manufacturer's specifications and fitted with noise suppression silencers.

The code of practice "Noise Control on Construction and Demolition Sites" will be followed at all times. We shall also look to adopt considerate construction principles and the requirements of BS5228.

Copies of the appropriate regulations and guidance notes are to be kept on the site. The Site Managers will ensure that supplies of ear defenders or other hearing protection are made available where it is not possible to reduce the noise level to a safe limit. On issue to operatives and others, the Site Managers will give instruction on their use and maintenance.

Employees will ensure that any equipment supplied for the protection of hearing is properly used and maintained. Only sound-reduced compressors shall be used, with properly lined and sealed acoustic covers fitted in accordance with manufacturer's instructions and kept closed whenever the machines are in use, and all ancillary pneumatic percussive tools shall be fitted with mufflers or silencers of the type recommended by the manufacturer.

The site opening hours will be within 08.00 – 18.00 Monday to Friday, 08.00 to 13.00 Saturday. Out of stated hours working by agreement with all affected parties. Personnel shall arrive and depart the site approximately ½ hour before or after the opening and closing times.

Work which is audible beyond the site boundary shall only be carried out between 08:00 hrs to 18:00 hrs Monday to Friday, 08:00 hrs to 13:00 hrs Saturday and not at all on Sundays or Bank Holidays unless written approval is obtained from the Local Planning Authority. Construction workers radios shall not be audible beyond the site boundary.

<b>Objective</b>	To appropriately manage noise during construction activities to minimise impact to workers, neighbours and community members.		
	<b>Requirements</b>	<b>Responsibility</b>	<b>Timing</b>
<b>Actions</b>	Site operating hours to be within 8.00am – 6pm Monday to Friday, 8.00am to 1pm Saturday. Out of stated hours working by agreement with all affected parties.	WHB Site Manager	Throughout construction works
	All significant noise generating activities will be undertaken after 8am.	All staff	Throughout construction works
	Adopt considerate construction principles	All staff	Throughout construction works
	Site manager to monitor the noise on site with a on phone application.	Site Manager	Throughout construction works
<b>Performance Indicators</b>	No complaints regarding noise from workers / neighbours / community members	Site Manager	Throughout construction works
<b>Monitoring</b>	Noise monitoring program and complaint-based monitoring	Site Manager	Throughout construction works
<b>Reporting</b>	Report concerns to site manager or WHB representative	All staff	Throughout construction works
<b>Corrective Actions</b>	Corrective action plan to be generated with a clear implementation time frame	WHB Site Manager SHEQ Manager	Throughout construction works

### 3.6 Hazardous Substances

A container will be provided on site to safely store all hazardous substances. Volumes of hazardous substances shall be kept to a minimum and the associated MSDS and COSHH Assessment shall be located in the site office whilst also accessible from the Google Drive. If the demands of diesel fuel are high a bunded fuel bowser shall be brought to site. Spill kits, sock and drip trays will be available on site and used when appropriate. A tool box talk on emergency response to a spillage will be carried out once construction begins on site and the site manager shall ensure that the spillage response plan is highlighted during the site induction. All hazardous substances shall be kept in the designated locations away from the watercourse to the Northeast and Southwest of the site.

Refuelling of vehicles is to be carried out in a designated area, preferably hard standing, and a drip tray used. Any spillages shall be cleaned up immediately and the waste materials disposed of at suitable licenced disposal facility.

Objective	To manage construction activities with the potential to cause contaminated soil.		
	Requirements	Responsibility	Timing
Actions	All chemicals will be stored in bunded, roofed areas with MSDSs kept nearby	Site Manager	Throughout construction works
	12 Steps to COSHH and COSHH Assessments kept in the site office	WHB Site Manager	Throughout construction works
	Spill kit and socks to be kept in stores	WHB	Throughout construction works
	Designated refuelling point on hard standing with drip tray used and spill kit at hand	WHB All staff	Throughout construction works
	Spillage emergency plan in place and known by all staff	Site Manager	Throughout construction works
Performance Indicators	No spills	Site Manager All staff	Throughout construction works
Monitoring	Chemical storage areas and spill kits will be inspected on a routine basis	Site Manager Safety Advisor SHEQ Manager	Throughout construction works
Reporting	Report concerns to site manager	All staff	Throughout construction works
	Report spillage incidents to site manager	All staff	Throughout construction works
Corrective Actions	Corrective action plan and a clear implementation time frame given	Site Manager SHEQ Manager	Throughout construction works

### 3.7 Contaminated Soil

The pre-construction information shall be reviewed to identify possible sources of contaminated ground. Limited risk of ground contamination has been identified as the site has been open land since 1888 with access road being built in 2023. Safe excavation procedures are to be followed. Ground workers are informed to investigate any change in the geological, environmental and material composition of the ground.

<b>Objective</b>	To manage construction activities with the potential to cause or disturb contaminated soil.		
	<b>Requirements</b>	<b>Responsibility</b>	<b>Timing</b>
<b>Actions</b>	Material excavated in layers to ensure segregation for reuse or recycling on or off site	Site Manager	Throughout construction works
	Material not able to be reused on site take to the appropriate waste transfer station / disposal facility	Site Manager	Throughout construction works
<b>Performance Indicators</b>	No evidence of contaminated soil on site from the pre-construction information	SHEQ Manager	Throughout construction works
<b>Monitoring</b>	Geotechnical reports indicated that no contaminates were located during the ground investigation	Site Manager Principal Designer Client	Throughout construction works
<b>Reporting</b>	Report concerns to site manager	All staff	Throughout construction works
<b>Corrective Actions</b>	Works to stop until soil assessed and deemed safe to continue	Commercial Manager Client SHEQ Manager	Throughout construction works
	Corrective action plan and a clear implementation time frame given	Site Manager SHEQ Manager	Throughout construction works



### 3.8 Acid Sulphate Soil

The proposed build shall incorporate a concrete raft that the timber frame and exterior finish shall be added upon. The reduced level excavation shall be kept to a minimum to allow the properties to sit at the correct levels. Excavations for services and drainage will be to the permitted depths to allow safe connections to the existing supplies. The excavations for plots are not expected to exceed 2 metre below ground level. Safe excavation procedures are to be followed. Ground workers are informed to investigate any change in the geological, environmental and material composition of the ground.

Service, utilities and swale excavations shall be assessed as the material is excavated. As dug material shall be reused on site where possible

<b>Objective</b>	To manage construction activities with the potential to cause or disturb contaminated soil.		
	<b>Requirements</b>	<b>Responsibility</b>	<b>Timing</b>
<b>Actions</b>	Actions to be undertaken if heavily saturated ground is identified during reduce level dig	Site Manager	Throughout construction works
<b>Performance Indicators</b>	No evidence of acid sulphate soil impacts (discoloration/odour)	Site Manager	Throughout construction works
<b>Monitoring</b>	Visual monitoring	Site Manager Ground works team	Throughout construction works
<b>Reporting</b>	Report concerns to site manager	All staff	Throughout construction works
<b>Corrective Actions</b>	Corrective action plan and a clear implementation time frame given	SHEQ Manager Commercial Manager Principal Designer	Throughout construction works

### 3.9 Waste Management

Williams Homes (Bala) Ltd shall develop a site waste management plan for the Brynsiencyn development. The following principles shall be followed:

Reduce – Reuse – Recycle

Where materials cannot be sorted on site for recycling the material will be taken to a waste transfer station for sorting and recycling. Where no available option for the material is available a licence disposal facility will be utilised.

Objective	To appropriately manage waste during construction activities.		
	Requirements	Responsibility	Timing
Actions	Appropriate and segregated waste receptacles will be provided on site	Site Manager	Prior to works commencing
	Skips to be signed to identify waste stream	WHB	Throughout remediation works
Performance Indicators	No waste deliberately or unintentionally released	Site Manager	Throughout remediation works
	Skips and stockpiles checked for cross contamination	Site Manager	All staff
Monitoring	e.g. Waste receptacles will be inspected daily and emptied weekly	Site Manager	Throughout remediation works
Reporting	Report concerns to site manager and SHEQ manager	All staff	Throughout construction works
Corrective Actions	e.g. Corrective action plan and a clear implementation time frame to be given	SHEQ Manager Safety Advisor WHB	Throughout construction works

### 3.10 Flora and Fauna

The site will be constructed as indicated in the relevant plans and according to the relevant permissions. The landscaping drawing and any environmental reports shall be available on site and referred to so that safe digging techniques are used and compliance maintained to the environmental protection zones.

The Preliminary Ecological Assessment and Tree Report shall be followed throughout the works. Further investigations shall take place prior to demolition and construction works to identify species immediately prior to the works, inclusive of nesting and roosting locations to be identified.

The below drawing identifies the trees and buildings to be taken down during the construction works, prior to the tree removal habitat surveys shall be carried out, an watching brief shall be carried out as required.

Within the existing site cotoneaster horizontalis was present near to the site boundary. There is a record of Himalayan Balsam 1068m west of the site on the river Afon Braint. Japanese Knotweed has been recorded 496m west, however there has been no records since 1993.

No protected species, or presence thereof, were identified during the Enfys Ecology survey. No designated sites are within or adjacent to the site.

Each dwelling will be provided with a rear garden that is turfed and landscaped accordingly. The apartments will have shared open space provided to the rear and the public open space is located to the North of the apartments.

To mitigate the loss of trees during the site clearance to allow the construction of the new properties a planting strategy has been developed and will be implemented during the construction phase.

Objective	To appropriately manage construction activities with the potential to disturb flora and fauna.		
	Requirements	Responsibility	Timing
Actions	No marine or terrestrial vegetation will be disturbed without prior approval.	Site Manager	Throughout construction works
	Tree planting strategy to be followed throughout the works	Contracts Manager	Throughout construction works
	Landscape drawings to be complied with throughout the project.	Site Manager	Throughout construction works
	Enfys Ecology Reasonable Avoidance measures to be implemented throughout the construction phase	Contracts Manager	Prior to construction and throughout the construction phase.
	Removal of the small section of Cotoneaster horizontalis from the site as instructed by the Ecologist	Contracts Manager	Prior to vegetation clearance and construction works
Performance Indicators	No injury / harm to local flora and fauna	Site Manager	Throughout construction works
Monitoring	Visual monitoring	Site Manager WHB Safety Advisor	Throughout construction works
Reporting	Report concerns to site manager	All staff	Throughout construction works
	Report to regulators or relevant parties if required	WHB	Throughout construction works
Corrective Actions	Corrective action plan and a clear implementation time frame to be given	Site Manager WHB	Throughout construction works

### 3.11 Biodiversity Mananagement

Williams Homes (Bala) Ltd shall follow the requirements of the Preliminary Ecological Assessment throughout the planning and construction phases. The loss of potential habitat from the demolition of structures and removal of existing trees shall be mitigated by the planning of trees and shrubs in accordance with the landscape plans. In addition artificial habitats will be created in the form of new planting and nesting and roosting boxes. No statutory or non-statutory designated sites are within or adjacent to the site. Enhancements shall be made for nesting birds as compensation for the loss during the construction phase.

A construction and development lighting plan shall be developed to ensure the construction process shall not impact upon the local wildlife populations.

Objective	To appropriately manage construction activities with the potential to disturb flora and fauna.		
	Requirements	Responsibility	Timing
Actions	Reptile survey to be carried out prior to commencing the construction phase	Contracts Manager	Prior to construction phase
	Bird boxes installed as per the PEA and landscaping plans	Contracts Manager	Prior to demolition phase
	Removal of trees as per tree report and demolition plan.	Contracts Manager	Prior to demolition phase
	Bird boxes installed as per the requirements of the PEA and landscaping plan	Contracts Manager	Prior to demolition phase
	Ecological watching brief to be carried out as required and advised by PEA and further survey results	Contracts Manager	Prior to demolition phase
Performance Indicators	No injury / harm to local wildlife	Site Manager	Throughout construction works
Monitoring	Visual monitoring	Site Manager WHB Safety Advisor	Throughout construction works
	Compliance checks carried out by ECoW	Ecological Clerk of Works	Throughout the construction phase
Reporting	Report concerns to site manager	All staff	Throughout construction works
	Report to regulators or relevant parties if required	WHB	Throughout construction works
Corrective Actions	Corrective action plan and a clear implementation time frame to be given	Site Manager WHB	Throughout construction works

### 3.12 Cultural Heritage

The pre-construction information shall be reviewed to identify any heritage artefacts. There are two locations of Cultural Heritage within 250m of the site, these include the following:

- Grade II Listed – Capel Horeb Assembly Rooms
- Grade II Listed – Capel Horeb

An archaeological mitigation plan has been developed by Archaeoleg Gwynedd Heneb Gwynedd Archaeology. Our groundworks team will be asked to excavate the ground in layers and to remain vigilant to when excavating. If any unusual geological, environmental or material changes occur during excavation the groundworks team shall stop and investigate the change.

Objective	To appropriately manage construction activities with the potential to disturb/uncover cultural heritage sites/artefacts.		
	Requirements	Responsibility	Timing
Actions	All contractors will be educated on their cultural heritage duty of care	Site Manager	Throughout construction works
Performance Indicators	No cultural heritage artefacts damaged during uncovering.	Site Manager	Throughout construction works
Monitoring	Visual monitoring	Site Manager	Throughout construction works
Reporting	Report identification of uncovered item of cultural heritage to site manager	All staff	Throughout construction works
	Report to regulators and relevant parties	WHB	Throughout construction works
	Work to be suspended until archaeologist indicates it is safe to continue work	Site Manager	Throughout construction works

### 3.13 Vibration

Vibration emitted from site will be limited to standard construction plant vehicles and equipment. This will be limited with the use of low vibration tools and equipment that are update and maintained on a regular basis.

Due to the nature of the existing site, we do not envisage having to use breakers or machines heavier than a 15tonne excavator, on this type of ground the vibration would be minimal beyond the site boundary. Vibration monitoring of existing structures within the zone of influence to the demolition phases to be carried out.

Deliveries shall be timed to avoid peak times and at an early stage of the development we shall install the road to site to unload the materials and equipment.

Objective	To appropriately manage construction activities with the potential to emit vibration nuisance to the local area		
	Requirements	Responsibility	Timing
Actions	Well maintained low vibration equipment to be used	Site Manager	Throughout construction works
	On site unloading and loading of plant and equipment from an early stage	Site Manager	At an early stage of construction
	Prestart dilapidation survey to be completed to show pre-development conditions	Contracts Manager	Prior to construction works
	Vibration monitoring to be carried out if within the zone of influence to buildings planned for demolition.	Contracts Manager	Prior to and during demolition phase
Performance Indicators	No complaints from the local area regarding vibration nuisance	Site Manager	Throughout construction works
Monitoring	Visual monitoring	Site Manager	Throughout construction works
Reporting	Report identification of fissures and cracks to surrounding area	All staff	Throughout construction works
	Report to regulators and relevant parties	WHB	Throughout construction works
Corrective Actions	Corrective action plan and a clear implementation time frame to be given	Site Manager	Throughout construction works
	Engineers to report on corrective actions and actions to be implemented.	Site Manager	Throughout construction works

**Appendix 1 – Initial Site Layout**

