Blue Dragon - Site 1

57 Bute St, Mount Stuart Square, Cardiff CF10 5AJ

Client:
Expedite Project Services Ltd, 8 Village Way, Cardiff CF15 7NE.

ORIGINATOR:

BECT BUILDING CONTRACTORS LTD.

TITLE:

Construction & Environmental Management Plan (CEMP)

	Name	Signature	Date
PREPARED	Gavin Thomas	G. Thomas	12 10 23
REVIEWED			
APPROVED			

A4	B	To Be Submitted for Review
SCALE & FORMAT	REVISION	PROPOSED STATUS
12.10.23		Job Folder/SHEA/ENV
DATE OF 1ST ISSUE	BECT Contract No.	FILE LOCATION

RECORD OF REVISIONS OR ADDITIONS:

Rev.	Date	Prepared	Reviewed	Approved	Details
A	12.10.23	G. THOMAS	J. PUGH		Original document to discharge pre commencement condition

Contents

APPENDICES

1.0 Introduction

This is the Environmental and Energy Management Plan (CEMP) for the Blue Dragon Project. It presents the environmental management approach that will be adopted by the project, including controls that will be implemented on site to effectively manage residual environmental risks and significant environmental aspects and their impacts, identified in the project risk profile and project environmental assessment respectively.

This CEMP forms part of BECT Management System,

The purpose of the plan is to ensure:

- a consistent and formal approach is in place to allow the Project Team to plan for environmental issues.
- the project is delivered without any breaches of environmental legislation.
- environmental risks and impacts arising from the project are proactively managed to minimise their effects.
- the project is delivered in alignment with client requirements and any other relevant compliance obligations.

The CEMP also assists the Project Team in meeting the requirements of the BECT Environmental and Energy Policy Statement, which can be found in **Appendix A1**. This Statement shall be clearly displayed on site notice boards, and this CEMP made available to both subcontractors and the general public on request or as required.

2.0 Project Description

Project Title & Location

Project Title:	Blue Dragon
Project No:	1107
Site Address:	Blue Dragon, 57 Bute St, Mount Stuart Square, Cardiff CF10 5AJ.
Project Lead:	Gavin Thomas
Project Lead Telephone:	07498179142
Project Lead Email:	gthomas@bect.co.uk

Project Description

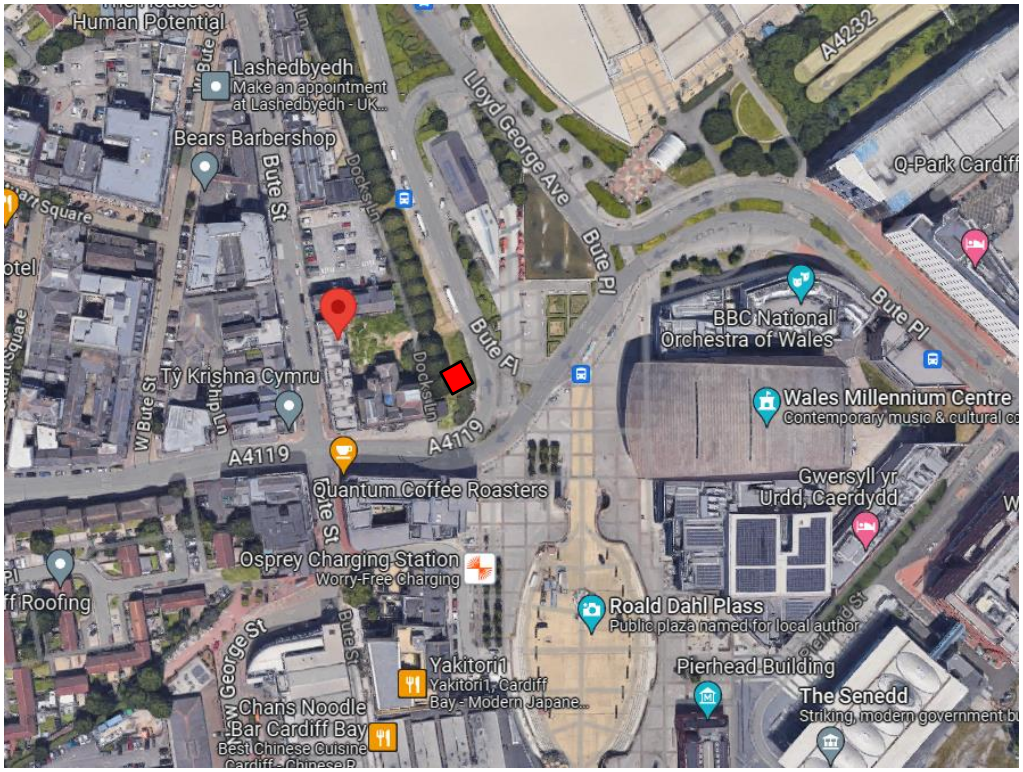
The refurbishment of the Merchants and Cory's building together with the design and construction of the new build extension together with landscaping, external works, drainage, offsite works including any section and adoption agreements to provide a fully. completed development.

By adopting the principles outlined above, the following have been applied to Blue Dragon:

- Fabric U values above and beyond the backstop values used for Building Regulation compliance.
- Ventilation via openable windows and extract fans to the Rooms & Office or teaching spaces, where applicable.
- Combined heat and power units to generate electricity and heat on site or High efficiency natural gas fired condensing boilers used throughout.
- Mechanical ventilation heat recovery units will be used where applicable with heat recovery efficiencies in excess of Eco-design.
- Energy Performance Directive.
- Low energy consuming LED lighting used throughout.
- Energy efficient lighting control to minimise artificial lighting wherever possible.

2.1.1 Site Location

The site is within five to ten minutes walking distance of many of Cardiff's key points of interest including the BBC National Orchestra and Wales Millennium Centre as well as major employers and amenities in the city underlines its suitability for a sixth form college development.



The site is located towards the Southern end of Bute Street, close to busy Cardiff Bay shopping and commercial areas of the city. The site lies wholly within the Bute Street Conservation Area and backs onto the Lloyd George Avenue Conservation Area.

2.1.2 Project Environmental Setting

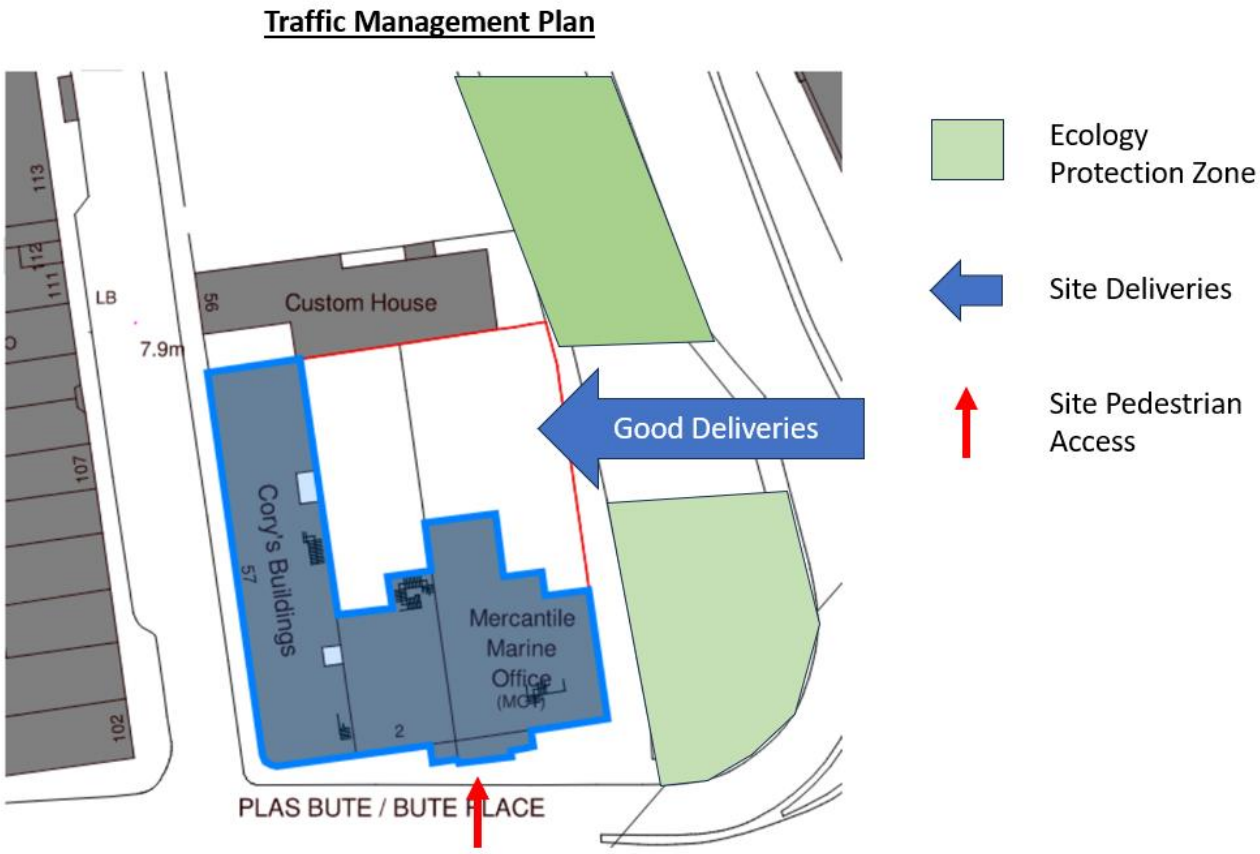
The project is based within the city bay region and is in close proximity to site surface water drains outside site perimeter which connect to a local river. There are a number of local schools nearby, hotels close by and residential areas surrounding the site etc.

2.2 Main Construction Elements

Demolition of Existing Blue Dragon Office Building (Internal works & Surveys)
Installation of CFA piled foundations,
Installation of Foundations,
Installation of a 7 storey Concrete Superstructure
Installation of Infill walling system and exterior brick cladding
Installation of MEP services
Installation of Internal finishes to all areas

2.3 Site Restrictions and Constraints

The diagram below indicates the Site Set up, traffic Management and logistics plan for the project.



3.0 Organisation & Responsibilities

3.1 Corporate Environmental Management

A dedicated Environmental Advisor/Manager is appointed to each of the BECT sites, providing a single point of contact. Gavin Thomas – BECT Project Director will fulfil this duty at Blue Dragon

Environmental management support to this contract will be provided by BECT H&S Manager Alex James

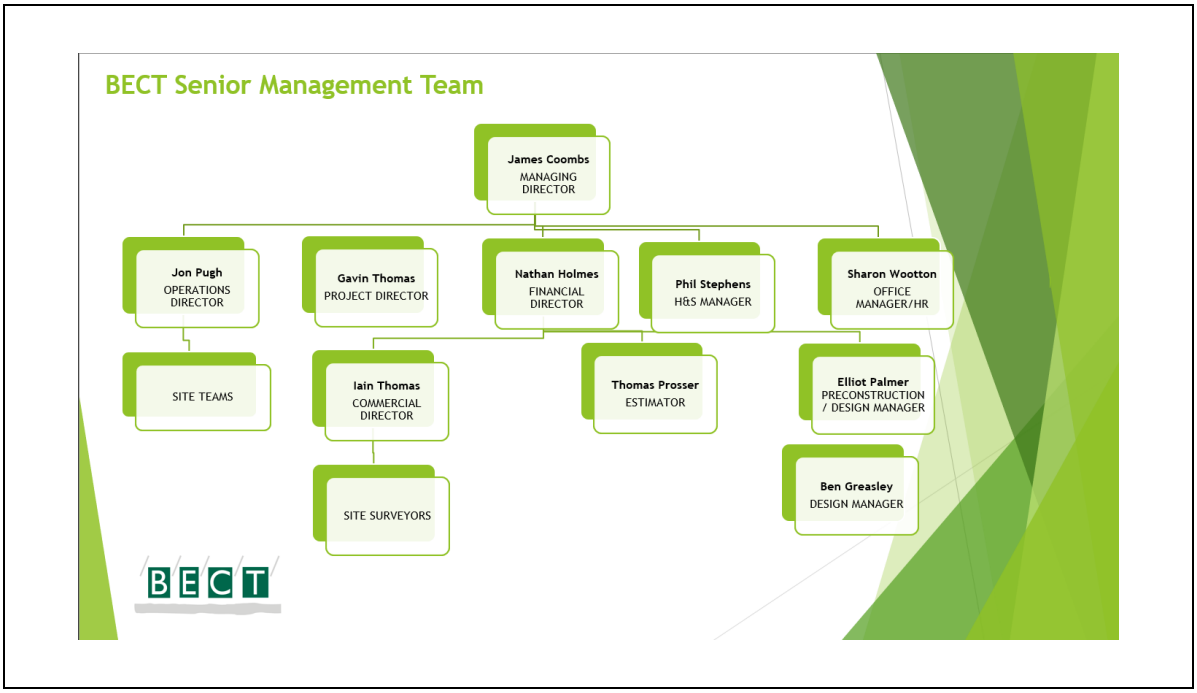
3.2 Project Environmental Management

Overall responsibility for maintaining compliance with the Environmental Management requirements of BECT and the contract is the Project Lead Matteo Brettin

Responsibility for operational monitoring and delivery of the requirements of the Project Environmental Management Plan is Project Lead Matteo Brettin.

3.2.1 Project Organisational Chart

The Project will produce and maintain a project organisation chart indicating working relationships and roles and responsibilities.



3.2.2 Roles & Responsibilities

This section describes the environmental roles and responsibilities of key members of the project team. BECT shall assign individuals to each of the roles and responsibilities outlined below.

Operations Director – Jon Pugh

- To lead by example and champion all areas of environmental management.
- Ensure that appropriate resources are in place to effectively implement the CEMP and deliver all legal requirements.

Project Manager – Matteo Brettin

- To lead by example and champion all areas of environmental management.
- Ensure that appropriate resources are in place to effectively implement the CEMP and deliver all legal requirements.

- Review the CEMP throughout the construction process to ensure it remains relevant and effective in identifying and managing environmental risks.
- Report to and agree in writing with the Local Planning Authority any amendments to the CEMP.
- Ensure that all legal requirements are identified and met.
- Implement the use of an accurate Site Waste Management Plan (SWMP) and ensure its applicability to the site operations.
- Ensure that the site is safe and that hazards are identified and secured.
- Undertake regular inspections to ensure compliance with necessary controls.
- Monitor performance of the project against statutory requirements, objectives and targets.
- Ensure the accurate reporting of resource usage e.g., energy and water.
- Ensure that all documentation referencing environmental procedures and policy are relevant and up-to-date and included within the CEMP.
- Manage all necessary documentation to demonstrate compliance with appropriate legislation for the required period.
- Identify necessary levels of environmental competence in staff and ensure necessary training is delivered to all personnel.
- Manage the investigation and resolution of complaints in accordance with Section 12.
- Ensure correct procedures are followed in the case of an environmental incident.

Site Management – TBC

- Ensure that the CEMP and associated documents and control methods are effectively implemented on site on a day-to-day basis.
- Fully investigate and act on any environmental incidents and report the findings to the Site Manager.
- Conduct and document weekly environmental inspections.
- Ensure that environmentally orientated briefings and "Toolbox Talks" are being delivered to the site workforce.
- Implement and maintain environmental controls on site.
- Ensure action is taken on any spills/incidents that occur on site.
- Report any activity that has potential to have an environmental effect immediately to the Project Manager.

Other Staff and Subcontractors - Various

- Comply with instructions given in the Site Induction.
- Proactively approach environmental issues whilst on site.
- To be fully aware of the environmental procedures in place and if they have any questions, they should be directed towards the Site Manager.
- Ensure all construction activities are carried out in line with the procedures detailed in the CEMP.
- Report any environmental incident to the Site Manager.

Biodiversity Champion - TBC

Work with the Sustainability Advisor supporting the project to help secure Biodiversity credits to achieve BREEAM.

- Champion biodiversity and ecological issues on site
- Monitor, maintain and manage areas of ecological importance or those that require protection on site.
- Understand biodiversity, including protection and enhancements present within the project contract.

- Be familiar with any ecology reports and implement recommendations appropriate to the project.
- Deliver relevant biodiversity and ecological toolbox talks.
- Maintain appropriate records in the biodiversity log on Waste.
- Assist in the achievement of Ecosite UK (where applicable)
- Assist the Project Lead in their response to ecological related environmental incidents.

4.0 Environmental Records

4.1 External Reference Documents

The following documents that give consideration to the environment (e.g., contractual, planning, Client reports etc.) have been used to develop this CEMP and will be referred to during the project.

Document Title / Description	Reference No.	File Location
Preconstruction Information - Archaeological	EXPEDITE Pre-Construction Information report / Red River Archaeology Desk based Assessment RR0513	BECT Job Folder – Available at request
Ground investigation	Integral Geotechnique 12966/LS/22/SL/A / UXO 1st Line Defence report PA14806-00	BECT Job Folder – Available at request
Asbestos	Enquin report Job No J038376	BECT Job Folder – Available at request
Noise (environmental/traffic) Refer to the Acoustic Design Specification	Hoare Lea Report	BECT Job Folder – Available at request
Ecological (protected species) – Refer to the Bat Activity Survey Report prepared by Avison Young Refer to the Preliminary Roost Assessment Report prepared by Wildwood Ecology	ArbTS Arboricultural Report ArbTS_1318.2_Merchants Place	BECT Job Folder – Available at request
Drainage– Refer to the Proposed Drainage and SUDs Layout Drawing prepared by	EXPEDITE DRAINAGE STATEMENT and SAB TECHNICAL NOTE	BECT Job Folder – Available at request

Services – Refer to the Combined External Services Layout prepared by EXPEDITE. Refer to M&E Specification	EXPEDITE MEP Energy Strategy Review P06 – Sep 22	BECT Job Folder – Available at request
Topographical – Refer to the topography survey prepared by Azimuth Land Surveys Limited	Hywel John Surveys	BECT Job Folder – Available at request
Flood Risk Potential – prepared by EXPEDITE	EXPEDITE FLOOD CONSEQUENCE ASSESSMENT	BECT Job Folder – Available at request
Design and Access Statement – Refer to the Design and Access Statement prepared by EXPEDITE	EXPEDITE Design Access statement document	BECT Job Folder – Available at request
Parking & Access Arrangements – Refer to Framework Travel Plan report prepared by Hydrock for comments on the parking and access arrangements relating to the proposed development	Apex transport Planning report Travel Plan C22007/TP01 & Transport Statement C22007/TS01.	BECT Job Folder – Available at request
Day Light, sun light & Overshadowing Assessment	RWDI report #2205854	BECT Job Folder – Available at request
Pedestrian level wind microclimate assessment	RWDI report #2205854	BECT Job Folder – Available at request
Tree Protection report ArbTS 1318.2 dated 23rd Aug 23	an Arboriculture Impact Assessment, Arboricultural Method Statement and Tree Protection Plan in general accordance with the Arboriculture Report prepared by ArbTS dated 23rd August 2022	to control the impact of demolition and construction (including associated access, parking and storage) to retained trees (including in terms of root loss, root damage, root crushing and asphyxiation, soil compaction and soil contamination), tracking plans of the largest demolition and construction vehicles to show the impact on trees and RPAs. The details shall extend to any areas used outside the application site for construction access and storage
Biodiversity Enhancement Report	by Just Mammals limited	BECT Job Folder – Available at request

Any obligations and/or controls stated within the above documents should be detailed in section 10 Project Environmental Controls.

4.2 Consents & Permits

The environmental consents and permits applicable to this project, together with how compliance will be achieved and responsible person for ensuring compliance, are detailed below.

Consent / Permit	Responsible Person	Compliance Requirements	File Location
Trade Effluent Discharge Consent	Gavin Thomas	TBC	TBC
Hazardous Waste Producer Registration (*Wales only)*	Gavin Thomas	TBC	TBC
Protected Species Licence	Gavin Thomas	TBC	TBC
U1 Waste Exemption	Gavin Thomas	TBC	TBC
S61 Agreement	Gavin Thomas	TBC	TBC

5.0 Environmental Conditions & Obligations

5.1 Planning Requirements (Environmental)

Local Planning Authority: Cardiff Council

Planning permission Number: 22/02201/FUL

Planning Condition No.	Planning Condition	Reason &/or Compliance Requirements
12	Contaminated land measures	Appropriate reports to provide information for the assessment of risks to future users.
17	Contaminated land measures	To ensure associated risks to future users are minimised.
18	Ecology	To ensure the protection of nesting birds
27	Landscaping Protection	To ensure the protection of the surround new and existing landscaping
28	SuDS	To ensure adherence to the local SuDs arrangements.
29	Refuse and recycling storage facilities	To ensure the Refuse and recycling storage facilities are suitable and sufficient
30	Site Working Hours	To ensure BECT stay within the allocation: 1. General Site Management, hours of Work on site ; 7 :30am to 6pm 2. Hours for deliveries, loading and Unloading ; construction compounds, 3. Temporary facilities for construction / sales staff ; site 7 :30am to 6pm

		4. Hoardings and means of enclosure to prevent unauthorised access 8am to 5pm
31	Commercial Collections	To ensure adherence to the local council policy
32 & 33	Window Conditions	To ensure the building is in keeping with the surrounding area and its historical features

5.2 Additional Legal and Other Compliance Requirements

The BECT Management System covers the scope of all relevant environmental legislation that generally applies to the activities of the business. The Preconstruction/Project Lead, with their appointed Environmental Advisor will review the project to ensure this scope is appropriately addressed by the BECT Management System.

6.0 Site Environmental Rules

The following site environmental rules shall be adhered to by both BECT staff and subcontractors whilst working on this project site:

No.	Site Environmental Rule
1	No wastewater or liquids are to be discharged to drains or sewers unless permission has been granted by site management
2	All spills of fuel, oils, chemicals and potential polluting materials are to be reported to your supervisor immediately
3	Oils, fuels, chemicals and other potentially polluting materials are to be located at least 10m from any watercourse or drain, and are to be securely contained, and bunded
4	Hazardous waste items are not to be mixed with other hazardous or non-hazardous waste
5	Waste segregated practices on site are to be adhered to
6	Site working hours are to be adhered to at all times
7	All plant and machinery are to be switched off when not in use
8	Dust reduction measures are to be employed where required e.g., dampening down techniques
9	Noise levels are to be kept to a minimum at all times where possible
10	Site management is to be notified immediately if any suspected Protected Species, Vermin or Invasive Weeds are encountered
11	Burning of waste on site is strictly prohibited
12	Site speed limit to be adhered to at all times

7.0 Environmental Key Performance Indicators

The following section details the environmental KPIs that the project will adopt to measure its performance.

7.2 Corporate Key Performance Indicators

The environmental KPIs set out below are the BECT minimum requirements on each project.

Include and update performance against targets in the table below at Quarterly CEMP review.

No.	Key Performance Indicator	Target	Current Project Performance
1	Timber	100% certified FSC/PEFC used	
2	Non-hazardous construction waste	95% diverted from landfill	

7.3 Project Specific Key Performance Indicators

In addition to the BECT KPIs, the following project specific KPIs have been set:

For each KPI update performance against targets in the table below at Quarterly CEMP review.

No.	Key Performance Indicator	Target	Current Project Performance Against Target
1	Zero RIDDOR incidents	0	**0**

2	Client Satisfaction	9 out of 10 or above	**0**
3	Zero Defects at Handover	0	**0**
4	SMART Waste Recording	100%	**0**
5	SHEA inspections above 80%	85%	**0**
6	Zero Environmental Incidents	0	**0**
7	Drug & Alcohol Testing (Random) 0%	0%	**0**

8.0 Environmental Monitoring

8.1 Project Commencement Environmental Review

The Project Lead will liaise with the Environmental Advisor/Manager to conduct a full review of the project environmental management approach after the project has been transferred from Preconstruction. This is to be completed prior to commencing on site.

The purpose of the review will be to ensure all environmental management requirements for the project are in place and being implemented to achieve the BECT standards.

8.2 Audits & Inspections

The following internal audits and inspections are to be carried out on the project:

Audit/Inspection	Frequency	Method	Conducted by
Site Team HSE inspection	Weekly	Site walk and inspection report	Gavin Thomas
HS Advisor HSE inspection	Monthly	Site walk and inspection report	Alex James
Director / Senior Manager HSE inspection	As required	Site walk and inspection report	Jon Pugh
Project Assessment Audit	Monthly	Audit Report	Gavin Thomas
Subcontractor HS&E Performance -	As required	SHEA Report	Matteo Brettin
Environmental Inspections	Quarterly	Site walk and inspection report	Alex James
Internal Audit	As required	ISO14001 compliance audit	BECT SHEA Department

8.3 Enforcement Agency Inspections & Visits

It is possible that from time-to-time external Regulatory Authorities may visit site to carry out an inspection. These may include NRW (Natural Resource Wales) and/or the Local Authority. The Project Team will be available to assist where required should such an inspection occur. The appointed Environmental Advisor is to be advised by the Project Team in advance of any pending external Regulatory Authority visit or upon their arrival to site if the visit is unplanned.

8.4 Risk Assessment & Method Statements (RAMS)

Specific site activities will be managed through a Risk Assessment & Method Statement. RAMS will be task specific and take account of the required and relevant environmental management controls detailed within this document. RAMS shall be subject to review and approval. Activities that are deemed to pose a high risk to the environment are to be reviewed in conjunction with the appointed Environmental Advisor/Manager. This is to be monitored through RAMS planner.

9.0 Project Environmental Aspects and Residual Risks

To deliver effective environmental management, it is crucial to:

- Identify the residual environmental risks and aspects of the project.
- Evaluate how the planned working activities on the project will potentially impact on the environment and the surrounding area so that appropriate controls can be identified and implemented.

See Appendix A for the latest copy of the Project Environmental Assessment to identify the following that are applicable to the project:

- Residual environmental risks
- Significant environmental aspects
- Positive environmental aspects

Controls to manage the identified residual risks and significant environmental aspects are detailed in next section of this plan.

10.0 Project Environmental Controls

To manage residual risks and significant environmental aspects, effective control measures must be identified, documented and implemented on site through this CEMP. Controls are to include those to manage site operations and activities. During the identification of controls reference is to be made to the Legal Environmental Register within the BECT Management System, and where necessary, advice sought from the Regional Environmental Advisor.

Controls will be subject to inspections and audits. The control measures detailed in this section will be implemented on this project to effectively manage any residual risks drawn from the Environmental Review and Project Risk Profile and the significant aspects and their impacts as identified in the Project Environmental Assessment.

10.1 Project Emissions

The following control measures will be employed on this project:

No.	Noise & Vibration Control measures
1	Site working hours are 08:00 to 18:00hrs Monday to Friday. 08:00hrs to 13:00hrs on Saturday. No work will be conducted on Sundays or Bank Holidays
2	BECT standard noise and vibration control measure would be to install monitoring devices via a specialist contractor should the MS & RAMS dictated that the levels would breach or come close to breaching statutory requirements.

No.	Dust & Pollution Control Measures
1	Dust monitoring will be covered off by one onsite automatic dust monitor during construction and demolition period of site.
2	All vehicles, plant and machinery are maintained in accordance with manufacturer's instructions and fitted with appropriate exhaust silencers.
3	All Local drains to be covered with silt mesh and monitored & cleaned weekly/fortnightly depending on site monitoring findings

No.	Light Control Measures
1	All lighting within the site boundaries is directed onto site.

No.	General Control Measures
1	The following measures will be undertaken to reduce the impact of construction on the surrounding community: · The works will be carried out by adopting the principles of best practicable means for control of noise and vibration in accordance with BS5228: 2009 Code of Practice for Noise Control on Construction and Demolition Sites; · Electric plant will be used wherever possible; · 'Sound reduced' generators and compressors will be used to minimise noise; · Any cutting of concrete or hard standing will generally be carried out by diamond rotary cutting or by hydraulic breaking; both methods avoid impact on the substrate material thus reducing noise and vibration; · All plant will be effectively silenced and maintained, with engines being switched off when not in use; · Restricting drop heights during lorry loading to the minimum required for safe and for safe and efficient operations; · Building operations audible at the site boundary may only take place between the hours of 0800 to 1800hrs Monday to Friday and 0800 to 1300hrs Saturday and nil Sunday or Public Holiday working; · The selection of plant, equipment and systems of work, including delivery times should ensure both noise and vibration is reduced to a minimum and must be below permitted levels and within the times above.
2	Plant and Material Loading Out – All plant and Materials will always be driven onto site with the aid of banksmen and only offloaded within the confines of our site
3	Material storage – We are employing an offsite storage facility to reduce the size of wagons delivering materials to site
4	Hoardings – We will install timber site hoardings around the perimeter of our site at a height and position in agreement with the LA and highways (on going agreements on positioning within the highway and bus bay suspension ongoing)
5	Wheel Washing facilities and road sweeper will be employed during the Demolition and Ground works period of the scheme
6	Lighting – will be situated (by agreement if required) to the street side hoarding along the pavement, on the tower crane and on the building, floor levels – all lighting will be able to be \ed off/on at the start and end of every day. Note that the Pavement lighting and building stairwell lighting will have to stay on but will be of minimal Lux levels.

10.2 Waste Management

10.2.1 Site Waste Management Plan

A Site Waste Management Plan (SWMP) for the project is incorporated into the Waste environmental tool. The SWMP will be produced to ensure that all waste from this site is managed appropriately in terms of legal compliance.

Recycled (potentially): Roof Slates, Chimney Cowls, Radiators, Parkway Flooring, Cylindrical Stair treads, Tables, Scrap Metal, Fireplaces, Stair Balustrade, Certain Doors, electrical goods/wiring, Post office cashier counter, Block work, Brick work and chairs.

Disposed Waste: Timber roof, timber in general, windows, plaster, mortar, concrete floors, drainage, Ground floor slab and contaminated land.

Construction Waste

Item	Waste Route
Bricks	Brick slip system chosen to minimise waste
Concrete	BECT site engineer on site for total duration of works to reduce waste
Insulation	Roof cut for area and minimal waste to Partition walling
Packaging	Segregated skip for recycling
Timber	Segregated skip for recycling
MEP	Segregated skip for recycling
Canteen Waste	Waste segregation to match local council requirements
Oils	COSHH bin provided to be removed by specialist waste contractor
Asphalt	Segregated skip for recycling
Tiles/ceramics	Mixed waste skip – not possibly to be recycled
Inert	Segregated skip for recycling
Metals	Segregated skip for recycling
Gypsum	Take back scheme employed via supply chain
Plastics	Segregated skip for recycling
Floor coverings	Take back scheme employed via supply chain
Soils	Segregated skip for recycling
Hazardous material	Segregated for shipping to specialist waste contractor
mixed waste	Mixed waste skip – not possibly to be recycled

10.2.2 Compliance & Validation

Waste Carriers

All companies removing waste from site, including those employed on behalf of subcontractors must be registered waste carriers. Copies of their Waste Carrier Registration certificate must be obtained and uploaded to the Waste system.

Permits & Exemptions

The environmental permitting regulations require that a premises receiving / treating waste must hold either an environmental permit or exemption. Copies of such documents, along with details of permitted waste types, must be obtained prior to the use of these services and retained on Waste.

Validation checks

All waste carriers and environmental permits must be checked to ensure they are valid by logging onto the .gov website. Evidence will be retained with the carrier license or permit on Waste.

Waste Transfer Notes and Hazardous Waste Consignment Notes

No waste is to be removed from site without appropriate traceability for the waste.
Waste transfer notes and Hazardous Waste Consignment Notes are to be entered onto Waste where they will be electronically stored and retained for a minimum of 2 and 3 years respectively.
Hazardous Waste Consignment notes shall have the Part E section completed. Copies of Duty of Care documentation will be made available on request.

10.2.3 Onsite Waste Management

The following control measures will be employed on this project:

No.	Control measure(s)
1	Waste is segregated, where possible, into separate skips/containers in order to assist in achieving the high recycling rates possible for the project.
2	Appropriate signage is displayed on all waste skips/containers.
3	Hazardous waste will be stored in separate labelled containers

10.3 Water Management

The following control measures will be employed on this project:

No.	Control measure(s)
1	All static fuelled plant have drip trays or plant nappies for use during refuelling. Drip trays are in place underneath mobile fuelled plant when parked up at the end of shift.
2	A designated refuelling area will be established on site and is clearly signed.
3	An impervious concrete wash out area, will be confirmed on site. This is the only area where concrete wagons are permitted to wash out. The resulting wastewater will be allowed to evaporate wherever possible.
4	No wastewater is discharged to any Controlled Water, surface water or foul drain, unless formal, documented authorisation has been obtained through a discharge consent notice or an environmental permit.

10.4 Energy Management

The following control measures 'is/are' employed on this project:

No.	Control measure(s)
1	Plant is to be kept well maintained and switched off when not in use.
2	Electricity supply to site will be metered to capture electricity consumption. This data is to be entered into the Waste tool.
3	An Energy Planning Review will be conducted, and performance established using the Project Energy Review. (Appendix **A3**).

10.5 Resource Management

The following control measures will be employed on this project:

No.	Control measure(s)
1	All timber products from a Chain of Custody source, certified by the Forest Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification Schemes (PEFC), to ensure legality and sustainability is procured. Where this is not possible, the Client will be informed if necessary and alternative timbers proposed.
2	Materials are stored in designated storage areas, as agreed with the Project Management, to prevent damage and subsequent waste.
3	The storage of all BECT and Subcontractor oil containers with a capacity of 200ltrs or more comply with the requirements of the Control of Pollution (Oil Storage) regulations as follows: • Oil drums / fuel containers are stored on proprietary secondary containment systems with capacity to contain 110% of the contents of the largest container, or 25% of the total, whichever is greater. These are protected so as to minimise the ingress of rainwater and secured against unauthorised discharge. • All bulk storage tanks are integrally bunded proprietary tanks. The tanks are located within the compound area of the site, away from general traffic movements and surface water drains, and secured against unauthorised discharge.
4	COSHH products stored on site are to be kept in locked, bunded and ventilated containers. A COSHH register and copies of MSDS and COSHH assessments must be held.

10.6 Contaminated Land

The following control measures will be employed on this project:

No.	Control measure(s)
1	The site investigation plan stated the site is not contaminated, however the BECT team and its sub-contractors will investigate during construction and use external specialists where required by means of off-site testing if required/contaminated soils found.

10.7 Protected Habitats and/or Species

The following control measures will be employed on this project:

No.	Control measure(s)
1	None recorded via Client surveys

10.8 Non-Native Invasive Species

The following control measures will be employed on this project:

No.	Control measure(s)
1	None recorded via Client surveys

10.9 Heritage and Archaeology

The following control measures will be employed on this project:

No.	Control measure(s)
1	The buildings are listed and therefore BECT will follow all the required procedures set out by CADW – BECT awaiting CADW requirements.

10.10 Other

The following control measures will be employed on this project:

No.	Control measure(s)
1	Imported Aggregates and or Any Site Won materials – any aggregate (other than virgin quarry stone) or recycled aggregate material to be imported shall be assessed for chemical or other potential contaminates in accordance with a scheme of investigation which shall be submitted to and approved in writing by the local planning authority in advance of importation

10.11 Unexpected Discoveries

Site management is to be notified if any of the following are encountered or suspected:

- protected species, vermin or non-native invasive weeds (e.g., Japanese knotweed)
- contamination or potential contamination of ground or water
- archaeological / buried remains.

Work in that area will be ceased immediately and procedure ENV07 shall be implemented.

11.0 Energy Management

11.1 Introduction

As per the BECT Environment Policy statement, we are committed to reviewing and reducing the use of raw materials and energy by using, wherever possible, materials from renewable sources, recycled or recyclable materials, and promoting energy conservation and efficiency in our offices and construction sites.

The Project shall make reference to Site Environment Guide for identification of energy efficiency solutions and controls.

11.2 Project Energy Review

The Project Team will conduct, document and maintain a full energy review, **analysing energy use** and **its consumption** to:

- Identify current energy **sources.**
- Evaluate **past** and **present** energy use and consumption.

Based on the analysis of energy use and consumption, areas of significant energy use will be identified, i.e.:

- **Activities** i.e., Project offices, equipment, processes and personnel working for, or on behalf of the organisation that significantly affect energy use and consumption.
- Identify other relevant factors and **variables** affecting significant energy uses.
- Estimate **future** energy use and consumption.

The **Project Lead** will be responsible for control measures that will be employed on this project, which are identified in Section 11.4

The **Project Lead** will ensure that Employees and contractors are made aware of the importance of resource and energy efficiency through the use of the Energy Review and through initiatives such as communications and toolbox talks.

The control measures that will be employed on this project are presented in Section 10.4.

11.3 Energy KPIs and other Monitoring Register

The fuel, electricity usage will be in the Automatic Metering and Targeting (AMT) Report. The AMT Report provides a simple way to record Project monthly resource data, set targets with reference to current industry benchmarks, and to report performance using the automatically generated graphs.

12.0 Training & Communication

To aid consultation with the workforce and the wider public, the following measures will be employed to ensure effective training and methods of communication are provided.

12.1 Training Opportunities

The following training will be conducted on this site:

- A site Induction will detail control measures to enable the management of the identified significant environmental aspects and will include communication of action to be taken in the event of environmental incident and the location of spill response materials.
- Environmental Toolbox Talks relevant to site activities will be conducted on site. For activities which have potential to result in an environmental incident, toolbox talks will be delivered by the relevant subcontractor supervisor on a regular basis. A record of attendance will be produced and retained in the relevant project file.
- BECT personnel with responsibility to managing environmental incidents on site will attend spill response training, in line with the Environmental Management training matrix.
- Evidence of attendance to spill response training will be requested for all subcontractor supervisors and operatives that will be undertaking refuelling activities on site. A copy of the evidence confirming the training will be kept in the relevant project file on site.
- Other specific environmental training will be provided as necessary to appropriate staff with specific roles and responsibilities.
- Energy efficiency awareness training shall be provided.

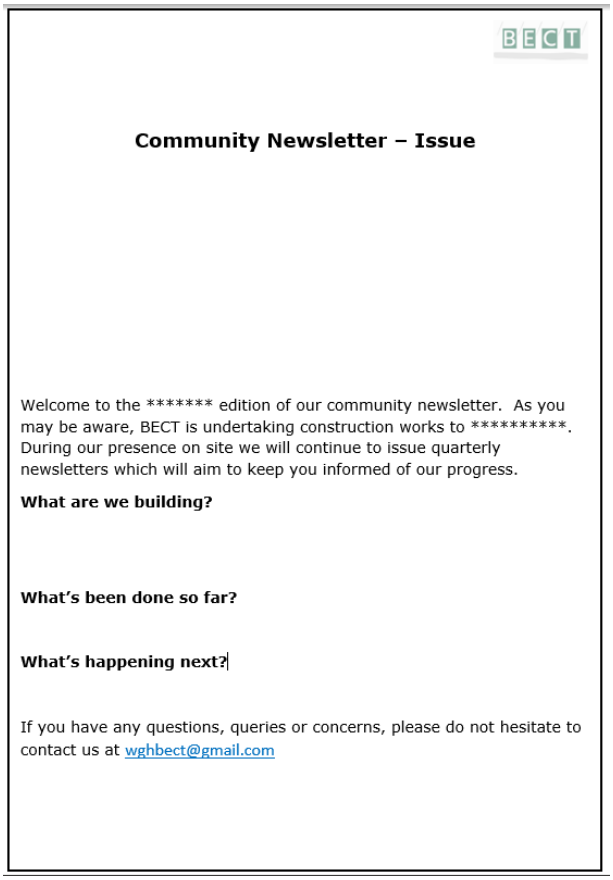
12.2 Communication

Various forms of communication will be utilised by the Project Team to convey environmental messages and raise awareness both with the on-site workforce and external parties, as set out below.

12.2.1 On-Site Communication

- Environmental notices will be displayed, and will be used to raise awareness on environmental issues as well as display information regarding site performance and emergency procedures
- Project co-ordination (Black Hat) meetings are held to discuss health, safety and environmental issues.
- Weekly progress meeting held to provide a mechanism for health, safety and environmental issues to be discussed.
- Any member of the project team or site workforce can arrange for a confidential meeting with the Site Team Lead to discuss any environmental issues.
- Environmental Alerts, Bulletins and Circulars
- External Communication

All external communication by BECT will be carried out via the Client RAP – BECT standard external communication would be via Newsletter, Complaints and compliments pads or Media reports. Template Example below:



BECT

Community Newsletter – Issue

Welcome to the ******* edition of our community newsletter. As you may be aware, BECT is undertaking construction works to **********. During our presence on site we will continue to issue quarterly newsletters which will aim to keep you informed of our progress.

What are we building?

What's been done so far?

What's happening next?

If you have any questions, queries or concerns, please do not hesitate to contact us at wghbect@gmail.com

12.2.2 Managing Compliments & Complaints

All Compliments & Complaints will be managed in accordance with the 'Manage Compliments & Complaints process, contained in the BECT Management System. In the event of a Compliment or Complaint being received the process ENV.08 will be followed and a record kept of the Compliment or Complaint. Where complaints or compliments are received via social media these will be handled by the central Communications Team.

Complaints are to be logged in the Compliments & Complaints Record which is managed on site. The log will include as a minimum the following information:

- Number
- Reference
- Date
- Name/recorded on behalf of (where applicable)
- Address
- Message Pad (where applicable)
- Nature of complaint (e.g., noise, cleaning, safety issue, etc.)
- Details of complaint (a brief summary)
- Immediate action
- Follow up action.
- Recorded by
- Closed (Y/N)
- Date resolved.
- Decision/resolution

Where a compliment or complaint cannot be successfully resolved at a site level further assistance will be sought from other relevant departments within BECT.

12.2.3 Environmental Health Department engagement

The Environmental Health Department will be engaged throughout the project, and dialogue maintained for key complaints. The contact details are.

Name: Alex James
Role: BECT SHEA Manager
Telephone: 07576085387
Email: ajames@bect.co.uk

13.0 Environmental Incident Management

13.1 Emergency Preparedness

Environmental aspects and any residual risks with potential to result in an emergency event have been identified and evaluated in the **Project Environmental Assessment** (Appendix A). As a result, the Project Lead has determined that the event that has the highest potential to cause a major environmental incident on this project is on site waste management.

Receptors identified within the vicinity and surrounding area of the project that could potentially be affected in the event of a larger scale environmental incident are summarised in Section 2.1.2 of the CEMP.

Control measures to manage the environmental impacts that could be produced by the aspects and/or residual risks are detailed in Section 10 of this CEMP.

Over the duration of the project, the following materials will be used and/or stored on site:

- Diesel and/or petrol fuel and oils
- Chemical products (i.e., COSHH products)
- Gaseous products (e.g., acetylene)
- Materials with potential to pollute e.g., Cement.

The location of any COSHH and/or Fuel storage areas will be identified on the Site Installation Plan.

In response to the storage and use of the above products, the following spill response materials will be present in a sufficient quantity on site:

- Spill response kits to manage releases of chemical and hydrocarbon products.
- Drain covers.

Spill kits will be maintained at key locations on site, these are.

- Fuel store
- COSHH store
- Site entrance
- Site offices

The location, condition and suitability of the spill response materials on site will be checked as part of the weekly Site Team HS&E Inspection and during the environmental Inspections conducted by the appointed Environmental Advisor.

Notices that detail the action to be taken in the event of an environmental incident will be displayed in appropriate locations around the project site.

Training in relation to emergency preparedness is detailed in section 12 of the CEMP.

13.2 Drills

Spill response drills will be conducted on the project site every 6 months. A record of the drill including attendance, outcome and any actions required will be recorded and retained in the relevant project file.

13.3 Incident Response Process

All Environmental incidents will be managed in accordance with the 'Manage Environmental Incident' process (ENV.07), contained in the BECT management system. ENV.07 references incident specific processes ENV.G.06, ENV.G.07 and ENV.G.08 that will be implemented in the event of:

- Fuel, oil or hazardous product spillage
- species/habitat or non-native invasive species, archaeological or buried human remains.
- Breach of a licence consent, Section 61 Agreement and/or receipt of a Section 60 Notice or another Enforcement Notice

All environmental incidents will be reported in accordance with the Environmental Incident Notification and Rating Matrix (ENV.G.05), by telephone and afterwards using the Environmental Incident Notification Record (ENV.F.09).

In the event of an environmental incident that requires external assistance, LCM Environmental (BECT appointed incident response provider) will be contacted, following consultation with the Environmental Advisor supporting the Region / Business Unit.

The incident hotline for LCM Environmental is Tel: **01884 841 387**.
Local Water Authority emergency contact: **Dwr Cymru 0800 052 0145**
Contact for project Ecologist (if required): **TBC.**

Should an environmental incident require assistance from a Regulatory Authority, the Project Lead or person delegated by them will notify the Environment Advisor/Manager, who will then make the necessary contact.

13.4 Fire Management

Fire-fighting foam is harmful to the environment. In the event of a fire and only where humanly safe to do so efforts will be made to prevent the escape of fire-fighting foam or other materials with the potential to pollute.

14.0 Review & Amendment

This CEMP will be reviewed (and amended where required) under the direction of the Project Lead every 3 months throughout the duration of the project as a minimum. Reviews shall also be undertaken as a result of the following:

- A significant amendment to an activity on site
- Significant change in legislation
- Failure of environmental control measures
- An environmental incident on site.