



Waste Management Plan
Abbey Primary
For submission with Planning Application

Project No: **HWS0361**

Rev No: **1**

Rev Date: **20/11/2019**



Waste Management Plan

for

Abbey Primary

Address: 2 Heol Penlan, Neath SA10 7LB

Prepared by **Rhys Lewis**

Date **20/11/2019**

Revision Record			
Rev	Date	Revision Details	Revised by



Contents

1.0 Introduction

2.0 Legal declaration

3.0 Description of the site

4.0 Resource Efficiency - Steps to be taken to minimise waste, the amount of waste generated during excavation, demolition and construction

5.0 Waste Management - Type and volume of the waste to be generated (three waste streams)

6.0 Recycle & Recover Measures - Steps to be taken to achieve the reuse and recycling percentages



1.0 Introduction

BAM Construction's Environmental Management System (EMS) is certified to ISO14001, and covers all activities of its construction sites and offices.

All BAM Construction sites aim to use natural resources responsibly to reduce our impact on the environment; this includes energy, water, sustainable & legal timber, waste reduction, waste prevention and forecasting wastes.

Our Environmental Management Systems had required our sites in England and Wales to produce a Site Waste Management's plan. Changes to the requirement for Site Waste Management Plans in England, BAM took the opportunity to change and introduce into our procedures project resource efficiency plans, extending beyond recording how we prevent/recycle waste to conserving energy and water during construction demonstrating a sustainable construction. Since March 2014, BAM construction projects produce a Resource Management Plan (RMP).

The completion of the RMP prior to project starting on site, is the responsibility of Project Manager (Rhys Lewis), supported by our in-house regional Sustainability Advisor Amanda Wright PIEMA. The RMP is to be reviewed quarterly, and updated where necessary to accurately reflect the progress of the project. A review of the project will also be carried out within 3 months of completion to compare the estimated quantities of resources used to actual consumption

The project is targeting an Excellent BREEAM rating, but BAM Construction will apply environmental targets to the construction phase of new Abbey Primary. The purpose of the specific waste targets is to both prevent, reduce and recycle the amount of waste created, and that what is produced is sent to licenced transfer station for further recovery and maximise diversion from landfill any that is produced.

For the purpose of the submission of this specific document with planning, we have extracted the relevant Waste Management sections from the Abbey Primary Resource Management Plan to create this Waste Management Plan

2.0 Legal Declaration

The Client and Principal Contractor will take all reasonable steps to ensure that all waste from this site is dealt with in accordance with Section 34 of the Environmental Protection Act 1990 (Waste Duty of Care), and the Environmental Protection (Duty of Care) Regulations 1991, and that all materials will be handled efficiently and waste managed appropriately.

3.0 Description of the Site

Proposed development site is on the site of the existing secondary school Dwr y felin, that is where the new abbey primary will be built. The scope of works includes demolition of existing primary school within new abbey primary site, and the construction of new primary school which will amalgamate 3 existing primary schools into one location. 450 pupils.

Images below taken from the project Design and Access statement show the site boundary in red.



The existing Building

- As part of the construction, it is necessary to demolish the existing abbey primary, picture below.
- The building in currently used and will remain live through building of the new Abbey primary, then after completion of new school existing abbey primary will be demolished.



4.0 Resource Efficiency

Steps taken to minimise waste, the amount of waste generated during excavation, demolition and construction

The management of materials on this site, will ensure that materials consumption is reduced and the, production of waste created (excavation, demolition and construction) is avoided wherever possible. This will be possible by following prevention, reduction and reuse measures outlined below. Only where these routes have been exhausted should waste be sent for disposal.

The site is a brownfield site which had an existing secondary school placed on it, we have tabled below the approach to how opportunities will be explored to how those existing materials could be reused or recycled in the first instance.



Waste Streams	Waste Prevention & Reuse, and recycling measures
Excavation	Application of the excavation activity to the waste hierarchy includes the following although not limited to: Foundations and drainage grubbed out, pilling arising and a surplus of the cut & fill will need to be removed from site.(TBC with design)
Demolition	Application of the demolition activity to the waste hierarchy includes the following although not limited to: - A pre-demolition audit will be undertaken by specialist demolition subcontractor, to identify those materials to be removed, for suitability for reuse and recovery to minimise non-recyclable waste, although the building has been in derelict since 1999 the reuse opportunities may be limited. - a soft strip will be undertaken to remove fixed furniture floor/wall treatments and fixtures and fittings etc. where possible these will be taken to a waste transfer station and recycled - There will be a full intrusive investigation carried out before demolition works are carried out.
Demolition (Hazardous)	Asbestos cement sheeting (hazardous waste) will be removed from the building after the R&D asbestos survey to a licenced NRW/EA facility

Construction

BAM Construction understands that steps to minimise waste that can be created latter on site, start early in a project concept/design where the biggest opportunities exist. Following the waste hierarchy, BAM look to view opportunities to influence the design with the design team and procurement through to on-site construction to reduce waste.

We have included in this section the outline measures of decisions taken that will reduce the amount of waste produced at later stages in the project, from the design team through to BAM Construction on site good site practices.

Prevent & Reduce - 'Designing out waste' steps that will contribute to minimising waste:

Reduce - Minimising construction Waste through design

- We will be utilizing the existing green palisade fencing around the site as our secure hoarding line, there will need some amendments.
- New structural steel frame – prefabricated off site
- Palette of materials is proposed that include:
 - yellow/blue brick in varying patterns – this to be reviewed for repetition to minimise waste
 - Roof sheeting is to composite pre-fabricated off site
 - Curtain walling – generally off site pre-fabricated
 - Louvre features – generally off site pre-fabricated
 - Windows & doors(both internally and externally – fabricated off site

Minimising Construction Waste through Procurement:

- Prevention: review opportunities with manufactures for take back schemes for offcuts of materials to reduce waste and alternative reusable packaging to reduce waste on site
- Prevention: timber bearers delivered with steel frame to prevent damage, returned to supplier to prevent timber waste on site
- Prevention: review opportunities with manufactures for alternative packaging of materials to reduce waste and ensure materials are not overpackaged to reduce waste

On site: Management to reduce Waste

The production of waste material on the site is to be avoided wherever possible by working through the waste hierarchy below. Only where all avenues under a category have been exhausted, would we move onto the next. Where disposal off-site is chosen, legal Duty of Care requirements will need to be followed.

1. Reduce the amount of waste generated.
2. Reuse materials more than once wherever possible.
3. Recycle the waste when it can no longer be reused.
4. Recover the energy from the waste if it cannot be recycled.
5. Dispose of the waste where none of the above are possible.

Storage of materials

- Good material storage will minimise waste caused by damage. The Abbey Primary project is being constructed on a brownfield site which is located of a housing estate, as a result of these materials will be delivered and materials stored in designated storage areas.
- All materials will be stored, off the ground and transferred safely to prevent damage that will result in waste. Take Back schemes will be utilised where available e.g. timber pallets returned to suppliers for reuse.
- Upon the completion of the ground floor slab a material storage area will be established within the building in the hall. This will serve as the distribution point to areas within the building.

5.0 Waste Management

Type and quantity of the waste to be generated (three waste streams)

Waste forecast types & Quantities of Waste

This table completed with forecast of types and quantities wastes generated, for removal off site during the construction period, reviewing proposed design and historical data from BAM construction of similar project for same client.

Source & type of Waste to be removed from site	Estimate forecast wastes generated (m ³)
Excavation Wastes	
Excavated material (soils & stones)	<i>To be advised, quantities to be completed once full structural and ground investigations surveys are completed to confirm quantity and type removed</i>
Demolition Wastes	
Mixtures of concrete, bricks, tiles & ceramics (inert)	<i>To be advised, quantities to be completed once appointment of demolition subcontractor from pre-demolition audit information</i>
Timber/Wood	
Mixed metals (e.g. steel roof)	
Mixed demolition waste	
Gypsum	
Hazardous waste (asbestos)	
Construction Wastes	
Mixtures of concrete, bricks, tiles and ceramics (inert)	TBC
Timber / Wood	TBC
Mixed metals	TBC
Gypsum (plasterboard)	TBC
Mixed Packaging, cardboard and paper	TBC
Mixed construction waste	TBC

6.0 Recycle & Recovery Measures, steps to achieve the reuse and recycling

Material Reuse the site will have a material reuse area, where offcuts of suitable materials e.g. timber length no longer needed or excess from one trade can be placed here for use by other subcontractors/trades as the project progresses rather than buying new.

Segregation of waste for reuse, recycling and recovery. As the project progresses with different types of materials being used, waste will be segregated into well signed skips not limited to, but including inert; wood; metals; gypsum and in addition to a mixed construction skip, example below of BAM site practice for this element.



Industry standard waste colour coding scheme



Waste colour coding scheme in practice

Transfer Station to be used, at the time of writing this Waste Management Plan BAM have not chosen a waste management company for the construction waste. We will select a company who meets our duty of care quality and recycling rate diligence check requirements. Construction waste leaving this site will go direct a transfer station for further recovery and recycling of waste material.