## Scheduled Ancient Monument Management Plan August 2015

## **BRONFLOYD LEADMINE (CD152)**



Figure I. General view from NNE (©RCAHMW 2009)

**Customer Reference Number (CRN): A0027900** 

Farm name: Rhosgoch





This management advice has been produced within the Historic Environment Branch of Cadw to inform management of the Scheduled Ancient Monument included in the Advanced Element of the Glastir land management scheme.

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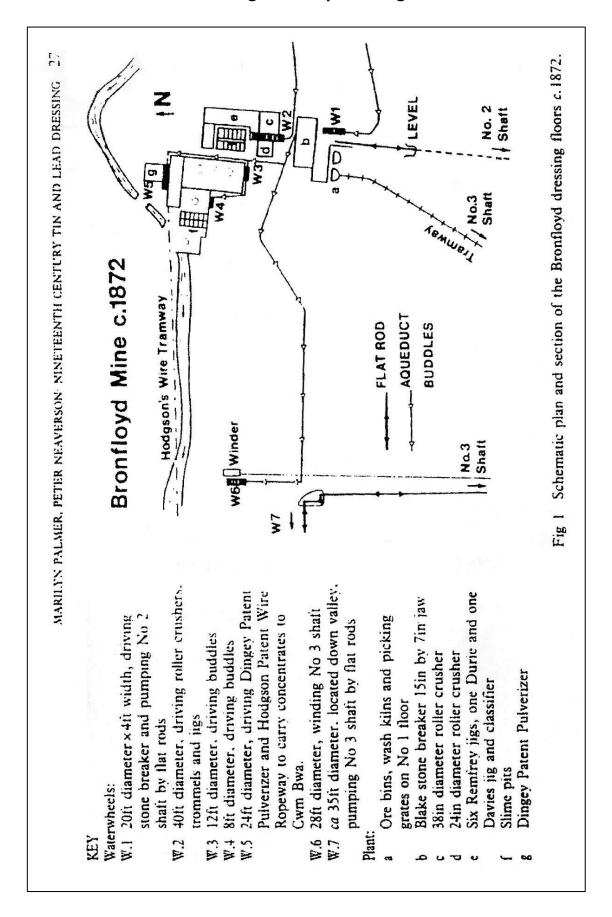
SAM name and reference number	Bronfloyd Leadmine, CD152
Grid reference	SN 66022 83477
Current Cadw funded schemes (MA /AM Grant)	None. Early Mines Research Group (Simon Timberlake) enquired in a general way about Grant Aid funding for masonry repair in 2012 but no firm offer was made. Some consolidation of the masonry of the processing plant area would still be desirable.
Cadw FMW and contact details	Helen Burnham Field Monument Warden Cadw Welsh Government Tel: 01570 422075 Mobile: 07968 609833 E-mail: helen.burnham@wales.gsi.gov.uk

#### I. Site Description

The following provides a general description of the Scheduled Ancient Monument.

- The monument comprises the remains of a lead mine. Mining for lead at this site began in the 17th century under Myddelton and Bushell and continued under the aegis of the Mine Adventurers into the 19th century. From 1854, the site was developed very successfully by J B Balcombe who introduced much new processing machinery and innovative techniques. Production ceased in 1892.
- The site is remarkably well-preserved and within one field are remains of all the processes involved. Extraction is represented by open cast pit, levels, shafts and an adit. There is a major building complex with two waterwheels comprising the dressing floors, a secondary waterwheel with winding drum, all linked by a well-preserved leat. Running up the hill between the processing sites and the extraction sites are two pump rod tracks and a tramway. Nowhere else in Wales demonstrates the full range of lead mining processes in such a small area.
- The monument is of national importance for its potential to enhance and illustrate our knowledge and understanding of mining technology from a single period. Lead mines may be part of a larger cluster of industrial monuments and their importance can be further enhanced by their group value.
- The scheduled area comprises the remains described and areas around them within which related evidence may be expected to survive.

#### Plan from 1995 article showing detail of processing area



#### 2. Current Condition

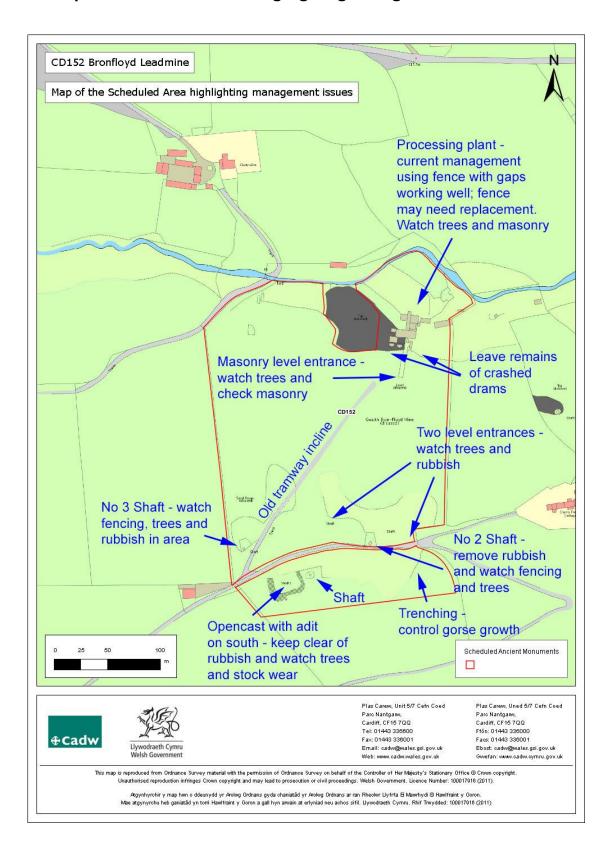
 The site overall is in a generally satisfactory condition. A specific management initiative has been carried out over recent years by specialist interest groups, which has led to a considerable improvement. Nonetheless some issues do remain.

#### **Management Issues**

- For further details please see the annotated map at Section 3 and the photographs at Section 4 below.
- A considerable amount of scrap and other rubbish has been removed from the site over the last few years.
- Nonetheless a small amount of material does remain in some areas, mainly
  close to the track which passes across the south of the site. This track is
  readily accessible, and may be attracting fly tipping. A particular problem was
  noted around No 2 Shaft (Figure 5 below), though some of the large metal
  parts here are original fittings relating to the shaft and should not be
  disturbed.
- Similarly, the remains of a number of drams (wagons) around the southern
  fringes of the processing plant further down the hill should not be disturbed,
  as they form part of the historic fabric of the site. These are likely to have
  run away out of control down the old incline at some point when a cable
  failed.
- A number of features have been fenced around; some of this fencing looks as
  if it may require replacement. Fenced areas include the main shafts and the
  processing plant, which contains deep wheel-pits and potentially precarious
  masonry.
- The fencing in this last area has been designed with gaps to allow some grazing; this seems to be working well and should continue.

- Vegetation has been cleared within the area of the processing plant as part of the recent management, but regrowth of saplings and shrubs is likely and should be prevented or controlled as far as practicable.
- Many of the fenced features, as well as the various level entrances, now have substantial trees around them; the condition of these should be checked to avoid the risk of their uprooting, with consequent damage to archaeological material.
- Tree surgery may be required to reduce the weight of the crowns in some cases.
- A number of features, particularly around the upper part of the site, have a good deal of gorse on and around them.
- Gorse detracts from the appearance and 'readability' of the site. In addition,
   erosion may occur at 'pinch-points' between gorse bushes.
- The cover gorse provides may encourage animal burrowing.
- There is also a certain amount of stock erosion, again particularly around the trenches and opencast at either end of the upper part of the site. This is not especially serious but should not be allowed to spread, and ideally encouraged to recover.

#### 3. Map of the Scheduled Area highlighting management issues



### 4. Photographs



Figure 2. Opencast at SW of site, from SE (Cadw 2015)



Figure 3. Entrance in opencast at SW of site, from NNW (Cadw 2015)



Figure 4. Middle level to N of track, from N (Cadw 2015)



Figure 5. SW side of No 2 shaft, showing rubbish (Cadw 2015)



Figure 6. Level at E end N of track, from NNW (Cadw 2015)



Figure 7. Arched level entrance to S of processing plant, from N (Cadw 2015)

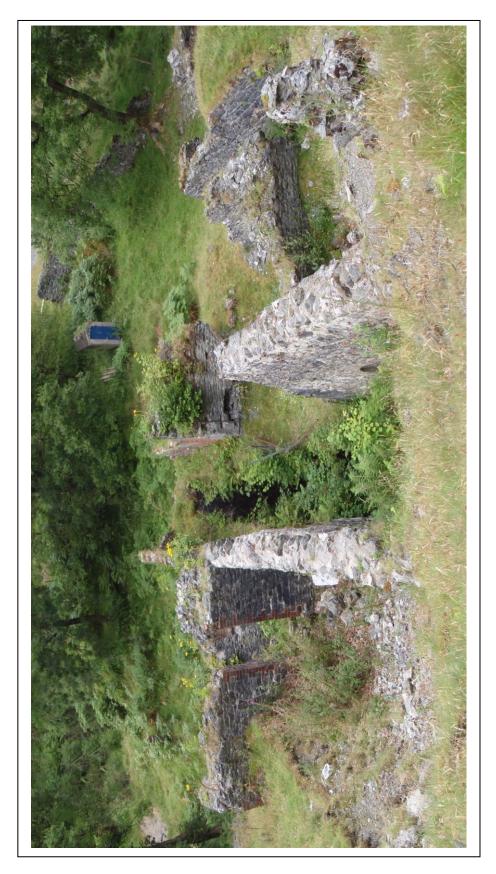


Figure 8. Processing area seen from S (Cadw 2015)

#### 5. Management Advice

The following works are recommended to improve the condition of the scheduled ancient monument. Cadw Field Monument Wardens are available to provide help and advice, and can be contacted via details shown on page 4.

#### Prioritised list of management works:

- Remove the remaining visible scrap and other rubbish from within the scheduled area. Suitable safety advice and / or equipment may be required.
- If fly tipping is a problem, consider providing an information panel and / or warning notice at the entrance to the site.
- Assess the condition of the fencing currently provided around the shafts and the processing area and replace with similar if necessary.
- Maintain the open areas in the central and southern portions of the site under a short grass cover with other vegetation not exceeding a maximum height of 50cm through an appropriate grazing regime and / or annual vegetation cut to ground level.
- Reduce stocking levels if over grazing is causing damage to the grass sward.
- Control scrub, bracken and sapling growth within the area of the processing plant, as far as realistically possible. Care will need to be taken not to damage masonry. Suitable safety advice and / or equipment may be required.
- Reduce or ideally remove the gorse cover on the features at the southern end of the site.
- Check the condition of the trees on site, particularly around the shafts and levels. Any diseased or unstable trees that could be susceptible to wind throw, causing disturbance to the ground surface by the upheaval of root plates, should be felled or substantially reduced in size and the cut material removed from the site.

The table below summarises the works and necessary consent procedures. Specific method statements are provided in the following pages.

#### **Summary Table**

5.1 Category I Works	5.2 Category 2 Works	5.3 Category 3 Works
These works can be undertaken without scheduled monument consent if they are carried out according to the guidance specified in section 5.1 below.	These minor works require Section 17 scheduled monument consent.  Consent will be granted automatically by completing and returning the form provided at the end of this management plan. The works may then be carried out according to the guidance specified in section 5.2 below.	These works require scheduled monument consent under the Ancient Monuments and Archaeological Areas Act 1979.  The works may only be undertaken following written consent from Cadw.  The works must then be carried out according to conditions specified in the consent.
<ul> <li>Rubbish clearance</li> <li>Pasture management</li> <li>Vegetation cutting and clearance</li> <li>Tree management</li> </ul>	Replacement of fencing	Information panel (if within SAM)

#### 5.1. Category I works

These works can be undertaken without scheduled monument consent provided that they are carried out according to the guidance specified below:

#### Rubbish clearance

- Remove the remaining visible scrap and other rubbish from within the scheduled area. Suitable safety advice and / or equipment may be required.
- There is good vehicular access to the part of the site most affected; however, particular care will need to be taken in the vicinity of open shafts.
- Some metal items are original features of the site and should not be disturbed. These include large metal parts adjacent to No 2 shaft, and a number of drams (wagons) around the southern fringes of the processing plant.
- If any of the scrap is very deeply lodged in the ground surface, such that its removal would produce a substantial hole, it should be allowed to remain.

#### Pasture management

- Maintain the open areas in the central and southern portions of the site under a short grass cover with other vegetation not exceeding a maximum height of 50cm through an appropriate grazing regime and / or annual vegetation cut to ground level.
- Reduce stocking levels if over grazing is causing damage to the grass sward.

- Mechanical cutting may be used where there are no surface stones and when ground conditions are dry. Care should be taken to avoid damaging stones with machinery.
- Where stones are present, any cutting should be carried out using a strimmer with line attachment, not a brush-cutter.
- Stems should be cut at ground level, leaving the roots to decay in-situ.
- A locally-sourced, native seed mix, shall be used for any re-seeding work on the monument.

#### Vegetation cutting and clearance

#### Processing plant:

- Control scrub, bracken and sapling growth within the area of the
  processing plant, as far as realistically possible. Care will need to be
  taken not to damage masonry. Suitable safety advice and / or
  equipment may be required.
- Scrub and sapling growth may be tackled with a brush-cutter or chainsaw provided care is taken not to damage any adjacent stonework.
- Stems, including those on masonry, should be cut leaving roots to rot in-situ.
- Stumps should be treated with herbicide to prevent re-growth (ensure that any necessary permissions are in place).
- Bracken management should be undertaken between mid June and early
   August, when the plants are about 30cm high. Bracken will need to be cut or
   bruised every year.
- Bracken may be tackled with a strimmer with the line attachment, or by brush-cutter if there are no stones beneath.
- Masonry and other stones or metalwork within the scheduled area should not be disturbed.

- Work should be carried out in dry weather so as to minimise ground disturbance.
- All cut timber / vegetation should be removed from the scheduled area, and no burning should take place within it.
- A locally-sourced, native seed mix, shall be used for any re-seeding work on the monument.
- Appropriate herbicides may be used if available, provided they are acceptable to the applicant and within the remainder of the scheme.

#### Upper parts of site (southern end):

- Reduce or ideally remove the gorse cover on the features at the southern end of the site.
- Gorse may be reduced using a flail cutter provided ground conditions are dry and the work can be carried out without causing damage to the ground surface.
- Otherwise hand management will be necessary using any tools appropriate;
   care should be taken not to damage the ground surface or any stones lying on it with either tools or support vehicles.
- Stems should be cut at or above ground level, leaving the roots to decay insitu.
- Brash should be removed from scheduled area; burning is not permitted within the scheduled area.
- A locally-sourced, native seed mix, shall be used for any re-seeding work on the monument.
- Appropriate herbicides may be used if available, provided they are acceptable to the applicant and within the remainder of the scheme.

#### Tree management

- Check the condition of the trees on site, particularly around the shafts
  and levels. Any diseased or unstable trees that could be susceptible to
  wind throw, causing disturbance to the ground surface by the upheaval
  of root plates, should be felled or substantially reduced in size and the
  cut material removed from the site.
- The trees shall first be assessed for the likelihood of bat roots being present and, if there is a roost, a Welsh Government licence shall be obtained in order to carry out the work. The occupier shall contact Natural Resources Wales to establish whether a felling licence is required prior to the commencement of any such work and, if so, shall obtain the necessary consent from Natural Resources Wales.
- Ensure that all woodland management work at the site is undertaken outside the bird breeding season of I March to 31 August.
- Trees should be felled above ground level, with stumps treated with herbicide (ensure that any necessary permissions are in place) and left to rot in-situ.
- Work on trees should be carried out in dry weather so as to minimise ground disturbance.
- All cut timber should be removed from the scheduled area, and no burning should take place within it.
- Care should be taken to avoid any damage to the ground surface or to archaeological features by vehicles or equipment.

#### 5.2. Category 2 works

The works included within section 5.2 require Section 17 Scheduled Monument Consent. If you sign and return the form (at the end of this document) to the Cadw FMW, prior to undertaking the works, consent will be granted automatically. The works must then be carried out according to the guidance specified. In addition:

- The Cadw FMW must be notified prior to the commencement of work and upon completion of the works;
- A digital photographic record showing the site before and after completion of the works must be submitted to the Cadw FMW within I month of completion of the work.

#### **Fencing**

- Assess the condition of the fencing currently provided around the shafts and the processing area and replace with similar if necessary.
- Maintain gaps in fencing around the processing plant to allow limited grazing.
- The existing strainer posts should be re-used, or if new strainer posts are required, they shall be located within the same pits
- Existing fence posts should be drawn out or cut off at ground level, not dug out.
- Wherever possible, intermediate posts should use former post holes.
- All fence posts should be knocked in not dug into the ground.
- All redundant fence posts and fencing wire should be removed from the site.

#### 5.3. Category 3 works

Significant or intrusive works such as these <u>require</u> full scheduled monument consent to be granted in writing by Cadw <u>prior to the works</u> <u>being undertaken</u>.

**Application form available at:** <a href="http://cadw.wales.gov.uk/historicenvironment/help-advice-and-grants/makingchanges/schedmonconsent/?lang=en">http://cadw.wales.gov.uk/historicenvironment/help-advice-and-grants/makingchanges/schedmonconsent/?lang=en</a>

Upon receipt of scheduled monument consent the works outlined below must then be carried out according to the conditions specified in the consent.

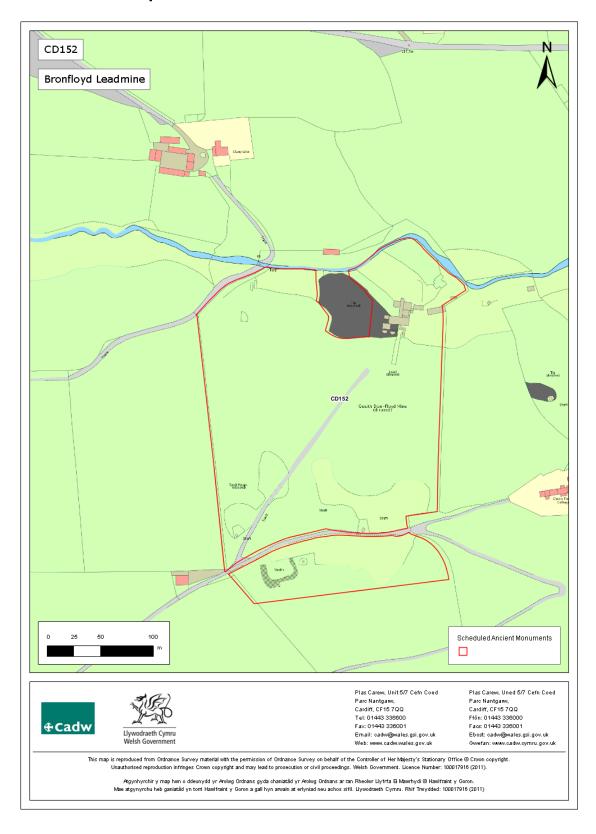
#### Information panel or warning notice

- If fly tipping is a problem, consider providing an information panel and / or warning notice at the entrance to the site.
- If the panel or notice is to be erected within the scheduled area, its siting and
  design should be agreed with Cadw as part of a scheduled monument consent
  process.

#### 5.4. Long-term management recommendations / best practice

- Continue to ensure that the site is kept clear of dumped scrap and other rubbish, removing any found as per the guidance specified above.
- Continue to maintain the open areas in the central and southern portions of
  the site under a short grass cover with other vegetation not exceeding a
  maximum height of 50cm through an appropriate grazing regime and / or
  annual vegetation cut to ground level, as per the works recommended and
  guidance specified above.
- Continue to control scrub, bracken, gorse and sapling growth as far as realistically possible, as per the works recommended and guidance specified above.
- Continue to monitor the condition of the trees on site, particularly around the shafts and levels, and take action to reduce or remove any which appear unsound, as per the works recommended and guidance specified above.
- Continue to maintain the fencing around the various features of the site as per the works recommended and guidance specified above.
- Note should also be taken of the general requirements given in Section 7 below.

#### 6. Indicative Map of the Scheduled Area



#### 7. Requirements

#### 7.1. Ancient Monuments and Archaeological Areas Act, 1979

Scheduled Ancient Monuments (SAMs) are monuments deemed to be of national importance and as such are protected under the Ancient Monuments and Archaeological Areas Act, 1979. It is an offence under the legislation to cause damage or disturbance to a SAM.

Damage or disturbance would include – any unauthorised works that involve ground disturbance (including fencing), but also importing material into the scheduled area, metal detecting, rewetting, burning etc.

Any operations involving ground disturbance, the importation of material or rewetting require Scheduled Monument Consent (SMC) to have been approved by Cadw prior to the works being undertaken

#### 7.2. Cross Compliance

Scheduled Ancient Monuments are afforded further protection under Cross - Compliance GAEC 7 Landscape Features.

#### **GAEC 7 States:**

- No work to a Scheduled Ancient Monument may be carried out without formal consent from Cadw e.g. ploughing, fencing, drainage, track upgrades etc
- Comply with all consent requirements in full
- Do not destroy or damage a Scheduled Ancient Monument
- Do not damage scheduled historic features through activities which cause or encourage soil erosion or ground disturbance on ancient monuments, e.g.:
  - overgrazing
  - o growth of invasive scrub or vegetation

- o trampling and poaching
- vehicle tracking, particularly on steep slopes or when ground conditions are wet
- o supplementary feeding
- o cultivation encroachment
- o storage of equipment, materials and rubbish

#### 7.3. Glastir - Whole Farm Code

The Glastir Whole Farm Code states:

You must not damage any historic feature identified on your agreement map

Definitions of damage to a historic feature include ANY of the following:

- Ground disturbance or excavation especially extending beneath topsoil
- Dumping or storage of material, including temporary storage
- Removal of any material, including stones, soil or subsoil
- Visible signs of active erosion (loss and disturbance of topsoil) caused by livestock and vehicles or other agricultural practice
- Planting trees
- Allowing scrub to develop
- Ploughing or reseeding
- Displacing individual stone features

#### 8. Section 17 Scheduled Monument Consent

#### **WELSH GOVERNMENT**

## AGREEMENT PROVIDING SCHEDULED MONUMENT CONSENT FOR THE WORKS SET OUT BELOW BRONFLOYD LEADMINE (CD152)

 By signing this agreement with the Welsh Government - which is made under section 17 of the Ancient Monuments and Archaeological Areas Act 1979 - and returning a signed copy to Cadw, you will be granted scheduled monument consent for the minor works set out below by virtue of Class 8 of the Ancient Monuments (Class Consent) Order 1994.

#### 2. Minor Works Hereby Granted Consent:

- Fencing works according to the recommendations in section 5.2 of the management plan.
- Further fencing works as required according to the recommendations in section 5.4 of the management plan.
- 3. The agreement shall operate for a period of five years and the works should be undertaken as timetabled in the associated Glastir Advanced contract.
- 4. The extent of the area covered by this agreement is shown outlined in red on the map of the scheduled area showing management issues.
- 5. The works must be undertaken in a safe manner by competent persons and in accordance with the guidance set out in section 5.2. This agreement does not convey any approval or consent required under any enactment, bylaw, order or regulation other then Section 2 of the Ancient Monuments and Archaeological Areas Act 1979.
- 6. This agreement will commence on the date it is signed on behalf of the Welsh Government.

Date :

Signed by authority on behalf of the Welsh Government:

Signed: HBBurnham Date: 27th August 2015

An Officer in the Welsh Government

#### RETAIN THIS COPY FOR YOUR RECORDS

#### WELSH GOVERNMENT

# AGREEMENT PROVIDING SCHEDULED MONUMENT CONSENT FOR THE WORKS SET OUT BELOW BRONFLOYD LEADMINE (CD152)

1. By signing this agreement with the Welsh Government - which is made under section 17 of the Ancient Monuments and Archaeological Areas Act 1979 - and returning a signed copy to Cadw, you will be granted scheduled monument consent for the **minor** works set out below by virtue of Class 8 of the Ancient Monuments (Class Consent) Order 1994.

#### 2. Minor Works Hereby Granted Consent:

- Fencing works according to the recommendations in section 5.2 of the management plan.
- Further fencing works as required according to the recommendations in section 5.4 of the management plan.
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- 5. The works must be undertaken in a safe manner by competent persons and in accordance with the guidance set out in section 5.2. This agreement does not convey any approval or consent required under any enactment, bylaw, order or regulation other then Section 2 of the Ancient Monuments and Archaeological Areas Act 1979.
- 6. This agreement will commence on the date it is signed on behalf of the Welsh Government.

Signed : [NAME OF APPLICANT]	Date :
Signed by authority on behalf of the Wels	sh Government:

Signed: HBBWnham
An Officer in the Welsh Government

PLEASE RETURN THIS PAGE TO: CADW, Plas Carew, Unit 5/7 Cefn Coed, Nantgarw, Cardiff, CFI5 7QQ.

Date: 27th August 2015