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Esgairlle Old Mine - Scour Protection Works 2023

Environmental Action Plan

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Project name	Esgairlle Old Mine - Scour Protection Works 2023
Project code	CE0821 (NRW) EV00544 (Coal Authority)
Area	Ceredigion
Date	25/07/23
Version number	1.1
Author	Lindsey Mansell

Revision history

Revision date	Summary of changes	Author	Version number
24/07/2023	Initial draft for CA project team review	Lindsey Mansell	1.0
25/07/2023	Amendments following project team review	Lindsey Mansell	1.1

EAP Approvals

Name	Signature	Title	Date	Version

Distribution

Name	Title	Date	Version

Purpose

This Environmental Action Plan (EAP) summarises the actions required to implement the environmental mitigation for Scour Protection Works at Esgairlle Old Mine, Ceredigion.

It sets out specific objectives and actions defining the way in which environmental risks should be minimised. It also details roles and responsibilities of those involved in the proposed works.

These actions form part of the contract documentation and must be adhered to.

Roles

Each action in the table below has **one** named person who is responsible for ensuring that the action is implemented. It is ultimately the Contractor's responsibility for ensuring the EAP commitments are delivered.

The Natural Resources Wales (NRW) or Coal Authority (CA) Project Manager is responsible for agreeing all changes to the EAP and for signing off the actions or agreeing to them being signed off. The significance of changes or requirement for additional consultation with statutory consultees will be discussed with the CA/NRW Environmental Advisor as required.

The Contractor is responsible for implementing good environmental practice on site, in line with their own EMS. Typical issues include:

- any working hour restrictions
- dust suppression measures
- traffic management
- site waste management
- materials management
- vehicle maintenance and management
- pollution prevention and control (including storage, refuelling and incident response)
- response procedures e.g. services strike, contaminated land
- hazardous materials handling and storage
- noise management
- securing and delineation of working areas including signage
- delivery of archaeology and ecology mitigation requirements

Environmental Audits

It is not anticipated that any audits will be undertaken during the working period.

Environmental Incident Reporting system

Procedure

1. STOP
Before you report the incident, stop the work
2. CONTAIN
Where safe to do so, carry out any local site pollution prevention or emergency incident measures

3. NOTIFY

Report the incident to the (24 hour) NRW incident hotline 03000 65 3000, stating that it is an NRW caused incident and giving full details of the incident, including location and contact details. Also request, and note, the incident number.

4. REPORT

Report the incident (including the incident number) to: the EMS team
(EMS.team@cyfoethnaturiolcymru.gov.uk)

All environmental incidents must be reported at the earliest opportunity to the Contractor Environmental Lead, NRW Project Manager, CA Project Manager and CA Environmental Advisor, (contact details are provided overleaf). In addition, near misses must be reported via the hotline where there was/is the potential for a significant impact and where lessons can be learned.

Initial reports for such incidents and near misses must be followed by a written report using the contractor's in-house forms. This must include the following information:

- project/location
- date
- contractor
- details of what happened
- cause of incident
- lessons learned

This final and comprehensive investigation report is to be provided by the Contractor/ Contractor's Environmental Lead to the CA Project Manager within 14 days, who shall then provide it to the NRW Project Manager, CA Environmental Advisor, and NRW Environmental Advisor.

Summary Scope of Works

The Site is located at Esgairlle Old former mine, (approximate NGR SN794828), situated 21 km east of Aberystwyth. A desk study undertaken in 2022 by Arup indicated that there are 6No. adits and 1No. shaft associated with the mine as well as extensive spoil deposits lying alongside, and being eroded by, the Afon Castell. One of the more prominent spoil heaps shows clear evidence of scouring with a utility/ distribution pole, that is mounted in the spoil, beginning to become undercut.

It is proposed to install rock roll scour protection measures within the watercourse to prevent the scouring of the mine waste spoil material in order to prevent water contamination and further undercutting of the utility/distribution pole. This will take the form of rock rolls installed along approximately 20m of the existing channel. A total of 36m of rock roll will be installed as they will be double height along a partial length of the stream. The aim of this work is to reduce the amount of contaminated material entering the Afon Castell and protect the utility distribution pole at the site until a long-term solution is in place. This work is the subject of this EAP.

Figure 1 (Drawing No. EV00544-01-02) identifies the positioning and lengths of the rock roll repair works and the site working area. It also identifies the welfare and compound site and the dedicated machine access route which will be used for all works (Also identified on the Environmental Constraints Plan in Figure 2).

The scour protection works are likely to take approximately one to two weeks to complete.

The scour protection works will follow the sequence outlined below:

1. Mobilise to site, carry out pre-start ecology/heritage briefings to mark out 'no go' areas and agree mitigation measures.
2. Trim existing banks and clearing rocks from the base of the areas to be protected as required to accept the rock roll.
3. Place geotextile in advance of placing rock rolls.
4. Place and fix rock rolls in position as shown on Figure 1 (Drawing No. EV00544-01-02)
5. Demobilise from site.

The Key Environmental Constraints are shown in Figure 2 of this document.

Relevant Contact Details

Project Sponsor	Ruth Jenkins
Project Executive	Craig Smith
NRW Project Manager – (Senior User)	Peter Stanley
NRW Environmental Advisor	N/A – Low Risk Site
NRW EnCoW	N/A
Contractor/ Contractor Site Supervisor/ Contractor Environmental Lead	Contractor – TBC (Likely to be Midwest Plant Ltd) Contractor Site Supervisor - TBC Contractor Environmental Lead – TBC - Anticipated to be fulfilled by Contractor Site Supervisor.
CA Project Manager	Marika Gates (MarikaGates@coal.gov.uk or 07990 754 740)
CA Environmental Advisor	Lindsey Mansell (LindseyMansell@coal.gov.uk or 07469 724 756)
Other Specialists	Project Ecologist – TBC Project Heritage Specialist – TBC

Environmental Action Plan

Ref no	Objective	Action	Responsibility	Reference to further information	Progress and Further Action	Sign off and date
Pre-construction						
A1	Stakeholder Engagement	A1.1 Inform landowners and local residents of works (including anticipated start and end date, hours of work, scope of works, access routes etc.).	<i>NRW Project Manager – (Senior User)</i> <i>(relevant information to be provided by contractor)</i>			
A2	Ordinary Watercourse Consent	A2.1 Liaise with Ceredigion County Council to agree whether Ordinary Watercourse Consent (OWC) is required prior to commencement of works. A2.2 Produce and submit appropriate OWC if required	<i>CA Project Manager</i>	<i>Annett Bircket from CCC confirmed OWC is required 14/07/23</i>		

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A3	EIA advert	<p>A3.1 Agree appropriate planning context for the proposed works.</p> <p>A3.2 If required (depending on planning context) EIA advert to be in newspapers/on site/issued to key consultees as per usual NRW guidance for 30 days prior to commencement of work - advertising works under 'The Environmental Impact Assessment (Land Drainage Improvement Works) Regulations' (Amended) SI 2017 No. 585.</p>	CA Project Manager		Confirmed - works to be carried out using: Part 15 Class A (b) of the Town and Country Planning (General Permitted Development) Order 1995. PD letter issued to Jonathan Eirug at CCC on 03/07/23	
A4	Competency and Quality Assurance	<p>A4.1 Input from a Project Ecologist with appropriate technical expertise in identification of important lower plant communities is to be commissioned to enable works and manage on site risks (refer to A6, A7 and B5).</p> <p>A4.2 Input from Project Heritage Specialist with appropriate knowledge of metal mine sites to be commissioned to complete the WSI and implement the watching brief (refer to A5 and B4).</p>	Contractor			

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A5	Agreement of Heritage Investigation	<p>A5.1 Prior to commencement of works the Project Heritage Specialist will need to produce a Written Scheme of Investigation (WSI) for the works for approval by Clwyd-Powys Archaeological Trust (CPAT).</p> <p>A5.2 This document will need to ensure it is appropriate to the final working approach that is being proposed and make reference to previous archaeological reports for the site. See Figure 2 (Environmental Constraints Plan). Works will be in a highly sensitive heritage area; however, works are small-scale and there will be only limited ground disturbance (to trim existing banks as required to accept the rock roll).</p> <p>A5.2 This document must be submitted to CPAT and their approval be in place prior to commencement of work.</p>	<i>Project Heritage Specialist</i>	<p><i>CPAT Report No. 1935. Castell Sett, Ponterwyd, Aberystwyth. Heritage Impact Assessment, Clwyd-Powys Archaeological Trust, July 2023.</i></p>		
A6	Pre-works Ecology Check	<p>A6.1 Prior to the Site visit to agree works details (A7 below), the Project Ecologist should undertake an update ecology check within and immediately adjacent to the work area/access routes including (but not limited to):</p> <ul style="list-style-type: none"> - Sensitive lower plant (or other plant) species within/close to the working areas. <p>A member of the project team should accompany the ecologist so proposed works locations can be identified.</p> <p>A6.2 This check can be on the same day as the Agreement of Works Site Visit (A8); however, the Project Ecologist should ensure they are given sufficient time to fully consider each works location, in particular in relation to potential for sensitive lower plant species so they can advise on suitable micro-siting and any additional mitigation measures that may be required.</p> <p>A6.3 The Project Ecologist must familiarise themselves with the results of the 2021 lower plant survey for the site prior to this work (as summarised in the Forster Brown C., Chambers S.P. 2021. Calaminarian habitat surveys in Ceredigion. NRW Evidence Report No 532: 133 pp, NRW, Bangor.</p> <p>A6.3 The Project Ecologist must familiarise themselves with the results of the 2021 lower plant survey for the site prior to this work (as summarised in the Forster Brown C., Chambers S.P. 2021. Calaminarian habitat surveys in Ceredigion. NRW Evidence Report No 532 and the Castell Sett Mines Preliminary Ecological Appraisal. June 2023. Jeremy Benn Associates.).</p>	<i>Project Ecologist</i>	<p><i>Forster Brown C., Chambers S.P. 2021. Calaminarian habitat surveys in Ceredigion. NRW Evidence Report No 532: 133 pp, NRW, Bangor.</i></p> <p><i>Castell Sett Mines Preliminary Ecological Appraisal. June 2023. Jeremy Benn Associates.</i></p>		

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A7	Agreement of Works Location	<p>A7.1 Prior to commencement of works, the Contractor Site Supervisor should arrange and attend a site meeting with the Project Ecologist, Project Heritage Specialist as well as a Coal Authority representative (TBC) to:</p> <ul style="list-style-type: none"> a) Identify any 'no-go' ecological and heritage areas within/adjacent to the working area and machine access route. Mark visually on site e.g. with canes/tape if required; b) Identify any locations where further mitigation measures may be required (e.g. ecologist watching brief, use of track mats); c) Run through heritage WSI and agree approach/timetable for heritage watching brief. <p>A7.2 During the above meeting, consideration should be given as to whether visual markers should be erected along the machine access route to delineate the route to avoid encroachment into sensitive areas.</p>	Contractor Site Supervisor	Environmental Constraints Plan (Figure 2)		
A8	Staff Briefing	<p>A8.1 All Site Staff should be briefed (toolbox talk) by the Contractor Site Supervisor regarding Environmental Constraints on Site making use of the Environmental Constraints Plan (Figure 2), the recommendations of the Castell Sett Mines Preliminary Ecological Appraisal. June 2023. Jeremy Benn Associates (section 4.2.7) and the content of this EAP prior to commencement of work. Any additional mitigation measures or no-go areas identified during the pre-works site meeting should also be referred to.</p> <p>A8.2 The Contractor Site Supervisor should advise all Site Staff during this toolbox talk of a suitable emergency protocol that would be implemented in the event of a pollution (or other Environmental) incident during the works.</p>	Contractor Site Supervisor	Environmental Constraints Plan (Figure 2)		
A9	Photographic Record	A9.1 Photographs should be taken to record conditions within works area (including welfare area and machine access route).	Contractor Site Supervisor			

Ref no	Objective	Action	Responsibility	Reference to further information	Progress and Further Action	Sign off and date
During construction						
B1	Stakeholder Engagement	B1.1 NRW is responsible for stakeholder engagement including informing local residents of any changes to the works, as well as access arrangements to the site.	NRW Project Manager – (Senior User)			
		B1.2 If the duration/programme of works requires amendment, the Coal Authority and NRW Project Manager shall be informed immediately this is known, to enable landowners and local residents to be kept informed. B1.3 Inform the NRW Project Manager within 24 hours of receiving complaints about the works or staff employed. Ensure a response within five days of original complaint.	Contractor Site Supervisor			
B2	Environmental Awareness	B2.1 The Environmental Constraints Plan (Figure 2) and this EAP will need to be retained on Site (ideally on display in the welfare area) throughout the duration of works.	Contractor Site Supervisor	Environmental Constraints Plan (Figure 2)		
B3	Awareness of Access Restrictions	B3.1 Vehicular access on Site shall be restricted to the dedicated machine access routes as shown on Figures 1 and 2. B3.2 All Site Staff must follow the access restrictions and there should be no deviation from this. B3.3 Site staff should be made aware that it is possible the tracks through the site could be in use by landowners and members of the public during the works.	Contractor Site Supervisor	Environmental Constraints Plan (Figure 2)		
B4	Protection of Historic Features	B4.1 The CPAT Report No. 1935. Castell Sett, Ponterwyd, Aberystwyth. Heritage Impact Assessment, Clwyd-Powys Archaeological Trust, July 2023 recommends works proceed under an Archaeological Watching Brief. The Heritage Specialist shall deliver a toolbox talk to all site staff prior to the start of the works. B4.2 The requirements of the heritage watching brief must be implemented in full to comply with the approved WSI.	Contractor Site Supervisor	Written Scheme of Investigation - WSI (still to be finalised and approved – see A5)		

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		<p>B4.3 The Project Heritage Specialist must be kept informed of the programme of work so they can attend site for the watching brief at key locations as required and must be given sufficient time to enable them to undertake any recording that is necessary.</p> <p>B4.4 Should a historical artefact/feature be seen during works outside of the watching brief requirement then the following protocol should be put into place:</p> <ul style="list-style-type: none"> - Site staff should be alerted to the presence of the (potential) artefact/feature and a no-go zone put in place to prevent disturbance/damage; - If the artefact/feature is restricting access or work then the Project Heritage Specialist should be contacted (by telephone) ASAP to discuss how to proceed; - A photograph should be taken of the feature, taking care not to disturb it and to retain it in-situ; - A note should be made of OS grid reference together with notes regarding general situation and condition; <p>The photograph and location/condition details should be sent to the Project Heritage Specialist ASAP.</p>		<p><i>CPAT Report No. 1935. Castell Sett, Ponterwyd, Aberystwyth. Heritage Impact Assessment, Clwyd-Powys Archaeological Trust, July 2023.</i></p>		
		<p>B4.5 The Project Heritage Specialist should be present for all critical activities (as identified in the WSI).</p> <p>B4.6 Watching brief to be undertaken as per the agreed WSI.</p> <p>B4.7 Any finds are to be recorded, photographed and documented appropriately.</p> <p>B4.8 Should the Project Heritage Specialist be contacted regarding an identified feature of potential historical value during any other works they should ensure this is communicated to CPAT ASAP. A report of findings to be submitted to CPAT as required.</p>	<p><i>Project Heritage Specialist</i></p>			

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B5	Protection of Ecological Features	<p>B5.1 Lower Plant Areas – the boundary of works locations, welfare areas and the machine access route should be as agreed with the Project Ecologist during the pre-start site meeting to avoid key areas of lower plant interest (A7). Any proposed change to working areas after this time must be discussed with the Project Ecologist.</p> <p>B5.2 'No-Go zones' – Any additional localised No-Go zones identified by the Project Ecologist during the pre-start site meeting (A7) should be adhered to fully at all times.</p> <p>B5.3 Additional measures – if any additional measures are specified by the Project Ecologist at the pre-start meeting these will need to be implemented in full. The location of these would be as identified by the Project Ecologist during the pre-start meeting (A7).</p> <p>B5.4 Contamination - mine spoil should be protected from contamination with soil, organic material and vegetation debris during works as these might result in soil forming on the surface of previously unvegetated or sparsely vegetated spoil.</p> <p>B5.5 Equipment, clothing, footwear and tools must be cleaned prior to arriving at the site and appropriate biosecurity measures must be in place to avoid introducing non-native species.</p> <p>B5.6 Spoil arisings – any spoil removed to trim existing banks (to allow for the rock rolls) is to be distributed on site as advised by the Project Ecologist.</p>	Contractor Site Supervisor	<p><i>Environmental Constraints Plan (Figure 2)</i></p> <p><i>Forster Brown C., Chambers S.P. 2021. Calaminarian habitat surveys in Ceredigion.</i></p> <p><i>NRW Evidence Report No 532: 133 pp, NRW, Bangor.</i></p> <p><i>Castell Sett Mines</i></p> <p><i>Preliminary Ecological Appraisal. June 2023. Jeremy Benn Associates.</i></p>		

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B6	Pollution Prevention	<p>B6.1 Stockpiles of any loose material are to be located a minimum of 4m away from watercourses and not on steep inclines.</p> <p>B6.2 The Contractor must comply with best practice Guidelines for Pollution Prevention (http://www.netregs.org.uk/environmental-topics/pollution-prevention-guidelines-ppgs-and-replacement-series/guidance-for-pollution-prevention-gpps-full-list/).</p> <p>B6.3 Weather conditions and forecast must be followed closely before/during works so that should a high flow event be considered likely (which would mean increased water flowing across the working area) proactive measures can be put into place to minimise risk of pollution/loss of working material occurring (e.g. removal of any machinery and/or loose material from the working area).</p> <p>B6.4 Sufficient spill kits are to be kept on site at all times and drip trays or plant nappies used for plant.</p> <p>B6.5 All plant working in or around watercourses should use biodegradable hydraulic oils.</p> <p>B6.6 Refuelling of plant and/or handheld equipment should only be undertaken in a designated area (preferably on hard standing within the site compound area) and away from watercourses.</p> <p>B6.7 Any incidents that involve pollution, fish kills or release of hazardous substances must be reported as per the Environmental Incident Reporting system outlined on Pages 3 and 4 of this EAP document.</p>	Contractor Site Supervisor			

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B7	Emissions, Noise and Dust Control	<p>B7.1 All machinery/vehicles used on site must be maintained according to manufacturers' instructions and there must be no excessive exhaust smoke – to ensure this engines must be switched off during periods of prolonged inactivity.</p> <p>B7.2 The works must be carried out in accordance with “Best Practicable Means” (BPM) as defined in Section 72 of the Control of Pollution Act (COPA; 1974).</p> <p>B7.3 Burning of any materials on-site is prohibited.</p> <p>B7.4 It may also be necessary to implement the following in dry conditions if dust generation from works activities is considered to be a potential risk: Off-site sweeping/washing/damping down.</p>	<i>Contractor Site Supervisor</i>			
B8	Control of Landscape/ Visual Impacts	<p>B8.1 The site must be kept tidy and orderly throughout the contract period. Vehicles and materials will be stored away overnight, at weekends or other times of inactivity.</p> <p>B8.2 The working area must be restored to pre works condition with all temporary works removed.</p>	<i>Contractor Site Supervisor</i>			
B9	Waste Management	<p>B9.1 The Contractor will minimise waste by reducing, reusing and recycling materials as far as practicable and in line with current good practice / the Contractor's current EMS requirements.</p> <p>B9.2 All waste generated during the works, is to be dealt with appropriately in line with waste management requirements.</p> <p>B9.3 No spoil will be removed from site.</p>	<i>Contractor Site Supervisor</i>			

Ref no	Objective	Action	Responsibility	Reference to further information	Progress and Further Action	Sign off and date
Post-construction						
C1	Reporting	C1.1 This Table must be completed by the Contractor Site Supervisor on completion of the works and issued to the NRW and CA Project Managers. C1.2 A record should be made of any changes deemed necessary during the works and any lessons learned from the implementation of the plan as specified (or any incidents that nevertheless occurred).	Contractor Site Supervisor			
		C1.3 The Project Heritage Specialist should provide a report of works completed under the WSI to the Contractor Site Supervisor within 2 weeks of completion of works (this should also be provided to CPAT).	Project Heritage Specialist	Written Scheme of Investigation - WSI (still to be finalised and approved – see A5)		
C2	Photographic Record	C2.1 A photographic record should be taken of the works area (including area and machine access route) on completion of works in order to verify against pre survey conditions (A9).	Contractor Site Supervisor			

Figure 1 – NRW MM – Castell Sett – Esgairlle Old Bank Scour Protection Works - Drawing No. EV00544-01-02

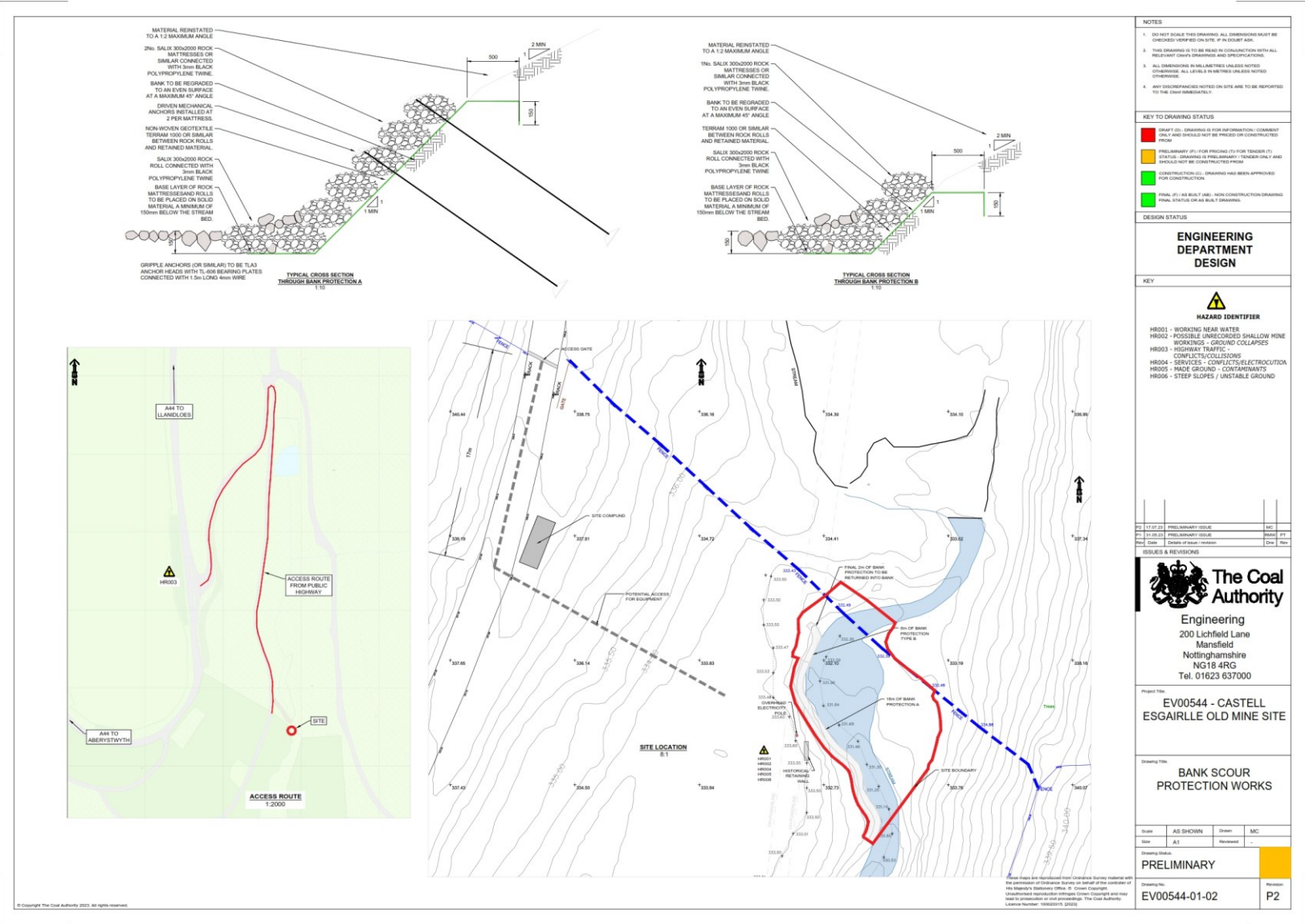


Figure 2 – Castell Sett – Esgairlle Old Bank Scour Protection Works – Environmental Constraints Plan - Drawing No. EV00544-ScourRepairECP001

