



# Confluence Design and Construct

# **Project Scope**

PROJECT TITLE:	Metal Mines Programme
	West Allen – Barneycraig

338

518

205

42120

CONTRACT F	REF:
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CA18/2400/Instruction P/001

Cost Centre:	
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# Overview

#### **Contractual References**

The conditions of contract are as the framework agreement, with main Option E and dispute resolution Option W2 of the NEC3 Professional Services Contract April 2013 and the amendments to the conditions of contract and Z clauses.

#### **Overview and Programme Details**

DEFRA have allocated funds for the Coal Authority and Environment Agency to implement a programme of site assessment and remediation for Abandoned Metal Mines across the country. The NoCAM project ranked the West Allen (Trib of South Tyne, Waterbody GB103023074680) as the 2nd worst impacted catchment in the Northumbria River Basin District, and 6th in England and Wales with respect to mine related pollution. Downstream waterbodies, the Allen and South Tyne, are also impacted.

Initial studies and assessments have indicated that it is both feasible and cost beneficial to treat the Barneycraig discharge. Early contractor involvement is required to further understand any constraints to buildability and to develop the design.

#### **Tasks and Deliverables**

The following tasks are included in this package of works:

- Attend an initial site visit with the Consultant and produce a brief report to highlight any key issues in respect to the buildability and functionality of the scheme.
- Review the feasibility study and addendum, including initial design proposals, and provide any comments to The Coal Authority.
- Produce build cost estimates for the treatment sites, to be included in the feasibility addendum.
- Attend subsequent meetings and site visits to advise on buildability and health and safety issues.
- Review specific design proposals for access to the site (remedial or replacement works to an unstable bridge) and for capturing and monitoring the mine water.

#### Milestones

The initial site visit to take place in December / January dates to be agreed in due course with TCA. ECI report to be delivered 2 weeks after visit.

The final feasibility report and addendum should be reviewed within 2 weeks of receipt is expected during March 2015.

Additional inputs are likely to be required during Outline Design, which is due to start in June 2016 and should be completed by November 2016.

Budget costings to be delivered 2 weeks after information on scheme size and transfer options has been provided.

# Site Data

### **Background: Water Body and Catchment Details**

The Barneycraig adit discharges into the West Allen, a tributary of the South Tyne.

### Background: Description of Contamination and Pollution

Mine water with elevated levels of zinc, cadmium and lead discharges from the Barneycraig and Scraithole levels into the River West Allen. The focus of the studies is currently the Barneycraig discharge, although consideration may also be given to potential capture and co-treatment of the Scraithole Level.

#### Site Location

The site is located to the south of the village of Carrshield, 20km southwest of Hexham, Northumberland. A plan showing the site is include in the 2015 Feasibility Study which will be available on Conject.

#### Heritage, Site History and Archaeological Constraints

The Carrshield mine site is a scheduled monument, the extents of which are included on the Site Constraints Plan in the 2015 Feasibility Study.

#### **Mining Information**

Mining plans are available on Conject if required. A shallow mining risk assessment has not yet been carried out for the site, but will be uploaded to Conject when completed.

#### Hydrogeology

Refer to the Feasibility Study.

#### **Geo-Environmental Issues**

The site is a former lead mine and dressing floor. A number of metal contaminants are likely to be present in the surrounding ground.

An initial ground investigation was undertaken as part of the Feasibility Study. Any geo-environmental issues identified during this will be included in the Feasibility Study.

#### Landscape and Ecology

The proposed site is within a Special Protection Area, Special Area of Conservation, Site of Special Scientific Interest and is designated Common Land. The outlines of these designations are presented on the Site Constraints Plan in the 2015 Feasibility Study.

#### Site Services

A utilities search has been undertaken and the resulting plan is available on Conject. High voltage overhead power lines cross the access track to the site.

#### **Ground Investigations**

An initial ground investigation has been undertaken for the site, the results of which are available on Conject.

#### **Previous Studies, Surveys and Reports**

A number of studies have already been undertaken for the scheme and are available for review on Conject, as listed below:

- Barneycraig Mine Water Treatment Scheme Feasibility Report Atkins April 2015;
- West Allen Metal Mine High Level Feasibility Report Atkins July 2012;
- West Allen Metal Mine Scheme High Level Review of Potential Mine Water Treatment Scheme Locations Atkins September 2013;
- EA report on mine water pollution in Allen catchment and subsequent data.
- The sources, fate and dynamics of abandoned metal mine water pollutants: a catchment scale investigation of the River West Allen, Northumberland, UK - \_\_\_\_\_, April 2008.

A topographical survey has also been carried out, the results of which are available on Conject.

# **Communications and Interfaces**

#### **Previous Communications**

There are a large number of stakeholders who may be affected by the proposed scheme. Further information can be obtained from The Coal Authority about specific communications if required.

#### **Coms' Plans and Requirements for Future Engagements**

A communications plan is included in the 2015 Feasibility Study and will be updated throughout the next phase of works.

It should be noted that stakeholder relationships for this scheme are managed by **statutes**, who should be consulted prior to any communications.

# Scope of Work

#### **Detailed Objectives**

The objective of this package of works is to provide input to the development of a mine water treatment scheme for the Barneycraig discharge.

The following tasks are included in this package of works:

- Attend an initial site visit with the Consultant and produce a brief report to highlight any key issues in respect to the buildability and functionality of the scheme.
- Review the feasibility study and addendum, including initial design proposals, and provide any comments to The Coal Authority.
- Produce build cost estimates for the treatment sites, to be included in the feasibility addendum.
- Attend subsequent meetings and site visits to advise on buildability and health and safety issues.
- Review specific design proposals for access to the site (remedial or replacement works to an unstable bridge) and for capturing and monitoring the mine water.

# Activity Schedule

Item Ref	Description
ECI01	Initial site visit
	Attend initial site visit with consultant to review possible site locations. (2 locations currently proposed)
ECI02	ECI report
	Produce a brief report following the site visit to summarise any buildability and functionality issues noted and discussions on site and which may impact the option selected.
ECI03	Review of feasibility study & addendum
	Review a copy of the feasibility study and addendum, which includes initial design proposals and cost estimates. Provide any comments regarding feasibility of the scheme to The Coal Authority.
ECI04	Budget costs
	From information on scheme size and transfer options provided by the Consultant provide budget build costs, for the 2 proposed treatment locations, for inclusion as an appendix in the feasibility study addendum.
ECI05	Additional site visits
	Allow for 2No. additional site visits to Barneycraig which may be required to finalise design proposals or to meet with stakeholders. Dates to be arranged as required to suit parties involved.
ECI06	Meetings
	Allow for 2No. meetings at The Coal Authority's offices in Mansfield to discuss and develop proposals for the site. Dates to be arranged as required to suit parties involved.

ECI07	River crossing
	Following a structural assessment of the existing bridge and initial recommendations by the Consultant, provide input to feasible, buildable solutions for a crossing adequate for expected construction traffic. Provide advice regarding costs and buildability.
ECI08	Capture
	Review consultant's proposals for a capture point and provide advice regarding costs and buildability.

#### Milestone Dates Imposed

The initial site visit to take place in December / January dates to be agreed in due course with TCA. ECI report to be delivered 2 weeks after visit.

The final feasibility report and addendum should be reviewed within 2 weeks of receipt is expected during March 2015.

Additional inputs are likely to be required during Outline Design, which is due to start in June 2016 and should be completed by November 2016.

Budget costings to be delivered 2 weeks after information on scheme size and transfer options has been provided.

Subject to agreement with a number of stakeholders it may be feasible to carryout initial access and capture works this financial year and therefore additional milestone dates may be imposed throughout the works to enable this to go ahead.

#### Permits, Consents and Licences

The works are expected to require Scheduled Monument Consent, Environment Agency permits, Planning Permission, Common Land consent and possibly others. Close liaison with the Consultant and The Coal Authority is required to ensure that the proposed works are in line with requirements from these bodies.

# **Tender Instructions**

#### Programme

Please provide a cost breakdown of the works by 16th December 2015. These costs will then be submitted to the Environment Agency for approval prior to award.

#### **Pricing, Accruals and Invoicing Instructions**

#### Pricing

The Consultant will be appointed based upon their financial and quality submissions via Confluence Design and Construct Contract (2400) through Option E - Cost Reimbursable of the NEC 3 Professional Services Contract (PSC).

A financial ceiling will be set, based upon the appointed Consultant's financial submission. The financial ceiling will not be exceeded by the appointed Consultant without prior justification and the written authorisation of the Coal Authority's Project Manager.

Change will be managed on this project by The Coal Authority and the appointed Consultant through the NEC 3 Early Warning and Compensation Event process. The Coal Authorities Conject system will be used to manage & track the change process.

#### Accruals and Invoice Information to be provided by the Consultant

The appointed Consultant shall:

- submit via email (<u>financedepartment@coal.gov.uk</u>) either an accrual or invoice value for this
  project by the close of business of working day minus five; whereby working day one is the
  first working day of the calendar month. The Coal Authority will write to the appointed
  Consultant with the reporting requirements for the end of financial year. The Coal Authority is
  content for the appointed Consultant to target +/-10% between the accrual and invoice
  values.
- provide invoices that clearly detail:
  - o breakdown of hours spent by each member of staff
  - Contract reference, cost centre, site reference, account code and capex code
  - Project title, including the site name
  - The Coal Authority Project Manager

# Please submit a DRAFT invoice via CONJECT to the Project Manager for Approval prior to submission to the finance department.