



nec^{*}3 Engineering and Construction

Short Contract

A contract between

THE COAL AUTHORITY



and SOIL ENGINEERING GEOSERVICES LTD



for TWO PROPOSED BOREHOLES. 1) ADJACENT TO HAUXLEY NATURE RESERVE, HAUXLEY, NORTHUMBERLAND. 2) AT EAST CHEVINGTON, NORTHUMBERLAND

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Notes about this contract are printed in boxes like this one. They are not part of the contract.



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Contract Data

Name	The <i>Employer</i> is THE COAL AUTHORITY			
Address	200 LICHFIELD LANE, MANSFIELD, NOTTS, NG18 4RG			
Telephone	01623 637000 Fax	01623 622072		
E-mail address	@coal.gov.uk			
The works are	BOREHOLE DRILLING WORKS			
The site is	HAUXLEY NATURE RESERVE AND EAST CHEVINGTON			
The starting date is	TBC			
The completion date is	28 TH MARCH 2016	weeks.		
The period for reply is	2	weeks after Completion.		
The defects date is	52	weeks.		
The defect correction period is	4 WEEKS	per day.		
The delay damages are	NOT APPLICABLE	of each month.		
The assessment day is the	28 [™] DAY	%.		
The retention is	0			
Does the United Kingdom Housin Regeneration Act (1996) apply?	g Grants, Construction and	V / No /delete on openinto)		
tegeneration Aut (1300) apply:		Yes / No (delete as appropriate)		
	The Adjudicator is			
Name				
Address	SS333			
		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Telephone	Fa	· · · · · · · · · · · · · · · · · · ·		
E-mail address		***************************************		





The interest rate on late payment is 2 % per complete week of delay.

Insert a rate only if a rate less than 0.5% per week of delay has been agreed.

The *Employer* provides this insurance

Only enter details here if the Employer is to provide insurance.

THE EMPLOYER PROVIDES NO INSURANCE

The minimum amount of cover for the third insurance stated in the

Insurance Table is £5M IN RESPECT OF EACH CLAIM, WITHOUT LIMIT TO THE NUMBER OF CLAIMS

The minimum amount of cover for the fourth insurance stated in the

Insurance Table is £5M IN RESPECT OF EACH CLAIM, WITHOUT LIMIT TO THE NUMBER OF CLAIMS

The Adjudicator nominating

body is THE INSTITUTION OF CIVIL ENGINEERS

The tribunal is ADJUDICATION

If the tribunal is arbitration,

п,

the arbitration procedure is

The conditions of contract are the NEC3 Engineering and Construction Short Contract April 2013 and the following additional conditions

Only enter details here if additional conditions are required.

CLAUSES Z1 TO Z27 ENCLOSED.



The Contractor	's Offer			
The	The Contractor is Scal Engineering Geseries Line for Parks III Lene Dendry Result Leeds LS II 55 k Eax Scal - Crystaering, Go Mis. entage for overheads and profit added to the Defined Cost for people is 42 %. The percentage for overheads and profit added to other Defined Cost is 22.5 %. Works in accordance with the conditions of contract for an amount to be			
determined in accordance with the co	Fifty Three Theresond, Fix Hendred and The Acen Pourus,			
Signed on behalf of the Contractor Name Position Signature	Enter the total of the Prices from the Price List. And my Calendar Date 1/3/16			
The Employer's Acceptance				
The Employer accepts the Contractor's Offer to Provide the Works				
Signed on behalf of the <i>Employer</i> Name Position Signature	HEAD OF ENVIRONMENT. Date 8/3/16			





Activity Schedule

Entries in the first four columns in this Price List are made either by the Employer or the tenderer.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tenderer enters the amount in the Price column only; the Unit, Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for the item of work which is the rate for the work multiplied by the quantity completed, the tenderer enters the rate which is then multiplied by the expected quantity to produce the Price, which is also entered.

Activity number	Activity Description	Unit	Quantity	Rate	Price
		ontractor to price			
		ed Framework S			
**********	C	of Rates (CA18/2			* * * * * * * * * * * * * *

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**********	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				*********
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The total of the Prices £ 53,513,99





Works Information

1 Description of the works

Drilling works to facilitate water level monitoring in 2 No. proposed boreholes into abandoned coal mine workings. Proposed borehole sites located at Hauxley Nature Reserve (see Figures 1 & 2) and East Chevington (see Figures 3 & 4).

Hauxley Nature Reserve:

Works to comprise drilling 1No. borehole, installation of piezometer pipe and lockable manhole cover. A Ground Investigation report detailing the field work and as built borehole and headworks construction is to be prepared with 1No.hard copy and an electronic copy in .pdf format provided within four weeks of completion. Drillers logs are to be handed to the Employer's project manager prior to work commencing the following day or at a time agreed with the regional project manager.

The expected geological succession is provided in "site information" section below. The expected design depth of the borehole is 77m, to the Top Brass Thill (Princess) Seam.

There are recorded worked horizons above the target depth. Gas may be encountered in any unsaturated strata at or above the worked horizons or in fractured or permeable strata. However, worked horizons are expected to be flooded with water.

The borehole should be completed with suitable headworks including a Newton lockable manhole cover (or similar) that is flush with the surrounding ground level. Standard design drawing attached.

Provision should be made to reinstate the compound area where required. These works are to be agreed by the Coal Authority and land owner.

The borehole should be drilled in accordance with the following specification, using a water/mud flush system. Measures for drilling into gas-filled environments will be required.

- 1. Drill a vertical hole through surface superficial deposits and install a temporary surface casing if required.
- 2. Drill a vertical rock bit hole to a suitable distance (to be agreed by the Engineer) below the Albert Seam horizon. Temporary or additional casing may be required from above and through the Albert Seam horizon.
- 3. Install steel casing from the surface to the base of the hole.
- 4. Grout the basal section of the steel casing into the borehole and allow the grout to fully set.
- 5. Continue drilling a vertical rock bit hole through the grout plug and down to a suitable distance (to be agreed by the Engineer) below the Queen Seam horizon. Temporary or additional casing may be required from above and through the Queen Seam horizon
- 6. Install steel casing from the base of the hole to approximately 1m above the base of the already installed permanent casing (below the Albert Seam). The uppermost section of casing should be flared at the top.
- 7. Grout the basal section of the steel casing into the borehole and allow the grout to fully set.
- 8. Continue drilling a vertical rock bit hole through the grout plug and down to a suitable distance (approx. 10m to be agreed by the Engineer) above the target Princess Seam horizon.
- 9. Install steel casing from the surface to the base of the hole.
- 10. Grout the basal section of the steel casing into the borehole and allow the grout to fully set.
- 11. Continue drilling a vertical rock bit hole through the grout plug and down to intersect the target horizon.
- 12. (This is a provisional item at the discretion of the Engineer). Install a plastic piezometer pipe from the base of the borehole to the surface. The pipe is to be slotted throughout the open-hole section of the borehole.

The minimum diameter of the (provisional) piezometer pipe should be 75mm. The drilling contractor should ensure that open hole and casings, including any that are required should unrecorded workings (as described in Section 5)





be encountered, are sized accordingly in order that this can be achieved.

No sampling is required as part of these works. However it is the Contractor's responsibility to supply BGS with suitable drilling logs as required.

THE Contractor IS REQUIRED TO PROVIDE AND MAINTAIN ALL PEDESTRIAN & TRAFFIC MANAGEMENT MESAURES REQUIRED TO SAFELY COMPLETE THE WORKS AND TO PROTECT THE PUBLIC FROM HIS OPERTAIONS. THE Contractor IS TO PROVIDE A PLAN WITHIN HIS OFFER TO DETAILING THE EXTENTS OF ANY FOOTPATH AND CARRIAGEWAY CLOSURES TO COMPLETE HIS WORK ALONG WITH PROPOSED POSITIONS OF HIS WELFARE FACILITIES AND THE MATERIALS COMPOUND.

PUBLIC UTILITY INFORMATION HAS BEEN OBTAINED, CHECKS FOR UTILITIES SHALL BE MADE WITH A CABLE AVOIDANCE TOOL ALONG WITH HAND EXCAVATED INSPECTION/SERVICE CLEARANCE PITS AT THE BOREHOLE LOCATION.

East Chevington:

Works to comprise drilling 1No. borehole, installation of piezometer pipe and lockable manhole cover. A Ground Investigation report detailing the field work and as built borehole and headworks construction is to be prepared with 1No.hard copy and an electronic copy in .pdf format provided within four weeks of completion. Drillers logs are to be handed to the Employer's project manager prior to work commencing the following day or at a time agreed with the regional project manager.

The expected geological succession is provided in "site information" section below. The expected design depth of the borehole is 42m, the depth of the Top Brass Thill (Princess) Seam. Although provision should be made for a depth of 51m, to the Bottom Brass Thill (Main) Seam.

Gas may be encountered in any unsaturated strata at or above the worked horizons or in fractured or permeable strata. However, all the recorded mine workings are expected to be flooded

The borehole should be completed with suitable headworks including a Newton lockable manhole cover (or similar) that is flush with the surrounding ground level. Standard design drawing attached.

The borehole should be drilled in accordance with the following specification, using a water/mud flush system. Measures for drilling into gas-filled environments will be required.

- 1. Drill a vertical hole into surface superficial deposits and install a temporary surface casing if required.
- 2. Continue drilling through superficial deposits and approximately 1m into bedrock.
- 3. Install steel casing from the surface to the base of the hole.
- 4. Grout the basal section of the steel casing into the borehole and allow the grout to fully set.
- 5. Continue drilling a vertical rock bit hole through the grout plug and down to a suitable (to be agreed by the Engineer) horizon above the estimated position of the Princess Seam horizon.
- 6. Install steel casing from the surface to the base of the hole.
- 7. Grout the basal section of the steel casing into the borehole and allow the grout to fully set.
- 8. Continue drilling a vertical rock bit hole through the grout plug and down to the Princess Seam horizon.
- 9. If there is a good connection to the mine working (to be agreed with the Engineer): Install a plastic piezometer pipe from the base of the borehole to the surface. The pipe is to be slotted throughout the open-hole section of the borehole.
- 10. If there is not a good connection to the mine workings (to be agree with the Engineer. Continue drilling a vertical rock bit hole down to the Main Seam horizon. Install a plastic piezometer pipe from the base of the borehole to the surface. The pipe is to be slotted throughout the open-hole section of the borehole.

The minimum diameter of the piezometer pipe should be 75mm. The drilling contractor should ensure that open hole and casings are sized accordingly in order that this can be achieved.

No sampling is required as part of these works. However it is the Contractor's responsibility to supply BGS with suitable drilling logs as required.

THE Contractor IS REQUIRED TO PROVIDE AND MAINTAIN ALL PEDESTRIAN & TRAFFIC MANAGEMENT MESAURES REQUIRED TO SAFELY COMPLETE THE WORKS AND TO PROTECT THE PUBLIC FROM HIS OPERTAIONS. THE Contractor IS TO PROVIDE A PLAN WITHIN HIS OFFER TO DETAILING THE EXTENTS OF ANY FOOTPATH AND CARRIAGEWAY CLOSURES TO COMPLETE HIS WORK ALONG WITH PROPOSED POSITIONS OF





HIS WELFARE FACILITIES AND THE MATERIALS COMPOUND.

PUBLIC UTILITY INFORMATION HAS BEEN OBTAINED. CHECKS FOR UTILITIES SHALL BE MADE WITH A CABLE AVOIDANCE TOOL ALONG WITH HAND EXCAVATED INSPECTION/SERVICE CLEARANCE PITS AT THE BOREHOLE LOCATION.

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Contract Data

Works Information

THE Contractors SITE SUPERVISOR SHALL HAVE A DEGREE IN CIVIL ENGINEERING, ENGINEERING GEOLOGY OR GEOLOGY AND HAVE ADEQUATE KNOWLEDGE AND EXPERIENCE OF THE TECHNICAL DIRECTION AND OUTPUT REQUIRED FOR THE SITE OPERATIONS TO ACHIEVE THE ABOVE AND RUN SAFELY.

THE Contractor IS TO CONDUCT ALL ACTIVITIES IN PROVIDING THE WORKS WITH THE UTMOST CONSIDERATION TO ADJACENT USERS OF THE HIGHWAY AND ADJOINING PROPERTIES ESPECIALLY IN RESPECT TO ENSURING THEIR SAFETY FROM OPERATIONS IN CONNECTION WITH THE WORKS AND LIMITING DISRUPTIONS, NOISE, DUST AND CONSTRUCTION DEBRIS. ALL DRILLERS SHALL HAVE NVQ LEVEL 2 LEAD LAND DRILLER AND BE BDA AUDITED. NO SUB-CONTRACTORS SHALL BE USED WITHOUT PRIOR APPROVAL/AGREEMENT WITH THE Employer.

2 Drawings		
Drawing number Revision		Title
Figure 1		Hauxley Nature Reserve Location Plan
Figure 2		Hauxley Nature Reserve Access Plan
Figure 3		East Chevington Location Plan
Figure 2		East Chevington Access Plan
Figure 4		Generic Manhole Chamber
Figure 5		Hauxley Nature Reserve Worked Seams
Figure 6		East Chevington Worked Seams
3 Specifications		
Title	Date or revision	Tick if publicly available
'UK SPECIFICATION FOR GROUND		
INVESTIGATION', PUBLISHED BY ICE PUBLISHING.	2nd EDITION	✓

COAL AUTHORITY AMENDMENTS AND ADDITIONS TO CLAUSES 3.5 (MANAGEMENT, SUPERINTENDENCE AND PROFESSIONAL ATTENDANCE), 3.8 (GENERAL SAFETY REQUIREMENTS), 3.16 (WORKING AREAS) AND 9 (GEOPHYSICAL TESTING), OF THE ABOVE DOCUMENT.





Works Information

4 Constraints on how the Contractor Provides the Works

- 4.1 WORKING HOURS ARE TO BE MONDAY TO FRIDAY 0800HRS TO 1800HRS
- 4.2 ONLY WATER IS TO BE USED FOR ROTARY DRILLING OPERATIONS

5 Requirements for the programme

5.1 - Starting date TO BE CONFIRMED AND CONSTRUCTION PHASE PLAN TO HAVE BEEN ACCEPTED BY THE EMPLOYER NO SOONER THAN 5 DAYS PRIOR TO COMMENCING. A GANT CHART SHOWING A PROGRAMME OF ACTIVITIES IS ALSO REQUIRED TO BE SUBMITED WITH THE Contractor's OFFERS.

6 Services and other things provided by the Employer

ltem

Date by which it will be provided

NONE

7 Completion

7.1 - AS CLAUSE 11.2(1).

7.2 - THE Contractor IS REQUIRED TO PROVIDE THE Employer WITH INFORMATION ON MATERIALS, QUANTITIES AND SUPPLIERS USED IN COMPLETING THE works FOR INCLUSION WITHIN THE HEALTH & SAFETY FILE.

8 Management of the works

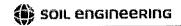
8.1 - THE COAL AUTHORITY WILL BE *Employer* AND IS THE APPOINTED PRINCIPAL DESIGNER; THE *Contractor* WILL BE RESPONSIBLE FOR THE MANAGEMENT OF HEALTH & SAFETY IN DELIVERY OF THE *works* THROUGHOUT THE CONSTRUCTION PHASE AND SHALL UNDERTAKE THE ROLE OF PRINCIPAL CONTRACTOR. RISK ASSESSMENTS, METHOD STATEMENTS AND THE CONSTRUCTION PHASE PLAN ARE TO BE SUBMITTED TO THE *Employer* FOR THEIR ACCEPTANCE IN ADVANCE THE *starting date*.

8.2 - NEC3:ECSC STANDARD COMMUNICATION FORMS PREPARED BY NEC3 ARE TO BE USED FOR ALL COMMUNICATIONS.

9 Working with the *Employer* and Others

9.1 – THE Contractor WILL PROVIDE ALL NECESSARY WELFARE, OFFICES AND SECURE STORAGE FACILITIES REQUIRED TO UNDERTAKE THE works AND THESE WILL BE IN PLACE FOR THE starting date AND REMAIN UNTIL THE completion date, THIS INCLUDES TEMPORARY SECURITY BOUNDARY FENCING AROUND THE WORKING AREAS AND LOCKABLE GATES.





Works Information

10 Health & safety

10.1 - THE CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015 APPLY TO THE works. THE CLIENT AND PRINCIPAL DESIGNER IS THE COAL AUTHORITY OF MANSFIELD.

10.2 - LIFTING OF PLANT AND MATERIALS IS ENVISAGED, THEREFORE LIFT PLANS WILL BE REQUIRED TO BE SUBMITTED TO THE *Employer* FOR APPROVAL AND COMMENT AT LEAST TWO WORKING DAYS IN ADVANCE OF THE LIFT TAKING PLACE. ANY TEMPORARY PLATFORMS REQUIRED FOR CRANES ARE TO BE DESIGNED AND CONSTRUCTED BY THE *Contractor*.

10.3 - TEMPORARY WORKS – THE *Contractor* IS TO PRODUCE A TEMPORARY WORKS REGISTER AND EACH TEMPORARY WORKS ELEMENT IS TO BE CERTIFIED FOR CONSTRUCTION BY A PROFESSIONALLY QUALIFIED TEMPORARY WORKS DESIGNER REPRESENTING THE *Contractor*. THE TEMPORARY WORKS DESIGNER IS TO PROVIDE A SIGNED CERTIFICATE FOR EACH ELEMENT IDENTIFIED ON THE REGISTER AND THIS IS TO BE SUBMITTED TO THE *Employer* PRIOR TO INSTALLATION, USE AND./ OR ENTRY.

10.4 - PERSONAL GAS ALARMS ARE TO BE PROVIDED BY THE *Contractor* FOR HIS PERSONNEL AND WORN AT ALL TIMES WHILST ACTIVITIES ARE BEING UNDERTAKEN. THE PERSONAL GAS ALARMS SHOULD BE MSA ALTAIR 4X OR SIMILAR APPROVED AND AS A MINIMUM SHOULD BE CAPABLE OF ALARMING WHEN THERE IS AN EXCESS OR A DEFICIENCY IN THE FOLLOWING GASES: OXYGEN, HYDROGEN SULPHIDE, CARBON MONOXIDE AND EXPLOSIVITY/COMBUSTION/L.E.L. GAS READINGS WITHIN EACH WORKING AREA ARE TO BE RECORDED EVERY 2HRS AFTER ENTRY HAS BEEN PERMITTED, AND AT THE END OF EACH WORKING DAY. RECORDS ARE TO BE AVAILABLE FOR THE *Employer* TO INSPECT AT ALL TIMES THROUGHOUT THE *WORKS* AND BE COLLATED AND SUBMITTED TO THE *Employer* ON COMPLETION.

10.5 - WELFARE PROVISION - TO COMPLY WITH CDM 2015 AND PREFERABLY SILENT IF TO BE USED FOR OUT-OF-HOURS SECURITY WELFARE DUE TO THE RESIDENTIAL AREA. CONSIDERATION TO BE GIVEN TO REMOTE AND / OR MOBILE OUT-OF-HOURS SECURITY PROVISION IF DEEMED NECESSARY.