CW/S/23

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MEMORANDUM

FROM Area Planning Branch, Glebe House, Fenton.

Our Ref. AL/BL.

TO P.Smallman, Esq., Agent/Manager, Chatterley Whitfield.

Your Ref.

Date 28th February,1961.

Subject Chatterley Whitfield Colliery
Proposed Pumping Arrangements for the
Deep Holly Lane, Cockshead and 8300' Horizon Water

Following our underground examination with regard to the above, please find listed below a number of proposals for the concentration of pumping facilities in this area:-

1. Deep Holly Lane

All pumping in this area has now ceased and the goaf will be allowed to fill with water to the level of Reec Crut (7950'). The water will then be allowed to flow out along Reec Crut falling 1 in 75, to a point approx. 20 yards inbye of Suttons 1 in 3 rise crut, where it will be collected and conveyed in a pipe line to No.11 Cockshead and thence down the Cockshead Back Dip (Steep Dip), discharging below No.2 level into the Cockshead Goaf.

The ventilation circuit to the above collecting point on Reec Crut will be intake from the Cockshead Main Dip via Reec Crut, returning up Suttons Crut to the Banbury Main Dip.

2. Banbury Main Dip

Pumping from the bottom of the Banbury Main Dip will cease following:-
a) the boring of an inclined hole from Suttons Crut to the dip bottom or
b) the withdrawal of the Banbury Main Dip Endless Rope Haulage Tension End,
the bottom of the dip below Suttons Crut Junction being allowed to fill with water and overflow, in a pipe,down Suttons Crut.

The water would discharge from the pipe at the above mentioned collecting point on Reec Crut (joining water from Holly Lane).

Considerable repair work is required in Suttons Crut and the outbye portion of Reec Crut.

3. Cockshead

It is agreed that following the removal of the Mono pump in Clarkes' Dip the water level will be allowed to rise in the Cockshead Goaf to just below No.2 level (approx.7570').

The existing electric pump sited at the bottom of the Cockshead Main Dip will be moved to the junction of No.2 Cockshead level and the Cockshead Back Dip. A main pumping station will be established here, all the above mentioned water being piped via the Cockshead Back Dip to No.11 Cockshead and thence via the Cockshead Main Dip to the 8300' Horizon proposed water lodge.

The ventilation circuit will be intake from the Cockshead Main Dip at No.12 down the 1 in 3 crut and along the No.2 level to the pumping station, returning via the Cockshead Back Dip to No.11 and via Kerrigans and Suttons Cruts to the Banbury Main Dip.

4. Middle Pit Holly Lane

The pumping of this water via the Middle Pit will cease following the completion of the proposed borehole from the 8300' Horizon to the Holly Lane Goaf. This water will be piped along the 8300' Horizon and join the water, pumped up from the Cockshead Goaf, at the proposed 8300' Horizon water lodge.

All water encountered on the 8300' Horizon will also be conveyed to this proposed new water lodge.

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A new pumping station on the 8300' Horizon, sited near to the existing battery charging station, will pump the water from the proposed water lodge up the Banbury Main Dip to No.4 and thence along the Hesketh Back Crut to the Hesketh Pit Bottom water lodge.

5. Proposed Pumping Stations

a) At No.2 Cockshead

The existing total make of water from the Deep Holly Lane, Banbury Main Dip Bottom and Cockshead is in the order of 20 gallons per minute per 24 hours.

It is envisaged that no weekend pumping will take place, and adequate 'lodge capacity' in the Cockshead Goaf should be available for a stand of say 70 hours over the weekend.

70 hours at 20 galls/min + 10% = approx. 95,000 galls.
At 200 galls/min the pump would remove this water in 425 mins.
(approx. 7 hours).

b) 8300' Horizon

The anticipated make of water from the Middle Pit Holly Lane is in the order of 30 gallons per minute per 24 hours.

It is again envisaged that no weekend pumping will take place, and adequate lodge capacity must be provided for a stand of say 70 hours over the weekend.

70 hours at 30 galls/min. + 10% = approx. 140,000 galls.
At 200 galls/min the pumps would remove this water in 700 mins
(approx. 12 hours).

The water lodge will be designed to a minimum capacity of 150,000 gallons, a plan of which will be forwarded when completed.

A.Leeming.

No.1 Group Planning Engineer

Copy to: G.A.Haslett,Esq., Assistant Manager, Chatterley Whitfield Colliery.

2 - MAR 1961

CWH/ECB.

No.1. Group Mechanical Engineer.

No.1. Group Manager.

C.Whitfield Colliery - 1st November, 1960.
Pumping for Hollylane and Cockshead districts:

At the last Group Planning Meeting I was asked to investigate the increased pumping facilities that would be required in the Cockshead district to handle Middle Pit Hollylane water which it is intended to draw via the 8300' horizon.

After discussing this problem with the No.1. Group Planning Engineer, I visited this district with him on Thursday, 27th October, 1960.

There are altogether 11 pumps in this combined district, 10 of them C/A ram pumps, all, in various ways, pumping to an electric Three Throw Ram Pump situated at the bottom of the Cockshead Dip some 80 yards below No.12 landing in a blind end. This electric pump works about 4 hours per day pumping at the rate of no more than 120 galls per minute to the Hesketh Pit bottom via the Cockshead Main Dip. All such services have to be withdrawn from the Cockshead Main Dip ready for coal drawing.

The make of water from the Middle Pit Hollylane is estimated as being no more than 30 galls per minute based on pumping time and theoretical pump capacity.

When drawn to the Hesketh Cockshead district this would add no more than 6 hours to the present pumping time, at most making it necessary to pump on two shifts instead of one as at present.

It is suggested that a new pumping station be made in the Cockshead District at the junction of No.2. Level and the bottom of the steep dip. The water would be pumped to the Hesketh Pit Bottom pump lodge via the Steep Dip to No.11. Cockshead then up Kerrigans and Suttons rise cruts to the Banbury Dip, up this dip to No.4. and along No.4. to the Hesketh Back Crut, then to Hesketh Pit Bottom where at the most 4 hours would be added to the present pumping time of approximately 10 hours per day.

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Here I would mention that although the quantity of water is not an embarrassment the lodge room is, there being no great capacity such that in the event of a power failure or some similar occurrence the pumps could be flooded. To meet this eventuallity an escape was once made so that when the water in the lodge reached a certain level, it would overflow into the North Brights Return Dip. The existence of this escape route now seems extremely doubtful.

From my observations it appears that at most a second shift would be required in the Hesketh Cockshead district to handle water from the Middle Pit Hollylane district but a reduction in pumping time would result in the Middle Pit Bottom similar to the increase at Hesketh.

In making this investigation other things came to light which are worthy of consideration and are as outlined below.

The reason for keeping the Hesketh Hollylane district open seems a little vague as it would appear that even though a coal face has been prepared in that district it is not likely to be worked for some considerable time, and unlike the Hollylane district in the Middle pit the water if allowed to flood will not embarrass anyone until then. The same applies to the Old Cockshead workings except that here there is not even a face to maintain.

A scheme for handling the water in the Hesketh Cockshead and Hollylane districts was prepared by Planning Department some 2 years ago and a recent revision incorporating the handling of Middle Pit Hollylane water being summerised as follows:-

1. A new electric pumping station be formed at the junction of the Cockshead No.2. Level and the Steep Dip.

   The Steep Dip which is in a poor condition would have to be opened up to take the pumping range, a water range from the bottom of the Banbury Dip, the electrical supply, a means of transporting pumping equipment and by no means least to complete the necessary ventilating circuit.

2. The pump in the Cockshead Old working (Clarkes Dip) be allowed to stop and the compressed air taken off.

   The water would then eventually reach a level at the bottom of the Steep dip where the pump station and lodge would be formed.

3. The Forschritt boring machine be used to draw the water from the botton of the Banbury Dip into the Sutton's 1 in 3 dip crut (from Banbury Main Dip to Reeces Crut)

from where it can be piped into the Cockshead district, as now, without the need for a C/A pump which now runs continuously to keep the water clear of the return wheel.

4. Stop the pumping in the Hollylane district.

Some consideration time would elapse before the Hollylane district flooded, but in the meantime arrangements could be made either to pipe the water along Reeces crut or to let the water find its own way along this crut until it could be collected inbye the bottom of Suttons Crut, From there it would be collected in a suitable dam and piped to the new pumping station in the Cockshead.

The second method appears the most commendable as there would be no satisfactory way of ventilating the inbye end of Reeces Crut and it is questionable anyway as to whether the cunt is worth retaining considering its present condition, and the length of time that will elapse before it will even be considered for coal drawing.

It is very doubtful whether it would be possible to salvage these pumps because of the condition of the roads. Conversely of a serious mishap occured with one of the pumps it is very doubtful whether it could be replaced.

In my opinion serious consideration should be given to:-

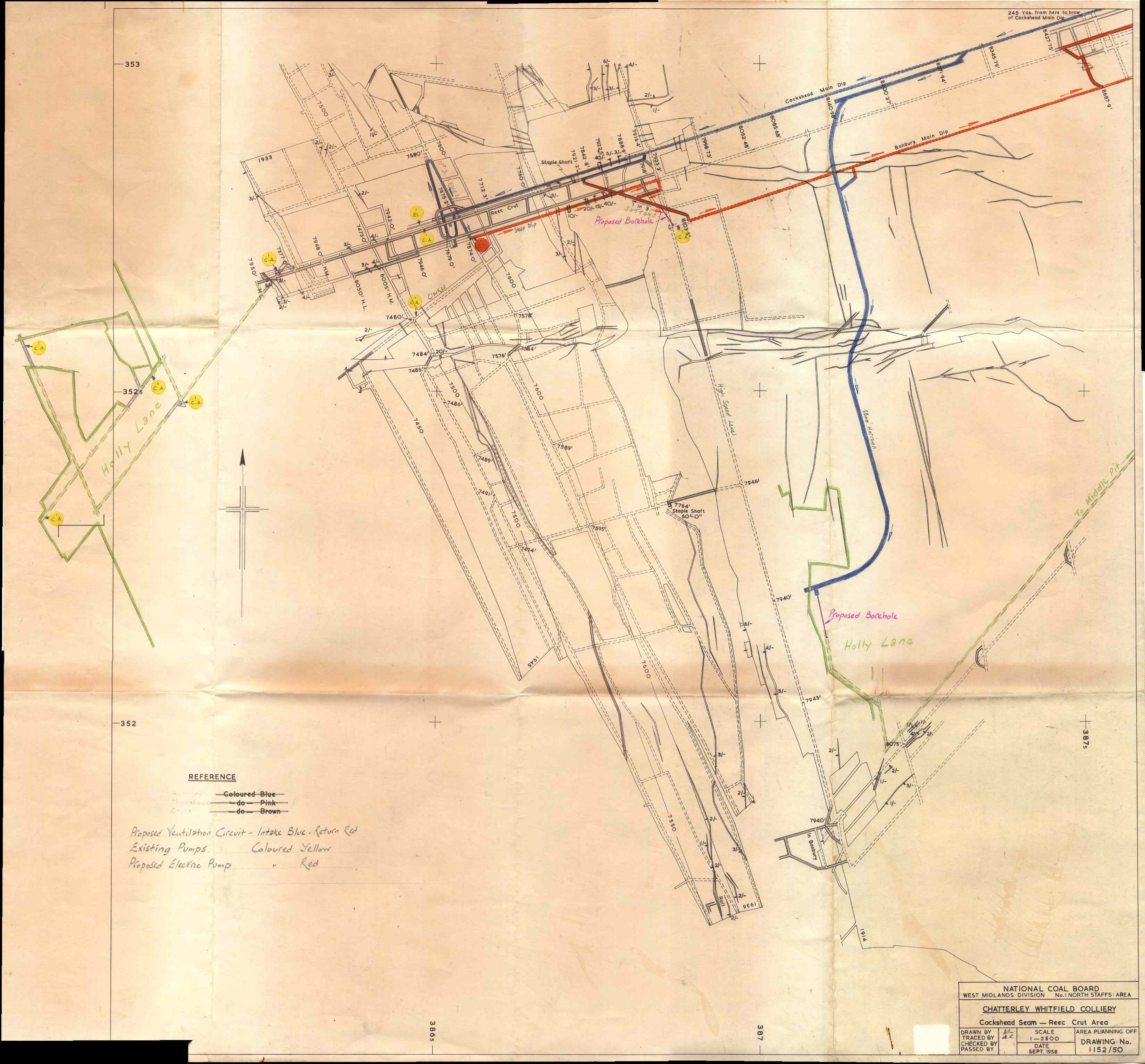
1. Need for inbye pumping in the Cockshead old workings.

2. Need for pumping in the Hollylane old workings.

In my opinion we are exposing curselves to severe criticism, both with regard to the dangers involved in sending pumpmen into these outlying districts and in the loss of compressed air in maintaining a supply for pumping.

C.W.Hibbert.
No.1. Group Mechanical Engineer.

Copies to: P. Smallman Esq., Agent Manager, C.Whitfield.
A. Leeming Esq., No.1. Group Planning Engineer.


245 Yds. from here to brow of Cockshead Main Dip
Cockshead Main Dip
Banbury Main Dip
Staple Shaft
Reec Crut
Steep Dip
1 in 3
Suttons
Proposed Borehole
Clarkes
High Speed Level
Staple Shaft 60'-0"
Proposed Borehole
Holly Lane
Holly Lane
To Middle Pit
In Banbury
Roll
REFERENCE
Coloured Blue
—do— Pink
—do— Brown
Proposed Ventilation Circuit - Intake Blue - Return Red
Existing Pumps. Coloured Yellow
Proposed Electric Pump " Red
NATIONAL COAL BOARD
WEST MIDLANDS DIVISION No.1 NORTH STAFFS: AREA
CHATTERLEY WHITFIELD COLLIERY
Cockshead Seam — Reec Crut Area
DRAWN BY
TRACED BY
CHECKED BY
PASSED BY
SCALE 1—2500
DATE SEPT. 1958
AREA PLANNING OFF
DRAWING No. 1152/50