

REMEDIATION STATEMENT

CLIFF HILL SITE

DENBY DALE

HD8 8RZ

Planning Ref :2022/62/9199

HARLAND RESOURCES LTD

4, WEST PARADE,

WAKEFIELD WF1 1LT

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BACKGROUND

Urban Group (York) Ltd have submitted an application to erect 47 Dwellings on the land off Cliff Hill Denby Dale under the planning reference 202/91911.

Following the results of the phase 2 ground investigation Urban have been in discussions with Harland Resources Ltd to formulate a suitable remediation strategy to deal with the legacy issues relating to historic coal and clay mining. The site investigation has revealed several challenges including shafts, voids and seams.

THE SITE

The site is approximately 5 acres in area and contains the upper (0.8m) and lower Cumberworth coal seams (0.8M).

Records show the site was last worked in the 1930's and the 1933 geological memoir suggests that the Windmoor clay seam (1.2m thick) was exploited locally as well.

The results of the mining have left the ground in a potentially unstable condition that will be addressed prior to building onsite.

METHOD

A number of potential solutions have been considered but the most suitable remediation strategy is as follows;

IT IS PROPOSED, TO EXCAVATE THE SITE AND THE REMNANT INCIDENTAL COAL SEAMS, BY REMOVAL AND DISPOSAL OF THE COAL OFF SITE AND DEAL WITH THE CLAY WORKINGS, BY EXCAVATION AND BACKFILLING, BOTH THE OVERBURDEN AND CLAY, IN AN ENGINEERED MANNER, IN 250 MM LAYERS, COMPACTED TO 95% MAX DRY DENSITY AND EACH LAYER, VALIDATED BY SUITABLY QUALIFIED PERSON.

IT IS PROPOSED, INITIALLY TO STRIP, ALL RECOVERABLE TOPSOILS AND PLACE IN BOUNDARY BUNDS FOR REUSE, AT THE END OF OPERATIONS. THIS WOULD HAVE THE BENEFIT OF A VISUAL BARRIER AROUND THE SITE AND A NOISE BARRIER.

THE MAIN EXCAVATION WILL BE EXCAVATED IN STRIPS OF APPROXIMATELY, 15 METRES IN WIDTH. THIS MAY VARY DUE TO THE IRREGULAR SITE BOUNDARY, THE MATERIAL FROM THE INITIAL EXCAVATION STRIP, BEING TAKEN AND STORED ON SITE AND BE REPLACED IN THE FINAL VOID.

ON REACHING THE COAL SEAM, THE MAIN EXCAVATOR, WILL LEAVE 250 MM OF MATERIAL, ABOVE THE COAL SEAM, WHICH WILL BE CAREFULLY REMOVED BY A 18 TONNE EXCAVATOR AND THE MATERIAL, THROWN BACK TO THE MAIN EXCAVATOR, FOR DISPOSAL ON SITE. HAVING CLEANLY EXPOSED THE COAL SEAM, HE WILL THEN EXCAVATE THE OLD WORKING, THE MATERIAL, GOING BACK IN THE BACKFILL, EXPOSING THE REMAINING PILLARS OF COAL. THESE PILLARS, WILL THEN BE, CAREFULLY, RECOVERED AND LOADED INTO A DUMPTRUCK AND TAKEN TO A STOCKPILE AREA, FOR SCREENING, TO REMOVE ANY DIRT CONTAMINATION, FOR IMMEDIATE DISPOSAL, OFF SITE.

ALL EXPOSED COAL SEAMS, IN THE BOUNDARY WALLS, WILL BE CLAY SEALED. TO AVOID, ANY RISK OF SPONTANEOUS COMBUSTION, AS REQUIRED BY THE COAL AUTHORITY.

THE FINAL SITE LEVELS, WILL BE ADVISED, BY THE CLIENT. THERE ARE 3 DISUSED MINESHAFTS, INDICATED ON SITE, WHICH WILL BE REMOVED DURING THE EXCAVATION PROCESS, AVOIDING THE ISSUE OF CAPPING AND STAND OFF AREAS, AT THE SURFACE.

PROGRAMME

Site Mobilisation:	1 WEEK
Topsoil removal and total excavation:	10 WEEKS
Demobilisation:	1 WEEK
Coal Production:	1200 TONNES PER WEEK
Duration :	12 WEEKS
Waggon Movements Per Day:	9 IN /OUT, 5 DAY WEEK

COAL AUTHORITY

On the issue of an approval for this remediation strategy by Kirklees Council this document will accompany an application for an incidental coal licence.

Tree Preservation Order

Harland Resources are aware of the TPO relating to the tree in the development and a protection zone will be established throughout these works.

RGW 11/07/2022