The Coal Authority

INVESTOR IN PEOPLE

RTPI Learning Partner

200 Lichfield Lane
Berry Hill
Mansfield
Nottinghamshire
NG18 4RG

Tel: 01623 637 119 (Planning Enquiries)

Email: planningconsultation@coal.gov.uk

Web: www.gov.uk/coalauthority

For the Attention of: Jonathan Roberts
Patrick Parsons

16 October 2019

Dear Mr Roberts

PRE-APPLICATION ENQUIRY: TCA-PPA-19-0065

Advice on proposed site investigation and remedial strategy for replacement dwelling at Pine Lodge, Stainborough Lane, Hood Green, Barnsley, S75 3EZ

I refer to your emails of 20 and 25 September 2019 regarding the above matter.

In providing our response, I have sought assistance from my colleague Dr Leigh Sharpe in our Permitting and Licensing Team and have reviewed the content of your emails and the following supporting documents:

- *Coal Mining Risk Assessment* – Dit/18/213-Rev 0 (June 2019, prepared by Design-it Structural Solutions Ltd)
- *Consultants Coal Mining Report* - ref. 51002154766001 (9 July 2019, prepared by the Coal Authority)
- *Existing dwelling details to identify footprint and elevation profile* – Peter Dimberline Drawing No. 2019/06/01 Rev. A
- *Proposed dwelling details to identify footprint and elevation profiles* – Peter Dimberline Drawing No. 2019/06/02 Rev. A
- Simplified Section drawing
- Annotated drawing of mature oak tree location
- Annotated photograph of possible mine entry positons relative to mature oak tree

The Coal Authority records indicate that there are five mine entries (shafts 431402-030, 031, 032, 033 and 034) present within the north western quarter of the proposed development site. In addition, the zones of influence of a number of further off-site mine shafts are recorded to be present adjacent to the boundary could potentially encroach into the site. We hold no treatment details for any of these mine entries.

Our information indicates that the Flockton Thick coal seam has been worked beneath the proposed development site at shallow depth. Further historic unrecorded shallow

underground mining associated with the Joan and Flockton Thick coal seams is also likely to have taken place beneath the site. The south eastern corner of the site falls within the boundaries of a wider site from which coal has been worked by surface (opencast) methods.

Your initial email indicates that your client intends to submit a planning application in the near future for the demolition of the existing dwelling and garage and its replacement with a new 1.5 – 2 storey dwelling and garage (as detailed on the drawings prepared by Peter Dimberline). A terrace is also proposed immediately to the south of the new dwelling.

It is understand that you are seeking clarification from the Coal Authority regarding the proposed scope of intrusive investigations required to address the coal mining legacy affecting the site and their potential effect upon the proposed redevelopment of the site. For ease of reference, we have responded to each of the numbered points included in your initial email in turn below:

1. Site Location and Description
These details are noted.

2. Development Proposal
These details are noted. Whilst we acknowledge that the dwelling would occupy a similar footprint to the existing dwelling, we note that the footprint would be extended further to the south west, thereby bringing it closer to development constraints, i.e. the mature oak tree and three recorded mine entries (431402-030, 031 and 032).

3. Coal Mining Risk Assessment and Supporting Information
We are in general agreement with the content of the Coal Mining Risk Assessment and mining circumstances which it describes.

4. Coal Mining Legacies
We are in agreement with the stated coal mining legacy.

5. Proposal for Intrusive Investigation

Pre-Demolition
The Coal Authority welcomes the intrusive investigations which are proposed to investigate the mining legacy at the site. Prior to commencement, these works must be formally agreed under a Coal Authority Permit.

The proposed positioning of rotary boreholes to determine the risk posed by unrecorded shallow workings along with the trenching/stripping to locate the mine entries, is considered appropriate. Minor revisions to the borehole locations could be considered in order to avoid the boreholes falling within the proposed building footprint. This would avoid issues associated with the creation of new gas migration pathways which could affect the new building. The nature of the site means that boreholes should be progressed with water flush and full gas monitoring should be carried out during drilling in accordance with published good practice.

The undertaking of trenching to define the former surface mine high wall may or may not be successful via safe trenching operations. The abandonment plans for the former surface mine should be obtained to inform the design of these investigatory works. Trenching will not confirm the depth of extraction at the base of the extraction at the foot of the highwall, however, the investigation of this aspect of the surface mining operations may not be necessary depending on the available records.

Based on the information available at present, pre-demolition investigations may prove sufficient to enable the preparation of appropriate mitigation measures, but there is no guarantee. The potential for unrecorded coal mining features, such as mine entries, being to be present within the footprint of the existing building cannot be ruled out. These have the potential to add significant cost to the groundworks/foundations of the new building and your client should be made aware of this. Should an unrecorded mining feature be encountered, this will need to be accommodated through the modification of the design of the dwelling.

We note that you indicate that monitoring for mine gases during drilling works is proposed, but that there is currently no intention to install monitoring wells. Given the presence of mine entries and the high risk of associated unrecorded shallow workings, a Detailed Quantitative Risk Assessment would be expected for mine gas, informed by a suitable programme of gas monitoring. You may wish to contact Barnsley MBC regarding Local Authority gas monitoring requirements.

Post-Demolition
The Coal Authority welcomes the proposed post demolition trial pitting, trenching and surface strip in order to determine the presence of any unrecorded past mine entries within the former footprint of the existing dwelling. We assume that the demolition of the building and these further works will only take place once your client has secured planning permission.

We take this opportunity to highlight that any form of development over or within the influencing distance of a mine entry can be dangerous and raises significant safety and engineering risks and exposes all parties to potential financial liabilities. The Coal Authority has adopted a policy where, as a general precautionary principle, the building over or within the influencing distance of a mine entry should wherever possible be avoided, even once treated. Our adopted policy on the matter can be found at:
www.gov.uk/government/publications/building-on-or-within-the-influencing-distance-of-mine-entries

In light of the available information, the existing dwelling and the proposed replacement may be sited within the zones of influence of shafts 431402-030, 032 and 033. This is on the basis that the actual positions of these shafts could deviate/depart from their plotted positions by several metres (c.8m) and taking into account the expected depths superficial/drift materials.

As such, we wish to clarify that we would expect all areas that require trenching and stripping, and which are currently accessible beyond the existing building footprint, to be investigated in the pre-demolition phase of works. The pre-demolition works must

demonstrate that the position of the proposed replacement dwelling is clear of the potential zone of influence of any of the mine shafts.

6. Constraints to Intrusive Investigation

Existing Oak Tree
For a development of the nature proposed, the Coal Authority would typically expect a full investigation across the departure areas for shafts 431402-030, 031 and 032. As you have indicated, however, the presence of the mature oak tree on site is likely to prevent such an investigation from taking place.

The presence of a tree in the vicinity of the mine shafts would not be considered by the Coal Authority to represent sufficient justification for the construction of the replacement dwelling in a position which could potentially be at risk from ground movement derived from a collapse of the mine entries.

Should the oak tree be subject to a Tree Preservation Order or any other formal protection, any proposals for its removal to enable investigations to take place would be a matter for consideration by Barnsley MBC.

If the removal of the tree is not possible, and to ensure the safety and stability of the development, the Coal Authority would expect the proposed replacement dwelling to be sited outside of any calculated zone of influence of the shafts present on site, either based on our plotted positions (taking into account the departure distances) or the actual position of the shafts, if found.

Existing Dwelling
The Coal Authority acknowledges that the majority of the intrusive investigations are proposed prior to demolition of existing structures, with further works to be undertaken across the footprint of the existing dwelling once removed. We consider this to be an acceptable approach, however, we reiterate that the stripping of the areas between the existing building and the aforementioned mine entries is necessary in order to determine the layout of development.

Area of Proposed Intrusive Works
The Coal Authority notes that the likely application site boundary for any future planning application will encompass the wider parcel of land associated with the property. It would appear that the majority of the site is, and will continue, to be used as garden land/domestic curtilage. Given that there is no change of use proposed to the wider site, we would only require the investigation of those mine entries which are expected to be or are subsequently demonstrated to be within the zone of influence of the building.

Ultimately, the Designer must be able to demonstrate that all mine entries which potentially place the new dwelling at risk, have been suitably investigated and mitigated by remedial measures and through the design of the building foundations. If the depth to rockhead is as expected (<3m depth) then some mitigation by foundation precautions, such as deepening foundations, may form part of the solution.

7. & 8. Planning
We note that no planning application has been made for the proposed redevelopment of the site. However, we take this opportunity to highlight that, in addition to the submission of the original Coal Mining Risk Assessment, we would expect any application which proposes a detailed site layout to be accompanied by a further report to demonstrate to the LPA that the proposed development has been suitably informed by the positions of the mine entries. This should include details of the results of intrusive investigations carried out at the site, should include a layout plan showing the positions of the shafts and their associated zones of influence along with details of proposed measures to mitigate the risk posed by coal mining legacy affecting the site..

I trust that the above comments are useful and provide clarity on the Coal Authority's views as a statutory consultee in the planning process, but please do not hesitate to contact me if you would like to discuss these issues further.

Please do not hesitate to contact me if you would like to discuss this matter further.

Yours sincerely

James Smith

James Smith *BSc. (Hons), Dip.URP, MRTPI*
Planning Liaison Manager

General Information

Under the Coal Industry Act 1994 any intrusive activities, including initial site investigation boreholes, and/or any subsequent treatment of coal mine workings/coal mine entries for ground stability purposes require the prior written permission of The Coal Authority, since such activities can have serious public health and safety implications. Failure to obtain permission will result in trespass, with the potential for court action. In the event that you are proposing to undertake such work in the Forest of Dean local authority area our permission may not be required; it is recommended that you check with us prior to commencing any works. Application forms for Coal Authority permission and further guidance can be obtained from The Coal Authority's website at:
www.gov.uk/get-a-permit-to-deal-with-a-coal-mine-on-your-property

Building over or within the influencing distance of a mine entry (shaft or adit) can be dangerous and has the potential for significant risks to both the development and the occupiers if not undertaken appropriately. The Coal Authority would draw your attention to our adopted policy regarding new development and mine entries:
www.gov.uk/government/publications/building-on-or-within-the-influencing-distance-of-mine-entries

Disclaimer

The above consultation response is provided by The Coal Authority as a Statutory Consultee and is based upon the latest available data on the date of the response, and electronic consultation records held by The Coal Authority since 1 April 2013. The comments made are also based upon only the information provided to The Coal Authority. The views and conclusions contained in this response may be subject to review and amendment by The Coal Authority if additional or new data/information (such as a revised Coal Mining Risk Assessment) is provided by the Local Planning Authority or the Applicant for consultation purposes.

In formulating this response The Coal Authority has taken full account of the professional conclusions reached by the competent person who has prepared the Coal Mining Risk Assessment or other similar report. In the event that any future claim for liability arises in relation to this development The Coal Authority will take full account of the views, conclusions and mitigation previously expressed by the professional advisers for this development in relation to ground conditions and the acceptability of development.