

Consultation Advice

R/2020/0318/FFM

ENGINEERING OPERATIONS ASSOCIATED WITH GROUND REMEDIATION AND PREPARATION INCLUDING REMOVAL OF FORMER RAILWAY EMBANKMENT AND WORKS TO HOLME BECK AND KNITTING WIFE BECK

Prairie Site, Grangetown

Background

1. The proposal involves remediation of the site, by ground clearance and capping, in order to create a platform for future development. The work will involve the turnover of made ground, removal of embankment, removal and crushing of relict structures, and removal and treatment of some contaminated material. A plan indicating estimated dig depths to carry out these works across the site accompanies the application. These depths range from 1.5 mbgl around the site periphery, 2.5 mbgl across large areas of the site, and 4 and 5 mbgl in parts of the site lying to the west and east.

2. A desk-based archaeological assessment ('DBA') is submitted with the application. The DBA follows the usual professional format, and has made use of databases such as the RCBC HER. The DBA is light on recommendations, but in part this lies with the likelihood that most pre-industrial period deposits on the site have been destroyed or deeply buried by land formation/reclamation processes within the last 200 years. One area where the DBA could have been more explicit is in the interpretation of potential industrial period remains on the western part of the site, i.e. the area of the Eston Iron Works and later Steel Works.

Assessment

3. Another, earlier, planning application has been made to the Council for the construction of an energy facility on the western part of the Prairie Site only, under Council reference R/2019/0767/00M. This earlier application included a DBA necessarily more focussed on what is the western part of the larger site. Our consideration of that earlier DBA and application can be seen in our consultation response to R/2019/0767/00M, on 9th January this year (set out below for ease of reference). In that instance we agreed with the assessment in the earlier DBA, that:

“a) The surviving bases of the late 19th and 20th century blast furnaces should be retained on site and consideration be given to their proper preservation and interpretation. (Figure 26 [of the DBA] gives an indication of the area involved, the precise area and size of this needs to be identified through detailed survey)

b) There should be an archaeological survey of the site as at present in order to record surviving features.

c) There should be archaeological analysis of the sequence of trial trenches and boreholes that South Tees Development Corporation is proposing to better understand the archaeology of the site and to attempt to identify the precise location and possible survival of the 1853 Eston Iron Works Blast Furnaces.

d) There should be archaeological monitoring of ground disturbance works in the vicinity of the surviving blast furnace bases and those of the Eston Iron Works to record features related to their use.”

We also commented that “These are reasonable recommendations and ones which can be developed and secured by any planning permission granted. It is important to note a preliminary aspect to the archaeological work required, consisting of archaeological evaluation of trenching and borehole data, together with an initial survey (drawn and photographed) of all upstanding remains. The survey will assist in accurately identifying the area where remains should be preserved *in situ* protected from construction works and consolidated before the new development is brought into use. Again, before construction works commence on the site, there will then be a requirement (if practical given the extent of overburden) for any further remains of high significance suggested by the borehole/trenching data, or observed during the initial survey, to be the subject of detailed archaeological investigation (stripped, mapped and sampled). Subsequent to this phase of archaeological work on site would be a watching brief of all ground disturbance during the remediation works (i.e. overburden and waste removal) and during groundworks e.g. piling, and installation of services, in all areas of the site identified as archaeologically sensitive (mainly but not exclusively) adjacent to remains of 19th century blast furnaces.” (Paragraph 7.2, below).

The current application is for groundworks only, in contrast to R/2019/0767/00M no piling or building is entailed. But clearly the proposal has the potential to destroy any archaeological deposits or remains of significance.

4. Although the red-line area of the current application is significantly larger than that of R/2019/0767/00M, there is no evidence, in the DBA submitted with the application, that the additional area contains other potential heritage assets.

The proposed development does involve the removal of the remains of the nineteenth-twentieth century viaduct, but this structure does not merit preservation *in situ*, and could be adequately recorded, according to an agreed methodology, before destruction.

Recommendation

5. In light of the above observations our recommendation is the same as that for the previous application relating to the ERF facility on the western part of the site, that a condition be attached to any planning permission granted as follows.

- (a) *No development shall take place until a written scheme of investigation (WSI) for archaeological work has been submitted to and approved in writing by the local planning authority. The WSI shall as a minimum make provision for:*
- *Before remediation or development commences, archaeological evaluation of borehole and trenching data*
 - *Before remediation or development commences, initial archaeological survey (drawn and photographed) of the whole application site, with particular emphasis on the remains the subject of preservation in situ*
 - *Where practical and before remediation or construction works takes place on site an archaeological strip, map and sample of remains of high significance suggested by the borehole/trenching data, or observed during the initial survey*
 - *An archaeological watching brief of all ground disturbance during the remediation works and during construction groundworks in areas identified as archaeologically sensitive*
 - *Protection during development, followed by consolidation and preservation of high value remains left in situ*
 - *a general programme of works and monitoring arrangements, including reasonable notification to the local planning authority of commencement of works*
 - *details of staff involvement in carrying out the work (including specialists), and their qualifications and responsibilities*
 - *the timetable for completing post-excavation assessment.*
- (b) *Provision for the analysis, archiving and publication of the results of the archaeological surveys and excavations shall be secured to the satisfaction of the local planning authority by the developer before the development is brought into use.*
- (c) *The development shall not without the prior written approval of the local planning authority be carried out otherwise than in accordance with the approved WSI, and the consolidation and preservation of on-site remains as provided for in the WSI (or as otherwise agreed at any time in writing by the local planning authority) shall be secured by the developer and/or landowner on an on-going basis.*

REASON: The site contains remains of significant archaeological interest, some of which merit preservation in situ

North East Archaeological Research Ltd,
4th August 2020

North East
Archaeological
Research Ltd
HER187

R/2020/0318/FFM
Engineering Work
Prairie Site, Grangetown

PREVIOUS ADVICE (9th JANUARY 2020)

.....

Consultation Advice

R/2019/0767/OOM

Outline application for the construction of an energy recovery facility (ERF) and associated development

Land east of John Boyle Road and west of Tees Dock Road, Grangetown

Background

1. The application relates to construction of an ERF facility proposed on the south bank of the River Tees, on a site of c. 10 hectares, centred on approximate grid reference NZ 544 213. The site is bound to the north by the main Middlesbrough to Redcar railway line, to the east by the site of Lackenby steel works, to the south by industrial units and A66 road, and to the west by industrial units.

2. Application is made by Hartlepool Borough Council on behalf of the other Tees Valley Authorities, and is an EA application (schedule 1) which has been the subject of a scoping reply by the LPA. The EA has a cultural heritage chapter (chapter 10), the main constituent of which is a desk-based archaeological assessment (DBA) produced in November 2019 by Tees Archaeology (the joint local authority archaeological service for Hartlepool and Stockton-on-Tees). The DBA methodology is sound, and the interpretation of the archaeological resource and likely effects of the development on that resource are persuasive.

3. As relevant professional guidance requires, the DBA also makes recommendations about the mitigation of the effects on the resource. These recommendations are considered below. Our advice to the LPA is that the proposal is likely to cause significant and, in some parts of the site, substantial harm to an important non-designated heritage asset, but that if (in accordance with national and local policy) the public benefit and other aspects of the proposal are considered to outweigh this harm the harm can be successfully mitigated by a programme of archaeological work, including some *in situ* preservation of the asset.

Archaeological Resource

4.1 Within the 1.5 km study area are three listed buildings, but all are in adjacent settlements and are all sufficiently far from the development not to be affected by it: there are modern industrial concerns between the buildings and the proposed development which means that there is no issue of setting (DBA, Page 4).

4.2 There are no scheduled monuments, listed buildings, conservation areas or other designated assets within the study area.

4.3 In total there are 34 sites identified by the HER in the study area. Of these, the sites of significance within the site are of 19th-20th century date.

4.4 Within the application site the likelihood of the presence of remains of prehistoric, roman, early-medieval, medieval or post-medieval remains is considered low. The potential of the site lies with possible remains of the Eston Iron Works (1850s) and proven remains of later steel works (1870s onwards). Remains of blast furnace bases of the latter phase were visible during the site visit carried out by the compiler of the DBA, together with physical evidence for the methods of charging and blowing the furnaces. On-site rail lines and concrete structures are also in evidence.

4.5 The DBA comments that “It is clear from the site visit that considerable evidence of the former use of the site survives. This takes the form of the concrete bases of the former installations. In a number of cases rail line was still clearly visible set into the concrete and brick foundations of buildings were also visible. In addition to the concrete features the bases of blast furnaces were visible as significant raised mounds c. 2m high with their adjoining raised working surfaces.” The DBA assesses the significance of these remains as ‘high’, and relates that the site has been considered by Historic England to be of national importance.

4.6 The area occupied by the remains measures approximately 100m north-south and 50m east-west. The area is depicted on the site Location plan accompanying the application and is defined as the area of ‘Archaeology Interest’ in that Plan (and the ‘Site Plan’).

4.7 Archaeological remains (of the 19th century steel works) could be present on the application site outside the area marked as of ‘Archaeology Interest’.

Preservation of remains and Potential Effects of Development

5.1 The DBA notes that the area within which the application site is situated was extensively reclaimed during the nineteenth century, and this limits the possibility of pre-nineteenth century strata being identified on the site. In addition to reclamation coincident with the industrial use of the site there is also evidence of extensive tipping across the site (of up to 2m deep). The DBA comments that “As far as it is possible to ascertain it is probable that there is good survival [*of industrial remains*, our italics] beneath this tipping”.

5.2 At page 9, the DBA notes that the development will be based on piled foundations and will be preceded by remediation works to be carried out before construction. “It is understood that this remediation will be to a depth of 2-3m. The remediation and piling are likely to cause severe damage to the visible and below ground remains on the site, i.e. the industrial period remains.”

5.3 While virtually all structures and plant have been cleared from the site, we would agree with the main conclusion of the assessment in the DBA that “the actual and potential survival of significant archaeological remains that will throw light on the industrial processes that took place on the site is considered to be high.”

5.4 In summary, highly adverse impacts on some archaeological assets of high importance are likely, and further highly adverse impacts on archaeological assets of potentially high importance are possible.

Planning Policy

6.1 The National Planning Policy Framework (2018) provides as follows:

Paragraph 195

Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

1. *a) the nature of the heritage asset prevents all reasonable uses of the site; and*
2. *b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and*
3. *c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and*
4. *the harm or loss is outweighed by the benefit of bringing the site back into use.*

Paragraph 197

The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

6.2 Relevant development plan policy is also found in Redcar & Cleveland Local Plan (adopted 2018). Policy HE3 states that:

Development that may affect a known or possible archaeological site, whether designated or non-designated, will require the results of a desk-based assessment to be submitted as part of the planning application. An archaeological evaluation may also be required to identify the most appropriate course of action.

Development that affects a site where archaeology exists or where there is evidence that archaeological remains may exist will only be permitted if:

- 1. The harm or loss of significance is necessary to achieve public benefits that outweigh that harm or loss. Harm or loss may be avoided by preservation in situ or refusal; or*
- 2. Where in situ preservation is not required, appropriate satisfactory provision is in place for archaeological investigation, recording and reporting to take place before, or where necessary during, development. Where archaeological investigation, recording and reporting has taken place it will be necessary to publish the findings within an agreed timetable.*

6.3 In application of the above policies to the proposal our advice to the LPA in this instance is that if the public benefit and other aspects of the proposal are considered to outweigh the identified harm to the important non-designated heritage asset, the harm can be successfully mitigated by a programme of archaeological work, including some *in situ* preservation of the asset. This could be achieved as set out below.

Recommendation

7.1 The DBA recommends that:

a) The surviving bases of the late 19th and 20th century blast furnaces should be retained on site and consideration be given to their proper preservation and interpretation. (Figure 26 [of the DBA] gives an indication of the area involved, the precise area and size of this needs to be identified through detailed survey)

b) There should be an archaeological survey of the site as at present in order to record surviving features.

c) There should be archaeological analysis of the sequence of trial trenches and boreholes that South Tees Development Corporation is proposing to better understand the archaeology of the site and to attempt to identify the precise location and possible survival of the 1853 Eston Iron Works Blast Furnaces.

d) There should be archaeological monitoring of ground disturbance works in the vicinity of the surviving blast furnace bases and those of the Eston Iron Works to record features related to their use.

7.2 These are reasonable recommendations and ones which can be developed and secured by any planning permission granted. It is important to note a preliminary aspect to the archaeological work required, consisting of archaeological evaluation of trenching and borehole data, together with an initial survey (drawn and photographed) of all upstanding remains. The survey will assist in accurately identifying the area where remains should be

preserved *in situ* protected from construction works and consolidated before the new development is brought into use. Again, before construction works commence on the site, there will then be a requirement (if practical given the extent of overburden) for any further remains of high significance suggested by the borehole/trenching data, or observed during the initial survey, to be the subject of detailed archaeological investigation (stripped, mapped and sampled). Subsequent to this phase of archaeological work on site would be a watching brief of all ground disturbance during the remediation works (i.e. overburden and waste removal) and during groundworks e.g. piling, and installation of services, in all areas of the site identified as archaeologically sensitive (mainly but not exclusively) adjacent to remains of 19th century blast furnaces.

7.3 In line with planning policy the results of archaeological investigation should be made publicly available within a reasonable period of time following completion of the investigations. It will also be necessary to agree with the developer a regime for the consolidation and on-going preservation of the remains retained *in situ*.

7.4 Should it be considered that the public benefits of the proposal outweigh the harm to the heritage asset in this case we suggest the following archaeological condition be attached to any planning permission granted for the development.

- (a) *No development shall take place until a written scheme of investigation (WSI) for archaeological work has been submitted to and approved in writing by the local planning authority. The WSI shall as a minimum make provision for:*
- *Before remediation or development commences, archaeological evaluation of borehole and trenching data*
 - *Before remediation or development commences, initial archaeological survey (drawn and photographed) of the whole application site, with particular emphasis on the remains the subject of preservation in situ*
 - *Where practical and before remediation or construction works takes place on site an archaeological strip, map and sample of remains of high significance suggested by the borehole/trenching data, or observed during the initial survey*
 - *An archaeological watching brief of all ground disturbance during the remediation works and during construction groundworks in areas identified as archaeologically sensitive*
 - *Protection during development, followed by consolidation and preservation of high value remains left in situ*
 - *a general programme of works and monitoring arrangements, including reasonable notification to the local planning authority of commencement of works*
 - *details of staff involvement in carrying out the work (including specialists), and their qualifications and responsibilities*
 - *the timetable for completing post-excavation assessment.*
- (b) *Provision for the analysis, archiving and publication of the results of the archaeological surveys and excavations shall be secured to the satisfaction of the local planning authority by the developer before the development is brought into use.*

- (c) *The development shall not without the prior written approval of the local planning authority be carried out otherwise than in accordance with the approved WSI, and the consolidation and preservation of on-site remains as provided for in the WSI (or as otherwise agreed at any time in writing by the local planning authority) shall be secured by the developer and/or landowner on an on-going basis.*

REASON: The site contains remains of significant archaeological interest, some of which merit preservation in situ

**North East Archaeological Research Ltd,
9th January 2020**
