



Archaeological Services
University of Durham

NYCC HER	
SNY	9760
ENY	2972
CNY	2980
Parish	4035
Rec'd	02/07/2003

**BBC Broadcast Tower, East Cliff,
Abbey Lane, Whitby, North Yorkshire**

archaeological assessment

on behalf of

Crown Castle UK Ltd

ASUD Report 993
May 2003

Archaeological Services
University of Durham

South Road

Durham DH1 3LE

Tel: 0191 334 1121

Fax: 0191 334 1126

archaeological.services@durham.ac.uk

www.durham.ac.uk/archaeologicalservices

BBC Broadcast Tower, East Cliff, Abbey Lane, Whitby, North Yorkshire

archaeological assessment

ASUD Report 993

May 2003

Archaeological Services University of Durham

on behalf of

Crown Castle UK Ltd

Altrincham Business Park, George Richards Way, Altrincham, Cheshire, WA14 5GL

Contents

1 Summary	1
2. Project background	2
3. Topography and geology	2
4. Historical and archaeological development	3
5 Survey work	5
6 The potential archaeological resource	6
7. Recommendations	6
8. Sources	6

1. Summary

The project

- 1.1 This report presents the results of an archaeological desk-based assessment and survey which were conducted in advance of development work to be undertaken within the compound of the BBC Broadcast Tower, East Cliff, Whitby, North Yorkshire. The assessment comprised a search of pertinent documentary and cartographic records, a field visit and a detailed topographical survey.
- 1.2 The works were commissioned by Crown Castle UK Ltd and conducted by Archaeological Services University of Durham in accordance with a specification provided by North Yorkshire County Council.
- 1.3 The site of the proposed development falls within the area of Scheduled Ancient Monument 13284, Whitby Abbey and Dark Age Settlement.

Results

- 1.4 The most obvious historical feature in the vicinity of the site are the medieval ruins of Whitby Abbey, which stands to the south of the site. This is also the site of the Anglo-Saxon monastery of *Streoneshalh*, which was founded on the site in 7th century. Both of these sites have been intensively studied and a number of works have been published in relation to them (Peers and Radford 1943, Cramp 1976; Johnson 1993). Although the location of the tower compound itself falls outside of the northern boundary of the abbey, which is demarcated by the wall which runs parallel with the Abbey Lane, there is evidence for Saxon and medieval occupation to the west of the site in an area known as Abbey Plain. There is also further evidence of Saxon and Iron Age occupation from an area directly to the east. Therefore there is a high possibility that archaeological deposits relating to either, or both, of these settlements may be disturbed by the proposed development.

Recommendations

- 1.5 It is recommended that a programme of rigorous archaeological evaluation is carried out prior to the proposed development, in order to establish the nature and extent of any archaeological resource present which may be affected by the works.

2. Project background

Location

- 2.1 The site is situated at NGR NZ 9042 1138, immediately to the north of Coastguard Cottages, Abbey Lane, East Cliff, Whitby, North Yorkshire. It is bounded on the north by a disused quarry and Abbey Plain, to the east is the Coastguard station.

Development proposal

- 2.2 The proposed development consists of two 3m by 3m square areas within the compound of the BBC broadcast tower. The two areas represent the pre-determined locations for the repositioning of two concrete anchor blocks. The relocation of the blocks is being undertaken as a temporary solution to the threat posed to the existing anchor point from the effects of coastal erosion.

Objective

- 2.3 The objective of the assessment is to identify any archaeological features which may be present within or near to the site. This will enable an informed decision to be made regarding the nature and extent of any potential archaeological resource that may be present within the proposed development area.

Specification

- 2.4 The works have been undertaken in accordance with a specification provided by North Yorkshire County Council Archaeology Section.

Dates

- 2.5 The field visit and survey took place on 7th May 2003. This report was prepared between 8th April and 14th May 2003.

Personnel

- 2.6 This assessment was conducted by Mark Douglas. Survey work was conducted by Jim Wright and Mark Douglas and this report was prepared by Mark Douglas, with illustrations by Linda Bosveld. The Project Manager was Richard Anns.

Acknowledgements

- 2.7 Archaeological Services is grateful for the assistance of Tony Wilmott of English Heritage CFA in the preparation of this report.

3. Topography and geology

- 3.1 The site is situated on an area of level ground on the raised headland west of the river Esk, Whitby, North Yorkshire, at a mean elevation of c 60m OD. Immediately to the north of the site is a vertical sea cliff, and to the west there is a cliff above Whitby harbour.
- 3.2 The underlying geology comprises alternate layers of sandstone and Carboniferous shale. This is overlain with glacial deposits consisting mainly of boulder clay.

- 3.3 The unstable nature of the geology in the area represents a serious threat as the sea cliff is liable to substantial collapse. It has been predicted that recently the geology in the area has entered into a particularly unstable phase. It is estimated that up to 30m of the headland may be lost to erosion within the course of the next century. This poses a significant risk not only to the buildings in the vicinity, including the medieval abbey, but also with respect to the loss of important archaeological deposits.

4. Historical and archaeological development

The prehistoric period

- 4.1 There is some archaeological evidence for the existence of prehistoric settlement in the vicinity of the tower compound. However the full extent of this settlement has not been established.

The Roman period (70AD to 5th Century AD)

- 4.2 It has been suggested that the Whitby Headland may have been the site of one in a chain of Roman signalling stations which stretched along the Yorkshire coast. The sites of five of these have been recognised, at Filey, Scarborough, Ravenscar, Goldsborough, and Huntcliff (White 1993). Although the Whitby Headland would have constituted a strategic site for the placement of such a signalling station the evidence for its actual existence on the ground has not been verified archaeologically. There is, however, the possibility that the site may have been lost to the effects of coastal erosion. This is in the process of occurring at Filey and Huntcliff. The Ordnance Survey map of 1894 does show some evidence of earthworks in the vicinity of the modern signal station.

The medieval period (5th century AD to 1540 AD)

- 4.3 The phase of development which took place in the area of the headland between the 7th to 9th centuries, with the establishment of the Anglo-Saxon monastery constitutes one of the most historically significant periods in the history of the Whitby area, and indeed nationally. The first literary reference to the monastery is made by Bede who says that it was founded by St Hilda at a place called *Streoneshalh* c657AD. This reference to an actual place may suggest that there was a settlement of some kind present on the headland prior to the establishment of the monastery. The monastery which was a double foundation, occupied by both men and women, lasted until the time of the first Danish raids on the North East coast in the 9th century, after which time it was abandoned. It is not known whether a secular settlement survived in the area as no mention is made of it until the re-establishment of a religious community in the 11th century. The medieval Benedictine abbey of Whitby was established by one Reinfrid who, it is said, founded it at "*the place long ago called Streoneshalc, then Prestebi and now Witebi*" (Atkinson 1878). The distinction between the two places of Prestebi and Witebi is considered by Rahtz, who suggested that the place name *Streoneshalh* probably went out of use after the destruction of the monastery and that Prestebi and Witebi constitute "*two distinct places, probably corresponding respectively to the hill-top settlement and that around the harbour. As Whitby grew in importance it presumably absorbed Prestebi as the place-name*" (Rahtz 1962,606). There are indications of a secular settlement associated with the Anglo-Saxon monastery and its

location is represented on the Charlton map of 1778 to the with the words "Here steanfhalh formerly stood" (Figure 1) Young, in his *History of Whitby* (1817) states that in this area "foundations of buildings, and even streets, are still very discernible in the fields that are on the verge of the cliffs adjacent to the church yard" (Young 1817,471).

The post-medieval period (1541 AD to 1899 AD)

- 4 4 After the dissolution of the abbey in 1540 land formerly associated with it came under the control of Sir Francis Cholmley The house built by Chomley utilized stone from the ruins. Although post-medieval agricultural activities continued at this time in the area of the Abbey Field it appears that the former settlement had long been abandoned. Documentary and cartographic evidence for the precise area of the headland under consideration is somewhat scant Map evidence from the 17th and 18th century either fails to indicate any form of structural or topographical features in the area or simply refers to the existence of the earlier settlement of *Streoneshalh* The first edition Ordnance Survey map of 1853 does show St Hilda's Cottages and a feature described as the 'Hole of Horcum' Post-medieval features were encountered during the excavations in Abbey Field in 2001-2, these were agricultural terraces, one with a stone revetment (Jennings, Muldowney and Wilmott 2002)

The modern period

- 4 5 Coastguard Cottages erected in the earlier part of the 20th century and which an earlier cottage and farmyard which are shown on the 1894 OS map The Coastguard signal station is a modern replacement of a former building which is shown on the 1894 and 1913 OS maps. The BBC mast and associated buildings within the compound were erected 1969.

Previous archaeological works

- 4 6 In 1968 an excavation in advance of the erection of the BBC mast was carried out on the site of the BBC mast compound by Mr Brewster of the East Riding Archaeological Research Committee The excavation report states that the "Excavation uncovered a sleeper trench associated with twelfth-century potsherds. Above was a layer containing numerous fragments of cooking pots and thirteenth-to 14th-century glazed ewer fragments and pieces of burnt daub No evidence to suggest a Roman signal station had existed on the site came to light T C M. Brewster 5/1/69 " (quoted in English Heritage 1997b)
- 4 7 The excavations carried out by Peers and Radford between 1920 and 1925 (1943) concentrated on the area the abbey precinct between the north side of the Abbey church and the boundary of Green Lane A number of buildings relating to the monastery were uncovered, along with numerous finds which relate to this type of ecclesiastical establishment. Within the area exposed by the excavation was line of a former roadway or bank and this has been interpreted as the remains of the former northern boundary, the 'Vallum Monasterii,' of the Anglo-Saxon monastery (Rahtz 1962). It was also evident from the site plan of the 1920-25 excavation that there was an extension of building remains beyond this northern boundary, in the direction of Abbey Plain



Archaeological Services
University of Durham

on behalf of
Crown Castle UK Ltd

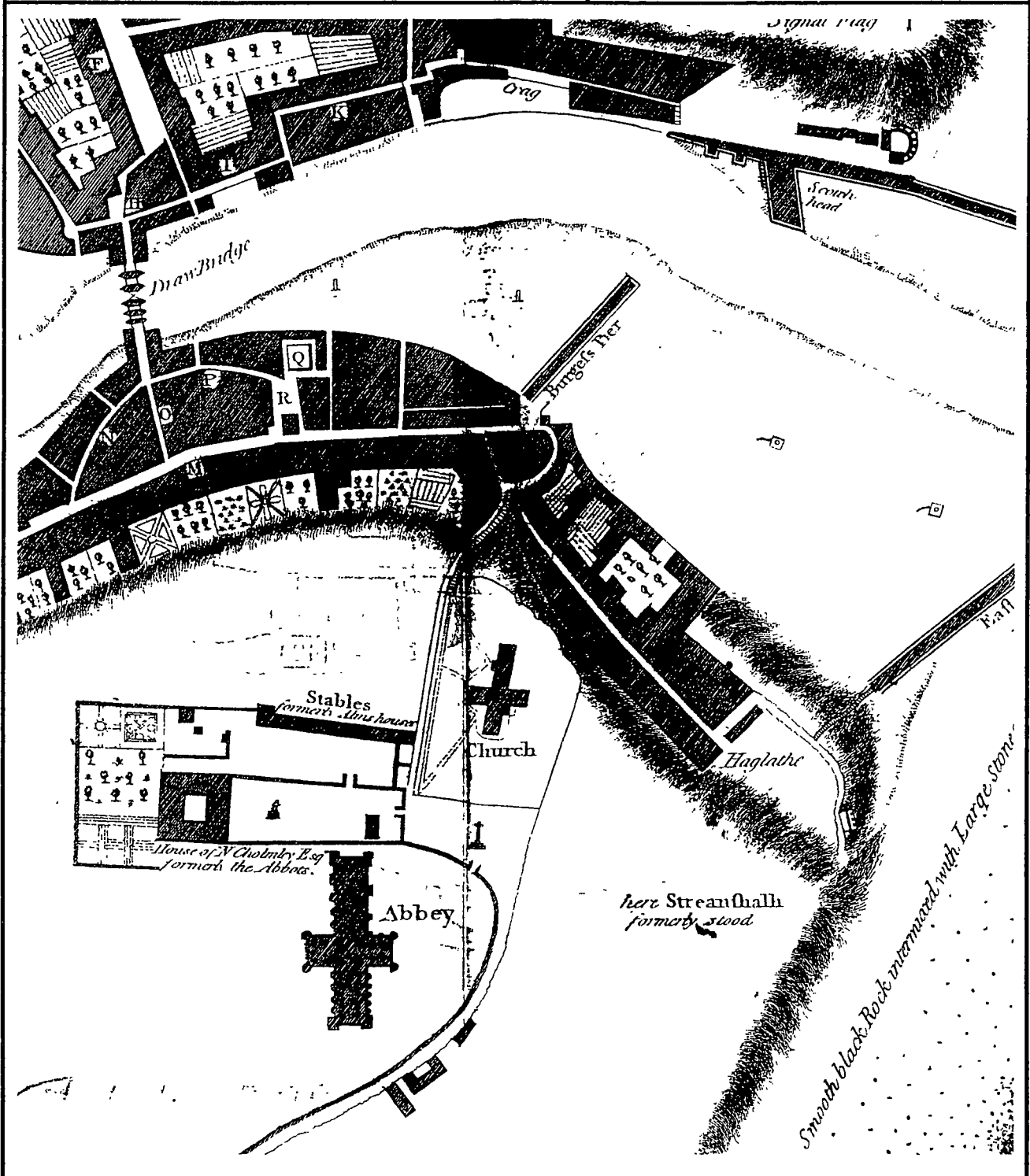
**BBC Broadcast Tower, East Cliff,
Abbey Lane, Whitby, North Yorkshire**
Archaeological assessment

Figure 1

Extract from Charlton's map of 1778



0 yards 200



- 4.8 Rahtz's excavation of 1958 (**Figure 2**) examined the archaeological remains located in the field north of Green Lane, this area, Abbey Field, lies to the west of the proposed development site. The area contained a number of surface features indicating the presence of banks and ditches. A slope running roughly north-south divided the eastern area of the site into an upper and lower terrace. The excavation demonstrated the existence of Saxon and medieval buildings and occupation deposits associated with the southern section of the site and the upper terrace to the east. Saxon pottery was recovered from trial pits excavated on the upper terrace and it is suggested that the centre of occupation lay in this area (Rahtz, 1962). It was concluded that the archaeological evidence recovered relates to the existence of a secular settlement located outside the limits of the Abbey grounds.
- 4.9 Excavations carried out by English Heritage in 2001-2 (Jennings, Muldowney and Wilmott 2002), to the east of the Coastguard station, (**Figure 3**) uncovered the remains of a prehistoric relating to four chronological phases. A section of a round house and associated features which may date from the 1st or 2nd century BC was excavated. A number of finds were recovered which included a quantity of Iron Age pottery, flint and fire cracked pebbles. This is the first definite indication of prehistoric settlement in the area and as such constitutes an important development in the history of the headland. The area excavated was limited to a strip along the cliff edge which was under imminent threat from coastal erosion, and so the full extent of the prehistoric occupation has not been fully established. The excavations revealed further evidence for the extent of the secular Anglo-Saxon and medieval settlement. Two areas of the headland were investigated, one to the west of the proposed development area and the other to the east. The western excavation revealed areas of occupation including postholes, hearths and domestic refuse, loom weights, spindle whorls, pottery, glass and copper alloy pins. Industrial activity was also indicated by the presence of large amounts of iron smithing slag. Further evidence of industrial activity was recovered from the excavations located to the east of the proposed development site. Here a number of pits was located, delimited by two charcoal-filled ditches. Lead working waste was recovered from one of the pits. The most significant finds from this area are represented by several pieces of coloured raw glass, which, it is suggested indicates the presence of glass working activity.
- 5. Survey work (Figure 4)**
- 5.1 Survey was carried out on 7th May 2003 using a Geodimeter 420 Total Station and an automatic level. An arbitrary datum was established for X and Y, while Z was established from the fundamental bench mark at Green Lane Top with a check on an adjacent bench mark.
- 5.2 Processing of data was carried out on Survpro and DGM3 software and drafted using ACAD2000 compatible CAD software. Five existing survey nails within red painted circles were found on site and surveyed in. One of these on the north west anchor block was used to establish approximate OS grid values using Magellan Sportrak hand held GPS with WAAS enabled giving absolute position of +/- 1 metre. The other two anchor block nails were used to establish a best mean fit for orientation to OS grid North.



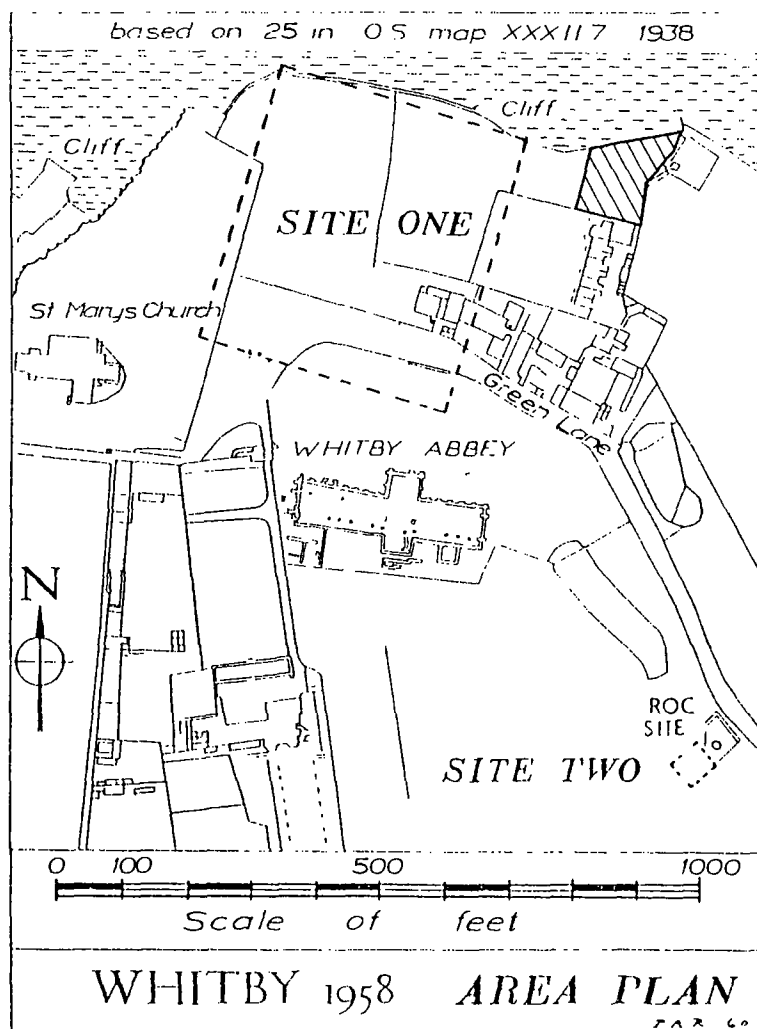
Archaeological Services
University of Durham

**BBC Broadcast Tower, East Cliff,
Abbey Lane, Whitby, North Yorkshire**
Archaeological assessment

Figure 2

*Site plan of 1958 excavation (the assessment
area is shown hatched)*

on behalf of
Crown Castle UK Ltd





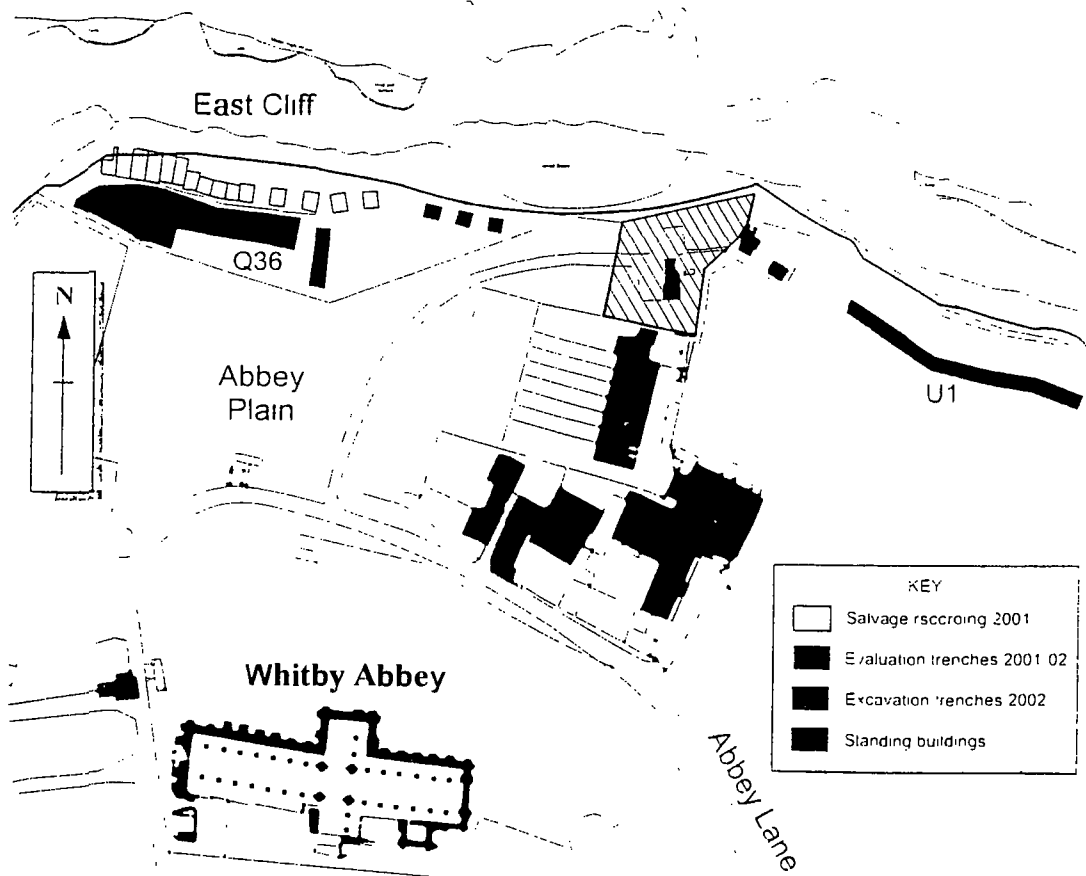
Archaeological Services
University of Durham

on behalf of
Crown Castle UK Ltd

**BBC Broadcast Tower, East Cliff,
Abbey Lane, Whitby, North Yorkshire**
Archaeological assessment

Figure 3

*Location plan of English Heritage 2002 excavation
(the assessment area is shown hatched)*



5.3 Although the specification required the surveying of the cliff edge, this was not carried out due to health and safety constraints

5.4 No evidence of archaeological features was recorded in the course of the survey work

6. The potential archaeological resource

6.1 Based on the evidence presented by this assessment and archaeological work previously carried out in the immediate vicinity of the proposed development site, it is clear that there is a very high probability that any form of ground disturbance in this area will result in the destruction of significant archaeological deposits. It is considered that the archaeological features and deposits which are likely to be present in the area of the proposed development constitute an important archaeological resource that requires rigorous and detailed examination.

7. Recommendations

7.1 It is apparent, based on the evidence provided, that these features and deposits are of an ephemeral nature and may not be immediately apparent during the course of a watching brief. This point is reiterated in the Whitby Abbey Headland Project Conservation Plan Policy A3, which states that "*The Archaeology of the headland is of international significance, but is very fragile. Piecemeal evaluation or excavation can be damaging and difficult to interpret*" (English Heritage 1997a, 46). It is therefore strongly recommended that the initial phase of excavation for the relocation of the anchor blocks (as outlined in para 2.2 above) is carried out in the form of a full and intensive archaeological investigation.

8. Sources

8.1 Cartographic sources

Charlton, 1778. Plan of the Town and Harbour of Whitby, taken from Young 1817

1843. Ordnance Survey 1st Edition, 6" sheet XXXII

1894. Ordnance Survey 1st Edition, 25" sheet XXXII

1913. Ordnance Survey 2nd Edition, 25" sheet

8.2 Other sources

Atkinson, J. C., 1878 *Whitby Abbey Chartulary*, Surtees Society Ixix

Cramp, R., 1976 *Analysis of the finds register and location plan of Whitby Abbey*, in Wilson, D., *The Archaeology of Anglo-Saxon England* Cambridge University Press, Cambridge, 453-8.

English Heritage 1997(a) *Whitby Headland Project Conservation Plan executive summary*, unpublished report

English Heritage 1997(b) *Whitby Headland Project Conservation Plan Annex Two Policy*, unpublished report.

Jennings, S Muldowney, L. and Wilmott, T, 2002 *Excavation and evaluation at Whitby, 2002 an archaeological response to coastal erosion*. English Heritage, Newsletter of the Centre for Archaeology 4, 2-4

Johnson, M, 1993 The Saxon monastery of Whitby: past, present and future, In Carver, M O H, *In search of cult, archaeological investigations in honour of Philip Rahtz*, Woodbridge, Boydell, 85-89.

Peers, C and Radford, C A R, 1943 The Saxon monastery of Whitby
Archaeologia 89, 27-88

Rahtz, P, 1962 Whitby 1958, *Yorkshire Archaeological Journal* 40, 604-18.

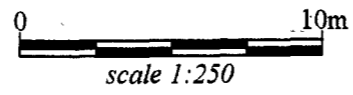
White, A, 1993 *A history of Whitby*, Chichester, Phillimore

Young, G, 1817 *A history of Whitby and Steoneshalh Abbey*, Vols I and II.



Archaeological Services
University of Durham

on behalf of
Castle Crown UK Ltd



- 60 65 levels
- stone wall
- brick wall
- post and wire fence

**BBC Broadcasting Tower, East Cliff,
Abbey Lane, Whitby, North Yorkshire**

Archaeological assessment

Figure 4

Topographical survey

