



Site Name: Kit Hill, Callington, Telecommunications Ducting, Archaeological Watching Brief. PL178HR.

Grid ref (10-fig): SX 37480 71345

Report Nos: 2018R014

Parish: Stoke Climsland

PA & Condition No: N/A

Site Type: Bronze Age barrow, Post Medieval Folly. Windmill and Chimney stack associated Kit Hill Great Consols Mine.

Period: Bronze Age to Modern

Form: Archaeological Watching Brief.

Description:

In January 2018 Cornwall Archaeological Unit (CAU), Cornwall Council was commissioned by Nick Shearer, Project Manager with 8point8 Support Ltd to undertake archaeological recording during groundworks associated with investigations of some possible blocked underground telecoms ducting carrying cables from aerials on the chimney to the Emergency Services Building (Herring and Thomas 1990) on Kit Hill, Callington (SX 37480 71345) (Figs 1 and 2).

The groundworks are located in the vicinity of an 18th century folly, which is a Scheduled Monument (DCO1360) and a chimney designated as a Grade II Listed Building (1290980). An archaeological watching brief was considered necessary because it was thought that trenching would be required along the length of the ducting in order to locate and remediate the blockage.

Kit Hill is a rounded hill reaching a height of 333m OD that dominates the western end of the west to east running ridge of Hingston Down, a block of upland that lies between Bodmin Moor and Dartmoor. The hill is within the ecclesiastical parish of Stoke Climsland roughly 2km to the north east the town of Callington. The underlying geology consists of coarse grained granite of a Permian, Carboniferous intrusion (BGS Sheet 337 Tavistock). There are many mineral lodes within the locale running from west to east that have been intensively worked for tin and wolfram especially around the summit of the hill.

The ducting running from the chimney to the Emergency Services Building (Fig 4) lies near the centre of Kit Hill (centred at SX 37479 71345) and affects four monuments (Fig 2) recorded in the Historic Environment Record (HER). The large mound into which the modern building is partially cut has been identified as a probable Bronze Age barrow (MCO2974), part of a group of eighteen, the majority of which form a linear pattern across the crest of the hill running from west to east (Site 12 in Herring and Thomas 1990).

This potential barrow has been substantially affected by being incorporated within part of the north west bastion of the pentagonal folly (MCO24424) constructed in the form of an earthwork castle at the end of the 18th century by Sir John Call of Whiteford to commemorate the battle of Hingston Down (Site 126 in Herring and Thomas 1990) and then by the construction upon its summit of a post-medieval wind engine, a windmill (MCO24406) used for pumping a shaft associated with Kit Hill Great Consols Mine shown on a contemporary drawing dated 1832 (Site 128 in Herring and Thomas 1990). This windmill was subsequently demolished, with its base forming the foundations for an ornate chimney (MCO24408) that was constructed in 1858 to service flues associated with the boiler house attached to an engine house (MCO24407) located to the north at SX 37483 71369 (Site 129 in Herring and Thomas 1990) and a calciner (MCO24423) located at SX37476 71423 (Site 147) again part of the infrastructure of Kit Hill Great Consols Mine (Fig 2).

Previous archaeological work (Buck 2000) to monitor the installation of the ducting from the chimney to the Emergency Services Building was undertaken in 1998. These groundworks consisted of three plastic cable ducts within a concrete duct that was 0.47m wide and 0.37m deep. The archaeological monitoring recorded a section through the outer revetment wall of the mound, interpreted as the outer foundation wall of the wind engine (Herring and Thomas 1990) and part of the flue connecting the chimney to the engine house as described above.

The current project involved archaeological monitoring during the excavation of ground to locate two draw pits (Figs 3 and 5) situated at either end of the ducting. Pit A was adjacent to the chimney (at SX37483 71343) and Pit B was adjacent to the Emergency Services Building (at SX37474 71349). The access to Pit A was at the surface lying under a concrete manhole cover (Fig 5) that covered a concrete block and brick manhole measuring 1.25m long by 1.1m wide that was 0.7m deep. The location of Pit B required the excavation of an area roughly 2m long and 1.5m wide and involved the removal of roughly 0.3m of topsoil in order to reveal the manhole cover over the draw pit. On lifting the cover this revealed a concrete block and brick manhole 1.4m long, 1.2m wide and 0.7m deep. Access to the draw pits enabled a cable rat (flexible steel cable) to be inserted down and along the ducts to determine the location of the blockage. Investigation, however, showed that there was no physical blockage due to collapse. Instead the apparent blockage was due to the existing cables within the duct having become twisted. This was remedied by straightening these by twisting and pulling from either end. With the draw pits open, the opportunity was also taken to insert some more cabling within the ducts to increase future capacity.

This project had no archaeological impact, as it proved possible to complete all the work required without any further trenching. The topsoil covering Pit B was carefully reinstated on completion of the work. No artefacts were recovered.

References

Buck, C, 2000. *Kit Hill. An archaeological record of cable trenching and the installation of telecommunications apparatus on Kit Hill Chimney.* CAU archive report 2000R009.

Herring, P and Thomas, N, 1990. *The Archaeology of Kit Hill: Kit Hill Archaeological Survey Project Final Report.* CAU archive report 1990R016.

The CAU project number is **146770**

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit, Cornwall Council, Fal Building, County Hall, Treyew Road, Truro, TR1 3AY. The contents of this archive are listed below:

1. Projects file containing site records and notes, project correspondence and administration (146770).
2. Digital photographs stored in the directory: X:\Live Projects\Kit Hill Telecoms Ducting WB 2018 146770\Data\Images\22nd February 2018
3. This report text is held in digital form as: X:\Live Projects\Kit Hill Telecoms Ducting WB 2018 146770\Report

Land Use (Area): Leisure

Land Use (Site): Country park

OASIS No. cornwall2- 310989

Date of Site Visit: 22/02/2018

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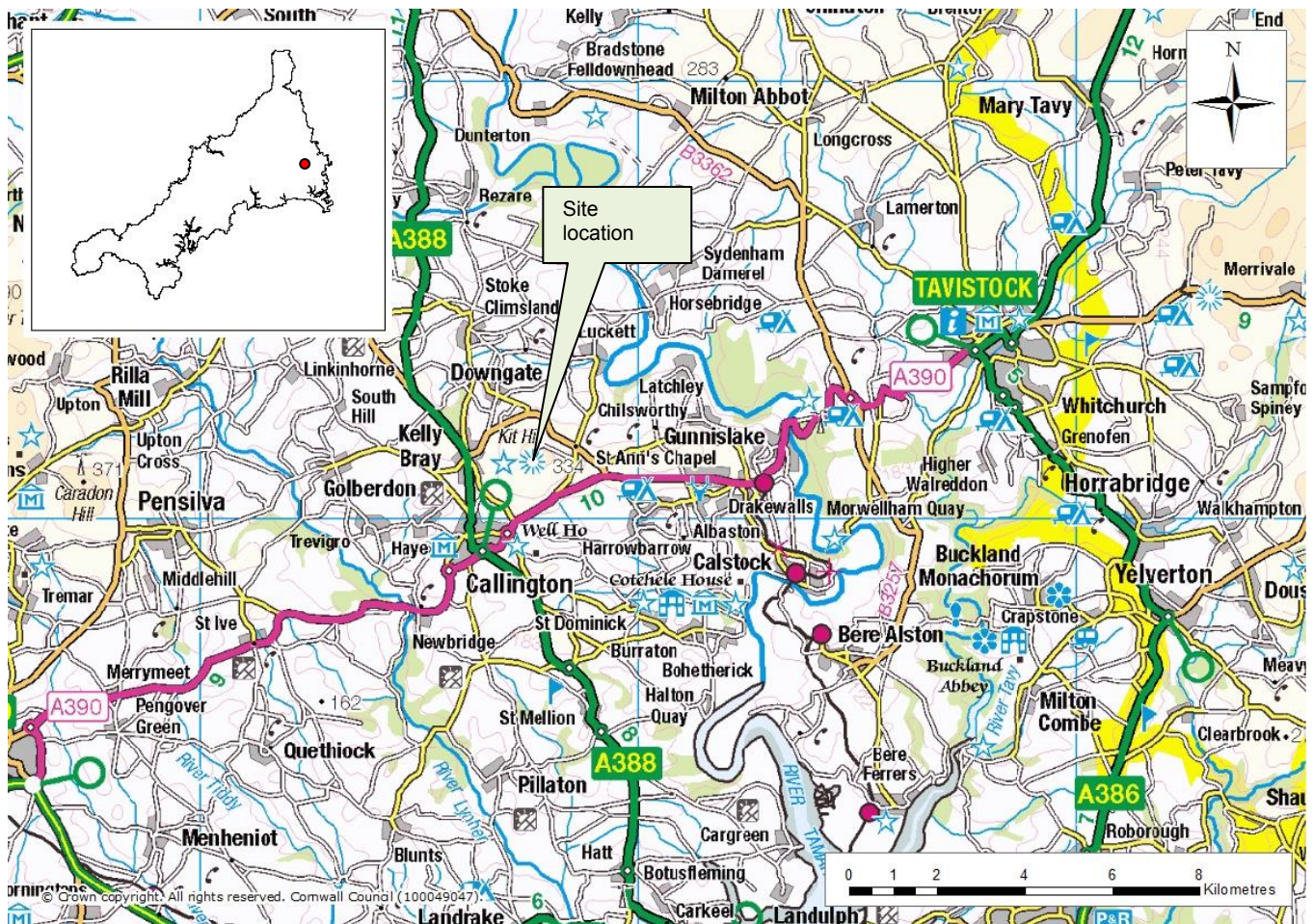


Figure 1. General site location.

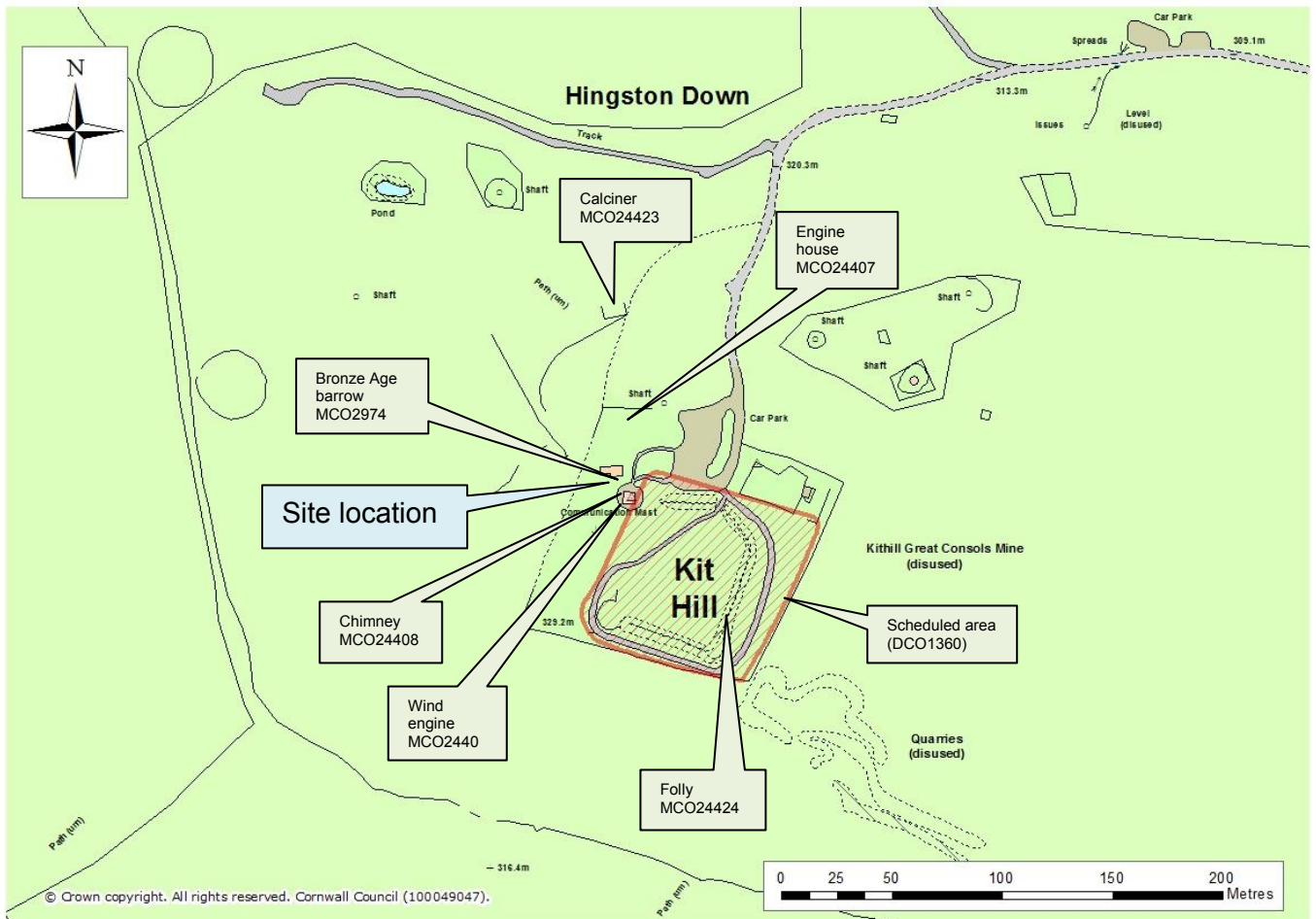


Figure 2. Detailed site location.

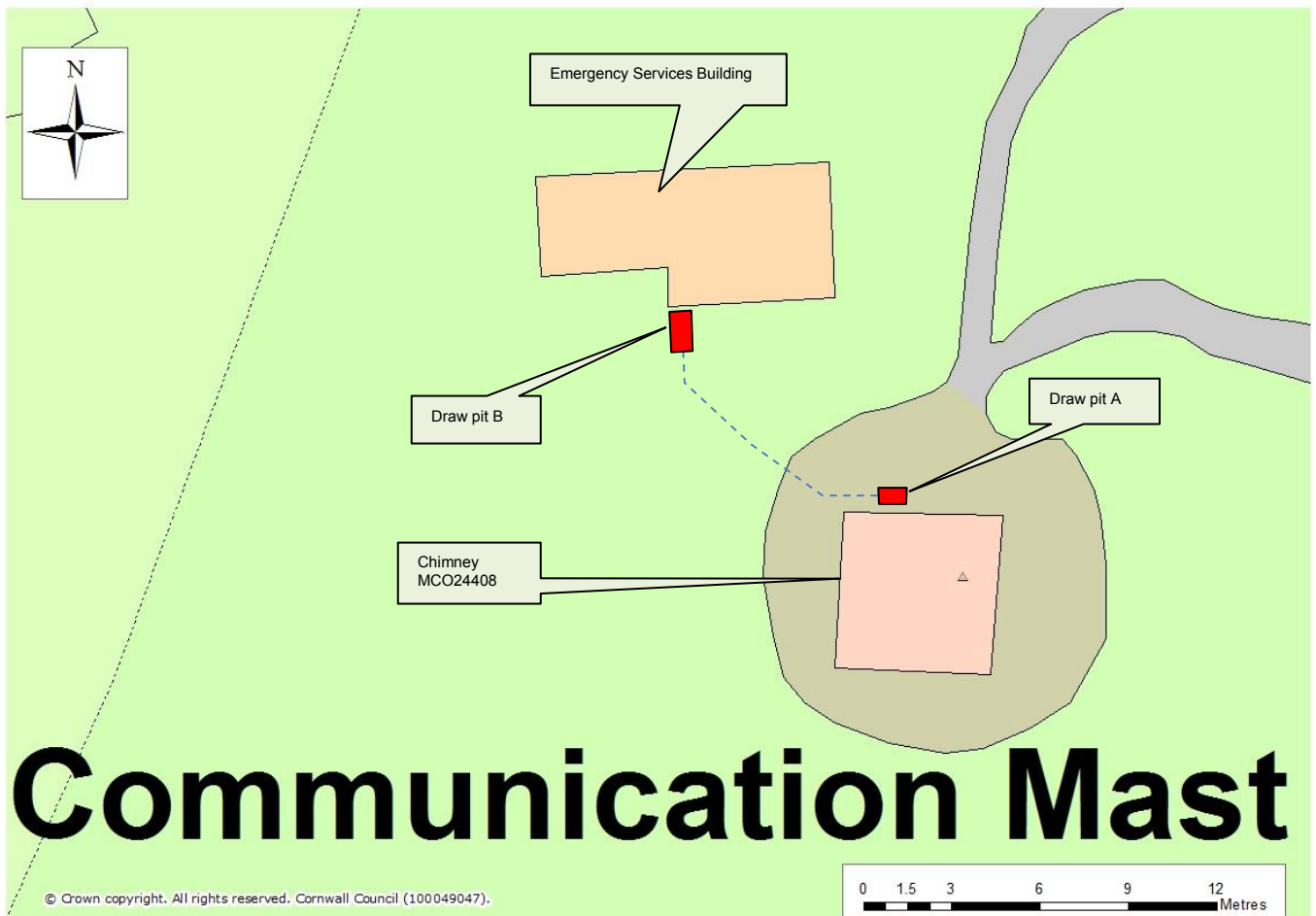


Figure 3. Site plan showing location of drawing pits (red), and line of ducting (blue).



Figure 4. General overview of site looking north east.



Figure 5. View looking west across site. Draw pit A in foreground, Draw pit B in background in front of the person wearing a reflective jacket.