



## YORK ARCHAEOLOGICAL TRUST REPORT

<b>SITE</b>	Clifford's Tower and Bar Walls Lighting		
<b>CLIENT NAME</b>	City of York Council		
<b>YAT PROJECT #</b>	5942	<b>YAT REPORT #</b>	87/2016
<b>MUSEUM ACCESSION #</b>	N/A	<b>GRID REFERENCE</b>	NGR SE 6046 5147
<b>PLANNING REFERENCE #</b>	N/A	<b>AAI OPS NOTICE #</b>	N/A

### INTRODUCTION

Between the 28<sup>th</sup> and 30<sup>th</sup> of November 2016 York Archaeological Trust undertook a watching brief on works involving the replacement of lighting around Clifford's Tower, Tower Street, York, YO1 9SA, SE 6046 5147 (Figure 1). The site lies within York's designated Area of Archaeological Importance and is a Scheduled Monument, (list entry 1011799).

These ground works were part of an ongoing programme of works that includes upgrading lighting at the Bar Walls in the vicinity of Station Road. The second phase of works is expected to commence in early 2017. All works were undertaken by Bouygues Energies and Services on behalf of City of York Council.

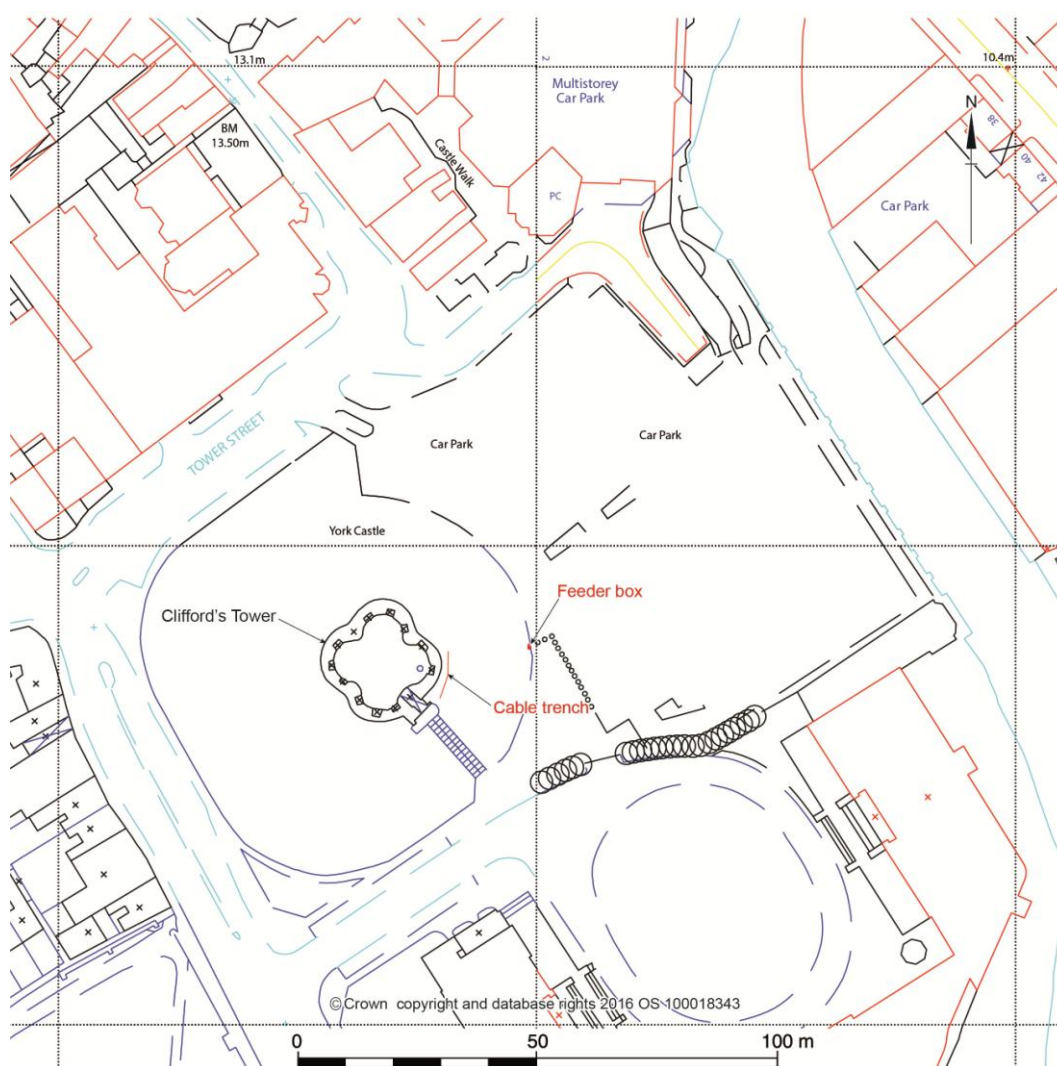


Figure 1 Works Location

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### METHODOLOGY

Works included the installation of a new feeder box at the base of the motte on its eastern side, replacing each of the 14 flood lights on their existing concrete plinths at the top of the motte, and the laying of ducting and electric cable. This required some hand excavation, including the digging of a small trench for the feeder box and a trench intended to hold 60mm diameter plastic ducting for electric cables. The cable trench was however abandoned and backfilled on the discovery of an existing plastic duct. Removal of the old cable enabled fitting of new electric cables without further extensive excavation. From this stage excavation was limited to small exploratory trenches on the tower side of each of the 14 concrete plinths in order to locate the existing duct and connection of new cable to each of the new lights. The shallow depth of that excavation work was into ground previously disturbed by the existing concrete plinths and cable ducting, consequently it was decided that continuous archaeological monitoring was no longer necessary and was stepped down to intermittent observation.

All excavation work was carried out by Bouygues staff.

### RESULTS

#### WORKS AT BASE OF MOTTE

A small trench, designed to house a feeder box, was hand excavated on the east side of Clifford's Tower motte close to the margins of the car park. This trench was positioned approximately 2.1m north of the existing feeder box and measured 900mm long 550mm wide and up to 300mm deep. Turf and top soil was observed to extend to a depth of c.100mm and was found to overlie an electric cable housed within plastic ducting, the backfill of which consisted of dark brown silty sand containing frequent fragments of brick, cobbles and stones. A small amount of digging was necessary in front of and along the north side of the existing feeder pillar to expose the duct running from it up the side of the motte to the lights at the top (Plate 1). Only turf, top soil and the backfill of the existing service run was disturbed by that excavation which extended only as far as the top of the existing duct, a depth of no more than 300mm BGL (below ground level).

#### WORKS AROUND CLIFFORDS'S TOWER AT TOP OF MOTTE

Work at the top of the motte commenced from the east side of the entrance into the tower and continued systematically to each of the 14 flood light plinths in an anti-clockwise direction. Following the removal of the old lights a length of trench measuring approximately 10m long and 200mm wide was excavated from the first concrete plinth. That plinth was positioned 1.7m north-east of the railings at the top of the steps accessing the tower and 2.7m from the face of the tower wall. The first stretch of cable trench ran as far as the second plinth, distance of c.4.5m and was excavated to a depth of 300mm (Plate 2). Turf and topsoil was observed to extend to a depth of c.150mm and was observed to grade through to firm dark brown sandy silt containing frequent small angular limestone fragments and pebbles (Plate 3). Just visible in small patches at the base of the cable trench, 300mm BGL, lighter mid orange/brown sandy clay was visible. The remaining 4.5m of trenching extended from plinth 2 to plinth 3, here only topsoil was removed before reinstatement (Plate 4). Further excavation for the new cable was not required as an existing duct suitable for housing the new cables was located and found to run the complete 87m circuit of the light locations.

Limited additional excavation was necessary on the tower side of each of the plinths in order to

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locate the duct, remove the old cable, install the new cable and connect it to the new lights. Typically the duct was positioned 600mm - 700mm on the tower side of the plinths at a depth of 200mm BGL. Only turf, top soil and in some places a nylon mesh, found at around 100mm – 150mm BGL, was disturbed (Plate 5).

Adjacent to the fourth plinth, excavation work encountered a soil filled plastic bucket used as a pug in the top of a cylindrical plastic sleeve (Plate 6). The sleeve created a void 300mm in diameter and 600mm deep at a point 1.6m from the tower wall and 0.9m from the edge of the motte slope. It had been set into the top of the motte presumably as part of recent geotechnical works. The base of the sleeve had exposed a firm dark orange/brown sandy clay with moderate small angular limestone fragments and occasional small pebbles, clearly constituting part of the motte construction make-up (Plate 7).

### DISCUSSION

The extent of excavation was very limited and with the exception of the abandoned cable trench at the top of the motte was exclusively into previously disturbed ground. It is possible that the abandoned section of cable trench extended just deep enough to expose the top of the motte construction make-up material, as it appeared to be very similar to the material exposed in the base of the geotechnical pipe pit.

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Plate 1 New feeder pillar in foreground, also showing excavation underway around existing feeder pillar



Plate 2 First section of cable trench running north-east from light plinth 1

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Plate 3 north-west facing section of cable trench c.1m north-east of light plinth 1, 0.1m scale units



Plate 4 Cable trench following reinstatement, looking south

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**Plate 5 Plinth 12, showing excavation to expose and access the existing duct, note the nylon mesh also found next to the majority of other plinths.**



**Plate 6 Plinth 4 and blue plastic sleeve in geotechnical inspection pit**

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**Plate 7 Motte make-up material exposed at base of geotechnical inspection pit**

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