Mytholmroyd Flood Alleviation Scheme: Church of St Michael Mytholmroyd, West Yorkshire

Archaeological Watching Brief

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wessex archaeology

Mytholmroyd Flood Alleviation Scheme: Church of St Michael Mytholmroyd, West Yorkshire

Archaeological Watching Brief

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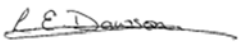
v02	E	*LED*	*LED*		07.12.2016
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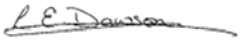
v04	F	*LED*	*LED*		19.01.2017
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* I = Internal Draft; E = External Draft; F = Final

DISCLAIMER

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Summary

Wessex Archaeology were commissioned by Atkins, on behalf of VBA Joint Venture Ltd, to carry out an archaeological watching brief during groundworks in advance of a Flood Alleviation Scheme based at St Michael's Church, Church Street, Mytholmroyd, centred on National Grid Reference (NGR) 401341, 425976.

A total of five small geotechnical test pits (trenches) had previously been excavated adjacent to the outer and inner faces of the north wall of the Church. The works intended to ascertain the underlying deposits and depth of foundations in advance of widening the channel of the River Calder which passes some 7 m to the north of the building. The results of the geotechnical test pits have been reported on within an earlier document. However, the depth of the foundations was not fully ascertained and therefore further coring, both vertical and inclined, was required. The new geotechnical works comprised seven cores at five locations within the north wall and associated buttresses and an internal wall within the Church. In addition, four boreholes and two window samples were excavated that were located along the right (south) bank of the River Calder, within the grounds of St Michael's Church. The boreholes and window samples were excavated in order to provide further information regarding the nature of the underlying deposits along the course of the River Calder.

The coring, boreholes and window samples were excavated by qualified geotechnical workers and monitored by Wessex Archaeology.

The results of the coring showed that the base of the buttresses are located at approximately 1.20 m to 1.30 m below the external ground level, with the exception of the easternmost buttress, which continues to a depth of 0.40 m only. The base of the foundations of the main north wall, and internal wall of the Church, is approximately 2.10 m to 2.70 m below ground level. The testing of the deposits along the route of the River Calder were fairly consistent across all boreholes and window samples. Following the removal of any upper modern deposits, a layer of silty sandy loam was encountered within two window samples and three of the boreholes, beneath which was a general distribution of redeposited dredged river materials above natural gravels and silts. Natural was identified at varying depths across the boreholes and window samples from approximately 1.30 m and 5.50 m below ground level. Nothing of archaeological importance was noted in any of the excavated material.

The project archive that resulted from the watching brief will be deposited with Calderdale Museum. The Museum has agreed in principle to accept the project archive on completion of the project. No finds were recovered during the investigation.

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Acknowledgements

The project was commissioned by Atkins on behalf of VBA Joint Venture Ltd and Wessex Archaeology is grateful to Fiona Deaton in this regard. The project manager for VBA Joint Venture, Donald Murray, and James Melody, senior engineer, are also thanked.

On site monitoring for Atkins was maintained by Craig Parry, Emily Cross, Adam Dargan and Jen Smith.

The watching brief was carried out by Andy Swann and Phil Weston. Report compilation and project management for Wessex Archaeology was carried out by Lucy Dawson.

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Archaeological Watching Brief

1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology (WA) was commissioned by Atkins, on behalf of VBA Joint Venture Ltd, (hereafter 'the Client'), to carry out an archaeological watching brief at St Michael's Church, Church Street, Mytholmroyd, West Yorkshire (hereafter 'the Site'), centred on National Grid Reference (NGR) 401341, 425976 (Figure 1).

1.1.2 The excavation of five geotechnical test pits, located adjacent to the Church, to ascertain the underlying deposits and depth of the foundations, did not fully achieve its aims (Wessex Archaeology 2016d). It was therefore decided between Atkins, the Leeds Diocese, Storah Architecture and the Environment Agency, that a scheme of vertical and inclined coring through the Church walls at five locations would be conducted. In addition, four boreholes and two window samples were excavated along the right (south) bank of the River Calder, within the grounds of St Michael's Church, in order to provide further information regarding the nature of the underlying deposits.

1.1.3 Wessex Archaeology produced a Written Scheme of Investigation (WSI) and two Addenda (Wessex Archaeology 2016a-c) outlining how the requirements of the work would be met. The WSI and addenda were approved by the Client prior to work commencing.

1.2 Site location and topography

1.2.1 The Site is located at the termination of Church Street, positioned within and to the east of the Mytholmroyd Conservation Area. The environs are characterised as a small urban centre with open fields and moorland beyond. The Site is situated immediately to the south of the River Calder, and east of the confluence of the River Calder and Cragg Brook. It lies south-east of the junction between Burnley Road (A646) and New Road (B6138). It is positioned centrally within the village of Mytholmroyd, which lies 8 km east of Halifax and 10.5 km north of the M62 motorway (Figure 1).

1.2.2 The Site comprises a large rectangular parcel of land and contains the Grade II listed Church of St Michael (List Entry 1229231; Appendix 2). The Church is a double height stone building with a pitched roof, orientated east-west with a tower rising from the west elevation. A graveyard is contained within the Site to the south and east, bounded by a wall, whilst the River Calder bounds the Site to the north and New Road to the west.

1.2.3 The underlying solid geology comprises Millstone Grit Group; mudstone, siltstone and sandstone. Sedimentary bedrock formed approximately 313 to 326 million years ago in the Carboniferous Period. With superficial deposits of alluvium comprising clay, silt, sand

and gravel left by the flowing floodwater in a river valley or delta (British Geological Survey).

2 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

2.1.1 The work comprised the monitoring of the excavation of seven cores, four boreholes and two window samples designed to ascertain the nature of the underlying deposits and the depth of the building foundations of St Michael's Church, Mytholmroyd (Figure 2). The works are part of the Mytholmroyd Flood Alleviation Scheme which aims to reduce flooding in Mytholmroyd and the Calder Valley, which is particularly vulnerable to flash flooding. The outline plan produced by the Environment Agency for the scheme (2016) includes proposals to:

- *construct new and raise existing walls on both banks of the River Calder and Cragg Brook to up to maximum height of approximately 1.8 m;*
- *strengthen buildings on both banks of the River Calder and Cragg Brook;*
- *make improvements to the culvert on White Lee Clough; and*
- *widen the channel on the River Calder including replacement or road and footbridges.*

2.1.2 The Site contains the Grade II listed Church of St Michael, Church Lane (List Entry 1229231, Appendix 2) and is situated within the Mytholmroyd Conservation Area.

2.1.3 A Written Scheme of Investigation (WSI) and two Addenda (Wessex Archaeology 2016a-c), detail how Wessex Archaeology would carry out the archaeological works. The format and content of the WSI and Addenda is based on current Chartered Institute for Archaeologists and Historic England guidance (CIfA 2014a-d; Historic England 2015) and was submitted to the Client prior to the commencement of work.

2.2 General historic background and recent investigations in the wider landscape

2.2.1 A Bronze Age burial ground with cremation urns is located on the moor top, north of Mytholmroyd. This burial ground is dated to a period between the 16th and 11th centuries BC and is of national importance. The peat moorlands surrounding Mytholmroyd attest to prehistoric land clearance for pasture (Calderdale Council 2001).

2.2.2 Iron Age settlements within the area are generally located upon hillside terraces, away from the valley floor which is prone to flooding. This produced a pattern of scattered farmsteads with a network of trackways (Calderdale Council 2001).

2.2.3 The name Mytholmroyd is derived from the Old English mȳthe + rodu '*clearing at the river mouths*' and it first appears in written sources in the 13th century (Mills 1991).

2.2.4 The modern road pattern is probably influenced by packhorse routes that existed between Mytholmroyd and the nearby hamlets of Sowerby and Heptonsall. In 1684 a stone bridge was constructed over the River Calder at Mytholmroyd, being widened later in 1823-4, and is that which survives today. Archaeological evidence uncovered under County Bridge (Mytholmroyd Bridge) during a flood alleviation scheme in the 1960s included heavy timbers with sockets which were thought to relate to an earlier wooden bridge. A turnpike road for the Calder Valley came to Mytholmroyd in 1760 and the Rochdale Canal in 1804.

The railway was built in the 1840s but there was no station at Mytholmroyd until the 1850s or 1860s (Calderdale Council 2001).

2.2.5 The textile industry came to the area during the post-medieval period. Elphaborough Hall, dated to the mid-17th century, displays evidence of textile manufacturing and storage whilst Mytholmroyd Mill was built in 1794 (Calderdale Council 2001).

2.2.6 The Church of St Michael and its graveyard were constructed in 1848 by Mallinson and Healey in an Early English style; a full description can be found in the List Entry 1229231 (Appendix 2). Prior to the publication of the 1908 OS map, St Michael's Hall had also been built. The Church has remained a place of worship since its consecration and was enlarged in 1887. Both the Church and Hall have been closed to the public since the Boxing Day floods of 2015 (Erringden Benefice).

2.3 Recent investigations in the area

2.3.1 Wessex Archaeology recently undertook a watching brief on five geotechnical test pits at the St Michael's Church as part of the Mytholmroyd Flood Alleviation Scheme, the results of which can be found in Wessex Archaeology 2016d. There are no other known recent archaeological investigations in the immediate area of the Church.

3 METHODOLOGY

3.1 Aims and objectives

3.1.1 The aims of the project were:

- *to identify and record any archaeological features exposed during the excavation of the cores, boreholes and window samples;*
- *to recover any artefact evidence during groundworks;*
- *to make available the results of the investigation;*
- *to identify any previously unknown archaeological remains and define their location, extent, date, function and form; and*
- *to investigate the depth and nature of the foundations of the Church to inform further groundworks as part of the Mytholmroyd Flood Alleviation Scheme.*

3.2 Fieldwork methodology

3.2.1 Wessex Archaeology monitored the excavation of the cores, boreholes and window samples as part of this phase of works. All monitoring was carried out in accordance with the approved WSI and Addenda (Wessex Archaeology 2016a-c) and industry standards and guidelines (CIfA 2014a and b).

3.2.2 The inclined excavation of the cores entailed the positioning of a concrete pad on top of the ground with the drilling rig located above. The cores were then drilled through the concrete pads and into the ground and structures of investigation beneath. The vertical core drill rig did not require a concrete pad, but was bolted into the foundation stone. The boreholes and window samples required hand excavation of small pits with shoring followed by the drilling down through the ground beneath. Boreholes continued into the bedrock using a rotary rig in order to take rock cores. This work along with the borehole and window sampling was monitored by a suitably qualified archaeologist (honorary full member of the CIfA and MCIfA), who analysed the samples taken and recorded any archaeological deposits encountered within the samples.

3.3 Monitoring

3.3.1 The monitoring of the archaeological works by Wessex Archaeology was undertaken by Atkins on behalf of VBA Joint Venture.

3.4 Recording

3.4.1 Written and drawn records were made of the Site's stratigraphy, by Wessex Archaeology, even where no archaeological deposits were identified. Full written and drawn records of all excavated contexts were made in accordance with best archaeological practice. Archaeological deposits which were excavated were recorded to the maximum extent possible.

3.4.2 Records included overall Site plans. All archaeological features were related to the Ordnance Survey datum and to the National Grid.

3.4.3 All archaeological deposits were recorded using Wessex Archaeology's pro forma recording system. This written record is hierarchically based and centred on the context record. Each context record fully described the location, extent, composition and relationship of the subject and was cross-referenced to all other assigned records. Context numbers used in the evaluation were not repeated.

3.4.4 A full photographic record was maintained consisting of digital images. The photographic record illustrates both the detail and the general context of any archaeological deposits.

3.5 Specialist strategies

Artefact

3.5.1 There were no finds recovered from the sampling works.

Environmental

3.5.2 No environmental samples were taken due to the limited interest of the deposits and nature of the geotechnical work.

4 ARCHAEOLOGICAL RESULTS

4.1 Introduction

4.1.1 Within the Wessex Archaeology WSI and Addenda (2016a-c) a plan of the Church and the Church site was produced showing the proposed locations of the boreholes and window samples, and the locations of the initially proposed four core locations (a fifth was added later) (Figure 2).

4.1.2 The purpose of the work was to define the depth of the foundations of the Church (Plate 1) and to provide further information regarding the nature of the underlying deposits along the banks of the River Calder.

4.1.3 Each borehole/window sample and core was given a unique core or trench number in the following sequence: C301, C302 (A and B), C303 (A and B), C304, C305, trench 6 (BH012), trench 7 (BH013), trench 9 (BH034), trench 10 (WS018), trench 11 (BH011) and trench 21 (WS023). It should be noted that for practical reasons the planned positions of some of the boreholes and window samples were adjusted slightly (Figure 2).

C301

4.1.4 Core C301 was a vertical core located inside the Church, through the wall which continues under the floor between the openings of the North Aisle and the organ chamber (Figure 2). The floor structure of the Church comprises floorboards (30101) resting on timber joists (30102) that are supported by small brick walls (30103). The sandstone foundations (30104) of the wall, the top of which is located at approximately 0.55 m below the internal floor level, were cored through to a depth of 3.05 m below the internal floor level. Beneath the foundation wall was a natural mid-brownish clay which was observed to a depth of 3.26 m (Plate 2).

C302 (A and B)

4.1.5 Two cores were drilled at the C302 location (Figure 2). Core 302A was drilled at an angle of 26° from the vertical to investigate the depth of the sandstone north wall of the Church, whilst C302B was drilled at an angle of 16° to ascertain the depth of the sandstone buttress of the north wall of the Church. C302A drilled through the buttress (30201) and into the north wall (30202) of the Church. This north wall foundation continued to a depth of 2.70 m below the external ground level, below which natural clay deposits were encountered. C302B was drilled directly through buttress 30201, to a depth of 1.30 m below external ground level.

C303 (A and B)

4.1.6 Two cores were also drilled at the C303 location (Figure 2). Core 303A was at an angle of 21° from the vertical to investigate the depth of the north wall buttresses. Core 303B was drilled at an angle of 26° to ascertain the depth of the foundations of the north wall. C303A drilled directly into the buttress (30301) which continued to a depth of 1.20 m below the external ground level (Plate 3) where underlying silty made ground material was located. C303B drilled through buttress 30301 and into north wall 30302 of the Church. This north wall foundation continued to a depth of 2.70 m below the external ground level, below which natural clay deposits were encountered.

C304

4.1.7 Core C304 was positioned at the eastern end of the north wall of the Church, close to the northern projection of the Choir Vestry (Figure 2). The core was drilled at an angle of 13° from the vertical into the north wall (30402, 30403, 30404). The wall was found to contain some minor variations in the sandstone material (a fine grain sandstone between 0.04-0.80 m, fragmented sandstone core from 0.80-1.30 m, small pieces of fine sandstone core from 1.30-1.50 m and fragmented sandstone core from 1.50-2.07 m), and continued down to a depth of 2.07 m (Plate 4).

C305

4.1.8 Core C305 was located to establish the depth of the easternmost buttress of the north wall of the Church (Figure 2). The core was drilled at an angle of 13° from the vertical through the concrete pad and into the buttress wall (30502). The base of the buttress was between 0.4-0.5 m below the external ground level (Plate 5).

Trench 6 (BH012)

4.1.9 Trench 6 (BH012) (Plates 6, 7) was located to the north of St Michael's Church, on the right (southern) bank of the River Calder (Figure 2). The borehole identified natural (604) at 4.70 m below ground level (bgl), which comprised a mid-brown to grey silt at 7 m+, above which were natural sands and gravels. Laying above the natural, between 1.10 m - 4.70 m bgl, was a light brown silty sand with small lenses of a darker loam (603). This was interpreted dredged, redeposited material from the river. Above this layer, 602 was a mid-

light brown sandy loam deposit that was identified as a later redeposited layer of dredged river material at a depth of 0.25 -1.10 m bgl. A mid- to dark brown sandy loam topsoil was recorded to a depth of 0.25 m bgl.

Trench 7 (BH013)

4.1.10 Trench 7 (BH013) (Plate 8) was located to the north of St Michael's Enterprise Centre, on a small pathway, adjacent to the right (southern) riverbank of the Calder (Figure 2).

4.1.11 Natural (707) was located at a depth of 5.50 m bgl, and comprised sands and gravel. Above the natural deposits, located between 0.80 m ad 5.50 m bgl, was a layer of, redeposited dredged river material or made ground (706) consisting of a loose silty sand with small pebbles and stones, becoming gradually siltier with depth. Above this were layers of mid-20th to early 21st century made ground and bedding layers overlain by the current granite setts forming the pathway.

Trench 09 (BH034)

4.1.12 Trench 09 (BH034) (Plate 9) was located at the north-east corner of a tennis court to the south-east of the Church (Figure 2) and comprised a borehole with a diameter of *c*. 0.20 m, drilled to a depth of *c*. 8.0 m. The first 0.60 m was hand excavated and a total depth of 2.50 m was monitored. Topsoil (901) to a depth of 0.40 m bgl included fragments of CBM and it was considered likely that the raised bank beyond the tennis court was the result of ground clearance within the last 40 years. Brown silty material (902) lay beneath the topsoil and was observed to a depth of 2.50 m. This may have been dredged material removed from the river and banked up.

4.1.13 A single small sherd of 19th century pottery located within the topsoil showed no evidence of having been river abraded and would have therefore originated on the side of the river and not within it.

Trench 10 (WS018)

4.1.14 Trench 10 (WS018) (Plate 10) was located on the right (south) bank of the River Calder above the north-east corner of a bowling green which was established sometime between 1907 and 1921, to the south-east of the Church (Figure 2). In practical terms the window sample was identical to the boreholes, but only extended down some 5.00 m of which the first 1.00 m was hand excavated.

4.1.15 Material from the upper soil horizon (1001) comprised stone, CBM and fragments of slag which continued to a depth of 0.75 m bgl and was consistent with a process of ground clearance prior to the construction of the bowling green. Below 0.75 m, silty material (1002) was identified, similar to river dredged material identified from the other locations in the vicinity. This was observed down to 1.2 m, but deposit 1002 continued to a depth of *c.* 3 m, below which natural gravels were located.

Trench 11 (BH011)

4.1.16 Trench 11 was moved several metres to the west of its original position due to access difficulties. It lay on a raised bank above the south side of the river positioned between the Church and the bowling green (Figure 2, Plate 11).

4.1.17 The trench was monitored to a depth of 1.15 m (Plate 12). The upper material (1101) was similar to 1001 within trench 10, but dryer due to the position of deep tree roots. The shallow bank upon which the window sample was taken is thought to represent an elevation of the bank as part of soft landscaping following earlier river dredging.

Trench 21 (WS023)

4.1.18 Trench 21 was positioned in the original position of trench 11, located to the north of the grave yard, and just south of the pathway running eastwards to the tennis court.

4.1.19 The trench was monitored to a depth of 1.20 m. The topsoil (2101) comprised a dark brown sandy loam with small fragments of sandstone, and continued to a depth of 0.38 m. Beneath the topsoil was a light to mid-brown silty sand (2102), with very occasional small sandstone inclusions located between 0.38-1.20 m. This has been interpreted as river dredged material. It is noted that below 2102 natural sand and gravel continued from 1.20-5.00 m+.

4.2 Summary

4.2.1 No archaeological features were located within the geotechnical works. Very little artefactual evidence was located, of which all was found within modern upper layers and not retained for any further recording or analysis. No previously unknown archaeological remains were noted, and much of the underlying deposits along the right (south) bank of the river, within the Church land, were consistent with those recorded during the earlier test pits at the Church (Wessex Archaeology 2016d). The extent of redeposited material varies across the Site, with the top of the natural located at depths of between 3.0 m - 5.50 m bgl. It is clear, however, that the bed of the River Calder, as it passes the Church, is much deeper than the depth of the redeposited material.

4.2.2 The depth of the foundations of the north wall of the Church, along with an internal wall was established at approximately 2.0-2.70 m bgl. whilst the buttresses were found at a depth of 1.30 m bgl with the exception of the easternmost buttress which had a depth of 0.40 m only.

5 ARTEFACTUAL EVIDENCE

5.1 Summary

5.1.1 As stated above, one of the key requirements of the fieldwork was that no part of the material excavated from the investigative cores and boreholes could leave the Site. A small quantity of finds (CBM) were observed in modern upper layers only and no finds were identified as significant for retention or for further recording and analysis.

6 DISCUSSION

6.1 Summary

6.1.1 All boreholes and window samples broadly identified similar evidence. The presence of pre-church dredged material, redeposited on the right (south) bank of the River Calder to form a plateau of considerable depth was noted. This was also consistent with the findings of the previous report on the results of test pits at the Church. This material was not evident following the construction of the Church in the middle of the 19th century.

6.1.2 The depth of the wall foundations for the north wall of the Church was established at a depth of 2.07 – 2.70 m bgl, below which are natural gravels. However, below the foundation of the internal wall between the North Aisle and organ chamber, natural clays were observed. The buttresses constructed as part of the north wall continued to a depth of only 1.3 m bgl, whilst that of the easternmost was even shallower at 0.4 m bgl.

6.2 Conclusions

6.2.1 The results of the investigations conform to and enhance those previously established during the monitoring of test pits at the Church (Wessex Archaeology 2016d). The practice of dredging riverbeds to improve flow, navigation and to mitigate against annual flooding is demonstrated from the start of the 19th century and probably earlier. It was particularly important that a strong head of water was maintained to drive the many mills that proliferated along the length of the Calder valley from medieval times.

6.2.2 Confirmation of the depth of the Church foundations, of the main primary walls, has identified that these are on a scale commensurate to the requirements of constructing a major stone building such as St Michael's into uncompacted made ground, although in some areas a more solid clay underlying deposit may have facilitated its construction. The stone buttresses are likely contemporaneous with the main north wall of the Church, however, an explanation for the shallow depth of the foundations of the buttresses is not forthcoming. It is possible that they were built purely as decoration, rather than for structural purposes.

7 STORAGE AND CURATION

7.1 Museum

7.1.1 It is recommended that the project archive resulting from the excavation be deposited with Calderdale Museum. The Museum has agreed in principle to accept the project archive on completion of the project, under the accession code 2016.73. Copies of this final report will also be deposited with St Michael's Church, West Yorkshire Archaeology Advisory Service, West Yorkshire HER, and the Environment Agency.

7.2 Preparation of archive

7.2.1 The complete site archive, which will include paper records, photographic records, graphics and digital data, will be prepared following the standard conditions for the acceptance of archaeological records by Calderdale Museum, and in general following nationally recommended guidelines (SMA 1995; CIfA 2014c; Brown 2011; ADS 2013). Finds were not removed from Site and will therefore not form part of the deposited archive.

7.2.2 All archive elements will be marked with the accession code (2016.73), and a full index will be prepared. The physical archive comprises 01 files/document cases of paper records and digital photographs.

7.3 Security copy

7.3.1 In line with current best practice (e.g. Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

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Erringden Benefice http://www.erringdenbenefice.org.uk/ (accessed 12/07/2016)

9 APPENDICES

9.1 Appendix 1: Context descriptions

C301	Vertical Core		
Context	**Type**	**Description**	**Depth (m)**
30101	Structure	Timber tongue and groove floor boards, c. 12cm wide	0.00-0.04m
30102	Structure	Timber floor joist	0.04-0.26m
30103	Structure	Brick wall aligned N-S, 3 courses	0.26-0.55m
30104	Structure	Sandstone foundation wall	0.55-3.05m
30105	Layer	Natural mid-brownish grey clay	3.05-3.26m+

C302A	Inclined Core		
Context	**Type**	**Description**	**Depth (m)**
30202	Structure	Sandstone wall (north wall)	0.00-2.7m

C302B	Inclined Core		
Context	**Type**	**Description**	**Depth (m)**
30201	Structure	Sandstone wall (buttress)	0.00-1.3m

C303A	Inclined Core		
Context	**Type**	**Description**	**Depth (m)**
30301	Structure	Sandstone wall (buttress)	0.00-1.2m

C303B	Inclined Core		
Context	**Type**	**Description**	**Depth (m)**
30302	Structure	Sandstone wall (north wall)	0.00-2.7m

C304	Inclined Core		
Context	**Type**	**Description**	**Depth (m)**
30401	Layer	Concrete pad	0.00-0.04m
30402	Structure	Fine grain sandstone	0.04-0.8m
30403	Structure	Fragmented sandstone	0.8-1.3m
30404	Structure	Sandstone wall	1.5-2.07m

C305	Inclined Core		
Context	**Type**	**Description**	**Depth (m)**
30501	Layer	Concrete pad	0.00-0.04m
30502	Structure	Sandstone wall	0.04-0.4m

Trench 6	Borehole: BH012		
Context	**Type**	**Description**	**Depth (m)**
601	Layer	Topsoil. Mid- to dark brown sandy loam. No finds.	0.00-0.25m

Trench 6	**Borehole: BH012**		
Context	**Type**	**Description**	**Depth (m)**
		Redeposited over 602	
602	Layer	Dredged river material. Mid- to light brown sandy loam – very silty but loose. No finds.	0.25-1.10m
603	Layer	Likely dredged river material. Light brown, dirty silty sand. Small lenses of darker loamy silt. Almost pure sand with greater depth.	1.10-4.70m
604	Layer	Natural. Gritty sand, occasional gravel and gritstone. Some large pebbles. This changes to very coarse sand, sine medium and large gravel and small broken sandstone between 5.0-6.5m. Mid-brown/grey mud silt at 7m+	4.70-7.0m+

Trench 7	**Borehole BH013**		
Context	**Type**	**Description**	**Depth (m)**
701	Layer	Oblong granite setts	0.00-0.05m
702	Layer	Sand bedding. Coarse light brown sand	0.05-0.09m
703	Layer	Dirty pale grey concrete	0.09-0.21m
704	Layer	Black ash concretion. Broken stone and pebble fragments	0.21-0.55m
705	Layer	Pale pinkish grey concrete. Small pebbles, stones, coal, lime with loose stones as a bedding layer – Mid- 20th century	0.55-0.80m
706	Layer	Loose silty sand with small pebbles and occasional large pebbles. Redeposited dredged river material. Progressively siltier with depth.	0.80-5.50m
707	Layer	Natural sands and gravel	5.50m+

Trench 9	**Borehole BH034**		
Context	**Type**	**Description**	**Depth (m)**
901	Layer	Turf and topsoil. Mid- to dark brown slightly clayey sandy loam. Small sandstone fragments, large rounded pebbles, brick fragment	0.00-0.40m
902	Layer	Mid-brown sandy silt. River dredged material. Sparse fragments of sandstone. Turns to dirty brown silty sand at depth.	0.40-2.50m+

Trench 10	**Window Sample WS018**		
Context	**Type**	**Description**	**Depth (m)**
1001	Layer	Topsoil. Mid-brown sandy loam. Some large fragments of sandstone.	0.00-0.75m
1002	Layer	Pale brown/buff very sandy/silty loam. Some fragments of sandstone	0.75-3.00m
1003	Layer	Natural sands and gravel	3.00-5.00m+

Trench 11	**Borehole BH011**		
Context	**Type**	**Description**	**Depth (m)**
1101	Layer	Mid-brown fine, dry sandy loam with occasional small stones. Tree roots and disturbance.	0.00-1.15m

Trench 21	**Window Sample WS023**		
Context	**Type**	**Description**	**Depth (m)**
2101	Layer	Topsoil. Dark brown sandy loam with small sandstone fragments.	0.00-0.38m
2102	Layer	Light to mid-brown silty sand. Very occasional small sandstone inclusions. River dredged material with some pottery.	0.38-1.20m
2103	Layer	Natural sands and gravel	1.20-5.00m+

9.2 Appendix 2: Listing Description

CHURCH OF ST MICHAEL

List Entry Summary

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

Name: CHURCH OF ST MICHAEL
List entry Number: 1229231

Location

CHURCH OF ST MICHAEL, CHURCH LANE
The building may lie within the boundary of more than one authority.
County:
District: Calderdale
District Type: Metropolitan Authority
Parish: Hebden Royd
National Park: Not applicable to this List entry.
Grade: II
Date first listed: 21-Jun-1984
Date of most recent amendment: Not applicable to this List entry.

Legacy System Information

The contents of this record have been generated from a legacy data system.
Legacy System: LBS
UID: 403925

Asset Groupings

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

List entry Description

Summary of Building

Legacy Record - This information may be included in the List Entry Details.

Reasons for Designation

Legacy Record - This information may be included in the List Entry Details.

History

Legacy Record - This information may be included in the List Entry Details.

Details

SE 02SW HEBDEN ROYD C.P. CHURCH STREET, Mytholmroyd 2/89 Church of St. Michael

C.V. II

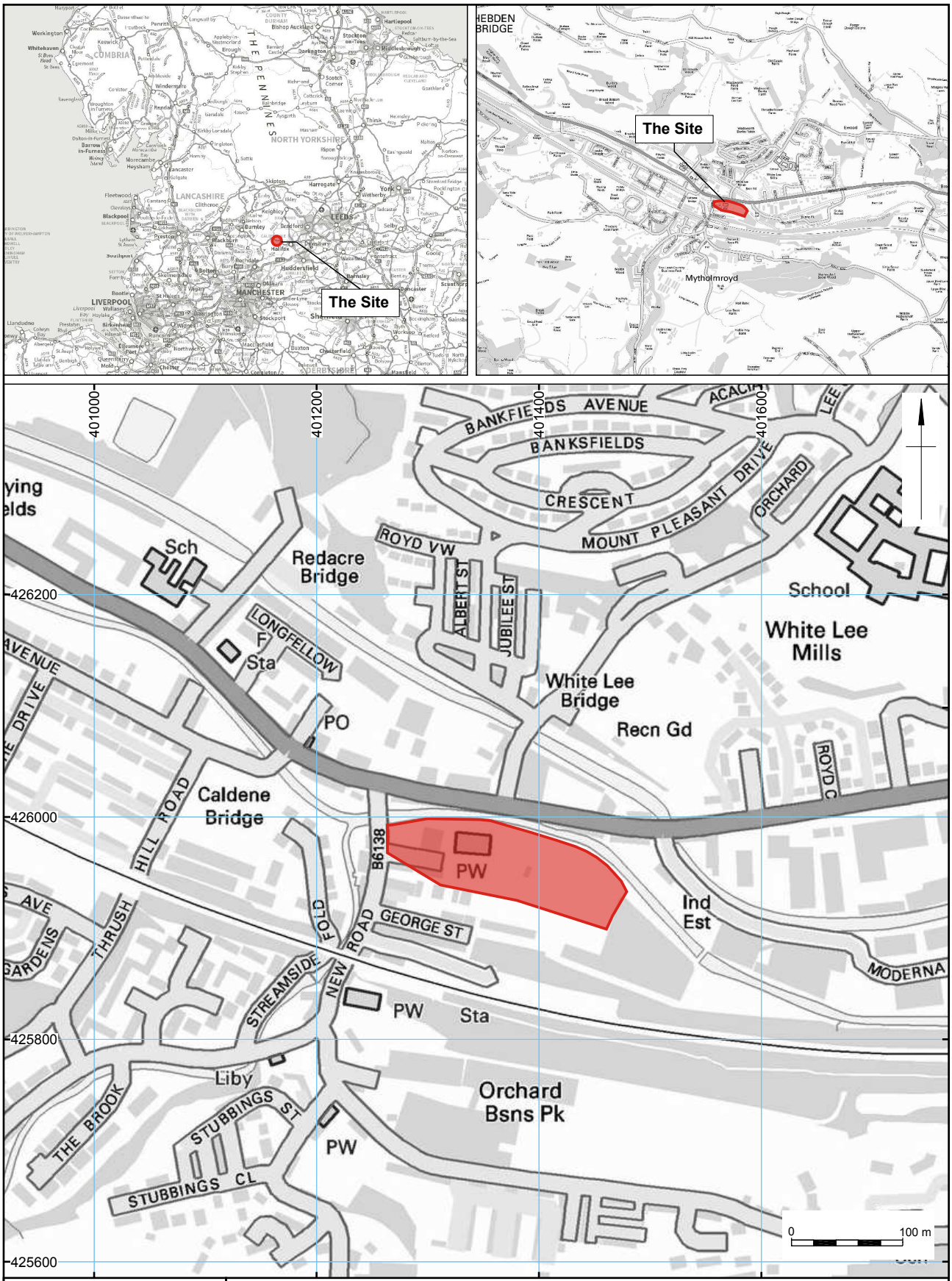
Church. 1848 by Mallinson and Healey. Early English style. Dressed stone, slate roof. Originally single aisled with added south aisle and chapel. Nave, aisles under 3-span roof with nave, chancel, west tower. 3-stage embattled tower with angle buttresses; pointed arched doorway with 2-light west window with trefoil head which rises into the 2nd stage which has small printed lights to 2 faces; 3rd stage has pointed arched belfry and later clock faces; octagonal vice clasps north corner of tower and rises higher surmounted by octagonal spire. Aisles have 5 bays of pointed arched 2-light windows with cusped lights surmounted by quatrefoil. Each bay articulated by offset buttresses. North aisle has extra blind bay. Attached to chancel at south side is small chapel with panelled tracery window in 2 canted faces. Chancel has offset diagonal buttresses and 3-light east window with Gothic rose-window. Coped gable with carved kneelers and cross to apex. String course continues round the building under the window sills. Low vestry at right angles to chancel on north side has hip to roof and 4-light window with trefoil head and spandrels; pointed arched doorway in the right hand return wall. Interior: 5-bay nave with open arcades to aisles which have octagonal columns with moulded capitals and pointed arches. Arch-braced roof rises from corbels. 3-bay chancel, the walls entirely covered with mosaics of the Apostles and the Northern Saints; waggon roof.

Listing NGR: SE0134225976

Selected Sources

Legacy Record - This information may be included in the List Entry Details

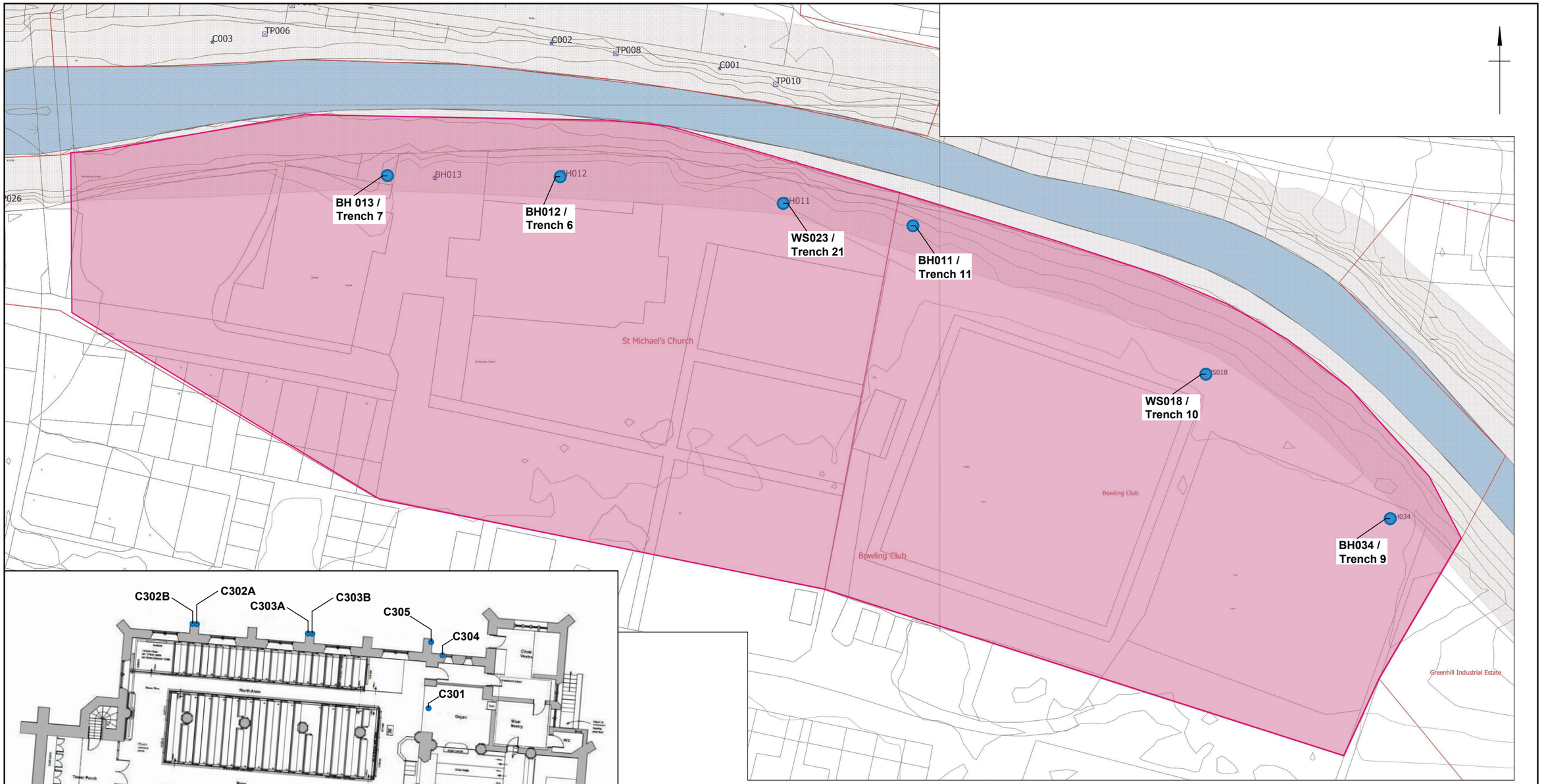
National Grid Reference: SE 01342 25976

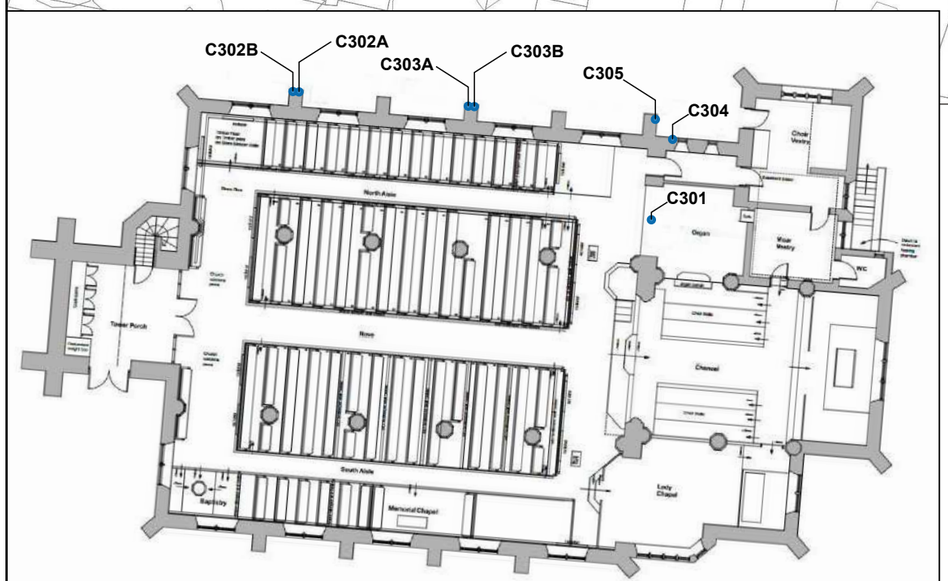


Date:	23/08/2016	Revision Number:	0
Scale:	Main graphic - 1:5000 @ A4	Illustrator:	JD
Path:	S:\PROJECTS\114020\Survey\CAD		

Site location

Figure 1





Borehole, core and window sample location

Date:	09/12/2016	Revision Number:	1.0
Scale:	Main graphic 1:625 @ A3	Illustrator:	CB
Path:	S:\PROJECTS\114020\Survey\CAD		

Borehole, window sample and core locations

Figure 2

Plate 1: General working shot of inclined core at St Michael's Church

Plate 2: General view of vertical core C301

Date:	08.12.2016	Revision Number:	1.0
Scale:	N/A	Illustrator:	LED
Path:	S:\PROJECTS\114020\Reports\Church Boreholes & Coring\Plates_114020_LED_20161208.cdr		

Plate 3: General view of inclined core C303A

Plate 4: General view of inclined core C304

Date:	08.12.2016	Revision Number:	1.0
Scale:	N/A	Illustrator:	LED
Path:	S:\PROJECTS\114020\Reports\Church Boreholes & Coring\Plates_114020_LED_20161208.cdr		

Plate 5: General view of inclined core C305

Plate 6: General view of borehole rig at St Michael's Church

Date:	08.12.2016	Revision Number:	1.0
Scale:	N/A	Illustrator:	LED
Path:	S:\PROJECTS\114020\Reports\Church Boreholes & Coring\Plates_114020_LED_20161208.cdr		

Plate 7: View of trench 6, borehole BH012

Plate 8: General working shot of trench 7, borehole BH013

Date:	08.12.2016	Revision Number:	1.0
Scale:	N/A	Illustrator:	LED
Path:	S:\PROJECTS\114020\Reports\Church Boreholes & Coring\Plates_114020_LED_20161208.cdr		

Plate 9: General working shot of trench 9, borehole BH034

Plate 10: General working shot of trench 10, window sample WS18

Date:	08.12.2016	Revision Number:	1.0
Scale:	N/A	Illustrator:	LED
Path:	S:\PROJECTS\114020\Reports\Church Boreholes & Coring\Plates_114020_LED_20161208.cdr		

Plate 11: General view of trench 11, window sample BH011

Plate 12: View of trench 11, window sample BH011

Date:	08.12.2016	Revision Number:	1.0
Scale:	N/A	Illustrator:	LED
Path:	S:\PROJECTS\114020\Reports\Church Boreholes & Coring\Plates_114020_LED_20161208.cdr		

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