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Wigton Waste Water Treatment Works Wigton Cumbria

Archaeological Evaluation

Report No. Y370/18

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Summary

An archaeological evaluation was undertaken by CFA Archaeology Ltd on land north of Wigton Waste Water Treatment Works, Wigton, Cumbria during April 2018. Five trenches were excavated over geophysical anomalies however no evidence of archaeological activity was discovered.

1. INTRODUCTION

This report presents the results of an archaeological evaluation undertaken by CFA Archaeology Ltd (CFA) on behalf of United Utilities, on the 18th & 19th of April 2018. The CFA code and number for the project is Y370/18.

All work was undertaken in accordance with a Written Scheme of Investigation produced by CFA Archaeology Ltd (2018a) and followed on from a geophysical survey of the area (CFA 2018b).

1.2 Site Location and Description

The site comprises a field to the north of the existing waste water treatment works with a total area of approximately 1.5ha. The site is bounded by the existing Wigton Waste Water Treatment Works to the south, a modern road to the west and pasture fields to the north and east. At the time of the survey the site was flat and consisted of short grass pasture.

The soils of the area are variable and are described as ‘loamy and clayey floodplain soils with naturally high groundwater’ (LandIS 2018). The geology of the area consists of Mercia Mudstone Group – mudstone with superficial deposits of alluvium-clay, silt, sand and gravels (BGS 2018).

1.3 Previous Archaeological work and Historical Background

Examination of pre and post World War II Ordnance Survey maps shows there has been no development on the site until the construction of the water treatment plant, which is first seen depicted on the 1968 Ordnance Survey map.

Within the wider area around the site the town of Wigton is a medieval town first mentioned in 1163. It has also been referred to as Wiggeton in a Pipe Roll in 1163 and as Wigeton in a Charter Roll in 1262.

Numerous cultural heritage sites in and around Wigton including listed buildings, find spots, cropmarks and enclosures are recorded within the HER. Sites of interest include a find spot of a Bronze Age flanged Axe, currently in the Greenwell Collection at the British Museum (Monument No. 9959), a Prehistoric flint working site (Monument No. 875473) and a medieval pilgrim route.

1.4 Previous Archaeological Work

There has been no previous invasive archaeological work on the site. A geophysical survey (CFA 2018b) was undertaken prior to the start of the evaluation, the results of which inform the location of the trenches.

1.5 Project Aims

In accordance with the WSI aims of the evaluation were to:

- establish the presence or absence, quality and extent of archaeological remains and their location within the development area;
- gather sufficient information to enable an assessment of the potential significance of any archaeological remains to be made and the impact which development will have upon them, and;
- enable an informed decision to be made regarding the future treatment of any archaeological remains and consider any appropriate mitigation measures to be undertaken either in advance of and/or during development.

2. WORKING METHODS

2.1 General

CFA Archaeology Ltd is a registered organisation (RO) with the Chartered Institute for Archaeologists (CIfA). CFA Archaeology follows all relevant CIfA and Historic England Standards and Guidance (CIfA 2014a-b and EH 2008).

Linear features (ditches and gullies) were sample excavated at a minimum of 10% of their length and a minimum of 1m per section at regular intervals where encountered. Intersections were investigated to establish relationships between features. Pits and post holes were sampled at a minimum of 50%.

Archaeological remains were recorded by means of photographs, drawings and written records conforming to CIfA standards (CIfA 2014a) and CFA's quality manuals. All features were planned and drawn at appropriate scales. The trenches, section lines and drawing points were surveyed using an industry standard Trimble GPS. The same equipment was used to establish levels above Ordnance Datum for the trenches.

All finds were treated in accordance with relevant guidance (CIFA 2014b). Modern finds were recorded and then discarded. The project archive, comprising all CFA record sheets, finds, plans and reports, will be prepared to current guidelines (Brown 2011) ensuring the proper transfer of ownership. The archive will be retained by CFA until being deposited at a suitable repository.

A summary of the results of archaeological works will be submitted for inclusion in OASIS. The OASIS reference is cfaarcha1-327210.

2.1 Trial Trenching

Five trial trenches, measuring 30m in length were excavated within the site boundary, with trenches targeting geophysical anomalies (Fig.1). Deposits were removed in even, shallow spits by a JCB 3CX excavator equipped with a 1.80m wide smooth-bladed ditching bucket. All mechanical excavation work was carried out under constant archaeological supervision. Any further excavation required to fulfil the objectives of the evaluation was carried out by hand.

2.4 Monitoring

The project was monitored by Jeremy Parsons, Cumbria County Council Historic Environment Officer (CCCHEO).

3. RESULTS

A summary of all contexts from the evaluation forms Appendix 1 whilst the site archive is listed in Appendix 2. The following results should be read in conjunction with figures 1-2.

Descriptions of the 5 trenches appear in the table below (Table 3.1). Full results of those trenches, if any, containing archaeological features follow.

The topsoil consisted of homogenous mid-dark brown silty clay (**100**) 0.30 to 0.39m thick across the site overlaying 0.12 to 0.28m of sandy clay sub soil (**101**) varying in colour from pale pinkish brown to mid reddish brown. These deposits sealed a thick glacial deposit with internal banding of alternate silty clays and silty sands, generally mid-light brown in colour with an occasional blue-grey silty clay band (**102**). In none of the trenches was the geological substrate reached due to safety concerns, this was agreed with the CCCHEO.

No.	Description
1	<p>The trench was orientated north-east to south-west and was generally flat across the trench (Fig.2.1).</p> <p>Topsoil in the trench measured 0.34-0.39m in depth and overlay a band of pink-brown sandy clay measuring 0.12 to 0.23m in thickness. Underlying this was a glacial deposit of light-blue clays and light brown sands.</p> <p>The natural substrate was not reached due to the depth of the overlying glacial materials.</p> <p>No archaeological features were identified within the trench.</p>
2	<p>The trench was orientated north-east to south-west and was generally flat across the trench (Fig.2.2).</p> <p>Topsoil in the trench measured 0.30m in depth and overlay a band of red-brown sandy clay measuring 0.11-0.23m in thickness. Underlying this was a glacial deposit of light-blue clays and light brown sands.</p> <p>One land drain was identified at the south-western end of the trench.</p> <p>The natural substrate was not reached due to the depth of the overlying glacial materials.</p>

No.	Description
	No archaeological features were identified within the trench.
3	<p>The trench was orientated north-east to south-west and was generally flat across the trench although some slight undulations were noted (Fig.2.3).</p> <p>Topsoil in the trench measured 0.32-0.35m in depth and overlay a band of red-brown sandy clay measuring 0.25-0.28m in thickness. Underlying this was a glacial deposit of light-blue clays and light brown sands.</p> <p>The natural substrate was not reached due to the depth of the overlying glacial materials.</p> <p>No archaeological features were identified within the trench.</p>
4	<p>The trench was orientated north-east to south-west and was generally flat across the trench (Fig.2.4).</p> <p>Topsoil in the trench measured 0.34-0.35m in depth and overlay a band of pink-brown compact clay measuring 0.12 to 0.15m in thickness. Underlying this was a glacial deposit of light-blue clays and light brown sands.</p> <p>The natural substrate was not reached due to the depth of the overlying glacial materials.</p> <p>No archaeological features were identified within the trench.</p>
5	<p>The trench was orientated north to south and was generally flat across its length Fig.2.5). The trench was moved from its original north-west to south-east alignment due to the presence of overhead electrical cables.</p> <p>Topsoil in the trench measured 0.26-0.30m in depth and overlay a band of red-brown compact clay measuring 0.12 to 0.16m in thickness. Underlying this was a glacial deposit of light-blue clays and light brown sands.</p> <p>The natural substrate was not reached due to the depth of the overlying glacial materials.</p> <p>No archaeological features were identified within the trench.</p>

Table 3.1: Trench Summaries

4. DISCUSSION

Despite the possibility of archaeological remains as suggested by the anomalies identified by geophysical survey, the lack of physical evidence and the presence of large deposits of glacially derived material suggest the anomalies are most likely due to geological rather than anthropological processes.

No surviving archaeological features were recorded within any of the trenches with only the presence of modern land drainage recorded after excavation. Historic ordnance survey mapping of the area had shown that there was no activity on the site until the construction of the existing water treatment plant to the south, with the site largely featuring as open fields from the earliest editions of these maps.

5. CONCLUSION

The archaeological evaluation on land adjacent to the existing Wigton Waste Water Treatment Works did not reveal any evidence of any early surviving archaeology within any of the trenches excavated during the project. Geophysical anomalies targeted by the evaluation proved to be the result of geological changes in the natural ground and not as the result of any archaeological activities in the area.

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Appendix 1: Context Summary

Context no.	Type	Max Depth (m)	Description
100	Layer	0.30-0.39	Topsoil for all trenches. Consisted of mid-dark brown silty clay with occasional small stone inclusions.
101	Layer	0.12-0.28	Subsoil for all trenches: sandy clay varying in colour from pale pinkish brown to mid reddish brown
102	Layer	0.75m+	Banded glacial deposit consisting of alternating silty clays and silty sands. Generally mid-light brown with an occasional blue-grey silty clay band

Appendix 2: Inventory of Primary Archive

Phase	File/Box No.	Description	Quantity
Evaluation	File no. 1	Context register sheets	1
		Context sheets	3
		Trench record sheets	5
		Digital photographic register sheets	1

FIGURES 1-2



Fig. 2.1 Trench 1, facing southwest



Fig. 2.2 Trench 2, facing southwest

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United Utilities Water Limited

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Fig. 2.3 Trench 3, facing north



Fig. 2.4 Trench 4, facing west

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Fig. 2.5 Trench 5, facing north

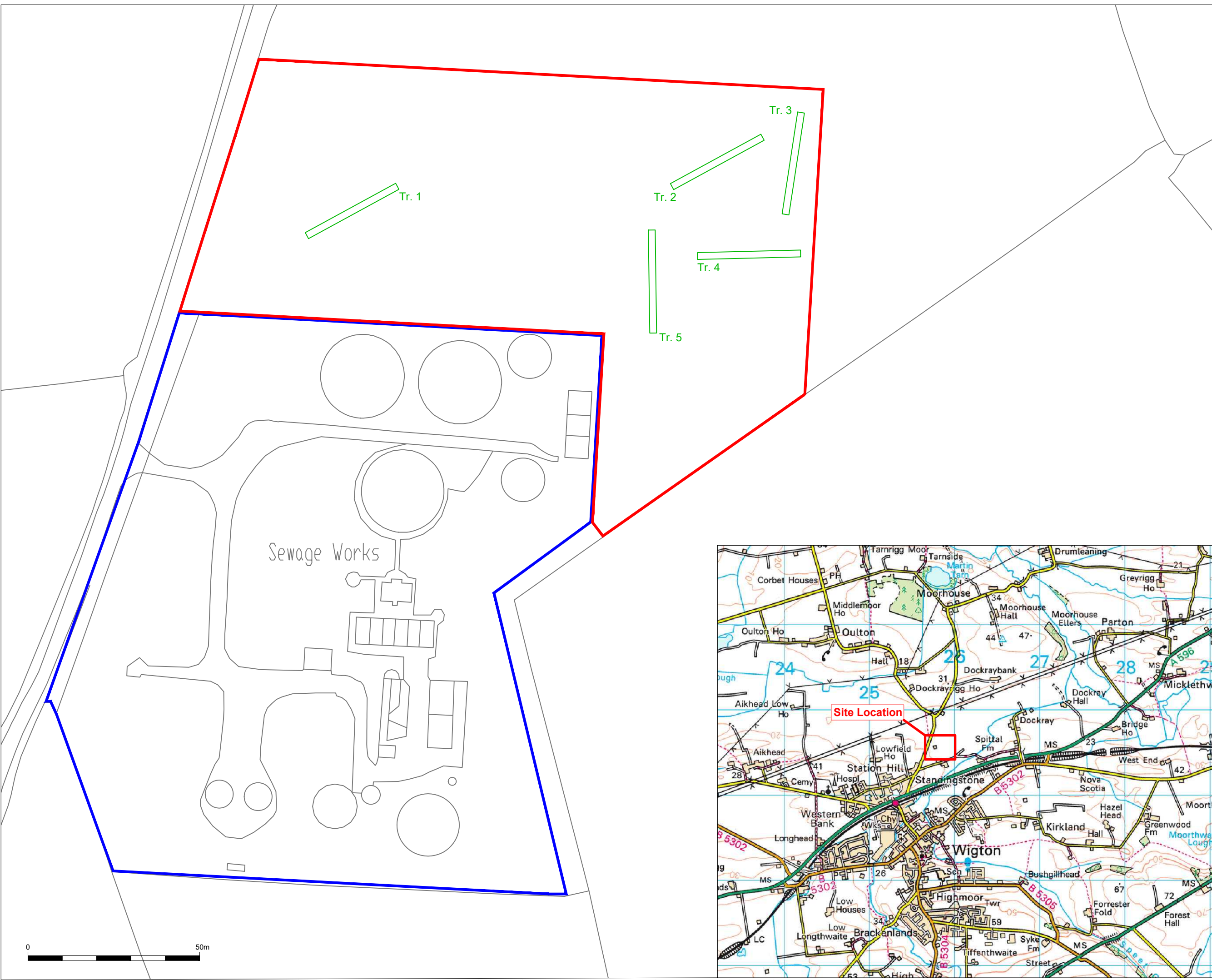
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Key:

- Site Boundary
- Extent of land owned by United Utilities
- Evaluation trenches



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Title:
Site Location and trench plan

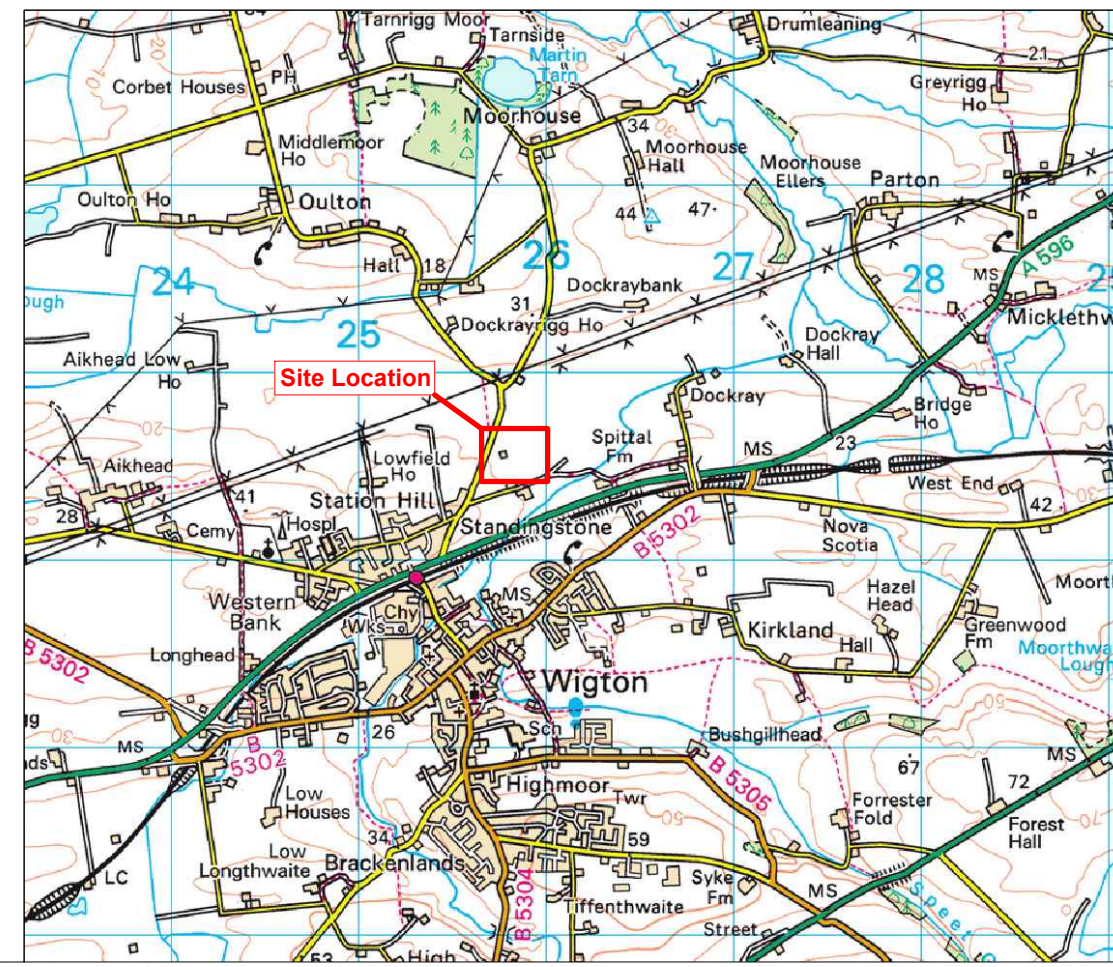
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Client:
United Utilities Water Limited

Scale at A3:
1:1000

Drawn by:	Checked:	Date:
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Report No.:	Fig. No.:
Y370/18	1





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