Cotswold Archaeology

Further GI Works
A417 Missing Link
Gloucestershire

Archaeological Watching Brief

for:
Arup

CA Project: CR0894
CA Report: CR0894_1

December 2022

Andover Cirencester Milton Keynes Suffolk

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SUMMARY

Project name:	Further GI Works, A417 Missing Link
Location:	Birdlip, Gloucestershire
NGR:	393957 214852
Type:	Watching brief
Date:	November 2021 – April 2022
Location of Archive:	To be deposited with Corinium Museum and the Archaeology Data Service (ADS)
Site Code:	CAMLG 22

Between November 2021 and April 2022, Cotswold Archaeology carried out an archaeological watching brief during ground investigation works at the proposed site of the A417 Missing Link, Gloucestershire.

An undated ditch and a furrow, of likely medieval/post-medieval date, were identified during the course of the watching brief. In addition, a single sherd of Roman pottery was recovered from the subsoil within one of the test pits.

1. INTRODUCTION

1.1. Between November 2021 and April 2022, Cotswold Archaeology (CA) carried out an archaeological watching brief at the proposed site of the A417 Missing Link, Gloucestershire (centred at NGR: 393957 214852; Fig. 1). This watching brief was undertaken for Arup.

1.2. The A417 Missing Link scheme proposes the construction of a new 5.5km length of dual carriageway between the existing A417 Brockworth Bypass and the existing A417 dual carriageway south of Cowley. Ground Investigation (GI) works are required for geotechnical, contamination and land quality purposes, and will be used to reduce the risk posed by such hazards to the detailed design of the scheme, as part of the Development Consent Order (DCO) process.

1.3. Due to the archaeological potential of the site, a watching brief was maintained during the GI works. The watching brief was carried out in accordance with a *Written Scheme of Investigation* (WSI) prepared by CA (2021a) and approved by Gloucestershire County Council Archaeology Service (GCCAS), following consultation with Historic England.

1.4. The watching brief was also undertaken in line with *Standard and guidance for an archaeological watching brief* (CIfA 2014; updated October 2020), *Management of Research Projects in the Historic Environment (MoRPHE) PPN 3: Archaeological Excavation* (Historic England 2015) and *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England 2015).

The site

1.5. The proposed development site covers a *c.* 5.5km-long area, which follows the existing A417 dual carriageway to the west of the Air Balloon roundabout, and then runs across the agricultural landscape and various land/ownership parcels to the north-east of the existing A417 corridor, before re-joining the existing A417 dual carriageway at the Cowley roundabout. The site lies at approximately 95m AOD at the western end of the scheme (lying at the base of Crickley Hill near Brockworth), before climbing steeply towards the uplands around Birdlip (at *c*. 290m AOD), and then descending to the Cowley roundabout at the south-eastern extent of the scheme, at *c*. 250m AOD.

1.6. The underlying bedrock geology of the site within the west of the scheme is mapped as mudstone, siltstone, limestone and sandstone of the Lias Group and Inferior Oolite Group, formed during the Jurassic and Triassic periods, which are variably sealed by Quaternary Period landslide deposits (BGS 2022). Within the central and western parts of the scheme the geology predominantly consists of limestone of the Birdlip, Salperton, Aston, Hampen and White Formations, all of the Jurassic Period (ibid.). The natural geological substrate identified during the course of the preceding evaluation (CA 2021b) and the current GI watching brief comprised variable deposits of limestone brash and clay.

2. ARCHAEOLOGICAL BACKGROUND

2.1. The site has previously been subject to an Environmental Assessment Report (EAR; Highways England 2018), geophysical surveys (Stratascan 2003; WA 2020), trial trench evaluation (CA 2021b) and previous phases of GI watching brief (CA 2019; 2020). It is not intended to fully reprise these reports here, but the following is a summary of their conclusions.

2.2. Evidence for prehistoric occupation has been recorded throughout the area surrounding the site (Highways England 2018), with the Cotswolds being influenced by human activity since the Mesolithic period. Worked flint of Mesolithic date was recorded during excavations on the promontory of Crickley Hill Camp (Historic England Scheduled Monument no. 1003586), approximately 160m north-east of the scheme, as well as Mesolithic flint microliths near Shab Hill, approximately 650m to the east (ibid.).

2.3. Evidence of Neolithic activity was also recorded during the excavations at Crickley Hill, as well as at Peak Camp approximately 500m west of the scheme, with several phases of activity; comprising extensive earthworks, enclosures, internal structures indicative of settlement and flint finds being identified (Highways England 2018). Evidence suggests that Crickley Hill was reoccupied and refortified during the Iron Age, with early post-Roman activity also noted (ibid.).

2.4. Bronze Age activity has been recorded throughout the study area. Most significantly is the funerary site of Emma's Grove (HE Scheduled Monument no 1017079), approximately 50m south of the scheme, which comprises three Bronze Age bowl barrows containing evidence for primary and secondary burials, along with grave goods (Highways England 2018). Archaeological work has identified multiple remains

associated with Emma's Grove consisting of roundhouses and barrows, as well as other isolated barrow sites. Fieldwalking to the south of site in advance of the construction of the Birdlip Bypass identified three sites in which Bronze Age features were found along with arrowheads, scrapers, retouched flakes and cores (ibid.).

2.5. Immediately to the south-east of the site, the Iron Age site of Barrow Wake is recorded, where a late Iron Age cemetery producing rich grave goods was uncovered during quarrying in 1879 (Highways England 2018). During the construction of the Birdlip Bypass, Iron Age rectilinear enclosures and an alignment of storage pits were also recorded (ibid.; Parry 1998).

2.6. During the Roman period, large settlements were established at Gloucester and Cirencester; the road connecting the two settlements, Ermin Street, ran to the south-west of the Air Balloon roundabout through Birdlip, where it is thought to be preserved in several places (Highways England 2018). Consequently, substantial remains dating to the Roman period relating to roadside activity (some of elevated status) have been recorded in and around the area of Birdlip, most notably at Birdlip Quarry, near the Cowley roundabout (Mudd et al. 2000).

2.7. Evidence for medieval activity within the area includes the village of Birdlip, which was established in the 13th century, approximately 600m south of site (Highways England 2018). The current site probably formed part of a managed landscape surrounding the village, evidenced by an area of upstanding of ridge and furrow earthworks, as well as lynchets and field boundaries. Other medieval remains include the deserted medieval village of Stockwell, adjacent to which the modern village is built, approximately 1.3km to the east of the current site, and a concentration of nationally important medieval remains at Brimpsfield, 1.7km to the south of the site.

2.8. From the 14th century, large open-field agricultural areas of the Cotswolds were converted into pasture to support the expanding wool industry of the area (Highways England 2018). To some degree this enabled the preservation of ridge and furrow earthworks, as evident on site. It appears that the current site was not subject to the creation of large regular fields during parliamentary enclosure of the 18th and 19th centuries, which may have destroyed the earthworks, and more likely represents evidence of piecemeal enclosures generally made by local arrangement.

2.9. Quarrying for Oolitic limestone forms a major part of the archaeological landscape throughout the area and is likely to have occurred in all periods (Highways England 2018). Over 60 quarry sites are recorded in the study area, a large proportion of which were located as part of the Crickley Hill Archaeological Survey (ibid.).

Geophysical Surveys

2.10. Two programmes of geophysical survey have been undertaken within the proposed route of the scheme (Stratascan 2003; WA 2020). These surveys identified numerous anomalies of archaeological potential, the majority of which are likely to relate to Iron Age/Roman settlement, agricultural and funerary activity.

2.11. A magnetometry survey carried out near Emma's Grove located an enclosure, likely to be prehistoric in date (Stratascan 2003). Discrete and linear anomalies to the south-east of the enclosure may be associated features. Further anomalies possibly relate to agricultural activity, quarrying, former land boundaries and trackways, and a faint curvilinear anomaly to the east of Emma's Grove may also be significant (ibid.).

2.12. In the southernmost area of the scheme, adjacent to the Cowley roundabout, extensive Roman settlement evidence was identified, probably related to those found at Birdlip Quarry (WA 2020). Located 1.5km to the north of this was a further concentration of rectilinear enclosures, and a large rectangular anomaly suggestive of a post-Roman Sunken-Featured Building (SFB). In the far west of the scheme, a possible roundhouse-type structure was recorded alongside linear anomalies, and these are suggestive of settlement of prehistoric origin. A series of north/south-aligned ovoid anomalies were also identified in the central-western part of the scheme that may be representative of burials, possibly related to the Barrow Wake cemetery, whilst a possible shrine/mausoleum was also highlighted in this area (ibid.). Further linear anomalies were also recorded across the scheme that likely relate to agricultural divisions of Iron Age to post-medieval date.

Trial Trench Evaluation

2.13. Between September 2020 and April 2021, CA carried out an archaeological evaluation of land along the route of the proposed A417 Missing Link, with a total of 323 trenches excavated (CA 2021a).

2.14. Archaeological features were identified throughout the site, closely correlating to the results of preceding geophysical surveys. The features recorded included those

dated to the Neolithic, Iron Age, Roman, Saxon, medieval, post-medieval and modern periods, with undated features also present.

2.15. At the western extent of the site a pit was identified containing abundant knapping waste, of probable Neolithic date, in association with a number of small ditches, pits and a possible hearth. Within the centre of the site, a group of pits/postholes were recorded, which contained worked flint of broad prehistoric date, potentially representing a structure. Towards the eastern extent of the site, a series of pits and ditches yielded pottery dateable to the Middle Neolithic. Each of these collections of features potentially represent small areas of settlement.

2.16. Iron Age activity was recorded in the western area of the site, with rectilinear and circular enclosure systems recorded, along with a possible trackway. An area of possible enclosed Iron Age settlement was recorded at Shab Hill, in the centre of the site, where Middle to Late Iron Age material was recovered from pits and ditches, which correlated to discrete and linear geophysical anomalies. A possible landscape boundary was identified to the south of this activity and may be contemporary and associated.

2.17. Near to the area of the Scheduled Monument at Emma's Grove, and adjacent to the approach to Crickley Hill hillfort, a fortified enclosure of Middle Iron Age date was recorded in two trenches. It included substantial ditches, internal bank material and evidence for a palisade; it is possible that this represents a satellite defended position to the main fort at Crickley Hill, or a camp associated with the siege of the fort in the Middle Iron Age. An area of possibly related late prehistoric activity was also recorded to the east of this.

2.18. Roman features represented the majority of those identified by the evaluation. This included at least two areas of settlement, an area of funerary activity, evidence for agricultural practice, quarrying, and indications of a ritualised element to structural features identified in the southern extent of the site.

2.19. A Roman cremation burial was identified within the central-western part of the site, within a small square enclosure. Whilst the pottery recovered from the burial pit suggests a Roman date for the cremation, an association with the nearby Barrow Wake Iron Age cemetery is highly likely, with the area possibly a focus of funerary activity in both the Iron Age and Roman periods.

2.20. Roman settlement evidence was recorded succeeding the Iron Age activity within the centre of the site at Shab Hill, with ditched enclosures and pits of Roman date recorded, potentially adjacent to a trackway running towards the main Roman road to the west.

2.21. The main concentration of Roman activity within the site was recorded towards its south-eastern extent, with enclosure, drainage and boundary ditches, pits, postholes, a stone-built well and structural remains identified. A substantial amount of pottery was recovered from these features, as well as brooches, coins, other metal items, and a rare example of a 'Cupid as Hercules' figurine. This, coupled with the vicinity of the structural remains to a potential former water course and the Ermin Street Roman road, raise suggestions of a ritual aspect to some of this activity.

2.22. Saxon pottery was retrieved from a probable sunken featured building within the central part of the site, where it lay within an area of previous Iron Age and Roman occupation at Shab Hill. Whilst the structure was an isolated feature, it suggests some level of early medieval settlement within the area.

2.23. Evidence of medieval/post-medieval ridge and furrow cultivation was identified across the site, correlating closely with geophysical trends and extant earthworks.

2.24. Within the south-eastern part of the site a series of large modern intrusions were identified, from which a 1939 issue data plaque for a War Department (WD) electric generator was recovered. It is likely that these modern truncations represent part of Gloucestershire's air defence during the Second World War, with gun emplacements, barrage balloons and search light batteries all known to have been located within the immediate area.

2.25. Numerous features were identified throughout the site which could not be dated artefactually, although many were recorded in the vicinity of dated features. Notably, this included a burial which was partially exposed in the northernmost part of the site, in association with undated ditches and pits, and a series of undated ditches, pits and/or postholes which were recorded across the site, away from the apparent main areas of settlement.

3. AIMS AND OBJECTIVES

3.1. The general objectives of the watching brief were:

- to monitor the GI works, and to identify, investigate and record any significant buried archaeological deposits/features thus revealed;
- at the conclusion of the project, to produce an integrated project archive and a report setting out the watching brief results and the archaeological conclusions that can be drawn from the recorded data;
- at the conclusion of the project, to compile a stable, ordered, accessible project archive.

4. METHODOLOGY

4.1. The watching brief comprised the observation by a competent archaeologist of all intrusive GI works categorised as having a potential conflict with known cultural heritage assets. This comprised a total of 43 separate interventions (Fig. 2).

4.2. Non-archaeologically significant deposits were removed by the GI works contractors under archaeological supervision. Where practical, mechanical excavators were fitted with toothless grading buckets, although toothed buckets and breakers were used to remove difficult deposits.

4.3. Archaeological features/deposits were investigated, planned and recorded in accordance with *CA Technical Manual 1: Fieldwork Recording Manual*.

4.4. Deposits were assessed for their palaeoenvironmental potential in accordance with *CA Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites.* No deposits were identified that required sampling.

4.5. Artefacts were processed in accordance with *CA Technical Manual 3: Treatment of Finds Immediately after Excavation*.

4.6. CA will make arrangements with Corinium Museum for the deposition of the project archive and, subject to agreement with the legal landowner(s), the artefact collection. A digital archive will also be prepared and deposited with the Archaeology Data Service (ADS). The archives (museum and digital) will be prepared and deposited in

accordance with *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (CIfA 2014; updated October 2020).

4.7. A summary of information from this project, as set out in Appendix C, will be entered onto the OASIS online database of archaeological projects in Britain.

5. RESULTS

5.1. This section provides an overview of the watching brief results. Detailed summaries of the recorded contexts are given in Appendix A. Details of the artefactual material recovered from the site are given in Section 6 and Appendix B.

5.2. The natural geological substrate was revealed at an average depth of 0.35m below present ground level (bpgl). This was overlain by a colluvial layer in ten trenches (Trenches 511 (TP639B), 521 (TP651), 520 (TP616), 508 (TP647), 510 (TP639A), 529 (TP623), 528 (TP624), 522 (TP707), 515 (TP623) and 512 (TP640)), averaging 0.3m in thickness. This was in turn overlain by subsoil, which sealed the natural in all other trenches, averaging 0.15m in thickness. This was sealed by an average of 0.2m of topsoil. A single sherd of Roman pottery was recovered from the subsoil horizon in Trench 506 (50601).

5.3. Archaeological features were identified in two of the GI interventions; Trenches 524 and 528.

Trench 524 (TP626) (Fig. 3)

5.4. Ditch 52403 (Fig. 3, Section AA) was recorded in Trench 524 (TP626). It was aligned north-west/south-east and measured 1.05m in width and 0.3m in depth. It had moderately sloping concave sides and a flattish base. It contained a single undated clayey-silt fill 52402 that was directly sealed by topsoil.

Trench 528 (TP624) (Fig. 3)

5.5. Within the north-eastern part of Trench 528 (TP624), furrow 52805 was recorded on a broad north-west/south-east alignment. It measured 0.6m in width and 0.12m in depth and had gently sloping sides and a shallow concave profile. It contained a single undated clayey silt fill, 52806.

6. THE FINDS

6.1. Artefactual material was hand-recovered from one subsoil deposit. The recovered material dates to the Roman period and quantities of the artefact types are given in Appendix B. The pottery has been recorded in accordance with current standards for archaeological material (Barclay et al. 2016). The fabric code (in parenthesis in the text) are equated to the online Gloucester pottery type series (http://glospot.potsherd.net/table/roman) and is matched with the *National Roman Fabric Reference Collection* (Tomber and Dore 1998).

Pottery

6.2. An unfeatured bodysherd of Severn Valley (oxidised) ware (TF11b), in a moderately abraded condition, was recorded from subsoil 50601. This ware type is commonly found in Gloucestershire and is broadly datable to the Roman period.

7. DISCUSSION

7.1. The watching brief identified limited archaeological features during the GI works, comprising an undated ditch and a furrow.

7.2. Ditch 52403 was not identified by the geophysical survey and does not correlate with any boundaries depicted on historic mapping dating. Iron Age and Roman agricultural activity was recorded in the vicinity of the trench during the preceding evaluation, and the ditch may therefore relate to this activity.

7.3. The alignment of furrow 52805 corresponded well with the alignment of the series of geophysical anomalies representing ridge and furrow cultivation extending throughout the vicinity of Trench 528. Although undated, it is likely associated with a regime of ridge and furrow cultivation dating from the medieval or post-medieval periods.

7.4. The GI test pits also revealed areas of colluvial build-up and were found at the base of slopes within the central part of the site. The recovery of a sherd of Roman pottery may date at least one of these horizons (subsoil/colluvium layer 50601 in Trench 506), although prehistoric material was retrieved from colluvial horizons elsewhere during the evaluation, and this Roman material could represent intrusive or residual material within an earlier or later context.

8. CA PROJECT TEAM

8.1. Fieldwork was undertaken by Christian Day, Josh Nowlan, Daniel Sausins, Richard Scurr, Kinga Werner and Liam Wilson. This report was written by Mark Brett and Richard Scurr. The finds report was written by Jacky Sommerville. The report illustrations were prepared by Krissy Moore. The project archive has been compiled by Richard Scurr and prepared for deposition by Hazel O'Neill. The project was managed for CA by Alex Thomson.

9. REFERENCES

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APPENDIX A: CONTEXT DESCRIPTIONS

Tren	GI TP Ref	Context No.	Type	Fill of	Interpretation	Description	Leng (m)	Width (m)	Depth (m)
102	TT102	10200	Laye		Topsoil	Dark brown silty loam	>20	>0.7	
103	TT103	10300	Laye		Topsoil	Dark brown silty loam	>20	>0.7	0.12
103	TT103	10301	Laye		Subsoil	Mid Reddish brown sandy silt with abundant limestone inclusions	>20	>0.7	0.21
103	TT103	10302	Laye		Natural Substrate	Yellow sandy clay with limestone brash	>20	>0.7	
104	TT104	10400	Laye		Topsoil	Dark greyish brown sandy silt	>20	>0.65	0.14
104	TT104	10401	Laye		Natural Substrate	Yellow sandy clay with small subangular limestone inclusions	>20	>0.65	1.7
105	TT105	10500	Laye		Topsoil	Dark brown silty loam	>20	>0.7	0.1
105	TT105	10501	Laye		Subsoil	Mid Reddish brown sandy silt with abundant limestone inclusions	>20	>0.7	0.25
105	TT105	10502	Laye		Natural Substrate	Yellow sandy clay with limestone brash	>20	>0.7	
106	TT106	10600	Laye		Topsoil	Dark greyish brown sandy silt	>20	>0.65	0.35
106	TT106	10601	Laye		Natural Substrate	Orange yellow silty clay with large limestone boulders and laminated limestone brash.	>20	>0.65	1.9
342	BH342	34200	Laye		Topsoil	Mid yellowish/greyish brown clayey silt	>0.45	>0.41	0.29
342	BH342	34201	Laye		Subsoil	Mid yellowish brown clayey sandy silt with limestone inclusions	>0.45	>0.41	0.12

Tren	GI TP Ref	Context No.	Type	Fill of	Interpretation	Description	Leng (m)	Width (m)	Depth (m)
342	BH342	34202	Laye		Natural Substrate	Yellow sand with angular limestone fragments	>0.45	>0.41	
432	BH432	43200	Laye		Topsoil	Dark greyish brown silty clay	>0.5	>0.5	0.27
432	BH432	43201	Laye		Natural Substrate	Light greyish brown limestone brash	>0.5	>0.5	
433	BH433	43300	Laye		Topsoil	Dark greyish brown silty clay with occasional limestone inclusions	>0.24	>0.2	0.37
433	BH433	43301	Laye		Subsoil	Mid orangey brown silty clay	>0.24	>0.2	0.1
433	BH433	43302	Laye		Natural Substrate	Limestone brash	>0.24	>0.2	>0.1
500	TP610	50000	Laye		Topsoil	Dark brownish grey silty clay, loose with occasional limestone inclusions	>3	>0.6	0.22
500	TP610	50001	Laye		Subsoil	Mid greyish brown silty clay, loose with occasional limestone inclusions	>3	>0.6	0.16
500	TP610	50002	Laye		Natural Substrate	Limestone brash in light yellowish brown silty clay matrix, friable	>3	>0.6	>0.97
501	TP646	50100	Laye		Topsoil	Dark brownish grey silty clay, loose with occasional limestone inclusions	>3.1	>0.6	0.2
501	TP646	50101	Laye		Subsoil	Mid greyish brown silty clay, loose with occasional limestone inclusions	>3.1	>0.6	0.17
501	TP646	50102	Laye		Natural Substrate	Limestone brash in light yellowish brown silty clay matrix, friable	>3.1	>0.6	>0.38
502	TP650	50200	Laye		Topsoil	Dark greyish brown silty clay, friable	>3.8	>0.6	0.26

Tren	GI TP Ref	Context No.	Type	Fill of	Interpretation	Description	Leng (m)	Width (m)	Depth (m)
502	TP650	50201	Laye		Natural Substrate	Light yellowish brown clayey silt, compact	>3.8	>0.6	>2.44
503	TP649	50300	Laye		Topsoil	Dark greyish brown silty clay, friable	>2.7	>0.6	0.26
503	TP649	50301	Laye		Natural Substrate	Limestone brash in light greyish yellow clayey silt matrix, friable	>2.7	>0.6	>0.81
504	BH402	50400	Laye		Topsoil	Dark greyish brown silty clay, friable	>0.48	>0.46	0.38
504	BH402	50401	Laye		Natural Substrate	Limestone brash in mid yellowish brown clayey silt matrix, friable	>0.48	>0.46	>0.22
505	BH354	50500	Laye		Topsoil	Dark greyish brown silty clay, friable with occasional limestone inclusions	>0.35	>0.33	0.25
505	BH354	50501	Laye		Natural Substrate	Limestone brash in mid yellowish brown clayey silt matrix, friable	>0.35	>0.33	
506	TP648	50600	Laye		Topsoil	Dark brownish grey silty clay, loose	>2.7	>0.6	0.28
506	TP648	50601	Laye		Subsoil/ possible colluvium	Mid greyish brown silty clay, friable with occasional limestone inclusions	>2.7	>0.6	0.2
506	TP648	50602	Laye		Natural Substrate	Light greyish yellow clayey silt, compact with occasional limestone inclusions	>2.7	>0.6	>1.02
507	TP708	50700	Laye		Topsoil	Dark brownish grey silty clay, loose	>2.8	>0.6	0.25
507	TP708	50701	Laye		Natural Substrate	Limestone brash in mid yellowish brown silty clay matrix, friable	>2.8	>0.6	>1.65
508	TP647	50800	Laye		Topsoil	Dark greyish brown silty clay, friable with rare limestone inclusions	>2.4	>0.6	0.28

Tren	GI TP Ref	Context No.	Type	Fill of	Interpretation	Description	Leng (m)	Width (m)	Depth (m)
508	TP647	50801	Laye		Colluvial Layer	Mid reddish brown silty clay, compact	>2.4	>0.6	0.26
508	TP647	50802	Laye		Natural Substrate	Light greyish yellow clayey silt, compact with occasional stone inclusions	>2.4	>0.6	>1.06
509	TP659	50900	Laye		Topsoil	Dark brownish grey silty clay, loose	>2.4	>0.6	0.28
509	TP659	50901	Laye		Subsoil	Mid greyish brown silty clay, friable	>2.4	>0.6	0.18
509	TP659	50902	Laye		Natural Substrate	Mid orangey yellow clay, compact	>2.4	>0.6	>2.24
510	TP639A	51000	Laye		Topsoil	Mid greyish brown silty clay, friable with rare limestone inclusions	>2.4	>0.6	0.28
510	TP639A	51001	Laye		Subsoil	Light yellowish brown silty clay, friable with occasional stone inclusions	>2.4	>0.6	0.12
510	TP639A	51002	Laye		Colluvial Layer	Light reddish brown silty clay, friable	>2.4	>0.6	0.32
510	TP639A	51003	Laye		Natural Substrate	Light yellowish brown clayey silt, compact with frequent limestone inclusions	>2.4	>0.6	
511	TP639B	51100	Laye		Topsoil	Mid greyish brown silty clay, friable with rare limestone inclusions	>1.7	>0.6	0.26
511	TP639B	51101	Laye		Subsoil	Light yellowish brown silty clay, friable with occasional stone inclusions	>1.7	>0.6	0.08
511	TP639B	51102	Laye		Colluvial Layer	Light reddish brown silty clay, friable	>1.7	>0.6	0.2
511	TP639B	51103	Laye		Natural Substrate	Light yellowish brown clayey silt, compact with frequent limestone inclusions	>1.7	>0.6	>1.46

Tren	GI TP Ref	Context No.	Type	Fill of	Interpretation	Description	Leng (m)	Width (m)	Depth (m)
512	TP640	51200	Laye		Topsoil	Dark greyish brown silty clay, friable with rare stone inclusions	>2.2	>0.6	0.25
512	TP640	51201	Laye		Colluvial Layer	Mid orangey brown clayey silt	>2.2	>0.6	0.14
512	TP640	51202	Laye		Natural Substrate	Light greyish yellow clay, compact	>2.2	>0.6	>3.61
513	TP658	51300	Laye		Topsoil	Mid greyish brown clayey silt, friable	>2.4	>0.6	0.28
513	TP658	51301	Laye		Natural Substrate	Light orangey yellow clay, compact	>2.4	>0.6	>3.12
514	TP629	51400	Laye		Topsoil	Mid greyish brown clayey silt, friable	>2.6	>0.6	0.29
514	TP629	51401	Laye		Natural Substrate	Light orangey yellow clay, compact	>2.6	>0.6	>3.51
515	TP623	51500	Laye		Topsoil	Dark greyish brown clayey silt , loose	>2.4	>0.6	0.18
515	TP623	51501	Laye		Subsoil	Mid greyish brown sandy silt, friable	>2.4	>0.6	0.15
515	TP623	51502	Laye		Colluvial Layer	Light brownish yellow silt, friable with rare charcoal inclusions	>2.4	>0.6	0.25
515	TP623	51503	Laye		Natural Substrate	Light orangey yellow clay	>2.4	>0.6	>0.32
516	TP641	51600	Laye		Topsoil	Dark greyish brown silty clay, friable with rare stone inclusions	>2.1	>0.6	0.22
516	TP641	51601	Laye		Subsoil	Mid yellowish brown silty clay, compact with occasional stone and rare charcoal inclusions	>2.1	>0.6	0.1
516	TP641	51602	Laye		Natural Substrate	Light greyish yellow clay, compact with frequent limestone inclusions	>2.1	>0.6	>1.48

Tren	GI TP Ref	Context No.	Type	Fill of	Interpretation	Description	Leng (m)	Width (m)	Depth (m)
517	TP642	51700	Laye		Topsoil	Dark brownish grey silty clay, loose with occasional stone inclusions	>2.6	>0.6	0.29
517	TP642	51701	Laye		Natural Substrate	Limestone brash in mid reddish brown silty clay matrix, friable	>2.6	>0.6	>1.31
518	TP644	51800	Laye		Topsoil	Dark brownish grey silty clay, loose with occasional stone inclusions	>2.5	>0.6	0.27
518	TP644	51801	Laye		Natural Substrate	Limestone brash in mid yellowish brown silty clay matrix, friable	>2.5	>0.6	>0.48
519	TP643	51900	Laye		Topsoil	Dark greyish brown silty clay, friable with occasional stone inclusions	>2.4	>0.6	0.25
519	TP643	51901	Laye		Natural Substrate	Light greyish yellow clay, compact	>2.4	>0.6	>3.75
520	TP616	52000	Laye		Topsoil	Dark greyish brown silty clay, loose with occasional stone inclusions	>2.4	>0.6	0.16
520	TP616	52001	Laye		Subsoil	Mid greyish brown silty clay, friable with occasional stone inclusions	>2.4	>0.6	0.12
520	TP616	52002	Laye		Colluvial Layer	Mid reddish brown silty clay, compact with occasional stone inclusions	>2.4	>0.6	0.1
520	TP616	52003	Laye		Natural Substrate	Light greyish yellow clay, compact	>2.4	>0.6	>2.52
521	TP651	52100	Laye		Topsoil	Dark greyish brown clayey silt, loose with rare stone inclusions	>2.1	>0.6	0.32

Tren	GI TP Ref	Context No.	Type	Fill of	Interpretation	Description	Leng (m)	Width (m)	Depth (m)
521	TP651	52101	Laye		Colluvial Layer	Mid orange brown silt, friable with rare stone inclusions	>2.1	>0.6	0.1
521	TP651	52102	Laye		Natural Substrate	Light greyish yellow clay, compact with occasional limestone inclusions	>2.1	>0.6	>3.58
522	TP707	52200	Laye		Topsoil	Dark greyish brown silty clay, loose with rare limestone inclusions	>3.3	>0.6	0.32
522	TP707	52201	Laye		Colluvial Layer	Mid reddish brown clayey silt, friable	>3.3	>0.6	0.93
522	TP707	52202	Laye		Natural Substrate	Limestone brash in light reddish brown silty clay matrix, friable	>3.3	>0.6	>1.25
523	TP625	52300	Laye		Topsoil	Dark greyish brown silty clay, loose with occasional limestone inclusions	>2.7	>0.6	0.34
523	TP625	52301	Laye		Natural Substrate	Limestone brash in light yellowish brown silty clay matrix, friable	>2.7	>0.6	>0.56
524	TP626	52400	Laye		Topsoil	Dark greyish brown silty clay, loose with occasional limestone inclusions	>2.7	>0.6	0.28
524	TP626	52401	Laye		Natural Substrate	Limestone brash in light yellowish brown silty clay matrix, friable	>2.7	>0.6	>0.82
524	TP626	52402	Fill	52403	Fill of ditch	Mid reddish brown clayey silt, friable	>0.6	1.05	0.3
524	TP626	52403	Cut		Cut of ditch	NW/SE aligned linear with moderate, concave sides and flat base	>0.6	1.05	0.3
525	TP617	52500	Laye		Topsoil	Dark Greyish Brown silty clay, loose with frequent limestone inclusions	>3.6	>0.6	0.05

Tren	GI TP Ref	Context No.	Type	Fill of	Interpretation	Description	Leng (m)	Width (m)	Depth (m)
525	TP617	52501	Laye		Subsoil	Yellowish brown silty clay with frequent limestone inclusions	>3.6	>0.6	0.15
525	TP617	52502	Laye		Natural Substrate	Limestone brash in light yellow silty clay matrix	>3.6	>0.6	>1.1
526	TP608	52600	Laye		Topsoil	Dark Greyish Brown silty clay	>3.8	>0.6	0.3
526	TP608	52601	Laye		Natural Substrate	Limestone brash in light yellow silty clay matrix	>3.8	>0.6	>1.45
527	TP709	52700	Laye		Topsoil	Dark Greyish Brown silty clay	3	>0.6	0.28
527	TP709	52701	Laye		Natural Substrate	Light orange brown sandy silt with frequent limestone slabs	3	>0.6	>3.52
528	TP624	52800	Laye		Topsoil	Dark Greyish Brown silty clay	3.5	>0.6	0.28
528	TP624	52801	Laye		Colluvial layer	Light yellowish brown clay silt	3.5	>0.6	0.45
528	TP624	52802	Laye		Colluvial layer	Light greyish brown silty clay manganese inclusions	3.5	>0.6	0.47
528	TP624	52803	Laye		Colluvial layer	Light reddish brown silty clay	3.5	>0.6	0.3
528	TP624	52804	Laye		Natural Substrate	Orange yellow silty clay with blue grey clay patches	3.5	>0.6	>2.5
528	TP624	52805	Cut		Furrow	NNW/SSE aligned, gentle concave sides.	3.5	>0.6	0.12
528	TP624	52806	Fill	52805	Fill of furrow	brown grey clay silt, friable, no inclusions	3.5	>0.6	0.12
529	TP623	52900	Laye		Topsoil	Dark Greyish Brown silty clay	3.7	>0.6	0.15
529	TP623	52901	Laye		Subsoil	Grey brown sandy silt, friable	3.7	>0.6	0.12
529	TP623	52902	Laye		Colluvial layer	Light brownish yellow, clay silt with rare charcoal inc.	3.7	>0.6	0.55

Tren	GI TP Ref	Context No.	Type	Fill of	Interpretation	Description	Leng (m)	Width (m)	Depth (m)
529	TP623	52903	Laye		Natural Substrate	Light orange yellow clay with mid grey clay patches	3.7	>0.6	>3.18
530	TP657	53000	Laye		Topsoil	Dark Greyish Brown silty clay	4	>0.6	0.25
530	TP657	53001	Laye		Made Ground	Light brown yellow clay with occasional small rounded stones	4	>0.6	0.12
530	TP657	53002	Laye		Made Ground	Mid grey brown silty clay with rare stones and mod. CBM inc.	4	>0.6	0.4
530	TP657	53003	Laye		Made Ground	Dark brown grey silty clay with stones, CMB & ceramic pipe fragments inc.	4	>0.6	0.3
530	TP657	53004	Laye		Natural Substrate	Limestone brash in light yellowish brown silty clay matrix, friable	4	>0.6	
531		53100	Laye		Topsoil	Dark Greyish Brown silty clay	4	>0.6	0.3
531		53101	Laye		Natural Substrate	Blue orange clay	4	>0.6	>1
532		53200	Laye		Topsoil	Dark Greyish Brown silty clay	4	>0.6	0.3
532		53201	Laye		Natural Substrate	Blue orange clay	4	>0.6	>1.7
654	TT654	65400	Laye		Topsoil	Dark orange brown sandy clay	>4.1	>0.65	0.2
654	TT654	65401	Laye		Natural Substrate	Limestone brash in light yellowish brown silty clay matrix, friable	>4.1	>0.65	1.8
654	TT654	65302	Laye		Natural	Mid orange brown gravelly limestone brash	>4.1	>0.65	>4
707	TP707	70700	Laye		Topsoil	Dark grey brown silty clay	>6	>0.6	0.3
707	TP707	70701	Laye		Subsoil	mid reddish brown clay silt	>6	>0.6	0.9

Tren	GI TP Ref	Context No.	Type	Fill of	Interpretation	Description	Leng (m)	Width (m)	Depth (m)
707	TP707	70702	Laye		Natural Substrate	Limestone brash in reddish yellow clay matrix	>6	>0.6	

APPENDIX B: THE FINDS

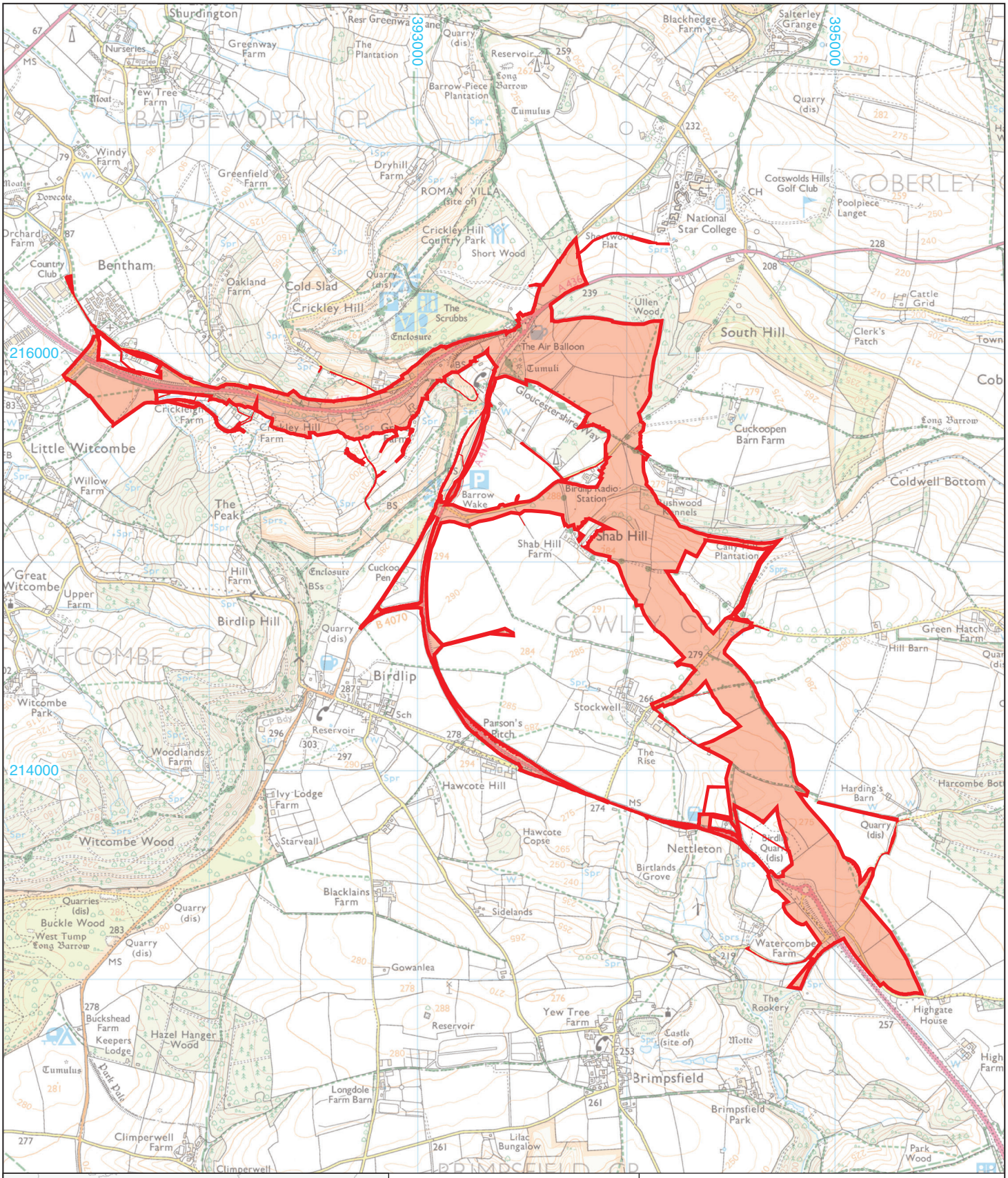
Table 1: Finds concordance

Context	Category	Description	Fabric Code/ NRFRC*	Count	Weight (g)	Spot-date
50601	Roman pottery	Severn Valley (oxidised) ware	TF11b/ **SVW OX2**	1	19	RB

* National Roman Fabric Reference Collection codes in bold

APPENDIX C: OASIS REPORT FORM

PROJECT DETAILS		
Project name	Further GI works, A417 Missing Link, Gloucestershire	
Short description	Between November 2021 and April 2022, Cotswold Archaeology carried out an archaeological watching brief during ground investigation works at the proposed site of the A417 Missing Link, Gloucestershire. An undated ditch and a furrow of likely medieval/post-medieval date were identified during the course of the watching brief. In addition, a single sherd of Roman pottery was recovered from the subsoil within one of the test pits.	
Project dates	November 2021 – April 2022	
Project type	Watching Brief	
Previous work	EAR (Highways England 2018) Geophysical Survey (WA 2022 & Stratascan 2003) Evaluation (CA 2021) Watching Briefs (Cotswold Archaeology 2019; 2020)	
Future work	Unknown	
PROJECT LOCATION		
Site location	Land between A417 Brockworth bypass and A417 Cowley roundabout, Gloucestershire.	
Study area (m^2/ha)	5.5km	
Site co-ordinates	393957 214852	
PROJECT CREATORS		
Name of organisation	Cotswold Archaeology	
Project brief originator	N/A	
Project design (WSI) originator	Cotswold Archaeology	
Project Manager	Alex Thomson	
Project Supervisor	Dan Sausins, Richard Scurr and Christian Day	
MONUMENT TYPE	None	
SIGNIFICANT FINDS	None	
PROJECT ARCHIVES	**Intended final location of archive**	**Content**
Physical	Corinium Museum	Pottery
Paper	Corinium Museum	Trench recording forms, context sheets, etc.
Digital	Corinium Museum	Digital photos, etc.
BIBLIOGRAPHY		
Cotswold Archaeology (CA) 2022 *Further GI Works, A417 Missing Link, Gloucestershire: Archaeological Watching Brief* CA typescript report **CR0894_1**		



N

Site boundary

0 1km

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PROJECT TITLE

Further GI Works, A417 Missing Link, Gloucestershire

FIGURE TITLE

Site location plan

DRAWN BY	**KM**	*PROJECT NO.*	**CR0894**	*FIGURE NO.*
CHECKED BY	**DJB**	*DATE*	**28/07/2022**	**1**
APPROVED BY	**MB**	*SCALE@A4*	**1:25,000**	

392000

394000

216500

214500

see Inset 2

see Inset 1

Inset 2

T28

T29

T528
(see Fig. 3)

T27

0 1:1500 50m

Inset 1

T195

T194

T196

T197

T524
(see Fig. 3)

T200

T201

T199

T203

T202

0 1:1500 50m

N

Site boundary

Extent of ground investigations

Previous evaluation trench (CA 2021)

Archaeological feature

Furrow

Deposit

Section location

Geophysical survey results (Wessex Archaeology 2020)

Survey boundary

Archaeology

Possible

Ploughing

Ridge and furrow

Drainage

Ferrous

Former field boundary

Former path

Increased magnetic response

Modern service

Superficial geology

Geophysical survey results (WSP 2003)

Geophysical survey area

Positive linear anomaly (possible cut feature)

Linear anomalies and pits (possible prehistoric)

Linear anomaly (agricultural origin)

Positive linear anomaly (land drainage channel)

Linear anomaly (possible relict field boundary)

Positive linear anomaly (land boundary/trackway)

Geophysical anomaly (possible filled-in quarry)

Geophysical anomaly (probable trackway)

Geophysical anomaly (probable quarrying)

0 1:15,000 500m

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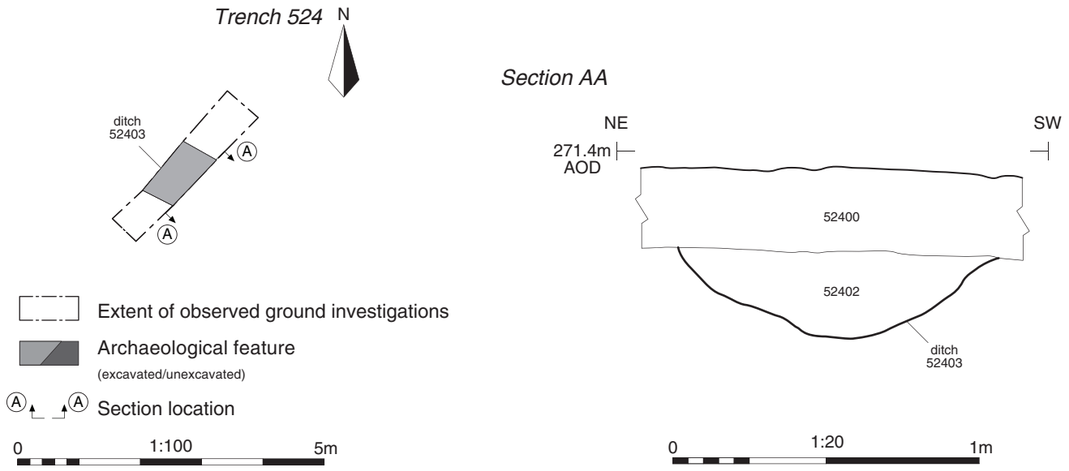
PROJECT TITLE

Further GI Works, A417 Missing Link, Gloucestershire

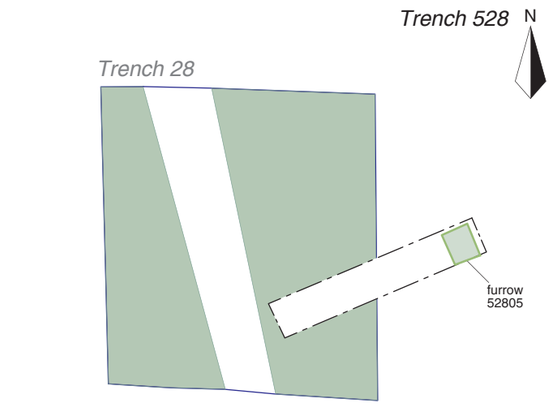
FIGURE TITLE

The site, showing location of observed GI works in relation to previous archaeological works and geophysical survey results

DRAWN BY	KM	PROJECT NO.	CR0894	FIGURE NO.
CHECKED BY	DJB	DATE	28/07/2022	2
APPROVED BY	MB	SCALE@A3	1:15,000 & 1:1500	



Ditch 52403, looking south-east (scale 1m)



Furrow 52805, looking east (scale 1m)

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PROJECT TITLE

Further GI Works, A417 Missing Link, Gloucestershire

FIGURE TITLE

Areas of ground investigation works: plans, section and photographs

DRAWN BY	KM	PROJECT NO.	CR0894	FIGURE NO.
CHECKED BY	DJB	DATE	28/07/2022	3
APPROVED BY	MB	SCALE@A3	1:100 & 1:20	

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