Kings Reach
Growth Scheme
– Stratton Farm to
Newspring Farm



Archaeological Evaluation Report



**Client: Anglian Water** 

OA East Report No: 1951 OASIS No: oxofrdar3-256559

NGR: TL 20534 43643 to TL 21146 40987



# Kings Reach Growth Scheme - Stratton Farm to Newspring Farm

Archaeological Evaluation

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Report Number: 1951

Site Name: Kings Reach, Biggleswade

HER Event No: BEDFM2016.01

Date of Works: May/June 2016

Client Name: Anglian Water

Client Ref: -

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Grid Ref: TL 20534 43643 to TL 21146 40987

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# Summary

Between the 16<sup>th</sup> to 21<sup>st</sup> June 2016 Oxford Archaeology East undertook an evaluation on behalf of Anglian Water along a proposed pipeline route from Stratton Farm to Newspring Farm, Biggleswade, Bedfordshire (TL 20534 43643 to TL 21146 40987).

A total of eleven trenches were excavated along the pipeline route, all measuring 30m in length. Six of these trenches contained archaeological features, an area of features were noted towards the northern end of the route with further features uncovered towards the east. The archaeology uncovered largely comprised ditches on various alignments, some of which may be Iron Age in date, although the majority are thought to date to the post-medieval period. Very little finds material was recovered from these features with only a very small number of datable finds present. The few sherds of pottery that were recovered dated to the later Iron Age.

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#### 1 Introduction

# 1.1 Location and scope of work

- 1.1.1 An archaeological evaluation was conducted at land from Stratton Farm to Newspring Farm, Biggleswade, Bedfordshire (Fig. 1)
- 1.1.2 This archaeological trial trenching was undertaken in accordance with a Brief issued by the Central Bedfordshire Archaeology Team (Oake 2016) supplemented by a Specification prepared by OA East (Mortimer 2016).
- 1.1.3 The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, in accordance with the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government March 2012). The results will enable decisions to be made by CBAT, on behalf of the Local Planning Authority, with regard to the treatment of any archaeological remains found.
- 1.1.4 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

# 1.2 Geology and topography

- 1.2.1 The geology on site comprises the Gault Formation Mudstone with overlying superficial deposits of the Oadby member. (http://mapapps.bgs.ac.uk/geologyofbritain/home.html)
- 1.2.2 The ground level alters only slightly across the pipeline route. The northern end of this section of pipeline nearest Stratton Farm is recorded at 46.6m OD before sloping down to the south east where it measures 44.88m OD. The land then rises again to the south west at the pipeline's most westerly point, close to Newspring Farm where it measured 52m OD.

# 1.3 Archaeological and historical background *Iron Age*

- 1.3.1 A series of Iron Age features have been identified in the area, particularly around Stratton Farm. To the north of Stratton Farm an Iron age trackway was identified as cropmarks and later dated by excavations in 2003 (HER 16157). Excavations also revealed further features including ditches on varying alignments and pits containing Iron Age pottery (Albion Archaeology 2003). Other work in this area confirmed the presence of the trackway and the series of ditches already known in this area (Albion Archaeology 2004).
- 1.3.2 North of Stratton Farm earthworks can be seen and are more extensive. Excavations here identified a ring ditch dating to the Bronze Age alongside settlement areas date to the Iron Age but continue into the early Roman period. These areas appear to be formed of rural farmsteads (Albion Archaeology 2015).
- 1.3.3 A recent evaluation on land directly north of the proposed pipeline route identified ditches of a late Iron Age date possibly related to the other features of this date around Stratton Farm (Bush 2016). Further excavation work revealed large enclosures, pits, ring gullys and a vast amount of late Iron Age pottery (Nicholls Forthcoming).

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#### Roman

- 1.3.4 Early Roman pottery has been recovered from an excavation towards the northern end of the pipeline route, although no features were uncovered dating to this period (Nicholls Forthcoming).
- 1.3.5 Directly east of Newspring Farm a series of cropmarks have been identified. These cropmarks comprise a north to south linear feature, rectilinear enclosures, a circular enclosure and quarry pits. Fieldwalking has produced Roman pottery from this area (HER 3547).
- 1.3.6 The suggested route of a Roman road that ran from Woburn to Dunton (HER 5342) can be seen 1km south east of Newspring Farm. Directly west of Newspring Farm is the route of the Roman road which run from Sandy to Godmanchester (HER 505).

#### Medieval and Post-medieval

- 1.3.7 Approximately 400m south west of Stratton farm medieval ridge and furrow has been identified (HER 15661). Much of the ridge and furrow in the area has been destroyed by ploughing but a geophysical survey of this area shows an area interpreted as ridge and furrow although not identified as such in the report (WYAS 2002).
- 1.3.8 In 1838 the field 350m north-east of Newspring Farm was marked as clay pit field although no further evidence for a clay pit at this location has been found (HER 13927).

# 1.4 Acknowledgements

- 1.4.1 The author would like to extend thanks to Anglian Water Services for commissioning and funding the archaeological works. Thanks also to the land owners, in particular Mr and Mrs Tunnard and Mr Black.
- 1.4.2 The work on site was undertaken by the author with the assistance of Emily Abrehart, Matt Edwards and Xosé Hermoso Buxán. Machine excavation was carried out by Lattenbury Services. The project was managed by Richard Mortimer and the evaluation monitored by Martin Oake of CBAT.

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# 2 AIMS AND METHODOLOGY

# 2.1 Aims

2.1.1 The objective of this evaluation was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

# 2.2 Methodology

- 2.2.1 The Brief required that 11 trenches measuring 30m in length across the proposed pipeline route be excavated.
- 2.2.2 Machine excavation was carried out under constant archaeological supervision with a tracked 360 excavator using a toothless ditching bucket.
- 2.2.3 The site survey was carried out by Dave Brown using a Leica GS08 GPS system.
- 2.2.4 Spoil, exposed surfaces and features were scanned with a metal detector. All metaldetected and hand-collected finds were retained for inspection, other than those which were obviously modern.
- 2.2.5 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.
- 2.2.6 Environmental sampling was undertaken on three features uncovered on site, all of which were ditches.
- 2.2.7 Site conditions were poor during the excavation of these trenches.

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# 3 Results

#### 3.1 Introduction

3.1.1 A total of 11 trenches were excavated on site, all measuring 30 metres in length. These trenches will be discussed by trench in numeric order. Topsoil and subsoil was recorded in all of the trenches. The topsoil (36) largely consisted of a dark grey silty clay and measured 0.3m deep in most cases. The subsoil (37) consisted of a mid orange brown silty clay and varied in depth from 0.1m at the south west end of the pipeline route to depths of 0.4m to the north east.

# 3.2 Trenches containing archaeology (Fig. 2 and Fig. 3) Trench 20

3.2.1 Trench 20 was aligned north-east to south-west, this trench contained a single ditch. Ditch **283** had a north-west to south-east alignment and measured 0.45m wide and 0.2m deep. This ditch contained a single fill (284) which consisted of a mid grey brown clayey silt. A single small piece of late Iron Age pottery weighing 0.002kg was recovered from this fill.

#### Trench 21

- 3.2.2 Trench 21 was aligned north-east to south-west, this trench contained a ditch and a pit or hollow. Ditch **285** had a north to south alignment and measured 1.1m wide and 0.36m deep (Plate 1). This ditch contained a single fill (286) which contained no finds.
- 3.2.3 Pit/hollow **287** was only partially visible in the trench and measured 0.8m wide and 0.2m deep. It contained a single fill (288) which consisted of a mid brown grey silty clay and contained no finds.

#### Trench 22

3.2.4 Trench 22 was aligned north-east to south-west, this trench contained two furrows, one of which was excavated and recorded. Furrow **289** was aligned north-west to south-east and measured 0.65m wide and 0.1m deep. This furrow contained a single fill (290) which contained no finds.

#### Trench 23

- 3.2.5 Trench 23 was aligned north-west to south-east and contained two ditches (**291** and **293**). Ditch **291** was aligned east to west and measured 0.55m wide and 0.17m deep. Its single fill (292) comprised a mid brown clayey silt and contained no finds. This ditch was truncated by a modern furrow.
- 3.2.6 Ditch **293** was aligned north to south and measured 0.8m wide and 0.18m deep. This ditch contained a similar fill to that of Ditch **291** and also contained no finds. This ditch was also truncated by a modern furrow.

#### Trench 25

- 3.2.7 Trench 25 was aligned north-west to south-east and contained three ditches (295, 297 and 303) and a field drain which was on the same alignment as two of the ditches (Plate 2). Ditch 295 was aligned north-east to south-west and measured 0.6m wide and 0.1m deep. This ditch contained a single fill (296) which contained no finds.
- 3.2.8 Ditch **297** also had a north-east to south-west alignment and measured 0.9m wide and 0.3m deep. This ditch contained a single fill (298) which consisted of a mid brown

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- clayey silt. This fill contained no finds and was environmentally sampled and contained no preserved remains.
- 3.2.9 Ditch **303** was just seen at the north-west end of the trench and had a roughly north-east to south-west alignment (Plate 3). This ditch measured 1.6m wide and 0.32m deep. Its single fill (304) consisted of a mid orange brown clayey silt. This fill contained no finds and the environmental sample only contained land molluscs.

#### Trench 26

- 3.2.10 Trench 26 was aligned north-west to south-east and contained two ditches (**299** and **301**). Ditch **299** was aligned roughly north-east to south-west and measured 1.1m wide and 0.3m deep (Plate 4). This ditch contained a single fill (300) which consisted of a mid grey brown clayey silt. This fill contained small pieces of animal bone identified as cattle scapula and two sherds of late Iron Age pottery weighing 14g. A fragment of unidentifiable fired clay weighing 1g was also recovered. This fill was environmentally sampled and was found to contain preserved plant remains of wheat, barley, indeterminate grains and grass seed.
- 3.2.11 Ditch **301** was aligned roughly north-east to south-west and measured 1.9m wide and 0.4m deep. Its single fill (302) consisted of a mid grey brown clayey silt which contained animal bone identified as cattle metatarsal.

# 3.3 Trenches devoid of archaeology

3.3.1 Trenches 17, 18, 19, 24 and 27 were devoid of archaeology (Plate 5)

# 3.4 Finds Summary

3.4.1 Only three sherds of pottery were recovered during this evaluation from two features (283 and 299), all of which were late Iron Age in date. Small fragments of animal bone weighing 0.043kg were also recovered (299 and 301) identified as cattle scapula and cattle metatarsal (Hadjikoumis pers comm.).

#### 3.5 Environmental Summary

3.5.1 Three samples were taken during the evaluation from three ditches (297, 299 and 303). Two of the samples contained no preserved remains. Ditch 299 contained plant remains including barley, wheat and grass seed.

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# 4 DISCUSSION AND CONCLUSIONS

#### 4.1 Introduction

4.1.1 Six out of eleven of the trenches contained archaeological features with a slight concentration in the northern trenches and in those at the south-east of the pipeline route. These features comprised largely ditches, either undated or dating to the Late Iron Age and post-medieval periods.

# 4.2 Late Iron Age

- 4.2.1 A large number of Iron Age sites have been identified in the area around Stratton Farm through previous evaluation and excavation (HER 13956, 16157, 16823, 18284) with the most recent being directly north-east of Trench 27 (Nicholls forthcoming). A possible Iron Age to Roman site has also been identified near the southern end of the pipeline route near Newspring Farm (HER 3547).
- 4.2.2 Some of the ditches uncovered during the evaluation may be Late Iron Age in date, in particular Ditch 283 in Trench 20, Ditch 299 and 301 in Trench 26, Ditch 303 in Trench 25. Finds were recovered from ditches 283 and 299 however these could easily be described as residual finds. It is clear that this area of trenching is located outside of the main foci of Late Iron Age activity, located to the north-east of the northern trenches and the south east of the southern trenches. The size of these ditches along with the lack of finds suggest that these Late Iron Age ditches are most likely part of agricultural field systems beyond the edges of the settlement cores.

#### 4.3 Post-medieval and modern

- 4.3.1 The remaining ditches and furrows that were uncovered are thought to be of a post-medieval or modern date. Although no finds were recovered to confirm this date many of these features were on the same alignment as field drains or modern-day boundaries and their fills were often very similar to the subsoil (mid orange brown silty clay).
- 4.3.2 Ditches and furrows of this date have also been recorded to the north during a recent excavation (Nicholls forthcoming).

# 4.4 Significance

4.4.1 This evaluation has identified that the known Late Iron Age settlement to the north-east does not continue with the same density to the south-west. The evaluation trenches close to Newspring Farm also indicated that the known cropmarks to the south-east (HER 3547) may extend as far north as these trenches but that the features here most likely represent parts of an agricultural field system at this point rather than evidence for settlement *per se*.

#### 4.5 Recommendations

4.5.1 Recommendations for any future work based upon this report will be made by the County Archaeology Office.

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# APPENDIX A. TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 17						
General de	escription				Orientation	NW-SE
					Avg. depth (m)	0.45
Trench dev overlying a			Consists of	f topsoil and subsoil	Width (m)	2
overlying a	naturai oi	Clay			Length (m)	30
Contexts					1	-
context no	type	Width (m)	Depth (m)	comment	finds	date
36	Layer	-	0.28	Topsoil	-	-
37	Layer	-	0.17	Subsoil	-	-
38	Layer	-	-	Natural	-	-
Trench 18						
General de	escription				Orientation	NE-SW
_			_		Avg. depth (m)	0.45
Trench dev overlying a			Width (m)	2		
overlying a	natarar or	oldy		Length (m)	30	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
36	Layer	-	0.28	Topsoil	-	-
37	Layer	-	0.1-2	Subsoil	-	-
38	Layer	-	-	Natural	-	-
Trench 19						
General de	escription				Orientation	NE-SW
					Avg. depth (m)	0.52
Trench con natural con				osoil and topsoil. The	Width (m)	2
natural con	Sisted of 6	i Sariay Ci	ay.		Length (m)	30
Contexts					,	,
context no	type	Width (m)	Depth (m)	comment	finds	date
36	Layer	-	0.28	Topsoil	-	-
37	Layer	-	0.2-0.25	Subsoil	-	-
38	Layer		_	Natural		

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Trench 20	)					
General d	escription	l			Orientation	NE-SW
					Avg. depth (	<b>m)</b> 0.65
				e modern features cut ed of a sandy clay.	Width (m)	2
unough un	e subson. 1	THE Hature	ai corisiste	a or a sarray clay.	Length (m)	30
Contexts						-
context no	type	Width (m)	Depth (m)	comment	finds	date
36	Layer	-	0.28	Topsoil	-	-
37	Layer	-	0.3-4	Subsoil	-	-
38	Layer	-	-	Natural	-	-
283	Cut	0.45	0.2	Cut of Ditch	-	-
284	Fill	0.45	0.2	Fill of Ditch	Pot	Late Iron Age

Trench 21	Trench 21											
General de	scription				Orientation	NE-SW						
					Avg. depth	(m) 0.65						
Trench con subsoil. Na				Width (m)	2							
Caboon: 14a	tarar corio	otou or u	Length (m)	30								
Contexts												
context	type	Width (m)	Depth (m)	comment	finds	date						
36	Layer	-	0.3	Topsoil	-	-						
37	Layer	-	0.3-0.35	Subsoil	-	-						
38	Layer	-	-	Natural	-	-						
285	Cut	1.1	0.36	Cut of Ditch	-	-						
286	Fill	1.1	0.36	Fill of Ditch	-	-						
287	Cut	0.8	0.2	Cut of Pit	-	-						
288	Fill	0.8	0.2	Fill of Pit	-	-						

Trench 22											
General d	escription	ı	Orientation	NE-SW							
			Avg. depth (n	n) 0.55							
	ntained a s le natural c		Width (m)	2							
topoon. Th	o natarar o	on londica .	or a carray	o.a.y	Length (m)	30					
Contexts					•	,					
context no	type	Width (m)	Depth (m)	comment	finds	date					
36	Layer	-	0.25-3	Topsoil	-	-					
37	Layer	-	0.25-3	subsoil	-	-					

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38	Layer	-	-	Natural	-	-
289	Cut	0.65	0.1	Cut of furrow	-	-
290	Fill	0.65	0.1	Fill of furrow	-	-

Trench 23											
General d	escription				Orientation	NW-SE					
Trench cor	ntained two	ditches to	Avg. depth	(m) 0.55							
were overl	ain by subs		Width (m)	2							
sandy clay	,		Length (m)	30							
Contexts	Contexts										
context no	type	Width (m)	Depth (m)	comment	finds	date					
36	Layer	-	0.3	Topsoil	-	-					
37	Layer	-	0.2-3	Subsoil	-	-					
38	Layer	-	-	Natural	-	-					
291	Cut	0.55	0.17	Cut of Ditch	-	-					
292	Fill	0.55	0.17	Fill of Ditch	-	-					
293	Cut	0.8	0.18	Cut of Ditch	-	-					
294	Fill	0.8	0.18	Fill of Ditch	-	-					

Trench 24											
General d	escription				Orientation		NW-SE				
					Avg. depth	(m)	0.47				
	void of arch a natural of		f topsoil and subsoil	Width (m)		2					
Overlying a	i ilatarai oi	a sandy (		Length (m)		30					
Contexts											
context no	type	Width (m)	Depth (m)	comment	finds	d	ate				
36	Layer	-	0.25-3	Topsoil	-		-				
37	Layer	-	0.1-0.25	Subsoil	-	-					
38	Layer	-	-	Natural	-		-				

Trench 25										
General de	scription		Orientation		NW-SE					
			Avg. depth	(m)	0.58					
				arious alignments overlain ted of a sandy clay	Width (m)		2			
by topson a	110 300301	i. The nate	1141 0011313	ica of a sariay day	Length (m)		30			
Contexts										
context no	type	Width (m)	Depth (m)	comment	finds	date				

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36	Layer	-	0.25-0.3	Topsoil	-	-
37	Layer	-	0.2-0.4	Subsoil	-	-
38	Layer	-	-	Natural	-	-
295	Cut	0.6	0.1	Cut of Ditch	-	-
296	Fill	0.6	0.1	Fill of Ditch	-	-
297	Cut	0.9	0.3	Cut of Ditch	-	-
298	Fill	0.9	0.3	Fill of Ditch	-	-
303	Cut	1.6	0.32	Cut of Ditch	-	-
304	Fill	1.6	0.32	Fill of Ditch	-	-

Trench 26	Trench 26										
General d	escription				Orientation		NW-SE				
			Avg. depth	(m)	0.55						
	ntained two of a sandy		Width (m)		2						
CONSISTED	or a sarray	olay	Length (m)		30						
Contexts											
context no	type	Width (m)	Depth (m)	comment	finds	da	ate				
36	Layer	-	0.25- 0.35	Topsoil	-		-				
37	Layer	-	0.25	Subsoil	-		-				
38	Layer	-	-	Natural	-		-				
299	Cut	1.1	0.3	Cut of Ditch	-		-				
300	Fill	1.1	0.3	Fill of Ditch	Pot and bone	Late Iron Age					
301	Cut	1.9	0.4	Cut of Ditch	-		-				
302	Fill	1.9	0.4	Fill of Ditch	Bone		-				

Trench 27											
General c	lescription	1			Orientation	1	NW-SE				
					Avg. depth	0.65					
	void of arcl a natural of			of topsoil and subsoil	Width (m) 2		2				
Overlying	a riatarai oi	Sariay Cit		Length (m)		30					
Contexts					,						
context no	type	Width (m)	Depth (m)	comment	finds	da	ate				
36	Layer	-	0.25-3	Topsoil	-		-				
37	Layer	-	0.3-0.45	Subsoil	-	-					
38	Layer	-	-	Natural	-		-				

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# APPENDIX B. FINDS REPORTS

# **B.1 Prehistoric Pottery**

By Kathryn Nicholls with Matt Brudenell

### Introduction and methodology

B.1.1 A total of 4 sherds (two refitting) weighing 0.016kg were collected from two excavated contexts. All sherds are Late Iron Age in date.

# Methodology

B.1.2 The assemblage was analysed in accordance with the Guidelines for analysis and publication laid down by the Prehistoric Ceramic Research Group (PCRG 2010). The total assemblage was studied and a full catalogue was prepared. The sherds were examined using a binocular microscope (x10 magnification) and were divided into fabric groups defined on the basis of inclusion types. The pottery and archive are curated by OAE

#### Results

- B.1.3 Two refitting body sherds from the same vessel along with a rim sherd of grog tempered ware were recovered from fill 300 of ditch **299** from trench 26. They are late Iron Age in date.
- B.1.4 A single piece of poorly preserved late Iron Age pottery was recovered from fill 284 from ditch **283**.

#### **Discussion and Conclusion**

B.1.5 Late Iron Age pottery was expected during this evaluation however the lack of its presence in large quantities signifies these trenches are not within the Late Iron Age area of settlement. These fragments of pottery may be residual.

Context No	Cut No	Fabric	Sherd Count	Sherd Weight (kg)	Date
284	283	Shelly Ware	1	0.002	LIA
300	299		2	0.011	LIA
		Grog tempered ware	1	0.003	LIA

Table 1: Pottery by context

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# APPENDIX C. ENVIRONMENTAL REPORTS

# C.1 Environmental Samples

By Rachel Fosberry

#### Introduction

C.1.1 Three bulk samples were taken from ditch fills within the evaluated area at Kings Reach to Toplers Hill, Biggleswade in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations.

# Methodology

C.1.1The total volume (8 litres) of the sample was processed by water flotation (using a modified Siraff three-tank system) for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieves. Both flot and residue were allowed to air dry. A magnet was dragged through each residue fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The dried flot was subsequently sorted using a binocular microscope at magnifications up to x 60 and a list of the recorded remains are presented in Table 1. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands and the authors' own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (1997) for other plants. Carbonized seeds and grains, by the process of burning and burial, become blackened and often distort and fragment leading to difficulty in identification. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

#### Results

C.1.2 Preservation of plant remains is by carbonisation with no evidence of any preservation by waterlogging. Samples 34 and 36 are devoid of preserved remains. Sample 35, fill 300 of Iron Age ditch **299** contains single charred grains of barley (*Hordeum vulgare*) and wheat (*Triticum* sp.), two fragments of indeterminate cereal grains and two small grass (Poaceae) seeds. Charcoal fragments are rare.

#### **Discussion**

C.1.3 Charred cereal grains are commonly recovered from archaeological sites as evidence of their cultivation and consumption as a staple food. The recovery of charred grains from ditch 299 indicates that there is the potential for the preservation of plant remains in a carbonised form and, potentially, indicates that there was human activity in this area during the Iron Age.

Sample No.	Context No.	Cut No.	Feature Type	Flot contents	Residue contents
34	298	297	Ditch	No preserved remains	No finds
35	300	299	Ditch	Occasional charred grain and grass seeds	Pottery, burnt bone, fired clay
36	304	303	Ditch	No preserved remains	No finds

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Table 2: Environmental samples

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# APPENDIX D. BIBLIOGRAPHY

Albion Archaeology. 2003. Land West of Stratton Farm, Biggleswade, Bedfordshire. Trial Excavation. Report No 2003/56.

Albion Archaeology. 2004. Stratton Business Park access road, Biggleswade, Bedfordshire. Trial Excavation. Report No 2004/53

Albion Archaeology. 2015. Land East of Stratton Business Park, Biggleswade, Bedfordshire. Archaeological Evaluation and Heritage Statement. Report No 2015/26

Archaeological Services WYAS. 2002. Stratton Business Park Phase IV, Biggleswade, Geophysical Survey.

Bush, L. 2016. Toplers Hill to Stratton Pipeline, Biggleswade, Bedfordhsire. Archaeological Evaluation. Oxford Archaeology East Report No 1891

Cappers, R.T.J, Bekker R.M, & Jans, J.E.A. 2006. *Digital Seed Atlas of the Netherlands Groningen Archaeological Studies 4*. Barkhuis Publishing: Eelde, The Netherlands. www.seedatlas.nl

Jacomet, S. 2006. *Identification of cereal remains from archaeological sites*. (2<sup>nd</sup> edition, 2006) IPNA, Universität Basel / Published by the IPAS: Basel University.

Mortimer, R. 2016. Written Scheme of Investigation for Archaeological Evaluation: Anglian Water – Kings Reach Growth Scheme, Biggleswade: Kings Reach to Toplers Hill. Oxford Archaeology East

Prehistoric Ceramic Research Group. 2010. The Study of Later Prehistoric Pottery: General Policies and Guidelines for analysis and Publication. Occasional Paper No1 and No 2. Revised 3rd edition.

Stace, C. 1997. New Flora of the British Isles. Second edition. Cambridge University Press

Zohary, D. & Hopf, M. 2000. *Domestication of Plants in the Old World – The origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley*. 3rd edition. Oxford University Press

#### Online Resources

Heritage Gateway - http://www.heritagegateway.org.uk/gateway/ (accessed 1/7/16)

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Project Originators

# APPENDIX E. OASIS REPORT FORM

Project De	etails										
OASIS Number oxofrdar3-			r3-256559								
Project Nam	ne [	Stratto	n Farm to I	Farm to Newspring Farm pipeline, biggleswade							
Project Dates (fieldwork) Start			Start	16-06-2016			Finish 21-06-2016			6	
Previous Work (by OA East)			ast)	Yes Future			Work Unknown				
Project Refe	Reference Codes										
Site Code	BEDFM2016.01			Planning App. No.			N	N/A			
HER No.					Related HER/OASIS No. oxfo			cford	ar3-242532		
Type of Proj	ect/Tec	hniqu	ues Use	d							
Prompt		Wa	ater Act 1989 and subsequent code of practice								
Developmen	t Type	Pip	pelines/Cables								
Please sele	ect all	techi	niques	used:							
Aerial Photo	ography -	interpre	etation	☐ Grab-Sa	mpling			□R	emo	ote Operated Vehicle Survey	
Aerial Photo	graphy -	new		Gravity-0		×		] Sample Trenches			
Annotated S	Sketch			Laser Sc		□s		Survey/Recording Of Fabric/Structure			
Augering				☐ Measured Survey			□ Ta	☐ Targeted Trenches			
☐ Dendrochro	nological	Survey	/	■ Metal Detectors			□ T	☐ Test Pits			
☐ Documenta	ry Search			☐ Phospha	nate Survey			□т	Гороgraphic Survey		
	ital Samp	ling		☐ Photogrammetric Survey			□V	☐ Vibro-core			
Fieldwalking		•		☐ Photogra	-	<u> </u>		isual	sual Inspection (Initial Site Visit)		
Geophysica					ified Photography						
Monument List feature type Thesaurus Monument	es using t	he NN	/IR Mon	ument Type	e Thesa	<b>aurus</b> ar	_		ate "r	the MDA Object type none".	
Ditch		Iron Age -800 to 43			pot				Iron Age -800 to 43		
Ditch		Post Me	Post Medieval 1540 to 1901		faunal remains			Iron Age -800 to 43			
Furrow		Post Me	Medieval 1540 to 1901					Select period			
Project Lo	ocatio	n									
County	Bedfordshire					Site Address (including postcode if possible)					
District	Mid Bedfordshire				Newspring Farm, SG18 9SY Stratton Farm , London Road, SG18 9SX						
Parish	Biggleswade					Stratto	n ⊦arm , Lo	ndon R	oad,	SG18 9SX	
HER	Bedfordshire										
Study Area	660sqm				Nationa	al Grid Re	eferen	се	TL 21146 40987		

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Organisation		OA EAS	DA EAST						
Project Brief Originator		Martin Oake							
Project Design O	Richard Mortimer								
Project Manager		Richard Mortimer							
Supervisor Kath			Cathryn Nicholls						
Project Archi	ves								
Physical Archive			Digital Archive			Paper Archive			
The Higgins, Bedfor	d		OA East			The Higgins, Bedford			
BEDFM2016.01			XBDKRT15			BEDFM2016.01			
Archive Content	s/Media					1			
	Physical Contents	Digital Contents	Paper Contents		Digital Me	dia	Paper Media		
Animal Bones	×	×	×		☐ Database		Aerial Photos		
Ceramics	X	×	X		GIS				
Environmental	×	×	$\times$		Geophysic	CS	Correspondence		
Glass					▼ Images		Diary		
Human Bones					▼ Illustration	ns	■ Drawing		
Industrial					☐ Moving Im	nage	Manuscript		
Leather					Spreadsh	eets			
Metal					Survey		Matrices		
Stratigraphic		$\boxtimes$	X		× Text		Microfilm		
Survey	<u> </u>		$\boxtimes$		☐ Virtual Re	ality	Misc.		
Textiles							Research/Notes		
Wood							Photos		
Worked Bone			$\vdash$				× Plans		
Worked Stone/Lithic None							■ Report		
Other		$\exists$					× Sections		
Otrici							X Survey		
Notes:									

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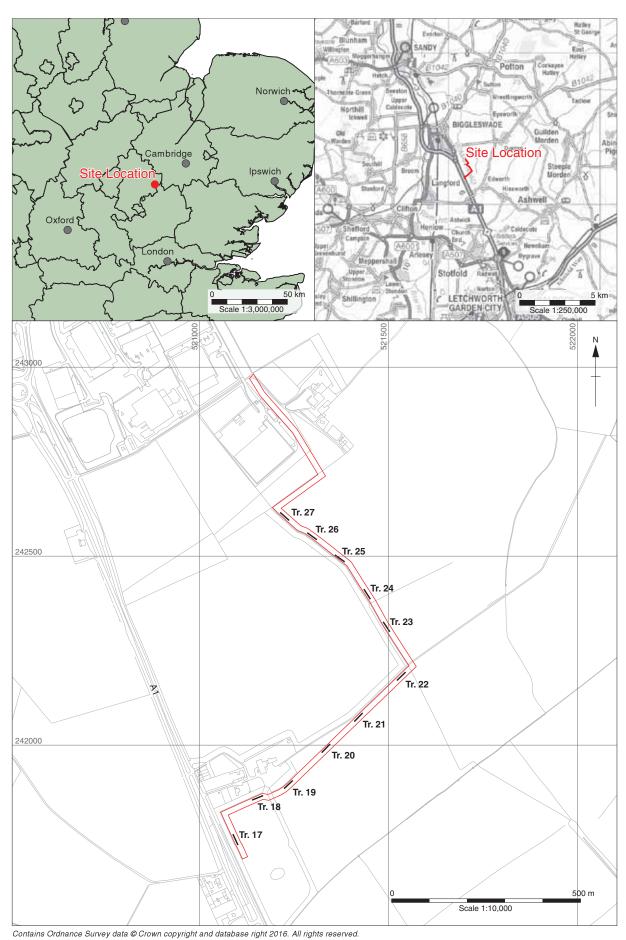
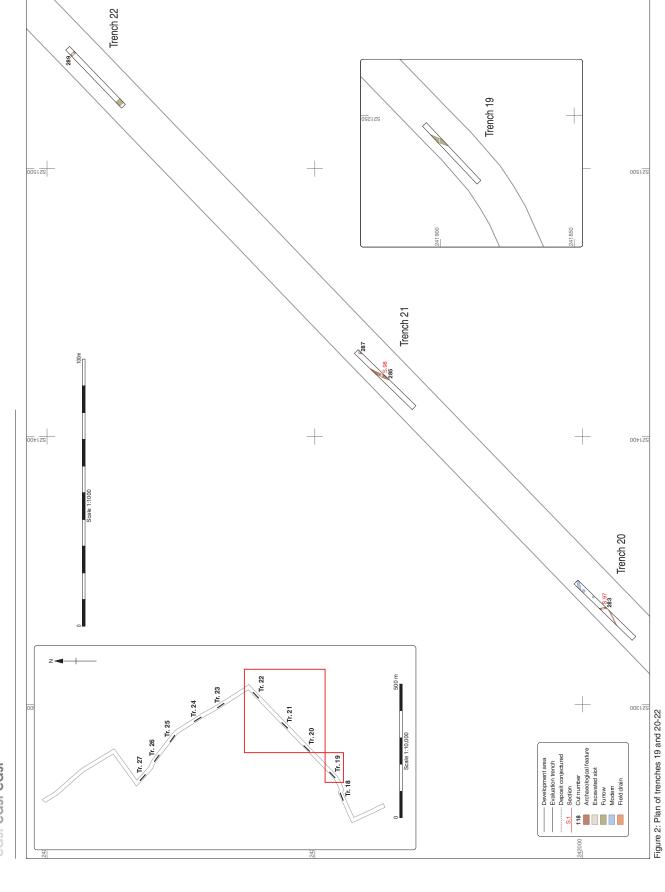


Figure 1: Site location showing archaeological trenches (black) in development area (red)



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Figure 3: Plan of trenches 23-26



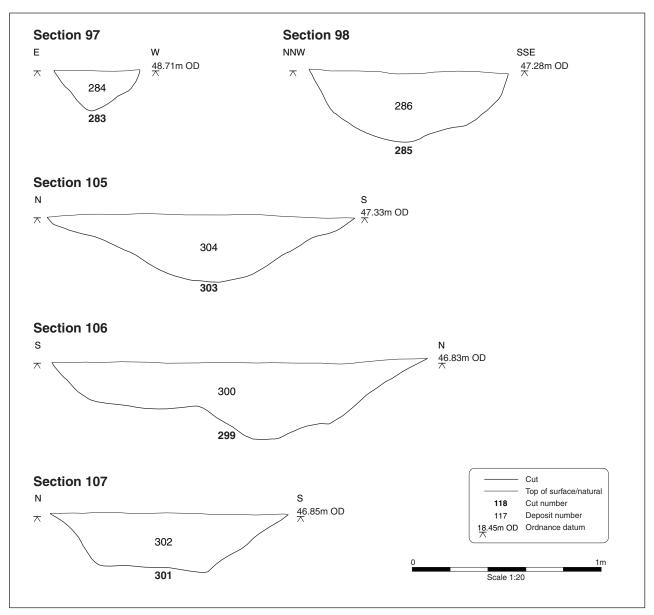


Figure 4: Selected sections

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Plate 1: Ditch 285, looking north



Plate 2: Trench 25, looking south-east





Plate 3: Ditch 303, looking north-east



Plate 4: Ditch 299, looking north-east





Plate 5: Trench 27, looking south-east

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