LINDSEY ARCHAEOLOGICAL SERVICES

Wainfleet All Saints

Residential Development off St. John's Street

Archaeological Watching Brief

NGR: TF 4985 5875
Site Code: WFJ 95
LCNCC Museum Accn. No. 203.95
ELDC Planning Application No. S/194/2126/94

prepared for Hugh Bourn Developments

LAS Report No. 286

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Lincolnshire County Council Archaeology Section

3 O. MAR 98

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Wainfleet All Saints: Watching Brief during Groundworks off St. John's Street

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Summary

Medieval pottery, ditches, pits and metalled areas were identified during groundworks close to the former Magdalen College School. None of these features necessarily relate to the 15th century school. No structural remains were revealed. Trenching was probably too shallow to disturb any early saltern remains which may be present.

Introduction

Lindsey Archaeological Services (LAS) was commissioned by Hugh Bourn Developments in October 1995 to conduct a watching brief during the mechanical excavation of house footings, an access road and service trenches on a c. 1.2ha. plot off St. John's Street, Wainfleet (Figs. 1 and 2; Pls. 1 and 2). The development included alteration of existing buildings on the plot and the construction of 4 houses and associated garages.

The watching brief was required to satisfy Condition 2 of East Lindsey District Council's full planning permission S/194/2126/94 dated 16th June 1995. This had initially required a full field evaluation for which a brief was prepared by the Archaeology Section of Lincolnshire County Council in July 1995. The requirement was subsequently revised to a watching brief and LAS prepared a specification dated 9th October 1995.

The development plot is bounded by a railway to the south, St. John's Street to the west, a pasture field to the east and the grounds of the former Magdalen College School to the north. The watercourse of Wainfleet Haven (also known as Steeping River) borders the railway.

Mechanical excavations for the access road, trenches for new services and the foundation trenches of house plot 4 were monitored between January 1996 and April 7th 1997; 5 visits were made. Plots 1-3 were created from an existing building. House plots 5 and 6 were not monitored. In advance of construction of garages beside 5 and 6 in March 1998 the Assistant County Archaeological Officer was consulted by LAS and determined that the watching brief could be ended in the light of the evidence of disturbed post-medieval deposits already recorded.

Archaeological Background

Wainfleet All Saints was a port of considerable economic importance by the 13th century until silting of the haven resulted in its present position 4km inland. The extent of the medieval town has not been fully established.

The settlement's position close to the coast was exploited by the use of saltpans (recorded in the 1086 Domesday Survey); some particularly well preserved saltpan earthworks are located in Wainfleet St. Mary, 1km south of the town.

Magdalen College School was founded in 1484 by William of Wayneflete, Lord Chancellor to Henry VI and Bishop of Winchester. The school was established (together with a school in Oxford) to provide scholars for Magdalen College, Oxford (Wales and White 1981). The surviving 15th century brick structure is a Scheduled Ancient Monument (Lincs. 321). Brick use at this date was restricted to a small group of wealthy and powerful landowners and the school building used a range of new skills; the doors, windows and spiral staircase used specially cut and moulded bricks. It is probable that the bricks were made locally, despite a tradition which claims they were brought from Ely. One of the aims of the watching brief was to identify, and preserve or record, any structural remains of associated buildings which may have extended beyond the present grounds.

The development plot lies within Wainfleet Conservation Area.

The Watching Brief

New Sewer Trench

The 0.6m wide trench for a new sewer serving the development was mechanically excavated along a similar alignment to the existing service, leading NW-SE from St. John's Street. This area was monitored in late January 1996.

The sequence of soil deposits observed over the western part of the development consisted of areas of recent tarmac surface 2 over a layer of brick rubble and tile 3. This demolition spread containing a piece of 18th-19th century clay tobacco pipe sealed a thick layer of dark brown silt 4, up to about 0.5m thick and containing coal fragments together with a cattle bone with knife chopping marks. This layer probably represents a post-medieval topsoil or ploughed soil horizon, although the thickness of the deposit may denote some other form of reworking or land raising (Pl. 3). Elsewhere on the site this topsoil deposit was numbered 11. It overlies lighter brown silt 39, probably also part of the same medieval or earlier flood deposit but which produced no visible sign of archaeological material.

Road Trench (Pl. 4)

Part of a small feature **8** thought to be a pit was recorded in the west-facing section of the trench cut for the access road for the development (Pls. 5-7). The 2.4m wide cut had gently sloping sides and a rounded base and survived to a depth of about 0.2m. The base had been lined with a single layer of orange/red bricks **15**. The dimensions of these bricks varied from 225x100x58mm to 220x105x72mm, and may have been of 17th or 18th century date. The overlying dark brown silty clay loam fill **14** produced four late-17th - mid-18th century pottery sherds, a fragment of an iron mounting, and six animal bone fragments (cattle, dog, chicken and sheep). The function

of this feature was not established; it had been truncated by the post-medieval topsoil layer 11.

Feature 9 appeared to be linear but may have been part of a pit (Pl. 8). It was recorded as over 2m wide north-south, and was at least 0.5m deep where it was exposed in a trench cut for a roadside drain close to St. John's Street. It contained fill 10, a dark grey-brown clay silt with charcoal flecks and stones. Finds consisted of sixteen mid-16th-mid-17th century pottery sherds, two undiagnostic iron fragments eighteen animal bone fragments (cattle, chicken, horse, sheep, pig) as well as a fish bone.

Layer 11 was seen at the southern end of the access road trench, where about 6m x 3m was exposed (Pl. 9). It was a thin dark brown clay silt loam with frequent fragments of charcoal and coal. Five late-17th - mid 18th century pottery sherds, a ridge tile fragment, two pieces of animal bone (cattle and sheep), one piece of medieval window glass and a later fragment, and two pieces of mid-17th/18th century clay tobacco pipe were recovered. This seems to have been a buried post-medieval topsoil layer, recorded elsewhere on the site as 4.

A concentration of animal bones 13, probably from burial of a dog, was identified 1m x 0.8m in area within 11 (Pl. 10). Not all the bones were collected. An overfired malformed brick was also recovered together with two late-15th/mid-18th century pottery sherds; the brick may have been shaped or worn to its semi-circular shape.

Beneath 11 was a dark orange-brown sandy clay layer 12, incorporating charcoal and coal fragments. Two medieval or post-medieval pottery sherds of Toynton-Bolingbroke type were found, together with four pieces of animal bone (cattle and sheep), brick and glass. This was thought to represent a zone of contamination from the overlying topsoil.

A shallow hollow 16 in the surface of layer 12, contained fill 17 (a brown silt loam which produced one mid-18th/19th century pottery sherd, a broken iron nail and a fragment of medieval window glass. A single fragment of sheep/goat bone was found. The hollow measured 0.5m W-E x 0.3m N-S, and was 0.05m deep. The feature had probably been truncated by later cultivation.

Northern Drain Slot

In the centre of the access road close to St. John's Street, the steeply sloping eastern edge of a deep pit 19, probably over 1.5m diameter, was seen at the base of the drain trench (Pl. 11). It had been cut by 18, a large pit with a gently sloping western edge. Its fill was dark brown silt, from which two cattle bones were found. The backfilled pit 18 was sealed by post-medieval topsoil layer 4.

Dark brown silt 20 survived at intervals between modern drain disturbances, overlain by post-medieval topsoil layer 4. The silt was interpreted as the fill of north-south aligned ditch 21, 2m wide at the base of the drain trench at its SW

end (Pl. 12). Three mid-16th/mid-18th century pottery sherds and a fragment of late-17th/mid-18th century clay tobacco pipe were found in **20**.

A second fill 27 within ditch 21 was orange-brown sandy silt mixed with darker material. It may have been part of an upcast bank of 21. Interpretation was affected by the considerable disturbance caused by existing modern drains. A narrow north-south aligned gully 22, either earlier or contemporary with 21, was observed on its north side. Its fill contained two bones, pig and sheep, with butchery marks.

Sewer Trench

The base of a gully 23 with sloping sides and a rounded base was found cut into orange brown clay silt 39 12m from St. John's Street. The surviving depth was 0.25m and it had been truncated at a width of 0.55m. The fill 1, a brown clayey silt containing cattle bone, was similar to layer 4 which sealed it (Pl. 13).

Part of a possible pit **25** was seen south of **24** (Pl. 14). The extent of this feature was not established; it was at least 0.4m wide (possibly considerably wider) and about 0.5m deep. It contained fills **7** (grey-brown sandy silt upper fill, with 25 sherds of late-17th/mid 18th century pottery, and four cattle and sheep bones some of which had chopping marks) and **26** (0.1m thick layer of ash with coal and charcoal fragments at the base) (Pl. 15).

A deep ditch or pit **29** had removed much of **25** (Pl. 14). Only the eastern edge of **29** was identified, sloping at 45° below the base of the trench; photographs indicate that it was at least 2m wide. It had been backfilled with 0.5m of light brown silt **5** with very few stones, initially interpreted as a naturally formed deposit. A thin layer of charcoal and coal fragments at the base of **5** separated it from the lower fill **28**, an orange-brown silt.

Part of **29** had been removed by gully **24**. This was 1.75m wide, 0.5m deep and filled by **6**, dark brown clayey silt, which produced six sherds of mid-16th/late 17th century pottery and an apparently intrusive modern tin opener.

Plot 4

The excavated footings for this plot were inspected on April 7th 1997. The depth of the trenches varied from 0.5m at the eastern side of the plot to 1.2m at the SW corner where deeper pit fill had been removed and the hole backfilled with concrete.

At the centre of the southern trench, the modern topsoil with brick rubble 30 extended 0.55m to the trench base. China fragments were present to 0.5m. This disturbance was probably part of a small brick-sided feature seen to the north, thought to be a post-medieval or modern cess pit.

The SW corner of the house footings had been excavated to a greater depth and then backfilled with concrete below 0.7m when the moist backfill of a large pit 31 had been encountered (Pls. 16 and 17). The extent of this pit

could not be established but it appeared to be at least 1.3m NE-SW, over 1.2m NW-SE and its base was over 1.3m below the modern ground surface.

The deposits seen in the trench face consisted of 0.45m of mixed dark soil with brick rubble (probably modern levelling material with topsoil) over the 0.15m thick band of yellow silt seen elsewhere on this house plot (Pl. 18). A 0.33m thick dark brown silt deposit with infrequent charcoal flecks probably represented the final fill of the pit; this overlay a thicker yellow silt fill which contained much charcoal, burnt soil and flecks of fired clay or daub.

Three glazed sherds of pottery, a fragment of fired clay and a small brick fragment were recovered from the earliest visible fill. The feature was interpreted as a rubbish pit probably of mid-16th - mid-17th century date but possibly later.

North of pit 31, in the centre of the front footing trench, a modern levelling deposit sealed a spread of white mortar, 0.02m thick 32. Below this was a layer of light brown silt mixed with mortar fragments. The lowest exposed layer was a brown silt at least 0.45m thick.

Between 28 and 32, in an internal wall trench, a 0.4m thick layer of dark mixed soil and rubble covered 0.05m of yellow silt 33. Beneath this was a brown silt deposit.

At the centre of the northern trench, the modern levelling layer sealed a dark brown silt layer **34** 0.25m thick, possibly a buried topsoil. This lay above light brown silt which appeared undisturbed.

In the NE corner of the foundation trench, several modern yard surfaces were present to a depth of 0.25m. Below these was an iron-panned gravel spread **35** 0.08m thick, probably representing an earlier metalled yard surface (Pl. 19). It had been laid over a 0.2m thick layer of light brown silt containing charcoal flecks, which sealed the undisturbed light brown silt deposit.

An area of gravel **36** was seen in the trench faces between **33** and **35**, sealed by modern deposits and the thin gravel spread seen at **35** (Pl. 19). It was 0.3m thick and up to 2m north-south. Two sherds of mid-18th-19th century pottery were found in this deposit. Despite its appearance as a metalled path, it was not seen in other trenches and was probably an isolated metalled area of yard.

The rear foundation trench was 0.5m deep. The 0.35m thick modern topsoil layer (with brick rubble) sealed a yellow silt deposit **37**, 0.15m thick, beneath which was brown silt which contained small fragments of brick.

To the west of **37**, the trench was 0.7m deep and exhibited the same deposits. A 0.06m thick layer of black loam with mortar fragments **38** was noted between the yellow silt and the brown silt; no dating material was seen in the loam.

A light brown silt deposit 39 with no visible archaeological inclusions, which underlies topsoil deposits 4 and 11 but is probably essentially the same material, was interpreted as a natural deposit introduced during an inundation episode.

Conclusion

Very little medieval pottery was found on the site. At the eastern edge of the area, the trenches for Plot 4 showed that the earliest exposed soil was light brown silt. This contained no trace of human activity and probably represents naturally deposited marine flood silts. This deposit may have covered earlier occupation remains.

The upper levels of the flood silt had been reworked with the consequent incorporation of charcoal. There was no trace of plough furrows.

The deposition of the flood silt pre-dated pit 31, which produced pottery no earlier than mid/late 15th century, and probably mid-16th to mid- 18th century. After this fell out of use as a rubbish pit (probably by the late 18th century) a layer of yellow silt formed or was spread across the area. This may be evidence for a further phase of flooding of this site.

The shaped or worn brick found in **13** was found in association with material dating from the late 15th to mid 18th centuries and may be construction or repair material spread from the adjacent College School, built in 1484.

Acknowledgements

Site plans and access to the site were arranged through Hugh Bourn Developments, and particular thanks are due to David Ingamells.

LAS would also like to thank the Lincolnshire County Archaeology Section, especially Ian George (former Archaeological Officer) and Jim Bonnor (Archaeological Officer), Mark Bennet (SMR Officer) and Sarah Grundy (Assistant SMR Officer) for their assistance during this watching brief.

Fieldwork for this project was conducted by Naomi Field, Chris Taylor and the author. The archive has been prepared by Chris Taylor and Mick McDaid. Pottery was identified by Jane Young. Illustrations were prepared by Mick McDaid.

Naomi Field offered assistance and comment on this report, which was collated and produced by Jane Frost.

Geoff Tann Lindsey Archaeological Services 27th March 1998

References

Pevsner, N. and Harris, J. 1964 The Buildings of England: Lincolnshire.

Wales, D. and White. A. 1981 *Magdalen College School, Wainfleet* (Lincolnshire Museums Information Sheet [Archaeology Series] 22.

Archive Summary

Developer's plans, annotated

Photographs: colour prints, LAS Film nos. 96/4 11-22; 96/10/6-24; 97/14/00-6

Specialists' archive lists

Finds: registered finds, pottery, brick and tile, animal bone, shell

Brick graph by M. Clark

Correspondence

Post-Roman Pottery Archive List (J. Young)

POST-ROMAN POTTERY ARCHIVE: WFJ95 WARE TYPES BY CONTEXT

Context	Ware	Sherds	Form	Comments
06	TOYII	1	JUG/CISTERN	HANDLE
06	GRE	1	HOLOW	BS
06	DUTR	1	JAR/PIPKIN	BS
06	FREC	1	JUG	BASE
06	BEAG	2	JUG	? ID;LARGE FRAG
07	STSL	1	DISH;PRESS MOULD	TAN & BROWN DEC
07	STSL	1	HOLLOW	TRAILED DEC
07	STSL	1	HOLLOW	-
07	SLIP	2	HOLLOW	BASE;SOOT;OR MY
07	MEDLOC	1	JUG	RIM
07	CIST	1	CUP	BS
07	CIST	1	CUP	BS;REVRS DEC
07	TB	1	?	MED OR EARLY P-M
07	TB	1	?	BASE;16/17TH
07	TB	1	?	BS
07	TB	1	?	BS
07	TB	1	JUG/HANDLED JAR	18TH
07	RGRE	2	HOLLOW	-
07	GRE	2	JAR	RIM;BOLINGBROKE
07	PMLOC	1	JAR	RIM
07	GRE	1	HOLLOW	KIIVI
07	GRE	1	?	
07	GRE	1	HOLLOW;SMALL	_
07	GRE	3	HOLLOW	INT DEP
07	TB	1	BOWL	RIM
10	PMLOC	1	JUG/JAR	UNDERFIRED;SPL GLZI
10	PMLOC	5	CISTERN	RIM & BS;FABRIC K
10	FREC	1	JUG	KIWI & BS,FABRIC R
10	BEAG		?	
10	TB	1		?? ID
	TB	1	BOWL	RIM;SOOT EXT
10		1	JUG	-
10	TB	1	JUG	-
10	TB	1	JUG	-
10	TB	1	JUG	-
10	TB	1	?	-
10	TB	1	?	-
10	TB	1	?	-
11	GRE	1	JAR	RIM
11	SLIP	1	CUP/CHAMBER	HANDLE
11	TB	1	?	<u>=</u>
11	TB	1	BOWL	RIM
11	TB	1	BOWL	BASE;SOOT
12	TB	1	?	OR TOY
12	TB	1	?	OR TOY
13	TB	1	BOWL	RIM;INT GLZE
13	TB	1	JUG	-
13	TB	1	JUG	INT DEP
14	STMO	1	MUG	

14	TB	1	JUG	RIM
14	TB	1	JUG	BS
14	TB	1	JUG	BS
17	CRMWARE	1	-	? DATE
20	GRE	1	H0LLOW	INT DEP
20	FREC	1	JUG	BEARD
20	TB	1	JUG/CISTERN	-
31	GRE	1	JAR	INT SOOT/CARB DEP
31	RGRE	1	HOLLOW	-
31	TB	1	JUG	THU BASE; SOOT ON BASE
36	GRE	1	HOLLOW	18TH
36	BS	1	-	MACHINE DEC

POST-ROMAN POTTERY ARCHIVE: WFJ95 HORIZON DATING

Context	Earliest horizon	Latest horizon	Probable horizon	Dating
03	PMH1	ЕМН	-	Post-medieval or modern DATING ON BRICK ONLY
06	PMH3	PMH6	-	mid 16th to mid/late17th
07	PMH7	PMH8	-	late 17th to mid 18th
10	PMH3	PMH5	-	mid 16th to mid 17th
11	PMH7	PMH8	-	late 17th to mid 18th
12	MH6 OR MH10	MH8 OR PMH8	-	medieval or post-medieval
13	MH10	PMH8	-	late 15th to mid 18th
14	PMH7	PMH8	-	late 17th to mid 18th
17	PMH9	EMH	-	mid 18th to 19th
20	PMH3	PMH8	-	mid 16th to mid 18th
31	PMH3	PMH8	-	mid 16th to mid 18th
36	РМН8	EMH	5	mid 18th to 19th

TILE ARCHIVE: WFJ95 TILE TYPES BY CONTEXT

Context	Form	Frags	Comments
03	BRK	1	6X?X?;FINE FABRIC
03	BRK	1	FRAG
10	BRK	3	FRAGS
11	BRK	5	
11	RID	1	PMED
13	BRK	1	V ODD; SHAPED OR WORN TO SEMI CIRCLE
31	?	1	BRK/BAKED CLAY

Glossary of Fabric Codes

Toyll Toynton All Saints (Kiln 3): mid 15th/mid 16th centuries Gre glazed red earthenwares: mid 16th/late 18th centuries

Dutr Low Countries red earthenware: mid 14th - late 17th centuries
Frec Frechen/Cologne stoneware: mid 16th - mid 18th centuries
Beag Beauvais green-glazed: ?late 15th/mid-late 16th centuries
Stsl Staffordshire slipware: mid 17th - mid 18th centuries

Slip slipwares: early 17th/20th centuries

Medloc medieval, local origin: early 13th/late 15th centuries Cist Cistercian-type wares: mid 15th/late 17th centuries

TB Toynton All Saints/ Bolingbroke kilns: mid 15th/mid 18th centuries Rgre reduced glazed red earthenwares: mid 16th/late 18th centuries

Pmloc Post-medieval local fabrics

Stmo Staffordshire mottled ware: mid 17th - mid 18th centuries

Bs Brown stoneware: late 17th century - modern Crmware Creamware: mid 18th -20th centuries

Registered Finds Archive List (Jen Mann)

Registered Finds

Context	Finds No	Material	Object	Comments
17	1	GLAS	WIND	MED;GROZX1
11	2	GLAS	WIND	LMED-PMED;
11	3	GLAS	WIND	MED;GROZX1
3	4	CERA	PIPE	PMED-MOD;18-19;DIS
20	5	CERA	PIPE	PMED;17-E18;DIS
11	6	CERA	PIPE	PMED;M17-18;DIS
11	7	CERA	PIPE	PMED;L17-18;DIS
14	8	IRON		MOUN/FITT (ROVE SHAP)
6	9	IRON	-	MOD;TIN OPENER
10	10	IRON	-	RIVE SHEET
10	11	IRON	-	NAIL?
17	12	IRON	-	X2 (= 1) NAIL?

Animal Bone and Shell Archive Catalogue

(James Rackham)

Archive list of marine shell remains

site	context	identification
WFJ95	11 Oy:	ster, fragment of lower valve
WFJ95	14 Wh	elk, Buccinum undatum
WFJ95	18 Oy	ster, lower valve

St Johns Street, Wainfleet All Saints - WFJ95

Animal bone and shell

Archive catalogues were produced from the bone and shell from the watching brief at Wainfleet All Saints. These are attached.

The bone remains included fragments of cattle, horse, sheep, pig, chicken and a part of the skeleton of a large dog in context 13. One large fish bone was recovered but has not been identified. The bones indicate that the domestic species are large animals of a size normally found in post-medieval layers. Three shells were collected included oyster and whelk, both food species

Fragment numbers of identified bones and shells

Horse	1
Cattle	1
Cattle size	7
Sheep or goat	15
Sheep	1
Sheep size	3
Pig	1
Dog	9
Chicken	2
Unidentified	4
Unidentified fish	1
Whelk	1
Oyster	2

ARCHIVE CATALOGUE OF ANIMAL BONE FROM

St Johns Street, Wainfleet All Saints - WFJ95 LCCM 203.95

D.James Rackham
The Environmental Archaeology Consultancy

Archive catalogue of animal bone from St John Street, Wainfleet All Saints

site -	context	species	bone	no.	side.	fusion	zone	butchery	gnawing	toothwear	measurement	comments
WFJ95	1	BOS	MAN	1	R		123					SYMPHYSEAL REGION OF HORI RAMUS
WFJ95	4	BOS	MTT	1	L	DF	345	CH			Bd-65.3 Dd-36.9	DISTAL HALF-MIDSHAFT HEAVILY
												CHOPPED AND DISTAL EPI CHOPPED
WFJ95	7	BOS	INN	1	L	EN	7					ISCHIUM-POROUS-ACET UNFUSED
WFJ95	7	BOS	MTT	1	R		12	CH				PROXIMAL HALF-MIDSHAFT CHOPPED
WFJ95	7	BOS	TIB	1	R		7	CH .	DG			DISTAL SHAFT-POROUS-SMALL-
												JUVENILE-END CHEWED OFF-SHAFT
W. 17		P AN										CHOPPED
WFJ95	7	OVCA	MAN	1	L		4578			I11J8K2		3 PIECES-LARGE-POST-MED?-
		L. P.D.										ASCENDING RAMUS
WFJ95	10	BOS	C23	1	W							
WFJ95	10	BOS	TIB	1	F							MIDSHAFT FRAG
WFJ95	10	CHIK	TIB	1	R							MIDSHAFT-POROUS-IMMATURE
WFJ95	10	CSZ	CEV	1	L			CH				ANT AND POST ZYGA- LATERAL FRAG-
												CHOPPED AXIALLY AND DORS-
												VENTRAL
WFJ95	10	CSZ	MAN	1	F							LATERAL FRAG WITH FRAG ALVEOLI
WFJ95	10	CSZ	RIB	1	L			CH				MIDSHAFT-BOTH ENDS CHOPPED
WFJ95	10	CSZ	TRV	1	F			CH				FRAG WITH TRANSVERSE PROCESS
WFJ95	10	EQU	PH2	1	W	PF	12					DISTAL ARTIC ERODED
WFJ95	10	OVCA	FEM	1	R		4					DISTAL SHAFT FRAG
WFJ95	10	OVCA	HUM	1	L							PROXIMAL SHAFT FRAG
WFJ95	10	OVCA	MAN	1	L		4					CORONOID
WFJ95	10	OVCA	MAN	1	R		678			J3K0		LAMB- LARGE SPECIMEN
WFJ95	10	OVCA	MAN	1	R		78			F4G6H10I		HORIZONTAL RAMUS
AF.III										13J11K8		
WFJ95	10	OVCA	MTC	1	L		5		DG			SHAFT-BOTH ENDS CHEWED OFF
WFJ95	10	OVCA	SKL	1	R							ZYGOMATIC ARCH
WFJ95	10	OVCA	TIB	1	R		4					PROXIMAL MIDSHAFT
WFJ95	10	OVI	MTT	1	R							MIDSHAFT
WFJ95	10	SUS	SCP	1	L		4					BLADE AND SPINE FRAG- 2 PIECES
WFJ95	10	UNIF	UNI	1	F							FISH SPINE?
WFJ95	11	BOS	SKL	1	R		8					TEMPORAL FRAG WITH ARTIC FACET
WFJ95	11	OVCA	TIB	1	R	DF	456	СН			Bd-29.4 Dd-21.2	DISTAL END-SHAFT CHOPPED

site	context	species	bone	no.	side.	fusion	zone	butchery	gnawing	toothwear	measurement	comments
WFJ95	12	CSZ	UNI	1	F			-				INDET FRAGMENT
WFJ95	12	OVCA	MTC	1	F							DISTALSPLIT SHAFT FRAG
WFJ95	12	SSZ	RIB	1	R	PN	1					PROX END
WFJ95	12	SSZ	RIB	1	F							MIDSHAFT FRAG
WFJ95	13	BOS	RAD	1	L	PF	3	СН				PROX SHAFT-EPIPHYSIS CHOPPED THRU OBLIQUELY & SHAFT CHOPPED- 2 PIECES
WFJ95	13	CAN	AST	1	R		1				L-31.7	COMPLETE
WFJ95	13	CAN	CAL	1	L	PF	123				L-54.4	COMPLETE
WFJ95	13	CAN	CDV	1	W	CFAF						CAUDAL VERT
WFJ95	13	CAN	FEM	1	L	PF	13					PROX END AND SHAFT-PROX DAMAGED
WFJ95	13	CAN	INN	1	L	EF	2357					ILIAL & ISCHIAL SHAFT-MIN BREADTH=24.1 - 4 PIECES
WFJ95	13	CAN	MC3	1	R							PROX END AND SHAFT-SAME FOOT AS ABOVE
WFJ95	13	CAN	MC4	1	R							PROX END AND SHAFT
WFJ95	13	CAN	TAR	1	W							ALLMATERIALFROM ONE ANIMAL!
WFJ95	13	OVCA	LM3	1	L					K7		L=25.2
WFJ95	13	UNI	UNI	3	F							INDET
WFJ95	14	BOS	RIB	1	R	PF	1	CH				PROX END-SHAFT CHOPPED OFF
WFJ95	14	CAN	INN	1	R							ISCHIAL SHAFT FRAG-LARGE
WFJ95	14	CHIK	TIB	1	L	DF					Bd-15.7 Dd-15.9	DISTAL THIRDBONE
WFJ95	14	CSZ	LBF	1	F							SHAFT FRAG
WFJ95	14	OVCA	UM2	1	R					J14		
WFJ95	14	SSZ	RIB	1	R							PROX SHAFT-POROUS
WFJ95	17	OVCA	LM3	1	L					K8		
WFJ95	18	BOS	MTT	1	F							MIDSHAFT FRAG
WFJ95	18	CSZ	RIB	1	L							PROX SHAFT FRAG
WFJ95	22	OVCA	MTC	1	R		12	СН			Bp-29.3 SD-18.7	PROXIMAL HALF- VERY BROAD-RAM? END AND SHAFT CHOPPED
WFJ95	22	SUS	AST	1	L		1	S		***************************************		PROX HALF- DISTAL PART SAWN OFF

Key to codes used in the cataloguing of animal bones

SPECI	ES	BONE	SIDE	FUSION
BOS CSZ	cattle cattle size	SKL skull TEMP temporal	W - whole L - left side R - right side	Records the fused/unfused condition of the epiphyses P - proximal; D - distal; E - acetabulum; N - unfused; F - fused; C - cranial; A - posterior
SUS OVCA OVI SSZ EQU CER CAN MAN UNI CHIK GOOS	sheep or goat sheep sheep size horse red deer dog human unknown chicken goose, dom	FRNT frontal PET petrous PAR parietal OCIP occipital ZYG zygomatic MAN mandible MAX maxilla ATL atlas AXI axis CEV cervical vertebra TRV thoracic vertebra	wear as a gui C.Grigson and <i>Archaeologica</i>	es are those used in Grant, A. 1982 The use of tooth de to the age of domestic animals, in B.Wilson, S.Payne (eds) Ageing and sexing animal bones from l sites, 91-108. s follows in the tooth wear column: f ldpm2/dupm2 g ldpm3/dupm3
LEP UNB	hare indet bird	LMV lumbar vertebra SAC sacrum	N This dills	
MALL GULL FISH UNIB	duck, dom. gull sp. fish	CDV caudal vertebra SCP scapula HUM humerus		d the part of the bone present. ch zone on each bone is on page 2
UNIB UNIF GSZE BEAV CORV BUZZ	bird indet fish indet goose size beaver crow or rook buzzard	RAD radius MTC metacarpus MC1-4 metacarpus 1-4 INN innominate ILM ilium PUB pubis ISH ischium FEM femur TIB tibia AST astragalus CAL calcaneum MTT metatarsus MT1-4 metatarsus 1-4 PH1 1st phalanx PH2 2nd phalanx PH3 3rd phalanx PH3 3rd phalanx LM1-LM3 Lower molar 1 - molumum 1 - mol	A Guic Sites, ar 3 ar 3	easurements are those listed in A.Von den Driesch (1976) de to the Measurement of Animal Bones from Archaeological Peabody Museum Bulletin 1, Peabody Museum, Harvard, USA
		UPM1-UPM4 upper premol DLPM1-4 deciduous lower prei DUPM1-4 deciduous upper prei MNT mandibular tooth MXT maxillary tooth LBF long bone UNI unidentified STN sternum INC incisor TTH indet. tooth CHP carpo-metacarpus	molar 1-4	

ZONES - codes used to define zones on each bone

SKULL -1. paraoccipital process 2. occipal condyle 3. intercornual protuberance 4. external acoustic meatus 5. frontal sinus 6. ectorbitale 7. entorbitale 8. temporal articular facet 9. facial tuber 0. infraorbital foramen MANDIBLE MANDIBLE 1. medial facet of proximal articula 2. lateral facet of proximal articula 3. medial distal condyle, MC3 4. lateral distal condyle, MC4 5. anterior distal groove and forame 6. medial or lateral distal condyle 7. entorbitale 8. temporal articular facet 9. facial tuber 1. proximal epiphysis 2. distal articular facet 1. tuber coxae 2. tuber sacrale + scar 3. body of illium with dorso-medial 4. iliopubic eminence 4. coronoid process 5. condylar process 6. angle 7. body of ischium 7. body of ischium	ation, MC4
3. intercornual protuberance 4. external acoustic meatus 5. frontal sinus 6. ectorbitale 7. entorbitale 8. temporal articular facet 9. facial tuber 0. infraorbital foramen MANDIBLE 1. Symphyseal surface 2. diastema 3. lateral diastemal foramen INNOMINATE 1. tuber coxae 2. tuber sacrale + scar 3. body of illium with dorso-medial 3. lateral diastemal foramen 4. iliopubic eminence 4. coronoid process 5. condylar process 6. symphyseal branch of pubis	MATERIAL PROPERTY OF STATES
4. external acoustic meatus 5. frontal sinus 6. ectorbitale 7. entorbitale 8. temporal articular facet 9. facial tuber 10. infraorbital foramen MANDIBLE 1. Symphyseal surface 2. diastema 3. lateral diastemal foramen TINNOMINATE 1. tuber coxae 2. tuber sacrale + scar 3. body of illium with dorso-medial 3. lateral diastemal foramen 4. coronoid process 5. condylar process 6. symphyseal branch of pubis	en
5. frontal sinus 6. ectorbitale 7. entorbitale 8. temporal articular facet 9. facial tuber 1. Symphyseal surface 2. diastema 3. lateral diastemal foramen 4. coronoid process 5. anterior distal groove and foramen 6. medial or lateral distal condyle 7. proximal epiphysis 7. distal articular facet 7. tuber coxae 7. tuber sacrale + scar 7. tuber sacrale + scar 7. body of illium with dorso-medial 7. tiliopubic eminence 7. distal groove and foramen 8. medial or lateral distal condyle 9. distal articular facet 9. tuber sacrale + scar 9. body of illium with dorso-medial 9. diliopubic eminence 9. acetabular fossa 9. acetabular fossa 9. symphyseal branch of pubis	en.
6. ectorbitale 7. entorbitale 8. temporal articular facet 9. facial tuber 1. symphyseal surface 2. diastema 3. lateral diastemal foramen 4. coronoid process 5. condylar process 6. medial or lateral distal condyle 6. medial or lateral distal condyle 7. medial or lateral distal condy	en.
7. entorbitale 8. temporal articular facet 9. facial tuber 1. facet 1. Symphyseal surface 2. diastema 3. lateral diastemal foramen 4. coronoid process 5. condylar process FIRST PHALANX 1. proximal epiphysis 2. distal articular facet 1. tuber coxae 2. tuber sacrale + scar 3. body of illium with dorso-medial 4. iliopubic eminence 5. acetabular fossa 6. symphyseal branch of pubis	
8. temporal articular facet 9. facial tuber 2. distal articular facet 1. symphyseal surface 2. diastema 3. lateral diastemal foramen 4. coronoid process 5. condylar process FIRST PHALANX 1. proximal epiphysis 2. distal articular facet 1. tuber coxae 2. tuber sacrale + scar 3. body of illium with dorso-medial 4. iliopubic eminence 5. acetabular fossa 6. symphyseal branch of pubis	
9. facial tuber 0. infraorbital foramen INNOMINATE 1. tuber coxae 2. tuber sacrale + scar 2. diastema 3. lateral diastemal foramen 4. coronoid process 5. condylar process 6. symphyseal branch of pubis	
9. facial tuber 0. infraorbital foramen INNOMINATE 1. tuber coxae 2. tuber sacrale + scar 3. lateral diastemal foramen 4. coronoid process 5. condylar process 6. symphyseal branch of pubis	
0. infraorbital foramen INNOMINATE 1. tuber coxae 2. tuber sacrale + scar 3. body of illium with dorso-medial 3. lateral diastemal foramen 4. coronoid process 5. condylar process 6. symphyseal branch of pubis	
MANDIBLE 1. Symphyseal surface 2. diastema 3. lateral diastemal foramen 4. coronoid process 5. condylar process INNOMINATE 1. tuber coxae 2. tuber sacrale + scar 3. body of illium with dorso-medial 4. iliopubic eminence 5. acetabular fossa 6. symphyseal branch of pubis	
MANDIBLE 1. Symphyseal surface 2. diastema 3. body of illium with dorso-medial 3. lateral diastemal foramen 4. coronoid process 5. condylar process 6. symphyseal branch of pubis	
2. diastema 3. body of illium with dorso-medial 3. lateral diastemal foramen 4. coronoid process 5. condylar process 6. symphyseal branch of pubis	
3. lateral diastemal foramen 4. iliopubic eminence 4. coronoid process 5. acetabular fossa 5. condylar process 6. symphyseal branch of pubis	foramon
4. coronoid process 5. acetabular fossa 5. condylar process 6. symphyseal branch of pubis	Totallell
5. condylar process 6. symphyseal branch of pubis	
6 angle 7 body of isohium	
7. anterior dorsal acsending ramus posterior M3 8. ischial tuberosity	
8. mandibular foramen 9. depression for medial tendon of r	ectus femoris
VERTEBRA 1. spine FEMUR 1. head	
2. anterior epiphysis 2. trochanter major	
3. posterior epiphysis 3. trochanter minor	
4. centrum 4. supracondyloid fossa	
5. neural arch 5. distal medial condyle	
6. lateral distal condyle	
SCAPULA 1. supraglenoid tubercle 7. distal trochlea	
2. glenoid cavity 8. trochanter tertius	
3. origin of the distal spine	
4. tuber of spine TIBIA 1. proximal medial condyle	
5. posterior of neck with foramen 2. proximal lateral condyle	
6. cranial angle of blade 3. intercondylar eminence	
7. caudal angle of blade 4. proximal posterior nutrient foram	en
5. medial malleolus	30 160
HUMERUS 1. head 6. lateral aspect of distal articula	
2. greater tubercle 7. distal pre-epiphyseal portion of	the diaphysis
3. lesser tubercle	
4. intertuberal groove CALCANEUM 1. calcaneal tuber	
5. deltoid tuberosity 2. sustentaculum tali	
6. dorsal angle of olecranon fossa 3. processus anterior	
7. capitulum	
8. trochlea METATARSUS 1. medial facet of proximal artciula	tion, MT3.
2. lateral facet of proximal articul	
RADIUS 1. medial half of proximal epiphysis 3. medial distal condyle, MT3	TROUMSHIP COMMITTEE TO
2. lateral half of proximal epiphysis 4. lateral distal condyle, MT4	
3. posterior proximal ulna scar and foramen 5. anterior distal groove and foramen	n
4. medial half of distal epiphysis 6. medial or lateral distal condyle	11
5. lateral half of distal epiphysis	
6. distal shaft immediately above distal epiphysis	
ULNA 1. olecranon tuberosity	
2. trochlear notch- semilunaris	

Context Summary

4		Relationships	Area
1	Type fill	fill of 23, below 4	service trench
2	tarmac layer	above 3	service trench
3	rubble surface	below 2, above 4	service trench
	?topsoil	below 3, above 1, 6, 7, 10, 11,	00,7100 1.011011
4	пороси	13, 14, 22	service trench
5	fill	cut by 24; over 28, fill of 29	service trench
_	fill	fill of 24; below 4, above 24;	COLVICO LI CITOLI
6		same as 7?	service trench
-	fill	fill of 25; below 4, above 26;	,
7		same as 6?	service trench
8	pit	filled by 14, 15; below 15, cuts	access road
0		39	trench
9	pit		access road
3	•	filled by 10, cuts 39	trench
10	fill		access road
10		fill of 9, below 4	trench
11	occupation layer?	above 12, 14, below 4; same as	access road
• • •	-	4?	trench
12	layer		access road
		above 39, below 11	trench
13	occupation layer?		access road
		below 4, above 12; same as 11	trench
14	fill		access road
		fill of 8, below 11, above 15	trench
15	brick lining	511 - 5 O. h - 1 4 4 - 1 O	access road
		fill of 8; below 14, above 8	trench
16	small	5111 h 47. hl 47 40	access road
	pit/depression	filled by 17; below 17, cuts 12	trench
17	fill	fill of 16: bolow 4, above 16	access road
18	pit and fill	fill of 16; below 4, above 16 cuts 19, below 4?	trench service trench
19	pit and fill		
13	fill	cut by 18, cuts 39 fill of 21?; below 4; same as	service trench
20	1111	22?	service trench
21	ditch	filled by 20, 27; filled by 22?	service trench
22	fill	fill of 21?; below 4; same as 20	service trench
23	gully/ditch	filled by 1, cuts 39	
24		filled by 6; same as 25?. cuts 5	service trench
24	gully or pit		service trench
25	pit	filled by 7, 26; same as 24?; below 26; cuts 5	service trench
26	fill	fill of 25, below 7, above 25	
27	fill		service trench
28	fill	fill of 21; below 4; cut by 22?	service trench
-		fill of 29	service trench
29	pit	cuts 7; filled by 5, 28; below 28	service trench
30	brick-walled cess		DI-4.4
24	pit	cuts 44	Plot 4
31		filled by 48	Plot 4
32	mortar spread	200ma on 27; heless 40, and	Plot 4
33	yellow silt layer	?same as 37; below 40, seals 48?	Diot 4
34	2huriad tanasil	below 40	Plot 4
35	?buried topsoil	above 36	Plot 4
	yard surface		Plot 4
36	yard surface	below 35	Plot 4
37	yellow silt layer	?same as 33; below 40, ?seals	Dict 4
	black loam with	48; above 38	Plot 4
38		bolow 27	Diat 4
	mortar undisturbed	below 37	Plot 4
39		portions identified describ	entire
	alluvium	earliest identified deposit	development

Context Summary

	Type	Relationships	Area
40	levelling layer/topsoil	same as 4?; above 33, 34, 37 and 42	Plot 4
41	layer, gravel sprea	d below 40, above 44	Plot 4
42	layer	below 40, above 43, 46	Plot 4: 31, 33, 37, 38
43	layer	above 44, below 42	Plot 4, 38
44	layer	below 43, 47; above 45, 48; cut by 30	Plot 4
45	layer	below 44; same as 39?	Plot 4: 34, 35
46	layer, mortar spread	below 40, above 47	Plot 4: 32
47	layer	below 46, above 44	Plot 4
48	fill	fill of 31; below 44	Plot 4: 31

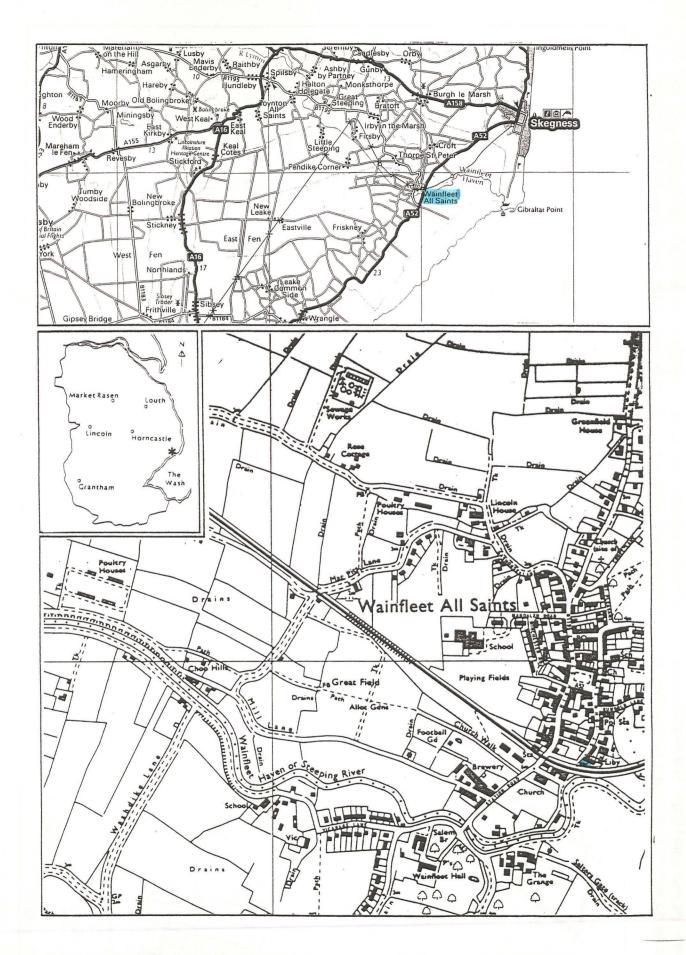


Fig. 1 Location of Wainfleet All Saints (based on the Ordnance Survey 1:10,000 map TF 45NE. Crown Copyright, reproduced with the permission of the Controller of HMSO. Licence No. AL 50424A.

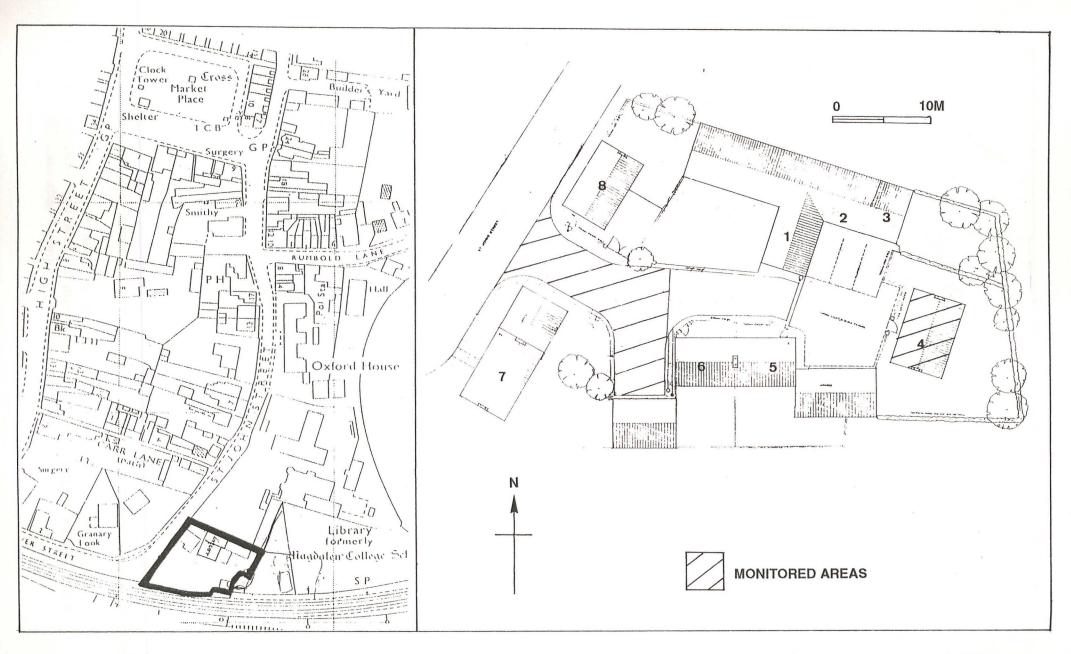


Fig. 2 Position and Layout of the development, St. John's Street, Wainfleet. Fig. 2a based on the Ordnance Survey 1:2,500 map. Crown Copyright, reproduced with the permission of the Controller of HMSO. Licence No. AL 50424A. Fig. 2b based on plan 609/5E (Alpha Design Partnership) supplied by the client, reproduced at reduced scale.

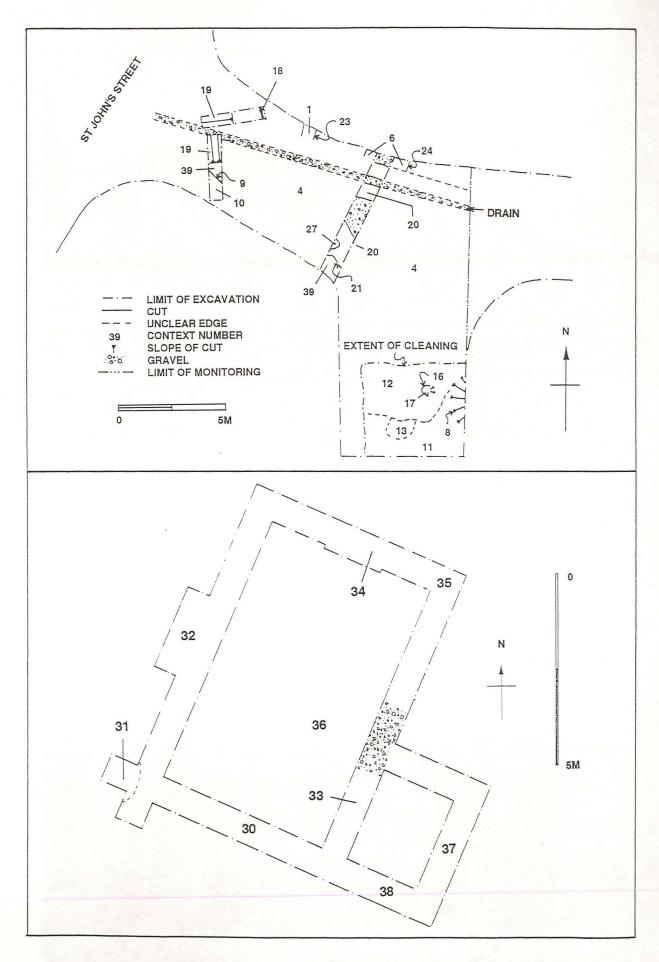


Fig. 3 Archaeological features observed during monitoring. Fig. 3a The Access Road (McDaid after Taylor and Field); Fig. 3b House Plot 4 (McDaid after Tann).

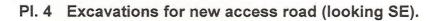


- PI. 1 The development site, showing the retained existing building and site conditions before development (looking east).
- PI. 2 Southern side of the development site, showing the adjacent railway line and low-lying farmland (looking SE from St. John's Street).





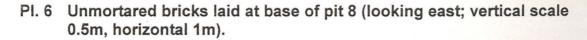
Pl. 3 New sewer trench: dark brown silt deposit 4 above mid brown flood silt 39.







PI. 5 Brick-lined pit 8 at the edge of the access road trench (looking SE, vertical scale 0.5m, horizontal 1m).





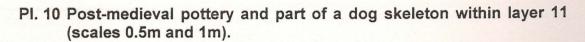


- PI. 7 Detail of bricks laid at base of 8 (looking south; scales 0.5m and 1m).
- PI. 8 Dark grey fill of ditch or pit 9 revealed in new drain trench (looking SW within access road trench).





Pl. 9 Layer 11 exposed in the access road trench (looking south).







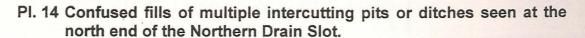
Pl. 11 Pits 18 (left) and 19 (right) close to St. John's Street frontage (looking SE; scales 0.5m and 1m).

Pl. 12 Dark fill of north-south aligned ditch 21 revealed in the Northern Drain Slot between existing modern drains (looking NE; scales 0.5m and 1m).





Pl. 13 Animal bones in dark brown fill 1 of gully 23, visible in the new sewer trench (scale 0.5m).







Pl. 15 Mixed dark soil deposits filling pits 24 (right), 25 (centre) and 29 (left); scale 0.5m.



Pl. 16 Location of pit 31, house plot 4 (looking NW to St. John's Street).

PI. 17 Pit 31 was seen in the trench face (centre right) after adjacent foundation trenches had been filled with concrete. The wider foundation where soft material was removed appears to indicate the extent of the pit. Looking SW.





Pl. 18 Deposits filling part of pit 31 visible in trench face (scale 1m; looking SW).

