Partners in UK offshore wind

MONA OFFSHORE WIND PROJECT

Environmental Statement

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F01

Image of an offshore wind farm

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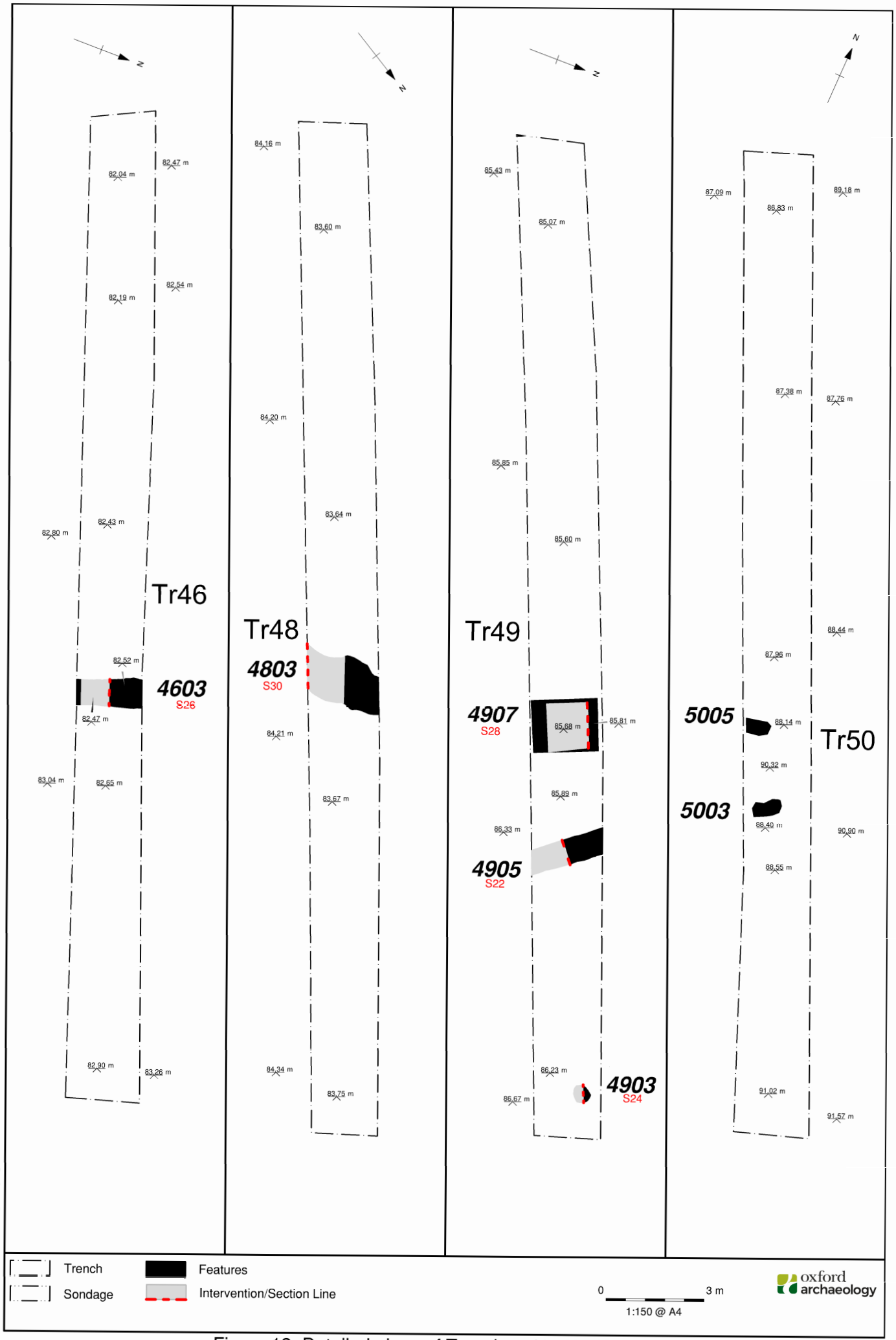

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Figure 13: Detailed plans of Trenches 46, 48, 49 and 50

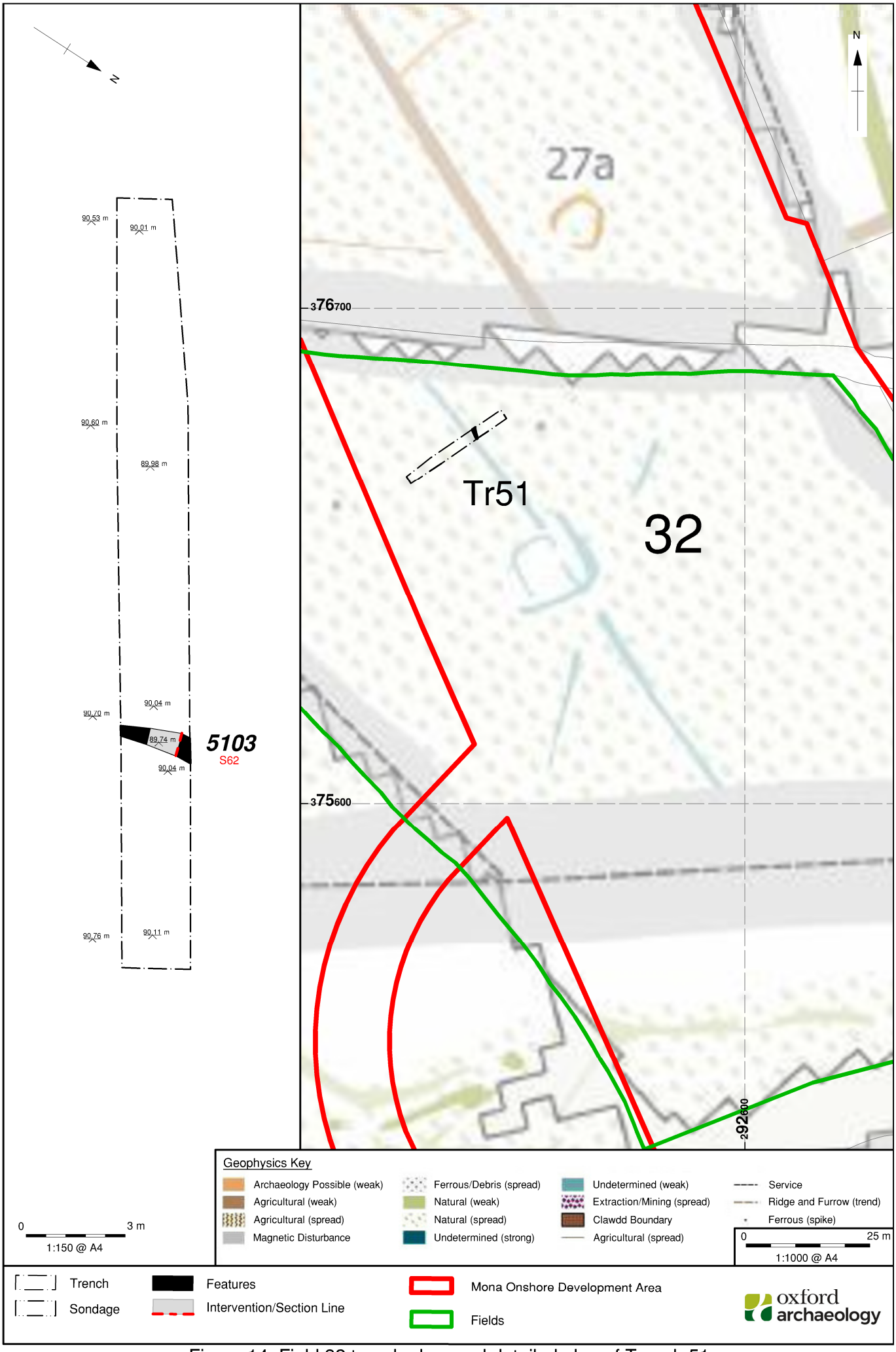

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Figure 14: Field 32 trench plan, and detailed plan of Trench 51

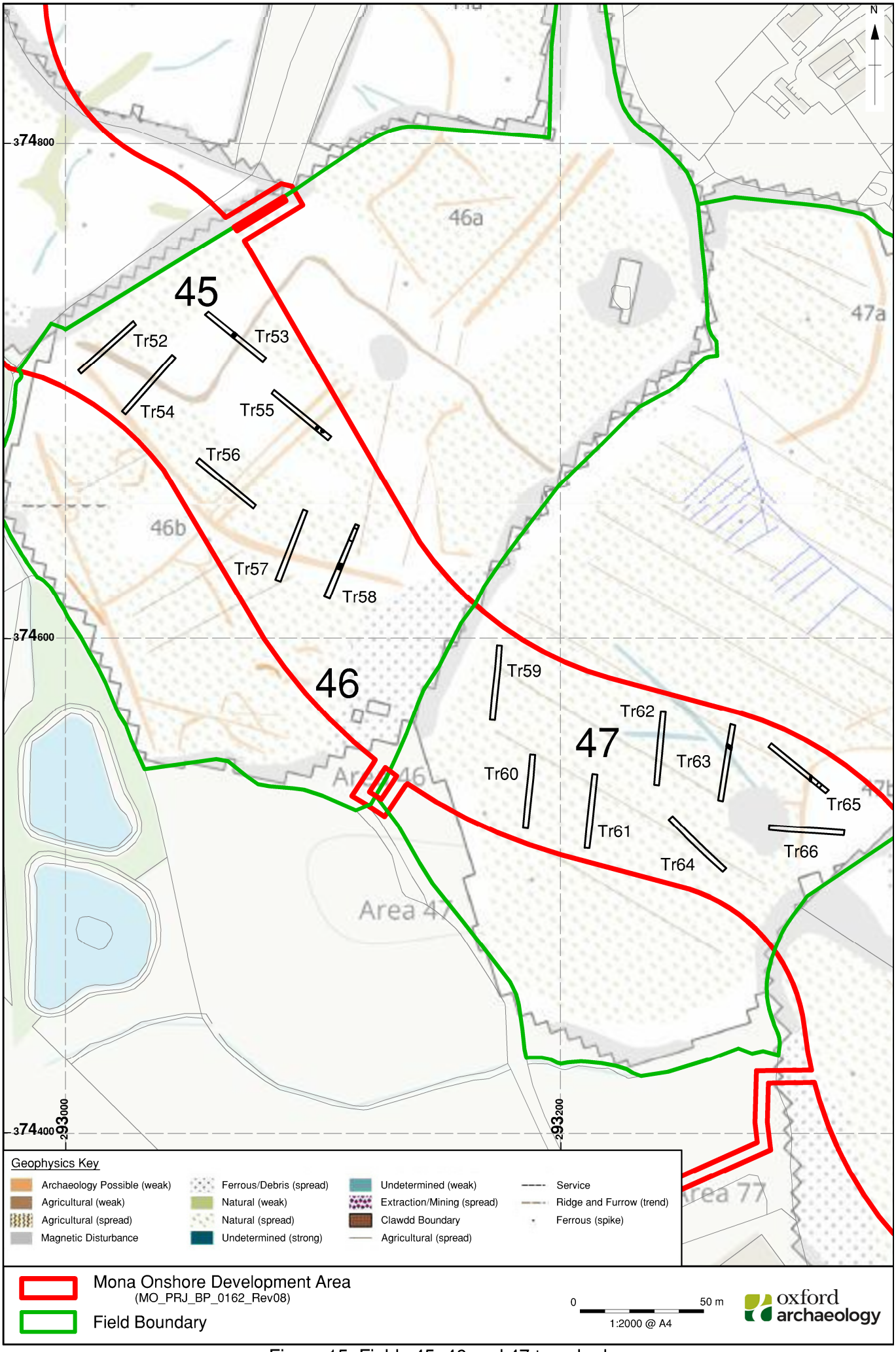

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Figure 15: Fields 45, 46 and 47 trench plan

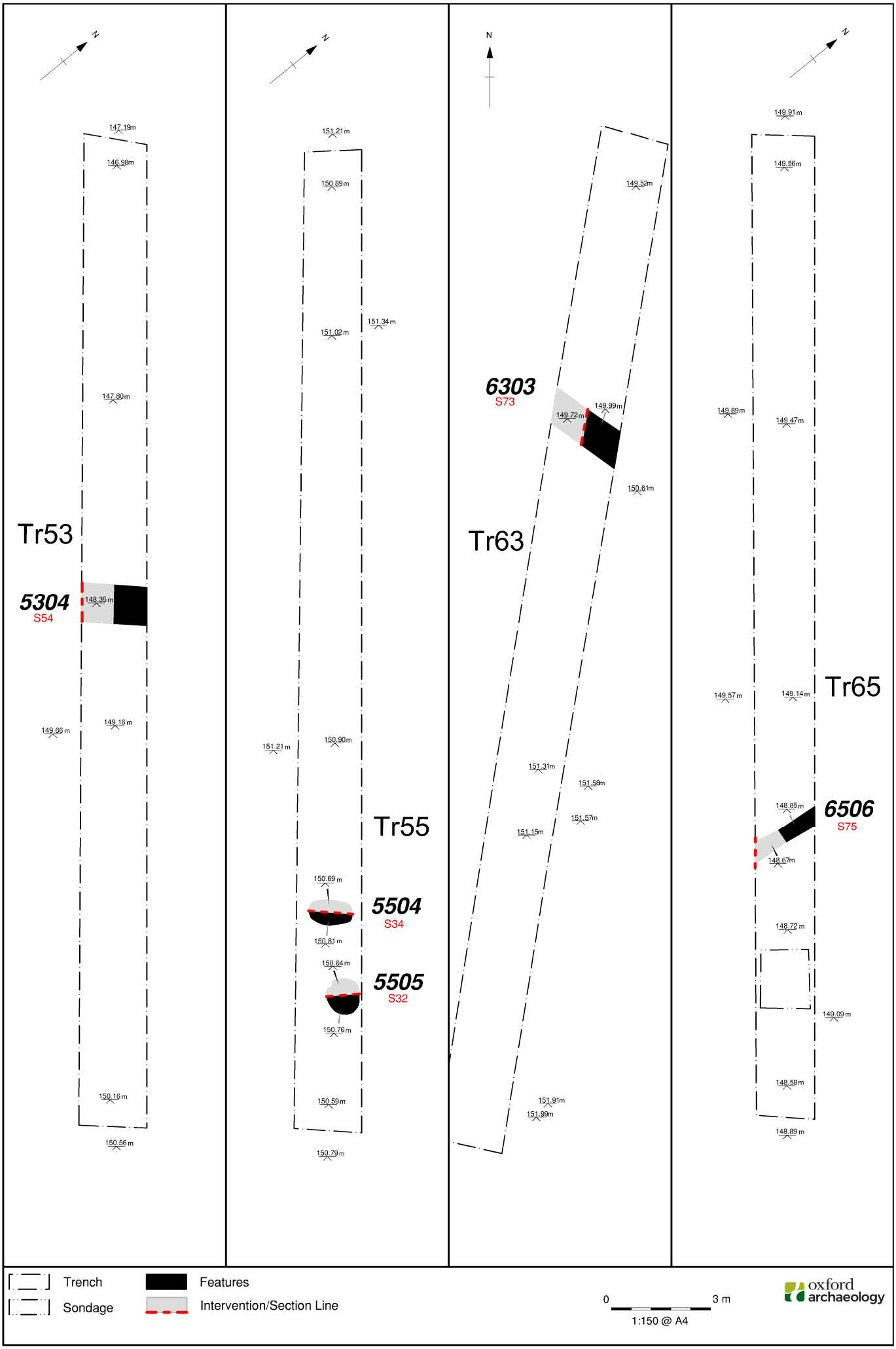

Figure 16: Detailed plans of Trenches 53, 55, 63 and 65

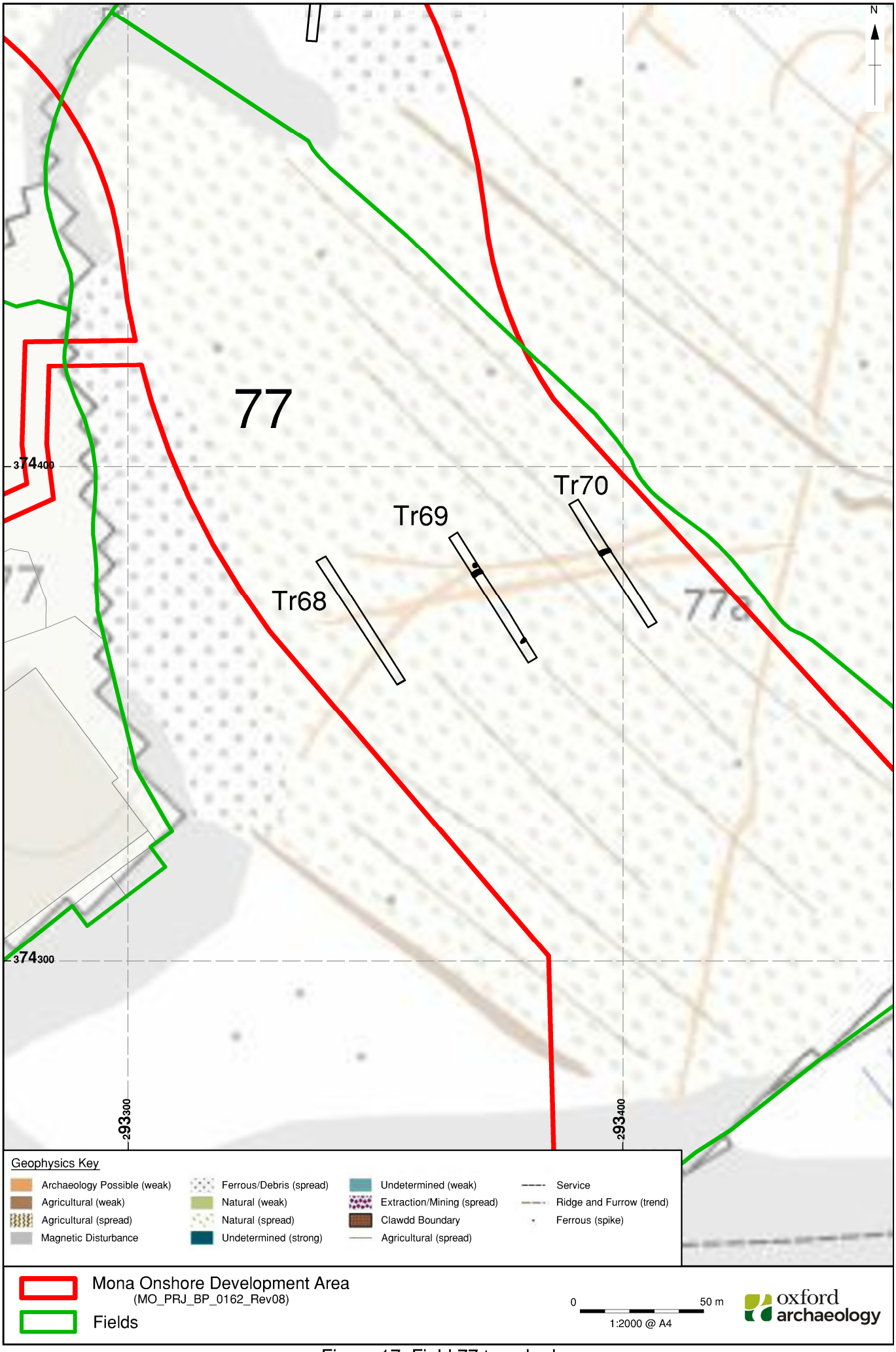

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Figure 17: Field 77 trench plan

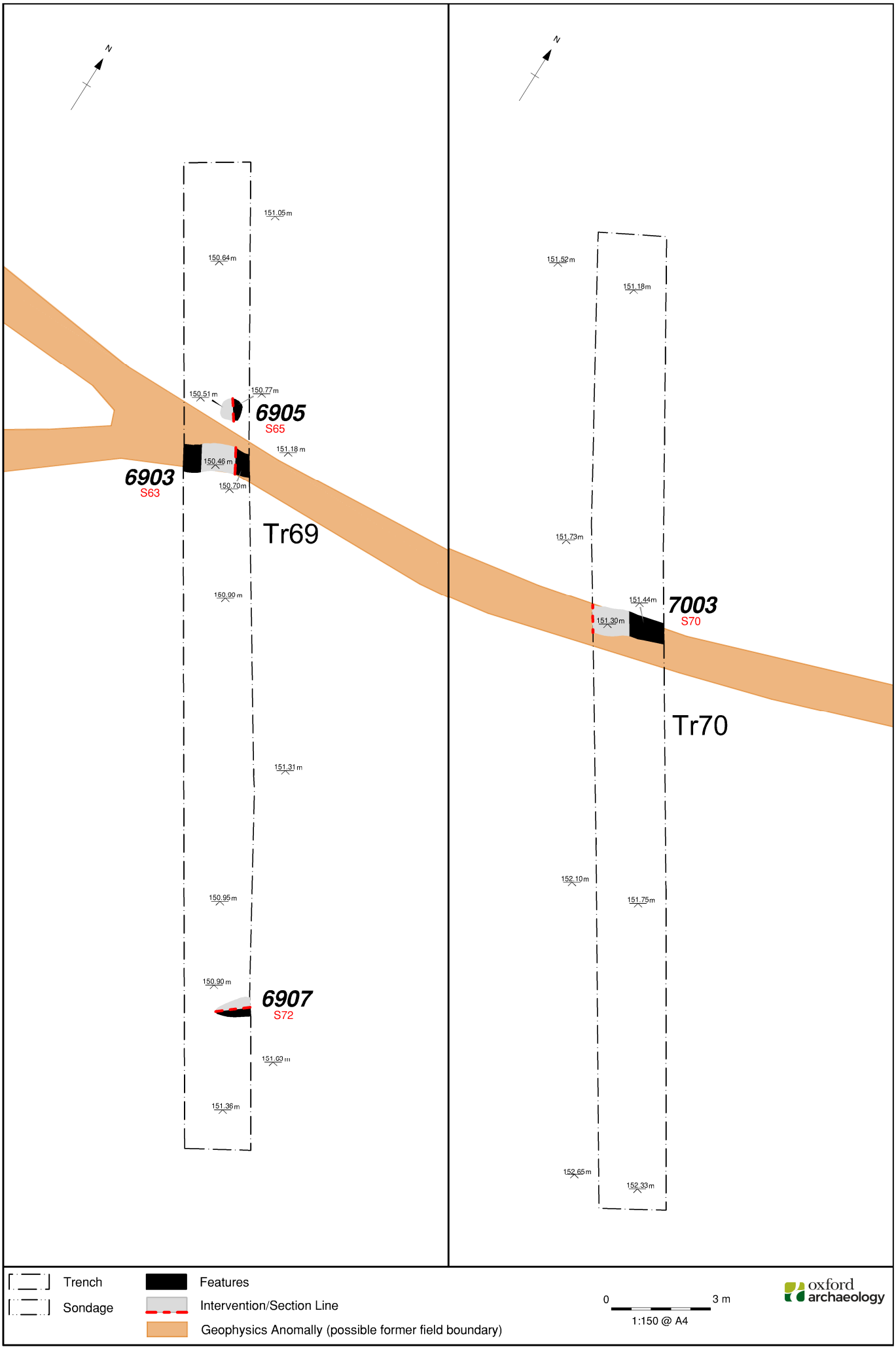

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Figure 18: Detailed plans of Trenches 69 and 70

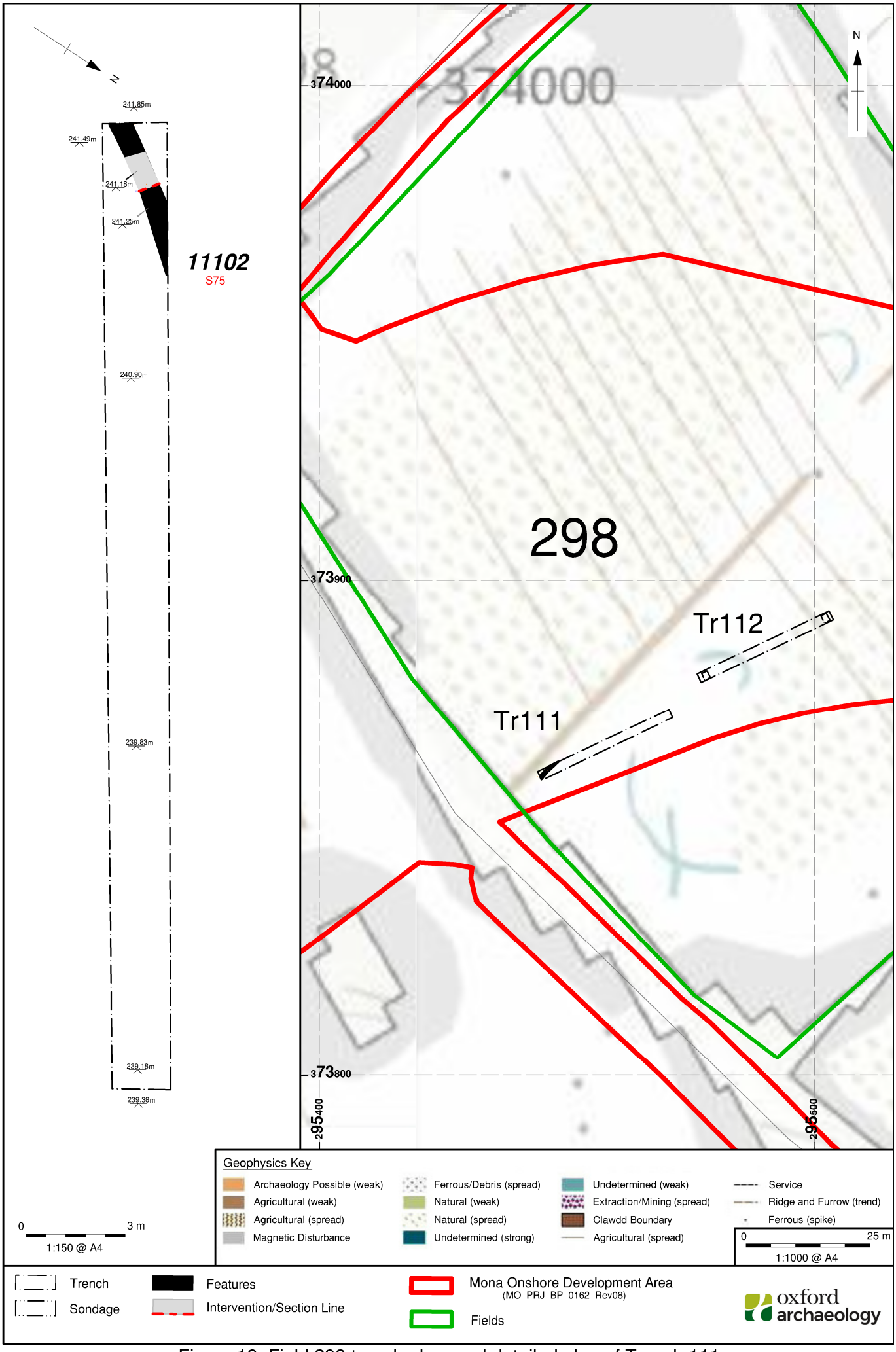

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Figure 19: Field 298 trench plan, and detailed plan of Trench 111

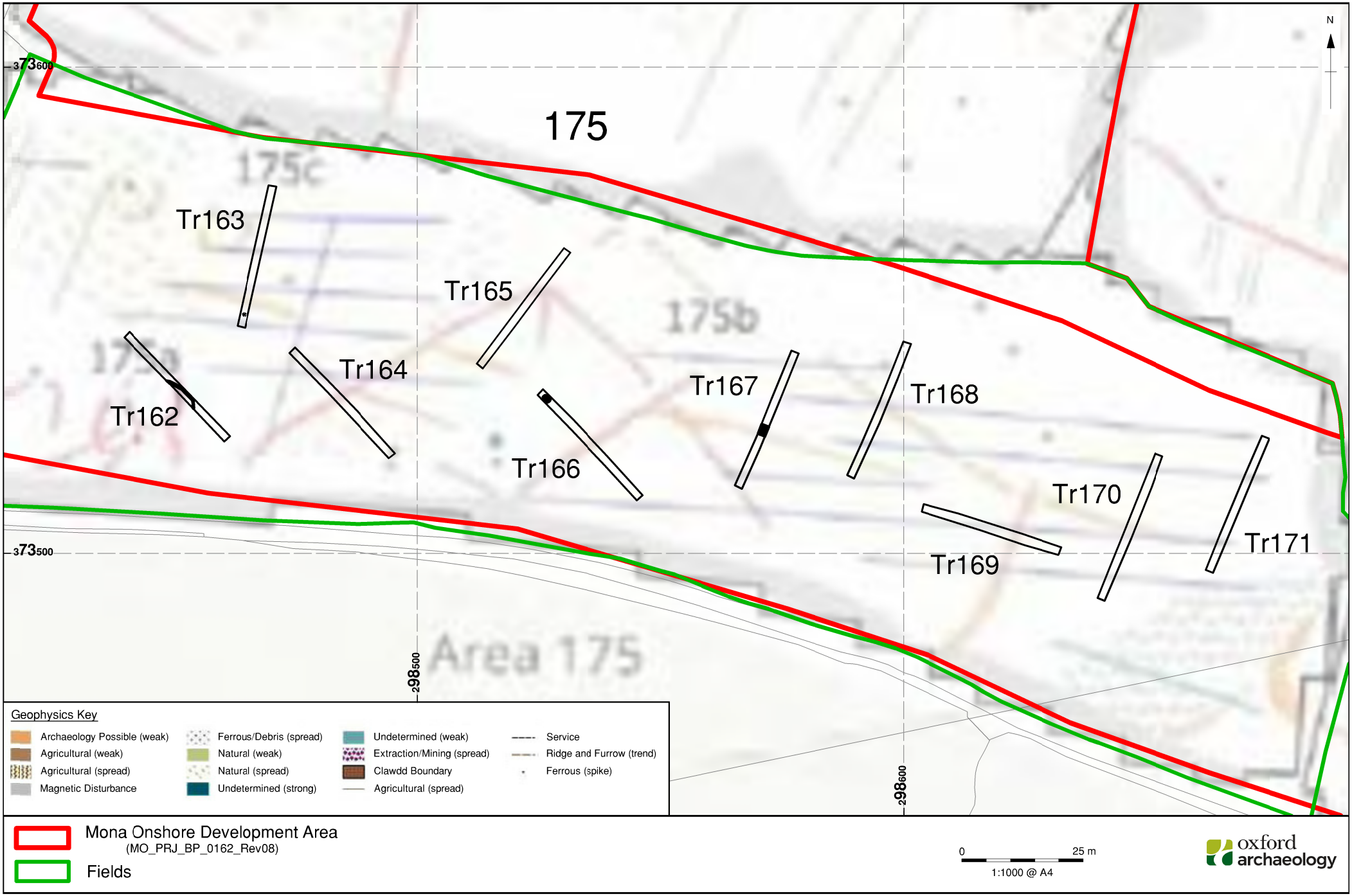

Figure 20: Field 175 trench plan

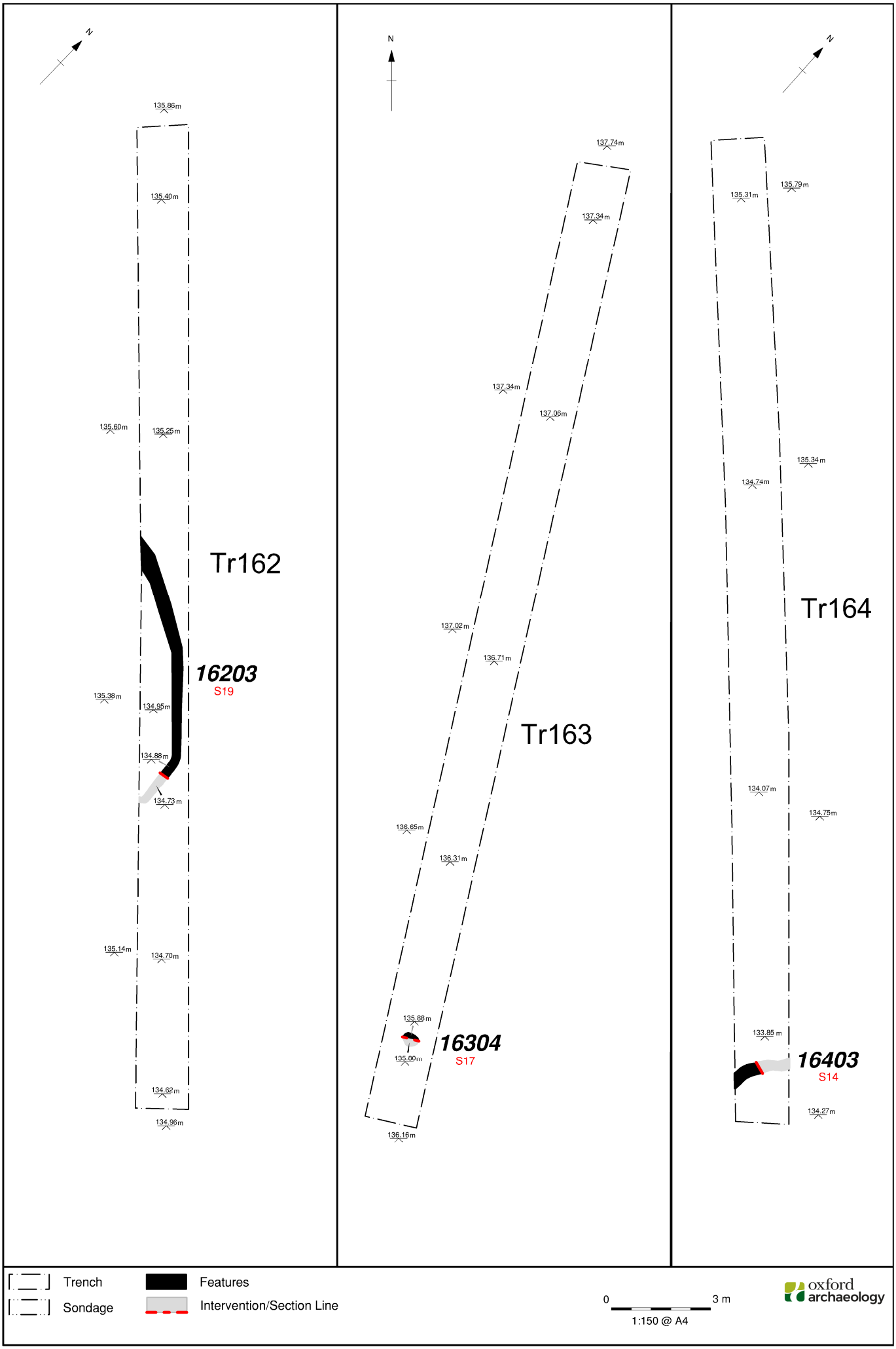

Figure 21: Detailed plans of Trenches 162-164

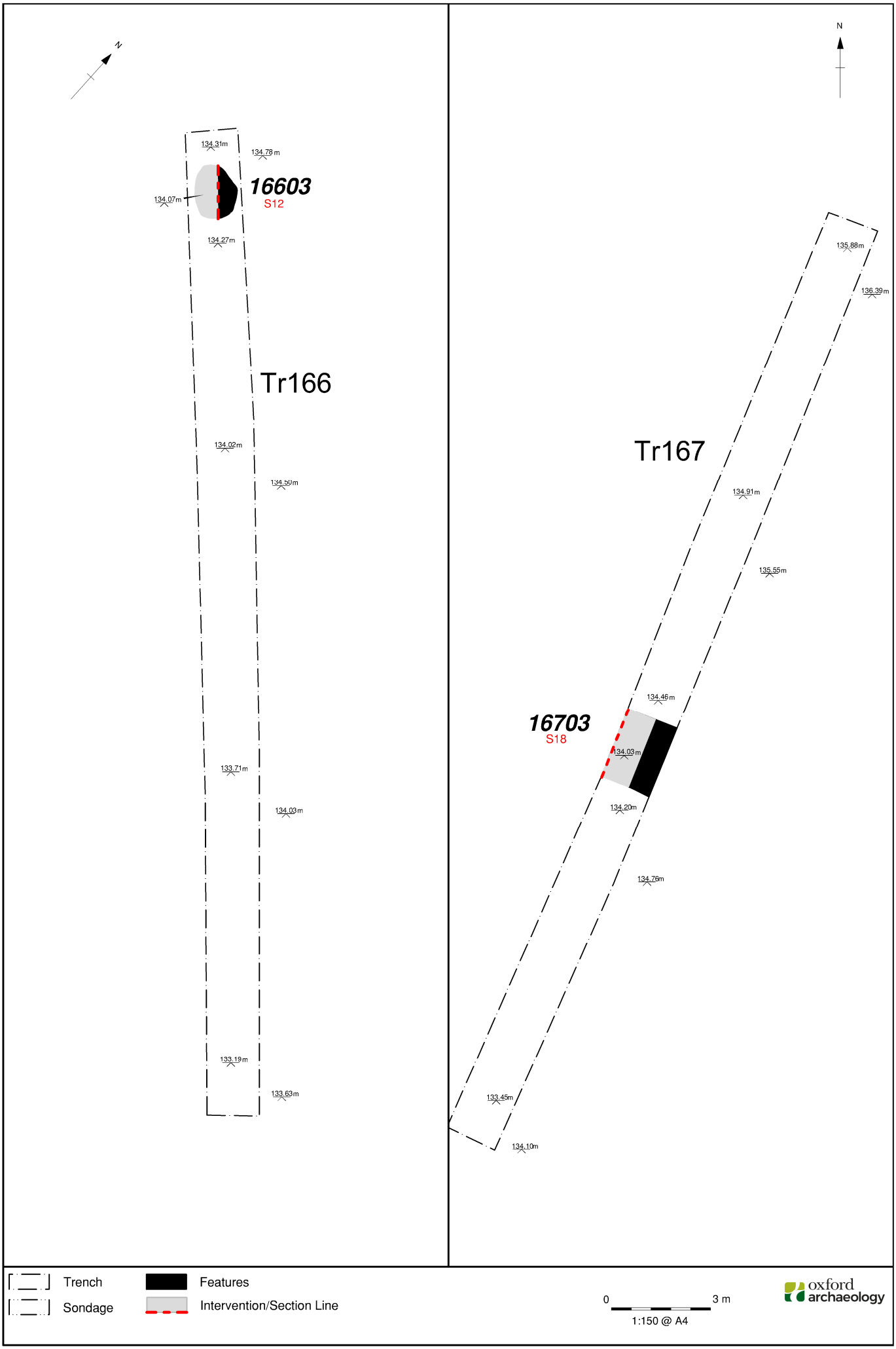

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Figure 22: Detailed plans of Trenches 166 and 167

APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1							
General description						Orientation	E/W
Topsoil overlaid a ditch and pit cut into the natural geology.						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.35
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
100	Layer				Topsoil.		
101	Layer			0.3	Natural		
102	Cut		1.37	0.21	Ditch		
103	Fill	*102*		0.21	Secondary Fill	Shell	
104	Cut		0.45	0.18	Pit		
105	Fill	*104*		0.18	Secondary Fill		
Trench 2							
General description						Orientation	N/S
Topsoil overlaid two pits cut into the natural geology.						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.3
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
200	Layer				Topsoil.		
201	Layer			0.26	Natural		
202	Cut		0.43	0.08	Pit		
203	Fill	*202*	0.43	0.08	Secondary Fill	Shell	
204	Cut		1	0.25	Pit		
205	Fill	*204*	1	0.25	Secondary Fill		
Trench 3							
General description						Orientation	N/S
Topsoil overlaid natural geology. No Archaeology present						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.45
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
300	Layer				Topsoil.		
301	Layer			0.4	Natural		
Trench 4							

General description						Orientation	N/S
Topsoil over natural, void of archaeology. S end of trench into subsoil. Two land drains preventing trench to natural depth. Unable to do sondage.						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.5
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
400	Layer				Topsoil.	Pottery	Post-med?
401	Layer			0.3	Subsoil.		
402	Layer			0.5	Natural.		

Trench 5							
General description						Orientation	E/W
Topsoil overlaid natural geology, trench void of archaeology						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.3
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
500	Layer				Topsoil.		
501	Layer			0.28	Natural		

Trench 6							
General description						Orientation	E/W
Topsoil overlaid ditch cut into the natural.						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.25
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
600	Layer				Topsoil		
601	Layer			0.25	Natural		
602	Void						
603	Cut		0.4	0.15	Ditch		
604	Fill	*603*	0.4	0.15	Secondary Fill		

Trench 7							
General description						Orientation	N/S
Topsoil overlaid natural geology						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.25
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
700	Layer				Topsoil.		
701	Layer			0.19	Natural		

702	Void						

Trench 8							
General description					Orientation		E/W
Topsoil overlaid subsoil which sealed natural.					Length (m)		30
					Width (m)		1.8
					Avg. depth (m)		0.5
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
800	Layer				Topsoil.		
801	Layer			0.27	Subsoil		
802	Layer			0.53	Natural		

Trench 9							
General description					Orientation		N/S
Topsoil overlaid subsoil which sealed a posthole which was cut into the natural geology					Length (m)		30
					Width (m)		1.8
					Avg. depth (m)		0.46
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
900	Layer				Topsoil.		
901	Layer			0.26	Subsoil.		
902	Layer			0.46	Natural.		
903	Cut		0.39	0.15	Posthole		
904	Fill	*903*	0.39	0.15	Secondary Fill		

Trench 10							
General description					Orientation		N/S
Topsoil overlaid subsoil which sealed pit cut into natural geology					Length (m)		30
					Width (m)		1.8
					Avg. depth (m)		0.62
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
1000	Layer				Topsoil.		
1001	Layer			0.26	Subsoil.		
1002	Layer			0.5	Natural.		
1003	Cut		1.24	0.19	Pit		
1004	Fill	*1003*	1.24	0.19	Secondary Fill	Bone	

Trench 11		
General description	Orientation	E/W
	Length (m)	30

Topsoil overlaid subsoil which sealed a ditch terminus. This was cut into a colluvial deposit, which overlaid the natural geology						Width (m)	1.8
						Avg. depth (m)	0.85
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
1100	Layer				Topsoil		
1101	Layer			0.31	Subsoil		
1102	Layer			0.7	Natural		
1103	Cut		0.83	0.18	Ditch		
1104	Fill	*1103*	0.83	0.18	Secondary Fill. Dark greyish brown clayey silt. With frequent charcoal flecks. Ditch terminus		

Trench 12							
General description						Orientation	N/S
Topsoil overlaid subsoil which overlaid colluvium in southern end of trench. Posthole, ring gully, and two possible tree-throw holes are cut into the natural.						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.7
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
1200	Layer				Topsoil.		
1201	Layer			0.2	Subsoil.		
1202	Layer			0.32	Colluvial Layer. In south end of trench. Mid-orangish brown silty clay		
1203	Cut		0.42	0.06	Posthole		
1204	Fill	*1203*	0.42	0.06	Secondary Fill		
1205	Cut		0.78	0.26	Ring Gully		
1206	Fill	*1205*	0.78	0.26	Secondary Fill		
1207	Cut		0.75	0.1	Tree Throw		
1208	Fill	*1207*	0.75	0.1	Secondary Fill		
1209	Cut		0.9	0.08	Tree Throw		
1210	Fill		0.9	0.08	Secondary Fill		
1211	Layer			0.7	Natural.		

Trench 13							
General description						Orientation	E/W
Topsoil overlaid subsoil, which sealed a posthole, pit and two ditches which were cut into the natural.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.51
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
1300	Layer				Topsoil		
1301	Layer			0.25	Subsoil		

1302	Layer			0.33	Natural		
1303	Cut		0.15	0.15	Posthole		
1304	Fill	*1303*	0.15	0.15	Secondary Fill		
1305	Cut		2.05	0.52	Ditch		
1306	Fill	*1305*	2.05	0.52	Secondary Fill	Bone, glass	
1307	Cut		0.8	0.13	Pit		
1308	Fill	*1307*	0.8	0.13	Secondary Fill	Fe nail?	
1309	Cut		1.02	0.2	Ditch		
1310	Fill	*1309*	1.02	0.2	Secondary Fill		

Trench 14

General description	Orientation	N/S
Topsoil overlaid subsoil which sealed two pits, a curvilinear ditch, and a ditch terminus, all of which are cut into the natural.	Length (m)	30
	Width (m)	1.8
	Avg. depth (m)	0.41

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
1400	Layer				Topsoil.		
1401	Layer			0.12	Subsoil.		
1402	Layer			0.27	Natural.		
1403	Cut		0.42	0.13	Gully		
1404	Fill	*1403*	0.42	0.13	Secondary Fill		
1405	Cut		0.72	0.25	Pit		
1406	Fill	*1405*	0.72	0.25	Secondary Fill		
1407	Cut		0.65	0.05	Pit		
1408	Fill	*1407*	0.65	0.05	Secondary Fill	Burnt clay, magnetic material	
1409	Cut		0.25	0.15	Ditch		
1410	Fill	*1409*	0.25	0.16	Secondary Fill		

Trench 15

General description	Orientation	N/S
Topsoil overlaid subsoil which sealed the natural.	Length (m)	30
	Width (m)	1.8
	Avg. depth (m)	0.32

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
1500	Layer				Topsoil		
1501	Layer			0.1	Subsoil		
1502	Layer			0.2	Natural		

Trench 16							
General description					Orientation		E/W
Topsoil overlaid subsoil that sealed a pit cut into the natural.					Length (m)		30
					Width (m)		1.8
					Avg. depth (m)		0.73
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
1600	Layer				Topsoil		
1601	Layer			0.27	Subsoil		
1602	Layer			0.62	Natural		
1603	Cut		0.64	0.11	Pit		
1604	Fill	1603	0.64	0.11	Secondary Fill. Dark greyish brown silty clay with charcoal fleck inclusions and sub-angular stones		
Trench 17							
General description					Orientation		E/W
Topsoil overlaid subsoil which sealed a pit and a ditch cut into the natural.					Length (m)		30
					Width (m)		1.8
					Avg. depth (m)		0.48
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
1700	Layer				Topsoil.		
1701	Layer			0.09	Subsoil.		
1702	Layer			0.27	Natural.		
1703	Cut		0.28	0.13	Posthole		
1704	Fill	*1703*	0.28	0.13	Secondary Fill		
1705	Cut		1.47	0.1	Ditch		
1706	Fill	*1705*	1.47	0.1	Secondary Fill		
Trench 25							
General description					Orientation		N/S
Topsoil overlaid subsoil, which sealed natural geology. No archaeology was observed.					Length (m)		30
					Width (m)		1.8
					Avg. depth (m)		0.4
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
2500	Layer				Topsoil.		
2501	Layer			0.23	Subsoil.		
2502	Layer			0.4	Natural.		
Trench 26							

General description						Orientation	NE/SW
Topsoil overlaid subsoil which sealed the natural geology. No archaeology observed.						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.33
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
2600	Layer				Topsoil.		
2601	Layer			0.15	Subsoil.		
2602	Layer			0.33	Natural.		

Trench 27							
General description						Orientation	NE/SW
Topsoil overlaid subsoil which in turn sealed natural geology. No archaeology present						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.36
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
2700	Layer				Topsoil.		
2701	Layer			0.21	Subsoil.		
2702	Layer			0.29	Natural.		

Trench 28							
General description						Orientation	NE/SW
Topsoil overlaid subsoil which in turn sealed natural geology. No archaeology present						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.47
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
2800	Layer				Topsoil.		
2801	Layer			0.22	Subsoil		
2802	Layer			0.3	Natural.		

Trench 29							
General description						Orientation	E/W
Topsoil sealed natural geology. No archaeology present.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.4
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
2900	Layer				Topsoil.		
2901	Layer			0.4	Natural.		

Trench 30							
General description						Orientation	N/S
Topsoil sealed a bank, which was above the natural bedrock geology.						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.22
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
3000	Layer				Topsoil.		
3001	Layer			0.15	Natural.		
3002	Layer		0.86	0.21	Bank		

Trench 31							
General description						Orientation	NW/SE
Topsoil sealed a gully and a bank. These cut and the natural geology.						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.21
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
3100	Layer				Topsoil.		
3101	Layer			0.21	Natural.		
3102	Cut		0.34	0.16	Ditch		
3103	Fill	*3102*	0.34	0.16	Secondary Fill. Mid-greyish brown clayey sandy silt		
3104	Layer				Bank. Unexcavated, excavated in Tr 30		

Trench 32							
General description						Orientation	N/S
Topsoil sealed a modern pit and a bank. These cut the natural geology.						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.43
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
3200	Layer				Topsoil.		
3201	Layer			0.2	Natural.		
3202	Layer			0.19	Bank		

Trench 33							
General description						Orientation	NE/SW
Topsoil sealed natural geology. No archaeology present.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.4

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
3300	Layer				Topsoil.		
3301	Layer			0.4	Natural.		

Trench 34		
General description	Orientation	E/W
Topsoil sealing natural geology. No archaeology found.	Length (m)	30
	Width (m)	2
	Avg. depth (m)	0.4

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
3400	Layer		2		Topsoil.		
3401	Layer		2	0.4	Natural.		
3402	Void						

Trench 35		
General description	Orientation	E/W
Topsoil overlaid subsoil which in turn sealed waterlogged natural clay. No archaeology present.	Length (m)	30
	Width (m)	2
	Avg. depth (m)	0.31

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
3500	Layer				Topsoil.		
3501	Layer			0.18	Subsoil.		
3502	Layer			0.26	Natural.		

Trench 36		
General description	Orientation	N/S
Topsoil overlaid subsoil which sealed the natural geology. No archaeology was observed.	Length (m)	30
	Width (m)	1.8
	Avg. depth (m)	0.5

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
3600	Layer				Topsoil		
3601	Layer			0.13	Subsoil		
3602	Layer			0.3	Natural		

Trench 37		
General description	Orientation	NW/SE
Topsoil overlaid subsoil which sealed the natural geology. No archaeology was observed.	Length (m)	30
	Width (m)	1.8

						Avg. depth (m)	0.3
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
3700	Layer				Topsoil		
3701	Layer			0.1	Subsoil		
3702	Layer			0.17	Natural		

Trench 38		
General description	Orientation	NE/SW
Topsoil overlaid subsoil which sealed a ditch. This cut the natural geology.	Length (m)	30
	Width (m)	1.8
	Avg. depth (m)	0.34

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
3800	Layer				Topsoil		
3801	Layer			0.08	Subsoil		
3802	Layer			0.14	Natural		
3803	Cut		1.68	0.25	Ditch		
3804	Fill	*3803*	1.68	0.25	Secondary Fill		

Trench 39		
General description	Orientation	NE/SW
Topsoil overlaid subsoil which sealed a posthole. This cut the natural geology.	Length (m)	30
	Width (m)	1.8
	Avg. depth (m)	0.31

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
3900	Layer				Topsoil		
3901	Layer			0.09	Subsoil		
3902	Layer			0.16	Natural		
3903	Cut		0.16	0.06	Posthole		
3904	Fill	*3903*	0.16	0.06	Secondary Fill		

Trench 40		
General description	Orientation	NW/SE
Topsoil overlaid subsoil which sealed the natural geology	Length (m)	30
	Width (m)	1.8
	Avg. depth (m)	0.5

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
4000	Layer				Topsoil		
4001	Layer			0.18	Subsoil		

4002	Layer			0.5	Natural		

Trench 41							
General description					Orientation		N/S
Topsoil overlaid subsoil which sealed one pit and two postholes. These are cut into the natural geology.					Length (m)		30
					Width (m)		2
					Avg. depth (m)		0.5
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
4100	Layer				Topsoil		
4101	Layer			0.15	Subsoil		
4102	Layer			0.3	Natural		
4103	Cut		0.16	0.02	Posthole		
4104	Fill	*4103*	0.16	0.02	Secondary Fill		
4105	Cut		0.31	0.14	Posthole		
4106	Fill	*4105*	0.31	0.14	Secondary Fill		
4107	Cut		0.94	0.17	Pit		
4108	Fill	*4107*	0.94	0.17	Secondary Fill		

Trench 42							
General description					Orientation		E/W
Topsoil over subsoil, overlying natural.					Length (m)		30
					Width (m)		2
					Avg. depth (m)		0.5
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
4200	Layer				Topsoil.		
4201	Layer			0.15	Subsoil.		
4202	Layer			0.35	Natural.		

Trench 43							
General description					Orientation		E/W
Topsoil over natural. Void of archaeology					Length (m)		30
					Width (m)		2
					Avg. depth (m)		0.35
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
4300	Layer				Topsoil.		
4301	Layer			0.16	Subsoil.		
4302	Layer			0.35	Natural.		

Trench 44

General description						Orientation	N/S
Topsoil over subsoil which sealed a ditch cut into the natural.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.45
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
4400	Layer				Topsoil		
4401	Layer			0.15	Subsoil		
4402	Layer			0.4	Natural		
4403	Cut		1.08	0.34	Ditch		
4404	Fill	*4403*	1.08	0.34	Secondary Fill		

Trench 45							
General description						Orientation	NW/SE
Topsoil overlaid subsoil, which sealed two pits and ten postholes, all of which are cut into the natural.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.46
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
4500	Layer				Topsoil		
4501	Layer			0.17	Subsoil		
4502	Layer			0.36	Natural		
4503	Cut		0.72	0.23	Pit		
4504	Fill	*4503*	0.72	0.23	Secondary Fill		
4505	Cut		0.68	0.37	Posthole		
4506	Fill	*4505*	0.68	0.13	Secondary Fill		
4507	Cut		0.19	0.09	Posthole		
4508	Fill	*4507*	0.19	0.09	Secondary Fill		
4509	Cut		0.36	0.11	Posthole		
4510	Fill	*4509*	0.36	0.11	Secondary Fill		
4511	Cut		0.37	0.22	Posthole		
4512	Fill	*4511*	0.37	0.22	Secondary Fill		
4513	Cut		0.57	0.1	Posthole		
4514	Fill	*4513*	0.57	0.1	Secondary Fill		
4515	Cut		0.35	0.28	Posthole		
4516	Fill	*4515*	0.35	0.28	Secondary Fill		
4517	Cut		0.56	0.15	Posthole		
4518	Fill	*4517*	0.56	0.15	Secondary Fill		
4519	Cut		0.3	0.09	Posthole		
4520	Fill	*4519*	0.3	0.09	Secondary Fill		
4521	Cut		0.41	0.12	Posthole		
4522	Fill	*4521*	0.41	0.12	Secondary Fill		

4523	Cut		0.4	0.08	Posthole		
4524	Fill	*4523*	0.4	0.08	Secondary Fill		
4525	Cut		0.68	0.4	Pit		
4526	Fill	*4525*	0.68	0.4	Secondary Fill		
4527	Fill	*4505*	0.61	0.24	Secondary Fill		

Trench 46							
General description					Orientation		E/W
Topsoil overlaid subsoil which sealed linear ditch cut into the natural. Archaeology present.					Length (m)		30
					Width (m)		2
					Avg. depth (m)		0.36
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
4600	Layer				Topsoil.		
4601	Layer			0.19	Subsoil.		
4602	Layer			0.36	Natural		
4603	Cut		1.05	0.09	Ditch		
4604	Fill	*4603*	1.05	0.09	Secondary Fill		

Trench 47							
General description					Orientation		E/W
Topsoil over subsoil, overlying varied natural.					Length (m)		30
					Width (m)		2
					Avg. depth (m)		0.4
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
4700	Layer				Topsoil.		
4701	Layer			0.19	Subsoil.		
4702	Layer			0.35	Natural.		

Trench 48							
General description					Orientation		NE/SW
Topsoil over subsoil which sealed ditch cut into natural.					Length (m)		30
					Width (m)		2
					Avg. depth (m)		0.48
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
4800	Layer				Topsoil.		
4801	Layer			0.19	Subsoil.		
4802	Layer			0.35	Natural.		
4803	Cut		1.47	0.18	Ditch		
4804	Fill	*4803*	1.47	0.18	Secondary Fill		

Trench 49							
General description						Orientation	E/W
Topsoil over subsoil sealing one posthole and two linear ditches cut into natural.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.3
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
4900	Layer				Topsoil.		
4901	Layer			0.13	Subsoil.		
4902	Layer			0.19	Natural.		
4903	Cut		0.53	0.09	Posthole		
4904	Fill	*4903*	0.53	0.09	Secondary Fill		
4905	Cut		0.97	0.1	Ditch		
4906	Fill	*4905*	0.97	0.1	Secondary Fill		
4907	Cut		1.22	0.15	Ditch		
4908	Fill	*4907*	1.22	0.15	Secondary Fill		

Trench 50							
General description						Orientation	N/S
Topsoil over subsoil which sealed a cremation cut into the natural.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.35
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
5000	Layer				Topsoil.		
5001	Layer			0.19	Subsoil.		
5002	Layer			0.32	Natural.		
5003	Cut		0.75		Cremation Cut. Not excavated		
5004	Fill	*5003*	0.75		Cremation Deposit. Dark bluish black slightly sandy silt		
5005	Cut		0.39		Ditch. Possible terminal		

Trench 51							
General description						Orientation	SW/NE
Ploughsoil over natural. One linear feature						Length (m)	24
						Width (m)	2
						Avg. depth (m)	0.35
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
5100	Layer				Ploughsoil		
5101	Layer			0.3	Natural.		

5102	Cut		0.82	0.38	Ditch		
5103	Fill	*5102*	0.82	0.38	Secondary Fill. Dark greyish brown slightly clayey silt. Mod charcoal flecks. Rare sub-angular pebbles less than 20mm		

Trench 52							
General description						Orientation	N/S
Topsoil overlaid subsoil which sealed colluvium at southern end of trench. This in turn sealed the natural geology.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.6
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
5200	Layer				Topsoil		
5201	Layer			0.2	Subsoil		
5202	Layer			0.4	Colluvial Layer. Only present at southern end of trench. 0.2m thick		
5203	Layer			0.6	Natural		

Trench 53							
General description						Orientation	NW/SE
Topsoil overlaid subsoil which in turn sealed a ditch cut into the natural geology. Trench targeted possible trackway on geophysics.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.45
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
5300	Layer				Topsoil		
5301	Layer			0.15	Subsoil		
5302	Layer			0.45	Natural.		
5303	Fill	*5304*	1.6	0.35	Secondary Fill		
5304	Cut		1.6	0.35	Ditch		

Trench 54							
General description						Orientation	NE/SW
Topsoil overlaid subsoil which in turn sealed the natural geology. Trench targeted trackway and possible linear from geophysics which was not present.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.48
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
5400	Layer				Topsoil		
5401	Layer			0.18	Subsoil		
5402	Layer			0.48	Natural		

Trench 55							
General description						Orientation	NW/SE
Topsoil overlaid subsoil which sealed two pits cut into the natural geology. Trench targeted two linear features on geophysics which were not present.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.4
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
5500	Layer				Topsoil		
5501	Layer			0.14	Subsoil		
5502	Layer			0.4	Natural		
5503	Fill	*5504*	1.35	0.16	Secondary Fill		
5504	Cut		1.35	0.16	Pit		
5505	Cut		1.05	0.2	Pit		
5506	Fill	*5505*	1.05	0.2	Secondary Fill		

Trench 56							
General description						Orientation	NW/SE
Topsoil overlaid subsoil which in turn sealed colluvium at Southeastern end. This sealed the natural geology. Trench targeted three possible linear features in geophysics which were not present.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.41
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
5600	Layer				Topsoil.		
5601	Layer			0.1	Subsoil.		
5602	Layer			0.32	Colluvial Layer. Thicker towards the southeastern end of trench. 0.32-0.41 Light pink-brown clay silt, sub-rounded pebbles		
5603	Layer			0.41	Natural, light orange clay silt, small to med sun angular pebbles		

Trench 57							
General description						Orientation	NE/SW
Topsoil overlaid the subsoil which sealed the natural geology.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.31
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
5700	Layer				Topsoil.		
5701	Layer			0.1	Subsoil.		
5702	Layer			0.31	Natural.		

Trench 58							
General description						Orientation	NE/SW
Topsoil overlaid subsoil which sealed the colluvium which only occurred in the NE of the trench, this sealed the natural geology						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.24
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
5800	Layer				Topsoil.		
5801	Layer			0.1	Subsoil.		
5802	Layer			0.24	Natural.		
5803	Layer			0.4	Colluvial Layer. 0.7m thick, light yellowish brown, clay siltin the NE of Trench 58		

Trench 59							
General description						Orientation	N/S
Topsoil overlaid subsoil which sealed natural geology. Trench void of archaeology						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.36
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
5900	Layer				Topsoil.		
5901	Layer			0.18	Subsoil.		
5902	Layer			0.3	Natural.		

Trench 60							
General description						Orientation	NE/SW
Topsoil overlaid subsoil over natural geology.						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.4
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
6000	Layer				Topsoil.		
6001	Layer			0.2	Subsoil.		
6002	Layer			0.33	Natural.		

Trench 61							
General description						Orientation	S/N
Topsoil over subsoil over natural, bedrock outcrop at SW end. Trench void of archaeology						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.34

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
6100	Layer				Natural.		
6101	Layer			0.13	Subsoil.		
6102	Layer			0.34	Natural.		

Trench 62		
General description	Orientation	NE/SW
Topsoil over subsoil, over natural.	Length (m)	30
	Width (m)	2
	Avg. depth (m)	0.3

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
6200	Layer				Topsoil.		
6201	Layer			0.1	Subsoil.		
6202	Layer			0.3	Natural.		
6203	Void						
6204	Void						

Trench 63		
General description	Orientation	N/S
Topsoil overlaid subsoil which sealed ditch cut into natural	Length (m)	30
	Width (m)	2
	Avg. depth (m)	0.42

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
6300	Layer				Topsoil		
6301	Layer			0.09	Subsoil		
6302	Layer			0.28	Natural		
6303	Cut		0.91	0.26	Ditch		
6304	Fill	*6303*	0.91	0.26	Secondary Fill		

Trench 64		
General description	Orientation	NW/SE
Topsoil overlaid subsoil which sealed natural geology	Length (m)	30
	Width (m)	2
	Avg. depth (m)	0.35

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
6400	Layer				Topsoil		
6401	Layer			0.15	Subsoil		
6402	Layer			0.35	Natural		

Trench 65							
General description						Orientation	NW/SE
Topsoil overlaid subsoil which sealed a ditch cutting the natural geology and two alluvium deposits at the south-eastern end of the trench. The alluvium overlaid gravel at 1.34m BGL.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.45
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
6500	Layer				Topsoil		
6501	Layer			0.25	Subsoil		
6502	Layer			0.45	Alluvial Layer. Only at south-eastern end of trench		
6503	Layer			0.73	Alluvial Layer. Only across south-eastern end of trench		
6504	Layer			1.34	Other Layer. Gravels under alluvium.		
6505	Layer			0.45	Natural		
6506	Cut		0.61	0.25	Ditch		
6507	Fill	*6506*	0.61	0.25	Secondary Fill		

Trench 66							
General description						Orientation	E/W
Topsoil over subsoil, overlying alluvium						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.42
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
6600	Layer				Topsoil.		
6601	Layer			0.18	Subsoil.		
6602	Layer			0.27	Alluvial Layer. Pale grey mottled by a light yellowish brown very slightly silty clay, manganese inclusions throughout		

Trench 67							
General description						Orientation	NE/SW
Topsoil overlaid a levelling deposit, which sealed two alluvium deposits (possibly remains of an old pond/lake). Which in turn overlaid terrace gravels.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.5
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
6700	Layer				Topsoil		
6701	Layer			0.35	Other Layer. Made ground		
6702	Layer			0.5	Alluvial Layer		

6703	Layer			0.75	Alluvial Layer		
6704	Layer			1.1	Other Layer. Possible terrace gravels		

Trench 68							
General description						Orientation	SE/NW
Topsoil overlaid the subsoil which sealed the natural						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.3
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
6800	Layer				Topsoil		
6801	Layer			0.07	Subsoil		
6802	Layer			0.25	Natural		

Trench 69							
General description						Orientation	NW/SE
Topsoil overlaid subsoil which sealed two ditches and a pit cut into Nat geology						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.45
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
6900	Layer				Topsoil		
6901	Layer			0.08	Subsoil		
6902	Layer			0.23	Natural		
6903	Cut		0.82	0.3	Ditch		
6904	Fill	*6903*	0.82	0.3	Secondary Fill		
6905	Cut		0.72	0.21	Pit		
6906	Fill	*6905*	0.72	0.21	Secondary Fill		
6907	Cut		0.74	0.3	Ditch. Terminus		
6908	Fill	*6907*	0.74	0.3	Secondary Fill	Bone	

Trench 70							
General description						Orientation	NE/SW
Topsoil overlaid subsoil which sealed a ditch cut into the natural geology						Length (m)	30
						Width (m)	1.8
						Avg. depth (m)	0.5
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
7000	Layer				Topsoil		
7001	Layer			0.08	Subsoil		
7002	Layer			0.34	Natural		

7003	Cut		1.08	0.19	Ditch		
7004	Fill	*7003*	1.08	0.19	Secondary Fill		

Trench 111							
General description						Orientation	NE/SW
Topsoil overlaid ditch which cuts the natural geology						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.4
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
11100	Layer				Topsoil		
11101	Layer			0.24	Natural		
11102	Cut		0.35	0.05	Ditch		
11103	Fill	*11102*	0.35	0.05	Secondary Fill		

Trench 112							
General description						Orientation	NE/SW
Topsoil overlaid two alluvium deposits separated by a band of natural towards the southwestern end of the trench. The alluvium sealed sand gravels.						Length (m)	30
						Width (m)	2
						Avg. depth (m)	0.4
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
11200	Layer				Topsoil		
11201	Layer			0.35	Alluvial Layer		
11202	Layer			0.5	Alluvial Layer		
11203	Layer			0.8	Other Layer. Mid-brown gravel sands under alluvium		
11204	Layer			0.25	Natural. Only present in centre of trench		
11205	Layer			0.4	Alluvial Layer. Only present in south-western sondage.		
11206	Layer			0.8	Other Layer. Mid-brown sandy gravels only present in south-western sondage		

Trench 162							
General description						Orientation	NW/SE
Topsoil overlaid subsoil, which sealed curvilinear ditch cut into the natural geology.						Length (m)	30
						Width (m)	1.6
						Avg. depth (m)	0.46
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date

16200	Layer				Topsoil		
16201	Layer			0.22	Subsoil		
16202	Layer			0.4	Natural		
16203	Cut		0.23	0.09	Ditch		
16204	Fill	*16203*	0.23	0.09	Secondary Fill		

Trench 163		
General description	Orientation	N/S
Topsoil overlying subsoil which sealed a pit which was cut into the natural.	Length (m)	30
	Width (m)	1.6
	Avg. depth (m)	0.4

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
16300	Layer			0	Topsoil		
16301	Layer			0.2	Subsoil		
16302	Layer			0.35	Natural		
16303	Fill	*16304*	0.47	0.05	Secondary Fill		
16304	Cut		0.47	0.05	Pit		

Trench 164		
General description	Orientation	NW/SE
Topsoil overlaid subsoil which sealed a ditch. This cut the natural geology.	Length (m)	30
	Width (m)	1.8
	Avg. depth (m)	0.4

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
16400	Layer				Topsoil		
16401	Layer			0.21	Subsoil		
16402	Layer			0.4	Natural		
16403	Cut		0.25	0.16	Ditch		
16404	Fill	*16403*	0.25	0.16	Secondary Fill		

Trench 165		
General description	Orientation	NE/SW
Topsoil over subsoil, overlying natural. Trench void of archaeology.	Length (m)	30
	Width (m)	1.6
	Avg. depth (m)	0.48

Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
16500	Layer				Topsoil		
16501	Layer			0.19	Subsoil		
16502	Layer			0.43	Natural		

Trench 166

General description					Orientation		NW/SE
Topsoil overlaid subsoil, which sealed a pit. This cut the natural geology.					Length (m)		30
					Width (m)		1.8
					Avg. depth (m)		0.45
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
16600	Layer				Topsoil		
16601	Layer			0.18	Subsoil		
16602	Layer			0.35	Natural		
16603	Cut		1.56	0.2	Pit		
16604	Fill	*16603*	1.56	0.2	Secondary Fill		

Trench 167							
General description					Orientation		NE/SW
Topsoil overlaid subsoil, which sealed a linear feature that cut the natural geology.					Length (m)		30
					Width (m)		1.8
					Avg. depth (m)		0.65
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
16700	Layer				Topsoil		
16701	Layer			0.18	Subsoil		
16702	Layer			0.51	Natural		
16703	Cut		1.2	0.22	Ditch. Likely natural-suspected old hedge line		
16704	Fill	*16703*	1.2	0.22	Secondary Fill		

Trench 168							
General description					Orientation		NE/SW
Topsoil overlying subsoil, over natural. Trench void of archaeology					Length (m)		30
					Width (m)		1.6
					Avg. depth (m)		0.53
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
16800	Layer				Topsoil		
16801	Layer			0.17	Subsoil		
16802	Layer			0.36	Natural		

Trench 169							
General description					Orientation		W/E
Topsoil overlying subsoil, over natural. Trench void of archaeology.					Length (m)		30
					Width (m)		1.6
					Avg. depth (m)		0.54
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
16900	Layer				Topsoil		

16901	Layer			0.15	Subsoil		
16902	Layer			0.49	Natural		

Trench 170							
General description					Orientation		NE/SW
Topsoil overlying subsoil, over natural. Trench void of archaeology.					Length (m)		30
					Width (m)		1.6
					Avg. depth (m)		0.6
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
17000	Layer				Topsoil		
17001	Layer			0.16	Subsoil		
17002	Layer			0.38	Natural		

Trench 171							
General description					Orientation		NE/SW
Topsoil overlying subsoil over natural. No archaeology present.					Length (m)		30
					Width (m)		1.6
					Avg. depth (m)		0.4
Context No.	Type	Fill Of	Width (m)	Depth (m)	Description	Finds	Date
17100	Layer				Topsoil		
17101	Layer			0.18	Subsoil		
17102	Layer			0.4	Natural		

APPENDIX B ENVIRONMENTAL REMAINS

B.1 Charred plant remains

By Marta Golebiewska and Maryne Baylet

B.1.1 *Introduction*: a targeted program of palaeoenvironmental sampling was implemented in accordance with the Oxford Archaeology *Environmental Sampling Guidelines* (OA 2017), which resulted in the selection and processing of 29 bulk samples. All samples were collected during the phase of evaluation, for the retrieval and assessment of ecofacts and the recovery of artefacts. They were collected from a range of contexts, such as ditch and pit fills, which had the potential for the recovery of macrofossils. The samples were assessed primarily for the presence of environmental remains as a means of investigating past diet, agricultural practices, environment, and fuel use. Other remains, such as small finds were also noted during processing and described in finds report.

B.1.2 *Fieldwork methodology*: to comply with accepted professional guidelines (EH 2011) 40-litre bulk samples, or the entirety of a deposit, were taken for the recovery of charred plant remains (CPR) and charcoal. One sample, however, *1004*, comprised 69 litres, as charcoal inclusions had been recorded during its excavation phase.

B.1.3 *Laboratory methodology*: the samples were floated, where the flots were captured in a 250 µm mesh, and air dried. The residue of the floated samples were washed through 2mm and 500 µm meshes and air dried. For the assessment, the samples were scanned using a stereo-microscope and any plant material, including seeds and charcoal, was quantified. Plant nomenclature follows Stace (2010).

B.1.4 Other remains, such as insects, molluscs and coal, were also quantified. In addition, the dried residues were scanned for botanical remains, bone and small artefacts. Quantification was based on a scale of 1– 4 where 1 is rare (one to five items); 2 is frequent (6 to 25 items); 3 is common (26–100 items); and 4 is abundant (greater than 100 items).

B.1.5 Charcoal fragments over 2mm in size were quantified and scanned to assess preservation and wood diversity. Wood maturity was also noted to assess wood type and to identify suitable material for radiocarbon dating. Identification and classification of the charcoal was aided by Hather (2000).

B.1.6 *Results*: the results of the archaeobotanical assessment are presented in Table 3, which also shows potential for any further analysis. It also shows potential for radiocarbon dating. Preservation was through charring. Seven of the samples contained charred plant remains, which were represented by low quantities of charred cereal grains, charred hazelnut (*Corylus avellana*) shell fragments or charred weed seeds.

B.1.7 Charred cereal grains, comprising wheat (*Triticum* sp including cf *Triticum aestivum*-type) and oat (*Avena* sp) were recovered from four of the samples. Weed species were discovered in two of the samples, represented by rare

cleavers (*Galium* sp), ribwort plantain (*Plantago lanceolata), sedge* (*Carex* sp), and small grasses (Poaceae).

B.1.8 Fourteen of the samples contained relatively large charcoal fragments suitable for species identification. A scan of the material suggests that many of the samples are dominated by oak (*Quercus* sp) charcoal. Eleven of the samples, however, contained short-lived wood taxa, including alder/hazel (*Alnus/Corylus)* charcoal.

B.1.9 Most of the samples contained both modern roots and modern seeds. The presence of modern chaff in some of the samples indicates recent agricultural activity on the excavated area.

B.1.10 *Statement of potential*: samples with common and abundant charcoal consist mostly of oak fragments, which may represent possible *in-situ* deposits of fuel waste. Although oak is not considered suitable for radiocarbon dating due to the old wood effect, charred short-lived wood, such as alder/hazel, or small charred round wood, provide potential for radiocarbon dating. Larger fragments of charred hazel nutshell also provide suitable material for radiocarbon dating. Charcoal from ditches ***5102*** and ***6907***, and pit ***6905***, may provide further information on local woodland and wood fuel-use, if these features were to be dated.

B.1.11 Remains other than charcoal were sparse, and although four of the samples contained charred cereals and weed seeds, little can be advanced about their presence at the site, given only very few were recovered. Charred plant remains such as cereals and weed seeds may provide evidence for possible earlier agricultural activity. Unfortunately, the low level of significant archaeobotanical remains recovered from the site does not allow for any further analysis.

B.1.12 *Retention and disposal*: any flots not required for further analysis and/or radiocarbon dating will be disposed of on completion of the project.

Trench No	Sample No	Context No	Cut/ Feature No	Cut/ Feature type	Volume processed for plant remains (L)	Flot size (ml)	Charred crop	Charred crop/chaff comments	Charred hazelnut fragments	Charred weed seeds	Charred other	Charred weed seeds/ fruits/ other comments	Charcoal <2mm	Charcoal >2mm	Charcoal comments	modern roots/ moss/weed seeds/leaves	modern chaff	earthworm egg cases	other insect eggs	insects	molluscs	coal	Potential CPR	Potential charcoal	Potential c14
41	1	*4106*	*4105*	Posthole	3	<5							1	-	diffuse porous	1 tiny leaf							No	No	No
55	2	*5503*	*5504*	Pit	32	4000			1	1	1	*Galium* sp, cf *Plantago lanceolata* charred buds	4	4	*Quercus* sp	2 *Chenopodium* sp, *Betula* sp, *Rumex* sp, *Spergula arvensis*, *Trifolium* sp, *Utrica urens*		1			1		No	No	No
45	3	*4506*			1	<5							-	-		1 *Utrica urens*, *Betula* sp, *Trifolium* sp	1			1			No	No	No
45	4	*4508*	*4507*	Posthole	5	<5							-	-		1 *Chenopodium* sp				1			No	No	No
45	5	*4510*	*4509*	Posthole	8	<5							-	-		1 *Chenopodium* sp		1		1			No	No	No

Trench No	Sample No	Context No	Cut/ Feature No	Cut/ Feature type	Volume processed for plant remains (L)	Flot size (ml)	Charred crop	Charred crop/chaff comments	Charred hazelnut fragments	Charred weed seeds	Charred other	Charred weed seeds/ fruits/ other comments	Charcoal <2mm	Charcoal >2mm	Charcoal comments	modern roots/ moss/weed seeds/leaves	modern chaff	earthworm egg cases	other insect eggs	insects	molluscs	coal	Potential CPR	Potential charcoal	Potential c14
45	6	*4504*			18	<5							-	-		1 *Chenopodium* sp, *Viola* sp, *Stellaria media*							No	No	No
45	7	*4506*			18	<5							-	-		1 *Chenopodium* sp, *Betula* sp				1			No	No	No
45	8	*4527*	*4505*	Posthole	21	230							-	-		1				1			No	No	No
45	9	*4514*	*4513*	Posthole	3	<5							-	1		1 *Stellaria media*							No	No	No
45	10	*4516*	*4515*	Posthole	7	<5							-	-		1			1			1	No	No	No
45	11	*4518*	*4517*	Posthole	5	<5							-	-		1 *Betula* sp						1	No	No	No
45	12	*4520*	*4519*	Posthole	3	<5	1	*Avena* sp					1	1		1		1		1			No	No	No

Trench No	Sample No	Context No	Cut/ Feature No	Cut/ Feature type	Volume processed for plant remains (L)	Flot size (ml)	Charred crop	Charred crop/chaff comments	Charred hazelnut fragments	Charred weed seeds	Charred other	Charred weed seeds/ fruits/ other comments	Charcoal <2mm	Charcoal >2mm	Charcoal comments	modern roots/ moss/weed seeds/leaves	modern chaff	earthworm egg cases	other insect eggs	insects	molluscs	coal	Potential CPR	Potential charcoal	Potential c14
45	13	*4522*	*4521*	Posthole	5	5	1	*Avena* sp	1				2	2	mostly *Quercus* sp, small diffuse porous including Maloideae	1 *Chenopodium* sp		1		1			No	No	poss
45	14	*4524*			2	5							1	2	diffuse porous including *Alnus/Corylus*	1				1			No	No	poss
67	15	*6702*	*6702*	Alluvial Layer	38	<5							2	1	mostly *Quercus* sp	1 *Stellaria media*, *Carex* sp, *Chenopodium* sp, leaves							No	No	No
45	16	*4526*	*4525*	Pit	8	<5							1	-		1 *Chenopodium* sp		1				1	No	No	No

Trench No	Sample No	Context No	Cut/ Feature No	Cut/ Feature type	Volume processed for plant remains (L)	Flot size (ml)	Charred crop	Charred crop/chaff comments	Charred hazelnut fragments	Charred weed seeds	Charred other	Charred weed seeds/ fruits/ other comments	Charcoal <2mm	Charcoal >2mm	Charcoal comments	modern roots/ moss/weed seeds/leaves	modern chaff	earthworm egg cases	other insect eggs	insects	molluscs	coal	Potential CPR	Potential charcoal	Potential c14
51	17	*5103*	*5102*	Ditch	33	80			1	1		*Carex* trigonous, small Poaceae	3	3	mostly *Quercus* sp, diffuse porous	2 *Chenopodium* sp, *Betula* sp, *Juncus* sp, *Ranunculus* sp				1		1	No	Poss	Yes
69	18	*6906*	*6905*	Pit	27	100							-	4	mostly diffuse porous incl *Alnus/Corylus, Quercus* sp	1 *Chenopodium* sp, *Carex* sp, *Persicaria l/p*		1					No	Yes	Yes
69	19	*6908*	*6907*	Ditch	36	15							-	3	mostly *Quercus* sp, few *Alnus/Corylus, Salix/Populus* sp, one round wood fragment	2 *Chenopodium* sp, *Juncus* sp			4				No	Poss	Yes

Trench No	Sample No	Context No	Cut/ Feature No	Cut/ Feature type	Volume processed for plant remains (L)	Flot size (ml)	Charred crop	Charred crop/chaff comments	Charred hazelnut fragments	Charred weed seeds	Charred other	Charred weed seeds/ fruits/ other comments	Charcoal <2mm	Charcoal >2mm	Charcoal comments	modern roots/ moss/weed seeds/leaves	modern chaff	earthworm egg cases	other insect eggs	insects	molluscs	coal	Potential CPR	Potential charcoal	Potential c14
13	20	*1308*	*1307*	Pit	38	<5							-	2	mostly diffuse porous including *Alnus/Corylus*, few *Quercus* sp	1 *Chenopodium* sp, *Betula sp*	1				1		No	No	Yes
14	21	*1408*			23	5							2	2	mostly *Quercus* sp diffuse porous including Maloideae, Coniferous sp	1 *Betula* sp				1			No	No	poss
2	22	*203*	*202*	Pit	28	20							-	1	tiny cf diffuse porous	2 *Chenopodium* sp, *Betula* sp, *Juncus* sp		1			1		No	No	No
2	23	*205*	*204*	Pit	32	50	1	cf *Titicum aestivum*					1	1	*Quercus* sp	2 *Chenopodium* sp, *Rubus* sp	1	1			2		No	No	No

Trench No	Sample No	Context No	Cut/ Feature No	Cut/ Feature type	Volume processed for plant remains (L)	Flot size (ml)	Charred crop	Charred crop/chaff comments	Charred hazelnut fragments	Charred weed seeds	Charred other	Charred weed seeds/ fruits/ other comments	Charcoal <2mm	Charcoal >2mm	Charcoal comments	modern roots/ moss/weed seeds/leaves	modern chaff	earthworm egg cases	other insect eggs	insects	molluscs	coal	Potential CPR	Potential charcoal	Potential c14
1	24	*103*	*102*	Ditch	28	25							1	-		2 *Chenopodium* sp, *Betula* sp, *Juncus* sp, *Sambucus* sp, *Rubus* sp	1				3		No	No	No
16	25	*1604*	*1603*	Pit	30	15	2	cf *Triticum* sp					2	2	mostly *Alnus/Corylus,* one round wood, cf *Salix/Populus* sp	1 *Chenopodium* sp, leaf	2					1	No	No	Yes
12	26	*1206*	*1205*	Ring Gully	3	5							1	1		1 *Chenopodium* sp	1			1			No	No	No
13	27	*1306*			25	<5							1	-		1 *Chenopodium* sp	2						No	No	No

Trench No	Sample No	Context No	Cut/ Feature No	Cut/ Feature type	Volume processed for plant remains (L)	Flot size (ml)	Charred crop	Charred crop/chaff comments	Charred hazelnut fragments	Charred weed seeds	Charred other	Charred weed seeds/ fruits/ other comments	Charcoal <2mm	Charcoal >2mm	Charcoal comments	modern roots/ moss/weed seeds/leaves	modern chaff	earthworm egg cases	other insect eggs	insects	molluscs	coal	Potential CPR	Potential charcoal	Potential c14
10	28	*1004*	*1003*	Pit	69	<5			2				1	2	diffuse porous including *Alnus/Corylus*	1 *Chenopodium* sp, *Betula* sp	2			1			No	No	poss
9	29	*904*	*903*	Posthole	8	0							-	-									No	No	No

Table 3: Archaeobotanical assessment results

Remains are quantified on a scale of 1–4 where (1) is rare (one to five items); 2 is frequent (6 to 25 items); 3 is common (26–100 items); and 4 is abundant (greater than 100 items)

B.2 Animal bone and Shall

By Ian Smith

B.2.1 *Animal bone*: a small assemblage of 32 fragments of animal bone, weighing 5g, was recovered, predominately from bulk environmental samples (Table 4). Bulk soil sample 28 of pit or tree throw fill (*1004*) produced four pig (*Sus domesticus*) tooth fragments (OR 1008; *c* 6-14mm in length) including at least one which is clearly from a mandibular tooth. Some small areas of occlusal surface and of tooth root are present and indicate teeth that are either unworn, developing in the crypt, or in the first stages of wear, and although no specific age at death can be arrived at, all are suggestive of the teeth from at least one young pig. One other tooth fragment (*c* 6mm x 3mm) is plausibly associated with these pig tooth fragments. An additional (*c* 4mm) fragment of mammal tooth (unidentified to species) is present. Also, from sample 28 (in the >2mm fraction) there are 11 fragments of mammal bone none of which bear countable diagnostic zones (Serjeantson 1996). Of these 11 fragments, 10 are judged either burnt or heat affected, nine of them are white in colour and clearly reached a high temperature (Lyman 1994, 386) one is a greyish white colour. There are a further five fragments of burnt and white coloured mammal bone in the <2mm fraction.

Material	Trench	Context	Quantity	Total weight (g)
Animal bone	10	*1004*	28	3
Animal bone	13	*1306*	2	1
Animal bone	69	*6908*	2	1
Total			32	5

Table 4: Animal bone quantification

B.2.2 Hand collection from the same context (*1004*) produced two refitting fragments of a pig mandibular permanent fourth premolar (OR 1000), with no occlusal wear and this again suggests a young pig. The tooth root appears at the early stages of development and this tooth may still have been in the crypt. Three other fragments of burnt (and white) mammal bone (maximum *c* 11mm) was recovered from this context.

B.2.3 Ditch *1305*, fill (*1306*) produced two fragments one of which is mammal bone (plausibly burnt) and the other (*c* 4mm) fragment remains unidentified.

B.2.4 From terminal *6907,* fill (*6908*) a small section (*c* 7mm) of an amphibian tibiofibula was recovered. Certainly, this bone is from an anuran and although not complete it is relatively gracile and its proportions suggest it is from a frog (*Rana* sp.) rather than a toad (*Bufo* sp.). One small unburnt fragment (*c* 5mm) of probable mammal bone is also present.

B.2.5 The composition of the assemblage, comprising largely of loose teeth and tiny fragments of burnt bone suggests conditions (possibly including repeated wetting and drying) that have led to poor bone survival.

B.2.6 *Mollusc shell*: a modest assemblage of 139 small fragments of mollusc shell, weighing 12g, was again, predominately recovered from bulk environmental

samples (Table 5). There are 17 fragments of mollusc shell (<5mm) from soil sample 22 of pit ***202***. No apices or other countable parts are present and although at least one fragment is plausibly from *Cepea* sp. there are no definite identifications from this sample.

Material	Trench	Context	Quantity	Total weight (g)
Mollusc shell	1	***103***	122	11
Mollusc shell	2	***203***	17	1
Total			139	12

Table 5: Mollusc shell quantification

B.2.7 A bulk soil sample 24 from ditch ***102***, fill (***103***) produced 10 largely complete specimens of the terrestrial snail *Discus rotundatus*. This species has a wide distribution across Britain (Kerney and Cameron 1979, 269) and Europe (Kerney and Cameron 1979, 237) and can be found in montane to lowland habitats under stones and rotting wood beside tree trunks (Pfleger and Chatfield 1983, 80), and in moist, sheltered places of all kinds (Kerney and Cameron 1979, 102). One can speculate that an ideal habitat was probably found in the moist, sheltered sides of the ditch. From the same sample 11 snails were identified as the terrestrial *Trochulus hispidus* (Cameron 2008, 68) (which is notable for bearing hair pits in archaeological specimens) and can be found across Wales and much of Britain (Kerney and Cameron 1979, 286) and can tolerate a wide range of habitats including woods, wetlands, and dry calcareous ground (Cameron 2008, 68).

B.2.8 Again, from sample 24 there are four largely complete specimens of the terrestrial snail *Cepea cf hortensis* (each of which bear a white lip which usually denotes *C. hortensis* rather than *C. nemoralis* (Cameron 2008, 70). There is a total from this sample of eight *Cepea cf hortensis* or *Cepea* sp. specimens based on a count of apices (Cameron 2008, 16) and including both the largely complete specimens and small shell fragments there are 61 identifications to either *Cepea cf hortensis*, *Cepea* sp. or *cf Cepea* sp.). *Cepea hortensis* has a very varied distribution across woods, grassland, hedges, and dunes but is commonly found in wetter places than *C. nemoralis* (Kerney and Cameron 1979, 204).

B.2.9 From the same sample there are two small snails (and one further damaged and more tentatively identified specimen) identified to *Galba truncatula* which is a species found in small areas of soft water, including springs, pools, and ditches, can survive long periods of drought buried in mud and is also of note in that it is a host for liver fluke larvae (*Pfleger and Chatfield* 1983, 188*;* Engelhardt and Merxmüller (1964, 188). Another, slightly damaged, gastropod specimen was identified as a member of the Succinidae, plausibly *Oxyloma elegans (Pfleger and Chatfield 1983*, 78), although this is tentative at best since the distinction between related species in this family can be hard to make even in complete living specimens (Cameron, 2008, 33-4). With that caution noted, as a member of this family, it nevertheless is most probably another indicator of a wet or moist habitat (Cameron, 2008, 33-4).

B.2.10 Some further fragments of mollusc shell in the >2mm fraction (including specimens with relatively poor surface preservation) from sample 24 comprise one probable adult terrestrial snail, two possible juvenile specimens (with few whorls), two fragmentary apices and *c*20 small fragments of shell. The <2mm fraction contains some *c*30 more further fragments that remain largely unidentified. However, at least one fragment in this fraction can be attributed to *Trochulus hispidus* and there is one possible *Carychium tridentatum*.

B.2.11 The molluscan evidence from sample 24 of ditch *102*, fill (*103*), in summary, is taken to suggest some moist, shady, and wet, habitat which most plausibly relates to the at least seasonally or periodically, water filled ditch. Given the catholic tastes of some of the mollusc species it is not possible (based on this sample) to suggest the likely conditions beyond the ditch.

APPENDIX C FINDS SUMMARY

C.1 Finds report

By Karen Barker

C.1.1 The evaluation produced a small quantity of finds (Table 6), including ceramic, iron, and glass. Most of the finds were found during environmental processing of soil samples except the ceramic vessel fragment and the iron nail. All finds have been quantified by material type within each context, and totals by material type and by trench/context area.

Material	Trench	Context	Quantity	Total weight (g)
Ceramic	4	*400*	1	203
Iron	13	*1308*	1	5.7
Glass	13	*1306*	1	1
Burnt clay	14	*1408*	25	10
Magnetic material	14	*1408*	80	8.4
Total			108	228.1

Table 6: Finds quantification

C.1.2 *Ceramic vessel*: a single base fragment of black-glazed post-medieval pottery came from the topsoil of Trench 4 (*400*; OR1004; 203g). The fabric is orange, with reduced exterior and internal black glaze with an extrapolated diameter of the base of 192mm, maximum surviving thickness 21mm, suggesting a quite substantial vessel.

C.1.3 *Iron*: a single iron nail head with partial shaft (OR1001; 5.7g) was retrieved from Trench 13 secondary ditch fill *1308*. The small size suggests carpentry use rather than structural and as nails have changed little over time, so cannot be firmly dated.

C.1.4 *Glass*: a single small fragment of colourless glass fragmented was recovered from a bulk environmental sample (OR1003; 1g, sample 27), retrieved from Trench 13 secondary ditch fill *1306*. This is frosted on one side, frosted / obscured glass was invented in the Victorian era (Hajdamach 1999) and continues in use to the present day.

C.1.5 *Burnt clay and magnetic material*: Environmental sample 21 from Trench 14, *1408* the secondary fill of pit *1407* produced 25 small fragments of burnt clay (OR1005, 10g) and 80 fragments of magnetic material (OR1006, 8.4g). The burnt clay could suggest a clay lining to the pit although the retrieved sample is small for such inference. The magnetic material was visually inspected under x10 magnification and contained no hammerscale (flake or spherical), or any other metalworking debris. These samples mostly comprise the remains of burnt soil (heat-magnetised residues). This indicates that fires were employed. Domestic fires can easily achieve the temperatures necessary to burn soil and leave small quantities of magnetic residue (Dungworth 2015).

C.1.6 *Recommendations*: only two finds are dateable and are post-medieval to modern in date. All the finds have no potential for further study due to their small size, average weight of 0.87g, and the limited number. Given the paucity of dating evidence and its recent date range, the animal bone and mollusc shell also have no further potential.

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APPENDIX E SITE SUMMARY DETAILS

Site name:	Mona Offshore Wind Project Onshore Cable Route and Substation, Abergele, Conwy, to St Asaph, Denbighshire, North Wales
Site code:	MOSWF23
Grid Reference	SH 9226 7804, SH 9355 7391, SJ 0148 7334
Type:	Evaluation
Date and duration:	September-October 2023
Location of archive:	The archive is currently held at OA, Mill 3, Moor Lane Mills, Moor Lane, Lancaster, LA1 1QD, and will be deposited with Royal Commission, the National Monuments Record of Wales, in due course.
Summary of Results:	Preceding geophysical survey of the wider proposed development site in 2022-3 detected series of linear and curvilinear anomalies of probable/possible archaeological and undetermined origin, as well as those suggestive of medieval/post-medieval and modern agricultural activity. A total of 75 of the 284 trenches proposed for the scheme were excavated during this phase of works, of which 36 trenches were found to contain archaeological remains, comprising linear and curvilinear ditches, pits, postholes, a probable cremation burial, remains of a bank deposit, and tree-throw holes. A moderately good correlation between the results of the geophysical survey and excavated trenches was demonstrated. The limited finds assemblage does not provide much further interpretation or dating evidence to the features beyond their stratigraphy, although the charcoal, recovered from bulk environmental samples, may provide further information on local woodland and wood fuel use, as well as potentially dating the features. The currently undated linear ditches recorded across the scheme provide evidence of land division possibly for agriculture, while the curvilinear ditches and postholes are suggestive of structures, perhaps of later prehistoric date. Scattered pits may also indicate associated occupation activity, and a single probable cremation burial provides limited evidence of funerary activity. Remains of post-medieval/modern agricultural activity comprised former field boundary ditches and field drains indicative of continued agricultural land use.

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