DRIVEWAY REPAIRS DRUM CASTLE ABERDEENSHIRE



Archaeological Watching Brief Carried out between February and May 2015 by Murray Archaeological Services Ltd



Report No: MAS 2015-9 by H K Murray and J C Murray

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-Archaeological watching brief-

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1. Background

1.1 In 2015 a major programme of maintenance to driveways and associated drainage was undertaken by the National Trust for Scotland at a number of properties, including Drum Castle, Aberdeenshire.

1.2 Dr Shannon Fraser, archaeologist for the National Trust for Scotland, determined that it was advisable to commission a watching brief on those parts of the works that would involve excavation for drains and other features in areas that were not already known to have been disturbed.

1.3 At Drum Castle there were two known areas of concern: the direct environs of the castle and the E end of the driveway which runs through an area of rig and furrow but it was considered that most of the deeper excavation beside the driveway should be watched.

1.3 Murray Archaeological Services Ltd was commissioned by the National Trust for Scotland to undertake a watching brief on ground disturbance in the agreed areas and to record any finds or features that were revealed. The watching brief was carried out between February and May 2015.

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2. The Site

The works relate to a number of sites within the estate of Drum Castle, Aberdeenshire.

(a) Drum Castle, Drumoak, Aberdeenshire.

Parish: Drumoak

NGR NJ 7962 0050

NMRS No: NJ70SE 4.00 Canmore ID 18550

(b) Associated sites:Rig and Furrow. NGR NJ80218,00372NMRS No: NJ80SW166 Canmore id 339496And NMRS No: NJ80SW162 Canmore id 339869 (duplicate entry)

N lawn Enclosure (visible on 1st OS 1865 (pub 1869) only). NGR NJ79602, 00533 NMRS No: NJ 70SE 128 Canmore id 333857 and NMRS No: NJ 70SE 160 Canmore id: 339484 (duplicate entry)

3 Methodology

3.1 All ground works in the areas agreed with Dr Fraser were observed with any potential features cleaned by hand, planned, photographed (Appendix 1) and recorded as appropriate.

3.2 All mapping was done with a Magellan Mobile Mapper 120 GPS and Glonass.

4 Results

All areas observed have been given a simple series of numbers. These do not relate to the contractor's numbers. Drain trenches were all observed. Trenches for kerbs which were only 300mm deep into the disturbed topsoil at the road edges were not observed, except the area which was recorded beside the known rig and furrow (see 2b above). The location of observed drain trenches and all observed features is shown on Illus 5 with details in Table 1.



Illus 1 Cutting drain trench 1



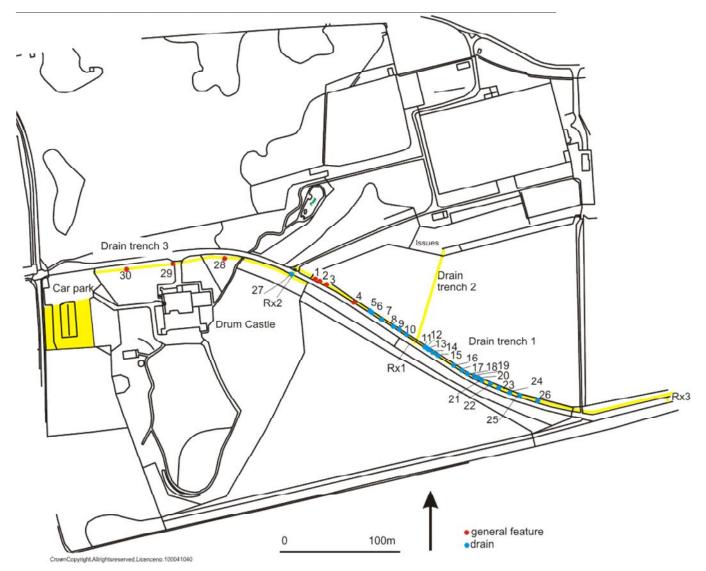
Illus 2 Drain trench lined with geotextile. Plastic pipe and gravel filled in.



Illus 3 Thin layer of topsoil recovered over gravel in drain trench



Illus 4 Silt trap in drain trench 1 with outlet to drain trench 2 into field



Illus 5 Plan of areas observed (yellow) and all features recorded red and blue dots). Crown copyright: All rights reserved Licence No 10004140

Table 1	Details of drain	locations observed.
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Location	Work observed	GPS	Stratigraphy	Context	Context detail
No				no	
Drain trench 1	Drain trench along N side of drive from path to gardens east to road crossing 3. Width of drain trench:c.700mm Depth: c.1.2m	Extends from W side of track to garden to E end opposite road to farm W:379710,800537 E:38022,800434	Deep infill from Context 1-4. Most of trench c. 600mm loam topsoil over hard yellow natural.		
		379732,800523	100mm topsoil over 100mm redeposited natural over c.300mm grey disturbed soil,	1	Deep infill to level road side

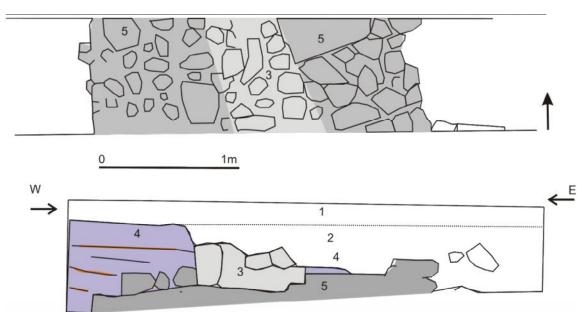
 	0.0	1	
	over c.80mm		
	redeposited		
	natural over		
	c.400mm loam		
	with slate frags.		
	c.1m redeposited	2	Deep infill to level
	loam. Includes		road side
	glass frags, slate		
379736,800520		3	Slightly shallower infill
379762,800506	c.500mm mixed	4	Deep infill to level
,	infill over		road side
	c.500mm loam		
	with frags slate,		
	19 th C		
	china/glass		
 379775,800500	c.1m below road	5	Drain. Plastic pipe.
			E/W
379776,800499	c.1m below road	6	Stone drain. E/W
379784,800491	c.1m below road	7	Stone drain. W:1 m.
			N/S in trench.
379799,800484	950mm below road	8	Stone drain. E/W. W:402mm
379793,800486	925mm below	9	Stone drain E/W.
379795,800480	road	2	W:600mm
379805,800480	900mm below	10	Stone drain. E/W
379805,800480	road	10	W:400mm
379820,800469	900mm below	11	Stone drain. E/W.
	road		W:350mm
379822,800469	950mm below road	12	Stone drain. E/W. W:350mm
379824,800467	c.900 below road	13	Stone drain. E/W.
2,7,902 1,000 107	•1900 0 • 1011 10 uu	10	W:350mm. Water
			flowing in from N.
379827,800466	c.1m below road	14	Stone drain. E/W.
579827,800400	c. Thi below toad	14	W:1m
379830,800462		15	From this point to 13
379830,800402		15	ceramic 4" field drain
			eerunne i nera arann
			(broken) visible in S
 270045 000454	000 1 1	16	side of trench
379845,800454	c.900mm below road	16	Stone drain. E/W. W:500mm
379851,800450	c.900mm below	17	Stone drain. E/W.
	road		W:500mm
379854,800448	950mm below	18	Ceramic drain (4")
, i i i i i i i i i i i i i i i i i i i	road		E/W. Functioning
379857,800446	900mm below	19	Stone drain. E/W.
	road		W:250mm
379862,800444	900mm below	20	Stone drain. E/W.
377002,000111	road		W:400mm
379867,800442	950mm below	21	Stone drain. E/W.
	road		W:350mm
379874,800439	900mm below	22	Stone drain. E/W.
270001 000107	road		W:300mm
379881,800437	850mm below	23	Stone drain. NW/SE
	road		W:400mm. Widens
			into soakaway c
			250mm x 1.5m
379890,800431	900mm below	24	Ceramic field drain
			•

			road		cut into earlier stone drain. E/W. W:200mm
		379897,800429	900mm below road	25	Stone drain. NW/SE. W:200mm.
		379914,800425	900mm below road	26	Stone drain. E/W. W:250mm
Drain trench 2	Drain installed from drain trench 1 extending N 80m into field to drain to burn. Trench W:400mm 700mm deep	N:379815,800475 S:379835,800551	250mm grass and topsoil over beige/yellow sandy ,silty natural		No features
Drain trench 3	Drain trench along S side of drive from opposite the path to gardens and W to car park. The E end of this trench from the manhole in the road through the arch of the courtyard to road crossing 2 was cut into an existing pipe trench and the old pipe removed. The W end from the manhole to the carpark was a new track. W:c500mm except around manhole W:<1.5m Depth: c.900mm	E end (E of manhole in archway road) W:379615,800541 E: 379721,800520 W end (across N lawn W of manhole in archway road) W: 379545,800533 E:379613,800540	Only around wall 28 was the E section away from the old pipe which ran further S. W section: Between manhole and c37m to W (379579,800536) there was c 1m deposited topsoil, mostly very clean with no slate or building debris. 1 19thC bottle base. W of this point natural rising and only c.300mm topsoil (ridge visible in grass)		
			379655,800546	28	Wall (details see below)
			379612,800539	29	Two water mains running N/S to below archway. Drain above pipes. Below pipes several v large natural boulders (<1.25 x0.75m). These are in disturbed context, and possibly form part of infill.
			379572,800535	30	Black alcathene water pipe NW/SE at 700mm below grass.
Car Park	The soil strip of S end of car park was observed (35m x 35m). Levels were reduced between 200 and 350mm.	NW:379499,800504 NE:379539,800508 SW:379509,800469 SE:379543,800480	On the W edge, which was in grass, there was c 200mm topsoil over natural. Elsewhere there was c100mm		In E half a N/S fuel line and NW/SE electricity cable and 1 possible stone drain (not logged).

	It was decided that		aggregate over		
	the N end of car		natural.		
	park did not				
	require observing.				
Road	Trench for drain	N:379815,800475	140mm tar over		No features
Crossing	pipe below road.	S:379737,800521	c220mm v hard		
1	W:450mm.		compact sub-		
	Depth:400mm		base over hard		
	Ĩ		stony natural		
Road	Trench for drain	N:379713,800532	140mm tar over		
crossing 2	pipe below road.	S:379707,800532	c220mm v hard		
8	W:500mm.		compact sub-		
	Depth:500mm		base over hard		
	1		stony natural		
		379709,800531		27	Drain sump. (details
					see below)
Road	Trench for drain	380021,800423			No features
crossing 3	pipe below road.				
0	W:500mm.				
	Depth:500mm				
Kerb		From	On road side of		No features. The rig
trench on	D: 300mm	W:380185,800455	cut =tar over		and furrow does not
N side of		То	road make-up on		survive up to road
drive		E:380327,800454	natural. On kerb		edge.
near			side=disturbed		
public			topsoil over		
road			natural		

Wall 28

Drain trench 3 cut across the basal foundations of a substantial stone wall (illus 6-9) at GPS: 379655,800546. The wall (illus 6: layer 5), which appears to run N/S at this point, was c. 2.25m wide. A fairly good straight edge survived on the W side but the E side had been damaged by the machine. An old drain had cut across the middle of the wall leaving an area of more disturbed stones c. 500mm wide (layer 3: paler on plan and elevation in illus 6). The wall was directly on natural. After it had been demolished it had been sealed by a black and orange layer of burnt material (section: layer 4. illus 6, 9) – this was cut by the later drain. Layer 2 (illus 6) comprised disturbed yellow clay/redeposited natural with stones and may have included debris from the wall. Layer 1 (illus 6) comprised road make-up on the N side and grass and topsoil on the S side. A single, very abraded, sherd of medieval or post-medieval pottery was found in the disturbed layer 2 and does not give any reliable dating for the wall itself.



Illus 6 Plan and section of wall Context 28.



Illus 7 Wall 28, looking E



Illus 8 Wall 28 looking W



Illus 9 N section across wall 28 showing burnt layers and the disturbed central drain cut

Drain sump 27

An early drain sump (illus 10-12) was excavated at 379709, 800531 in Road Crossing 2, 1.20m N of the S side of the drive. It was 360×260 mm formed of a red brick surround, and 250mm deep with a base onto natural. The bricks were 200-250 x 100 x 60mm. The associated pipe was 70mm (3") in diameter. Dressed granite slabs and an iron grill found in the overlying disturbed ground appeared to have been displaced from the sump.



Illus 10 Road crossing 2 with drain sump 27



Illus 11 Detail of brick drain sump 27



Illus 12 Stone surround and iron grill displaced from drain sump 27

5 Discussion

Drain trench 1 and road crossings

The deep band of c.1m of redeposited earth along the N side of the W end of this section of drain (contexts 1-4) included 19th -century china, glass and fragments of slate in the lower fill. This suggests that there has been considerable levelling up of this part of the drive during or since the 19th century. The normal depth of topsoil in this area was c.250-300mm above natural as is shown in the field N of driveway in drain trench 2. The very large number of drains crossing E/W below the road is testament to the known drainage problems in the field S of the driveway (Murray & Murray 2013), the number and range of different drain types suggest this has been a long-standing problem and it may be in relation to this that the W end of this section of driveway was raised and levelled up.

Field: Drain trench 2

There was no evidence of any archaeology within the field and the very shallow topsoil renders survival unlikely in this area.

Kerb trench in area N of drive near public road by rig and furrow

The trench in this area was only 300mm deep to set a stone kerb. It did not cut through the rig and furrow (NMRS No: NJ80SW166 Canmore id 339496) which does not survive this close to the road.



Illus 13 Kerb trench at N side of drive beside rig and furrow (which is just visible to RHS of trees).



Illus 14 Detail of kerb trench beside rig and furrow

Drain trench 3: E of manhole in road through archway: Wall 28

The wall (28) recorded in this area appears to show on the resistivity survey as an isolated area of high resistance (Ovenden, 2014, fig 4: No number). The isolation may however be illusory as there are large uncharted areas because of the nearby trees. The width of the wall suggests that this potentially may have been the base of an early wall enclosing the tower. It is however perhaps surprising that it comprised relatively small stones and some caution should be given to its interpretation. It is very different from the stones observed on the N side of the driveway in 1995 by Robin Turner (Drum archive DRU/A054) which were interpreted, probably correctly, as a garden feature.



Illus 15 Wall 28 in relation to tower. (Ranging rods indicate the E and W faces of wall.)

Drain trench 3: N lawn (W of manhole in road through archway)

Although there were no archaeological features in this trench, it does give some insight into the landscaping of levels and aids in interpretation of the geophysical survey undertaken in this area (Ovenden, 2014, fig 4).

The geophysical survey showed a high resistance line running NW/SE across the grass (Ovenden 2014, fig 4:1). This appears to coincide with the ridge observable across the grass and shown in the drain trench to be the point at which the natural ground slopes down from c 300mm below the grass to over 1m below the grass. The slope appears to

have been infilled with deposited clean loam brought in from elsewhere. This did not contain building debris but there was one 19th-century bottle base. Very large boulders to the W of the manhole were not structural and may have been part of the infill. The boulders may have derived from a former structure in the vicinity or may have been natural rocks. They may account for the high resistance trends (Ovenden 2014, fig 4: 6) shown in the geophysical survey. This infilling would appear likely to be part of the 19th-century landscaping.

It is not clear how, or if, these features relate to the rather odd enclosure in this area of the N lawn which is shown only on the 1st OS map of 1865 (NMRS No: NJ 70SE 128 Canmore id 333857).

Car park

There was no evidence of any archaeology within the car park which had been stripped to natural when the original car park was originally created.

References

Murray, H K & Murray, J C 2013 *Drum Castle Aberdeenshire. Drainage: Archaeological watching brief.* MAS 2013-18. Unpublished client report, available in NTS archive

Ovenden, S 2014 *Geophysical Survey Report: Drum Castle*. Unpublished client report, available in NTS archive

Appendix 1: Catalogue of digital photographic record (to archive)

Digital frame number	Content
1	W end of Drain trench 1.
2-5	Drain trench 1 Deep infill in Drain trench 1. contexts 1-4
6-7	Drain trench 1 .Views E of W end of Drain trench 1
8-16	Drain trench 1. Deep infill in Drain trench 1. contexts 1-4
16-26	Drain trench 1. Stone infill in context 2
27-29	Drain trench 1. Context 4
30-31	Field to N of driveway beside contexts 1-4 showing built-up

	ground
32-36	Drain trench 1. Built-up ground tapering away near context
	4
37	Geotextile in base of trench
38-44	Drain trench 1. Drains contexts 5-6
45-46	Drain trench 1. General view
47-54	Road Crossing 1
55-60	Road Crossing 3
61-64	Drain trench 1. E end.
65-67	Drain trench 1. W end across garden track
68-70	Road Crossing 2
71-79	Brick sump context 27 in Road Crossing 2
80-85	Cover displaced from context 27 sump
86-88	Drain trench 1. E end.
89-97	Drain trench 2
98-100	Drain trench 3. Central section
101-118	Drain trench 3. Wall context 28
119-123	Drain trench 3. Wall context 28 in relation to tower (wall
	width indicated by ranging rods)
124-127	Drain trench 3. Wall context 28 in relation to N side of
	driveway (wall width indicated by ranging rods)
128-132	Drain trench 3. Wall context 28
133-142	Drain trench 3. E end
143-148	Drain trench 1. Area beside rig and furrow, near public road
	at E end of driveway
149-150	Drain trench 3. Central section E of road below arch to
	courtyard
151-153	Drain trench 3. Central section across road below arch to
	courtyard
154-155	Drain trench 3. W end across N lawn
156-179	Car park