Building the Great Dolmens
Excavations at Garn Turne, Pembrokeshire, 2012

Data Structure Report
November 2012

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1. Introduction: Building the Great Dolmens project

Dolmens are one of the best known, yet least understood, types of monument in Britain and Ireland. These monuments have seen virtually no modern excavation or investigation, and we still have no definite date for the construction of these monuments, although there is the suggestion that this was at a potentially early date in the Neolithic (Cummings and Whittle 2004; Kytmannow 2008). If this is the case, dolmens may well be the earliest form of monumentality in Britain and Ireland and may be able to inform our understanding of the transition to the Neolithic. In addition to this we have little understanding of how these monuments were constructed, even though some dolmens employ enormous stones. These were extraordinary feats of engineering, where people were quarrying, hauling and lifting stones that were up to 150 tonnes in weight. It is also obvious that many dolmens were architectural failures, in the sense that at some sites the capstone was never successfully placed on top of uprights, yet this idea of monumental failure, and its impact on society, has not been explored in any depth. Moreover, we have only a very limited understanding of how these sites were used once they were constructed, either successfully or unsuccessfully. Did people abandon monumental failures, or did they use them as if they were successful constructions? Did these sites all start off as burial chambers, or was this a 'secondary' use? The other key element of the project involves thinking beyond typological classification. We advocate a critical approach to the traditional monument typology of Britain and Ireland by focussing instead on the construction processes involved, and the overall ‘effect’ that people were trying to achieve when building these sites, instead of the minutiae of typological classification. Since this is the case, some sites that have not been previously classified as dolmens will need to reclassified and considered as part of our project. Overall, then, a new project addressing all these issues is being initiated in order to understand this crucial class of monument, and potentially the beginnings of monumentality in Britain and Ireland.

In order to answer our research questions we will approach the Neolithic monumental record of Britain and Ireland in three key ways:

1. Survey: by undertaking geophysical survey around a number of dolmens, we can look for traces of the construction methods used to build the dolmens (pits, ramps, quarries and so on).
2. Geological assessment: we have already noted that many dolmens are built from stones that are both local and non-local. In order to fully understand the biography of these monuments, the geological assessment of multiple sites in different areas is an essential component of the

project.

3. Excavation: five sites will be selected in Wales, England and Ireland that appear to be ruinous but, for our purposes, will allow us to focus on their construction. We will also select sites for excavation that show signs of monumental disaster, and where we can identify and excavate a nearby quarry or pit. Because dolmens are relatively simple constructions, and since they very rarely produce large quantities of material culture, it is realistic to excavate one site a year. This report details the excavation in 2012 of our first target site, Garn Turne in SW Wales. Garn Turne was first excavated in 2011, and a separate Data Structure Report exists for that season.

Fig. 1. Garn Turne dolmen prior to excavation

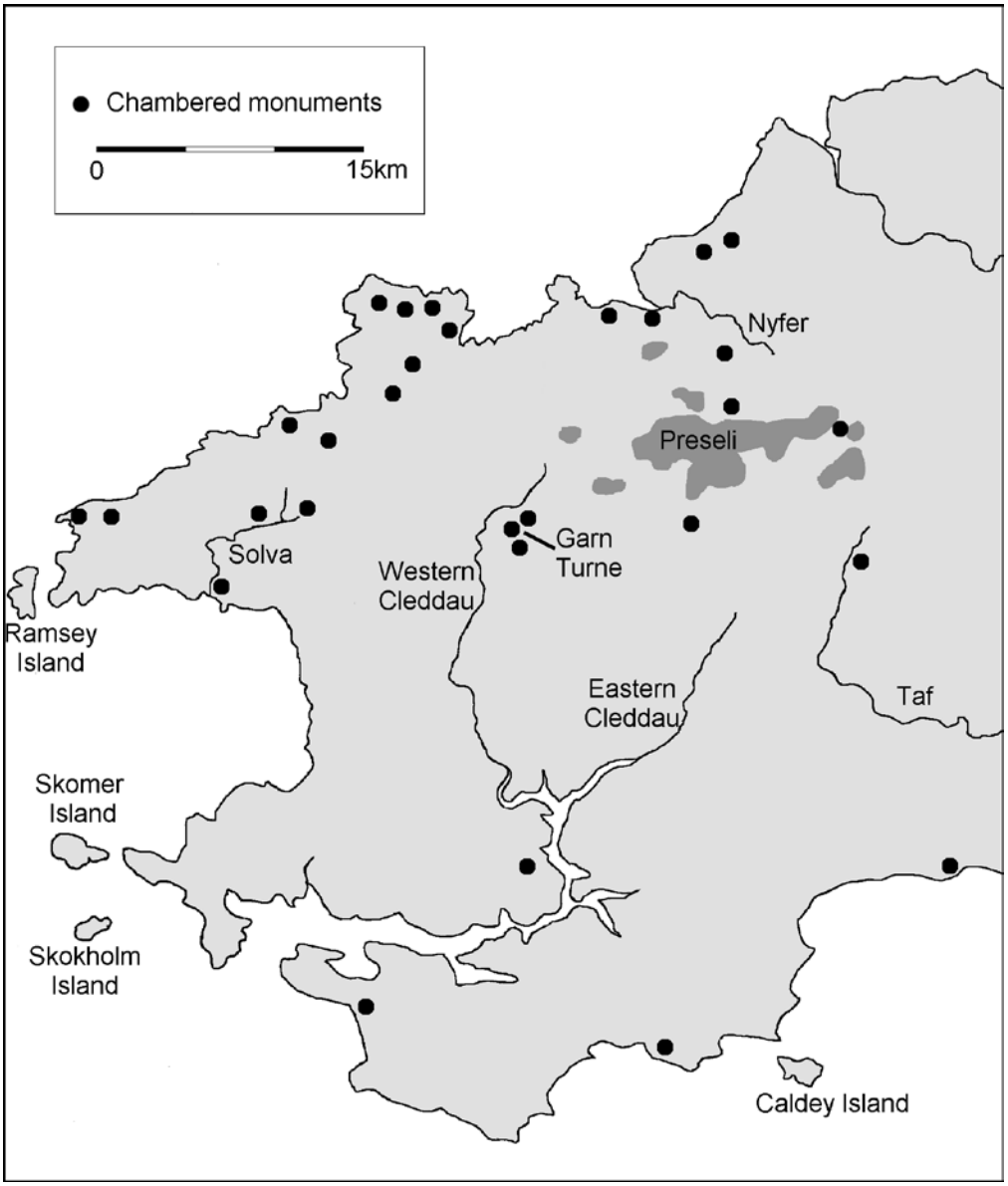

Fig. 2. The location of Garn Turne in south-west Wales, and in relation to other chambered tombs in the region

2. Garn Turne excavation methodology and previous work

Garn Turne was chosen as our first site for investigation for a number of key reasons:
1. It was a monument that appears to have collapsed during construction. This meant it offered excellent potential for exploring our aim of identifying construction processes.
2. It has not been previously investigated, so any archaeological deposits should not be disturbed.

Prior to excavation a detailed measured survey using a total station was made of the monument and geophysical survey was conducted (Figure 3).

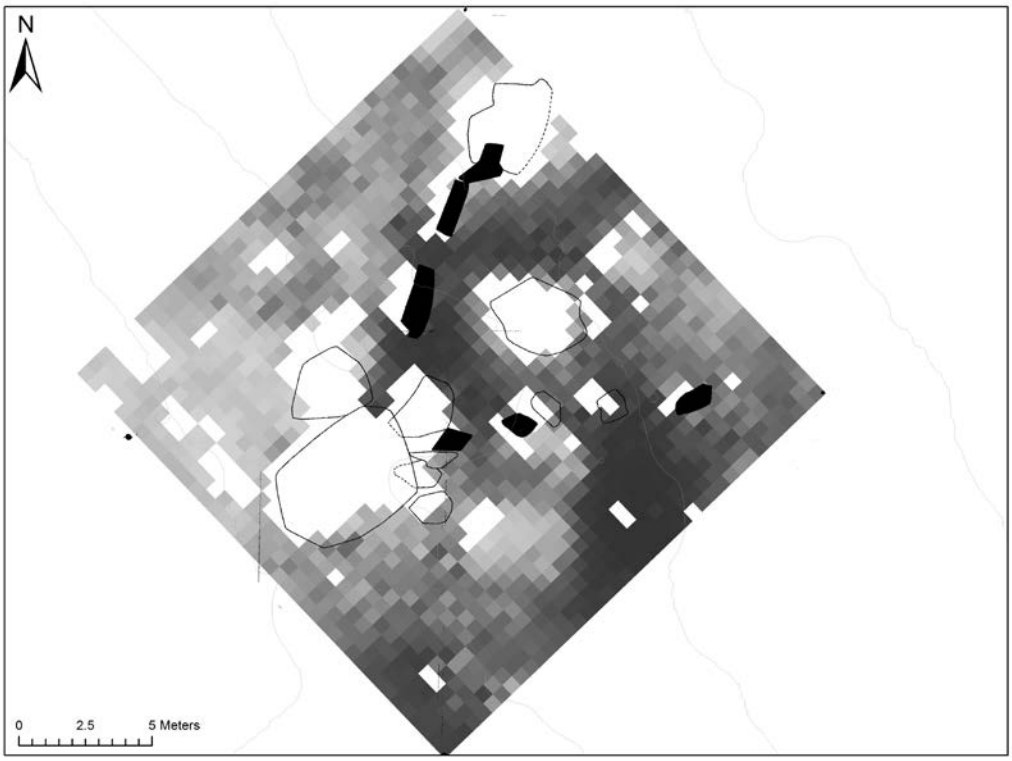

Fig. 3. Geophysical survey of Garn Turne conducted in June 2011 prior to excavation

In 2011 we opened two trenches at Garn Turne. The first trench was around the collapsed dolmen. In the forecourt area of the monument it was quickly obvious that there were considerable deposits lying within a massive pit. We excavated down to a layer of stones in this area, and obtained three radiocarbon dates from short-lived charcoal at this level (two were L.Neo/EBA, a third was Iron Age). To the west of the collapsed dolmen we found evidence for a smaller collapsed dolmen. All trenches in this area were not large enough to gain a sufficient understanding of the archaeology – none of the trenches were large enough to

catch the edge of the large pit. The trenches were covered with teram at this level and backfilled. We also opened a trench at the top of the field which we thought was the location from which the capstone had been quarried. This turned out to be a recent quarry, made to create a watering hole for cattle.

In 2012 we reopened the main trench around the collapsed dolmen. The trenches were expanded in key areas in order to find the edge of the pit in two areas. We also wished to gain a better understanding of the possible smaller collapsed dolmen to the west of the main monument, so the trench was also expanded here.

We followed standard archaeological procedure in the UK. We excavated using a trowel and hand-shovel and all archaeological deposits were dry sieved where possible to recover finds. The deposits were recorded in plan and section. Find locations were recorded in three dimensions and by context using a total station. The recovery of samples for palaeobotanical analysis followed English Heritage guidelines (2002). Accordingly any sealed archaeological contexts that were excavated were sampled for flotation, as well as a random selection of other contexts.

The documents and finds that result from the excavations – comprising photographs, drawn plans, written documents and artefacts – will be preserved and maintained as a record of the fieldwork. Digital data – photographs, geospatial data, CAD drawings etc. – will be prepared and archived in accordance with industry standards of good practice (Eiteljorg *et al*. 2003; Gillings and Wise 1998; Richards and Robinson 2000). The deposition of the archive will be prepared and undertaken in consultation with CADW and in accordance with current best practice (Archaeological Archives Forum 2007; Richards and Robinson 2000).

3. Context narratives

Garn Turne 2012 season (GT12)

Many components of the monument were visible in the main trench (northern area) prior to excavation in 2011. Each stone was given a separate number in 2011, as detailed in Figure 4. This included the stones which make up a 'façade', some of which are still standing (stones 1, 2, 3, 5, 8 and 11) and some of which have fallen over (stones 4, 6, 7, 9 and 10) . These create a 'forecourt' area and their numbers were retained throughout this season. Other stones which were previously thought to be natural were given individual context numbers and these are referred to within the context narrative.

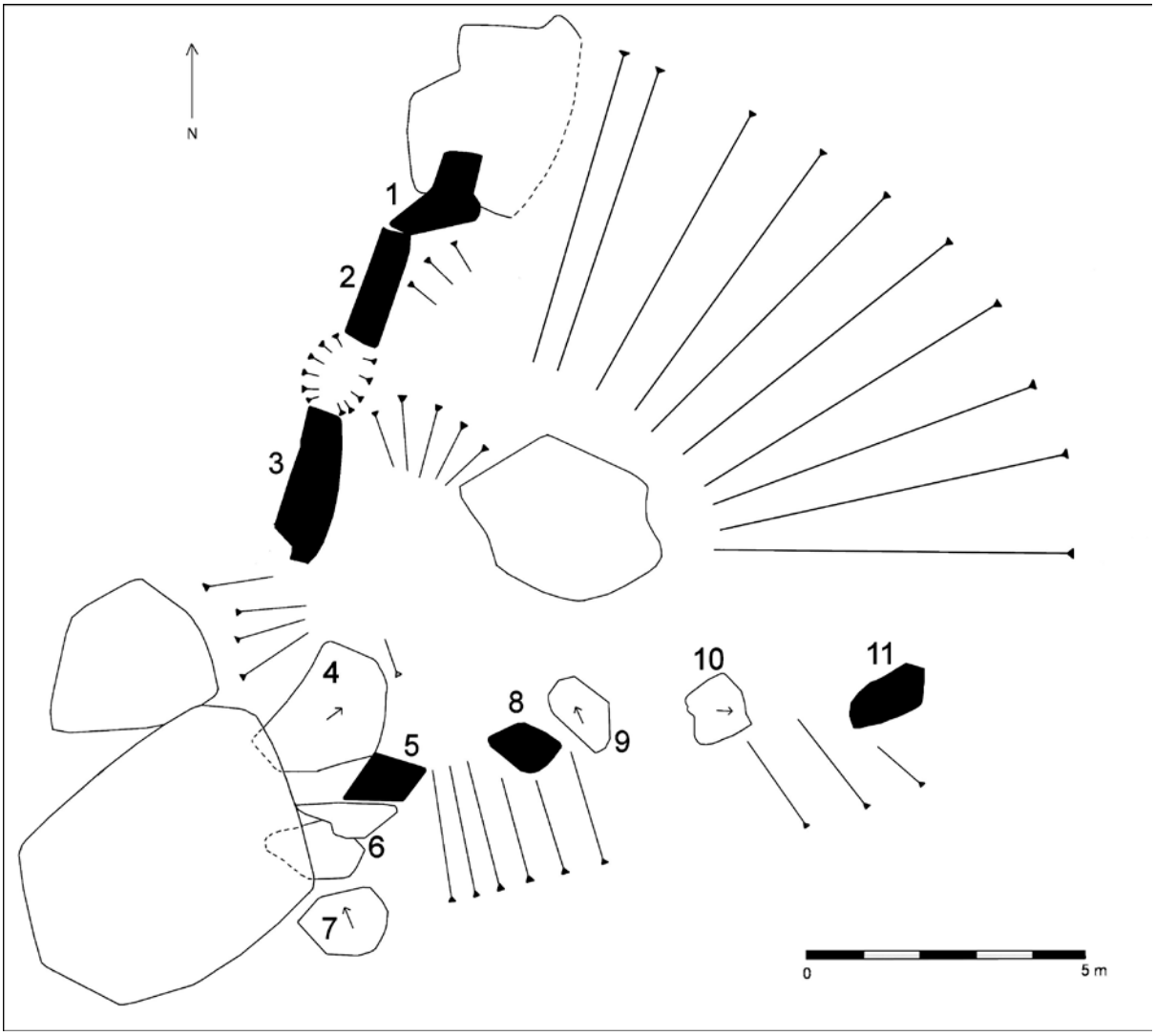

Fig. 4. The pre-ex plan of the dolmen prior to excavation also showing the numbering of the main stones of the monument, as used throughout this report

We have already outlined the contexts from the excavations in 2011 and will not repeat those in detail here. In the main trench north of the collapsed large dolmen we had removed a series of silts which seemed to fill a great pit [007]. This pit, where visible in our trenches, was divided into two sections by a baulk running north-south through roughly the middle of the pit. This divided the fills of the pit into those in eastern and western sides and resulted in two sets of context numbers being attributable to the same context/event.

We will detail the events and activities occurring at Garn Turne in sequence beginning with the earliest on-site.

The Floss Stone

The primary construction occurring at Garn Turne centred on the quarrying of a large stone [052], known as Floss Stone, measuring 1.95m x 1.45m. The Floss Stone had a bulbous upper surface and relatively flat lower surface. It appears to have been quarried from a spot further north and the cut [100] may well relate to this activity. Certainly, a substantial area of low resistance, representing a large pit or cut, was visible in the geophysical survey undertaken in 2011. The cut [100] had been backfilled with a silty loam [088]. A second cut [076], filled with small stones [077] in silt [078], was visible in the north-east corner of the trench and again this may well relate to the extraction of the Floss Stone. Given the presence of at least two potentially large and deep cuts or pits north of the limits of the excavation, it is difficult to be precise about the actual original location of the Floss Stone. A large naturally bedded stone [086], was clearly glacial and separated the two cuts [100] and [076], this demonstrates the presence of glacially moved stones coming from the large outcrop to the north of Garn Turne. It is suggested that the Floss Stone was a capstone, whether it actually covered a deposit, or was a fallen or disturbed monument, is impossible to tell given our inability to remove the stone. Suffice to note, this stone becomes the focal point of the subsequent dolmen, and the majority of activities and architecture of Garn Turne Major is orientated in relation to it. The Floss Stone appears to be supported by a series of small stones blocks up to 0.40m in length. In between the blocks a silt [101] had accumulated.

A series of deposits are associated with the Floss Stone. The basal fill [088], in cut [100], was overlain by a spread of burnt material [087] which ran around the western side of the Floss Stone from north to south. This deposit consisted of large amounts of charcoal and red ash which ran up to c. 0.2m beneath the stone. High magnetic susceptability readings

demonstrated this to be *in situ* burning (Figure 5). No sign of a continuation of this 'halo' of material was present to the east of the Floss Stone, where a layer of light-brown silt [080] provided a matrix for a compact spread of small stones [055] running around its perimeter. This may relate to a clearly defined rammed stone surface [099] to the west of the Floss Stone. A sequence of silty layers [065] ran over the deposits associated with the Floss Stone representing subsequent downslope soil movement. An interesting spread of larger stone blocks [067] were present overlying the large naturally set stone [086]. Given their high stratigraphic position it is difficult to attribute them a relationship with the Floss Stone, however, this cannot be ruled out.

Fig. 5. Large piece of burnt wood underneath 052, part of context 087

Garn Turne Minor

In 2012 we expanded our trench to the west of large stone [048] which we suspected in 2011 was the capstone of another dolmen monument which also appeared to have collapsed. The relationship between this monument and Garn Turne Major was represented by an orthostat [045] of the former beneath the fallen capstone [051] of the latter. Therefore, Garn Turne minor must have been erected and collapsed before Garn Turne Major was being built.

Initially, a large sub-circular stone [048], measuring c. 2.5m diameter, was quarried from the glacial till. This resulted in the digging of a substantial pit [044] which may well have been partially utilised as a 'chamber'. Either way, the large stone acted as a capstone, and was originally supported by at least three orthostats [045, 046 and 062] within this pit/hollow. An oval cut [109] filled with a brown silt [104] at the base of the large pit [044] may well represent the base of a socket for one of the supporting orthostats. At a later date the dolmen either collapsed or was deliberately demolished: the splayed-out nature of the orthostats is suggestive of collapse (Figures 6 and 7).

Fig. 6. The collapsed smaller dolmen at Garn Turne. The stone marked with the arrow is one of the possible collapsed uprights for this monument

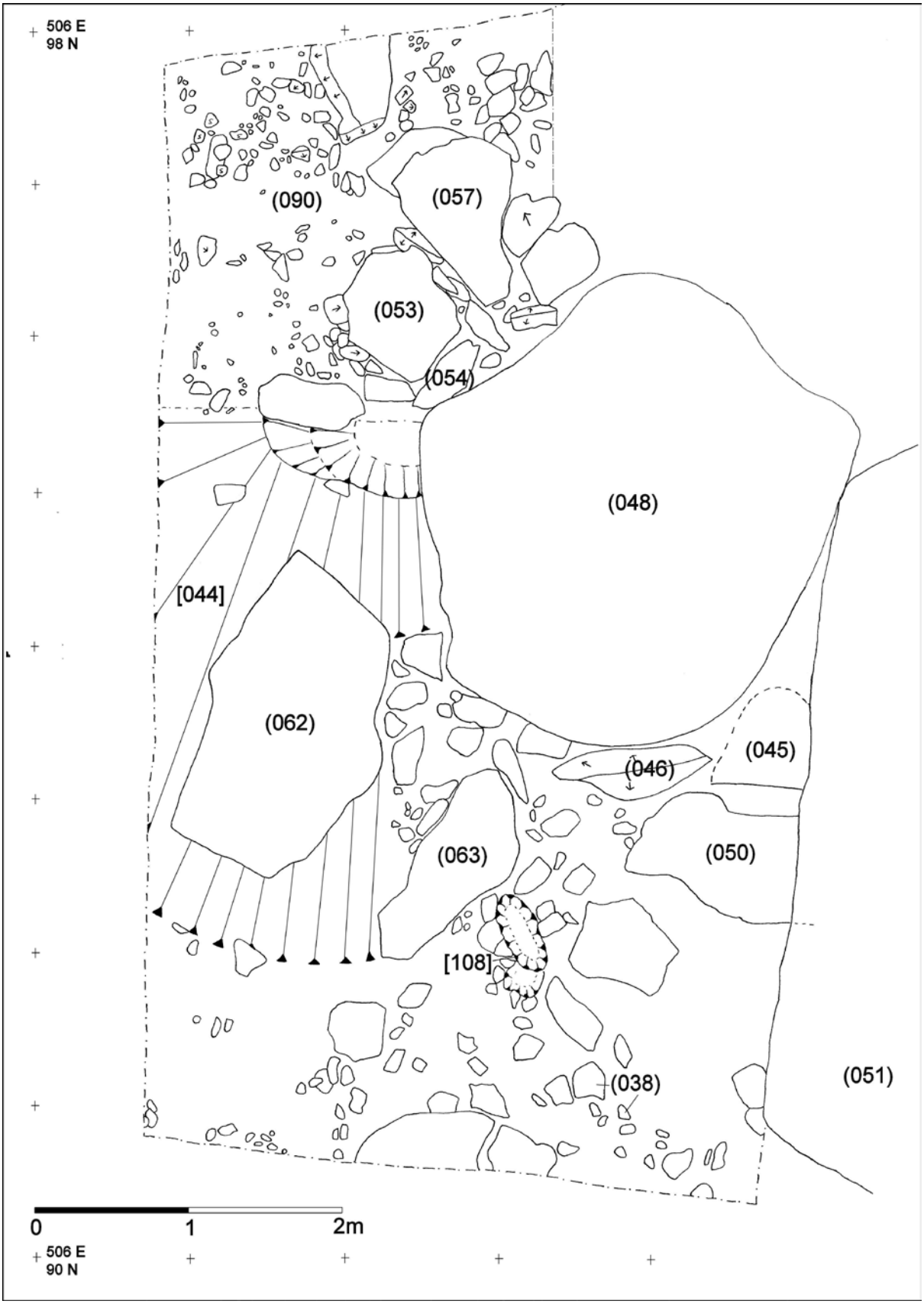

Fig. 7. Post-excavation plan of the smaller collapsed dolmen at Garn Turne Minor

Garn Turne Major

When Garn Turne Minor and the Floss Stone were quarried and erected, an adjacent stone block [051] lay embedded in the natural till. This was an immense stone, weighing between 70-80 tonnes, and must have resembled an actual outcrop. In fact, it had been torn off the outcropping rhyolite outcrop to the north and been redeposited in the natural till by glacial action. At some time after the collapse of Garn Turne Minor a decision was made to quarry and erect this stone as the capstone of another dolmen. Initially, the top-soil and glacial till was removed from around this stone. This created the large pit [007]. After this material was removed, at least two elongated slots, one in the east [107] and a second in the west [102], were cut beneath the stone (Figures 10 and 11). Given the small size of the slots, it seems likely that they were excavated by a small person or child. The eastern slot appeared to be ramped into the pit, allowing leverage to be applied to any timber inserted. These slots appear to have been left open for a short time as a silty clay [084] formed at the base of [107], and an equivalent deposit [103] formed at the base of [102].

Fig. 10. The Floss Stone in the forecourt [052] in relation to the Great Pit [007] and slot [102] in the foreground

Fig. 11. Post-excavation plan of the main trench, showing the cut of the Great Pit [007]

The massive stone [051] was slowly levered and raised up, and in all probability, the large stone blocks [070] which filled the base of the pit [007], were employed as supports. These were left in place, and formed the basal pit fill. Around the stone blocks [070], dumps of clay with charcoal and slate [040, 082 and 083], were laid down. A flint (SF 540) and two sherds of pottery (SF 541 and 542) were recovered from context [083], and two hammerstones (SF 512 and 525) and one pot sherd (SF 523) from [082]. It was also from this point in the infilling process that rhyolite flakes from the shaping of the capstone appear in the stratigraphic sequence. From this, we can discern that the base of the capstone was shaped as it was supported over the pit.

Fig. 12. Two pot sherds found on the base of the Great Pit [007], and rhyolite flakes (right)

As was seen at the excavations at Carreg Samson and Pentre Ifan the backfilling of the pit also provided the support for the uprights of the dolmen at Garn Turne Major. Interestingly, in the south-west of the pit around the fallen Garn Turne Minor a yellow clay deposit [090] was used to fill the pit. The clay deposit [090] in conjunction with [041] and [042] supported orthostat 4.

Above the dumps of clay and the large stones [070], a series of deposits were laid down to fill the upper portion of the pit (Figure 13). These included discrete spreads of white silty clay and ash deposits [031, 068, 069 and 071]. These layers are dumps of material accumulating above the stone layer [070] and they contained a series of small finds, including pot sherds (SF 429, 430, 442, 444, 472, 507, 508, 520, 528, 535, 537, 538), flint (SF 409, 410), hammerstones (SF 417, 420 and 421) and a piece of flaked tuff (SF 476). More pieces of flaked rhyolite from the capstone were also found in these layers. It is at this time that the large orthostats of the forecourt are put into position. At this level roughly defining the outer lip of the pit were two arcs of smaller stones [032 and 037].

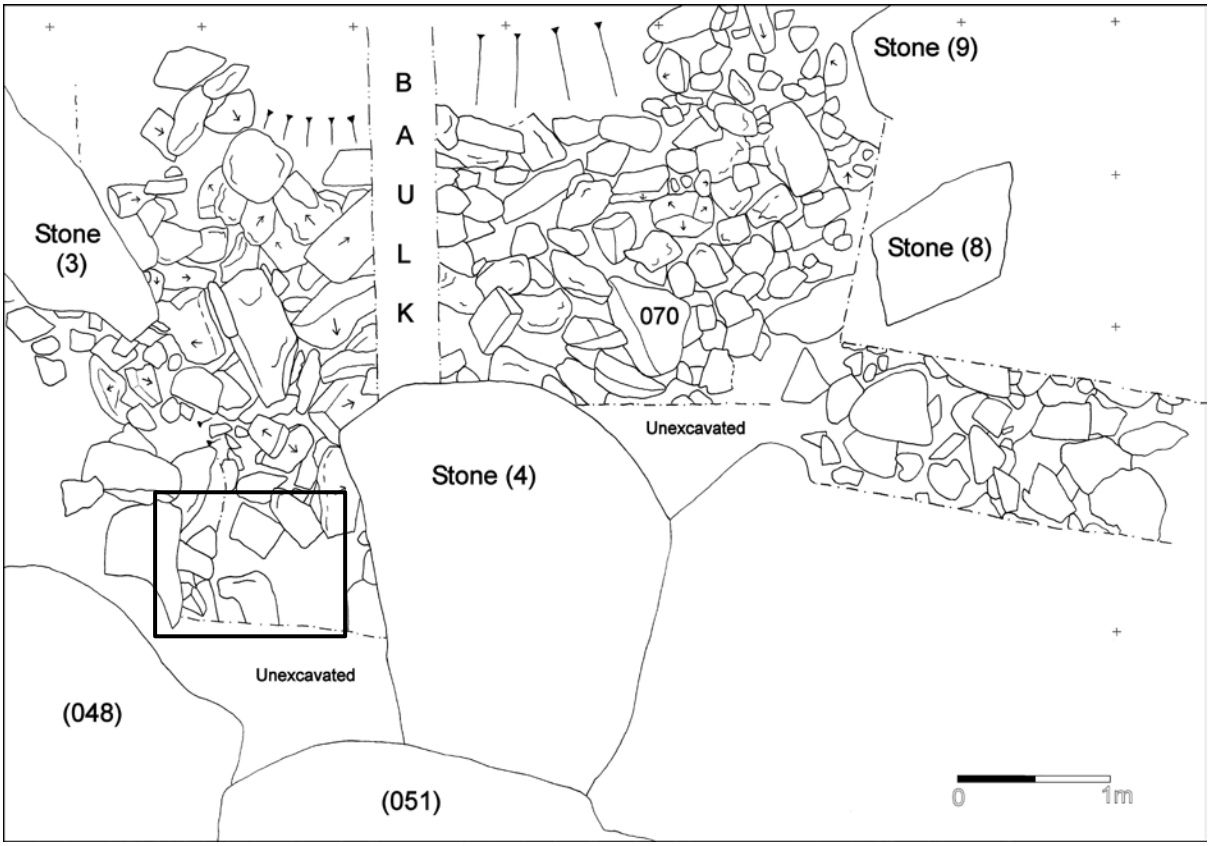

Fig. 13. [070] large stones filling the bottom of the great pit *in situ.* The darker square indicates the original location of stone 4

The final filling episode is represented by the laying down of a thick layer of grey silty clay [040 and 028]. On the surface of this layer a hearth and spread of ashy material was encountered in 2011.

Final activity

The removal of the topsoil across the western part of the trench and adjacent to the capstone of Garn Turne Minor [048] revealed a series of standing stones held upright by packing stones (Figure 14).

There were the remains of at least five standing stones in this area, all around the collapsed capstone of the smaller dolmen [048]. These were

- Stone 057 with packers 059
- Stone 053 with packers 054 and matrix 055
- Stone 058 with packers 060 and matrix 066
- Stone 063

- Cut [108], the remains of a small standing stone with packers 098

Fig. 14. Standing stones around the collapsed smaller dolmen

These appeared to encircle the location of Garn Turne Minor and they represent some form of later commemoration of this early dolmen. We only investigated one of these, 058, in order to look at the deposits underneath these stones. Beneath 058 were its packers along with a cushion stone (074) which seems to have been placed as a support under the standing stone.

Interpretations

We now have a really good understanding of the construction processes and sequences at Garn Turne. We would suggest that the Great Pit [007] originally held the capstone from the large dolmen at Garn Turne. It is certainly large enough to have been the original location of this stone. The Great Pit seems to have been cut as a single event, with the two slots at the base cut at the same time, which acted as burrow holes to get underneath the huge stone. The capstone was then almost certainly flaked *in situ*, as rhyolite flakes and hammerstones are found throughout the different fills of the pit, including the basal deposits. Once the stone had been extracted from the pit, the builders seem to have quickly backfilled the pit with enormous boulders and loosely-packed clay. On top of this dense mass of stones were various silting layers which suggest that the upper part of pit lay open while the monument was being

constructed. A thick deposit of silty clay effectively capped the pit and activities involving burning occurred on its surface. The C-14 dates of L.Neo/EBA and the Iron Age suggest that activities may have taken place over a considerable period of time.

We also have some idea about the collapse of Garn Turne. It seems likely that the dolmen originally stood in a different orientation that its current position. We can see this from the original location of stone 4, which was once one of the uprights for the capstone. It seems that this originally stood slightly to the west and to the side of its current position. This would mean that it was pulled over and twisted to one side when the monument collapsed. This event also ripped a big chunk of material up with it when it fell over, which explains the mixed nature of deposits where stone 4 originally stood. The twisting of capstone as it collapsed also resulted in two of the supporting stones falling and being trapped beneath the capstone where they can still be seen under the capstone today.

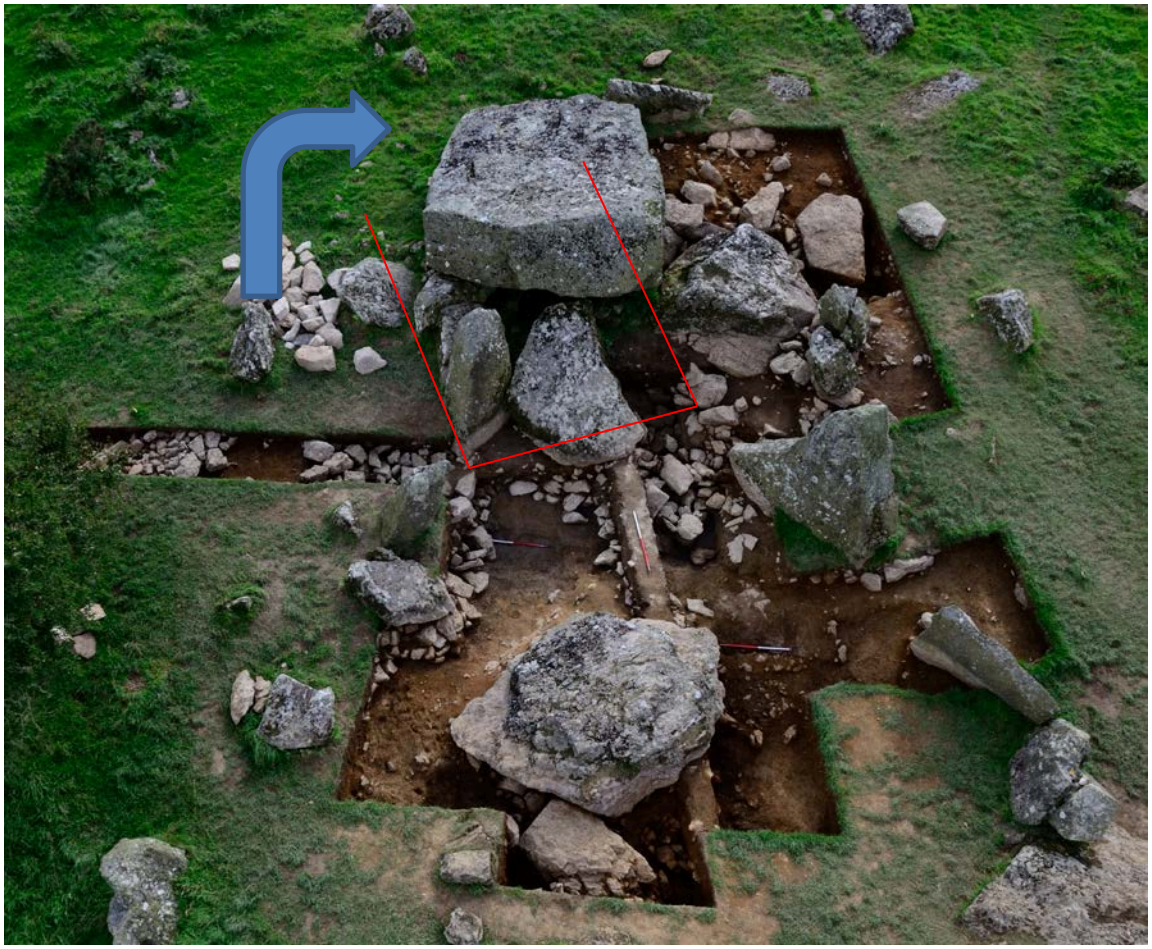

Fig. 15. Aerial view of the trench at Garn Turne, with the red lines indicating the proposed original location of the capstone when it was upright on its supporters

Overall we can now discern three separate monuments, two of which definitely pre-date Garn Turne Major, but due to lack of stratigraphic relationships we cannot untangle the chronology. Undoubtedly, the Floss Stone provided the focus for Garn Turne Major. The rammed stone platform [099] associated with the Floss Stone [052] is cut by the great pit [007], establishing the sequence of events in this area. It shows that pit [100] predated the cutting of the great pit [007], and since we did not find the full extent of pit [100] it may well have been a substantial feature, presumably cut to extract another stone. The stone extracted may well have been the Floss Stone [052] which now lies to the south-east of pit [100], slightly overlying it. Certainly this stone has clearly been moved from somewhere. It may equally be for another stone now found in the monument.

The location of the Floss Stone [052] in the forecourt area remains a mystery. Was it a stone being moved elsewhere in the monument before being abandoned? Does it represent an *in situ* capstone or covering stone? Or was it a deliberate placement, which subsequently saw additional activity referencing it, including the construction of a large dolmen and the forecourt? Certainly it seems to have been there when the Great Pit was cut, as the cut of this pit respects the location of the stone. This suggests that this stone may have been of great importance to the builders at Garn Turne, a stone important enough for a huge dolmen to be constructed nearby.

We have furthered our understanding of the forecourt. Parts of the forecourt were built on top of the Great Pit, so we know that its construction post-dates the quarrying of the big capstone and the primary backfilling of the pit. Bearing in mind that there was considerable activity involving the standing of stones around Garn Turne Minor, the stones in the forecourt could also have been added once the main monument had collapsed.

The confirmation of a second dolmen at Garn Turne is exciting. It has interesting implications for how we understand the origins of this monument (double dolmens are located in Ireland, and Garn Turne may parallel some of these. Equally, Garn Turne may be a unique monument, or following other monuments in the area, which have not survived as well at Garn Turne). Garn Turne Minor has its uprights splayed around the outside of the capstone, which seems to suggest that this monument collapsed through pressure from above. Clearly once the smaller dolmen had collapsed, people built a large platform around it before commemorating this

event with a series of standing stones around the edge of the capstone. Indeed, it is entirely possible that the smaller dolmen was commemorated with the addition of standing stones around its perimeter alongside a standing Garn Turne Major. This monument, then, seems to have been the focus of several different episodes of building, potentially over many hundreds, and possibly thousands, of years. The extensive quantities of charcoal recovered from Garn Turne should enable us to address the chronology of the site.

We also now have incontrovertible evidence for the shaping of the capstone at Garn Turne, evidenced by hammerstones and flakes of rhyolite. Indeed, flaking evidence can be found on the base of the capstone. This should represent the earliest known stone shaping from a megalithic monument in Britain.

Registers for 2012

1. Context register (2011 and 2012)
2. Photographic register
3. Drawing register
4. Finds register
5. Samples register

1. Context register 2011

Context no	Type	Description	Trench	Date
001	Deposit	Topsoil: silty clay overlying entire trench	GT	16/8/11
002	Deposit	Topsoil: mud and manure overlying entire trench	GTQ	17/8/11
003	Fill	Orange silty clay found throughout trench	GT	18/8/11
004	Structure	Quarried surface of outcrop	GTQ	18/8/11
005	Deposit	Cobbled layer running up to quarried outcrop	GTQ	18/8/11
006	Structure	Masonry found to the west & underneath capstone	GT	18/8/11
007	Cut	Cut of great pit under and around dolmen	GT	18/8/11
008	-	CONTEXT NOT USED	-	-
009	Deposit	Glacial till: natural subsoil	GT	18/8/11
010	Fill	Very dark brown silt, upper fill of 007	GT	18/8/11
011	Structure	Stony layer to west of capstone	GT	22/8/11
012	Structure	Large packing stones around orthostat (2)	GT	22/8/11
013	Fill	Cobbled surface between (2) and (3) in 007	GT	22/8/11
014	Structure	Packing stones around orthostat (3)	GT	23/8/11
015	-	CONTEXT NOT USED	-	-
016	-	CONTEXT NOT USED	-	-
017	Fill	Dump of silty loam south of orthostat (3)	GT	23/8/11
018	Fill	Ashy-grey silty clay under 003 – east side of trench	GT	24/8/11
019	Fill	Very dark orange sandy silt, with large charcoal pieces	GT	24/8/11
020	-	CONTEXT NOT USED	-	-
021	Fill	Stones in matrix 017 – dump of material incl. flakes	GT	29/8/11
022	Fill	Spread of stones west of 052	GT	30/8/11
023	Fill	Spread of stones east of 052, probably same as 032	GT	30/8/11
024	-	CONTEXT NOT USED	-	-
025	-	CONTEXT NOT USED	-	-
026	Fill	Dark brown fill by orthostat (4), same as 010?	GT	30/8/11
027	Fill	Brown silty clay east side of forecourt overlying 037	GT	31/8/11
028	Fill	Grey silty clay east side of forecourt under 003	GT	31/8/11
029	Fill	Orange-brown silty dump south of orthostat (3)	GT	31/8/11
030	-	CONTEXT NOT USED	-	-
031	Fill	Grey silty clay below 028, east side of forecourt	GT	1/9/11
032	Fill	Arc of stones filling 007 in western side of trench	GT	1/9/11
033	Fill	Brown-grey clay surface next to orthostat (4)	GT	1/9/11
034	Fill	Stone foundation for 033 next to orthostat (4)	GT	1/9/11
035	Fill	Loamy clay base for 034 next to orthostat (4)	GT	1/9/11
036	Cut	Cut of feature next to 050 (outcrop 2)	GT	2/9/11

037	Fill	Arc of stone filling 007 in eastern side of trench	GT	3/9/11
038	Structure	Large slabs west of capstone under 011	GT	3/9/11
039	Fill	Orange silty clay dump under 017	GT	3/9/11
040	Fill	Grey silty clay east side of forecourt, same as 028	GT	4/9/11
041	Structure	Large broken stone in front of 048 (outcrop 2)	GT	5/9/11
042	Structure	Large packing stone to west of 041	GT	5/9/11
043	Fill	Dark brown silty loam in between 038	GT	5/9/11
044	Cut	Cut for pit associated with early dolmen?	GT	7/9/11
045	Structure	Collapsed orthostat early dolmen, part under capst.	GT	7/9/11
046	Structure	Collapsed orthostat early dolmen, S of 048	GT	7/9/11
047	Fill	Orange clay redeposited beneath capstone 048	GT	7/9/11
048	Structure	Possible capstone for earlier dolmen (outcrop 2)	GT	7/9/11
049	Fill	Possible fill for 044	GT	7/9/11
050	Structure	Possible collapsed orthostat for early dolmen	GT	7/9/11
051	Structure	80 tonne capstone for main dolmen	GT	7/9/11
052	Structure	Possible standing stone in forecourt (outcrop 1)	GT	7/9/11

Context register 2012

Context no	Type	Description	Date
053	Structure	Standing stone next to 048	02-Aug
054	Structure	Packing stones around 053	02-Aug
055	Deposit	Small spread of stones by 052	02-Aug
056	Deposit	Matrix of soil around packers 054	02-Aug
057	Structure	Large stone to the north of 053	02-Aug
058	Structure	Large stone to the south of 053	02-Aug
059	Structure	Packing stones around 057	02-Aug
060	Structure	Packing stones around 058	02-Aug
061	Structure	Bob's fulcrum- stones in 1x5 to E	02-Aug
062	Structure	Large stone- bedrock? Nr 048	06-Aug
063	Structure	Possible upright for small dolmen	06-Aug
064	Deposit	Small stones to SW of larger stones 038	06-Aug
065	Deposit	Orange soil to west of 052	08-Aug
066	Deposit	Matrix for 060 packing stones	08-Aug
067	Structure	Larger stones to N of 052	08-Aug
068	Deposit	White/grey silty clay under 031 and 040	09-Aug
069	Deposit	Ashy layer with charcoal in pit	09-Aug
070	Structure	Larger stones at bottom of pit	09-Aug
071	Deposit	Dark layer with slate above 068 in W of pit	09-Aug
072	Deposit	Dark silt layer with slate over 068 in top of pit	09-Aug
073	Deposit	Dark brown silt under 035 next to stone 4	10-Aug
074	Structure	Cushion stone under 058	12-Aug
075	Deposit	Greasy black soil next to 048	12-Aug
076	Cut	Cut of pit in northern extension	14-Aug
077	Structure	Stones filling 076	14-Aug
078	Deposit	Soil matrix filling 076	14-Aug

079	Deposit	White clay fill (secondary) over 031	14-Aug
080	Deposit	Matrix for 055	14-Aug
081	Structure	Group of stone NW of capstone = 070	14-Aug
082	Deposit	Matrix around 070 big stones	14-Aug
083	Deposit	Grey clay infill of pit with charcoal and slates	16-Aug
084	Deposit	Light grey ashy clay at very base of pit	16-Aug
085	Deposit	Brown silt at base of pit W side	18-Aug
086	Structure	Bedrock north of 052	18-Aug
087	Deposit	Charcoal and in situ burnt material west of 052	18-Aug
088	Deposit	Grey loose gritty layer west of 052	19-Aug
089	Structure	Small stones NE corner of trench in 055	19-Aug
090	Deposit	Clay dump next to 048 make-up layer/platform	20-Aug
091	Deposit	Lens of charcoal c3cm thick in 090	20-Aug
092	Deposit	Silty clay filling hollow between stones 2 and 3	20-Aug
093	Cut	Hollow between stones 2 and 3	20-Aug
094	Structure	Stones directly underneath 052	21-Aug
095	Cut	Cut of posthole to west of 048	21-Aug
096	Deposit	Fill of posthole west of 048	21-Aug
097	Cut	Slot to west of capstone (048)	21-Aug
098	Structure	Packers in slot 097	21-Aug
099	Structure	Platform of small stones around 052	21-Aug
100	Cut	Cut rock-cut pit under and to N of 052	21-Aug
101	Deposit	Grey-brown silty clay directly under 052	22-Aug
102	Cut	Slot at bottom of pit west side	23-Aug
103	Deposit	Grey silt fill of 102	23-Aug
104	Deposit	Brown silt packed up against 048 on 044	23-Aug
105	Deposit	Charcoal lens in 104	23-Aug
106	Deposit	Grey clay silt up against 048	23-Aug
107	Cut	Slot at bottom of pit east side	23-Aug
108	Cut	Cut or socket for collapsed standing stone	23-Aug
109	Cut	Possible socket for orthostat for GT Minor	23-Aug

2. Photographic register

Photo No.	Date	Description	Direction	Conditions
201	03/08/2012	(55) North East corner	East	Cloudy + Wet
202	03/08/2012	(55) + (52) to the North	North	Cloudy + Wet
203	03/08/2012	(053) Standing Stone + (54)	East	Dry/Cloudy
204	03/08/2012	(053) Standing Stone + (54)	East	Dry/Cloudy
205	03/08/2012	(053) Standing Stone + (54)	East	Dry/Cloudy
206	03/08/2012	(053) Standing Stone + (54)	South	Dry/Cloudy
207	03/08/2012	(053) Standing Stone + (54)	South	Dry/Cloudy
208	03/08/2012	(053) Standing Stone + (54)	South-East	Dry/Cloudy

209	03/08/2012	(053) Standing Stone + (54)	South-East	Dry/Cloudy
210	03/08/2012	(058) + (060) Stone feature?	East	Dry/Cloudy
211	03/08/2012	(058) + (060) Stone feature?	East	Dry/Cloudy
212	03/08/2012	(058) + (060) Stone feature?	West	Dry/Cloudy
213	03/08/2012	(058) + (060) Stone feature?	West	Dry/Cloudy
214	03/08/2012	Trench W side of capstone, + coll dolmen	West	Dry/Cloudy
215	03/08/2012	Trench W side of capstone, + coll dolmen	West	Dry/Cloudy
216	03/08/2012	Trench W side of capstone, + coll dolmen	West	Dry/Cloudy
217	03/08/2012	Trench West side of capstone	West	Dry/Cloudy
218	03/08/2012	Standing stone (053)	West	Dry/Cloudy
219	03/08/2012	Stones of Collapsed small Dolmen	North	Dry/Cloudy
220	03/08/2012	Stones of Collapsed small Dolmen	North	Dry/Cloudy
221	08/08/2012	(060) Packing stones for (058)	East	Overcast
222	08/08/2012	(060) Packing stones for (058)	North-East	Overcast
223	08/08/2012	(060) Packing stones for (058)	North-East	Overcast
224	09/08/2012	1 x 8m extension (037)	North	Sunny
225	09/08/2012	1 x 8m extension (037)	East	Sunny
226	09/08/2012	(061) - fulcrum/walkway	South	Sunny
227	10/08/2012	Working Shot (060) + (70)	North	Bright + Sunny
228	10/08/2012	Working Shot (060) + (70)	North	Bright + Sunny
229	10/08/2012	(058) without Packers (060)	East	Bright + Sunny
230	10/08/2012	(058) without Packers (060)	East	Bright + Sunny
231	10/08/2012	(058) without Packers (060)	South - East	Bright + Sunny
232	10/08/2012	(058) without Packers (060)	North-West	Bright + Sunny
233	10/08/2012	Great pit with (070)	North	Cloudy
234	10/08/2012	Great pit with (070)	North	Cloudy
235	10/08/2012	Great pit with (070)	South	Cloudy
236	12/08/2012	(074) cushion stones? + (074)	South-East	Cloudy
237	12/08/2012	(074) cushion stones? + (074)	North	Cloudy
238	12/08/2012	(074) cushion stones? + (074)	North	Cloudy
239	12/08/2012	(074) cushion stones? + (074)	North	Cloudy
240	16/08/2012	Bottom of pit (007) after excavation	South	Cloudy
241	16/08/2012	Bottom of pit (007) after excavation	South	Cloudy
242	16/08/2012	Bottom of pit (007) after excavation	South	Cloudy
243	16/08/2012	Bottom of pit (007) after excavation	East	Cloudy
244	16/08/2012	Bottom of pit (007) after excavation	East	Cloudy
245	16/08/2012	Bottom of pit (007) after excavation	East	Cloudy
246	16/08/2012	Bottom of pit (007) after excavation	North	Cloudy
247	16/08/2012	Bottom of pit (007) after excavation	North	Cloudy
248	16/08/2012	Bottom of pit (007) after excavation	North	Cloudy
249	16/08/2012	Possible socket E of (063)	West	Cloudy/Sunny
250	16/08/2012	Possible socket E of (063)	West	Cloudy/Sunny
251	16/08/2012	Small Rhyolite flakes Dorsal	N/A	Sunny
252	16/08/2012	Small Rhyolite flakes Dorsal	N/A	Sunny
253	16/08/2012	Small Rhyolite flakes Ventral	N/A	Sunny

254	16/08/2012	Small Rhyolite flakes Ventral	N/A	Sunny
255	16/08/2012	Small Rhyolite flakes Medium Dorsal	N/A	Sunny
256	16/08/2012	Small Rhyolite flakes Medium Dorsal	N/A	Sunny
257	16/08/2012	Small Rhyolite flakes Medium Ventral	N/A	Sunny
258	16/08/2012	Small Rhyolite flakes Medium Ventral	N/A	Sunny
259	16/08/2012	Large rhyolite flakes Dorsal	N/A	Sunny
260	16/08/2012	Large rhyolite flakes Dorsal	N/A	Sunny
261	16/08/2012	Test pit 2 - possible standing stone	East	Sunny
262	16/08/2012	Test pit 2 - possible standing stone	East	Sunny
263	16/08/2012	Test pit 2 - possible standing stone	North	Sunny
264	16/08/2012	Test pit 2 - possible standing stone	North	Sunny
265	16/08/2012	(070) - stones from pit	N/A	Sunny
266	20/08/2012	(070) - stones in pit West Side	North	Cloudy
267	20/08/2012	(070) - stones in pit West Side	East	Cloudy
268	20/08/2012	(070) - stones in pit West Side	South	Cloudy
269	20/08/2012	(087) Charcoal next to (052)	South - East	Cloudy
270	21/08/2012	(087) Charcoal - in situ burning	East	Cloudy
271	21/08/2012	(087) Charcoal - in situ burning	South	Cloudy
272	21/08/2012	(070) West side of baulk	South	Cloudy
273	21/08/2012	(070) West side of baulk	South	Cloudy
274	21/08/2012	(070) West side of baulk	North	Cloudy
275	21/08/2012	(070) West side of baulk	North	Cloudy
276	21/08/2012	1 x 8 Final Shot (070)	East	Cloudy
277	21/08/2012	1 x 8 final shot (061)	East	Cloudy
278	21/08/2012	(099) on [007]	North	Cloudy
279	21/08/2012	(099) on [007]	East	Cloudy
280	21/08/2012	West facing baulk section	East	Cloudy
281	21/08/2012	East facing baulk section	West	Cloudy
282	21/08/2012	North facing baulk section East of stone 4	South	Cloudy
283	21/08/2012	West facing section of (070)	East	Cloudy
284	21/08/2012	East facing section West of (052)	West	Cloudy
285	21/08/2012	South facing section North of (052)	North	Cloudy
286	21/08/2012	East facing section to East of (2)	West	Cloudy
287	22/08/2012	TP02 (001)	East	Sunny/Cloudy
288	22/08/2012	TP02 (001)	South	Sunny/Cloudy
289	22/08/2012	TP01 (001) East end	North	Sunny/Cloudy
290	22/08/2012	TP01 (001) East end	West	Sunny/Cloudy
291	22/08/2012	TP01 (001) West end	South	Sunny/Cloudy
292	22/08/2012	TP01 (001) West end	East	Sunny/Cloudy
293	22/08/2012	TP01 (001) West end	East	Sunny/Cloudy
294	22/08/2012	(048) + collapsed orthostats	West	Sunny/Cloudy
295	22/08/2012	(048) + collapsed orthostats	South	Sunny/Cloudy
296	22/08/2012	(048) + collapsed orthostats	East	Sunny/Cloudy
297	23/08/2012	(087) against (052)	South-East	Cloudy
298	23/08/2012	(048) + pit excavated	East	Cloudy

299	23/08/2012	South facing section by (048)	North	Cloudy
300	23/08/2012	(048) + pit excavated	West	Cloudy
301	23/08/2012	[100] cut to North West of (052)	South	Cloudy

3. Drawing register

Plan no	Plan/section	Contexts/description	Scale	Date
27	Plan	Multi-context plan west of capstone	1:20	08-Aug
28	Plan	Trench north of capstone redrawn from 2011	1:20	08-Aug
29	Plan	1 x 8 m extension to E of main trench	1:20	08-Aug
30	Profile	Profile through 058 and 060	1:10	09-Aug
31	Plan	060 packing stones	1:20	09-Aug
32	Plan	070 pre-ex east side of trench	1:20	14-Aug
33	Plan	077 in 076 north of trench	1:20	19-Aug
34	Plan	1 x 8 m extension 070	1:20	20-Aug
35	Plan	SW area of trench 090, 082, 083	1:20	20-Aug
36	Section	W facing section through Great Pit 007 I	1:10	22-Aug
37	Section	W facing section through Great Pit 007 II	1:10	22-Aug
38	Plan	Mag sus readings around 052	1:20	22-Aug
39	Plan	087 *in situ* burning around 052	1:20	22-Aug
40	Section	W facing section through Great Pit 007 III	1:20	23-Aug
41	Section	Section plus profile through 048 and 051 I	1:10	23-Aug
42	Section	Section plus profile through 048 and 051 II	1:10	23-Aug
43	Section	Section plus profile through 048 and 051 III	1:10	23-Aug
44	Section	W facing section N of 052	1:10	23-Aug
45	Section	S facing section N of 052	1:10	23-Aug
46	Section	E facing section N of 052	1:10	23-Aug
47	Section	S facing section W of 052	1:10	23-Aug
48	Plan	Test pit 2	1:20	23-Aug
49	Plan	Test pit 1	1:20	23-Aug
50	Plan	Post-ex plan of forecourt	1:20	23-Aug
51	Section	E facing section of baulk	1:10	23-Aug
52	Section	N facing section E of stone 4	1:10	23-Aug
53	Section	N facing section through 070 E side	1:10	23-Aug
54	Section	N facing section W of stone 4	1:10	23-Aug
55	Section	S facing section in N of trench	1:10	23-Aug
56	Section	E facing section next to 048	1:10	23-Aug

4. Finds register

Find #	Context	Description	Easting	Northing	Height
401	54	Rhyolite flake	509.211	96.485	49.897
402	54	Rhyolite flake	509.06	96.288	49.809
403	54	Rhyolite flake	508.926	96.151	49.823

404	54	Quartz	509.046	96.199	49.797
405	54	Rhyolite flake	509.035	95.811	49.898
406	54	Stone flake (Dolerite)	508.894	95.84	49.925
407	28	Rhyolite flake	507.755	101.217	49.718
408	28	Rhyolite flake	508.205	100.897	49.662
409	31	Flint Knife	511.774	101.185	49.682
410	31	Flint	515.249	101.291	49.675
411	3	Rhyolite flake	516.174	97.212	49.553
412	3	Stone	508.145	97.041	49.756
413	3	Quartz	507.401	91.577	49.498
414	55	Flint	516.922	102.499	49.895
415	55	Hammerstone	515.597	102.196	49.786
416	66	Hammerstone	508.547	94.22	49.786
417	31	Hammerstone	501.607	96.998	49.516
418	66	Hammerstone?	507.562	94.254	49.59
419	68	Hammerstone	513.385	97.718	49.197
420	31	Hammerstone frag	515.277	97.754	49.135
421	31	Hammerstone frag	515.277	97.754	49.135
422	33	Broken hammerstone	512.168	96.386	49.429
423	33	Rhyolite flake	511.114	96.14	49.27
424	31	Rhyolite flake	514.928	97.573	49.7
425	31	Rhyolite flake	515.809	97.438	49.429
426	33	Rhyolite flake	511.128	96.153	49.193
427	34	Rubbing stone	511.792	96.435	49.292
428	34	Rhyolite flake	511.409	96.417	49.307
429	68	Rim sherd pottery	511.253	98.463	49.131
430	68	Pottery	511.612	98.342	49.084
431	68	Rhyolite flake	511.104	98.34	49.127
432	68	Rhyolite flake	511.202	94.203	49.142
433	68	Rhyolite flake	511.282	98.242	49.112
434	68	Rhyolite flake	511.51	98.134	49.134
435	68	Rhyolite flake	511.43	98.415	49.129
436	68	Rhyolite flake	511.123	98.58	49.178
437	68	Rhyolite flake	511.269	98.702	49.154
438	68	Quartz	511.334	98.315	49.145
439	68	Rubbing stone	511.838	97.754	49.097
440	31	Quartz	515.491	97.531	49.463
441	72	Rhyolite flake	513.757	98.78	49.154
442	68	Pottery	511.263	98.117	49.067
443	35	Burnt Hammerstone	511.399	96.6	49.268
444	68	Pottery	511.318	98.197	49.058
445	35	Hammerstone flake	511.947	97.215	49.193
446	68	Rhyolite flake	511.346	98.437	49.119
447	68	Rhyolite flake	511.211	98.351	49.113
448	68	Rhyolite flake	511.341	98.276	49.054

449	35	Struck quartz	511.646	97.069	49.018
450	68	Rhyolite flake	511.372	98.285	49.069
451	68	Rhyolite flake	511.321	98.413	49.049
452		Find discarded			
453	35	Rhyolite flake	512.109	96.178	49.248
454	35	Rhyolite flake	512.049	96.15	49.226
455	35	Rhyolite flake	511.788	96.261	49.195
456	35	Notched slate	511.558	96.395	49.246
457	35	Rhyolite flake	511.409	96.396	49.267
458	68	Rhyolite flake	511.226	98.276	49.082
459	35	Rhyolite flake	512.009	96.401	49.176
460	35	Flake/blade	511.332	96.561	49.198
461	31	Worked pebble	515.329	97.429	49.363
462	68	Rhyolite flake	512.033	98.726	49.072
463	35	Rhyolite flake	511.864	96.359	49.082
464	35	Rhyolite flake	511.363	96.311	49.098
465		Find discarded			
466	68	Rhyolite flake	511.996	98.088	49.094
467	73	Rhyolite flake	511.733	96.888	49.134
468	31	Rhyolite flake	511.275	97.34	49.272
469	73	Struck quartz	511.692	96.315	49.089
470	73	Rhyolite flake	511.435	98.329	49.1
471	73	Flake	512.026	98.098	49.05
472		Find discarded			
473		Find discarded			
474	68	Pottery	511.868	97.704	49.071
475	55	Stone	516.355	102.783	49.924
476	68	Chunk of tuff	511.726	97.784	49.005
477	3	Hammerstone	517.12	102.572	50.05
478	73	Struck quartz	512.153	96.406	49.053
479	55	Pebble	516.879	102.623	49.826
480	68	Pebble quartz	512.806	97.864	48.95
481	73	Rhyolite flake	511.663	96.405	49.043
482	73	Struck quartz	511.014	97.253	49.178
483	73	Rhyolite flake	511.777	96.563	49.094
484	73	Rhyolite flake	511.758	96.649	49.021
485	1	Pottery	512.367	95.514	49.77
486	3	Stone	507.87	96.435	49.724
487	3	Flint	507.399	95.597	49.757
488	28	Flint	508.841	101.591	49.654
489	56	Rhyolite flake	508.788	96.204	49.683
490	3	Pebble hammerstone	508.514	97.651	49.77
491	31	Rubbing stone	516.448	101.215	49.766
492	31	Struck quartz	515.498	101.65	49.682
493	31	Rhyolite flake	517.668	96.836	49.62

494	31	Worked pebble/hammerstone	520.081	96.908	49.817
495	31	Rhyolite flake	516.777	96.876	49.523
496	28	Flint	512.785	103.904	49.863
497	31	Rhyolite flake	517.114	97.627	49.627
498	68	Quartz	514.721	98.685	49.072
499	82	Large flake	513.087	99.019	48.886
500		Find discarded			
501		Find discarded			
502	73	Rhyolite flake	511.394	97.598	49.197
504	73	Rhyolite flake	511.14	97.684	49.205
503	73	Rhyolite flake	511.264	97.635	49.228
505	73	Rhyolite flake	511.068	97.394	49.185
506	73	Rhyolite flake	511.123	97.147	49.165
507	68	Pottery	512.788	99.302	49.054
508	68	Pottery	513.478	99.404	48.968
509	68	Rhyolite flake	513.54	99.284	48.96
510	68	Rhyolite flake	513.92	98.37	48.998
511	82	Rhyolite flake	514.181	99.585	49.254
512	82	Hammerstone quartz	514.384	99.543	49.113
513	48	Rhyolite flake	511.799	97.222	49.124
514	37	Hammerstone quartz	514.847	100.712	49.319
515	37	Hammerstone quartz	515.199	100.426	49.437
516		Find discarded			
517	73	Rhyolite flake	511.823	96.611	49.033
518	73	Rhyolite flake	511.645	96.511	49.033
519	73	Pottery	511.908	96.288	49.042
520	31	Pottery	515.177	99.154	49.141
521	58	Rhyolite flake	514.412	99.728	49.209
522	58	Quartz	514.719	100.59	49.439
523	82	Pottery	514.554	99.889	49.188
524	82	Rhyolite flake	515.024	99.073	49.091
525	82	Hammerstone	515.159	98.753	49.196
526	82	Rhyolite flake	515.147	99.091	49.068
527	82	Rhyolite flake	514.462	100.167	49.216
528	68	Pottery	514.468	100.193	49.215
529	82	Rhyolite flake	514.916	99.492	49.1
530	73	Rhyolite flake	511.665	97.178	49.107
531	73	Rhyolite flake	511.792	97.217	49.024
532	73	Rhyolite flake	511.599	97.253	49.108
533	73	Pottery	551.708	97.365	49.127
534	68	Rhyolite flake	513.807	99.003	48.955
535	68	Pottery	514.203	98.847	48.849
536		Find discarded			
537	68	Pottery	514.383	98.836	48.826
538	68	Pottery	511.689	100.441	49.318

539	43	Flint	508.29	93.631	49.409
540	83	Flint	513.301	99.188	48.864
541	83	Pottery	514.156	99.086	48.762
542	83	Pottery	514.165	98.82	48.773
544	1	Rhyolite flake	509.449	70.958	48.133
548	1	Rhyolite flake	510.671	71.176	48.241
549	1	Blade Flint	521.958	76.102	48.348
550	1	Flint	512.142	71.007	47.94
552	85	Scraper Flint	511.385	100.536	49.236
553	84	Bone?	514.629	98.257	48.436
554	85	Hammer Stone	511.833	100.502	49.292
555	65	Quartz	513.332	103.782	49.716
556	87	Charcoal	513.222	103.309	49.791
557		Find discarded			
558		Find discarded			
559		Find discarded			
560	87	Rhyolite flake	512.782	103.136	49.555
561	28	Rhyolite flake	511.687	98.66	48.522
562	28	Rhyolite flake	512.558	99.544	49.595
563	28	Rhyolite flake	512.452	98.712	49.511

5. Sample register

Sample No.	Context	Type/Reason	Easting	Northing	Height
15	65	Charcoal in fill	511.571	101.804	49.541
16	69	Ash/Charcoal in fill	513.245	98.024	49.125
17	69	Ash/Charcoal in fill	512.796	98.951	49.031
18	72	Silt layer over (068) in pit	514.49	97.783	49.075
19	35	Clay next to stone 4	512.123	98.169	49.245
20	31	Clay under 028	515.687	97.648	49.318
21		Not taken			
22	68	Charcoal in fill	513.699	99.362	48.948
23	68	From base of fill, side of pit	514.686	100.029	49.036
24	83	Charcoal in pit	513.468	98.643	48.72
25	83	Charcoal in pit	513.892	99.387	48.857
26	83	Charcoal in pit	513.133	98.373	48.877
27	83	Charcoal in pit	514.363	98.681	48.682
28	83	Charcoal in base of pit	513.735	98.474	48.447
29	84	Ash at base of pit	514.629	98.257	48.436
30	85	Charcoal base of side of pit W/side	511.414	100.633	49.237
31	87	Charcoal layer W of (052)	511.903	102.184	49.646
32	91	Charcoal	508.022	95.085	48.972
33	87	*In situ* burning	511.721	102.547	49.437
34	96	Post-hole fill	507.073	94.513	49.052

35	75	Fill next to (048)	508.534	94.29	49.075
36	83	Clay on top of cut [007] by (052)	511.011	100.96	49.248
37	87	Charcoal W of (052)	511.721	102.547	49.437
38	87	Charcoal beside (052)	512.184	102.972	49.443

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