1 FACTUAL DATA

1.1 Worked Stone

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08/02/2021

1.1.1 A total of 18 items of stone were retained and submitted for assessment. These were scanned for signs of burning or use and worked items were fully recorded with the aid of a x10 magnification hand lens. Recording included size, weight, lithology and any distinguishing characteristics. Full details can be found in a Microsoft Excel spreadsheet entitled HS2N-1N19ITCAR-Exc-Stone-Data-RS.xlsx. A summary of the worked stone is provided here in Tables 1 and 2. Three items were found to be unworked and are not reported on further (including small finds 12003 and 14001).

1.1.2 The worked stone objects have been used for a range of grinding or processing tasks. Occasionally the division between 'querns' (specifically used for the processing of cereals) and 'grinding stones' (used for other forms of grinding or rubbing) is blurred but the items have been classified according to the function thought most likely.

1.2 Area 1

1.2.1 Three saddle querns or rubbers were found in Area 1. A single saddle quern was found in pit 13207 (13208, SF 13002). It has been roughly shaped from a sandstone boulder of presumed local origin and has a flat pecked grinding surface. A second saddle quern is made of imported Millstone Grit. This was found in ditch 13379 (13380). The quern has been more carefully shaped to have a rounded under surface and pecked grinding surface worn to be slightly concave. A rubber from ring ditch 11111 (11109; SF 11001) is made from a sandstone cobble; only the grinding surface has been modified and this has been shaped and pecked to a gently rounded convex shape.

1.2.2 Two items show evidence for having been used for tasks involving rubbing. One of these (12133, SF 12002) has been extensively used on one face so that it is completely flat and highly smoothed. It could have been used with a completely flat saddle quern to grind grain, or possibly it was used in other non-cereal related tasks. A small boulder was found in pit 10027 (10028). This is largely in its natural state but it has one face that is worn smooth and slightly hollowed with traces of pecking or batter marks. Its wear is not consistent with use as a saddle quern. It seems more likely that it was used for polishing and battering other materials and its possible it was used as a metal-working stone.

1.2.3 Table 1: worked stone from Area 1

SFNO	Context	Area	Function	Notes	Lithology
13002	13208	Area 1	Saddle quern	Complete crudely rectangular large saddle quern with roughly flat pecked grinding surface with traces of wear towards some of the edges. The sides of the quern are vertical and the base is flat but these look largely natural and it is probably made from a boulder	Medium-coarse grained quartz sandstone

12002	12133	Area 1	Rubber/grinder	Cobble with rounded edges and naturally flat faces caused by the strong bedding planes. One of these flat faces has been extensively used so that it is completely flat and highly smoothed. Could have been used with a large completely flat saddle quern	Sandstone
	10028	Area 1	Processing stone	Small boulder with flat profile and irregular shape. It has not been shaped but one face is worn very smooth and slightly hollowed with traces of either pecking or batter marks. Probably too small and the wear not quite consistent with use as a saddle quern so a stone for grinding other substances or polishing/working with other materials is likely. Possibly a metal working stone	Sandstone
11001	11109	Area 1	Rubber	Large cobble. Unshaped but with one surface carefully pecked into a gently rounded convex shape. Not especially worn. Broken approximately in half widthways	Sandstone
	13380	Area 1	Saddle quern	Central portion of shaped saddle quern, both ends missing. Under surface has been crudely shaped to a convex shape curving right round to the sides. The grinding surface has been finished with fine pecking and is slightly concave across the width. It looks as though it migh have been straight along the length which would be unusual so possibly the full length survives and it is the sides that are missing, but that would make it quite short	Millstone Grit

1.2.4 Area 2

1.2.5 Four rotary querns were found in Area 2. These consist of two lower stones (a surface find and one from context 210103). The former is made of Millstone Grit and the latter of Old Red Sandstone. Two upper stones comprise a Millstone Grit example (250228) and an unstratified example of Old Red Sandstone. The Millstone Grit quern has a slightly raised ridge around a shallow based shaped hopper. The four querns are in the range 360-430mm in diameter, which is typical for rotary querns in the region.

1.2.6 Two fragments of Millstone Grit millstone were found in context 250073. These are probably from the same millstone although they do not adjoin. They are of disc type, slightly tapering in thickness. The smaller fragment has a wide central eye measuring c 250mm diameter. They represent one or two millstones exceeding 680mm in diameter.

1.2.7 Two further items were used for other processing tasks. One of these is a large boulder of approximately triangular cross-section (210368, SF 21021). It has a large circular depression on one face that is heavily worn inside and a shallower circular depression on another face that is less worn but has some evidence for having been shaped by pecking. This could have been used on both sides as a small mortar. However, stones with depressions of comparable size to the deeper one here have been used as socket or pivot stones for doors or gates, and that should be considered a possibility.

1.2.8 A large cobble has been extensively used on one edge so that this is highly smoothed and flattened. It was found in corn dryer 23282 (SF 23006) but is a tool that would not

have been associated with cereal processing. It could have been used as a whetstone or in other types of tool maintenance.

Table 2: worked stone from Area 2

SFNO	Context	Function	Notes	Lithology
25001	250073	Upper millstone	Approximately one third of large millstone. Grinding surface is pecked but worn. Towards the centre of the grinding surface is a single pronounced groove. The centre does not survive. Slightly tapered disc type. Crudely pecked upper surface. Vertical pecked edges	Millstone Grit
21021	210368	Mortar/socket stone	Boulder with approximately triangular cross section. One face is gently hollowed and worn smooth but not regularly so. Towards one side of this surface is a circular depression measuring 155mm diameter x 77mm deep. This is completely smooth inside. The almost opposite face has a shallow depression with some evidence for having been shaped with pecking. This is also lightly smoothed.	Medium-coarse grained quartz sandstone
26038	None	Lower rotary quern	Edge fragment of slightly tapered disc type with pecked grinding surface worn into rotational grooves. The edges are vertical. The base has been roughly worked into a flat shape. The eye is missing.	Millstone Grit
21012	210103	Lower rotary quern	Two adjoining fragments of tapered lower stone with slight lip around fully perforated spindle hole which measures 13mm in diameter at the grinding surface and 25mm at the base. The grinding surface is worn smooth but has traces of pecking beneath the smoothing and there is also some rotational wear. The base is roughly tooled into a gently convex shape which curves up to the edges making these quite thin.	Old Red Sandstone
23006	None	Upper rotary quern	Edge fragment of flat/slightly tapered disc type. Edges are straight and vertical and these and the grinding surface have been pecked. The upper surface is smoothed suggesting the quern has been reused, probably in a floor surface. The centre is missing.	Old Red Sandstone
23006	23282	Rubber/grinder	Large cobble that has been extensively used as a rubber on one edge only to create a highly smoothed flattened edge. This would not have been used to grind grain.	Sandstone
25002	250073	Lower millstone	Central fragment of large stone with part of wide central eye, cylindrical, c 250mm diameter. Tapered disc type. The edges do not survive. The lower face is roughly worked to a flat shape. The grinding surface has been pecked and is worn into slight rotational wear. Could be part of same millstone as the larger fragment.	Millstone Grit

	250228	Upper rotary quern	Central fragment of disc shaped quern with slightly raised rim around the hopper. The eye is damaged. The rim is c 85mm diameter internally, 18mm wide x 3mm high. The hopper is 2mm shalllower than the rest of the upper face. There are traces of grooves on the grinding surface but it's not possible to determine a pattern. Upper surface finished by smoothing	Millstone Grit

2 STATEMENT OF POTENTIAL

2.1 Worked Stone

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2.1.1 The stone assemblage is small but contains a range of objects representing domestic activity which have the potential to add to our understanding of what was happening on site. The worked stone in Area 1 mostly consists of saddle querns and rubbers used to grind grain, but there is also a processing stone that could have been used in the working of other items, for example bone or metal objects.

2.1.2 The stone assemblage in Area 2 contains tools indicating that a range of processing tasks took place. The most significant amongst these are the rotary querns and millstones. Both indicate cereal processing but the millstone is evidence for the centralisation and industrialisation of that process nearby and, presumably, the production of a surplus.

2.1.3 Initial assessment suggests that the querns and grinding stones from Middle Iron Age features in Area 1 were mainly sourced locally but they include an imported Millstone Grit quern. Querns of Roman date from Area 2 are all of imported stone - Old Red Sandstone from the Wye Valley and Millstone Grit, probably from Derbyshire. The transition from the use of locally sourced querns to imported querns usually occurred either as a result of the changeover from saddle querns to rotary querns, or as a result of the Roman conquest. The presence of a Millstone Grit saddle quern is therefore unusual. With comparison to other quern (and millstone) assemblages from the region, this has the potential to improve our understanding of the organisation of quern production and supply to the area and to feed into our general understanding of the economy.

3 UPDATED PROJECT DESIGN

3.1 Methods statement

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3.1.1 The worked stone has been fully recorded at assessment stage and no further analysis is required. Further work will consist of placing the querns, millstone and other objects in their local and regional context, both in terms of their stone types and in terms of grain processing patterns in the local area.

3.1.2 In order to understand the significance of the changes in quern supply initially identified, the assemblage should be compared to other published quern assemblages from the region.

3.1.3 The report should also consider where a mill could have been located and what the presence of the millstone here tells us about grain processing on the site and in the local area. Little is known about the organisation of cereal processing in this area and it is therefore important to ensure that these items are published.

3.1.4 Up to seven items should be illustrated

Tasklist:

Task
Preparatory tasks (read PXA and UPD, add phasing to database)
Research quern and millstone use in local area, look for local sources of stone for querns
Write report
Illustration of seven items

3.2 Retention and disposal

3.2.1 All items listed in Table 1 and 2 should be retained because there is the potential to provenance the stone objects more closely in the future. All remaining stone can be discarded.