Gunns Mills
Flaxley
Forest of Dean
Gloucestershire

Historic Building Recording

for

Forest of Dean Building Preservation Trust

CA Project: 5274
CA Report: 15106

May 2015
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SUMMARY

Project Name: Gunns Mills
Location: Lower Spout Lane, Flaxley, Gloucestershire
NGR: SO 67516 15945

In February 2015 Cotswold Archaeology was commissioned by Forest of Dean Building Preservation Trust to carry out a programme of Historic Building Recording and assessment of the retaining and boundary walls of Gunns Mills. This was to inform and in mitigation of proposals to repair and probably partly rebuild these walls.

The Mill itself is a Grade II* Listed Building and a Scheduled Ancient Monument, being probably the oldest surviving blast furnace in the country, dating to 1683. In 1740 the furnace was converted into a paper mill and much altered. In the 19th and 20th centuries the site functioned as part of a farm. Detailed historical research, topographical survey and building recording has been carried out in the past but concentrating on the mill. To complete the record, as far as possible, a laser scan building record was made of the mill site, except for the furnace/mill itself and the wheel pit, which were both inaccessible. In addition the blowing chamber could not be adequately scanned because of the mass of scaffolding tubes in it, supporting the furnace/mill.

An extensive photographic coverage using a digital camera was also undertaken of the masonry of the retaining walls, blowing chamber and as far as possible given access issues, of the wheel pit. Stone-by-stone, phased, line drawings of the relevant parts of the retaining walls were made from the laser scan date and the photographic coverage.

Five phases of retaining wall repair and replacement were identified, the latest certainly post-dating 1838. Similar phases of repair and rebuild were evident in the rest of the structure but were not fully analysed for this report.
1. INTRODUCTION

Outline

1.1 In February 2015 Cotswold Archaeology was commissioned by Forest of Dean Building Preservation Trust to carry out a programme of Historic Building Recording and assessment of the retaining and boundary walls of Gunns Mills, Lower Spout Lane, Flaxley, Gloucestershire (centered on NGR: SO 67516 15945; Figure 1).

1.2 Forest of Dean Buildings Preservation Trust (FODBPT) intend to carry out repairs and conservation works at Gunns Mills for which it is understood Scheduled Monument Consent (SMC) is to be sought. Gunns Mills furnace is a Scheduled Monument (National Heritage List No. 1002080) and is also a Listed Building Grade II* (National Heritage List No. 1186479a). English Heritage has advised that a measured survey and assessment of the structures will be necessary to inform and support any conservation works and necessary consents.

Location and landscape context

1.3 The site is some 2,075m² in area and is the site of the former blast furnace, later paper mill and most recently farm. The farm and its outbuildings to the north and north-west of the site have recently been refurbished as a private home and form a separate property (Gun’s Mills House, Listed Grade II). The site is located on the eastern edge of the Forest of Dean in Gloucestershire. The site lies at the confluence of St Anthony’s Well stream with the Westbury brook, straddling the 50m contour. Immediately below this confluence another stream joins the Westbury brook, creating a junction of three valleys. The valleys are steep sided, narrow and wooded, except where the Westbury brook flows through enclosed fields just north of Gunns Mills. Each valley is followed by a minor road and the site dominates the three-way junction of these roads at its eastern corner (Fig. 4).

1.4 The furnace is built into the steep, south-east-facing facing slope, east of a dam which held back the now-largely-dry millpond that fed the head race. The tall wall of this race forms, along with the furnace building, the north-west boundary of the site. South-east of these structures is a broad, comparatively level yard in a sunken area demarcated by the retaining walls that are the main subject of this report to the south-east and south-west (Fig. 2). It is supposed that this level area is an artificial creation, varying as it does no more than 300mm in height across the great majority of the area.
2. METHODOLOGY

General
2.1 A brief for the works was supplied by English Heritage and a Written Scheme of Investigation (WSI) was prepared on this basis after discussion with English Heritage. The scope and methodology of the survey was set out in the WSI prepared by Cotswold Archaeology (CA 2015). The WSI was provided to, and approved by, Ms Mel Barge of English Heritage. This assessment was informed further by key professional guidance and publications including:

- ‘Conservation Principles’ (EH 2008)
- The South-West Archaeological Research Framework

Data acquisition
2.2 The site, apart from the furnace building itself, was photographed using high resolution digital photography. Metrical data was acquired through laser scanning as specified in the WSI.

2.3 The site is much studied and the key historical and industrial archaeological work is Demidowicz 2001. This is so comprehensive that no further historical research was necessary to provide adequate background for this report. Nonetheless, the following archives and repositories were scanned for information.

English Heritage
- Information on Scheduled Monuments
- Information on Listed buildings (all Grades)

English Heritage Archives (former National Monuments Record) Swindon
- Information on archaeological events and monuments

Regional and Local Planning policy and designations
- Consultation of relevant Regional and Local planning policy and constraints set out in Regional and Local Plans

Site visit
2.4 A site visit was undertaken on 19 February 2015 in order to record and analyse the boundary walls of the scheduled monument, especially to the south and west, to identify their characteristics and significances to inform proposals to repair and
interpret the remains to the public, and to identify and assess any other potential heritage constraints affecting the proposed development.

3. ARCHAEOLOGICAL AND HISTORICAL SUMMARY

Physical background

Geology

3.1 The underlying geology of the study area is of the Brownstones Formation: Sandstone and [subequal/subordinate] Argillaceous Rocks, an interbedded. Sedimentary Bedrock formed approximately 398 to 416 million years ago in the Devonian Period, in a local environment previously dominated by rivers. These rocks were formed from rivers depositing mainly sand and gravel detrital material in channels to form river terrace deposits, with fine silt and clay from overbank floods forming floodplain alluvium, and some bogs depositing peat; includes estuarine and coastal plain deposits mapped as alluvium.

3.2 The superficial deposits in the valley floors are alluvium, clay, silt, sand and gravel. These are superficial deposits formed up to 2 million years ago in the Quaternary Period (BGS 2015).

Historical Background

3.3 The site consists of the remains of a palimpsest of structures dating from the 17th century and possibly before, centred on a blast furnace dating to 1682/3 and remains of water-powered forced draught machinery. There is a contemporary building on the top of the stone and plaster furnace, extended later in timber-frame, and various ancillary buildings and waterworks from this period and the later conversions to a paper mill and a farm.

3.4 “The original blast furnace was built here in 1625 by Sir John Wintour. A 22ft diameter waterwheel powered giant bellows that fed a blast of air into the furnace. Wintour was a Royalist and during the Civil War the furnace was destroyed by order of Parliament. Iron lintels above the furnace bear the dates 1682 and 1683, marking the rebuilding of the site after the War. The lintels are furnace sows which must have been cast elsewhere. They demonstrate very early use of structural cast iron (and are older than the ones dated 1777 found at the better known Abraham Darby coke furnace at Coalbrookdale). Much of the timber-framed structure above the furnace was also constructed at this time as tree ring-dating has found that this timber was
cut down in 1681. This makes Gunn’s Mill an exceptional survivor from Britain’s early industrial period. The furnace continued producing cast iron until about 1740. Joseph Lloyd gave Gunn’s Mill a new lease of life in 1741 when he converted it to a paper mill. Several generations of the Lloyd family were paper makers. They left their names and dates as watermarks on the paper they made here. By the late 19th century the mill was used as a cow shed.” (FODBPT 2013). A very full account of both the history and the archaeology of the site is given in Demidowicz 2001.

3.5 The site is in extremely poor condition. Only the furnace and building above it are in any sense still roofed and some of the stone walling of the latter is seriously dilapidated. Much of the timber is in very poor condition. It is currently supported by major propping works which have been in place since 2001 and are in places themselves failing.

3.6 The rest of the site consists of unroofed buildings and retaining walls that, at various times in the past, supported lean-to buildings (Figs 3 and 4). The wheel pit and head race appear to be in reasonable condition, with some significant exceptions.

3.7 A measured survey and analysis of the furnace building and the associated mill buildings was carried out in 1987 (Shoesmith 1988) and a photogrammetric survey of the furnace building was made by WS Atkins in 2001 for English Heritage (archived at the English Heritage Archive (EHA) at Swindon). A tree-ring analysis was also carried out by English Heritage in that year (EH 2001). A topographical survey has been created by A. D. Horner for the FODBPT (used as the basis for Fig. 2). These records have all been consulted for this report.
4 SITE DESCRIPTION

The furnace building

4.1 The furnace building was carefully studied by Shoesmith who proposed that the timber frame was of two periods. The north-west section, that part that has masonry side walls to the eaves was argued to be the earliest and the fully timbered south-east part over the furnace proper was a later addition (Shoesmith 1988). The 2001 tree ring analysis strongly supports this view, adding comments on the differences between the timber used in each section to the observations by Shoesmith (English Heritage 2001). The timber from the south-east section also failed to date, being fast-grown and having fewer rings, while the dates from the north-west section were consistent with a felling date of 1681/2.

4.2 This makes it pretty clear that the part over the furnace proper is a later structure, built as a drying room for the paper mill before 1743 (on historical grounds – Demidowicz 2001, 64) and removes the need to explain the otherwise somewhat surprising decision to erect a timber frame over an active blast furnace.

The Boundary/retaining walls

4.3 From the roads around the site (Abenhall Road on the south-east and Lower Spout Lane on the south-west) these walls are low, up to 1.4m high. Along Abenhall Road around the junction with Lower Spout Lane and for the first 18m along the latter, the walls here retain ground higher than the lanes which continues to slope westwards up towards the furnace building (Fig. 5).

4.4 The wall along Abenhall Road (Fig. 2, wall N) is in poor condition and is reduced in height (Fig. 5). The ground west of it has been dug away in readiness to rebuild it and the west face is merely disturbed rubble. North of a point c. 5m from the corner, the eastern, roadside elevation only survives to a maximum of 11 thin courses of roughly squared, rather long blocks of local stone. This all appears to be one build set in a very soft almost loamy, red-brown mortar as if the lime, present only as a very small proportion of specks, has dissolved out. Plant root ingress, although not very obvious visually, may have contributed to this condition.

4.5 The wall abuts, at its southern end, Wall M, superficially similar but with a higher proportion of thicker courses (Figs 5 and 6). Wall N is finished at this point with small neatly cut quoins. Wall M is set in a medium hard, friable, red-brown lime mortar with visible lime specks, <0.5mm, but otherwise well-mixed. Wall M ends at the north in a set of three well-cut, long-and-short quoins. They suggest either that the wall ended
or turned south-westward here at one time or that there was a gate, the northern jamb of which was removed when wall N was added.

4.6 It seems very probable, from what can be seen, that wall M continued around the eastern corner for a short distance, but the section of wall towards the modern entrance to the site on Lower Spout Lane, is of a very different character, rubble-built and uncoursed. As this section of wall has been re-pointed and partly rebuilt recently, this can not be confirmed.

4.7 The retaining/boundary wall along Lower Spout Lane and along the north-western boundary of the site is clearly of several builds. Five different phases of work have been identified: A-E, plus a rebuild of the upper parts along the entire length of A-D (Figs 7 and 8).

**Phase 1**

4.8 The earliest section is Wall C (Figs 7 and 9). This is in two sections, a lower, irregularly-coursed wall of roughly-squared rubble and an upper section of more regular, thinner courses, all in the local sandstone. The courses of the lower wall and the lowest courses of the upper section are horizontal, but a few courses above the junction the courses slope a few degrees down to the north-east and this continues up to the top of the surviving wall of this phase of work (Figs 7 and 9). Both sections of wall are laid in a soft, but coherent, salmon-pink lime mortar with lime specks <2mm.

4.9 The north-east end of the upper section of the Phase 1 wall ends in neat long and short quoins. Four survive (the uppermost is visible on the other face showing that they ran full depth) and it is clear that two more were removed from the top of the wall and one from the base when wall B was added to or replaced the north-eastern section of this wall (Figs 7 and 9). Again this can be seen on both sides of the wall. It may be that the wall ended at this point or that there was a gateway here (or possibly some other kind of opening), the other side of which was removed when wall B replaced it. The lower part of the wall also ends at this point, but in a more ragged, unfinished way (Figs 7 and 9).

**Phase 2**

4.10 Wall B post-dated wall C as it abuts it (Figs 7 and 9), but its relationship to wall D cannot be demonstrated. However, it does pre-date wall A (Figs 7 and 10). It is similar to Wall C in general construction, its courses even sloping slightly, if not quite so far from the horizontal, and its narrow but varied thickness courses are
occasionally interrupted by larger, blocks (Fig. 9). It is set in a hard, beige-grey lime mortar with stone aggregates <2mm.

4.11 This section of wall continues just past the angle where the boundary wall turns towards the east where there is a ragged junction with wall A (Fig. 10). Wall A is somewhat similar in construction, but is less regular and the courses are not level or straight. It continues to the modern entrance way on Lower Spout Lane. This wall is set in a medium hard, purley-brown lime mortar.

**Phase 3**

4.12 Moving back to the south-west end of the retaining wall, Wall C ends raggedly and is abutted by wall D (Figs 7 and 11). Wall D is somewhat similar to wall B but is firmly horizontally coursed, has generally thicker coursing and a higher proportion of larger blocks. It is set in an almost identical mortar to Wall B so may, nevertheless, be contemporary. Just north-east of the mid point of this wall is a ragged vertical line of ashlar blocks, presumably intended as some sort of bonding (Fig. 7).

4.13 Wall D continues to the southern corner of the site and turns along the south-western edge. It survives to about 2.5m at the corner but rapidly descends to ground level within a few metres of the corner as it has been completely replaced by Wall E (Figs 8 and 12).

**Phase 4**

4.14 Wall E must have failed at some point in the past as it has been completely rebuilt (and a large section at the north-western end has again fallen – Fig. 14). It has a very different character to the other walls, containing a much higher proportion of larger square blocks and is essentially rangework rather than coursed. Oddly, it is set in very soft, dark red but well-mixed lime mortar. It has been pointed in hard cement mortar. Apart from the incorporated section of D it is of one build throughout. The top capping of mortar and upright stones may be more recent however, as it is essentially part of the garden wall of Gun’s Mill House.

4.15 A short length of wall against the southern side of wall H, beyond the collapsed section, appears to be the north-western end of Wall E, but is not quite aligned. Between it and the rest of Wall E and to the north-east, is a scree of masonry now almost completely overgrown and buried (Figs 2 and 14). It seems probable, unless the wall failed from the base, that the lower part of Wall E remains behind the scree.
**Phase 5**

4.16 The upper part of Walls B-D have been rebuilt in one operation, producing a wall with a crest that follows the slope of Lower Spout Lane (although firmly horizontally coursed), about one metre high at the south-western end reducing to nothing above the junction of Wall B and C (Fig. 13).

4.17 The phasing above only applies to the retaining walls as detailed analysis of the rest of the building is not part of the brief for this report.

4.18 The scree also obscures much of the two-part south-eastern wall of the head race (Walls G and H). The upper is set back from the lower, but both are of the same or very similar build, but the lower only has a proper face for the north-eastern 1.5m. While the rest is mortared core only, the faced wall comes to a straight finished edge so this seems to be deliberate. The masonry is very similar in style to Wall B, but is set in firm, well-mixed salmon-pink lime mortar. The scree obscures most of the rest so this cannot be further investigated at the moment.

4.19 The other walls will not be described in detail in this report, but a preliminary outline follows.

4.20 Wall F is a short length butting Wall E and forming a room south-west of the bellows room (Figs 2 and 14). There is no sign of it butting Wall I and it probably stopped short, forming a doorway.

4.21 The bellows or blowing chamber is immediately south of the wheel pit and consists of walls I, J1 and K (Fig. 2). Wall I and the upper part of Wall K are of one phase, constructed in regular, neatly laid, shallow courses (Fig. 16). They appear to pre-date the head race walls, which seem to abut and clasp the northern corner of the blowing chamber. Wall J1 has been almost entirely demolished and replaced by J2, itself partly rebuilt in concrete block. The spring for an arch-headed window can be seen in the southern corner stub of Wall I/J1 (Fig. 17). The lower parts of two windows survived the rebuilding of Wall J2 which, as well as bricks, incorporated ashlar blocks the same as those in the lower part of wheel pit Wall K and the quoins of Wall I.

4.22 Wall K is also quite clearly butted to the stone walls of the furnace building in both phases (Fig. 18).

4.23 As implied above, Wall K is of two phases (or indeed three). The main upper part of the wall is in a masonry generally similar to wall I, while the lower section also
forming the wheel pit wall, is built of a very high quality rusticated masonry of regular-sized, carefully cut and finished blocks set in a very hard, salmon pink hydraulic lime mortar with visible lime particles (Fig. 19). The two openings have flat-arched heads with properly shaped voussoirs and keystone. The smaller one is on the axis of the original wheel and will have contained the wheel bearing. There is a rotation scar on the wheel pit side of this wall centred on the base of this opening (Fig. 19). The larger opening was made tight against the furnace wall and must have been for access for maintenance. It has lost many of its voussoirs and is currently meant to be held up by temporary propping. This has moved, however, and the wall is currently unsupported and at risk.

4.24 An opening in the upper part of the wall has been blocked in brick and after this was done the top five courses of the wall were rebuilt somewhat narrower (Fig. 20).

4.25 Blocks similar to those in the lower part of Wall K are found, presumably re-used, in the corner of Wall I (Figs 16 and 17).

4.26 The opposite side of the wheel pit (Wall L) is of a very different built to anything else. The lower part was not accessible for close inspection, but appears to be of high quality masonry. At about the level of the original inflow to the wheel pit, there is a ledge c. 0.4m wide in Wall L and above this the wall is rubble of varying quality set in a hard, pale creamy-pink, hydraulic lime mortar with cinder/slag aggregate <3mm. There is a large cellar-like chamber just above this ledge with a floor at the same level as the smaller opening in Wall K. Again this must have been to house the bearings for the preceding 22 foot wheel. The chamber has an elliptically vaulted ceiling. The junction of this wall with the furnace could not be inspected.

4.27 The wheel pit currently contains the remains of a small reverse-flow, over-shot, cast-iron wheel. The alterations to the headrace to suit this were made in brick and are still in place (Figs 19 and 20). The large, earlier wheel appears to have been breast-shot, as the earlier inflow from the head race is just below axle level (Fig. 19).

Demolished Buildings

4.28 The 19th-century maps all show buildings completely occupying the space between the retaining walls B-E and the furnace and blowing room. Further buildings are shown to the north-east, leaving just a small space north of Walls A and B. These were all cleared between 1890 and 1903 (Demidowicz 2001, figs 16 and 17). Their extent is indicated on Fig. 2.
4.29 Traces of these buildings can be seen on the south-eastern elevation of the furnace building, including the joist pockets for a floor at top floor level and the scar of stairs running from the door here down to a lower floor. Plaster on this face also indicates that this was once internal (Fig. 21).

4.30 However, a photograph taken before 1960 (Fig. 21, from FODBPT), shows a large wooden-framed shed, clad in corrugated iron, in front of the furnace building, but not attached to it, and corrugated iron roofing to the blowing room (this having lost its original roof at some earlier point). The shed is presumably a 20th-century farm building, and it is first mapped in 1959 (Demidowicz 2001, fig. 19). Photographs said to be from the 1970s show the entire yard south-east of the blowing room roofed with an extension of the latter's tin roof (Fig. 4). The roof of the shed shown in Fig. 21 was extended to the retaining wall. The roof shape makes it clear there was some sort of support structure in the centre of the yard, probably more timber work.

4.31 There are only two widely spaced, possible joist holes in walls B-D and these are of different sizes and at different levels, so there is nothing here to give any idea of the buildings demolished by 1903 (Fig. 11). There are widespread but very subdivided fragments of white-painted plaster on these walls and these are likely to refer to the pre-1903 structures (Fig. 9). They are too fragmentary to form any patterns like those recorded and partly surviving on the furnace building. They are only to be found on Walls B and C, however.

4.32 Wall E has a row of similar-sized, regularly-spaced, square joist holes about one metre from the present ground level in the yard but, apart from one hole vertically out of line, this row stops four metres short of the south-eastern end. Another row of upright rectangular joist pockets starts the south-eastern end at about 2.5m above the yard, but after the first three, forms a very ragged and irregular set, in size and spacing, as it straggles toward Wall F (Figs 12 and 14). The 1924 OS map shows small buildings along the north-west end of Wall E, against Wall F, marked “sheepwash” (Demidowicz 2001, fig. 18).

4.33 The blowing chamber had a floor inserted at some point, as shown by the joist holes on the south-western wall (Wall I), and the upper room was plastered (Fig. 22). Joist holes on the north-western wall (Wall K) seem to belong to the late tin roof and post-date the brick blocking of the window.
5. SIGNIFICANCE OF ARCHAEOLOGICAL REMAINS

5.1 The status of Gunns Mills as a Scheduled Monument and a Grade II* Listed building means it is of national significance, historical and archaeologically, based on its preservation and that it is “considered to be 'best remaining furnace of the earliest phase of British blast-furnace practice'…” (Appendix A). It is clear from this fairly superficial analysis that the building retains a very high evidential value in its structural complexity. A high potential community value as expressed by the involvement of the Forest of Dean Building Preservation Trust and its plans is also apparent. Its setting, both visual and functional, clearly contributes enormously to its aesthetic and evidential significances.

6. CONCLUSIONS

6.1 The retaining walls along Abenhall Road and Lower Spout lane were the main focus of this report. It is clear that they are of several phases, five in fact being identified along Lower Spout Lane. Wall C is the oldest and the existence of ashlar quoins at the north-west end may indicate that the wall ended here. The height of its base indicates that the ground level north of it was at this depth when it was built, but the height of the lowest quoin suggests that a building existed here and the quoins represent the jambs of an opening into its first floor from Lower Spout Lane (which would have to have been lower than today at that point, by more than a metre).

6.2 The base of the wall is the same as that of the blast furnace, suggesting some degree of contemporaneity (in use if not construction). That the quoins line up with the south-western side of the blast furnace may also indicate a relationship. It is not known whether the later walls along the lane are extensions or replacements. To the south-west it is likely that Wall D is simply a rebuild. Wall B is probably contemporary with Wall D and may represent either an extension or a rebuild. It seems likely that the retaining walls did need replacing relatively frequently, as D and E both evidently failed and it rather looks as if the south-west end of Wall C did too.

6.3 Wall A is not shown on the 1838 Abenhall Tithe Map (Demidowicz 2001, fig. 12) and first appears in the Ordnance Survey mapping of 1884 (op. cit., fig. 14). Prior to this, the yard south-east of the mill was open to Lower Spout lane and led to a track
passing the north-easternmost mill building and meeting the access track to the upper part of the mill/farm from Abenhall Road (op. cit., fig. 13).

6.4 The line of walls B-D seems to have been in existence from before 1838 (Demidowicz 2001, fig. 12), but not the section of D (later replaced by E) in front of the dam, which only appears in 1856. This appears at the same time that Gun's Mill House is recast or rebuilt (as it is a totally different plan on the two successive mappings of 1838 and 1856). Presumably it was part of a reorganisation of the mill grounds at that point.

6.5 The walls M and N are superficially similar to Walls B and D, but the mortar is closer to I and K, but darker, and in the case of N, much softer. They were always lower retaining walls, holding up the site away from the road rather than the road away from the site.

6.6 The other structures of the mill, blowing chamber and mill races are clearly complex and multiphase and have been interpreted in Demidowicz 2001, 63-66, but as that author states, further analysis is necessary.
7. REFERENCES

British Geological Survey 2013 *Geology of Britain Viewer*, 1:50,000
[http://mapapps.bgs.ac.uk/geologyofbritain/home.html](http://mapapps.bgs.ac.uk/geologyofbritain/home.html) accessed 6th March 2015

Chartered Institute for Archaeologists 2014a *Standard and Guidance for Archaeological Desk Based Assessment*

Chartered Institute for Archaeologists 2014b *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*


English Heritage 2001 *Tree-Ring Analysis of Timbers from Gunns Mills, Spout Lane, Abenhall, Near Mitcheldean, Gloucestershire*. Centre for Archaeology Report 25.2001

English Heritage 2006 *Understanding Historic Buildings: A guide to good recording practice (Swindon)*

English Heritage 2008 *Conservation Principles: Policies and Guidance (Swindon)*

APPENDIX A: NATIONAL HERITAGE LIST ENTRY

Listed Building Grade II*
SO 61 NE LITTLEDEAN Mill at Gun's Mills 6/67 (formerly Listed as Barn at Gunn's Mills, East Dean Parish) 23.9.55
GV II*

Formerly blast-furnace, later paper mill, now unused. 1682/3 (on iron lintels), mid C18. Coursed, squared rubble to furnace and blowing chamber, ashlar dressings and corrugated-iron roof to latter; upper building part rubble stone, part timber-framed, with slate roof. ‘L’ plan, pivoted on furnace, wings at different levels. Square blast-furnace at lower level, with tapering recess in main face, roof sloping back to main wall line, with 2 iron lintels. Doors at ground floor and in sloping face above. This recess repeated on left return, in blowing chamber, with dated lintels. Inside square chamber with sloping walls above 2m. Narrow top now covered by stone slab in floor of room above. Blowing chamber on left with opening against furnace, then 2 windows, unclosed: upper part of wall rebuilt in concrete block, (originally 2 floors). Behind pit, 7.5m long for overshot water-wheel: small arched recess in back wall. Space in front of furnace and blowing chamber was casting floor. Upper level at right-angles; timber-framed over furnace, 3-bays, built as paper mill. Wattle and daub infill to gable wall, open or glazed sides in 2 panels per bay: partition to stone section beyond, 3 bays, with floor over at eaves level. Trusses queen strut. Stone section 2 large openings in gable, one in side leading to 4-bay wing. Furnace originally built 1628, probably destroyed 1650; rebuilt 1682/3. Converted to papermill by 1743, and so used to at least 1900: furnace became stairs. Mill pond lay beyond house now filled in. Considered to be ‘best remaining furnace of the earliest phase of British blast-furnace practice’. (C. Hart, The Industrial History of Dean, 1971, p. 43, 70, 379).

Listing NGR: SO 67516 15945

Also a Scheduled Monument: SAM 1002080, but no details available

Gun’s (sic) Mills House is also separately Listed

SO 61 NE LITTLEDEAN -

6/66 Gun's Mills House (formerly listed as Gunn's Mills, East Dean Parish) 23.9.55
GV II

House; early C19, part may be earlier; ‘L’-plan, main wing 2 rooms deep. Brick, Flemish bond to front of main wing, wing to left coursed, squared stone with larger quoins, rendered on front: hipped slate roots. 2-storey front, 3 sash windows, with bowed end on right. Windows stone sills, rubbed-brick flat arches. Central door up 2 semi-circular steps: semi-circular stone-head on Tuscan pilasters: porch missing. Radial fanlight over original 6-paneled door. Ground-floor window sills extended as plain stone string course: plain stone plinth. To left of front door ashlar between string and plinth: blocked door at left end. To left return wing, 2-windows wide, originally 3 storey but eaves slightly lower. Windows were 4-panes wide. Interior: panelled doors to entrance hall: large fireplace in room on left, stone surround, elliptical head, salt cupboard. No floors survive in 3-storey wing. Third floor to main block had been removed by 1947. (C. Hart, The Industrial History of Dean, 1971, pl. 50).

Listing NGR: SO6747815940
APPENDIX B: OASIS FORM

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<tr>
<td>Gunns Mills, Flaxley, Forest of Dean, Gloucestershire: Historic Building Recording. CA typescript report: 15106</td>
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3  View to the south across the level yard and its retaining walls

4  Aerial view (1960s?) looking north (FODBPT)
5  The retaining walls M and N along Abenhall Road (scale 2m)

6  The junction of Walls M (left) and N (right) looking south-west (scale 2m)
9  Walls B-D with the junctions of Wall B and C (left) and Walls C and D (right) (scale 2m)

10  The junction of Walls A and B (scale 2m)
11 The junction of Walls C and D (scale 2m)

12 The south-east end of Wall E over-riding the remains of Wall D, looking south-west (scale 2m)
13 The south-east elevation of Walls B-D along Lower Spout Lane. The three phases and the rebuilt upper courses are evident (scale 2m)

14 The north-west end of Wall E and the collapsed section. Wall F abuts near the 2m scale
15  Walls G (lower) and H and the scree from the collapse of Wall E, looking north-west (scale 2m)

16  The south-west wall of the blowing chamber, looking north-east (scale 2m)
The spring of an arched window in Wall I/J1 (scale in 0.5m divisions)
18 The junction of Wall K (left) with the furnace building
19  Walls G (lower) and H and the scree from the collapse of Wall E, looking north-west (scale 2m)

20  The south-west wall of the blowing chamber, looking north-east (scale 2m)
Photograph taken before 1960 showing the post-1903 timber farm buildings and the traces of the pre-1903 buildings on the furnace building. The coping on the wall in front (Wall D) has obviously been rebuilt since (FODBPT)
The north-western wall (Wall I) of the blowing chamber, looking north-west showing floor joist pockets.