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LLANLLWCH MILL LEAT AND POND

SURVEY FOR MR. W. JENKINS,

LLANLLWCH MILL

BY

DYFED ARCHAEOLOGICAL TRUST LTD.

PRN 12759

SUMMARY OF SURVEY

The Old Palace,
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BRIEF: To establish what water levels would be required to re-instate water to the former mill leat and pond without detriment to the land in the former OS parcel 10 (enclosure upstream of the bridge).

History. Llanllwch Mill is mentioned as early as 1300 AD, as part of the demesne land of Carmarthen Castle in the ownership of King Edward I. The mill has been converted to domestic use and there is nothing in the existing fabric which would indicate a period earlier than the 19thC. However, there is every reason to suppose that the present structure stands on the site of the mediaeval mill. Moreover, there is nothing in the cartographic or topographical evidence to suggest that the course of the existing leat and the site of the pond are not those of the earliest recorded mill. In short, apart from periodic repairs and refurbishments over the centuries, the existing mill leat and pond are likely to be more than 600 years old.

General Description. The system consists of three main elements upstream of the mill: The mill pond, the mill leat, and at the time of its most recent working arrangement, a feeder pond and weir (both above the bridge), the latter with a central sluice. Water from the weir was diverted through a conduit beneath the road into the mill leat. The conduit is infilled, but investigation on its western side showed that here, the arch is still intact. The leat (ditch and bank) is generally well preserved as an earthwork, though the bank has been eroded in some areas. Its condition has not been documented in detail.

A complete longitudinal profile along the leat bottom and top of the leat bank was not undertaken, but it is considered that the spot levels taken at the intervals shown on the accompanying diagrams were sufficient to establish water level requirements. Irregularities in the level of the bottom of the leat and in the mill pond are due to a limited amount of dumping in a few areas (eg point 3, and point 7). A certain amount of soil has accumulated as a result of natural weathering since the leat was withdrawn from working use, but this material could easily be removed. A small excavation at Point 4 suggested that the original clay lining of the leat lies some 40cms/1'4" below the existing bottom of the leat. Further excavation would be necessary to establish this matter conclusively.

CONCLUSIONS

In our opinion, the restoration of a channel on the north side of the remains of the existing weir and cut through the material dumped in the former feeder pond, and linked with the conduit beneath the road, would enable water to be re-introduced into the system without affecting land in the remainder of the field. This also assumes clearance of dumped material in the few portions of the leat so affected, and the removal of relatively recent soil accumulations.

To achieve a consistent level of water in the leat and pond, the sill of the former sluice gate in the weir would have to be raised by c 50cms/1'8" (at a height above OD of 19.87m), and the remainder of the weir made good. This would allow, again assuming the clearance of material mentioned above, for a depth of c 57cm/1'10" of water in the leat above the level suggested for the clay lining.

To secure this situation, we imagine that it would be necessary to obtain rights to re-cut and maintain a channel from the north side of the weir to the conduit feeding the leat (as marked in red on the enclosed plan), and reconstruct and maintain the weir with sluice gates at a height of 50cms/1'8" (at 19.87m above OD) above the existing sill.

Dyfed Archaeological Trust Ltd., The Old Palace, Abergwili, Carmarthen, Dyfed.

17th July, 1986

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