Technical Paper 7

Drawing for Microfiche Publication

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The advent of microfiche publication in archaeology is leading to the development of different illustrative demands and techniques.

To the illustrator, and the commissioner of the illustrative work, the chief problem at the moment is not what the fiche can reproduce, but what can be reproduced from the fiche. Most drawings that are designed for standard A4 or Quarto book-form publication should be readable on a fiche-reader, but on all the systems so far tried, there has been a significant loss of detail on print-out from fiche, especially at a large scale.

Other technical illustrative disciplines have produced guidelines that are designed to avoid this loss of detail on print-out. The essential points are that, at camera-ready copy size (A4 or A3), the minimum line width should be 0.2–0.25 mm and annotating lettering should have capital letters that are no less than 2.5 mm high (a standard typewriter face). The figure below shows the line widths and lettering sizes required on the original artwork to achieve these minimum line widths and letter sizes on the camera-ready A4 or A3 copy.

For some types of archaeological illustration, it would clearly be a retrograde step to introduce such large minimum pen sizes. The following suggestions are therefore offered as a means of overcoming this problem.

- 1. The Landscape A3 format (see fig.) should be standard for plans, sections etc. to keep reductions to a minimum.
- 2. Small finds should be pasted up at the size at which they are drawn (normally × 2) to a landscape A3 format.
- 3. Pottery drawings should be either drawn at half-size or photographically reduced to half size, and then pasted up to a landscape A3 format.
- Complex details on plans, pottery and small finds illustrations should be drawn as larger scale insets
- 5. Any illustration included in microfiche should be obtainable as a xerox or preferably bromide copy of the original artwork, if the fiche print-out quality is not good enough.

REDUCTION	FOR 4 \ LINEAR REDUCTION	FOR 3 × LINEAR REDUCTION	FOR 2 × LINEAR REDUCTION	CAMERA-READY COPY
SIZE OF ORIGINAL (in mm) LANDSCAPE	1680	1260	840 594	A3 LANDSCAPE 420 297
Min. line width	0.8 mm	0.6 mm	0.4 mm	0.2 mm
Min. cap. height	10 mm	7.5 mm	5 mm	2.5 mm
SIZE OF ORIGINAL (in mm) VERTICAL (or PORTRAIT)	1188 840	630	594	297 210 A4 VERTICAL

Minimum line widths and capital letter heights required for the microfiching of landscape A3 and vertical A4 illustrations.

While the commonly-used negative fiche is acceptable for text, both in the fiche reader and as a print-out source, many illustrations make very little sense on the fiche-reader unless they are on positive fiche, and they will only produce decent print-out if they are on negative fiche. The simplest

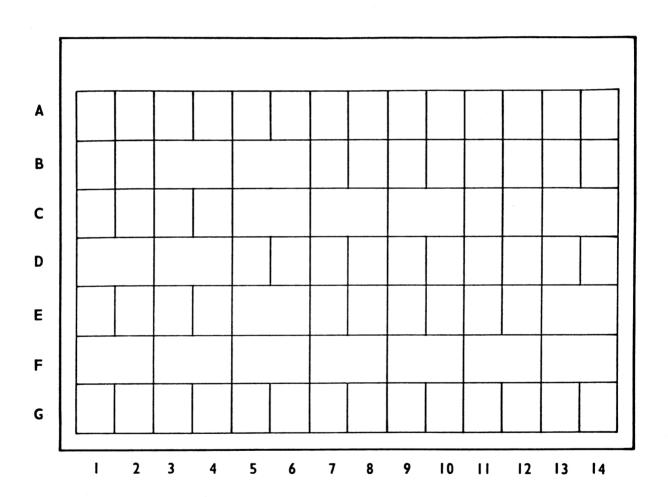
solution to this problem would be to provide both negative and positive fiche for these drawings. Failing this, it would be best to request that those illustrations that make no sense as a negative image (e.g. photographs or shaded small finds) should be reproduced as positive frames within a negative

fiche, and to make available (as in point 5 above) bromide or xerox copies of the original artwork.

If drawings need to be reduced, it is possible to use a reducing photocopier, but there is almost always a loss of detail, or thickening and blocking-up of fine line detail. It is far better to have the drawings reduced photographically, and, of all the photographic systems available, the best is still the large-format studio camera normally found in lithographic plate-making printers or in specialist technical photographers' studios. This system is extremely accurate, can be relatively cheap, and it has an additional advantage in that negative copies of illustrations can be produced. If negative copies are submitted with the text and other illustrative material for microfiching, a positive image will be produced on a negative fiche.

One vital element of any drawing that is designed to be microfiched (including *all* field and archive drawings, and publication drawings) is the presence of a bar-scale. This should ideally be calibrated in imperial and metric and have sufficient sub-divisions to be an accurate measuring aid.

One last point to remember is that microfiche film is continuous-tone film and will, therefore, reproduce paste-up marks and annotation even if this is done with a blue pencil. If notes are required they should be written on a separate sheet attached to the back of the illustration. If they must be added to the front of an illustration, then a yellow pen should be used, but even this may show on the fiche. Paste-up lines should be painted-out with process white, or, if costs will allow, a copy should be taken on line bromide paper.



A mixed frame microfiche using A4 and landscape A3 original material