Archaeological Research Services Ltd

RECORDING PROCEDURES

Contents

The Single Context Planning System

The key to understanding remains in the archaeological record is through the stratigraphic sequence. The stratigraphic sequence is the accumulated layers of occupation which represent actions in the past. Each ‘context’ is derived from an action of deposition or removal. Within any sequence such as this, the earlier deposits will always be cut or sealed by the later giving the stratigraphic sequence a relative chronology. It is important to note that the only relevant relationship between two contexts is that which lies immediately before or after any given context. All contexts within a site should be given equal consideration when considering the stratigraphic sequence, including physical artefacts such as coffins or walls, along side the more common types of context such as cuts and deposits. The stratigraphic sequence can be represented by a Harris Matrix showing the full interconnectivity of all contexts on a site. Each context is given its own unique context number and is recorded in isolation after the removal of all contexts above. In this way plans can be overlaid to compile and then check the site matrix.

The Context Recording System (see also Context Recording Sheet)

Site Code: Unique site identifier, usually consisting of a three or four letter code denoting the site and a two digit code denoting the year of the project. *e.g.* **HEX02** – **H**owick **EX**cavations 20**02**

Area Code: Used to further denote the part of the excavations in which the context is situated. This will be generally be used on larger sites where more than one trench is being investigated at any one time.

Feature Number: If the context is within a larger feature then write the feature number (prefixed by an 'f') here.

Context Type: Indicate here whether the context is a fill, deposit, cut or interface, or whether it is a more unusual context such as a wall or a coffin.

Context Number: must be taken from next available number on the context register; blocks of numbers may be taken for features or areas. Where the number is to be used as a feature number – e.g. when it is the number of a wall or ditch cut – 'F' should precede the number.

Description: Cross out the section which is not relevant to the type of context being recorded, whether it is a deposit/fill or a cut/interface.

Deposit/Fill
Dimensions of Context: Note the dimensions of the context including the depth/thickness of a deposit or fill.

Texture: In this section, indicate what the texture of the deposit is. The prompts are coarse, medium and fine, but it is also useful to include one of the following terms to describe the compaction of the deposit:

Sediment Type	Term	Definition
Coarse-Grained Sediments	Indurated	Broken only with sharp pick blow even when soaked
	Strongly Cemented	Cannot be broken with hands
	Weakly Cemented	Pick removes sediment in lumps which can be broken with hands
	Compact	Requires mattock for excavation
	Loose	Can be excavated with hoe or trowel
Fine-Grained Sediments	Hard	Brittle or very tough
	Firm	Moulded only by strong finger pressure
	Soft	Easily moulded with fingers
	Very Soft	Exudes between fingers when squeezed
	Friable	Non-plastic, crumbles in fingers
Peat	Firm	Fibres compressed together
	Spongy	Very compressible and open structure

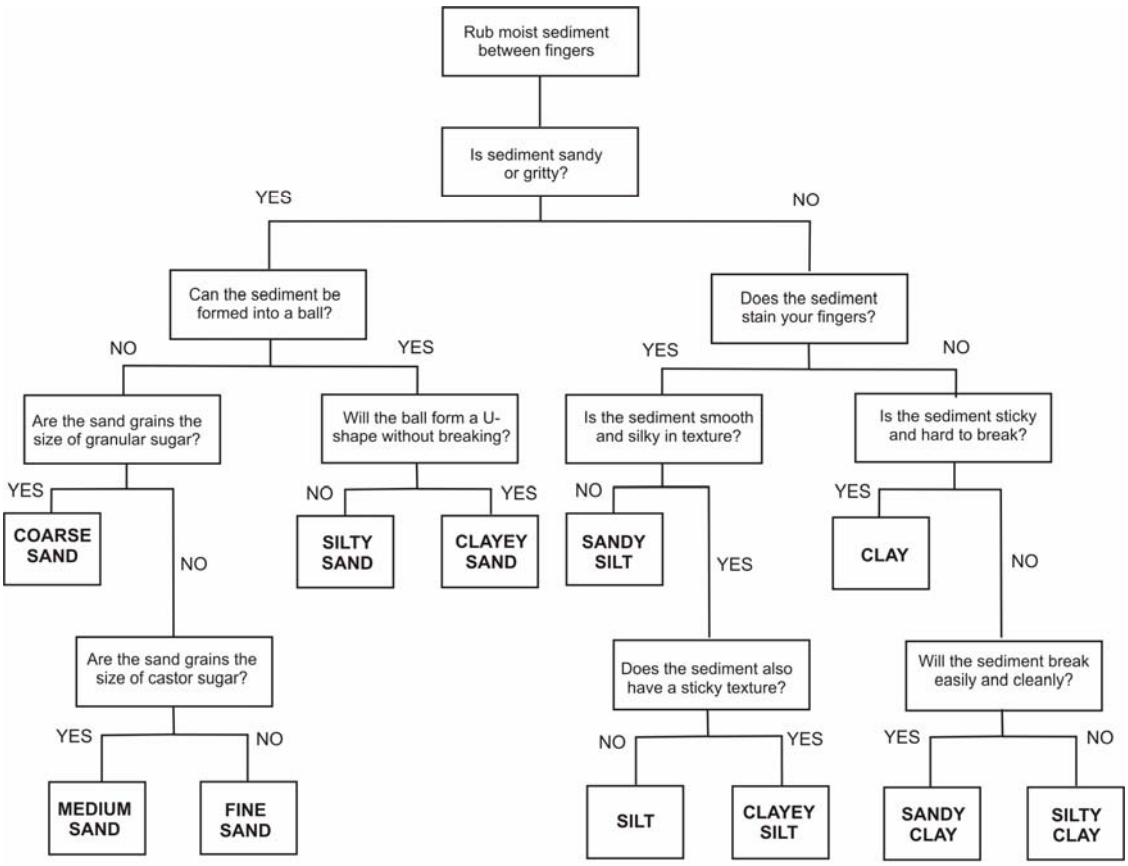
	Plastic	Can be moulded in hands and smeared between fingers

Table redrawn after MoLAS (1994)

Colour (verbal) wet/dry: Enter a verbal description of the colour of the matrix as excavated, not that contained in the Munsell book, and indicate whether it was wet or dry at the time of description.

Wet Munsell number: Enter relevant code e.g. 10YR ¾. The comparison to the Munsell Chart must be taken when the deposit is wet. Do not write in the Munsell colour description.

Composition: Enter the relative proportions of sand, clay and silt. NB. that a loam is a soil with equal proportions of each. The flow chart below provides a check of the composition of a matrix based on a series of tests.



Flow chart to inform the composition of a deposit (redrawn after MoLAS 1994)

Inclusions: These should be entered in terms of size (mm), shape and frequency. Do not use this field for types of find. These should be entered in the appropriate field below. In this section, there should also be an indication of how well sorted the deposit is if this is relevant. The charts and diagrams below can be used as an aid in determining the percentage of inclusions.

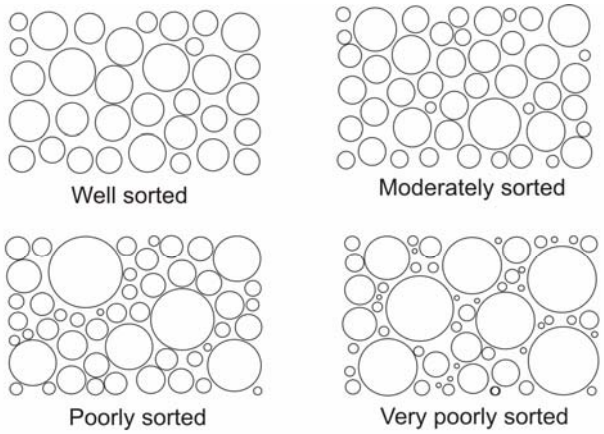


Diagram to show degrees of sorting of the composite particles within a matrix (redrawn after MoLAS 1994)

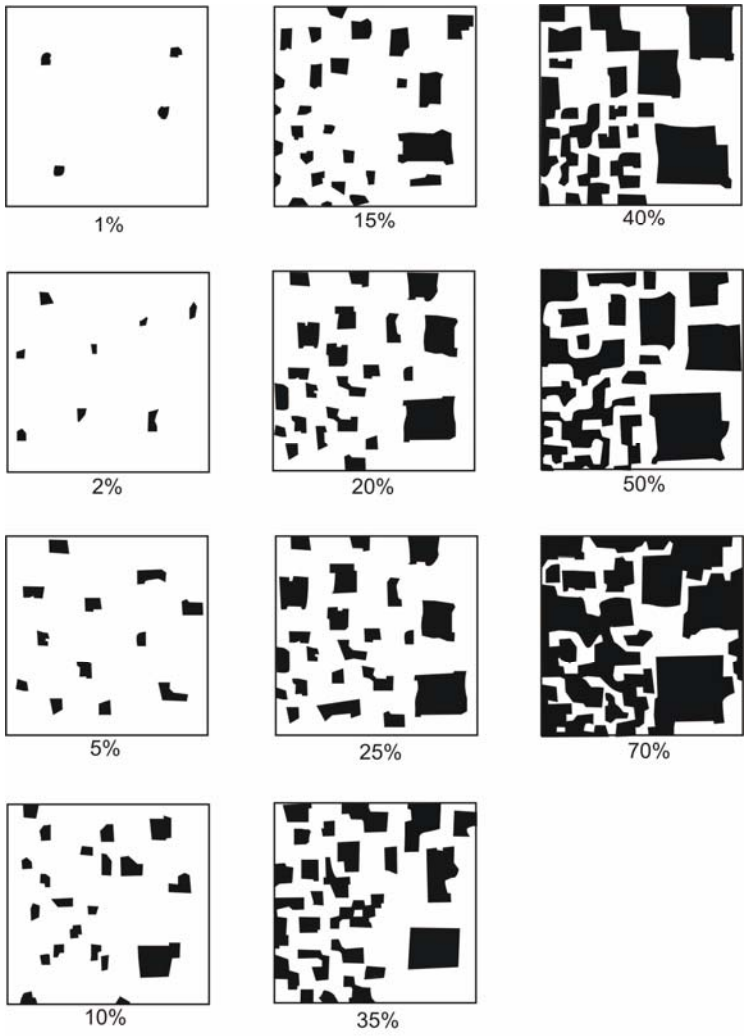


Diagram to help in estimating percentage of inclusions (redrawn after MoLAS 1994)

Method of Excavation: Enter here the techniques of excavation used for investigating the context. E.g. mattock, trowel, leaf.

Cut

Shape in Plan: Enter here the shape of the cut or interface as it appears in plan using a standard term: square, circular, sub-circular, ovoid, sub-ovoid, rectangular, sub-rectangular, linear or irregular.

Corners: If the shape in plan contains corners then indicate whether they are squared, rounded *etc*.

Dimensions/Depth: Indicate the dimensions of a cut at its fullest extent with the longest measurement first.

Break of slope - top: Note what the break of slope is at the top of the cut, e.g. sharp, gradual or not perceptible. Also provide a description of the form that they take *e.g.* concave, convex, uniform, vertical, flared.

Sides: Enter a verbal description of the smoothness or regularity of the sides and their angle. If possible give a ratio of the angle.

Break of slope - bottom: Using the same terms as for the top of the cut, indicate the sharpness of the bottom break. Also provide a description of the form that they take *e.g.* concave, convex, uniform, vertical, flared.*

Base: Describe the base of the cut in standard terms: flat, concave, sloping, pointed, tapered, uneven.

Orientation: If the cut is linear note the orientation of the context or in the case of a sloping posthole note the angle of the slope.

Further Questions: Go through the twelve questions below the main context description noting short answers to any of the prompt questions given. If any prompt raises a major interpretive point concerning the context then give further information within the main context description. The questions are: Is the context truncated? Is the context disturbed by root penetration? Has the context been disturbed through bioturbation (moles, worms *etc.*)? What is the upper surface of the context like (*e.g.* distinct, graded, uneven)? Is the upper surface of the context compacted? Is the deposit sealed? Has the upper surface of the context been exposed to weathering? Can the context be described as a laminate? Has the context been created in a single episode? Has the context accumulated over a long period of time? Is there any evidence within the context of waterlogging? Has the context been formed by natural processes such as flowing/standing water or wind? These questions aim to add an extra layer of information to he context recording sheets while also serving as prompts for any extra information entered in the ‘context description’.

Context Description: Enter here an objective, non-interpretive written description of the context providing as much information as possible. Enter here any information raised from the questions above, but do not make interpretive comments on that information.

Stratigraphic Relationships: In this section enter the number of the context in the centre box and use the boxes around to illustrate the stratigraphic relationships with the surrounding contexts. It is imperative that this is correct as it will be the basis for the overall site matrix. In the boxes to the right enter the context numbers of the contexts which relate directly.

Drawing Numbers/Photographs: Write into this section the numbers of drawings which relate to this context, and indicate whether photographs have been taken and of which variety they are.

Levels: Enter the corrected levels taken at the highest and lowest points of the context.

Finds: Tick the boxes that apply to the types of small finds found within the context and the small finds numbers.

Samples: Note here whether any samples have been taken, what they are, and the numbers of the samples.

Interpretation: This section allows for interpretive comment to be made based on the objective observations made in the context description. In this section there should be a first interpretation written in the field immediately after the recording of a context. This interpretation should take into account all the basic factual information entered above and should be initialed and dated.

Checked Interpretation: The fully completed context sheet and interpretation should be checked by a supervisor, initialed and dated.

Overleaf: On the reverse of the context sheet there is a space provided for a sketch plan or section of a context to provide a visual depiction of the context/feature.

The Burial Recording System

The burial record sheet is used for human burials. Fields are filled in as for the context sheet. The objective is to maximize the amount of information about the burials whilst on site. Individual burials are given separate burial numbers within the context system.

Site Code: Unique site identifier, usually consisting of a three letter code denoting the site and a two digit code denoting the year of the project. e.g. HEX02 – **H**owick **EX**cavations 20**02**

Area Code: Used to further denote the part of the excavations in which the context is situated. This will be generally be used on larger sites where more than one trench is being investigated at any one time.

Grid Reference: Should be the grid reference of the pelvis where possible.

Associated Context Numbers: The context numbers should be given here of the contexts of the grave cut and grave fill.

Burial Number: Context Number. Ideally a set of numbers should be reserved for burials in the context list e.g. 5000-5999.

Basic Information

Primary/Secondary: Is the burial a primary internment or a secondary insertion.

Cremation/Inhumation: Indicate whether the burial remains are that of a cremation or an inhumation.

Position: Enter in this section whichever of the three-letter codes below describe the position of the burial. The codes are reproduced on the rear of the burial sheet.

SUP supine (lying on back as opposed to prone - see FDO)
EXT extended
ORS on right side
OLS on left side
CRO crouched (with knees and legs brought up to body)
FLX flexed (on side with body not fully extended)
FDO face down
NLO not laid out (e.g. dumped)
LAP redeposited bones laid around a primary interment

Alignment: In degrees north according to the direction of the head. Three digit character. E.g. an east-west burial with the head at the west end would be 270. Subsequent post-excavation work should refine this from the plans to the nearest 5 degrees.

Provisional Date: To be completed as appropriate.

Provisional Sex: Enter a single letter: M, F, U (for unknown).

Provisional Age: Enter one or two letters: I for infant (unfused cranial sutures), YA for young adult (for skeleton with unfused pubic symphyses), A for adult.

Position of Arms: Enter in this section whichever of the three-letter codes below describe the position of the arms of the burial. The codes are reproduced on the rear of the burial sheet.

AOC arms on chest
LOC left arm on chest
ROC right arm on chest
RBS right arm by side
LBS left arm by side
LOR left arm on right side
ROL right arm on left side
HTO hands together
HRF hands on right femur
HLF hands on left femur
HOP hands on pelvis
LOP left hand on pelvis
ROP right hand on pelvis

Position of Legs: Enter in this section whichever of the three-letter codes below describe the position of the legs of the burial. The codes are reproduced on the rear of the burial sheet.

LCF legs crossed over femur
LCT legs crossed over tibia
LCA legs crossed at ankles

Facing of Skull: Enter whichever prompt most accurately describes the facing of the skull.

Bones Present: Using the diagram and the boxes provided indicate which bones are present in the burial.

Drawing Numbers/Photographs: Write into this section the numbers of drawings which relate to this context, and indicate whether photographs have been taken and of which variety they are.

Stratigraphic Position: Note here the position of the burial within the surrounding contexts.

Grave Goods/Finds: Tick the boxes that apply to the types of small finds found associated with the burial and the small finds numbers.

Levels: Levels should be taken at the points indicated and entered here. If it is deemed necessary include more levels when recording the burial, then indicate what these levels are in the spaces provided.

Samples: Note here whether any samples have been taken, what they are, and the numbers of the samples.

Interpretation: In this section there should be a first interpretation written in the field immediately after the recording of the burial. This interpretation should take into account all the basic factual information entered above and should be initialed and dated.

Checked Interpretation: The fully completed burial record sheet and interpretation should be checked by a supervisor, initialed and dated.

Overleaf: On the reverse of the burial record sheet there is a space provided for a sketch plan of the burial provide further interpretive data.

Plans, Sections and Sketches

Drawing Register

Drawing Number: Plans, sections and sketches are all numbered in one single numerical sequence (*i.e.* Plan 1, Section 2, Sketch 3, Plan 4,).

Description and context numbers: Write here a brief description of the subject of the drawing, and the context numbers which relates to it.

Scale: Where the plan is recorded by the total station, enter 'TST' here. Where a sketch is not to scale enter 'not to scale'.

By: Enter initials here so that during interpretation and post-excavation any ambiguities can be clarified through talking with the original artist.

Date: Enter the date on which the drawing was made.

General

Total Station Plans: These are normally used for large areas where the use of tapes is inappropriate or inaccurate, and wherever it is quicker than manual drawing, *e.g.* simple features such as pits or ditches. They are usually accompanied by a sketch plan. Total Station Plans are printed out and checked in the field where possible. Where there is any confusion, ask your survey supervisor to clarify.

Plan Locations: Drawings may be located to a site grid that has been established in advance with the total station. More usually, datum points used during manual drawing are established at the most appropriate position, and their location recorded using the total station.

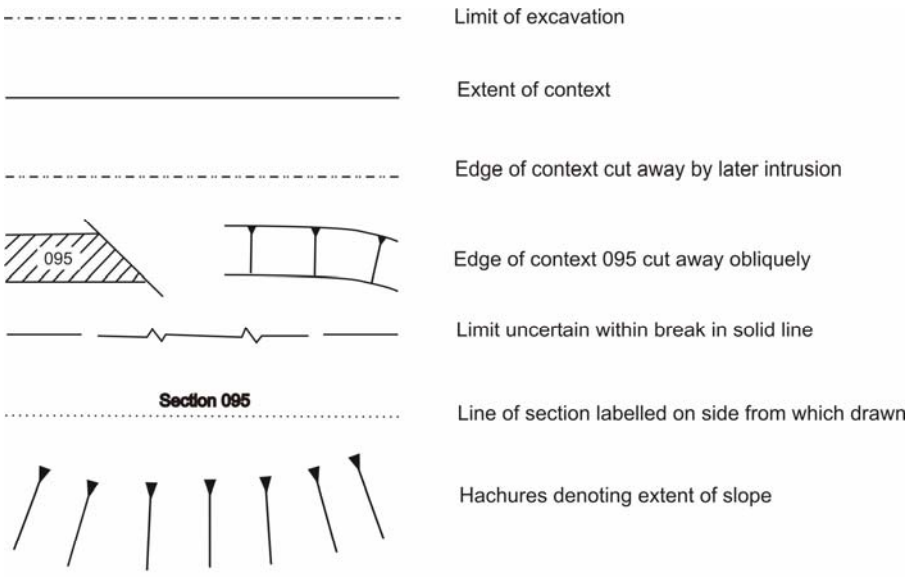
Sketches: Any sketches made of profiles or surface plans may be drawn to scale on the reverse of the context sheet. They are designed to assist in the excavation and understanding of relationships etc., but these should not replace formal scaled plans.

Legends: All appropriate information is recorded to the side of the plan. The minimal information required is: Site code, date, what the drawing is of, who is drawing it, drawing number, scale, and north arrow (or other indication of overall position).

Levels and co-ordinates: Where a level is used, the location of the levels is recorded on the plan, the back sight and foresight and all calculations recorded

to the side of the plan. Where levels and co-ordinates are recorded by total station, the total station number is marked directly onto the plan next to a clear cross sign. Co-ordinates and sections datum location records should be checked before the drawing is removed from the drawing board. Where section data have been recorded using a level, the location of the section must be recorded on a plan.

Conventions: Standard archaeological drawing conventions are used for all drawings so as to provide uniformity across all ARS Ltd work and also to facilitate the interpretational work undertaken during post-excavation.



Planning conventions (redrawn after MoLAS 1994)

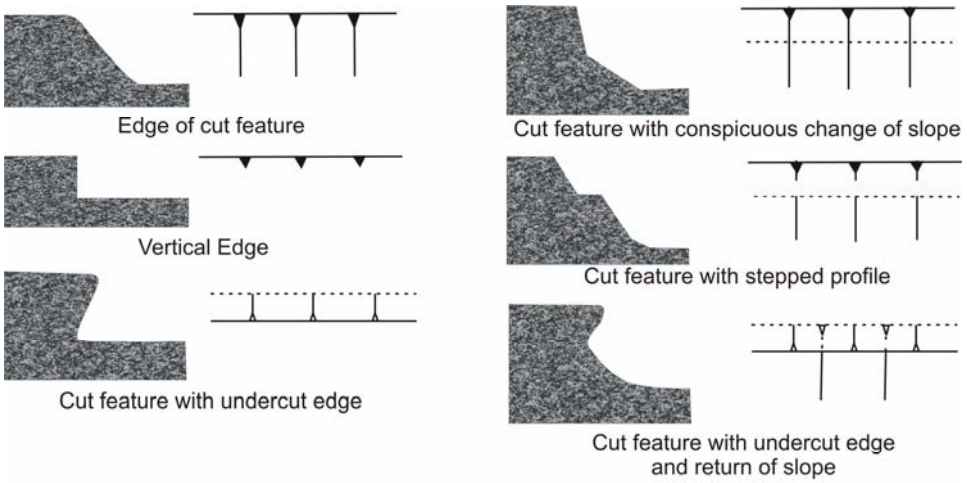


Diagram showing planning conventions for different types of cut features (Redrawn after MoLAS 1994)

Environmental Sampling

Environmental sampling is a key device of archaeological prospection undertaken on a wide variety of sites and to obtain a wide range of information. Environmental sampling can provide data on: climatic and ecological factors not immediately evident through the excavated evidence; economies and agriculture associated with a particular site; and also behavioral information such as identifying certain activities or patterns of activity on a site.

Kind of remains	Sediment Type	Information available from investigation	Method of extraction and examination	Volume to be collected
Human remains	All but v. acidic	Diet, disease, demography, lifestyles, burial practices	Hand sorting, trowelled sediment and sieving	
Large mammal bone	As above	Diet, husbandry, butchery, disease, social status, wealth, behaviour, craft techniques	As above	Whole context trowelled except when bulk samples are taken
Small mammal bone	As above	Natural fauna, ecology, and synanthropic spp	Sieving to 1mm	75 ltr
Bird bone	As above	See large/small mammal bone	See large/small mammal bone	As Above
Fish bone, scales and otoliths	As above	As below plus fishing technology and industrial development, and seasonal activity	See large and small mammal bone	As above
Large molluscs	Alkaline and neutral	Diet, subsistence, trade, season of collection, shellfish farming	Hand sorting, trowelled sediment and sieving	As above
Small molluscs	Alkaline	Past vegetation, soil type, depositional history	Laboratory sieving to 500 microns	10 ltr
Insect remains (charred)	All sediments	Climate, vegetation, living conditions, trade, human diet	Laboratory sieving and paraffin flotation to 300 microns	10-20 ltr
Insect remains (uncharred)	Wet to waterlogged	As above	As above	As above
Parasite Eggs	As above	Intestinal parasitic diseases, sanitation, cesspit ident.	Laboratory extraction and high power(x400) microscopy	0.25 ltr

Kind of remains	Sediment Type	Information available from investigation	Method of extraction and examination	Volume to be collected
Charred plant remains (grain, chaff, charcoal)	All sediments	Vegetation, diet, plant materials used in building crafts, technology, fuel, processing of crops, and behaviour	Bulk sieving or flotation to 300 microns	75 ltr
Uncharred plant remains (seeds, mosses, leaves)	Wet to waterlogged	Vegetation, diet, plant materials used in building crafts, technology, and fuel	Laboratory sieving to 300 microns	10-20 ltr
Wood/(Charcoal)	Wet to waterlogged, charred	Dendrochronology, climate, building materials, and technology	Low power microscopy (x10)	Hand or lab. collection
Diatoms	Waterlain deposits	Salinity and levels of water pollution	Laboratory extraction and high power microscopy (x400)	0.10 ltr
Pollen	Buried soils, waterlogged deposits	Vegetation, land use	As above	0.05 ltr or column sample
Phytoliths	All sediments	As above	As above	As above
Soil	All	Detailed description of how the deposit formed and under what conditions	(Must be examined *in situ* by environmental staff)	(Column sample)

Table redrawn from MoLAS (1994)

Finds

Bulk Find Sampling

100% of bulk finds are collected and bagged by context. This includes post-medieval pottery, and pottery may not normally be discarded in any circumstances. Where material is unstratified, the sampling strategy should be set in consultation with the site director.

Where abnormal distribution patterns within contexts are noted (*i.e*. concentrations within certain parts of contexts, towards the bottom *etc*), this information must be recorded on the context sheet, and the matter discussed with the site director.

Where small finds are present not suitable for 100% hand recovery, a soil sampling or on-site sieving programme may be implemented.

Small finds sampling

A separate register of small finds is maintained. The 3-D recording of small find location by Total Station may also take place where this information is considered useful.

Excavation

Finds should be excavated under the assumption that, as objects are being removed from a relatively stable environment into one in which decay processes are likely to proceed at a variable and often increasing speed, the rate of decay will increase. The handling of the finds should preserve the maximum amount of information recoverable from the objects (preservation by record).

Recording

All finds must be labeled before they leave the site. Labeling is the responsibility of the excavator, and should be checked by the supervisor or finds supervisor. The finds bags should be labeled. Where trays are used, waterproof labels should be used. All labeling should be in indelible ink.

The label should include: Site Code, context number, area number if applicable, excavators initials. Total Station information should also be added if applicable. The label should be legible.

Transport

Common sense dictates methods of packing during transport, which are designed to minimise stress to the finds (see First Aid for Finds).

Mechanical Stress: e.g. Physical shock, abrasion. Do not pile finds on top of each other, or cram them into small spaces.

Environmental Stress: e.g. Condensation. While it is important to seal bags during transport, they should not be sealed for longer than is necessary, particularly if they contain metal finds.

Destratification: when the bags/labels become detached from the finds. From bags left untied, split or overfilled.

Special Cases: waterlogged material – contact conservation via the site supervisor.

Processing

If immediate washing and marking is impossible than the contents of the bags should be spread out in plastic trays at the earliest opportunity. Labels should be checked when this is done and should be placed so that they cannot be accidentally disturbed. No more than one bag of finds should be placed in any one tray. Trays should be placed out of direct sunlight but in places where the air can circulate freely. Any artifact likely to be damaged by exposure to the normal environment should be placed in the appropriate kind of controlled environment. This is likely to affect metal objects and organic objects other than bone. Full details can be found in 'First Aid for Finds', 18-29.

Washing: The washing and marking of finds is of critical importance and has a direct influence upon all subsequent work. Consequently this has an indirect effect upon the value of the excavation as a whole.

As a basic guide, if in doubt do not wash or mark a particular object. Keep it together with its labels and ask advice at the earliest opportunity from a supervisor or finds specialist.

The following classes of artefacts (mainly small finds) should never, under any circumstances, be washed:

Copper Alloy
Silver
Gold
Lead
Pewter
Other metal
Slag and metallic residues
Crucibles
Kiln furniture

Organic material, including wood and cremated bone
Samples for environmental analysis (including snail shells)
Samples of pottery bearing organic or other residues

It is normally safe to wash the following material:

Pottery (except poor quality prehistoric pottery/unfired pottery which may disintegrate)
Bone (though still consult with a finds supervisor)
Stone

A number of basic principles should be observed. These include the following:

1) The aim of washing is to remove the soil without damaging the object. The object should be brushed gently using a toothbrush with soft bristles. Do not use an old brush with short stiff bristles. Do not scrub at the surface of the object. Pay particular attention to the edges of potsherds and the ends of bones, but be careful not to damage the latter.
2) Rinse the object frequently in the water and note the condition of the surface. Certain classes of pottery are particularly susceptible to abrasion and these include some of the most critical and diagnostic types. Damage to such sherds with a toothbrush is far more devastating than accidental breakage with a trowel during excavation. Fresh breaks can be repaired, but once the surface of a sherd is lost it cannot be restored. Similar considerations apply to traces of disease on bones.
3) Do not soak objects in water but wash them one at a time.
4) Keep one label with the bag of finds and one with the tray – avoid having any unlabelled finds.
5) Lay the objects out evenly in the tray so that air can circulate around them. If the tray becomes full use another – duplicate the labels exactly and DO NOT amend them.
6) Always assume that washing has the potential to damage finds and proceed accordingly.

Washing Human Bones: Human bone should be treated with extreme care as a great deal can be learnt about disease and injury from trace on the surface of bones. No hard and fast rules can be laid down for the treatment of bone as the processes involved in the funeral rite and in the subsequent burial will vary and these will affect the condition of the bone. The following are basic guidelines which should be interpreted in the light of examination of the particular bones in question.

1) Delicacy is essential – when washing bones use a paintbrush or new, soft, toothbrush. Do not scrub the bones.
2) On no account should bones be soaked in water.

3) If the bones are crumbly or flaky do not try to wash them. Lay them on a tray to dry. Do not put them in direct sunlight.
4) On no account try to wash cremated bone.
5) Do not poke anything into the holes in bones. Do not poke around inside skulls, especially around the ears and nose.
6) Do not wash skulls, dry brush the soil from the surface and put then to dry as suggested in (3). Do not try to clean the teeth. If any teeth fall out do not try to replace them in the sockets but put them in the tray with the skull. Do not pick skulls up by the eye sockets.
7) If in doubt do not wash the bones, but put them to dry as suggested in (3).

Drying: Pottery, bone and many kinds of stone are porous and will rapidly absorb surprisingly large quantities of water. Drying nearly always takes longer than anticipated. In summer a normal bag of pottery and bone will take at least two days to dry, often longer. In cold weather, in an unheated room, they may take a week or longer. Brick and tile are particularly porous and require at least double the drying time of ordinary pottery.

The final bagging of all classes of washed finds should therefore be delayed as long as is reasonable. Never re-bag a find when still wet.

Marking:

1) Finds should be marked with Indian ink and a fine mapping pen or bagged with unique find number clearly visible, whichever has been chosen as the site recovery technique.
2) Check the labels in the bag or tray.
3) Mark sitting at a table in good light.
4) Write legibly but as small as possible. Use your common sense when deciding where to mark. There are no hard and fast rules, but imagine the object is to be photographed for publication or will be put on display. In the case of pottery avoid decoration and, if possible, glazed areas. Do not mark too close to the edge of a sherd. Ink can be removed with water if it is still wet (i.e. If you spill ink on the object), but ensure that the object is fully dry before bagging the group.
5) When the whole group has been marked and the ink is dry put the finds into clean plastic bags. Whether the whole group goes into the same bag or is divided into classes will depend on the way the process is organised. Ensure that each bag has two legible, dry and intact labels. Ensure that at least one of the labels is visible and legible from the outside of the bag.
6) Wash the pen in water. Do not stand the pen on its nib.

Photography

It is essential that a complete photographic record be made of any works undertaken. The archive that this provides is invaluable during post-excavation.

Stills

Set-piece photography is taken before, during and after excavation of features, and when areas have been cleaned *etc*. All photographs should include a scale which is clearly identifiable. Unwanted objects (buckets, feet *etc*) should be removed from shot. A photographic record is taken using digital, monochrome print and colour transparencies. The use of both digital and print cameras serves as a back up against either format becoming corrupted in some way. As well as set-piece photography fully recording the site and features, it is also advisable to compile an archive of 'working shots' showing various areas of a site under excavation at different stages. Pictures such as these provide a log of the works and also a resource for illustrating reports.

Video

In addition to set-piece photography, video footage can be taken. The video footage records set-piece excavation segments (i.e. where plans and photographs are normally taken) but also the process of excavation, features before they are excavated, after they are excavated, and the context of individual features. A voice commentary gives a complete description of what the camera is looking at, along with comments on interpretation and the site in general.

When taking footage:

- Always film the video board before starting, on which the date, your name and the context/what you are filming should be clearly written.
- Speak clearly and loudly explaining what you are filming.
- Start by showing the location of what you're filming and its wider context; explain what has happened, what you think it is, and what is going to happen next.
- The video footage is logged and downloaded at the end of each day.

Wide ranging footage is taken:

- At the beginning of a new excavation or excavation area.
- Of 'modern' features that do not warrant full archaeological recording.
- On the completion of an excavation.
- During the course of an excavation, to provide an overview of current progress, to provide a record of the excavation process, and to record current interpretations about the site.
- When site tours are being given.

Specific footage of features is taken:

- During the excavation of features, to record stages of excavation not recorded on plan or by set-piece photography.

- As part of the normal recording process on completion of excavation of features etc., when a plan is drawn, contexts recorded and photographs taken.
- To record aspects of the archaeology that will not form part of the normal context record.

It is imperative to note that video footage should never replace still photography and standard recording techniques on a site; it should only be used to augment the existing recording.

References

Museum of London Archaeological Services. 1994. *Archaeological Site Manual*. London, MoLAS.