SILBURY HILL 2007 DATABASE USER GUIDE: DRAFT 5

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Introduction

This database was created to meet the need for continual monitoring of project progress during the field work at Silbury Hill. It is based on the English Heritage Recording Manual, which contains detailed guidance on completing the paper records. The primary archive record for the fieldwork stage of the project remains as the paper record forms. It was originally designed for on-site data entry of the full Context record and index-level data from the Sample and Small Find records. It has since been developed to take the full set of site paper records.

This is a general guide for users. There is also a documentation and administration guide.

Please note:
- There are no roll back capabilities or permissions written into the database. Effective use of the database depends on effective procedures, and you must follow the guidelines in the user notes (page 3). **If in doubt, ask**.
- Do not change the design of any tables, queries or forms.

The database is written in Access 2002. The user interface is SilburyFront, which is linked to a second database containing the data (SilburyData). The file to open is SilburyFront,, and when it's in use, it behaves like a single database. If there is any problem with the link (e.g. if you get a message asking where SilburyData is) ask for advice.

The SilburyFront database opens to a Menu from which forms and some frequently used queries can be accessed.

There are forms showing Context, Small Finds, Bulk Finds, Samples, Sample Evaluations, Skeletons, Drawings and Photography records, and an additional form for provisional Phasing.
- The Context form holds the complete Context record from the Deposit and Cut form. It also displays related information form other records, such as a list of the small finds. A checking and interpretation section has been added.
- The Context Index form shows selected fields from the Context Index record sheet and the Deposit and Cut form. It was designed to allow entry of the basic context data rapidly for on-site checking and to supply basic information to the finds/environmental team. It can be used before the Context paper sheet is completed and checked. It holds the Context number, SSD and initial description from the Index, plus the Simple name and Fill Of field from the Deposit and Cut form. When the full Context data is added, the SSD, Simple name and Fill Of field must be checked in case there have been corrections made on the Deposit and Cut form.

- The Small Find, Bulk Find, Sample, Sample Evaluation, Drawing and Photograph forms show the full record as on the paper sheets, with a few additional fields, sub-forms or queries for cross checking or to show basic Context information.
- The Phases form is not a standard part of the recording system, and is intended to assist interpretation by the project manager.

The database has been designed so that the data can be entered and viewed without the user having a detailed knowledge of Access, but if you are totally unfamiliar with Access, please ask for a quick introduction to the standard Access tools etc.

Users can create their own queries, but if you want some additional queries and are not familiar with Access, VC will try to set them up for you.

Security

No security or permission systems are in place, so data integrity depends entirely on the users.

- There is no data tracking – once something is changed or deleted it has gone permanently, unless it can be recovered from the backup tapes or a security copy of the database made previously.

- If you suspect you have accidentally changed or deleted something, get advice from VC, HC or ML as soon as possible. Keep a note of what and when the problems was, in case we need to go to the back-up tapes.

- Back up copies can be used as a check if needed, for example if you suspected data has been corrupted or accidentally deleted. Back up copies must not be altered in any way.

- Data responsibilities must be clearly defined and respected – for example, only the finds staff may edit finds records.

- To encourage this, some fields on the forms are locked, so that context data can only be changed on the context form, and finds data can only be changed on the finds form. Text in locked fields is shown in blue.

- Fields in green are equivalent to the greyed-out field on the record forms, and are for use by the project manager and/or in post-excavation work.

- The design of tables and forms must not be altered.

- Queries beginning with an X (e.g. XF_ContextSFList) are used in the forms, standard queries or reports, and must not be altered. Changing them is likely to stop the database working as intended, and could result in lost or corrupted data.

- If you create a query and want to save it, start the query name with your initials so we know who created it (e.g. VC Pit list).

- Using action queries to change data globally is **not allowed** under any circumstances. These are the query types with **!** after their icons.
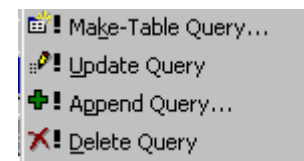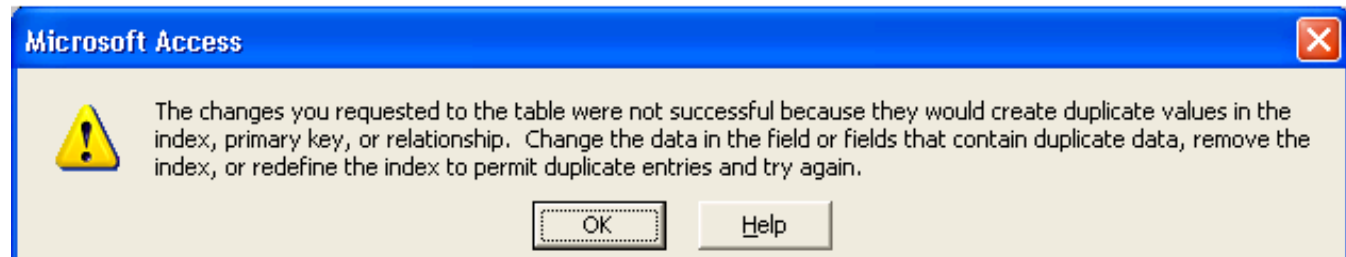
Entering data: general points

- Version control is very important here – the digital record must be the same as the paper record.
  - the data must be entered after the context sheet is fully completed
  - it must be entered exactly as it is on the paper record form
  - once a record is entered, no additional information should be added to the paper record without being added to the database.

- The forms are set out to look as much as possible like the paper records. The Tab order should follow the order on the paper records (if it doesn't, this is easily changed so let me know).

- The status bar at the bottom right of the screen gives information about the field currently selected. This will usually be a brief description and the number of the field on the paper record form. In some cases it also refers to the relevant section of the Recording Manual, especially where controlled vocabulary is required in a free text field. Please do use the correct terms – it makes searching the database much easier.

- Several fields are glossary controlled, with drop-down lists to help data entry. This also ensures consistent descriptive terms are used, prevents typing errors, and making searching and querying easier. If you type the first letter or two, the database will move to the corresponding place in the drop-down list.

- Some fields are 'colour coded' – green text corresponds to the greyed-out sections on the paper forms, and is for use in checking, interpretation and post-excavation work. Blue text is read-only, displayed for information but taken from another record and only editable from there.

- There are validation checks in place – if you try to create a record with a number which is outside the appropriate range for the record type, you will get an error message. Click OK and type in the correct number. If you don't know what the number should be, you will need to select 'Undo Current Field/Record' from the Edit Menu (just deleting the number or using 'Undo Typing' won't work).
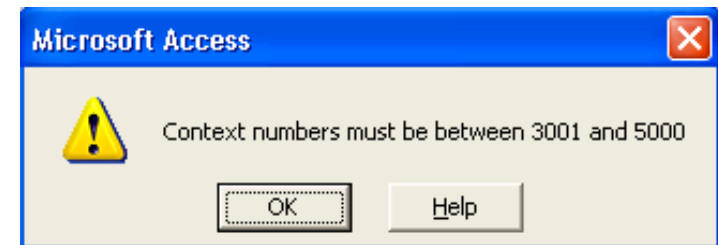
- If you create a new record but use a number which has already been used, you will get this error message. You need to either correct the number or delete the record using 'Undo Current Field/Record' from the Edit Menu.

Microsoft Access

⚠ The changes you requested to the table were not successful because they would create duplicate values in the index, primary key, or relationship. Change the data in the field or fields that contain duplicate data, remove the index, or redefine the index to permit duplicate entries and try again.

[OK]   [Help]

On the Context record, if you tab or return after putting in a number, the database will check the number has not been used already. If you don't check, you could type in a whole record and only find it's a duplicate when you try to exit or save the record – in which case you will lose what you have typed.

- When records have been partly entered on site, all fields must be checked in case the paper record sheets have been altered or information on the Index sheet was updated on the full record sheet. If this is a frequent problem, it may be simpler to remove the site data and start again.

Menu

The database opens to a Menu from which forms and selected frequently used queries can be accessed.

There are forms showing Contexts, Small Finds, Bulk Finds, Samples, Sample Evaluations, Skeletons, Drawings and Photography records, and an additional form for provisional Phasing.

Click the buttons to open the forms or run the queries.

Some queries will prompt you to enter a record number, e.g to get a list of Small Finds from one context only.

 closes both the database and Access

Navigation

The standard navigation buttons appear at the bottom left of the screen on each form except the Menu. Larger versions of the navigation buttons are on some forms.

 Each form has a Return to Menu button.

To close a form or query, click the lower X at the top right of the form.

Context Records: the Context Index form

The Context Index form holds selected fields from the Context Index record sheet and the Deposit and Cut form.

It was added to allow entry of the basic context data rapidly for on-site checking and to supply basic information to the finds/environmental team. It can be used before the Context paper sheet is completed and checked.

It holds the Context number, SSD and initial description from the Context Index paper record, plus the Simple Name and Fill Of fields from the Deposit and Cut form.

When the full Context data is added to the Context form, the SSD, Simple name and Fill Of fields must be checked in case there have been corrections made on the Deposit and Cut form.

Context Records: the full record

The Context record is divided into four pages – you can move up and down either by using the page buttons or by scrolling. Pages 1 to 3 hold the information from the paper Context Record, and page 4 shows related records, such as a list of Small Finds from the Context. The information on page 4 cannot be edited.

To go to a specific record, type its number into the box at the top right and press enter.

Navigation buttons are at the bottom left.

This button opens a new record.

If you create a new context record, tab or return after you have put in the Context number to check there is not already a record for the Context in the database.

Context record – page 2

Enter lists of numbers separated by semicolons.

Most of these fields require lists of numbers separated by semicolons.

'Division of' and 'Fill of' can only contain one number.

Context record page 3

Silbury Hill   Project 661   2007   **Context record**

Context: 3021   Find Context:

Page 3

INTERPRETATION   PreliminaryPhase:
                  Preliminary Date:
                  PartOf: ConsistsOf:
                  Interpretation:

FINDS   Contains:
         Small Find Nos:
         Sample Nos:

CHECKING   Notes:
and
INTERPRETATION

Checked by:

                  Interim
                  Interpretation:
Date:

                  Tunnel side equivalent contexts
                  Same as: Reason: Confidence:

◄ ► ►*   Return to Menu   Small Finds   Page 1   Page 2   Page 3   Page 4: Related records

Record: I◄ ◄   1   ► ►I ►* of 158

Excavator's on-site interpretation, with reasons. Field 60   NUM

Sections in green correspond to the greyed-out sections on the paper forms, and are for use in checking, interpretation and post-excavation work.

When the Preliminary phase number is entered, the summary text for the Phase appears. It cannot be edited from here.

Preliminary Date is the pottery (or other) spot date.

The 'Checking and Interpretation' section is non-standard and specific to Silbury.

Context record page 4

This page summarises related records, for information and cross-checking.

The information in the sub-forms (in blue) is from the related tables in the database and cannot be edited from here.

The lists at the top right (in green) are from this context record, and can be edited as part of the checking process.

The data in the lists and sub-forms should agree once checking is completed, to ensure the data is consistent for digital archiving.

Small Find Record

If data was entered on site from the Abbreviated and Site Small Finds Form, the material and simple name information may be inaccurate. They should be checked and changed if necessary after the Small find Record has been completed by Finds Staff, and the Record Updated box should be changed to 'Yes' to indicate this.

If the data is taken from the Small Find record, it may be worth checking the 'Comments' field on the Site form as it may give useful additional information for the Siting Description.

To record the context information for the find, use the 'Found within'. If the find was in a sample, enter the sample number. Otherwise enter the context number.

Then click the [!] and the context and sample information will appear in the box above. For finds from samples, check the context shown agrees with the context number given on the Small Find form. If there is a discrepancy, this should be checked out as soon as possible. The SSD number shown here in blue relates to the context overall, not the find.

The Count defaults to 1 – just type over it if there are more objects under the number.

The context and sample information at the bottom of the screen cannot be edited from this form.

The status bar at the bottom of the screen gives information about the field the cursor is in.

Bulk Find Record

You can have multiple entries for a material, for example to list retained and discarded material separately, and to distinguish material recovered during excavation and in different samples. Totals for a material can be easily calculated using a query.

Totals can be readily calculated using queries *provided that the quantities and weights are consistently recorded as numbers* – the estimates (*** or number ranges) cannot be added to numbers.

The Small Finds information will not show fully until the relevant Context records (and Sample records where Small Finds are from Samples) have been entered.

The status bar at the bottom of the screen gives information about the field the cursor is in.

Sample Record

Enter the number(s) of the context the sample was taken from in the sub-form at the bottom left. The context information will then appear when you press Enter or move to another field. The context information cannot be edited from this form.

If the Sample Index was entered on site, the Description from the index will show here.

The status bar at the bottom of the screen gives information about the field the cursor is in.

Sample Evaluation Record

You can't create a Sample Evaluation Record unless the Sample Record has already been created in the database.

You can have multiple entries for a material, for example to list retained and discarded material separately.

Drawing record

This contains the information from the Drawing Index sheet.

The list of record numbers of what the drawing shows (these can be context, small find, or sample numbers) is entered in the sub-form on the right.

Sheet size is not a standard field on the Drawing index, but I think it makes a useful addition as it can make it quicker to find drawings if you know what size they are.

As the list of record numbers on the Drawing Index is not uncommonly incomplete, it's worth checking the list against the drawing itself, and ticking the check box to show this has been done.

Photograph record

This contains the information from the Photographic Record sheet.

The list of record numbers of the things the photograph shows (these can be context, small find, or sample numbers) is entered in the sub-form on the right.

Context check This button brings up a list of the Contexts Records which include this Photo in their Photo Nos field. For use in cross-checking records.

Phasing record

This is not based on a standard record sheet, although the Phase number corresponds to field 77 on the Deposit and Cut sheet. The Phase description is broken into two parts – a short 'Summary' and the full 'Description'. The reason for this is so that if you want to create queries or show Phasing information on other forms, a short piece of text can be used.

The context/phase relationship is one of the few things you can edit in more than one place – you can list contexts on the Phase form, or you can assign a phase number on page 3 of the context form.

When a context number is added, the list will update and sort the contexts into numerical order.

Silbury Hill Project 661 2007

Site database – Administration and Documentation notes. Draft 2

Introduction

This database has been created to meet the need for continual monitoring of project progress during the field work at Silbury Hill. It is based on the English Heritage Recording Manual and has been developed from the record indexes database used during the Badger Damaged Barrow Project and as part of the Revelation data collection process. The database has been increased in scope to hold the complete Context record from the Deposit and Cut form. The Small Find and Sample records are based on the Indexes, with a few additional fields added following discussion with the project Finds and Environmental specialists.

The primary record for the fieldwork stage of the project remains the paper record forms.

The mix of paper and digital recording (a 'hybrid system') has the potential to cause problems, and attention to version control is essential.

The database is written in Microsoft Access 2002. It consists of two linked databases: SilburyFront, containing the user interface, and SilburyData, holding the data.

Effective use of the database depends on effective procedures: backing up, controlling access, and ensuring all staff follow guidelines and the user notes. There are no roll back capabilities or permissions written into the database.

The database has a specific and limited scope. Further enhancements are possible, if for example specialists would like additional information to be entered to assist in assessment, but this is neither replacing Delilah nor pre-empting Intrasis. It should hold all the data normally entered into Delilah.

The database has been designed so that the data can be entered and viewed without the user having a detailed knowledge of Access. There has had to be compromise between completeness, making it user friendly and sticking within time constraints. It opens to a Menu from which forms and selected frequently used queries can be accessed. There are forms showing Context, Small Finds, Samples, Skeletons, Drawings and Photography records, plus a provisional Phases form.

Archiving

The data can be downloaded as comma delineated text for archiving. As an example, a query (XA_ContextArchiveOutput) has been set up to output the context data in csv format in the correct field order. Similar queries will be needed for the other record types.

Relationships usually exist in two places (for example, a Drawing record lists the Contexts shown, but the Context record also has a semicolon separated list of the Photos it appears on). To ensure a consistent archive, these should be cross-checked and corrected as necessary.

Database documentation

The database uses the fields from the recording forms and the related guidance in the Recording manual. Each field is described and its corresponding recording form field number stated in the metadata in the design window of each table. This text (or an edited version of it) appears in the status bar at the bottom of the screen when a field is selected. This provides information during data entry, and in some cases refers to the appropriate section of the Recording Manual (particularly where controlled vocabulary is required in a text field).

A list of the tables, queries, forms, reports and macros used and their purpose follows as **Appendix 1** to these notes (22/06/2007 – not completed). At present there are no standard reports set up – these can be added at a later stage if required.

Queries which underlie forms or reports, or which run from command buttons, have names starting with X (e.g. XF_abcd for forms) to distinguish them from user-generated queries. They should not be changed in any way by any user.

Where possible, glossaries and drop-down lists are used to assist data entry and enforce the controlled vocabulary required by the Recording Manual. The relevant tables begin Gloss (e.g. GlossSimpleName). They can be edited if required, but only the project manager or the relevant finds/environmental specialist should do so.

The relationships between the tables are shown in the relationships window of the database (**Appendix 2**)

User notes are in a separate document.

Appendix 3 is the **Changes and Issues Log** for changes made to the database after we started adding data to it. It also has comments where these changes relate to site practice.

Backing up the database

A secure back up routine is essential.

On Site

There are **two** reasons for back up – disaster recovery (portacabin burns down) and database problems (database becomes corrupted or data are accidentally deleted). For disaster recovery, the database and the back up should be kept in on different computers (or on a disk/data stick) and in different places…

The SilburyData file should be backed up each day (or each time data is added). Copy and rename it, e.g. as SilburyDataMay15. The copy should preferably be made read-only, as it should only be used as a check if there are problems and should not be edited.

Send a copy of SilburyData back to Fort Cumberland regularly (it should be small enough to e-mail internally – if you send it to me I'll put it into the project file).

The SilburyFront file does not need backing up, unless you want to backup the design of any queries you have saved or you have created any additional tables in it. If you do copy it, you need to ensure that you change the link to the data file accordingly. It's probably best not to.

At Fort Cumberland

The normal Fort Cumberland backup tapes provide adequate backup for the database. However, it is sensible to make backups before making any major changes to the database structure or before appending or moving any large blocks of data.

'End of Stage' backup copies should be made as appropriate – for example after the data is entered and checked (Site Archive Completion) and at the end of Assessment. Only SilburyData needs to be copied, and the copies should be made read-only and given informative names in accordance with the Digital Archiving Strategy. The copies provide both a record of the information as it was at the key project stages and an additional backup if it is later suspected that data has been lost.

Other database administration

Maintaining the link between SilburyFront and SilburyData

There shouldn't be a problem, but because the database consists of two linked files, if you move the database the interface will lose its link to the data. If so, SilburyFront will ask where SilburyData is, and you just enter the path.

But note that if you make a copy of SilburyFront, it will remain linked to the **original** data file unless you change the links.

[If you do make a copy or change the file path to the database, you need to open SilburyFront and press F11 to see the database window. Select the Tables tab, and rightclick on one of the linked tables (a black arrow left of a table name indicates it is a linked table). Select Linked Table Manager from the menu, select all the tables, and follow the instructions. I suggest you don't unless there is a strong reason.]

Version control

This can be a real problem with hybrid paper/digital systems.

Context Records should be entered only when completed, and only what's on the form should be entered. It is important that once a context record is entered, no additional information is added to the paper record without being added to the database.

A Context Index form was added to the original design. It holds selected fields from the Context Index record sheet and the Deposit and Cut form. It is designed to allow entry of the basic context data rapidly for on-site checking and to supply basic information to the finds/environmental team. It can be used before the Context paper sheet is completed and checked. It holds the Context number, SSD and initial description from the Index, plus the Simple name and Fill Of field from the Deposit and Cut form. It is important that when the full Context data is added, the SSD, Simple name and Fill Of field must be checked in case there have been corrections made on the Deposit and Cut form.

This is probably less of an issue with other records as less data is being entered, but it needs to be clear that the paper record is the primary record – for example, if finds staff use the database, any comments they add to a Small Find form must also be on the paper sheet.

Glossaries

Several fields are glossary controlled, with drop-down lists to help data entry. This also ensures consistent descriptive terms are used, prevents typing errors, and making searching and querying easier.

The glossaries can be updated by editing or adding records to the relevant tables.

To change a glossary, use the F11 key to show the database window, and click the tab for Tables. All glossary table names start Gloss, and the tables are opened by either selecting then clicking 'Open', or by double clicking. Just add a new record at the bottom of the list. In most cases, the lists are simply sorted alphabetically and this will be updated automatically. But some glossaries have an 'Order' field controlling the order they display in, and in this case you will need to change the numbering as well. [Note that 'Order' demands unique values, and won't let you have two records with the same number even while you are rearranging the list..]
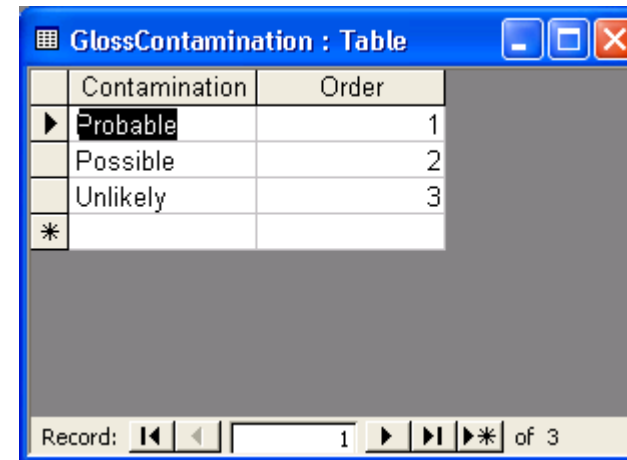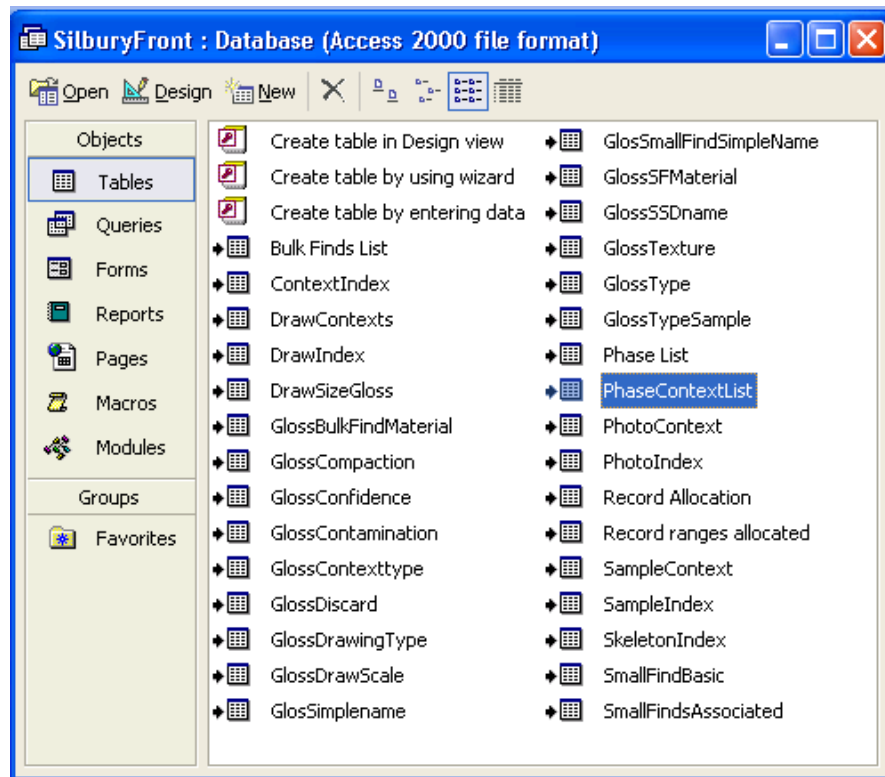
Security

No security or permission systems are in place, so data integrity depends entirely on the users.

- There is no data tracking – once something is changed or deleted it has gone, unless a security copy of the database had been made.

- If you suspect you have accidentally changed or deleted something, get advice from VC, HC or ML as soon as possible. Keep a note of what and when the problems was, in case we need to go to the back-up tapes.

- Regular back up copies are essential. These copies can be used as a check if needed, but should not be altered in any way, and it's best to make them read-only to prevent accidental changes.

- Data responsibilities must be clearly defined – for example, only the finds specialist may change finds records. Make sure site staff understand this.

- To encourage this, some fields on the forms are locked, so that context data can only be changed on the context form, and finds data can only be changed on the finds form. Text in locked fields is shown in blue.

- Fields in green are equivalent to the greyed-out field on the record forms, and are for use by the project manager and/or in post-ex..

- The design of tables and forms must not be altered.

- Queries beginning with an X (e.g. XF_ContextSFList) are used in the forms, standard queries or reports, and must not be altered. Changing them is likely to stop the database working as intended.

- Any user-generated queries which are saved should indicate who created them, by starting the query name with the user's initials (e.g. VC Pit list).

- Using action queries to change data globally is ***not recommended*** under any circumstances. These are the query types with **!** after their icons.

Menu showing: Make-Table Query…, Update Query, Append Query…, Delete Query
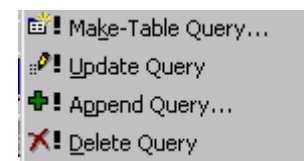
Appendix 1

Database elements and their functions

All Tables are in SilburyData, and all queries, forms and macros are in SilburyFront

Tables	
Table name	*Table purpose*
BulkContexts	List of context numbers which have bulk find sheets. Some have no bulk finds listed but do have small finds. Table created 04/12/2007 to allow creation of bulk finds records before the context data is entered.
BulkFindsList	This table holds the data from the main section of the Bulk Finds form, listing and quantifying the materials present.
ContextIndex	This table holds the entire Context record, plus some additional phasing and interpretation fields.
DrawContexts	This table relates the Drawing number to the Contexts, Small Finds, Samples or Skeletons shown on the Drawing.
DrawIndex	This table holds the main fields from the Drawing Index paper record (but excludes the Drawn By/Date and Checked By/Date fields). There are two non-standard fields (SheetSize and Checked).
DrawSizeGloss	Glossary for SheetSize field of DrawIndex table
GlossBulkFindMaterial	Glossary for Material field (Field 75) of BulkFindsList table.
GlossCompaction	Glossary for Compaction field of ContextIndex table
GlossConfidence	Glossary for SideConf field of ContextIndex table
GlossContamination	Glossary for Contamination field of ContextIndex table
GlossContexttype	Glossary for Context Type field of ContextIndex table
GlossDiscard	Glossary for Discarded field of SmallFindBasic table
GlossDrawingType	Glossary for DrawType field of DrawIndex table
GlossDrawScale	Glossary for Scale field of DrawIndex table
GlosSimpleName	Glossary for Category field of ContextIndex table
GlosSmallFindSimpleName	Glossary for SimpleName field of SmallFindBasic table
GlossSampleCondition	Table listing the controlled vocabulary terms for the condition of a sample at the time of excavation. Field 18 of the Sample Record Form.

Tables

Table name	Table purpose
GlossSampleCoords	Table listing the acceptable terms for Field 04 of the Sample Record form, to indicate whether or not precise co-ordinates were recorded.
GlossSampleEvalMaterial	Glossary for Material type on Sample Evaluation form. Field S7.
GlossSampleTreatment	Glossary for SiteTreatment (Field 66) of the Sample Evaluation Form.
GlossSFMaterial	Glossary for Material field of SmallFindBasic table
GlossSmallFindCompleteness	Glossary - controlled vocabulary list for Small Find Record Field 20 Completeness
GlossSmallFindCondition	Glossary - controlled vocabulary list for Condition field 18 of the Small Find record.
GlossSmallFindGenericName	Controlled vocabulary list for Field 85 Generic Name on the Small Find record. [As there is not a list in the current Recording Manual (2007) I have taken the terms from the Raunds database.]
GlossSSDName	Glossary intended for site subdivision field of various tables, but not used due to SSD system employed at Silbury
GlossTexture	Glossary for Texture field of ContextIndex table
GlossType	Glossary for type of record (Context, Sample, etc)
GlossTypeSample	Glossary for Type field (= Simple Name) of SampleIndex table
Gloss_Finds_EstimatedQuantities	Glossary - *** codes used in estimating quantities of material on the Sample Evaluation form and the Bulk Finds form, and the number ranges they represent (info from LC).
PhaseList	Table defines Phases
PhaseContextList	Table relates Contexts to Phases.
PhotoContext	This table relates the Photo number to the Contexts, Small Finds, Samples or Skeletons shown on the Photo.
PhotoIndex	This table holds the main fields from the Photo Index paper record (but excludes tracking information and the Recorded By/Date field).
RecList	List of record numbers used and their type. Although empty, it is essential to structuring the Union Query XX_RecordsUsed. [Once data entry is complete, it could be populated using the query.]
RecordAllocation	*Duff table, to go??*
Record ranges allocated	Gives the range of record numbers allocated to each record type, including division by SSD where applicable.
SampleContext	Table relates the Sample record number to the contexts it was taken from. Most samples are from 1context only, but some specialist samples (column samples) are taken from several contexts.
SampleEvaluationDetails	Table listing the material recovered from Samples during Evaluation. Field S7 (Contains) on the Sample

Tables

Table name	Table purpose
	Evaluation Form.
SampleEvaluationHeader	Table holding the Sample Evaluation record (Field S7 Contains is in the linked table SampleEvaluationDetails).
SampleEvaluation	Table holds selected fields from the Sample Index and Sample forms
SkeletonIndex	Table holds selected fields form the Skeleton Form. This table is unlikely to be needed at Silbury.
SmallFindBasic	Table holds selected fields from the 'Small Find' and 'Abbreviated and Site Small Finds' forms
SmallFindsAssociated	Table relates a Small Find number given to a group of small finds which are probably associated to the individual small finds.
XT_FindsQueryBlank	Table used to structure Finds Queries using union queries. This table should NOT CONTAIN ANY DATA.

Naming convention for queries	
XA_	Queries designed for archive output
XF_	Queries used in form design
XQS_	Queries run from command buttons, for example on the Menu
XR_	Queries used for reports
XX_	Union queries, also used in other queries and forms
All **user-generated queries** should start with the user's initials or short name followed by an underscore.	

Forms and related queries

Form	Sub-form	Based on Query	Description
Frm_BulkFindsList		XF_Bulk_Header	The Bulk Finds record form
	Frm_Bulk_SmallFinds	XF_Bulk_SmallFinds	Subform to list Small Finds on the Bulk Finds Form
	Frm_Bulk_SubBulk	XF_Bulk_Header	Subform listing Bulk Finds details by material
Frm_ContextMain		XF_ContextMain	The Deposit and Cut record form
	Frm_ ContextFilledBy	XF_FilledBy	Lists the contexts described as fills of this context.
	Frm_ ContextPhase	XF_ContextPhase	
	Frm_ ContextPhotoList	XF_PhotoCxt	Lists the photographs described as showing this context.
	Frm_ ContextSampleList	XF_ContextSampleList	Lists the samples recorded as from this context.
	Frm_ ContextSkelList	XF_ContextSkeletonList	Lists the skeletons described as from this context – not used at Silbury
	Frm_ ContextSub_SFList	XF_ContextSFList	Lists the Small Finds described as from this context, with Sample numbers where applicable.
	Frm_ ContextSub_SFSummary	XF_ ContextSub_SFSummary	Not used at Silbury (totals Small Finds by Material for the context).
	Frm_RecordDrawingList	XF_ RecordDrawingList	Lists the Drawings described as showing this context.
Frm_ContextIndex		XF_ContextIndex	Shows subset of the Context record, for use before full record is checked and ready to enter.
Frm_DwgMain		XF_DwgMain	The Drawing Index form.
	Frm_DwgCxts	XF_DwgContexts	Lists all records shown on the drawing – can include samples and small finds as well as contexts.
Frm_Menu			Menu – database opens to this form

Forms and related queries

Form	Sub-form	Based on Query	Description
Frm_Phasing		XF_Phasing	The main Phasing record.
	Frm_PhaseContextList2	XF_PhaseContextSub2	Lists the contexts assigned to the Phase
Frm_PhotoMain		XF_PhotoMain	The Photograph Index form.
	Frm_PhotoRec	XF_PhotoCxt	Lists all records shown on the photograph – can include samples and small finds as well as contexts.
Frm_ProjectHeading			Appears in the header of some other forms, showing Project name, code and year
Frm_SampleEvaluation		XF_SampleEvaluationMain	The Sample Evaluation form – an entry cannot be created unless a record already exists for the Sample.
	Frm_SampleEvalContexts	XF_SampleEvalContexts	Lists the contexts the sample is from
	Frm_SampleEvaluationDetail	XF_SampleEvalList	Lists what the sample contains
Frm_SampleRecord		XF_SampleMain	The Sample Record form
	Frm_SampleContextsInfo	XF_SampleContextInfo	Sub-form to enter the numbers of the contexts the sample is from, and give basic information about them
	Frm_SampleSFs	XF_SampleSFList	Lists the Small Finds from the sample (data from the Small Find form)
Frm_SFMain		XF_SFMain	The S
	Frm_SFAssocFindsSub	XF_SFSubAssocFinds	Used for relating associated finds – hidden at bottom of SF form, not used at Silbury? Can be shown if required.
	Frm_SFAssocGroupSub	XF_ SFSubAssocGroup	Used for relating associated finds – hidden at bottom of SF form, not used at Silbury? Can be shown if required.
	XF_SF_CxtSampSub	XX_SmallFindContextSample	The Sample/Context relationships subform
	Frm_SmallFind_ContextAndSample	XF_SFSampleAnd Context	Shows additional basic information about the Context and (where applicable) the Sample the Small Find came from.

Forms and related queries

Form	Sub-form	Based on Query	Description
Frm_SkeletonIndex		XF_SkeletonMain	*Incomplete form, not needed at Silbury.*

Other Queries			
Name	*Type*	*Purpose*	*Command button/Form?*
XA_ContextArchiveOutput	Select	Selects all context records in numerical order and with columns ordered by Recording Manual field number. Recording Manual field number and name shown in column caption. For output to digital archive.	
XQS_SmallFindsList	Select	Lists all Small Finds in Small Find number order	Command43 on Frm_Menu
XQS_SmallFindsListByContext	Select	Lists all Small Finds in Context number order	Command44 on Frm_Menu
XQS_SmallFindsListNoDisc	Select	Lists all Small Finds in Small Find number order, excluding those marked as discarded	Command45 on Frm_Menu
XQS_SmallFindsListByContextNoDisc	Select	Lists all Small Finds in Context number order, excluding those marked as discarded	Command46 on Frm_Menu
XQS_ContextSmallFindsList	Select	Parameter query, listing all Small Finds from the specified Context	Command47 on Frm_Menu
XQS_ContextDrawingsList	Select	Parameter query, listing all Drawings from the specified Context	Command55 on Frm_Menu
The following Union Queries are used both directly and as sources for other queries			
XX_RecordsUsed	Union	To list all records of types Context, Drawing, Photo, Sample, Skeleton and Small Find which have been created in the database. Union query linking RecordType field in the ContextIndex, DrawIndex, PhotoIndex, SampleIndex, SkeletonIndex and SmallFindBasic tables. Requires the empty table RecList for its structure.	
XX_SmallFindContextSample	Union	The field Within in the SmallFindBasic table can contain either Sample or Context record numbers. This query is used to link a Small Find explicitly to the Sample and Context records it relates to.	
XF_Bulk_FindsUnion	Union	Relates SFNo, RecordNo and Sample No for Bulk Finds form –	

		used in query XF_Bulk_SmallFinds. Needs empty table XT_FindsQueryBlank to set its structure.	
XF_SFSampleAnd Context	Union	Gives context and sample information on the SF form, via sub form Frm_SmallFind_ContextAndSample.	

Reports and related queries

Report	Sub-report	Based on Query	Purpose
No reports are currently in use, but some reports and related queries have not been removed from the database. Reports may be added at a later stage if required.			

Command Buttons

Started listing all these, but ML decided not necessary so stopped!

Name	Form	Purpose
Command55	Frm_Menu	Runs Query XQS_ContextDrawingsList
Command54	Frm_Menu	Opens Form samp
Command53	Frm_Menu	Opens Form phas
Command47	Frm_Menu	Runs Query XQS_ContextSmallFindsList
Command46	Frm_Menu	Runs Query XQS_SmallFindsListByContextNoDisc
Command45	Frm_Menu	Runs Query XQS_SmallFindsListNoDisc
Command44	Frm_Menu	Runs Query XQS_SmallFindsListByContext
Command43	Frm_Menu	Runs Query XQS_SmallFindsList
Command4	Frm_Menu	Closes Database
Command3	Frm_Menu	Opens Form Frm_SFMain
Command20	Frm_Menu	Opens Form sk
Command2	Frm_Menu	Opens Form Frm_ContextMain
Command19	Frm_Menu	Opens Form pho
Command18	Frm_Menu	Opens Form dwgs
Command27	Frm_SFMain	Opens Form cxts
Command26	Frm_SFMain	Opens Form menu
Command28	Frm_SFMain	Navigation – next record
Command29	Frm_SFMain	Navigation – previous record
Command 30	Frm_SFMain	Navigation – new record
Command12	Frm_ContextMain	Navigation – previous record
Command11	Frm_ContextMain	Navigation – next record
Command13	Frm_ContextMain	Navigation – new record
Command9	Frm_ContextMain	Open Form menu
Command10	Frm_ContextMain	Opens Form Frm_SFMain
Command31	Frm_ContextMain	Moves to Page 1 of the form
Command30	Frm_ContextMain	Moves to Page 2 of the form
Command175	Frm_ContextMain	Moves to Page 3 of the form
Command177	Frm_ContextMain	Moves to Page 4 of the form

Command Buttons

Started listing all these, but ML decided not necessary so stopped!

Name	Form	Purpose
Command	Frm_SampleIndex	
Command	Frm_DwgMain	
Command	Frm_PhotoMain	
Command	Frm_Phasing	
Command	Frm_SkeletonIndex	
Command		
Command		
Command		
Command		

Macros		
Name	*Linked to*	*Purpose*
mcrAutoexec	Database	Opens and maximises the Menu form when the database is opened
mcrCheckContextNo	Text box ContextNo on Form Frm_ContextMain	When the ContextNo text box on the Context form is updated, this requires the form and so produces an error message if the Context number entered already has a record in the database.
mcrFindBulk	Text box Text13 on Form Frm_BulkFindsList	Goes to specified record number
mcrFindContext	Text box Text19 on Form Frm_ContextMain	Goes to specified record number
mcrFindDrawing	Text box Text16 on Form Frm_DwgMain	Goes to specified record number
mcrFindPhoto	Text box Text31 on Form Frm_PhotoMain	Goes to specified record number
mcrFindSample	Text box Text 25 on Form Frm_SampleRecord	Goes to specified record number
mcrFindSFRec	Text box Text31 on Form Frm_SFMain	Goes to specified record number
mcrFindSFRec2	?	*Goes to specified record number – but probably relates to a now deleted Abbrev and Site SF form. Delete?*
mcrupdateform	Command button Cmd67 on SmallFindBasic (shown with !)	Refreshes the Form (used after entering the Within field to display the Context and Sample relationships for the Small Find).
mcrFindSampleEval	Text box Text35 on Form Frm_SampleEvaluation	Goes to specified record number

Appendix 2: Relationships
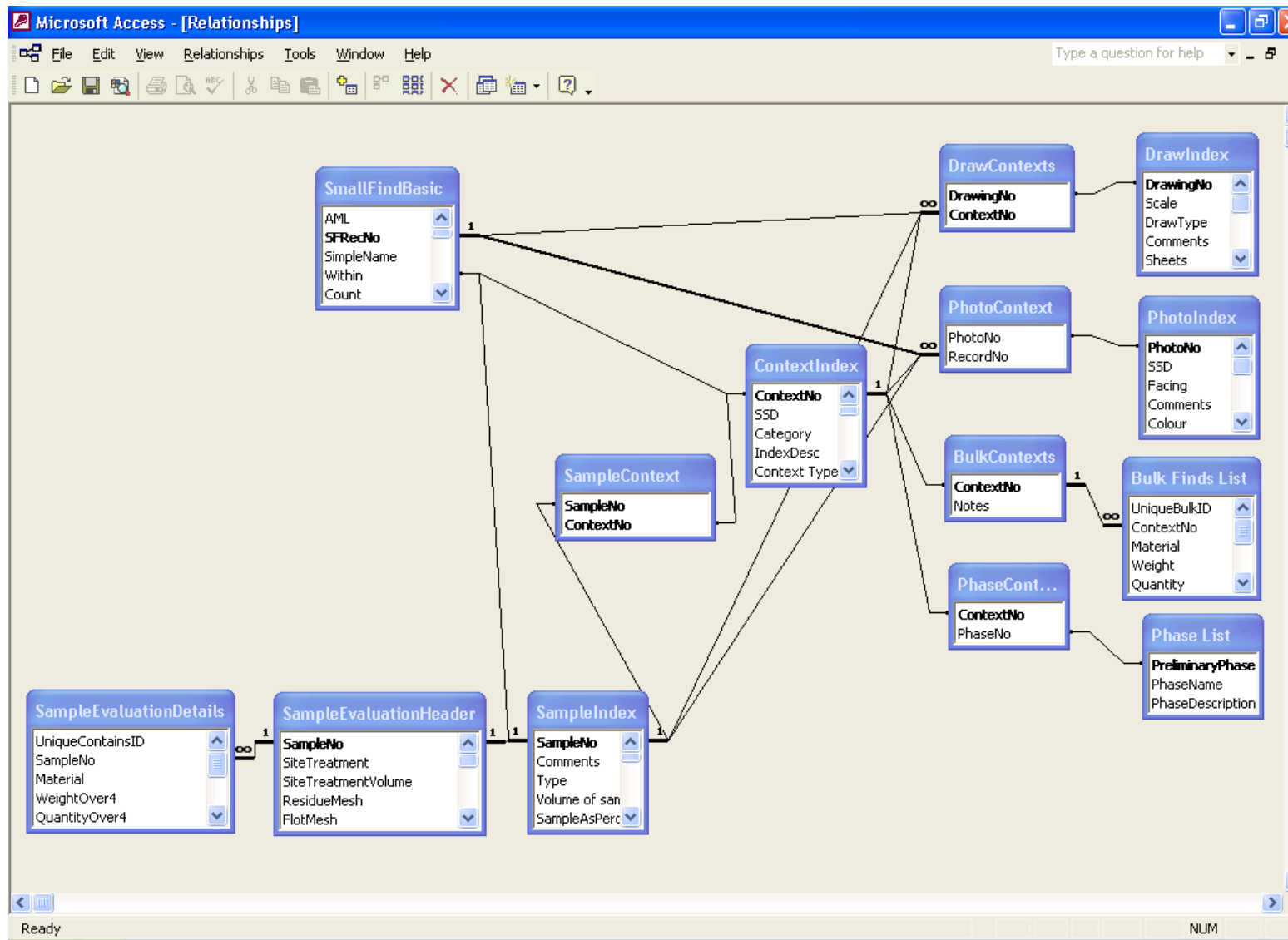
Referential integrity has been imposed where appropriate and possible (because of partial data entry, it is not yet possible everywhere it's desirable).

Much of the apparent complexity is because Drawings and Photographs relate to Contexts, Samples and Small Finds.

Note that Small Finds from Samples relate to their Context through the Sample record not directly. This is important in designing queries (use Union Query XX_SmallFindContextSample to build Small Finds context queries).

Appendix 3: Changes and Issues Log

Date	Changes to database	Comments and recording implications, and other Issues	
14/06/2007	Because of the way Site Sub-divisions are used on site, I have added SSD fields to the Sample and Small Find Tables (and the related forms and queries).	SSDs are used to divided up contexts spatially – hence the need to attach the SSD to the Sample or Small Find and not bring it through from the Context record.	VC
14/06/2007	Because of the pressure of work on site, resulting in no data entry until today, I have added a Context Index form (modified on 21/06/2007)		VC
14/06/2007	Added 'Tunnel Fill: mixed' to GlosSimpleName (the context simple name glossary)	Site-specific Context Simple Names need adding to the Glossary GlosSimpleName (Susanna may have added some during data entry as she was aware of this, but if so they may need checking for consistency etc)	VC
21/06/2007	Since last week, Susanna has entered the remaining ditch contexts to the database (now 43 contexts are entered). She has fitted them into gaps while waiting for the photo rectification software to process data.	These contexts are finished and the ditch backfilled, but I do not know the extent to which the context sheets had been checked.	VC
21/06/2007	On site, at request of Susanna, I changed the Context Index table field DivisionOf from Number (Long Integer) to Text (50 characters). Requested as some of the Deposit and Cut forms she was entering had multiple entries.	I don't understand why a context is a Division Of more than one context, and wonder if this is a slip in filling out the paper sheet. This should be checked out.	VC
21/06/2007	The Context Index form now holds selected fields from the Context Index record sheet and the Deposit and Cut form. It is designed to allow entry of the basic context data rapidly for on-site checking and to supply basic information to the finds/environmental team. It can be used before the Context paper sheet is completed and checked. It holds the Context number, SSD and initial description from the Index, plus the Simple name and Fill Of field from the Deposit and Cut form.	When the full Context data is added, the SSD, Simple name and Fill Of field must be checked in case there have been corrections made on the Deposit and Cut form	VC

Date	Changes to database	Comments and recording implications, and other Issues	
22/06/2007	I have deleted forms Frm_SFAbbreviated and Frm_RecordPhotoList and query XF_RecordPhotoList from the current version of SilburyFront in the site folder (as part of the documentation process, they were identified as redundant).	These should be removed from the Site version of SilburyFront also.	VC
22/06/2007		Note that if it is decided that Sheila should be asked to enter the Context records during the excavation so they can be loaded into the database, she will need to enter them either directly into a copy of the database (using the form or table or the archive-ordered query QA_ContextArchiveOutput) or into Excel. At present she cannot convert data entered in our standard format into Excel. When this was required, BKA always did it (and as far as I know, normally for finds records rather than context records).	VC
16/10/2007	None	Updated User Notes, now version 4, with the revised screen shots for Finds and Samples and one typo changed on Finds page ("If the find was in a sample, enter the sam**ple** number" rather than "the same number"). Replied to Jim's email ref the SSD question (no reason not to use SSDs 8 and 9 for laterals and seems a good idea).	VC
Dec 2007	Added Bulk Finds tables, forms and associated glossaries to database for Kayt Brown. Also standard queries relating to bulk finds. Tables BulkContexts, Bulk Finds List, GlossBulkFindMaterial and Gloss_Finds_Estimated-Quantities. [apologies for inconsistent naming…]	Data: entered all contexts with bulk finds into table BulkContexts from the paper sheets.	VC
12/12/2007	Created relationships for existing tables (excluding glossaries). Referential integrity not imposed due to partial nature of data as entered to date.	Discussed database with Manny Lopez.	VC

Date	Changes to database	Comments and recording implications, and other Issues	
13/12/2007	Added the additional standard recording system fields to the Sample Record table, and created Sample evaluation tables: SampleEvaluationHeader, SampleEvaluationDetail, GlossSampleCondition, GlossSampleCoords, GlossSampleEvalMaterial, GlossSampleTreatment.	Metadata: added explanation of the ** codes for finds estimation to GlossFindsEstimatedQuantities. Info from Liz Chambers.	VC
14/12/2007	Sample forms and queries Created new SampleRecord form to replace the less complete SampleIndex.	Having difficulties sorting the unique context thing – 'on lose focus' macros not having the right effect (see 21/12).	VC
17-18	Small Finds table and form - added fields. New Glossaries for condition, completeness and generic names. Replaced the SF context and sample info form – add new subform to listings.		
18/12/2007		Compacted both. Data from 3156 to 1216, Front from 5196 to 1124.	VC
21/12/2007	Finished forms. Put on update Macro on Context No box on Context form to check if Context number had already been entered. Imported the generic project header sub-form, edited it, and put it on Contexts form.		
		Compacted both. Data from 1288to 1216, Front from 3544 to 1096.	
14/01/2008	Updated Admin and Documentation notes. Removed a number of redundant forms from database (Frm_ContextCoords, Frm_ContextDataEntry, Frm_PhaseContextsSub, Frm_SampleCoordsSub, Frm_SmallFindMat).		VC
15/01/2008	Changed the 'Lists for cross-checking' on page 4 of the Context form from Locked to Unlocked to allow editing during the checking process. Change text colour to green. Added new screen shots to User Guide (Draft 5) and completed documentation Draft 2. Removed temporary comments from the Bulk Finds form (copy exists as screen shot).		VC

Date	Changes to database	Comments and recording implications, and other Issues	
28/05/2008	Increased sizes of text fields in Context table for lists of samples, drawings, small finds and photographs from 150 to 255 as SK was concerned they weren't long enough.	May need to also change the text box size on the Context form.	VC
28/05/2008		Glossary terms – added X– not a standard term to GlossSimpleName. Need to review the glossary terms – are any site specific ones required?	VC
28/05/2008	Later increased sizes of text fields in Context table for Contains and Compaction.		VC
28/05/2008		SK raised issue with entering dates. These fields (in Context table) are set up as short date (12/07/2007) but SK normally enters dates as 12.7.07, and use of the full stops leads Access to assume the information is time, and add default date of 30/12/1899 (the information as typed does appear when you click in the field). SK wanted the field changed to free text to avoid this problem without having to change the way she enters data. I did not change the data type, as I felt it could be useful to be able to select records by date in some cases. She can enter data using spaces instead of slashes as she finds it easier and the date will default to Short Date format.	VC
28/05/2008		Note that Compaction and texture both have glossaries but are not limited to list. For Compaction, this is presumably so can have multiples (eg Loose/Friable) but I'm not sure why Texture isn't limited to list (could this have been changed on site??).	VC
25/06/08		Glossary terms – added 'Mound' to GlossSimpleName following Jim Leary's request to VC, at the behest of VC	AL

Date	Changes to database	Comments and recording implications, and other Issues	
11/09/08		Context Data Entry problems – issues raised by SK after she had entered the Context data as far as possible. VC discussed with SK and in phone calls to JL on 09/09/2008. SK had problems with some 'vanishing' Context records. Unable to see why at this time – possibly the Context number already existed?? SK thinks all OK now.	VC
11/09/08		Co-ordinates: Data not acceptable for field. The values on the sheet (e.g. 00-01) are not co-ordinates. JL – please check what they refer to and note them in the Comments field if required.	VC
11/09/08	Text field sizes increased to allow entry of multiple values (Colour 50 to 255 characters, Munsell 10 to 100 characters). Sizes of the textboxes on the form also increased a bit.	Colour and Munsell : Text fields too short for data on paper form. Multiple colours and Munsells were noted for some contexts. For Silbury, recording multiple colours was desirable. VC checked with JL who will not want to sort on this field (otherwise would need to add a related table for Colour and Munsell).	VC
11/09/08		Preliminary phase This is a tabbing issue – cannot tab out of this field, and if you do the data in the field seems to vanish. If you try to retype it you get an error message (duplicate values). However, the data in the field is in fact saved OK the first time you tab out of it. This is because the field is in a concealed subform. There isn't a solution, except perhaps making it obvious it's in a subform. If this is still an issue now the Context records are entered, I can change the form layout.	VC

Date	Changes to database	Comments and recording implications, and other Issues	
11/09/08		Texture and Compaction: text fields too short for data on paper form, as descriptions rather than controlled vocabulary were written on some paper forms. SK will put "See Comments" in Texture/Compaction and put the descriptive text into the Comments field headed Texture: or Compaction: as appropriate	VC
11/09/08	Samples field format changed from Text to Memo. Size of the textbox on the form also increased a bit.	Samples List: Text field of 255 characters too short for the number of Samples listed on some paper forms.	VC
11/09/08	Sandy clay changed to Sandy clay in the glossary for Texture…		VC
22/10/2008	Databases re-linked after being moved during reorganisation of the project folder by JL and HC. They are now in: **Pr666 – Silbury Hill\Datasets\database**		VC
01/08/2013	Archiving, using the data end of the database, the tables were amended in order to ensure referential integrity within the database. Some fields were added, blank fields were removed. Rows were added to glossaries and some blank tables were removed. Site data from other Silbury events pre-dating the 2007 conservation works were also added in order to make them more useful than the original text files. All of the tables were then included in the relationship diagram and all relationships shown and referential integrity enforced.		JR