



# **DATA COLLECTION MANUAL 2017**

**BY**

**THE DIRECTORS AND STAFF OF  
THE TELL TIMAI PROJECT**

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The Tell Timai Project  
**TABLE OF CONTENTS**

<b>I. INTRODUCTION</b>	<b>4</b>
<b>II. DEFINITIONS</b>	<b>5</b>
UNIT	5
FEATURE	5
SUB-FEATURE	5
BAG	5
SPECIAL FINDS	5
<b>III. NUMBERING SYSTEMS</b>	<b>6</b>
STRUCTURE	6
UNIT NUMBERS	6
FEATURE NUMBERS	7
SUB-FEATURE NUMBERS	7
BAG NUMBERS	8
PHOTOGRAPH NUMBERS	9
DRAWING NUMBERS	9
NOTE ON REOPENED UNITS	9
<b>IV. FORM INSTRUCTIONS</b>	<b>10</b>
COMMON DATA	10
DATES	10
FEATURE IDENTIFICATION	10
FEATURE STATUS	10
FEATURE RELATIONSHIPS	11
FEATURE LEVELS	12
PLAN DRAWING	12
NOTES	12
BACK OF FORM IDENTIFYING INFORMATION	12
INCLUSIONS AND FINDS	13
PHOTOGRAPHS	14
DRAWINGS	15
STRATIGRAPHIC ANALYSIS	15

The Tell Timai Project  
TABLE OF CONTENTS (CONTINUED)

UNIQUE DATA	17
SOIL FEATURE FORM	18
WALL FEATURE FORM	30
FLOOR/SURFACE FEATURE FORM	40
INSTALLTION FEATURE FORM	46
INTERMENT FEATURE FORM	52
HUMAN SKELETON FEATURE FORM	58
FEATURE SUPPLEMENT FORM	64
UNIT SUMMARY FORM	68
SUPERVISOR NOTES FORM	72
LEVEL CALCULATION FORM	76
MATRIX FORMS	84
UNOFFICIAL PHOTOGRAPH LOG	90
UNOFFICIAL DRAWING LOG	90
UNOFFICIAL BAG LOG	90
BAG TAGS	94
V. BIBLIOGRAPHY	96

# The Tell Timai Project DATA COLLECTION MANUAL

## I. INTRODUCTION

This manual provides instructions for using the data collection forms specifically designed for the Tell Timai Project by Project staff. These forms allow the recording of pertinent excavation data as accurately, thoroughly, and quickly as possible in the field. Two types of forms were designed: (1) feature forms and (2) all other forms.

### FEATURE FORMS

Forms were created to collect information on the following six types of features excavated at Tell Timai:

1. **Soil Feature Form** -- Used to collect information pertaining to each soil feature.
2. **Wall Feature Form** -- Used to collect information pertaining to architectural walls, such as, a building's or structure's exterior or interior walls, a courtyard wall, or a fortification wall.
3. **Floor/Surface Feature Form** -- Used to collect information pertaining to each type of floor or surface. A floor generally is inside a building or structure. A surface generally is outside a building or structure and could be, for example, a stone courtyard, or a beaten earth walkway or road.
4. **Installation Feature Form** -- Used to collect information pertaining to installations, such as, a pit, kiln, drain, hearth, oven, well, or ditch.
5. **Interment Feature Form** -- Used to collect information pertaining to in-ground and above-ground graves and tombs.
6. **Human Skeleton Feature Form** -- Used to collect information pertaining to articulated or disarticulated human skeletons or isolated human bones or fragments.

In addition, a **Feature Supplement Form** was created to collect overflow information that would not fit on the other six feature forms.

### OTHER FORMS

1. **Unit Summary Form** -- The Unit Summary Form has two purposes: (1) to collect information on a unit, such as, its designation, geographical coordinates, dates opened and closed, dimensions, aims, and supervisor; and, because all numbering systems are unit-based, to maintain a sequential master listing of them.
2. **Supervisor Notes** -- Used as each unit supervisor desires to take notes on the excavation's progress within a unit.
3. **Level Calculation Form** -- Used to walk crew members through the math involved in calculating levels using a dumpy level and stadia rod and to keep as a record of the calculations.
4. **Matrix Sheet** -- Used by unit supervisors to show graphically the relationships of features within a unit using the Harris Matrix. Sheets are available in portrait and landscape format. Also, each format has a supplement sheet, if needed.
5. **Unofficial Photograph Log** -- Used by unit supervisors on a voluntary basis as they see beneficial.
6. **Unofficial Drawing Log** -- Used by unit supervisors on a voluntary basis as they see beneficial.
7. **Unofficial Bag Log** -- Used by unit supervisors on a voluntary basis as they see beneficial.
8. **Bag Tags** -- Used to identify the provenience (also called provenance) and type of artifacts and soil samples removed from a unit and taken to the laboratory.

## II. DEFINITIONS

**UNIT** -- Excavations take place at Tell Timai in **units**, which frequently, but not exclusively, are 5x5 meter squares with one-meter balks between them. Sometimes, though, they might be referred to as squares or trenches.

**FEATURE** -- Like all archaeological excavations, Tell Timai is excavated within each unit stratigraphically by carefully removing or articulating one layer at a time and recording the information on that layer before moving on to the next one. The individual layers, therefore, are the basic cornerstone to archaeological excavation, recording, and analysis. At Tell Timai these layers are called **features**. As stated in the introduction, there are six types: (1) soil, (2) wall, (3) floor/surface, (4) installation, (5) interment, and (6) human skeleton.

**SUB-FEATURE** -- Many features stand alone as a single component, for example, a layer of soil. However, some features have multiple components, such as, interments or installations. An example of a multiple component feature is a pit, which is a type of installation. All pits would have at least two components, (1) the pit itself, which is the hole dug into the ground that might or might not be lined and (2) the soil in the pit. The system used at Tell Timai to maintain the proper associations between multiple components of one feature is to refer to the overall object (e.g., the pit) as the feature and to refer to its components (e.g., the soil that fills the pit) as **sub-features** of the feature. More examples are provided at various places in this manual to help explain sub-features.

**BAG** -- All artifacts removed from a feature within a unit and taken to the expedition laboratory are given bag numbers. The word "bag" is used because most artifacts are put into plastic bags in the field. Not all artifacts, however, fit into a plastic bag, for example, pottery sherds, which are removed from the field in **muktafs** (floppy-sided buckets made of recycled car tires). Regardless of the container used to transport artifacts to the laboratory, they are generically called "bags" for purposes of record keeping. The categories of artifacts that are bagged (given bag numbers) fall into two groups, material-related and artifact-related:

### MATERIAL-RELATED BAG CATEGORIES:

- **Pottery** (clay)
- **Bone**
- **Shell**
- **Metal**
- **Glass**
- **Stone**
- **Flora**--Seeds, plants, wood, charcoal
- **Soil Samples**--For water screening, flotation, or microscopic analysis.

### ARTIFACT-RELATED BAG CATEGORIES:

- **Faience** -- A ware made from powdered quartz that is white and covered with a glass-like glaze that is usually green or blue. Faience is used to make jewelry, tiles, and some vessels (e.g., bowls, chalices).
- **Figurines** -- Small statues made of clay, bone, faience, stone or any other material.
- **Building Materials** -- Fired brick, mudbrick, mortar, cement, concrete, stone, or any other material used to construct a building, structure, or wall.
- **Slag** -- Globular residue from making metal or glass products over heat.
- **Other Small Finds** -- Objects made of multiple materials (e.g., jewelry made of precious stones and gold).

**SPECIAL FINDS** -- Not all artifacts found in a feature within a unit are recognizable (e.g., miscellaneous pieces of metal) or are of marginal significance (e.g., non-diagnostic<sup>1</sup> pottery sherds). Nevertheless, they are collected and bagged under their material types and taken to the laboratory for analysis. On the other hand, other artifacts are clearly recognizable, such as, coins, figurines, jewelry, whole pottery vessels, and articulated (connected) bones. These recognizable and significant artifacts are called "**special finds**."

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<sup>1</sup> Diagnostic pottery sherds have distinctive characteristics that potentially allow their cultural phasing (e.g., Greek or Roman) and dating. The sherds most likely to fall into this category are rims, bases, handles, spouts, and anything with a design or writing. Body sherds with no design frequently are considered non-diagnostic.

### III. NUMBERING SYSTEMS

#### STRUCTURE

The Tell Timai Project uses unique numbering systems throughout its forms and tags to keep an accurate record of all aspects of its field work. Specific numbering systems have been created for units, features, sub-features, bags, photographs, and drawings. The unit number is assigned by the site surveyor. All other numbering systems are unit-based and are assigned by the unit supervisor.

The numbering systems are hierarchical. Because they are unit-based, the unit number comes first. Excavations within a unit take place by feature, so, the feature number comes next followed by a sub-feature number, if any. Artifacts are collected from each feature and sub-feature in “bags,” which makes the bag number next.

Unit Number → Feature Number → Sub-Feature Number (if any) → Bag Number

However, field work is more than excavating and completing data collection forms. Two other important aspects of record keeping are photographs and drawings (both balk drawings<sup>2</sup> and plan drawings<sup>3</sup>). Every photograph and drawing gets a unique number in one of two formats.

1. Every feature and sub-feature is photographed and drawn in plan view. Frequently, in taking these photographs or making the drawings, other features are incorporated. In this situation, use the number of the feature that is the primary subject, which normally is the last one excavated. The general format of photograph and drawing numbers in this situation is as follows:

Unit Number → Feature Number → Photograph Number

Unit Number → Feature Number → Drawing Number

2. Also, photographs are taken and drawings are made of the vertical balks. Because the balks show all features and sub-features that intersected the balk, using a feature number within the photograph and drawing numbers is unnecessary. In this situation, omit the feature number, as follows:

Unit Number → Photograph Number

Unit Number → Drawing Number

These hierarchical numbering systems allow for the proper associations in the paperwork and in analyses.

#### UNIT NUMBERS

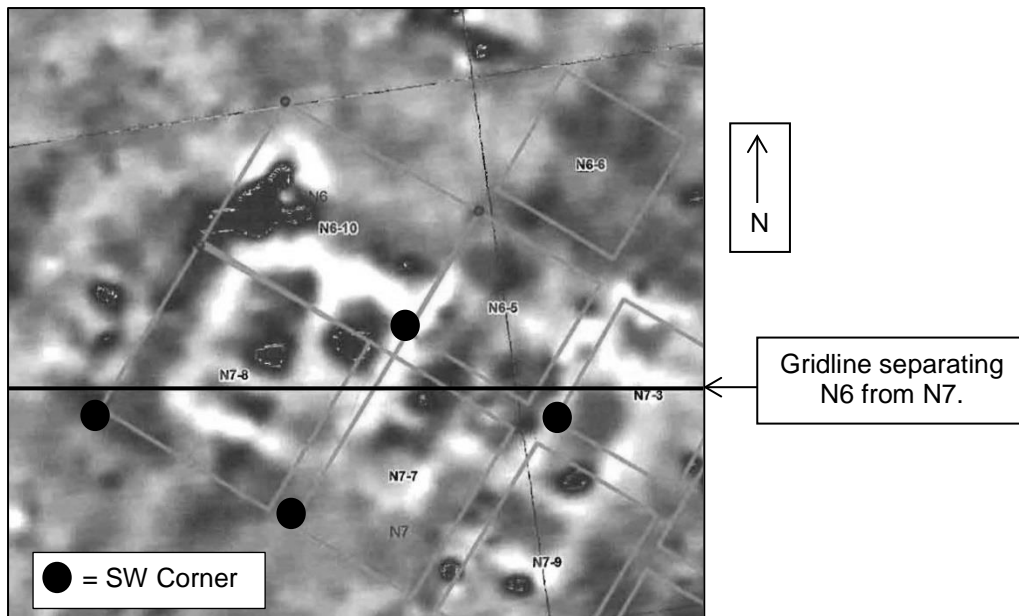
Unit numbers consist of an alpha-numeric grid identifier and the unit number. The entire surface of Tell Timai has been divided into 50-meter grids on a computer using a total station. Each grid has an alpha-numeric designation based on its north-south (alpha) and east-west (numeric) coordinates, for example, N6. The units are numbered sequentially as they are opened within a grid. Therefore, the first unit opened in grid N6 is unit 1, the second one opened is unit 2, and so forth. The complete unit designation consists of the grid, followed by a dash, followed by the unit number. For example, the first unit opened in grid N6 is labeled N6-1. Unit numbers are assigned by the site surveyor.

Every unit has four sets of coordinates, one for each corner. Because a unit can straddle more than one grid, the unit is considered within the grid where its **southwest corner** is located. For example, in the figure on the next page, units N6-5, N7-3, N7-7, and N7-8 straddle the line between grids N6 and N7. However, the southwest corner of N6-5 is in grid N6 and the southwest corners for the other three units are in grid N7.

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<sup>2</sup> Balks are the one meter-wide earthen walls left between units. They are important analytical tools because they show those excavated features that intersect the balk in two dimensions (width and height, but not length, within the unit). Because of their importance they are drawn to scale.

<sup>3</sup> Plan drawings are “bird’s-eye” view, scaled drawings of the unit that are also two dimensional (length and width, but not height).



Grid placement of units N6-5, N7-3, N7-7, and N7-8 based on the location of their SW corners.  
Graphic by Israel Hinojosa Baliño with additions by Hal Bonnette.

## FEATURE NUMBERS

Feature numbers consist of the letter F followed by a sequential three digit number beginning with 001 and are assigned within each unit by the unit supervisor. The first feature within each unit is F001, the second feature is F002, and so forth. Each number is preceded with the unit designation, which makes it unique. For example, the first feature number for unit N6-1 would be N6-1-F001, and the first feature number for unit N6-2 would be N6-2-F001.

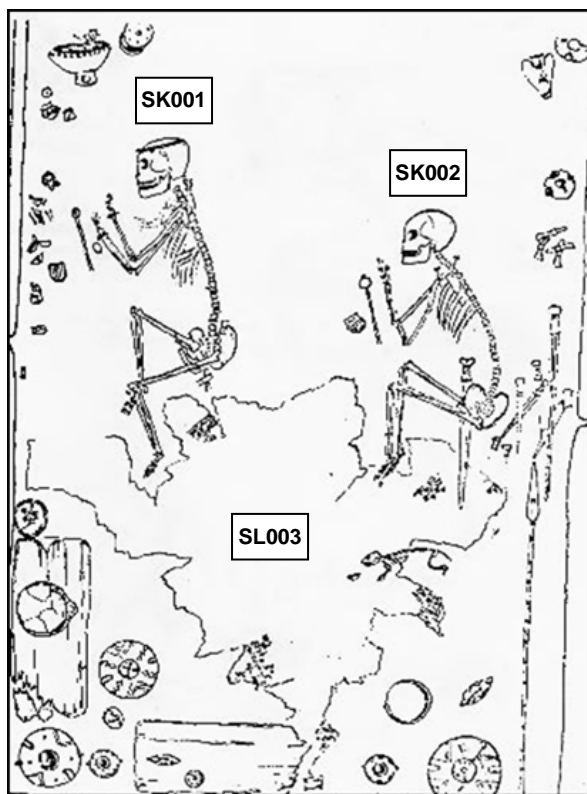
## SUB-FEATURES NUMBERS

Features that stand alone as a single component, for example, a typical layer of soil, are assigned a feature number without any sub-feature numbers. However, some features have multiple components, for example, an interment that is an in-ground burial with two skeletons. In this situation, the overall interment is given a feature number and each component (each skeleton and the soil) is assigned a sub-feature number.

Sub-feature numbers begin with a two-letter prefix that is one of the following: **SL** for soil, **WA** for wall, **FS** for floor/surface, **IS** for installation, **IT** for interment, and **SK** for skeleton (human). The sub-feature numbers are three digits (beginning with 001) and run sequentially within a unit regardless of the two-letter prefix. The sub-feature number is preceded by the unit number and feature number. The complete sub-feature numbers for the sub-features in the graphic below, for example, are N6-2-F004-SK001 (first skeleton), N6-2-F004-SK002 (second skeleton), and N6-2-F004-SL003 (soil).

### Graphic Example:

As an example, an interment is uncovered in unit N6-2 and is assigned the feature number of F004. For purposes of this example, features F001-003, bags B001-004, and drawings D001-003 were used in features F001-F003. The first three features did not have any sub-features.



Overall concept of figure from Liesel Gentelli.  
Graphic: After Joukowski, 1980:190.

**Unit:** N6-2

**Overall Interment Feature:** N6-2-F004

**Sub-Features:**

**1. First Skeleton:** N6-2-F004-SK001

**Bag Example:**

Other Small Find (Jewelry on Skull):  
N6-2-F004-SK001-B005

**2. Second Skeleton:** N6-2-F004-SK002

**Bag Example:**

Metal (Sword): N6-2-F004-SK002-B006

**3. Soil:** N6-2-F004-SL003

**Bag Examples:**

20 whole vessels with each getting a separate #:  
N6-2-F004-B007 through  
N6-2-F004-B026

**Drawing:** N6-2-F004-D004

## BAG NUMBERS

Bag numbers consist of the letter B followed by a sequential three digit number beginning with 001. The first assigned bag within each unit is B001, the second bag is B002, and so forth. Each number is preceded with the unit designation, feature number, and sub-feature number, if any. In the interment example above, the bag numbers are written in their entirety, e.g., N6-2-F004-SK001-B005.

## Bag Numbers and Special Finds

As stated in section two (DEFINITIONS), special finds are recognizable and significant artifacts, such as, coins, jewelry, whole vessels, figurines, etc. In contrast, non-special finds are either unrecognizable (e.g., miscellaneous metal or bone fragments) or of marginal significance (e.g., non-diagnostic pottery sherds). Both types of artifacts are assigned bag numbers. The difference is that non-special finds get one collective bag number for the material-related bag category or artifact-related bag category discovered within a feature. For example, several unrecognizable bone fragments were uncovered and put into one bag with one bag number. On the other hand, each special find gets its own bag and bag number. For example, a coin was uncovered within the same feature as the bone fragments. It would get its own bag and bag number. This process allows each special find to be tracked throughout lab processing, photographing, and analysis.

## Associated Bag Numbers

If non-special finds and special finds of the same material or artifact type are uncovered in the same feature, then the non-special finds are assigned one collective bag number and each special find is assigned a separate bag number. For example, the excavators found in the same feature one muktaf of pottery sherds and two complete vessels. The pottery sherds are assigned one collective bag number and each of the two complete vessels are assigned separate bag numbers.

However, the association between the non-special finds (e.g., pottery sherds) and the special finds (e.g., whole vessels) is important during the analysis of the overall pottery collection for that feature. Therefore, on the paperwork and bag tag, for each special find bag number, the unit supervisor writes the bag number for the overall sherds (i.e., the "associated" bag number).

As another example, in unit N6-2, feature F005, the excavators found six pieces of metal. Five were unrecognizable and one was a coin. All of the unrecognizable metal pieces would get one bag number, for



example, N6-2-F005-B008. The single coin, being a special find, would get a separate bag number, for example, N6-2-F005-B009. On the paperwork and bag tag, B008 would be the associated bag number for B009.

***NOTE: When a hoard of coins is uncovered stuck together, never try to pry them apart in the field. Put the clump of coins into one bag and let the conservator in the laboratory separate them. The clump would get one bag number.***

## **PHOTOGRAPH NUMBERS**

Photograph numbers consist of the letter P followed by a unit-based, sequential three digit number beginning with 001. The first photograph within each unit is P001, the second photograph is P002, and so forth. Each number is preceded with the unit designation and feature/sub-feature numbers, for example, the first photograph number for unit N6-2, feature F001 would be N6-2-F001-P001.

However, if a photograph is taken of a balk with many features, then omit the feature number.

## **DRAWING NUMBERS**

Drawing numbers consist of the letter D followed by a unit-based, sequential three digit number beginning with 001. The first drawing within each unit is D001, the second drawing is D002, and so forth. Each number is preceded with the unit designation and feature/sub-feature numbers, for example, the first drawing number for unit N6-2, feature F001 would be N6-2-F001-D001.

However, omit the feature number when labeling a balk drawing.

## **NOTE ON UNIT-BASED SEQUENTIAL NUMBERING IN REOPENED UNITS**

Frequently, units remain open more than one season. When this occurs, the sequential numbering for features, sub-features, bags, photographs, and drawings continue until the unit officially closes. For example, suppose that unit S13-3 was opened in 2013 and was reopened in 2014. Also, suppose that feature numbers F001 through F036 were used during 2013. When the unit is reopened in 2014, the first feature number would be F037.

## IV. FORM INSTRUCTIONS

Instructions for completing the data entry forms and bag tag used at Tell Timai are provided in this section. Several of the data entry boxes are common among the forms, especially the feature forms. So, instead of repeatedly explaining these boxes for each form, they are explained once under the section labeled **"COMMON DATA."** All information unique to each form is presented under the section labeled **"UNIQUE DATA."**

Even though the staff and crew at Tell Timai come from a variety of countries, all paperwork is completed in English.

### COMMON DATA

1. **DATES:** All dates should be in ddmmmyy format. For example, 05JUN14 represents 05 June 2014. The Tell Timai Project is truly international with participants from around the world. In some countries dates are written numerically ddmmmyy (e.g., 050613 for 05 June 2013) and in other countries dates are written mmddyy (e.g., 060513 for June 05, 2013). To eliminate confusion and for consistency, all dates written at Tell Timai use the ddmmmyy date format with a three-letter abbreviation for the month (i.e., the first three letters of the month name, such as, JUN=June and JUL=July).
2. **FEATURE IDENTIFICATION:** All of the forms begin with boxes asking for identifying season and unit information. Most of the forms ask for the feature and sub-feature numbers, opening and closing dates, and the supervisor's name. The basic information requested is shown in the boxes below.

#### FEATURE IDENTIFICATION:

Season (Year)	Unit (Grid-Unit)	Feature	Sub- Feature	Date Opened (ddmmmyy)	Date Closed (ddmmmyy)	Supervisor
201__		F	SL			

**Season:** Enter the fourth digit of the year for the current season.

**Unit:** Enter the unit designation, which consists of the grid and unit number, e.g., N6-9.

**Feature:** Enter the three digit feature number. The F prefix is already provided.

**Sub-Feature:** Enter the three digit sub-feature number, if relevant. The appropriate two-letter prefix is already provided.

**Date Opened:** Enter the date that the feature was opened in ddmmmyy format, e.g., 10JUN14.

**Date Closed:** Enter the date that the feature was closed in ddmmmyy format, e.g., 11JUN14.

**Supervisor:** Enter the unit supervisor's name.

3. **FEATURE STATUS:** The Feature Status box allows the supervisor to indicate whether the feature was fully or partially excavated by season's end.

#### FEATURE STATUS:

- ☐ **Fully Excavated**  
☐ **Partially Excavated**  
(Explain in NOTES.)

**Fully Excavated:** Darken this box if the feature was fully excavated.

**Partially Excavated:** Darken this box if the feature was not fully excavated.

**(Explain in Notes.)** If a feature is not completed during the season in which it was opened, then describe the reason in the **NOTES** section of the feature form.

4. **FEATURE RELATIONSHIPS:** One of the most important aspects of analyzing archaeological data is understanding the feature and sub-feature relationships. Data on these relationships are collected for each feature and sub-feature in boxes like the one below (a modified Harris Matrix<sup>4</sup>). (The Matrix Sheet is used to show all feature relationships within a unit.)

**FEATURE RELATIONSHIPS:**

<b>This Feature:</b>	<b>Feature or Unit/Feature #s</b> (Use unit/feature under "Equals" if the feature is in a different unit)			
<b>Is Under</b>				
<b>Abuts</b>				
<b>Is Over</b>				
<b>Equals</b>				
<b>Cuts</b>				
<b>Is Cut By</b>				

**NOTE:** Enter only the feature or sub-feature number (e.g., F001 or SL003) for features and sub-features within the same unit as the current feature. Because all numbering systems within a unit begin with 001 and have a specific prefix, there should be no problem with confusing the numbers entered into the box. However, if the related feature is in a different unit, then use the unit and feature numbers (e.g., N6-1-F001). In this situation, do not use sub-feature numbers.

**This [current] Feature:**

**Is Under** -- Enter the numbers for the features/sub-features that are above and touch this feature.

**Abuts** -- Enter the numbers for the features/sub-features that are at the same level as this feature and touch it.

**Is Over** -- Enter the numbers for the features/sub-features that are under this feature and touch it.

**Equals** -- There are two types of "equal" features/sub-features:

- Features/sub-features that are identical or nearly identical to the current feature/sub-feature. If the identical feature/sub-features are in the same unit, then they will not touch the current feature/sub-feature. However, if they are in a different unit, then they might or might not touch it. For example, suppose a plaster floor was found in a building, but portions of the floor are missing and the existing portions are on opposite sides of the same unit. If the unit supervisor chooses to treat the two portions as two features, then they would be "equals" because they are identical and do not touch. However, suppose that the two portions of the plaster floor are in two abutting units. In this case, the two features would be "equals" even if they did touch.
- When a balk is removed it is given a new feature number. All of the features that comprised the balk would be listed as "equals." Sometimes a balk is removed stratigraphically, one feature at a time. In this situation, the feature being removed would "equal" the feature that touched the balk at that point. On the other hand, sometimes a balk is removed in bulk and not stratigraphically. In this case, the feature number representing the balk would "equal" all of the features that touched it.

**Cuts** -- Some features, such as installations (e.g., a pit, well, etc.), were created by digging a hole into the ground, which, obviously, means that the pit post-dates the ground. When we excavate many hundreds of years later, the ground would be a feature that surrounds the pit. In this situation, we would conclude that the pit cuts through the ground soil feature.

**Is Cut By** -- However, using the previous example, if the current feature is the ground soil feature, then it is "cut by" the pit.

<sup>4</sup> The Harris Matrix was created by Edward Harris and is a graphical representation (similar to a flow chart) of the features and sub-features within a unit. Harris explains the matrix concept in his book Principles of Archaeological Stratigraphy.

5. **FEATURE LEVELS AND PLAN DRAWING:** Opening (top) and closing (bottom) levels are taken at multiple places of every feature and sub-feature. This allows the analyst to understand the feature's or sub-feature's depth and thickness. Space is allotted for up to ten opening and closing levels and the mathematical difference between them. Also, a rough (not to scale) plan drawing is made of every feature and sub-feature.

**FEATURE LEVELS:**

**PLAN DRAWING (Not to scale):**

Level #*	Opening (Top)	Closing (Bottom)	Diff.	N ____ (Draw in north arrow)
$\frac{1}{\wedge}$				
$\frac{2}{\wedge}$				
$\frac{3}{\wedge}$				
$\frac{4}{\wedge}$				
$\frac{5}{\wedge}$				
$\frac{6}{\wedge}$				
$\frac{7}{\wedge}$				
$\frac{8}{\wedge}$				
$\frac{9}{\wedge}$				
$\frac{10}{\wedge}$				

\*Put these numbers in the appropriate locations in the drawing to the right and use the same numbers for the scaled drawing on graph paper.

**FEATURE LEVELS:**

**Level #:** The level number is entered onto the plan drawing where the level was taken. At Tell Timai level numbers are written on plans with the number, a dash, and the ^ symbol.

**NOTE:** The location of the level numbers on the rough plan drawing (above on the right) should approximate the locations of the same levels on the scaled drawing that is done on graph paper. When the levels are taken, they are recorded on the Level Calculation Form and then transferred to the feature form.

**Opening (Top):** Enter the opening (or top) level(s) written to three decimal places.

**Closing (Bottom):** Enter the closing (or bottom) level(s) written to three decimal places.

**Difference:** Enter the mathematical difference between the opening and closing levels to derive the thickness(es) of the feature or sub-feature.

**PLAN DRAWING (Not to scale):** Make a rough drawing showing the feature's location in the unit. Be sure to enter an arrow to show north. If possible, try to draw the plan with north or roughly north at the top of the drawing.

6. **NOTES:** Enter any notes, explanations, descriptions, or any other information pertaining to the feature or sub-feature not already provided in one of the boxes. If you need more room than what is provided, then use the **SUPERVISOR NOTES** form.

7. **BACK OF FORM IDENTIFYING INFORMATION:** The reason that the same identifying information is entered on the front and back of each two-sided form is because the forms are scanned for computerized storage and each side is treated as a separate document. With the identifying information on both sides of the form, the two scanned copies can be associated.

Season	Unit	Feature	Sub-Fea.	BACK SOIL FEATURE FORM
201__		F	SL	

Enter the requested information.

#### 8. INCLUSIONS AND FINDS:

**"Inclusions"** are artifacts found in a feature or sub-feature that are not taken back to the laboratory, and, therefore, do not require a bag number. They are either left in place or discarded on site. The boxes for collecting information on inclusions differ between the feature/sub-feature forms; therefore, their instructions will be provided under the section labeled **"UNIQUE DATA."**

**"Finds,"** on the other hand, are items that are taken back to the laboratory and, therefore, require a bag number. All bag numbers begin with the letter "B." All of the feature/sub-feature forms have the same boxes for collecting information, as shown below. All special finds, receive a separate bag number.

**FINDS** (Require a bag number):

Bag #	Special Find?		Date (ddmmmyy)	Category <sup>1</sup>	Type <sup>2</sup>	Description	# Items <sup>3</sup>	Level (Bottom)	Phase/Dating (Provided by Expert)
	Y/N	Assoc. Bag #							
B		B							
B		B							

<sup>1</sup> Use only pottery, bone, shell, metal, glass, stone, flora, faience, figurine, building materials, slag, other small finds, or soil samples.

<sup>2</sup> For example, coin, vessel, jewelry, skull, etc.

<sup>3</sup> The # of items in the bag, e.g., 15 bones. For general pottery sherds, enter the # of muktafs rounded to nearest half muktaf, e.g., 1.0 or 1.5.

#### Information:

**Bag #:** Enter the bag number. The prefix B is pre-entered.

**Special Find?:** Enter Y for yes, N for no.

**Associated Bag #:** Enter the number for the bag of artifacts associated with the special find, if any.

**Date:** Enter the date (in ddmmmyy format) that the finds were collected.

**Bag Category:** Enter only one of the 13 bag categories (pottery, bone, shell, metal, glass, stone, flora, faience, figurine, building materials, slag, other small finds, or soil samples).

**Find Type:** Enter the type of special find, such as, coins, jewelry, complete vessel, etc.

**Description:** Describe the bag category or special find type.

**# Items:** For a bag that has no special finds, enter the number of items in the bag unless the bag is for general pottery sherds, in which case, enter the number of muktafs that are used to hold the sherds. Round off the number of muktafs to the nearest one-half muktaf. For a bag of special finds, enter the number of items or the number of pieces of an item, e.g., the number of sherds of a complete vessel broken in place.

**Level:** If the supervisor feels that the special find warrants the taking of its level, then take it at the bottom of the find.

**Phase/Dating:** The phase (e.g., Greek/Hellenistic or Roman) and dating information are provided by an expert analyst, e.g., the project ceramicist.

Bag #	Special Find?		Date (ddmmmyy)	Category <sup>1</sup>	Type <sup>2</sup>	Description	# Items <sup>3</sup>	Level (Bottom)	Phase/Dating (Provided by Expert)
	Y/N	Assoc. Bag #							
B001	N	B	10JUN14	Pottery		Sherds	1 mk		
B002	N	B	10JUN14	Metal		Unknown metal	4		
B003	Y	B002	10JUN14	Metal	Coin	Bronze coin	1	8.778	Hell., 2 <sup>nd</sup> c. BC
B004	N	B	10JUN14	Bone		Probably animal	10		
B005	N	B	11JUN14	Pottery		Sherds	1.5 mk		
B006	Y	B005	11JUN14	Pottery	Vessel	Intact vessel	1	8.121	Hell., 2 <sup>nd</sup> c. BC
B007	Y	B005	11JUN14	Pottery	Vessel	Broken in place	7	8.121	Hell., 2 <sup>nd</sup> c. BC
B008	Y	B	11JUN14	Metal	Coin	Bronze coin	1	8.538	Hell., 2 <sup>nd</sup> c. BC

**Examples** (see table above for data entry):

- A. The first bag (B001) on 10JUN13 was for pottery sherds that filled one muktaf (mk). No special finds were found, e.g., no vessels were found intact or broken in place nor were any special sherds found (e.g., a stamped handle). The special find information and find type are left blank. There is no need to take a level and the phase/dating information has not yet been provided.
- B. Also on 10JUN13 we found four pieces of unidentifiable metal as well as one bronze coin. First, the overall metal bag (B002) information is listed on one line. On the next line we list the coin under a separate bag number (B003), denote it as a special find, enter B002 (overall metal bag number) as the associated bag number, and provide the other information as shown above.
- C. Finally on 10JUN13 we found 10 bones that are possibly animal bones. Among the bones are no special finds (e.g., skull). The overall bone bag gets the next sequential bag number of B004.
- D. On 11JUN13 we found 1.5 muktafs of pottery sherds and two vessels, one intact and one broken in place. The overall pottery bag (B005) gets a line to itself. Then each of the two vessels gets a separate line and special find bag number. The intact vessel is given bag number B006 and the second vessel that is broken in place is given bag number B007. The associated bag number for both vessels is the number for the overall pottery sherds, B005.
- E. Also on 11JUN13 we found one coin and no other metal. When the only item within a bag category is a special find, it gets a bag number (B008), is noted as a special find, but does not get an associated bag number.

**9. PHOTOGRAPHS:** Every feature, sub-feature, and special find should be photographed. This section is for recording information on all official photographs.

**PHOTOGRAPHS:**

Photo #	Camera Photo #*	Date (ddmmmyy)	Facing**	Phot. Initials	Description
P					
P					

\*The photograph number in a digital camera or on a camera's removable disk.

\*\*The direction the photographer faced when taking the picture (N, S, E, W, NW, NE, SW, SE, or DOWN (i.e., straight down on an artifact)).

**Photo #:** Enter the photograph number that begins with the letter "P." The numbers are unit-based and run sequentially, e.g., P001, P002, etc.

**Camera Photo #:** When a digital camera is used to take a photograph, the camera gives the photograph a number that is unique to the type of camera used. Enter the number of the photograph provided by the camera. By having the Tell Timai photograph number and the camera photograph number, the two can be easily associated.

**Date:** Enter the date that the photograph was taken in ddmmmyy format.

**Facing:** Enter the direction that the camera was facing when the photograph was taken. The direction options are as follows: N (north), S (south), E (east), W (west), NE (northeast), NW (northwest), SE (southeast), SW (southwest), or DOWN (for photographs taken of artifacts or features straight down or nearly straight down).

**Phot. Initials:** Enter the photographer's initials.

**Description:** Enter a description of the photograph's subject.

**10. DRAWINGS:** Every feature and sub-feature should be drawn to scale on graph paper. This section is for recording information on all drawings.

**DRAWINGS:**

Drawing #	Date (ddmmmyy)	Scale	Drawers' Initials	Description
D				
D				

**Drawing #:** Enter the drawing number that begins with the letter "D." The numbers are unit-based and run sequentially, e.g., D001, D002, etc.

**Date:** Enter the date that the drawing was made in ddmmmyy format.

**Scale:** Enter the scale used to make the drawing. At Tell Timai we frequently use 1:25 or 1:20.

**Drawers' Initials:** Enter the initials of the persons involved in making the drawing. Usually, there are at least two.

**Description:** Enter a description of the drawing's subject.

**11. STRATIGRAPHIC ANALYSIS:** The stratigraphic analysis information is either entered by an expert analyst or the information is provided by an expert analyst.

**STRATIGRAPHIC ANALYSIS (Information provided by expert)**

Phase	Dating	Interpretation	Initials

**THIS PAGE IS INTENTIONALLY LEFT BLANK.**



## UNIQUE DATA

Part of the information collected on each form is unique to the form's purpose. In this section, instructions are provided for these unique parts. The forms are listed in sequence beginning with the feature/sub-feature forms and followed by the other forms.

The structure of this section is as follows:

1. A display of the entire form that is smaller than actual size. The sections of each form, however, are the actual size.
2. A display of the unique sections of each form and a presentation of their instructions.

The Tell Timai Project  
**SOIL FEATURE FORM**

**FEATURE IDENTIFICATION:**

Season (Year)	Unit (Grid-Unit)	Feature	Sub- Feature	Date Opened (ddmmmyy)	Date Closed (ddmmmyy)	Supervisor
201__		F	SL			

**FEATURE STATUS:**

<input type="checkbox"/> Fully Excavated <input type="checkbox"/> Partially Excavated (Explain in NOTES.)
---

**FEATURE SIGNIFICANCE:**

Type of Soil (■ 1):	<input type="checkbox"/> Surface (1 <sup>st</sup> in unit)	<input type="checkbox"/> Cleanup (Reopened unit)	<input type="checkbox"/> Analytical (Others)	<input type="checkbox"/> Bulk Removal
Deposition (■ 1):	<input type="checkbox"/> Primary (Not disturbed, in original context) <input type="checkbox"/> Secondary (Disturbed, not in original context, e.g., fill)			

**REASON FOR NEW SOIL FEATURE**

Change in Soil (■ all that apply):	<input type="checkbox"/> Color	<input type="checkbox"/> Texture	<input type="checkbox"/> Compaction	<input type="checkbox"/> Contents	<input type="checkbox"/> Not Applicable
Diff. from Previous Feature (■ 1):	<input type="checkbox"/> Distinct	<input type="checkbox"/> Somewhat Distinct	<input type="checkbox"/> Arbitrary	<input type="checkbox"/> Not Applicable	

**SOIL COMPOSITION:**

Soil Level* (■ 1)	Color (Use Munsell Soil Color Charts)		Texture (■ one)	Compaction (■ one)
	Color Code	Color Name		
<input type="checkbox"/> Pri <input type="checkbox"/> Sec <input type="checkbox"/> Ter			<input type="checkbox"/> Silty/Loamy <input type="checkbox"/> Clayey <input type="checkbox"/> Sandy <input type="checkbox"/> Ashy	<input type="checkbox"/> Loose <input type="checkbox"/> Crushable <input type="checkbox"/> Hard
<input type="checkbox"/> Pri <input type="checkbox"/> Sec <input type="checkbox"/> Ter			<input type="checkbox"/> Silty/Loamy <input type="checkbox"/> Clayey <input type="checkbox"/> Sandy <input type="checkbox"/> Ashy	<input type="checkbox"/> Loose <input type="checkbox"/> Crushable <input type="checkbox"/> Hard
<input type="checkbox"/> Pri <input type="checkbox"/> Sec <input type="checkbox"/> Ter			<input type="checkbox"/> Silty/Loamy <input type="checkbox"/> Clayey <input type="checkbox"/> Sandy <input type="checkbox"/> Ashy	<input type="checkbox"/> Loose <input type="checkbox"/> Crushable <input type="checkbox"/> Hard

**FEATURE RELATIONSHIPS:**

This Feature:	Feature or Unit/Feature #s (Use unit/feature under "Equals" if the feature is in a different unit)			
Is Under				
Abuts				
Is Over				
Equals				
Cuts				
Is Cut By				

\*Pri = primary (dominant) soil, Sec = secondary (next dominant) soil, Ter = tertiary (least dominant) soil. Intact mudbricks are not a soil.

**FEATURE LEVELS:**

**PLAN DRAWING (Not to scale):**

Level #*	Opening (Top)	Closing (Bottom)	Diff.	<div style="text-align: center;">N ____ (Draw in north arrow)</div>
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

\*Put these numbers in the appropriate locations in the drawing to the right and use the same numbers for the scaled drawing on graph paper.

**NOTES** (To enter additional notes, use the Supervisor Notes form):

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Season	Unit	Feature	Sub-Fea.	BACK
201__		F	SL	SOIL FEATURE FORM

**INCLUSIONS** (Do not require a bag number)( ■ All that apply):

**Architectural Debris** (fallen or out of place):

☐ Mudbrick ☐ Fired Brick ☐ Plaster ☐ Mortar ☐ Cement ☐ Concrete ☐ Ashlar  
☐ Column/Base ☐ Other (Explain):

**Rocks:** ☐ Pebbles (<=7.5cm) ☐ Cobbles (7.6-24.9cm) ☐ Stones (25-59.9cm) ☐ Boulders (60+cm)

**Burned Material:** ☐ Ash ☐ Charcoal ☐ Other **Modern Material:** ☐ No ☐ Yes (Explain)

**Other:**

**FINDS** (Require a bag number):

Bag #	Special Find?		Date (ddmmmyy)	Category <sup>1</sup>	Type <sup>2</sup>	Description	# Items <sup>3</sup>	Level (Bottom)	Phase/Dating (Provided by Expert)
	Y/N	Assoc. Bag #							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
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B		B							
B		B							
B		B							
B		B							

<sup>1</sup> Use only pottery, bone, shell, metal, glass, stone, flora, faience, figurine, building materials, slag, other small finds, or soil samples.

<sup>2</sup> For example, coin, vessel, jewelry, skull, etc.

<sup>3</sup> The # of items in the bag, e.g., 15 bones. For general pottery sherds, enter the number of muktafs rounded to nearest half muktaf, e.g., 1.0 or 1.5.

**PHOTOGRAPHS:**

Photo #	Camera Photo #*	Date (ddmmmyy)	Facing**	Phot. Initials	Description
P					
P					
P					
P					
P					

\*The photograph number in a digital camera or on a camera's removable disk.

\*\*The direction the photographer faced when taking the picture (N, S, E, W, NW, NE, SW, SE, or DOWN (i.e., straight down on an artifact)).

**DRAWINGS:**

Drawing #	Date (ddmmmyy)	Scale	Drawers' Initials	Description
D				
D				

**STRATIGRAPHIC ANALYSIS** (Information provided by expert):

Phase	Dating	Interpretation	Initials

## SOIL FEATURE FORM

### PURPOSE

The purpose of the Soil Feature Form is to collect information pertaining to each soil feature.

### INSTRUCTIONS

#### FEATURE IDENTIFICATION:

See the instructions in the section labeled “COMMON DATA.”

---

#### FEATURE STATUS:

See the instructions in the section labeled “COMMON DATA.”

---

#### FEATURE SIGNIFICANCE:

Type of Soil (■ 1):	<input type="checkbox"/> Surface (1 <sup>st</sup> in unit)	<input type="checkbox"/> Cleanup (Reopened unit)	<input type="checkbox"/> Analytical (Others)	<input type="checkbox"/> Balk Removal
Deposition (■ 1):	<input type="checkbox"/> Primary (Not disturbed, in original context)	<input type="checkbox"/> Secondary (Disturbed, not in original context, e.g., fill)		

**FEATURE SIGNIFICANCE:** This section allows the unit supervisor to indicate the contextual significance of the soil feature by its soil type and deposition. The key is to know when artifacts are found in undisturbed (i.e., analytical) features in their original (i.e., primary) context. These artifacts are the most important in conducting analyses of purpose, culture, and dating.

**Type of Soil:** Darken one box to indicate the soil type.

**Surface:** The first feature in each unit.

**Cleanup Soil:** When a unit is opened in one season and continued into another season, the unit surface between the seasons usually gets covered by debris that falls or is blown into the unit. The first order of business when a unit is reopened in a subsequent season is to clean it. This is the cleanup soil, and it gets the next sequential feature number.

**NOTE:** *Often during the cleaning of a reopened unit no artifacts are found, which is understandable, because the unit's surface is only cleaned and not excavated. In this situation, there is no need to assign a feature number or complete a feature form. The “cleanup soil” option is to be used only when artifacts are found as a means of accounting for them.*

**Analytical Soil:** All of the soil features beneath the surface and cleanup soil features are analytical soil features. They are the features that, hopefully, are not contaminated and are most useful in data analysis.

**Balk Removal:** Sometimes the balks between units are removed to help clarify complicated features, such as, architecture that continues through multiple units. A balk is a vertical section of soil left intact; therefore, it contains multiple features. By darkening the “Balk Removal” box, the analyst reviewing the form will understand the multiple feature characteristic of this feature.

**Deposition:** Darken one box to indicate the soil's deposition.

**Primary:** A feature is primary if it is not disturbed and is uncovered in its original context, e.g., an earthen floor in a building. Artifacts in a primary deposition are the most valuable to the analyst.

**Secondary:** A secondary feature is one in which its materials were removed from one or more contexts and placed into another, or secondary, context. For example, suppose a building was destroyed by fire, earthquake, or military intervention. To build on that spot again, the materials of the destroyed building materials at and above ground level would be removed leaving the foundation walls below ground. The portion of the building below ground would be filled in with whatever materials are available, such as, the building materials from above ground or other nearby soil. These materials (and the artifacts in them) used to pack and stabilize the foundation for the subsequent building would be classified as fill, which is a secondary deposition.

---

## REASON FOR NEW SOIL FEATURE

Change in Soil (■ all that apply):	<input type="checkbox"/> Color	<input type="checkbox"/> Texture	<input type="checkbox"/> Compaction	<input type="checkbox"/> Contents	<input type="checkbox"/> Not Applicable
Diff. from Prev. Feature Is (■ 1):	<input type="checkbox"/> Distinct	<input type="checkbox"/> Somewhat Distinct	<input type="checkbox"/> Arbitrary	<input type="checkbox"/> Not Applicable	

**REASON FOR NEW SOIL FEATURE:** This section allows the unit supervisor to explain the difference between the current feature and the previous one and the clarity of that difference. Darken the boxes for all of the soil changes that apply for the new feature. Also, darken one box to show the clarity of the difference between the features.

### Change in Soil:

**Color:** The soil's color(s) (described below).

**Texture:** The type of soil (described below).

**Compaction:** The looseness or hardness of soil (described below).

**Contents:** The soil's "inclusions" and "finds" (described below).

**Not Applicable:** Darken this box when the feature is a surface or cleanup soil or the soil difference is "Arbitrary."

### Difference from the Previous Feature:

**Distinct:** The difference in the two features is clear.

**Somewhat Distinct:** A difference can be seen, but not clearly.

**Arbitrary:** Sometimes when a feature is very thick, it is best to excavate it in thin layers (e.g., about 10 cm) instead of in one huge layer. When this situation occurs, there is no difference in these common layers (features), so the "Arbitrary" box is darkened.

**Not Applicable:** Darken this box when the feature is surface or cleanup soil.

### GUIDELINES:

1. Surface soil features, by definition, have no features above them. Therefore, darken the boxes for "Not Applicable" under both "Change in Soil" and "Diff. from Prev. Feature Is."
2. Cleanup soil features, by definition, also have no features above them at the time of removal. Therefore, darken the boxes for "Not Applicable" under both "Change in Soil" and "Diff. from Prev. Feature Is."
3. Analytical soil features are nearly always below another feature. So, darken the box for each change in soil characteristic that applies as well as one box for the clarity in difference.

**NOTE:** *If the cleanup soil feature in a reopened unit contains no artifacts and, therefore, is not recorded on a feature form, the first true layer for the season would be an analytical soil feature. If information is not readily available on the last feature excavated from the previous season, then darken the "Not Applicable" boxes.*

4. For features that are "Balk Removals" darken both boxes for "Not Applicable."

**SOIL COMPOSITION:**

Soil Level* (■ 1)	Color (Use Munsell Soil Color Charts)		Texture (■ one)	Compaction (■ one)
	Color Code	Color Name		
<input type="checkbox"/> Pri <input type="checkbox"/> Sec <input type="checkbox"/> Ter			<input type="checkbox"/> Silty/Loamy <input type="checkbox"/> Clayey <input type="checkbox"/> Sandy <input type="checkbox"/> Ashy	<input type="checkbox"/> Loose <input type="checkbox"/> Crushable <input type="checkbox"/> Hard
<input type="checkbox"/> Pri <input type="checkbox"/> Sec <input type="checkbox"/> Ter			<input type="checkbox"/> Silty/Loamy <input type="checkbox"/> Clayey <input type="checkbox"/> Sandy <input type="checkbox"/> Ashy	<input type="checkbox"/> Loose <input type="checkbox"/> Crushable <input type="checkbox"/> Hard
<input type="checkbox"/> Pri <input type="checkbox"/> Sec <input type="checkbox"/> Ter			<input type="checkbox"/> Silty/Loamy <input type="checkbox"/> Clayey <input type="checkbox"/> Sandy <input type="checkbox"/> Ashy	<input type="checkbox"/> Loose <input type="checkbox"/> Crushable <input type="checkbox"/> Hard

\*Pri = primary (dominant) soil, Sec = secondary (next dominant) soil, Ter = tertiary (least dominant) soil. Intact mudbricks are not a soil.

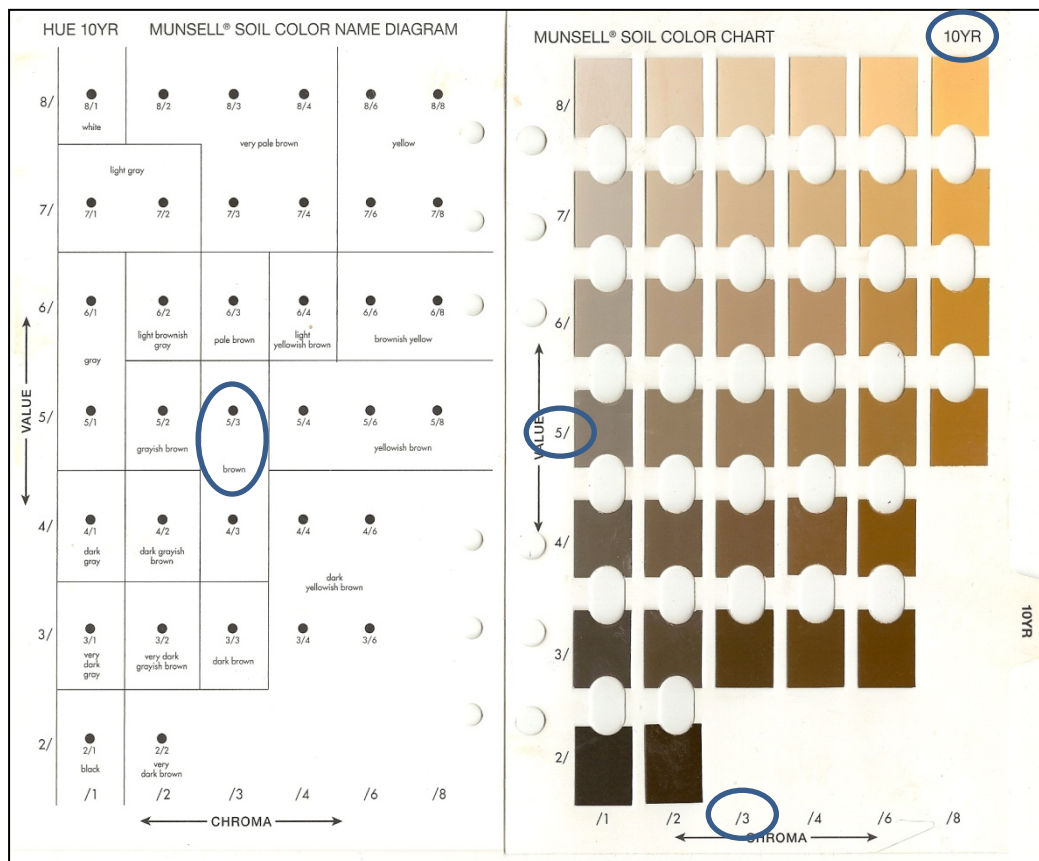
**SOIL COMPOSITION:** This section is used to describe the soil in a soil feature. The description involves four soil characteristics: (1) color, (2) texture, (3) compaction, and (4) contents. A change in any one or more of these characteristics could indicate a change in feature. A standard method for defining each characteristic is presented below.

**NOTE:** The description of contents is presented later in the instructions when “inclusions” and “finds” are discussed.

**Soil Level:** Many soil features are not homogeneous. Some have a primary (dominant) characteristic mixed with one or more less dominant characteristics. Darken one box for up to three soil characteristics. “Pri” means the primary or most dominant characteristic. “Sec” means the secondary or next most dominant characteristic. And, “Ter” means the tertiary or least dominant characteristic.

**Soil Color:** This is the easiest of the four characteristics to determine. Use the **Munsell Soil Color Charts** (see the example on the next page) to determine the soil color code and color name. The code consists of the page number, row number and column number, e.g., 10YR 5/3. The name for this color code is located on the preceding page and, for 10YR 5/3, is “brown.”

The charts are easy to use; however, determining the correct color is not necessarily so. The right-hand page with the color palettes has an oval hole between the colors. Scoop up a small amount of soil onto the triangular point of a trowel. The soil should be freshly excavated and not dried out in the sun. If necessary, dig down a couple of centimeters for fresh, somewhat moist soil. Raise the page containing the color palettes and put the trowel with the soil on its point under the selected page. Move the trowel around the page until you find the color that best matches the soil on your trowel. The best match might be on a different page. If you have difficulty choosing the best match, ask someone else to help you. Record the color’s code (page number, row number, /, and column number) and the textural definition of that code from the left hand page.



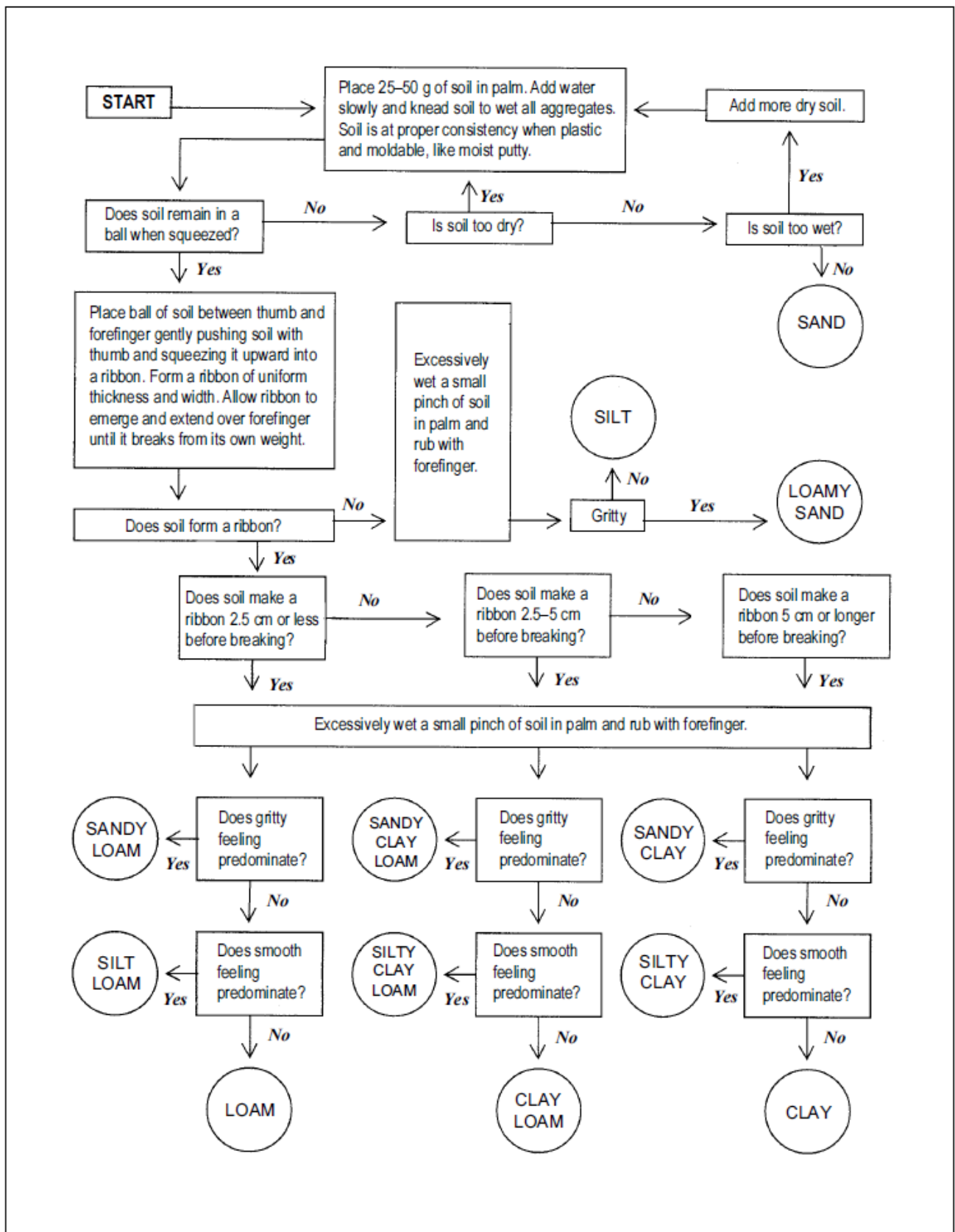
Source: Munsell Soil Color Charts

**Soil Texture:** Soil texture pertains to the “feel” of the soil. Geologically, there are three basic types of soil: clay, silt, and sand. Each soil type is determined by the size of its particles using the Wentworth scale<sup>5</sup> and specialized sieves. However, most soils are a combination of two or more of these basic types. The U.S. Department of Agriculture created a soil textural triangle<sup>4</sup> that is used frequently by geologists and archaeologists to determine soil texture. According to the soil textural triangle, there are twelve soil combinations with each combination being based on the percentage of clay, silt, and/or sand that comprises it. The most prominent combination of clay, silt, and/or clay is loam and its variations. Loam is what we commonly call dirt. It is so prominent that it is treated here as a basic soil type. The twelve soil combinations are as follows:

Clay	Silt	Loam	Sand
Clay	Silt	Loam	Sand
Silty Clay		Clay Loam	Loamy Sand
Sandy Clay		Silty Loam	
		Silty Clay Loam	
		Sandy Loam	
		Sandy Clay Loam	

From a field archaeological perspective, we do not have the time, equipment, or need to be as precise as a geologist. Therefore, we can use the simpler “texture-by-feel” method,<sup>4</sup> which is presented below.

<sup>5</sup> For a thorough description of soil, the Wentworth scale, the U.S. Department of Agriculture’s soil textural triangle, and the “texture-by-feel” method see the paper “Soil Science for Archaeologists” at <http://www.sjsu.edu/people/marco.meniketti/courses/ArchIntro/s0/Soil-Science.pdf>.



"Texture-by-feel" method from "Soil Science for Archaeologists"



The “texture-by-feel” method can even be simplified further by examining the smoothness or grittiness of the soil and the size of a ribbon that can be rolled with the soil. That simplified method is presented in the table below.

Dominant Feel When Wet	Ribbon Size			
	None	Short (<1 in.)	Medium (1-2 in.)	Long (>2 in.)
Smooth	Silt	Silt Loam	Silty Clay Loam	Silty Clay
Neither smooth nor gritty		Loam	Clay Loam	Clay
Gritty (very slightly cohesive)	Loamy Sand			
Gritty (non-cohesive)	Sand	Sandy Loam	Sandy Clay Loam	Sandy Clay

Simplified “texture-by-feel” method from “Soil Science for Archaeologists”



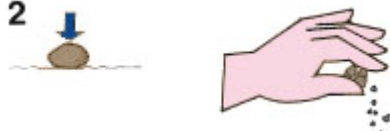



### Soil Texture at Tell Timai:

For purposes of record keeping at Tell Timai, the twelve soil combinations have been collapsed into three:

1. **Silty/Loamy** -- Any combination that ends in silt or loam.
2. **Clayey** -- Any combination that ends in clay.
3. **Sandy** -- Any combination that ends in sand.

We also include another soil texture called “**ashy**.” Frequently at sites that were destroyed one or more times during their existence or where a large fire occurred, we will find burn layers that are completely or nearly completely ash and charcoal. Ash is not a true soil but needs to be accounted for. So, “ashy” was added as a surrogate soil texture.

**Soil Compaction:** Soil compaction pertains to the soil’s coherency (whether it sticks together) and hardness of soil particles. In layman’s terms, there are two types of compaction: (1) the soil is loose and does not stick together (is non-coherent or incoherent) to form aggregates (clods) or (2) the soil does form aggregates, but at varying degrees of hardness. Therefore, when excavating the soil with a trowel, the possibilities of soil compaction (called “consistency” in the chart, below) are as follows:

Consistency	Description
Loose	The soil is non-coherent (does not form aggregates (clods)). 
Soft	The soil is weakly coherent and friable and breaks into powder or individual grains under very slight pressure. 
Slightly Hard	The soil resists light pressure, but can be broken easily between thumb and forefinger. 
Hard	The soil resists moderate pressure, can barely be broken between the thumb and forefinger, but can be broken in the hands without difficulty; 
Very Hard	The soil resists great pressure, cannot be broken between the thumb and forefinger but can be broken in the hands with difficulty; 
Extremely Hard	The soil resists extreme pressure and cannot be broken in the hands. 

Source: [ftp://ftp.fao.org/fi/CDrom/FAO\\_Training/FAO\\_Training/General/x6706e/x6706e08.htm](ftp://ftp.fao.org/fi/CDrom/FAO_Training/FAO_Training/General/x6706e/x6706e08.htm).

For purposes of record keeping at Tell Timai, the six types of compaction described in the above table have been collapsed into three.

1. **Loose** -- Loose or soft.
2. **Crushable** -- Slightly hard or hard.
3. **Hard** -- Very hard or extremely hard.

**FEATURE RELATIONSHIPS:**

See the instructions in the section labeled “COMMON DATA.”

**FEATURE LEVELS/PLAN DRAWING:**

See the instructions in the section labeled “COMMON DATA.”

**NOTES:**

See the instructions in the section labeled “COMMON DATA.”

Season	Unit	Feature	Sub-Fea.	BACK SOIL FEATURE FORM
201__		F	SL	

See the instructions in the section labeled “COMMON DATA.”

**SOIL CONTENTS:** Above under “Soil Composition” it was stated that soil features have four characteristics: (1) color, (2) texture, (3) compaction, and (4) contents. Soil color, texture, and compaction were explained there. This section explains contents. There are two types of soil contents: **inclusions** and **finds**.

**INCLUSIONS** (Do not require a bag number)( ■ All that apply):

<b>Architectural Debris</b> (fallen or out of place):	
<input type="checkbox"/> <b>Mudbrick</b> <input type="checkbox"/> <b>Fired Brick</b> <input type="checkbox"/> <b>Plaster</b> <input type="checkbox"/> <b>Mortar</b> <input type="checkbox"/> <b>Cement</b> <input type="checkbox"/> <b>Concrete</b> <input type="checkbox"/> <b>Ashlar</b> <input type="checkbox"/> <b>Column/Base</b> <input type="checkbox"/> <b>Other</b> (Explain):	
<b>Rocks:</b> <input type="checkbox"/> <b>Pebbles</b> (<=7.5cm) <input type="checkbox"/> <b>Cobbles</b> (7.6-24.9cm) <input type="checkbox"/> <b>Stones</b> (25-59.9cm) <input type="checkbox"/> <b>Boulders</b> (60+cm)	
<b>Burned Material:</b> <input type="checkbox"/> <b>Ash</b> <input type="checkbox"/> <b>Charcoal</b> <input type="checkbox"/> <b>Other</b>	<b>Modern Material:</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/> <b>Yes</b> (Explain)
<b>Other:</b>	

**INCLUSIONS:** “Inclusions” are artifacts found in the soil that are not taken back to the laboratory, and, therefore, do not require a bag number. They are either left in place or discarded on site. Darken all of the boxes that apply.

**Architectural Debris:** Materials used to construct a building, structure, wall, installation, or interment that have fallen from their original location or are otherwise out of place and mixed in with a soil feature. This usually occurs around some sort of architecture, such as, a mudbrick or fired brick wall.

**Mudbrick:** Sun-dried bricks made of clay (usually Nile alluvium), sand, and some form of temper, such as, straw.

**Fired Brick:** Clay bricks fired in a kiln to make them solid and impervious to weather.

**Plaster:** Protective and decorative coating applied to walls, ceilings, and floors.

**Mortar:** A material used in constructing a wall made of mudbricks, stones, fired bricks, or dressed/ashlar blocks to bind them together.

**Cement:** A building material made by grinding limestone and clay to a fine powder. When mixed with water it sets and hardens independently. Cement is also a binder in mortar and concrete.

**Concrete:** An artificial, stone-like building material made by mixing cement and various aggregates, as sand, gravel, or shale, with water and allowing the mixture to harden. The Romans also added volcanic ash, when available.

**Ashlar:** A finely dressed (cut, worked) stone that is rectangular or square.

**Column/Base:** A length of column or a column base in a unit that is not removed to the laboratory.

**Other:** Anything else not listed above and not considered a “find.”

**Rocks** -- Any type of rocks found in the soil feature. They are identified by their size<sup>6</sup>, which are as follows:

**Pebbles** -- Up to 7.5 cm

**Cobbles** -- From 7.6 – 24.9 cm

**Stones** -- From 25.0 – 59.9 cm

**Boulders** -- 60 or more cm

**Burned Material** -- Darken one or more squares to indicate whether the burned material is ash, charcoal, or some other type of burned material, such as, partially burned wood.

**Modern Material** -- If modern material is found, especially in an analytical soil feature, then this occurrence is of immense importance. It shows that the feature is contaminated and could negatively affect any analysis of that feature. If the box for "Yes" is darkened, then indicate what the item is. If more room is needed to describe the modern object, then use the "Notes" section.

**Other** -- Describe any other type of inclusions in the soil feature not listed earlier. If more room is needed to describe the object(s) more fully, then use the "Notes" section.

---

**FINDS:**

See the instructions in the section labeled "**COMMON DATA.**"

---

**PHOTOGRAPHS:**

See the instructions in the section labeled "**COMMON DATA.**"

---

**DRAWINGS:**

See the instructions in the section labeled "**COMMON DATA.**"

---

**STRATIGRAPHIC:**

See the instructions in the section labeled "**COMMON DATA.**"

**NOTE:** *If additional space is needed to enter information on finds, photographs, or drawings, then use the Feature Supplement Form.*

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<sup>6</sup> The definitions of rocks according to size vary by organizations defining them. The sizes used in this manual were obtained from the U.S. Department of Agriculture's Soil Survey Manual, Chapter 3, which can be found on the Internet at [https://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_051308.pdf](https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051308.pdf).

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The Tell Timai Project  
**WALL FEATURE FORM**

**FEATURE IDENTIFICATION:**

Season (Year)	Unit (Grid-Unit)	Feature	Sub- Feature	Date Opened (ddmmmyy)	Date Closed (ddmmmyy)	Supervisor
201		F	WA			

**FEATURE STATUS:**

<input type="checkbox"/> Fully Excavated
<input type="checkbox"/> Partially Excavated (Explain in NOTES.)

**WALL TYPE (■ 1):**

☐ Building (Exterior), ☐ Room (Interior), ☐ Court Yard, ☐ Fortification, ☐ Other \_\_\_\_\_

**WALL CONSTRUCTION:**

Material	Construction Style	Dominant Size (cm)	Mortar	Wall Finish ↓Inside Outside↓	Mudbrick Composition
<input type="checkbox"/> Mudbrick	<input type="checkbox"/> Head/Stretch <input type="checkbox"/> Stacked <input type="checkbox"/> Tied <input type="checkbox"/> Other	L: _____ W: _____ H: _____	<input type="checkbox"/> None (Dry) <input type="checkbox"/> Mud/Clay <input type="checkbox"/> Lime <input type="checkbox"/> Other	<input type="checkbox"/> Mud <input type="checkbox"/> Plaster <input type="checkbox"/> Other <input type="checkbox"/> Unknown	<input type="checkbox"/> Main Ingredient: <input type="checkbox"/> Mud (e.g., Nile Silt) <input type="checkbox"/> Clay <input type="checkbox"/> Other  <input type="checkbox"/> Temper/Binder: <input type="checkbox"/> Straw <input type="checkbox"/> Pottery Sherds <input type="checkbox"/> Pebbles/Gravel <input type="checkbox"/> Sand <input type="checkbox"/> Other <input type="checkbox"/> Unknown  <input type="checkbox"/> Munsell Color Code: _____  <input type="checkbox"/> Munsell Description: _____
<input type="checkbox"/> Fired Bricks  <input type="checkbox"/> Dressed/ Ashlar Blocks	<input type="checkbox"/> Head/Stretch <input type="checkbox"/> Orthostat <input type="checkbox"/> Quoin & Pier <input type="checkbox"/> Rubble-Filled <input type="checkbox"/> Other	(cm) L: _____ W: _____ H: _____	<input type="checkbox"/> None (Dry) <input type="checkbox"/> Mud/Clay <input type="checkbox"/> Cement <input type="checkbox"/> Gypsum <input type="checkbox"/> Lime <input type="checkbox"/> Other	<input type="checkbox"/> None <input type="checkbox"/> Plaster <input type="checkbox"/> Other	

**OVERALL WALL SIZE AND ORIENTATION:**

Length (m) (within unit):	Width (cm) Min:	Max:
Height (cm) Min:	Max:	# of Existing Courses (i.e., # rows high):
Orientation: <input type="checkbox"/> N/S, <input type="checkbox"/> E/W, <input type="checkbox"/> NE/SW, <input type="checkbox"/> NW/SE, <input type="checkbox"/> Other (Explain)		

**FEATURE LEVELS:**

**PLAN DRAWING (Not to scale):**

Level #*	Opening (Top)	Closing (Bottom)	Diff.	N ____ (Draw in north arrow)
1 ^				
2 ^				
3 ^				
4 ^				
5 ^				
6 ^				
7 ^				
8 ^				
9 ^				
10 ^				

\*Put these numbers in the appropriate locations in the drawing to the right and use the same numbers for the scaled drawing on graph paper.

**NOTES** (To enter additional notes, use the Supervisor Notes form):

Season	Unit	Feature	Sub-Fea.	BACK	
201__		F	WA	WALL FEATURE FORM	

#### ARCHITECTURAL FEATURE RELATIONSHIPS

#### NON-ARCHITECTURAL FEATURE RELATIONSHIPS

Relationship	Feature # or Unit/Feature #				This Feature:	Feature Numbers			
Bonding Walls					Is Under				
Abutting Walls					Abuts				
Foundation Wall					Is Over				
Superstructure Wall					Cuts				
Foundation Trench					Is Cut By				
Associated FL/Surf.					Equals				
Extends into Abutting Unit(s) as Feature(s)									

#### FINDS (Require a bag number):

Bag #	Special Find?		Date (ddmmmyy)	Category <sup>1</sup>	Type <sup>2</sup>	Description	# Items <sup>3</sup>	Level (Bottom)	Phase/Dating (Provided by Expert)
	Y/N	Assoc. Bag #							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							

<sup>1</sup> Use only pottery, bone, shell, metal, glass, stone, flora, faience, figurine, building materials, slag, other small finds, or soil samples.

<sup>2</sup> For example, coin, vessel, jewelry, skull, etc.

<sup>3</sup> The # of items in the bag, e.g., 15 bones. For general pottery sherds, enter the number of muktafs rounded to nearest half muktaf, e.g., 1.0 or 1.5.

#### PHOTOGRAPHS:

Photo #	Camera Photo #*	Date (ddmmmyy)	Facing**	Phot. Initials	Description
P					
P					
P					
P					
P					

\*The photograph number in a digital camera or on a camera's removable disk.

\*\*The direction the photographer faced when taking the picture (N, S, E, W, NW, NE, SW, SE, or DOWN (i.e., straight down on an artifact)).

#### DRAWINGS:

Drawing #	Date (ddmmmyy)	Scale	Drawers' Initials	Description
D				
D				

#### STRATIGRAPHIC ANALYSIS (Information provided by expert)

Phase	Dating	Interpretation	Initials

## WALL FEATURE FORM

### PURPOSE

The purpose of the Wall Feature Form is to collect all information on a feature that is an architectural wall. In this context, a wall could range from a structure's exterior or interior wall to a courtyard wall to a fortification wall.

### INSTRUCTIONS

#### FEATURE IDENTIFICATION:

See the instructions in the section labeled "COMMON DATA."

#### FEATURE STATUS:

See the instructions in the section labeled "COMMON DATA."

#### WALL TYPE (■ 1):

☐ **Building** (Exterior), ☐ **Room** (Interior), ☐ **Court Yard**, ☐ **Fortification**, ☐ **Other** \_\_\_\_\_

**WALL TYPE:** Darken the box indicating the wall type.

**Building:** An exterior wall to a building or structure.

**Room:** An interior wall to a building or structure.

**Court Yard:** A wall partially or wholly surrounding a courtyard.

**Fortification:** Any type of fortification wall.

**Other:** Any type of wall not listed above. Explain.

#### WALL CONSTRUCTION:

Material	Construction Style	Dominant Size	Mortar	Wall Finish ↓Inside      Outside↓	Mudbrick Composition
<input type="checkbox"/> <b>Mudbrick</b>	<input type="checkbox"/> <b>Head/Stretch</b> <input type="checkbox"/> <b>Stacked</b> <input type="checkbox"/> <b>Tied</b> <input type="checkbox"/> <b>Other</b>	<b>(cm)</b> <b>L:</b> _____ <b>W:</b> _____ <b>H:</b> _____	<input type="checkbox"/> <b>None (Dry)</b> <input type="checkbox"/> <b>Mud/Clay</b> <input type="checkbox"/> <b>Lime</b> <input type="checkbox"/> <b>Other</b>	<input type="checkbox"/> <b>Mud</b> <input type="checkbox"/> <b>Plaster</b> <input type="checkbox"/> <b>Other</b> <input type="checkbox"/> <b>Unknown</b>	<b>Main Ingredient:</b> <input type="checkbox"/> <b>Mud</b> (e.g., Nile Silt) <input type="checkbox"/> <b>Clay</b> <input type="checkbox"/> <b>Other</b>  <b>Temper/Binder:</b> <input type="checkbox"/> <b>Straw</b> <input type="checkbox"/> <b>Pottery Sherds</b> <input type="checkbox"/> <b>Pebbles/Gravel</b> <input type="checkbox"/> <b>Sand</b> <input type="checkbox"/> <b>Other</b> <input type="checkbox"/> <b>Unknown</b>  <b>Munsell Color Code:</b> _____  <b>Munsell Description:</b> _____
<input type="checkbox"/> <b>Fired Bricks</b>  <input type="checkbox"/> <b>Dressed/Ashlar Blocks</b>	<input type="checkbox"/> <b>Head/Stretch</b> <input type="checkbox"/> <b>Orthostat</b> <input type="checkbox"/> <b>Quoin &amp; Pier</b> <input type="checkbox"/> <b>Rubble-Filled</b> <input type="checkbox"/> <b>Other</b>	<b>(cm)</b> <b>L:</b> _____ <b>W:</b> _____ <b>H:</b> _____	<input type="checkbox"/> <b>None (Dry)</b> <input type="checkbox"/> <b>Mud/Clay</b> <input type="checkbox"/> <b>Cement</b> <input type="checkbox"/> <b>Gypsum</b> <input type="checkbox"/> <b>Lime</b> <input type="checkbox"/> <b>Other</b>	<input type="checkbox"/> <b>None</b> <input type="checkbox"/> <b>Plaster</b> <input type="checkbox"/> <b>Other</b>	

**WALL CONSTRUCTION:** This section pertains to the method used to construct a wall and the basic size of the primary construction materials (i.e., mudbricks or masonry).

**Material:** Darken the box if the wall material is mudbrick or masonry (any form of fired brick or "dressed" stone).



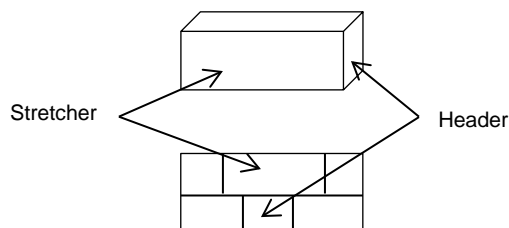
**Mudbrick:** Mudbricks basically are made of clay and sand with some sort of temper or binder for strength, such as, straw, pottery sherds, or pebbles, and then dried in the sun.

**Masonry:** There are two types of masonry walls: (1) fired bricks, and (2) dressed/ashlar blocks.

**Fired Bricks:** Clay bricks fired in a kiln to make them solid and impervious to weather.

**Dressed/Ashlar Blocks:** Stones that are neatly carved into rectangular or square blocks with square corners and an excellent fit so that chinkstones are not needed.

**Construction Style:** The method of construction by type of material. Some of the mudbrick, fired brick, and dressed/ashlar methods involve the use of headers and stretchers. The illustrations below show that the long side is the stretcher and the end is the header.



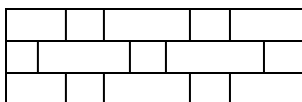
Source: Redrawn after Tassie and Owens, 2010: 218.

### Mudbrick:

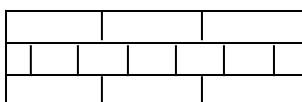
(All examples under this section are redrawn after Tassie and Owens, 2010: 219-220.)

**Header/Stretcher:** There are several types of header/footer configurations. The two basic types are shown below. All header and stretcher walls are “tied” together (i.e., they overlap). Use “header/stretcher” when the wall contains both headers and stretchers.

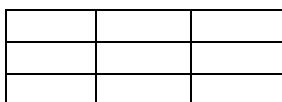
The first configuration is alternating headers and stretchers in the same row.



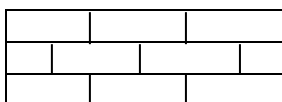
The second configuration is alternating rows of headers and stretchers.



**Stacked:** Mudbricks stacked on top of each other in columns without any attempt to “tie” them together.



**Tied Together:** Mudbricks are “tied” together by overlapping them, which is the normal process used in modern times. Use “tied” when the wall is all stretchers or all headers, both not both.

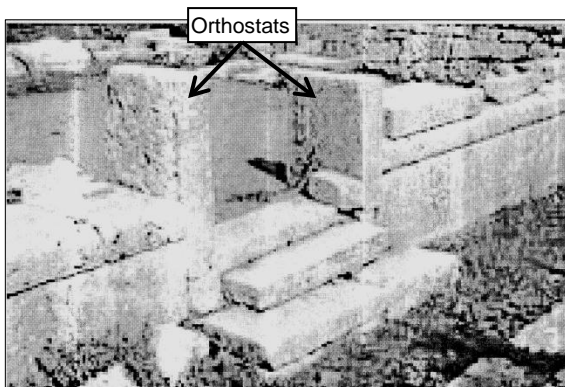


**Other:** Any other form of mudbrick construction style. Explain in “Notes.”

## Fired Brick and Dressed/Ashlar Blocks:

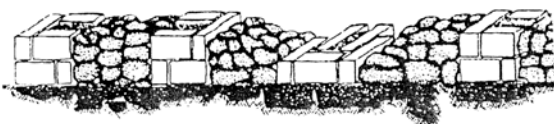
**Header/Stretchers:** Any combination of header and/or stretcher.

**Orthostat:** Large, thin ashlar block set on its edge.



Source: <http://encyclopedia.thefreedictionary.com/>

**Quoin & Pier:** Pronounced “coin” and “peer.” A method of construction in which uncut fieldstones (quoins) are wedged between vertical ashlar pillars (piers). The piers are often at intervals of two-to-four meters with the intervening spaces filled with fieldstones.



Source: *Excavation Manual: Madaba Plains Project*

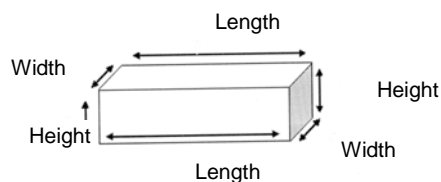
**Rubble-Filled:** Similar to quoin and pier walls, except the space between two parallel, outer rows of ashlar blocks is filled with rubble.



Wall to a Roman bath in Jordan.  
Photo by Kip Tyler

**Other:** Any other form of ashlar construction style. Explain in “Notes.”

### Dominant Size:



Source: Redrawn after Tassie and Owens, 2010: 217.

### **Mudbrick, Fired Brick, and Dressed/Ashlar Blocks:**

**Length:** The typical length in cm.

**Width:** The typical width in cm.

**Height:** The typical thickness in cm.

### **Mortar:**

**None (Dry):** No mortar is used.

**Mud/Clay:** A mortar made of mud and/or clay, usually Nile alluvium.

**Lime:** A hard, white mortar made with lime that is impervious to water.

**Cement:** A building material made by grinding limestone and clay to a fine powder. When mixed with water it sets and hardens independently.

**Gypsum:** The fibrous, silky mineral also called alabaster.

**Other:** Any other form of mortar. Explain in "Notes."

**Wall Finish:** Walls could have an inside finish, an outside finish, both, or neither. Darken the appropriate box for inside and outside finishes.

**None:** The wall does not have a finish on one or both sides. Dressed/ashlar block walls probably did not have a finish. So, darken the "None" box if a finish is not seen. Mudbrick walls always had a finish to protect them, so darkening the "None" box is not appropriate. See "Unknown" below.

**Mud/Clay:** The finish is a made of mud and/or clay.

**Plaster:** Plaster can be almost as hard as cement. Its basic composition includes white lime or chalk and can be combined with mud and sand.

**Other:** Any other form of wall finish. Explain in "Notes."

**Unknown:** The wall probably had a finish, but the finish is not discernible. All mudbrick walls in ancient times had a finish to protect the mudbrick from the elements, especially moisture. Therefore, if a mudbrick wall is found and the finish is not discernible, then darken the "Unknown" box.

**Mudbrick Composition:** As stated above, mudbricks basically are made of soil, such as, mud or clay with some sort of temper or binder to strengthen them.

### **Main Ingredient:**

**Mud:** The mudbrick is made of hardened mud, which at Tell Timai is usually Nile silt, and does not display any characteristics of clay.

**Clay:** The mudbrick is made of a material that has the characteristics of clay.

**Other:** Any other form of mudbrick main ingredient. Explain in "Notes."

### **Temper/Binder:**

**Straw:** Dried grain stalks or stems.

**Pottery Sherds:** Pottery sherds broken into small pieces.

**Pebbles:** Small rocks.

**Sand:** Small grains of disintegrated rock.

**Other:** Any other form of temper/binder. Explain in "Notes."

**Unknown:** The temper/binder is unknown.

**Munsell Color:** Enter the Munsell color code and description of the mudbrick as provided by the *Munsell Soil Color Charts*.

**Code:** After determining the appropriate soil color, enter the color code, which is comprised of the page identifier (e.g., 10YR), the row number (e.g., 5/), and the column number (e.g., /3). The complete code would be 10YR 5/3.

**Description:** Enter the color description for the code, which is found on the previous and facing page to the color chart page. For example, the description for code 10YR 5/3 is "brown."

**OVERALL WALL SIZE AND ORIENTATION:**

<b>Length (m)</b> (within unit):	<b>Width (cm)</b> Min: Max:
<b>Height (cm)</b> Min: Max:	<b># of Existing Courses</b> (i.e., # rows high):
<b>Orientation:</b> <input type="checkbox"/> N/S, <input type="checkbox"/> E/W, <input type="checkbox"/> NE/SW, <input type="checkbox"/> NW/SE, <input type="checkbox"/> Other (Explain)	

**OVERALL WALL SIZE AND ORIENTATION:** Enter the wall's dimensions, number of courses, and orientation.

**Length:** The length of the wall that is within your unit in meters. If a wall extends into two or more units, then the segment within each unit is treated—for recordkeeping purposes—as a separate wall with a different feature number. (Because each segment is in a different unit, each one has to be assigned a feature number in accordance with each unit's feature number sequence.)

**Width:** The thickness, or depth, of the wall in centimeters. Because a wall might not have a uniform thickness, the maximum and minimum thicknesses can be entered.

**Height:** The height of the wall from its bottom to its top as it exists in centimeters. A maximum and minimum height can be entered.

**# of Existing Courses:** The number of existing courses (rows). A maximum and minimum number of courses can be entered. If the number of courses cannot be determined (e.g., the mudbrick in a mudbrick wall are too deteriorated to distinguish the courses), then enter "Unknown."

**Orientation:** Darken the box to indicate that the wall's orientation is N/S (north-south), E/W (east-west), NE/SW (northeast-southwest), or NW/SE (northwest-southeast). If the orientation is other than one of these four possibilities, then darken the box for "Other" and explain.

**FEATURE LEVELS / PLAN DRAWING**

See the instructions in the section labeled "COMMON DATA."

**NOTES:**

See the instructions in the section labeled "COMMON DATA."

<b>Season</b>	<b>Unit</b>	<b>Feature</b>	<b>Sub-Fea.</b>	<b>BACK</b> <b>WALL FEATURE FORM</b>
201__		F	WA	

See the instructions in the section labeled "COMMON DATA."

## ARCHITECTURAL FEATURE RELATIONSHIPS

## NON-ARCHITECTURAL FEATURE

Relationship	Feature # or Unit/Feature #				This Feature:	Feature Numbers			
Bonding Walls					Is Under				
Abutting Walls					Abuts				
Foundation Wall					Is Over				
Superstructure Wall					Cuts				
Foundation Trench					Is Cut By				
Associated FL/Surf.					Equals				
Extends into Abutting Unit(s) as Feature(s)									

**ARCHITECTURAL FEATURE RELATIONSHIPS:** Pertains to features and sub-features that have a direct connection to the wall.

### Relationship:

**Bonding Walls:** Walls that join this wall at an angle within the unit. “Bonding” means that the materials of both walls are interlaced to form a strong connection. This could indicate that the walls were built at the same time.

**Abutting Walls:** Walls that abut this wall at an angle within the unit. “Abutting” means that the materials of both walls are not interlaced and a vertical distinction between them is discernible. This could indicate that the walls were built at different times.

**NOTE on Foundation and Superstructure Walls:** Sometimes a wall is built in two sections with a stone (for example) foundation and a mudbrick (for example) superstructure (on top of the stone portion). In this situation, the wall is assigned one feature number, and each section is assigned a sub-feature number. If the wall is all stone or all mudbrick, then there are no separate foundation and superstructure sections.

**Foundation Wall:** If the Wall Feature Form being completed pertains to the superstructure section, then enter the sub-feature number here for the foundation section.

**Superstructure Wall:** If the Wall Feature Form being completed pertains to the foundation section, then enter the sub-feature number here for the superstructure section.

**Foundation Trench:** Often a trench was dug to make a level surface on which a wall was built. This trench is called a foundation (or builders’) trench. It is usually seen as a soil feature running parallel to the wall.

**Associated Floors/Surfaces:** Walls could belong to a building or structure where they separate one interior room from another or the interior from the exterior. Or, they could be a courtyard or even part of a fortification. Whatever their purpose, frequently, they are abutted by a floor or other form of surface (e.g., stone courtyard, roadway). Enter here the feature/sub-feature numbers for all floors or surfaces that appear to be associated with the wall within the unit.

**Extends into Abutting Unit(s) as Feature(s):** If the wall extends into an abutting unit(s), then enter the unit/feature number(s) for that unit(s). If the abutting unit has not yet been excavated and the wall feature number is not known, then enter the unit number and a question mark (?) for the feature number until the real number becomes known.

**Feature # or Unit/Feature #:** If the relevant feature is within the unit being excavated, then enter only the feature or sub-feature number. If, however, the relevant feature is in an abutting unit, then enter the unit and feature number (if known).

## NON-ARCHITECTURAL FEATURE RELATIONSHIPS:

See the instructions for “FEATURE RELATIONSHIPS” in the section labeled “COMMON DATA.”

**FINDS:**

See the instructions in the section labeled "**COMMON DATA.**"

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**PHOTOGRAPHS:**

See the instructions in the section labeled "**COMMON DATA.**"

---

**DRAWINGS:**

See the instructions in the section labeled "**COMMON DATA.**"

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**STRATIGRAPHIC ANALYSIS:**

See the instructions in the section labeled "**COMMON DATA.**"

***NOTE: If additional space is needed to enter information on finds, photographs, or drawings, then use the Feature Supplement Form.***

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The Tell Timai Project  
**FLOOR/SURFACE FEATURE FORM**

**FEATURE IDENTIFICATION:**

Season (Year)	Unit (Grid-Unit)	Feature	Sub- Feature	Date Opened (ddmmmyy)	Date Closed (ddmmmyy)	Supervisor
201__		F	FS			

**FEATURE STATUS:**

- ☐ Fully Excavated  
☐ Partially Excavated  
 (Explain in NOTES.)

**FEATURE CHARACTERISTICS:**

<b>Feature Type (■ 1):</b>	<input type="checkbox"/> Floor (Interior)	<input type="checkbox"/> Surface (Exterior, e.g., road, walkway, platform)	<input type="checkbox"/> Unknown
<b>Feature Dimensions:</b>	<b>Length (cm) Min:</b>	<b>Max:</b>	<b>Width (cm) Min:</b> <b>Max:</b>

**REASON FOR NEW FEATURE**

<b>Change in Soil (■ all that apply):</b>	<input type="checkbox"/> Color	<input type="checkbox"/> Texture	<input type="checkbox"/> Compaction	<input type="checkbox"/> Contents	<input type="checkbox"/> Not Applicable
<b>Diff. from Prev. Feature Is (■ 1):</b>	<input type="checkbox"/> Distinct	<input type="checkbox"/> Somewhat Distinct	<input type="checkbox"/> Arbitrary	<input type="checkbox"/> Not Applicable	

**FLOOR/SURFACE MATERIAL AND CHARACTERISTICS:**

Material (■ all that apply)	Dominant Size	Munsell Color Code	Munsell Description
<input type="checkbox"/> Beaten Earth	Not Applicable		
<input type="checkbox"/> Lime			
<input type="checkbox"/> Plaster			
<input type="checkbox"/> Cement/Concrete			
<input type="checkbox"/> Mudbrick	L:    W:    H:    cm		
<input type="checkbox"/> Fired Brick	L:    W:    H:    cm		
<input type="checkbox"/> Tesserae (Mosaic)	L:    W:    H:    cm		
<input type="checkbox"/> Stone slab or tiles	L:    W:    H:    cm		
<input type="checkbox"/> Crushed Rock/Pebbles	( ≤7.5 cm) _____ %	Not Applicable	Not Applicable
<input type="checkbox"/> Cobble	( 7.6-24.9 cm) _____ %		
<input type="checkbox"/> Stone	(25.0-59.9 cm) _____ %		
<input type="checkbox"/> Boulder	( 60.0+ cm) _____ %		
<input type="checkbox"/> Other:			

**FEATURE LEVELS:**

**PLAN DRAWING (Not to scale):**

Level #*	Opening (Top)	Closing (Bottom)	Diff.	N ____ (Draw in north arrow)
1 ▲				
2 ▲				
3 ▲				
4 ▲				
5 ▲				
6 ▲				
7 ▲				
8 ▲				
9 ▲				
10 ▲				

\*Put these numbers in the appropriate locations in the drawing to the right and use the same numbers for the scaled drawing on graph paper

**NOTES** (To enter additional notes, use the Supervisor Notes form):

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Season	Unit	Feature	Sub-Fea.	BACK
201__		F	FS	FLOOR/SURFACE FEATURE FORM

**INCLUSIONS** (Do not require a bag number):

List All Types of Inclusions
Modern Material: <input type="checkbox"/> No <input type="checkbox"/> Yes

**FEATURE RELATIONSHIPS:**

This Feature:	Feature or Unit/Feature #s (Use unit/feature under "Equals" if the feature is in a different unit)			
Is Under				
Abuts				
Is Over				
Equals				
Cuts				
Is Cut By				

**FINDS** (Require a bag number):

Bag #	Special Find?		Date (ddmmmyy)	Category <sup>1</sup>	Type <sup>2</sup>	Description	# Items <sup>3</sup>	Level (Bottom)	Phase/Dating (Provided by Expert)
	Y/N	Assoc. Bag #							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							

<sup>1</sup> Use only pottery, bone, shell, metal, glass, stone, flora, faience, figurine, building materials, slag, other small finds, or soil samples.

<sup>2</sup> For example, coin, vessel, jewelry, skull, etc.

<sup>3</sup> The # of items in the bag, e.g., 15 bones. For general pottery sherds, enter the number of muktafs rounded to nearest half muktaf, e.g., 1.0 or 1.5.

**PHOTOGRAPHS:**

Photo #	Camera Photo #*	Date (ddmmmyy)	Facing**	Phot. Initials	Description
P					
P					
P					
P					
P					

\*The photograph number in a digital camera or on a camera's removable disk.

\*\*The direction the photographer faced when taking the picture (N, S, E, W, NW, NE, SW, SE, or DOWN (i.e., straight down on an artifact)).

**DRAWINGS:**

Drawing #	Date (ddmmmyy)	Scale	Drawers' Initials	Description
D				
D				

**STRATIGRAPHIC ANALYSIS** (Information provided by expert)

Phase	Dating	Interpretation	Initials

## FLOOR/SURFACE FEATURE FORM

### PURPOSE

The purpose of the Floor/Surface Feature Form is to collect information pertaining to each floor or surface feature. A floor generally is inside a building or structure. A surface generally is outside a building or structure and could be, for example, a stone courtyard or a beaten earth walkway or road.

### INSTRUCTIONS

#### FEATURE IDENTIFICATION:

See the instructions in the section labeled "COMMON DATA."

---

#### FEATURE STATUS:

See the instructions in the section labeled "COMMON DATA."

---

#### FEATURE CHARACTERISTICS:

<b>Feature Type (■ 1):</b>	<input type="checkbox"/> <b>Floor</b> (Interior)	<input type="checkbox"/> <b>Surface</b> (Exterior, e.g., road, walkway, platform)	<input type="checkbox"/> <b>Unknown</b>
<b>Feature Dimensions:</b>	<b>Length (cm) Min:</b>	<b>Max:</b>	<b>Width (cm) Min:</b> <b>Max:</b>

**FEATURE CHARACTERISTICS:** This section pertains to the type of floor/surface and the feature's dimensions.

**Feature Type:** Darken the box indicating whether the feature is a floor or a surface.

**Floor:** Usually inside a building or structure.

**Surface:** Usually outside a building or structure, e.g., a walkway, road, platform.

**Feature Dimensions:** Provide the minimum and maximum length and width of the floor or surface in centimeters.

---

#### REASON FOR NEW FEATURE

<b>Change in Soil (■ all that apply):</b>	<input type="checkbox"/> <b>Color</b>	<input type="checkbox"/> <b>Texture</b>	<input type="checkbox"/> <b>Compaction</b>	<input type="checkbox"/> <b>Contents</b>	<input type="checkbox"/> <b>Not Applicable</b>
<b>Diff. from Prev. Feature Is (■ 1):</b>	<input type="checkbox"/> <b>Distinct</b>	<input type="checkbox"/> <b>Somewhat Distinct</b>	<input type="checkbox"/> <b>Arbitrary</b>	<input type="checkbox"/> <b>Not Applicable</b>	

**REASON FOR NEW FEATURE:** This section allows the unit supervisor to explain the difference between the current feature and the previous one and the clarity in that difference. Darken the boxes for all of the soil changes that apply for the new feature. Also, darken one box to show the clarity of the difference between the features. (*See the Soil Feature Form for a full description.*)

#### Change in Soil:

**Color:** The soil's color(s).

**Texture:** The type of soil.

**Compaction:** The looseness or hardness of soil.

**Contents:** The soil's "inclusions" and "finds."

**Not Applicable:** Darken this box when the feature is surface or cleanup soil or the soil difference is "Arbitrary."

#### Difference from the Previous Feature:

**Distinct:** The difference in the two features is clear.

**Somewhat Distinct:** A difference can be seen, but not clearly.

**Arbitrary:** Sometimes when a feature is very thick, it is best to excavate it in small layers (e.g., about 10 cm) instead of in one huge layer. When this situation occurs, there is no difference in these common layers (features), so the “Arbitrary” box is darkened.

**Not Applicable:** Darken this box when the feature is surface or cleanup soil.

#### FLOOR/SURFACE MATERIAL AND CHARACTERISTICS:

Material (■ all that apply)	Dominant Size	Munsell Color Code	Munsell Description
<input type="checkbox"/> Beaten Earth	Not Applicable		
<input type="checkbox"/> Lime			
<input type="checkbox"/> Plaster			
<input type="checkbox"/> Cement/Concrete			
<input type="checkbox"/> Mudbrick	L:      W:      H:      cm		
<input type="checkbox"/> Fired Brick	L:      W:      H:      cm		
<input type="checkbox"/> Tesserae (Mosaic)	L:      W:      H:      cm		
<input type="checkbox"/> Stone slab or tiles	L:      W:      H:      cm		
<input type="checkbox"/> Crushed Rock/Pebbles	(    <=7.5 cm)      %	Not Applicable	Not Applicable
<input type="checkbox"/> Cobble	(    7.6-24.9 cm)      %		
<input type="checkbox"/> Stone	(    25.0-59.9 cm)      %		
<input type="checkbox"/> Boulder	(    60.0+ cm)      %		
<input type="checkbox"/> Other:			

#### FLOOR/SURFACE MATERIAL AND CHARACTERISTICS:

##### Material:

**Beaten Earth:** A floor or surface that is similar to a soil feature, except it is generally harder and more compact from traffic. Also, it could have on its surface crushed contents, such as, flat lying pottery sherds or bone fragments.

**Lime:** Finely crushed or burned limestone that is not cemented into plaster. Because the ancients sometimes sprinkled it thinly onto their beaten earth surfaces to harden them, lime surfaces often appear as very thin white layers (best seen in balks) that are very easy to dig through.

**Plaster:** Lime that has been cemented into a fairly hard material and is usually thin.

**Cement/Concrete:** Cement or concrete floor or surface.

**Mudbrick:** Mudbricks laid to form a floor or surface.

**Fired Brick:** Fired bricks laid to form a floor or surface.

**Tessera (Mosaic):** Tessera (plural is tesserae) is a small unit of rectangular stone or glass that is used in making a mosaic floor.

**Stone Slab or Tiles:** Thin layers of stone in larger slabs or smaller tiles.

**Crushed Rock/Pebbles:** Crushed rock or pebbles that are less than or equal to 7.5 cm in size.

**Cobbles:** Range in size from 7.6-24.9 cm.

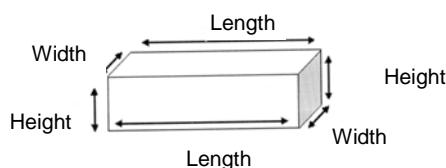
**Stones:** Range in size from 25.0-59.9 cm.

**Boulders:** Range in size from 60.0 cm or more.

**Other:** Another type of floor or surface material. Explain the material in “Notes.”

**Dominant Size:**

**Mudbrick, Fired Brick, Tessera:**



Source: Redrawn after Tassie and Owens, 2010: 217.

**Length:** The typical length in cm.

**Width:** The typical width in cm.

**Height:** The typical thickness in cm.

**Fieldstones:** Determining the precise percentage of the fieldstones that are crushed rock/pebbles, cobbles, stones, and boulders for an entire floor or surface could be time-consuming. So, take a one-square meter segment (or larger, if necessary) that appears to represent the overall floor/surface and determine the percentages of that segment based on visual observation.

**Munsell Color:** For all materials except fieldstones, enter the Munsell color code and description as provided by the *Munsell Soil Color Charts*.

**Code:** After determining the appropriate soil color, enter the color code, which is comprised of the page identifier (e.g., 10YR), the row number (e.g., 5/), and the column number (e.g., /3). The complete code would be 10YR 5/3.

**Description:** Enter the color description for the code, which is found on the left facing page to the color chart page. For example, the description for code 10YR 5/3 is “brown.”

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**FEATURE LEVELS / PLAN DRAWING**

See the instructions in the section labeled “COMMON DATA.”

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**NOTES:**

See the instructions in the section labeled “COMMON DATA.”

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Season	Unit	Feature	Sub-Fea.	BACK	
201__		F	FS	FLOOR/SURFACE FEATURE FORM	

See the instructions in the section labeled “COMMON DATA.”

**INCLUSIONS** (Do not require a bag number):

List All Types of Inclusions
Modern Material: <input type="checkbox"/> No <input type="checkbox"/> Yes

**INCLUSIONS:** "Inclusions" are artifacts that are not taken back to the laboratory, and, therefore, do not require a bag number. They are either left in place or discarded on site. Enter all of the types of inclusions found in this feature/sub-feature.

**Modern Material** -- Darken the appropriate box to indicate whether any modern materials were found in this feature/sub-feature.

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**FEATURE RELATIONSHIPS:**

See the instructions in the section labeled "**COMMON DATA.**"

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**FINDS:**

See the instructions in the section labeled "**COMMON DATA.**"

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**PHOTOGRAPHS:**

See the instructions in the section labeled "**COMMON DATA.**"

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**DRAWINGS:**

See the instructions in the section labeled "**COMMON DATA.**"

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**STRATIGRAPHIC ANALYSIS:**

See the instructions in the section labeled "**COMMON DATA.**"

**NOTE:** *If additional space is needed to enter information on finds, photographs, or drawings, then use the Feature Supplement Form.*

The Tell Timai Project  
INSTALLATION FEATURE FORM

**FEATURE IDENTIFICATION:**

Season (Year)	Unit (Grid-Unit)	Feature	Sub- Feature	Date Opened (ddmmmyy)	Date Closed (ddmmmyy)	Supervisor
201__		F	IS			

**FEATURE STATUS:**

☐ Fully Excavated  
☐ Partially Excavated  
 (Explain in NOTES.)

**INSTALLATION INFORMATION:**

<p><b>Installation Type:</b></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> Pit/Cut  <input type="checkbox"/> Hearth  <input type="checkbox"/> Oven  <input type="checkbox"/> Posthole  <input type="checkbox"/> Well  <input type="checkbox"/> Kiln  <input type="checkbox"/> Drain         </div> <div style="width: 48%;"> <input type="checkbox"/> Ditch  <input type="checkbox"/> Foundation Trench  <input type="checkbox"/> Robber Trench  <input type="checkbox"/> Silo  <input type="checkbox"/> Cistern  <input type="checkbox"/> Reservoir  <input type="checkbox"/> Other: _____         </div> </div> <p><b>Construction Material:</b></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> None  <input type="checkbox"/> Mud  <input type="checkbox"/> Mudbrick  <input type="checkbox"/> Fired Brick         </div> <div style="width: 48%;"> <input type="checkbox"/> Ceramic  <input type="checkbox"/> Stone  <input type="checkbox"/> Plaster  <input type="checkbox"/> Other: _____         </div> </div> <p><b>Lining:</b></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> None  <input type="checkbox"/> Mud  <input type="checkbox"/> Mudbrick  <input type="checkbox"/> Fired Brick  <input type="checkbox"/> Cement         </div> <div style="width: 48%;"> <input type="checkbox"/> Ceramic  <input type="checkbox"/> Stone  <input type="checkbox"/> Plaster  <input type="checkbox"/> Other: _____         </div> </div>	<p><b>Basic Shape at Top</b> (in plan view):</p> <input type="checkbox"/> Linear, <input type="checkbox"/> Curvilinear, <input type="checkbox"/> Rectangular, <input type="checkbox"/> Triangular, <input type="checkbox"/> Circular, <input type="checkbox"/> Semi-circular, <input type="checkbox"/> Oval, <input type="checkbox"/> Irregular, <input type="checkbox"/> Other: _____
<p><b>Dimensions</b> (of those that apply in meters):            Length: _____ Width: _____ Height: _____            Depth: _____ Diameter: _____            Construction/Lining Thickness: _____</p>	
<p><b>Sides:</b>  <input type="checkbox"/> Vertical, <input type="checkbox"/> Undercut, <input type="checkbox"/> Sloped, <input type="checkbox"/> Rounded,  <input type="checkbox"/> Other: _____</p>	
<p><b>Orientation</b> (if not circular):  <input type="checkbox"/> N/S, <input type="checkbox"/> E/W, <input type="checkbox"/> NE/SW, <input type="checkbox"/> NW/SE</p>	
<p><b>If Made of or Lined With Bricks/Blocks:</b>  <b>Dimensions (cm) of average brick/block:</b>            Length: _____ Width: _____ Height: _____  <b># of Existing Courses:</b> _____</p>	

**FEATURE LEVELS:**

**PLAN DRAWING** (Not to scale):

Level #*	Opening (Top)	Closing (Bottom)	Diff.	
1 ^				N ____ (Draw in north arrow)
2 ^				
3 ^				
4 ^				
5 ^				
6 ^				
7 ^				
8 ^				
9 ^				
10 ^				

\*Put these numbers in the appropriate locations in the drawing to the right and use the same numbers for the scaled drawing on graph paper.

**NOTES** (To enter additional notes, use the Supervisor Notes form):

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Season	Unit	Feature	Sub-Fea.	BACK	
201__		F	IS	INSTALLATION FEATURE FORM	

INSTALLATION FEATURE RELATIONSHIPS					NON-INSTALLATION FEATURE RELATIONSHIPS				
Relationship	Feature # or Unit/Feature #				This Feature:	Feature Numbers			
Soil (Fill)					Is Under				
					Abuts				
					Is Over				
Extends into Abutting Unit(s) as Feature(s)					Cuts				
					Is Cut By				

**FINDS** (Require a bag number):

Bag #	Special Find? Y/N	Assoc. Bag #	Date (ddmmmyy)	Category <sup>1</sup>	Type <sup>2</sup>	Description	# Items <sup>3</sup>	Level (Bottom)	Phase/Dating (Provided by Expert)
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							

<sup>1</sup> Use only pottery, bone, shell, metal, glass, stone, flora, faience, figurine, building materials, slag, other small finds, or soil samples.

<sup>2</sup> For example, coin, vessel, jewelry, skull, etc.

<sup>3</sup> The # of items in the bag, e.g., 15 bones. For general pottery sherds, enter the number of muktafs rounded to nearest half muktaf, e.g., 1.0 or 1.5.

**PHOTOGRAPHS:**

Photo #	Camera Photo #*	Date (ddmmmyy)	Facing**	Phot. Initials	Description
P					
P					
P					
P					
P					

\*The photograph number in a digital camera or on a camera's removable disk.

\*\*The direction the photographer faced when taking the picture (N, S, E, W, NW, NE, SW, SE, or DOWN (i.e., straight down on an artifact)).

**DRAWINGS:**

Drawing #	Date (ddmmmyy)	Scale	Drawers' Initials	Description
D				
D				

**STRATIGRAPHIC ANALYSIS (Information provided by expert)**

Phase	Dating	Interpretation	Initials

## INSTALLATION FEATURE FORM

### PURPOSE

The purpose of the Installation Feature Form is to collect information pertaining to installations, such as, a pit, kiln, drain, hearth, oven, well, or ditch.

### INSTRUCTIONS

#### FEATURE IDENTIFICATION:

See the instructions in the section labeled "COMMON DATA."

#### FEATURE STATUS:

See the instructions in the section labeled "COMMON DATA."

#### INSTALLATION INFORMATION:

<b>Installation Type:</b> <input type="checkbox"/> Pit/Cut <input type="checkbox"/> Hearth <input type="checkbox"/> Oven <input type="checkbox"/> Posthole <input type="checkbox"/> Well <input type="checkbox"/> Kiln <input type="checkbox"/> Drain  <b>Construction Material:</b> <input type="checkbox"/> None <input type="checkbox"/> Mud <input type="checkbox"/> Mudbrick <input type="checkbox"/> Fired Brick  <b>Lining:</b> <input type="checkbox"/> None <input type="checkbox"/> Mud <input type="checkbox"/> Mudbrick <input type="checkbox"/> Fired Brick <input type="checkbox"/> Cement	<input type="checkbox"/> Ditch <input type="checkbox"/> Foundation Trench <input type="checkbox"/> Robber Trench <input type="checkbox"/> Silo <input type="checkbox"/> Cistern <input type="checkbox"/> Reservoir <input type="checkbox"/> Other: _____  <input type="checkbox"/> Ceramic <input type="checkbox"/> Stone <input type="checkbox"/> Plaster <input type="checkbox"/> Other: _____	<b>Basic Shape at Top</b> (in plan view): <input type="checkbox"/> Linear, <input type="checkbox"/> Curvilinear, <input type="checkbox"/> Rectangular, <input type="checkbox"/> Triangular, <input type="checkbox"/> Circular, <input type="checkbox"/> Semi-circular, <input type="checkbox"/> Oval, <input type="checkbox"/> Irregular, <input type="checkbox"/> Other: _____  <b>Dimensions</b> (of those that apply in meters): Length: _____ Width: _____ Height: _____ Depth: _____ Diameter: _____ Construction/Lining Thickness: _____  <b>Sides:</b> <input type="checkbox"/> Vertical, <input type="checkbox"/> Undercut, <input type="checkbox"/> Sloped, <input type="checkbox"/> Rounded, <input type="checkbox"/> Other: _____  <b>Orientation</b> (if not circular): <input type="checkbox"/> N/S, <input type="checkbox"/> E/W, <input type="checkbox"/> NE/SW, <input type="checkbox"/> NW/SE  <b>If Made of or Lined With Bricks/Blocks:</b> <b>Dimensions (cm) of average brick/block:</b> Length: _____ Width: _____ Height: _____  <b># of Existing Courses:</b> _____
--	---	--

**INSTALLATION INFORMATION:** Enter the requested information on the installation.

#### Installation Type:

**Pit/Cut:** A hole dug into the surface or floor.

**Hearth:** A place where a fire was made. The spot usually has burnt soil and might be lined with rocks.

**Oven:** Frequently, cooking is done in ceramic cooking pots that typically have rounded bottoms. These are vessels and not installations. However, other times much larger cooking devices, ovens, are used and are made of clay or clay and pottery sherds

**Posthole:** The location where a wooden post once stood.

**Well:** Usually a round hole dug into the surface to retrieve water and usually lined, for example, with fired bricks.

**Kiln:** A place where high temperatures were reached to fire pottery or bricks or to make glass, faience, or lime.



**Drain:** A channel by which water is (1) drawn off or (2) distributed. This could be a small channel dug under a building and possibly lined to drain water from the building. Or, it could be an elaborate fired brick-lined channel for distributing water from its source to other places.

**Ditch:** A long narrow trench or furrow dug in the ground.

**Foundation Trench:** A ditch dug into the ground and made level into which the foundation to a wall is placed.

**Robber Trench:** A ditch, usually a foundation trench, from which the materials comprising the foundation or wall have been removed for use elsewhere.

**Silo:** An underground space for storing grain.

**Cistern:** A natural or artificial receptacle for holding water.

**Reservoir:** A natural or artificial pond or lake used for the storage and regulation of water.

**Other:** Any other type of installation not listed above.

### Construction Material and Lining:

**None:** The installation does not contain any construction material or lining.

**Mud:** Mud used to construct or line the installation.

**Mudbrick:** Mudbricks used to construct or line the installation.

**Fired Brick:** Fired bricks used to construct or line the installation.

**Stone:** Any natural rocks used to construct or line the installation.

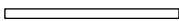
**Ceramic:** Any type of ceramic (pottery or tiles) used to construct or line the installation.


**Plaster:** Plaster used to construct or line the installation.

**Cement:** Cement used to construct or line the installation.


**Other:** Any other type of construction material or lining not listed above.

### Basic Shape at Top (in plan/bird's eye view):

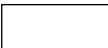
**Linear:** 

**Circular:** 

**Semi- Circular:** 

**Curvilinear:** 

**Oval:** 

**Rectangular:** 

**Triangular:** 

**Irregular:** Not symmetrical.

**Other:** Any shape not listed.

### Dimensions (of those that apply in meters):

**Length**

**Width**

**Height** (if completely above ground)

**Depth** (if completely or partially in the ground, for example, a well)

**Construction/Lining Thickness**

**Diameter** (if circular)

### Sides:

**Vertical:** 

**Rounded:** 

**Undercut:** 

**Sloped:** 

**Other:** Any other angle not listed.

**Orientation** (if not circular):

Darken the appropriate box: **N/S, E/W, NE/SW, NW/SE**

**Dimensions of Average Brick/Block:**

If the installation is made of or lined with bricks or blocks, then enter in centimeters the length, width, and height of the average brick or block.

**# of Existing Courses:**

Enter the number of existing courses if the installation is made of bricks or blocks.

**FEATURE LEVELS / PLAN DRAWING:**

See the instructions in the section labeled "**COMMON DATA.**"

**NOTES:**

See the instructions in the section labeled "**COMMON DATA.**"

Season	Unit	Feature	Sub-Fea.	<b>BACK</b>			
201__		F	IS	<b>INSTALLATION FEATURE FORM</b>			

See the instructions in the section labeled "**COMMON DATA.**"

**INSTALLATION FEATURE RELATIONSHIPS****NON-INSTALLATION FEATURE RELATIONSHIPS**

Relationship	Feature # or Unit/Feature #				This Feature:	Feature Numbers			
Soil (Fill)					Is Under				
					Abuts				
					Is Over				
Extends into Abutting Unit(s) as Feature(s)					Cuts				
					Is Cut By				

**INSTALLATION FEATURE RELATIONSHIPS:** Pertains to features and sub-features that have a direct connection to the installation. Not all possible relationships are provided below because they could be many depending on the type of installation. A soil sub-feature is common to many of them.

**Relationship:**

**Soil (Fill):** The sub-feature that pertains to the soil inside the installation, if any.

**Extends into Abutting Unit(s) as Feature(s):** If the installation extends into an abutting unit(s), then enter the unit/feature number(s) for that unit(s). If the abutting unit has not yet been excavated and the installation feature number is not known, then enter the unit number and a question mark (?) for the feature number until the real number becomes known.

**Feature # or Unit/Feature #:** If the relevant feature is within the unit being excavated, then enter only the feature/sub-feature number. If, however, the relevant feature is in an abutting unit, then enter the unit and feature number.

**NON-INSTALLATION FEATURE RELATIONSHIPS:**

See the instructions for "**FEATURE RELATIONSHIPS**" in the section labeled "**COMMON DATA.**"

**FINDS:**

See the instructions in the section labeled "**COMMON DATA.**"

**PHOTOGRAPHS:**

See the instructions in the section labeled "**COMMON DATA.**"

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**DRAWINGS:**

See the instructions in the section labeled "**COMMON DATA.**"

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**STRATIGRAPHIC ANALYSIS:**

See the instructions in the section labeled "**COMMON DATA.**"

***NOTE: If additional space is needed to enter information on finds, photographs, or drawings, then use the Feature Supplement Form.***

The Tell Timai Project  
**INTERMENT FEATURE FORM**

**FEATURE IDENTIFICATION:**

Season (Year)	Unit (Grid-Unit)	Feature	Sub- Feature	Date Opened (ddmmmyy)	Date Closed (ddmmmyy)	Supervisor
201__		F	IT			

**FEATURE STATUS:**

- ☐ Fully Excavated  
☐ Partially Excavated  
(Explain in NOTES.)

**INTERMENT INFORMATION:**

**INTERMENT TYPE:**

**Simple Grave:**

- ☐ Unlined  
☐ Lined with mudbrick  
☐ Lined with organic material (e.g., reed, papyrus)  
☐ Lined with stone  
☐ Other \_\_\_\_\_

**Tomb**

- ☐ Chamber (Stone tomb with access from side)  
☐ Shaft (Elongated entrance to chamber)  
☐ Catacomb  
☐ Mausoleum (Building above ground)  
☐ Other \_\_\_\_\_

**INTERMENT CONTAINS HUMAN REMAINS?**

- ☐ Skeleton(s): # \_\_\_\_\_  
☐ Cremation(s): # \_\_\_\_\_  
☐ None

**CONTAINER(S) INFORMATION:**

**NUMBER AND TYPE OF CONTAINER(S):**

# Type(s):

- \_\_\_\_ A. Wooden Coffin  
\_\_\_\_ B. Slipper Coffin (Ceramic)  
\_\_\_\_ C. Sarcophagus (Stone, for corpse)  
\_\_\_\_ D. Jar (Ceramic, for remains)  
\_\_\_\_ E. Urn (For cremated ashes)  
\_\_\_\_ F. Cartonnage (Plastered linen or papyrus)  
\_\_\_\_ G. Matting (Reed usually)  
\_\_\_\_ H. Other \_\_\_\_\_

(Use the Type letter from above in the left columns below.)

**Container Size (cm)(length, width, height, diameter):**

\_\_\_\_ L: \_\_\_\_\_ W: \_\_\_\_\_ H: \_\_\_\_\_ D: \_\_\_\_\_  
\_\_\_\_ L: \_\_\_\_\_ W: \_\_\_\_\_ H: \_\_\_\_\_ D: \_\_\_\_\_  
\_\_\_\_ L: \_\_\_\_\_ W: \_\_\_\_\_ H: \_\_\_\_\_ D: \_\_\_\_\_

**Container Orientation(s):**

- \_\_\_\_ ☐ N/S, ☐ E/W, ☐ NE/SW, ☐ NW/SE, ☐ NA  
\_\_\_\_ ☐ N/S, ☐ E/W, ☐ NE/SW, ☐ NW/SE, ☐ NA  
\_\_\_\_ ☐ N/S, ☐ E/W, ☐ NE/SW, ☐ NW/SE, ☐ NA

**FEATURE LEVELS:**

**PLAN DRAWING (Not to scale):**

Level #*	Opening (Top)	Closing (Bottom)	Diff.	N ____ (Draw in north arrow)
1 ^				
2 ^				
3 ^				
4 ^				
5 ^				
6 ^				
7 ^				
8 ^				
9 ^				
10 ^				

\*Put these numbers in the appropriate locations in the drawing to the right and use the same numbers for the scaled drawing on graph paper.

**NOTES** (To enter additional notes, use the Supervisor Notes form):

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Season	Unit	Feature	Sub-Fea.	BACK
201__		F	IT	INTERMENT FEATURE FORM

**INTERMENT FEATURE RELATIONSHIPS**

Relationship	Feature # or Unit/Feature #				This Feature:	Feature Numbers			
Skeleton(s)					Is Under				
Soil(s)					Abuts				
					Is Over				
Extends into Abutting Unit(s) as Feature(s)					Cuts				
					Is Cut By				

**NON-INTERMENT FEATURE RELATIONSHIPS**
**FINDS** (Require a bag number):

Bag #	Special Find?	Date (ddmmmyy)	Category <sup>1</sup>	Type <sup>2</sup>	Description	# Items <sup>3</sup>	Level (Bottom)	Phase/Dating (Provided by Expert)
B								
B								
B								
B								
B								
B								
B								
B								
B								
B								
B								
B								
B								
B								
B								
B								
B								
B								
B								
B								

<sup>1</sup> Use only pottery, bone, shell, metal, glass, stone, flora, faience, figurine, building materials, slag, other small finds, or soil samples.

<sup>2</sup> For example, coin, vessel, jewelry, skull, etc.

<sup>3</sup> The # of items in the bag, e.g., 15 bones. For general pottery sherds, enter the number of muktafs rounded to nearest half muktaf, e.g., 1.0 or 1.5.

**PHOTOGRAPHS:**

Photo #	Camera Photo #*	Date (ddmmmyy)	Facing**	Phot. Initials	Description
P					
P					
P					
P					
P					

\*The photograph number in a digital camera or on a camera's removable disk.

\*\*The direction the photographer faced when taking the picture (N, S, E, W, NW, NE, SW, SE, or DOWN (i.e., straight down on an artifact)).

**DRAWINGS:**

Drawing #	Date (ddmmmyy)	Scale	Drawers' Initials	Description
D				
D				

**STRATIGRAPHIC ANALYSIS** (Information provided by expert)

Phase	Dating	Interpretation	Initials

## INTERMENT FEATURE FORM

### **PURPOSE**

The purpose of the Interment Feature Form is to collect information pertaining to in-ground and above-ground graves and tombs.

### **INSTRUCTIONS**

#### **FEATURE IDENTIFICATION:**

See the instructions in the section labeled "COMMON DATA."

#### **FEATURE STATUS:**

See the instructions in the section labeled "COMMON DATA."

#### **INTERMENT INFORMATION:**

##### **INTERMENT TYPE:**

##### **Simple Grave:**

- ☐ **Unlined**
- ☐ **Lined with mudbrick**
- ☐ **Lined with organic material** (e.g., reed, papyrus)
- ☐ **Lined with stone**
- ☐ **Other** \_\_\_\_\_

##### **Tomb**

- ☐ **Chamber** (Stone tomb with access from side)
- ☐ **Shaft** (Elongated entrance to chamber )
- ☐ **Catacomb**
- ☐ **Mausoleum** (Building above ground)
- ☐ **Other** \_\_\_\_\_

##### **INTERMENT CONTAINS HUMAN REMAINS?**

- ☐ **Skeleton(s): #** \_\_\_\_\_
- ☐ **Cremation(s): #** \_\_\_\_\_
- ☐ **None**

#### **CONTAINER(S) INFORMATION:**

##### **NUMBER AND TYPE OF CONTAINER(S):**

##### **# Type(s):**

- \_\_\_\_ **A. Wooden Coffin**
- \_\_\_\_ **B. Slipper Coffin** (Ceramic)
- \_\_\_\_ **C. Sarcophagus** (Stone, for corpse)
- \_\_\_\_ **D. Jar** (Ceramic, for remains)
- \_\_\_\_ **E. Urn** (For cremated ashes)
- \_\_\_\_ **F. Cartonnage** (Plastered linen or papyrus)
- \_\_\_\_ **G. Matting** (Reed usually)
- \_\_\_\_ **H. Other** \_\_\_\_\_

**(Use the Type letter from above in the left columns below.)**

##### **Container Size (cm)(length, width, height, diameter):**

\_\_\_\_ **L:** \_\_\_\_\_ **W:** \_\_\_\_\_ **H:** \_\_\_\_\_ **D:** \_\_\_\_\_  
 \_\_\_\_ **L:** \_\_\_\_\_ **W:** \_\_\_\_\_ **H:** \_\_\_\_\_ **D:** \_\_\_\_\_  
 \_\_\_\_ **L:** \_\_\_\_\_ **W:** \_\_\_\_\_ **H:** \_\_\_\_\_ **D:** \_\_\_\_\_

##### **Container Orientation(s):**

\_\_\_\_ ☐ **N/S,** ☐ **E/W,** ☐ **NE/SW,** ☐ **NW/SE,** ☐ **NA**  
 \_\_\_\_ ☐ **N/S,** ☐ **E/W,** ☐ **NE/SW,** ☐ **NW/SE,** ☐ **NA**  
 \_\_\_\_ ☐ **N/S,** ☐ **E/W,** ☐ **NE/SW,** ☐ **NW/SE,** ☐ **NA**

#### **INTERMENT INFORMATION--INTERMENT TYPE:**

##### **Simple Grave:**

**Unlined:** A grave dug into the ground that has no lining on its edges.

**Lined with mudbrick:** A grave that has edges lined with mudbrick.

**Lined with organic material:** A grave that has edges lined with organic material, such as, reed or papyrus.

**Lined with stone:** A grave that has edges lined with stone.

**Other:** Any other type of simple grave or a simple grave lined with something other than what is listed.

##### **Tomb:**

**Chamber:** A stone tomb with access from the side.

**Shaft** (Shaft and Chamber): A chamber tomb with an elongated shaft entrance.

**Catacomb:** An underground tunnel with recesses where bodies were buried.

**Mausoleum:** A building or room above ground.

**Other:** Any other type of tomb than what is listed.

## INTERMENT CONTAINS HUMAN REMAINS?

**Skeleton(s):** Darken the box if the grave contains skeletons and enter the number of them.

**Cremation(s):** Darken the box if the grave contains cremations and enter the number them.

**None:** Darken the box if the grave does not contain any human remains.

## CONTAINER(S) INFORMATION--NUMBER AND TYPE OF CONTAINER(S):

### Type(s):

**Wooden Coffin:** A coffin made of wood.

**Slipper Coffin:** A ceramic coffin made of one piece with an opening at the "head" end where the body was slid into the coffin. The opening was then closed with a cover that often was decorated with a face.

**Sarcophagus:** A stone or terra cotta coffin into which a body was placed.

**Jar:** A ceramic vessel into which the remains of the deceased, as opposed to the body, were placed.

**Urn:** A container for holding cremated ashes.

**Cartonnage:** A body covering made of layers of linen or papyrus covered with plaster.

**Matting:** A body covering made of matting, usually reed.

**Other:** Any other type of interment container not listed above.

### Container Size(s) (in meters):

Enter the length, width, height, and diameter, as relevant, of each container or type of container, if all of the containers within a type have the same basic dimensions.

### Container Orientation(s):

Enter the orientation of each container or type of container, if all of the containers within a type have the same orientation.

## ENTERING CONTAINER INFORMATION:

The container information box is setup to record information on a variety of container types. The first segment of the box has three parts: (1) a listing of container types, (2) a one-letter designation for each type for use in the other segments, and (3) the number of containers within each type. The example in the box below has an interment with 2 slipper coffins, 1 sarcophagus, and 2 urns. (This is an example for completing the box, so please do not worry about the unlikeliness of the container combinations, sizes, or orientations.)

### NUMBER AND TYPE OF CONTAINER(S):

#### # Type(s):

\_\_\_ **A. Wooden Coffin**

2 **B. Slipper Coffin** (Ceramic)

1 **C. Sarcophagus** (Stone, for corpse)

\_\_\_ **D. Jar** (Ceramic, for remains)

2 **E. Urn** (For cremated ashes)

\_\_\_ **F. Cartonnage** (Plastered linen or papyrus)

\_\_\_ **G. Matting** (Reed usually)

\_\_\_ **H. Other** \_\_\_\_\_

(Use the Type letter from above in the left columns below.)

#### Container Size (cm)(length, width, height, diameter):

B **L:** 160 **W:** 76 **H:** 41 **D:** \_\_\_\_\_

C **L:** 170 **W:** 80 **H:** 110 **D:** \_\_\_\_\_

E **L:** \_\_\_\_\_ **W:** 20 **H:** 26 **D:** 10

#### Container Orientation(s):

B ☒ **N/S**, ☐ **E/W**, ☐ **NE/SW**, ☐ **NW/SE**, ☐ **NA**

C ☐ **N/S**, ☒ **E/W**, ☐ **NE/SW**, ☐ **NW/SE**, ☐ **NA**

E ☐ **N/S**, ☐ **E/W**, ☐ **NE/SW**, ☐ **NW/SE**, ☒ **NA**

The second segment of the box pertains to the container size(s). Enter the one-letter designation for the appropriate container type(s) from the previous segment in the spaces on the left. Then enter the relevant dimensions of the container in centimeters. The diameter is used for round containers, such as, jars and urns. In the example above, the two slipper coffins were similar in size, 160cm long, 76cm wide, and 41cm high.

The sarcophagus was 170cm long, 80cm wide, and 110cm high. The urn, being a small, round container with a body wider than the mouth was 20cm wide at the body (which is also the body diameter), 26cm high, and with a mouth diameter of 10cm.

Suppose, now, that the only containers were the two slipper coffins, and they were of different sizes. The data would be entered as follows:

**Container Size** (cm)(length, width, height, diameter):

**B** L: 160 W: 76 H: 41 D: \_\_\_\_\_  
**B** L: 100 W: 60 H: 30 D: \_\_\_\_\_

If the space allotted for container sizes is insufficient for the number of containers, then write the other sizes in the "Notes" section of the form.

The third segment of the box pertains to the container(s) orientation. Enter the one-letter container type in the spaces on the left and darken the correct orientation. "NA" stands for "not applicable" and is used for round containers, such as, jars and urns that have no orientation.

### FEATURE LEVELS / PLAN DRAWING

See the instructions in the section labeled "**COMMON DATA.**"

### NOTES:

See the instructions in the section labeled "**COMMON DATA.**"

Season	Unit	Feature	Sub-Fea.	<b>BACK</b>			
201__		F	IT	<b>INTERMENT FEATURE FORM</b>			

See the instructions in the section labeled "**COMMON DATA.**"

### INTERMENT FEATURE RELATIONSHIPS

### NON-INTERMENT FEATURE RELATIONSHIPS

Relationship	Feature # or Unit/Feature #				This Feature:	Feature Numbers			
<b>Skeleton(s)</b>					<b>Is Under</b>				
<b>Soil(s)</b>					<b>Abuts</b>				
					<b>Is Over</b>				
<b>Extends into Abutting Unit(s) as Feature(s)</b>					<b>Cuts</b>				
					<b>Is Cut By</b>				

**INTERMENT FEATURE RELATIONSHIPS:** Pertains to features and sub-features that have a direct connection to the interment.

#### Relationship:

**Skeleton(s):** The sub-features of skeletons inside the interment, if any.

**Soil(s):** The sub-feature that pertains to the soil inside the interment.

**Extends into Abutting Unit(s) as Feature(s):** If the interment extends into an abutting unit(s), then enter the unit/feature number(s) for that unit(s). If the abutting unit has not yet been excavated and the interment feature number is not known, then enter the unit number and a question mark (?) for the feature number until the real number becomes known.

**Feature # or Unit/Feature #:** If the relevant feature is within the unit being excavated, then enter only the feature number. If, however, the relevant feature is in an abutting unit, then enter the unit and feature number.



**NON-INTERMENT FEATURE RELATIONSHIPS:**

See the instructions for “**FEATURE RELATIONSHIPS**” in the section labeled “**COMMON DATA.**”

---

**FINDS:**

See the instructions in the section labeled “**COMMON DATA.**”

---

**PHOTOGRAPHS:**

See the instructions in the section labeled “**COMMON DATA.**”

---

**DRAWINGS:**

See the instructions in the section labeled “**COMMON DATA.**”

---

**STRATIGRAPHIC ANALYSIS:**

See the instructions in the section labeled “**COMMON DATA.**”

***NOTE: If additional space is needed to enter information on finds, photographs, or drawings, then use the Feature Supplement Form.***

The Tell Timai Project  
HUMAN SKELETON FEATURE FORM

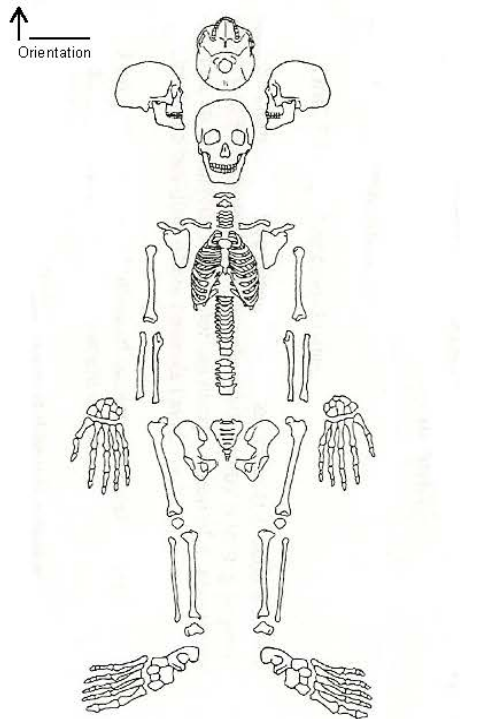
**FEATURE IDENTIFICATION:**

Season (Year)	Unit (Grid-Unit)	Feature	Sub- Feature	Date Opened (ddmmmyy)	Date Closed (ddmmmyy)	Supervisor
201__		F	SK			

**FEATURE STATUS:**

☐ Fully Excavated  
☐ Partially Excavated  
 (Explain in NOTES.)

**SKELETON BONES** (Show bones found in red):



↑  
Orientation

# Teeth Found: \_\_\_\_\_

**SKELETON INFORMATION:**

**ARTICULATION (# 1):**  
☐ Completely Articulated (bones touch and connect)  
☐ Partially Articulated  
☐ Completely Disarticulated  
☐ Isolated Bones or Fragments

**DIMENSIONS:**  
 Length : \_\_\_\_\_ cm (longest point--end to end)  
 Width : \_\_\_\_\_ cm (widest point--side to side)  
 Thickness: \_\_\_\_\_ cm (thickest point--top to bottom)

**ORIENTATION (# 1 of each):**  
 Body: ☐ N, ☐ S, ☐ E, ☐ W, ☐ NE, ☐ NW, ☐ SE, ☐ SW, ☐ Other  
 Face : ☐ Left, ☐ Right, ☐ Up, ☐ Down, ☐ Forward, ☐ Other, ☐ Unk

**BODY POSITION (# 1):**  
☐ Supine (Lying on back)  
☐ Prone (Lying on front)  
☐ Left Side (Lying on left side)  
☐ Right Side (Lying on right side)  
☐ Crouched (Sitting with legs bent up to chin)  
☐ Other (specify) \_\_\_\_\_

**LEG POSITION (# 1):**  
☐ Extended (Legs and spine in straight line)  
☐ Flexed (Legs bent up towards chin or under body)

**BONE CONDITION:**  
 # Bones Intact: \_\_\_\_\_  
 # Bones Broken: \_\_\_\_\_

**FEATURE LEVELS:**

**PLAN DRAWING** (Not to scale):

Level #*	Opening (Top)	Closing (Bottom)	Diff.
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

N \_\_\_\_ (Draw in north arrow)

\*Put these numbers in the appropriate locations in the drawing to the right and use the same numbers for the scaled drawing on graph paper.

**NOTES:** Write notes on the Supervisor Notes form.

Season	Unit	Feature	Sub-Fea.	BACK
201__		F	SK	HUMAN SKELETON FEATURE FORM

#### SKELETAL FEATURE RELATIONSHIPS

#### NON-SKELETAL FEATURE RELATIONSHIPS

Relationship	Feature # or Unit/Feature #				This Feature:	Feature Numbers			
Other Skeleton(s)					Is Under				
Soil(s)					Abuts				
					Is Over				
Extends into Abutting Unit(s) as Feature(s)					Cuts				
					Is Cut By				

#### FINDS (Require a bag number):

Bag #	Special Find? Y/N	Assoc. Bag #	Date (ddmmmyy)	Category <sup>1</sup>	Type <sup>2</sup>	Description	# Items <sup>3</sup>	Level (Bottom)	Phase/Dating (Provided by Expert)
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							
B		B							

<sup>1</sup> Use only pottery, bone, shell, metal, glass, stone, flora, faience, figurine, building materials, slag, other small finds, or soil samples.

<sup>2</sup> For example, coin, vessel, jewelry, skull, etc.

<sup>3</sup> The # of items in the bag, e.g., 15 bones. For general pottery sherds, enter the number of muktafs rounded to nearest half muktaf, e.g., 1.0 or 1.5.

#### PHOTOGRAPHS:

Photo #	Camera Photo #*	Date (ddmmmyy)	Facing**	Phot. Initials	Description
P					
P					
P					
P					
P					

\*The photograph number in a digital camera or on a camera's removable disk.

\*\*The direction the photographer faced when taking the picture (N, S, E, W, NW, NE, SW, SE, or DOWN (i.e., straight down on an artifact)).

#### DRAWINGS:

Drawing #	Date (ddmmmyy)	Scale	Drawers' Initials	Description
D				
D				

#### ANALYSIS (Information provided by bone and dating experts)

Factors	Summary of Expert's Analysis:
Phase:	
Dating:	
Expert's Initials:	

# HUMAN SKELETON FEATURE FORM

## PURPOSE

The purpose of the Human Skeleton Feature Form is to collect information pertaining to articulated (connected) or disarticulated (not connected) human skeletons or isolated bones or fragments.

## INSTRUCTIONS

### FEATURE IDENTIFICATION:

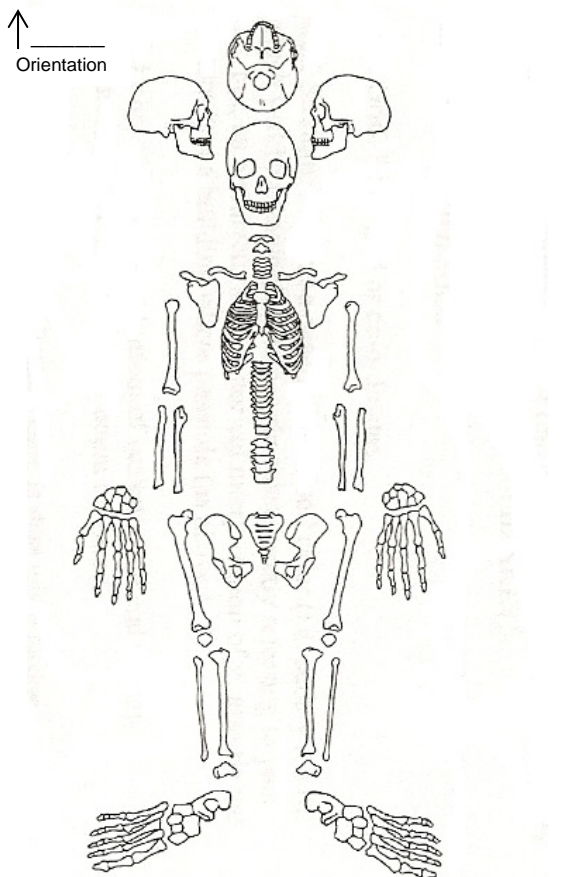
See the instructions in the section labeled "COMMON DATA."

### FEATURE STATUS:

See the instructions in the section labeled "COMMON DATA."

### SKELETON BONES (Show bones found in red):

### SKELETON INFORMATION:

 <p># Teeth Found: _____</p>	<b>ARTICULATION (■ 1):</b> <input type="checkbox"/> Completely Articulated (bones touch and connect) <input type="checkbox"/> Partially Articulated <input type="checkbox"/> Completely Disarticulated <input type="checkbox"/> Isolated Bones or Fragments
	<b>DIMENSIONS:</b> <b>Length</b> : _____ cm (longest point--end to end) <b>Width</b> : _____ cm (widest point--side to side) <b>Thickness:</b> _____ cm (thickest point--top to bottom)
	<b>ORIENTATION (■ 1 of each):</b> <b>Body:</b> <input type="checkbox"/> N, <input type="checkbox"/> S, <input type="checkbox"/> E, <input type="checkbox"/> W, <input type="checkbox"/> NE, <input type="checkbox"/> NW, <input type="checkbox"/> SE, <input type="checkbox"/> SW, <input type="checkbox"/> Other <b>Face:</b> <input type="checkbox"/> Left, <input type="checkbox"/> Right, <input type="checkbox"/> Up, <input type="checkbox"/> Down, <input type="checkbox"/> Forward, <input type="checkbox"/> Other, <input type="checkbox"/> Unk
	<b>BODY POSITION (■ 1):</b> <input type="checkbox"/> Supine (Lying on back) <input type="checkbox"/> Prone (Lying on front) <input type="checkbox"/> Left Side (Lying on left side) <input type="checkbox"/> Right Side (Lying on right side) <input type="checkbox"/> Crouched (Sitting with legs bent up to chin) <input type="checkbox"/> Other (specify) _____
	<b>LEG POSITION (■ 1):</b> <input type="checkbox"/> Extended (Legs and spine in straight line) <input type="checkbox"/> Flexed (Legs bent up towards chin or under body)
<b>BONE CONDITION:</b> <b># Bones Intact:</b> _____ <b># Bones Broken:</b> _____	

### SKELETON BONES:

Using a red pen or pencil, if available, color in the bones that were found, if they are recognizable.

Next to the skull, enter the compass orientation of the skeleton. The orientation is decided by the length of the body (feet to head) with the skull as pointer. For example, the orientation is north if the skeleton is in a north/south direction with the skull on the north end.

Enter the number of teeth found.

## SKELETON INFORMATION:

**ARTICULATION:** Darken the box that best describes whether the bones are **completely articulated** (all of the bones touch and connect), **partially articulated** (some of the bones touch and are connected, but others are not), **completely disarticulated** (none of the bones touch or are connected), or there are only **isolated bones** or **bone fragments**.

**DIMENSIONS:** Enter in centimeters the skeleton's **length** (e.g., from the top of the head to the bottom of the feet, if supine or prone), **width** at the widest point side to side (e.g., shoulder to shoulder, if supine or prone), and **thickness** at the thickest point (e.g., from the ground or container bottom upwards, if supine or prone). To determine the dimensions of a skeleton lying on its side, see the example below.

**ORIENTATION:** Darken the box to show the orientation of the body and the skull. The body orientation is somewhat redundant with the orientation arrow in the left hand box. The arrow is used for a quick view of the skeleton. The boxes for darkening are used because one more option is offered--"Other," which is used when the bones are placed disarticulated into a jar or the skeleton is upright. In both instances, the body has no orientation.

With the body compass orientation known, the skull direction simply is whether it is facing left, right, up, or down. These choices are used primarily, but not always, when the skeleton is horizontal on the ground or in a container. The "Forward" choice is used when the skeleton is lying on its side or crouched and the face direction is the same as the body. The "Other" choice is used for any other face direction. The "Unknown" option could be used if the skeleton is partially or completely disarticulated or the skull is missing.

**BODY POSITION:** Darken the appropriate box to show that the skeleton's position is

**Supine:** Lying flat on its back.

**Prone:** Lying flat on its front

**Left Side:** Lying in a fetal-like position on its left side.

**Right Side:** Lying in a fetal-like position on its right side.

**Crouched:** Sitting with its legs bent up to its chin, as in a vertical container.

**Other:** Any other position not listed above.

**LEG POSITION:**

**Extended:** Legs and spine are in a straight line (usually when the body is in supine or prone position).

**Flexed:** Legs are bent up towards the chin or under the body (usually when the body is on its side or crouched).

**BONE CONDITION:** Enter the number of bones that are **intact** and the number that are **broken**, to the extent possible.

## EXAMPLE:

A separate Human Skeleton Feature Form is completed for each skeleton. The SKELETON INFORMATION box below provides information on the first skeleton (SK001).



Graphic after Martha Joukowsky, 1980: 190.

### SKELETON INFORMATION:

#### ARTICULATION (■ 1):

- ☐ Completely Articulated (bones touch and connect)
- ☒ Partially Articulated
- ☐ Completely Disarticulated
- ☐ Isolated Bones or Fragments

#### DIMENSIONS:

**Length** : \_\_\_\_\_ cm (longest point--end to end)

**Width** : \_\_\_\_\_ cm (widest point--side to side)

**Thickness**: \_\_\_\_\_ cm (thickest point--top to bottom)

#### ORIENTATION (■ 1 of each):

**Body**: ■ N, ☐ S, ☐ E, ☐ W, ☐ NE, ☐ NW, ☐ SE, ☐ SW,  
☐ Other

**Face**: ☐ Left, ☐ Right, ☐ Up, ☐ Down, ☒ Forward, ☐ Other,  
☐ Unk

#### BODY POSITION (■ 1):

- ☐ Supine (Lying on back)
- ☐ Prone (Lying on front)
- ☐ Left Side (Lying on left side)
- ☒ Right Side (Lying on right side)
- ☐ Crouched (Sitting with legs bent up to chin)
- ☐ Other (specify) \_\_\_\_\_

#### LEG POSITION (■ 1):

- ☐ Extended (Legs and spine in straight line)
- ☒ Flexed (Legs bent up towards chin or under body)

#### BONE CONDITION:

# Bones Intact: \_\_\_\_\_

# Bones Broken: \_\_\_\_\_

Skeleton SK001 is **partially articulated** because the ribcage is not fully intact, the body is oriented **north**, the face direction is **forward**, the body position is on its **right side**, and the legs are **flexed** upward. The rectangle around the body is to help understand the skeleton's dimensions. The **length** is from the top of the skull to the most distance point, which is the furthest extending toe on the left foot. The **width** is from the back of the pelvis bone to the furthest extended finger on the right hand. The **thickness** is from the ground to the point highest from the ground, whether it is the top of the shoulders, ribcage, or pelvis. (The dimensions are not provided because the drawing does not have a scale.)

The BONE CONDITION is left blank for this illustration, because it cannot be determined from the drawing, especially the ribs, which are partially disarticulated and possibly broken.

### FEATURE LEVELS / PLAN DRAWING:

See the instructions in the section labeled "**COMMON DATA**."

**NOTES:** Use the **Supervisor Notes** to enter any notes, explanations, descriptions, or any other information pertaining to the feature not already provided in one of the boxes.

Season	Unit	Feature	Sub-Fea.	<b>BACK</b> <b>HUMAN SKELETON FEATURE FORM</b>
201__		F	SK	

See the instructions in the section labeled “**COMMON DATA.**”

#### SKELETAL FEATURE RELATIONSHIPS

#### NON-SKELETAL FEATURE RELATIONSHIPS

Relationship	Feature # or Unit/Feature #				This Feature:	Feature Numbers			
Other Skeleton(s)					Is Under				
Soil(s)					Abuts				
					Is Over				
Extends into Abutting Unit(s) as Feature(s)					Cuts				
					Is Cut By				

**SKELETAL FEATURE RELATIONSHIPS:** Pertains to features and sub-features that have a direct connection to the skeleton.

##### Relationship:

**Other Skeleton(s):** The sub-features of skeletons inside the interment, if any.

**Soil(s):** The sub-feature that pertains to the soil inside the interment.

**Extends into Abutting Unit(s) as Feature(s):** If the interment extends into an abutting unit(s), then enter the unit/feature number(s) for that unit(s). If the abutting unit has not yet been excavated and the interment feature number is not known, then enter the unit number and a question mark (?) for the feature number until the real number becomes known.

**Feature # or Unit/Feature #:** If the relevant feature is within the unit being excavated, then enter only the feature number. If, however, the relevant feature is in an abutting unit, then enter the unit and feature number.

#### NON-SKELETAL FEATURE RELATIONSHIPS:

See the instructions for “**FEATURE RELATIONSHIPS**” in the section labeled “**COMMON DATA.**”

#### FINDS:

See the instructions in the section labeled “**COMMON DATA.**”

#### PHOTOGRAPHS:

See the instructions in the section labeled “**COMMON DATA.**”

#### DRAWINGS:

See the instructions in the section labeled “**COMMON DATA.**”

#### STRATIGRAPHIC ANALYSIS:

See the instructions in the section labeled “**COMMON DATA.**”

**NOTE:** If additional space is needed to enter information on finds, photographs, or drawings, then use the Feature Supplement Form.

Season	Unit	Feature	Sub-Feature	Sheet
201		F		of

[illegible]

Use only pottery, bone, shell, metal, glass, stone, flora, faience, figurine, building materials, slag, other small finds, or soil samples.

<sup>2</sup> For example, coin, vessel, jewelry, skull, etc.

<sup>3</sup> The # of items in the bag, e.g., 15 bones. For general pottery sherds, enter the number of muktafs rounded to nearest half muktaf, e.g., 1.0 or 1.5.





## FEATURE SUPPLEMENT FORM

### **PURPOSE**

The purpose of the Feature Supplement Form is to provide additional space for the recording of find, photograph, and drawing data that did not fit completely on one of the other feature forms.

### **INSTRUCTIONS**

Season	Unit	Feature	Sub-Feature	Sheet
201__		F		of

See the instructions in the section labeled "**COMMON DATA.**"

---

#### **FINDS:**

See the instructions in the section labeled "**COMMON DATA.**"

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#### **PHOTOGRAPHS:**

See the instructions in the section labeled "**COMMON DATA.**"

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#### **DRAWINGS:**

See the instructions in the section labeled "**COMMON DATA.**"

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## The Tell Timai Project

## UNIT SUMMARY FORM

**UNIT INFORMATION:**

Season	Unit (Grid-Unit)	Coordinates of Unit's SW Corner	Date Unit <input type="checkbox"/> Opened <input type="checkbox"/> Reopened (ddmmmyy)	Date Unit Closed (ddmmmyy)	Unit Dimensions	Supervisor	Sheet
201__		N: _____ E: _____					of

**UNIT AIMS:**

UNIT AIMS:	Contiguous Units __ N	

### FEATURE NUMBERS AND INFORMATION:

[illegible]

\*Enter each feature and its associated sub-features, if any, on separate lines.

**\*\*SL (Soil), WA (Wall), FS (Floor/Surface), IS (Installation), IT (Interment), SK (Skeleton)**



## UNIT SUMMARY FORM

### PURPOSE

The Unit Summary Form has two purposes:

1. to collect information on a unit, such as, its designation, geographical coordinates, dates opened, reopened, and closed, dimensions, supervisor, aims, and contiguous units; and
2. because all numbering systems are unit-based, to maintain a record of their assignment.

### INSTRUCTIONS

#### UNIT INFORMATION:

Season	Unit (Grid-Unit)	Coordinates of Unit's SW Corner	Date Unit <input type="checkbox"/> Opened <input type="checkbox"/> Reopened (ddmmmyy)	Date Unit Closed (ddmmmyy)	Unit Dimensions	Supervisor	Sheet
201__		N: _____ E: _____					of

**Season:** Enter the fourth digit of the year in which the excavation occurred.

**Unit:** Enter the unit designation which consists of the grid, dash, and unit number, e.g., N6-5.

**Coordinates of Unit's SW Corner:** A unit's southwest corner determines the grid that the unit is assigned to. Enter the unit's southwest corner north and east coordinates, which are provided by the site surveyor.

**Dates:** A unit can remain open more than one season. Therefore, space on this form is allotted for indicating when a unit is first opened and, if necessary, when it is reopened during a subsequent season(s). For example, Unit X5-1 was opened on June 7, 2013, and work terminated on July 10, 2013, because the season ended. Also, assume that this unit was reopened on June 10, 2014, reached bedrock, and was closed for good on July 3, 2014. For the 2013 season, the unit was opened on June 7, 2013, and closed on July 10, 2013. For the 2014 season, the unit was reopened on June 10, 2014, and closed on July 3, 2014.

**Unit Dimensions:** Enter the unit's dimensions in meters, e.g., a unit that is five by five meters is written 5x5m.

**Supervisor:** Enter the supervisor's name.

**Sheet \_\_\_\_ of \_\_\_\_:** If a unit has more features, bag numbers, photograph numbers, or drawing numbers than will fit on one sheet, then use a second sheet. If there are only two sheets, the first one is labeled Sheet 1 of 2 and the second one is labeled Sheet 2 of 2. Be sure to complete the "Unit Information" on the second sheet the same as on the first sheet so they can be connected.

<b>UNIT AIMS:</b>	Contiguous Units __N		

**Unit Aims:** Enter the aims or reasons for excavating this unit.

**Contiguous Units:** Enter the unit designation for all units touching this unit. The current unit number is entered in the blackened middle box. Also, enter a north arrow.

**FEATURE NUMBERS AND INFORMATION:**

Feature/ Sub-Feature Number*	Date Opened (ddmmmyy)	Date Closed (ddmmmyy)	Feature/Sub-Feature Description		Phase/Dating (Provided by Expert)
			Type**	Description	
F					
F					

\*Enter each feature and its associated sub-features, if any, on separate lines.

\*\***SL** (Soil), **WA** (Wall), **FS** (Floor/Surface), **IS** (Installation), **IT** (Interment), **SK** (Skeleton)

**FEATURE NUMBERS AND INFORMATION:** The purpose of this section is to maintain the feature number list for this unit and to enter information on each feature.

**Feature/Sub-Feature Number:** Enter the feature number or the feature/sub-feature number. Each feature and its associated sub-features should be entered on separate lines. The feature prefix F is pre-entered.

**Date Opened:** Enter the date the feature or sub-feature opened.

**Date Closed:** Enter the date the feature or sub-feature closed during the season.

**Type:** Enter the feature or sub-feature type code. The possibilities are as follows: **SL** for soil, **WA** for wall, **FS** for floor/surface, **IS** for installation, **IT** for interment, and **SK** for skeleton.

**Description:** Enter a brief description of the feature or sub-feature. For example, suppose that the feature was a pit and the sub-feature was the pit's fill. The description for the feature could say "Pit" and the sub-feature could say "Pit's soil fill." In summary, **type** is the general category and **description** is a short explanation.

**Phase/Dating:** The phase (Greek/Hellenistic or Roman) and dating are either entered by an expert or the information is provided by an expert.

Season	Unit	BACK UNIT SUMMARY FORM
201__		

**Season:** Enter the fourth digit of the year in which the excavation occurred.

**Unit:** Enter the unit designation which consists of the grid, dash, and unit number, e.g., N6-5.

Bag Numbers						Photograph #s		Drawing #s	
#	Note	#	Note	#	Note	#	Note	#	Note
B		B		B		P		D	
B		B		B		P		D	

**Bag, Special Find, Photograph, and Drawing Numbers:**

All numbers are unit-based. This means that each numbering type (bag, photograph, or drawing) begins with 001 and runs sequentially from the date the unit is opened until the date the unit is closed permanently, regardless of how many seasons the unit is opened and regardless of the number of features.

Bag numbers begin with the prefix **B**, photograph numbers with the prefix **P**, and drawing numbers with the prefix **D**. These prefixes are pre-entered in the cells.

**Note:**

This column is used for entering a brief note as a reminder as to what the bag, photograph, or drawing number pertained. Normally, the note would be the feature/sub-feature number.

## The Tell Timai Project

**SUPERVISOR NOTES**

Season (Year)	Unit (Grid-Unit)	Feature	Sub- Feature	Date Began (ddmmmyy)	Date Ended (ddmmmyy)	Name of Supervisor and Note Taker If Not The Supervisor
201__		F				

**Subject:**

NOTES:

[illegible]



Season	Unit	Feature	Sub-Fea.	<div style="text-align: center;"> <b>BACK</b>  <b>SUPERVISOR NOTES</b> </div>
201__		F		

**NOTES CONTINUED:**

[illegible]

## SUPERVISOR NOTES

### PURPOSE

The purpose of the Supervisor Notes form is to allow each unit supervisor to make notes on a feature or sub-feature within a unit as the excavation progresses. Because a unit supervisor might prefer to use his/her own daily notebook, this form is voluntary.

### INSTRUCTIONS

Season (Year)	Unit (Grid-Unit)	Feature	Sub- Feature	Date Began (ddmmmyy)	Date Ended (ddmmmyy)	Name of Supervisor and Note Taker If Not the Supervisor
201__		F				

**Season:** Enter the fourth digit of the year in which the excavation occurred.

**Unit:** Enter the unit designation which consists of the grid, dash, unit number, e.g., N6-5.

**Feature:** Enter the feature number that the notes pertain to. The F prefix is pre-entered.

**Sub-Feature:** Enter the sub-feature number, if any, that the notes pertain to. Include the appropriate two-letter prefix (SL, WA, FS, IS, IT, SK).

**Dates:** Enter the beginning and ending dates during which the notes were taken in ddmmmyy format.

**Name of Supervisor and Note Taker If Not the Supervisor:** Enter the name of the unit supervisor and of all other persons who contributed to the notes.

\_\_\_\_\_  
**Subject:**

**Subject:** Enter the subject of the notes.

### **NOTES:**

Write notes that explain or describe any aspect of the feature or sub-feature, such as, excavation goals and techniques, finds, complications and how they were remedied, and crew members present each day.

Season	Unit	Feature	Sub-Fea.	<b>BACK</b> <b>SUPERVISOR NOTES</b>
201__		F		

See the instructions in the section labeled "**COMMON DATA.**"

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The Tell Timai Project  
**LEVEL CALCULATION FORM**

Season	Unit
201__	

[illegible]

\* Level number

Sketch 1	Sketch 2	Sketch 3	Sketch 4	Sketch 5



# LEVEL CALCULATION FORM

## PURPOSE

The purpose of Level Calculation Form is to walk crew members through the math involved in calculating levels using a dumpy level and stadia rod and to keep as a record of the calculations.

## LEVEL BASICS

One of the most important types of information that archaeologists collect on an excavation is levels (also referred to as elevations), that is, the depth of such items as features and artifacts. Archaeologists use levels to determine the relationship among these items in the same time period (i.e., at about the same level) and between these items in different time periods (i.e., at different levels).

## SEA LEVEL

The key to collecting levels is consistency. The same technique must be used in all parts of the site. In archaeology, therefore, all levels are based on the distance from **sea level**. In general, the closer a feature or artifact is to sea level, the older it is and the further from sea level, the younger it is. This concept is simple to visualize if you keep in mind that as you dig down (which is usually towards sea level), you are digging further into the past. **(At sites or areas of sites that are near or below sea level, such as, the northern part of Tell Timai, the logic is reversed. The further one gets from sea level [below sea level], the older the features and artifacts. See "IMPORTANT CAVEAT" below.)**

## BENCH MARKS

Every site has a central bench mark (site bench mark), which is also called a site datum point. This bench mark is measured from sea level and is the point from which all levels at the site are taken. However, it is cumbersome for all levels on a large site to be taken from the same site bench mark; therefore, each area of a site has its own bench mark (also called a temporary bench mark [TBM]). Further, an archaeologist might even decide to have multiple bench marks in an area if it is widely spread out, or if an area's terrain is not flat. Regardless of how many bench marks are plotted, all of them are based on the site bench mark for consistency. The site surveyor determines the level of each bench mark.

Bench marks are normally placed on a high point of the site or of an area. The reason is that it is simpler to calculate levels if they are below the bench mark rather than above it. They are also placed in a location that is not expected to be excavated.

## TAKING LEVELS

As with all aspects of archaeological field work, specific tools and techniques are used when taking levels.

### Tools for Taking Levels

- **Dumpy Level** – Levels usually are taken using a dumpy level, which is a surveying instrument with a telescope that sits on a tripod. The dumpy level must be perfectly level.
- **Stadia Rod** – The stadia (or graduated) rod is an extendable, rectangular pole that shows meters, decimeters (one-tenth of a meter), and centimeters (one-hundredth of a meter). These numbers can be seen through the dumpy level's telescope.
- **Level Calculation Form** – The Level Calculation Form is used to record the measurements taken using the dumpy level and stadia rod and to help you do the math to calculate final levels (called reduced levels).
- **Pencil and Eraser** – Always use a pencil to record the measurements and levels. This allows for a mistake to be erased and neatly reentered.

## Setting Up the Dumpy Level

The key to determining correct and consistent levels using a dumpy level is that its line of sight is perfectly level. When this is accomplished, the dumpy level can be swiveled 360 degrees to take measurements anywhere in the area. Therefore, the first step in taking levels is to set up the dumpy level.

### Steps in Setting Up a Dumpy Level

1. Place the dumpy level where it can see both the bench mark and the unit.
2. Extend the dumpy level tripod's legs and push the pointed tips of the legs firmly into the soil.
3. Adjust the tripod legs as necessary to make the dumpy level roughly level.
4. ON the dumpy level is a bubble in a glass circle. The dumpy level is perfectly level when the bubble is in the center of the glass circle. The dumpy level has three adjustment knobs that are used to center the bubble.

At this point, the tripod is firmly planted into the soil and the dumpy level (and its line of sight) is level. We are now ready to take levels.

**Note: If, after the dumpy level is set up, it is accidentally bumped or kicked, it must be reset to re-level its line of sight. This will require the taking of a new instrument height (line of sight).**

### Using the Dumpy Level and Stadia Rod

Taking levels requires two persons: one for using the dumpy level (the *reader*) and a second for holding the stadia rod (the *holder*). The reader also records the information.

1. The holder places the bottom of the stadia rod onto the spot to be measured.
2. The rod is extended upward as necessary to reach the dumpy level's line of sight.
3. The reader will need to see the front of the stadia rod. So, the holder should stand behind the rod and hold it vertically with his/her hands on the sides of the rod. The holder's fingers should not wrap around the front of the rod, which could block the reader's view of the rod's numbers.



Dumpy level reader and recorder



Stadia rod holder

4. The reader will then determine the elevation to the nearest centimeter, enter that measurement onto the Level Calculation Form, and do the math to calculate the final level (reduced level).

**Note: After taking the closing (bottom) elevation of an item, compare this elevation to the opening (top) elevation for that same item. The closing elevation should be smaller than the opening elevation, because it is closer to sea level. If the closing elevation is larger than the opening elevation, then something is wrong. Re-check your math on both levels. For a caveat to this theory see "IMPORTANT CAVEAT" below.**

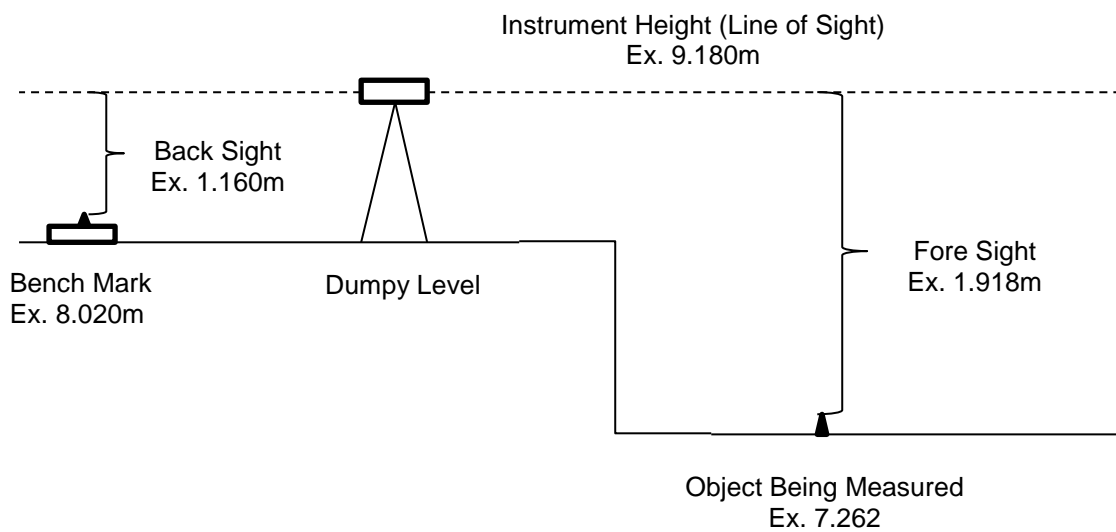
## Calculating Levels

Theoretically, an item's level is the distance of that item below the area bench mark. The process of determining a level involves the taking of two measurements and then doing some simple math.

When the dumpy level is setup on a tripod and leveled, it is higher than the bench mark. Therefore, the first measurement is the distance of the dumpy level's **line of sight** above the bench mark. The second measurement is the distance of the object below the dumpy level's line of sight. The entire process is as follows:

1. Determine the distance of the dumpy level's line of site to the bench mark (**back sight** in the diagram, below).
2. Determine the distance of the dumpy level's line of site to the object being measured (**fore sight** in the diagram, below).
3. Do the math as follows:

Bench Mark + Back Sight = Instrument Height (Line of Sight) -- Fore Sight = Reduced Level (Object's Level)  
Ex. 8.020m + 1.160m = 9.180m -- 1.918m = 7.262m ASL (above sea level)



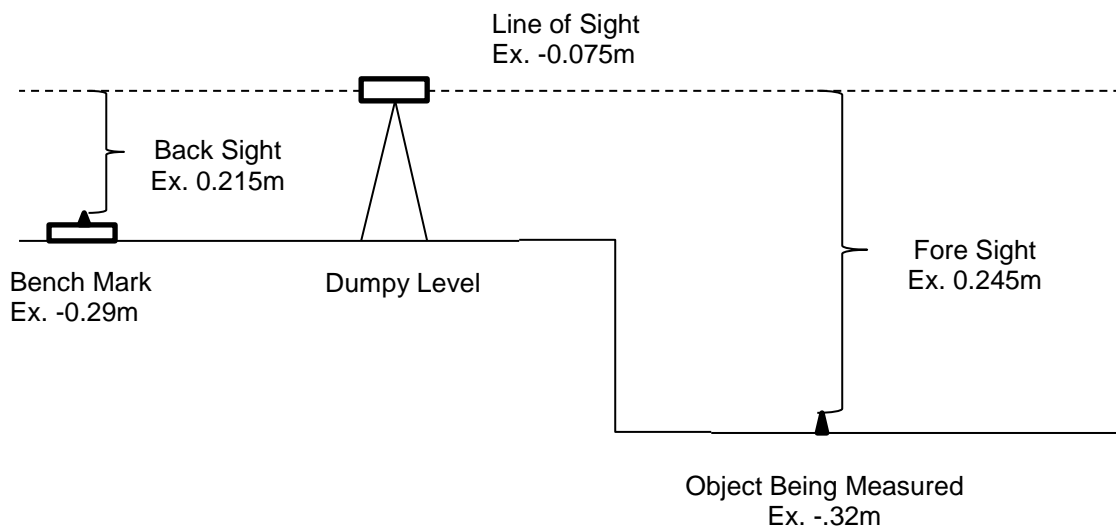


## IMPORTANT CAVEAT

Not all of Tell Timai is above sea level. Areas in the northern part of the tell are at or below sea level. Even though this situation does not change the mathematical formula, it does make the math a bit more intuitively complex. The example below is from unit N6-5 that was excavated during the 2011 season<sup>7</sup>. The bench mark was 0.29 meters below sea level, which for math purposes is written -0.29.

Even though the formula stays the same, the math is slightly different because of the minus signs that indicate below sea level.

Bench Mark + Back Sight = Instrument Height (Line of Sight) -- Fore Sight = Reduced Level (Object's level)  
Ex. -0.29m + 0.215m = -0.075m -- 0.245m = -0.32m (or .32 below sea level)



<sup>7</sup> The back sight is only 0.215m (21.5 cm), which is not very high. Actually, a dumpy level was not used. The line of sight was based on a string attached to a corner stake and held level using a line level.

## INSTRUCTIONS

Season	Unit	Sheet
201__		of

**Season:** Enter the fourth digit of the year in which the excavation occurred.

**Unit:** Enter the unit designation which consists of the grid, dash, unit number, e.g., N6-5.

**Sheet:** If more than one Level Calculation Form is used for a unit, then number them 1 of x, 2 of x, etc. For example, if three forms are needed for a unit, then number them 1 of 3, 2 of 3, and 3 of 3.

Date (ddmmmyy)	Feature- Sub- Feature	Note	Bench Mark	+ Back Sight	= Instrument Height	-- Fore Sight	= Reduced Level	Open- Close (O,C)	# ^*	Sketch # (Below)	Scaled Drawing #
	F										D
	F										D

**Date:** Enter the date that the level was taken in ddmmmyy format.

**Feature - Sub-Feature:** Enter the feature number or the feature/sub-feature number, if any.

**Note:** Enter any relevant note as necessary. For example, if the level is the closing elevations for one feature, it probably will be the opening elevation of the subsequent feature. The number of the subsequent feature could be entered as a reminder.

**Bench Mark:** Enter the height of the bench mark used to take the levels.

**Back Sight:** Enter the distance from the bench mark to the dumpy level's line of sight.

**Instrument Height:** Add the bench mark to the back sight to get the instrument height (line of sight).

**Fore Sight:** Enter the distance from the dumpy level's line of sight to the point being measured.

**Reduced Level:** Subtract the fore sight from the instrument height.

**Open-Close:** Enter the letter **O** if the calculation is for an opening level or the letter **C** if it is for a closing level.

**# :** Enter the level number that matches the number on the scaled drawing and on the feature form.  
^

**Sketch #:** At the bottom of each side of the form are five sketch boxes. These boxes can be useful to guarantee that the person taking the levels and the person holding the stadia rod are in synch in the location of each level number. For example, usually the person using the dumpy level also records the levels. The reason is that the dumpy level could be a distant from the unit and yelling the levels to the person with the stadia rod could lead to mistakes. Also, as the unit gets deeper, the person reading the levels might not be able to see where the rod is placed. Therefore, a solution is for both the reader and the holder to have diagrams of where the levels will be taken and have them numbered the same. The holder with the stadia rod could have the scaled drawing in hand. The reader and recorder would then need a quick sketch, hence the sketch boxes. The use of the sketch boxes is voluntary.

Sketch 1		Sketch 2		Sketch 3		Sketch 4		Sketch 5

**Scaled Drawing #:** Enter the number of the scaled drawing that the levels belong to. The drawing number always begins with the letter D, which is pre-entered.

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The Tell Timai Project  
MATRIX SHEET

<b>Season: 201</b> __	<b>Unit</b> (Grid-Unit):	<b>Date:</b>	<b>Name:</b>
<b>Comments:</b>			


**The Tell T'mai Project**  
**MATRIX SHEET**

<b>Season: 201</b> _____	<b>Unit</b> (Grid-Unit):	<b>Date</b> (ddmmmyy):	<b>Creator's Name:</b>
<b>Comments:</b>			

A handwriting practice sheet featuring a grid of 150 empty rectangular boxes, arranged in 10 rows and 15 columns. The boxes are designed for students to practice writing individual letters or words.

## MATRIX SHEET

### PURPOSE

The purpose of the Matrix Sheet is to allow unit supervisors to show graphically the stratigraphic relationships of features within a unit using the Harris Matrix. Sheets are available in portrait and landscape format. Also, each format has a supplement sheet, if needed.

### INSTRUCTIONS

<b>Season: 201</b> __	<b>Unit (Grid-Unit):</b>	<b>Date:</b>	<b>Name:</b>
<b>Comments:</b>			

**Season:** Enter the fourth digit of the year in which the excavation occurred.

**Unit:** Enter the unit designation which consists of the grid, dash, unit number, e.g., N6-5.

**Date:** Enter the date on which the matrix was created in ddmmmyy format.

**Name:** Enter the name of the person who created the matrix.

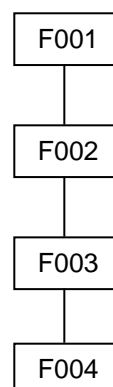
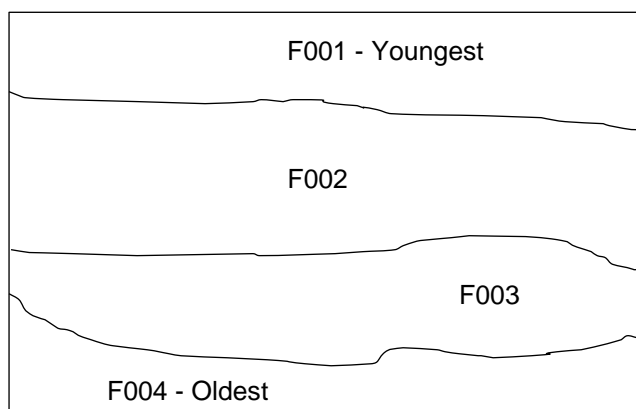
**Comments:** Enter any comments necessary to explain the matrix or the features within the matrix.

### CREATING A HARRIS MATRIX:

A thorough explanation of the Harris Matrix and the five laws of stratification are beyond this manual. Anyone wanting to read more about the process can download a free copy of Edward Harris' book *Principles of Archaeological Stratigraphy* from his website at [www.harrismatrix.com](http://www.harrismatrix.com). Another discussion that is more condensed and simplistic is by Geoffrey Tassie and Lawrence Owens in their book *Standards of Archaeological Excavation; a Fieldguide to the Methodology, Recording Techniques and Conventions*, Chapter Ten.

The purpose of the Harris Matrix is to show graphically the stratigraphic relationships between the features excavated in a unit. (The ultimate matrix shows the relationships across an entire site.) The key word is "stratigraphic" (or "stratigraphy"), which means the chronology of the features. Chronology pertains to the timing in which each feature was created by nature or man, that is, which feature was first (oldest) and the order of accumulation upward to the surface (youngest). When creating the matrix, however, the features are numbered in order of excavation (top down) and not accumulation (bottom up).

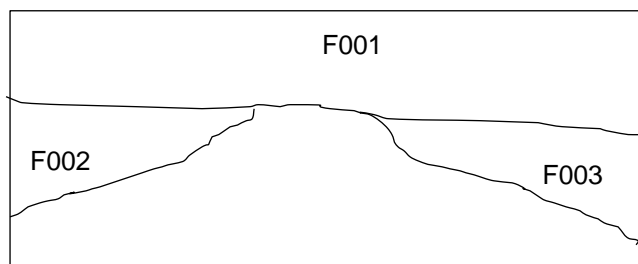
In the example below, feature F004 is the oldest. On top of it is feature F003, then feature F002, and, finally, feature F001 (the youngest). In the Harris Matrix, they are ordered (numbered) in order of excavation from top to bottom.



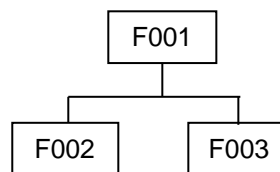
Redrawn after Tassie and Owens, 2010: 467.

Feature F001 is on top of and touches feature F002, therefore, they are chronologically related, as are features F002 and F003, and F003 and F004.

But what happens when two features are at the same level, but do not touch, such as features F002 and F003 in the example below? Even though they are chronologically at the same level, they do not touch and, therefore, are not related.

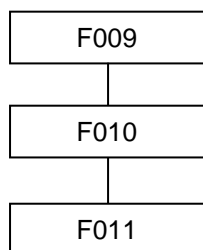


Redrawn after Tassie and Owens, 2010: 467.

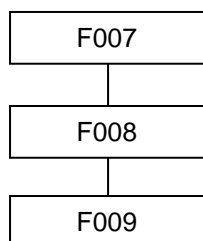


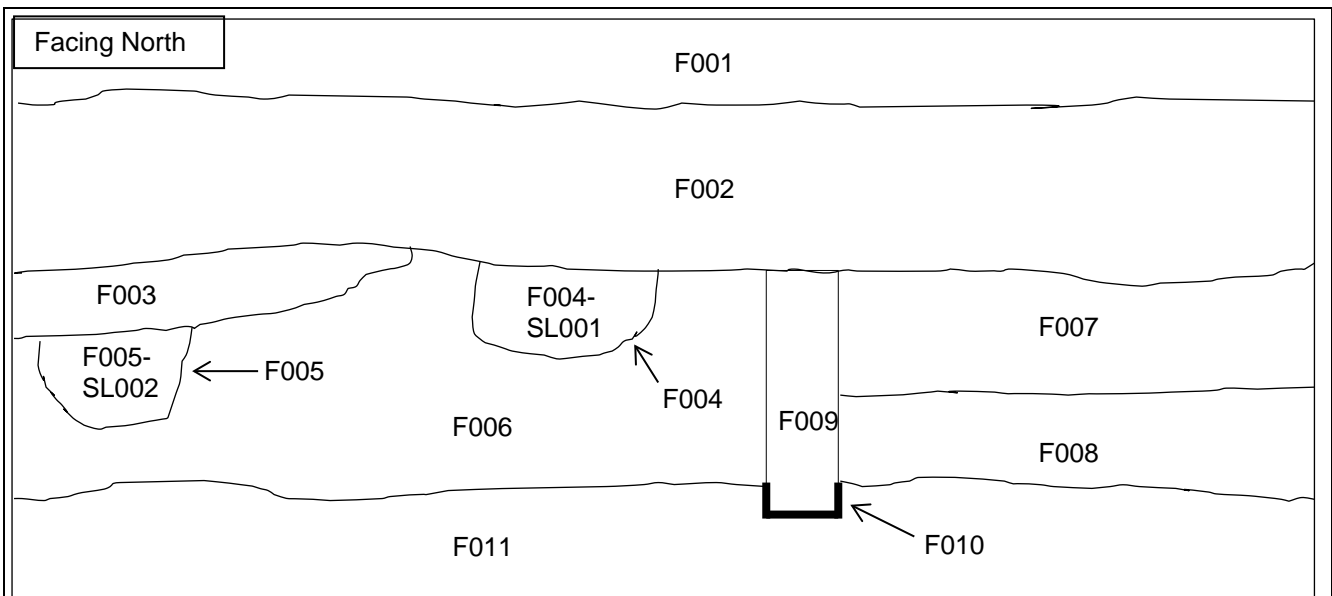
Now comes the tricky part. Remember that the matrix concerns itself with stratigraphic (chronological) relationships and not necessarily physical relationships. Tassie and Owens state that: "A common error in building a matrix is to insert physical relationships as well as the stratigraphic relationships." What does that mean? We will see in the next, and final, example.

Using the example on the next page, let us begin at the bottom. In antiquity, a foundation trench (F010) was cut into the soil (F011) for the purpose of building a level and stable wall (F009). Chronologically then, the soil existed before the trench and the trench before the wall.



The accumulation of soil on either side of the wall differed. On the east side of the wall there were two soil accumulations, first F008 and then F007. So, F008 is the first soil layer deposited on the east side of the wall after the wall was built, therefore, it is older than F007, but younger than the wall (F009). The fact that F007 touches the wall is insignificant in the Harris Matrix, because it was not the next accumulation after the wall was built--F008 was. That is why there is no line connecting F007 and F009. Once again, our interest is in the order of accumulation and physical contact, not just physical contact. Two features have to touch to be chronologically related; however, two features can touch without being chronologically related. This is more readily seen on the west side of the wall.



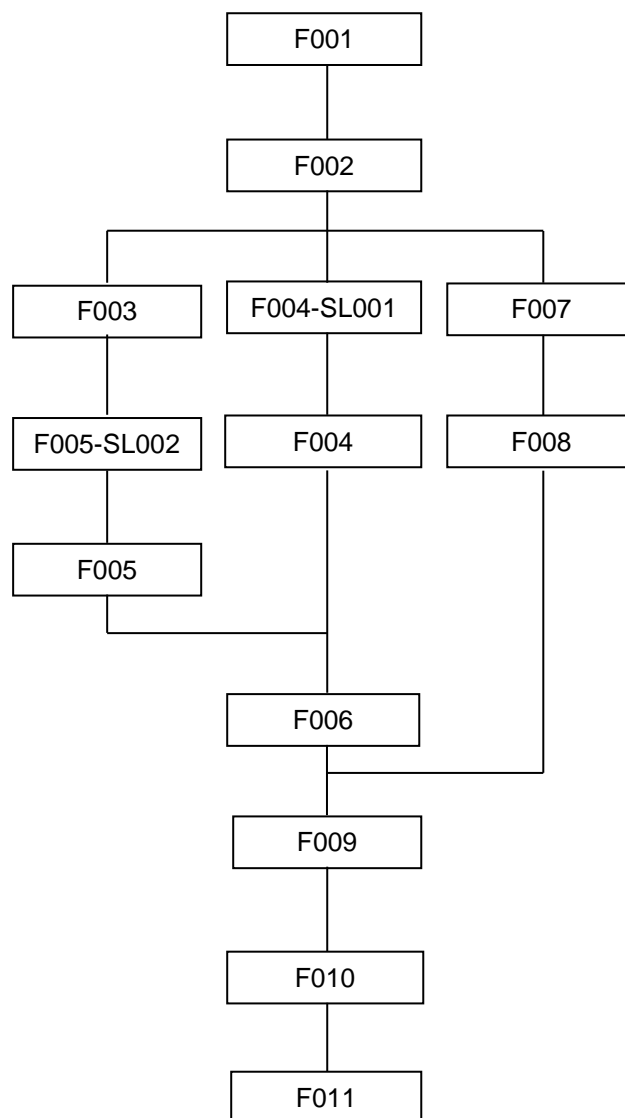


Notes:

F004 = Pit  
F004-SL001 = Pit fill

F005 = Pit  
F005-SL002 = Pit fill

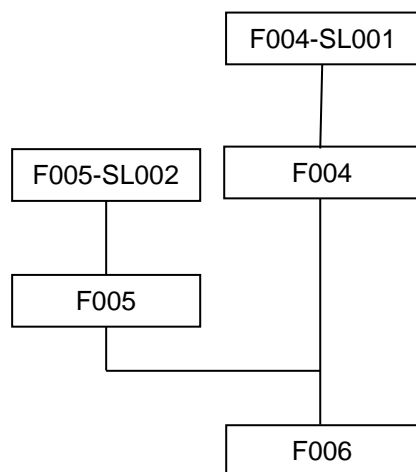
F009 = Wall  
F010 = Foundation  
Trench



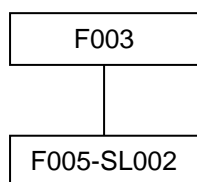
Redrawn after Tassie and Owens, 2010: 454 and Harris, 1989: 62.



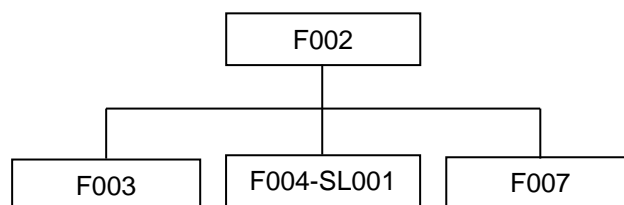
On the west side of the wall is one large accumulation, F006. So, chronologically, F006 and F008 were the first layers deposited after the wall was built and touch the wall, therefore, they are related to the wall, but not each other. Two pits were dug into F006, F004 and F005; therefore, they are younger than F006. Both pits are filled with soil, which makes them sub-features within their respective pits (F004-SL001 and F005-SL002). The pits had to be dug before they could be filled, so the fills are younger than the pits.



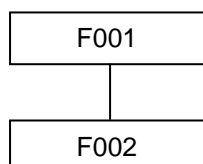
Pit fill (F005-SL002) is under and touches soil layer F003, So, they are chronologically related.



Above and touching soil layer F003, pit fill F004-SL001, and soil layer F007 is another soil layer F002. F002 is chronologically related to the other three; however, they are not related to each other. F002 is above and touches F006, but they are not chronologically related, because F003 and F004-SL001 come between them in terms of accumulation. In this instance, the fact that F002 touches F006 is insignificant in terms of timing.



Finally, feature F002 is under and touches the topsoil, feature F001.



**The complete Harris Matrix for this example is on the previous page.**

The Tell Tímaí Project  
UNOFFICIAL PHOTOGRAPH LOG

Season	Unit	Sheet
201__		of

Photo #	Camera Photo #*	Date (ddmmmyy)	Facing**	Phot. Initials	Feature/ Sub-Feature	Description
P					F	
P					F	

The Tell Tímaí Project  
UNOFFICIAL DRAWING LOG

Season	Unit	Sheet
201__		of

Drawing #	Date (ddmmmyy)	Scale	Draw. Initials	Feature/ Sub-Feature	Description
D				F	
D				F	

The Tell Tímaí Project  
UNOFFICIAL BAG LOG

Season	Unit	Sheet
201__		of

**FINDS** (Require a bag number):

Bag #	Special Find?		Date (ddmmmyy)	Category <sup>1</sup>	Type <sup>2</sup>	Description	# Items <sup>3</sup>	Feature/ Sub-Feature
	Y/N	Assoc. Bag #						
B		B						F
B		B						F

## UNOFFICIAL PHOTOGRAPH, DRAWING, AND BAG LOGS

### PURPOSE

The purpose of the Unofficial Photograph, Drawing, and Bag Logs is to allow the unit supervisor to list and describe all photographs, drawings, and bags pertaining to a unit. The official photograph, drawing, and bag numbers are listed on the Unit Summary Form with only a small space for a description. The primary descriptions are on each feature form. The problem arose that for a supervisor to search for a particular photograph or drawing, he/she might have to search through some or most of the feature forms to find the appropriate number and description. So, the unofficial logs were created to be used voluntarily by those supervisors who want to maintain unit-wide logs.

### INSTRUCTIONS

<b>Season</b>	<b>Unit</b>	<b>Sheet</b>
201__		of

**Season:** Enter the fourth digit of the year in which the excavation occurred.

**Unit:** Enter the unit designation which consists of the grid, dash, unit number, e.g., N6-5.

**Sheet:** If more than one sheet is used for a unit, then number them 1 of x, 2 of x, etc. For example, if three forms are needed for a unit, then number them 1 of 3, 2 of 3, and 3 of 3.

### UNOFFICIAL PHOTOGRAPH LOG

Photo #	Camera Photo #*	Date (ddmmmyy)	Facing**	Phot. Initials	Feature/ Sub-Feature	Description
P					F	
P					F	

**Photo #:** Enter the photograph number that begins with the letter "P." The numbers are unit-based and run sequentially, e.g., P001, P002, etc.

**Camera Photo #:** When a digital camera is used to take a photograph, the camera gives the photograph a number that is unique to the type of camera used. Enter the number of the photograph provided by the camera. By having the Tell Timai photograph number and the camera photograph number, the two can be easily associated.

**Date:** Enter the date that the photograph was taken in ddmmmyy format.

**Facing:** Enter the direction that the camera was facing when the photograph was taken. The direction options are as follows: N (north), S (south), E (east), W (west), NE (northeast), NW (northwest), SE (southeast), SW (southwest), or DOWN (for photographs taken of artifacts or features straight down or nearly straight down).

**Phot. Initials:** Enter the photographer's initials.

**Feature/Sub-Feature:** Enter the three digit feature number, and, if relevant, the three digit sub-feature number.

**Description:** Enter a description of the photograph's subject.

## UNOFFICIAL DRAWING LOG

Drawing #	Date (ddmmmyy)	Scale	Draw. Initials	Feature/Sub-Feature	Description
D					
D					

**Drawing #:** Enter the drawing number that begins with the letter "D." The numbers are unit-based and run sequentially, e.g., D001, D002, etc.

**Date:** Enter the date that the drawing was made in ddmmmyy format.

**Scale:** Enter the scale used to make the drawing. At Tell Timai we frequently use 1:25 or 1:20.

**Drawers' Initials:** Enter the initials of the persons involved in making the drawing. Usually, there are at least two.

**Feature/Sub-Feature:** Enter the three digit feature number, and, if relevant, the three digit sub-feature number.

**Description:** Enter a description of the drawing's subject.

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## UNOFFICIAL BAG LOG

Bag #	Special Find?		Date (ddmmmyy)	Category <sup>1</sup>	Type <sup>2</sup>	Description	# Items <sup>3</sup>	Feature/Sub-Feature
	Y/N	Assoc. Bag #						
B		B						
B		B						

**Bag #:** Enter the bag number. The prefix B is pre-entered.

**Special Find?:** Enter Y for yes, N for no.

**Associated Bag #:** Enter the number for the bag of artifacts associated with the special find, if any.

**Date:** Enter the date (in ddmmmyy format) that the finds were collected.

**Bag Category:** Enter only one of the 13 bag categories (pottery, bone, shell, metal, glass, stone, flora, faience, figurine, building materials, slag, other small finds, or soil samples).

**Find Type:** Enter the type of special find, such as, coins, jewelry, complete vessel, etc.



**Description:** Describe the bag category or special find type.

**# Items:** For a bag that has no special finds, enter the number of items in the bag unless the bag is for general pottery sherds, in which case, enter the number of muktafs that are used to hold the sherds. Round off the number of muktafs to the nearest one-half muktaf. For a bag of special finds, enter the number of items or the number of pieces of an item, e.g., the number of sherds of a complete vessel broken in place.

**Description:** Enter a description of the drawing's subject.

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FRONT	BACK
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="text-align: center;">  </div> <div style="flex-grow: 1;"> <p><b>A B C D</b>    <b>Tell Timai--201__</b>    Tag ____ of ____</p> <p>Grid/Unit: _____ Feature: F _____ Sub-Fea: _____</p> <p>Bag: B _____ Special Find? <input type="checkbox"/> Yes, <input type="checkbox"/> No</p> <p>Category: _____ Type: _____ # Items: _____</p> <p>Description: _____</p> <p>Date: _____ Name: _____</p> </div> </div>	<div style="text-align: center; padding-bottom: 10px;"> <b>ADDITIONAL INFORMATION:</b> </div> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="flex-grow: 1;"> <p>Associated Bag(s): Pottery Muktaf: B _____, Other Bag: B _____</p> <p>Deposition: <input type="checkbox"/> Primary, <input type="checkbox"/> Secondary</p> <p>Description: _____</p> <p>Laboratory--Date Bag (Find) Was: Registered: _____, Analyzed: _____</p> </div> <div style="text-align: center;">  </div> </div>

## BAG TAGS

### PURPOSE

All finds (i.e., artifacts) that are removed from a unit and taken to the laboratory require a bag number. They are placed into bags (i.e., appropriate containers), which are secured by or contain a bag tag. The purpose of the bag tag is to record information on the find's provenience, description, and associations.

### INSTRUCTIONS

#### FRONT:

**A B C D:** These letters indicate the urgency with which the supervisor feels that the artifact(s) need to be analyzed. For example, coins, figurines, and whole pottery vessels might get an A, because they can be cleaned and analyzed during the season.

**Tell Timai-201\_\_:** Enter the fourth digit of the year.

**Tag \_\_\_\_ of \_\_\_\_:** Sometimes, the number of artifacts found of the same material or type is such that more than one container is needed to hold them. For example, a feature could contain so many pottery sherds that more than one muktaf is needed to hold them. When this situation occurs, each container should have its own tag. However, all of the information on the tags should be identical, except for, the tag number, e.g., 1 of 2 and 2 of 2 if there are two containers.

**Grid/Unit:** Enter the unit code, which consists of the grid and number, e.g., N6-5.

**Feature:** Enter the three-digit feature number. The F prefix is pre-entered.

**Sub-Fea:** Enter the three-digit sub-feature number, if relevant, and its two-letter prefix (SL, WA, FS, IS, IT, SK).

**Bag:** Enter the three-digit bag number. The B prefix is pre-entered.

**Special Find?:** Darken the appropriate box to indicate whether the artifact(s) is or is not a special find.

**Bag Category:** Enter only one of the 13 bag categories (pottery, bone, shell, metal, glass, stone, flora, faience, figurine, building materials, slag, other small finds, or soil samples).

**Find Type:** Enter the type of special find, such as, coins, jewelry, complete vessel, etc.

**# Items:** For a bag that has no special finds, enter the number of items in the bag unless the bag is for general pottery sherds, in which case, enter the number of muktafs that are used to hold the sherds. Round off the number of muktafs to the nearest one-half muktaf. For a bag of special finds, enter the number of items or the number of pieces of an item, e.g., the number of sherds of a complete vessel broken in place.

**Description:** Describe the bag category or special find type.

**Date:** Enter the date (in ddmmmyy format) that the finds were collected.

**Name:** Enter the name of the person completing the tag.

### **BACK (ADDITIONAL INFORMATION):**

**Associated Bag(s) / Pottery Muktaf / Other Bag:** As described in section “III. NUMBERING SYSTEMS,” sub-section “Associated Bag Numbers,” if non-special finds and special finds of the same material are found in the same feature, then the non-special finds are assigned one collective bag number and each special find is assigned a separate bag number.

For example, in unit N6-2, feature F005, the excavators found six pieces of metal. Five were unrecognizable and one was a coin. All of the unrecognizable metal pieces would get one bag number, for example, N6-2-F005-B008. The single coin, being a special find, would get a separate bag number, for example, N6-2-F005-B009. On the bag tag, B008 would be the associated bag number for B009 and entered under “Other Bag.” (“Other” refers to “other than pottery.”) However, if the coin was the only metal found in that unit and feature that day, then it would not have an associated bag number.

As another example, if the special find was pottery, a whole vessel labeled N6-2-F005-B011, and the pottery sherd muktaf for that same unit and feature that day was labeled N6-2-F005-B010, then the associated bag number for the whole vessel would be B010 and entered under “Pottery Muktaf.”

**NOTE:** Pottery is the most frequently found type of artifact on most sites, and one of the most important in phasing and dating analyses. Sometimes, when an artifact is uncovered that cannot be dated, the diagnostic pottery with which it is found could be useful in this regard. Therefore, the bag number for the pottery muktaf should be entered for all artifacts.

### **Deposition: Primary or Secondary**

When artifacts are brought back from the field, they are registered and then analyzed by the various Tell Timai analysts (e.g., ceramicist). They will not have the feature forms to consult at that time, so limited critical information is provided on the bag tag. One of the crucial pieces of information is the deposition in which each artifact, especially each diagnostic artifact, is found.

As explained with the Soil Feature Form under “UNIQUE DATA,” a deposition can be primary or secondary.

**Primary:** A feature is primary if it is not disturbed and is uncovered in its original context, e.g., an earthen floor in a building. Artifacts in a primary deposition are the most valuable to the analyst.

**Secondary:** A secondary feature is one in which its materials were removed from one or more contexts and placed into another, or secondary, context. For example, suppose a building was destroyed by fire, earthquake, or military intervention. To build on that spot again, the materials of the destroyed building materials at and above ground level would be removed leaving the foundation walls below ground. The portion of the building below ground would be filled in with whatever materials are available, such as, the building materials from above ground or other nearby soil. These materials (and the artifacts in them) used to pack and stabilize the foundation for the subsequent building would be classified as fill, which is a secondary deposition.

### **Laboratory--Date Bag (Find) was Registered and Analyzed:**

**Registered:** The date that the bag was registered in the laboratory log or, if pottery, in the ceramicist's log.

**Analyzed:** The date that the specialist (e.g., ceramicist, coin or figurine expert) analyzed the bag.

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