TEXAS ARCHEOLOGICAL SOCIETY®

2023 Field School

Excavation Manual

&

Emergency Contacts

Emergency Numbers for Nacogdoches County Field School

1. 911 for any serious injury or problem.

2. Nacogdoches County Sheriff - (936) 560-7777
2306 Douglass Rd, Nacogdoches, TX 75964

3. Nacogdoches Police - (936) 559-2607
312 W Main St, Nacogdoches, TX 75961

4. Nacogdoches Fire Department - (936) 559-2541
3106 North St, Nacogdoches, TX 75965

6. Nacogdoches Medical Center: Emergency Room (hospital) - (936) 569-9481
4920 NE Stallings Dr, Nacogdoches, TX 75965

7. Nacogdoches Memorial Health: Emergency Room – (936) 564-4611
1204 N Mound St, Nacogdoches, TX 75961

8. Excel ER Nacogdoches - (936) 245-8122
1420 North Street, Nacogdoches, TX 75961
24 hours/7 days a week

2023 Texas Archeological Society Field School
Research Objectives and Field Methods for the Excavations at Nuestra Señora de la Purísima Concepción de los Hainais and Associated Sites in Nacogdoches County, Texas

Dr. Tamra L. Walter, Principal Investigator

The 2023 TAS Field School excavations will focus on three sites: 41NA338, 41NA344, and 41NA346. All three sites are located on private property in Nacogdoches County (Figure 1). Site 41NA344 has been identified as the first location of Mission Nuestra Señora Purísima Concepción de los Hainais (or Mission Concepción for short). Founded in 1716 by the Domingo Ramón expedition, the mission served as the headquarters for three missions established in the area for the Hasinai Caddo. Mission Concepción operated at this location until it was moved in 1730. Today, the final location of Concepción is in San Antonio. Until relatively recently, the first location of the mission was unknown. Concerted efforts by Dr. Jim Corbin, Dr. George Avery, Dr. Tom Middlebrook, and Dr. Morris Jackson, among others, eventually led to the discovery of the site.

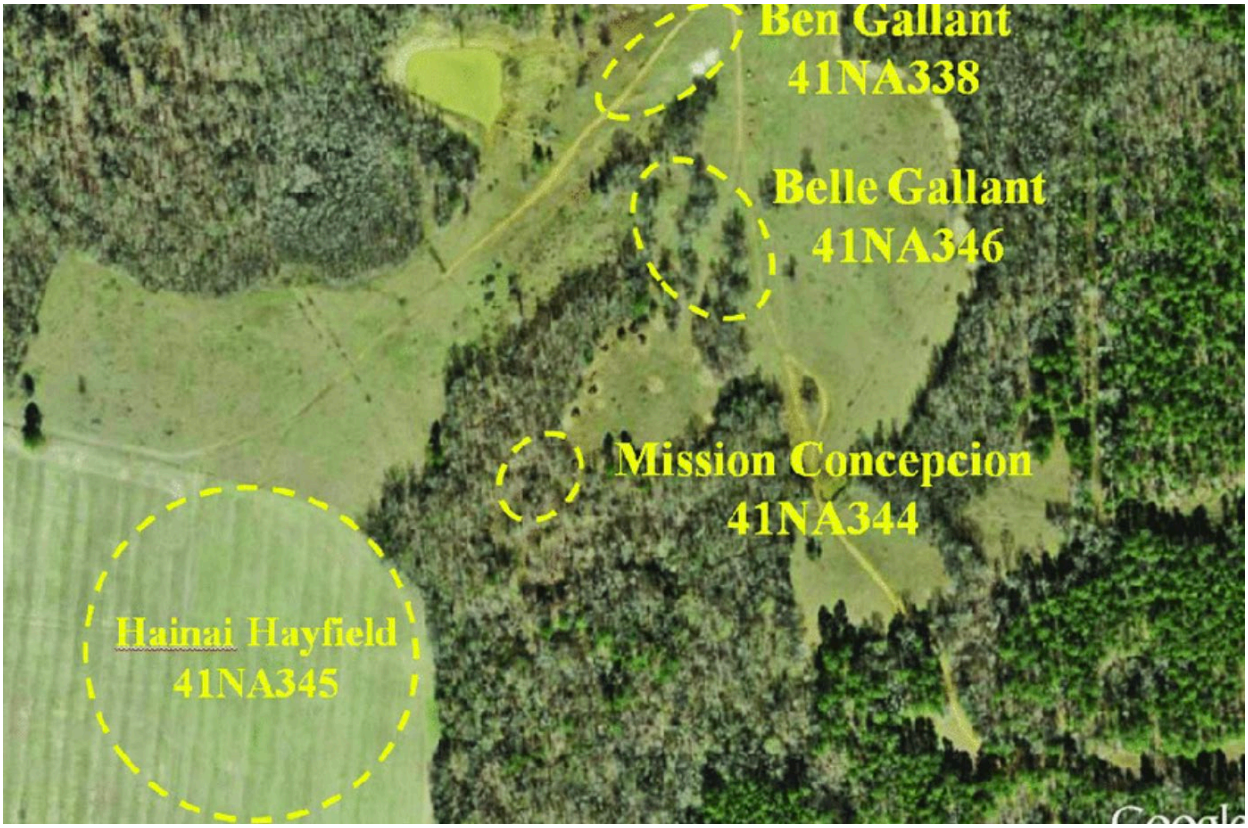


Figure 1: Google Earth view of archeological excavation areas for the 2023 TAS Field School. (image courtesy of Tom Middlebrook).

Previous Investigations

In 2010, Middlebrook and Jackson located the site of Mission Concepción (41NA344). Their early investigations at the site included a magnetometer survey, metal detecting, mechanical scraping, and limited archeological testing. While no direct evidence of the mission structures was found, the recovery of colonial artifacts strongly suggested a Spanish presence. Glass beads, bottle fragments, metal buckles and shoe parts, metal cutlery, iron chains, horse gear, building hardware, and gun parts were among the artifacts collected during Middlebrook and Jackson's initial investigation of the mission site. Similar artifacts were also collected from the Ben Gallant Site and the Belle Gallant Site (41NA338 and 41NA346, respectively) located to the northeast of the mission proper and all three sites yielded Caddo pottery. Given these similarities in material culture and the close proximity of 41NA338 and 41N346 to the mission site, it is likely that all three are related and may actually be part of the same site. Regardless, each site will be investigated separately during our excavations this summer.

Although no architectural features were identified at the mission, postholes from round houses were exposed at both 41NA338 and 41NA346. Undoubtedly, temporary structures were also constructed at Mission Concepción. Wattle and daub-style construction and perhaps even round-house structures were used as mission buildings, but no evidence has yet been recovered to verify the exact nature and location of such structures. Based on findings from the 2010 investigations, Middlebrook and Jackson suggest the presence of three distinct areas within the mission proper—a residential area, the church, and a storage area. Housing for the priests, a church structure, and a granary of some kind were among the most important buildings for Texas missions and were usually the first structures erected after a mission's founding.

2023 Goals

1. **Expose large portions of the mission proper**
   Large-scale excavations at 41NA344 will reveal new sections of the mission architecture and will help complete the plan of the compound. Moreover, particular care will be taken to document construction techniques and architectural styles. Excavations inside the plaza area will focus on identifying features and recovering data regarding daily activities that likely took place here. This information will help guide future revitalization plans and inform interpretations that will be incorporated into new outdoor signage.

2. **Investigate the round house and associated features at 41NA388**
   During initial investigations at the Ben Gallant site, Middlebrook and his team exposed a round house with no central hearth and few artifacts. Middlebrook suggests that perhaps this round house was used by Governor Alarcon when he visited the site in 1718. Historical records indicate that the Caddo built Alarcon a house for his use during his nearly two-week stay. Given Alarcon's short visit, a hearth may not have been necessary. Block excavations near the round house will be opened to identify any related features

and associated cultural deposits. Data recovered from these investigations will shed light on the connection between this site, 41NA346, and the mission itself.

3. **Further expose the two round house features at 41NA346**
   Two additional round houses were encountered at 41NA346, or the Belle Gallant site. A mix of European and Native material culture was also recovered from these investigations. The exact relationship between the Belle Gallant site and the mission is not fully understood. Block excavations here will focus on exposing more of the post holes from the houses and documenting associated features. Careful attention to the distribution and variety of material culture will also be key for our understanding of the connection between Belle Gallant and the mission site, as well as the Ben Gallant site.

Excavation Plan

For the 2023 TAS investigations, block excavations are planned for all three sites (Figure 2). Each block will consist of 2 x 2-meter units designated by their southwest corners (northing/easting). A grid system for each site was previously established and all new excavation blocks will be tied to the existing grid. Block A will be located at site 41NA338 (Ben Gallant site), Blocks B and C will be located at 41NA346 (Belle Gallant site), and Blocks D and E will be located at 41NA344 (Mission Concepción). An arbitrary vertical datum of 100.00 meters will be established at each site and all sub-datums will be established in reference to this datum point. Sub-datum stakes will be established for each 2 x 2 meter unit. The elevation of each datum will be written on the stake along with the Unit designation.

Excavations at 41NA338 (Ben Gallant site) will focus on exposing features and artifacts related to the round house that was investigated in 2010. A mix of colonial and 19th century-era materials are expected from the excavations at 41NA338. Texas Tech graduate student Alex Hernandez will serve as the Site Supervisor for this site.

The Youth Group units and another large excavation block will be opened at 41NA346 (Belle Gallant site). Postholes from round houses and a mix of European and Native artifacts are anticipated here. Don Badon will serve as the Site Supervisor of this area.

Finally, another two excavation blocks will be opened at 41NA344 (Mission Concepción) for a minimum of twenty 2 x 2-meter units. A block of ten 2 x 2- meter units arranged in a hopscotch pattern will be placed near the “residence” area of the mission and another block of similar size will be opened up near the church area. Additionally, at least one test unit will be opened up near the “storage” area (see Figure 3). Depending on our findings, more units may be opened up as needed. Alex Smith will serve as the Site Supervisor for the excavations at the mission.

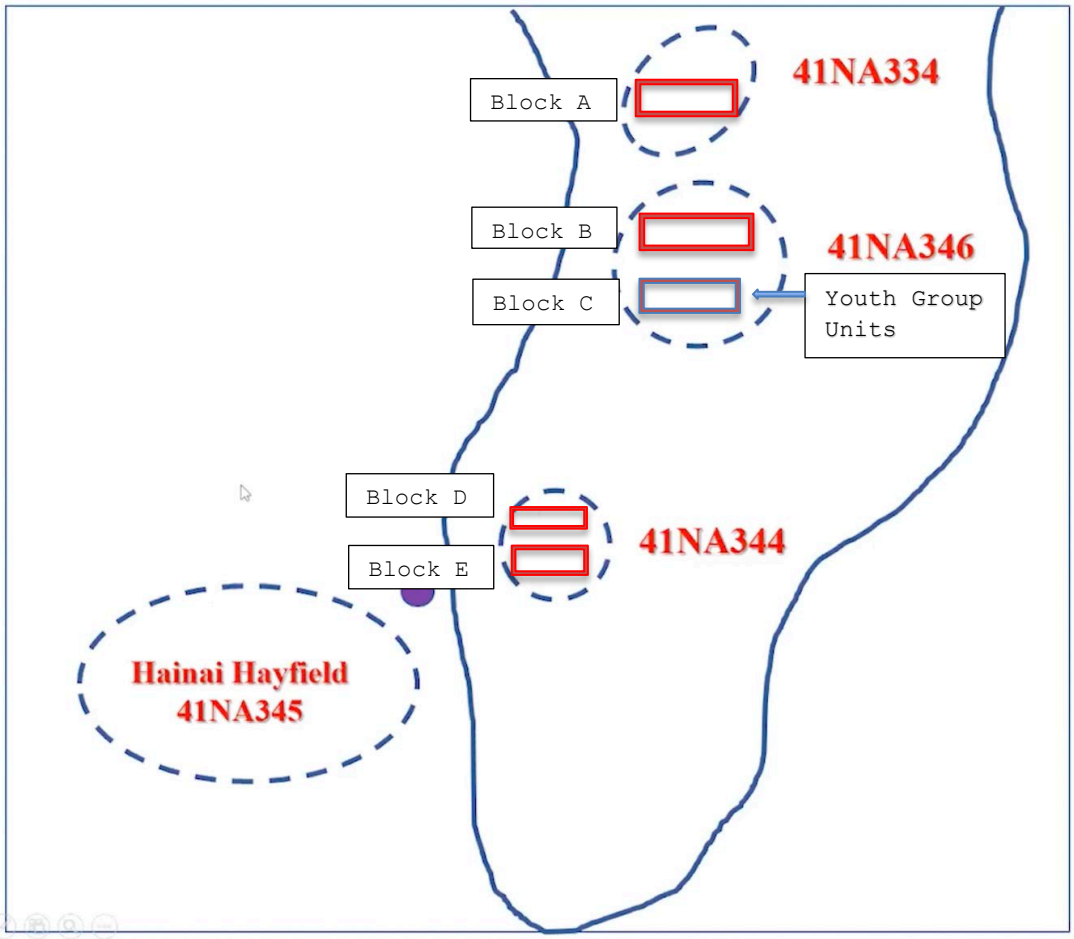


Figure 2: Approximate location of excavation blocks and block designations (not to scale). Image courtesy of Tom Middlebrook.

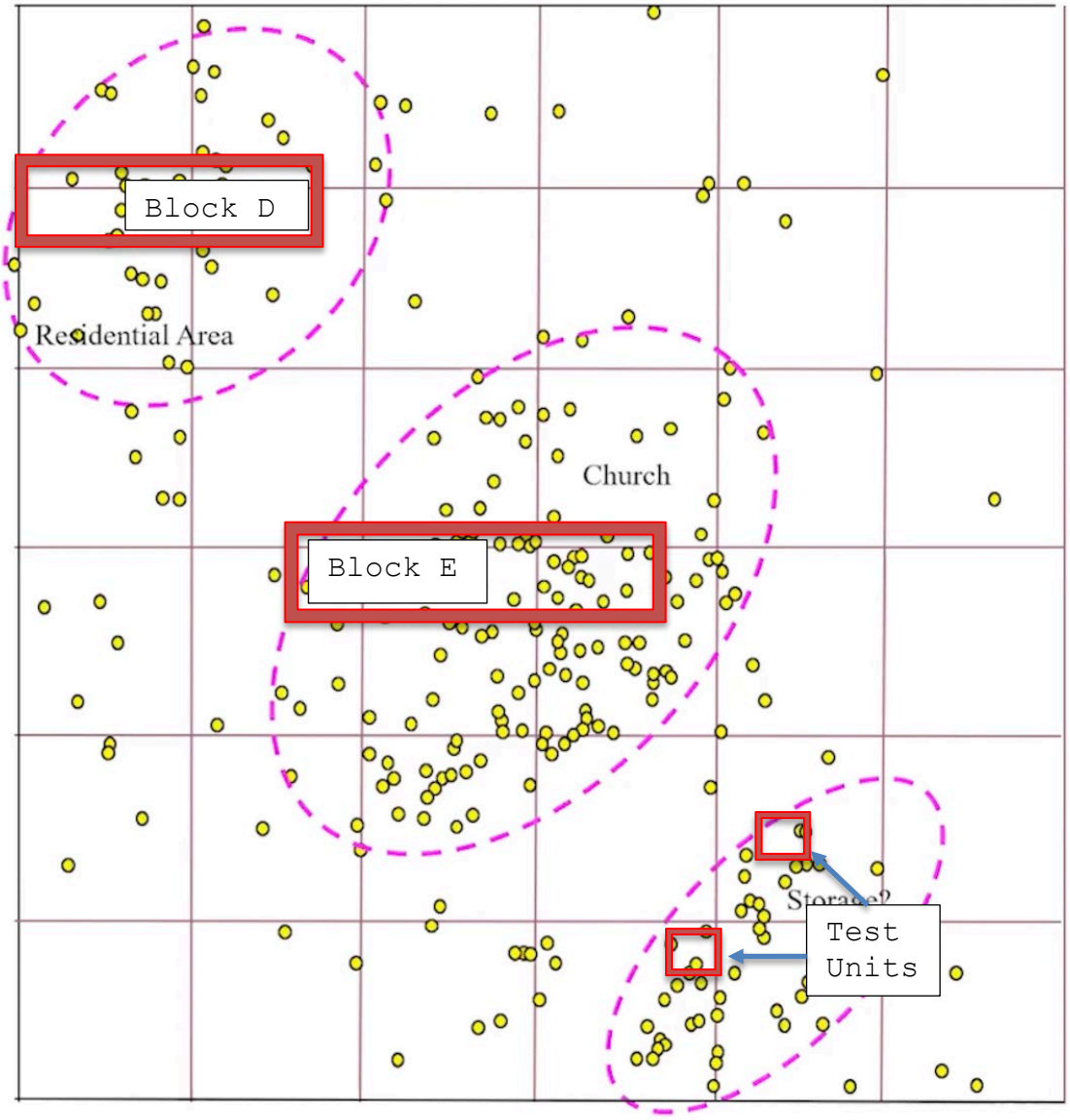


Figure 3: Map of Mission Concepción. Yellow dots indicate the location of nails. Red areas indicate proposed locations of excavation blocks and test units (not to scale). Image courtesy of Tom Middlebrook.

Collection Strategy

All ceramic, lithic, glass, and metal artifacts will be collected. Every effort will be made to minimize the amount of non-diagnostic and modern material collected for long-term curation. The following guidelines outline the collection strategy for excavations at Mission Concepción and related sites:

1. Burned rock, if encountered, will be noted but NOT collected. A rough count and weight (scales will be available) of burned rock should be recorded on excavation and feature forms when found but otherwise the rock will not be kept.
2. Modern trash (plastic, pull tabs, aluminum cans, modern beer bottles, foil etc.) will NOT be kept. If these items are found during excavations they should be recorded on level forms and then discarded.
3. Faunal remains smaller than a nickel (unless diagnostic) should NOT be collected. Larger bones will be collected when encountered in the field. Only a portion of these will be held for curation. Specifically, samples from the collected faunal materials will be analyzed and these remains will be the only materials retained for long-term curation. Any remaining bones will be kept at the TTU archaeological laboratory to be used as a teaching and comparative collection. Faunal remains recovered from features will be purposely selected for analysis.
4. Unless indicated by the P.I., charcoal will NOT be collected. Charcoal should be noted on all field forms when encountered but only collected when the sample has the potential for wood-species identification, comes from a feature, or as directed by the P.I.
5. Similarly, land snails should be noted on the level form but NOT collected.
6. Freshwater shells should only be collected when the umbo (or hinge) is present or when the shell is whole. Fragments of mussel shell should be noted on forms but not collected.
7. Select samples of mortar, daub, plaster, and adobe will be collected, though it is not feasible to collect all loose building materials encountered during excavations. If large quantities of displaced materials are found, the materials should be weighed, recorded on the field forms, and a small sample of the materials should be taken. Otherwise, all non-collected construction materials will be returned to the excavation unit when it is backfilled.

If you are in doubt about what to keep or toss, please consult with your Site Supervisor. Keep in mind that if you are still unsure what to keep or throw away it is best to err on the side of caution and collect. Any materials that should be discarded can be sorted out later in the lab.

Excavation Methods

TAS personnel will assign field crews and crew chiefs. Each crew chief will oversee 3 to 4 excavation units and 4 to 5 crew members will be assigned to each 2 x 2 meter unit. All units will be laid out prior to the arrival of the field school participants and labeled according to the grid system. Sub-datums, placed in the southwest corner of each unit, will also be established before the TAS field school begins. All datums are tied to the main vertical datum, which is set arbitrarily at 100.00 meters. Units will be excavated in 10 cm arbitrary levels unless otherwise instructed. Surface elevations should be taken for all four corners of the unit as well as the middle and recorded on the first level form for that unit. When point plotting an artifact, you should measure from the SW corner. For example, your measurement should increase from the south to the north and from the west to the east. For example, if you find a projectile point in situ and it measures

100 cm to the north of the SW corner and 80 cm east of the SW corner the correct provenience is N100 E 80. Figure 4 illustrates the proper point plotting method for horizontal provenience.

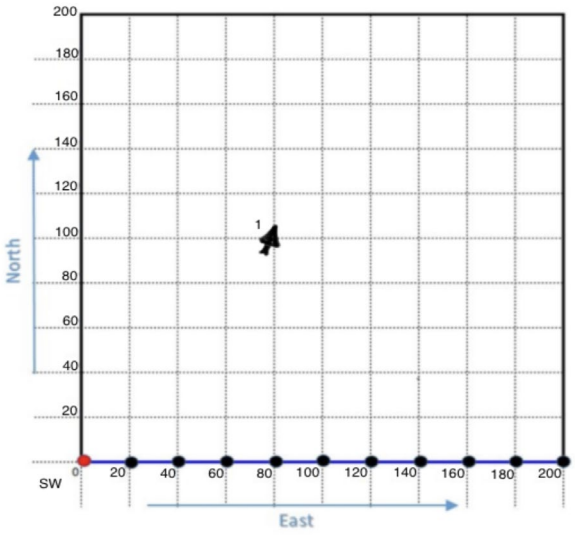


Figure 4: The plotted arrow point on the above map is located at N100 E80.

When measuring for vertical provenience, refer to the sub-datum elevation established for the unit you are working in. If the sub-datum elevation is set at 99.90 m, all of your elevation measurements will be subtracted from that number. To properly take an elevation measurement, you should place your line level on the center of the string attached to your sub datum. Make sure that the line is pulled taut and that the bubble is leveled in the line level before taking a measurement. Figure 5 illustrates proper vertical measurement technique.

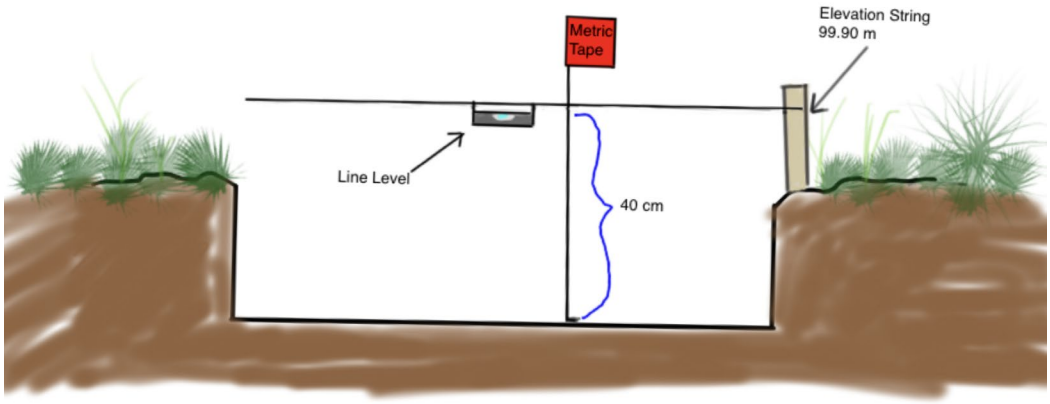


Figure 5: Vertical elevation measurements. The bottom of this unit is at 99.50 m or sub-datum elevation minus the tape measure reading (99.90 m - 40 cm = 99.50 m)

The first level of each unit should be excavated to the nearest tenth of a meter. For example, if opening elevations are as follows: 98.17, 98.12, 98.13, 98.09, and 98.15, then the level should be taken to 98.10. Please note, if you make observations of the surface before excavating, this information belongs on the Level 1 form- **NO LEVEL 0 forms should be created**. We are trying to reduce paperwork and confusion. If you need additional space for level recording, your crew chief will have continuation forms that can be used for this purpose. At the end of each day, your crew chief will collect all level forms (both finished and unfinished) and deliver them to the Site Supervisor for safekeeping. Unfinished level forms will be re-distributed the next day. **NO ONE** should be taking artifact bags back to camp or to their motel room. At the end of the field school all forms, artifacts, and cultural materials **MUST** be turned into your Site Supervisor.

The colonial deposits at the mission site are relatively shallow and are typically reached in the first 5-10 cm and extend 20-25 cm below the ground surface. Once sterile deposits or hardpacked clay are reached, units should be discontinued. Excavated dirt removed from each level will be screened through ¼" wire mesh and all materials collected in a field bag. Crews will likely have to share screens so please make an effort to avoid mixing materials from other units with your own unit. Be sure and clean out your screen completely after each use to prevent mix-ups. Also, crews may want to label or flag their dirt buckets to minimize confusion at the screens.

The upper levels of each unit can be removed carefully with shovels. However, once cultural materials are encountered excavators should switch to trowels to avoid damaging artifacts. When possible, all diagnostic artifacts, or faunal materials larger than 5 cm should be mapped in place on the back of each level form. If significant numbers of artifacts or faunal materials are encountered, photographs should also be taken and recorded on the level forms. We anticipate encountering numerous postholes during the excavations at ALL three sites. For detailed instructions on recording and excavating features, please refer to the section below.

Excavation Methods for Features

While the method of excavation for each feature will vary depending on the nature of the feature, some basic steps are required. First, if you think you have found a feature, alert your crew chief and Site Supervisor. Your Site Supervisor is in charge of assigning feature numbers. Once assigned a feature number, excavators should start a feature form and the feature should be photographed before, during, and after it is removed or exposed. Further, all features must be mapped either on the back of a feature form or if necessary, documented on a separate piece of graph paper. A profile of the feature should be drawn as well. When feasible, a soil sample should be taken from the feature (if possible, a gallon-sized bag of fill should be collected from every feature). Dirt from a feature that is not collected for sampling should be fine screened using 1/8" hardware cloth. Finally, all cultural materials recovered from the feature excavations should be bagged separately from the rest of the unit and labeled accordingly with the feature number, excavators name/s, date, site number, unit or units in which the feature was found, and the level/s and elevation of the feature.

Feature types expected at the sites include but are not limited to the following: trash pits/middens, prepared floors, builder's trenches, hearths, artifact caches, and postholes.

Postholes will likely be the most common feature present at all three sites. Each posthole will be assigned a feature number and soil samples of the fill should be collected. Excavators should fill a quart-sized bag for each soil sample removed from a posthole. Postholes should also be recorded on a feature form and the diameter and depth noted. To properly profile each posthole feature, one half of the posthole fill should be removed or bisected. A plan view showing the section of the posthole removed for the profile should be recorded along with a profile (see Figure 7). Photos of the posthole plan view (prior to removal) and the profile should be taken and recorded on the feature form. The remaining fill left in the post hole should either be collected for a soil sample (assuming a sample has not already been collected) or fine-screened.

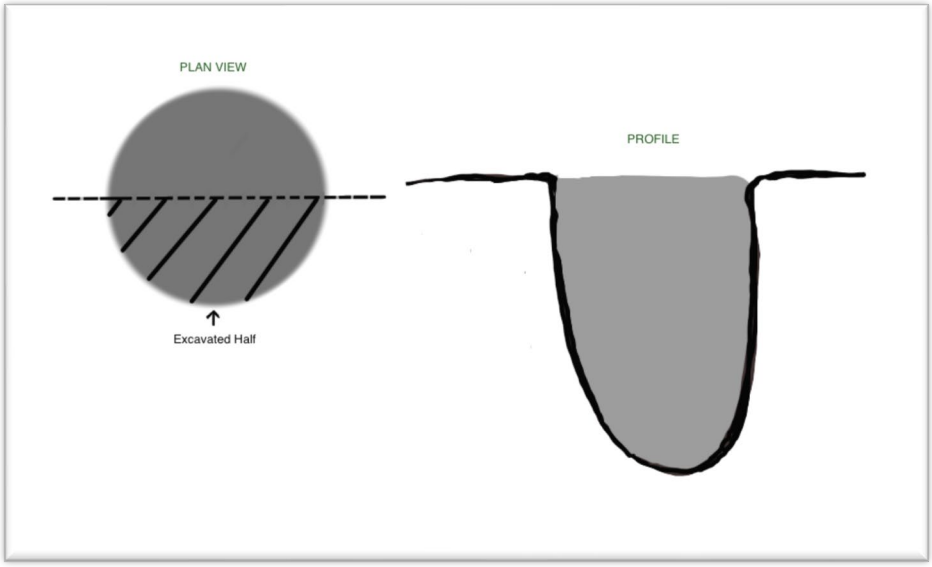


Figure 6: Posthole plan view and profile.

Field Bags

All field bags should be labeled with the site number (41NA334, 41NA344, or 41NA346), Block (e.g., Block A, B, C, D, or E) unit number (e.g., N1020 E950), level number (e.g., Level 2: 98.10-98.00), and date (see Figure 6 for an example). Point plotted artifacts found in situ should be placed in their own plastic artifact bags with all of the above information as well as the exact provenience of the object (e.g., N19 E34 cm elev. 98.14). Diagnostic artifacts recovered in the screen should also be bagged separately. When a level is completed, all of the paperwork should be placed inside one large plastic bag with all the individual artifact bags associated with the level. Once a level is finished, the level bag is delivered to the crew chief. The crew chief is

responsible for delivering the artifacts and all paperwork to the artifact collection area at the end of the day.

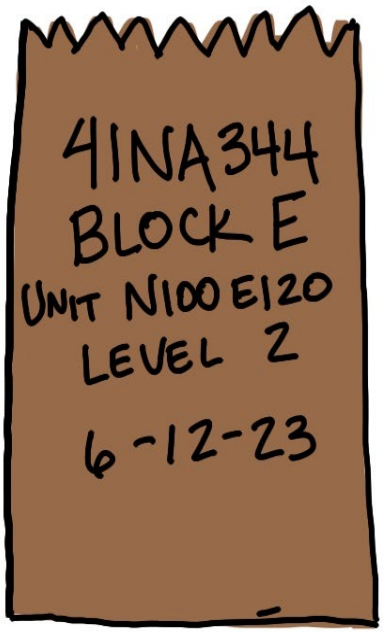


Figure 6: Artifact Bag label example.

Daily Artifact Log

When a level or a feature is completely excavated, the crew chief will enter the artifact and provenience information onto the Daily Artifact Log. Use a separate log for features. Complete the log for every level, even if artifacts were not recovered. At the end of every day, the crew chief will bring the log, artifacts bags, and forms to the designated artifact collection area at the sites. Start a new log the next day.

Field Forms

Examples of this year's excavation forms are provided in the Appendix. Forms include level forms, continuation forms, features forms, photo log, and daily artifact log. Please use **PENCIL ONLY** and not pen when filling out the forms, especially when creating plan maps on the back of each level form. Names of crew members, dates, unit numbers, levels etc. are all important pieces of information that must be listed on each form. Crew chiefs should check each form handed in for any missing information before it is given to their Site Supervisors. If a feature is found, a feature form must also be filled out.

Once a unit is finished, a profile of at LEAST one wall should be recorded and photographed. Graph paper will be provided for profile drawing and each unit MUST have a profile completed before a unit can be backfilled. Please include the site number, block, unit coordinates, indicate which wall of the unit is profiled, the name of the individual creating the profile, the date, a menu, and soil descriptions. Crew chiefs, **PLEASE** figure in enough time at the end of the week to complete this task. We have had problems with this in the past and need to stress the importance of profiling as a part of the excavation and recording process.

Photography

We will not have a "designated" photographer for this year's excavations. We ask instead that each unit have an assigned photographer selected from the crew to take photos each day. However, all crew members are also encouraged to take photos. All photographs should be downloaded in the field lab by the end of field school. Photo boards will be provided to each block for excavation photos. Please use the photo board to indicate the Site Number, Block, Unit, Level, Feature # (if present), and Date for the images taken. Images without the photo board can be taken as well, as long as at least one image has been taken with the photo board so we can identify where and of what the pictures were taken. Photos can be taken with smartphones provided the camera is capable of taking good quality images. Whenever possible, try to eliminate shadows from your photos and take as many images as needed to properly document your unit or feature. Every level does NOT need to be photographed unless you encounter features or large quantities of in-situ cultural materials. If you are not sure if you need a photo of a unit, err on the side of caution, and take a picture. Pictures cost us nothing, so snap away!

Photo Logs and Downloads

Every person taking photographs will have their own photo log for the duration of the field school. Any time photos are taken of a unit, please record the number of images taken and the photographer's name on the level and/or feature forms. The assigned photographer and anyone else taking photos should bring their phones to the field lab, so images can be downloaded onto the field school computer. Lab Director Aina Dodge will be responsible for downloading your images. Please make every effort to come to the lab and download your photos and turn in your photo log before you leave Nacogdoches.

Appendix: Examples of Field Forms

2023 TAS FS Nacogdoches 41NA_____ Page____of_____

Level Form

Provenience Info	
Northing	
Easting	
Block	
Level #	
Starting Elevation	
Ending Elevation	

Features
Feature #s
Feature Types

Additional Forms	
Feature Form	
Continuation Form	
Photo Log(s)	
Other	

General Info	
Date	
Crew Chief	
Excavators	

Samples Taken	
Matrix	
Charcoal	
Other	

Screening	
Wet	
Dry	
1/4”	
1/8”	
1/16”	

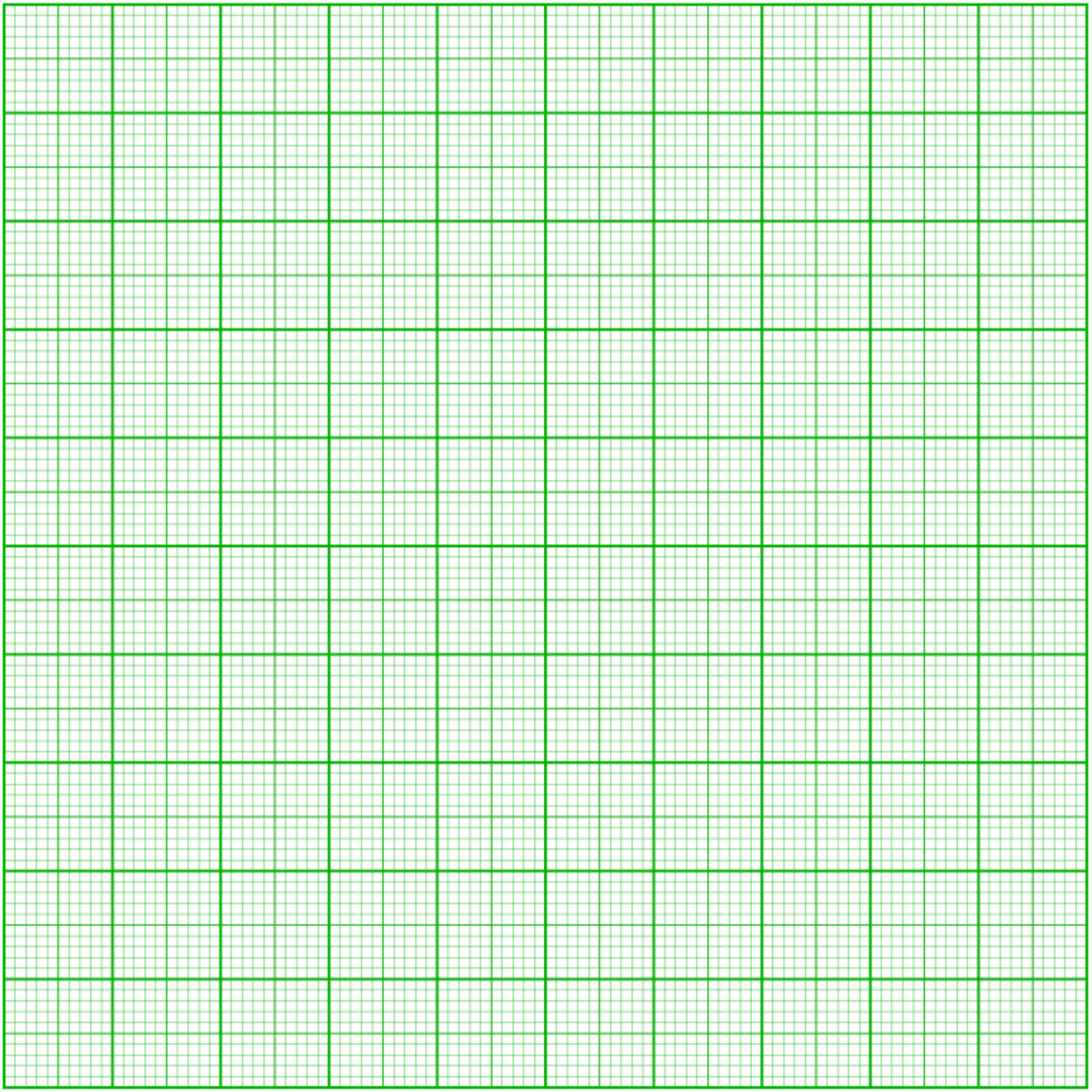
Soil	
Munsell Color	
Texture	
Moisture	

Materials Collected check all that apply	
Native Pottery	
Non-Native Pottery	
Glass	
Bone	
Lithic Tools	
Debitage	
Lead Shot	
Other Metal	
Mussel Shell	
Daub/Adobe	
Other	
Total Number of Bags	
# level bags	
# point plotted bags	

Photos	
# photos taken	
Photographers	

Additional Notes:_____

Scale: ____ : ____ N



Item	Horizontal Location		Bottom Elevation	Notes
	N	E		
	N	E		
	N	E		
	N	E		
	N	E		
	N	E		
	N	E		

Feature Form

Feature #_____Block:_____Unit Coordinates: Northing_____Easting_____

Date: June___2023 Crew Chief:_____

Contained within___units Associated Units:_____

_____

Dimensions:_____

Top Elevation:_____Bottom Elevation:_____

Associated Features:_____

_____

Soil Descriptions:_____

Exposed by:_____

Recorded by:_____

Sketched by:_____

Samples Collected:_____

_____

_____

_____

Photo Record:_____

Remarks:_____

_____

Feature Description:_____

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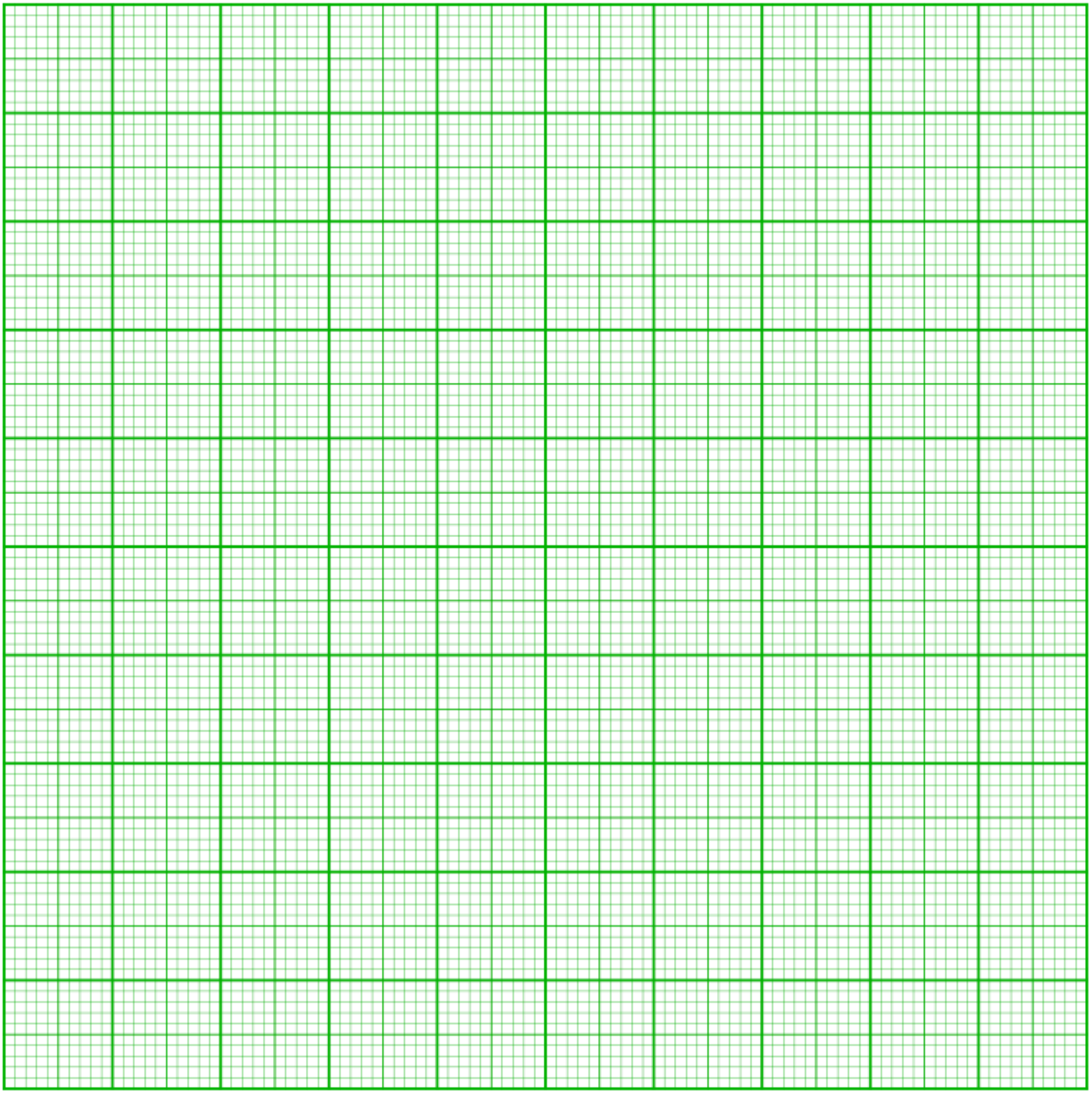
_____

_____

Scale: _____: _____



Item	Horizontal Location		Bottom Elevation	Notes
	N	E		
	N	E		
	N	E		
	N	E		
	N	E		
	N	E		
	N	E		

Provenience Info

Northing/Easting		
Block		
Level		
Feature#		

Date	
Recorder	
Excavators	

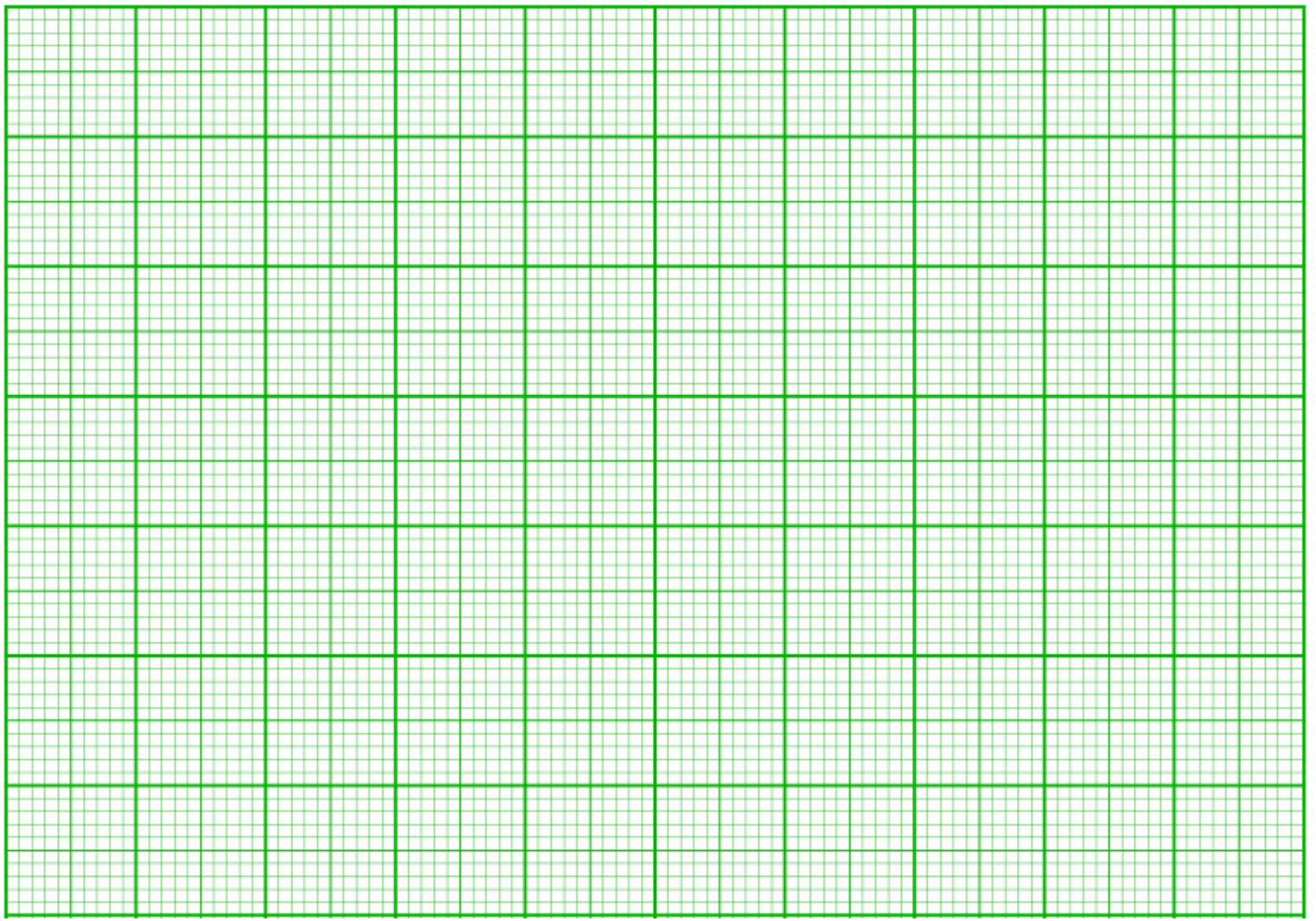
Diagnostic Items

Item	Horizontal Location		Bottom Elevation	Notes
	N	E		
	N	E		
	N	E		
	N	E		
	N	E		
	N	E		
	N	E		

2023 TAS FS Nacogdoches
Profile Form

41NA_____

Page ___ of ___



Recorder(s)_____

_____

_____

Date:_____

Block:_____

N_____E_____

Soil Descriptions:

_____

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June 2023 TAS Field School Photo Log

Photographer_____

Every person taking photos gets their own log. Fill out the log in the field.

Download your photos at the lab before you leave Nacogdoches.
Contact Aina to make other arrangements. 512-914-8687

EXP. #	Site #	Block	Northing	Easting	Level	Description

June 2023 TAS Field School Daily Artifact Log

Submit a new log with each round of artifacts submitted to the lab.

Use a separate log for features.

Site # 41NA_______Feature #______________Crew Chief________________________

Date	Block	Northing	Easting	Level #	Depth (cmbs)	Elevation Below Datum	# artifact bags	Name of person filling out the line	Lab √
Just the Day	Letter	Use unit coordinates for the artifacts from the general level. Use specified coordinates for a point plot.		1 - 10	Use a range for the artifacts from the general level. Use specified depth and elevation for a point plot.		Total # bags in level bag	First initial, last name	Lab use only