# EMERGENCY EXCAVATION OF LA 50245, THE NORTH EDITH CASA-CORRAL: INITIAL REPORT 

By

## David A. Phillips, Jr.



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Maxwell Museum of Anthropology MSC01 1050, 1 University of New Mexico
Albuquerque, New Mexico 87131-0001
www.unm.edu/~maxwell

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## PREFACE

Excavation of LA 50245 project was sparked by Mr. Edgar Boles, the City of Albuquerque's historic preservation planner. At the time Ed believed that the property was inside city limits. Given the likely fate of the property after sale-residential development-and given the lack of legal protection for the site, Ed felt that the best option was to arrange for voluntary excavation.

The property proved to be just north of the city limits, thus outside Ed's jurisdiction, but the landowner, Mr. Chang An, asked him to continue seeking an appropriate solution. Ed then recruited me to conduct the emergency excavation. The N.M. Historic Preservation Division was notified, and supported the decision to excavate the site. Fieldwork was done under a right-ofentry provided by Mr. Chang, who later signed a deed of gift allowing the Maxwell Museum to keep the collections. One of the pleasures of doing the project was to get to know Mr. Changfor years, a source of knowledge and inspiration for Albuquerque gardeners-and to experience his open spirit.

The museum provided my time and limited field supplies, but otherwise the excavation depended on volunteers. They included Anne Bagwell, Beth Bagwell, Jean Ballagh, Tim Beauchene, Joanna Berman, Mary Blackburn, Ann Carson, Andrea Carvey, Luanne Chowning, Caleb Chung, Michael Coleman, Tyler Coleman, Michael Cooper, Kay Deniston, John Evaskovich, Peter Ford, Stephanie Ford, Anne Francis, Jack Francis, Joan Goldberg, Neal Goldberg, Hillary Gorman, Katherine Hauth, Dylan Hecht, Tom Jasek, Matt Kelso, Collette Maes, Colin McKenzie, Gregory McKenzie, Morgan McKenzie, Lionel Moisa, Raquel Montoya, Jerrod Mora, Tom Ormsby, Benjamin Pedneau, Charles Pfuntner, Beverly Rowe, Samantha RuscavageBarz, Kari Schleher, Jennifer Secrest, Braelyn Urioste, Rita Urioste, Shane Urioste, Shayleigh Urioste, Gabriel Varoz, Elaine Waterbury, Tim Waterbury, Wayne White, Anna Winter, Steven Winter, Crystal Zamora, and Rosa Zamora. Volunteers were recruited from the Albuquerque Archaeological Society, from the UNM student body, from the Albuquerque Metal Detectors Association, and from the general public. Erin Hudson, a Hibben Scholar at the University of New Mexico, proofread the draft. To all those individuals, and to any whose names I forgot to include, my thanks.
D.A.P.

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## Chapter 1

## INTRODUCTION

From June 3 to August 28, 2004, the Maxwell Museum, University of New Mexico conducted emergency archaeological excavations at LA 50245, the "North Edith Casa Corral," a Hispanic home with attached corral in Bernalillo County, New Mexico (Figures 1 and 2). The site was on property being sold by Mr. Chang An, who graciously delayed sale of the property through the summer so the site could be excavated.

Because the project was unfunded, the goals were limited to (1) exposing architectural features and collecting a useful sample of artifacts, (2) creating field notes and an organized collection useful to later researchers, and (3) preparing a brief descriptive report of the site. In other words, the goals resembled those of salvage archaeology projects of the 1950s and 1960s. The field records and collections from the project are at the Maxwell Museum of Anthropology, and are available to researchers who wish to follow up on the work described in this report.

## Project Context

LA 50245 was a Hispanic home in the North Valley, a suburban, formerly rural area between Albuquerque and Sandia Pueblo. The site is bounded on the west by Edith Boulevard, on the south by Tyler Road, and on the north by a private drive next to a channelized arroyo. The property is at 6900 Edith Blvd., N.E., which is unincorporated land in Bernalillo County, on the Elena Gallegos Grant.

UTM Zone 13 values (NAD 1927) for the site datum are: E 352404.3, N 3891495.3 (average of three readings; Garmin eTrex GPS with WAAS correction). The elevation at the intersection of Edith Blvd. and Tyler Rd. is 1526 m (5008 feet).

The site is on the west edge of a bajada extending from the Sandia Mountains, just out of the Rio Grande floodplain. The location provided immediate access to irrigated lands on the valley floor, but was high enough to avoid flooding. The location also provided direct access to the grazing lands of the bajada. The site was next to and faced Edith Blvd., formerly an alignment of the Camino Real and ever since a valley-edge route between Albuquerque and points north.

Before the local tributary drainages were so heavily modified, the site lay on slightly higher ground between Bear Arroyo and Arroyo del Pino. The local biotic community is artificial, and reflects late 20th century suburban development. Until recently, the property served as a satellite nursery for Osuna Nursery, owned and operated by Mr. Chang.


Figure 1. Site location.


Figure 2. LA 50245, redrawn from Michael Marshall’s 1985 survey map. The small circles indicate the "downhill" sides of the wall melt and borrow pit.

## Site History

LA 50245 may be one of the buildings shown on Reginald Fisher's (1931) "Plat 3" map, east of his Site 8. The site goes unmentioned in his published report. In recording the site in 1985 (see below), Michael Marshall commented, "Fisher in 1931 described the site as a 'Large ... Spanish hacienda' which ... was 'In a fair state of preservation. The walls which are 1 to 2 feet thick are standing from 8 to 10 feet high.'" The fact that Fisher recorded LA 50245 during an archaeological reconnaissance indicates that as of 1931, it was a ruin (albeit with standing walls) rather than an occupied or recently abandoned home.

The location of LA 50245 can be pinpointed on the USGS Alameda 7.5 minute quadrangle prepared in 1934. Tyler road was indicated as a two-track extending east from Edith Blvd., but LA 50245 was not shown-again suggesting that in the 1930s, the building was in ruins.

A mid-1930s aerial photograph of the area (by the Soil Conservation Service; a copy was provided to the author by Dr. John Roney of the BLM) shows the location of the casa-corral and hints at the former existence of an insubstantial livestock enclosure (of barbed wire, for example) extending south and east from the building. The lack of shadows indicates that the walls were down or mostly down. Otherwise, the photo is too blurry to interpret. Figure 3 shows the same area in 1974; the detail is much sharper than in the 1930s SCS photo but otherwise the site looks very similar. The inverted square U of lighter soil in Figure 3 appears to be the north half of the casa-corral. The south half of that structure does not stand out in the photo, due to insufficient contrast between the wall melt and the adjacent ground surface.

Casa Corral was recorded by Michael P. Marshall in April 1985 (Figure 2). Fortunately for the current project, Marshall's information is detailed and accurate. His site description (on file at ARMS, Santa Fe) reflects conditions before construction of the nursery. Given its value, Marshall's narrative is provided below.

It is ... 500 meters south of the Arroyo del Pino confluence area [in] open scrubland. The terrain is open and characterized by barren hummocks and clumps of Black Brush and Salt Brush.

The site consists of an adobe walled Casa-Corral complex and associated midden debris which appear in an area 75 meters north-south by 50 meters east-west. The corral is a high-walled adobe block enclosure 23 by 21 meters in size and the house is a large "L" shaped construction which forms the southwestern margin of the corral. The entire construction appears to be with terron block ...

The corral is a well defined enclosure and wall fall indicates that the walls were quite high, at least two meters in elevation. The corral appears to be enclosed with block walls [on] three sides and built into a bank on the south. A portion of the house corner also appears to be constructed against the bank in dug-out fashion. Two gates appear to enter the corral at the northwest and northeast corners. Two posts visible along the north wall may represent a hitching rail.


Figure 3. LA 50245 in 1974.

The house is a large "L" shaped construction 30 meters north-south by 16 meters east-west and with rooms 4.5 to 6.0 meters wide. Interior walls are difficult to discern but it appears as if only three large rooms are present. Near the north end of the house is a cluster of iron scraps and coal fragments which suggest a possible forge area or storage bin.

The middens are quite extensive and consist of low mounds ... north and northwest of the Casa-Corral. The midden areas are 22 by 13 meters and 20 by 10 meters in size. Iron fragments which were observed consist of horse gear (shoes, rings), a wood stove part, and some large bolts, nuts, and [a] ring collar which may be well parts.

Some earthenware ceramics are present but glass and ironstone are most common. Most of the earthenware was found in the west area of the south midden.

Today there are no standing walls and the rooms and corral area are reduced to mounds 1.0 to 1.5 meters in elevation. The entire construction is adobe and most appears to be terron block based on the inclusion of rootlets. The bricks are often a dark gray color which allows for definition of wall alignments in the native tan soil.

Marshall classified the site as "Hispanic ... Ca. 1860-1910" and commented on its condition: "The site remains largely intact and in good condition. A borrow pit was, however, excavated in the house and mound ... destroying one room and ... $1 / 3$ of the house area."

Marshall discussed the artifact assemblage as follows:
There [is] some indication that this settlement was established in the middle 19th Century (i.e., black glass and shell edge [ceramics]). Most of the assemblage, however, including the marked pottery dates to the late 19th Century and early 20th Century. The ... porcelain and semi-porcelain cups and table ware would have been fairly expensive in their day. Two of the three pottery marks are English made.

Alfred Meaken-England 1891+
Shell edge, very late (post 1860?)
Wilkinson (England) Mark 1896+
Dresden (mark)
Large semi-porcelain deep dish
3 semi-porcelain cup raised decorations 1860+
2 decal and raised designs, floral 1850+
Lusterware-redware with luster and white glaze
Yelloware 1840-1930
3 hand-painted porcelain-floral
Black rim band-white earthenware
Red, blue, and gold on porcelain
Raised plain 1860+
Stoneware with interior Albany slip 1850-1900+
Semi-porcelain cup with gilt band
White earthenware cup
14 white earthenware sherds
3 olive black glass (light color) 1840-1880+

3 brown bottle glass 1880+
8 purple glass fragments 1880-1920
4 aqua window glass-thick
2 yellow glass
Blue bottle glass
Milk glass
2 oval glass disks from eyeglasses
2 horseshoe fragments
1 iron circle-part of a bit
Blue enamelware pot
Slate fragment
Earthenware ceramics: the artifact assemblage at this site is dominated by EuroAmerican ironstone and glass containers. Native earthenwares represent less than 5 percent of the assemblage. Most of the earthenware materials recovered from the location were found in the west area of the west midden.

Utilities: 16 specimens. All plainware. 10 sherds have fine to medium sand temper and 6 have coarse opaque quartz-feldspars similar to the materials from Sandia Pueblo. 13 are reduced and 3 are oxidized. Eleven have a light interior polish. One rim form 219-1. Walls of fine sand group range [from] 5.5 to 9 mm , mean 7.7 mm . Walls of coarse tempered group range [from] 6.5 to 15 mm with a mean [of] 10.2 mm .

Santa Ana or Sandia Polychrome Group: ... Sand temper in red paste. Three polychrome sherds, one red on white, one with eroded surfaces. One small rim edge is black. Walls 5 to 6 mm .

Zia Group-Basaltic temper: one specimen. A white slip, undecorated sherd. A jar ... polychrome ... The wall is 4.5 mm .

Northern Keres (probable Santo Domingo): 5 specimens. All bowls. One with carbon bichrome, tan paste with fine crushed white rock temper. Walls 6.5, 7, 7.5 and 9 mm .

Flower pot fragments: 3
Well after Marshall recorded the site, Mr. Chang converted the property into a satellite nursery. The work included mechanical leveling of the property, placement of underground utilities and drains, and other activities that greatly altered the site from what Marshall had recorded. The nursery operation is shown in Figure 4, an aerial photograph dating to 2002.


Figure 4. LA 50245 in 2002, with the 2004 surface contours superimposed. Greenhouses, roads, and planted trees can be seen. Note the dropoff at the north end of the site, toward a now-channelized arroyo (off the image). Image prepared by John Evaskovich of the Public Service Company of New Mexico.

## Field and Laboratory Methods

Figure 5 shows the site at the beginning of the excavation. All but one of the nursery buildings (labeled "House") had been removed but the area was littered with debris. Some of the debris had been gathered mechanically, leading to new blading. Nothing in the area could be firmly tied to Marshall's site plan. Strips of less vegetated ground suggested the locations of the north and south walls of the casa-corral, but it was unclear whether these wall traces were real or a product of nursery activity.

Fieldwork began on June 3, 2004 and continued through August 28 of that year. Most work took place on Fridays and Saturdays. The crew established a datum at the estimated location of the casa-corral, and assigned the value E 500 N 500 to the datum. Using a transit and fiberglass tape, the crew marked points on a 10 m grid system, using wood stakes and steel spikes (the latter in roadways, driven flush with the ground). The grid was oriented to true north (defined as 10 degrees, 15 minutes west of magnetic north). Once the initial 10 m interval points were in place, additional points were established by stretching a tape between two existing points, until much of the area (and all but the most widely scattered surface artifacts) was covered by 5 by 5 units. Subsequent mapping of the site surface and excavated areas used an XY coordinate approach, in which points on maps were measured from the edges of 5 by 5 m units. The grid points were also used to generate elevation data (Appendix A).

During surface collection, provenience control was by 5 by 5 meter units. The few artifacts collected outside those units were bagged by site quadrant (Figure 6). Due to the heavy reuse of the site, the crew was instructed to ignore surface artifacts (and later, subsurface artifacts) that were unlikely to be from the historical occupation. Thus, for example, clear bottle glass was usually not collected unless it was patinated. This intentional sample bias seemed preferable to collecting and curating several cubic feet of probably modern trash. Not all units yielded surface artifacts. Because of the heavy disturbance, the distribution of surface artifacts did not help us correlate the surface remains with Marshall's map.

No mechanical equipment was used during excavation. Given the limited time and resources, the excavation was conducted in two stages. In the initial stage, a 5 by 5 m unit was stripped of its upper fill (nursery-introduced or otherwise disturbed), without screening, in order to find deposits deserving more careful treatment. In the second stage, selected deposits were excavated using tight horizontal and vertical controls, and the fill was screened. In practice, deposits intact enough to warrant second-stage treatment were almost absent.

Initial stripping of the 5 by 5 m units consisted of shovel-stripping, trowel-scraping, and brushing or sweeping away fill in search of walls, floors, and other features. Partial excavation of units was common (Figure 7). The work in each 5 by 5 m unit was logged on an excavation unit report form prepared for the project. Features were given sequential numbers and supplemental information was recorded for each.


Figure 5. LA 50245, modern surface before excavation. Excavation showed the central, smallest "wall trace" to be spurious.


Figure 6. LA 50245, surface collection units.


Figure 7. LA 50245, excavation units, partly or completely exposed.

Excavation was complicated by the shared orientations of historical features and nursery features. To provide one example, the north wall of the casa-corral was closely paralleled by a French drain, making it more difficult to define the south edge of that wall. The shared orientations are not surprising, as both the house and the nursery were oriented to the local street grid.

Due to the limited time and labor available to the project, and because most of the work consisted of initial stripping through disturbed material in search of intact deposits, most fill was not screened. For the exceptions noted in Chapters 2 and 3, quarter-inch mesh was used. Artifacts were bagged by provenience and material type. The provenience and other key information were written on each paper bag and logged on a field specimen sheet.

Duplicate photographs were taken using black-and-white print film, color slide film, and digital images. The photos were logged on a field photo form. In addition to these records, the author maintained a daily log of the fieldwork.

At the end of the excavation, members of the Albuquerque Metal Detectors Association located still-buried metal artifacts that would otherwise have been left behind on the site. Their sweep of the site proved very productive. When the detector operators located metal, they excavated the items and left them in the 5 by 5 m units for collection by the archaeologists.

All collected artifacts were taken to the Maxwell Museum. Over the next year and a half they were cleaned, then rebagged using archival plastic bags with inserted information slips of acidfree paper. During this process the field specimen sheets were checked against the bags, and an Excel spreadsheet of the field specimen data was prepared. Most of the lab work was done by Collette Maes, whose continued volunteer efforts are deeply appreciated. During artifact cleaning, an unexploded round (bagged under FS No. 301) was found. The round was turned over to the UNM Police Department, which decided that the safest course of action was to dispose of the round. Otherwise, the collections and original notes are currently housed at the Maxwell Museum, UNM.

## Reference Cited

Fisher, Reginald G.
1931 Second Report of the Archaeological Survey of the Pueblo Plateau, Santa Fe SubQuadrangle A. University of New Mexico Bulletin 1(1). School of American Research and University of New Mexico Press, Albuquerque.

## Chapter 2

## UNIT DESCRIPTIONS

Unit details are presented for 10 by 10 m areas, beginning with the most southwesterly excavated 10 by 10 m area and proceeding north, then moving to the next series of 10 by 10 m areas to the east. For each 10 by 10 m area, the presentation begins with the southwest quadrant ( 5 by 5 m unit), followed by the northwest, southeast, and northeast quadrants. Unexcavated quadrants are ignored.

## E 480-490, N 480-490

In this 10 by 10 m area, two units were partly excavated (Figure 8), with minimal results.

## E 480-485, N 485-490

The only work in this unit was a shovel pit (A in Figure 8) that measured 1.15 by 1.1 m . The pit was 15 cm deep at its east end and 25 cm deep at its west end. The pit was excavated during an attempt to locate the southwest corner of the casa-corral. The brown, sandy fill was introduced by the nursery operation.

## E 485-490, N 485-490

A gravel road covered the east half of this unit. The road's west edge is shown as a dashed line.
A shovel trench was placed along the unit's west edge, in an attempt to intercept the south wall of the casa-corral. The south 70 cm of the shovel trench (B in Figure 8) was quite shallow. The northern three-quarters of the shovel trench (C) was deeper; the narrow strip shown between B and C is the almost vertical surface between the two levels. Portions of two tree planting holes (th) were exposed by the deeper portion of the trench. The northern tree planting hole cut through a deposit reminiscent of terrones found elsewhere on the site, but the deposit could not be confirmed as part of a compound wall.

A second, shorter shovel trench (E) was placed east of the first one, to search for the south wall of the compound. This trench measured 1.3 by 0.7 m and varied from 20 to 25 cm deep. No features were exposed in the trench.

After rain softened the road, an area of gravel along the east edge of the unit was stripped away (F), to a depth of 1 to 10 cm . The intention was to return to this area to search for the south wall of the compound, but the additional work never took place. The exposed area was too shallow to expose any surviving historical deposits.

Aside from the road gravel, the unit fill was brown and sandy, and was introduced by cut-and-fill work during construction of the nursery.


Figure 8. E 480-490, N 480-490, plan of excavations.

## E 480-490, N 490-500

In this 10 by 10 m area, two units were excavated (Figure 9), with minimal results.

## E 480-485, N 495-500

The only excavation in this five-by-five (A in Figure 9) occurred when a volunteer elected to continue beyond the limits of E 485-490, N 495-500. The exposure was 1.6 by 0.7 m across and 1 to 9 cm deep-too shallow to reach any surviving archaeological deposits. The fill was brown and sandy, and was introduced by cut-and-fill work during nursery construction or use.


Figure 9. E 480-490, N 490-500, plan of excavations.

## E 485-490, N 495-500

The north two-thirds of this unit was stripped in an attempt to find the west wall of the casacorral. Except in planting holes, 1 to 15 cm of soil was removed, which was too shallow to find the wall. (In planting holes, with their soft fill, it was common to excavate more deeply until the hole was emptied.) On the other hand, the unit was so badly disturbed that any cultural features may not have survived. A small exploratory hole in the southwest corner of the unit (C) failed to expose cultural features. This small excavation measured 50 by 30 cm .

The excavation exposed a 30 by 25 cm sandstone rock (B in Figure 9) that could have come either from the historical compound or from the nursery operation. The excavated fill was brown and sandy, and was introduced by the nursery operations.


Figure 10. E 480-490, N 510-520, plan of excavations.

## E 480-490, N 510-520

Within this 10 by 10 m area, one unit was partly excavated (Figure 10, above).

## E 485-490, N 510-515

The only excavation in this 5 by 5 m unit (A in Figure 10) occurred when a volunteer continued into the unit from the unit to the east ( $\mathrm{E} 490-495$, N 515-520). The irregular incursion was 1.7 by 1.3 m across and 5 to 15 cm deep-too shallow to reach any surviving cultural deposits. The unit fill was brown and sandy, with large amounts of bark mulch. The fill was introduced during nursery operations.


Figure 11. E 490-500, N 480-490, plan of excavations.

## E 490-500, N 480-490

In this 10 by 10 m area, one unit was completely exposed and two units were partly exposed (Figure 11, above).

E 490-495, N 485-490
Road gravel was stripped from this entire unit, but in the west half of the unit nothing else was done (A in Figure 11). In the south-central portion of the unit, a shovel trench was excavated to find the south wall of the casa-corral (B). The shovel trench was 1.5 m long, 0.7 m wide, and extended 15 to 20 cm below ground surface. Within the shovel trench, terrón-like material indicated the wall location (aw). The north edge of the wall was fairly clear but the south edge was questionable. The observed wall remnants may have been from a base course of terrones.

Within the east half of the unit, which was exposed slightly more deeply than the west half, disturbance was extensive (C). This disturbance including a French drain (fd) and a buried irrigation line (D). Nonetheless, a roughly north-south adobe wall segment was defined (aw). Adjacent to the wall segment, in the northeast corner of the unit, was a surviving patch of adobe floor (af), bisected by the French drain. The surviving wall and floor segments in the unit were defined as Feature 8 (see Chapter 3, Feature Descriptions).

The trench for the buried irrigation line sliced a wood post in half (E). The post originally measured $10+\mathrm{cm}$ in diameter. A nearby area of deeper disturbance ( F ; a planting hole?) included a piece of plastic garden hose. South of that disturbed area, in the southeast corner of the unit, a fragment of wall was found.

Five rusted structural staples (s), $11 / 4$ inches wide, were found in almost perfect alignment with the west edge of the main wall segment. At first the staples were considered a possible part of the casa-corral. Subsequent work on the site made it clear that the staples were nursery-derived. The shared alignment of the wall and staples was therefore a coincidence.

## E 495-500, N 480-485

The north end of this unit was excavated to chase the south wall of the casa-corral (aw). In the excavated area (G in Figure 11), an adobe wall was exposed (aw), with room fill (H) north of the wall. The wall and room are described in Chapter 3, as Feature 6. The excavated fill-loose brown dirt with a weed and Bermuda grass cover-was highly disturbed by the nursery operation.

## E 495-500, N 485-490

This unit had been highly disturbed by the nursery operation. The south third of this unit (G in Figure 11) was stripped, mostly to 1 to 5 cm below the ground surface, to chase the wall and room also exposed in E 495-500, N 480-495. The central third was so disturbed that no excavation was attempted.

The northern third (I) was stripped off while chasing the middle (and smallest) wall trace shown in Figure 5. This part of the unit was stripped to a depth of 1 to 5 cm but the area proved to be so disturbed (including planting holes) that the work was stopped. Based on the work in this unit and the one to the west, the middle wall trace observed on the site surface (and shown in Figure 5) was spurious. To the unit as a whole, fill was described as loose brown soil with a weed and grass cover.

## E 490-500, N 490-500

In this 10 by 10 m area, the two western units were partly stripped (Figure 12).


Figure 12. E 490-500, N 490-500, plan of excavations.

## E 490-495, N 490-495

After a heavy rain, when most of the site was too muddy to excavate, the softened road gravel in this unit was stripped (to a depth of 3 cm ) along three edges of the unit (A in Figure 12). The exposed surface was most likely still in road fill (a light-colored, silt-like road bed below the gravel cap). Due to a lack of time and labor, the exposures in this unit were not pursued.

## E 490-495, N 495-500

After the heavy rain just mentioned, the softened road gravel layer in this unit was stripped along the east edge of the unit, to a depth of 2 cm (B in Figure 12). At this depth, the exposed surface was still in road fill. In this case as well, the initial exposure was not pursued.

In the western third of the unit, 5 to 10 cm of fill was stripped away in an unsuccessful attempt to locate walls or other features (C in Figure 12). The fill was not described.


Figure 13. E 490-500, N 500-510, plan of excavations.

## E 490-500, N 500-510

In this 10 by 10 m area, all four units were completely exposed (Figure 13, above).
E 490-495, N 500-505
Much of this unit was stripped to a depth of less than 5 cm , exposing an adobe-like deposit. The western portion of the unit (A in Figure 13) was stripped to 5 to 15 cm below the present ground surface, exposing mostly disturbed material. A French drain from the greenhouse operation was exposed at the north end of the unit ( fd ).

A tabular stone was found near the east edge of the unit. The stone measured 40 by 35 cm by 15 cm thick; its top was flush with the adobe-like deposit, suggesting that it might be a structural element (such as a base for a post). The stone was therefore recorded as Feature 9. As the fieldwork drew to a close, a 1.7 by 1.4 m area was quickly removed around the stone (B), to an
additional depth of 15 to 25 cm , with little attempt to save artifacts. The deposits at the base of the stone included pieces of adobe or terrón but they appeared jumbled, possibly from mechanical action. The stone may also have been intruded by mechanical disturbance of the site.

## E 490-495, N 505-510

A graveled two-track road extended north-south through the east edge of this unit. Most of the unit was stripped to a depth of 3 to 5 cm (C in Figure 13). The western portion was stripped even more superficially (less than 3 cm ), except in the northwest corner where stripping reached 5 to 10 cm below the surface (D). In the southwest corner of the unit and near the southeast corner of the unit, an enthusiastic volunteer dug two deeper holes (E). The French drain mentioned in the previous unit description continued through this unit and intersected with a second, branch French drain (fd). The exposed material was adobe-like. The overlying fill was described as loose brown soil with a grass and weed cover.

## E 495-500, N 500-505

A graveled two-track road extended through the west half of this badly disturbed unit. The entire unit was stripped to a depth of 3 to 15 cm , exposing multiple tree planting holes. The stripping exposed a highly disturbed burned area (F in Figure 13), which was recorded as Feature 7 (see Chapter 3). Part of the feature had been removed by a series of overlapping planting holes (th).

The work also exposed the remnants of a wall alignment, of terrones, in the eastern third of the unit (aw, shaded). The most complete terrón-albeit one partly removed by the mapped tree planting holes-measured 40 by 20 cm . The unit fill was described as loose brown soil with a grass and weed cover.

## E 495-500, N 505-510

The upper fill of this disturbed unit consisted of loose brown soil with a grass and weed cover. Once that upper fill was removed, most of the unit contained a material resembling adobe melt. In the southeast corner of the unit, the disturbance was much deeper, extending to clearly sterile soil (probably from a series of tree-planting holes; $G$ in Figure 13). Within the deeper disturbance, a 30 cm diameter concentration of animal bones was found (H). The unit was cut east-west by a French drain (fd) and north-south by a slit trench with plastic irrigation tubing (it).

## E 490-500, N 510-520

In this 10 by 10 m area, two units were completely exposed and two more were partly exposed (Figure 14).


Figure 14. E 490-500, N 510-520, plan of excavations.

## E 490-495, N 510-515

Most of this unit was stripped to a depth of 3 to 15 cm , in a futile attempt to find the west wall of the casa-corral (A in Figure 14). The stripping, which was deepest toward the southwest corner of the unit, exposed only disturbed fill.

E 490-495, N 515-520
Part of this unit's surface was lightly bladed during removal of debris by the nursery staff. Excavation showed that the subsurface portion was highly disturbed. The excavated portion of the unit (B in Figure 14) was opened to chase the wall found in the unit to the east (aw). The wall is described as Feature 2 in Chapter 3. Three large, convincing-looking posthole stains were found at the west end of the wall (s) and defined as Features $3-5$. These proved to be quite shallow and were more likely the bases of planting holes (see Chapter 3).

The work was continued from the wall to the southeast corner of the unit, in an unsuccessful attempt to define the northwest gate area of the casa-corral. The excavated fill was loose brown soil with a cover of weeds and grass.

## E 495-500, N 510-515

This unit was completely exposed. The upper fill was loose brown sandy silt, with a cover of weeds and grass. The fill was derived from the nursery operation and included numerous bits of landscaping bark. A graveled two-track road passed north-south through the west half of the unit.

Once the upper fill was stripped off, much of what remained resembled adobe melt. In the southwest quadrant of the unit, a gravel layer (C in Figure 14) was exposed and included a piece of nylon bag (D). Next to the gravel layer were two rocks ( E ; all rocks on the site were introduced, generally by the nursery operation). A trench with plastic irrigation tubing (F) cut north-south through the east half of the unit. An area west of this trench was identified as possible adobe floor (pf). East and west of the possible floor area were areas of adobe melt (ad). A large, deep disturbed area (probably from multiple tree planting holes) was found in the southeast portion of the unit (G).

In order to better understand the adobe melt material that dominated this part of the site, A 1 by 1 m unit was placed within the larger unit (H). The unit is described later in this chapter, under "Stratigraphic Units." The unit results suggest that the material was indeed structural melt. At the very end of fieldwork, the metal detector crew located an 80 by 50 cm concentration of cobbles and metal within the melt (I).

## E 495-500, N 515-520

A graveled two-track road passed north-south through the west half of the unit. The upper fill consisted of loose brown sandy silt, with a cover of weeds and Bermuda grass. The fill was highly disturbed and contained many bits of landscaping bark. Once the upper fill was removed, the south half of the unit was dominated by adobe melt (ad in Figure 14). Two pieces of bone (bn) protruded from the adobe melt.

Before fieldwork began, Mike Marshall visited the site with Ed Boles and identified a small patch of possible wall at this location. Beginning with Marshall's identification, we were able to define a large segment of the north wall of the casa-corral (aw). The wall continued into the units to the east and west, and was recorded as Feature 2 (see Chapter 3).

Disturbance in the unit included a plastic French drain (fd), which began at a square drain grill. The drain closely paralleled the adobe wall. In much of the area north of the wall (J), the nursery disturbance extended below what had been the historical occupation level; excavation was therefore halted before sterile soil was reached. Disturbance was shallower in the northeast corner of the unit (K), and in this area sterile soil was reached. A linear "feature" (L) was first identified as the possible base of a light wall (such as a jacal wall). It later became apparent that the "feature" was due to site disturbance.


Figure 15. E 500-510, N 480-490, plan of excavations.

## E 500-510, N 480-490

Each unit in this 10 by 10 m area was partly exposed, but most of the work took place in the west half of the area (Figure 15, above).

E 500-505, N 480-485
Roughly the north half of this unit (A in Figure 15) was initially cleared to a depth of 3 to 5 cm , in order to chase the south wall of the casa-corral (aw) east from E 495-500, N 480-485. Within the unit, the south edge of the wall was poorly defined but the north edge was well-defined. North of the wall the crew found room fill (rf) over a wood floor. An interior cross wall (cw) was also located. The walls and floor exposed in this unit were documented as part of Feature 6 (see Chapter 3).

In the final hours of work, Feature 6 was chased to and past the northeast corner of the unit (D; see below).

## E 500-505, N 485-490

The southern third of this unit (B in Figure 15) was initially stripped to a depth of 1 to 5 cm , then was excavated more deeply to expose Feature 6 ( D ; see Chapter 3 ). The northern third of the unit was stripped to a depth of 3 to 5 cm but the area was highly disturbed, including by multiple tree planting holes. The middle third of the unit was not excavated, as it was heavily disturbed by the nursery operation. In other words, although the room recorded as Feature 6 once extended well into this unit, the most of the room was destroyed by nursery activities.

In the final hours of work, Feature 6 was chased into the southeast corner of the unit (D), exposing rotted wood floor.

## E 505-510, N 480-485

In the final hours of work, Feature 6 was chased into the extreme northwest corner of this unit ( D in Figure 15), exposing a 30 by 15 cm area.

## E 505-510, N 485-490

In the final hours of work, Feature 6 was chased into the southwest corner of this unit (D in Figure 15), exposing a 75 by 75 cm area. The work uncovered rotted floor remnants (see Feature 6 in Chapter 3).

## E 500-510, N 500-510

In this 10 by 10 m area, only the northwest unit was excavated (Figure 16).

## E 500-505, N 505-510

Most of this unit was excavated. The upper fill was loose brown sandy silt, with a cover of weeds and grass. The unit was highly disturbed by the nursery operation, and the upper fill included many bits of landscaping bark.

Once the upper fill was stripped off, large, amorphous areas of deeper disturbance were found (A in Figure 16). A French drain (fd) and tree planting holes (th) were more clearly defined sources of disturbance. A probable corral surface covered much of the rest of the unit (os). Patches of adobe melt (ad) were found, but one of the patches proved to be fill in the French drain.


Figure 16. E 500-510, N 500-510, plan of excavations.

## E 500-510, N 510-520

The east half of this 10 by 10 m area was completely exposed (Figure 17).

## E 500-505, N 510-515

Initial stripping of this unit exposed a large disturbed area with landscaping debris (A in Figure 17). The southwest corner of the unit consisted of a series of overlapping tree planting holes, and individual planting holes were found elsewhere in the unit (th). A plastic French drain (fd) cut through the northeast corner of the unit, and a trench with plastic irrigation tubing (it) cut through the northern part of the unit. A patch soft orange sand (B), the sterile substrate, was exposed in the northwest corner of the unit.


Figure 17. E 500-510, N 510-520, plan of excavations.

The unit contained what appeared to be the base of a light wall (such as a jacal wall) (C). Later, this proved to be a result of disturbance.

Despite the heavy disturbance, a patch of possible occupation surface (os) was found in the northwest corner of the unit. In addition, a mostly undisturbed trash pit was found in the northeast corner of the unit (D) and was excavated as Feature 1 (see Chapter 3).

## E 500-505, N 515-520

The upper fill of this unit was loose brown sandy silt with a cover of weeds and Bermuda grass. The unit had been highly disturbed by the nursery operation. Once the upper fill was removed, the exposed surface consisted of sand (B in Figure 17). Within the site this orange sand, with flecks of gold mica, clearly represented the pre-occupation substrate. Nursery-related disturbance often extended into the pre-occupation substrate, however, as well as into the historical deposits.

A French drain (fd) extended through the southern portion of the unit and irrigation tubing protruded from the unit in two locations (E). In the center of the unit, a large patch of dark soil (F) probably represented additional nursery-related disturbance. In the east half of the unit, modern intrusions included a piece of concrete block (G) and a piece of plastic (H).

Two narrow alignments, roughly at right angles to each other, were first thought to be possible remnants of light walls (such as jacal walls) (C). One of the alignments was a continuation of the possible wall found in E 500-505, N 510-515. These linear features were later found to be disturbance-derived.

Despite all the disturbance, patches of adobe were found in the southwest and southeast corners of the unit (ad). The north wall of the casa-corral was later found to extend into this unit (see Feature 2 in Chapter 3), and the patches of adobe were derived from the wall or from the associated occupation surface.

## E 515-525, N 505-515

As the fieldwork neared its end, four units were partly stripped to examine wood exposed on the surface (A in Figure 18). The work exposed Feature 10, which is described and illustrated in Chapter 3.

## Stratigraphic Units

Two stratigraphic units were excavated and are described below. The units were recorded on excavation unit forms, and depths were measured as centimeters below an arbitrary level string. Feature 1 also yielded stratigraphic information, but is described in Chapter 3. Most of the cultural deposits on the site were shallow as well as disturbed, so no attempt was made to make vertical distinctions within units.

## E 493-495, N 526-528

This 2 by 2 m unit was an unsuccessful attempt to find undisturbed midden, which according to Marshall's map extended north from the northwest corner of the casa-corral. However, recent items extended to the bottom of the cultural deposits within the unit, indicating complete disturbance of the trash. Before excavation, the corner depths (below string) were: NW, 17 cm ; NE, 17 cm ; SE, 22 cm ; SW, 20 cm . Due to the lack of internal variation and the evidence for disturbance, the fill was removed in a single level, to: NW, 31 cm ; NE, 37 cm ; SE, 35 cm ; SW, 37 cm . Thus, the unit was excavated to a depth (relative to the starting points) of 14 cm in the northwest corner, 20 cm in the northeast corner, 13 cm in the southeast corner, and 17 cm in the southwest corner. The fill, which was screened through quarter-inch mesh, consisted of brown (7.5 YR 6/3, dry) sandy silt with extensive bark mulch and other nursery debris.


Figure 18. E 515-525, N 505-515, plan of excavations. See Chapter 3 for illustration of Feature 10.

## E 497-498, N 512.5-513.5

After E 495-500, N 510-515 was stripped, this 1 by 1 m unit was placed in the adobe melt to look for a room floor. Before excavation of the unit, the corner depths were: NW, 13 cm ; NE, 10 cm ; SE, 9 cm ; SW, 10 cm . The fill was removed in a single level, to: NW, 26 cm ; NE, 25 cm ; SE, 25 cm ; SW, 27 cm . Thus, the unit was excavated to a depth (relative to the starting points) of 13 cm in the northwest corner, 15 cm in the northeast corner, 14 cm in the southeast corner, and 17 cm in the southwest corner. The unit fill was screened through quarter-inch mesh.

Two strata were observed in the unit faces. The upper stratum was the adobe melt (10 YR 6/3, dry), which was 4 to 9 cm thick (averaging 7 cm thick). Artifacts were found in the adobe melt. The lower stratum was the pre-occupation substrate, sand (7.5 YR 6/6, dry) with flecks of gold mica. No traces of floor were found; the adobe melt simply gave way to the pre-occupation sand. If a prepared floor was present, it was indistinguishable from the wall and roof melt.

## Chapter 3

## FEATURE DESCRIPTIONS

## Feature 1 (Trash Pit)

The most intact trash deposit found during the project was in a pit in the corral. The pit was large, shallow, and fairly flat-bottomed. It may have started as a borrow pit for sand used during construction, then became a trash pit. The pit yielded a large amount of bone, including sawed bone. Future study of the pit contents should yield useful information on domestic food consumption.

The trash was sampled using two 1 by 2 m units, placed to provide a 4 m long north-south exposure. All unit fill was screened through quarter-inch mesh. The units were recorded using excavation unit forms. A profile of the west faces of the units was prepared. Unit elevations were measured in centimeters below a level string, which had the same elevation as the string used to prepare the profile.

## E 503.5-504.5, N 513-515

A French drain cut through the north end of the feature; to prevent contamination from the drain trench fill, the north end of this unit was not excavated (A in Figure 19). The actual northern corners of the unit were at E 503.5, N 514.86 and E 504.5, N 514.44. Before excavation, the corner depths were: NW, 13 cm ; NE, 9 cm ; SE, 11.5 cm ; SW, 10 cm . These string depths represent the surface after the upper (nursery-derived) fill had been stripped off; the original surface was about 5 cm higher. The unit was excavated in two levels.

Level 1 was excavated to depths of: NW, 30 cm ; NE, 30 cm ; SE, 26 cm ; SW, 26 cm . Thus, the level was excavated to a depth (relative to the starting points) of 17 cm in the northwest corner, 21 cm in the northeast corner, 14.5 cm in the southeast corner, and 16 cm in the southwest corner. The fill was described as trash including bone and other materials, in a matrix of mostly brown soil with occasional bits of charcoal and coal. A thin ash lens was found near the top of the level, indicating that at least some of the trash was a primary deposit.

After completion of Level 1, work halted in the northern portion of the unit (B) while Level 2 was excavated in the southern portion of the unit (C). (The thin strip between C and D represents a small portion of the unit not excavated below Level 1.) The two new upper corner depths were: NW, 26 cm ; NE, 28 cm , SE, 26 cm ; SW, 26 cm . Level 2 was excavated to: NW, 41 cm ; NE, 36 cm ; SE, 48 cm ; SW, 45 cm . Thus, the level was excavated to a depth (relative to the starting points) of: NW, 15 cm ; NE, 8 cm ; SE, 12 cm ; SW, 19 cm . Work halted at the base of the pit. The level fill was described as a trash deposit.


Figure 19. Plan and profile of units through Feature 1. See text for key to letters and numbers.

## E 503.5-504.5, N 511-513

This 1 by 2 m unit was started to chase the trash pit exposed in the unit to the north. The fill was removed in a single level. Before excavation, the corner depths were: NW, 10 cm ; NE, 11 cm ; SE, 8 cm ; SW, 9 cm . The unit was excavated to depths of: NW, 35 cm ; NE, 38 cm ; SE, 11 cm ; SW, 12 cm . Thus, the level was excavated to a depth (relative to the starting points) of: NW, 25 cm; NE, 27 cm; SE, 2 cm; SW, 3 cm.

The shallowness of excavation at the southern corners reflects the fact that while the north half of the unit was in the trash pit (D in Figure 19), the south half of the unit was outside the pit (E). Excavation also revealed extensive tree planting disturbance (th). The south lip of the pit was 17 to 18 cm below string, while the base of the pit wall was 35 to 36 cm below string. The pit was 18 cm deep, not counting any upper portion removed by the nursery work. The unit fill was described as trash including sawed bone and other items but with little or no charcoal, in a matrix of brown sandy soil.

## Profile

The profile in Figure 19 is rotated to match the plan view. The profile shows (1) the profile string (and thus the baseline for depth measurements); (2) the surface after stripping (about 5 cm below the original surface); (3) a lens of trash rich with rusted ferrous artifacts (the ash lens noted in the unit descriptions was at the same depth); (4) a stratum of homogenous brown sandy silt with trash, possibly deposited quickly; (5) a deposit of layered brown sandy silt with trash, probably deposited over an extended period; (6) a layered deposit, grayer and more silty than (4) and (5), with almost no trash; (7) the upper part of the trench for the French drain; (8) the balk left to prevent mixing of French drain trench fill and feature fill (same as A in the plan view); (9) the sterile soil into which the trash pit was dug (the upper edge of this deposit represents the lip of the pit); (10) a tree planting hole (same as the western "th" disturbance in the plan view); (11) a disturbed deposit, outside the pit so not excavated further; (12) a dashed line indicating the projected extent of the pit.

## Feature 2 (North Wall of Corral)

Marshall's site map indicates that the corral was bounded on the north by a wall, with a gate between the west end of the wall and the northernmost room. After the surface disturbance was stripped off, and after repeated trowel scraping, it was possible to define a surviving base course of terrones. The latter were primarily in E 495-500, N 515-520 but extended into the units to the east and west (Figure 20). The west end became increasingly amorphous and simply petered out. The east end of the line of terrones ended more abruptly, due to disturbance; an isolated fragment of terrón was noted about a meter to the east of the continuous series. Based on the surviving remnants, the terrones varied in size (from 30 to 45 cm long and from 15 to 25 cm wide). Thickness could not be determined, as the surviving turves (to use the old English word) had probably been planed by erosion, nursery disturbance, or both.


Figure 20. Plan of Feature 2 (turf wall base) and Features 3-5.

## Features 3-5 (Spurious Post Hole Stains)

At the west end of the north wall of the casa-corral, three large, almost circular stains were found (F3-F5 in Figure 20). These looked like classic post hole stains and suggested the presence of a gate involving upright log posts. Upon excavation, the stains proved to be extremely shallow, and dish-shaped in profile, and were probably the bottoms of shallow planting holes. Feature 3 was 34 cm north-south by 35 cm east-west and was 3.5 cm deep. Feature 4 was 33 cm northsouth by 29 cm east-west by 3.5 cm deep. Feature 5 was 38 cm north-south by 35 cm east-west by 5 cm deep. Each had soil slightly more gray than their matrix (the orange pre-occupation sand), with occasional flecks of charcoal but no artifacts.

## Feature 6 (South Compound Wall and Adjoining Room)

Feature 6 is the surviving portions of the wall and adjoining room found at the south end of the casa-corral (Figure 21).


Figure 21. Plan of Feature 6. See text for explanation of numbers.

In Figure 21, (1) represents the south wall. The north (interior) edge of the wall was better defined than the south (exterior) edge. The few somewhat definable terrones suggest that individual turves were 50 to 55 cm long and 20 to 30 cm wide. North of the wall, a rotted floor was marked by a thin layer of "punk" (rotted but unburned) wood over a sterile substrate (2). The remains of the floor were cut off by areas of deep nursery disturbance (3).

Fragments of rotted floor joists were found (4-11), some of them clearly set into the wall (4-8). The joists were thin logs (like those used in coyote fences) that rested on the ground. No. 4 was 65 cm long and 12 cm in diameter. No. 5 was the very rotted end of a joist. No. 6, also very rotted, was 46 cm long and 10 cm in diameter. A rounded soil cast showed the original shape of the joist. Fragments of rotted wood suggested a possible continuation of the beam. No. 7 was 195 cm long and the diameter varied from 12 to 15 cm . Here also, the soil cast showed that the joist was round in cross-section. Part of No. 8 had been pulled up by the nursery operation; the in situ portion was highly rotted. The more intact portion measured 32 cm long by 9 cm in diameter; the rotted portion was 1 m long. No. 9 was highly rotted; it was 80 cm long. No. 10 was 190 cm long and 12 cm in diameter, with a circular cross-section. No. 11 was 85 cm long and 10 cm in diameter. The joists had been laid 80 cm to 1 m apart.

The floor planks were mostly too rotted to allow detailed observations. Just east of joist No. 6, the planks seemed to parallel the south wall, and were at right angles to the joists, as would be expected (12). This was also the case in the southeast corner of E 500-505, N 500-505 (13). In the southeast corner of the room, one floor plank was identifiable as a two-by-six (14). A possible second two-by-six was found in the southwest corner of E 505-510, N 500-505 (15).

The floor could not have been a conventional wood floor, because at least three round posts extended upward through the floor (16-18). Posts Nos. 16 and 17 were similar; the former was

12 cm in diameter, the latter was 13 cm in diameter, and both were centered 65 cm from the wall. No. 18 was smaller ( 8 cm in diameter) and was centered about 60 cm from the wall. The posts indicate that the room incorporated benches, shelves, storage bins, or possibly even animal stalls as well as the wood floor.

Wall fall was present above the rotted floor. At (19), a cluster of recognizable terrones overlay one of the floor joists. Additional, individual terrones were identified in the fill to the southeast (20). In the southeast corner of the room, a fire-darkened surface was found under the rotted floor (21). The floor wood was unburned, so the surface must have been fire-darkened before the floor was built.

Four terrones marked the location of an cross wall that abutted the compound wall (22). The space between the southernmost terrón and the compound wall was filled with mud mortar. The terrones were 40 to 50 cm long and 20 to 25 cm wide. Only the base course was present. The wall could not have continued much farther, as floor extends beyond the line of the wall (11 and 15). Thus, the cross wall (22) was a wing wall, or else there was a doorway in the cross wall (in which case, the easternmost "joist" [11] may be part of a lintel). Given the continuation of the wood floor, if the cross wall (22) was not a wing wall, there must have been another room east of the one defined as Feature 6.

## Feature 7 (Burned Area)

During unit clearing, a fire-reddened surface was labeled Feature 7 (Figure 22). Upon further cleaning, a second patch of reddened soil was identified, along with two clayey patches that may have been terrones. The feature was badly disturbed; part of the feature had been removed by overlapping tree planting holes. The ambiguous nature of the surviving remains led project members to suggest a range of possible functions: interior fireplace, exterior horno, and even a blacksmith's furnace.

The larger fire-reddened patch measured 50 by 20 cm , but burning could have been more extensive before the feature was disturbed. The second patch measured 25 by 5 m and was slightly curved; it conceivably marked the outer edge of a circular or semicircular burned area, formerly continuous with the larger patch. The two clayey patches were unburned.

If Feature 7 was an interior fireplace, it was not a corner fireplace; remnants of the nearest wall were found 1 m to the east. If Feature 7 was an exterior feature, the same wall remnants suggest that a room was subsequently built over the same area. If the feature was part of a blacksmith's furnace, the extent and intensity of the fire-reddening was minimal. It seems best to identify Feature 7 as a burned area of unknown function.


Figure 22. Plan of Feature 7 and the nearby wall remnants.

## Feature 8 (Interior Compound Wall and Adjacent Room)

In E 490-495, N 485-490, traces of the south compound wall included in Feature 6 were found and a second, interior wall was identified. Where the compound wall and interior wall met, they defined the southeast corner of a room labeled Feature 8 (Figure 23).

The best-preserved portion of the room was the 4 m long, 50 cm wide segment of interior wall. At its north end, the wall segment was truncated by disturbance. Only the lowest course of the wall was preserved, and that was probably partly scraped away. Within the wall, several individual terrones could be identified; they were 25 to 50 cm wide. The exact lengths could not be determined because the east edge of the interior wall coincided with a ditch for irrigation tubing. Because no trace of the turves was seen east of the ditch, the turves must have been between 50 and 60 cm long. The southeast corner of the room was well-defined but west of there, the south compound wall was found only as traces in a shovel trench.


Figure 23. Plan of Feature 8.

Intriguingly, the interior wall seemed to continue beyond the projected outside edge of the compound wall, but the amount of disturbance made it impossible to determine whether this was the case, or whether the "extension" was just wall melt.

The only positively identified patch of floor found during the project was found next to the interior wall. Here, the floor was smoothed, unstained adobe.

Besides marking the southeast corner of Feature 8, the wall shown in Figure 23 was the west wall of the room labeled Feature 6. The ditch paralleling the wall sliced a $10+\mathrm{cm}$ diameter wood post in half. This post would have been inside Feature 6, which included other interior posts. A large disturbed area (a possible tree planting hole) was present where the southwest corner of Feature 6 would have been, so that while the outside edge of the compound wall was defined in that area, the inside edge was missing. The disturbance at the room corner also made it impossible to determine the bonding-abutting sequence for that room corner.

## Feature 9 (Possible Foundation Stone)

A large rectangular piece of sandstone was identified as a possible foundation stone, footer for a post, or other possible structural element, and was labeled Feature 9. Excavation failed to clarify the function of the stone, which may have been a nursery-era introduction (see unit description for E 490-495, N 500-505).

## Feature 10 (Outbuilding)

Toward the end of the fieldwork, the crew examined a large piece of exposed wood that appeared old enough to be part of the casa-corral rather than the nursery. The wood proved to be part of a collapsed feature that was examined to the extent that time allowed.

The feature was built on a smooth, firm surface that formed a clear upward-curling lip (A in Figure 24). The lip resembled a wall-floor juncture. If the compound wall formerly extended through this spot, on the north side of the line of the lip, the local wall segment must have been adobe rather than turf (none of the latter material was seen). The following pieces of lumber were recorded: (B), fallen round post; 1.1 m long by 8 cm in diameter; (C), fallen round post; 1.2 m by 11 cm in diameter; (D), patch of highly rotted wood; (E), sawed beam, 2.2 m long and 10.2 cm (4 in) across; (F), sawed beam cut by a French Drain (G), the surviving portion measuring 1.4 m long and $10.2 \mathrm{~cm}(4 \mathrm{in})$ across; (H), sawed beam, 2.3 m long, 12.7 cm ( 5 inches) across, and possibly 7.6 cm (3 inches) thick; (I), sawed beam, 2.3 m long and 12.7 cm (5 inches across); (J), patch of highly rotted wood. The same area had a deposit of quicklime.


Figure 24. Plan of Feature 10.

## Chapter 4

## DISCUSSION

In Figure 25, Marshall’s 1985 map is overlaid on the few architectural details found in 2004. Given that Marshall's map is a site plan from survey, the agreement is remarkable. The best fit is achieved by shrinking Marshall's map slightly, throwing off the agreement between the scales. The resulting composite map fixes the location and extent of the casa-corral before it was disturbed by construction and use of the nursery. The figure also allows a fuller interpretation of features exposed in 2004.

As was assumed in the field, Feature 1 falls within the corral. Its location-next to the north wall of the complex, near the north room-is consistent with its beginning life as a borrow pit for construction. (Mud is heavy. Why lug it farther than necessary?) The local soil is too sandy to use as adobe without added clay, but might have served fill for leveling floors. Also, clayey material may have been mined in the nearby floodplain, then mixed with the local soil (taken from pits such as Feature 1) to increase the sand content. Afterwards, being so close to the house would have made it a handy pit for burial of noisome trash.

Feature 2 lay west of the indicated west end of the north wall of the complex, suggesting that the wall was originally longer than was evident in 1985. The southern dump shown by Marshall may represent trash thrown outside the wall to keep it away from actively used areas.

Feature 6 was only slightly longer (east-west) than Marshall's map indicates (most of the difference is due to scale changes during image manipulation). Excavation showed that the room at Feature 6 had a wood floor and internal wood posts. If wood floors had been present in the other rooms, the excavations should have found some evidence of them despite all the disturbance. We are thus faced with the question of why this room had a wood floor, when others did not. The 2004 work also showed that the east wall of Feature 6 abutted the compound wallthus that the room may have been an addition-and also that the east wall of the room either included a doorway or was a wing wall. Either way, there was probably an additional room, possibly with a wood floor, east of the room at Feature 6.

In the field, Feature 7 was thought to be an interior hearth or similar feature set in from the east wall of the room. As Figure 25 shows, Feature 7 falls within the northernmost room identified by Marshall. According his map the room also contained "powdered coal bits" and "coal lumps," so perhaps there was a coal-burning feature where Feature 7 was identified. Marshall also identified "iron scraps" just north of the room, and the excavations turned up many pieces of what looked like hand-forged steel. Perhaps the casa-corral included a smithy, of which Feature 7 was a part.

At Feature 8, the length of the surviving interior wall (east wall of the room) correlates well with the undisturbed portion as recorded by Marshall. The 1985 map shows that much of the front row of rooms had been destroyed by a borrow pit. As the local soil is quite sandy, the melted abandoned building must have been a tempting place to mine adobe.


Figure 25. LA 50245, Marshall survey map overlaid on selected excavation features.

The surface-wall juncture found at Feature 10 appears to mark the south edge of the north compound wall, near the compound's northeast corner. Marshall indicated a possible gate at that corner, so some of the wood recorded at Feature 10 could be remnants of a gate. On the other hand, Marshall recorded three posts along the north wall, west of Feature 10, so an elongated outbuilding or multiple outbuildings (such as pens) may have been built against the north wall of the compound.

A privy also makes sense at this location, as it would have been well away from the living area. For both a privy or abandoned pens, application of quicklime was consistent with early 1900s sanitary beliefs.

The excavations indicate that most of the casa-corral was built of terrones, presumably because the local soil is too sandy for making adobe. Usable turf must have come from the Rio Grande floodplain a short distance to the west. The evidence from Feature 10 suggests that part of the corral wall was nonetheless adobe rather than cut turf.

The work completed as of this report did not include archival studies or analysis of the collections. During fieldwork, a volunteer searched county records but was unable to find documents relating to the site. The earliest known reference to the site is from Fisher's 1931 visit (cited by Marshall in his survey form). At the time, the building was ruined but with standing walls. Allowing for initial deterioration and possible minimal use for several years (for example, for dead storage), the building was probably abandoned between 1910 and 1930.

This evidence is consistent with the artifacts, which included sun-colored amethyst (SCA, or "purple") glass and aqua glass (the latter including window glass). The assemblage of manufactured goods was generally consistent with occupation during the early railroad era, from 1880 to World War I.

Marshall suspected that the casa-corral was first used about 1860. Two clues point to a pre-1880 initial occupation. First, the building had a defensive layout, including keeping livestock close to living quarters to prevent the livestock raids practiced by certain native groups. In the 1860s and 1870s this defensive mentality was a wise one but by 1880 it was obsolete, so that corrals and pens could be located away from domestic space. In other words, the casa-corral reflects a mindset predating the railroad era. Still, in the 1880s it might not have been clear to rural residents that it was time to abandon that mindset, so it is conceivable that a home built in that decade would retain a conservative, more easily defended layout.

The other clue to an earlier occupation is an abundance of traditional earthenware-some clearly traded from the Pueblos, the rest a mix of Pueblo and Hispanic pottery. The Hispanic tradition of earthenware manufacturing, acquisition, and consumption died quickly when the railroad arrived, so LA 50245 was established soon after 1880 at the latest, and most likely a few years before. How many years before will probably be determined only through a combination of archival and artifact studies.

The last thing worth mentioning, in this initial report, is the field crew's impression of the comparative comfort of the site's inhabitants. While the architecture and earthenware ceramics
point to a Hispanic occupation, other material remains indicate ready access to manufactured goods and a diet with substantial animal protein. We seem to be dealing with a land-owning, livestock-owning, financially comfortable Hispanic family. Further study of the recovered remains should allow a more precise picture of that family, its economic base, and its activities. Further archival study may allow us to identify the family, including to its living descendants.

## Appendix A: Elevation Data

Datum Location: E 500, N 500 (meters)
Arbitrary Datum Elevation: 10.00 m
WORK OF JUNE 26, 2004
1.34 Instrument height above datum, in meters

| East | North | Ground Elevation | Rod Reading | Comments |
| :---: | :---: | :---: | :---: | :---: |
| 500 | 500 | 9.88 |  | Top of datum = ground elevation +12 cm |
| 500 | 505 | 9.64 | 1.70 |  |
| 500 | 510 | 9.71 | 1.63 |  |
| 500 | 515 | 9.70 | 1.64 |  |
| 500 | 520 | 9.62 | 1.72 |  |
| 500 | 525 | 9.55 | 1.79 |  |
| 500 | 530 | 9.50 | 1.84 |  |
| 500 | 540 | 9.52 | 1.82 |  |
| 500 | 550 | 8.89 | 2.45 |  |
| 500 | 560 | 8.70 | 2.64 |  |
| 500 | 495 | 9.94 | 1.40 |  |
| 500 | 490 | 9.93 | 1.41 |  |
| 500 | 485 | 9.90 | 1.44 |  |
| 500 | 480 | 9.89 | 1.45 |  |
| 500 | 475 | 9.96 | 1.38 |  |
| 500 | 470 | 9.96 | 1.38 |  |
| 500 | 465 | 9.91 | 1.43 |  |
| 500 | 460 | 10.03 | 1.31 |  |
| 505 | 460 | 10.06 | 1.28 |  |
| 505 | 470 | 10.05 | 1.29 |  |
| 505 | 475 | 9.95 | 1.39 |  |
| 505 | 485 | 9.90 | 1.44 |  |
| 505 | 490 | 9.95 | 1.39 |  |
| 505 | 495 | 10.00 | 1.34 |  |
| 505 | 500 | 9.78 | 1.56 |  |
| 505 | 505 | 9.72 | 1.62 |  |
| 505 | 510 | 9.73 | 1.61 |  |
| 505 | 515 | 9.78 | 1.56 |  |
| 505 | 520 | 9.54 | 1.80 |  |
| 505 | 525 | 9.53 | 1.81 |  |
| 505 | 530 | 9.52 | 1.82 |  |
| 505 | 540 | 9.54 | 1.80 |  |
| 505 | 550 | 9.22 | 2.12 |  |
| 510 | 550 | 9.04 | 2.30 |  |
| 510 | 540 | 9.54 | 1.80 |  |
| 510 | 530 | 9.78 | 1.56 |  |
| 510 | 525 | 9.63 | 1.71 |  |
| 510 | 520 | 9.66 | 1.68 |  |

Appendix A: Elevation Data

| East | North | Ground Elevation | Rod Reading | Comments |
| :---: | :---: | :---: | :---: | :---: |
| 510 | 515 | 9.61 | 1.73 |  |
| 510 | 510 | 9.69 | 1.65 |  |
| 510 | 505 | 9.76 | 1.58 |  |
| 510 | 500 | 9.89 | 1.45 |  |
| 510 | 490 | 10.01 | 1.33 |  |
| 510 | 485 | 10.02 | 1.32 |  |
| 510 | 480 | 9.92 | 1.42 |  |
| 510 | 475 | 10.15 | 1.19 |  |
| 510 | 470 | 10.13 | 1.21 |  |
| 510 | 460 | 10.24 | 1.10 |  |
| 515 | 460 | 10.26 | 1.08 |  |
| 515 | 485 | 10.08 | 1.26 |  |
| 515 | 500 | 9.93 | 1.41 |  |
| 515 | 505 | 9.73 | 1.61 |  |
| 515 | 510 | 9.78 | 1.56 |  |
| 515 | 515 | 9.69 | 1.65 |  |
| 515 | 520 | 9.69 | 1.65 |  |
| 515 | 525 | 9.66 | 1.68 |  |
| 515 | 530 | 9.67 | 1.67 |  |
| 515 | 540 | 9.40 | 1.94 |  |
| 515 | 550 | 9.20 | 2.14 |  |
| 520 | 550 | 9.49 | 1.85 |  |
| 520 | 545 | 9.29 | 2.05 |  |
| 520 | 540 | 9.33 | 2.01 |  |
| 520 | 530 | 9.68 | 1.66 |  |
| 520 | 525 | 9.63 | 1.71 |  |
| 520 | 520 | 9.68 | 1.66 |  |
| 520 | 515 | 9.71 | 1.63 |  |
| 520 | 510 | 9.68 | 1.66 |  |
| 520 | 505 | 9.75 | 1.59 |  |
| 520 | 500 | 9.91 | 1.43 |  |
| 520 | 495 | 10.15 | 1.19 |  |
| 520 | 485 | 10.23 | 1.11 |  |
| 520 | 480 | 10.22 | 1.12 |  |
| 520 | 475 | 10.25 | 1.09 |  |
| 520 | 470 | 10.30 | 1.04 |  |
| 520 | 465 | 10.32 | 1.02 |  |
| 520 | 460 | 10.38 | 0.96 |  |
| 495 | 525 | 9.45 | 1.89 |  |
| 495 | 520 | 9.44 | 1.90 |  |
| 495 | 515 | 9.54 | 1.80 |  |
| 495 | 510 | 9.67 | 1.67 |  |
| 495 | 500 | 9.81 | 1.53 |  |
| 495 | 495 | 9.85 | 1.49 |  |
| 495 | 490 | 9.89 | 1.45 |  |
| 495 | 485 | 9.85 | 1.49 |  |

Appendix A: Elevation Data

| East | North | Ground <br> Elevation | Rod Reading | Comments |
| :---: | :---: | :---: | :---: | :---: |
| 495 | 480 | 9.83 | 1.51 |  |
| 495 | 475 | 9.92 | 1.42 |  |
| 495 | 470 | 10.00 | 1.34 |  |
| 495 | 465 | 9.99 | 1.35 |  |
| 495 | 460 | 10.07 | 1.27 |  |
| 490 | 460 | 10.04 | 1.30 |  |
| 490 | 465 | 9.89 | 1.45 |  |
| 490 | 470 | 9.92 | 1.42 |  |
| 490 | 475 | 9.93 | 1.41 |  |
| 490 | 480 | 9.85 | 1.49 |  |
| 490 | 485 | 9.82 | 1.52 |  |
| 490 | 490 | 9.81 | 1.53 |  |
| 490 | 495 | 9.81 | 1.53 |  |
| 490 | 500 | 9.70 | 1.64 |  |
| 490 | 510 | 9.62 | 1.72 |  |
| 490 | 515 | 9.46 | 1.88 |  |
| 490 | 520 | 9.48 | 1.86 |  |
| 485 | 525 | 9.48 | 1.86 |  |
| 485 | 520 | 9.46 | 1.88 |  |
| 485 | 515 | 9.42 | 1.92 |  |
| 485 | 510 | 9.58 | 1.76 |  |
| 485 | 505 | 9.56 | 1.78 |  |
| 485 | 500 | 9.54 | 1.80 |  |
| 485 | 495 | 9.64 | 1.70 |  |
| 485 | 490 | 9.66 | 1.68 |  |
| 485 | 480 | 9.82 | 1.52 |  |
| 485 | 475 | 9.86 | 1.48 |  |
| 485 | 470 | 9.86 | 1.48 |  |
| 485 | 465 | 9.90 | 1.44 |  |
| 485 | 460 | 10.00 | 1.34 |  |
| 480 | 460 | 9.84 | 1.50 |  |
| 480 | 465 | 9.75 | 1.59 |  |
| 480 | 470 | 9.73 | 1.61 |  |
| 480 | 475 | 9.76 | 1.58 |  |
| 480 | 480 | 9.70 | 1.64 |  |
| 480 | 485 | 9.61 | 1.73 |  |
| 480 | 490 | 9.54 | 1.80 |  |
| 480 | 495 | 9.58 | 1.76 |  |
| 480 | 500 | 9.50 | 1.84 |  |
| 476 | 500 | 9.51 | 1.83 | t; at fence) |
| 475 | 460 | 9.74 | 1.60 |  |
| 470 | 460 | 9.65 | 1.69 |  |

## Appendix A: Elevation Data

## WORK OF AUGUST 27, 2004

1.45 Instrument height above datum, in meters
Rod
Elevation Reading Description
9.7551 .695 "Feature 9," top of rock
$9.785 \quad 1.665 \quad$ Feature 7, top of burned surface
$9.8 \quad 1.65 \quad$ Level string for $1 \times 1$ unit at $E 497-498$, N 512.5-513.5
$9.805 \quad 1.645 \quad$ Level string for Feature 1, trash pit (also for profile string)
$9.715 \quad 1.735 \quad$ Level string for $2 \times 2$ unit at E 493-495, N 526-528
$9.62 \quad 1.83$ Feature 10, smooth, firm surface under rotted wood
$9.66 \quad 1.79 \quad$ Feature 2, top of terrones, at E 500
$9.47 \quad 1.98$ Feature 2, top of terrones, at E 495
9.82 1.63 Feature 6, top of south wall of compound, at E 497.5
$9.84 \quad 1.61$ Feature 6, top of south wall of compound, at E 500
9.8051 .645 Feature 6, surface under wood floor, at E 501.5, N 484.75
9.781 .67 Feature 8, top of floor, at E 494, N 488.5*
(* N value reconstructed. Field notes have erroneous value
of N 493.5)

