La Iglesia de Maragiiez: A Local Prehistoric Ceremonial Center in the Cerrillos River Valley, Ponce, Puerto Rico

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Archaeological data recovery operations conducted at La Iglesia de Maragiiez (PO-39) from 1989 to 1991 revealed a relatively small site with a major component that dated to *the eleventh century A.D. The site consisted of a batey, or ball court, with petroglyphs, a buried midden deposit on a slope below the batey, and a single structure on a ridge nose to the south of the buried midden. PO-39 apparently was used only as a local ceremonial center, and there was no evidence it had ever been used as a domestic site. This paper discusses the results of the PO-39 excavation, and presents the data that support the interpretation of the site as a local ceremonial center.*

INTRODUCTION

La Iglesia de Maragiiez (PO-39) is located on a ridge and ridge spur overlooking the confluence of Quebrada Los Fondos and the Cerrillos River. This places the site in the Sector Los Fondos in the barrio of Maragiiez in Ponce, Puerto Rico (Figure 1). The site is located in the physiographic transition zone from the Cordillera Central and the coastal plain (Lobeck 1922). The Cordillera Central is the largest mountain chain in Puerto Rico, and the setting of PO-39 is within the foothills below the Cordillera Central at an elevation between 160 and 165 m above mean sea level (AMSL). The Caribbean is located approximately 15 km south of the site, and the urban fringe of Ponce is approximately 4 km to the southwest (Garrow et al.1993:6).

The terrain around PO-39 is characterized by steep valley walls with occasional ridge spurs and benches that have been formed by erosion and slumping of the hillsides. The Cerrillos River, the major drainage through the area, is characterized by narrow flood plains and is separated from adjacent drainages by parallel ridges of metamorphic and igneous rocks. Where it flows into the coastal plain the Cerrillos becomes the Rio Bucana. The Cerrillos has few tributaries, and most of its tributaries (including the Quebrada Los Fondos) are Rank I or II streams. This means that the setting of PO-39 on a ridge spur overlooking a confluence is a relatively rare topographic feature along the section of the Cerrillos that drains the foothills (Garrow et al. 1993:6-8).

Site PO-39 was initially identified by Solís Magaňa (1987:68-76) as he was testing high probability areas within the proposed flood pool of the Cerrillos Reservoir under contract to the Jacksonville District of the U.S. Army Corps of Engineers (COE). He noted that a Catholic church (La Iglesia de Maragiiez) and its associated buildings were present on the top of the ridge spur that contains the site, and concluded that the portion of the site that had been located there had been destroyed by historic construction and occupation. He did find an intact buried midden on a slope below the top of the ridge, and noted the buried midden as site "CT-4."

The initial phase of data recovery investigations at PO-39 was conducted by Garrow & Associates, Inc., in 1989. That investigation was designed to sample the buried midden on the slope, and to determine if the site was sufficiently intact to warrant larger-scale study. Weaver (1989), while conducting the planned investigation, discovered that a stone-lined batey with at least one petroglyph was present on the ridge top.

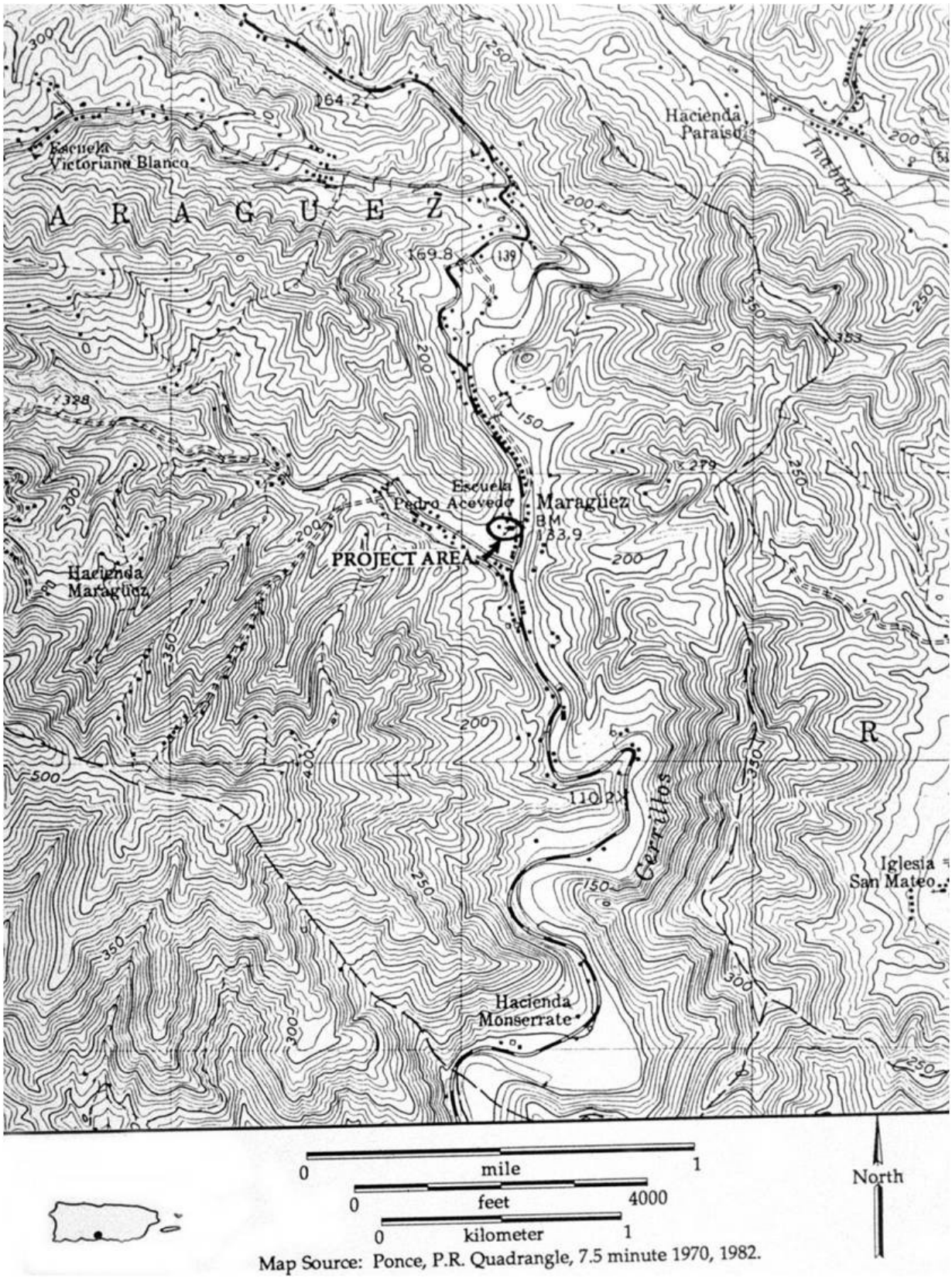


Figure 1. Location Map.

Upon further investigation, he found a circle of vertically set stones on a ridge spur below the slope that contained the buried midden. He interpreted the stone circle to be a possible prehistoric feature.

Weaver's discoveries required that PO-39 be reevaluated, and the site was divided into three areas, or loci, for investigative purposes (Figure 2). Locus 1 consisted of the ridge top with the stone-lined batey, while the slope with the intact midden became Locus 2. The circle of vertically set stones located on the ridge spur became Locus 3. Phase I data recovery studies were subsequently conducted on Locus 1 and Locus 3 (McNutt and Garrow 1990; Garrow and McNutt 1990), followed by Phase II data recovery operations at all three loci.

The Phase II data recovery investigations were conducted in the winter and spring of 1991 (Garrow et al. 1993). The site was accidentally cleared and grubbed by subcontractors working for the Jacksonville District COE prior to the initiation of the Phase II data recovery. Locus 1 suffered the greatest damage from the clearing, as the batey had been bulldozed and contained a large burn pile that was still smoldering when the investigation began two months later. Most of the batey stones were displaced by the bulldozing or shattered by the heat of the burn pile. The buried midden in Locus 2 was undamaged, but the circle of upright stones that marked Locus 3 was gone. An assessment of the site indicated that it still contained substantive enough remains to merit the Phase II data recovery, however, and the investigations were conducted with modifications required by the changed site conditions.

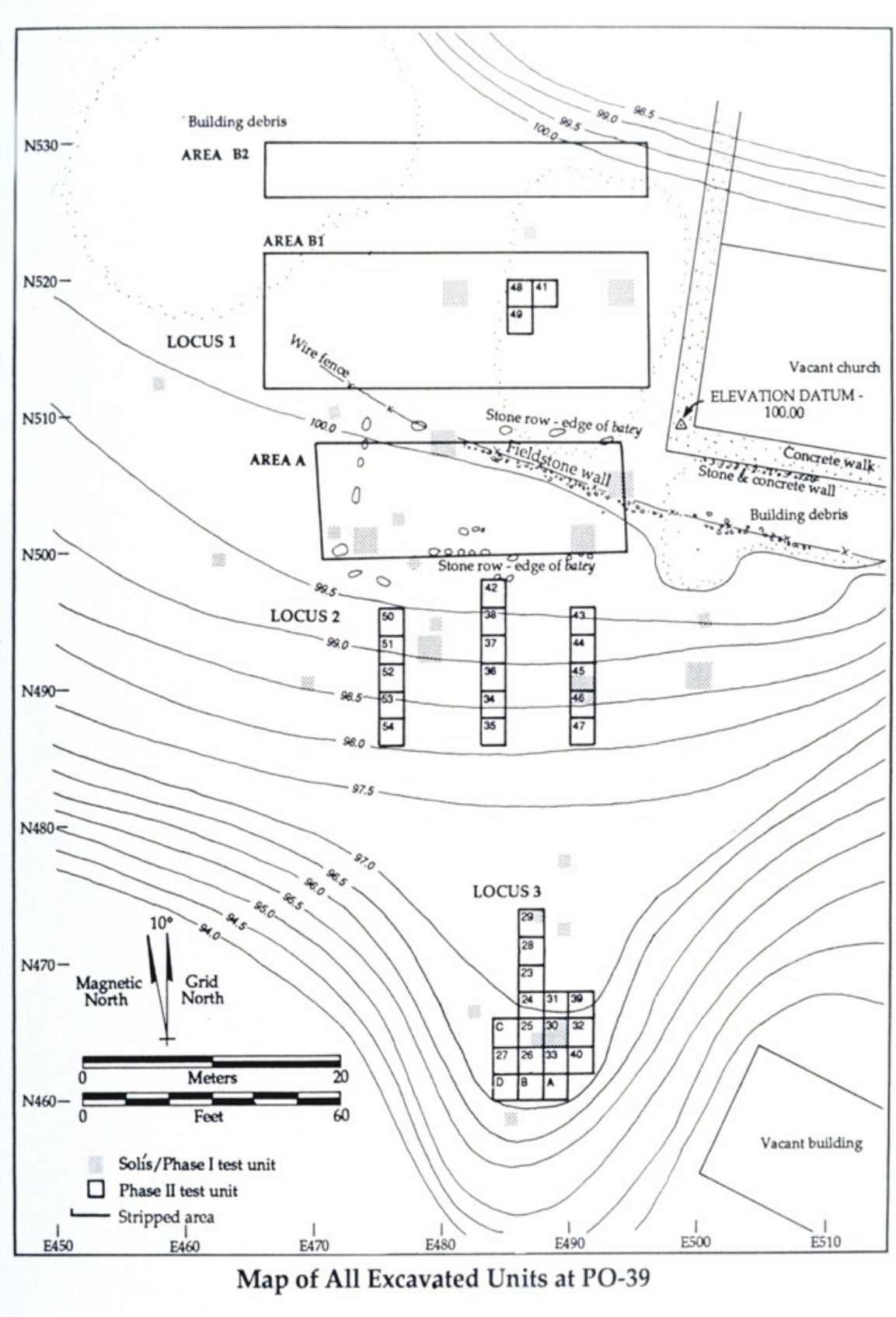
LOCUS 1: THE BATEY

Locus 1 was located on a narrow ridge top that may have been artificially flattened to accommodate the prehistoric occupation. The prehistoric elements of PO-39 shared the ridge top with a Catholic church and associated buildings, although the church had been built entirely on historic fill that had extended the ridge to the east. A stone-lined batey was located on the south side of the ridge top adjacent to the slope that contained the buried midden of Locus 2. At least some prehistoric deposits were present on the ridge to the north of the batey (see Figure 2).

The batey, the dominant feature in Locus 1, consisted of a 10 x 20 m area outlined by a combination of upright stones and stones lying on the surface. The batey stones were all composed of greenstone, which is freely available in the area. Four stones contained petroglyphs, which were pecked into the greenstone slabs as broad, bold lines. Three of the stones with petroglyphs were found during the Phase I data recovery investigations (Weaver 1989:55-58; McNutt and Garrow 1990:110-113); the fourth was found after the site was disturbed prior to the Phase II data recovery (Garrow et al. 1993:257,261).

The first petroglyph (Weaver 1989:55-58), found near the center of the south row of the batey stones, contained a transformational figure and three dots (Figure 3A). The view that would have been visible when the stone was set in the ground was that of a human head and arms with three-fingered hands. Two projections suggestive of insect antenna extended from the figure's "head." Turned upside down, the figure was a realistic depiction of a frog.

The second petroglyph (Figure 3B) was found near the center of the north row of batey stones, opposite the first petroglyph (McNutt and Garrow 1990:110-113). The figure depicted by the petroglyph appears to be a hooded human face, and was interpreted by McNutt and Garrow as a death head figure.



Map of All Excavated Units at PO-39

Figure 2. Excavation Map of Loci 1, 2, and 3.

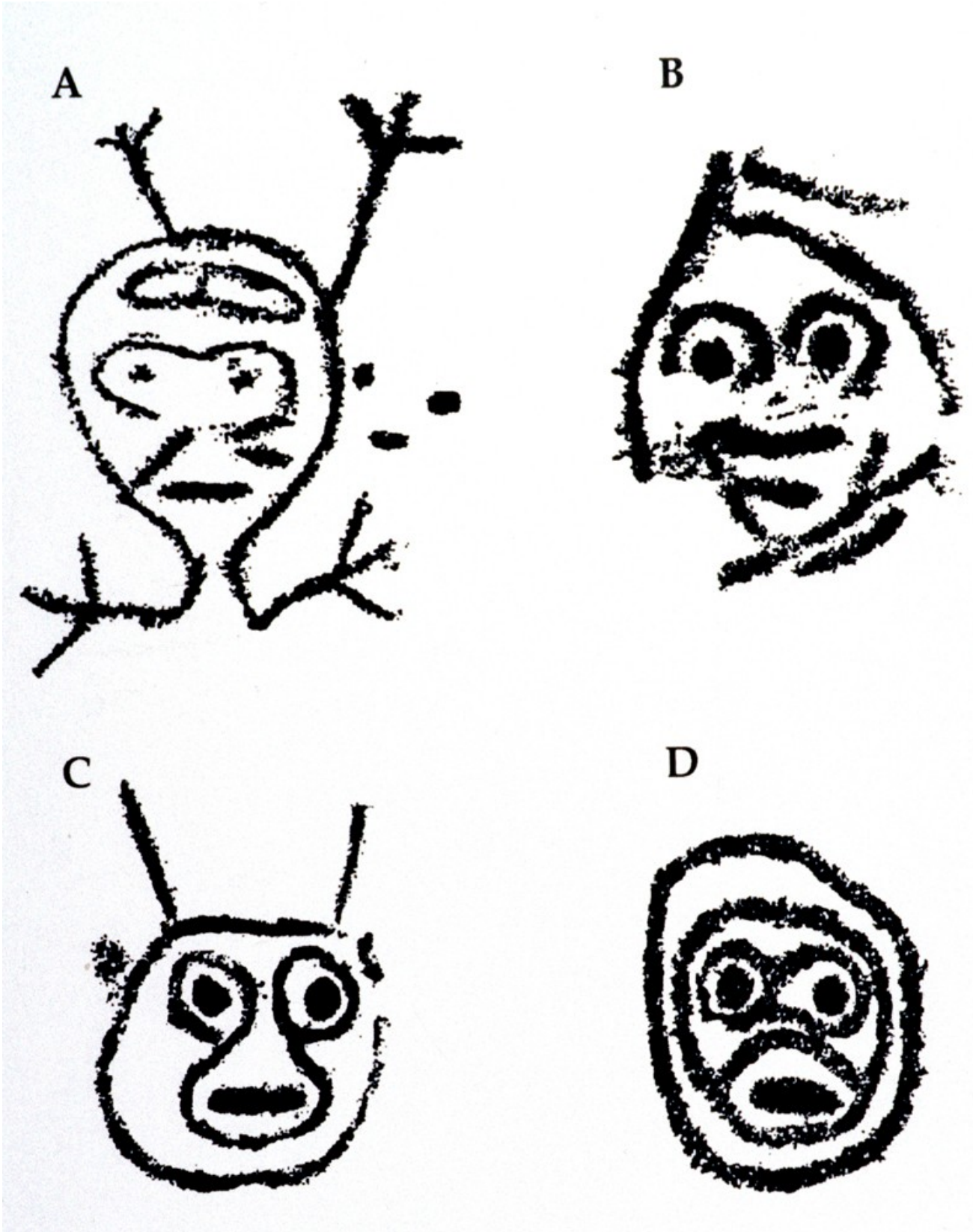


Figure 3. Petroglyphs from Locus 1: The Batey.

The third petroglyph (Figure 3C) was found at the east end of the north row of batey stones (McNutt and Garrow 1990:110-113), and depicts what is normally referred to as a "monkey face" figure with two rays projecting from the top of its head. That petroglyph probably represents an anthropomorphized sun figure, which could explain its position at the east end of the batey, i.e. closest to the rising sun.

The fourth petroglyph (Figure 3D) was found during the Phase II data recovery (Garrow et al. 1993:257, 261), and its original position in the batey could not be determined. This figure depicts a "monkey face" surrounded by a circle. The petroglyph could represent an anthropomorphised moon figure, but that is certainly not a secure interpretation.

The excavations conducted in Locus 1 included hand-dug units and machine excavated strips. No substantive prehistoric features were found in Locus 1, although a few isolated anomalies that could have been postmolds were found. No evidence was found to indicate that a domestic area had been associated with the batey or that a substantial structure had been present.

LOCUS 2: THE BURIED MIDDEN

Locus 1 was located on the top of a ridge that was approximately 2 m higher than Locus 3, and the slope that connected Loci 1 and 3 was investigated as Locus 2. Buried deposits were initially identified in Locus 2 by Solís Magaňa (1987:68-76) (see Figure 2), and were confirmed by Weaver (1989).

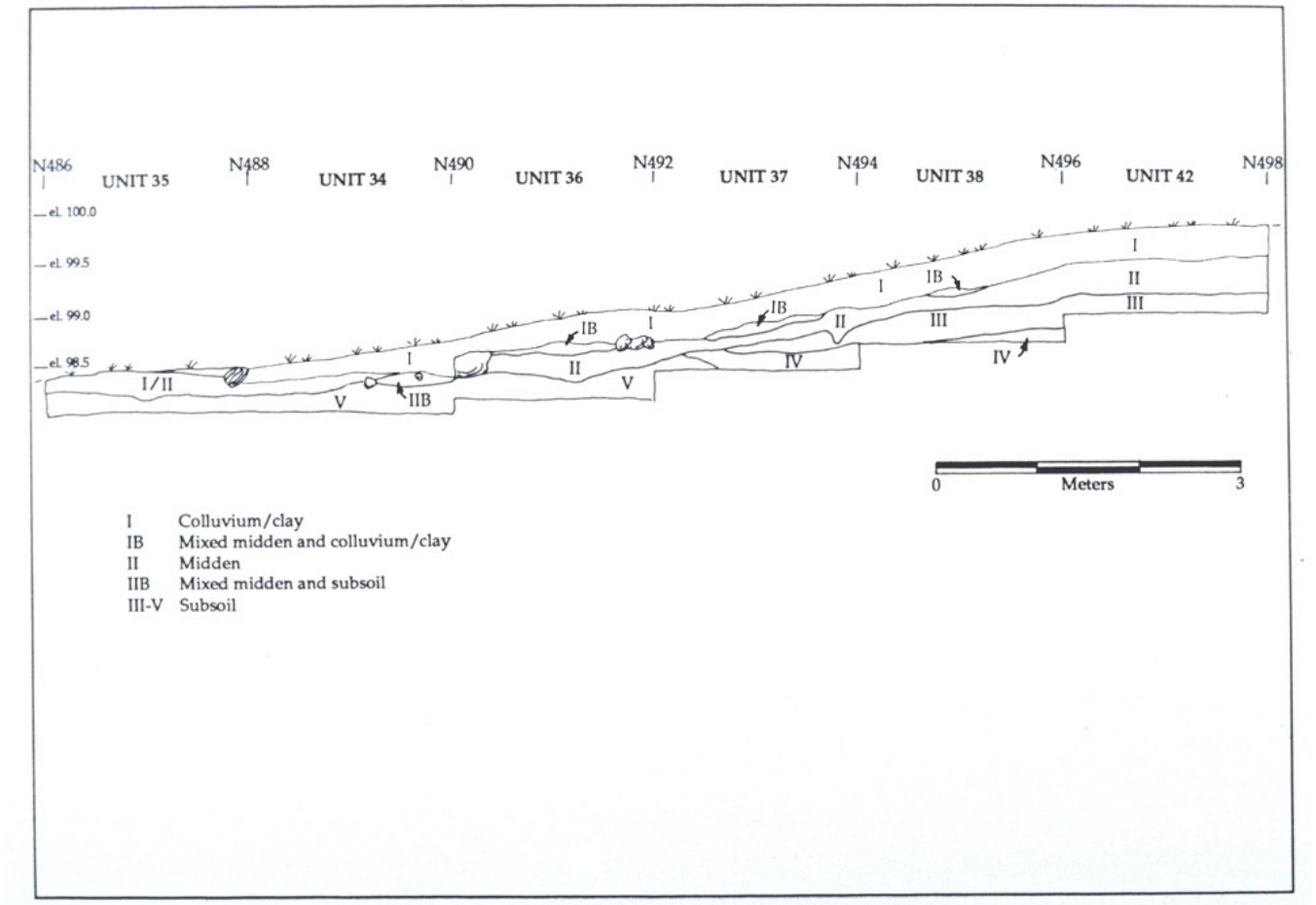
The Phase I and II data recovery excavations indicated that five major soil strata were present in Locus 2 (Figure 4). Stratum I, colluvium, was composed of clay and artifacts, was probably redeposited from Locus 1 through sheet erosion. Stratum IB consisted of a mixture of colluvium and midden, while Stratum II was intact midden. Strata III-V represented layers of undisturbed subsoil. The erosion that redeposited Stratum I within Locus 2 may have begun while the batey was in use or shortly after the site was abandoned, as elevated frequencies of prehistoric artifacts were noted near the base of Stratum 1.

Cultural features were rare in Locus 2, and insufficient features were found to indicate that a structure was present. Fire-cracked rock was recovered from Unit 38, which could indicate that a hearth was located somewhere in that area, but there is no indication that the hearth was associated with anything more than a food preparation area.

LOCUS 3: THE STONE CIRCLE

Weaver (1989:73) recommended investigation of Locus 3 (see Figure 2) after noting the presence of a circular arrangement of upright stones in that area. The Phase I data recovery (Garrow and McNutt 1990) did not resolve the origin of the upright stones, but did find postmolds indicative of a prehistoric structure. The upright stones were destroyed during the premature clearing of the site prior to the Phase II data recovery, but the Phase II investigations indicated that the stone circle had probably been a historic feature that was not related to the prehistoric structure.

At the conclusion of the Phase II data recovery the Locus 3 structure was interpreted to have been D-shaped (Garrow et al. 1993:267-269). That interpretation now seems to be incorrect based on structural



Section of Locus 2 along the West Profile of Row A

Figure 4. Profile Map of Locus 2: The Midden

Righter 2002). The Tutu site structure was slightly younger than the PO-39 structure, and was circular with four central support posts. Reevaluation of the PO-39 structure (Figure 5) indicates that the Phase II features 6 and 106, and the Phase I features 2, 4, and 6 may represent three of four central supports. The semicircular arc of posts on the east side of the structure could represent the outer wall. If that interpretation is correct, the PO-39 structure would measure approximately 10 m across, and occupy the entire end of the ridge spur. There was no evidence of midden build up around the structure, and the soils within Locus 3 consisted of no more than 30 cm of artifact-bearing topsoil over sterile subsoil.

RESULTS OF THE PO-39 ARTIFACT ANALYSIS

The Phase I and II data recovery excavations yielded 2,571 prehistoric artifacts from Locus 1; 6,213 from Locus 2; and 1,690 from Locus 3. The 10,474 prehistoric artifacts recovered from the site included 7,755 ceramic artifacts and 2,719 lithic items. Ceramics outnumbered lithics by a ratio of over 3:1 in Locus 1 and 4.4:1 in Locus 2, while lithics outnumbered ceramics by a 1.3:1 ratio in Locus 3. No faunal or floral material was recovered from the site.

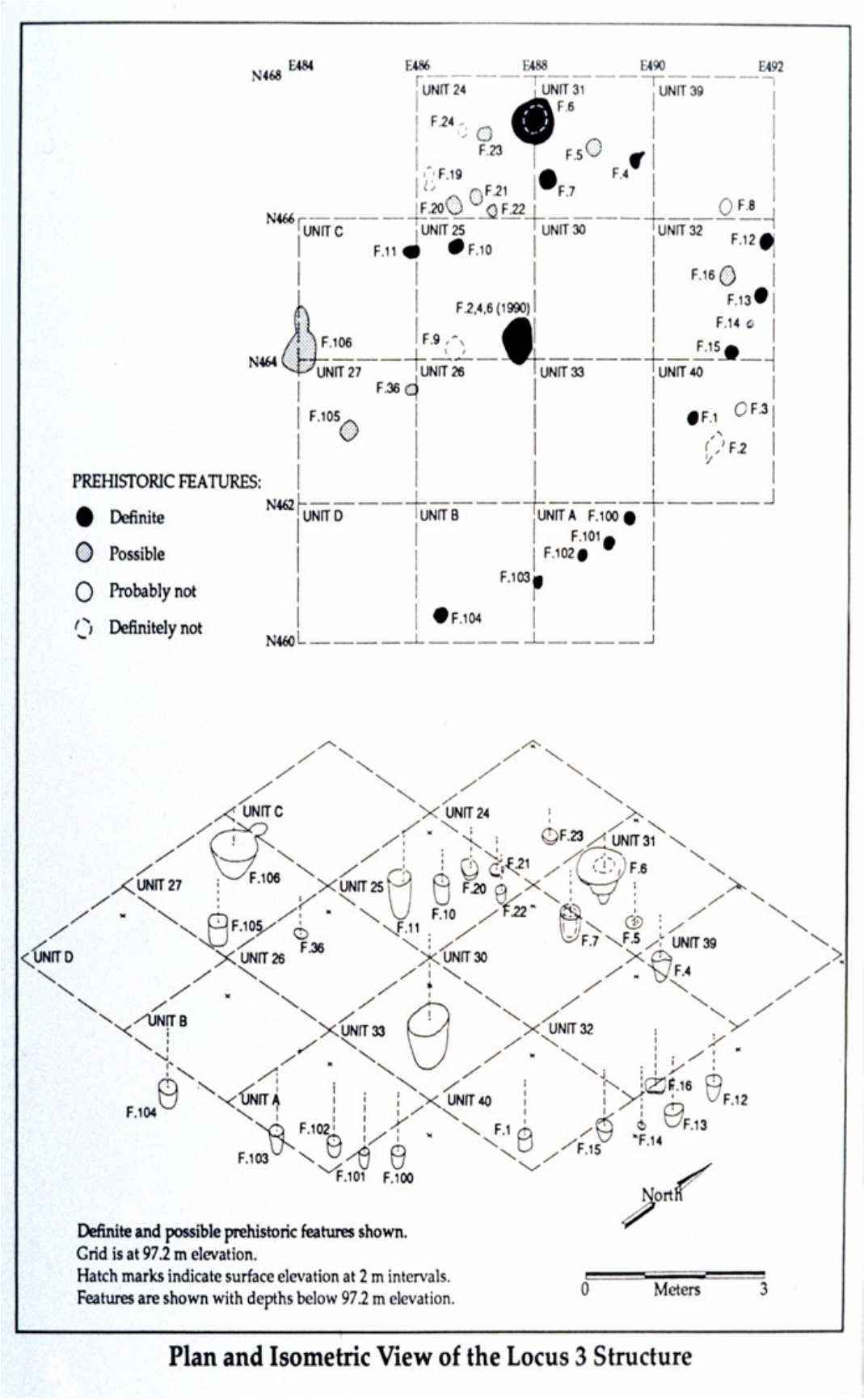
Ceramic Analyses

The ceramics recovered from the site were generally small, and it was not possible to restore vessels or discern more than general information about vessel shapes and frequencies. The ceramics were thoroughly studied, however, and yielded valuable information concerning the functions carried out in the three loci.

Table 1 reflects the proportion of plain or decorated ceramic sherds, manioc griddle sherds, and residual sherds within PO-39 by locus. Griddle sherds are assumed to have been used to bake a type of bread made from manioc (cassava), and are easily sorted because they are much thicker than vessel sherds. Residual sherds were sherds that were too small to tabulate by decoration or surface finish and that fit through a 0.5 inch wire mesh screen. Residual sherds were simply counted and noted by provenience.

Table 1. Frequency of Plain/Decorated Sherds, Manioc Griddle Sherds, and Residual Sherds by Locus.

Locus	Plain/ Decorated		Manioc Griddles		Residuals		Totals
1	1,563	80%	98	5%	296	15%	1,957
2	3,708	73%	225	4%	1,135	22%	5,068
3	502	68%	14	2%	218	30%	734
Totals	5,773	74%	337	4%	1,649	21%	7,759



Plan and Isometric View of the Locus 3 Structure

Figure 5. The Postmolds of Locus 3: Structure.

It is probably significant that the lowest percentage of residual sherds was recovered from Locus 1 and the highest from Locus 3. Locus 1 contained the most intensive historic occupation within PO-39, and logically it could be assumed that the sherds in Locus 1 would have been subjected to more trampling, which should have produced a high percentage of residual sherds. The ceramic data seem to indicate that ceramic vessels were used with much greater frequency in the batey area and on the adjacent slope than within and around the structure in Locus 3. This could indicate that domestic functions were centered around the batey, and were less frequently conducted in and around the Locus 3 structure.

A very large majority of the ceramic sherds recovered from PO-39 would be classified as "plain" under most analytical schemes. The current analysis was able to describe the PO-39 ceramic collection more finely, however, by tabulating traits such as surface finish, decorative design, and structural elements (Garrow et al. 1993:190-212). That approach followed conventions established by Rouse (1952b), and was consistent with analytical methods used on PO-38 (Weaver et al. 1992) and PO-21 (Espenshade et al. 1987) within the Cerrillos Reservoir.

The surface finishes, decorative designs, and structural elements noted on the exterior surfaces of the PO-39 ceramics are noted below in Table 2. That table excludes residual sherds, sherds with eroded exteriors, and sherds that lacked any type of surface alteration (and were thus truly "plain").

Table 2. Comparisons of Ceramic Exterior Decorations/Surface Finishes from PO-39 by Locus.

	Burn'd	**Paint**	**Slip**	**Incised**	**En-graved**	**Applied**	**Pinched**	**Mod-eled**	**Lug/ H'dle**	**Totals**
Locus										
Σ	592	50	0	56	1	3	1	5	4	712
%	83.2	7%	0%	7.9%	0.1%	0.4%	0.14%	0.7%	0.6%	
Locus										
Σ	1,43	163	23	44	1	18	0	11	34	1.725
%	83%	9.5%	1.3%	2.6%	0.1%	1%	0%	0.6%	2%	
Locus										
Σ	197	16	4	8	0	1	0	1	6	233
%	84.6	6.8%	1.7%	3.4%	)%	0.4%	0%	0.4%	2.6%	
Totals										
Σ	2,22	229	27	108	2	22	1	17	44	2,670
%	83.2	8.6%	1%	4%	0.1%	0.8%	0.1%	0.6%	1.7%	

It is significant to note that the percentage of plain/decorated sherds remained constant through the three loci. A total of 45.5 percent of the sherds from Locus 1 contained some type of surface finish, decoration, or structural element, compared to 46.5 percent from Locus 2 and 46.4 percent from Locus 3. That finding supports the interpretation that all three loci were in use at the same time, and that the major occupation of the site dates from a single period.

The analysis indicated that ceramic elements from Rouse's (1992) periods IIIb (A.D 900-1200) and IV a (A.D. 1200-1500) were present in the collections. These included Late Ostiones of the Ostionan Ostionoid subseries; Santa Elena of the Elenan Ostionoid sub series; and Capa and Esperanza of the Chican Ostionoid subseries. The Period IVa occupation, marked by the Capa and Esperanza sherds, consisted of a very minor component centered on Locus 1 and Locus 2. The major component at PO-39 was the earlier IIIb occupation, which in this case was reflected by a combination of Ostionan and Elenan ceramics.

Ostionan and Elenan ceramics from Period IIIb can be distinguished from each other in several ways, but in general the Elenan ceramics tend to be thicker and cruder than the Ostionan (Rouse 1952b:341, 344). Many of the sherds from PO-39 exhibited shared traits, and could not be clearly determined to be Ostionan or Elenan.

Sherd thickness was one way Rouse (1952b:341, 344) distinguished Ostionan from Elenan sherds. He stated that Ostionan sherds have an average thickness of 6 mm, while Elenan sherds have an average thickness of 8 mm. The PO-39 ceramic collection had a mean sherd thickness of 7.482 mm, with mean thickness for the three loci being 7.35 mm for Locus 1; 7.34 for Locus 2; and 7.62 for Locus 3. The sherd thicknesses observed with PO-39 appear to place the ceramics closer to Elenan than Ostionan under Rouse's scheme, although sherd thickness studies of early Ostionoid component sherds from nearby PO-38 and PO-21 yielded mean thicknesses of 6.58 and 6.7, respectively (Weaver et aI. 1992:163). The sherd thickness results for PO-38 and PO-21 could imply that Ostionan Ostionoid ceramics were thicker in the Cerrillos Reservoir area than among the sample populations studied by Rouse. If the Ostionan Ostionoid ceramics were generally thicker along the Cerrillos than elsewhere, that would support a more even division between Ostionan and Elenan ceramics than the thickness data otherwise would imply.

The mixture of Ostionan and Elenan ceramic traits observed for PO-39 is hardly surprising, since the site is located on the rough dividing line between the Period IIIb sites to the east, which exhibit primarily Elenan traits, and those to the west, which are primarily Ostionan (Rouse 1985; Rodriguez L6pez 1992). EI Bronce (Robinson et al. 1985), located downstream from PO-39, yielded both Ostionan and Elenan ceramics, and Elenan ceramics have apparently been recovered from the nearby ceremonial center of Tibes (Oliver 1992a). The PO-39 ceramics reflect the relative "frontier" position of the site between the groups classified under the Late Ostiones of the Ostionan Ostionoid subseries and the Santa Elena of the Elenan Ostionoid subseries.

Lithic Analysis

PO-39 yielded a totaI of 2,720 lithic artifacts during the Phase I and II data recovery. Solís Magaňa (1987:76) noted that PO-39 contained the most lithics he had observed among all of the Cerrillos River sites, and that the amount of chert present in the site was particularly noteworthy. Lithics accounted for 26 percent of the prehistoric artifacts from PO-39, and 59.5 percent of the lithic artifacts were made of chert (Garrow et al. 1993:223). By comparison, the El Bronce site yielded between 1,900 and 2,000 lithic artifacts, or less than 18 percent of the recovered lithics/ceramics from the site, of which only 3.4 percent of the "flaked stone" was chert (Robinson et al. 1985:Appendix G20). EI Bronce was apparently occupied for a much longer time than PO-39, but the occupations at the two sites did overlap.

Table 3 summarizes the lithic assemblage recovered from PO-39. Locus 2 yielded the largest lithic sample with 1,145 items, which is to be expected because the majority of the artifacts from the site came from the buried midden. It is surprising that over a third of the lithics from the site came from Locus 3, because that locus had the smallest total artifact assemblage of the three loci. It should be noted that the notched stones recovered from the site were associated with the Capa and Esperanza ceramics, and could mean that PQ-39 served as an extractive site, perhaps to exploit shrimp or fish in the river during the Period IVa occupation.

The raw materials present in the PO-39 lithic assemblage included chert (59.5 percent), greenstone or siliceous tuff (33.6 percent), and small amounts of unidentified metavolcanic/igneous lithic, quartz, limestone, ochre, steatite, and sandstone. Loci 1 and 2 contained nearly equal amounts of chert and greenstone, but 84.4 percent of the lithics from Locus 3 were chert. In Table 3, raw material 1 is chert, raw material 2 is greenstone, and raw material 3 is "other".

Locus 3 contained significantly more chert than greenstone, and yielded the majority of the blade flakes recovered from the site. The blade flakes from Locus 3 were smaller than those from the other loci, and lacked visible wear. It is likely that the Locus 3 blades were used to cut soft tissue as opposed to harder plant materials, but that assumption cannot be proven with the available data.

Ornaments and amulets were not evenly distributed throughout the site. Locus 1 and Locus 3 each produced a pendant fragment, although the Locus 3 example was made of an exotic, honey-colored stone not found elsewhere on the site. Two pendant fragments, a small, carved effigy, and a possible pendant fragment, both made of steatite, were found in Locus 2. A small, carved human head made of greenstone also came from Locus 2.

Locus 2 can probably best be explained as a food preparation area based on both the lithic and ceramic assemblage. The function of Locus 1 probably differed from Locus 2 based on the artifact data. Locus 3 appeared to have served a distinctly different function than either Locus 1 or Locus 2, and few if any domestic functions appear to have been carried out there.

CHRONOLOGICAL POSITION OF PO-39

The artifact data clearly indicate that the main occupation of PO-39 took place in Rouse's (1992) Period lIIb, which dated between AD. 900 and 1200. A minor occupation was attributable to Period IVa.

Seven radiocarbon dates were run during the Phase I and Phase II data recovery efforts. All of the radiocarbon samples were wood charcoal, and the two samples from Locus 3 were taken from posts associated with the Locus 3 structure. All samples were run by Beta Analytic, Inc. Each radiocarbon sample is presented in Table 4 by provenience, sample number, and uncalibrated and calibrated date.

Table 3. Summary of Lithic Artifacts from PO-39.

Locus	Locus 1				Locus 2				Locus 3				Totals
Raw Material	**1**	**2**	**3**	**Su**	**1**	**2**	**3**	**Su**	**1**	**2**	**3**	**Su**	
DEBITAGE													
Thinning Flake	35	79	20	134	49	16	14	22	16	48	13	22	581
Unspecialized Flake	18	27	2	47	38	37	4	79	26	4	-	30	156
Bipolar Flake	7	5	-	12	14	3	4	21	32	-	2	34	67
Flake Fragments	115	110	12	237	19	21	10	42	34	39	19	42	1081
Shatter	66	26	8	100	15	68	4	22	15	9	6	16	498
Subtotals	241	247	42	530	44	48	36	96	72	10	40	86	2536
CORES & TOOLS	**Locus 1**				**Locus 2**				**Locus 3**				**Totals**
Core (random)	7	15	2	24	28	29	5	62	24	3	-	27	113
Core (bipolar)	9	-	-	9	24	1	2	27	30	-	-	30	66
Core (utilized)	-	-	-	0	1	-	-	1	-	-	-	0	1
Blade Flake	9	3	-	12	7	-	-	7	21	-	-	21	40
Retouched Flake	6	-	1	7	16	5	1	22	10	-	-	10	39
Utilized Flake	4	2	-	6	10	2	-	12	4	1	-	5	23
Bifaces & Frag-ments	4	-	-	4	-	3	1	4	-	1	-	1	9
Ground Stone	-	2	2	4	-	2	-	2	-	-	2	2	8
Polished Stone	-	2	1	3	-	1	6	7	-	1	-	1	11
Hammerstone	-	-	2	2	-	1	5	6	-	-	-	0	8
Notched Stone	-	2	6	8	-	5	1	6	-	-	-	0	14
Subtotals	39	26	14	79	86	49	21	15	89	6	2	97	332
OTHER	-	-	5	5	10	3	21	24	-	1	1	2	31
TOTALS	280	273	61	614	53	53	78	11	81	10	43	96	2719

Table 4. PO-39 Radiocarbon Dates from All Phase I and Phase II Data Recoveries.

Provenience	Locus	Sample #	Uncalibrated	Calibrated*
Unit 3, L5	2	Beta-31 038	A.D. 980±90	AD 984 [1025] 1186
Unit 3, L5	2	Beta-31039	A.D.1060±70	A.D 1027 [1158] 1221
Unit 11, L6	2	Beta-36518	A.D. 960±60	A.D. 988 [1021] 1151
Unit 16, F6	3	Beta-36519	A.D.1000±50	A.D. 1012 [1034] 1154
Unit 38, L2	2	Beta-45286	A.D. 910±70	A.D. 901 [995] 1025
Unit 50, L6	2	Beta-45287	A.D. 420±90	A.D. 419 [539] 638
Unit 31, F91-6	3	Beta-45288	A.D. 930±80	A.D. 904 [999] 1149

*Following Stuiver and Becker (1986), to one sigma.

The radiocarbon dates, with the exception of the anomalous early date, were averaged, and yielded a calibrated average date of A.D. 1002 [1024] 1149 at one sigma. This means that the most likely time of the Period IIIb occupation at PO-39 based on those dates was A.D. 1024, with a minimum date of A.D. 1002 and a maximum of A.D. 1149. The occupation date range for the site was probably fairly brief, as the Locus 3 house reflected no evidence of possible rebuilding or structural replacement. The radiocarbon dates firmly linked Loci 2 and 3 in time. The recovered artifacts unquestionably link Loci 2 and 3 with Locus 1, although insufficient carbon for even one radiocarbon date was recovered from Locus 1. The radiocarbon date from Level 6 of Unit 50 clearly predates both occupations at PO-39. That could be a spurious date, but it could also date charcoal burned in a forest fire of natural origin. A third possibility is that the charcoal could have been derived from a tree burned to clear the slopes for agriculture during the initial Cuevas occupation of nearby PO-38. At any rate, there is no occupation at PO-39 that can be linked to this early radiocarbon date.

The Period IVa occupation at PO-39 is not reflected in the carbon dates, and that component cannot be more accurately dated than the 300-year span of A.D. 1200 to 1500 proposed for the period by Rouse (1992).

THE PO-39 FUNCTIONAL AREAS

Locus 1: The Batey Area

A 10 x 20 m batey lined by two rows of upright greenstone slabs was the dominant prehistoric feature within Locus 1. The batey was, unfortunately, destroyed during reservoir clearing before the Phase II data recovery investigation could be conducted, and the exact number of stones present and their place-

ments within each row were therefore not determined. Four petroglyphs were found in Locus 1, however, and three were in direct association with the batey stones. One petroglyph contained a transformational figure that can be interpreted at least in part as a frog. That stone also contained three pecked dots that were probably symbolic of rain, and the entire petroglyph can be interpreted as a symbol of rejuvenation (birth). Directly opposite the transformational figure was a petroglyph interpreted as a death's head, which may symbolize the rite of passage of death. A third figure, located at the east end of the northern row, was an anthropomorphized sun figure, and was placed at the end of the batey that received the rising sun. The fourth petroglyph had been displaced by heavy equipment before it was found, and contained a "monkey face" surrounded by a solid, circular line. The symbolism of that petroglyph could not be determined, but it may have been linked to the moon in some fashion.

The term "batey," the Taino's own term for "ball court" (Alegria 1983:8), was used in this report to describe the Locus 1 structure after a great deal of consideration. Use of that term was not intended to imply that the function of the structure was to serve as a court to play ball games, but instead to reflect a more neutral term than many of the English or Spanish terms that may have been used. Alegria (1983:4-5) states:

> The terminology of different archaeologists to designate the structures where the ball games, *areytos,* dances, and other magico-religious ceremonies of the Taino took place is another problem. The terms plaza, court, batey, enclosure, parallels, corral, and *cercado* are used interchangeably by different historians and archaeologists to denominate structures of various shapes made of earth or stone. In part, the differences of terminology lie in the fact that most Latin American archaeologists and historians continue using "plaza" as it was used by the early Spanish chroniclers, that is, to describe the area where some type of gathering was held.

The PO-39 batey undoubtedly was a space where gatherings of some type were held, and the ball game may or may not have been one of those activities. Use of the Locus 1 batey as a ball court seems unlikely based on its small size alone. Most of the bateys described by Alegria (1983) were larger than 10 by 20 m, and true ball courts may have been limited to larger villages.

The artifacts recovered from Locus 1 are little help in resolving the function of the Locus 1 batey. No paraphernalia (such as stone collars and stone elbow rings) associated with the ball game were found at PO-39, but those artifacts are generally rare on sites in Puerto Rico. The artifacts recovered from Locus 1 appear to have been domestic in function, and the single ornament recovered from that locus was a fragment of a steatite pendant.

No evidence of prehistoric burials was found in Locus 1 (or in any other part of PO-39). Further, the isolated anomalies that may have been prehistoric postmolds were too few in number and too scattered to define even one structure within Locus 1.

Locus 1 was probably the precinct of PO-39 where public ceremonies were held. There is no evidence to indicate that PO-39 was a residential village, in fact there is every reason to believe that the site was a specialized ceremonial center that served the needs of individuals and families who lived in scattered homesteads throughout the Cerrillos River valley. The limited information that can be extracted from the symbolism of the PO-39 petroglyphs indicates that ceremonies to celebrate rites of passage such as birth and death were carried out on the site. The site may have also been where seasonal rituals were held, or where special ceremonies were staged in response to emergencies such as disease or drought.

1992b:51), and was replaced by the Caguana ceremonial center (Oliver 1992a). The abandonment of PO-39 may have been linked to the abandonment of Tibes, and the dating derived for PO-39 may provide good terminal dating for the Tibes ceremonial center.

Locus 2: The Buried Midden

Phase I and II data recovery excavations within Locus 2 indicated that the prehistoric deposits were more complex than originally believed. A buried midden that rested on subsoil, marked by soils rich in organics and artifacts, did extend over the Locus 2 area. Additional deposits present above that midden, however, contained numerous prehistoric artifacts but lacked a rich, organic soil matrix. The whole area was capped by soils that contained combinations of prehistoric and historic artifacts. No appreciable differences were noted between the artifacts in the basal midden deposit and those from upper levels, with the exception of a small number of Capa and Esperanza sherds recovered from upper levels in a few units. Otherwise, the artifacts from Locus 2 consisted of the same mixture of Elenan and Ostionan types noted for Locus 1.

The artifact analyses conducted for the Phase I and II data recoveries indicated that there were functional differences between Locus 2 and the rest of PO-39. The only fire cracked-rock recovered from PO-39 came from a single level in Unit 38 in Locus 2. Unit 38 was probably marginal to a hearth, and there were sufficient hand and machine excavations in Loci 1 and 3 to indicate that hearths were absent in those loci. The presence of the hearth in Locus 2 probably indicates that food was cooked in that area.

Locus 2 yielded 66.8 percent (n=225) of all griddle sherds recovered from PO-39, with 29.1 percent (n=98) from Locus 1 and 4.2 percent (n=14) from Locus 3. The griddles are believed to have been used in the baking of a type of bread made of manioc flour (Oliver 1992b:192), and it would be expected that the largest number of sherds would be found in the area where the cooking was done.

A large lithic sample was recovered from Locus 2, including 58.5 percent (n=533) of all greenstone artifacts. This compares to 29.7 percent (n=271) of the total site greenstone from Locus 1 and 11.8 percent (n=107) from Locus 3. The relative frequencies of greenstone in the three loci are an important measure, as greenstone was freely available in the P0-39 area, and probably would have been used most often for expedient plant or animal processing tools. Indeed, over half of all retouched and utilized flakes came from Locus 2, and both can be considered to be expedient tool types. As a further indication, Locus 2 yielded several greenstone bifaces that had been heavily battered, as well as two blade flakes with pronounced plant polish.

Locus 2 should be considered the domestic precinct of PO-39, although domestic activities were probably restricted to the processing and preparation of food. The presence of a food processing and preparation area within PO-39 is in no way inconsistent with the hypothesized use of the site as a minor ceremonial center. Indeed, certain domestic functions, such as eating and drinking would have to be accommodated in any ritual center where people congregated for more than a few hours at a time.

Locus 3: The Stone Circle

No trace of the stone circle that had focused attention on Locus 3 still existed when the Phase II data recovery began. That feature had been totally obliterated by the premature clearing of the site, and not even one stone remained in place. The loss of the stone circle did not hamper the Phase II data recovery, however, because that feature appears to have been of historic origin and was not related to the prehistoric remains in Locus 3.

The structure in Locus 3 was only partially exposed during the Phase I and II data recovery excavations (see Figure 8). That structure was circular, and measured approximately 10 m across. It is clear that the Locus 3 structure was not rebuilt, and the lack of rebuilding argues in favor of a short-term use of the overall site.

Little is currently known about prehistoric structures in Puerto Rico. Curet (1992) recently published a study on Caribbean houses that focused on Puerto Rican structures and summarized available structural data. Curet (1992:161) indicated that structures at the time of contact were "circular and constructed using a framework of posts, reed walls, and straw roof." He further indicated that the structures were conical and had two doors and no windows. Curet dismissed reports of rectangular structures with porches and windows, attributing them to European influences over the 40 years before they were first described by Fernandez de Oviedo (Fernandez de Oveido y Valdes 1959).

Curet (1992:162) further indicated that there are few mentions of structures sizes in the early accounts; de Las Casas (1967:1:243) indicated that houses were 9 to 12 m in diameter, and Martir de Anglería (1964:123) described the diameter of a chief's house as 26 to 32 m. It is clear that the limited data indicate that the Taino structures at the time of contact tended to be quite large, and Curet (1992:162) referenced the widely held view that Taino households at contact were made up of extended families.

Ramcharan (2004) produced a Master's thesis that summarized the current state of knowledge concerning prehistoric and contact period structures in the Caribbean that included Puerto Rico and The U.S. Virgin Islands. That research indicated that structures of various shapes and sizes were used through prehistory in the Caribbean. At any rate, Ramcharan presented data for structures from the Tutu Site on St. Thomas that dates to around the same time as the PO-39 structure.

The archaeological investigations in Puerto Rico and the U.S, Virgin Islands have yielded limited evidence concerning the sizes and shapes of structures through time. Table 5 summarizes the available evidence as presented by Curet (1992:163) and Ramcharan (2004:107-108), including the Locus 3 structural data. Table 5 illustrates that the Locus 3 structure is within the size range given by de Las Casas (1967:1:243) for a Taino house at contact, but is larger than the other known Ostionoid/Elenoid examples.

Curet (1992:167-168) believes that the oblong structure at El Bronce was earlier than the round structure at the same site. He has hypothesized that the oblong structure at El Bronce belongs to the later Elenoid period (A.D. 1000-1200) and the round structure was Chicoid (A.D. 1200-1500). That assignment may well be valid, as the early Ostionoid structure from PO-21 is believed to have been oval, but the Chicoid structure from Playa Blanca-5 was essentially round. At the same time, the presence of the round structure at PO-39, in association with Ostionoid/Elenoid artifacts and carbon dates that cluster in the eleventh century A.D., could mean that the oblong structure at El Bronce is earlier than Curet believed, or that they were from the same time period.

The function of the Locus 3 house was not immediately evident. The structure was apparently not a residence, as evidenced by the low percentage of manioc griddle fragments and the relatively low representation of ceramics. The sherd size within Locus 3, based on the relative numbers of residual sherds, was smaller than that observed in Loci 1 or 2, and the plant processing tools associated with food preparation appear to have been largely absent from this locus.

Locus 3 did exhibit the largest percentage of chert debitage and tools of any locus within PO-39. The assemblage of chert debitage and tools included some examples made of what appears to have been local material, but it also includes the largest array of nonlocal or exotic materials identified for any assemblage within the site.

Table 5. Sununary of Known Prehistoric Structures From Puerto Rico and St. Thomas.

Source	Site	Period	Dimensions	Shap
Righter 2002*	Tutu	Saladoid/Ostinoid	4.2 m across	round
Righter 2002*	Tutu	Saladoid/Octinoid	7.2 across	round
Siegel 1989	Maisabel	Monserrate/ Ostionoid	52 x 14 m	ob-long
Espenshade et al. 1987	PO-21	Early Ostionoid	8x6m	oval
Curet 1992**	El Bronce	Ostionoid/Elenoid/ Chicoid	7.6 x 4 m	ob-long
Curet 1992**	EI Bronce	Ostionoid/Elenoid/ Chi-coid	5.2 x 5 m	round
Garrow et al. 1992	PO-39	Ostionoid/Elenoid	10 m across	round
Rivera and Rodrigez 1991	Playa Blanca-5	Chicoid	7.14 x 6.64	round

*Interpreted from Ramcharan 2004 **Interpreted from Robinson et al. (1985).

Included among the lithic tools recovered from Locus 3 was an adjusted total of 21 chert blade flakes. This blade flake total is greater than the total from Locus 1 (n=9) and Locus 2 (n=7) combined (n=16). Blade flake production appears to have been the most important product of the chert lithic industry at PO-39. In fact, chert bifaces and biface fragments were exceedingly rare at PO-39, with only four examples recovered from Locus 1.

Blade flakes appear to have been multi-purpose tools, as evidenced by the examples from Locus 2 that exhibited plant polish. None of the Locus 3 blade flakes exhibited plant polish or evidence that they had been used to cut anything more than soft tissue, however, and indeed those blades may have had a specialized ceremonial usage such as scarification, tattooing, bloodletting, or circumcision.

The structure in Locus 3 probably served as a place where private ceremonies were conducted. Those ceremonies may have been related to rites of passage, such as puberty rites, that would have tied back into the petroglyphs in what has been interpreted as the public ceremonial area of the batey in Locus 1. Alternatively, the structure in Locus 3 may have been a shaman's house, where private ceremonies were conducted by the shaman and the shaman alone.

CONCLUSIONS

La Iglesia de Maragiiez site proved to contain two prehistoric components. The earliest, and primary, component was reflected by a combination of Elenan and Ostionan style ceramics. That occupation appears to have dated to the eleventh century A.D., with a most likely occupation date of A.D. 1024, and a probable maximum range of A.D. 1002 to A.D. 1149. The first occupation of PO-39 appears to have been brief; available evidence indicates it was probably restricted to less than 50 years, and perhaps even less than 25 years.

The second prehistoric occupation of PO-39 occurred at some point between A.D. 1200 and 1500. That occupation was marked by small numbers of Chican style ceramics with both Capa and Esperanza traits. The ceramics from the Chican component co-occur with notched stones, and that occupation may have been a temporary fishing camp that housed people who were netting shrimp or fish in the Cerrillos River. The Chican occupation of PO-39 appears to have been nonintensive and very brief, and left little imprint on the site.

PO-39 appears to have functioned as a local ceremonial center at the time of the Elenan/Ostionan occupation. The site was divided into three loci during the site investigations, and those subdivisions appear to have coincidentally reflected discrete functional areas at the time the site was in use. Locus 1 was located on the ridge top that housed the historic period church that gave the site its name. Locus 1, which contained a batey delineated by upright stones, appears to have functioned as an area for public ceremonies. Locus 2, located on the slope below Locus 1, contained deeply buried midden deposits. Locus 2 appears to have served as a food processing and preparation area, and indeed the only evidence for cooking found on the site came from that locus. Locus 3 contained a structure that may have served as a private ceremonial area or shaman's house. All three loci were unquestionably tied to the same time period and presumably the same occupation episode, based on radiocarbon dates and comparisons of the respective artifact collections.

PO-39 represents a site type that has not been previously identified in Puerto Rico or the rest of the Caribbean. Prior to the investigation of PO-39 the only sites believed to have been used exclusively as ceremonial centers were the large and complex multi-batey sites of Tibes and Caguana in Puerto Rico, and both were thought to have been ritual centers of importance to much or all of Puerto Rico when they were in use. PO-39 is a small, single batey ceremonial center that was not used as a village or homestead, but appears to have been visited periodically by nearby residents and reserved for ceremonial use. PO-39 probably functioned on a local level in much the same manner as Tibes and the later Caguana site did on a regional basis (Oliver 1992a). Ceremonies held at PO-39 probably dealt with the more routine ceremonial and/or religious needs of the local residents. Sites like PO-39 were probably fairly common throughout at least the mountainous interior of Puerto Rico during the later prehistoric period, and were ancillary sites to the major centers like Tibes and Caguana.

It is possible that local ceremonial functions like those carried out at PO-39 were conducted in special areas of the larger village sites along the coast, where the population density was higher. If that is the case, minor ceremonial centers like PO- 39 that were not permanently occupied may have existed only in the high valleys of the interior, where residents were more likely to live in scattered homesteads than in concentrated villages. At any rate, the possibility that more sites like PO-39 exist in the Caribbean must be recognized, and additional examples should be searched for and investigated.

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