Markets and the Socio-Economic Integration of Caracol, Belize:

Investigating Residential Groups and Public Architecture in the Vicinities of the Monterey Residential Group and the Puchituk Terminus: Caracol Archaeological Project Investigations for 2018

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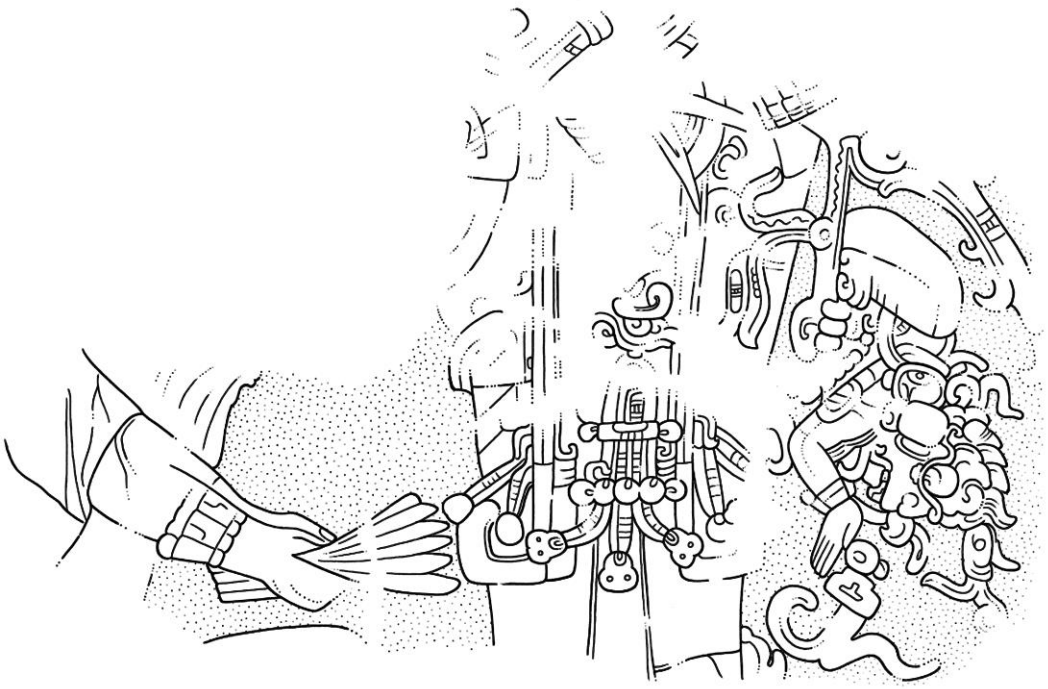

with an Appendix entitled:
Epigraphic Report on Recently Discovered Stelae at Caracol, Belize
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The 2018 field season constituted the first year of a three-year program designed to investigate how the market economy that existed at Caracol actually worked. Since previous field seasons had collected significant amounts of artifactual materials and primary deposits close to the site epicenter and in association with two of the southeastern market plazas, this new three-year program proposed to work further afield, specifically in the areas around the Puchituk market plaza and the public architecture associated with the Monterey residential group in the northeastern section of the site. The Puchituk Terminus is 3 kilometers distant from the site epicenter and the public architecture associated with Monterey is 5.5 kilometers distant from the site epicenter. The 2018 field season ran from the middle of January through the middle of March and involved 24 individuals (see Table 1). The 2018 field season focused on the excavation of residential groups in the immediate vicinity of the Puchituk Terminus and also on collecting soil samples from both the Puchituk main plaza and from the plaza associated with the ballcourt in the Monterey area to test for potential market residue. Both plazas were sampled and the results of that sampling are reported here. Excavations were undertaken in two residential groups that had been previously tested in 1994 (Sage and Midget) and in three new residential groups (Cheech, Chon, and Chak) that had never been previously sampled.

Background

Within the last decade researchers in Maya archaeology have begun to significantly alter long-standing views regarding the complexity and composition of Classic Period society. The use of LiDAR has permitted the demonstration that many Classic Period Maya cities were quite large in areal extent (e.g., Canuto et al. 2018; A. Chase and D. Chase 2016, 2017) and archaeological research has also shown that ancient Maya marketplaces were located at many of these Late Classic (500-800 C.E.) Maya centers (e.g., Dahlin et al. 2010; King 2015; Masson et al. 2019). The existence of both sizeable cities correlated with

urbanism and a market economy were topics that had been long debated in Maya archaeology. Because economic discussions are largely absent in the Classic Period hieroglyphic texts that have been recovered (see Tokavinine and Beliaev 2013), interpretations about Maya society did not initially focus on economic transactions in markets but rather discussed tribute, gifting, and household production (e.g., Foias 2013: 140-144; MacAnany 1993). Even though plentiful status and trade goods had long been recognized among the excavated households of the Maya (e.g., Willey 1956), the mechanisms for the distribution of these materials to households were either largely ignored or alternatively focused on elite-controlled redistribution and gifting (e.g., Foias 2013: 190-191). Then-standard economic models used in anthropology did not view market systems as being possible for ancient societies like the Maya (eg., Polyani 1957; Sahlins 1972). However, researchers have now recognized that markets could indeed exist in ancient non-western economies (Feinman and Garraty 2010; Garraty and Stark 2010). Thus, the relatively recent realization that the ancient Maya had market systems has major ramifications for our understanding of how their society functioned.

Even before the current paradigm shift in Maya archaeology, our research at Caracol, Belize had postulated the existence of markets at the site based on the distribution and connectivity of public plazas as well as on evidence for local household production (A. Chase 1998; D. Chase and A. Chase 2004); we have subsequently amplified our views on how these markets functioned as a system within Classic Period society (A. Chase and D. Chase 2015; A. Chase et al. 2015; D. Chase and A. Chase 2014, 2019). We also now know that different kinds of markets existed within the Maya area. Some focused on the supply of foodstuffs for the populace and employed small market stalls, as at Chuchucmil, Mexico (Dahlin et al. 2007, 2010; Hutson 2017). Others were centered in vaulted stone buildings, as at Tikal (Becker 2015; Jones 1996, 2015). Still others focused on the use of large plaza areas, as at Buenavista, Belize (Cap 2015) and Motul de San Jose (Bair and Terry 2012). No matter what their form, these public loci served to make a variety of goods – such as imported fineware and quotidian ceramics (A. Chase and D. Chase 2012), jadeite (D. Chase and A. Chase 2017), and obsidian (Martindale Johnson 2016) – available to the inhabitants of a given site.

The market system at Caracol is a relatively elaborate one. It consists of a solar system of seven main plaza markets that are directly connected to the epicenter of the site (see D. Chase and A. Chase 2017:

fig. 1). The Caracol market system used plazas, buildings, and stalls in different combinations (see A. Chase et al. 2015); smaller platform buildings line the sides of the plaza marketplaces and stalls line some of the causeways where they join the public plazas. Excavation data has shown that these non-epicentral markets were constructed at the beginning of the Late Classic Period and were either added to engulfed centers or purposefully built as separate units within the city landscape, providing easy access for the site's inhabitants; no one had to walk more than 3 km to reach a marketplace (D. Chase and A. Chase 2014:243). Each marketplace also effectively served a different geographic segment of Late Classic Caracol; these segments are referred to as "districts," following the earlier use of this term in reference to other cities (A.S.Z. Chase 2016; Smith 2010; Smith and Novic 2012). Because of limited archaeological data on parts of Caracol (including market plazaslocated over 3 km from the site epicenter), we are only beginning to understand how these markets functioned both within the broader city and within the communities they served. Thus, the research being carried out from 2018-2020 helps define how the Caracol market system served different neighborhoods distributed across the city's landscape.

he Problem: Markets, Distribution, and Integration of Caracol's Late Classic Society

While now recognizing that ancient Maya markets existed and that they likely appeared at many sites (Hirth and Pillsbury 2013; Hutson 2017; King 2015), researchers still do not know exactly how they functioned within Classic Period Maya society. Because of the history of Maya research with its focus on elite control of long-distance trade (for background, see: Becker 1973 and Tourtellot and Sabloff 1972), there is disagreement over whether institutional (prestige goods) and domestic (household necessities) economies were part of the same market system (but see Isaac 2013 and Masson and Freidel 2012). However, excavations within residential groups at most Maya sites often recovered what are considered to be prestige items (see Willey 1965 for Barton Ramie; Becker 1999 and Haviland 1985, 2014 for Tikal; Hutson 2016 for Chunchucmil), leading to questions as to whether or not these items derived from gifting or from market exchange. While archaeological research initially permitted a less complex viewpoint, as more and more excavations have been undertaken in residential groups it has become clear that the volume of items recovered in households strongly argues against gifting and redistribution as the predominant means for site-wide household provisioning. At Caracol, in particular, it is possible to demonstrate that obsidian was distributed through the market system (Martindale Johnson 2016), that jadeite was distributed

through the market system (D. Chase and A. Chase 2017:225; 2019: fig. 4); and that marine shell and polychrome pottery were also available through this system (D. Chase and A. Chase 2004, 2017:215). The widespread distribution of monochrome Belize Red ceramics, imported into Caracol from the Belize Valley 55 km due north, also appears to have been accomplished through the site's market system (A, Chase and D. Chase 2012). Yet, the presence of specific forms of Belize Red in some parts of the site and not in others (e.g., D. Chase and A. Chase 2014:246) is strongly suggestive of either centralized control or the differential distribution of certain items to the site's markets based on other factors. And, as noted above, greater sampling of areas at substantial distance from the site epicenter will also be important in filling out this picture.

The current research program is designed to examine the distribution of artifactual materials within two different parts of Caracol that would have used different marketplaces, particularly comparing and contrasting items found in residential groups with access to the epicentral market with items found in residential groups with access to a more remote market – in this case the Puchituk market 3 km northeast of the site epicenter. An extensive amount of data has been collected that relates to goods that would have been available through the epicentral market. Between 2010 and 2014, two different neighborhoods with access to the epicentral marketplace were investigated. To the immediate northwest of the epicenter, seven co-located residential groups were investigated that yielded a series of Late Classic deposits that can be compared and contrasted with other areas. To the southeast of the epicenter nineteen co-located residential groups have been investigated that also yielded a series of Late Classic deposits that can be compared and contrasted with other areas. While there are differences between these two epicentral neighborhoods in terms of Late Classic burial patterns, both areas had access to imports from outside of Caracol, presumably obtained through the site's epicentral market.

A settlement pattern program focusing on the northeast sector of Caracol was carried out between 1994 and 1996, recording the Puchituk Causeway and Terminus (at a distance of 3 km from the epicenter) and also the public architecture at Monterey (located 5.5 km from the epicenter). This settlement pattern program block-mapped some 8 sq km of residential groups (Figure 1) and 2 sq km of agricultural terraces (A. Chase and D. Chase 1998) in the northeast portion of the site. Small non-structural test-pits were excavated in 22 dispersed residential groups (usually within the associated plazas); only four groups in this

portion of the site were more intensively excavated (2 near Puchituk and 2 near Monterey). Seven open tombs, four chultuns, 20 non-tomb burials, and 36 caches were recovered in the northeast sector of the site as a result of these investigations. The data recovered in the course of this research suggest some variances within this portion of the site when compared to the data from the epicentral neighborhoods, implying that variation in availability of items possibly existed within Caracol's markets. For instance, there are differences in ceramic forms recovered from the northeastern burials, even though they date to the Late Classic and overlap temporally with those known from the epicentral neighborhoods. But, the sample at this point is too small to say whether the variation is meaningful, which is why more intensive research needs to be undertaken.

Further excavation within the northeast sector will help define the Late Classic social and economic systems for the city of Caracol by permitting the comparison and contrasting of Late Classic residential patterns and artifactual materials that would have been derived from the Puchituk market with patterns and residential materials derived from the epicentral market. It is also likely that these data will permit new insight to be gained into the presence and distribution of different status groups within the urban matrix. Because of the test-pits undertaken in the 1990s, we know that this sector of the site shared in the broader Caracol patterns associated with inlaid teeth (n=9) and ritual caching (see D. Chase and A. Chase 2004, 2017), but that the burials we have from this part of the site hint at differences from those in the epicenter in terms of a paucity of certain goods (such as stone spindle whorls). Thus, this research will better permit us to understand how distribution patterns relate to broader patterns of site integration.

This research also has the potential to provide some time depth to Caracol's markets. While the Puchituk Terminus mimics the same architectural configuration seen at the other two inner ring termini (e.g., Conchita and Ramonal; A. Chase and D. Chase 2001; A. Chase et al. 2015:242-243; D. Chase and A. Chase 2014), the public architecture at Monterey was never connected to the Late Classic causeway system. Yet, Monterey exhibits a ball court and an eastern temple (these are unexcavated and, thus, of unknown date). Excavations in the group south of the ballcourt revealed a vaulted northern building and ritual deposits that went back to the Late Preclassic era (A. Chase and D. Chase 2006, Lomitola 2012), as well as Late Classic and Terminal Classic artifactual remains. This may be due to a truncated

developmental sequence. Thus, further investigation into the earlier remains in this part of the site may be useful for better contextualizing Late Classic Caracol and its spatial order.

Research Carried out during 2018 and its Context

The 2018 field season represented the first year of this three-year excavation program and, as noted above, concentrated on better defining residential settlement in the vicinity of the Puchituk market plaza (Figure 2). Residential groups excavated in the immediate vicinity of the plaza provide archaeological data that can be compared to the neighborhood excavations conducted in the vicinity of the epicenter (D. Chase and A. Chase 2017: 198). In addition to the 2018 excavations, the Puchituk Plaza was also sampled for soil testing, as was previously done for the Conchita and Ramonal plazas of Caracol (A. Chase et al. 2015), to help identify any remaining market plaza use residue. Soil testing during 2018 was also carried out in the Monterey area on the raised platform that supports the ballcourt and also on the terrace immediately west of the ballcourt.

Excavations during 2018 focused on residential groups that are co-located in the vicinity to the Puchituk Plaza (see Figure 2) in order to identify artiactual remains that could be used to compare and contrast distribution systems within the site. In addition, investigation of two residential groups in the vicinity of Puchituk Plaza were undertaken in 1994 and have been incorporated into this report. One is the residential group nicknamed "Midget" which had two chultuns excavated in 1994 and a trench placed through its eastern building that yielded four interments and two caches. The Sage Residential Group was also cursorily investigated in 1994; 2018 excavations significantly amplified our knowledge of both the southern and eastern building in this group. Besides the Sage Residential Group, connected to the Puchituk Plaza by a short causeway, three additional residential groups – nicknamed "Cheech," "Chon," and "Chak" – were investigated during 2018 with a combination of trenching and areal excavations to begin to garner an archaeological sample that can be compared to the two epicentral neighborhoods referenced above. Data on all of the groups excavated in the Puchituk area are presented here and the locations of these groups relative to Puchituk Plaza are shown in Figure 2.

The 2019 field season will continue working on residential groups in the Puchituk area while also shifting to research in the Monterey area (see Figure 1), where previous data indicate an occupation existing from the Late Preclassic Period (A. Chase and D. Chase 2006: fig. 2) through the Terminal Classic

Period (A. Chase and D. Chase 2004: fig. 16.8). Monterey also provides mapped evidence for public architecture that is not connected to the Late Classic causeway system and, thus, may also provide distinctive artefactual distribution and market useage. Besides what appears to be a public plaza, there is also an eastern pyramid and a ballcourt. The ballcourt may be associated with carved stone monuments, as occurred in both epicentral ballcourts at Caracol (see A. Chase and D. Chase 1987; A. Chase et al. 1991; Helmke et al. 2006) and as is also known from Hatzcap Ceel (Thompson 1931: 264-266). As with Puchituk Plaza, residential groups in the immediate vicinity of Monterey will also be investigated. Most of these residential groups will likely yield Late Classic materials that may have derived from the Puchituk market. Based on previous research undertaken in 1995, it is expected that Monterey will represent a failed terminus dating to either the Late Preclassic or early Early Classic Period. Thus, any Late Classic materials associated with residential groups in this area should permit an assessment of how well residential groups that were located further from away from market locales were integrated into the socio-economic fabric of the site.

During the 2020 field season, further research will be undertaken on other residential groups within the northeast sector of the site in order to further augment the comparative sample of residential groups for final analysis. In this way, it is expected that this three-year excavation program has the potential to inform us about the development of Caracol's markets and market system over time.

The excavations within the immediate vicinity of the Puchituk Plaza are presented below in order of Operation number.

Sage Residential Group: Structures 4C7-C49

The Sage Residential Group is located atop a raised hill at the southeast corner of the Puchituk Plaza (see Figure 2). It is connected to the Puchituk Plaza by means of a a broad causeway that is tangent to the southern edge of the range structure (Structure 4C4) that defines the eastern edge of the Puchituk Plaza. The Sage Residential Group is defined by three large structures (Figure 3). The northern structure was likely vaulted; its substructure rose some 3 m above the associated plaza; its central doorway could be seen in the collapse pattern. The southern building substructure rose about 2 m above the associated plaza and was excavated to reveal its entire front room during the 2018 field season. The eastern building in Sage is

actually a pyramid that rises some 8 m above the plaza. The front base of this building was investigated during 2018

Structure 4C8

The eastern building in Sage was designated Structure 4C8. It is actually a pyramid that may have supported a vaulted building on its summit (based on similarities to other pyramids excavated by J.E.S. Thompson (1931) at the Hatzacap Ceel and Tizmin Kax termini. The base of the structure was initially investigated in 1994, at which point a reset stela was found and drawn by Alfonso Morales (see http://caracol.org/wp-content/uploads/2016/05/Season-Report-1994-1996.pdf Figure 7). This monument, Caracol Stela 24, was redrawn in 2018 by Christophe Helmke (see Figure 93). The 1994 excavation also located an architectural feature at the base of Structure 4C8. The 2018 field season returned to Structure 4C8 in an attempt to find more of the stela and also to better understand the basal feature in front of Structure 4C8 (see Figure 4 for photographs of the 2018 excavations).

Operations C106B and C106E were designated for the excavations undertaken in at the base of Structure 4C8 and in the plaza to the front of this building. Sub-operation C106B comprised the original 2 m by 5.3 m plaza excavation undertaken in 1994 that revealed Caracol Stela 24. Sub-Operation C106E comprised the basal excavations undertaken in 2018 and incorporated the area excavated as Sub-Operation C106B. Sub-Operation 106E extended some 4.65 m west of the base of the constructed room at the base of Structure 4C8 and range in extent from 3.5 to 5.3 m in width. An additional excavation in front of the northern doorway extended 2 m into the plaza. The building at the base of Structure 4C8 measured approximately 2.5 m from the plinth to the back wall with the room itself being approximately 1.7 m in depth (see Figure 5). The central doorway was 2 m wide while the northern doorway was 1.6 m wide. A raised bench with c-shaped entryways ran the entire length of the building. These c-shaped entryways were a later modification to the building; originally a narrow space ran the length of the room in front of the raised bench. Excavations recorded 6.4 m of the room interior, which is projected to have been 10.5 m in total length. The 1994 excavations recovered bedrock in the plaza (Figure 8) and the 2018 excavations recovered bedrock beneath the front room of the building (Figure 7). Two main plaza surfaces were recovered in the excavations; one ran under the front room to the east and the other abutted the front room and the reset stela. Two plaza caches associated with the stela were recovered in 1994 (Figures 9 and 10).

The only feature recovered during 2018 that was anomalous was a heavily burnt pit placed through the bench behind the northern doorway (Figures 14, 15). While some ceramics were recovered in association with the pit and floor of the room (Figure 16), very little in the way of in situ artifactual material was recovered (see Figure 17).

S.D. C106B-1 was designated for a small pit found to the west of Stela 24, but on axis to the central doorway of Structure 4C8, that contained two sets of lip-to-lip cache vessels (Figures 10 and 11). No contents were recovered in association with these cache vessels.

S.D. C106B-2 was designated for two broken jadeite objects set at the base of, and on axis to, Stela 24. One of these objects was a large bead and the other was a flat plaque (see Figures 10, 12, and 13).

Structure 4C9

Structure 4C9 is the southern building in the Sage Residential Group. It rose approximately 2 m above the plaza and had been looted on its eastern side prior to 1994. The exterior terrace architecture and walls were visible in this portion of the structure (see Figure 23) and it is suspected that this led to a tunnel being placed into the center of the building; this tunnel was shored up and filled in in 2018. Investigations during 2018 revealed the interior of the building and also its frontal axis (see Figure 18)

Operations C106C and C106F were the Sub-Operations designated for investigations into Structure 4C9 in 1994 and in 2018. The 1994 investigations only focused on the exterior northeast corner of the building, recording the basal portions of terraces associated with the building (see Figure 22). The 2019 investigations recovered a stairway balk with evidence of side stairs and also exposed the interior of the front room of the building (Figure 19). The stair balk was penetrated, but like Structure 4C8, it appears that Structure 4C9 was constructed in a single phase (Figure 20). The room evinced single central doorways in both its front wall and its rear wall; these measure 1.8 m in width. It is likely that a second room had once existed south of the front one, but that it had completely collapsed off the edge of the Sage Plaza. This interpretation is based on what appeared to be an infilled doorway to the west of the inner doorway in the room. The interior of the front room of Structure 4C9 measured 8.3 m in legth by 2.25 m in width. Very little artifactual material was recovered in these excavations, but portions of some larger vessels were recovered on the interior room floor (Figure 21).

Midget Residential Group: Structures 4C10-4C13

The residential group that was given the moniker "Midget" is attached to the same raised area upon which the Puchituk Plaza sits. It is also directly west of the large constructed reservoir at Puchituk. The placement of the group in association with the Puchituk Plaza was certainly not fortuitous and it is likely that the inhabitants of this group were directly associated with the operation of the public plaza. The Midget Residential Group, however, is not as ostentatious as the Sage Residential Group, implying that there were differences in status between the two plazuela groups. None of Midget's structures are raised more than 1.5 m above the associated plaza and there are no vaulted building associated with this residential group. A plan of the Midget Residential Group reveals four distinct buildings, all cardinally situated (Figure 24). The largest building is to the north and a shrine building is to the east; the platforms for buildings to the west and south are barely raised above the plaza itself.

Structure 4C11

Structure 4C11 was a large range building on the northern side of the Midget Residential Group. It rose approximately 1.4 m above the associated plaza and had an identifiable outset frontal stairway.

Operation C107B was designated for a small excavation set above an area of collapse (Figure 25) that was on axis to Structure 4C11 and directly tangent to the outset frontal stairway. Excavation of this collapsed area exposed a small chultun (Figure 26). The capstone that had once sealed the chamber was recovered within the fill for the open feature (Figure 27a). Little in the way of artifactual material was recovered, but some human bone was found, implying that the chultun had once served as a burial chamber. However, the bone was not articulated and was not designated as a formal S.D.; what was recovered consisted of miscellaneous long bone fragments (including a radius) and a single upper right canine with hypoplasia and wear.

Structure 4C12

The eastern building in Midget, Structure 4C12 (Figure 28), functioned as a shrine building for the residential group. The squarish building rises approximately 1.4 m above the plaza and, although capped with plaster floors, the structure yielded no evidence of actual architecture. Excavation of the structure yielded 3 burials and 2 caches.

Operation C107C was assigned for a trench placed into Structure 4C21 (Figure 29). The trench was 1.5 m wide by 8.55 m in length. With the exception of a small tomb placed in the middle of the structure, the other four deposits were located towards the front of the building beneath what would have been an area of frontal steps for the structure (Figure 30).

S.D. C107C-1 was assigned for an interment found in the south wall of the excavation. A 1.5 m long by 0.75 m wide extension was made in order to recover an interment (Figure 30, plan 3). The crypt was covered by capstones and contained skeletal material, both articulated and disarticulated (Figure 31). Three individuals were recovered in this deposit. All were clearly adults. Two were old enough to have had their teeth completely resorbed. One of the mandibles had a single lower right incisor still in place. Only four other teeth were recovered: three lower premolars and one lower left second molar with heavy wear and caries. One individual was possibly female based on the recovery of a small right mastoid process; the other cranial material was non-diagnostic. A total of four femurs and four tibia were recovered. No ceramics accompanied this interment. However, the crypt contained the fragments of the lower mandible of a peccary and half of a fragile Atlantic *mactra* clam shell.

S.D. C107C-2 was assigned to a cache that was recovered in the northern wall of the trench (see Figure 29 and Figure 30, plan 3). The cache consisted of a very friable ceramic urn and its lid (Figure 32a). Besides the ceramic vessel, no other materials were associated with the cache.

S.D. C107C-3 was assigned for a small tomb located in the center of Structure 4C12. The tomb ran north-south across the trench and had a small entryway step on its northern side (Figure 33). It had been set directly upon bedrock. A plan of the chamber (Figure 34) revealed three ceramic vessels (Figure 35) and disarticulated bone concentrated on the south side of the chamber. The tomb measured 2.4 m in length by 0.65 cm in width by ca. 1 m in height, encompassing approximately 1.56 sq m of space. Besides the ceramic vessels, artifacts included within the chamber an unworked shell, a filed deer tooth, a piece of worked slate, and incensario fragments. The fact that one of the vessels in the chamber was a cache vessel (Figure 35c) suggests that the chamber had been re-entered and disturbed in antiquity. Analysis of the human skeletal material revealed the fragmentary remains of one individual. Long bone fragments, foot bones, fingers, and cranial fragments were all present, but no teeth were recovered. Age and sex was not established.

S.D. C107C-4 was assigned for lip-to-lip ceramic cache (Figure 32b) located in a pit placed in the center of trench and just east of S.D. C107C-2, directly under the front steps. Besides the ceramic vessels, no other materials were associated with the cache.

S.D. C107C-5 was assigned for an interment (Figure 36) found underneath the front construction wall for Structure 4C12. Its excavation required a slight extension into the northern side of the excavation. The interment was placed within a small crypt with human bone resting directly on top or dry core fill. Assorted small fragmentary pieces of long bone were recovered along with three teeth (a lower left canine, a lower right canine with a heavy calculus deposit, and an upper right canine with hypoplasia. Based on the limited material recovered, the bone is assumed to represent a single individual of unknown age and sex. There were no associated artifacts.

Structure 4C13

Structure 4C13 is the small raised pad for a structure located on the southern site of the Midget Residential Group. The structure itself was not excavated, but a depression to the north of the building and on axis to it was.

Operation C107D was assigned for a 1 m by 1m investigation placed over a collapsed area in the plaza to the north of Structure 4C13. Initially, loose fill was uncovered; towards the bottom of this fill the rounded cover of what appeared to be a chultun was found (Figure 27b). Excavation beneath the capstone revealed an open hollow that confirmed that the excavation was on top of a collapsed chultun (see Figure 37). Excavation at the bottom of the hollow yielded sherd concentrations (Figure 38) that were reconstructable as four distinct ceramic vessels dating to the early Late Classic Period (Figure 39) recovered. Also recovered were pieces of conch shell and two hammerstones. Interestingly, there is no record of human bone associated with this deposit.

Puchituk Plaza: Structures 4C1-4C6

Puchituk Plaza was mapped in 1994 as part of the northeast settlement pattern program funded by the National Science Foundation (Grant No. SBR-9311773). The formal plaza is defined by a series of buildings that enclose a large public space (Figure 40). The western building is about 1. 5 m in height and the northern and southern buildings are about 2.5 m in height. The eastern building takes advantage of the

hill that supports the Sage Residential Group with the result being that the main eastern structure protrudes forward and rises about 3 m above the Puchituk Plaza.

Structure 4C4

Structure 4C4 is the main eastern structure associated with the Puchituk Plaza. The building itself is approximately 3 m above the plaza and must have been approached by a broad stairway. After clearing the structure of brush, the outlines of seven rooms associated with building, each with a westward-facing doorway, became clear. The central room was selected for testing.

Operation C113B was assigned for a 2 m wide by 4 m long excavation placed on axis to the central room in Structure 4C4 (see Figures 41 and 42). This excavation revealed a plastered floor that rose in three 1 m deep low steps as well as the rear wall of the room. The door jambs were not located in this excavation, meaning that the door was quite wide; the lack of cut stone suggests that these rooms only had base-walls with the upper parts of the building being made of perishable materials. The arrangement of the segmented floors make it likely that this building was not meant for occupation. No artifactual materials of note were recovered.

Cheech Residential Group: Structures 4C15-4C18

Cheech Residential Group is located approximately 50 m southeast of the Sage Residential Group. Cheech is at a lower level than Sage, being at the base of the hill that supported the more impressive architectural group. Cheech Residential Group consists of four buildings. Two are located atop the same low platform that defines the northern extent of the plaza. The other two buildings are on the eastern and western sides of the plaza. The western building is a very low basal platforms for a perishable construction, while the constructions to the north and east were more sizeable. Investigations in this group were carried out on the eastern building and in the alleyway between the two northern buildings. Associated remains from these investigations indicate an occupation extending from the late Early Classic Period through the Late Classic Period.

Structures 4C15 and 4C16

The northern platform in the Cheech Residential Group supported two building pads that were separated by a small alley. In an attempt to recover associated trash in the alley, an excavation was placed over this alley (see Figure 44, bottom).

Operation C209C was assigned to the excavation placed over the alley between Structures 4C115 and 4C16. This excavation measured 1.5 m east-west by 5.2 m north-south. It succeeded in defining the east side of Structure 4C15 and the west side of Structure 4C16 as well as a rough surface between these two buildings (see Figures 45 and 46). It also recovered most of a large olla, dating to the Late Classic Period, within this alleyway (Figure 47).

Structure 4C17

The eastern building in Cheech, Structure 4C17, was not very impressive and excavation found little in the way of formal architecture (Figure 44, top). Based on the two intements that were recovered, however, the structure served as a shrine and mausoleum for this group during the later part of the Early Classic Period.

Operation C209B was assigned for a trench placed on axis to the eastern structure in Cheech. The trench measured 1.5 m north-south by 5.3 m east-west. A crude frontal step and the single course of a rear facing were the only architectural materials recovered in the excavation (Figures 48 and 49). These do not indicate a great deal of continued construction in this locus. The front part of the excavation was dug to bedrock. Two burials were recovered, but no associated cache material was found.

S.D. C209B-1 was assigned for a tomb that had been placed in the core of the building (Figure 50, top). The tomb was covered with capstones (Figure 51) and the open-air chamber had been dug into bedrock (Figures 48 and 52). The chamber was 1.85 m in length by 0.5 cm in width by 1.05 cm in height, encompassing some 0.97 sq m of space. One older adult in supine position with head to the south was recovered within the chamber. Sex could not be determined. The skull was substantially thickened and there were no teeth in the mandible (complete resorption). Two upper teeth were recovered; both had caries but not heavy wear. The individual was accompanied by two ceramic vessels that date the interment to the late Early Classic Period (Figure 53a, b). Artifactual materials from the chamber included chert flakes and worked bone (Figure 54b-e).

S.D. C209B-2 was assigned for a burial recovered in a crude cist west of S.D. C209B-1 and also situated directly on bedrock (Figure 51, bottom). The amount of bone in this deposit led to it colloquially being referred to as a "bone dump." The various layers of bone were recorded as the deposit was dug (Figure 55). Multiple individuals were included within this interment. Based on teeth, there were

at least four individuals, and possibly up to seven individuals, given the partial dental remains that were present. All individuals appear to have been adults and at least two were older adults. Possibly three individuals were male based on a sciatic notch and on mastoid processes. One set of bones appears to have been a female. One individual was clearly articulated and at least two individuals had been placed within the interment as bundles. An articulated leg was located above the bulk of the bodies. One individual had a substantial infection on the right femur and thickened bone in the skull. No ceramic materials were in direct association with the interment, but an almost whole ceramic flanged dish was recovered in the fill above this burial (Figure 53c), suggesting that this interment likely dates to the later part of the Early Classic Period. A plethora of artifactual materials were associated with the interment, including a single rectangular shell earflare; a pair of shell earrings with posts; a pair of drilled shell disks; a shell bead; a worked shell disk; a deer antler; worked bone, a barkbeater fragment, a fragmentary shale mirror back, and fragmentary pieces of chert and obsidian (Figure 56).

Chon Residential Group: Structures 4C19-4C22

The Chon Residential Group is located approximately 110 m due east from the Puchituk Plaza on the side of a ridge in an area of terracing. Four constructions surround a small plaza (Figure 57). Very low building pads define the western and southern side of the plaza. The northern construction was approximately 1 m in height and had a low pad attached to its western side. The eastern mound rose approximately 1.65 m above the plaza and was the focus of excavation in this group.

Structure 4C20

The eastern building, Structure 4C20, was a squarish substructure located on a raised terrace that defined the eastern side of the Chon Residential Group; it rose approximately 30 cm above the upper surface of the terrace but 1.65 m above the associated plaza.

Operation C213B was assigned for an axial trench placed over Structure 4C20. A 1.5 m north-south by 6.45 m east-west excavation was placed over the axis of Structure 4C20 (Figures 58, top) and dug to bedrock for the entire extent of the investigation (Figures 59 and 60). Architectural features were almost non-existent with only some plastered floor patches recovered along the southern extent of the trench. However, three special deposits were recovered: two caches and one burial. It is suspected that the burial was placed under the front stairway of the building based on general patterns recovered in other Caracol

investigations. Recovered artifactual materials from general excavation contexts included a pyrite chip, chert drills and flakes, a fragmentary slate mirror back, and a Late Classic censer flange (Figure 61).

S.D. C213B-1 was assigned for a cache placed directly on bedrock in the area of where a stairway would have been located (see Figure 60, plan 2 and Figure 62, lower). A lidded ceramic urn (or face cache; Figure 63) comprised this cache and two jadeite chips were also recovered associated with it and exterior to the vessel (Figure 61c,d).

S.D. C213B-2 was assigned for a burial that was recovered in front of Structure 4C20 (Figure 59, lower). A single individual, probably extended with head to the north, had been placed in a small cist dug into bedrock (Figure 65) and was then covered with capstones (Figure 60, plan 2). Bone recovered from the cist included most of one individual and extra bone from one or more other individuals. A portion of the skull and mandible were recovered in the northern part of the chamber and there was disarticulated bone above the skull that included long bones. The skull and many of the other bones were blackened, either due to burning or because of having been embedded in the bedrock matrix. None of the teeth were in situ when recovered. Two ceramic vessels (Figure 66), a fluted cylinder and a footed plate, dating to the early part of the Late Classic Period, were recovered in the northern part of the burial near the skull. Artifactual materials associated with interment included a worked marine shell (two drill holes for suspension) and a small greenstone pendent (in the vicinity of the skull), worked bone, and a fragmentary chert biface (Figure 61f-i).

S.D. C213B-3 was assigned for a bedrock cache found in the rear of Structure 4C20. A pit had been excavated into bedrock (Figure 60, plan 2) and three limestone bars had been placed within the pit (Figure 64). The bedrock beneath the limestone bars had also been modified to mimic the appearance of other limestone bars (Figure 62, upper).

Chak Residential Group: Structures 4C23-4C26

The Chak Residential Group is located 240 m west of Puchituk Plaza and 190 m west of Midget Residential Group. It's eastern side is tangent to the Puchituk Causeway and the group serves to denote where the causeway turns south to go down the hill, eventually joining the Cahal Pichik – Caracol Causeway just west of the Plaza of the Three Stelae. The rear of the eastern building formed an impressive marker on this causeway, rising some 4 m above the causeway at this point (the Chak Plaza is raised by a

meter over the surrounding area). The Chak Residential Group consisted of four structures (Figure 61): two smaller substructures to the south and west; a sizeable eastern shrine; and a northern building that was approximately 2 m in height prior to excavation and likely vaulted based on the collapse pattern.

Structure 4C24

Structure 4C24 was the most massive structure associated with the Chak Residential Group; the unexcavated mound rose some 3 m above its associated plaza. No architectural features could be recognized in association with the structure before excavation.

Operation C214B was assigned for an axial trench placed over Structure 4C24 (Figure 68, upper). The trench measured 2 m north-south by 8.45 m east-west (Figures 69 and 70). Architectural features were plentiful in the excavation and indicated that the building had gone through numerous modifications and rebuilding efforts with minimally two major phases of construction being evident based on floors. The latest construction phase apparently manifested a central stair balk on the western side of the building. The investigation of Structure 4C24 yielded 4 interments and 2 caches. Some of these deposits had been disturbed because of the amount of rebuilding that was undertaken in this locus. The artifactual materials recovered from Structure 4C24 included a fragmentary Late Classic censer flange (Figure 73e) as well as cache and burial vessels that appear to date exclusively to the Late and Terminal Classic Periods.

S.D. C214B-1 was designated for a sherd concentration (Figure 71) that was recovered east of (behind) a squarish feature that may have functioned as an altar (Figure 70, plan 2) and west of the stairway balk for the latest building phase of Structure 4C24 (see Figure 68). The sherds in this concentration were all from the same large unslipped olla (Figure 72d) that may be dated to the Late to Terminal Classic Periods.

S.D. C214B-2 was designated for a crushed cache vessel located in the western extent of Sub-Operation 214B directly on bedrock (Figure 74). The upper part of the ceramic face cache (Figure 75) had been disturbed but was also in association with five obsidian eccentrics (Figure 76a-e) that had presumably been placed exteriorly to the vessel (based on patterns from elsewhere at Caracol).

S.D. C214B-3 was assigned for a burial recovered immediately to the east of the stairway balk in Sub-Operation C214B. Initially, a row of capstones was uncovered behind the balk and their removal lead to the recovery of a body placed directly into fill (Figure 77). The remains of a single

articulated individual were recovered from this interment. The person was likely an adult; the phalanges were complete and the epiphyses were attached. The only tooth recovered was a worn lower premolar. While no sex identification is possible, the individual appears to have been of slight build and, if an adult, was likely a female. Artifactual materials recovered in the immediate vicinity of this interment included a fragmentary obsidian blade, chert drills, and chert blades (Figure 76f-j)

S.D. C214B-4 was assigned for what appears to have been a disturbed interment in the front of the stairway balk (Figure 78). This burial was disturbed both by activity carried out in front of Structure 4C24 and possibly by the placement of S.D. C214B-5. Skeletal material recovered with this interment represents one older adult and one sub-adult (ca. 18 months). The only obvious sub-adult remains are two teeth (upper central incisors). Miscellaneous adult bones include femur, arm, ribs, skull, two femurs, and vertebrae. While there is no clear evidence of articulation, the individual may have been articulated or semi-articulated and disturbed in antiquity. The materials associated with this deposit were at a higher level than the lower S.D. C214B-5. One and probably two vessels of Late to Terminal Classic date were associated with this interment. The rim-impressed bowl (Figure 72b) was recorded in direct association with the interment (Figure 78, upper) while the small perfume bottle (Figure 72a) was in pieces among the fill sherds associated with this context (and may be earlier in date).

S.D. C214B-5 was assigned for an interment located under a set of capstones directly in front of the Structure 4C24 stair balk (Figure 68, lower; Figure 78). Human bone recovered with this interment indicates that two adults were present. One was articulated with head to the south and one consisted of two sets of what appear to have been bundled or semi-articulated legs to the south-southwest of the skull. The articulated individual was associated with eight total teeth. Assuming that these were the only teeth existing at the time of death would indicate that this could be an older adult. There is only slight to moderate wear on these teeth, which would be appropriate for no occlusal surfaces; however without mandible or maxilla, the designation has to be simply "adult" for this individual.

S.D. C214B-6 was assigned for an interment located east of (and behind) the balk and directly below S.D. C214B-3. Upon the removal of S.D. C214B-3 and a slight fill layer, capstones were encountered and directly beneath these capstones a small crypt had been constructed (Figure 79). Excavation of this crypt (Figure 68, lower) recovered an articulated adult male with head to the south and

face to the east (based on teeth). Teeth recovered in association with this interment indicate that there were two individuals: one adult and one older adult. The adult teeth are associated with a partial maxilla and presumably the skull. The sex identification is based on the size of the mastoid process. Artifactual materials associated with the interment included a worked bone tubular bar with two holes for suspension as well as fragmentary chert and obsidian materials (Figure 80). Additionally, a single ceramic bowl (Figure 71c) was recovered; it is similar to those recovered in a tomb in Caracol Structure A3 in 1986 (A. Chase and D. Chase 1987: Figure 11b,d-g) dating to C.E. 695.

Structure 4C26

Structure 4C26 was a small building rising approximately 0.5 m on the western side of Chak Residential Plaza. The structure itself was not excavated. However, there was a large open hole on its northwest corner, likely caused by a collapsed chultun. Since the chultun was both open and fairly deep and since Caracol's chultuns generally contained earlier material (e.g. Hunter-Tate 1994), it was selected for excavation in order to gain a artifactual sample that would represent the earlier end of occupation for the Chak Residential Group.

Operation C214C was assigned for the excavation of the collapsed chultun (Figure 81) located beneath Caracol Structure 4C26. The excavated chultun revealed two distinct chambers with the central capstone still in place beneath Structure 4C26 (Figures 83 and 83). The northern chamber, where the collapse had occurred, measured approximately measured approximately 3.4 m east-west by 1 m north-south and the southern chamber was approximately 1.8 m in radius. A higher area between the two chambers would have permitted easier entry from above. The recovered artifactual remains mainly derived from the southern chamber and consisted of a largely complete incensario missing its flanges (Figure 84) and partial vessels representing ollas, jars, bowls, and flanged dishes (Figure 85). All of the ceramics dated to the later part of the Early Classic Period. Human bone was also present within the chultun, but was not labeled as a formal S.D. The bone is very small in quantity and represented one individual; 3 pieces of a partial skull, 5 pieces of ribs, 3 pieces of vertebrae fragments, and some teeth were recovered. No age or sex identification was possible.

Soil Testing

One of the goals of the 2018 field season was to carry out soil testing of both the Puchituk Plaza and the Monterey Plaza in order to see whether or not the chemical signatures would help to indicate that these areas had been used as a market, in accord with previous testing that had been undertaken by Richard Terry and his students elsewhere at Caracol (A. Chase et al. 2015). Accordingly, this testing was done in 2018 under the guidance of Dr. Matthew S. Lachniet from the Geosciences Department at the University of Las Vegas (Figure 86).

Following the protocol outlined by Terry and his colleagues (2015:142-143), a sampling grid of 5 m intervals was laid out across the open space of the Puchituk and the Monterey plazas and surface soil samples were collected once the leaf litter has been removed. The locations of these samples relative to the Puchituk Plaza and the Monterey Plazas are shown in Figures 87 and 90. All of the soil samples were exported from Belize to Las Vegas and the analysis of the soils was sub-contracted to Asset Laboratories in Las Vegas. The samples were tested for phosphorus concentrations (see Terry et al. 2000) and for extractable trace metal concentrations (see Lindsay and Norvell 1978 and Parnell et al. 2002). These data were collected from the best venues for useable public space and serve as a comparative sample to the earlier results obtained from sampling at Conchita and Ramonal (A. Chase et al. 2015).

Mtathew Lachniet took the results provided to the Caracol Archaeological Project by Asset Laboratories and prepared illustrations for the relative distributions of calcite, iron, phosphorous, and potassium from both Puchituk Plaza (Figure 88) and Monterey Plaza (Figure 91). He additionally prepared bivarate plots of calcite, iron, phosphorous, and potassium from Puchituk Plaza (Figure 89) and from Monterey Plaza (Figure 92).

These soil data provide an interesting contrast to the expectations of Terry and his colleagues (2015) and suggest that soil sampling may not always clearly indicate the functional use of ancient space. The control samples from terraces contained very high amounts of phosphorous, which is what might be expected from intensive night-soiling. Preliminary analyses of the two plazas tested in 2018 also suggested that the chemical concentrations were associated with ground height over the breadth of the plazas (something possible to do because of the associated lidar data with these plazas); this would indicate that

soil signatures may be reflective of the entire planza and not the specific location from which they were drawn. Thus, these data raise more questions than answers and will be explored further in follow-up testing.

Epigraphy

Christophe Helmke from the University of Copenhagen was on-site from March 13 through March 19 to prepare new drawings of Caracol monuments with the impetus being Stela 24 (Figure 93) in the Sage Residential Group. He also drew Stelae 25 (Figure 94), 26 (Figure 95), and 27 (Figure 96) while at Caracol and presents a detailed account of these Caracol monuments in an attached appendix that follows the body of this field report.

Significance

Research into Maya markets and market systems promises to significantly augment our understanding of the Classic Period Maya. The archaeological work at Caracol has documented that the site had a solar market system and that residential groups had access to a wide variety of quotidian, prestige, and ritual items that were likely provided to the inhabitants of the city through its markets. Excavation and analysis also has suggested that different kinds of goods may have been available in different quantities in various parts of the site; exactly if and why this may have occurred is the subject of this three-season project and still needs further archaeological investigation. The work undertaken thus far confirms the differential distribution of artifacts in the northeast sector of the site. Perhaps mos interesting in this year's excavations is the possibility that trash was handled differently in this sector of the site and/or that excavation encountered a differen point in given structures' occupation history – one where trash was cleared from structure floors and moved to other locations more frequently than in groups around the site epicenter. Re-use of artifacts (specifically sherd material) also appears to be less than in other site sectors. Investigations also suggest that his secor may have had some differences in occupation dates and location choices; however, the subsequent years' sampling will be necessary to confirm that this is the case. Research thus far suggests that this program of study on both public architecture and on the adjacent residential groups will flesh out our understanding of a functioning market system as well as to better detail potential social differences related to status or wealth that may have occurred in different parts of Caracol. Minimally, this research will permit an investigation of "down-the-line" economic exchange and integration through the comparison of three spatially discrete data sets from the Caracol epicenter, the

Puchituk area, and the Monterey area. Thus, the proposed research will serve a number of goals. First, it will permit an archaeological determination of whether or not the same items were available in different parts of Caracol through its market system, providing an indirect measure of centralized versus distributed control of the site's economic system. Second, these investigations will yield a large sample of residential deposits and materials that are not associated with the central part of the city, providing a better view of socio-economic variability at the site. Third, the additional excavations in the vicinities of Monterey and Puchituk should also provide a comparative sample of residential groups and public architecture that has substantial time depth. This means that the purposeful placement and construction of Puchituk on the cityscape during the early part of the Late Classic should be able to be confirmed. Excavations in the Monterey area will likely reveal Late Preclassic and Early Classic remains, as well as Late Classic materials, and also hopefully provide some insight as to why this area of public architecture was never connected to Caracol's causeway system. Finally, with the subsequent two seasons of work this research will better explain how an ancient market system worked to socio-economically integrate a Maya city, something likely to be of interest to the broadest spectrum of researchers working in Mesoamerica and elsewhere.

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Appendix:

Epigraphic Report on Recently Discovered Stelae at Caracol, Belize

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The cornerstone of Caracol epigraphy remains the foundational study by Carl Beetz and Linton Satterthwaite (1981), reporting on the 21 stelae and 19 altars then known. Since that study, the epigraphy of Caracol has been covered in state-of-art treatments by Stephen Houston (1987, 1991), Nikolai Grube (1994) as well as Arlen and Diane Chase (Chase et al. 1991). These later studies in large part focused on Stelae 22 and 23 as well as Altars 21, 22 and 23 found as part of the Caracol Archaeological Project, under the direction of Arlen Chase and Diane Chase. With continued investigations at the archaeological site of Caracol, additional carved monuments have come to light and since 1995, counting a total of four further stelae (Stela 24, 25, 26 and 27), two altars (Altar 25 and 26) and a ballcourt marker (Ballcourt Marker 4). In addition to references made in the progress reports of the respective field seasons (Chase and Chase 1996:7, 2001:2, 2002:5), two studies have appeared, one on the B Group ballcourt markers (Helmke et al. 2006) and another on Altar 26 (Chase and Chase 2015). With the exception of these two monuments, the more recently discovered monuments as a whole have not been the subject of a more detailed epigraphic treatment.

This report is meant to redress these exceptions and to present new drawings and descriptions of the more recently discovered monuments, with the stelae presented in ascending numerical order. These monuments were documented and inspected by the author during the 2018 field season, securing measurements and photographs with a combination of natural light as well as artificial raking light, and making field sketches. Scaled and othorectified photographs were used as templates for the drawings, which were printed and then inked on high-silicate paper to be scanned and corrected in a raster graphic editor programme, for final output as black and white artwork. The conventions used in these drawings follow those developed and employed by the Corpus of Maya Hieroglyphic Inscriptions project (Graham 1975), with minor amendments suited to the particular monument, such as using differential stippling to indicate depth of relief, with sparser and thinner stippling representing shallow relief and the denser stippling denoting higher relief.

Stela 24

Illustration: Figure 93

Metrics: **w**: 92 cm. **h**: 79 cm. **th**: 43.5 cm. **f-b**: 2.5 mm. **det**: 0.5 mm.[1] Based on comparisons to other monuments at Caracol, the stela may have measured as much as 1.86 m high (height above lowest carving, excluding the butt, based on size ratios and proportions of the iconography of Stelae 1 and 3).

Context: Puchituk Causeway Terminus, found reset in secondary context at the base of the eastern structure, of the Sage group (see Chase and Chase, this volume). The stela faces west and was first discovered in 1995, and re-exposed during the 2018 field season (Chase and Chase 1996:7, Fig. 7).

Description: Only the front of the stela is carved. The stela is preserved as a single large block of the medial section of the original monument, the upper and basal portion have not been relocated and their context is unknown. It is suspected that the butt of the stela is still in situ at its original context. The upper portions of the iconography have suffered from exposure to the elements and the extensive fracturing of the stone has led to spalling of much of the iconography.

Dating: Based on the overall style of the iconography, the stela can be dated to sometime between 9.8.0.0.0 and 9.9.10.0.0 (based on comparisons to Stelae 1, 3, 5, 6 at Caracol), which corresponds to AD 593 ~ 633. Inspection of the beadwork, including small anthropomorphic and bone-shaped elements corroborates this timespan.

Iconography: The iconography shows a standing primary figure to the right and a seated secondary figure to the left. The standing figure is dressed in fine regalia, with much of the elaborate loincloth assemblage preserved, including the serpentine forms with squared nostrils that define the edges of the loincloth, the large beadwork in the middle, bound together at the top by a personification head. What may be parts of knee decorations are also represented.

[1] w = width, h = height, th = thickness, f-b = foreground to background relief, det = detailed of incised carving. All measurements are expressed as maxima.

The royal figure braces what was undoubtedly a large and rigid bicephalic ceremonial bar across the chest, with the upper portion extending forward and pointing diagonally downwards to the back and side of the figure. The maw of the bicephalic ceremonial bar, preserved to the right of the scene, is serpentine and includes a large circular eye, sharp and hooked fangs, a skeletal lower jaw and a splayed beard. Emerging from the ceremonial bar is one of the tutelary deities of Caracol, in this case, a crouched anthropomorphic figure exhibiting feline traits, including paws on the hind legs. Additional identifying features include the cruller around the orbits, the filed central incisors, the pompadour hairstyle, all of which identify this as the personification of the nocturnal sun, known as the Jaguar God of the Underworld (see Schele and Miller 1986:50). The inclusion of what may have been the sign *ahk'ab* 'darkness' in the earflare and the flame elements *k'ahk'* at the back of the head, identify this as a creature of darkness, associated with nocturnal pyrolitic rituals (see Stuart 1998:404-407, 409), and as one particular manifestation or aspect of the Jaguar God of the Underworld.

The secondary figure appears to be seated cross-legged at the feet of the regal figure that dominates the scene. The seated figure wears a large cloth cape, suggesting that this is a person of subsidiary status (the same can be seen in the murals of Bonampak, for instance, where courtiers wear large white cloth cloaks, see Miller and Brittenham 2013:220-221). In addition, the figure holds out a bundle of feathers, quite possibly an offering or gift to the ruler, as tribute bundles in the Classic period consisted preferentially of stacks of folded cloth *mantas*, or mantles, topped by long feather bundles fastened to the valve of a spiny oyster (*Spondylus* sp.) (see Stuart 1998:411). One might speculate that this represents the dominant lord of Puchituk offering tribute to the king of Caracol in the late sixth/early seventh century, indicating close, albeit subservient relations between these two seats of power.

Epigraphy: If texts were originally included in smaller registers framing the iconography, none of these have preserved on the medial segment.

Stela 25

Illustration: Figure 94

Metrics: **w**: 53 cm. **h**: 104.5 cm. **th**: 35.5 cm. **f-b @ iconography**: 1.3 mm. **f-b @ glyphs**: 7 mm **det**: 1.5 mm. Based on comparisons to the late monuments at Caracol and Naranjo, the stela may have measured as much as 2.20 m high (height above lowest carving, excluding the butt).

Context: Found during the 2002 field season, fractured across the surface of the terminal floor of the B-Group plaza, at the base of Str. B28, and directly to the east of Altar 23, suggesting that these monuments were paired (Chase and Chase 2002:7, Figs. 5 and 6). The breakage of the monument may have been occasioned by the collapse of the structure behind it, thereby concealing its existence amongst the structural debris.

Description: Only the upper portion of the stela is preserved, as a series of 4 large and 3 smaller conjoining fragments. The uppermost portion of the stela as well as the lower portions have not been recovered but may still be located at the foot of Str. B28. Some portions of the carving have preserved all the original details whereas others, due to fracturing, have been entirely obliterated. Some spalling has also affected the carving, especially in the panel of glyphs.

Dating: Based on the style of the iconography, the reference to *Tum Yohl K'inich* in the text, as well as the pairing of the stela with Altar 23, the probable date of dedication is 9.18.10.0.0, AD 800, the same date recorded on Altar 23 as well as Stela 11, raised early during the reign of *K'inich Joy K'awil* (see Chase et al. 1991:7-10; Grube 1994:83-86; Helmke et al. 2006:7; Houston 1987:94). Alternatively, this stela may have been raised a few years before the accession of *K'inich Joy K'awil*, which is to say before AD 799.[2]

Iconography: The imagery depicts a standing primary figure, undoubtedly the ruler, wearing a broad necklace of concave beads, a large circular earflare, and pendulous beadwork, as well a large headdress dominated by a spray of long feathers, which are finely rendered,

[2] Possibly, this stela raised in commemoration of the 9.18.0.0.0 Period Ending of AD 790. This would place the erection of this monument to the reign of the predecessor of *K'inich Joy K'awil*.

including the rachises and the small barbs. The lower portion of the headdress suggests that this was made of long beaded elements and the knotted cloth strips at the back of the head hint at a diadem that was once fastened to the brow (thereby duplicating, for instance, the same kind of headdress as represented on Dos Pilas Stelae 14 and 15 as well as Aguateca Stelae 1 and 3, the latter without the diadem).

Epigraphy: The glyphic text of Stela 25 is framed in a □-shaped panel at the top. At present, eight glyph blocks are preserved in a frame that accommodated at least nine. The text is first read as a single vertical column (A), followed by a short pair of double columns (B-C). Due to fragmentation it is unclear whether there were additional glyphs above, but enough subsists to suggest that perhaps the largest part is preserved.

The text undoubtedly was initiated by a Calendar Round date (Ap1-Ap2) (possibly 10 Ajaw 8 Sak, duplicating the dates of Altar 23 and Stela 11, marking the 9.18.10.0.0 Period Ending). This would have been followed by a verb, recording a ritual action that transpired on this day (Ap3) although too little remains at present to provide a coherent reading. The subject of this action, or the agent of the verb, is identified thereafter. At Ap4 the name can be transliterated as **tu-#-OL-#**, suggesting that we are seeing the regnal name *Tum Yohl K'inich*, favored by several Caracol kings (Helmke and Awe 2008:85-86). This name also appears in the text Altar 23 as the person responsible for the capture of the bound kings represented in the iconography, and the text that serves as the circular frame to Altar 12 (Glyph blocks: 10-11). This has led to some discussion as to whether this was a military leader or subsidiary figure in the royal court of Caracol (Chase et al. 1991:10-11). Yet, the context in which this name appears in the text of Stela 11, suggests that this could well be the father and predecessor of *K'inich Joy K'awil* (Houston 1987:92). *Tum Yohl K'inich* is also ascribed the Caracol dynastic title and the venerable title *ux winakhaab ajaw* '3 k'atun king' suggesting that he was a relatively long-reigning figure, and based on known parameters could have acceded to power anytime between AD 741 and 761. Much as on Stela 11 and Altar 23, on Stela 25, the regnal name is followed by the dynastic title of Caracol (Ap5)—read *k'uhul*

k'a(h)ntumaak—although here only the outlines remain. This was followed by another title at the top of the first set of double columns (Bp1), written **ba-ka-ba** for *bahkab*, lit. 'head-earth'; possibly "chief of the land" in more figurative terms. *Tum Yohl K'inich* carries the same title on the aforementioned monuments and the sequential congruity here on Stela 25, between the dynastic title at the bottom of the first column (Ap5) and the incidence of *bahkab* at the top of the paired columns (Bp1) suggest that there were no additional glyphs above those found. With this title, the first clause is completed.

The second clause starts thereafter (Cp1) with a stative expression written **u-BAH-ji**, to be read as *u-baah*, lit. 'it is his head/self', but figuratively "it is his image/portrait" (see Houston and Stuart 1997). The use of the syllabogram **ji** as a phonetic complement to the logogram **BAH** (wherein _h ≠ j_) is indicative of the times, since at this juncture the *h:j* contrast had eroded to such an extent that the glottal fricative had essentially elided and the two fricatives had merged into one phoneme (Grube 2004). Regardless of the details of the phonetics, this stative construction is a direct reference to the iconography and thereby describes the imagery, by naming the individual represented and/or the action depicted. In this case, the subject of the stative expression is written in two glyph blocks, both of which are unclear, on account of erosion. The first (Bp2) may be written **u?-K'AK'**, for *u-k'ahk'*, 'his-fire', whereas the second (Cp2) is written as **#-T239**. The final glyph block, involves an eroded head variant preceding a rare and undeciphered sign labelled as T239 in the Thompson catalogue (1962:63), which represents a small human profile within a circular cartouche. This logogram is found in the undeciphered name of one of the tutelary deities of Palenque, known as GIII, as well as in the dynastic title of Altar de Sacrificios and in that of an otherwise unknown king named on the Cuychen vase (Helmke et al. 2015:26, Fig. 18b-c; Stuart and Houston 1994:19-20, Fig. 20).

Considering that the protagonist of the stela appears to be *Tum Yohl K'inich* it seems reasonable to assume that the regal figure depicted in the iconography would represent one and the same individual. The caption that forms the secondary clause

thereby probably refers to another figure, quite possibly a supernatural entity who is said to own a particular ritual fire. The same pattern is seen in texts of the region, including those of Naranjo (Stelae 6, 13, 46), Sacul (Stela 1), Baking Pot (Komkom Vase), and Caracol (Stela 21), where fires brought about by ritual action are said to be owned by particular deities, including the culture hero *Juun Ajaw*, the Maize God, and the solar deity *K'inich Ajaw* (Helmke et al. in press). The reference on Stela 25 may thereby be to one such ritual event, suggesting that *Tum Yohl K'inich* could have been equally represented with an oversized fire drill, on par with the earlier, but near-contemporaneous, monuments of Naranjo (Stela 30) and Sacul (Stela 9), dated to between AD 771 and 790.

Stela 26

Illustration: Figure 95

Metrics: **w**: 92 cm. **h**: 67 cm (above alley floor). **th**: 38 cm. **f-b**: 2.5 mm. **det**: 1 mm.

Context: Found during the 2003 field season by the Tourism Development Project, in a secondary context, reset at the end of the alleyway between Strs. A6 and A7. As found, the monument faces east was slants to the south, exposing part of the butt.

Description: Only the lower portion of the stela is preserved as a single large block. The upper portion of the stela has not been relocated. The stela appears to have been carved on three sides, the front and both lateral sides. The very base of the front is preserved as sliver across the top of the plain butt and part of the glyphic text on the right side of the monument is also preserved. The glyphic text on the left side that is presumed to have existed is not preserved on the extant monument. No traces of carving were found on the back of the stela.

Dating: Based on the mention to the regnal name *Yajawte' K'inich* in the lateral text, the stela may be ascribed to either *Yajawte' K'inich* I (r. AD 484-514+) or *Yajawte' K'inich* II (r. AD 553-593+), with the latter being more likely. As such, the monument may date to the latter half of the sixth century.

Iconography: Only the very lowest portion of the basal register is preserved on the front of the monument. What remains is not sufficient to properly qualify it, although the sinuous forms that subsist suggest that this included features of the natural world, such as vegetation and mountainous elements, the latter suggested by the partial *tuun* sign preserved on the left side of the basal register.

Epigraphy: Only the very lowest part of the glyphic text on the right side of stela is preserved. The stela was carved on relatively friable stone with calcareous inclusions that have since dissolved, making the lateral text rather pitted and eroded across its entire surface. Yet, despite the extensive weathering, the carving was relatively deep and details could be enhanced with raking light. Together these reveal the last four glyphs of a clause, presumably the very end of the entire glyphic text (based on syntactical parameters), which may have started on the opposite left side.

The first glyph block (pCp1) is only partly preserved but what remains can be transliterated as **#-TAN-na**, involving the spatial designator *tahn* 'middle'. This was probably part of a prepositional sub-clause, following the verb, specifying where or when an action took place. The subject and agent of the event is named in the following three glyphs blocks. The first nomino-titular glyph (pDp1) is written **7-#-CHAPAT**, probably part of the theonym *uhuk tz'ikiin chapaaht* 'seventh raptorial.bird centipede'. This was one of the deities that was impersonated as part of rituals during the Classic period and following such ceremonies, kings could integrate these theonyms into their nomino-titular string by introducing these before to their regnal names (Nehammer Knub et al. 2009:187, 189, Fig. 7). The regnal name proper follows (pCp2), which can be read as *Yajwate' K'inich*, adding features of *ajaw* to the profile of the solar deity *k'inich*, the whole prefixed by the syllabogram **ya–** to help cue the reading. Precisely the same pairing of the theonym *Uhuk Tz'ikiin Chapaaht* and the regnal name *Yajawte' K'inich* is also seen on Stela 14 (D7-C8), suggesting that this is a reference to the same king.[3] The

[3] A comparable pairing of *uhuk tz'ikiin chapaaht* and the regnal name of K'an I is rendered on the back of Stela 16 (A10-A11).

final glyph block on Stela 26 (pDp2) provides the dynastic title of Caracol, written **K'AN-tu-ma-ki**, read *k'a[h]ntumaak*, confirming the exalted status of the individual cited in the text. From distributional patterns in the texts of Caracol it appears that the dynastic title was first used during the reign of *Yajawte' K'inich* II, with earlier kings preferring the title *Uxwitza' Ajaw*, based on the main toponym of Caracol: *ux-witz-a'*, 'three-mountain-place' (Helmke et al. 2018; Stuart and Houston 1994:52, Fig. 63). This observation once more speaks in favor of attributing this stela to the reign of *Yajawte' K'inich* II.

Stela 27

Illustration: Figure 96

Metrics: **w**: 47.5 cm. **h**: 32 cm. **th**: 28.5 cm. **f-b**: 2 mm **det**: 1 mm.

Context: Uncertain. Found by park rangers in the interim between the 2011 and 2012 field seasons, during clean-up and maintenance of the site, in anticipation of the New Year's celebrations of 2012, commemorating the 13.0.0.0.0 Period Ending. The fragment may have been recovered from near the middle of A Plaza at the location where the modern altar was built to provide amenities for the same touristic celebrations.

Description: The uppermost portion of a carved stela with a slightly rounded top. This is a single block, the back and sides are irregular indicating that this is but a small fragment of a larger monument. The surface is evenly weathered and details along the fractured edges have suffered spalling. Despite this, with raking light, many details are readily apparent and much of the preserved segments can be read.

Dating: Based on the mention to the 11th k'atun, it seems clear that the dedicatory date of this monument was in 9.11.0.0.0, AD 652. This date is confirmed by a mention to K'an II, whose reign spanned from AD 618 until his death in 658.

Iconography: None preserved. Comparison to Stela 3 suggests that the preserved portion of Stela 27 may be just one part of a much larger monument that combined both an extensive text and may once have borne iconography and an impressive depiction of the king.

Epigraphy: The text was written in sets of paired double columns, the pairs closely juxtaposed to one another, and pairs separated by a larger plain gap in between. As such, we can see that parts of three pairs of double columns are preserved.

The very first glyph preserved (pB1) records **11-WINAK?-HAB**, for *buluch winakhaab*, or '11 k'atun'. This is undoubtedly a record of the 9.11.0.0.0, AD 652 Period Ending, celebrated late in the reign on K'an II. Due to the fragmentary nature of the text, we cannot say anything with certainty about the initial portion of the text, but if it is anything like the preceding monuments of K'an II it probably gave a synopsis of the major events that unfolded over the previous k'atun, or almost two decades, tracing back to events in AD 642. At that juncture the hieroglyphic stair of K'an II, likewise gave an overview of the preceding k'atun, back to AD 623 (Helmke and Awe 2016a, 2016b). The following, partly legible, glyph block on the fragment of Stela 27 (pB2) represents part of the headdress of a profile or head variant glyph. Considering the reading order of this text, this glyph must somehow connect with the intervening and now missing glyph block (pA2). Based on comparison to the initial clause of the recently discovered Panel 4 at Xunantunich, which provides the opening statement of the entire hieroglyphic stair, we can see that the Period Ending of AD 642 was attributed to the Paddler Deities (Helmke and Awe 2016b:11-12). If the same was the case on Stela 27, then we can posit that the 11 k'atun statement was written in the possessive as *u-buluch winakhaab*, followed by the name of the Paddler Deities, who would be said to own and thereby preside over this Period Ending. As the Jaguar Paddler is always named first, we can reconstruct his name for the intervening glyph block (pA2) and propose that the eroded profile that follows (pB2) named the Stingray Paddler.

Owing to fragmentation, we cannot be certain that the text continued further down from there, or up to the next remaining portion at the top of the following pair of double columns. However, the syntax suggests that this is entirely plausible, since the first recorded clause is syntactically coherent and complete and the next segment initiates another clause. Thus the next glyph block (pC1) provides another ritual expression that is

appropriate for this type of Period Ending, namely **u-K'AL[TUN-ni]**, for *u-k'altuun*, 'it is his stone-binding/presentation' (see Stuart 1996:154-158). This expression is usually used as part of monument dedications and in this case probably self-referentially introduces the dedication of Stela 27. The antecedent of the possessive pronominal prefix attached to the nominalized *k'al-tuun* 'stone-binding' (see Lacadena 2003) is the subject of the clause, the king of Caracol. He is named in the next two glyph blocks, first by an honorific title (pD1) and thereafter by the regnal name of K'an II (pC1a). The honorific is written **3-WINAK?-HAB-AJAW**, for *ux winakhaab ajaw*, or '3 k'atun king'. This suggests that the individual was somewhere between 39 and 59 years of age, or was incumbent of that station for the same duration. This is not always entirely clear in the usage of these k'atun titles and thus has to be parsed in each case (Mathews 2011). In the present case, knowing that K'an II was 64 in AD 652—when Stela 27 was raised (being born in AD 588)—this should mark him as a 4 k'atun king, if the title referred to his biological age. From known records, such as Stela 3 and 22, we know that K'an II first acceded to power in AD 618, thereby marking 652 as the 34th regnal year, which would make it his 2nd k'atun in office. This incongruence is difficult to reconcile, unless the honorific is retrospective, since K'an II died in his 40th regnal year, which may well be thought of as at the cusp of the 3rd k'atun in kingship. As such, Stela 27 may well date to later than the Period Ending of AD 652 recorded so clearly in its text.

The remainder of the text is not entirely clear, but following the regnal name is another expression initiated by the third person pronominal prefix (pD2), which may provide a relationship expression with the individual named next. That name bears features of the name of Batz' Ek' (pE1) and this part of the text may thereby have linked K'an II to this individual by some type of kinship relation, possibly parentage, or at least consanguinity.

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TABLE 1:
Caracol Project Members: 2018 Field Season

Staff:

Directors

Arlen F. Chase	C1
Diane Z. Chase	C2

Lab and Field Director

Adrian S.Z. Chase	C154
Amy Morris	C111

Field Associate:

Gabriela Saldana	C243

Field Assistants:

Roxayn Povidas	C244
Fayt Raithwell	C245

Soils:

Matthew Lachniet	C246

Epigraphy:

Christophe Helmke	C243

Visitor:

Elgin Litke

Belizean Labor:

Kitchen

Angelica Meneses
Linda Aurora Meneses
Marta Sanchez
Rosita Isadora Lolwani

Field

Carlos Mendez
Saul Galeano
Jaime Iglesias
Asterio Moralez
Julio Trujillo
Flavio Pirir
Gustavol Adolfo Mendez
Irvin Santiago Choc
Erwin Santiago Choc
Abner David Mendez

Figures

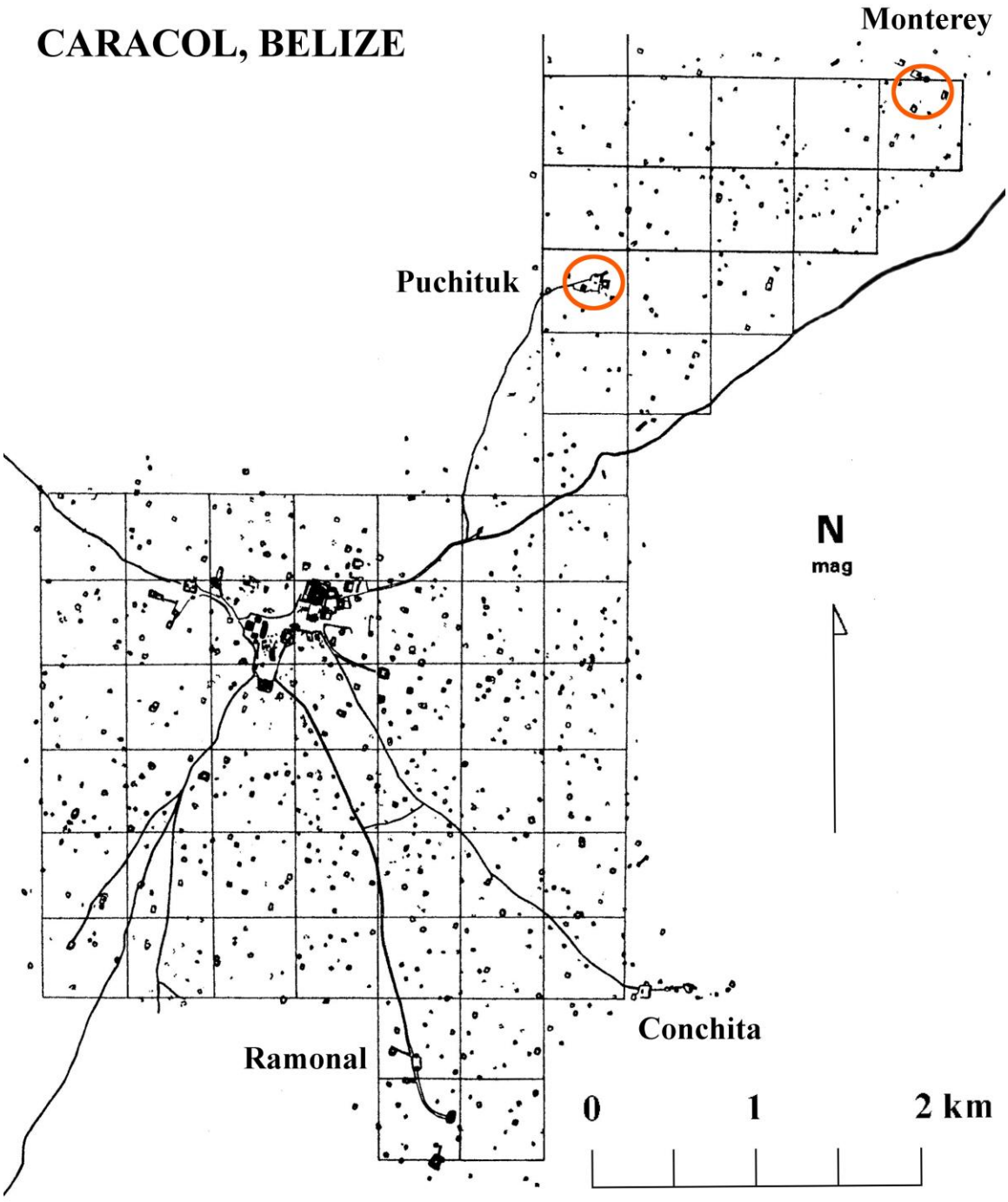


Figure 1: Map of ground-surveyed settlement at Caracol showing the location of Puchituk and Monterey, the areas of focus for the 2018-2020 field seasons.

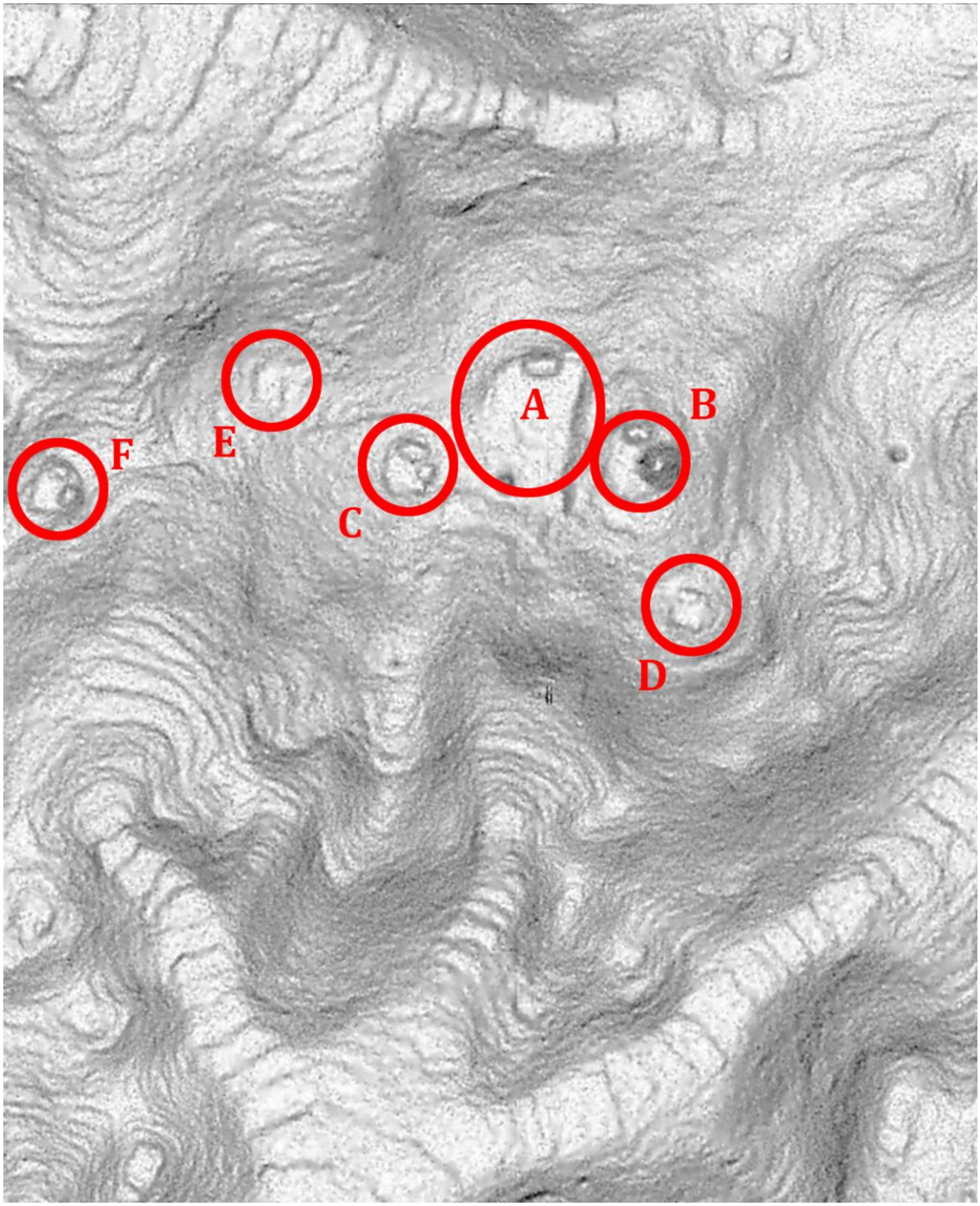


Figure 2: Lidar image of Puchituk Terminus area, showing the locations of the residential groups and public architecture investigated during the 2018 field season: A. Puchituk Plaza; B. Sage; C. Midget; D. Cheech; E. Chon; and, F. Chak.

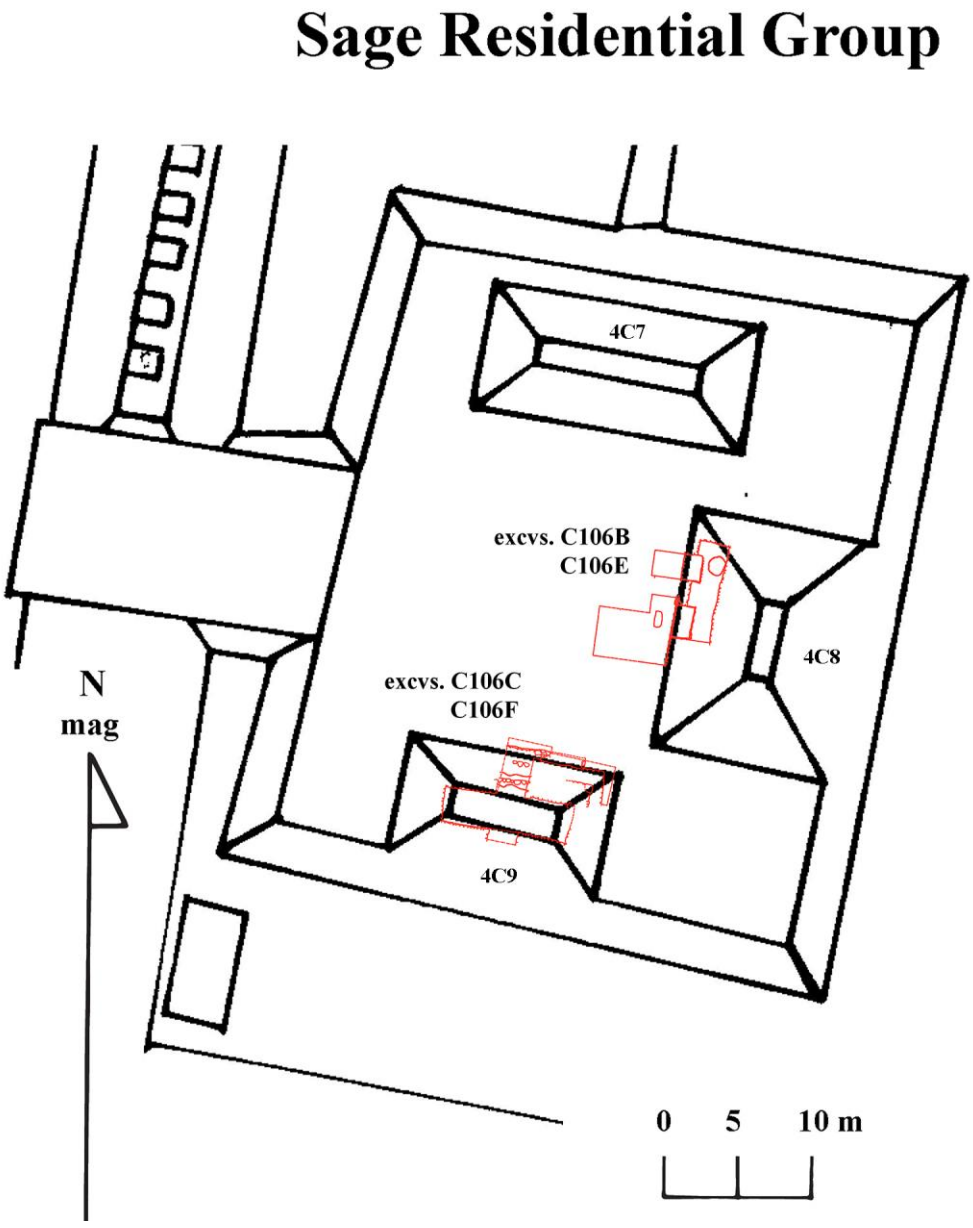


Figure 3: Plan of Sage Group, showing the locations of Operations C106B, C106C, C106E, and C106F.

Figure 4: Photographs of excavations at front base of Caracol Structure C48, the eastern building in Sage, showing the locations of Operations C106B and C106E.

Caracol Structure 4C8
excvs. C106B and C106E

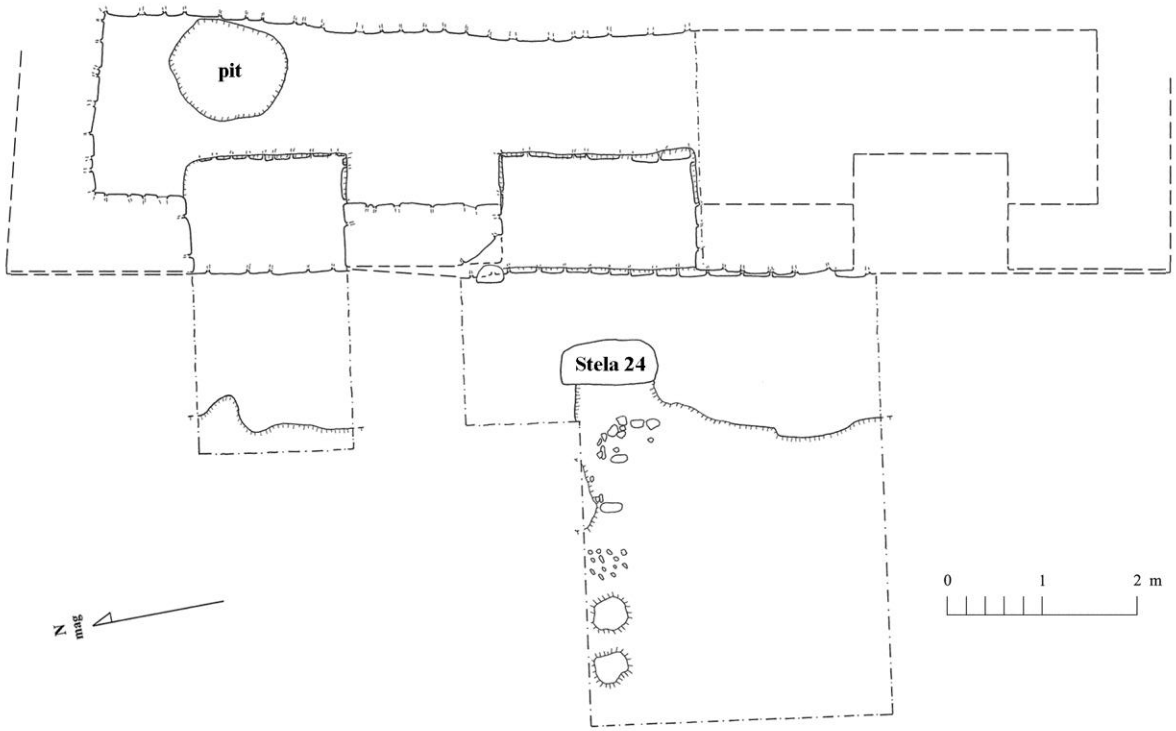


Figure 5: Plan of the frontal structure at the base of Structure C48 revealed through Operations C106B and C106E.

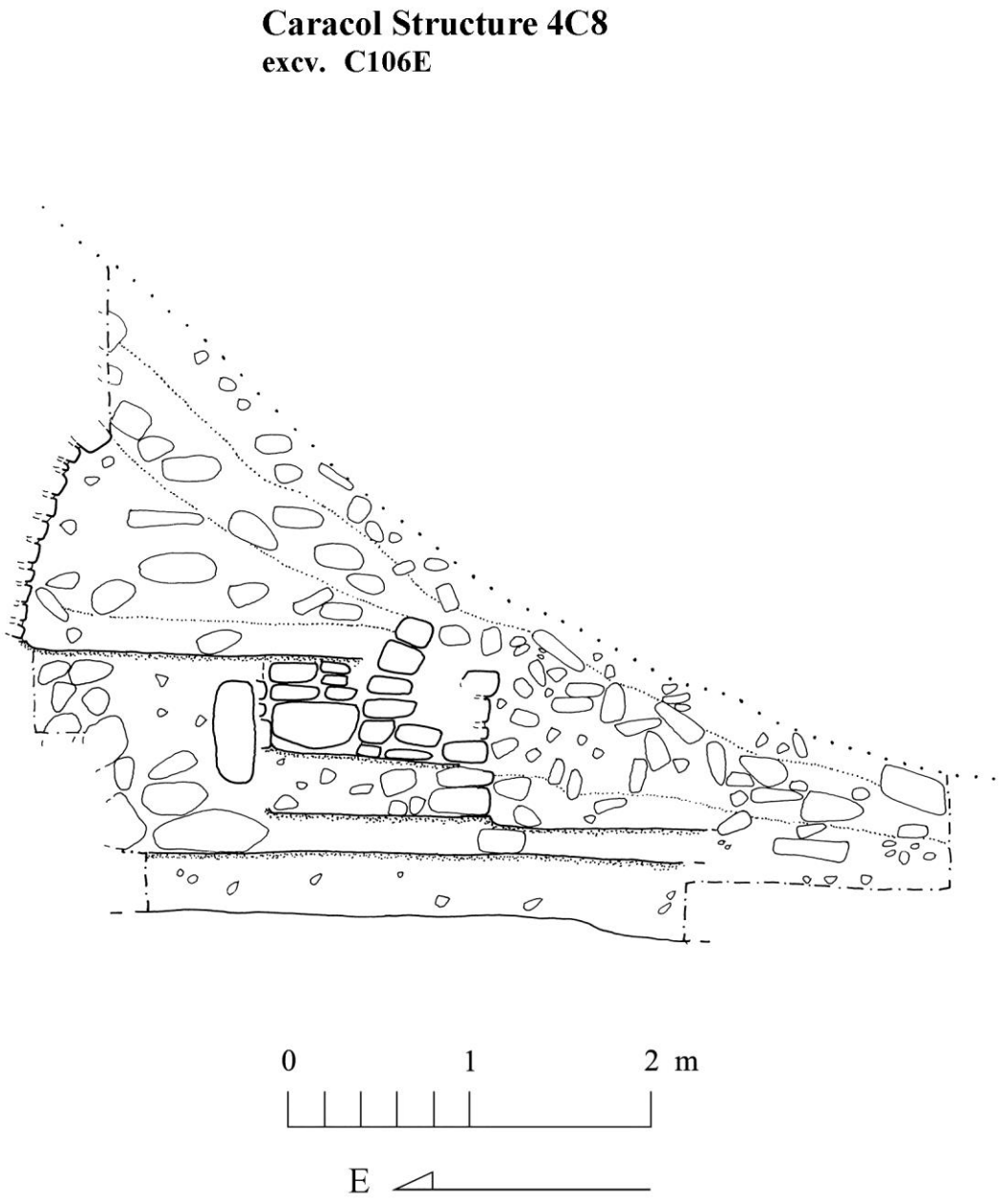


Figure 6: Section through Operation C106E and the deeper trench into Caracol Structure 4C8.

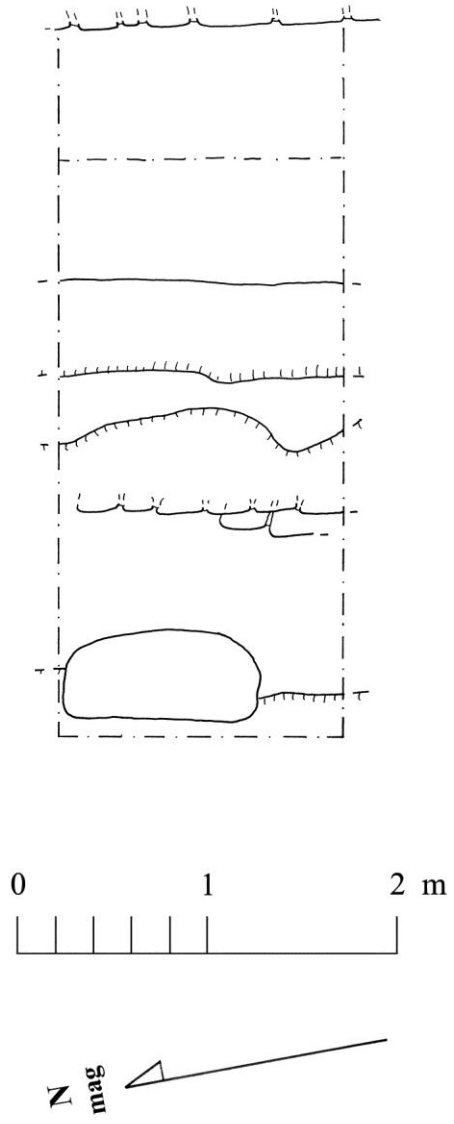


Figure 7: Plan of features encountered in Operation C106E, the deeper excavation into Caracol Structure 4C8.

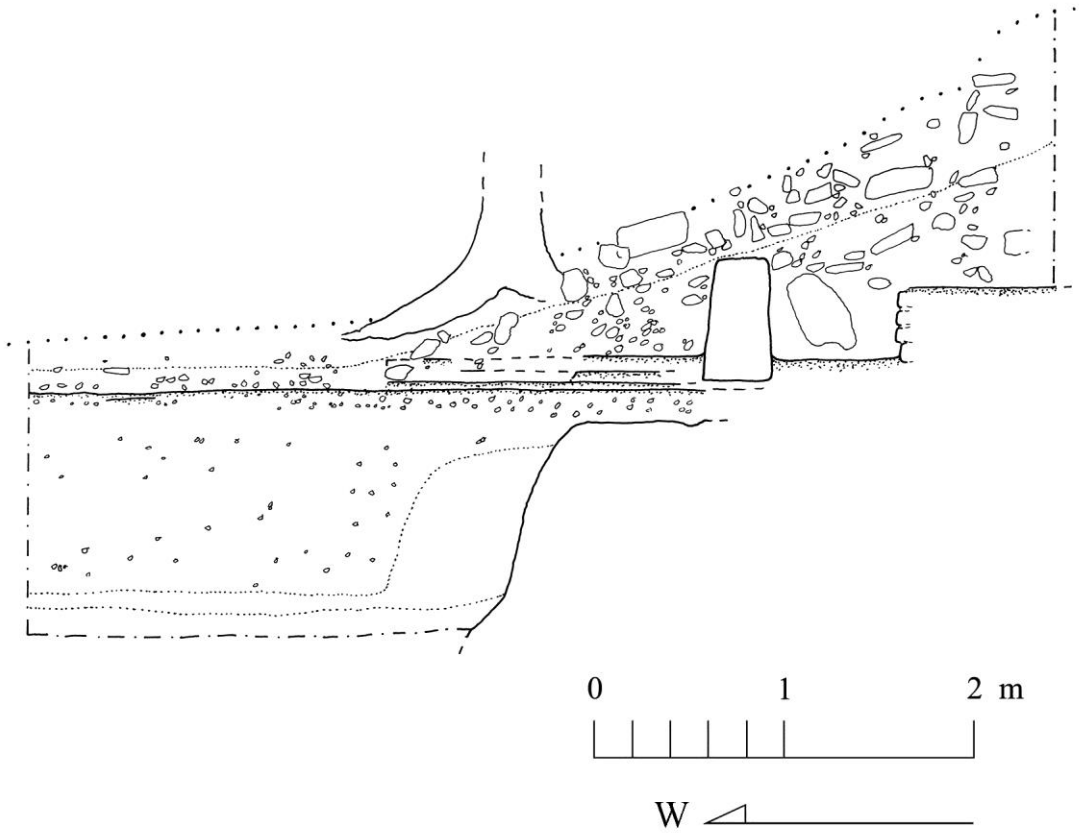


Figure 8: Section of the original plaza excavation (Operation C106B) on axis to Caracol Stela 24 in front of Caracol Structure 4C8.

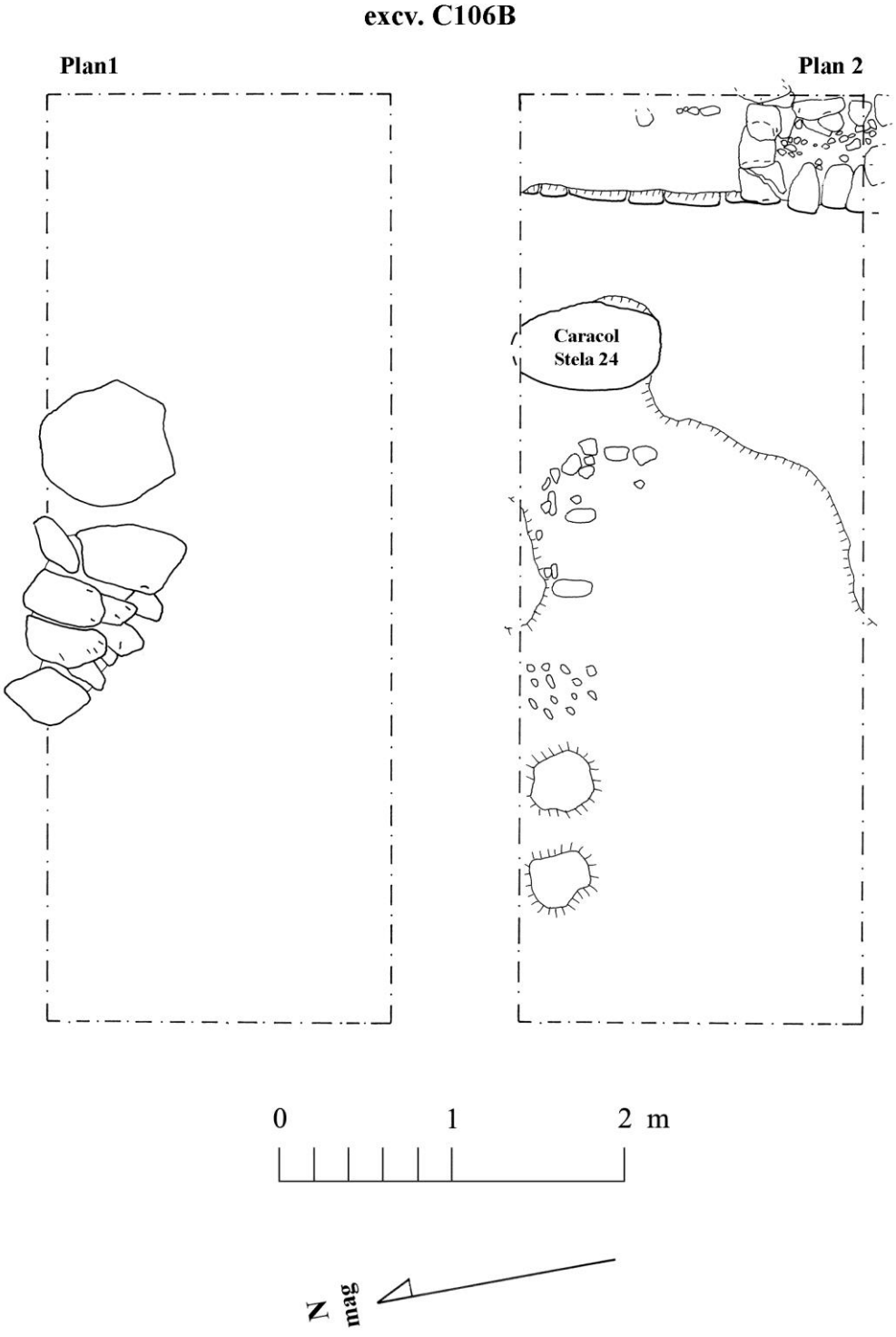


Figure 9: Upper plans associated with Operation C106B in front of Caracol Structure 4C8.

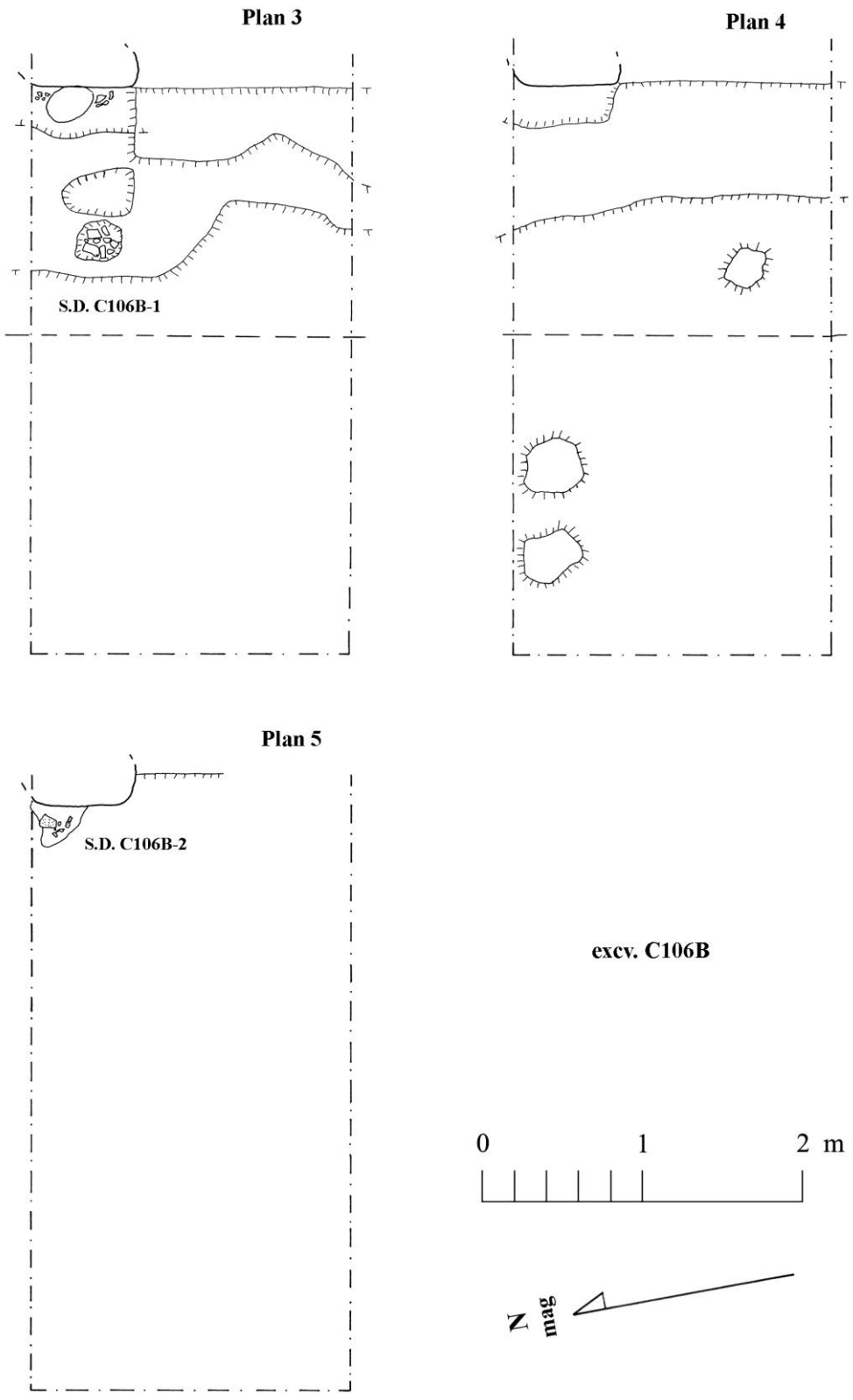


Figure 10: Lower plans associated with Operation C106B, showing the locations of S.D. C106B-1 and S.D. C106B-2.

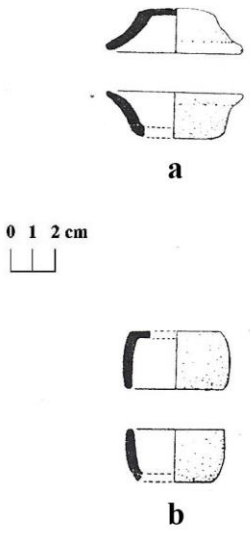


Figure 11: Ceiba Unslipped cache vessels from Operation C106B and S.D. C106B-1.

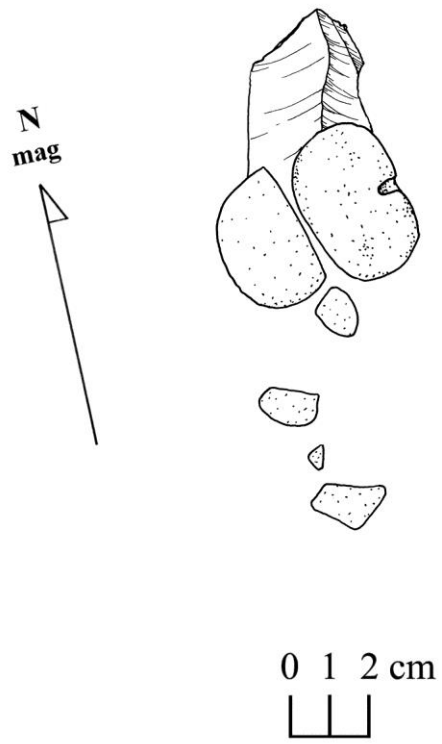


Figure 12: Detailed plan of S.D. C106B-2 at the base of Caracol Stela 24.

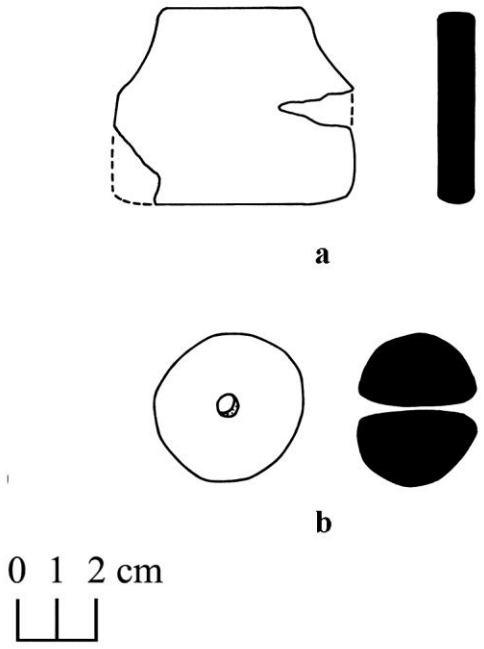


Figure 13: Jadeite items from S.D. C106B-2 at the base of Caracol Stela 24.

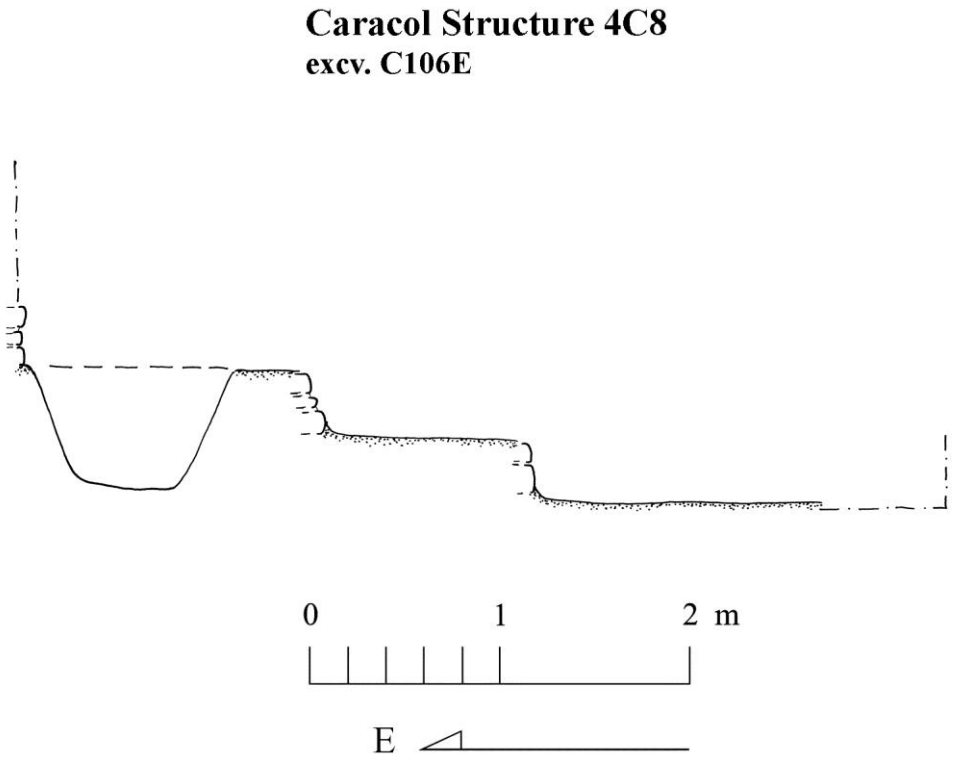


Figure 14: Section through northern doorway and building room in Operation C106B, showing open rear pit cross-section.

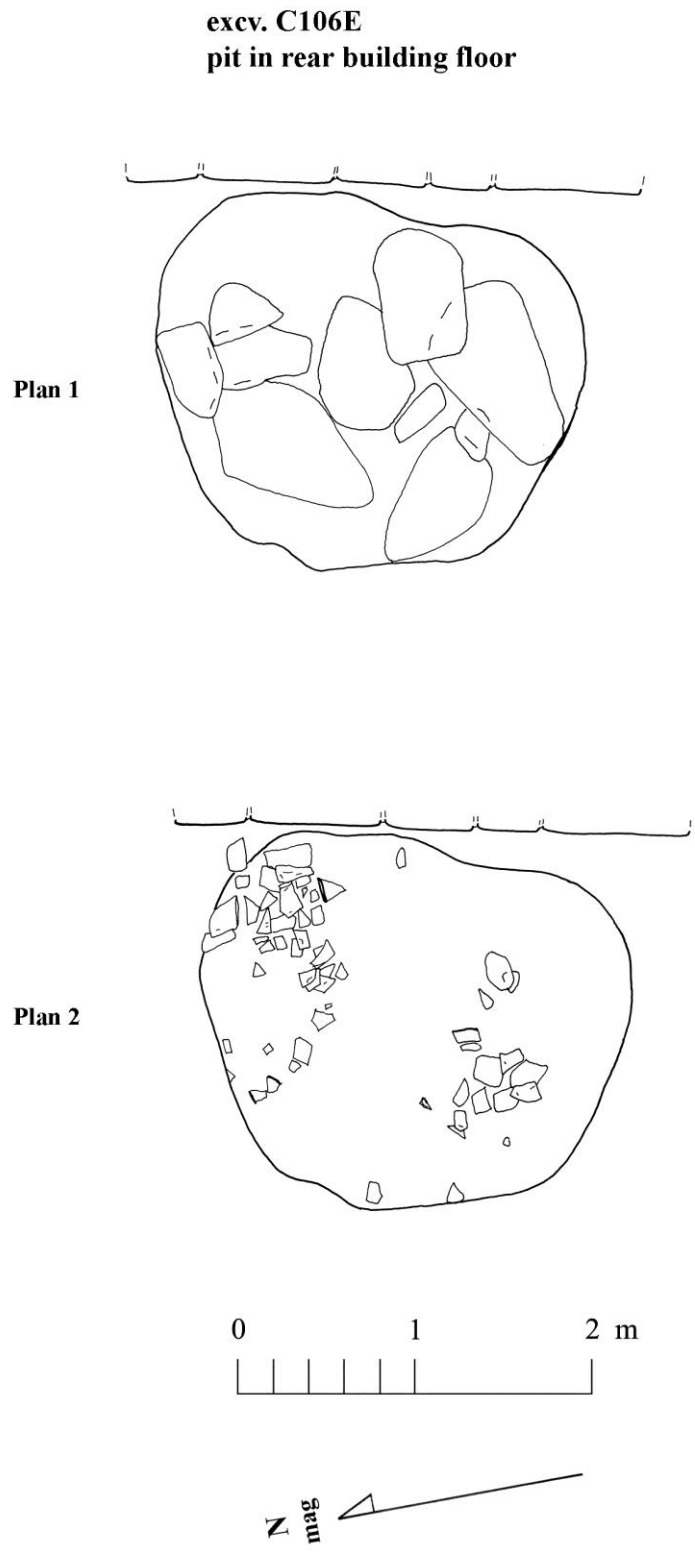


Figure 15: Detailed plans of pit through floor in the northern part of the basal room for Caracol Structure 4C8; upper plan shows stones in pit; lower plan shows sherd concentration.

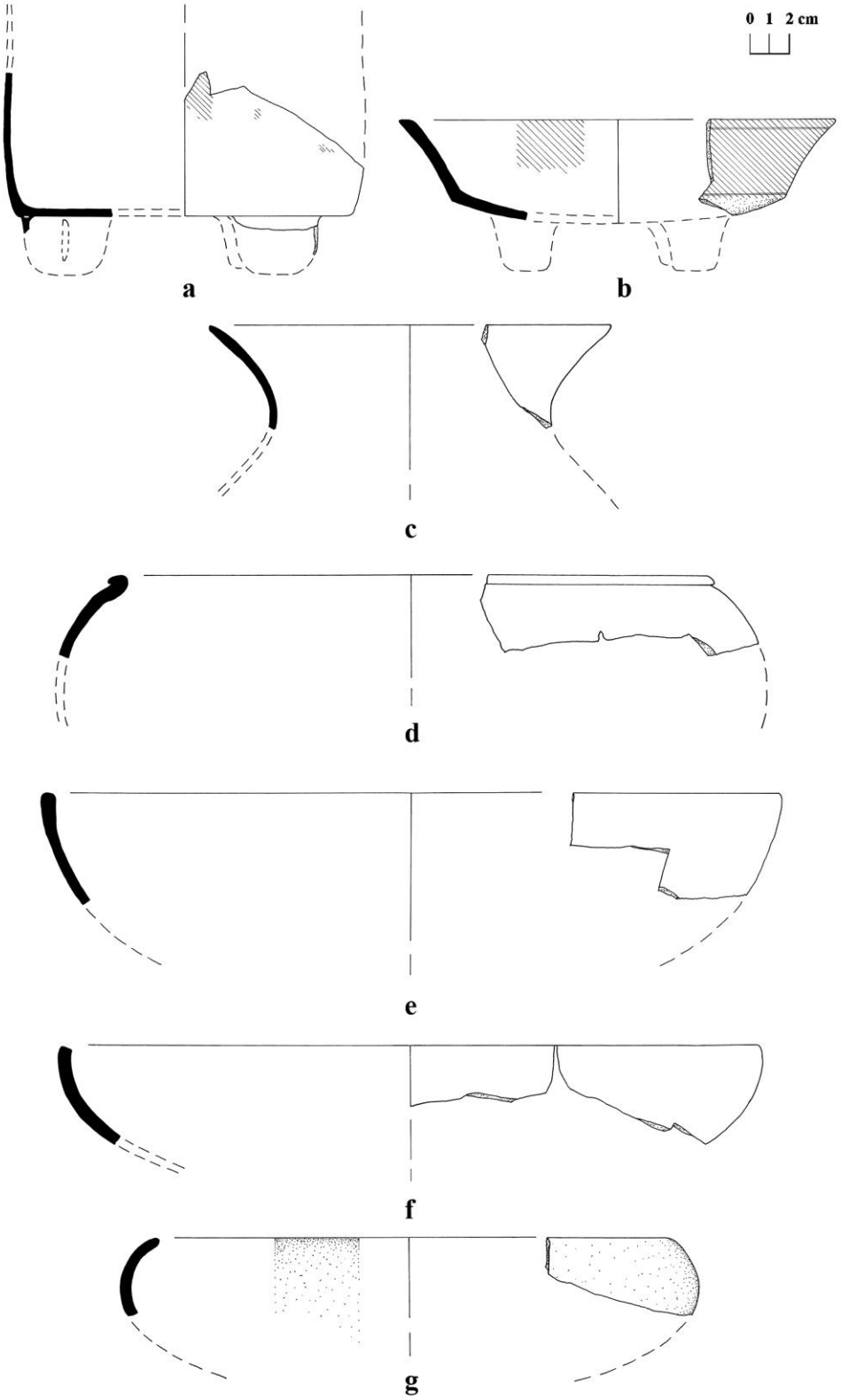


Figure 16: Ceramics recovered on the floor of Structure 4C8 in the vicinity of the rear northern room pit: a. probably Nanzal Red, b. Belize Red, c., f., g. Valentin Unslipped; d., e. eroded Tinaja Red or Valentin Unslipped.

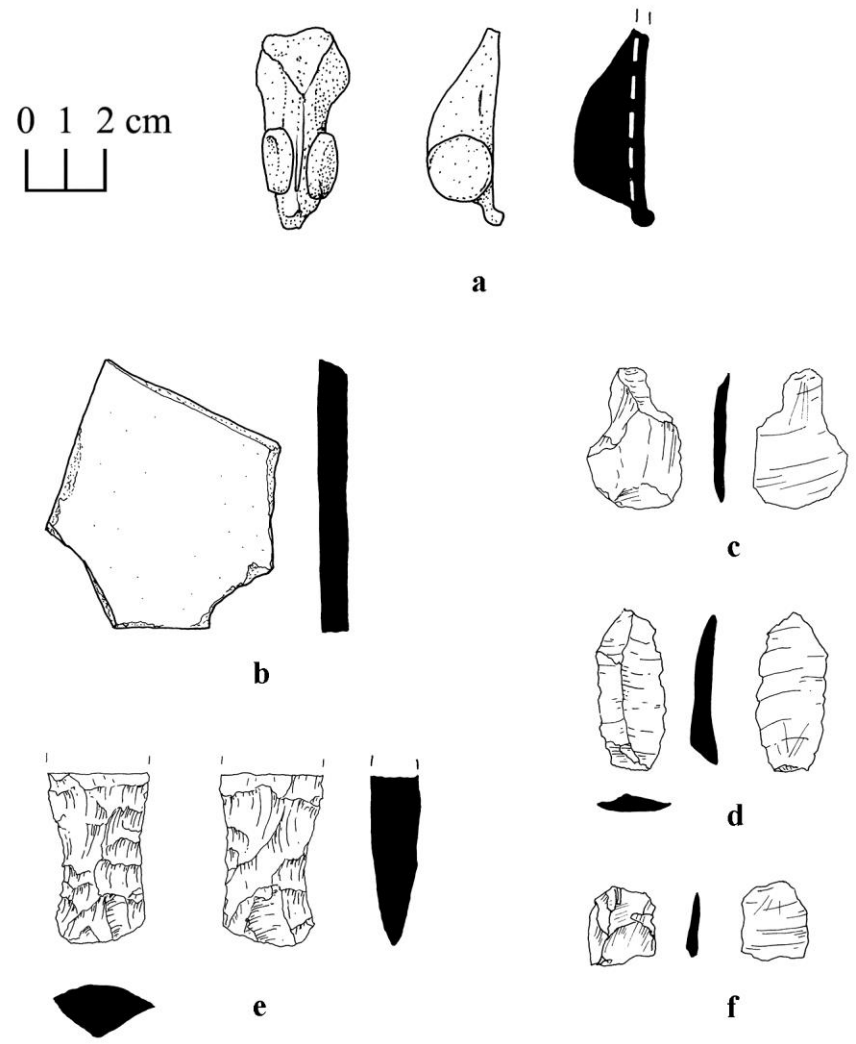


Figure 17: Artifactual materials recovered in association with Operation C106E: a. ceramic nose from a Hebe Modeled urn; b. fragment of a slate mirror back; c.,d.,f. fragments of obsidian blades; e. fragmentary chert biface.

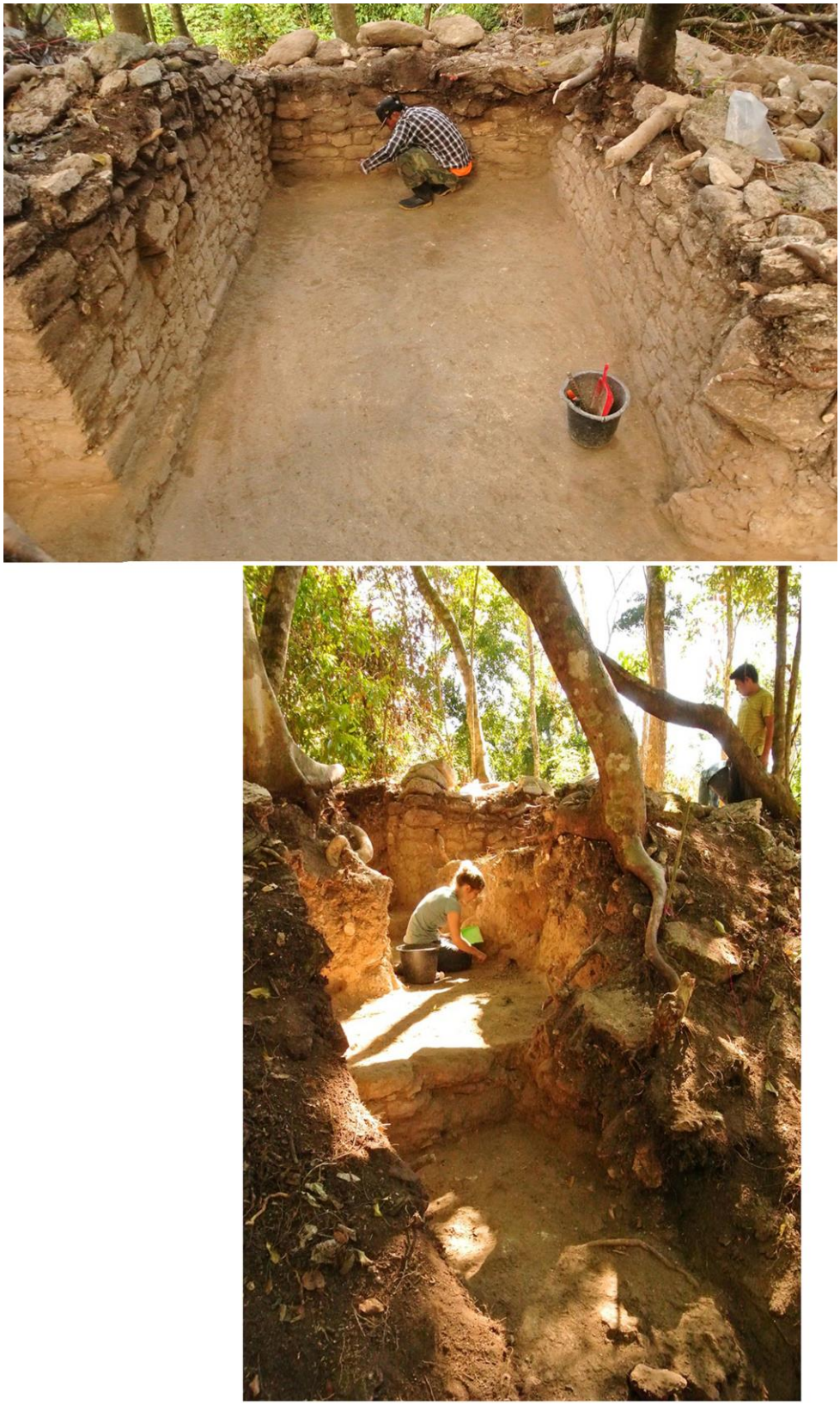


Figure 18: Photographs of excavations associated with Caracol Structure C49, the southern building in Sage, showing the locations of Operation C106F; upper photo is the summit room looking west; lower photo is the axial trench looking south.

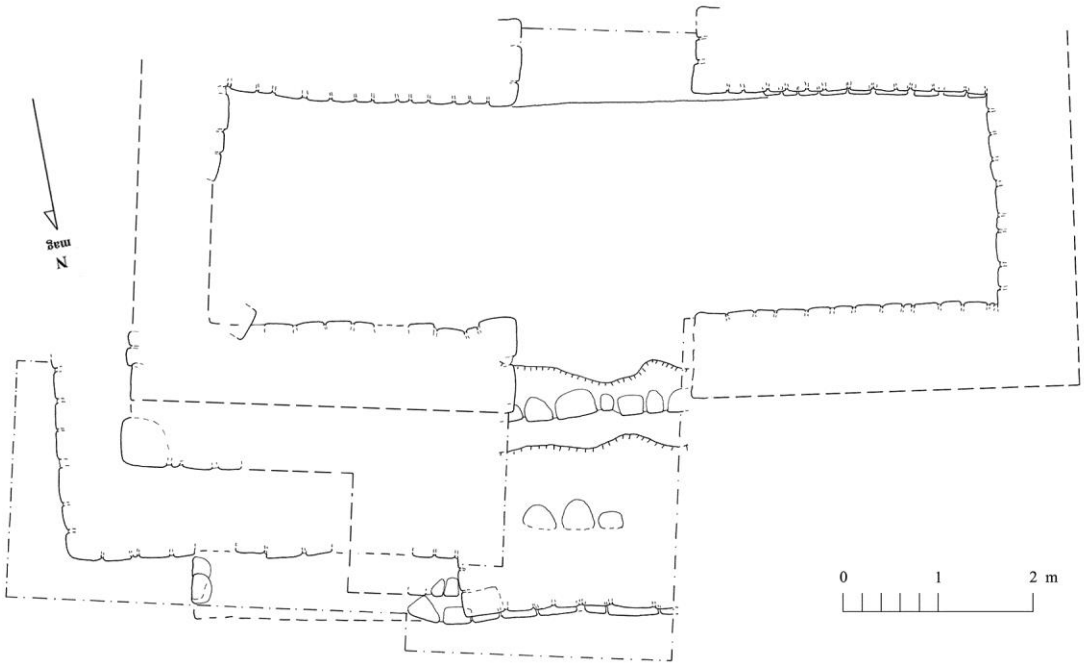


Figure 19: Plan of Caracol Structure 4C9 revealed through Operations C106C and C106F.

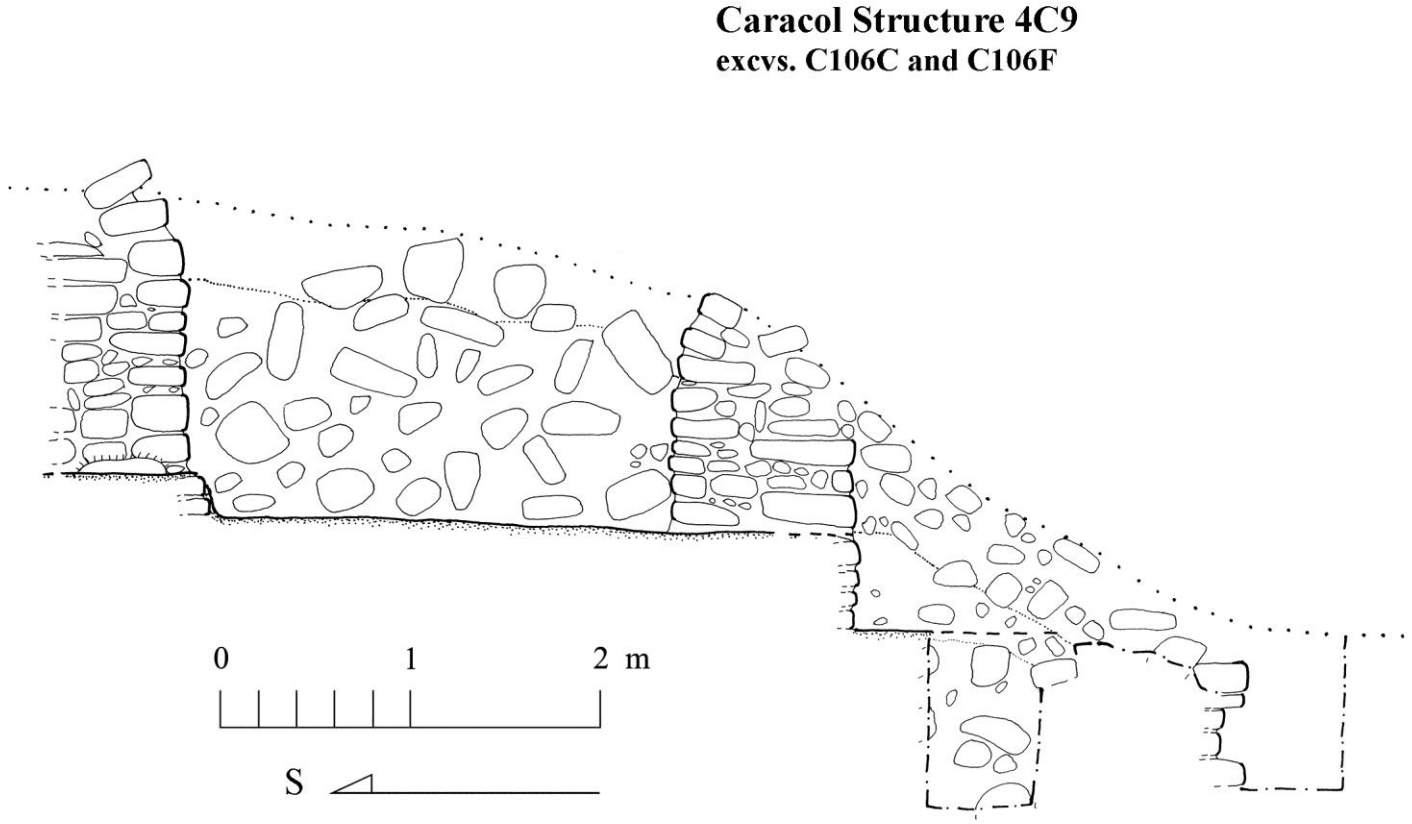


Figure 20: Section through Operation C106F and Caracol Structure 4C9.

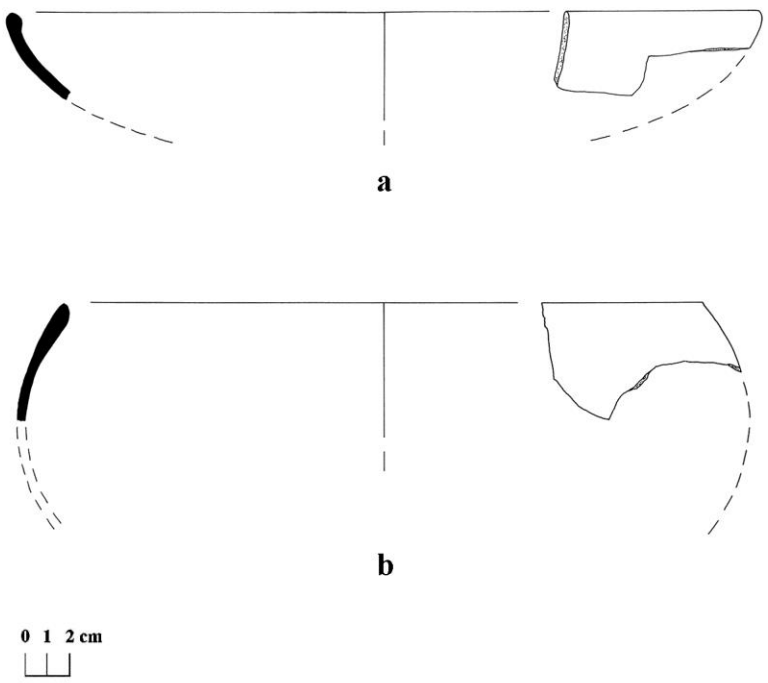


Figure 21: Ceramics recovered on the room floor of Structure 4C9: a., b. Valentine Unslipped or eroded Tinaja Red.

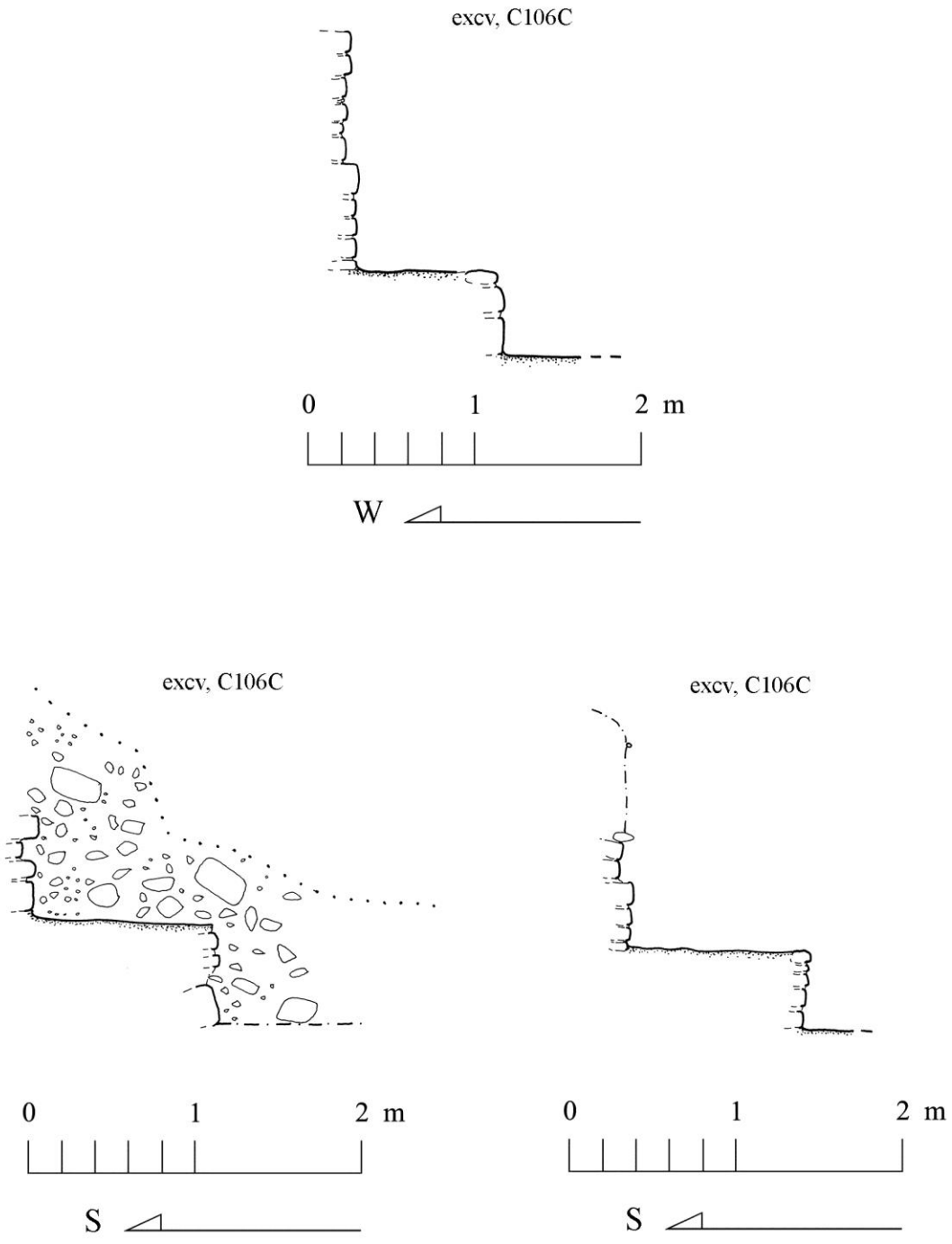


Figure 22: Profiles associated with exterior terracing of Structure 4C9.

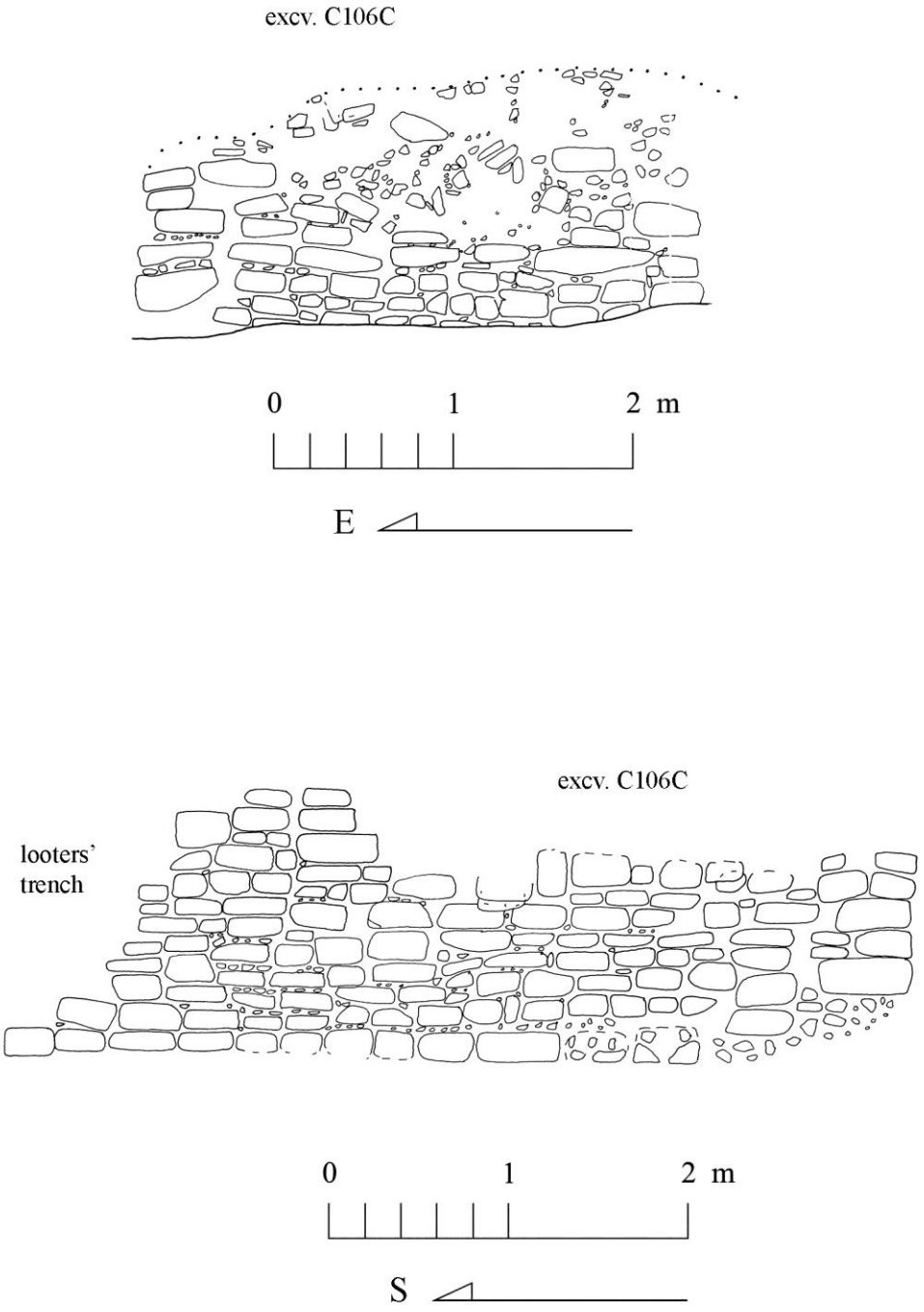


Figure 23: Elevations of wall facings exposed by looters, northeast exterior corner of Structure 4C9.

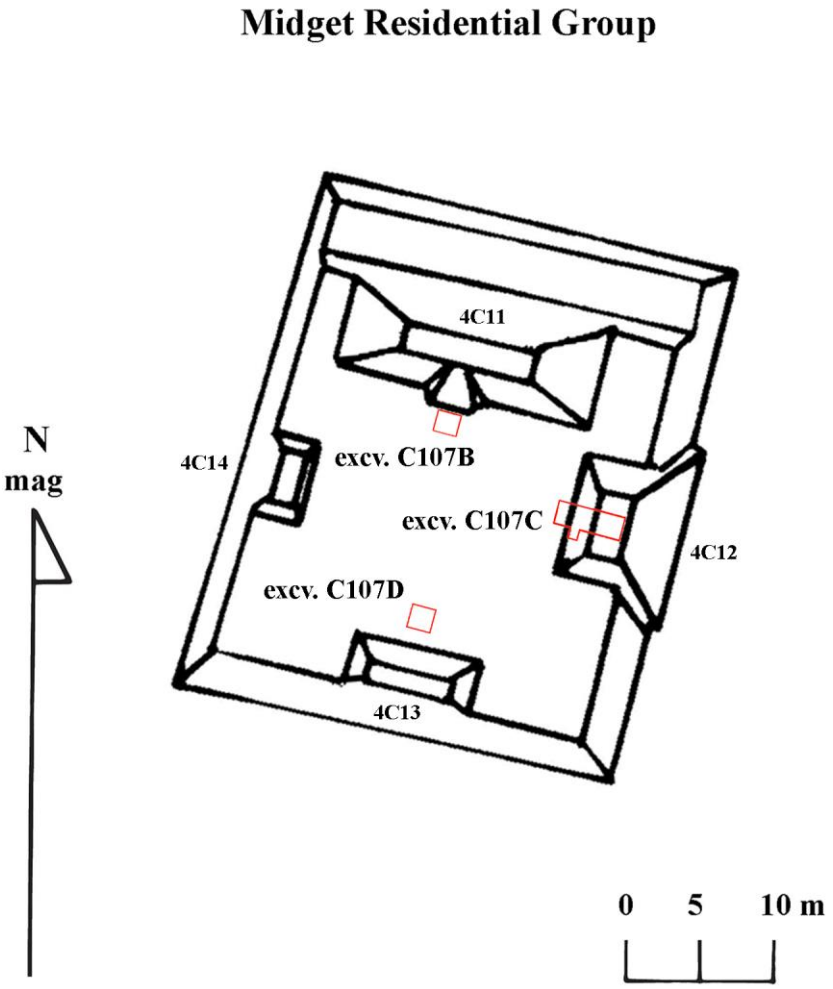


Figure 24: Plan of Midget Residential Group, showing the locations of Operations C107B, C107C, and C107D.

Figure 25: Photograph of excavation of Operation C107B in front of Caracol Structure 4C11.

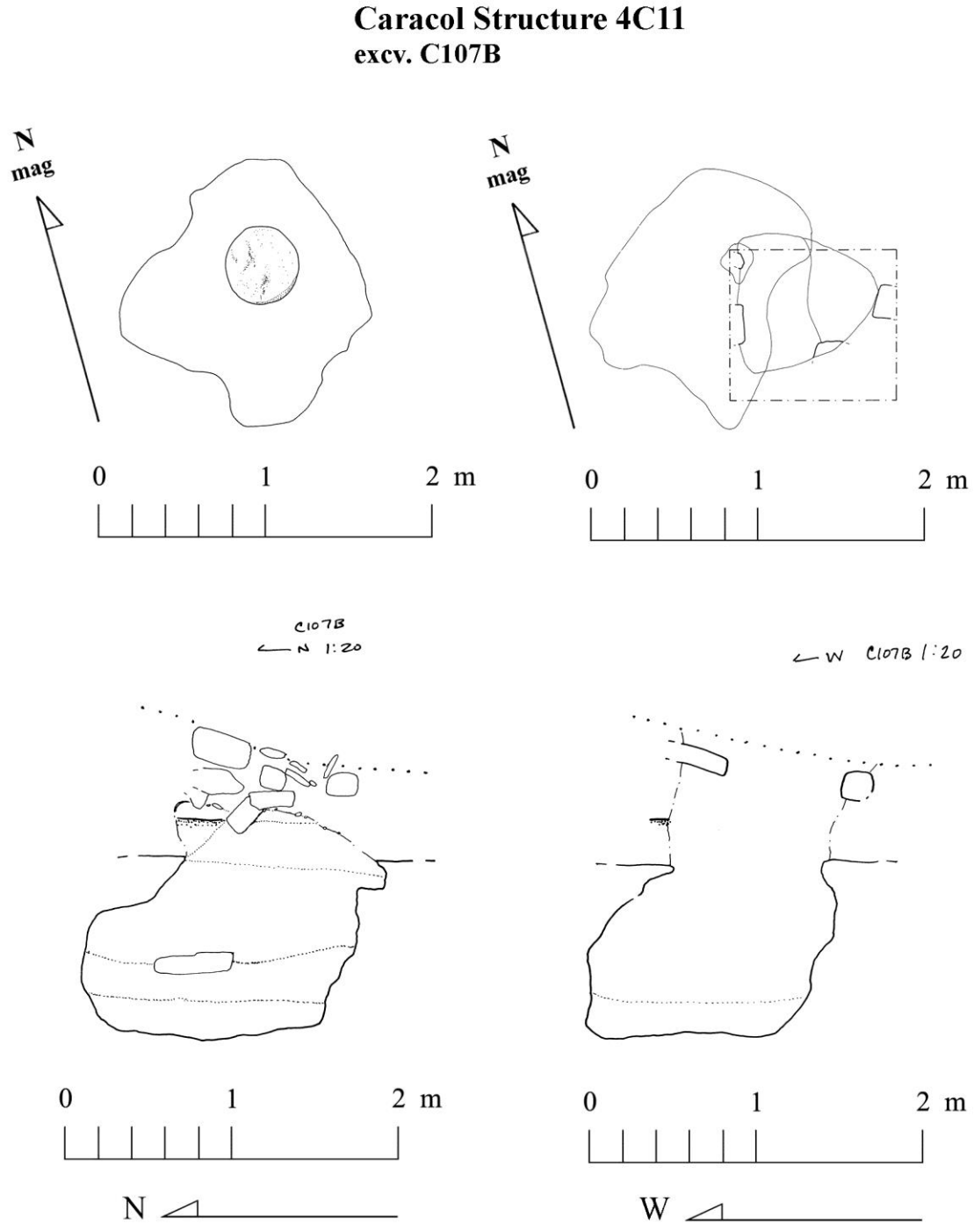


Figure 26: Plans and sections relating to the chultun recovered in Operation C107B.

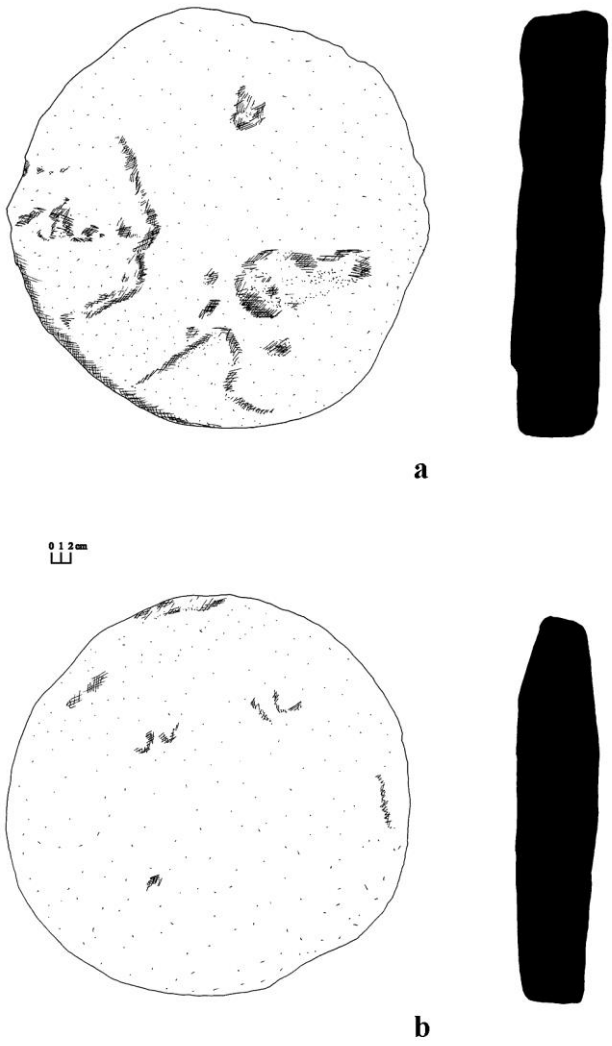


Figure 27: Illustrations of the chultun capstones recovered in Operations C107B (a) and C107D (b).

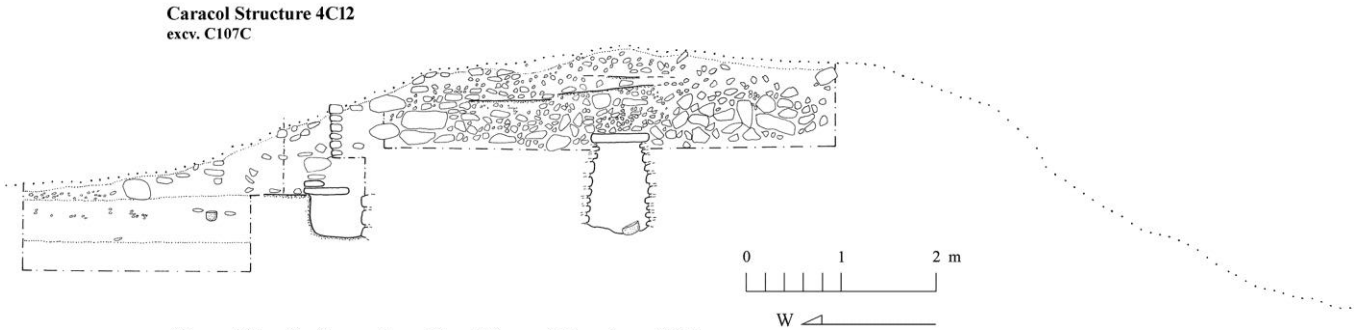


Figure 28: Section and profile of Caracol Structure 4C12

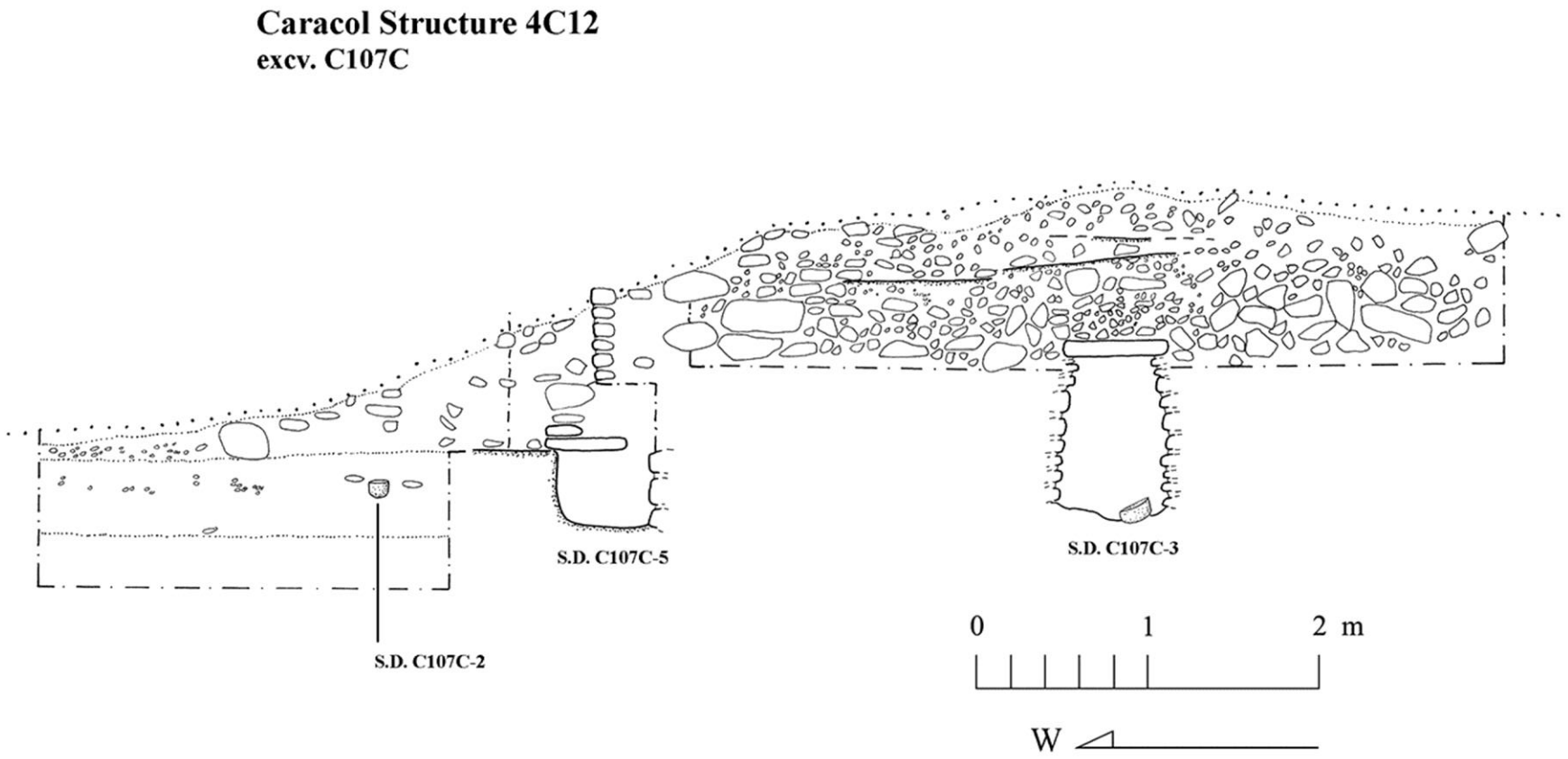


Figure 29: Section through Operation C107C and Caracol Structure 4C12.

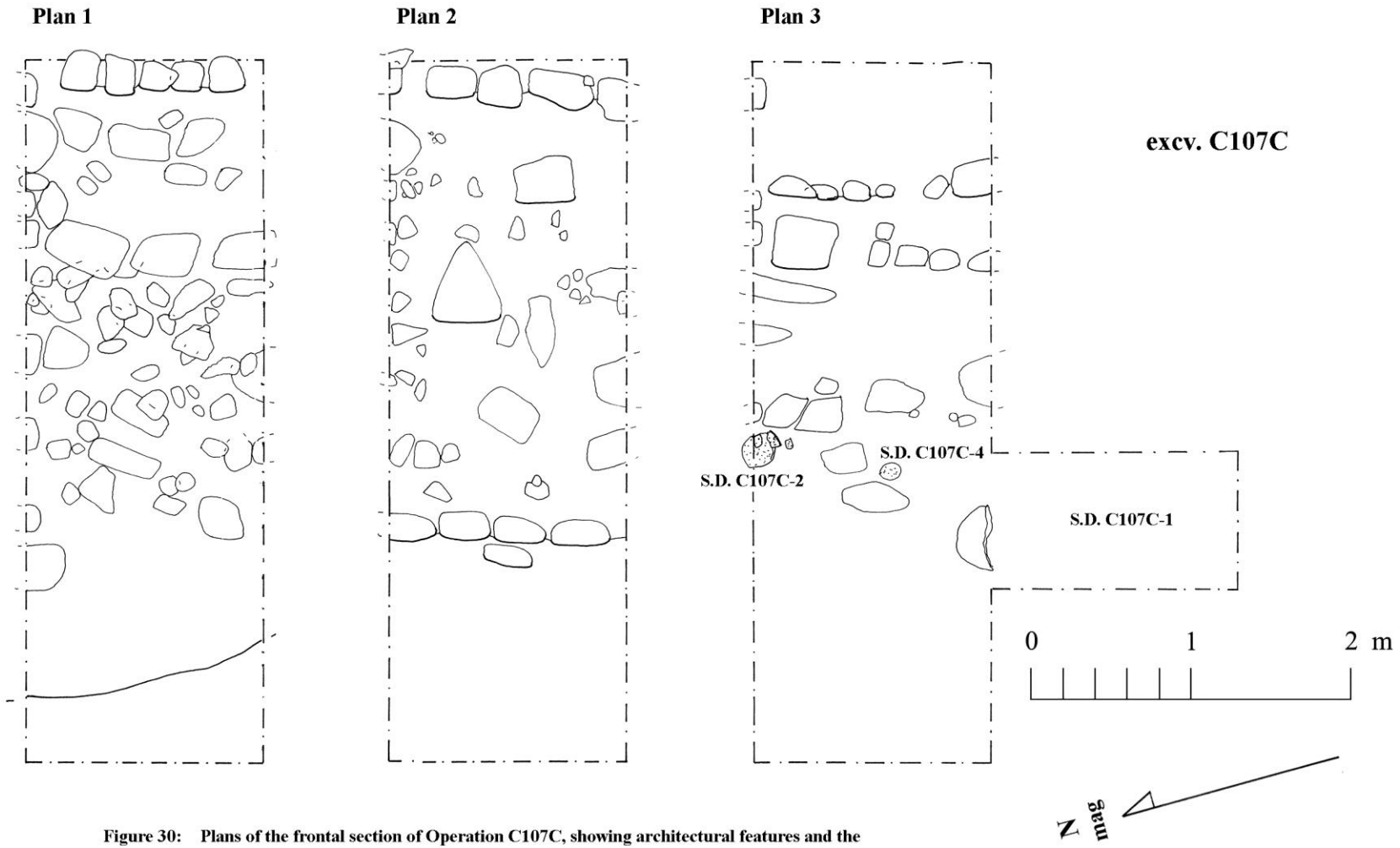


Figure 30: Plans of the frontal section of Operation C107C, showing architectural features and the locations of S.D.s C107C-1, C107C-2, C107C-4. and C107C-5.

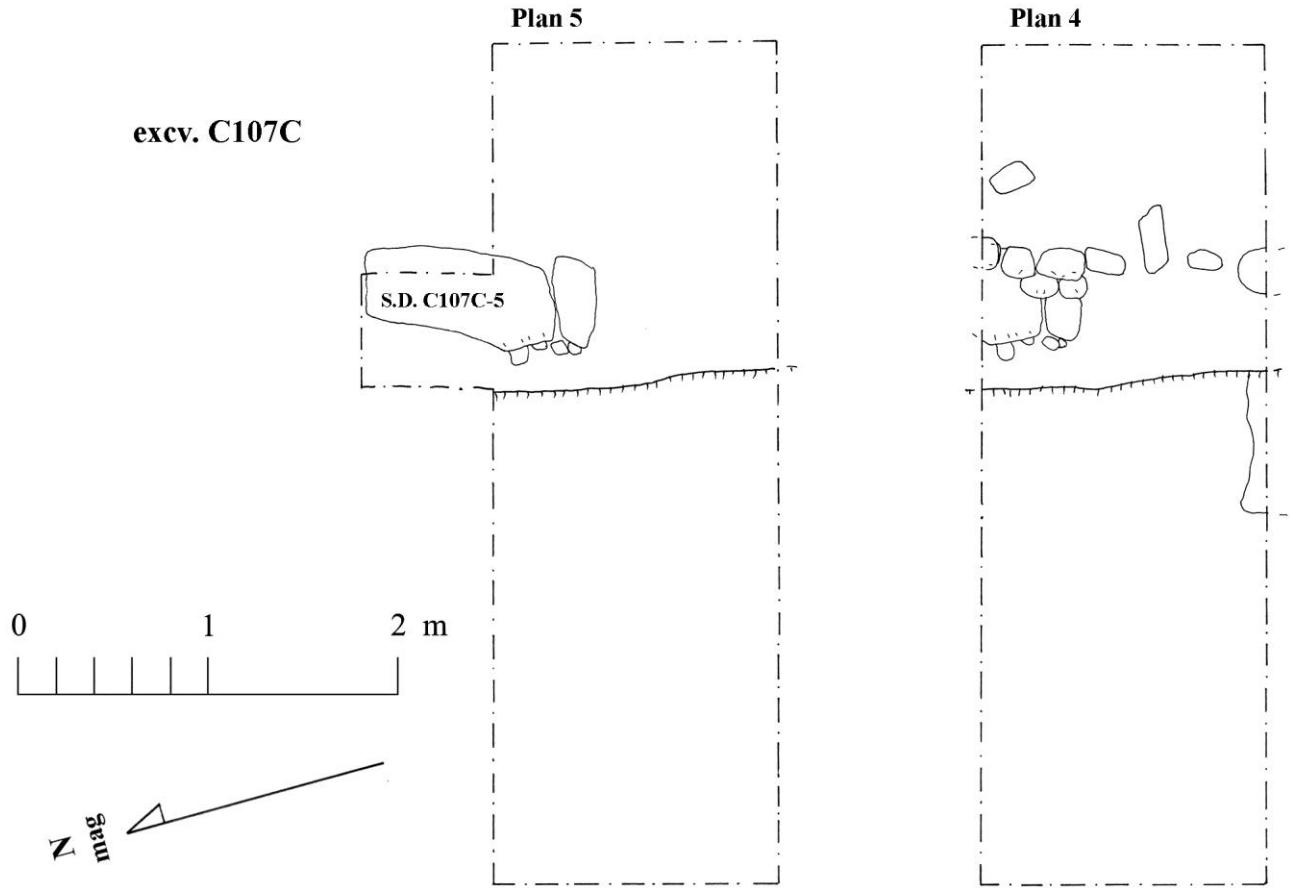


Figure 30: Plans of the frontal section of Operation C107C, showing architectural features and the locations of S.D.s C107C-1, C107C-2, C107C-4. and C107C-5.

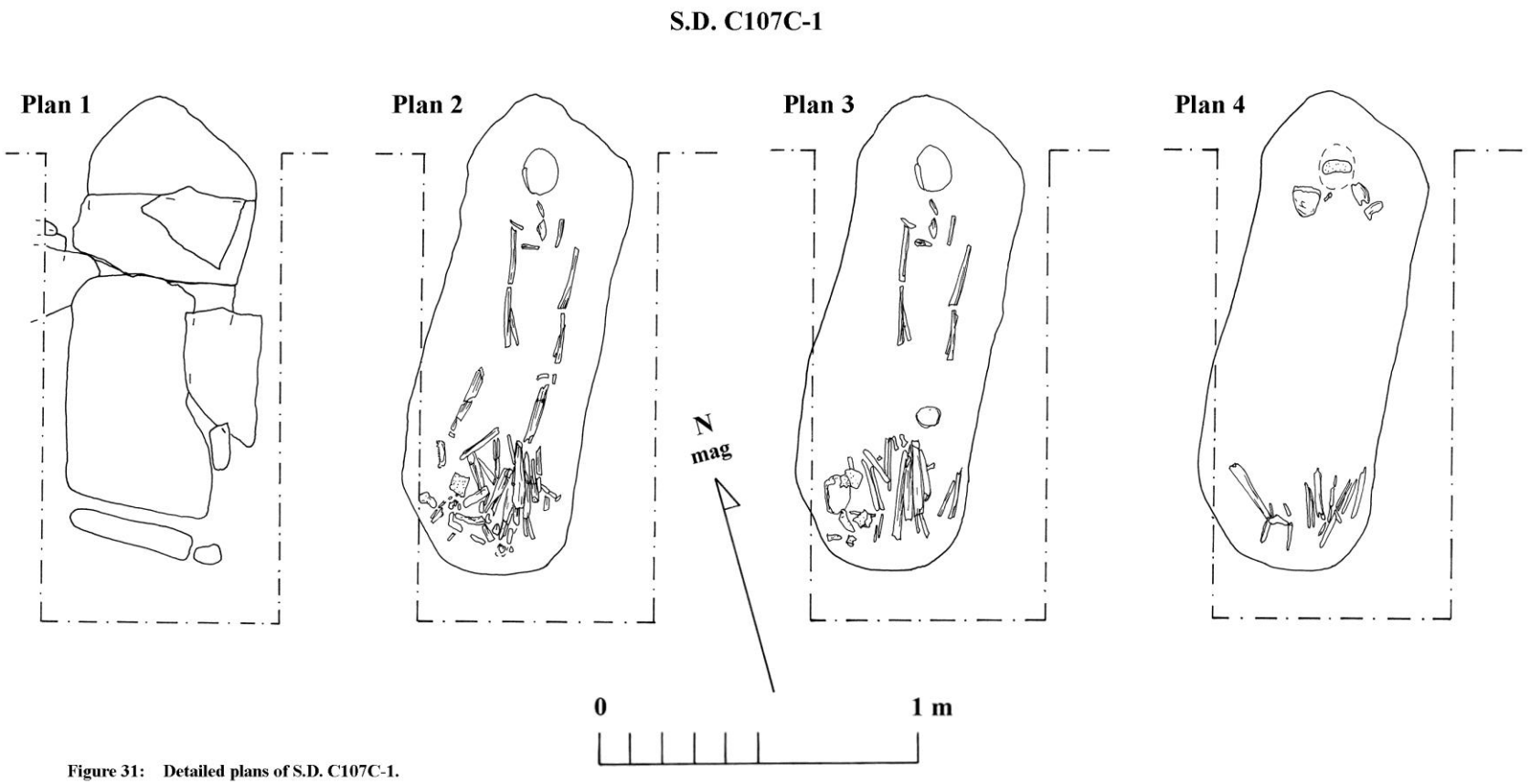


Figure 31: Detailed plans of S.D. C107C-1.

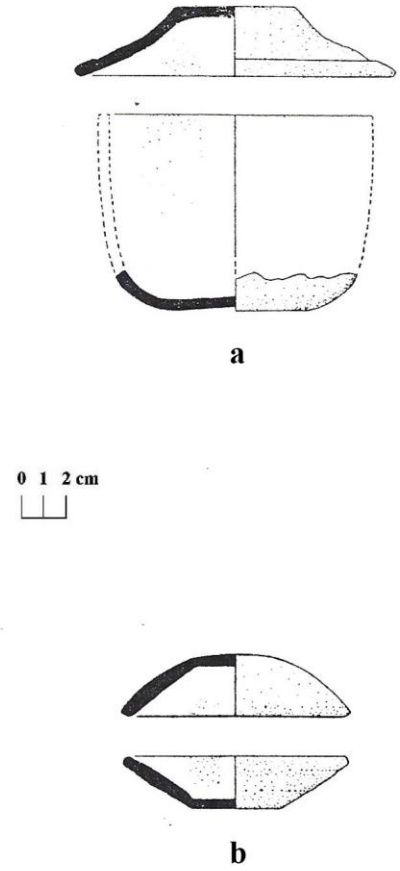


Figure 32: Ceramic vessels associated with S.D. C107C-2 (a.) and S.D. C107C-4 (b.); both are Ceiba Unslipped.

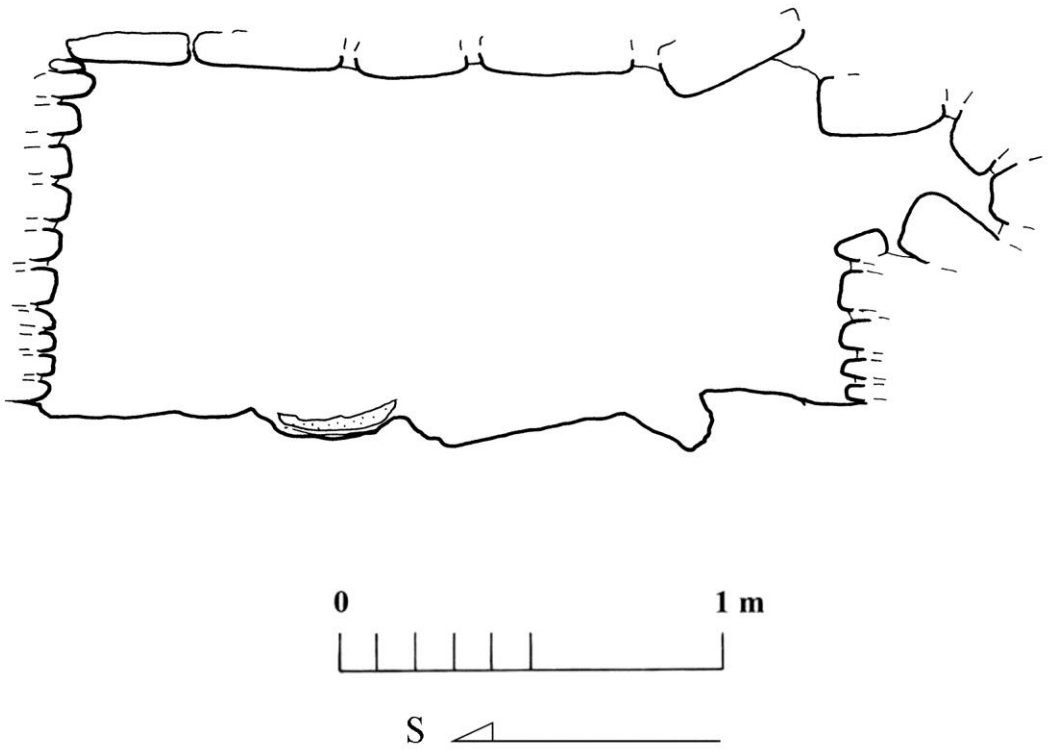


Figure 33: Cross-section of chamber associated with S.D. C107C-3.

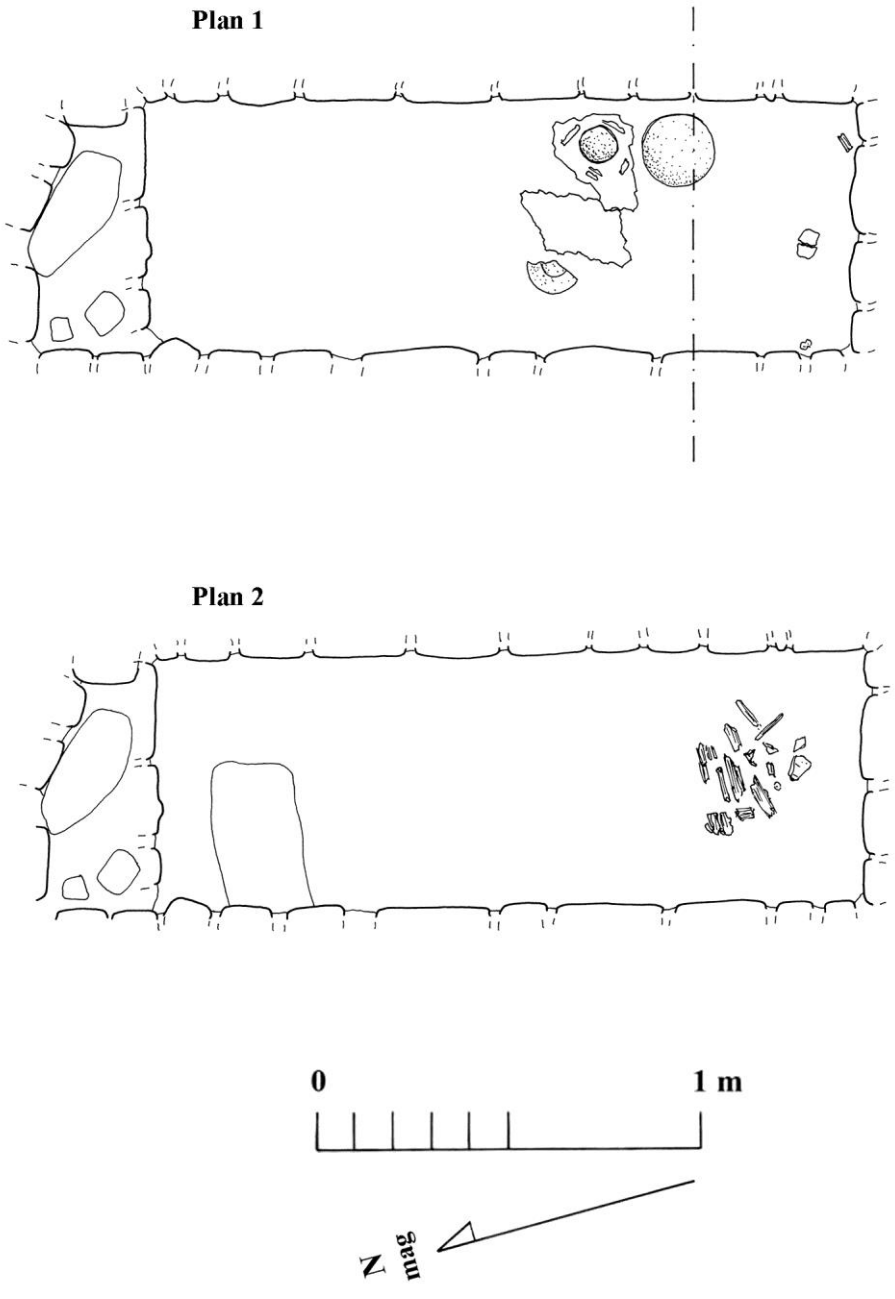


Figure 34: Detailed plans of the chamber containing S.D. C107C-3.

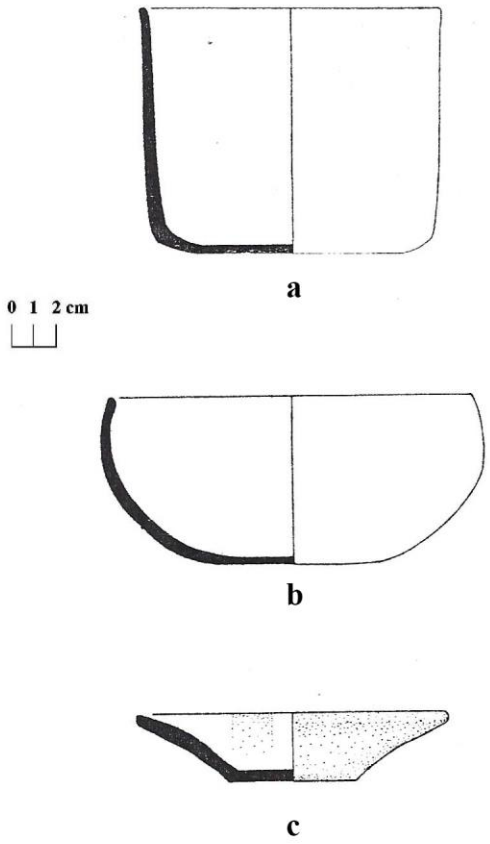


Figure 35: Ceramic vessels associated with S.D. C107C-3: a. eroded Tialipa Brown, b. eroded Nanzal Red, c. Ceiba Unslipped.

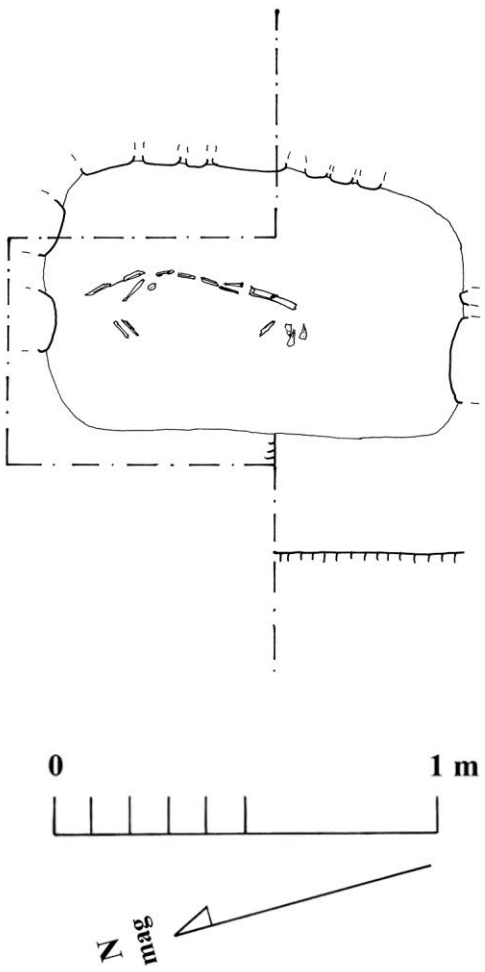


Figure 36: Detailed plan of S.D. C107C-5.

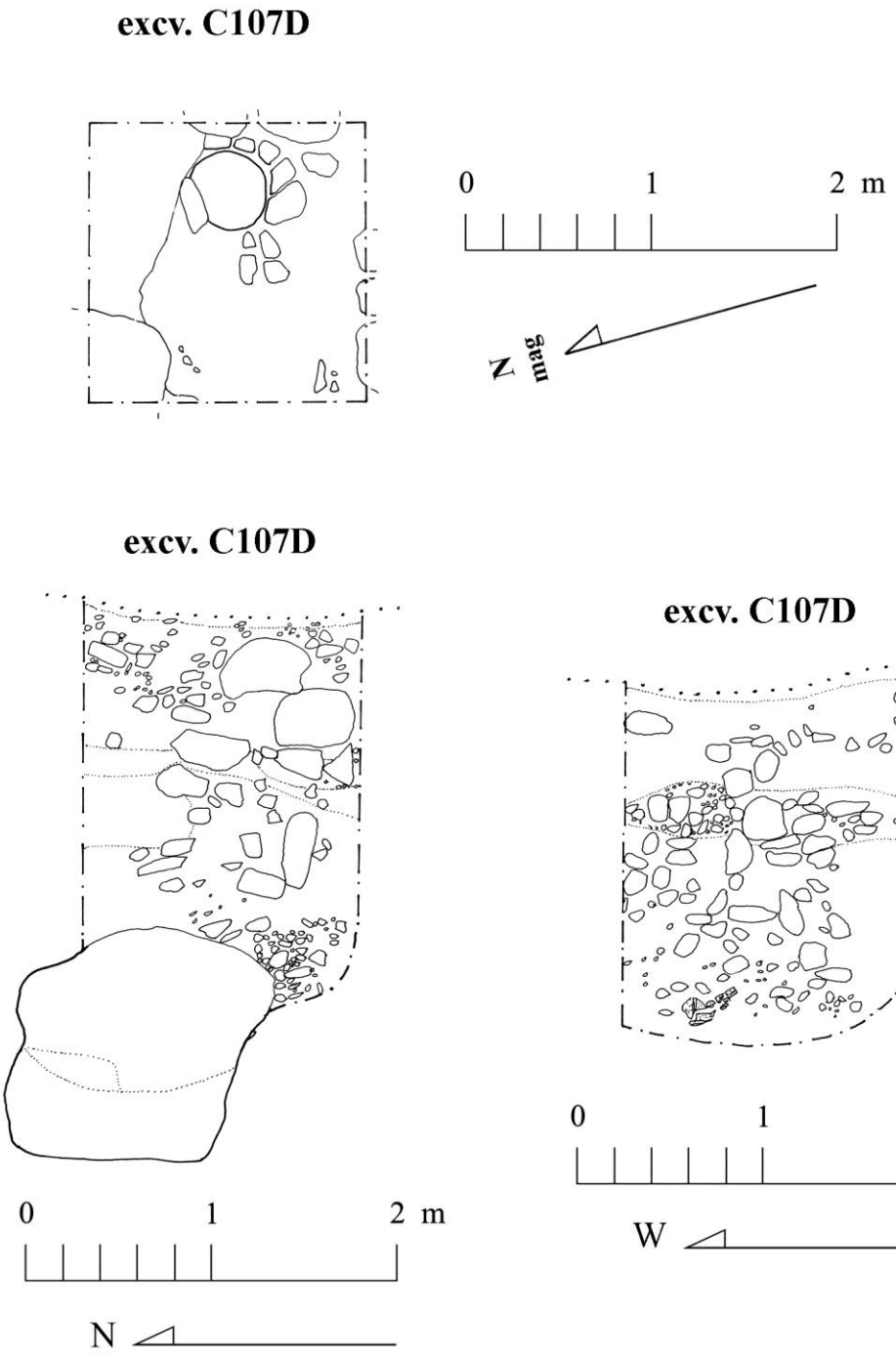


Figure 37: Plan and sections associated with Operation C107D.

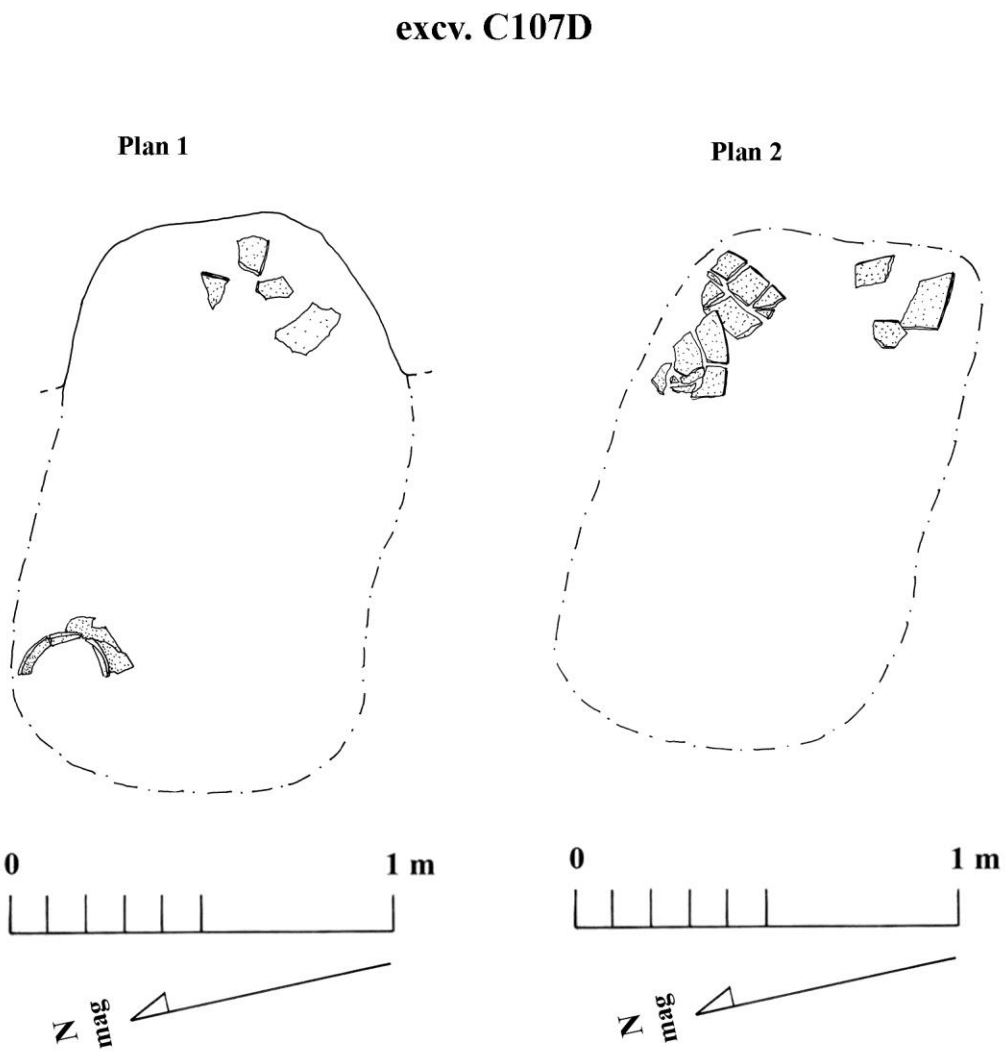


Figure 38: Detailed plans of the sherds within the open chultun in Operation C107D.

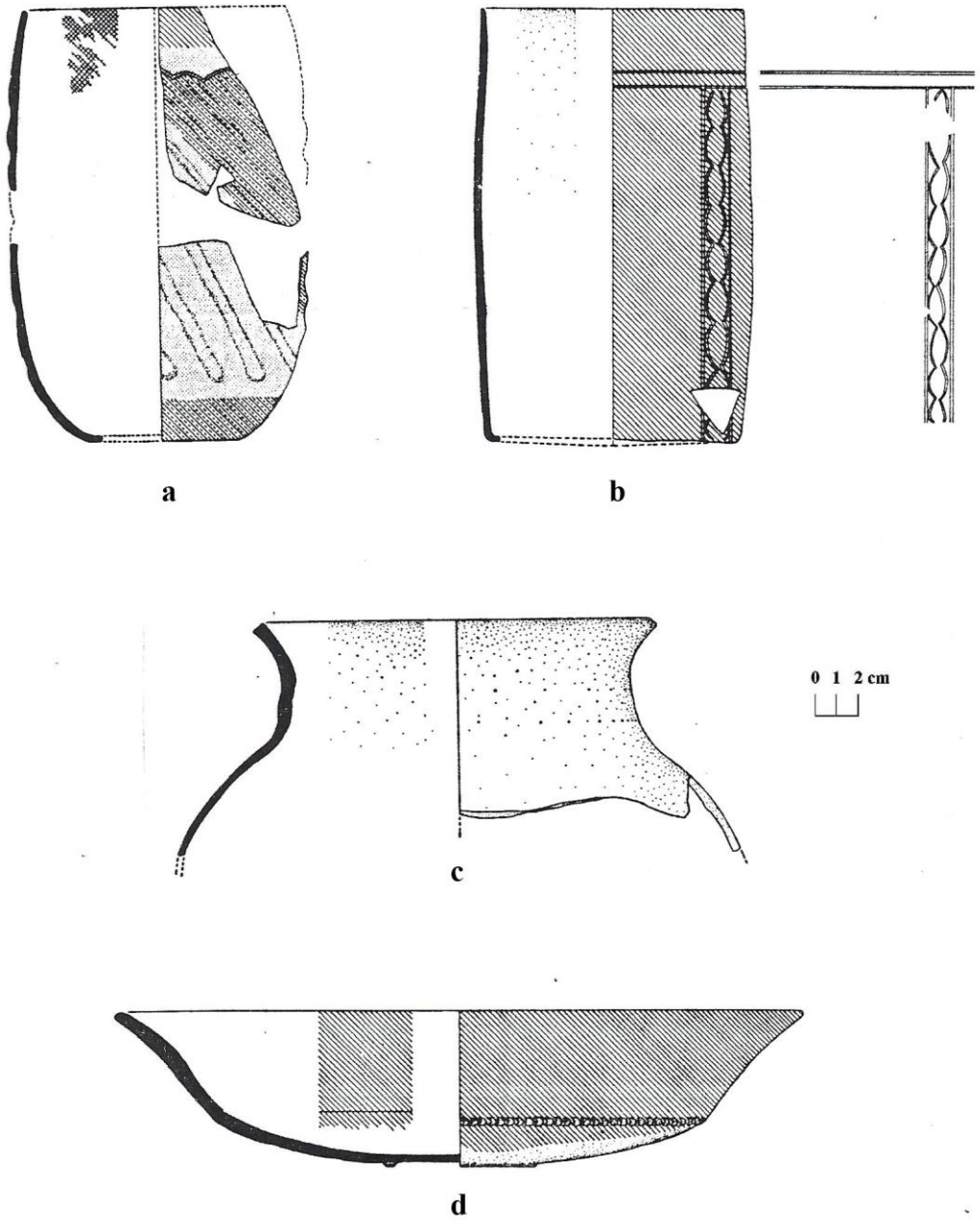


Figure 39: Ceramic vessels associated with the chultun in Operation C107D: a. Tsak Fluted (related to Molino Black) , b. Martins Incised, c. probably Valentin Unslipped, d. Saptam Impressed.

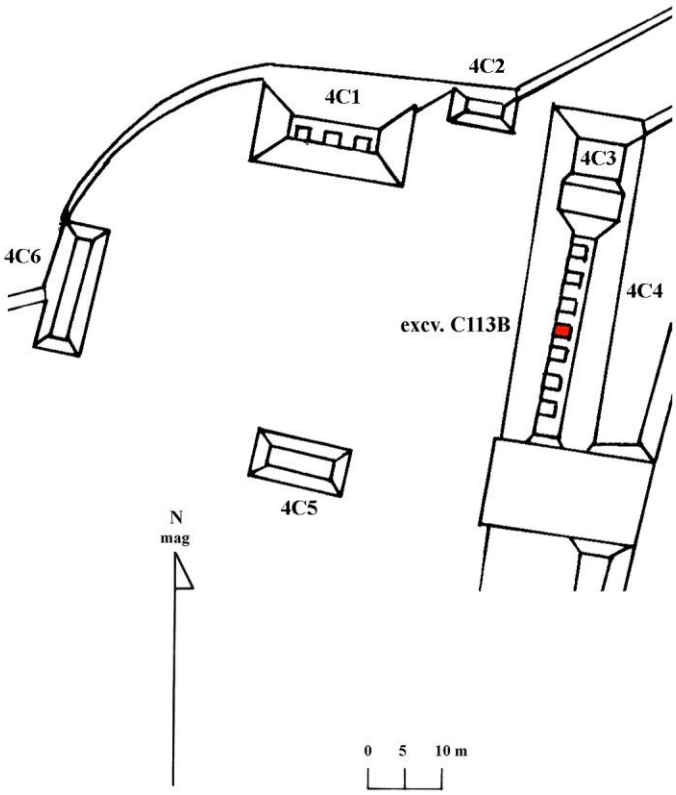


Figure 40: Plan of Puchituk Plaza, showing the location of Operation C113B.

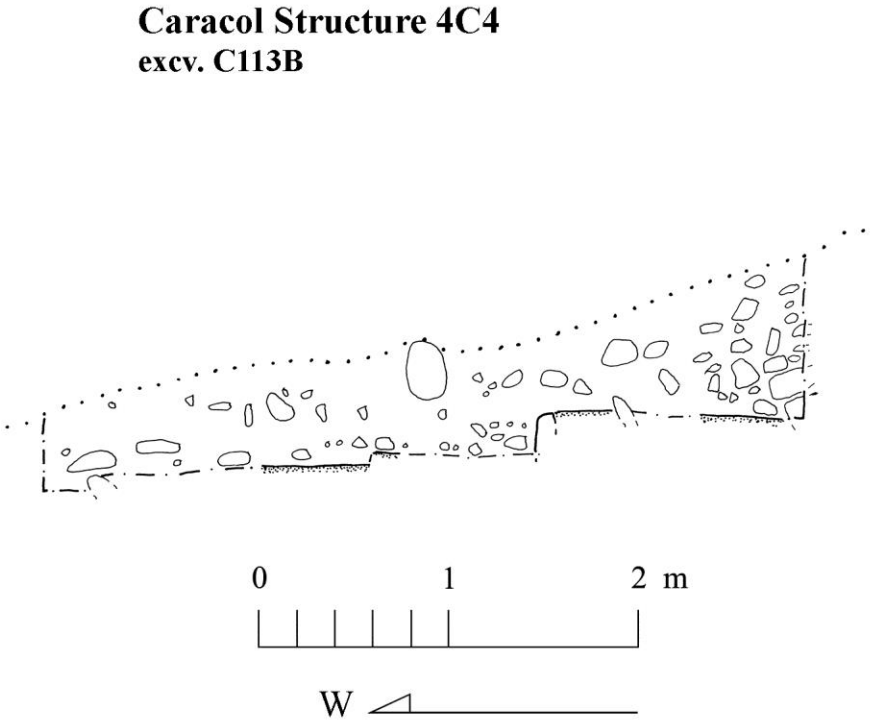


Figure 41: East-west section through Operation C113B and Caracol Structure 4C4.

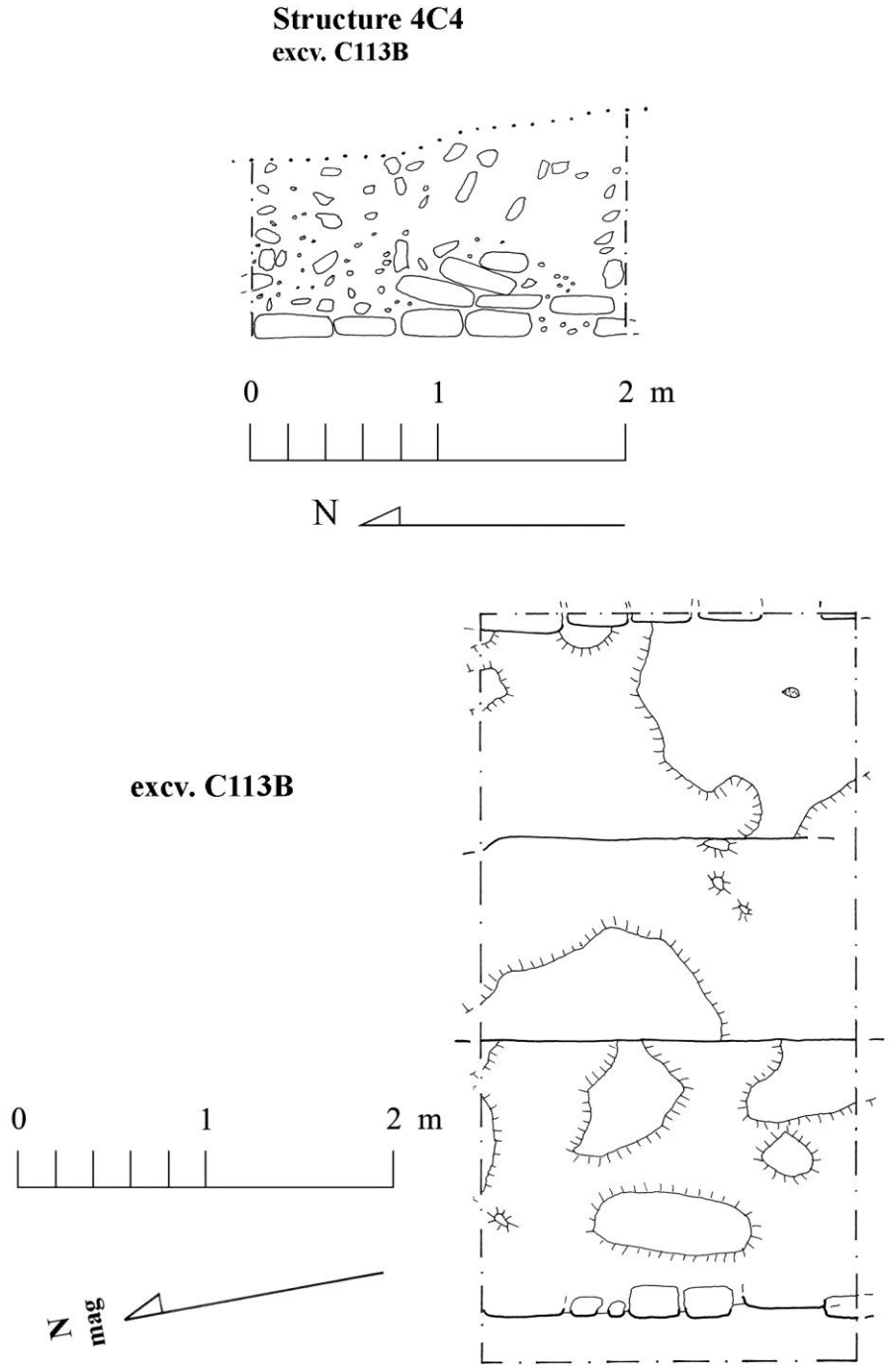


Figure 42: North-south section and plan of Operation C113B in Caracol Structure 4C4.

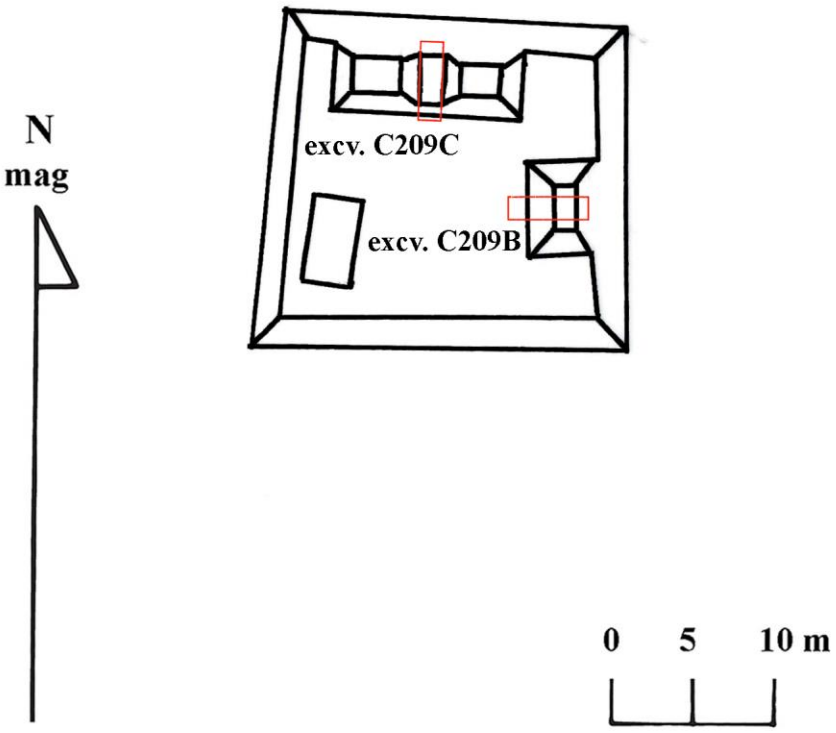


Figure 43: Plan of Cheech Residential Group, showing the locations of Operations C209B and C209C.

Figure 44: Photographs of excavations in Cheech; upper photo is Operation C209B; lower photo is Operation C209C.

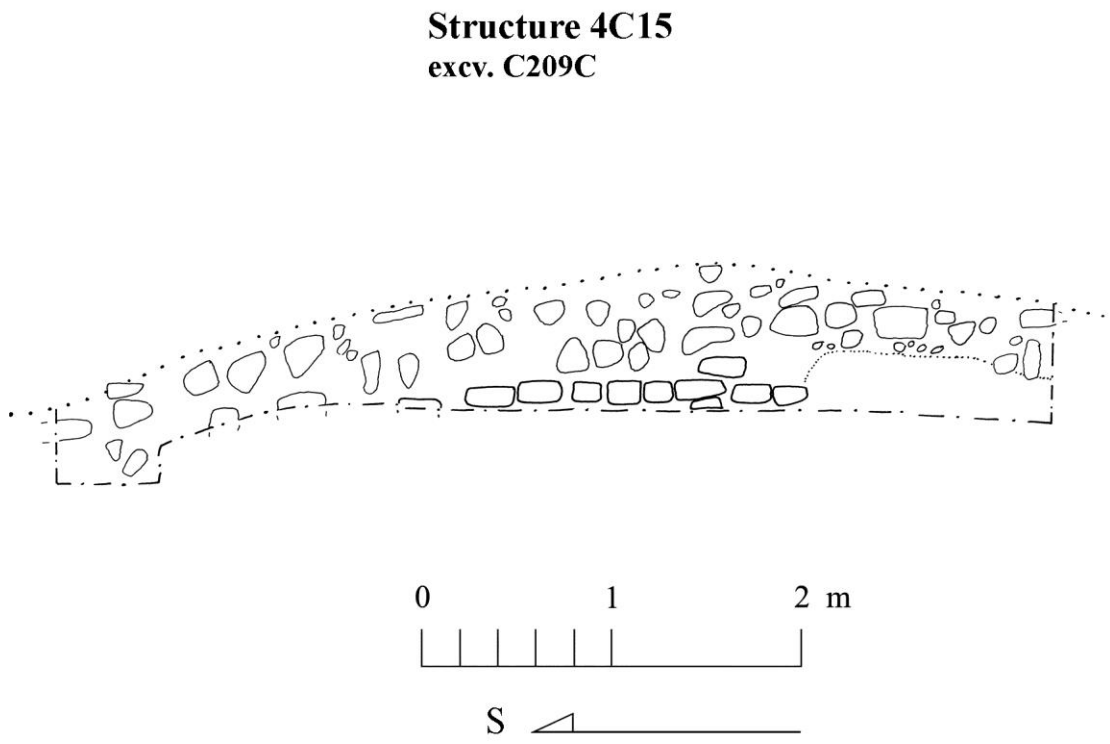


Figure 45: North-south section of Operation C209C.

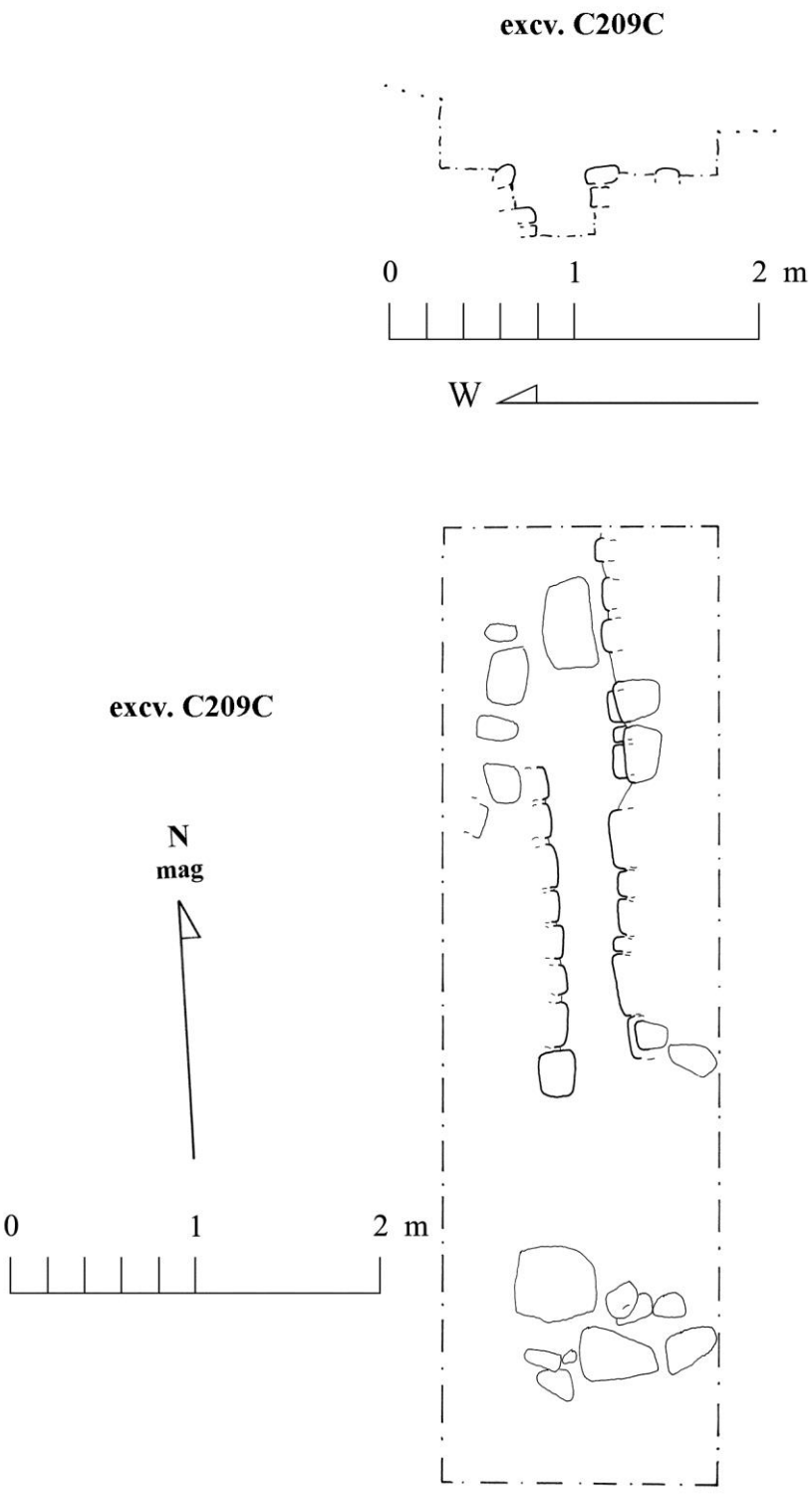


Figure 46: East-west profile of Operation C209C and plan of Operation C209C.

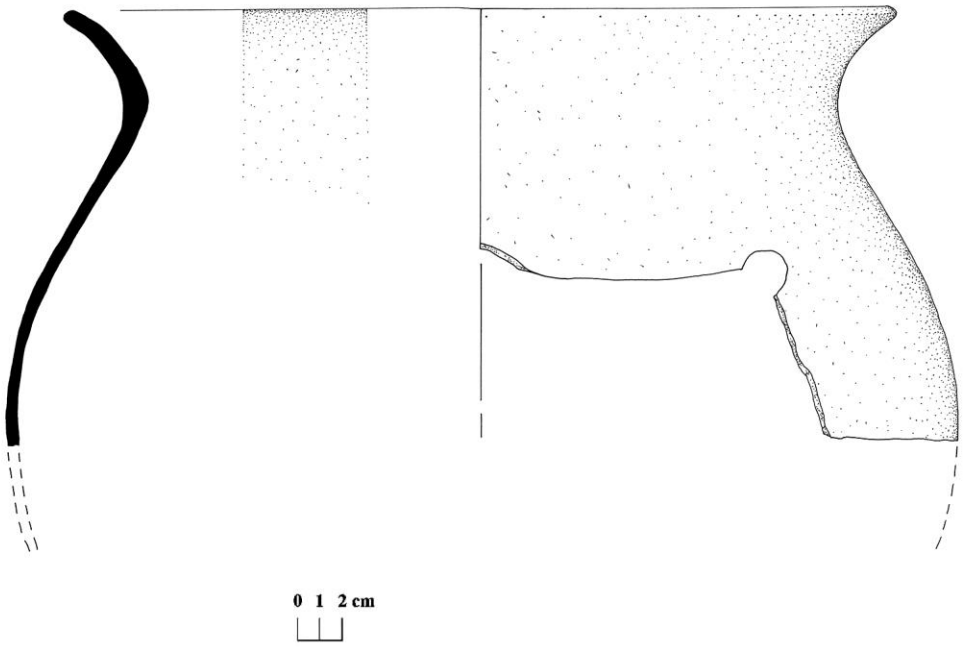


Figure 47: Ceramic vessel (Valentin Unslipped) from the alley between Structures 4C15 and 4C16 in Operation C209C.

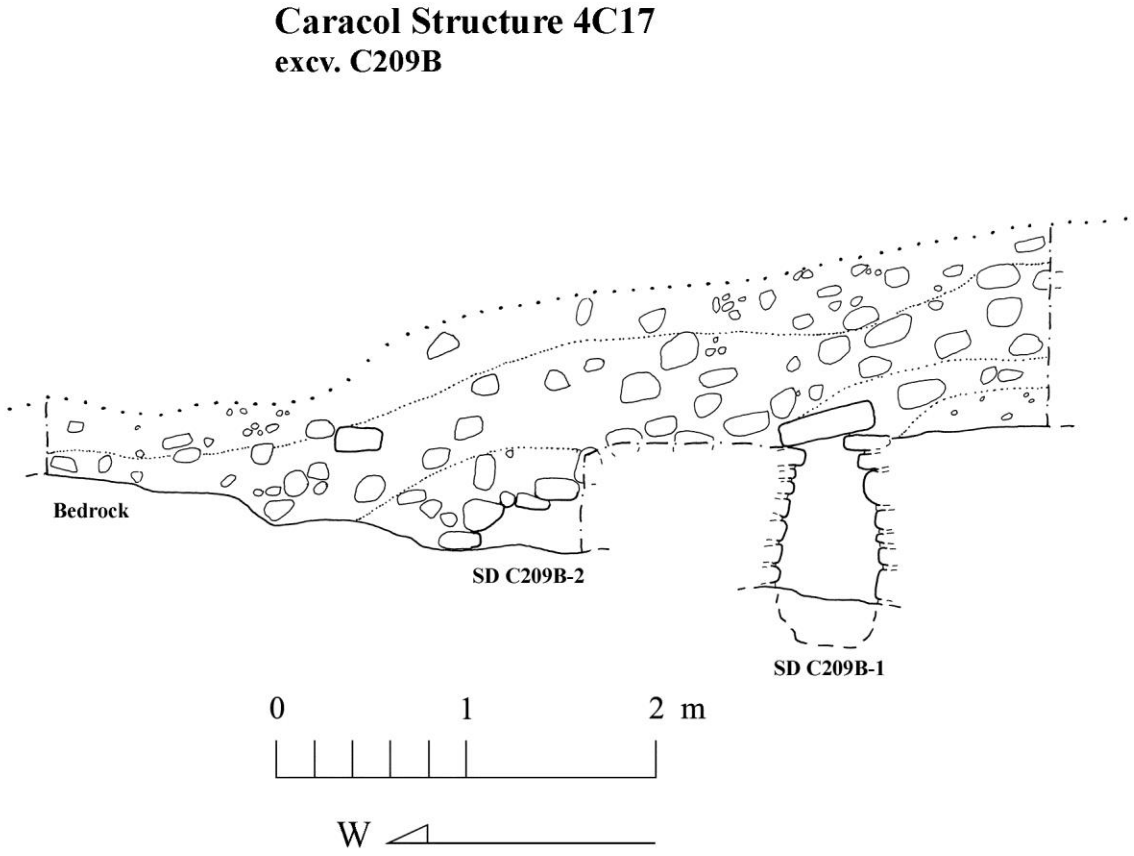


Figure 48: Section through Operation C209B and Caracol Structure 4C17.

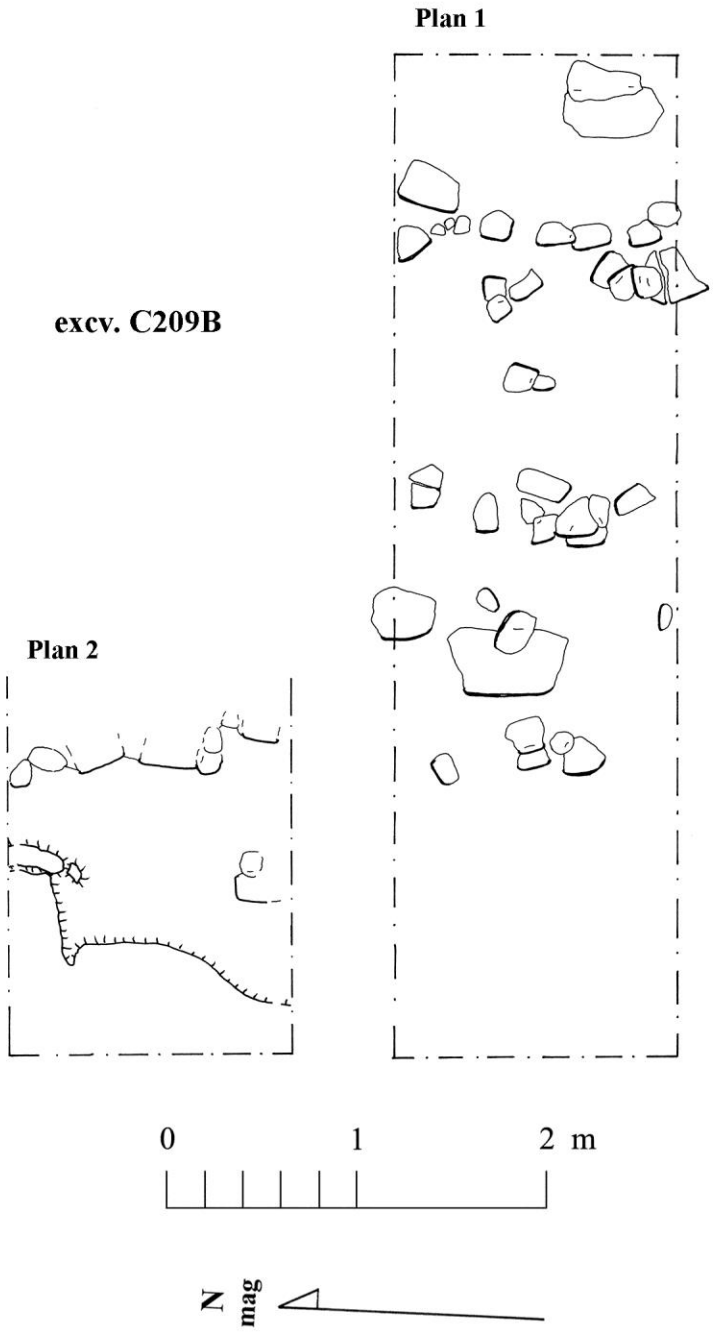


Figure 49: Plans of Operation C209B.

Figure 50: Photograph of special deposits recovered in Operation C209B: a. S.D. C209B-1; b. S.D. C209B-2.

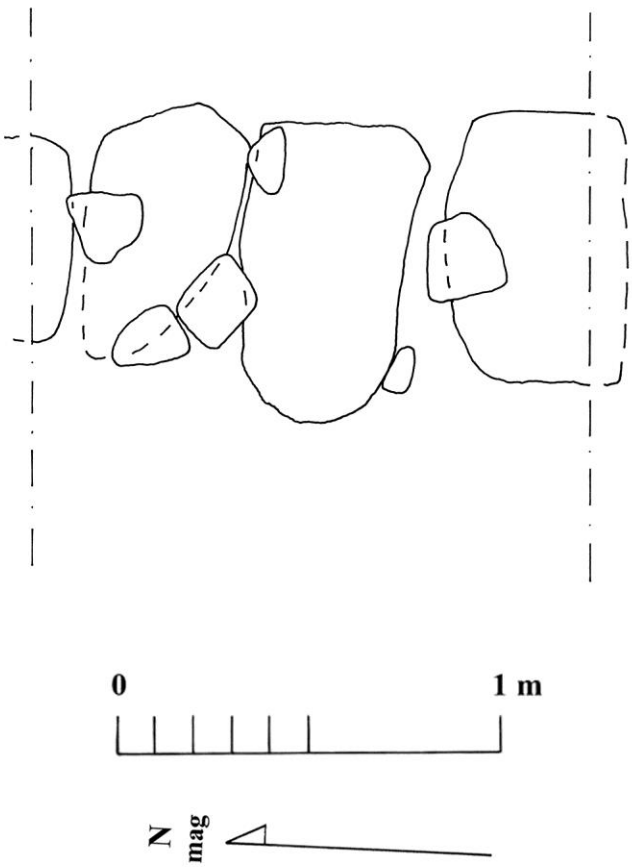


Figure 51: Plan of capstones over S.D. C209B-1.

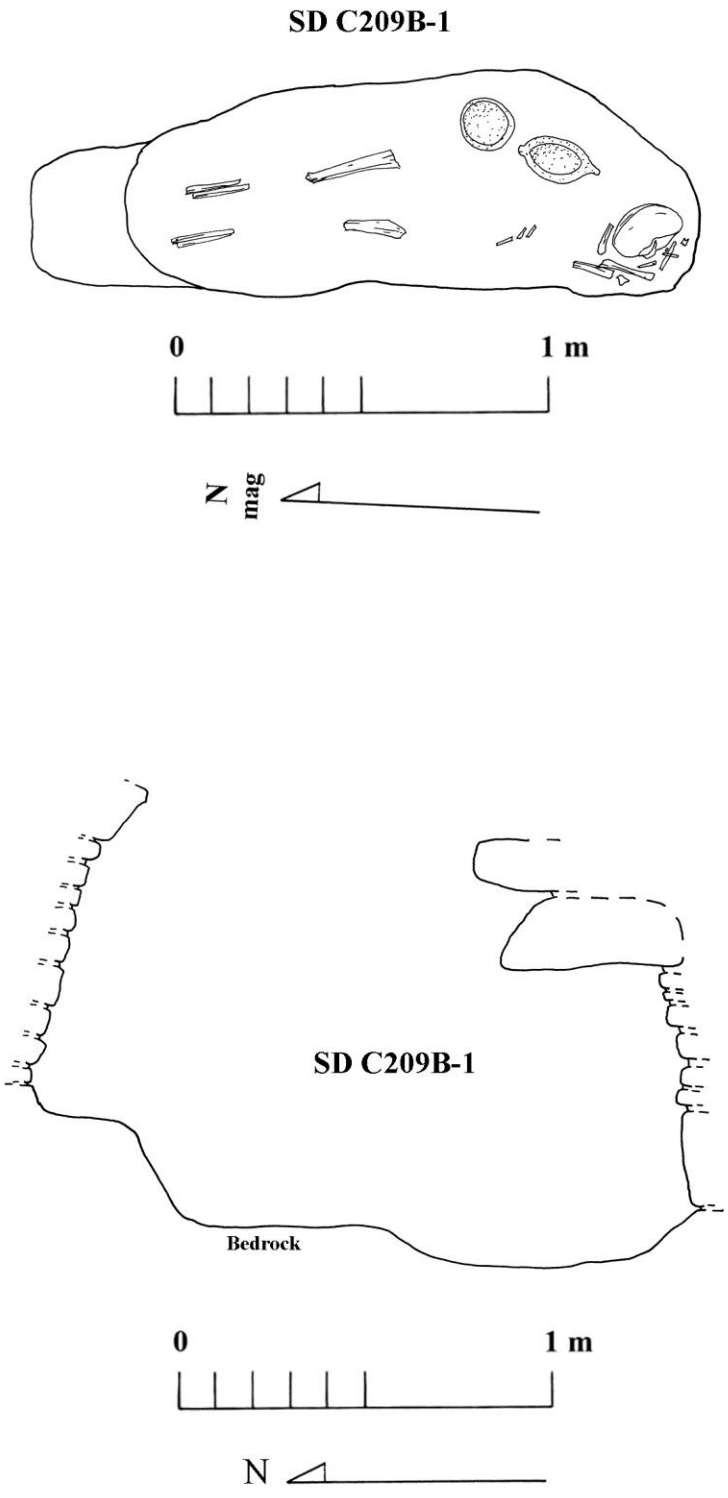


Figure 52: Plan of S.D. C209B-1 and cross-section of the chamber for S.D. C209B-1.

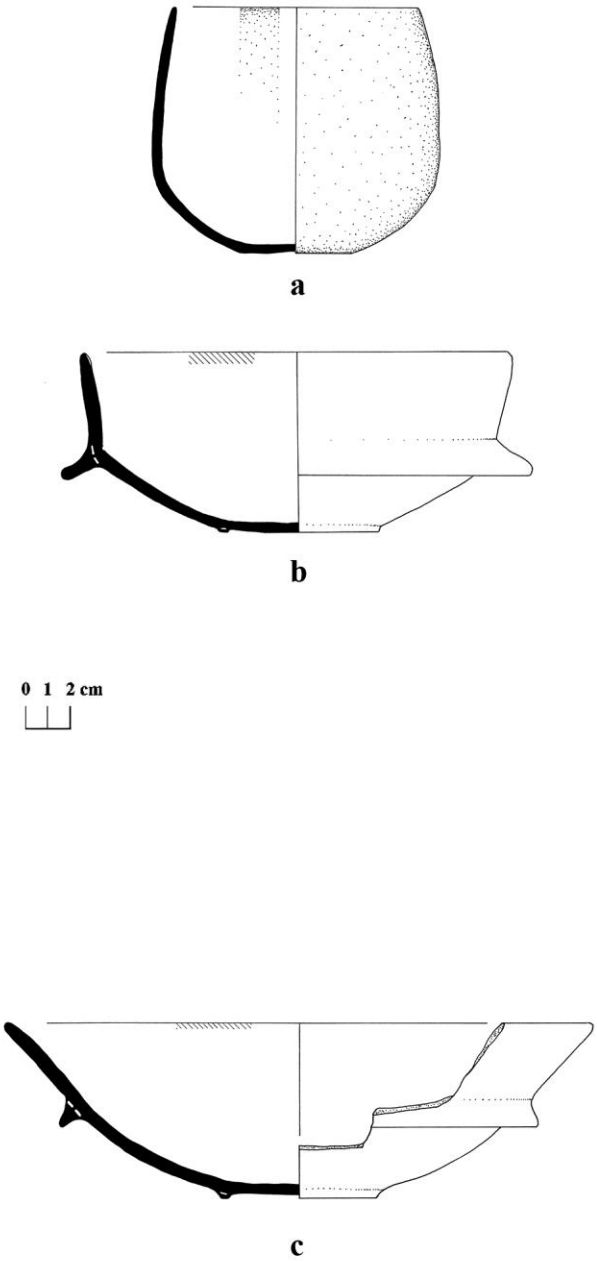


Figure 53: Ceramic vessels association with Operation C209B (a. and b. from S.D. C209B-1): a. eroded Saxche Orange-Polychrome , b. eroded Dos Arroyos Orange-Polychrome, c. eroded Pajarito Orange-Polychrome.

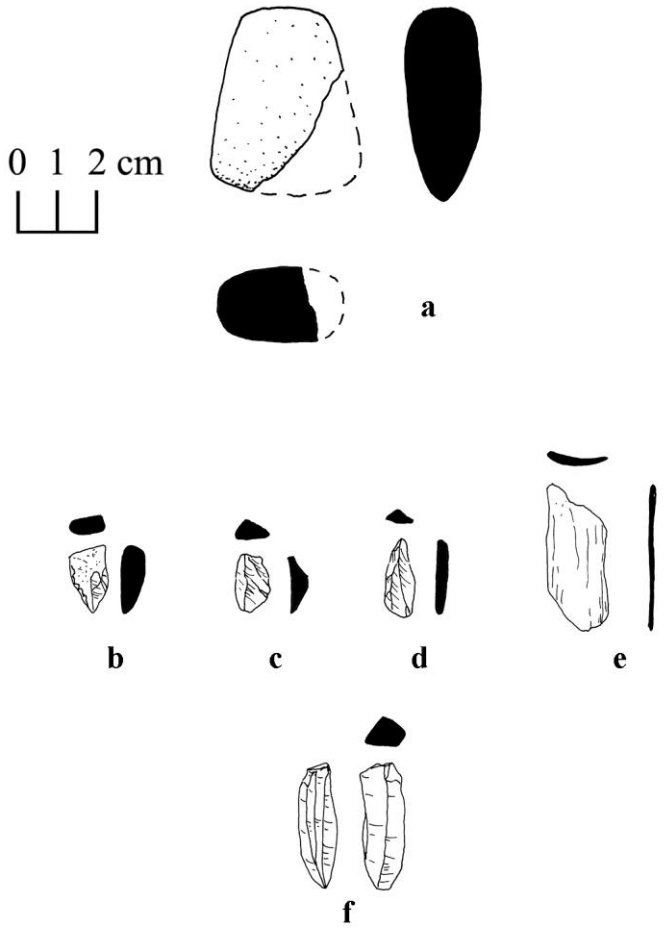


Figure 54: Artifactual materiasls from Operation C209B (b.-e. from S.D. C209B-1): a. broken greenstone celt; b. fragmentary chert drill; c., d. fragmentary chert blades; e. worked bone; f. partial chert core.

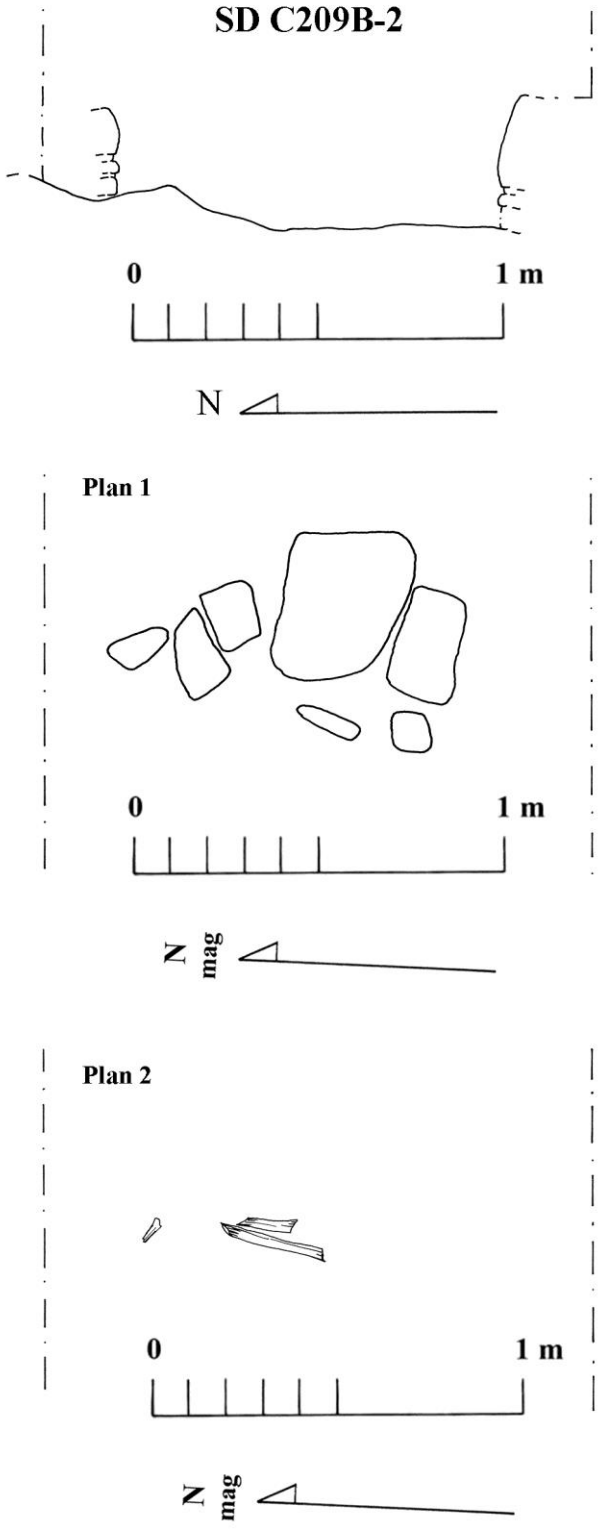


Figure 55: Cross-section and detailed plans related to S.D. C209B-2.

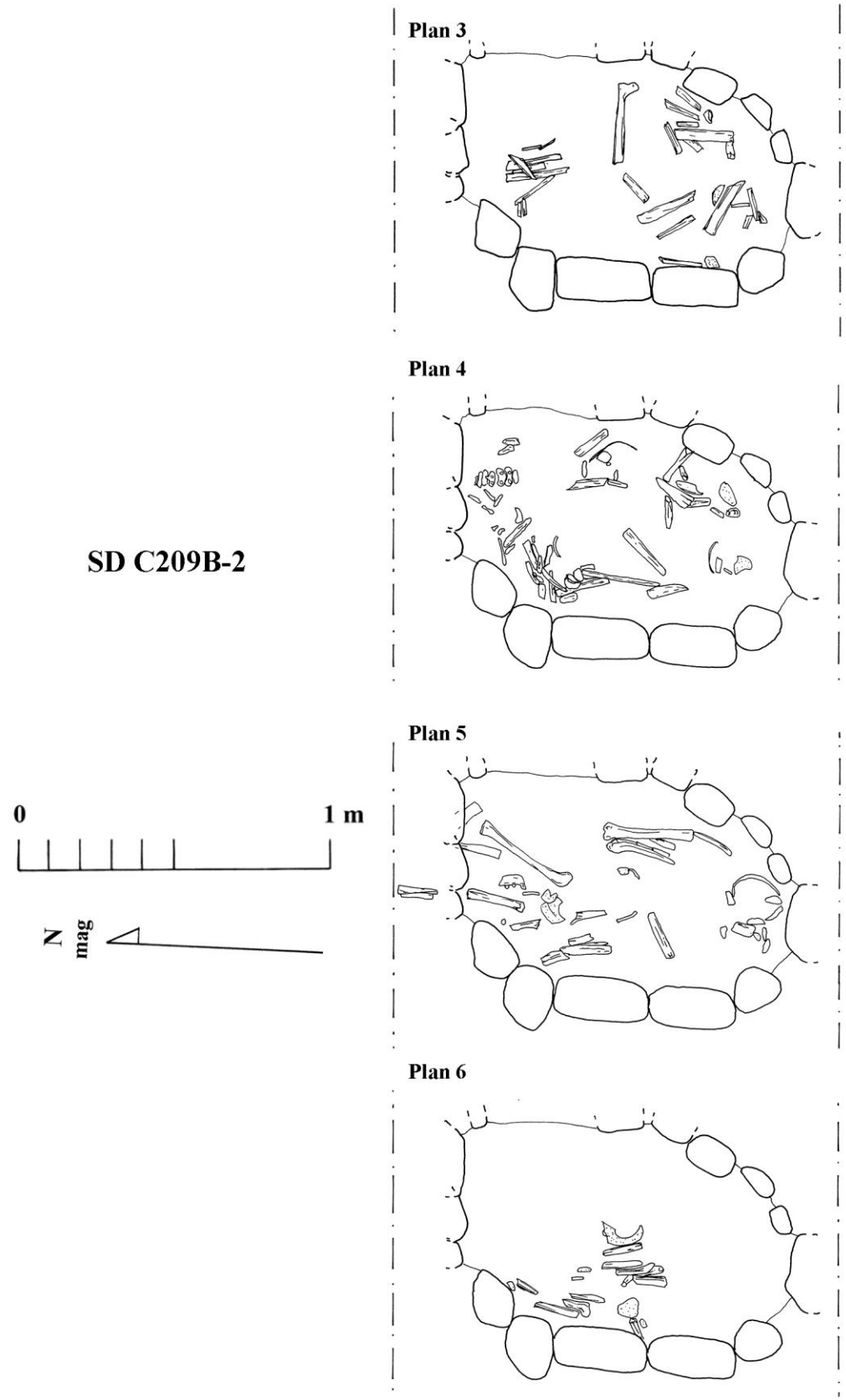


Figure 55: Cross-section and detailed plans related to S.D. C209B-2.

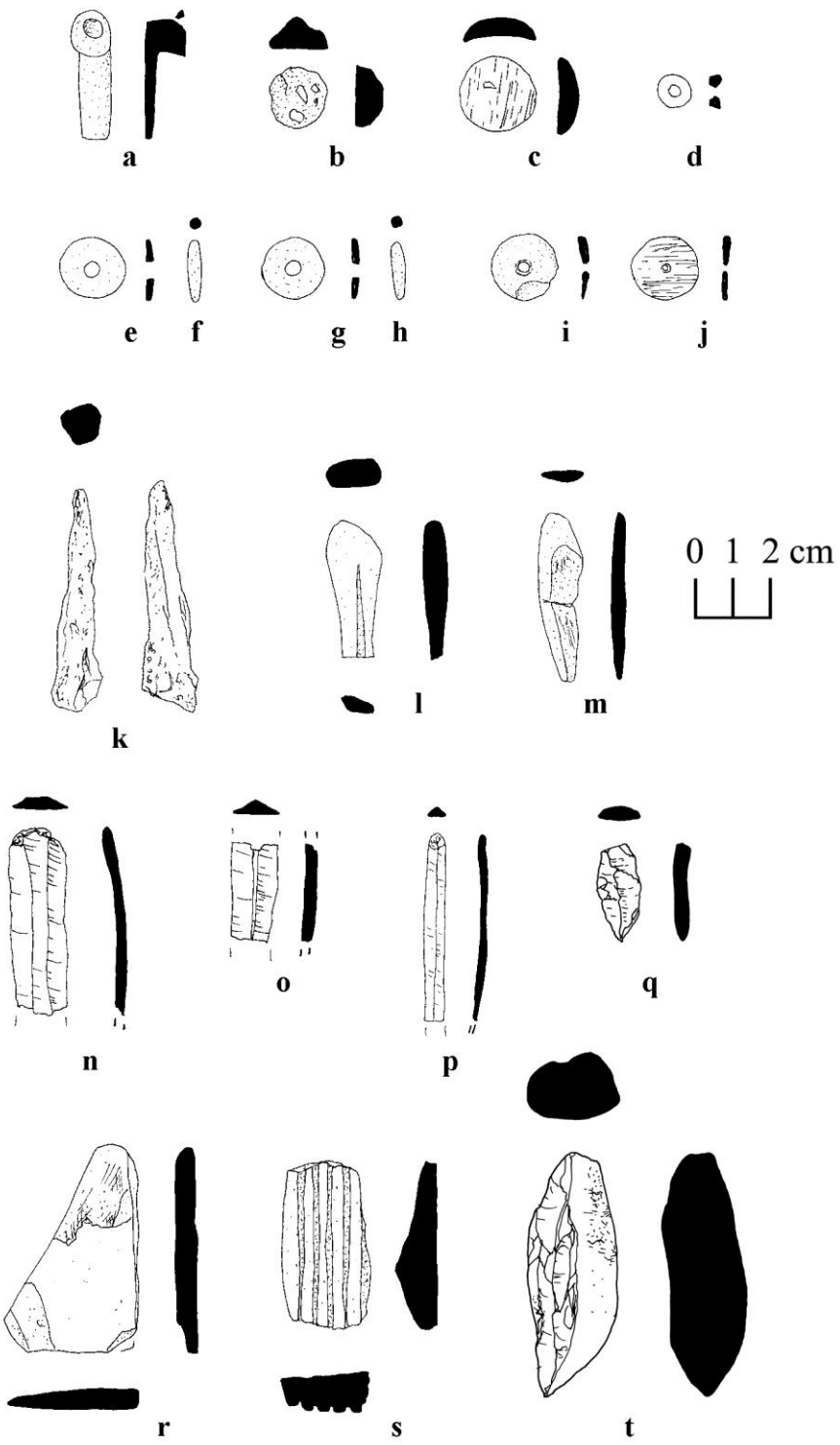


Figure 56: Artifactual materials associated with S.D. C209B-2: a. shell earflare; b. worked stone disk; c. worked shell disk; d. shell bead; e.-h. pair of shell earflares with posts; i.-j.drilled shell disks; k. fragmentary deer antler; l.-m. worked bone; n.-p. fragmentary obsidian blades; q.chert drill; r. shale mirror back; s. slate fragment of a barkbeater; t. chert chuk.

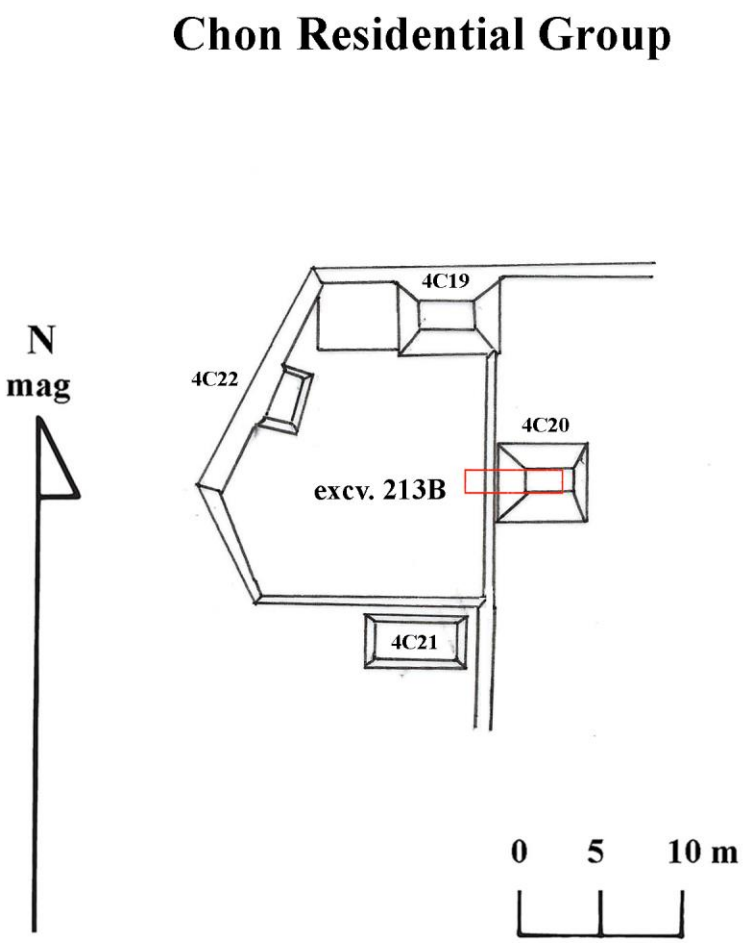


Figure 57: Plan of Chon Residential Group, showing the location of Operation C213B.

Figure 58: Photographs of excavation in Chon; upper is Operation C213B; lower is S.D. C213B-2.

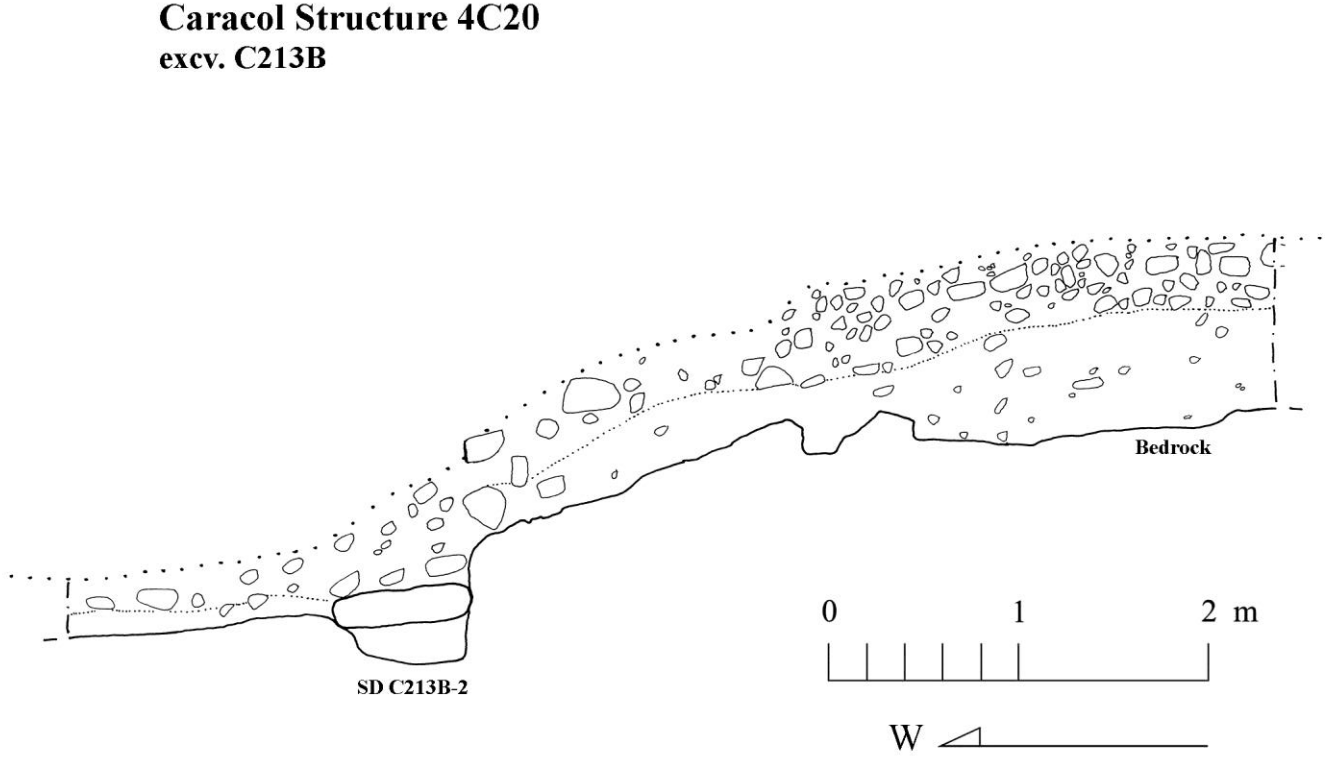


Figure 59: Section through Operation C213B and Caracol Structure 4C20.

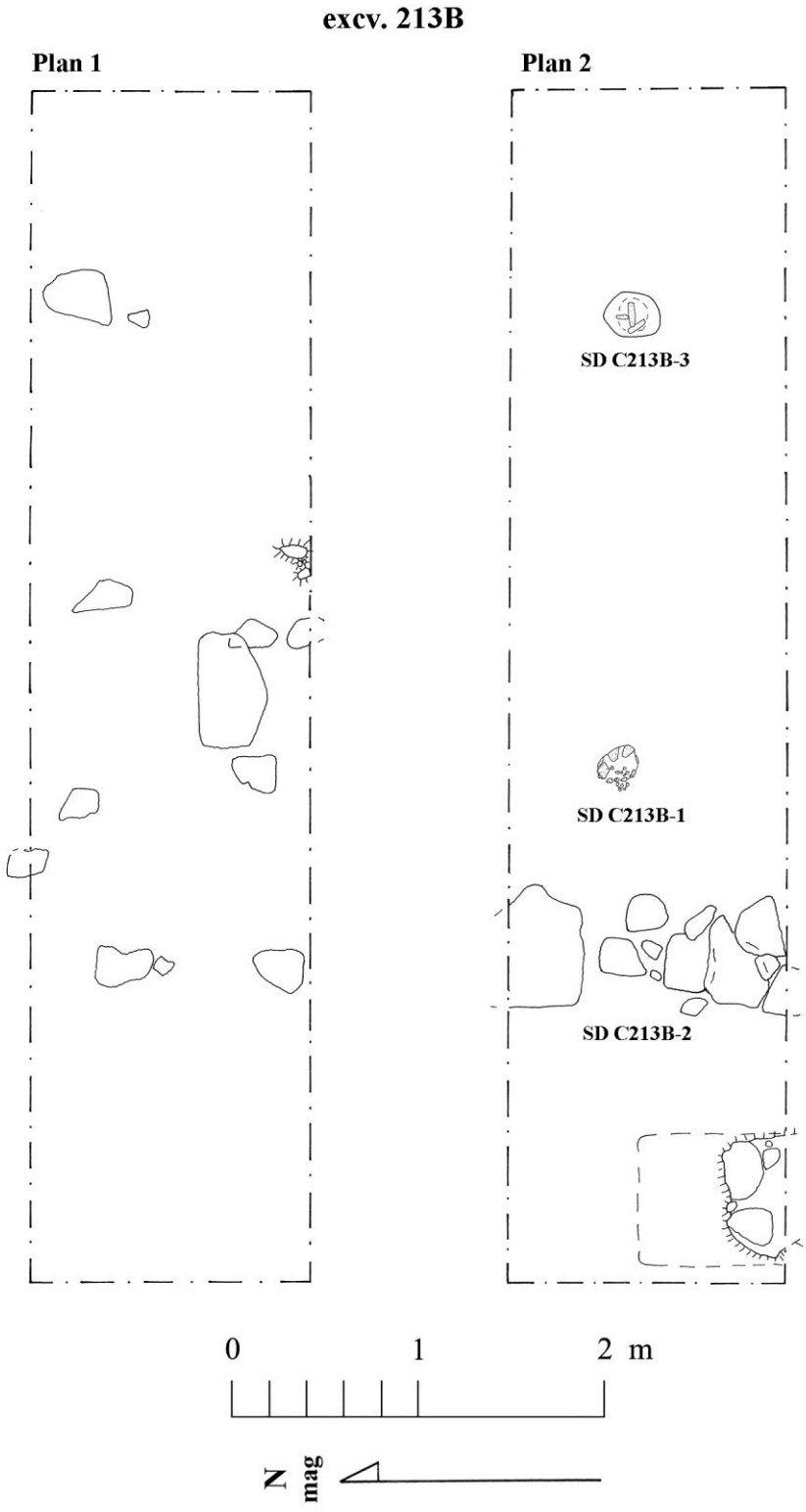


Figure 60: Plans of Operation C213B, showing architectural features and locations of S.D.s C213B-1, C213B-2, and C213B-3.

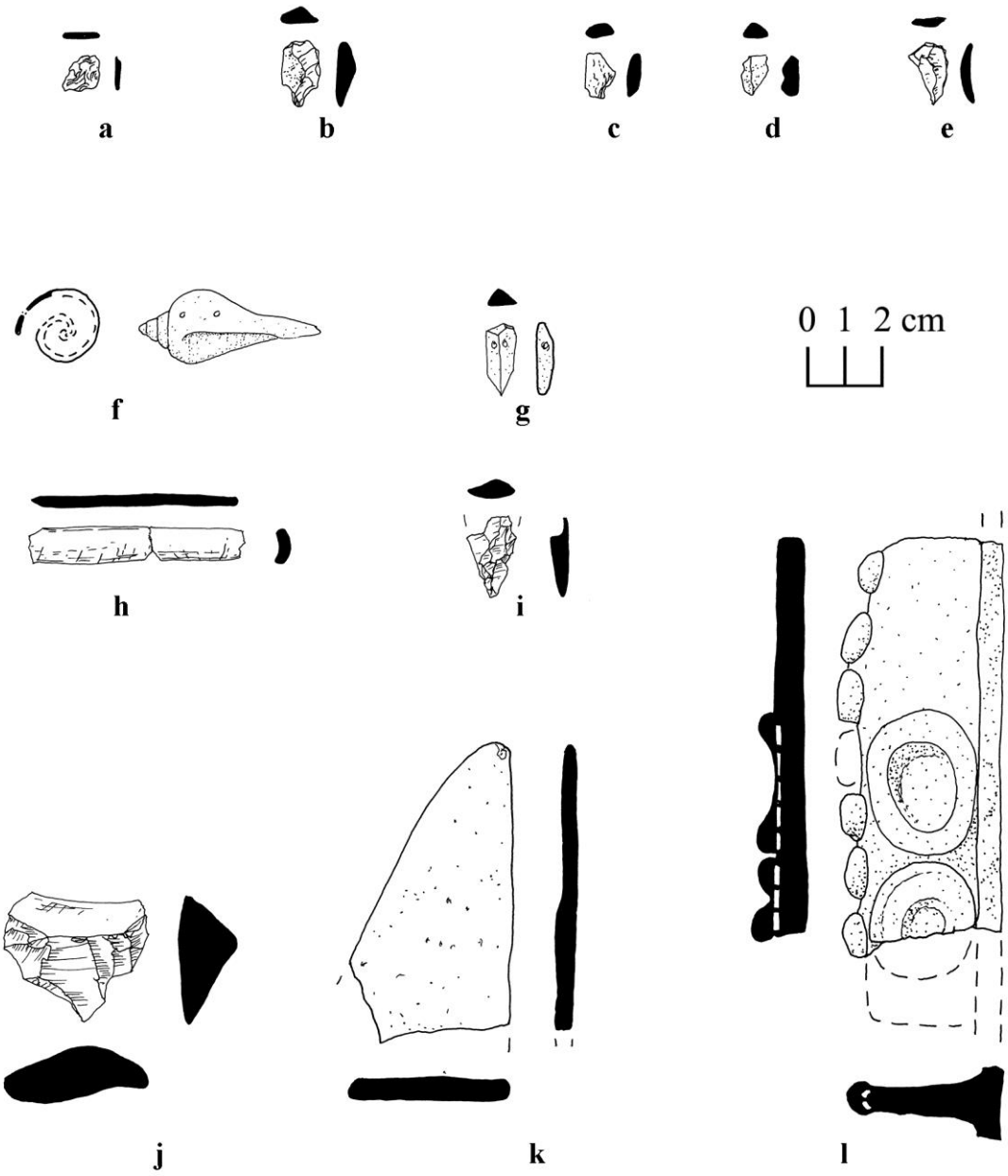


Figure 61: Artifactual materials from Operation C213B (c.,d. from S.D. C213B-1; f.-i. from S.D. C213B-2): a.pyrite chip; b. partial chert drill; c.,d. jadeite chips; e. chert flake; f. worked marine shell; g. greenstone pendent; h. worked bone; i. fragmentary chert biface; j. large chert drill; k. slate mirror back; l. Late Classic censer flange.

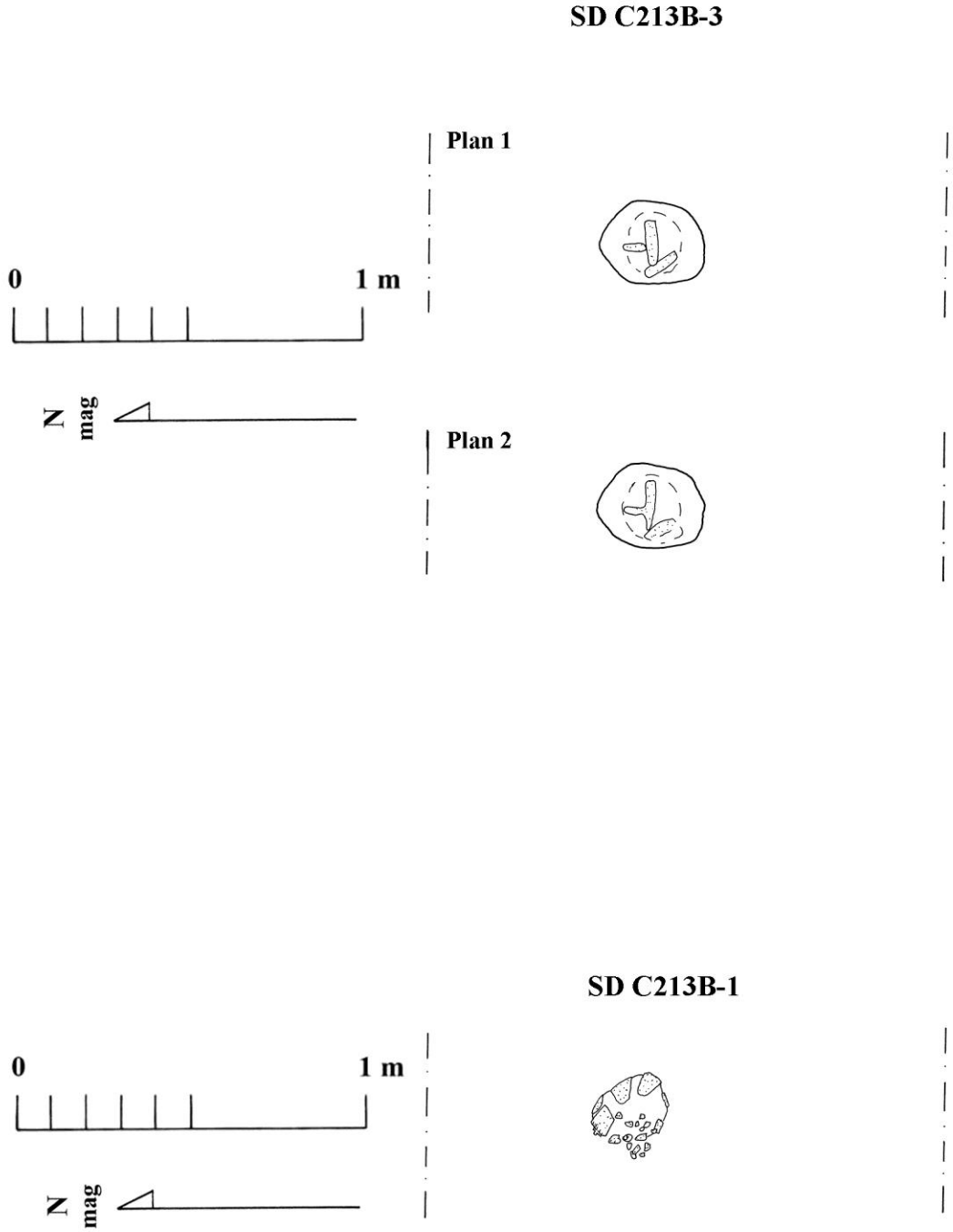


Figure 62: Detailed plans of S.D. C213B-1 and S.D. C213B-3.

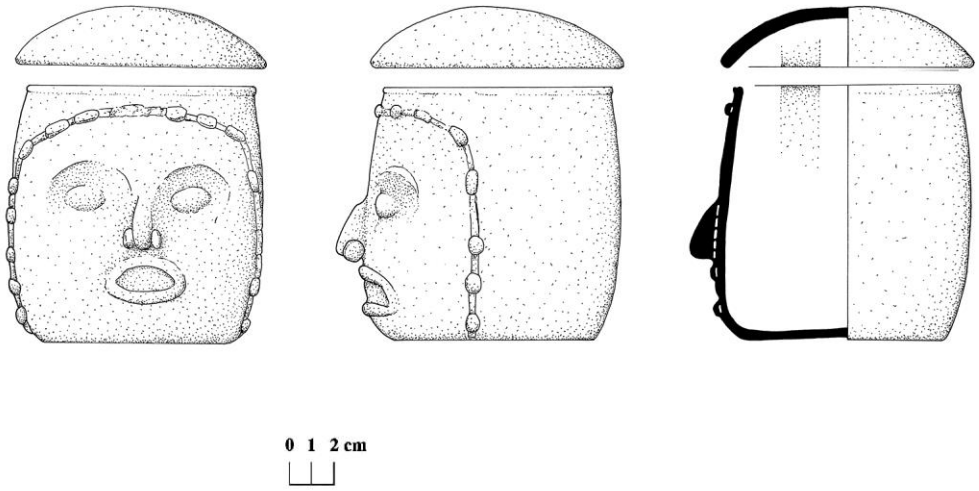


Figure 63: Hebe Modeled cache vessels and lid from S.D. C213B-1.

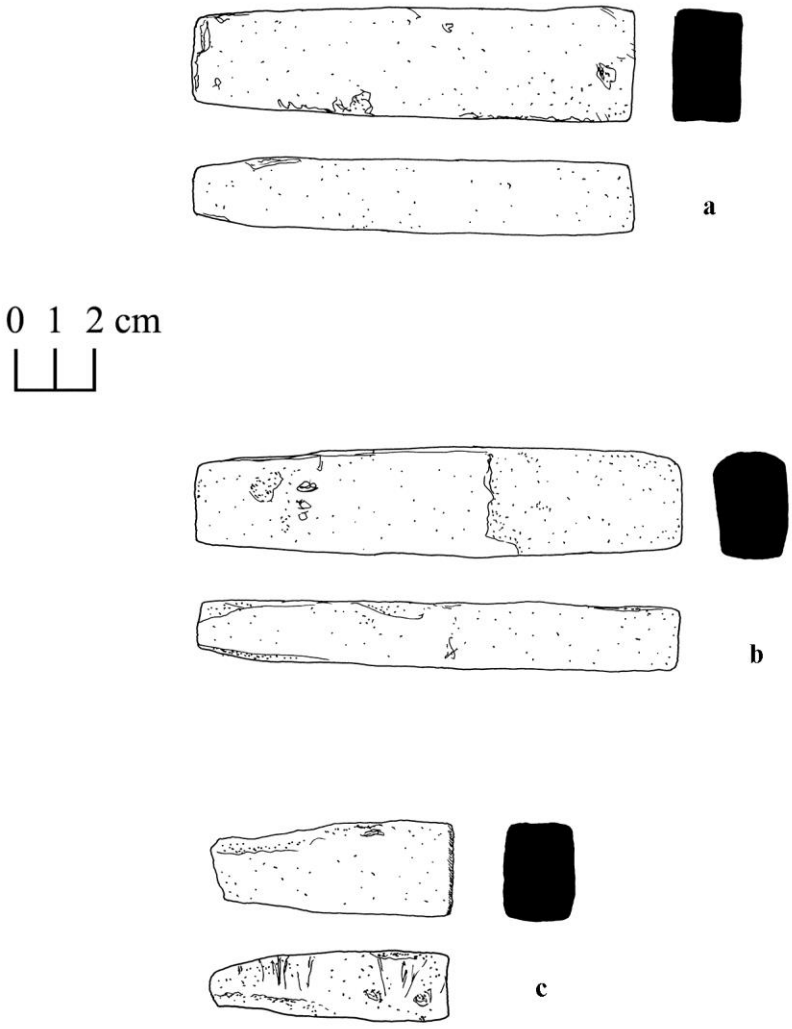


Figure 64: Limestone bars associated with S.D. C213B-3.

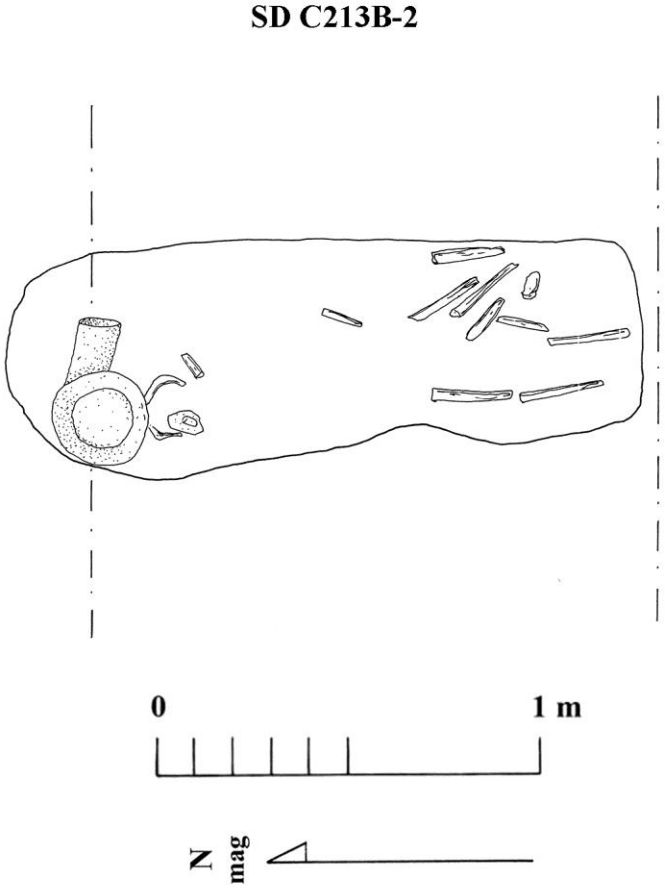


Figure 65: Plan of S.D. C213B-2

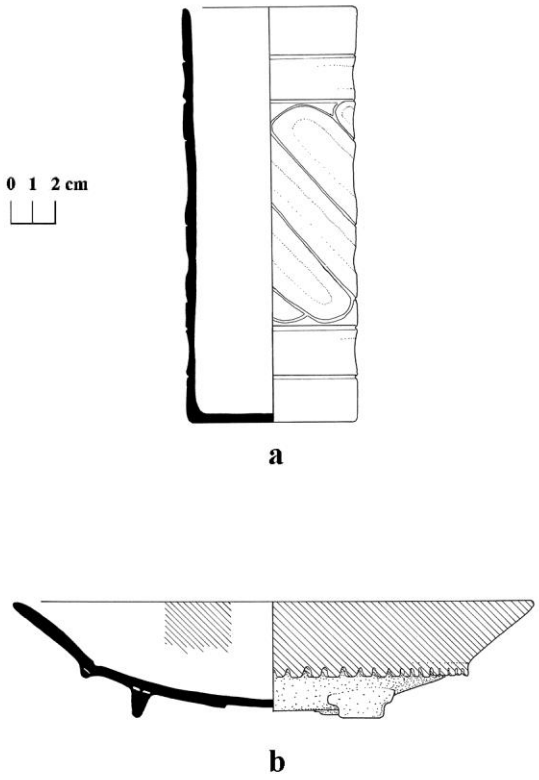


Figure 66: Ceramic vessels associated with S.D. C213B-2: a. Chilar Fluted, b. possibly McRae Impressed.

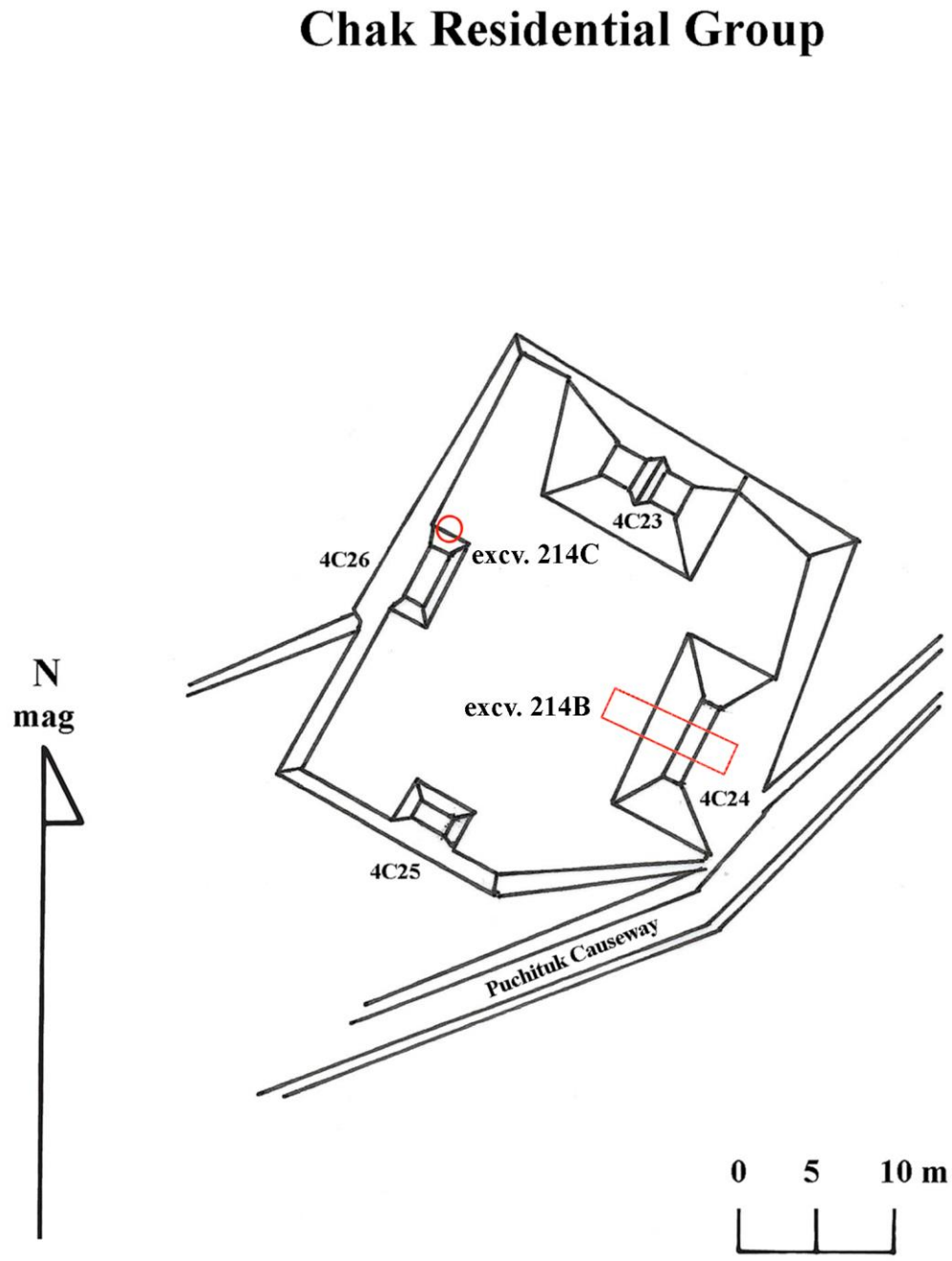


Figure 67: Plan of Chak Residential Group, showing the locations of Operations C214B and C214C.

Figure 68: Photographs of excavations in Chak: upper photo looking east; lower photo showing S.D.s C214B-5 and C214B-6.

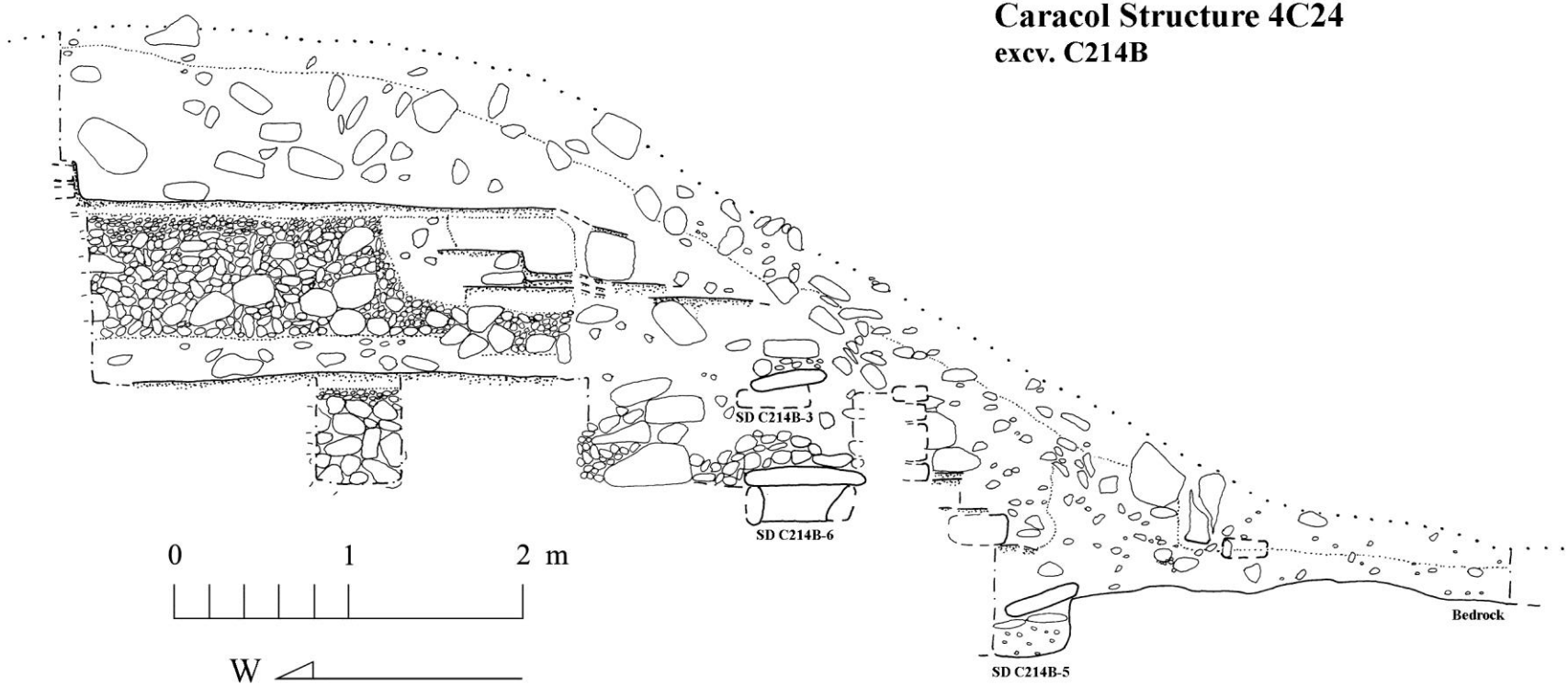


Figure 69: Section through Operation C214B and Caracol Structure 4C24.

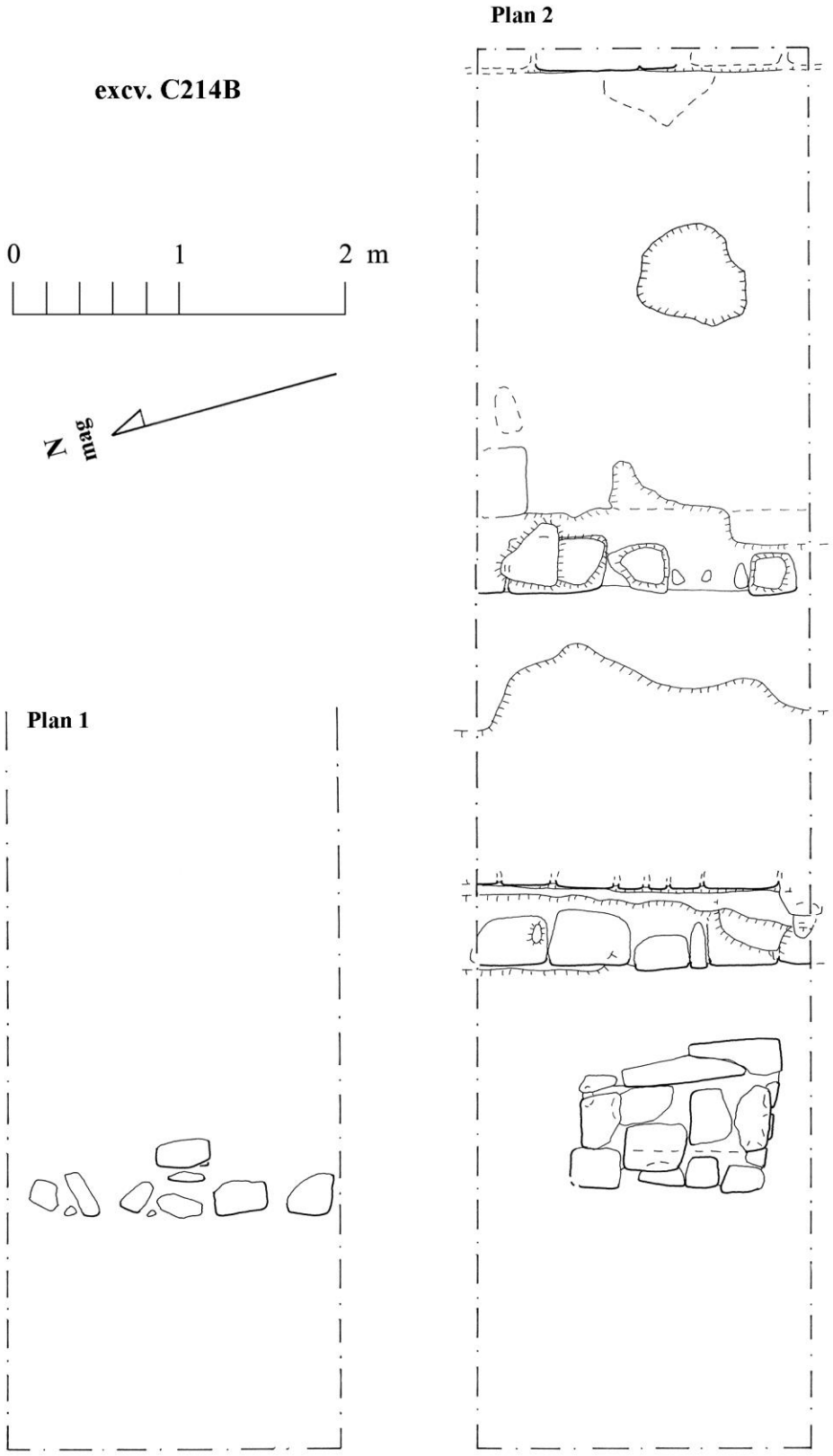
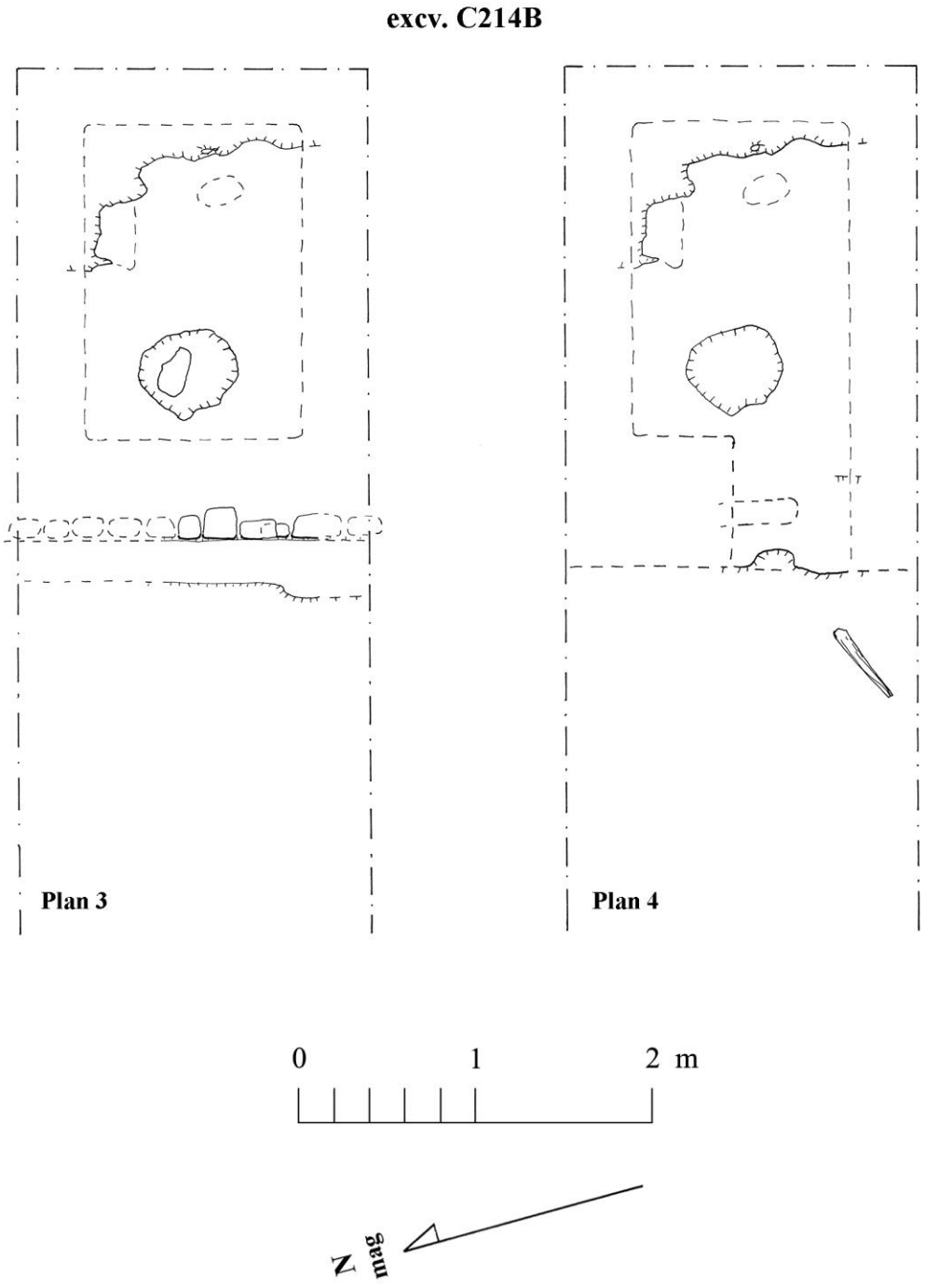


Figure 70: Plans of Operation C214B.



F

igure 70:Plans of Operation C214B.

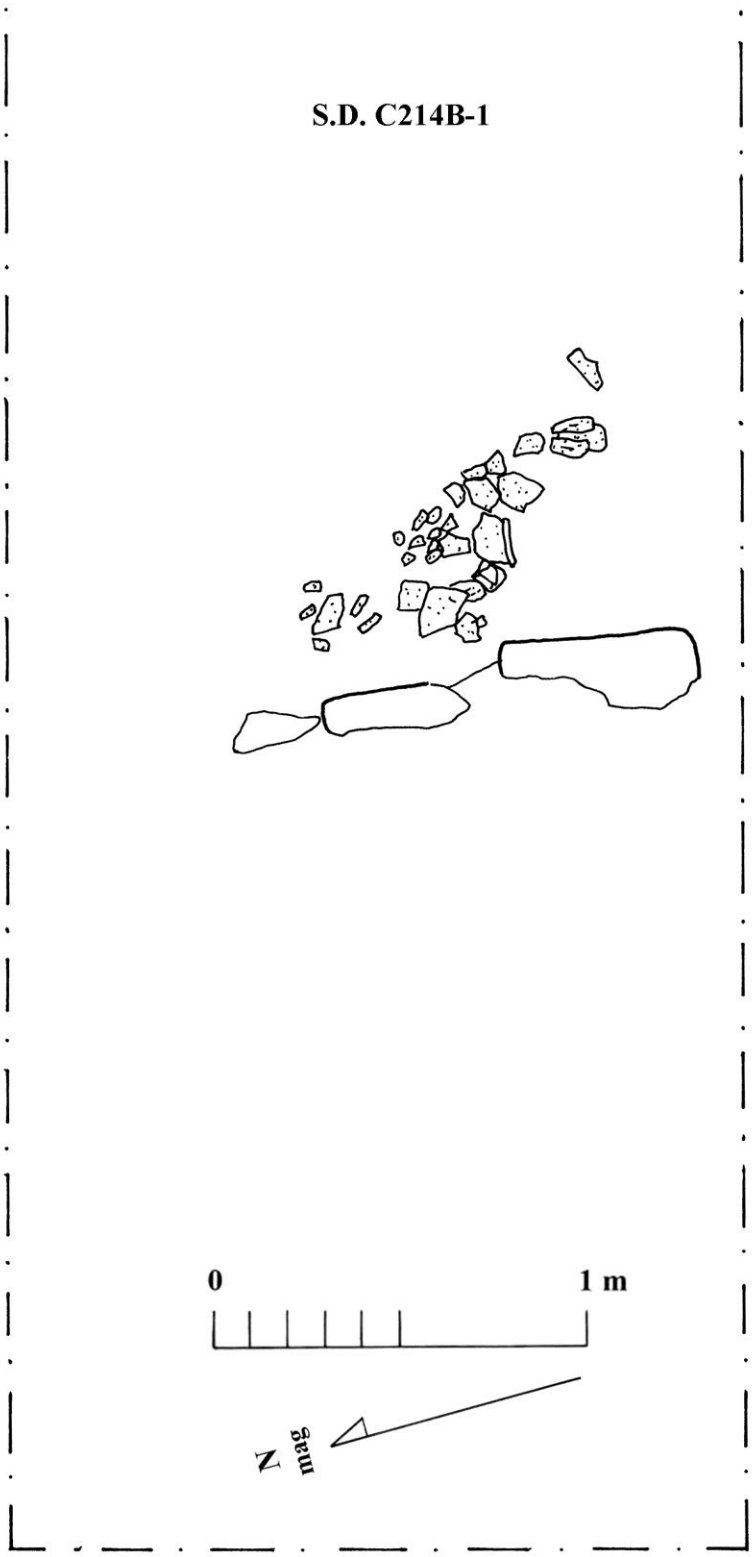


Figure 71: Detailed plan of S.D. C214B-1.

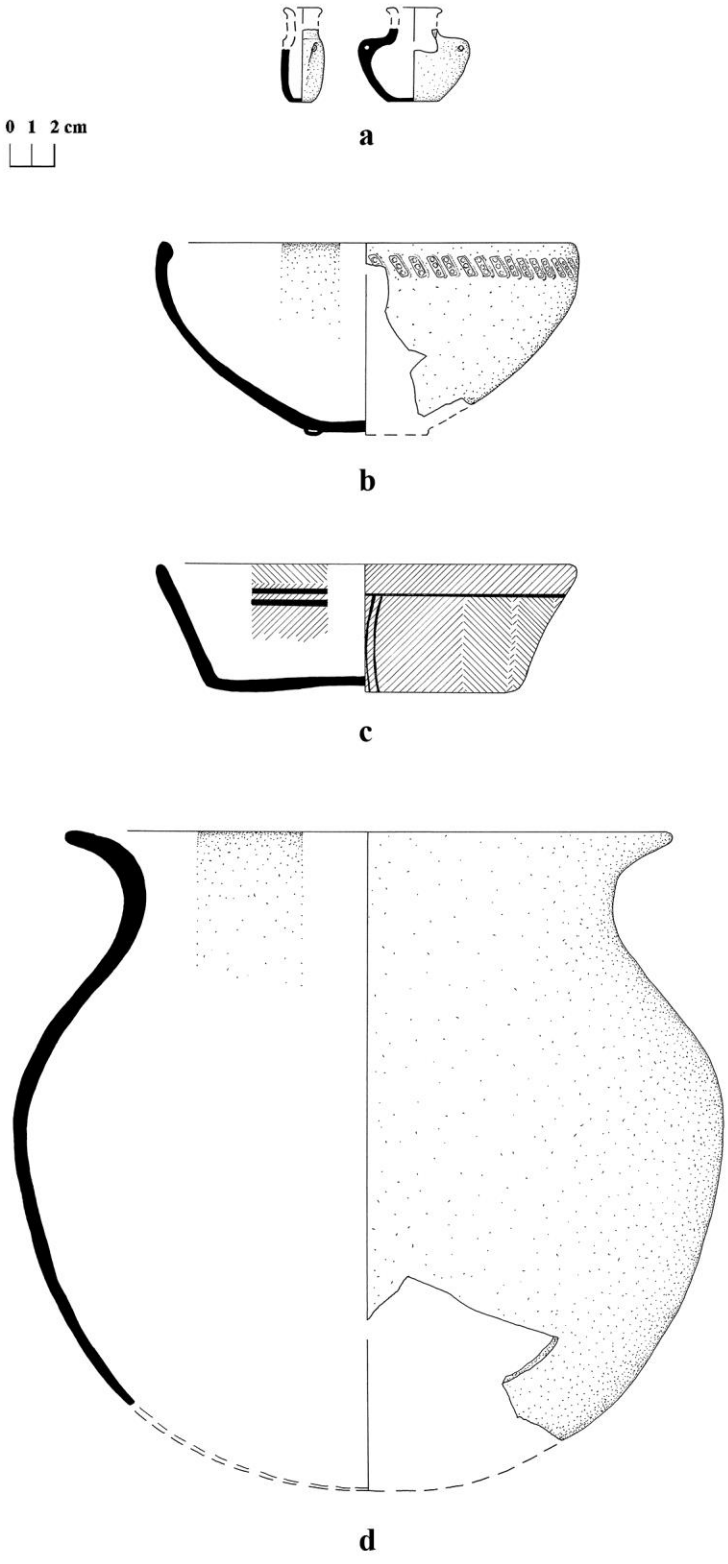


Figure 72: Vessels from Operation C214B: a. undesignated type (probably associated with S.D. C214B-4); b. Pantano Impressed (from S.D. C214B-4); c. Benque Viejo Polychrome (from S.D. C214B-6); d. Valentin Unslipped (from S.D. C214B-1).

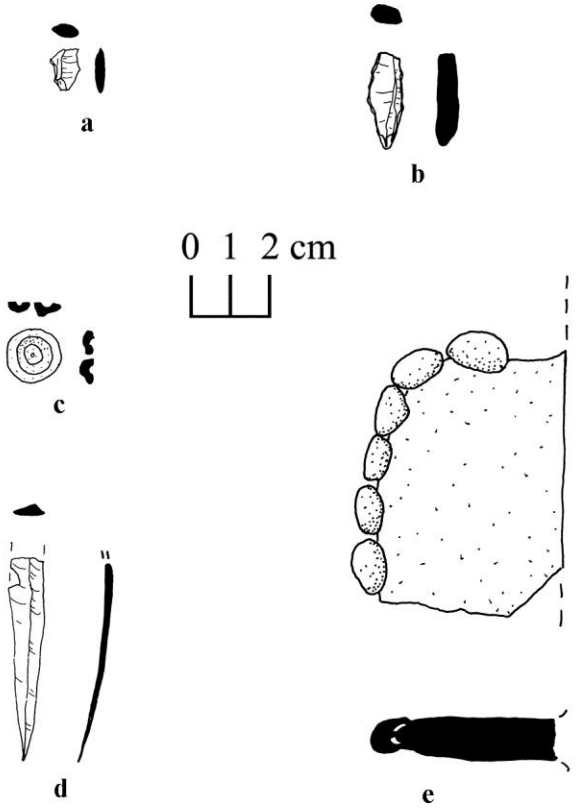


Figure 73: Artifactual materials from Operation C214B: a. jadeite chip; b. chert drill; c. shell bead (from S.D. C214B-4); d. obsidian lancet (from S.D. C214B-5); e. fragmentary Late Classic censer flange.

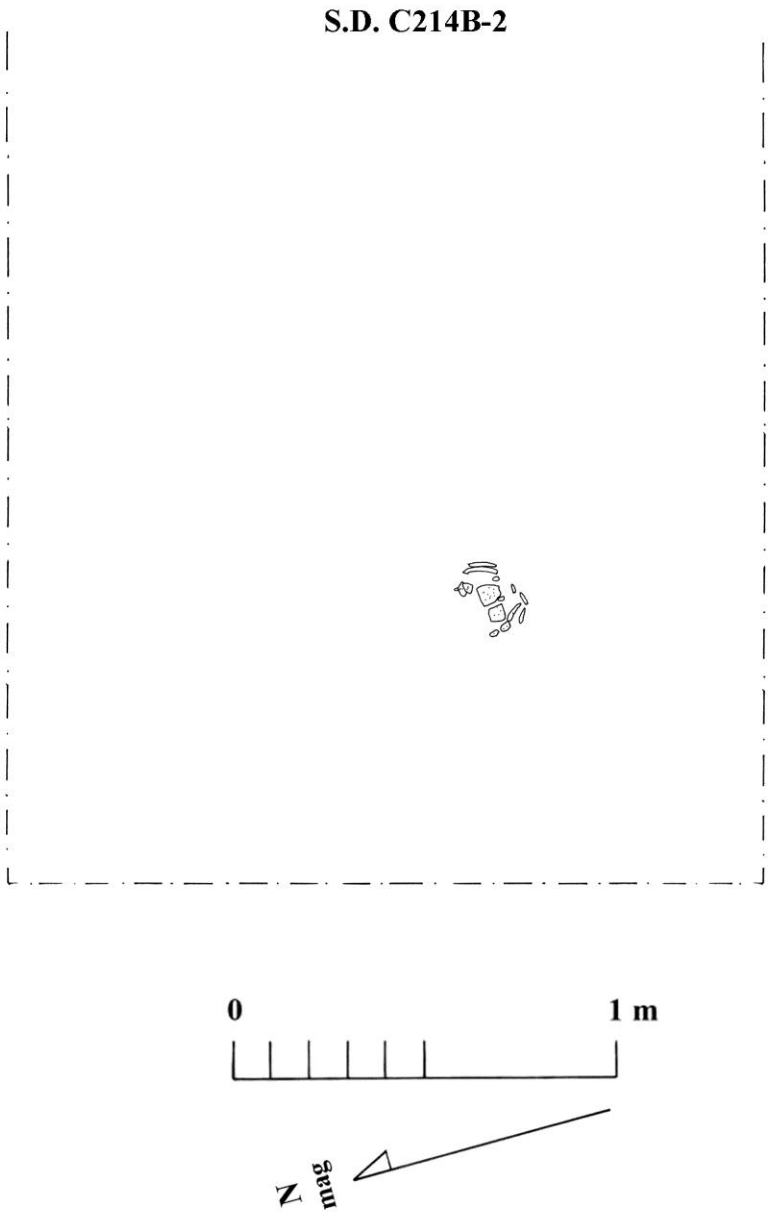


Figure 74: Detailed plan of S.D. C214B-2

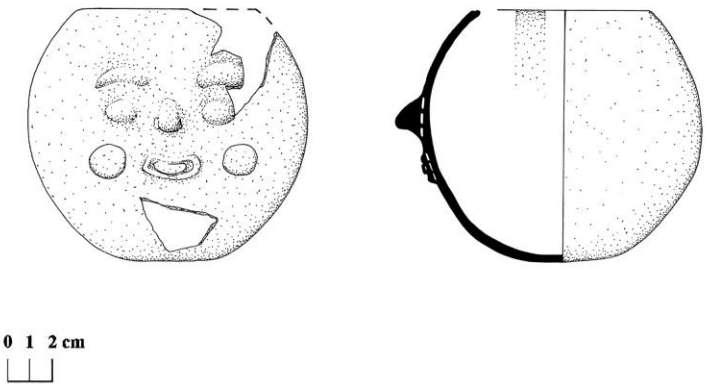


Figure 75: Hebe Modeled vessel from S.D. C214B-2.

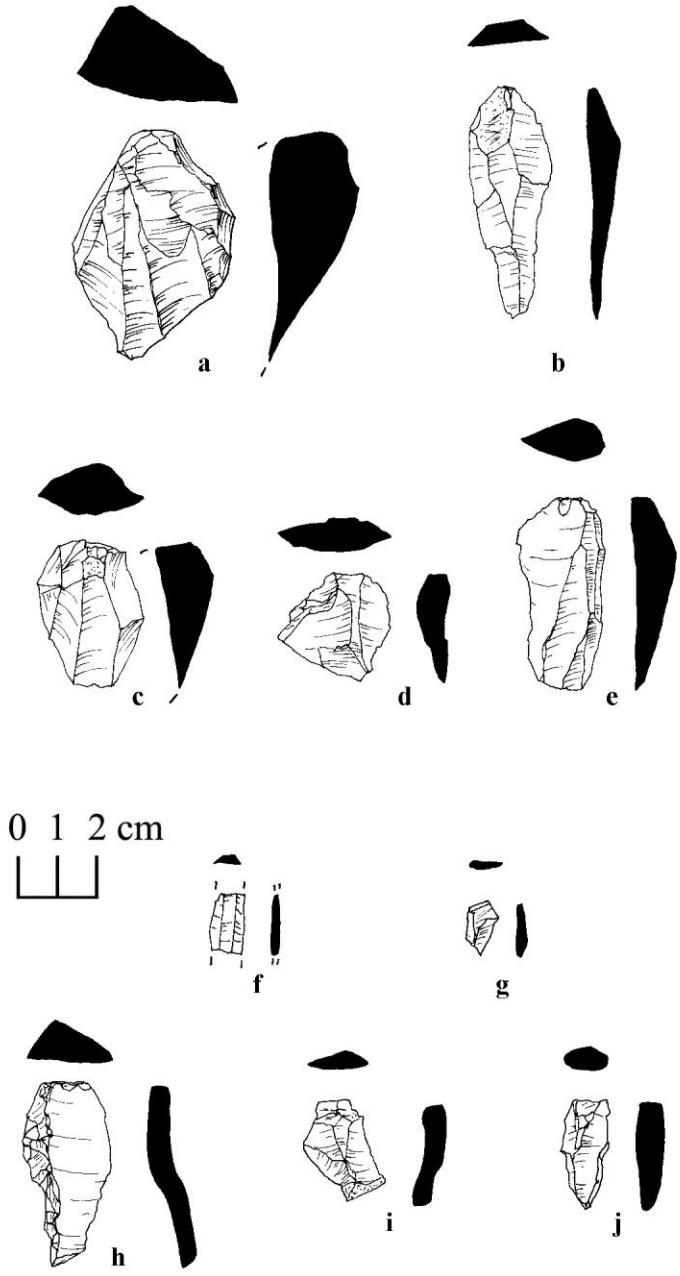


Figure 76: Artifactual materials from S.D. C214B-2 and S.D. C214B-3 (a.-e. from S.D. C214B-2; f.-j. from S.D. C214B-3): a.-e. obsidian eccentrics; f. fragmentary obsidian blade; g., j. chert drills; h., i. chert blades.

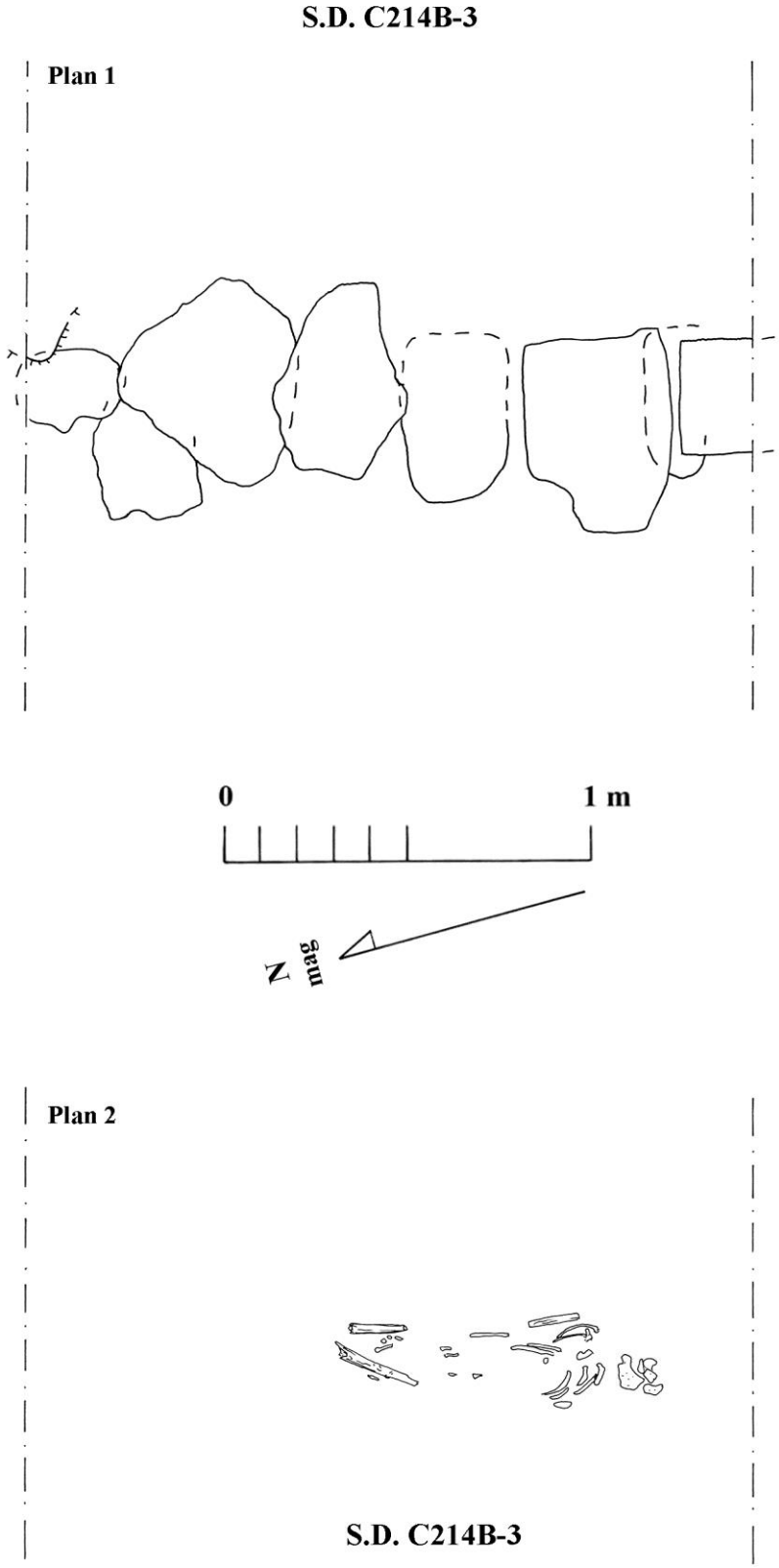


Figure 77: Detailed plans of capstones and interment comprising S.D. C214B-3.

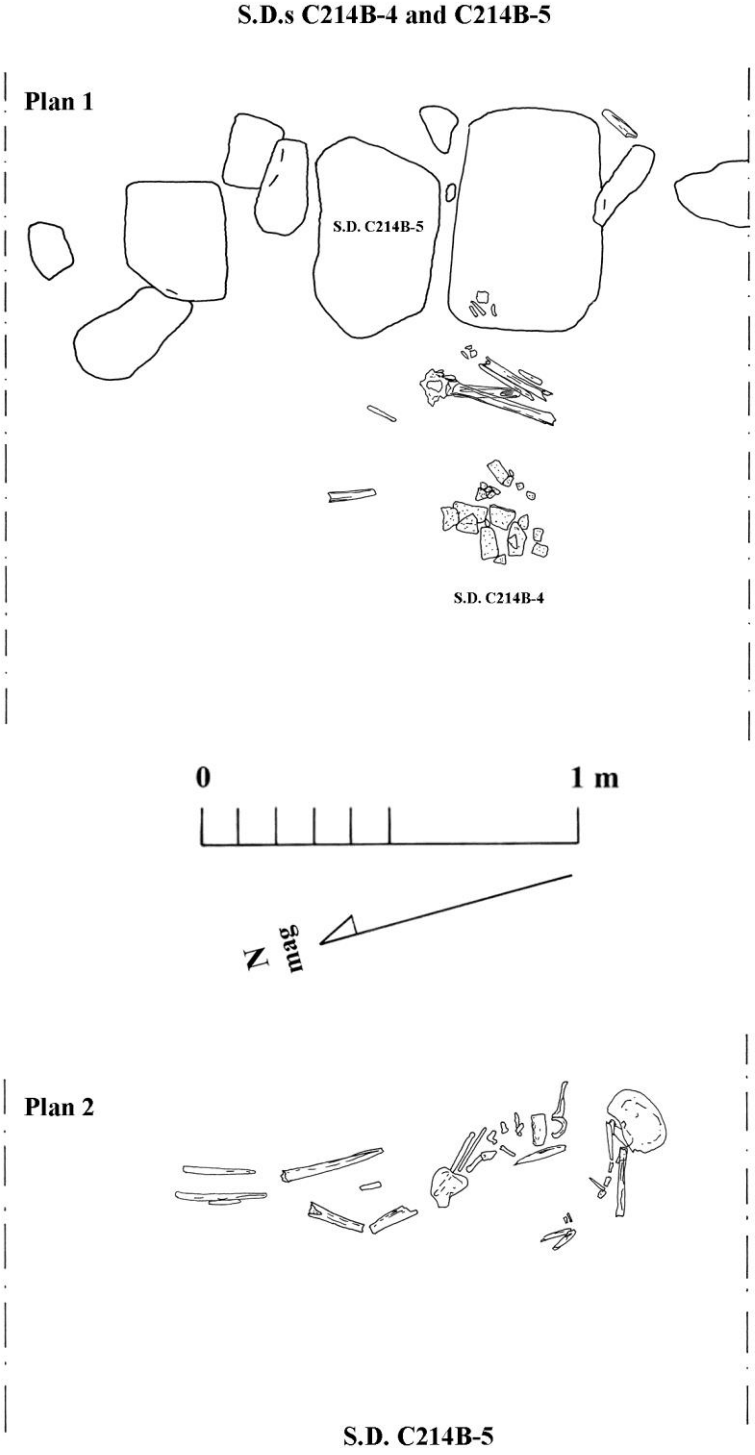


Figure 78: Detailed plans of S.D.s C214B-4 and C214B-5.

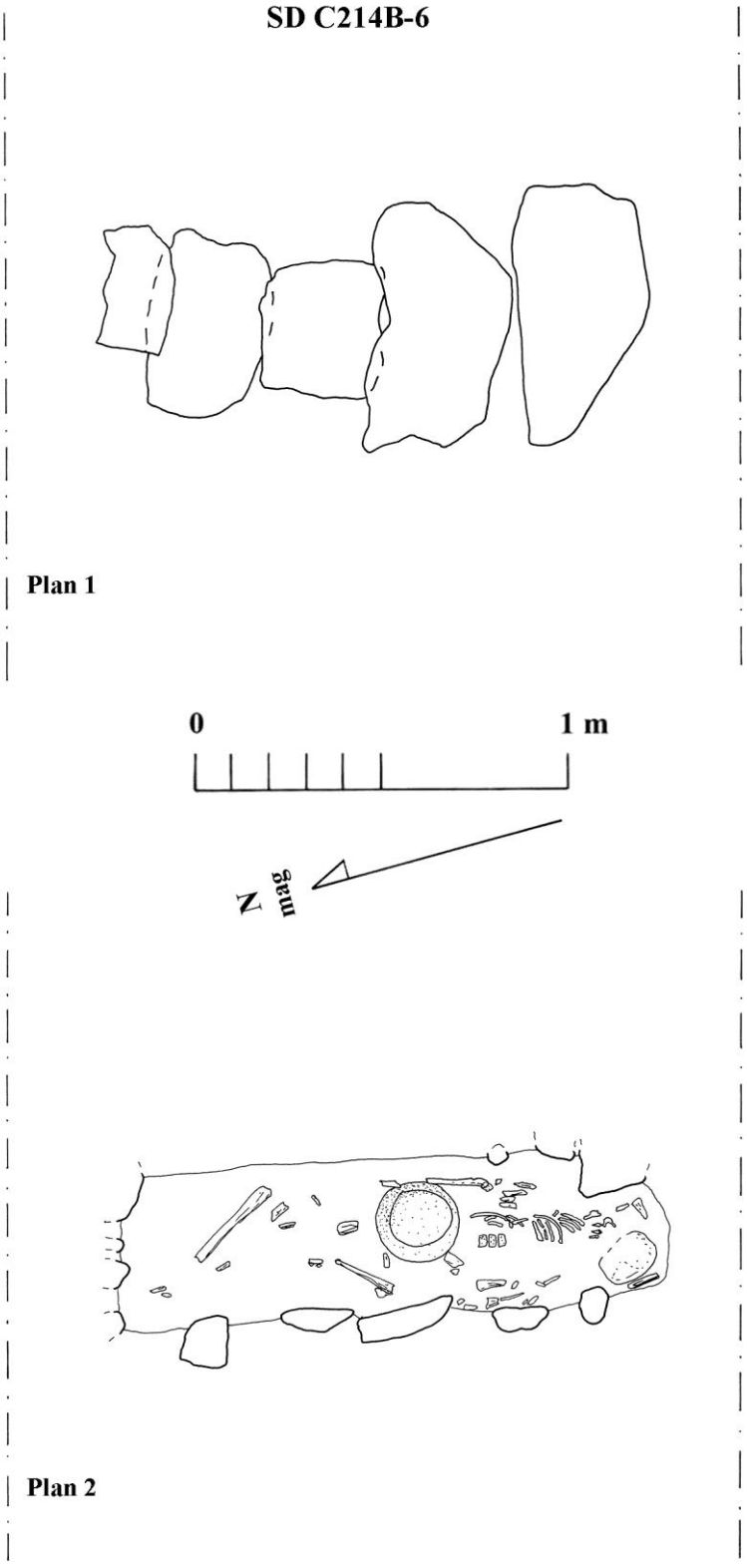


Figure 79: Detailed plans of capstones and interment comprising S.D. C214B-6.

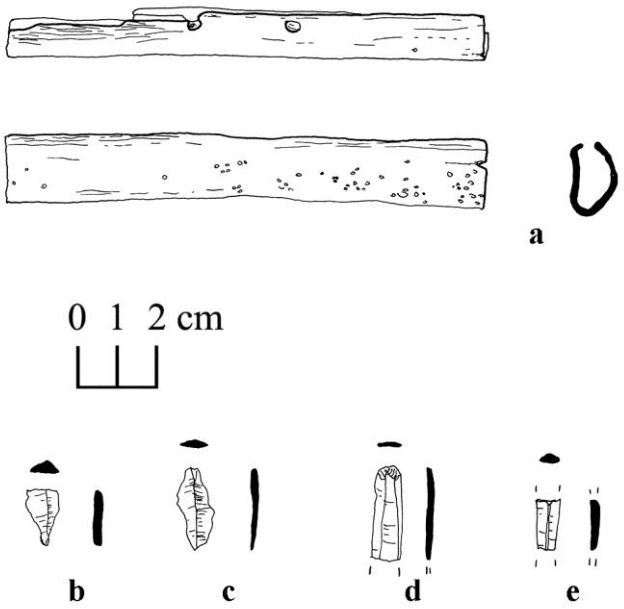


Figure 80: Artifactual materials associated with S.D. C214B-6: a. worked bone drilled tubular bar; b. chert drill; c. chert blade; d., e. fragmentary obsidian blades.

Figure 81: Photographs of Operation C214C, chultun excavation beneath Caracol Structure 4C26.

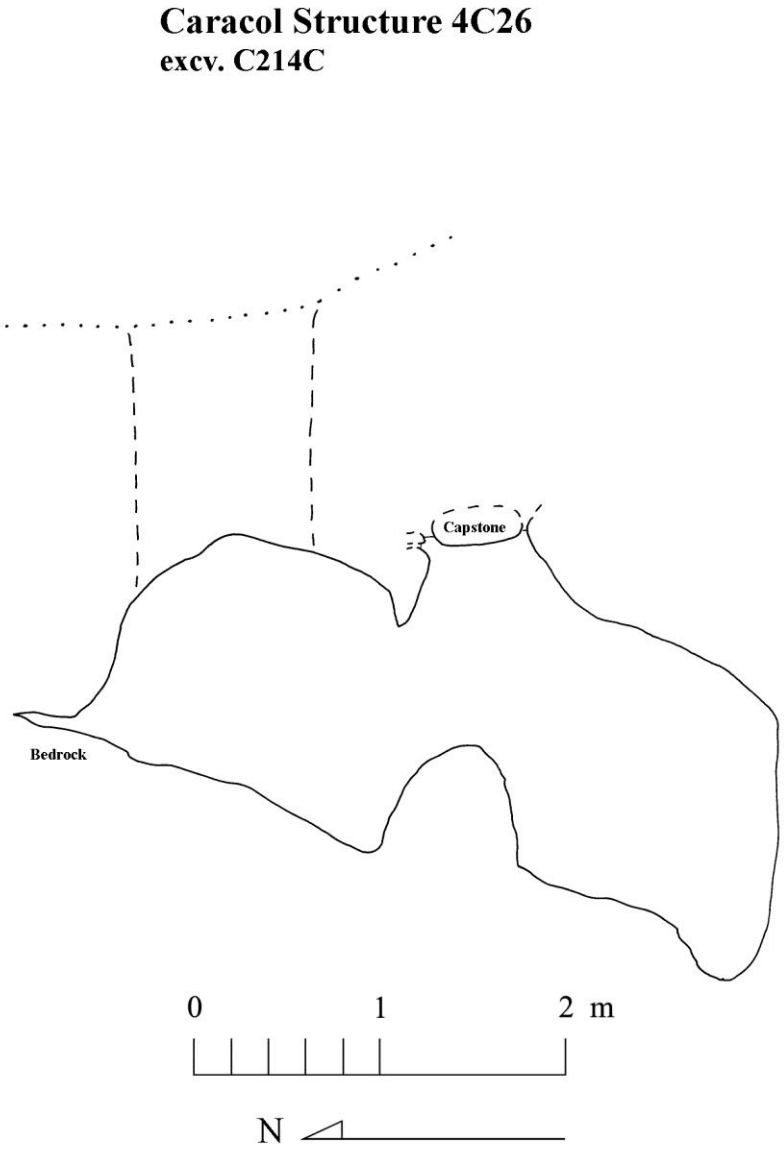


Figure 82: Section of Operation C214C.

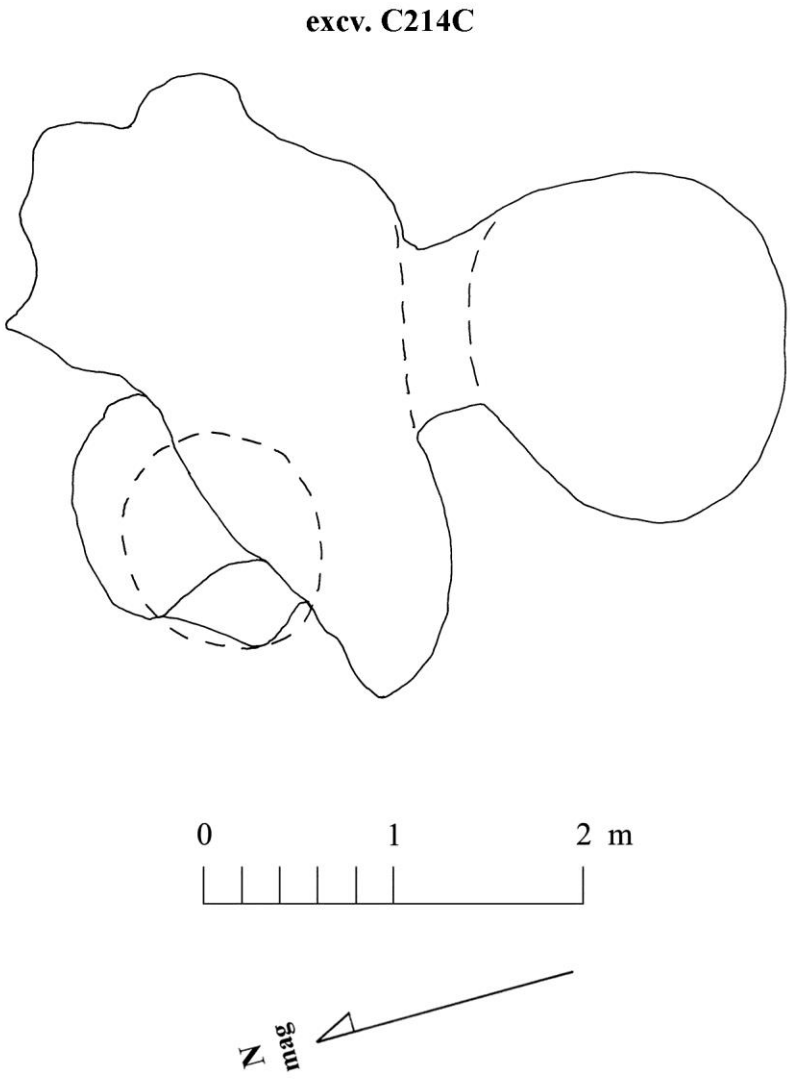


Figure 83: Plan of Operation C214C.

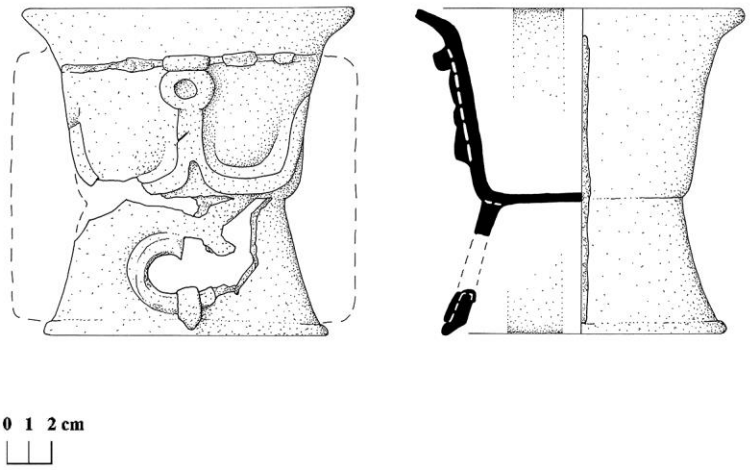


Figure 84: Candelario Appliqued incensario recovered within Operation C214C.

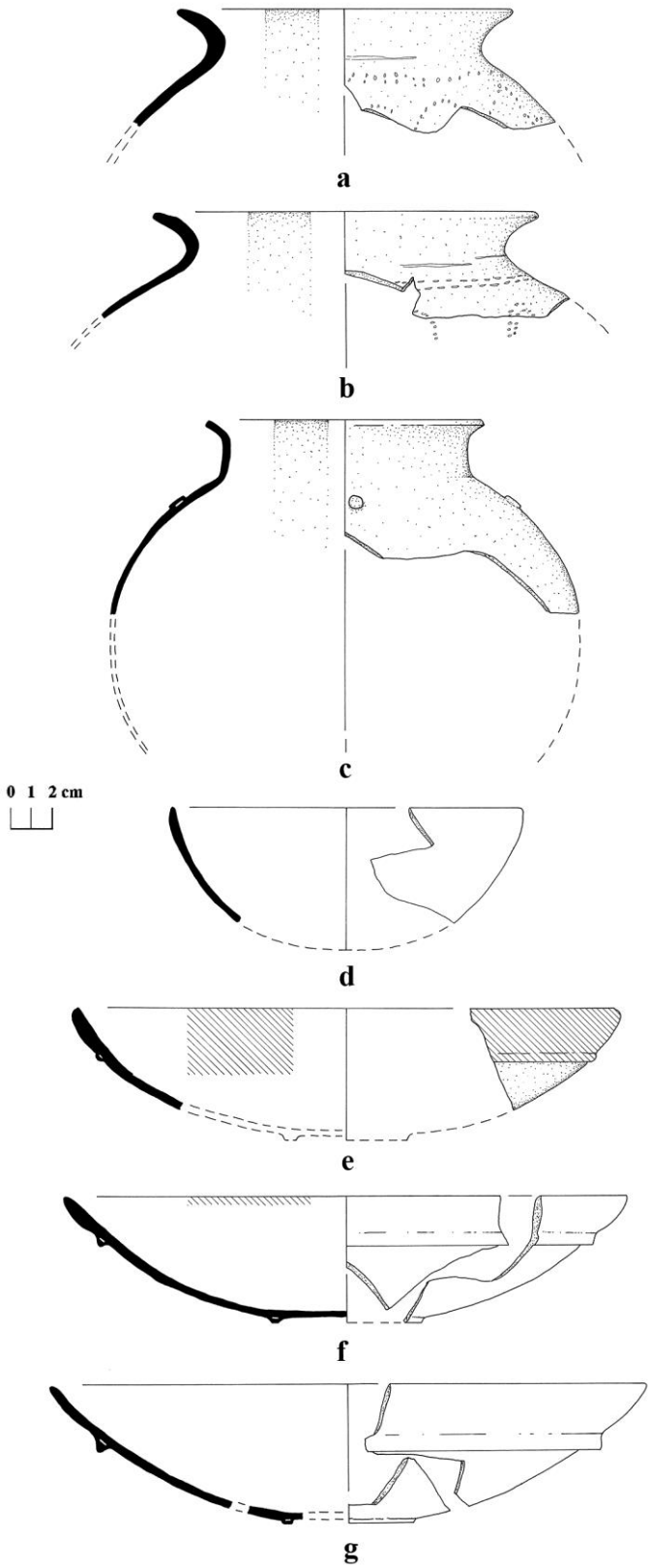


Figure 85: Partial ceramic vessels recovered from Operation C214C: a., b. Hoya Punctated; c. Quintal Unslipped; d. possibly Fama Buff; e. Dos Hemanos Red; f., g. possibly Pajarito Polychrome.

Figure 86: Photograph of Matthew Lachniet carrying out soil collection in Puchituk Plaza.

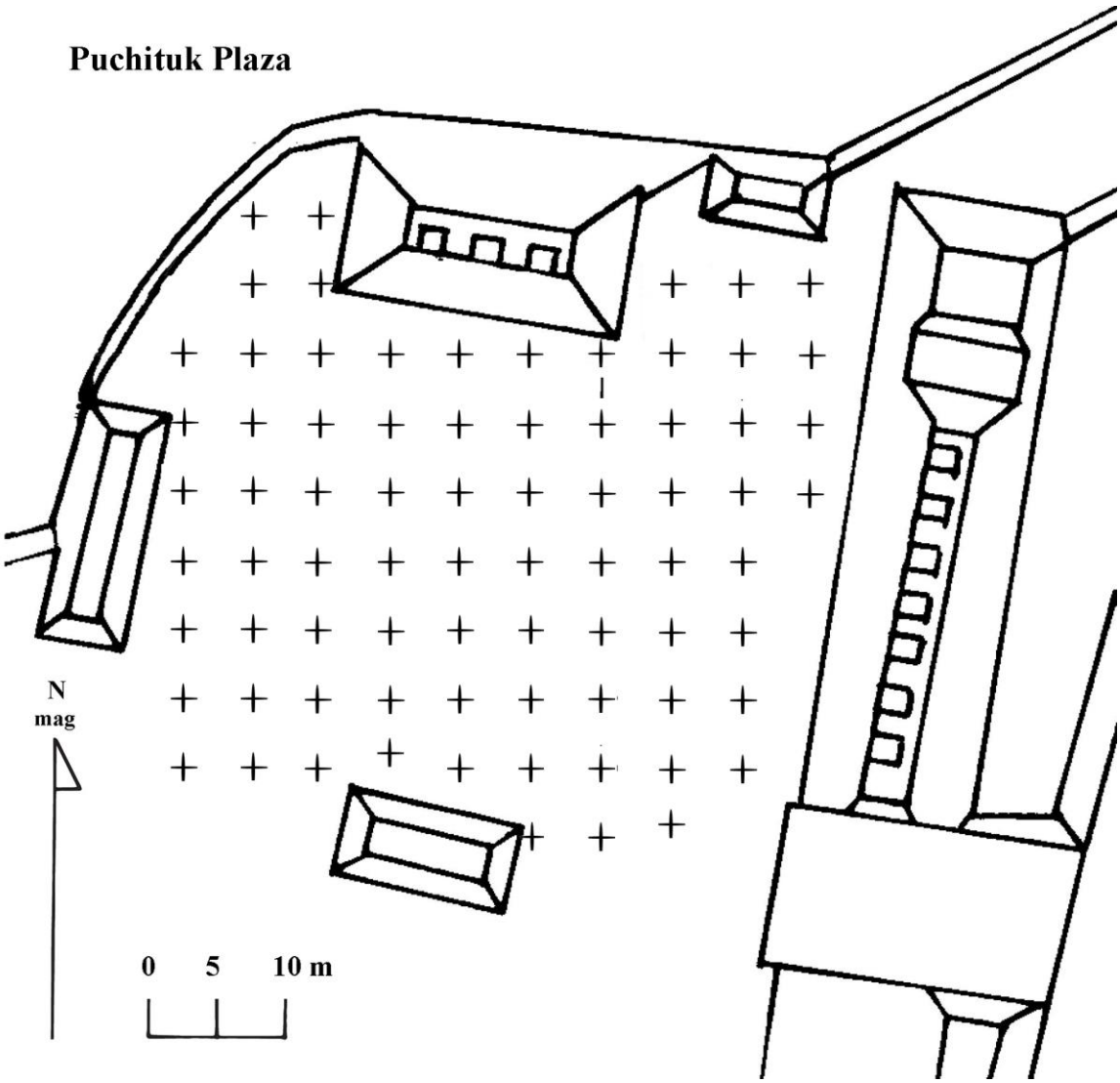


Figure 87: Location of areas of soil collection in Puchituk Plaza.

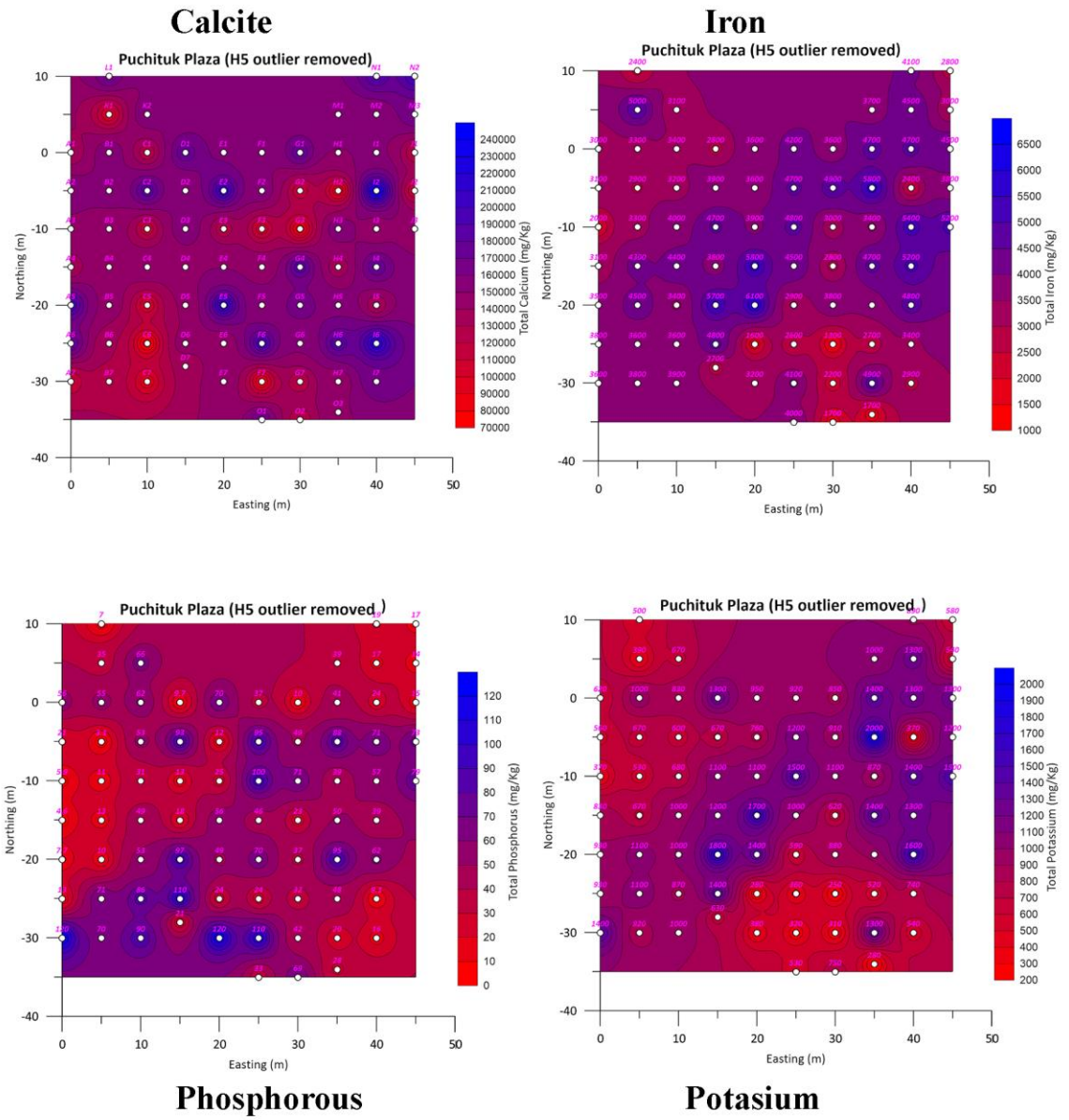


Figure 88: Relative distributions of Calcite, Iron, Phosphorous, and Potasium in Puchituk Plaza (from Matthew Lachniet).

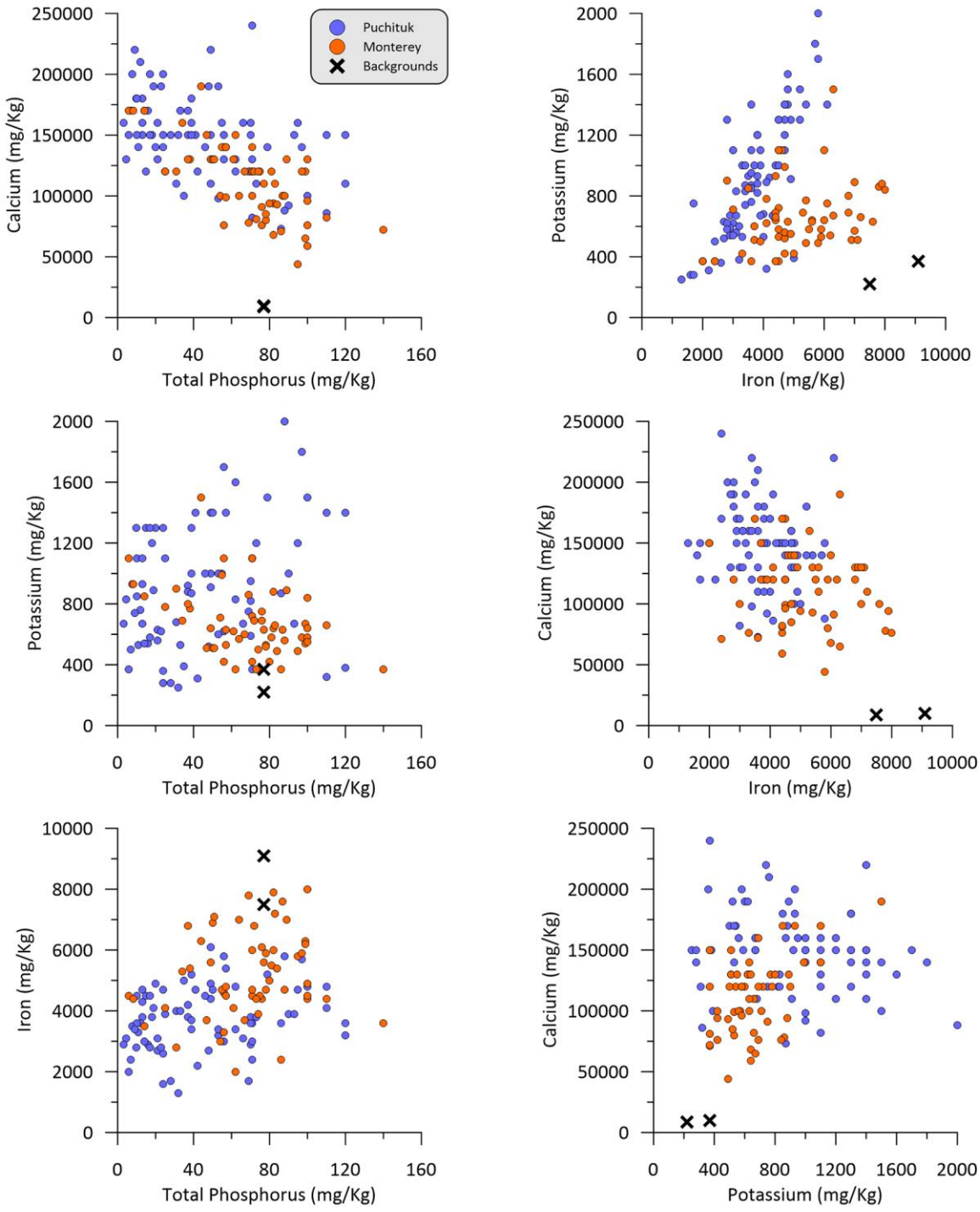


Figure 89: Bivariate plots of Clacite, Iron, Phosphorous, and Potasium from Puchituk and Monterey Plazas (from Matthew Lachniet).

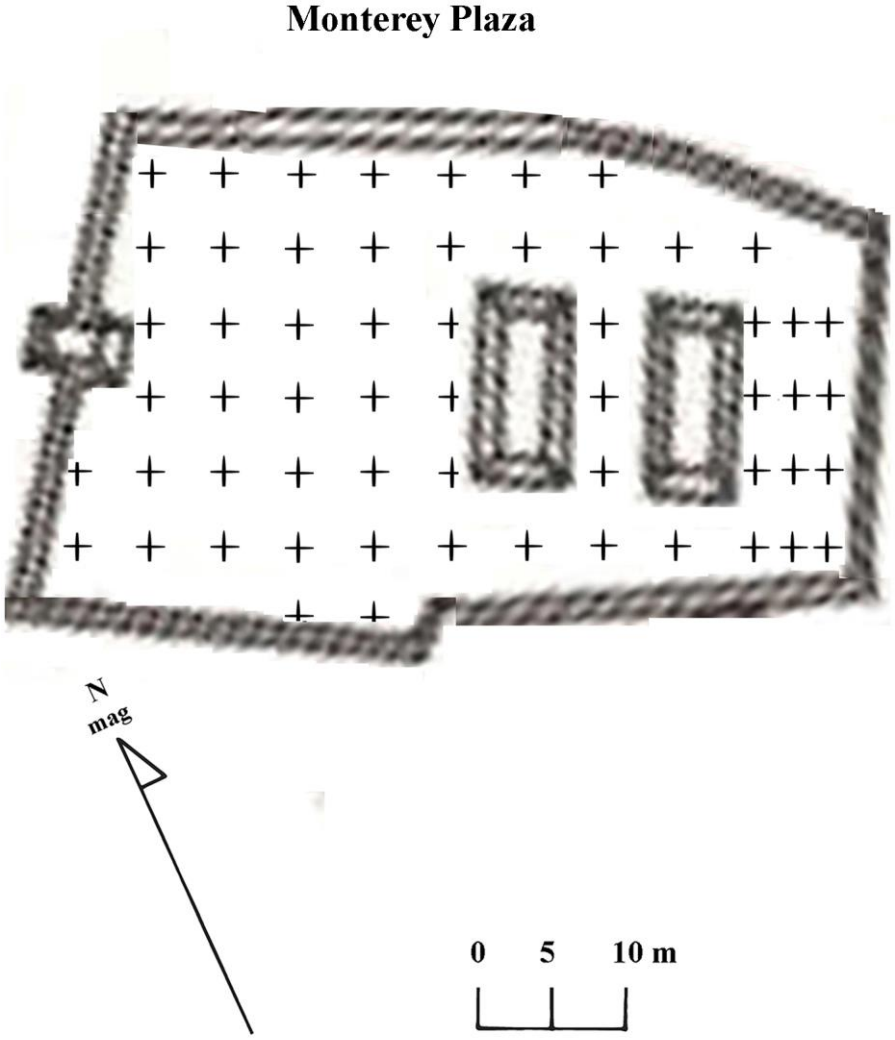


Figure 90: Location of areas of soil collection in Monterey Plaza.

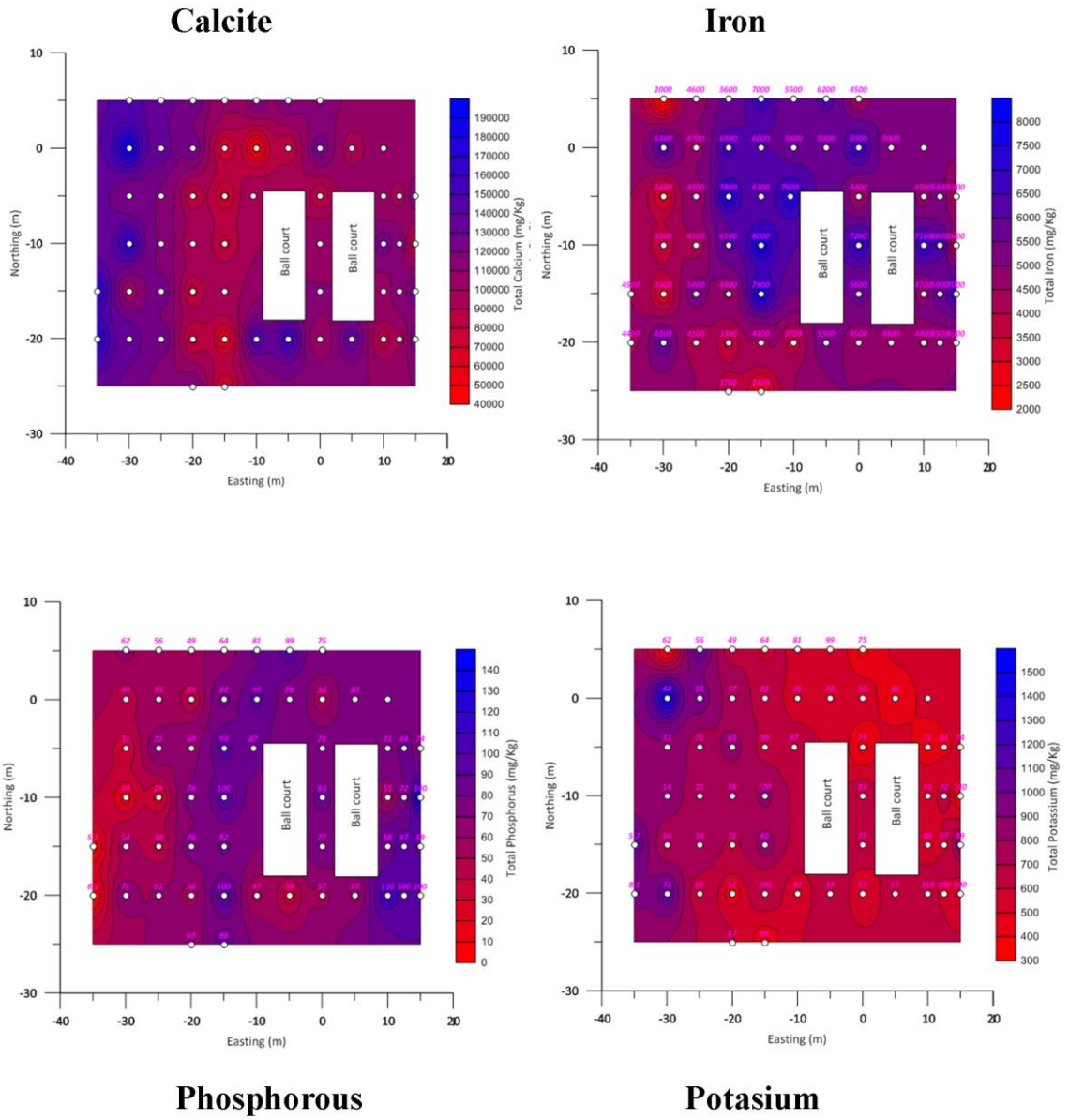


Figure 91: Relative distributions of Calcite, Iron, Phosphorous, and Potasium in Monterey Plaza (from Matthew Lachniet).

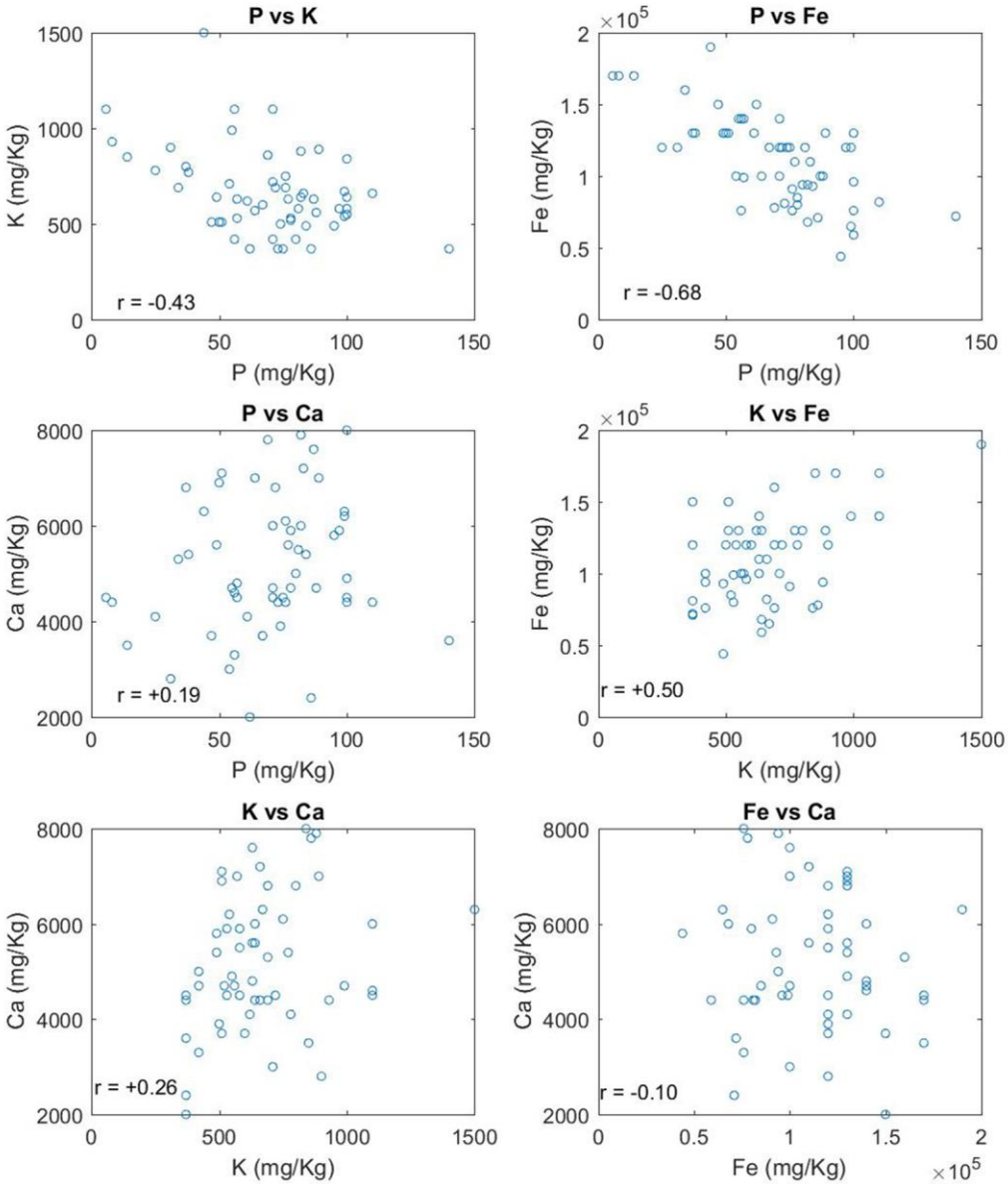


Figure 92: Bivariate plots of Clacite, Iron, Phosphorous, and Potasium from Monterey Plaza (from Matthew Lachniet).

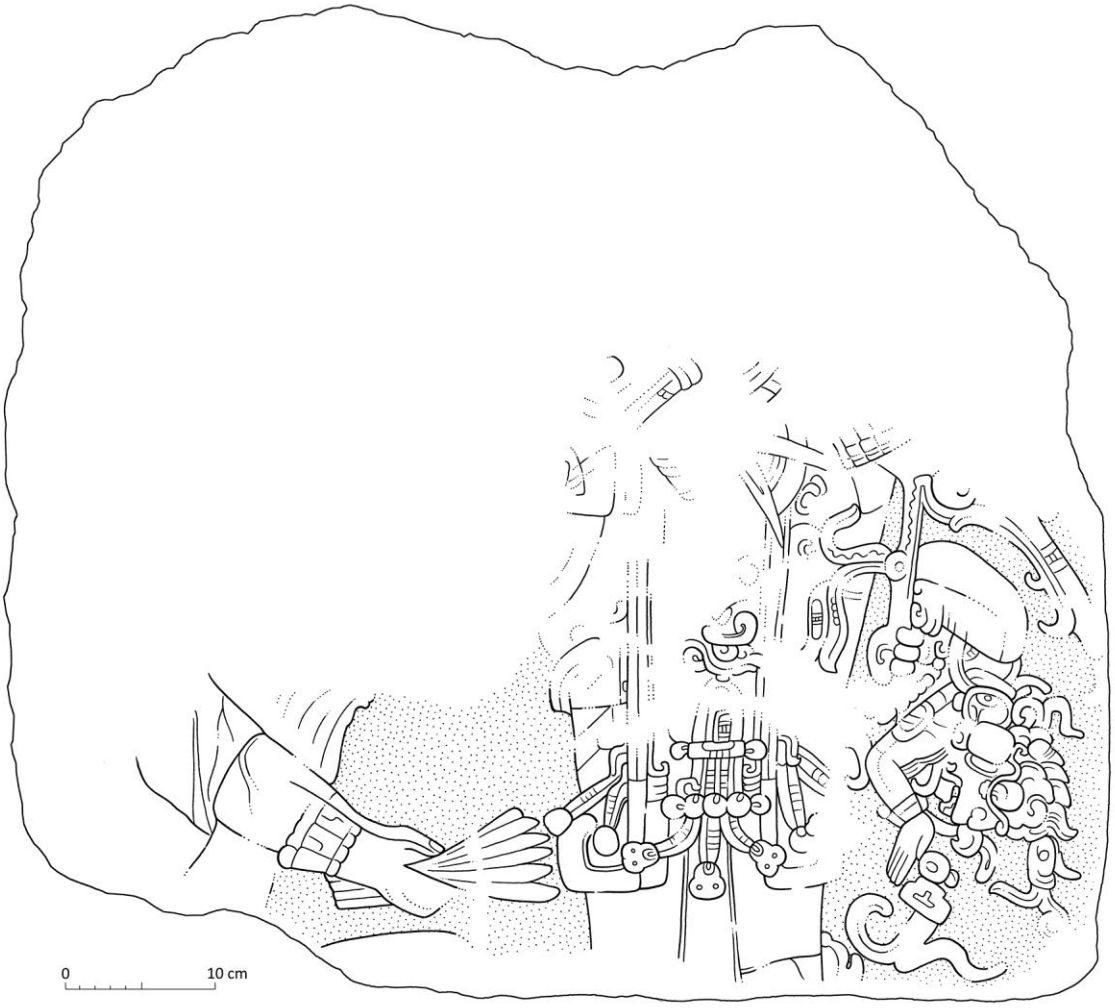


Figure 93: Drawing of Caracol Stela 24 (by Christophe Helmke).

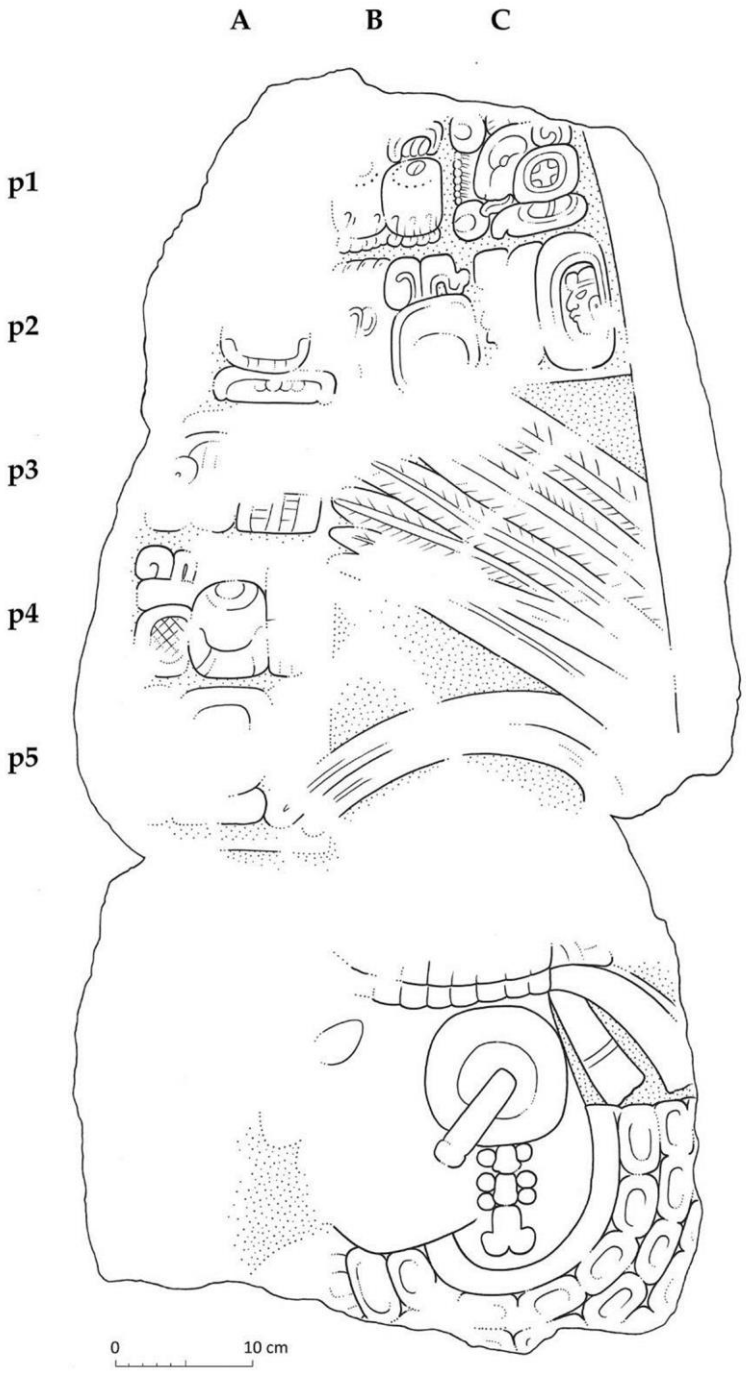


Figure 94: Drawing of Caracol Stela 25 (by Christophe Helmke).

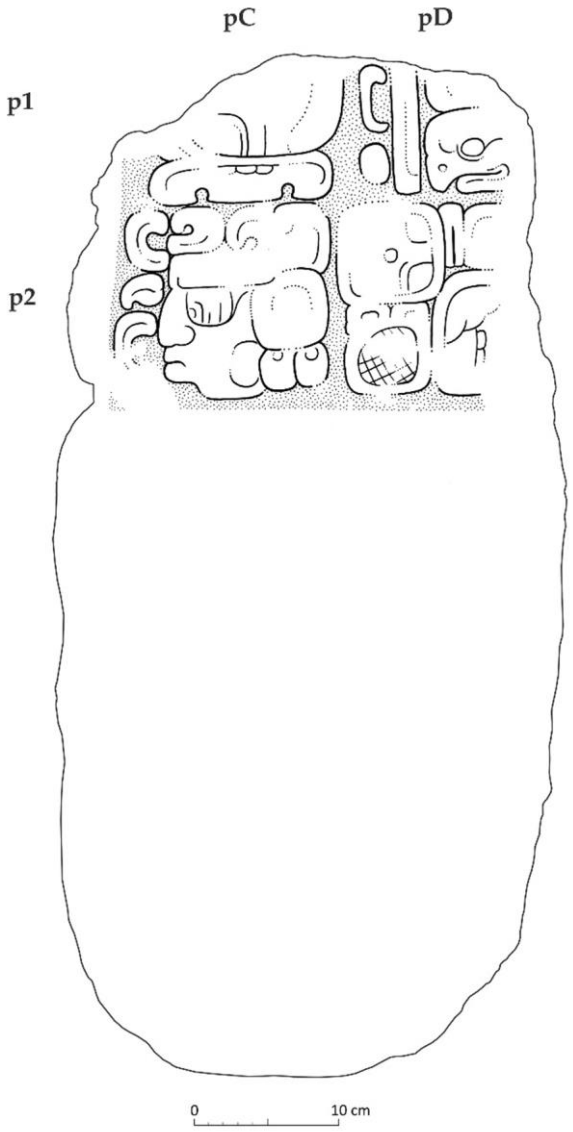


Figure 95: Drawing of Caracol Stela 26 (by Christophe Helmke).

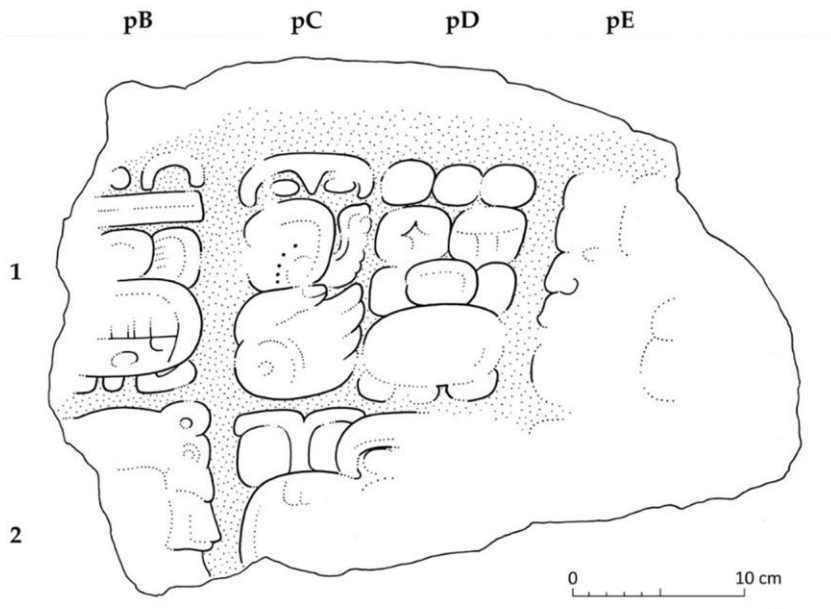


Figure 96: Drawing of Caracol Stela 27 (by Christophe Helmke).