

**Results of the 2004
Valley of Peace Archaeology Project:
The Temples and Ballcourt of Yalbac**

Report submitted to the Institute of Archaeology
National Institute of Culture and History
Government of Belize

Permit No. IOA/H/2/1/04(11)
Accession No. 10140

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Chapter 1
The 2004 Season at Yalbac: Plazas, Temples, and the Ballcourt

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For the 2004 season (May 17-June 25), we had planned to excavate the eastern structure of an elite compound (site 94E22N-4) on the northeast outskirts of Yalbac to collect comparable ritual data to that from Saturday Creek. It originally consisted of seven non-looted structures around a plaza when mapped in 2001. Sometime between 2001 and 2004, however, loggers bulldozed most of four structures and a large part of the plaza for road fill. We profiled an exposed wall of one of the remaining structures, which is described later in the chapter. Field goals were then revised to address NSF reviewers' comments on the political role of Yalbac in broader Maya politics as expressed in temple attributes. My long-term goals are to assess temples as text on Classic Maya society. For too long Mayanists have remained relatively silent on temple functions—other than the assumption of that they served as royal ritual and political stages.

I received permission from the IOA to clean and profile temple looters trenches (LT) described here and in chapter 3. We also noted an additional LT on the upper southwest edge of Str. 3A (LT 29), for a total of 29 (Figure 1.1). Additional looting occurred at acropolis LT 2 and LT 3 (Str. 1A). At LT 2 looters dug a bit into the south wall about .5 m. The damage at LT 3 was more extensive; they dug into the south wall and exposed the upper west section of another vaulted room (Figure 1.2). I have informed the guard at the gate leading to Yalbac Cattle and Ranch Co. land, Feliciano de Paz, and asked him to keep an eye out for looters.

We cleared Plazas 1, 2, and 3 to search for stelae. Figure 1.1 shows the location of possible stelae (numbered 1-4), which were identified based on the dimensions of large limestone fragments. In Plaza 2, we noted at least one possible stela (no. 4). However, there is not much stone on the surface. Local outcrops all around Yalbac provide plentiful limestone, which erodes into a porous mass once exposed to the elements. In Plaza 1 during clearing, Mr. Scott noted what appeared to be a 2 x 2 m mound (0.16 m tall) in the center of the plaza. The testing program is described below.

While showing John Morris around Plaza 2, he commented on a platform in front of Str. 2F that we had not noticed before (see Figure 1.1). We also cleaned and profiled LT 11 and LT 21 on Str. 2F (described below) and finally completed the ballcourt alley test trench that we began in 2002 (see chapter 2).

In Plaza 3 we cleared and raked the plaza and mapped a Postclassic platform and *chich* mounds; we also set up a test unit (2 x 1 m) in the center of the platform, but were unable to begin excavations due to time constraints. In order to search for stelae, we also moved the large (over 1 m high) LT 8 backdirt pile from the front of Str. 3D to an area between Strs. 3C and 3D; we also backfilled the lower portion of LT 8. In contrast to Plaza 2, Plaza 3 has a noticeable amount of cut and uncut large boulders strewn about on the plaza surface, most of which we turned over to look for any sign of iconography. It is pretty obvious that the Maya who built the Postclassic platform re-used stone from the temples. We also cleaned and profiled LT 9 at Str. 3B (described below), as well as LT 25, LT 29, and LT 7 at Str. 3A (see chapter 3). John Morris also suggested we clear Strs. 3E and 3F (both 2.5 m in height) to see if they might not comprise a ballcourt, which they did not. We cleared them only to find that Str. 3E had been totally gutted sometime between when we mapped it in 2001 and this season (Figure 1.3).

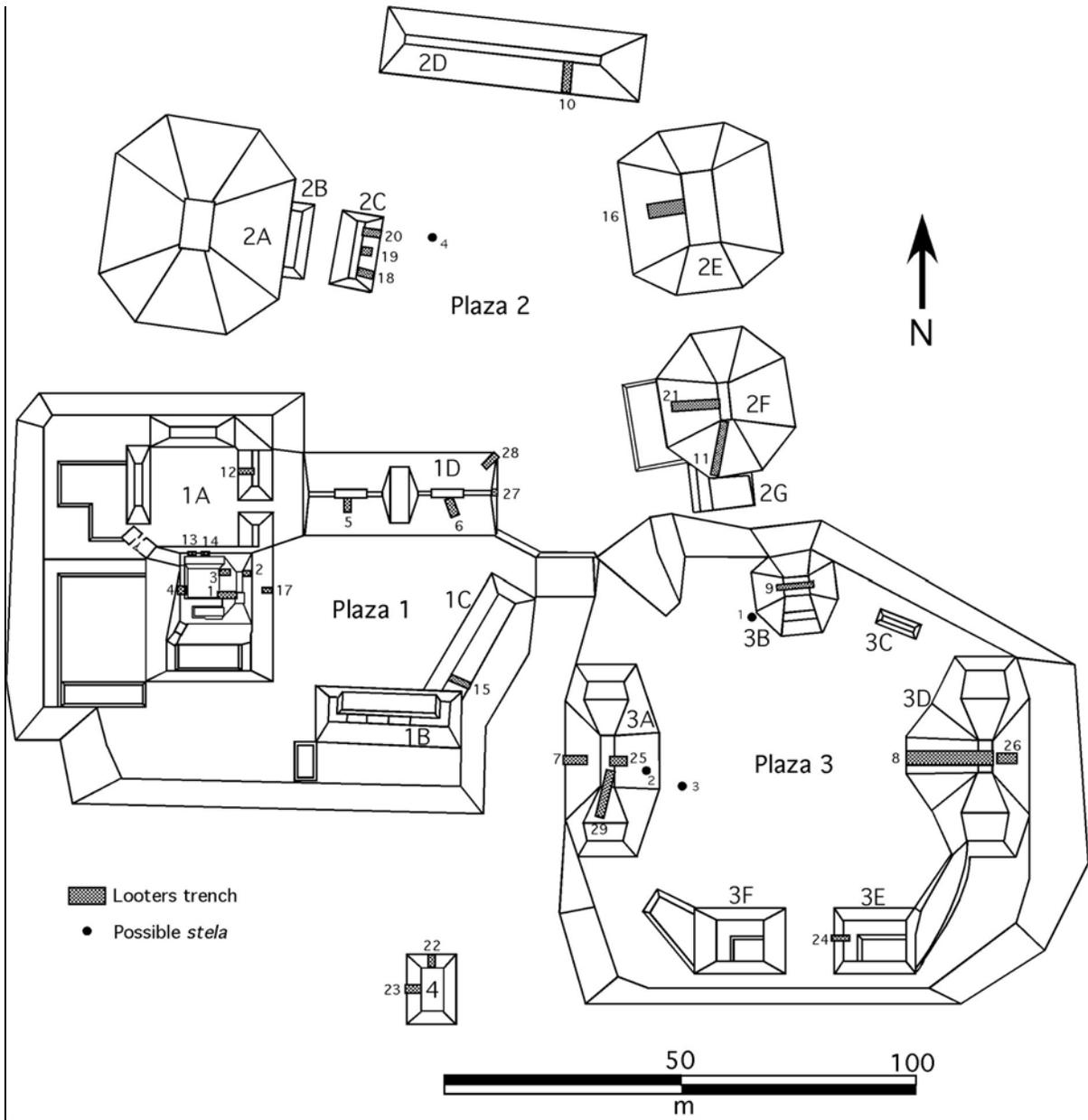


Figure 1.1 Yalbac with possible stelae noted (•). Str. 3E is shown as originally mapped in 2001.

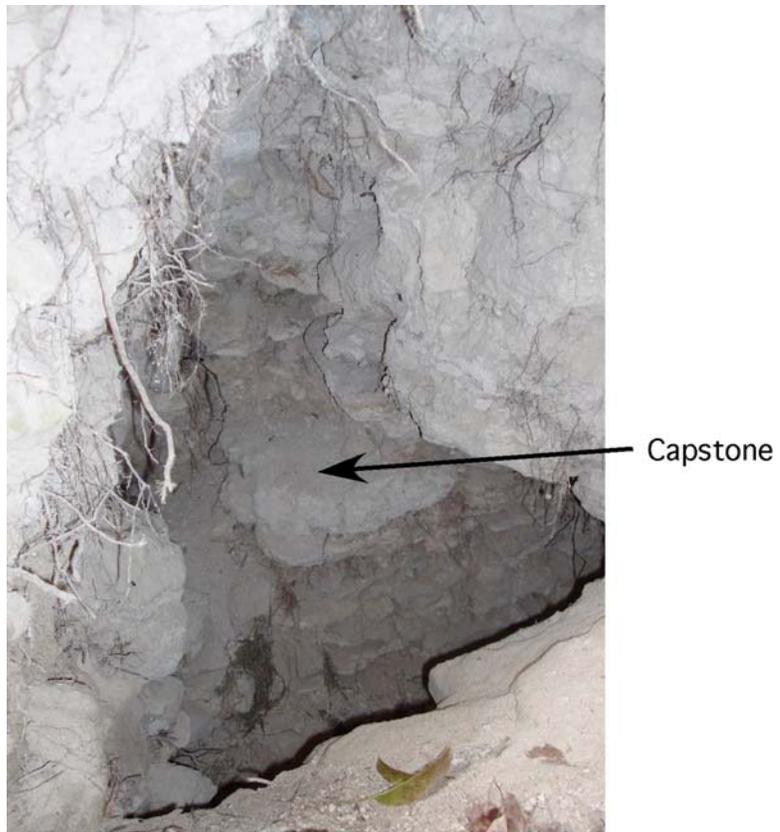


Figure 1.2 Further looting at LT 3, Str. 1A



Figure 1.3 Looting at Str. 3E

Andrew Kinkella (who arrived June 14) continued surveying the area between Yalbac and the Cara Blanca pools, where he began to set up a transect 4 km long from Yalbac's site core (traverse point YL) to Pool #7 oriented $41^{\circ}30''$ (see chapter 4).

We also plotted Str. 5, c. 500 m from the site core (UTM 293.976E 1922.232N) (Figure 1.4). We included it because of its substantial size (c. 85 x 48 m, c. 9 m tall). We need to survey the entire surrounding area in greater detail. The owners, the Tut family, who are currently building a resort up top on the southern portion (thus the southern mound has been destroyed), have generally maintained the original staircases.

In the following section, I summarize project logistics after which I describe the LTs. I then describe Plaza 1 test unit results; finally, I detail our efforts at site 94E22N-4.

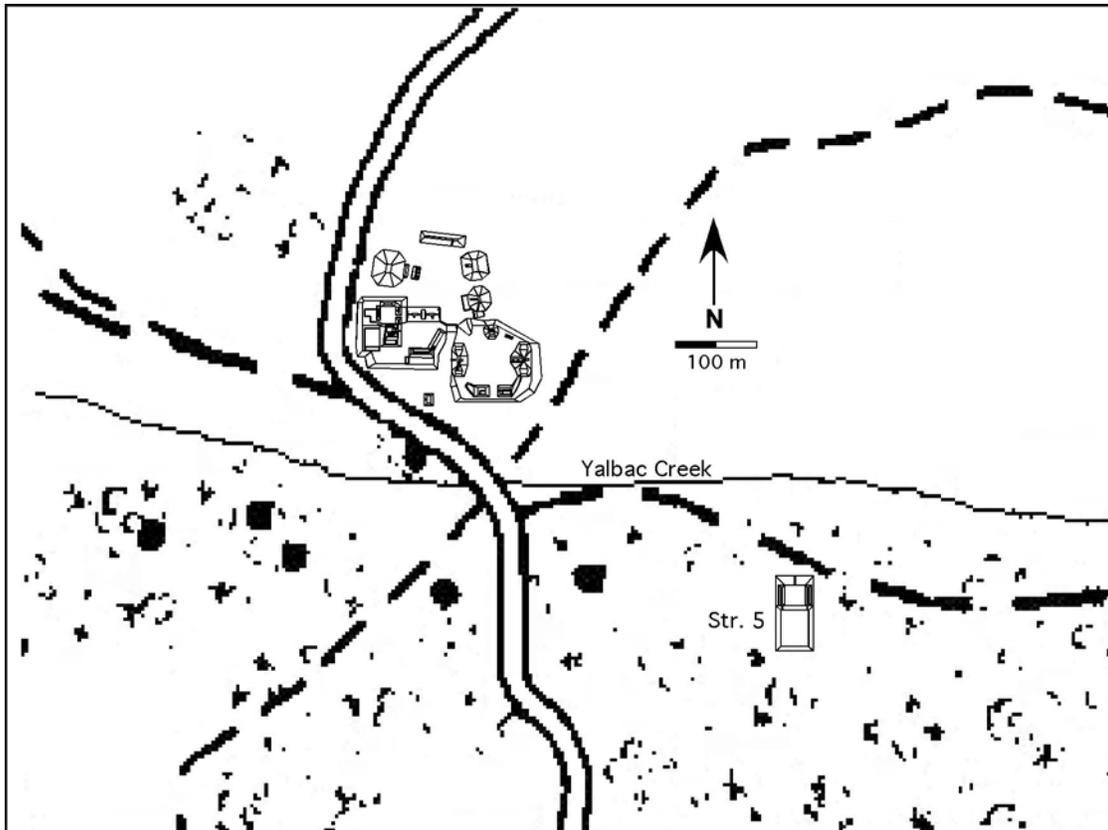


Figure 1.4 Str. 5 in relation to Yalbac core

2004 Season (May 17-June 25)

Staff

The 2004 VOPA crew consisted of myself (PI), Andrew Kinkella (UC-Riverside), and NMSU field school students Sandra Andrade, Joanne Baron, Ivy Luchetti, Adam Lujan, and Charles (Chad) Norred. The VOPA crew also included four field assistants from the Valley of Peace Village: Cleofo Choc, Zedekiah Scott, Isabel Ascencio (Don Luna), and Jose Ernesto Vasquez. One field assistant, Henry de Paz, is from Buena Vista and lives at the guard house at the entrance to the Yalbac Cattle and Ranch Co. property.

Funding and Expenses (US\$)

Funding for 2004 was provided by a private donation (\$4000), and field school fees (\$5000), and

personal funds (\$2564), for a total of \$11,564. The below amounts include project expenses only. Students paid their own expenses (airfare, tuition, food, transportation, IoA fees, etc.). Of the total, \$493.95 was for airfare for PI; \$1800 was paid to the Institute of Archaeology for administrative and consolidation fees; \$2284.80 for labor costs (including social security); \$2396.52 for vehicle rental; \$843.50 for fuel; \$971.66 for food for PI; \$502.50 for house rental in Cayo; \$131.47 for conference hotel; and \$2147.63 for supplies including internet, phone cards, field equipment, copying, etc.

Previous Research

Preliminary survey results from the first field season (June 1-July 10, 1997) in the Valley of Peace area demonstrated a dispersed settlement pattern located away from rivers, and more dense settlement along rivers (Lucero 1997; Lucero et al. 2004). The major goals of the 1998 field season (May 23-July 7) were four, three of which focused in the Cara Blanca area: 1) survey for pools, caves and nearby settlement (Lucero 1999a); 2) test excavate a presumed ceremonial structure at the edge of a pool (Kinkella 2000); 3) explore a pool for offerings (Osterholtz 1999); and 4) map the river center of Saturday Creek (Lucero 1999a). The major goal of the 1999 field season (May 11-July 1) consisted of collecting chronological data from the river center of Saturday Creek through a test-pitting program (Lucero 1999b). In addition, a brief return trip was made to Cara Blanca, Pool #1 to collect additional chronological data (Kinkella 2000). We also continued mapping Saturday Creek. In 2001, I received a National Science Foundation grant (BCS #0004410) to conduct extensive excavations at Saturday Creek (Jan.19-May 5) (Lucero 2002, 2003a, in press). We excavated two small residences, a structure from an elite compound, and a temple ball court. We also spent 15 days at Yalbac, where we collected enough points to generate a preliminary map of the core area of Yalbac. We also surveyed the area in the immediate vicinity of Yalbac to evaluate hinterland settlement (Graebner 2002a, 2002b). In 2002, we excavated two small residences on the outskirts of Yalbac, cleaned two looters trenches, continued mapping core features, conducted survey north of Yalbac to the Cara Blanca pools, recorded three more looters trenches (for a total of 28), and tied Yalbac in to the regional archaeology map (Graebner and Lucero 2003; Kinkella 2003; Lucero 2003b; Lucero and Graebner 2003). In addition, another NMSU graduate student, Hollie Jo Fuhrmann, conducted a study of the effects of biomedicine on traditional midwifery in the Valley of Peace Village (Fuhrmann 2003). In 2003 (June 11-27) we focused our efforts on the acropolis (Hooper 2004a, 2004b), continued excavations at the ball court alley (Lucero 2004), and continued survey between Yalbac and the Cara Blanca Pools (Kinkella 2004).

Temple Looter's Trenches

As I briefly mentioned in the introduction, my goals are to explore what temples themselves can tell us about prehispanic Maya life. Throughout the world, temples serve as the nexus for political, social, economic, and religious life. The Classic Maya were no different. This being said, we need to move beyond common assumptions of their only having served as ritual and royal stages. Their frequency (every center has several) and common features (pyramid and platform for standing wall or perishable structures) suggest that temples had several functions—for example, for feasts, seasonal rites, markets (plazas), social interactions (e.g., exchange and searching for mates), and other events. The fact that Mayanists rarely, if ever, find inscriptions stating, 'this temple is for...' suggests that each had several functions depending on who was funding the event and for what purpose. And I also think it important to address the question of why each center has several temples; it is assumed that royals built all of them. But perhaps other groups built some of them for various reasons. For example, other noble houses could build them as an arena to compete for political power or royal favor. Some temples could have been built through community effort—including elites and commoners. Also, it is not clear to which god(s) temples were built, which also suggests a multifunctional use.

To begin addressing these issues, especially at centers without obvious hieroglyphic or iconographic records, including Yalbac, it is critical to compare temple attributes within centers, even at those with iconographic and hieroglyphic records. We need to take a closer look at temples themselves to see if

they show variability. If they vary, this might indicate different builders, functions, or different gods. Even if are similar, we still need more information. To accomplish this, we need to focus on temple frequency, size differences, location, layout and accessibility, temple type, history of use, and construction patterns—including style, labor, materials, decorative features, and ritual deposits. The VOPA project is only just beginning to assess temple attributes, and we plan in the next few seasons to continue our focus on temples.

We began at each LT by clearing out some of the backdirt and cleaning one sidewall. Once photographed and profiled, we probed strata with trowels to look for diagnostic ceramics to assist in dating construction histories (Table 1.1). Upon completion, most LTs were covered as best as possible on the steep walls with plastic, and covered with dirt. Non-diagnostic artifacts (mostly body sherds and chert chunks and flakes) were backfilled from whence they came (backdirt) in museum quality ziploc bags with tags on the inside and pertinent information written on the outside with permanent ink (LTs 7, 9, and 27) (see appendix for a list of artifact location).

Table 1.1 Yalbac temples

LT #	Str. #	Size (m)	Height (m)	Dates*	LT dimensions l x w x d (m)	Status
16	2E	40 x 36	8	A.D. 700-900	8.5 x 1.4 x .7-2	Profiled
11	2F	30 x 30	10	Backdirt: Tiger Run, A.D. 600-700; upper LT wall: late Tiger Run, A.D. 650-750	13.5 x 2 x .8-1.8	Profiled
21	2F	30 x 30	10	Backdirt: late Spanish Lookout, A.D. 800-900	17 x 2.25 x 1-2.3	Profiled
7	3A	45 x 25	11-12	A.D. 650-750, surface; earliest phase: Barton Creek, 300-100 B.C.	11 x 1 x 1.5-3	Profiled
25	3A	45 x 25	11-12	Backdirt: late Spanish Lookout, A.D. 800-900; ~late New Town, A.D. 1150 or later	3.4 x 2.4 x 1.2-2.1	Profiled
29	3A	45 x 25	11-12	Backdirt: Hermitage, A.D. 300-600; Late Classic	11 x 1.5 x 1.6	Profiled
9	3B	20 x 20	6	A.D. 800-900; burial-Spanish Lookout, A.D. 700-900; backdirt: varies- 600 B.C.- A.D. 900	10 x 1.4 x 1.2-2.4	Profiled
8	3D	45 x 25	8	A.D. 800-900	Upper: 5 x 3 x 2.5 Lower: 6 x 1.4 x .8-3.1	Profiled

26	3D	45 x 25	8	-	6.4 x 1.3 x 1.5	Not Profiled
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*ceramics are from surface except when noted

Five of the six temples have looters trenches. Temples range from 8 to 16 m in height. We have profiled all but one (LT 26), which we will do in future. In general, all LTs appeared to lack summit structures, which indicates that the Maya likely built perishable structures on top. Temples have cut-stone tiered facades and boulder and cobble fill, and all have at least one or more mortared strata. Surface ceramics date to the Late Classic. The apparent construction and stylistic similarities might indicate that temples served several functions that perhaps changed quite frequently as political, religious, and social factors deemed it.

Below I describe each LT in more detail. I am also including the description for LT 16 (Str. 2E) and LT 8 (Str. 3D) that we profiled in the 2002 season for comparative purposes (Lucero 2003b). The range of stone blocks sizes described includes boulders (length greater than 15 cm), small boulders (length between 11-15 cm), and cobbles (length 5-10 cm).

Structure 3A

Structure 3A sits on the western edge of Plaza 3 near the major entrance to the plaza on its northwest corner. It is slightly taller on its backside (12 vs. 11 m). It has wings on its north and south sides, which likely house tombs. It has several terraces (e.g., at least three possible tiers are exposed in LT 25). Ceramics from the earliest construction date it to at least 300-100 B.C. And ceramics from its summit indicate its use until c. A.D. 900 and likely later. For a more detailed description of the three LTs (25, 29, and 7), see chapter 3.

Structure 3B

This temple is located on the north side of Plaza 3 just east of the plaza's major entrance. It is much taller on its backside (c. 8 m vs. 6 m). It is the smallest pyramid temple on Plaza 3, though not the smallest structure (Strs. 3C, 3F, 3G). Unlike Str. 3A and Str. 3D, it does not have wings. A burial immediately below the summit façade dates to the Late Classic period, though sherds from the backdirt date from 600 B.C. through A.D. 900. It may have been built in the Preclassic (likely Late Preclassic since the other Plaza 3 structures appear to date to this period), and maintained throughout the Classic. There seems to have been a resurgence of building in the Early Classic as plaza test pit data show from the 2001 season (Conlon and Ehret 2002; Graebner 2002b).

LT 9

We profiled the south wall of the LT, which exposed mortared and non-mortared core fills (Figure 1.5). The earlier phase is mortared with a plaster marl (10YR72) and large, apparently faced, boulders, neatly laid. Based on the number of ceramic sherds recovered during clean-up, it is clear that the looters likely destroyed and removed several caches and grave offerings. The looters missed part of a Late Classic burial immediately underneath the summit façade on the eastern side. Remaining grave goods included two lip-to-lip vessels containing a cut and polished jaguar tooth, two obsidian blade points, and two spiral land snails (*Pomacea* sp.), one of which was drilled (Figure 1.6). While the looters destroyed much of the burial, we still were able to recover many small and unidentifiable fragments, five phalanges, two feet bone fragments, 14 vertebra fragments, 27 long bone fragments, 20 skull fragments, 16 rib fragments, and 27 teeth (8 incisors, 8 premolars, 1 canine, and 8 molars).

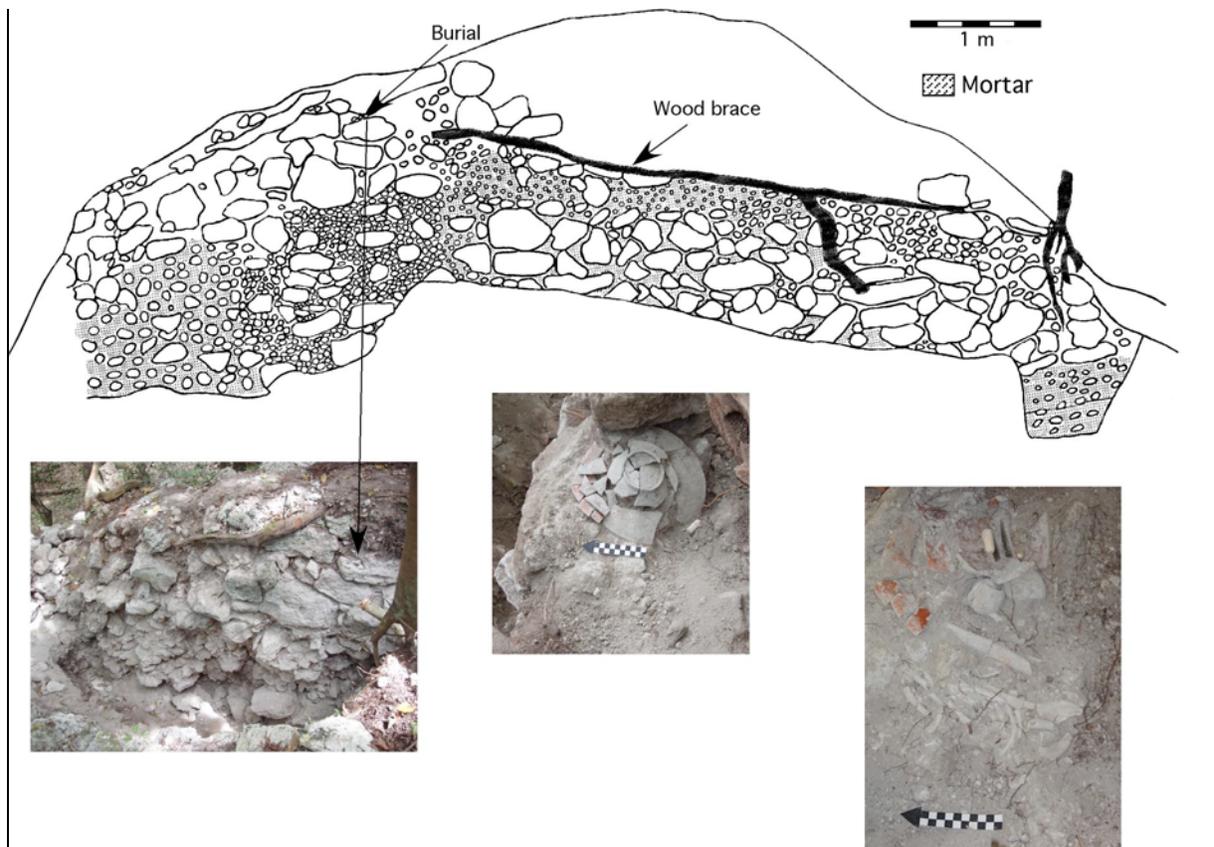


Figure 1.5 South wall, LT 9, Str. 3B



Figure 1.6 LT 9 remaining grave goods

Structure 3D

This pyramid temple has wings on its north and south sides, which likely house tombs. Four terraces were exposed in the upper and lower parts of LT 8. From screening the lithic concentration at the roots of an uprooted tree (likely from over tomb) at the northeast side of Str. 3D, we recovered thousands of thin fine-grained chert flakes, all pastel-colored, as well as several decorated ceramics, including one with a face design, and bone, likely faunal. We placed the lithics to one side for future study (Figure 1.7). The Maya were known to place thousands of chipped chert or obsidian flakes and blades over the lintel or roof of a tomb, as archaeologists have found at Tikal (Moholy-Nagy 1997). Sherds from the screened lithic concentration represent a wide range of ceramic types and dates, from 300 B.C. to A.D. 800, and surface ceramics date to A.D. 800-900.



Figure 1.7 Lithic concentration at Str. 3D

LT 8

We profiled the north walls of the upper and lower sections of the trench in 2002, located 1.7 m apart (Figure 1.8) (Lucero 2003b). The looters trench is massive enough to have completely erased evidence for a summit room or rooms, if they existed. The upper trench reveals a tall wall and core fill (c. 2 m tall). It is also difficult to determine at present whether or not the staircase has been revealed,

though the lower trench has potential. Further, the steps are more apparent in the south wall, which we did not profile (but will do so in future). Str. 3D has a façade with faced stone. All fills appear to have mortar, likely a marl or plaster mortar with cobbles and pebbles in the lower trench, and a compact and loose (clayey loam) mortar in upper part. Munsell color depends on mortar type: 10YR72 and 10YR81 for the marl/plaster and 10YR62 for the clayey loam. Not including mortar, there is about 4% faced stones, 55% boulders, 33% small boulders, and 7% cobbles.

Looters disturbed a substantial tomb based on the artifacts strewn about, including human skull fragments, a complete unmodified clam shell, a slate disc (likely a mirror backing), obsidian, a marine shell disc, and numerous sherds.

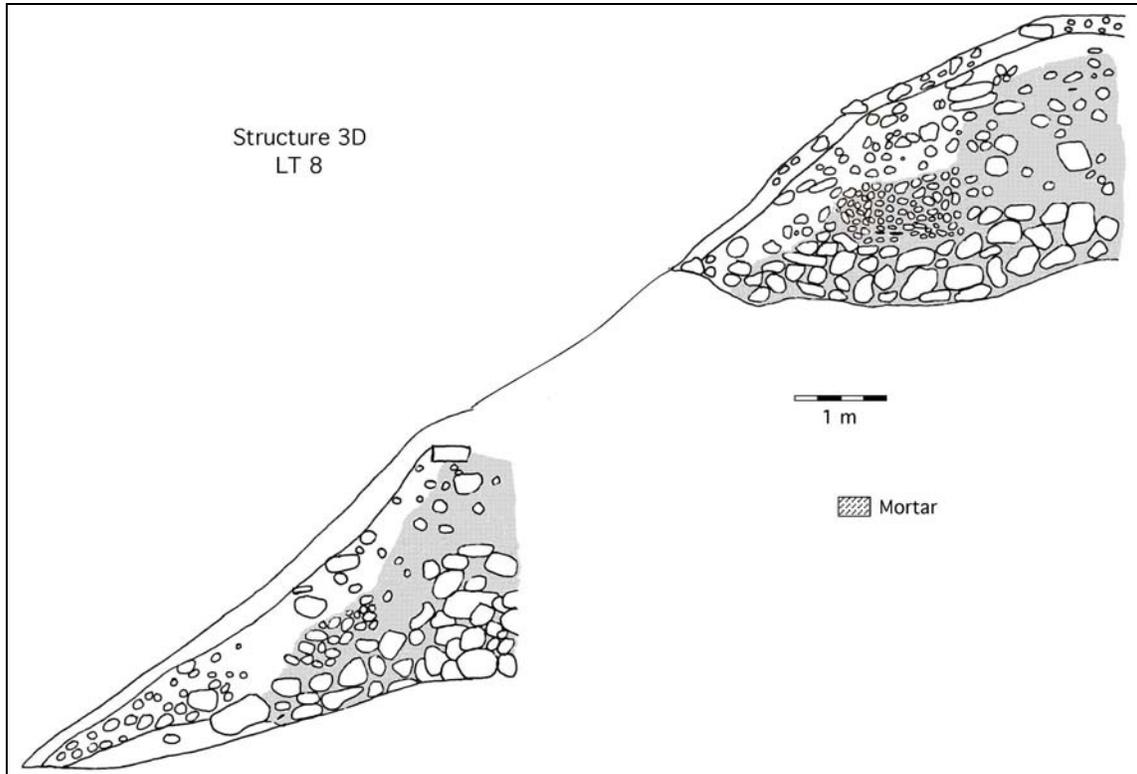


Figure 1.8 North wall, LT 8, Str. 3D

Structure 2F

This temple is located on the southeast corner of Plaza 2 and has a 1 m tall platform on its west side facing the plaza. The two LTs (11 and 21) exposed several terraces, at least four, with a platform at the summit for a perishable structure. The few ceramics we recovered from backdirt and clean-up all date to the Late Classic, c. A.D. 600-900.

LT 11

The west wall profile revealed a stone façade where most of the stones appear to be faced on one side only; some, however, especially the long thin boulders (some in the fill), appear to be faced on all sides (Figure 1.9). Exclusive of mortar, stones include 15% faced, 43% boulders, and 43% cobbles. Mortar is both a marl/plaster (10YR73 and 10YR72) and clayey loam (10YR63).

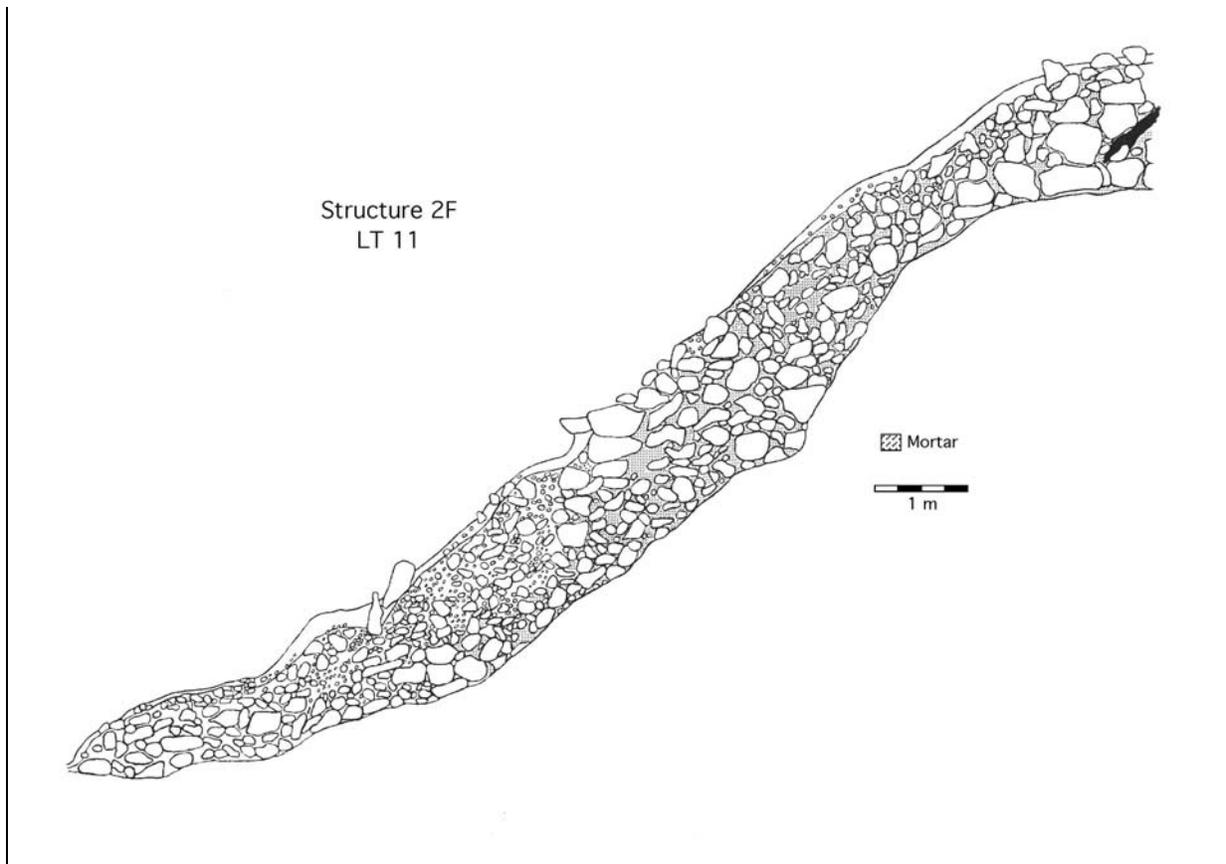


Figure 1.9 West wall, LT 11, Str. 2F

LT 21

We profiled its north wall; the middle portion exposed the same large boulder wall as that visible in LT 11 (visible in the middle of LT 11 and the lowest wall of LT 21) (Figure 1.10). During clean-up, we found a Jaina-like figurine fragment of a head, which may represent God N. Its façade has faced stone, some of which is faced on all sides, and sorted fills of either large or small boulders; there are only a few cobbles (28% faced, 55% boulders, 9% small boulders, and 8% cobbles). We noted sandy loam (10YR52) mortar throughout the uppermost fills; the lower fills are mortared with marl/plaster (10YR73 and 10YR72).

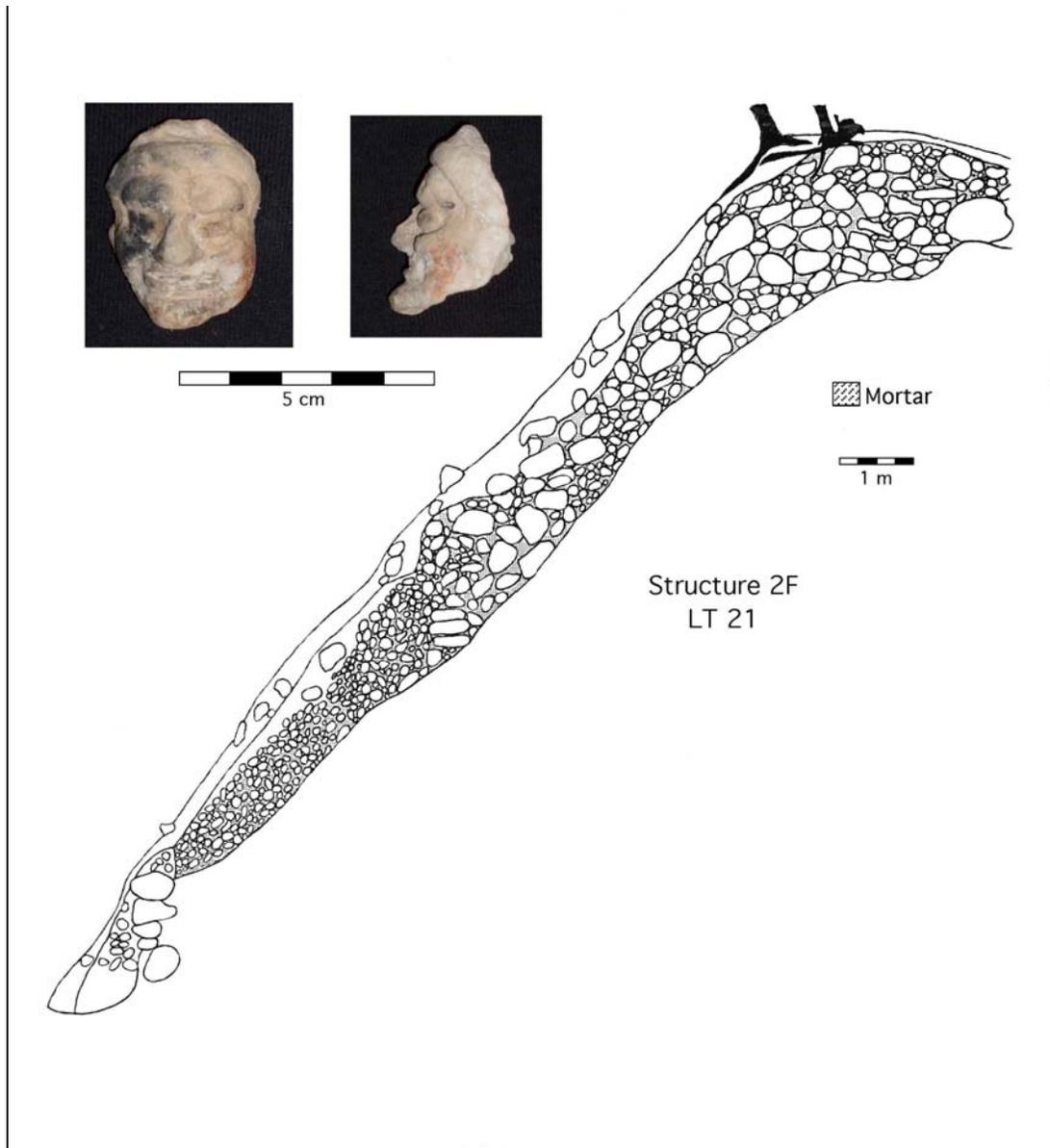


Figure 1.10 North wall, LT 21, Str. 2F

Structure 2E

This pyramid temple is located on the east side of the most open plaza, Plaza 2, just north of Str. 2F and southeast of Str. 2D, a range structure. Surface ceramics date to c. A.D. 700-900.

LT 16

The exposed strata in the north wall include cut stone facades, some of which appear to be shaped on four sides (Figure 1.11). Faced stone make up 15% of blocks, boulders 20%, small boulders 50%, and cobbles 15%. Boulder fills have limestone mortar, as well as a sandy clay mortar. While Munsell colors were not recorded in 2002, photos show that the marl/plaster mortar is white (likely 10YR72), similar to LT 8, and the sandy clay mortar is likely 10YR62.

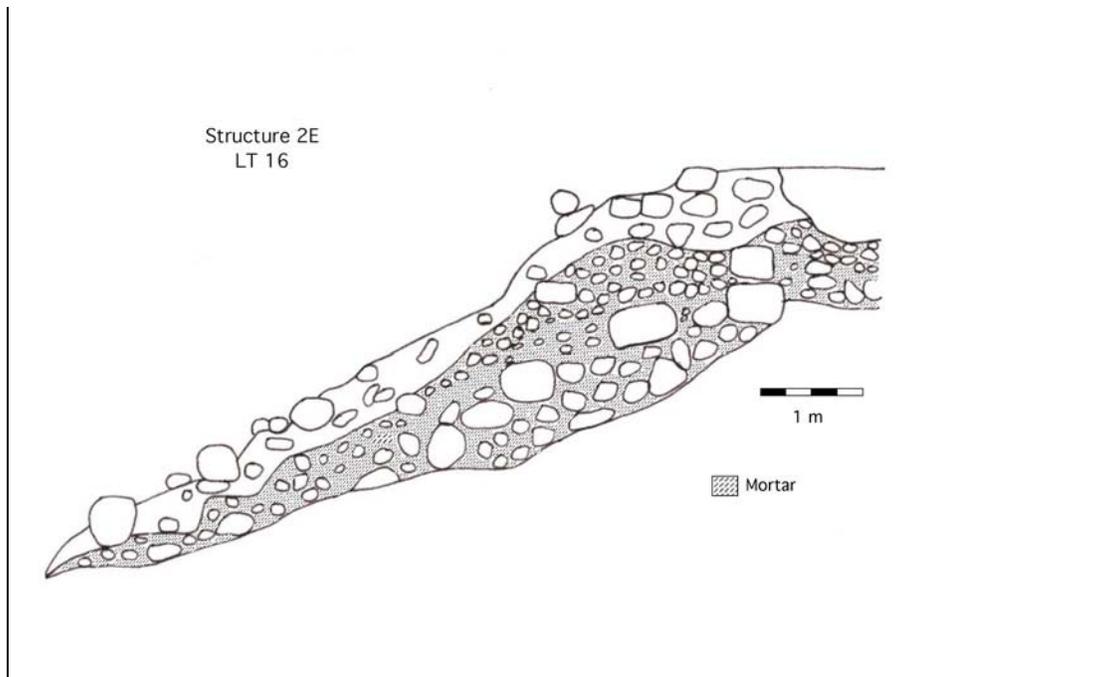


Figure 1.11 North wall, LT 16, Str. 2E

Results and Discussion

We have not yet found obvious evidence for public iconography or hieroglyphics at Yalbac. The Maya definitely began to build some of the temples, if not all, in the Late Preclassic (300-100 B.C.) based on ceramics recovered from looters' backdirt (e.g., Strs. 3B and 3D). All of them, no matter when they were built, were used through the Classic period (c. A.D. 900) based on surface ceramics. All temples likely served several purposes such as ceremonies, feasts, and political display. However, they all probably have tombs and burials, or at least Plaza 3 temples do (e.g., LT 8, Str. 3D backdirt yielded human skull fragments; and we recovered a partial burial at the edge of LT 9, Str. 3B).

Plaza 2 temples are on average bigger than Plaza 3 temples (15,960 m³ vs. 7792 m³). Plaza 2 temples have more faced stones on average (19% vs. 12%) and thrice the average size than those on Plaza 3 temples (1318 cm² vs. 435 cm²). Shaped stone blocks are faced on all exposed sides, especially on the front sides of temples. The back or sidewall blocks appear to be faced only on one side (e.g., LT 7 and LT 29, Str. 3A). The exposed core fills at Strs. 2E and 2F have mortar, usually of marl or plaster and gravel or sand. In contrast, Strs. 3A and 3B have both mortared and dry core fills; while dry core fill requires less materials and labor, it is more difficult to contain and is more unstable (Schele and Mathews 1998:30). Core fill boulders are larger on average in Plaza 2 temples, averaging 569 cm² compared with 416 cm² at Plaza 3 temples, and they comprise a greater proportion (30% vs. 15%). However, Plaza 3 temples have more similarly sized (sorted) faced stone and core fills (boulders, small boulders, and cobbles); for example, the average range difference of Plaza 3 faced stone is 564 cm² compared with 1887 cm² at Plaza 2 temples. The Maya may have used more midden deposits since we found greater quantities of sherds in Plaza 3 temples (though they might represent items broken by looters). In sum, the Maya built bigger Plaza 2 temples using larger stone blocks and mortared fills, and used more sorted fills for Plaza 3 temples.

While these results are preliminary, they undoubtedly show the potential temple attributes have to reveal about Classic Maya ceremonial and political life. Did Str. 2F serve as a rain/celestial temple (God N)? It is attached to Str. 2G, which on closer inspection might turn out to be an artificial pool (it is quite steep on all sides). And what is the significance of the ballcourt being attached at the front of the largest temple (Str. 2A)? Was the ballcourt and temple a stage for re-enacting creation rites since

ballcourts play a large role in origin myths (Schele and Miller 1986:243-245)? Its proximity to the acropolis might indicate its association with the ruling family. Further, its location on the largest and most accessible plaza indicates large audiences. Plaza 3 temples might represent a necropolis, perhaps for founding and royal families; the large plaza size suggests that public ceremonies took place, whatever their purpose. Further, do the differences in temple size and construction patterns indicate that different groups built them, or that different gods required specific requirements? Or do differences only indicate their being built at different times in the Late Classic as was found to be the case for some monumental buildings at Tikal (Jones 1996, 2003)? While it is not yet possible to answer these questions, preliminary findings illustrate that temples indeed vary which likely relate to who built them and for what purpose.

Plaza 1 Testing Program

We opened a 2 x 2 m unit oriented 15° over what we thought to be a 2 x 2 m platform (.16 m high) in the center of Plaza 1. Once we started excavations, however, we soon realized that our unit missed the 'platform.' Since permission was only granted to excavate a 2 x 2 m unit, we decided to move the unit south and west to incorporate the architecture we exposed in the southwestern corner. We also changed the unit orientation to 300°. Upon completion of the season, we lined the unfinished excavation unit and placed bagged and labeled non-diagnostic artifacts before backfilling.

There definitely was noticeable building activity in the plaza center. The topsoil yielded a high density of sherds including handles and feet pods, as well as marine shell, a speleothem fragment, an obsidian blade point, two large mano fragments (measured, not collected, and placed in backfill), and a utilized chert flake, flakes, two bifaces, a core, and chunks. We soon came upon a cross-shaped wall or feature consisting of two-courses of cut and un-cut stones (Figure 1.12). From the loose clay loam mortar and from near the wall on top of the upper most plaster floor, we recovered Belize Red McRae Impressed sherds from at least five different vessels (Figure 1.13). As Figure 1.14 illustrates, there are several thick plaster floors and ballasts. One floor ballast (104) consists of large flat limestone blocks in a sandy loam fill (with c. 15% cobbles); their thickness depended on the undulating surface underneath. We recovered six speleothem fragments, freshwater shell, and sherds, some of which appear to date to Floral Park (c. A.D. 200-300), as do other sherds (Monkey Falls, an Uaxactun Unslipped Ware). The undulating plaster and cobble floor underneath floor/ballast 104 (105) yielded Sapote Striated sherds dating to Barton Creek, or 300-100 B.C. Once we removed this floor we came upon two different strata; 107 in the south part and 106 in the remainder (Figure 1.15). Stratum 107 is a possible uncut boulder wall or a boulder fill. We were unable to excavate this wall/fill. Nor were we able to finish excavating the lowest cobble/loose plaster ballast we exposed (106), but plan to continue excavations in 2005.



Figure 1.12 Plaza 1 cross-shaped feature



Figure 1.13 Belize Red McRae Impressed sherds

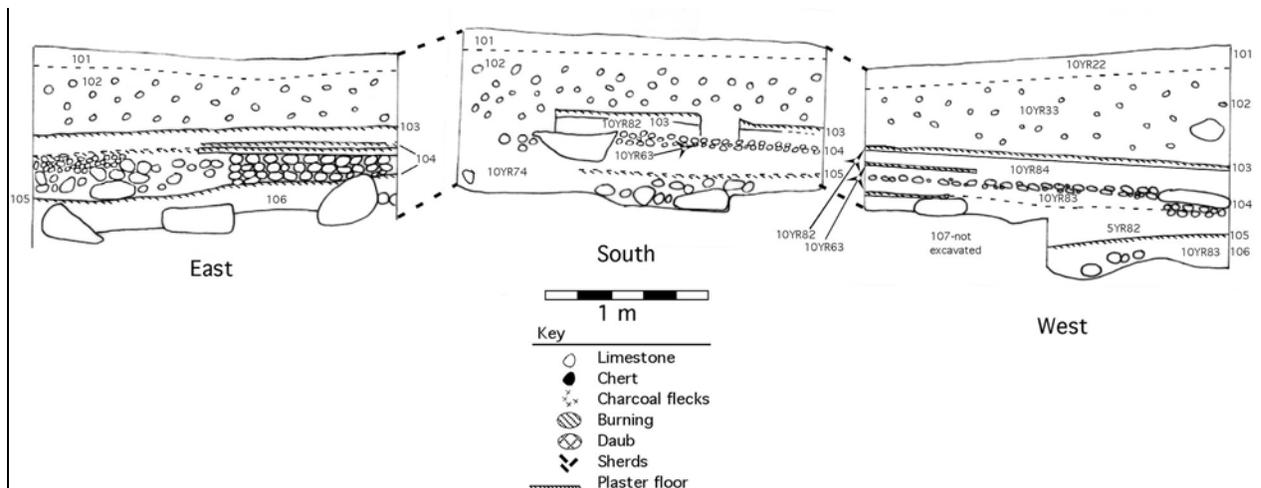


Figure 1.14 Plaza 1 test unit profiles

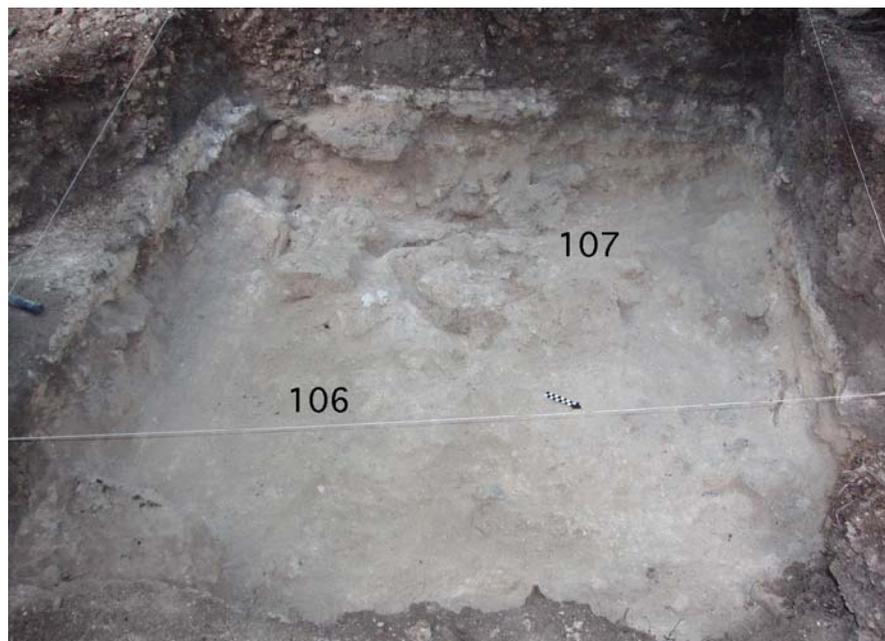


Figure 1.15 Plaza 1 test unit strata 106 and 107

Many of the construction events took place on top of the plaza surface and were concentrated in a relatively small area in the plaza center. With such a small test unit, it is not possible to determine at present which floor served as the original plaza surface, though they all may have since they are present in the three examined sidewalls.

The artifact assemblages suggest that either the Maya used midden-laden fills, or they conducted specialized, likely ritual, activities. Ritual activities are suggested with the large number of Belize Red sherds from several vessels (smashed as part of a termination rite?) and speleothem fragments. If the Maya performed rituals, we need to find out why they conducted them in the plaza center versus the temples. Plaza 1 is the only plaza without temples; it is surrounded by the acropolis and range structures. It is also the most restricted plaza, and is raised as well. It would have been difficult, if not impossible, for people to witness Plaza 1 events from its entrance, which itself was reached by a staircase (not on Figure 1.1, but it will be mapped in future). Ritual activities, if represented, probably

were associated with construction events (i.e., termination and dedication deposits and caches) rather than other kinds of ceremonies.

Site 94E22N-4

As briefly mentioned, site 94E22N-4 (UTM 293.9E 1922.7N) consists of seven structures (A-G) around a plaza (50 x 48 m). It is located about 430 m from traverse point YI (near the southeast corner of Str. 2F) at 75°. The dashed line on Figure 1.16 shows the bulldozed section, which occurred sometime between the 2001 and 2004 seasons. The north side of Str. C (23 x 9 m, 2.5 m high) was sheared off. We cleaned, photographed and profiled the exposed strata and collected diagnostic sherds from strata when possible. In general, the vessels are noticeably smaller than those found in the core, which is not surprising given their different scale and function. Further, during clean-up, we noted ceramics of all major types from all major time periods. However, since most of the in situ diagnostic ceramics date from A.D. 600 to 800, it is likely that earlier ceramics came from fill contexts.

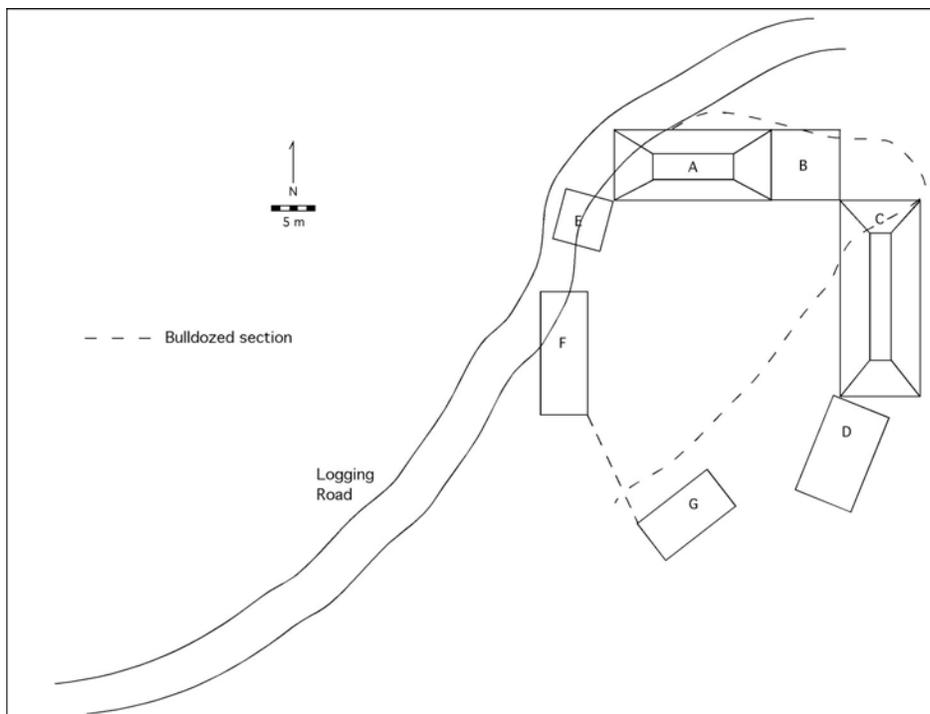


Figure 1.16 Site 94E22N-4 with road and bulldoze cut depicted

This structure was clearly an elite structure; it has standing walls with faced stone, plaster floors, and platforms or porches (Figure 1.17) (Table 1.2). Each construction phase was relatively labor intensive, the most recent ones even more so. For example, the earliest exposed fill level (7) consists of a clay fill whereas later fill deposits include cobbles and small boulders. The residents, however, appeared to have disassembled an earlier wall (3) to construct a later one (10).

While the ceramics from the backdirt, clean-up and strata suggest Late Classic occupation (c. A.D. 600-900), Maya still could have lived there much longer. We do not know how deep construction history is, though I think we were pretty close to ground level. The Late Classic dates, however, are in line with those from the two residences we excavated near the site core in 2002 (Graebner and Lucero 2003; Lucero and Graebner 2003). Site 94E22N-14, an elite structure located southeast of traverse point YG in Plaza 3 at a bearing of 133° and distance of 154 meters, is a U-shaped structure oriented east-west measuring 28.5 x 18 meters and is approximately from 1.7 (north side) to 3 (south side) meters in height.

It has several construction episodes consisting of a series of standing walls, faced limestone steps, plaster floors, ballasts, and cobble fill. Site 94E22N-18 is located east of traverse point YJ behind structure 2F near Plaza 2 at a bearing of 89° and a distance of 320 meters. It is a square-shaped structure oriented north-south that measures 9.5 x 9.5 m and is approximately from 0.62 (north side) to 1.5 (south side) m in height. It appears to be a single room structure with a porch on the south side; other than relatively thin plaster floors, architectural remains were limited to a prominent 4-7 coursed faced walls.

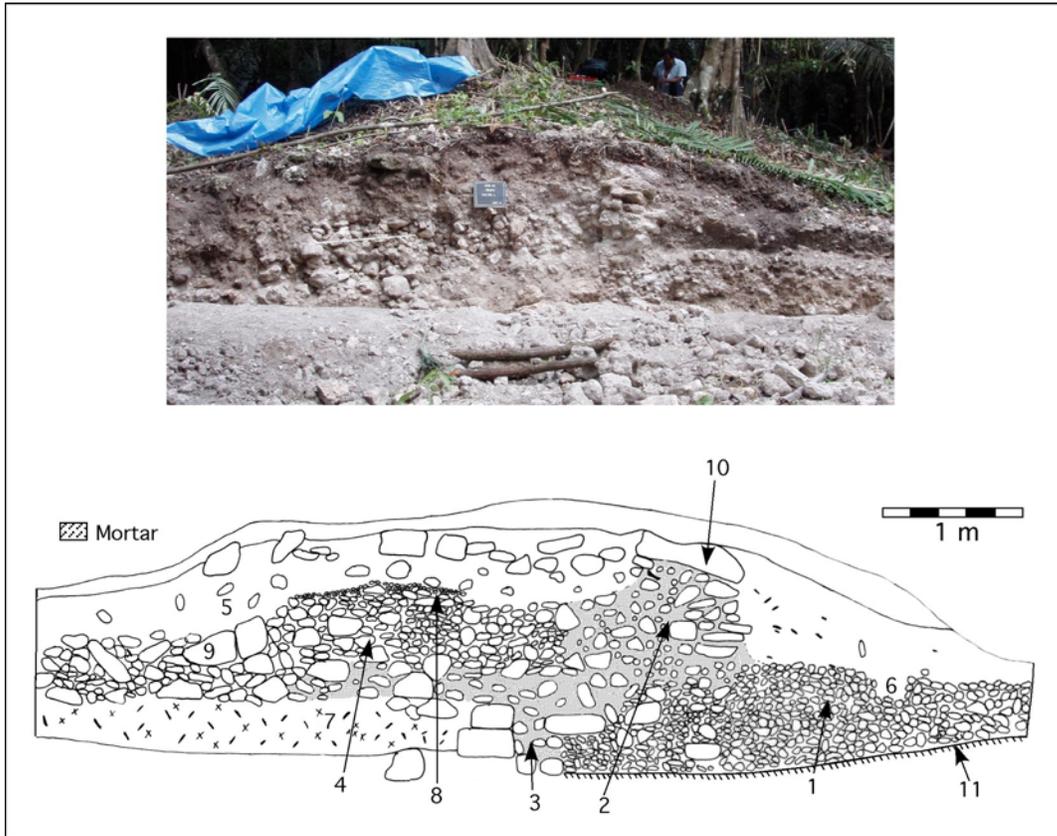


Figure 1.17 South wall, Str. C, Site 94E22N-4

Table 1.2 Site 94E22N-4 strata

Level	Description	Date
1	Cobble fill (10YR33), west platform/porch with a pit or posthole (6); mortar or natural debris	Late Classic
2	Cobble fill with plaster mortar (10YR72)	Late Classic
3	This is the earliest wall exposed consisting of two stones within which is mortared (10YR53)	Saxche Polychrome, Tiger Run, A.D. 600-700; Chunhuitz Orange bowl
4	Cobble and small boulder fill below floor (8) ballast (10YR64) without mortar	Dolphin Head Red, LC early facet, A.D. 700-800
5	Possible back wall of structure; no obvious faced stones	NA
6	Pit/possible posthole with dark, possibly organic, soil (10YR22)	NA
7	Earliest exposed clay fill within the earliest wall (3) (10YR32)	~White Cliff Striated, late Tiger Run (A.D. 600-700);

		Benque Viejo Polychrome, Spanish Lookout
8	Plaster floor (10YR72) with pebble ballast; plaster is missing in parts	Late Classic flared dish
9	Cobble (10YR42)	NA
10	Most recent wall, facing plaza; constructed with faced boulders and marl or plaster mortar (10YR72)	Well-fired Belize Red sherds, Spanish Lookout
11	Plaster floor at bottom of exposed profile; sherds were embedded in the floor.	NA

Clearly something was happening in the Late Classic period in and around Yalbac. Perhaps local farmers materially benefited from successful rulers and started to build more substantial homes. Surface ceramics collected from hinterland mounds during a preliminary survey in the 2001 season range in date from c. A.D. 400 to 1500, though the majority date to c. A.D. 700-900 (Graebner 2002b). Dates from Yalbac core contexts date much earlier—from the Middle and Late Preclassic. We clearly need to conduct more excavations at hinterland residences to ascertain how their occupants interacted with those living in the site core. I would also expect to find evidence for earlier farmsteads (earlier than the Late Classic, that is) built of perishable materials. As some farmers became more wealthy, for whatever reasons, they built more substantial structures with standing walls, stone core fills, and thick plaster floors. Alternatively, the hinterland could have been sparsely settled until the Late Classic when Maya from other areas occupied the area; they might have left their homes because of demanding kings, increased competition for resources, or degraded resources. These issues await future research.

Concluding Remarks

Yalbac is turning out to be an interesting site. The temple ball court is a unique feature that needs exploring (e.g., a possible Preclassic component; see chapter 2). Further, we need more information on the order in which the Maya built the different plazas and complexes. John Morris suggested either one of two scenarios. In the first, Plaza 2 was built first (which would not be the normal pattern), after which Plaza 3 was built in the style of Early Classic or Late Preclassic; if so, then it would be similar to Lamanai. In the second scenario, Plazas 2 and 3 were built first, and like at Xunantunich, the acropolis (and Plaza 1) were built in the late Late Classic; if so, the pattern would be similar to the Mirador Basin, where large early temples were built. Further, like at Xunantunich, Yalbac's ruling family benefited for a brief time when kings at the primary centers like Naranjo, Caracol and others were losing power.

Without any obvious iconographic or epigraphic records, temple functions are not completely understood. While I have little doubt that they served as royal ceremonial and political stages, I think they also had several other basic roles, such as their use for seasonal rites, feasts, and games. As a matter of fact, I think the same goes for temples of centers with inscriptions and public iconography. The standardized temple layout, particularly its pyramid shape, suggests their having multiple functions, especially given the fact that Maya centers are famous for having several temples. They also could have served different gods, and/or could have been built by different groups (e.g., royals, nobles, elites, or community efforts).

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Appendix
2004 Artifacts and curation information*

Cat #	Structure	Unit/LT	Stratum/ Context	Freq	Description	Curation location
685	94N22E-4	Str. C	1	2	bases	IoA
685	94N22E-4	Str. C	1	1	flange	IoA
685	94N22E-4	Str. C	1	5	rims	IoA
686	94N22E-4	Str. C	2	2	rims	IoA
687	94N22E-4	Str. C	3	3	2 rims, 1 decorated sherd	IoA
688	94N22E-4	Str. C	4	5	3 rims, 2 body sherds	IoA
689	94N22E-4	Str. C	6	7	body sherds	IoA
690	94N22E-4	Str. C	7	5	4 rims, 1 decorated sherd	IoA
691	94N22E-4	Str. C	Top of 8	1	rim	IoA
692	94N22E-4	Str. C	9	2	1 rim, 1 body sherd	IoA
611	BC Alley	TP 2B	101	1	chert flake	Backfill
611	BC Alley	TP 2B	101	1	obsidian blade	Backfill
611	BC Alley	TP 2B	101	4	sherds	IoA
611	BC Alley	TP 2B	101	1	handle	IoA
610	BC Alley	TP 2C	101	1	flake	Backfill
610	BC Alley	TP 2C	101	1	chert core	Backfill
610	BC Alley	TP 2C	101	9	sherds	IoA
610	BC Alley	TP 2C	101	1	base	IoA
612	BC Alley	TP center	102	8	chert flake	Backfill
612	BC Alley	TP center	102	4	chert chunk	Backfill
612	BC Alley	TP center	102	5	sherds	IoA
664	BC alley	TP	102	2	basal flanges	IoA
664	BC alley	TP	102	6	Sherds	IoA
664	BC alley	TP	102	6	rims	IoA
664	BC alley	TP	102	1	chert flake	Backfill
664	BC alley	TP	102	4	chert biface fragments	IoA
663	BC alley	TP	103	2	marine shell	IoA
663	BC alley	TP	103	1	fauna tooth	IoA
663	BC alley	TP	103	1	bone fragment	IoA
663	BC alley	TP	103	1	chert flake	Backfill
663	BC alley	TP	103	7	sherds	IoA
663	BC alley	TP	103	6	rims	IoA
663	BC alley	TP	103	2	handles	IoA
663	BC alley	TP	103	2	bases	IoA
663	BC alley	TP	103	1	chert chunk	Backfill
663	BC alley	TP	103	5	chert cores	Backfill
663	BC alley	TP	103	4	chert biface fragments	Backfill
663	BC alley	TP	103	7	chert flakes	Backfill
663	BC alley	TP	103	1	red granite round groundstone fragment	Backfill
650	BC alley	TP	Top of 104	1	sherd	IoA
662	BC alley	TP	104	3	rims	IoA
662	BC alley	TP	104	7	sherds	IoA
662	BC alley	TP	104	3	complete marine shell	IoA
660	BC alley	TP	105	3	chert lakes	Backfill
660	BC alley	TP	105	6	bone fragments; possible human skull	IoA
660	BC alley	TP	105	4	rims	IoA
660	BC alley	TP	105	7	sherds	IoA

660	BC alley	TP	105	1	jute	Backfill
668	BC alley	TP	106/107	1	chert blade fragment	IoA
668	BC alley	TP	106/107	2	rims	IoA
669	BC alley	TP	108	3	chert flakes	IoA
669	BC alley	TP	108	1	marine shell	IoA
669	BC alley	TP	108	2	jutes	IoA
669	BC alley	TP	108	1	lid	IoA
669	BC alley	TP	108	3	bases	IoA
669	BC alley	TP	108	4	rims	IoA
669	BC alley	TP	108	12	sherds	IoA
669	BC alley	TP	108	1	charcoal	IoA
677	BC Alley	TP	108	1	possible speleothem fragment	IoA
677	BC Alley	TP	108	4	chert flakes	IoA
677	BC Alley	TP	108	1	mano fragment	IoA
677	BC Alley	TP	108	1	sm. marine shell	IoA
677	BC Alley	TP	108	18	body sherds	Backfill
677	BC Alley	TP	108	11	rims	IoA
677	BC Alley	TP	108	1	basalt chunk	IoA
680	BC Alley	TP	108 burned matter	1	carbon sample	Export
680	BC Alley	TP	108 burned matter	1	paleobotanical sample	Export
680	BC Alley	TP	108 burned matter	1	flotation	Export
679	BC Alley	TP	108 lower burning	1	shell	IoA
679	BC Alley	TP	108 lower burning	5	rims	IoA
679	BC Alley	TP	108 lower burning	13	body sherds	Backfill
678	BC Alley	TP	108 upper burning	2	sm. marine shell	IoA
681	BC Alley	TP	109	4	possible speleothem fragments	IoA
681	BC Alley	TP	109	1	bone	IoA
681	BC Alley	TP	109	4	rims	IoA
681	BC Alley	TP	109	2	chert flakes	Backfill
681	BC Alley	TP	109	1	burned limestone core	Backfill
682	BC Alley	TP	110	1	freshwater shell	Backfill
682	BC Alley	TP	110	1	carbon sample	Export
682	BC Alley	TP	110	1	chert flake	Backfill
682	BC Alley	TP	110	11	body sherds	Backfill
682	BC Alley	TP	110	3	rims	IoA
683	BC Alley	TP	111	2	rim and neck	IoA
702	BC Alley	TP	112	1	body sherd	IoA
703	BC Alley	TP	113	1	body sherd	IoA
704	BC Alley	TP	114	1	rim	IoA
704	BC Alley	TP	114	2	body sherds	IoA
701	Plaza	TP	102	44	5 vessels (incomplete) with 9 rims and 35 body sherds (Belize Red McRae impressed)	IoA
701	Plaza	TP	102	1	handle	IoA

701	Plaza	TP	102	1	base	IoA
701	Plaza	TP	102	1	decorated sherd	IoA
700	Plaza 1	TP	101	1	possible miniature jar rim	IoA
700	Plaza 1	TP	101	4	handles	IoA
700	Plaza 1	TP	101	12	bases	IoA
700	Plaza 1	TP	101	3	flanges	IoA
700	Plaza 1	TP	101	3	pods	IoA
700	Plaza 1	TP	101	1	marine shell	IoA
700	Plaza 1	TP	101	1	possible speleothem fragment	IoA
700	Plaza 1	TP	101	1	obsidian blade point	IoA
700	Plaza 1	TP	101	11	chert flakes	IoA
700	Plaza 1	TP	101	1	chert core	IoA
700	Plaza 1	TP	101	4	chert chunks	IoA
700	Plaza 1	TP	101	1	utilized chert flake	IoA
700	Plaza 1	TP	101	2	chert bifaces	IoA
700	Plaza 1	TP	101	41	rims (including 8 Belize Red McRae impressed, likely part of 102 vessels)	IoA
700	Plaza 1	TP	101	39	1-3 possible vessels/plates (18) and body sherds (21); plates may be part of Belize Red cache in 102	IoA
700	Plaza 1	TP	101	2	mano fragments; 12 x 10 x 13 cm and 12 x 8.5 x 4 cm	Noted only; Backfill
718	Plaza 1	TP	104	6	speleothem fragments	IoA
718	Plaza 1	TP	104	1	freshwater shell	IoA
718	Plaza 1	TP	104	2	handles	IoA
718	Plaza 1	TP	104	2	rims	IoA
719	Plaza 1	TP	105	2	body sherds	IoA
720	Plaza 1	TP	106-not completely excavated	1	chert flake	IoA
720	Plaza 1	TP	106	1	freshwater shell	IoA
720	Plaza 1	TP	106	3	rims	IoA
720	Plaza 1	TP	106	4	body sherds	IoA
714	Str. 2C	LT18	Backdirt	1	body sherd	IoA
715	Str. 2F	LT11	2	1	jar rim	IoA
705	Str. 2F	LT11	Backdirt	1	rim	IoA
705	Str. 2F	LT11	Backdirt	1	chert flake	IoA
716	Str. 2F	LT21	1	1	bowl rim	IoA
717	Str. 2F	LT21	6	1	bowl rim	IoA
699	Str. 2F	LT21	backdirt	3	rims	IoA
699	Str. 2F	LT21	backdirt	1	Jaina-like figurine fragment of head—God N?	IoA
706	Str. 3A	LT25	Backdirt	2	rims	IoA
684	Str. 3A	LT29	Backdirt	21	rims	IoA
684	Str. 3A	LT29	Backdirt	2	chert flakes	Backfill
684	Str. 3A	LT29	Backdirt	1	chert core	Backfill
684	Str. 3A	LT29	Backdirt	6	bases	IoA
684	Str. 3A	LT29	Backdirt	1	flange	IoA
697	Str. 3A	LT7 TP	14	1	body sherd	IoA

697	Str. 3A	LT7 TP	14	2	chert flakes	IoA
698	Str. 3A	LT7 TP	15	1	carbon sample	Export
698	Str. 3A	LT7 TP	15	3	chert flakes (2 fire-cracked)	IoA
698	Str. 3A	LT7 TP	15	3	marine shell	IoA
698	Str. 3A	LT7 TP	15	12	1 spiral freshwater, 11 jutes	IoA
698	Str. 3A	LT7 TP	15	5	rims	IoA
698	Str. 3A	LT7 TP	15	6	body sherds	IoA
698	Str. 3A	LT7 TP	15	1	handle	IoA
693	Str. 3A	LT7 TP	2	1	carbon sample	Export
693	Str. 3A	LT7 TP	2	1	freshwater shell	Backfill
693	Str. 3A	LT7 TP	2	4	body sherds	IoA
694	Str. 3A	LT7 TP	3	3	body sherds	IoA
694	Str. 3A	LT7 TP	3	1	chert flake	IoA
695	Str. 3A	LT7 TP	4	4	body sherds	IoA
695	Str. 3A	LT7 TP	4	1	carbon sample	Export
696	Str. 3A	LT7 TP	5	1	carbon sample	Export
696	Str. 3A	LT7 TP	5	5	1 rim, 4 body sherds	IoA
676	Str. 3B	LT9	Backdirt	7	decorated sherds (3 incised, 2 painted, 1 bas relief)	IoA
676	Str. 3B	LT9	Backdirt	1	lid	IoA
676	Str. 3B	LT9	Backdirt	3	handles	IoA
676	Str. 3B	LT9	Backdirt	1	vase base with pod	IoA
676	Str. 3B	LT9	Backdirt	5	flanges (1 painted-EC)	IoA
676	Str. 3B	LT9	Backdirt	6	bases (1 vase)	IoA
676	Str. 3B	LT9	Backdirt	41	body sherds	IoA
676	Str. 3B	LT9	Backdirt	35	rims	IoA
676	Str. 3B	LT9	Backdirt	1	flake	Backfill
676	Str. 3B	LT9	Backdirt	1	fire-cracked utilized chert flake core	Backfill
676	Str. 3B	LT9	Backdirt	1	chert chunk	Backfill
708	Str. 3B	LT9 TP	101	2	rims	IoA
708	Str. 3B	LT9 TP	101	1	handle	IoA
708	Str. 3B	LT9 TP	101	2	chert flakes	IoA
707	Str. 3B	LT9 TP	101/102	27	rims (5) and body sherds (22) from one vessel, likely part of cache/burial	IoA
709	Str. 3B	LT9 TP	102	2	rims	IoA
709	Str. 3B	LT9 TP	102	6	body sherds	IoA
709	Str. 3B	LT9 TP	102	1	base	IoA
709	Str. 3B	LT9 TP	102	1	slipped lid?	IoA
709	Str. 3B	LT9 TP	102	3	chert flakes	IoA
709	Str. 3B	LT9 TP	102	1	chert chunk	IoA
713	Str. 3B	LT9 TP	Burial	-	human remains: lots of fragments, 5 phalanges, 2 feet bone fragments, 14 vertebra fragments, 27 long bone fragments, 20 skull fragments, 16 rib fragments, and 27 teeth (8 incisors, 8 premolars, 1 canine, and 8 molars)	IoA
711	Str. 3B	LT9 TP	Burial cache, top plate	27	8 rims, 4 bases, 15 body sherds	IoA
712	Str. 3B	LT9 TP	Cache	1	cut and polished jaguar tooth?	IoA

			contents			
712	Str. 3B	LT9 TP	Cache contents	2	obsidian blade points	IoA
712	Str. 3B	LT9 TP	Cache contents	1	spiral shell (<i>Pomacea</i> sp.)	IoA
712	Str. 3B	LT9 TP	Cache contents	1	drilled land shell (<i>Pomacea</i> sp.)	IoA
710	Str. 3B	LT9 TP	Cache, bottom plate	22	13 rims, 3 bases, 6 body sherds	IoA
675	Str. 3D	Lithic pile	Screened	3	plate	IoA
675	Str. 3D	Lithic pile	Screened	2	handles	IoA
675	Str. 3D	Lithic pile	Screened	1	basal flange	IoA
675	Str. 3D	Lithic pile	Screened	1	plate base	IoA
675	Str. 3D	Lithic pile	Screened	1	nubbin	IoA
675	Str. 3D	Lithic pile	Screened	2	decorated body sherds (1 face sherd	IoA
675	Str. 3D	Lithic pile	Screened	18	rims	IoA
675	Str. 3D	Lithic pile	Screened	5	bone fragments (2 likely bird)	Export
675	Str. 3D	Lithic pile	Screened	1	possible shaped white quartz	IoA
675	Str. 3D	Lithic pile	Screened	2	jar rim and neck	IoA

*Ballcourt Alley test pit artifacts from the 2002 (cat # 610-612) and 2003 (cat # 650-669) seasons are included.

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Chapter 2 The Ballcourt at Yalbac: 2004 Season

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This chapter focuses on the ballcourt alley test pit program that was started in 2002. The ballcourt at Yalbac is located in Plaza 2 and is comprised of Structures 2B and 2C. Structure 2B is attached to Structure 2A, the largest temple at the site (see Figure 1.1, Figure 2.1).

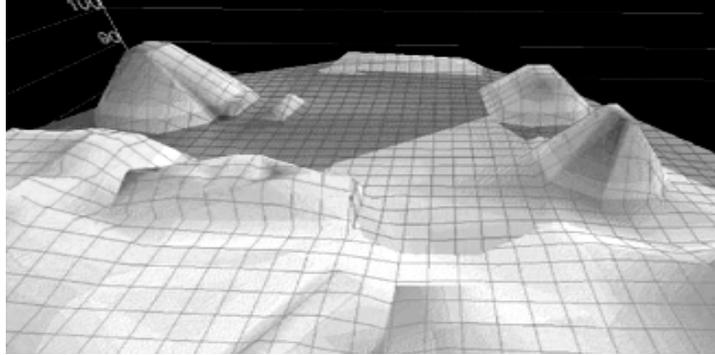


Figure 2.1 Plaza 2 looking north

The 2004 investigations at the ballcourt were a continuation of previous work done in 2002 and 2003. In both seasons, rain halted excavations; in 2004 we were able to complete test excavations to sterile. In 2003 a 3 x 1 meter test unit was opened between the parallel ballcourt Structures 2B and 2C, which are oriented 15° east of north (Figure 2.2). The goal was to locate the alley floor and, it was hoped, a ballcourt marker. For this reason the unit was placed in the center of the alley, perpendicular to Structures 2B and 2C. Figure 2.3 depicts the stratigraphic relationship of exposed strata. Excavations revealed collapse debris (102 and 103) as well as a series of plaster floors (104 through 107). Finally, clay fill (108) and a cut plaster floor (109) were exposed before excavations ended for the 2003 season (Lucero 2004).

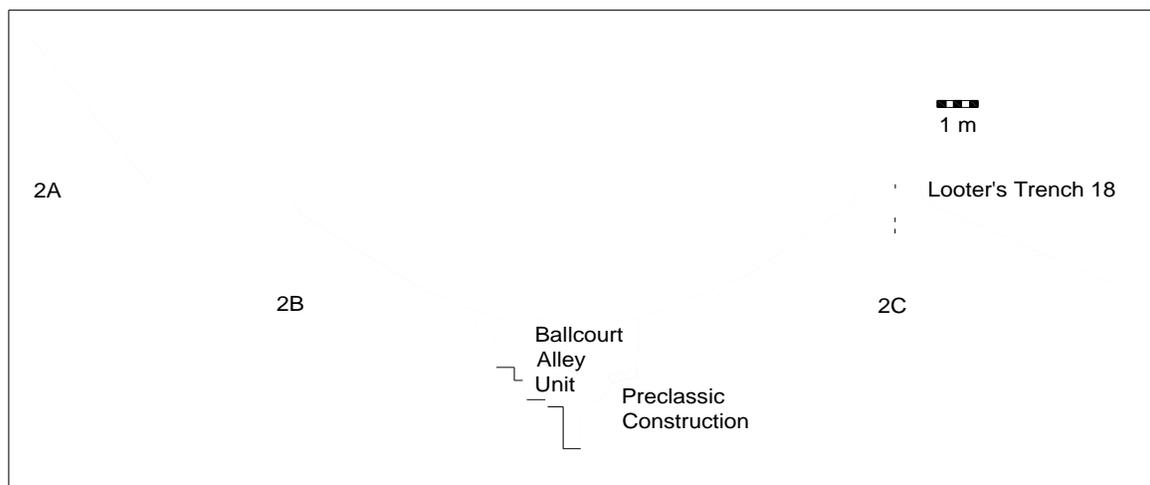


Figure 2.2 Schematic of north profile of ballcourt alley

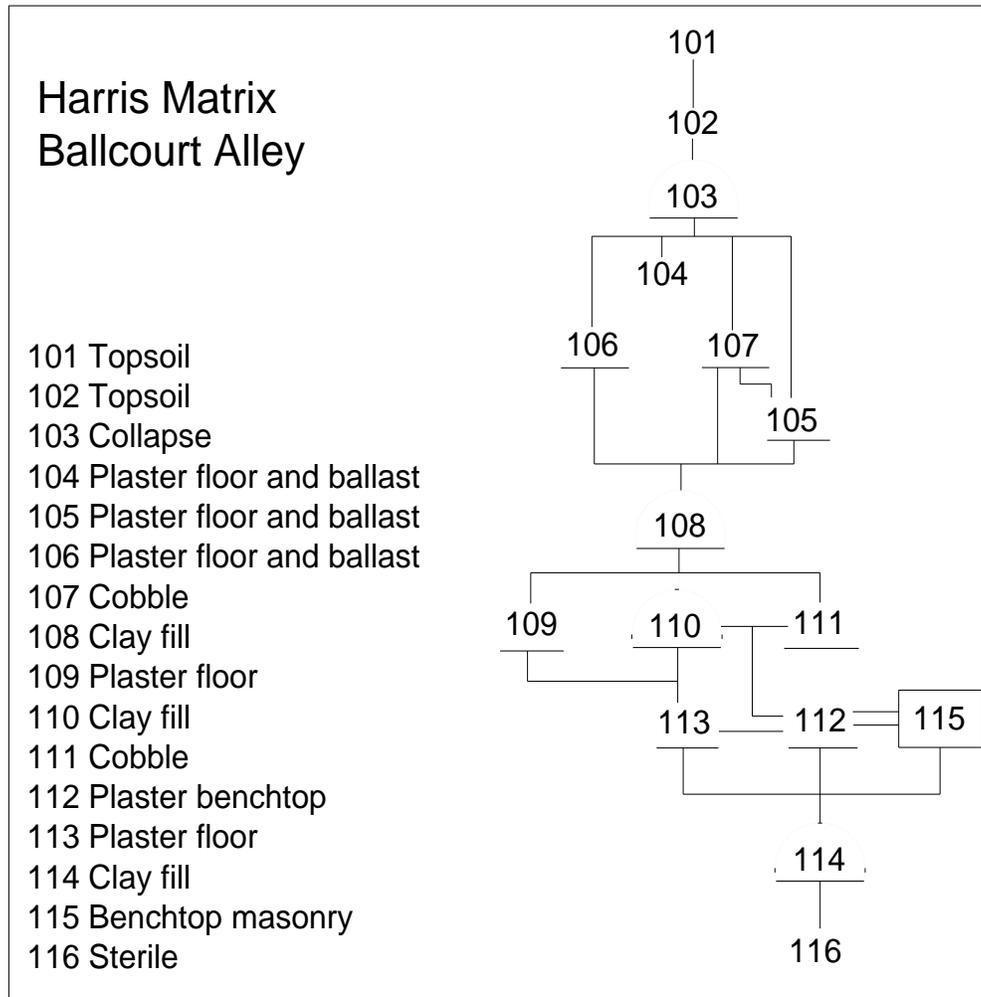


Figure 2.3 Ballcourt alley test pit stratigraphic relationship

2004 Excavations

The 2004 excavations began with a 1 x 2.75 meter unit. We used the same datum as previous seasons, 7 cm above the surface (8 cm in previous seasons) centered on the south side of the unit (located 15.24 m from traverse point YP at 12°). After removing the backdirt and plastic from the 2003 season, we found that much of plaster floor 109 had deteriorated due to the rain in 2003, and we were left with only a small patch of plaster in the southwest corner of the unit, as well as the ballast stones for the floor in the western third of the unit. Before removing these, we concentrated on the burned deposits (108) east of the ballast.

Stratum 108 yielded a series of burnt materials, all of which were patchy and uneven. The burning was clustered on the eastern side of the unit. We separated this series into three sub-strata, 108, 108 Upper Burning, and 108 Lower Burning. However, due to the undulating quality of all three layers, it is possible that these designated layers represent different objects from a single burning or a series of separate burning events (Figures 2.4 and 2.5).

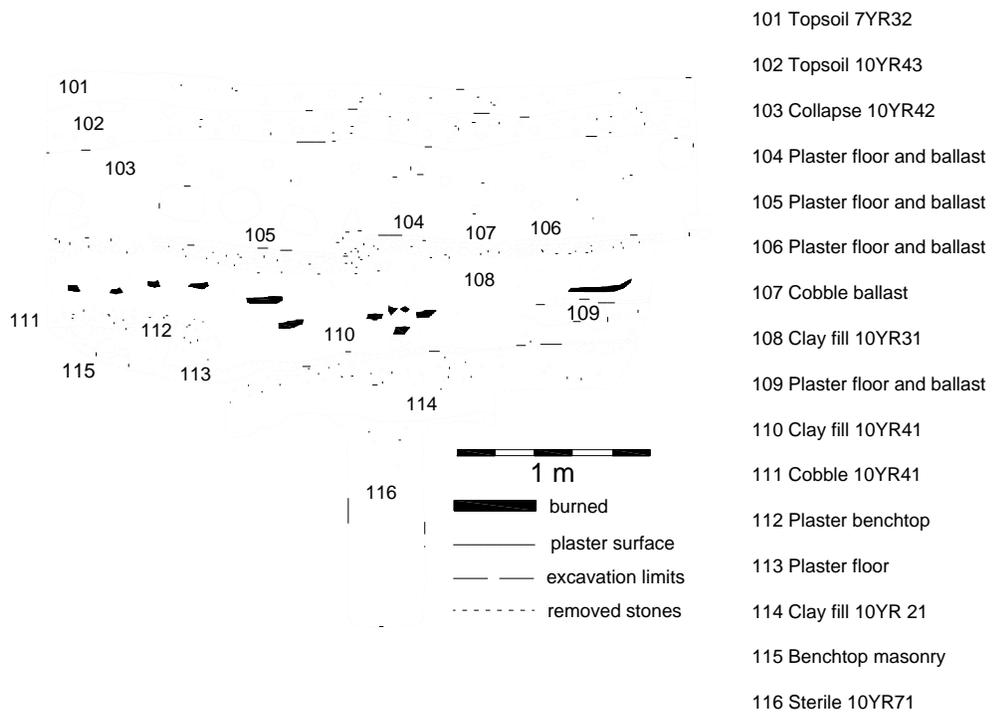


Figure 2.4 South profile of ballcourt alley unit

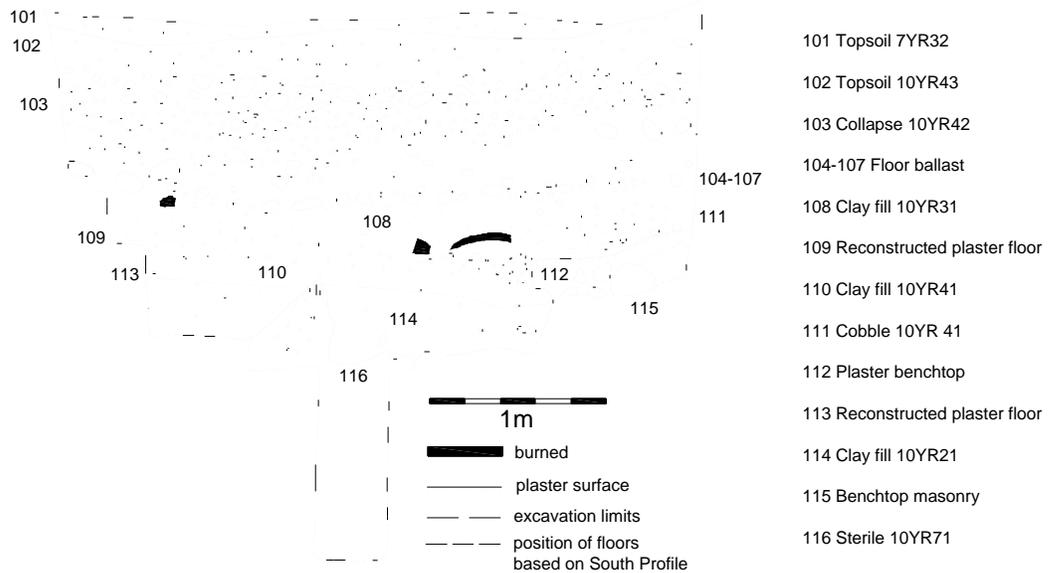


Figure 2.5 North profile of ballcourt alley unit

Stratum 108 included large burnt areas, while 108 Upper Burning yielded mostly smaller patches and one large strip with an obvious edge on the eastern end of the unit (Figure 2.6). In 108 Lower

Burning, the patches are very small except for a burned strip 1-1.5 cm thick. This strip runs north-south through the unit, roughly down the center of the ballcourt alley. It is 4 cm wide and continues into the north and south walls of the unit (Figure 2.7). Because of its placement in relation to the ballcourt and its substantial size, we took three samples from this strip of burning for flotation, C-14, and botanical analysis.



Figure 2.6 108 Upper Burning



Figure 2.7 108 Lower Burning

The ballast stones of 109 extended 95 cm from the west wall. The ballast consisted of cobble and small boulders, with larger stones along the western and southern sides of the unit. Below this layer of ballast was a thin layer of clay which yielded a piece of cut stone, a piece of bone, and several speleothem fragments (Figure 2.8). Under this thin layer of clay was another layer of stones, but these were small cobbles and pebbles and were spaced farther apart than the previous layer. These stones also continued to 95 cm from the west wall.



Figure 2.8 Speleothem fragments

On the east side of the unit, we identified another stratum of small cobbles and pebbles (111). From the east wall of the unit, this stratum continued only 40 cm to the west. We noted a similarity between 111 and the lower pebbles in 109 and it is possible that 111 could represent the ballast of floor 109 if it continued all the way to the east side of the unit. In any case, stratum 111 is only 2 cm thick and sits on top of 112, discussed below. Between 109 and 111 is a clay fill (110) (see Figure 2.3). We originally thought that the Maya had cut through floor 109 to deposit something, possibly a cache. However, we did not find any noticeable items underneath in 110.

Plaster floor 113 was underneath fill 110; it is a thick plaster floor, especially on the east end (see Figure 2.4). The floor appears to have been cut or broken because it has a distinct edge protruding about a centimeter from the south wall of the unit for most of its length, then widening on the eastern end to a maximum of 56 cm beyond the south wall of the unit (consequently, this floor does not appear in Figure 2.5) (Figure 2.9). Above this floor were several chunks of limestone, the largest of which was up against the northern wall of the unit. While following floor 113 east, we came upon another plaster surface only 2 cm below the top of 111. This surface (112), while 20 cm above floor 113, appeared to be continuous with it, resembling a plastered step. The plaster of this step was very thick and hard; while excavating it we found a large, flat stone under the surface of the plaster (Figure 2.10). This boulder was a smooth, hard river stone, unlike most of the soft, porous limestone usually found. It was

encased by plaster, as well as large pieces of hard limestone (harder and less porous than most limestone found at Yalbac). Because of the placement of this boulder, its material, and two rounded edges, we hoped that it might be a ballcourt marker and removed it. However, it lacked markings and we found that it was similar to many other large stones surrounded by the plaster of 112.

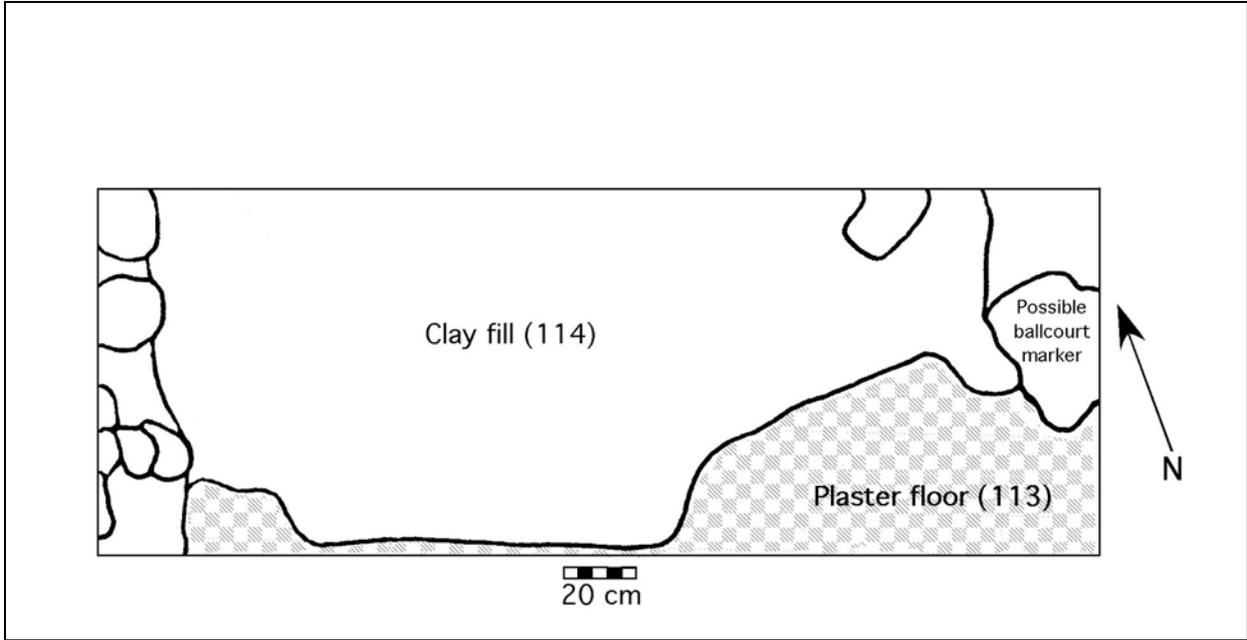


Figure 2.9 Floor 113, showing an obvious missing section, likely cut through



Figure 2.10 Smooth river boulder near top of 112

To expose more of 112, we expanded the unit eastward half a meter. This stratum slopes up slightly to the east, but it was difficult to tell whether this was intentional or the result of collapse (see Figures 2.4 and 2.5). Removing the plaster exposed more boulder sized stones, most of them limestone, but some of them river stones as well (stratum 115). Stratum 115 may comprise of a bench (Figure 2.11). We collected all the stones that we had removed and discontinued excavation in that part of the unit. Unlike all other strata, 112 and 115 did not yield artifacts.



Figure 2.11 Possible Preclassic ballcourt bench

Stratum 114, a pebble ballast and a clay fill, was underneath 115 and floor 113. Larger ballast stones were found under the floor closest to the base of 112. We collected ceramics from the top of 114, but artifacts became less frequent further down. In addition, the clayey fill became darker with fewer limestone specks. Under 114 we encountered an undulating natural clay—light gray mixed with limestone chunks. Thus, it appears that fill 114 was the first cultural layer, used to level out the surface prior to construction (see Figures 2.4 and 2.5).

After completion, we lined the test pit with black plastic; we then put in the bagged and labeled non-diagnostic artifacts (e.g., chert chunks, plain body sherds) before backfilling. The location of the entire artifact collection from the ballcourt test-pitting program is listed in the appendix in chapter 1, including those from the 2002 and 2003 seasons.

Discussion

Structures 2B and 2C represent the final phase of construction at the ballcourt alley. Structure 2B is attached to Temple 2A, and the final construction phases of all three structures apparently were contemporaneous. While unexcavated, Structures 2B and 2C are parallel and mirror each other in shape, the top of which is formed by intact platforms three courses high (see Figure 2.2). The east side of Structure 2C had three looter's trenches; an examination of the north profile of the southernmost trench (LT 18) shows that this final construction phase consists of limestone boulders in a fill of loose dirt (Figure 2.12; see Figure 2.2 for the location of LT 18).

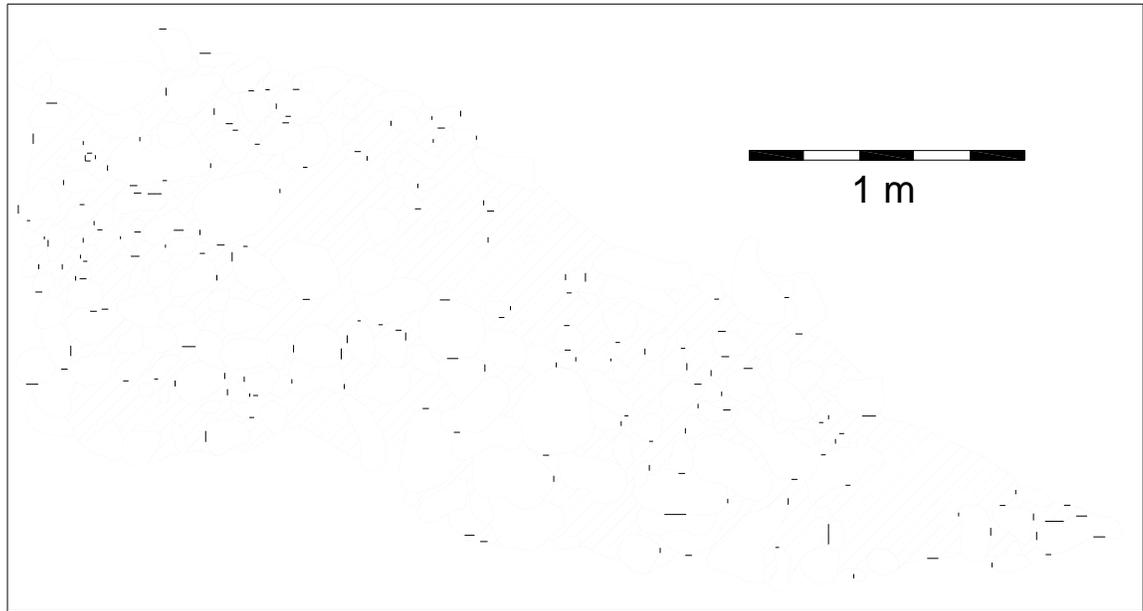


Figure 2.12 North profile of LT 18, Structure 2C

This masonry noticeably differs from the earliest construction phase, which was thickly encased in plaster, and likely corresponds to one or more of the plaster floors 104-107 excavated in 2003. These floors slope down toward the center of the excavation unit possibly because there was not enough ballast placed under the floor when it was constructed. It seems apparent, from the profiled looter's trench and the sloping floors, that less care was taken in the building of this final phase than in the building of the earliest phases.

In previous seasons, a comparison was made between the floors of the ballcourt alley and the floors exposed in the Plaza 2 1 x 1 m center unit based on elevation and chronology (Lucero 2004). Floors 104 and 105 and clay fill 108 in the ballcourt alley correspond to floors 6, 7 and 10 of Plaza 2, respectively. However, when the data from 2004 are taken into consideration (Table 2.1), strata from the two units no longer seem to line up. Floor 12 of Plaza 2, which was constructed soon after Floor 10, is later chronologically than strata 109, 110, 111 and 112 of the ballcourt alley, although it is lower in elevation. Based on elevation alone, clay fill 114 from the ballcourt and clay fill 13 from Plaza 2 may correspond to one another. However, since dates are not available for either stratum, it is not possible to confirm. Not surprisingly, sterile clay appears at about the same elevation in both units.

Table 2.1 Comparison of ballcourt alley and Plaza 2 test unit floors

Ballcourt	Elevation (m asl)	Date	Plaza 2	Elevation (m asl)	Date
Floor 104	68.68	c. A.D. 600-700 or later	Floor 6	68.81	c. A.D. 600-700 or later
Floor 105	68.61	c. A.D. 600-700	Floor 7	68.78	c. A.D. 600-700
Floor 106	68.64	NA			
Clay Fill 108	68.58	c. 250 BC-AD 250	Floor 10	68.58	c. 100 B.C.-A.D. 250
Floor 109	68.31	c. 300-100 B.C.	Fill 11	68.55	NA
Clay Fill 110	68.26	c. 300-100 B.C.			
Floor 111	68.26	c. 300-100 B.C.			
Bench 112	68.13	NA			
			Floor 12	68.13	c. 100 B.C.-A.D. 250
Floor 113	68.05	NA			
Clay Fill 114	68.05	NA	Clay Fill 13	68.09	NA
White clay sterile	67.65		White clay sterile	67.54	

While we started excavation with the hope of finding a cache deposited under floor 109, we instead found evidence for earlier construction episodes. While the lack of artifacts made dating 112/115 difficult, ceramics from strata 108-111 indicate a Preclassic construction. When examining the chronological sequence of all the strata of the ballcourt alley unit, there is a noticeable gap between the later strata 102-105, which date to the Late Classic period, and the earlier 108-111, which date to the Late Preclassic period or earlier (Table 2.2). Thus, there is a gap in construction history corresponding to the Early Classic period. This same apparent gap can be seen in other Preclassic ballcourts at Yalbac's neighboring sites, both in coastal areas further north and in the Belize Valley further south (discussed below).

Table 2.2 Ballcourt ceramic dates

Stratum	Description	Time period
102	Topsoil/cobbles	Late Preclassic through Terminal Classic; Sierra Red (Barton Creek), Minanha Red (Hermitage), Mt. Maloney (late facet Spanish Lookout), Roaring Creek Red (late facet Spanish Lookout), Tutucan? Striated (Spanish Lookout)
103	Collapse	Late Classic; ash tempering; Belize Red (Spanish Lookout), and perhaps Mt. Pine Red (Tiger Run)
104	Floor/ballast	Tiger Run or later
105	Floor	~Tiger Run
108	Clay fill	Middle Preclassic-Late Preclassic; Jocote Orange-brown (early facet Jenny Creek); jar w/ filleting (likely late facet Jenny Creek); Polvero Black (Barton Creek); Trijinto?

		Cream
108 lower	Cultural clay fill with burning	~Paso Caballo; what also seems Preclassic is thickness of plate/bowl forms
109	Cobbles/ deteriorating plaster	Savanna Orange; Jenny Creek; 900-600/300 B.C.; calcite/ash
110	Cultural clay fill	Sierra Red- BC, 300-100 B.C.; ~Quacco Creek-Mount Hope, 100 B.C.-A.D. 100
111	Possible plaster floor (remnant/ ballast)	Sapote Striated, BC, 300-100 B.C.
112	Plaster floor	Ashy body sherd ~w/ medial flange; ~Floral Park
113	Plaster floor	Ashy orange w/ thick grayish core; open form (bowl or plate)
114	Dark cultural clay fill	Ashy orange; ~very shallow plate w/ remnant red slip

Construction History

There are at least three major construction phases of the ballcourt at Yalbac. The earliest occurred during the Late Preclassic period, is represented by floor 113 and the possible bench (115/112). The floor and bench are related because they are plastered in the same episode. The floor and the bench were built on top of a clay fill (114), which the Maya used to level out the uneven natural clay stratum. Later, but probably also in the Late Preclassic, a clay fill (110) was added on top of floor 113 to prepare the alley for another plaster floor (109). Although we did not find a cache, it is likely that the Maya cut through floor 113 at this time as well.

Later during the Late Preclassic period, a series of burning events took place and floor 109 was covered with clay fill 108. It was around this time that floors 10 and 12 were constructed in Plaza 2. These are the first two floors in the plaza, so it is possible that the burning in the ballcourt represents a termination event associated with a new construction episode at Yalbac. The earliest construction phases at Temple 2A probably occurred later than the earliest phases at the ballcourt. Perhaps construction of Structures 2A, as well as 2D, 2E and 2F, began at this time, along with the first two plaza floors. The ballcourt, in its awkward position in relation to the new temple building, was terminated to make way for this new building program. There are weaknesses with this hypothesis, however; as of yet, there is no evidence for Preclassic construction in any other structures in Plaza 2. Structure 2F, the only structure that has been examined, has yielded only Late Classic artifacts in both Looter's Trench 11 and 21. Also, if the first phases of Temple 2A were built at this time, and the ballcourt was terminated and covered by plaza 2, we would expect to have exposed obvious plaza floors during our excavations of the ballcourt. Plaza 2 floors were not found in the unit however, and therefore could not have extended to Structure 2A. However, until more extensive testing of Plaza two structures is conducted, we will not have a clear understanding of Plaza 2 construction history.

Whatever the history of Plaza 2, following the burning of 108, the ballcourt remained unaltered for the duration of the Early Classic period. A third and final major phase of construction took place in the Late Classic period, when a series of floors was built on top of 108. Floors 106 and 105 were added first, but poor construction caused them to slant toward the center of the playing alley. Both floors were covered by floor 104 without an intervening layer of fill (Lucero 2004). These three floors represent the final major phase of construction at the ballcourt and correspond to the final phase of Structures 2B and

2C. At the same time, the final phase of Structure 2A was built abutting Structure 2B (see discussion below).

Discussion and Conclusion

In their 1982 article, Scarborough and others discuss the two Preclassic ballcourts found at Cerros, Belize, and predict the discovery of other Preclassic ballcourts. Time has proved them correct, as there are now several known Late Preclassic ballcourts in northern Belize and the Belize Valley. These include ballcourts at Colha (Eaton and Kunstler 1980), Pacbitun (Healy 1992), El Pilar (Ferguson 1999:40-41), Actuncan (McGovern 1993, 1994), Buenavista (Ball and Taschek 2001) and possibly Blackman Eddy (Garber et al. 2004), all of which display a similar design. All are oriented north-south, all are open-ended, although some sites have end-zone buildings, and they all have similar dimensions: playing alleys range from 14 to 22 meters long (22 being an outlier: the next longest ballcourt is 19 meters long) and from 3.1 to 7 meters wide. Yalbac's ballcourt fits within this range at approximately 14 meters long and more than 2.2 meters wide during the earliest construction phase (at present, Structures 2B and 2C are approximately 6 m apart).

One area of comparison that will become more apparent with future investigations is the actual form that Yalbac's ballcourt takes. I have used the term "bench" to refer to the exposed architecture as an analogy to other ballcourts such as those of Cerros and Pacbitun. At these courts, a sloped bench face rises above the playing alley floor, and a flat bench top widens the alley before the rise of the sloped playing walls. These benches are covered in plaster backed by rubble or stepped-back masonry (Healy 1992; Scarborough et al. 1982). It is possible that the ballcourt at Yalbac was constructed with the same design; however, the dimensions of its bench are very different from those mentioned above. The benches range from 54 cm high at Pacbitun to over a meter at both ballcourts at Cerros. In contrast, the Preclassic bench at Yalbac is only about 30 cm high. In addition, all three benches from Pacbitun and Cerros have sloped faces whereas Yalbac's bench face is vertical. It is possible that Yalbac's ballcourt does not have a Preclassic bench. It is unclear whether the slope seen in the masonry (best seen in Figure 2.5) is a result of collapse, or whether it indicates an immediate sloped playing wall after a short vertical face. This reconstruction would make Yalbac's ballcourt more similar to that at Colha, where sloped playing walls rise directly off the alley floor. Colha's Preclassic phase does not show the short vertical rise seen at Yalbac, and its walls rise at a steep angle of 45° (Eaton and Kunstler 1980). Neither of these reconstructions is perfect, and only further exposure of Structure 2C will resolve this issue.

Of the known Preclassic ballcourts, only the South Ballcourt at Buenavista contains construction from the Early Classic period (Ball and Taschek 2001), and only one additional ballcourt in the Belize Valley, at Las Ruinas de Arenal, has an initial construction phase dating to the Early Classic Period (Ferguson 1999:51). Like the ballcourt at Yalbac, those of Actuncan, Pacbitun and Colha all display a gap in construction history between the Late Preclassic and Late Classic construction phases. Scarborough and others (1982:33) hypothesize that "the absence of reported ballcourts in the Early Classic sites of the interior lowlands is a true reflection of a hiatus in the construction of masonry courts between Late Preclassic and Late Classic times." While it is unclear why so many sites would discontinue ballcourt construction during the Early Classic period, the fact that this pattern is apparent at several sites demonstrates that it was a regional phenomenon.

One way in which the ballcourt at Yalbac differs greatly from the above-mentioned ballcourts is its position within the site. At other sites, ballcourts are located on the edge of a large plaza or behind a temple and do not intrude a great deal into the plaza area. Yalbac's ballcourt instead is located in front of Temple 2A, protruding into Plaza 2. There are several possible explanations for this arrangement of structures. It could be an oddity specific to Yalbac, or perhaps Structures 2B and 2C do not even represent a ballcourt at all. This is unlikely given their similarities to other ballcourts discussed above, as well as the symmetry between the two structures. The most likely explanation is that Structure 2A was added after the earliest construction phase of Structures 2B and 2C. If Temple 2A did not exist

when they were first built, the ballcourt would indeed have been located on the edge of Plaza 2 as would be expected. Only the later addition of Structure 2A would make it appear to protrude into the plaza. A similar pattern of construction can be seen at Xunantunich, where a large structure (A-1) was superimposed on one of the range structures of a Late Classic ballcourt (Jamison and Wolff 1994). However, the ballcourt structure is found behind the temple—not facing the plaza as is the case at Yalbac. In order to work out the details of the construction phases of Structures 2A, 2B and 2C, further excavation is required.

It may seem illogical to retain the position of the ballcourt even when it impeded construction of Temple 2A. However, as Scarborough (1991:130-132) points out, “seldom has a ballcourt been buried by subsequent construction and only then as a consequence of a major reorganization....Most courts have an extended period of use and reuse.... The fact that a court would be reconstructed at the same identical locus as an earlier abandoned one suggests the enduring quality of the masonry court.” Retaining the position of the ballcourt took precedence over the practicality of moving it out of the way of later construction. Similar to Xunantunich where “it seems certain that the ballcourt retained some measure of socioreligious significance, as it is not entirely enveloped by the construction of Structure A-1” (Jamison and Wolff 1994:36), the location of the ballcourt at Yalbac was not abandoned, but retained even after the construction of Temple 2A.

It is apparent that ballcourts and associated activities were extremely important since they influenced site planning. Many explanations have been proposed for the significance of the ballcourt and ballgame in general. These explanations tend to fall into two major categories: political or social significance, and ritual or religious significance. Social and political models focus on the ballcourt as a representation of competing groups within society, whether they are lineages (Fox 1991), ethnic groups, or rulers and subjects (Gillespie 1991). The ballgame thus was a symbolic representation of competition between these groups (Scarborough 1991) that may or may not have had real societal consequences (Fox 1996; Santley et al. 1991; Scarborough 1991).

Ritual and religious models focus on the ballgame as a representation of agricultural fertility cycles (Cohodas 1991; Fox 1996; Gillespie 1991), as a reenactment of the origin myth (e.g., the ballgame played by the Hero Twins as related in the Popol Vuh) (Freidel et al. 1993:341; Tokovinine 2002; Zender 2004), or as a symbolic representation of the underworld or entrance to the underworld (Fox 1991; Freidel et al. 1993:355; Gillespie 1991). Their association with the underworld may explain the presence of speleothem fragments found in stratum 109 at Yalbac, as well as other sites (e.g., Ferguson 1999).

The significance of the ballgame was undoubtedly a combination of several of these explanations, and very likely changed through time. Such a change could be reflected by changes in ballcourt form through time. For example, Ferguson (1991:124, 131-133) proposes that the sudden appearance of Late Classic construction phases after Early Classic gaps in construction history seen at many sites in the Belize Valley is a reflection of a revitalization movement in the face of social and political changes. Whatever the reasons, it is clear that the ballcourt was of primary significance during the Preclassic and Classic periods, leading to its influence on site layout as seen at Yalbac.

The ballcourt remained in place even with the construction of Temple 2A because of its social and religious significance. This does not explain, however, why Temple 2A was built where it was. Even the above example of Xunantunich, where Structure A-1 was built in such a way that the ballcourt remained on the edge of the plaza, does not entirely resemble Yalbac's Plaza 2. Why then, was Temple 2A built behind the ballcourt at Yalbac, rather than in front of it, as at Xunantunich? As discussed above, perhaps the ballcourt had temporarily fallen out of use when construction of Temple 2A began. Other explanations for this arrangement are possible as well, such as size restraints within the plaza. At 16 meters tall, Temple 2A is the largest temple at Yalbac and is also the only one free of looter's trenches. It has been possible to take advantage of the destruction caused by looters in other structures by using profiles of the trenches to examine construction histories. But since Temple 2A is unlooted, we consequently have no data with which to relate it to other structures at Yalbac. It therefore offers an opportunity for excavation in order to better understand the construction history of the entire site.

The 2004 excavations of Yalbac's ballcourt alley highlighted both the similarities and differences between site construction at Yalbac and at other sites both in northern coastal Belize and in the Belize Valley. The ballcourt shows the same construction history of many other sites and probably reflects the same social and political changes as its neighbors. The excavation also revealed Yalbac's peculiarity in the placement of its largest (and currently most mysterious) temple. Why was Temple 2A built where it was? How does it relate to other temples at Yalbac? How does it reflect the political and social organization at this site? These questions can only be answered with further investigation in future seasons.

Acknowledgements: I would like to thank the entire 2004 VOPA crew, especially Mr. Scott, who made life at the ballcourt so entertaining.

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Chapter 3

Temple 3A Looters' Trenches: Construction History

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One of the structures that we concentrated on during the 2004 field season at Yalbac was Structure 3A, located on the western side of plaza 3 (adjacent to the northwest main entrance into the plaza) (see Figure 1.1). Because of its three looters trenches (LT), Temple 3A provides an excellent opportunity to collect information about construction patterns and chronology. Accordingly, members of the crew cleaned and profiled its trenches, LT 25, LT 29, and LT 7. When possible, we also collected ceramics from side walls and backdirt.

Structure 3A

It measures 45 x 25 m in size, and is taller in the back, measuring 12 m, and shorter on its eastward facing front side, measuring 11 m (Figure 3.1). Additionally, on its front side facing the plaza there are traces of terracing, which will be discussed in greater detail when I describe LT 25 below. And on its sides are elongated portions or wings that jut out from the main section of the temple. This characteristic is similar to Structure 3D (located on the opposite end of the plaza), which has wings on both its north and south ends. Lucero postulates that these wings might contain tombs (Lucero 2004). Based on the ceramic samples taken from Str. 3A, its dates range from approximately the Barton Creek phase (300-100 B.C.) at its base, to about the Hermitage phase (A.D. 300-900) at its latest construction level (though ceramics dating to later periods were recovered).

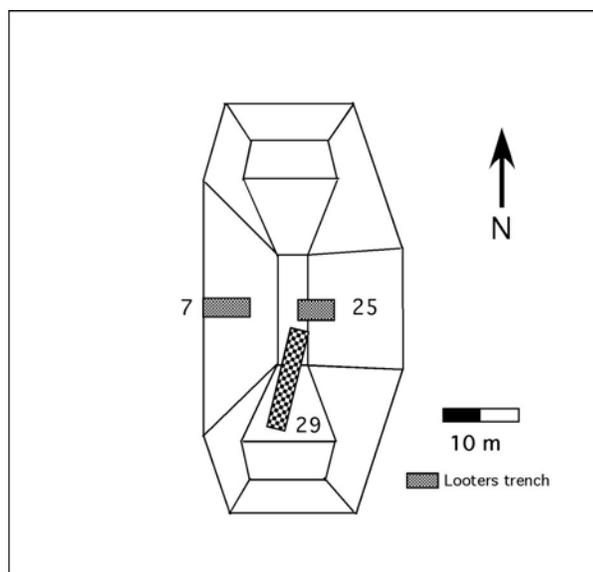


Figure 3.1 Structure 3A
Methods

Our procedures for recording information from the looter's trenches were basically the same. First, we began by clearing the walls that revealed the most information with trowels. The only time that we had to use shovels to remove access dirt was with LT 29, and then it was only the middle and bottom portion of the trench. Once the walls were cleaned, we profiled each using a level, nails, and string to orient our drawings. All of the profiles were drawn to 1/20th scale. During the process of cleaning side walls ceramics were collected if present.

Next we tied in the three LTs to each other by measuring the distance between the starting point of each profile line. To accomplish this, we tied a string to the east side of LT 25's profile line since it is higher than LT 29. With a line level we then measured the distance to the profile line of LT 29. We used the same system we measured the distance down from LT 29 to LT 7's profile line, which was at the base of the structure. We then tied all profile lines to traverse point YD (3.5 m west of the western edge of LT 7).

Throughout our work at Temple 3A, an extensive amount of digital photos were taken of each trench.

Looter's Trenches

LT 25

This trench is located at the top of the front (east) side of the structure, facing Plaza 3. It measures about 3.5 meters long, and approximately 2.5 meters deep at its deepest point. The humus is generally 20 cm thick throughout the profiled area (the south wall), which is composed mainly of large rocks, cobbles, and plaster. Ceramics found in the backdirt dates the trench area to the late Spanish Lookout period, about A.D. 800-900. However, surface ceramics from the summit above LT 25 date to c. A.D. 1150 (New Town Phase).

The trench exposes what appears to be three terraces. This is evident from the variation of construction materials (Figure 3.2). The possibility does exist that there are more terraces, but it is difficult to determine due to a large tree root in the front portion of LT 25. The terraces are composed of medium size cobbles and plaster fill with the facade stones faced on all four sides. Running along their base is a relatively flat stratum of large boulders with a small amount of plaster mortar. The mortar likely seeped down over time. The purpose of this stratum might be the result of an earlier phase of construction when the builders wanted more of a defined structured platform upon which they could build a perishable structure. Or perhaps it provided for a more stable foundation upon which to build their terraces.

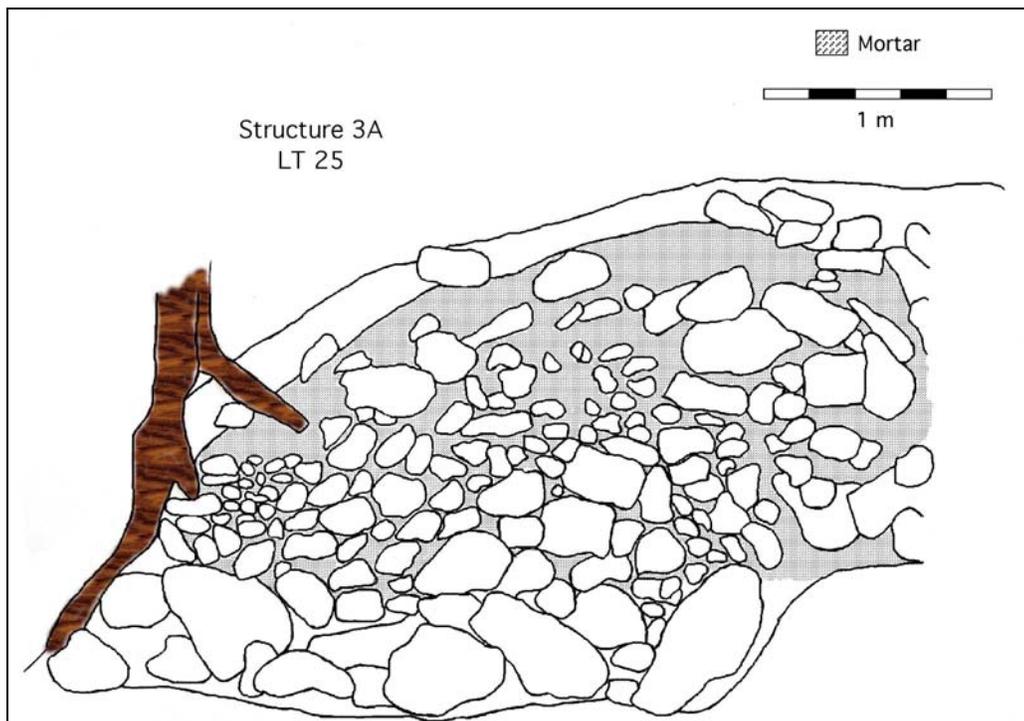


Figure 3.2 South wall of LT 25, Structure 3A

LT29

LT 29 is located on the south side (right wing) of the structure. The trench is divided into two parts (Figure 3.3). The first at the top of the structure measures about 3.6 meters in length and 2.8 meters at its deepest point. The second is located in the middle portion of the structure, with a length of about 4.6 meters and a depth of roughly 2.4 meters. Ceramics from the looter's backdirt date from c. A.D. 300-600 (Hermitage) to the c. A.D. 600-900 (Spanish Lookout).

The west wall of the trench and a portion of the north were profiled. The trench exposes strata of sorted cobbles and boulders, with and without mortar. The areas without mortar have a base of cobbles and small boulders, then on top a stratum of smaller stones. The mortared portion is a marl/plaster with gravel and is located at the bottom of the trench, in the stratum above a large boulder base. This composition is also seen on the north wall of LT 25. The trench reveals the possibility for larger terraces than those found in LT 25.

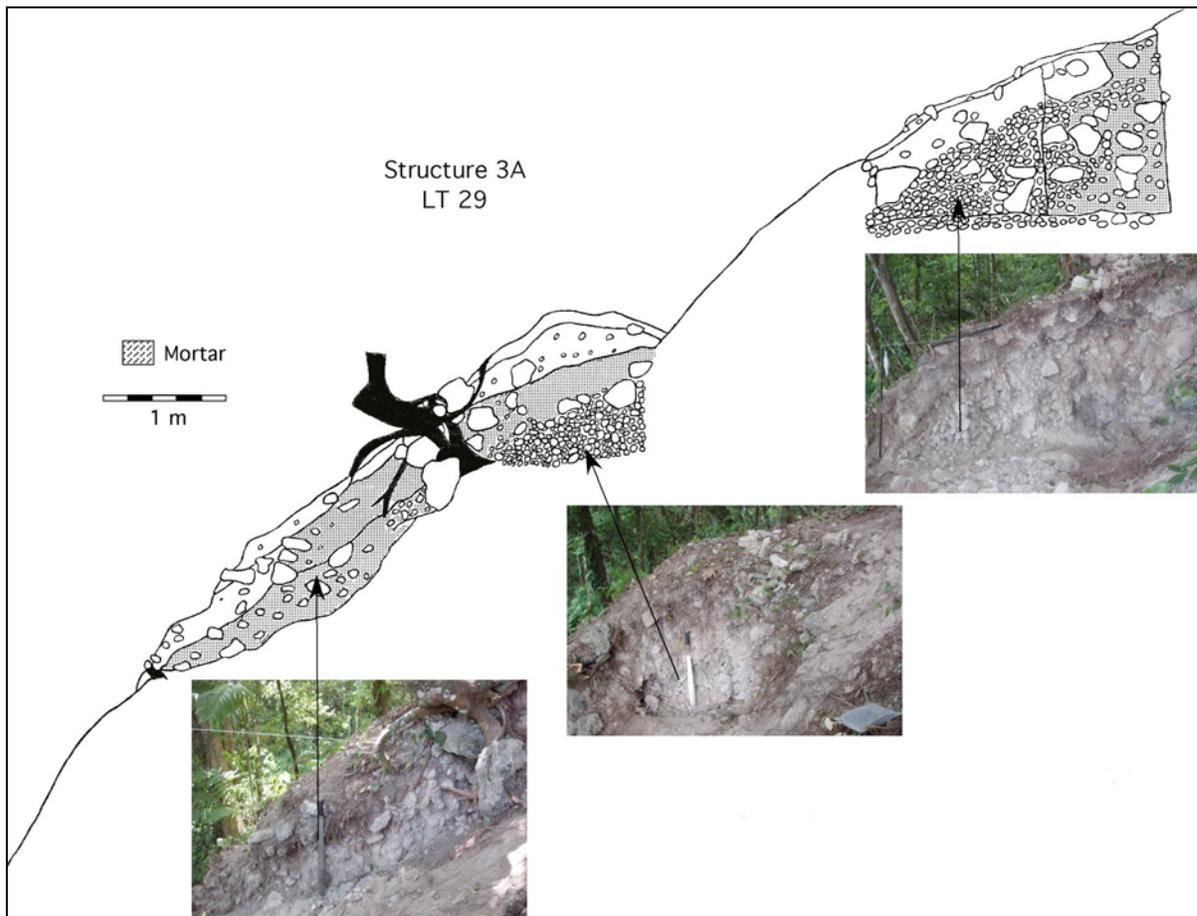


Figure 3.3 West wall of LT 29, Structure 3A

LT7

LT 7 is located on the west side (back) of the structure. The north wall, which we profiled, measures approximately 8.2 meters in length and 3.2 meters at its deepest point. Additionally, we put in a column test unit in the eastern wall of the trench (35 x 35 cm) because of the several construction phases that were visible at the eastern end of the trench (Figures 3.4, 3.5, and 3.6). The earliest ceramics found were in the fill immediately above the bedrock, and include Flor Creme bowl sherds, which dates this phase of the structure the Barton Creek Phase (300-100 B.C). Diagnostic sherds found near the entrance indicate that the last construction phase of the trench was c. A.D. 650-750.

Table 3.1 provides a detailed description of each of the LT 7 levels. Overall, the general consensus is that level 15 represents an elevated platform upon which the builders constructed a plaster floor (levels 17, 6 and 7) with steps leading down to a patio that was resurfaced. Plaster floor 6 was noted for its unusual tanish color (10YR72) and sandy texture. Usually *sascab*, or decomposed limestone, is used for mortar, resulting in a white appearance (like the other plaster floors in the trench) (Abrams 1994:69). Lucero postulates that its material may be from a cave, signifying a possible symbolic connection. Strata beneath 6 and 7 indicate that the elevated platform was built after a previously established floor in the patio area (level 10). Level 10 is the earliest plaster floor found in the trench. All together there are an estimated 6 plaster floors in the likely patio area.

Table 3.1 LT 7 strata descriptions

Level	Description
1	dry core fill with large boulders (the only non-mortared fill)
2	dark mottled gray (5Y31) clay/clay loam mortar with limestone flecks throughout
3	light gray (10YR51) clay mortar with pebbles
4	gray (5Y51) clay mortar with pebbles and cobbles; charcoal was also noted.
5	thick limestone boulder and clay (10YR62) fill; a noticeable amount of charcoal was noted
6	brownish (10YR72) sandy plaster floor that covers the earliest platform; it was only visible on the east and top sides
7	ballast for level 6 floor consisting of reddish pebbles
8	brownish (10YR63) stratum, likely part of level 7
9	dark gray (10YR52) mottled clay loam fill
10	plaster floor (10YR82)
11	pebble and clay loam (10YR52) pebble ballast
12	dark gray (10YR51) immediately above bedrock
13	relatively soft limestone (10YR81) bedrock
14	light gray (10YR62) clay loam fill mottled with limestone pebbles and cobbles
15	dark gray (10YR52) mottled clay loam fill with pebbles; a number of unworked marine shells were noted, as well as charcoal and sherds (including pieces from a Flor Creme bowl). It is immediately above the bedrock. Its eastern edge has faced stones, which likely represent one of the earliest construction events—likely steps.
16	plaster floor (5Y81) without an obvious ballast
17	plaster floor (5Y81) without an obvious ballast
18	the last construction event on the backside of Str. 3A; there might have been a terrace near the bottom (which would cover level 14). It consists of plaster/marl mortar (c. 50%, 10YR72) with boulders and cobbles. About 12% of the stones are faced on one side.
19	plaster and limestone boulders, likely a fill retaining wall within level 14 fill
20	uneven plaster floor between levels 5 (boulder fill) and 6 (brownish floor)
21	thin plaster floor underneath and slightly longer than floor/level 20
22	clay loam (5Y31) mortar similar to level 2 but with more cobbles. It abuts level 14 on its eastern edge

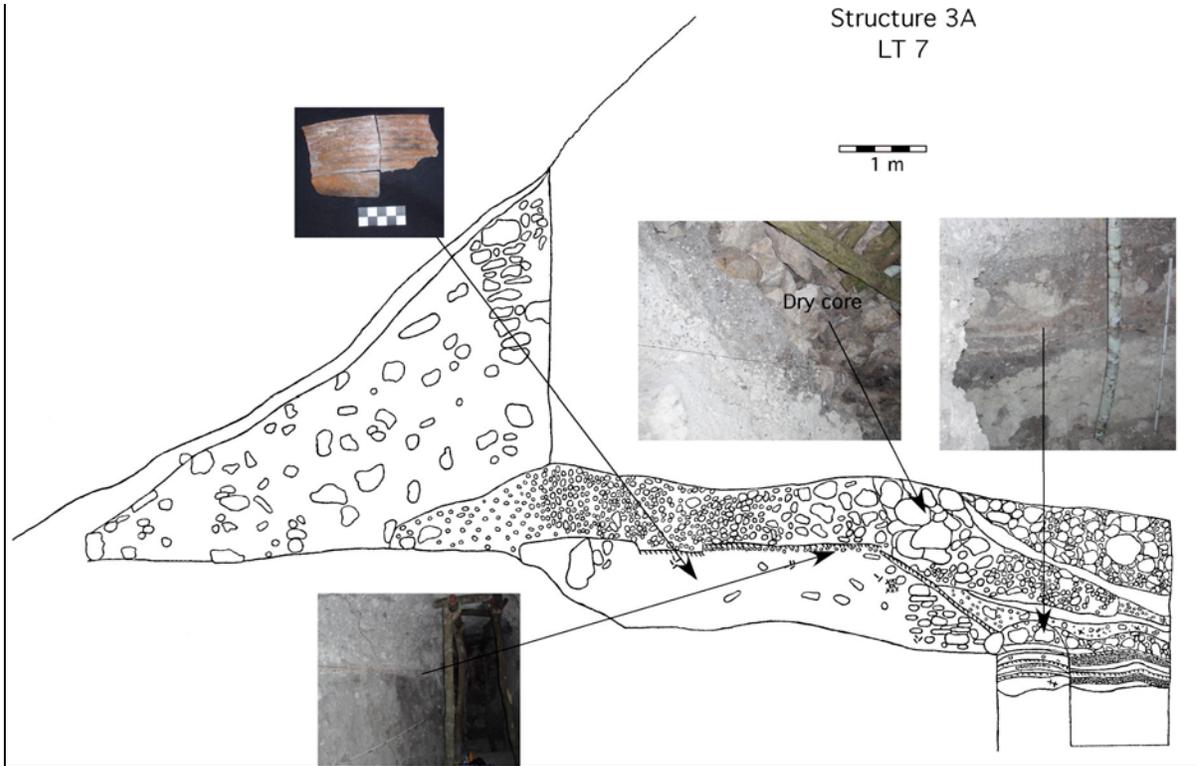


Figure 3.4 North wall of LT 7, Structure 3A

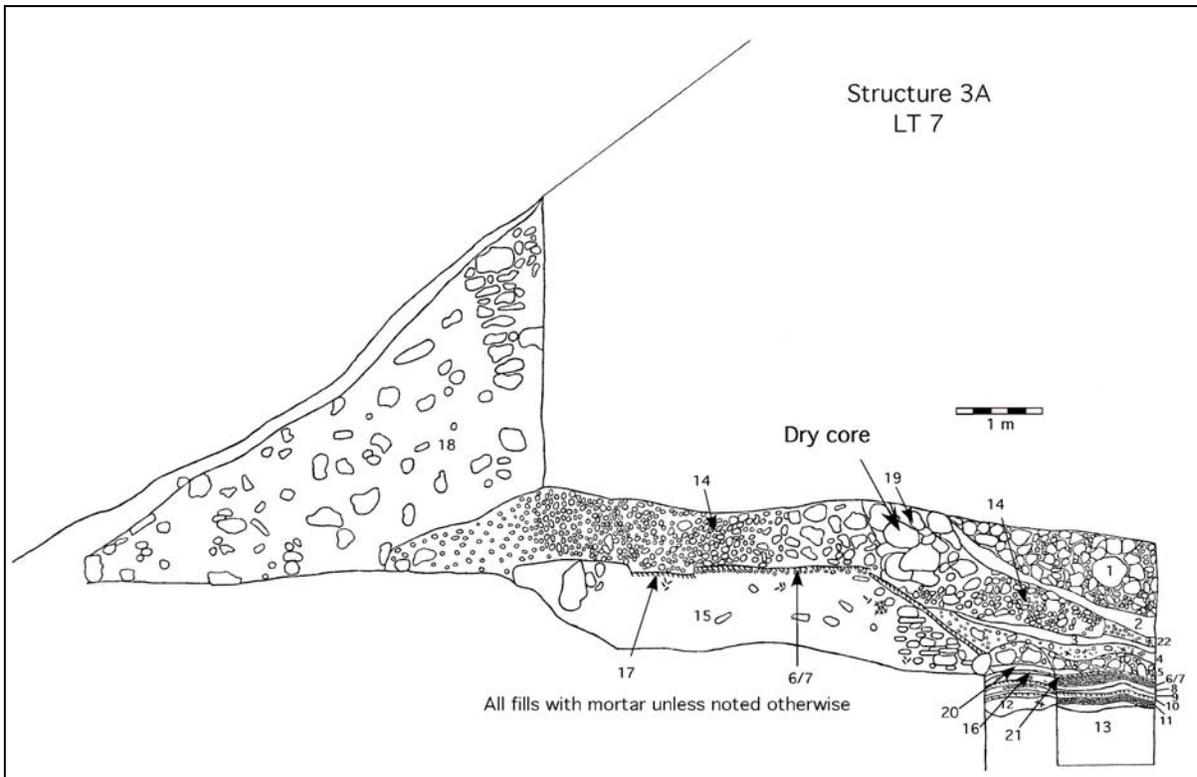


Figure 3.5 LT 7 levels

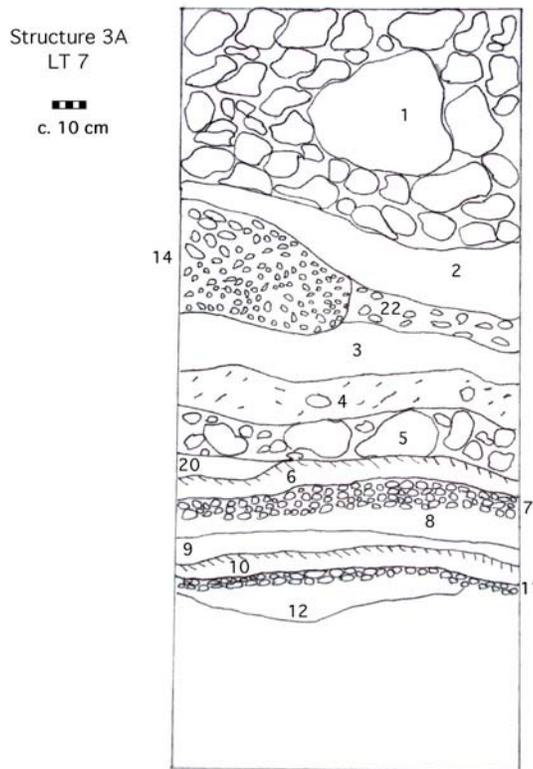


Figure 3.6 Close-up of LT 7 floors exposed in column test.

Discussion

The looter's trenches at Temple 3A provide a construction chronology for one of the major temples at Yalbac. The ceramics from the three LTs indicate that the Maya began building at the central base of the present day structure between 300 and 100 B.C. (Barton Creek phase). Next they built the lower portion of LT 29, which dates from c. A.D. 300-600. Not unexpectedly, the higher strata and/or ceramics are more recent in date. As to be expected, the higher one goes, the more recent the ceramics become, through at least the Late New Town phase (A.D. 1150+) in LT 25. It is important to keep in mind that we have no samples from the extended wings, therefore these areas could have coincided with the first construction phases in the central portion.

The early dates of Str. 3A indicates that it, likely like the other temple structures of Plaza 3, were some of the earliest, if not the earliest, monumental buildings built at Yalbac. The construction methods seem congruent with other Maya sites in that they built on top of the established foundation, leaving lower ones largely intact. Elliot Abrams explains that doing so, it provided "...greater strength and stability to the fill or core of the final building" (Abrams 1994:69). Additionally, the core of the structure demonstrates a higher density of rock to soil or mortar fill. The rocks also tend to be larger towards the center, most likely for support.

For future work it would be interesting to further excavate the base of LT 7 to identify how the lowest/earliest floor 10 was constructed. Was it a plaza or patio type area that was at the base of an elevated area like floor 6, or was it entirely level? Additionally, I would like to better understand the style or reasoning for the small portion of plaster floor, level 17, that dips down from floor 6. There is no obvious ballast under this area, what does this imply? To do this, we need to excavate further into the trench for more clues.

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Chapter 4

Forty-Two Degrees, and Straight on 'Till Morning: 2004 Settlement Survey in the Yalbac Area

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This report is a summary of the archaeological survey portion of the 2004 Valley of Peace archaeology project. We have spent the last few years solidifying our maps of the Yalbac site core (Lucero 2003), and are now expanding our map out from the core towards the hinterlands. Of critical importance to the settlement survey is the question of how the site of Yalbac is related to the string of 22 natural pools that are located some four kilometers to the north (see Kinkella 1999). The settlement survey that continues this year builds directly on the work done in 2003, and this data will be used as the core of my dissertation research (UC Riverside).

Research Strategy

The settlement survey took place during the last two weeks of June, 2004. The survey was undertaken by small crews of between two and five crew members, all supervised by Field Director Andrew Kinkella. The focus of the 2004 survey was the creation of a transect between the Yalbac site core and Pool 7 (Figure 4.1). The transect was devised using a Brunton Compass and tripod, which facilitated the maintenance of a straight baseline that ran at 42° from traverse point YL (north of Structure 2D) at Yalbac to Pool 7 (Figure 4.2). In accordance with other survey projects in the Belize Valley area (see Ashmore 1996), a width of 400 meters was agreed upon as being the best compromise between data acquisition and an economical use of time and resources (W. Ashmore, pers. comm., 2005). A Garmin Venture GPS was used in tandem with the Brunton Compass to record our survey track as well as any mounds, pools, and mound groups as we came upon them. Sketch maps were made of all solitary mounds and mound groups encountered using pace and compass techniques.

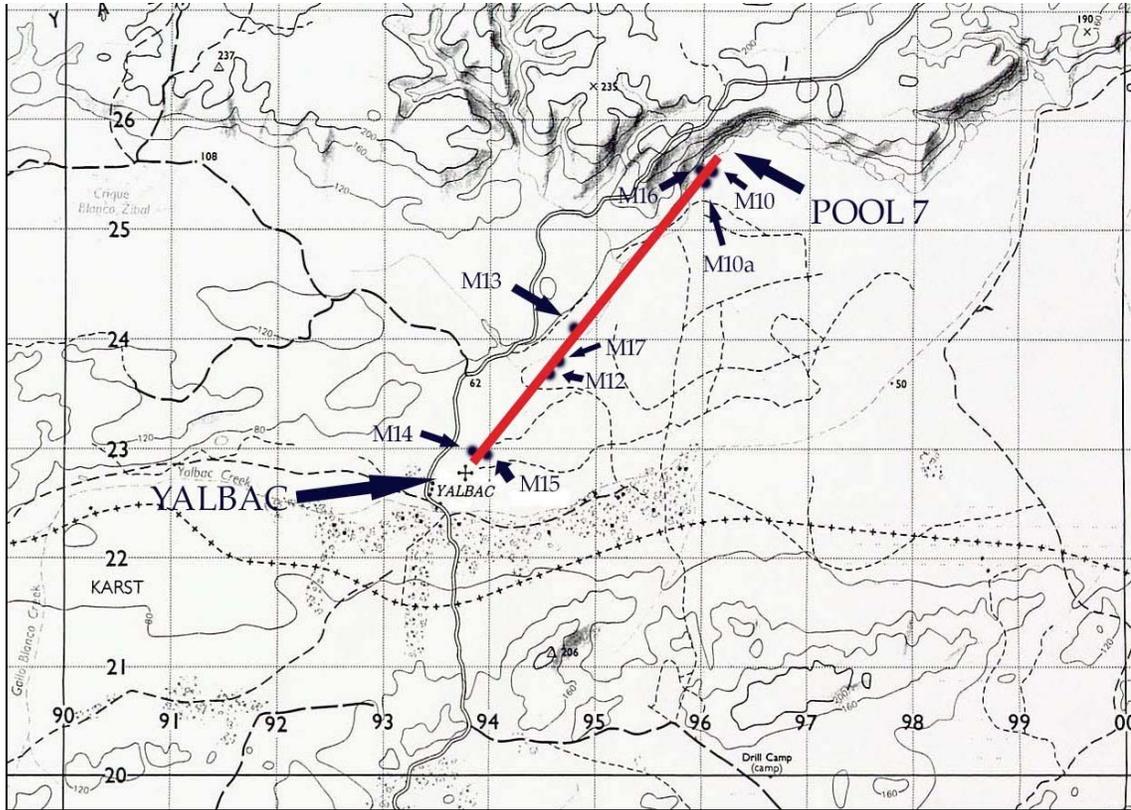


Figure 4.1 2004 transect with Pool 7 and numbered mounds

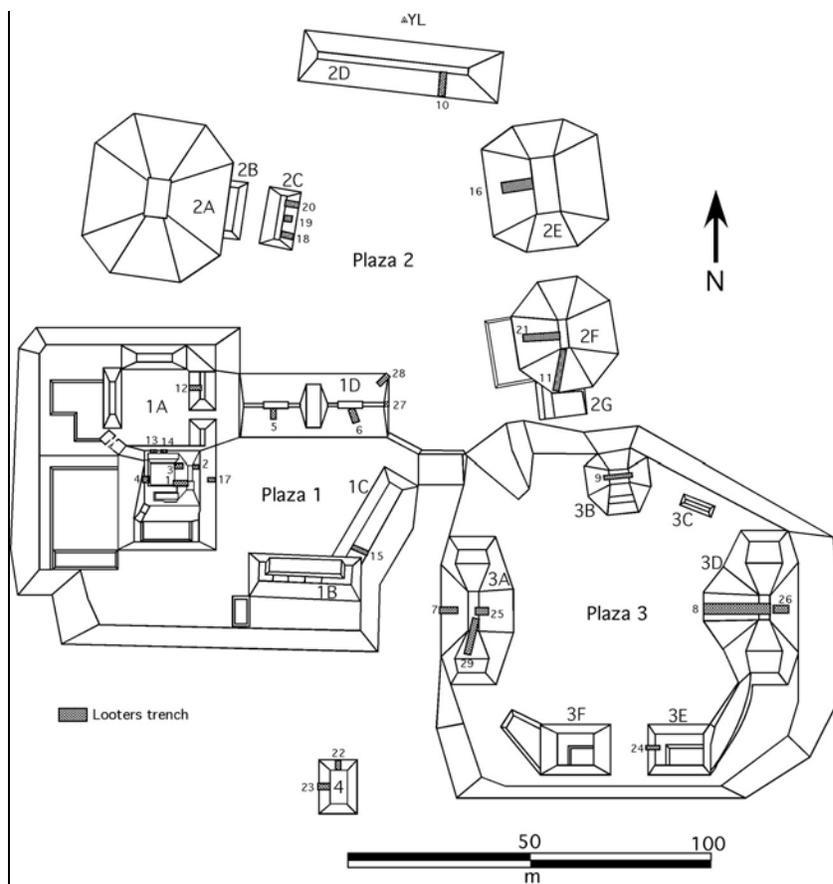


Figure 4.2 Yalbac with traverse point YL noted (north of Str. 2D)

Mounds Observed

The survey crew was able to document eight mounds that were located within the 400-meter-wide transect. Although the transect baseline has been completed between Yalbac and Pool 7, much of the exploration to the outskirts of the transect has yet to be completed, so many more mounds are expected to be found. Most of the new finds were either directly on the baseline or within 25 meters of the baseline. The mounds ranged in size from less than a meter to approximately 2.5 meters in height. Each mound is located in Figure 4.1, and drawings of each mound are found in Figures 4.3 and 4.4. It is important to note that there is no Mound 11 at this point (an oversight in numbering in the field which will be corrected during the 2005 field season).

Results

Preliminary analysis of the patterning of the mounds indicates that soil type continues to correlate strongly with settlement location (see Fedick 1996). In addition to this, mounds also look to cluster with more density nearer to the pools than previously thought. In fact, there appears to be three distinct areas of mound clustering; near the Yalbac site core, near Pool 7, and at a location approximately equidistant between Yalbac and Pool 7 (see Figure 4.1). These initial patterns will be further refined during the 2005 season, and possible explanations for these patterns will be proposed. Specifically, I will examine ideas on ritual and its relation to water sources as a possible explanation for the observed settlement patterns (see Andrews and Corletta 1995; Bassie-Sweet 1996), especially concerning settlement near pools. The Cara Blanca area is unique and may have served as a pilgrimage area, or perhaps the Maya collected sacred water from its pools (see Kinkella 2000). For

example, among the Zinacantecos of highland Chiapas, shamans' assistants collect sacred water from each of the seven sacred waterholes located around Zinacantan Center for curing ceremonies (Vogt 1993:63-65). Sacred water is used for several parts of the complex ritual to cure an individual.

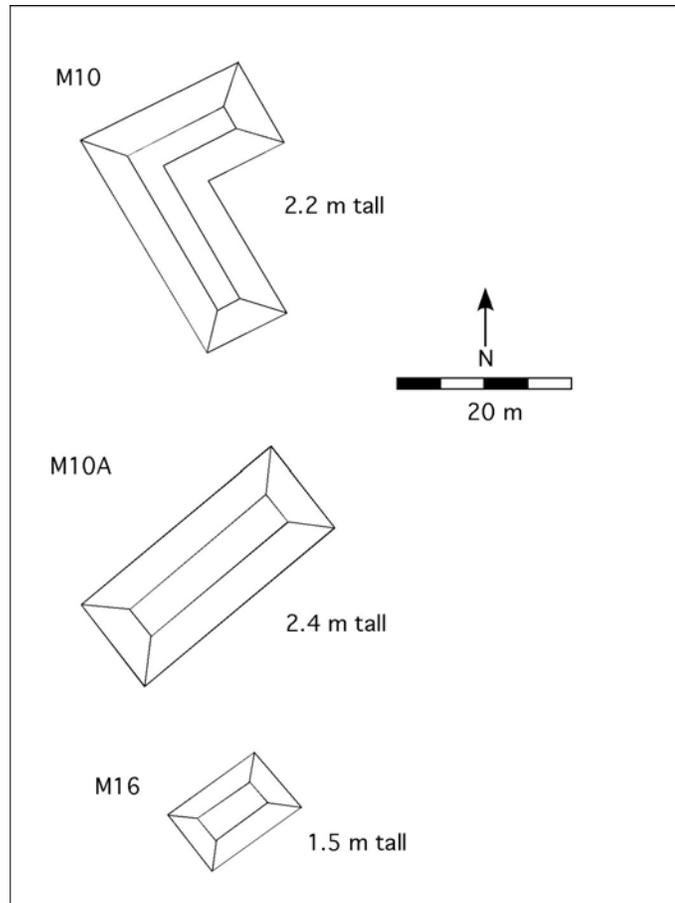


Figure 4.3 Recorded mounds on Yalbac/Pool 7 transect

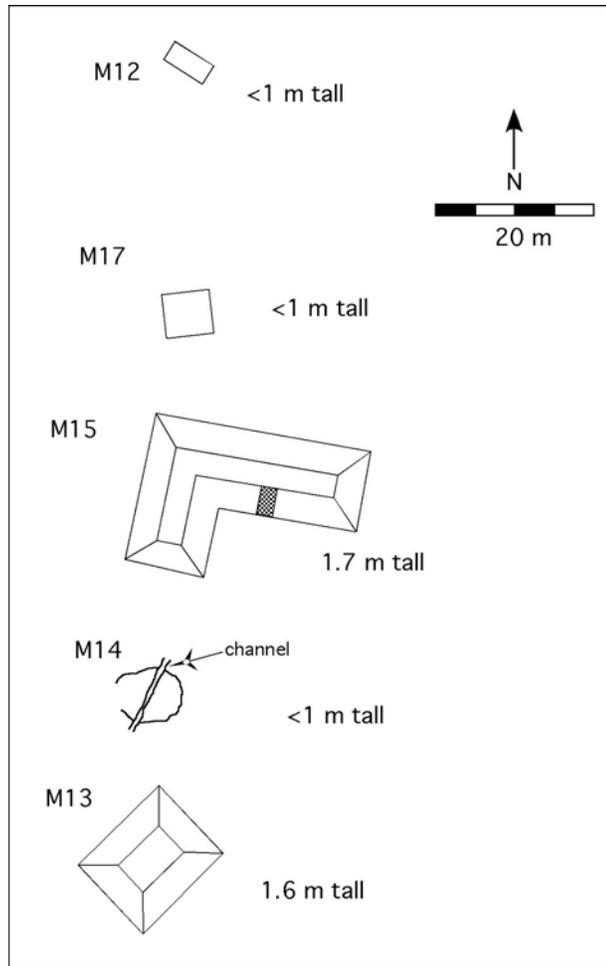


Figure 4.4 Recorded mounds on Yalbac/Pool 7 transect

Plans for Future Research

The 2005 field season will see a continuation of the work done on the Yalbac/Pool 7 transect. From there, the transect will stretch across the line of 22 pools in the area, and then turn southeast and terminate at the site of Saturday Creek (Figure 4.5). Settlement survey will also continue in a more intensive fashion in the immediate vicinity of the pools themselves. Underwater explorations of pools with settlement are scheduled for 2006, as are possible excavations into the mounds located near pools to examine chronology as well as possible building function.

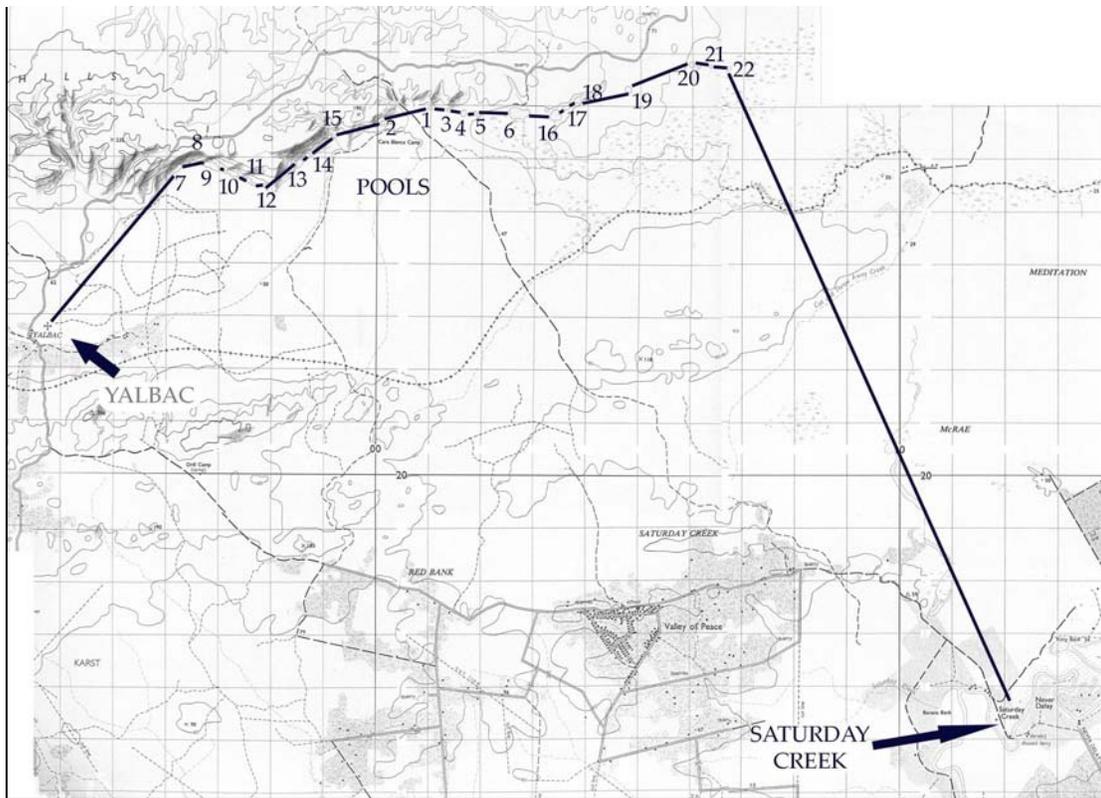


Figure 4.5 Proposed survey transect for the 2005-2006 season

Concluding Remarks

Openings in the earth, such as water bodies and caves, were and are considered by the Maya as portals to the underworld or Xibalba (Bassie-Sweet 1996), and include pools, cenotes, and lakes. Pools are fed by underground river (cave) systems or springs whereas lakes are fed by surface rivers. They differ from cenotes in the northern lowlands, which are collapsed sinkholes into which water seeps from the water table. Cenotes are not found in the southern Maya lowlands since the water table is too low. The major feature they have in common, other than all having fresh water, is their sacred quality.

Exploration of cenotes and lakes has shown that they clearly had a sacred and ritual significance (Andrews and Corletta 1995). For example, among the objects recovered from the sacred cenote at Chichén Itzá by Edward Thompson were gold, silver and copper artifacts, as well as jade, shell, chert, obsidian, ceramic vessels and figurines, and human and faunal remains (Folan 1966). At Lake Amatitlan, also in Guatemala, underwater explorers found hundreds of vessels with diverse designs including spider monkeys, fruits, flowers, snakes, lizards and human heads, as well as the rain gods Chac and Tlaloc (Borhegyi 1961). These water bodies may have served as pilgrimage centers of some sort for millennia for different ethnic groups.

Cara Blanca may have had similar religious significance. Only future research will tell. The Yalbac settlement survey is expected to continue until 2006 and beyond. Further study will increase our understanding of the relationship between the pools and the surrounding communities, as well as explore the possibilities of the pools as pilgrimage destinations of ritual importance.

Acknowledgements: As always, I am indebted to Cleofo Choc for his expert assistance with the difficulties of jungle survey, to Banana Bank Lodge for the safety net they provide, and to Zedekiah Scott for his steadfast support.

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