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## PVN OP 423 Excavation Report

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Site PVN423 (UTM 16-98-761/3-69-635)

Site PVN423 consists 23 surface-visible buildings distributed among three distinct patio-focused structure groups stretched out in a rough southwest-northeast trending line. The terrain over which these buildings were erected rises approximately 1.5m over 280m southwest-to-northeast. The southwestern aggregate is the largest, containing 13 buildings among which is the only monumental platform recorded at the site (Str. 423-6). Edifices in the Southwest Group delimit two adjoining patios set in an east-west line. The Central Group, 90m northeast of and ca. 1m upslope from the Southwest Group, is made up of seven platforms that define a single plaza on all sides. Forty meters over level terrain to the northeast are the three buildings that comprise the Northeast Group. These edifices define a small plaza. Seven structures were dug in the Southwest Group, five were excavated in the Central Group, and the one building that had not been looted in the Northeast Group was investigated. These studies were pursued from January 29-March 13, 1992 and resulted in the clearing of ca. 317m<sup>2</sup> under the direction of numerous individuals whose work is credited as appropriate in the following discussion.

Southwest Group

Structure 423-2

Structure 423-2, together with Str. 423-1, define the west side of the Southwest Groups' western patio. Structure 423-4 is 10m to the east and Str. 423-1 is 5m to the south. Digging here within Subop. 423 H, J, and AP cleared ca. 52m<sup>2</sup> in the course of revealing the entirety of Str. 423-2. Excavations were pursued to maximum depths of 0.76m and 0.85m below modern ground surface within and beyond construction, respectively. One principal construction phase was identified during the course of this work, though numerous renovations to that core building are evident. Investigation of Str. 423-2 was directed by Matthew Turek.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.2, 4-6	F.2	LCLII?
2	Str. 423-2-1st	U.1-6, 8, 23	-	-	LCLII
3	Str. 423-2-1st	U.7, 9-11	-	-	LCLII?
4	Str. 423-2-1st	U.7, 10, 12	-	-	LCLII/III

	Str.423-2-Sub1	U.1, 2			
	Str. 423-2-Sub3	U.1			
5	Str. 423-2-1st	U.13, 14, 19-22, 24	-	-	LCLIII/II
	Str. 423-2-Sub2	U.1, 2			
6	Str. 423-2-1st	U.15	-	-	LCLIII?
7	Str. 423-2-1st	U.16-18	-	-	LCLIII
8	-	-	S.1-4	F.1	

### Time Span 1

The earliest activity attested to in the vicinity of Str. 423-2-1st was the deposition of a moderately coarse-textured, very loosely compacted, light tan soil (S.5). Stratum 5 was identified in a deep probe 0.92m south of the building where it was exposed to a maximum thickness of 0.1m, its base extending beyond our excavation limits. Stratum 6, a fine-textured, hard-compacted, tan soil, was revealed beneath TS. 2 architecture 2m north of S.5's exposure. These earth levels are distinguished by slight differences in texture and degrees of compaction and may represent two, discontinuously uncovered segments of the same stratum. *If so*, then Str. 423-2-1st may have been raised atop a low knoll that ascended 0.39m over 2m south-to-north before descending an unknown distance farther north; no soil resembling S. 5 and 6 were uncovered here.

Blanketing S.6 by 0.3m is a fine-textured, soft-compacted gray soil (S.4). Stratum 4 was found underlying construction on all sides of Str. 423-2-1st though, on the north, it apparently resumed accumulating after the building was abandoned. Feature 2, a fine-textured, soft-compacted, ashy soil, is at approximately the same level as S.6, located 0.6m north of where the latter was revealed. Like S.6, F.2 underlies TS. 2 architecture, in this case by at least 0.16m (its base was not found). Most likely, F.2 consists of trash deposited atop the ground surface formed by S.6, though this interpretation is based on the unproven assumption that S..6 lies beneath F.2.

Fully 0.09m of S.2, a moderately coarse-textured, hard-compacted, brown soil, rests atop S.4 and extends beneath Str. 423-2-1st's earliest known construction on the south. As indicated below (TS. 8), deposition of this soil continued after Str. 423-2-1st was abandoned.

Recovery of artifacts from soils assigned to this interval, along with the ash included in F.2, indicate a human presence in the area before Str. 423-2-1st was raised.

### Time Span 2

The earliest version of Structure 423-2-1st that we identified consisted of a platform defined on all sides by stone facings that rose directly to the earthen-floored summit (U.1-4). Units 1-4 are 0.39-0.46m high and 0.3-0.55m wide; they probably doubled as fill retaining units and supports for the perishable walls that bound the platform's superstructure. Dividing the summit into two spaces is U.5, a 0.6m wide foundation that spans the entire width of the building. Unit 5 abuts the western and eastern basal facings (U.2 and 4) and its base rests at a depth equivalent to that of U.1-4. As with U.1-4, U.5 probably did not project far above the summit floor, being largely submerged within a fill composed of a moderately dense concentration of small to medium-size rocks set in a moderately coarse-textured, hard-compacted, brown soil (U.23). Unit 5's height, therefore, is greater than that needed to sustain a perishable room divider. It may be the case that Str. 423-2-1st began its use-life as a surface-level building, its interior divided into north and south rooms by U.5. Subsequently, the doorway was sealed and the interior filled with U.23 to create an elevated living space. Unfortunately, no such entry was identified though it may have breached the north or west walls (U.1 and 2) which were largely buried by later construction.

Unit 6, located 0.66m south of U.5, projects 1m east into the summit's south room from its abutment with U.2. This construction would have protruded a scant 0.05m above the reconstructed level of the summit floor though its base is at 0.06m above that of U.5. Unit 6 is backed on the south by a stone surface (included in U.6) that spans the 0.28m between it and the southern basal wall, U.3. The architectural significance of U.6 is abundantly ambiguous; it may have defined a small paved space in the south enclosure's southwest corner. If Str. 423-2-1st was originally a surface-level building, U.6 might have been a 0.28m high stone-faced and -surfaced shelf that was 1m long by 0.28m wide. When converting the edifice to a platform most of U.6 would have been covered and its top left as a pavement extending south to U.3.

Unit 8, a 0.1m-wide wall extends 0.4m west from its abutment with U.2, the western basal platform facing. This wall, which intersects U.2 at a point 0.1m south of Str. 423-2-1st's northwest corner, was embedded in the stone surface capping a later addition to the building (U.24, TS. 5). As such, its full height is not known.

As TS. 2 drew to a close Str. 423-2-1st was a stone-faced, earth-and-stone-filled platform that stood roughly 0.39-0.46m high, measured 3.1x3.48m, and was aligned 12-20 degrees. The summit was divided into two earthen-floored rooms set in a north-south line by a substantial wall that spans the building's full width. The northern enclosure covers 0.61x2.5m (1.5m<sup>2</sup>) whereas its southern neighbor encompasses 1.21-1.4 by 2.5m (ca. 3.3m<sup>2</sup>). A stone-paved area measuring 0.28m<sup>2</sup> occupies the southwest corner of the south room; to what extent this space was distinguished from the remainder of the compartment is unknown. The very narrow wall that extends 0.4m west of the platform from a point just shy of its northwest corner may signal the existence of a small surface-level building erected against the building's west flank. It is also possible that Str. 423-2-1st began as a surface-level building, the aforementioned wall demarcating one side of its entryway. If so, the building's interior would have been organized much as it is described here, with two rooms set in a north-south line. In neither case was any

built-in furniture clearly recognized though it is possible that U.6 in the south room's southwest corner was originally a 0.28m-high, stone-face and -surfaced shelf.

All architecture dated to TS.2 consists primarily of unmodified stones set in a mud mortar.

### Time Span 3

During this interval Str. 423-2-1st's core platform remained largely unchanged. A 0.28m high by 0.7m wide terrace (U10) was added to the buildings north side. Unit 10 runs at least 2.3m east-west; on the east it ends in U.9 which runs 0.7m south to intersect the next ascending riser (U.7) whereas its western segment is overlain by later construction (U.22). As it stands, the newly added basal terrace stops 0.5m shy of the platform's northeast corner but its relation to the building's northwest corner is uncertain. A second terrace (U.7) rises an estimated 0.24m above U.10's earthen tread and covers completely the platform's north basal wall (U.1). Unit 7 was exposed running 3.35m east-west. On the east this facing junctions with U.11 which extends 0.75m south before stopping. Unit 11 lies 0.3m east of the platform's eastern facing (U.4) but the two are not joined. Why this relatively short distance was not bridged by construction and how, if it was left open, any fill backing U.7 and 11 was retained are questions to which we have no answers. Equally unclear is how far west U.7 extends. As with U.10, this edge of U.7 was obscured by the raising of U.22 during TS. 5.

Overall, the primary renovations undertaken during TS. 3 involved the expansion of Str. 423-2-1st's northern summit wall, now measuring 0.85m across, through the addition of U.7 onto U.1. A comparable expansion of the edifice's eastern basal facing was limited to the northernmost 0.75m of U.4 which was fronted by U.11. A 0.28m high by 0.7m wide stone-faced terrace now ascended the building's north face, its earthen tread possibly channeling traffic to the superstructure. This terrace did not run the full length of Str. 423-2-1st's north flank, stopping 1.1m west of U.7's east end. The west ends of both U.7 and 10 were obscured by later architecture. Whether these modification signal a change in Str. 423-2-1st's orientation is unclear; they do seem to reflect an effort to formalize access to the platform's summit from the north. Structure 423-2-1s now measures 4.52m north-south, its other dimensions and alignment remaining the same as they were during TS. 2.

All TS. 3 constructions were fashioned of unmodified stones set in a mud mortar.

### Time Span 4

Units 7 and 10 were extended 1.4m eastward during TS. 4. They now ended in U.12, a 1.6m-long wall that runs south and closes off the east sides of both U.7 and 10. Unit 12's southern terminus is equal to the end of U.11. Just like its predecessor, U.12 is not linked by obvious construction with either U.11 or U.4, lying 0.3m and 0.8m away from these constructions, respectively. Why these short distances were not closed by intervening architecture is profoundly unclear, though the absence of linking construction

apparently is part of a pattern that spans several time periods in this area. The TS.4 additions covered U.9, the former east end of U.10; the situation on the west is still uncertain.

Structure 423-2-Sub1 is represented by U.1 and 2, low stone foundations that are 0.2m wide and form parts of the north and west foundations of an earthen-floored surface-level building. This construction is off Str. 423-2-1st's northeast corner, much of the western footing (U.2) lying beneath additions made to the platform during TS. 5. Not enough of U.1 and 2 were revealed to determine their full lengths; the uncovered segment of U.1 is 0.7m long while its western counterpart was exposed to a maximum length of 0.65m. Structure 423-2-Sub1's orientation ranges between 105 and 215 degrees.

Structure 423-2-Sub3 may well have been another earthen-floored, surface-level construction, this time lying west of Str. 423-2-1st. Its sole component unearthed during excavations is a 1m-long stone wall (U.1) running at an azimuth of ca. 335 degrees. It would seem that U.1 runs under additions made to Str. 423-2-1st during TS. 5 (U.19-22) though the wall's relationship to the latter architecture is unclear.

At the conclusion of TS. 4, Str. 423-2-1st looked much as it had when TS.3 drew to a close. The northern terrace was expanded to the east, no longer stopping shy of the edifice's northeast corner. Unit 7, part of the platform's northern basal facing, was also extended eastward, making the edifice's northeast corner especially thick, measuring 1x1.1m. As noted above, the additions made to U.7 and 10 did not run back westward to join the core platform. In any event, Str. 423-2-1st's northern entryway was seemingly enhanced, if not significantly changed, by these renovations. During this interval at least two surface-level buildings were apparently raised in Str. 423-2-1st's immediate vicinity. These relatively insubstantial edifices may have been part of a warren of rooms filling in formerly open spaces along the western patio's west margin.

All TS.4 architecture consists of unmodified stones set in a mud mortar.

### Time Span 5

Structure 423-2-1st's core platform was expanded significantly to the west during this interval. Four retaining walls (U.19-22) define the addition's perimeter while its summit (encompassing 1.2-1.7x4.7m) is paved with stone (U.24). The southern facing (U.19) diverges slightly from the orientation of Str. 423-2-1st's southern basal facing (U.3, 290 degrees) running at ca. 280 degrees. The western facing, U.20 steps in (eastward) 0.5m at 2.5m north of the addition's southwest corner. The U.24 surface is unblemished by any foundations or built-in furniture; it may be that this area was left open adjacent to the roofed rooms lying immediately east within the earlier version of the platform's superstructure.

A new basal facing, U.13, was added to the building's north flank at about this time, burying U.10. Unit 13 is an estimated 0.5m high and runs 1.1m back south to where it intersects U.7. The latter still projects 0.1m above U.13's earth-and-stone surface. Unit 13 runs 4m east from its junction with U.22, the western addition's east

facing. Unit 14 then projects 2m south from U.13's east end, terminating at the same point where U.11 and 12, which it covers, had themselves ended in previous time spans. Once again, whereas U.14 seems to delimit the east side of a northern terrace it does not connect with either its predecessors (U. 11 and 12 are 0.55m and 0.1m distant) or the original platform (U.4 is 1m to the west). All of those nagging questions about fill retention that plagued earlier interpretations of how northern additions to Str. 423-2-1st were resolved on the east pertain to our understanding of U.13 and 14.

Structure 423-2-Sub2 is an earthen-floored surface-level building lying 0.1m west-northwest of Str. 423-2-1st's newly established northwest corner. Portions of the edifice's east and west foundations were exposed, U.1 and 2, respectively. They are both 0.2-0.25m wide and were exposed to a length of 0.9m. Structure 423-2-Sub2's orientation is approximately 10 degrees.

By the end of TS. 5, Str. 423-2-1st was a stone-faced platform standing 0.39-0.5m high, covering 4.9m on a side (measured across its center), and aligned between 10-20 degrees. The addition of U.13 on the north and U.19-22 to the west greatly enlarged the platform's summit. The two rooms set in a north-south line that comprised the superstructure during TS. 2 were still in use and had not changed in their dimensions or organization. North of these enclosures was now an open space encompassing 1.1x4m. On the west a stone surface measuring 1.2-1.7x4.7m bordered the original two compartments. In both cases, these additions may have been uncovered, functioning as work areas only partially sheltered by the eaves of the roof that spanned the two earlier rooms. As in three earlier versions of the edifice, its northeast corner was particularly thick, now covering 1.6x2.1m. This aspect of the platform's design resulted from wrapping the eastern wall of the northern addition (U.14 and 13, respectively, in this case) around the building's northeast corner. The significance of this oft-repeated pattern is unclear. Also lurking in the mists of uncertainty is how the summit was now reached. The blanketing of the earlier northern terrace (U.10) under the summit's northward expansion rendered this means of ascent moot. No known steps or terraces replaced the earlier risers. It may be that the step-out described in TS. 6 was actually added late in TS. 5, thereby providing a means of reaching the much-expanded summit. As in TS. 4, at least one modest surface-level building was erected in Str. 423-2-1st's vicinity, this time a scant 0.1m west-northwest of the platform.

All constructions pertaining to TS. 5 were made using, primarily, unmodified stones set in a mud mortar.

### Time Span 6

The primary change wrought to Str. 423-2-1st during TS. 6 consisted of adding what appears to be a 0.34m-high stone-faced and -surfaced step (U.15) to the platform's north face. Unit 15 projects 0.34m north of Str. 423-2-1st's northern basal facing (U.13) and encompasses roughly 1.6m east-west (its western and eastern margins are overlain by later architecture [U.17 and 18]). This step-out is near the center of the platform's north face.

Units 15 was made largely of unmodified stones set in a mud mortar.

### Time Span 7

Overlying the east and west edges of Str. 423-2-1st's outset northern step (U.15) are two low walls that extend 0.65 and 0.85m north from their abutments with U.13 and 21 (U.17 and 18, respectively). Units 17 and 18 are 0.2 and 0.3m wide; they may define the limits of the U.15 step, thus further formalizing the northern entryway. It is most likely that U.15-18 were built in quick succession near the end of Str. 423-2-1st's use-life. There erection reinforced an enduring tendency seen throughout much of the platform's history to channel traffic onto the summit from the north.

A 0.18m-high stone wall (U.16) extends 0.47m north from U.15's northeast corner and then runs 2.35m eastward without formally terminating or connecting to the main body of the platform. Unit 16 may have been a casually built or never-completed terrace facing that was intended to front U.13. Alternatively, it could be part of a surface-level room appended to Str. 423-2-1st near the end of its use-life. In the latter case its open eastern end may have provided access to the compartment's interior.

Units 16-18 were primarily fashioned using unmodified stones set in a mud mortar.

### Time Span 8

Following Str. 423-2-1st's abandonment all but the upper-most portions of the edifice were blaneted by the natural deposition of very similar soils. Stratum 4, a fine-textured, loosely compacted, gray soil, which had started accumulating during TS. 1, was found covering the lower 0.18m of U.15 on the north. Similarly, S.2, a moderately coarse-textured, hard-compacted, brown soil that underlies U.3 on the south also covers the basal 0.32m of that wall. Overlying S.4 by 0.06-0.22m on the north is a moderately coarse-textured, moderately loosely compacted light brown soil (S.3). Stratum 3 was not recorded elsewhere around the building. It is the case, however, that S.2 (described above) does cover S.3 by 0.22-0.27m. Blanketing all of these earth layers is a moderately coarse-textured, moderately hard-compacted, root-rich dark brown earth (S.1). Stratum 1 is 0.1-0.19m thick. Embedded, in S.1 and upper S.2 is a light concentration of rocks fallen from final-phase architecture (F.1). Feature 1 is densest where it overlies construction but dwindles rapidly off the building's flanks. The paucity of stones in F.1 implies that rocks were not a major component of superstructure construction.

### Structure 423-4

Structure 423-4 lies 3m north of Str. 423-5 and 5m west of Str. 423-6 on the north side of the Southwest Group's central plaza. Structures 423-4 and 6 are connected by a low (ca. 0.2m high above modern ground surface) construction, or 'saddle.'



Excavations conducted here within Subop. 423F uncovered ca. 30m<sup>2</sup> in the course of clearing most of the building's perimeter (all of its northern and western flanks, roughly two-thirds of the south facing and 1m along the east face). Investigation of the summit was limited to a 1m-wide swath cut across the edifice's approximate center running north-south. Digging was pursued to a maximum depth of 1.08m below modern ground surface outside architecture; fill was not probed. One major construction phase was identified in the course of this work overseen by Jennifer Shearin.

### Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.2-5	-	LCLI, II
2	Str. 423-4-1st	U.1-6	-	-	LCLII/III, III
3	-	-	S.1, 2	F.1	

### Time Span 1

The first activity attested to in Str. 423-4-1st's environs is the seemingly natural deposition of a fine-textured, loosely consolidated, tan to yellow-tan soil (S.4). Stratum 4 was uncovered to a maximum thickness of 0.14m (its base lies beyond excavation limits) 2.2m north of Str. 423-4-1st's north face (U.1). Blanketing S.4 is 0.13-0.21m of fine-textured, moderately-hard compacted, brown soil (S.3). Both S.3 and 4 are identified solely north of the investigated structure and run relatively flat over their exposed extents (S.4's top remains at the same depth over 1.96m north-south whereas S.3 rises 0.13m over 4m from north to south). South of Str. 423-4-1st, S.5, a fine-textured, hard-compacted, tan soil underlies TS. 2 construction. Stratum 5 was revealed to a maximum thickness of 0.18m immediately south of the edifice, its base remaining undiscovered. At least 0.17m of S.2, a coarse-textured, brown soil, covers S.5 and runs beneath Str. 423-4-1st's south face. Approximately 0.14m of S.2 may also have been laid down on the north prior to U.1's construction. This interpretation is based on the distribution of debris tumbled from final phase architecture (F.1) here; this detritus rests 0.14m above S.3 within S.2, as though it had fallen onto an ancient ground surface formed by S.2.

The disparity in the heights of Str. 423-4-1st's north and south facings, U.1 and 2 (see below), strongly implies that this platform was raised atop a north-to-south ascent that rose approximately 0.44m over 5m. This escarpment was not clearly recognized in the extant soil stratigraphy.

Cultural material derived from all of these soil layers save S.4 points to a human presence in the area while these deposits were accumulating.

## Time Span 2

Structure 423-4-1st is a stone-faced platform whose perimeter walls (U.1-4) lead directly to the earthen-floored summit. As noted above, the northern facing (U.1), at 1.06m tall is considerably higher than its southern counterpart (U.2; 0.36m). It is likely that U.1 was exposed during TS.2 to a full preserved height of 0.8m, its remaining 0.26m extending below ancient ground surface. This foundation likely ensured the stability of the building's north face, the side most threatened by collapse due to downslope erosion (see TS.1, above). The platform's southwest corner is outset 0.4m from the south line of the building (U.2). The northern corners do not exhibit a comparable feature; the form of the southeast corner was not determined.

Very little of the summit was exposed. What we know of the superstructure tentatively suggests that it was dominated by a 0.2m high stone-faced bench (U.5) that ran for an undetermined distance east-west and was 1.3m wide north-south. At some point in the occupation sequence this bench was seemingly expanded 1.04m to the south by the addition of U.6. Unit 6 rises to the same height as, and covers, U.5. Fronting U.5, and eventually U.6, on the south is the earthen summit floor.

Structure 423-4-1st, by the conclusion of TS. 2, was a stone-faced platform that stood 0.36-0.8m high, measured 4.97x8.75m, and was aligned roughly 92 degrees. The edifice's southwest corner was outset 0.4m from the line of its southern basal facing the remaining corners either being direct (on the north) or of undetermined form (southeast). The basal facings lead directly to the earthen-floored summit and likely doubled as supports for the superstructure's perishable upper walls. Access to the superstructure was likely from the south where the 0.36m-high basal wall was no impediment to reaching the summit. At least one room surmounted the platform. This enclosure was open to the south and was backed on the north by what was likely a fairly substantial stone-faced bench standing 0.2m high and measuring, initially, 1.3m across north-south (its east-west dimensions are unknown). Later in TS. 2 the bench was extended 1.04m to the south creating an elevated surface 2.34m wide. The construction units described above were made primarily of unfaced cobbles, their naturally flatter surfaces oriented outwards, and set in a mud mortar.

## Time Span 3

Following abandonment, S.2 resumed accumulating, eventually covering all but the uppermost portions of Str. 423-4-1st's basal facings. Blanketing S.2 by as much as 0.16m is a moderately coarse-textured, hard-compacted, root-rich, dark brown soil (S.1). Embedded in S.1 and 2 is a moderately dense concentration of rocks dislodged from final-phase architecture (F.1). Feature 1 was traced for 2.2m north of the platform and for 0.6m to the south.

## Structure 423-5

Structure 423-5 is 3m south of Str. 423-4 and borders the east side of the western plaza within the Southwest Group; Str. 423-11 is ca. 18m to the southeast across the patio from Str. 423-5 while Str. 423-12 is 2m to the south. Digging here within Subop. 423R and AN uncovered ca. 56m<sup>2</sup> in the course of clearing nearly all of the building and the 3m separating it from Str. 423-4-1st to the north. Excavations were pursued to a maximum depth of 0.89m below modern ground surface outside construction; architectural fill was not investigated to any significant degree. One major building phase was identified in the course of this work overseen by Jennifer Shearin.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata*</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.5, 6	-	LCLI, II
2	Str. 423-5-1st	U.1-4, 12	-	-	LCLII/III
	Str. 423-5-Sub1	U.1-3	-	-	
3	Str. 523-5-1st	U.5-11, 13, 14			LCLII/III,III
	Str. 423-5-Sub1	U.4			
4	-	-	S.1, 2, 5	F.1	

\* Note that the strata designations used here are the same as those employed in the description of Str. 423-4.

Time Span 1

The earliest activity recognized in the immediate vicinity of Str. 423-5 is the apparently natural deposition of a loosely compacted tan sand (S.6). Stratum 6 was identified 0.6m south of Str. 423-5-1st where it was exposed to a maximum thickness of 0.04m (its base lies beyond excavation limits). This earth layer runs more-or-less flat over the 0.47m it was traced north from the southern edge of excavations. At this point it drops 0.04m over 0.03m and disappears into the base of excavation. Stratum 5, a fine-textured, hard-compacted, tan soil, covers S.6 by 0.22m south of Str. 423-5-1st and was exposed to a maximum thickness of 0.18m north of Str. 423-5-Sub1 (its base was not revealed here). Stratum 5 rose 0.27m over 8.66m from south to north, indicating that Strs. 423-5-1st and 423-5-Sub1 were erected over a natural rise in this direction. This supposition is supported by the variable depths of constructions associated with both buildings, their bases rising from south to north. Artifacts recovered from S.5 point to a

human occupation in the area while this soil was accumulating. No cultural material was retrieved from S.6, though its shallow exposure urges caution in advancing any interpretations based on this absence of artifacts.

## Time Span 2

Structure 423-5-1st is a platform oriented roughly 278 degrees, covering 2.2x4.3m, and bordered on all sides by stone facings (U.1-4) that lead directly up to an earthen-floored summit divided into two spaces by an east-west running foundation (U.12). Units 1-4 are 0.4-0.91m high. The tallest of these walls, the southern basal facing (U.4), was probably set 0.3m into underlying S.5 to enhance the platform's stability on this, its downsloping flank. As such, variations in wall heights are 0.4-0.61m, the remaining discrepancy being due largely to the south-to-north ascent over which the platform was raised. The summit they define measures 1.6x3.5m and is bisected by a low stone footing that is 0.4m wide and runs 2.75m east-west (U.12). Unit 12 divides the summit into two long, narrow spaces set in a north-south line. The northern compartment (Room 2) encompasses 0.6x3.5m while its southern counterpart (Room 1) covers 0.6x3.5m. A gap measuring 0.55m across between U.12's west end and U.2, the western basal facing, seemingly provided access between these two cubicles.

By far the vast majority of U.1-4 and 12 consists of unmodified rocks set in a mud mortar. The naturally flatter faces of these stones are directed outwards. A cut block was embedded in the top, and near the center, of the southern basal facing, U.4. The architectural significance of this piece of masonry is unclear; similar stones mark points of entry in other Naco structures, though they are usually set in room floors and not in walls. It is also unclear whether this rock was part of U.4's original construction or was added later to match another cut block (U.13) located immediately west and below it in the floor of a room added in TS.3 (see below).

At least portions of Str. 423-5-Sub1 were probably raised during this span. In particular, U.1 and 2 reach depths comparable to those achieved by U.1, Str. 423-5-1st's north basal facing, and Str. 423-4-1st's southern basal wall (U.2). This stratigraphic relationship implies that these constructions were erected at about the same time.

Unit 1 is a 0.5m high (estimated; the wall's base was not securely identified) by 1.2m wide wall that runs 4.25m at an orientation of roughly 271 degrees. It is 0.58m south and 0.98-1.45m north of Strs. 423-4-1st and 423-5-1st, respectively (the distance between U.1 and Str. 423-5-1st increases from west to east). Unit 1 intersects U.3 on the east but does not join with other construction on the west. Unit 3 intersects Str. 423-4-1st's southern facing (U.2) on the north and extends south from that junction for 2.35m where it, too, ends. Fronting U.1 on the south is a 0.31m high by 0.28m wide stone-faced and -surfaced step.

Structure 423-5-Sub1 appears to have been a surface-level building erected between Strs. 423-4-1st and 423-5-1st, those platforms forming the edifice's northern and eastern sides, respectively while U.3 closed the east side. Unit 1 divides this space into two earthen-floored spaces arranged in a north-south line and open on the west; the

northern compartment encompasses 0.58x4.25m (2.5m<sup>2</sup>) while its southern neighbor covers ca. 5.2m<sup>2</sup>. The exceptional width of U.1 (1.2m across) suggests that it served as more than just a foundation for perishable upper construction; possibly it was a bench or raised work area. In fact, there is no compelling reason to believe that U.1 ever supported an upper wall. The low outset fronting U.1 across its entire southern face save for the westernmost 0.25m (U.2) may have served as step providing access to U.1's summit from this side.

All of these constructions are fashioned of unmodified stones set in a mud mortar. Whereas most surface-level buildings are believed to have been roofed this may not have been the case in this instance. Aside from U.3 on the east, there are no obvious footings that might have supported walls and a roof covering the 3.1m (north-south) expanse of Str. 423-5-Sub1 (measured across its center). Possibly the eaves of neighboring Strs. 423-5-1st and 423-4-1st converged to shelter those engaged in activities within this edifice.

### Time Span 3

The major change made during this interval was the expansion of Str. 423-5-1st. This was accomplished by the construction of U.5-8, low stone basal facings (ca. 0.45m high) that bound a 1.58m southward extension of the initial platform. The addition's east side (marked by U.8) continues in the same line as U.3, the east facing of the TS. 2 platform. On the west, however, the new construction projects 0.5m in this direction from the older edifice's southwest corner before turning south. The addition, therefore, is offset slightly west of its TS. 2 antecedent. Structure 423-5-1st's southern summit consists of two earthen-floored rooms arranged in an east-west line. The eastern compartment (Room 3) measures 1.1x2.25m and was entered through a 1.1m-wide doorway in the southern wall (U.7 doubling as basal wall and footing for a perishable superstructure wall) near the room's center. Immediately east of this door is a low stone step up that gives way to a pavement composed of angular rocks (U.10). Unit 10 runs the full 1.1m width of the enclosure north-south and extends 0.75m eastward to U.8 which defines the compartment's east flank. A cracked but still whole cut stone block encompassing 0.4x0.5m is located in the compartment's northwest corner (U.13). Slightly east of, but overlooking, U.13 is another shaped stone set in the top of U.4 ca. 0.44m above U.13 (U.4 now marks the boundary between the original summit and that surmounting the southern addition). It is unclear whether the block topping U.4 was part of its original construction or added now. In either case, U.13 and its counterpart in U.4 may have marked a formal passage between Room 3 on the south and Rooms 1 and 2 on the north. Room 4 measures 1.1x1.3m and is immediately west of Room 3. The two compartments are separated by U.11, a low stone foundation that ranges from 0.3-0.5m across, narrowing from north to south. Unit 11 abuts U.4 on the north and its base extends to a point 0.06m above the base of the latter construction. A 0.5m-wide gap between U.11 and 7, the summit's southern limit, would have provided passage between Rooms 3 and 4. Room 4 lacks any built-in furniture.

At some point in the sequence a 0.28m-high stone-faced terrace (U.9) was added to Str. 423-5-1st's south flank. Unit 9 projects 0.61m south from U.7, the platform's southern basal facing, and is surfaced with a mixture of stones and earth. The southern terrace runs 3.7m east from the platform's southwest corner where it stops 2.25m shy of the southeast corner. Unit 9's eastern edge is not clear nor is its manner of articulation with U.7 on this side.

Unit 14, a low, 0.5m-wide stone wall projects 0.6m north from Str. 423-5-1st's northeast corner, which it abuts. This addition is apparently part of construction related to Str. 423-5-Sub1 part of which it intersects (U.5).

By the conclusion of TS. 3 Str. 423-5-1st was a stone-faced platform covering 3.78x4.3m (measured across the center but excluding the southern terrace), standing 0.4-0.61m high, and aligned approximately 278 degrees. The portion of the edifice built in TS. 2 was still visible whereas the addition expanded the building 1.58m southward and 0.5m to the west. The superstructure now contained four enclosures. Rooms 1 and 2 still occupied the northern summit while two new compartments (Rooms 3 and 4) were set in an east-west line atop the southern addition. Room 3, in the superstructure's southeast corner, encompasses 2.5m<sup>2</sup> and was entered through a 1.1m door in the approximate center of its south side. This cubicle contains what may be a low stone-faced and -surfaced shelf measuring 0.75x1.1m built against its east wall. A cracked but complete cut block set into Room 3's northwest corner may mark a formal passage between it and Rooms 1 and 2 to the north. A comparable block situated immediately east of the putative entry marker and embedded atop the wall separating Rooms 1 and 3 may have been the northward extension of this entrance. Room 4, immediately west of Room 3, covers 1.4m<sup>2</sup> and lacks any discernible built-in features. The floors of Rooms 1 and 2 on the north may have been 0.2m higher than their analogues in Rooms 3 and 4 on the south. Altogether, it seems likely that Str. 423-5-1st was now entered from the southeast through Room 3. From here people could move west into Room 4 or north across U.4 into Rooms 1 and 2. Whereas as Room 2 had been less accessible than Room 1, its southern counterpart, in TS. 2, it was now by far the most difficult space to reach within the superstructure.

A stone-faced terrace rising 0.28m high projects 0.61m south of the platform and runs 3.7m east from its intersection with the edifice's southwest corner. A low wall extending 0.6m north from Str. 423-5-1st's northeast corner was seemingly added late in the sequence to link the platform with an extensive surface-level building (Str. 423-5-Sub1) lying between it and Str. 423-4-1st to the north.

During TS. 3 there was at least one addition made to Str. 423-5-Sub1. Unit 4, a low, 0.25m wide foundation was appended to U.3's southeast corner. This wall was followed for 0.85m to the east, excavation stopping before it did. The architectural significance of U.4 is unclear though it may be part of another surface-level room added to the east of the U.1/3 complex. Unit 14, which extends 0.6m north from Str. 423-5-1st's northeast corner, abuts the southwest corner of Str. 423-5-Sub1's U.4; most likely these additions were made at about the same time.

Unfaced stones set in a mud mortar define constructions dating to TS. 3. The primary exceptions are the cut blocks described above as parts of a possible entry feature linking Rooms 3 and 1.

#### Time Span 4

Following abandonment, Strs. 423-5-1st and 423-5-Sub1 were gradually submerged almost entirely by the natural deposition of S.1, 2, and 5. The last of these soils, described under TS. 1, generally underlies all architecture. The sole exception is in Str. 423-5-Sub1 where S.5 covers U.2, the low stone step fronting U.1 on the south, by 0.02-0.07m. Stratum 2, a moderately coarse-textured brown soil, blankets S.5 by as much as 0.44m. Covering S.2, in turn, is a moderately coarse-textured, hard-compacted, root-rich, dark brown earth that is 0.08-0.21m thick (S.1). Embedded in S.1 and 2 is a moderately dense concentration of rocks that fell from final-phase architecture (F.1). Feature 1 was most commonly found overlying, but not extending far beyond, construction. The relative paucity of tumbled stones suggests that rocks were not a major component of Strs. 423-5-1st's and 423-5-Sub1's upper architecture.

#### Structure 423-7

Structure 423-7, on the north side of the Southwest Group's eastern patio, is 4m west/northwest of Str. 423-6, 3m northwest of Str. 423-10, and 15m and across the plaza from Str. 423-9. Excavations conducted here within Subop. 423I, K, Q, Z, AX, and AY uncovered ca. 51m<sup>2</sup>, digging being pursued to maximum depths of 0.6m and 0.64m below modern ground surface outside and within construction, respectively. One major construction phase was identified in the course of this work which was overseen by Suzanne Crow.

#### Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.3	-	LCLI
2	Str. 423-7-1st Str. 423-6-1st	U.1-12, 14, 15 - U.16, 17	-	F.2 -	LCLII, II/III
3	Str. 423-7-1st	-	U.13	F.3	LCLIII/II, III
4	-	-	S.1, 2	F.1	

#### Time Span 1

The first activity identified in research pursued around Str. 423-7-1st is the natural deposition of S.3, a moderately fine-textured, soft-compacted, light brown soil. Stratum 3 was exposed to a maximum thickness of 0.2m, though its base lies beyond excavation limits. This layer runs more-or-less flat over the 10m it was exposed running north-south, ascending 0.1m from south to north over this distance. The recovery of artifacts from S.3 points to a human presence in the area prior to Str. 423-7-1st's erection.

### Time Span 2

Structure 423-7-1st is a stone-faced platform defined on all sides by 0.45-0.48m high vertical stone facings (U.1-4). On all flanks save the south these walls rise directly to the summit. The southern side, however, is fronted by two low (0.26m and 0.1m high) stone steps (U.5 and 6, respectively) that project 0.8m south of the southern basal wall (U.3). Units 5 and 6 are 0.25 and 0.55m wide and give way to U.3 that protrudes 0.09m above U.6's tread. The U.5/6 steps intersect the platform at its southeast corner but peter 0.6m shy of the southwest corner. The way in which the steps and platform are related on the west is unclear; it may be that the risers are set asymmetrically with regards the building's south face. The treads are surfaced with a mixture of earth and stone whereas they are succeeded on the summit by a 2.87m wide north-south stone-paved floor (U.7). Set into the approximate center of U.7 is a circular stone with a diameter of 0.49m (F.2). Feature 2 may have formally marked the entrance onto Str. 423-7-1st's summit, a practice that was also noted on Str. 175-6-1st. Though the eastern and western limits of U.7 were not revealed, it appears that this broad pavement was open on all sides; it certainly was unobstructed where it overlooked the steps leading up from the plaza to the south. Backing U.7 on the north are two small rooms bounded by low stone foundations (0.25-0.75m wide, U.9-12) and set in a north-south line. The southern compartment encompasses 1.08x2.5m, is floored with a stone pavement (U.8), and is open on the south. A change in the nature of the pavement from U.7 to U.8 subtly marks the southern edge of this enclosure. Its northern analog measures 0.49m north-south by 2.6m east-west and was connected to the southern room through a 0.8m-wide doorway in the northern compartment's southeast corner. Unlike its southern counterpart, the northern cubicle has an earthen floor which, based on the depths at which primary artifact deposits were found within the room, was 0.2m below U.8. The northern room is delimited by two of the most substantial foundations identified on the summit, U.9 and 10, 0.75m and 0.7m wide, on the south and north, respectively. The unusual girth of these constructions may imply that they doubled as wall footings and benches or shelves.

A low stone foundation (U.14), 1m long north-south by at least 0.15m wide (its west side was not uncovered) lies 0.35m west of the southern summit room. Unit 14's architectural significance is uncertain though it might have been part of yet another summit enclosure, this time located on the superstructure's west margin.



The limited portion of Str. 423-7-1st's fill exposed in our excavations revealed a moderately coarse-textured brown soil (U.15).

A very limited portion of what seems to be Str. 423-6-1st's northeast corner (U.16) was uncovered 1.2m west of Str. 423-7-1st. Intersecting U.16's north wall 0.3m west of that corner is U.17. The latter projects 0.35m north of U.16 and runs 1.3m eastward where it stops 0.2m shy of Str. 423-7-1st's southwest corner. Unit 17 may have been added as part of an effort to seal off the northwest corner of the Southwest Group's eastern plaza.

In general, Str. 423-7-1st is a stone-faced, earth-filled platform that stood 0.45-0.48m high, measured 6x6.87m, and was aligned roughly 3 degrees. Two steps project 0.8m south of the southern facing into the plaza. This staircase covers 5.5m east-west, intersecting the platform's southeast corner but stopping shy of its southwest corner. Overlooking the southern stairs is an apparently open paved summit surface that covers 2.87m north-south. A circular stone is set flush with his floor, possibly marking a formal entryway into the superstructure. Backing this extensive pavement are two small rooms set in a north-south line. The southern compartment encompasses 2.7m<sup>2</sup>, is completely open on the south, and its floor is surfaced with stone. The northern cubicle covers 1.3m<sup>2</sup>, is entered through a 0.8m wide door in its southeast corner, and is surfaced with earth. The latter floor looks to have been 0.2m lower than its paved southern analog. Wide foundations (0.7-0.75m across) separate these two rooms and bound the northern example on the north. They may have doubled as wall supports and benches/shelves. At least one more room might have graced the summit on the west, though no more than the eastern foundation of this putative enclosure was unearthed. Relatively late in TS. 2 (or possibly during TS. 3) a wall was extended from Str. 423-6-1st to a point 0.2m west of Str. 423-7-1st, possibly narrowing or sealing off this pasageway into the eastern Southwest Group plaza. By this point the scant 1m separating Strs. 423-7-1st and 423-8-1st would still have allowed passage into the plaza through its northeast corner.

Architecture raised during TS.2 was mostly fashioned of unmodified rocks set in a mud mortar. The naturally flatter aspects of the stones were directed outwards. Feature 2, the circular stone set in the U.7 floor, was, however, purposefully shaped.

### Time Span 3

Two minor additions were made to Str. 423-7-1st during this interval, neither of which changed the building's overall form, orientation, or dimensions. Unit 13 was built now. It is a 0.28m-high by 0.2m-wide wall that runs 1.6m south from a point 0.5m south of U.9. This late wall stops 0.21m shy of F.2, the large circular rocks set in the southern summit surface (U.7). The role played by U.13 in Str. 423-7-1st's superstructure remains baffling; it may have been introduced to funnel traffic into the southern summit room along the latter's east side. The addition of U.13 also partially divided the southern room into two spaces of unequal side; one, on the east, measuring 1.08x1.7m and the other, on the west, covering 0.5x1.08m. A 0.5m-wide gap between

U.9 and 13 might have been a means of passing between these cubicles though both remained unobstructed on the south.

A 0.25m-high stone-faced terrace might have been added to the platform's north face at this time (F.3). Feature 3 is a casually built construction that extends 1.23m beyond U.1, the northern basal facing during TS. 2. The latter would have still protruded 0.21m above F.3's putative tread. It is unclear how far F.3 ran east-west.

By TS. 3's conclusion Str. 423-7-1st remained much as it had been during TS. 2. If F.3 is an actual construction, something its poor state of preservation leaves in doubt, then the building would have now measured 6x8.1m. The summit remained largely unmodified save for the construction of a low, narrow wall that subdivided the southern summit room into two spaces; an eastern compartment encompassing 1.8m<sup>2</sup> and a western cubicle measuring 0.5m<sup>2</sup>. This addition may also have directed traffic into the larger, eastern portion of the southern room. Unmodified stones again predominated in TS. 3 construction though at least one cut block was used to face F.3.

#### Time Span 4

Following Str. 423-7-1<sup>st</sup>'s abandonment all but the uppermost portions of the edifice were covered by as much as 0.38m of a moderately coarse-textured, soft-compacted, brown soil (S.2). Stratum 2, in turn, was blanketed by 0.11-0.2m of a moderately coarse-textured, hard-compacted, root-rich, dark brown soil (S.1). Stratum 1 appears to be the humus horizon formed atop S.2. Embedded in S.1 and 2 are rocks fallen from final-phase architecture (F.1). Feature 1 is a moderately dense concentration of debris that extends for at least 0.4m off the sides of Str. 423-7-1<sup>st</sup>.

#### Structure 423-8

Structure 423-8 occupies the northeast corner of the eastern plaza within the Southwest Structure Group. It is ca. 3.5m north of Str. 423-9 and about the same distance on the surface from Str. 423-7 to the west/northwest. Digging here within Subop. 423G and X uncovered approximately 39m<sup>2</sup>, digging being pursued to maximum depths of 0.92m and 1.12m below modern ground surface within and outside architecture, respectively. Though there were hints of earlier occupation here, only one major construction episode was identified in the course of this work which was overseen by Bevin Etheridge.

#### Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.2-6	F.4	LCL I, II
2	Str. 423-8-1st	U.1-22	-	F.2, 3	LCLII/III, III

### Time Span 1

The earliest activities attested to in the vicinity of Str. 423-8 are the seemingly natural deposition of at least portions of S. 2-6. Stratum 4, one of the earliest of these layers to accumulate, was exposed to a maximum depth of 0.06m, 0.89m north of Str. 423-8-1st. It consists of a loosely consolidated, tan, sandy soil that was revealed for a maximum north-south distance of 0.3m. A hard-compacted, reddish-brown soil (S.6) seems to take S.4's place near Str. 423-8-1st's southwest corner. Stratum 6 was revealed to a maximum thickness of 0.09m well below (0.42m ) TS. 2 architecture (its base, however, was not found). The reddish-brown tinge of S.6 may imply that it contains deteriorated fragments of burnt earth comparable to that concentrated in F.4 to the east.

Overlying S.4 and 6 is 0.12-0.26m of S.3, a moderately fine-textured, softly compacted, light to medium-brown soil. Stratum 3 was revealed to a maximum thickness of 0.42m east of construction where its base was not found. Stratum 3 runs more-or-less even over the 12m it was uncovered from east to west.

Burying S.3 on the west is ca. 0.1m of S.2, a moderately coarse-textured, hard-compacted, brown soil. Though S.2 continued to accumulate after Str. 428-8-1st was abandoned (TS. 3), this lower segment underlies TS. 2 architecture (U.2). Near the platform's southwest corner S.3 is overlain by 0.16m of S.5, a gray silt that is, in turn, capped by TS. 2 construction (U.2). Stratum 5 was not recorded elsewhere around Str. 423-8-1st.

A patch of burned earth (F.4) measuring 0.9m east-west was found embedded within S.3 at a point 0.7m west and 0.18m below Str. 423-8-1st's western summit wall (U.5). Feature 4 likely marks an ancient living surface whose use temporarily interrupted the steady deposition of S.3. This, together with the artifacts recovered from the above-mentioned earth layers, point to a human presence in the area prior to the erection of Str. 423-8-1st.

### Time Span 2

Structure 423-8-1st was raised in what appears to have been one major construction episode. The platform's core is defined by relatively large stone walls (U.4-7); U.4 on the west is 0.74m high by 0.84m wide while its eastern counterpart, U.5, stands a preserved 0.66m tall and measures 1.14m across; the northern facing (U.6) measures 0.5m across while its southern counterpart (U.7) was only uncovered on its northern, interior face. Units 4-7 define a central elevated space encompassing 2.95m east-west (including the widths of these walls). The remaining construction units are built off the flanks of the aforementioned central architectural elements. The fill retained by these facings is a moderately coarse-textured, hard-compacted, brown soil with varying quantities of included stones (U.18).

The building's western flank is delimited by a ca. 0.9m-high stone facing (U.1). Unit 1 corners with U.13 on the north and U.12 on the south, though neither of these perimeter walls was followed for more than 2.8m. Appended to U.1's west side are two low steps (U.2 and 3) that are 0.3m and 0.24m high by 0.37m and 0.41m wide. Units 2 and 3 run for nearly the full length of Str. 423-8-1st's west side, stopping 1.5m south of the platform's northwest corner and 0.8m short of its southwest corner. Together with U.1, therefore, those entering the superstructure from the west would have ascended 0.9m by passing over three risers that led to the three rooms (Rooms 1-3) on the summit's west side. The central enclosure, Room 1, measures 1.7x1.91m and is delimited by stone foundations on the north and south (U8 and 9) along with U.1 and a core platform wall (U.4) on the east. A 1m-wide gap between U.4 and 8 in the enclosure's northeast corner provided access to Room 3. This cubicle was only partially cleared, covers 0.8x1.9m, and is bounded by U.1, 8, 19, and 20. Another doorway, this time 0.5m across, issues from Room 1's southwest corner into Room 4. The latter is a long (1.7m), narrow compartment (0.5m across) that is bounded by U.1 and 10 on the west and east and terminates on the south in a block of stone covering 0.7m on a side (U.11). At some point later in the occupation sequence the 0.4m separating U.11 and 10 was sealed by construction of a low stone wall (U.16). Another enclosure may lie immediately south of Room 4. Limited excavations conducted in this area revealed a low foundation (U.21) 2.4m south of U.11. This putative compartment would have been open to the west overlooking the U.2 and 3 steps though no more of the enclosure's form, dimensions, or built-in furniture (if any) was recorded.

Backing this trio on the east is Room 2, an enclosure that covers 0.93x2.15m and is surfaced with a stone floor atop which is a layer of burned earth (U.17). Several special deposits, composed of large fragments of partial as well as whole broken vessels, were found resting on the burnt earth. The walls delimiting Room 2 are the substantial facings that define the core platform (U.4-7). They measure 0.5-1.14m across (U.4-6; U.7's full width was not revealed) and the two broadest examples, U.4 and 5, the western and eastern facings, are sufficiently wide (0.84 and 1.14m across) to have doubled as wall supports and benches. No clear doorway provides access to Room 2's interior. A change in construction mid-way along U.4's east side hints at the earlier presence of a door that was later sealed. This putative entrance is 1.2m wide. *If* these are the remains of an entryway, then it is possible that Room 2 was originally accessed from Room 1 on the west through an ample doorway. The sealing of this passage points to a change in traffic patterns though how Room 2 was now reached is unclear. Another indication of changing movement patterns across the summit is the construction of U.15. This 0.22m-high by 0.4m-wide wall borders Room 1 on the south and runs from U.1 to 0.4m shy of U.4 on the east. Construction of U.15 would have sealed the door linking Rooms 1 and 4 and created a niche measuring 0.4m across by 0.45m deep in Room 1's southeast corner.

The platform's east flank was poorly preserved. What look to be the remnants of two stone-faced terraces were tentatively identified here (F. 2 and 3). The basal riser, F.2, is an estimated 0.3m high by 0.33m wide and gives way on the west to the next

ascending riser, F.3. The latter stands an estimated 0.52m tall and runs back (west) 1.42m to U.5, the eastern core platform facing. Unit 5, itself, was not in good enough shape to determine whether or not it rose above the putative top of F.3.

One late addition to Str. 423-8-1st was built off the platform's north face. This low wall (U.22) intersects the northern facing (U.13) 1m east of the building's northwest corner and was followed for 0.5m northward before excavation ceased. Unit 22's architectural significance is unclear; it may be the remains of a surface-level building set against Str. 423-8-1st's north flank.

By TS. 2's conclusion, Str. 423-8-1st was a stone-faced, earth-and-stone-filled platform that stood roughly 0.65m high (from the bottom of its basal facings to the summit floors), measured 8.17x10.5m, and was aligned ca. 2 degrees, 30 minutes. The east side is possibly ascended by two terraces while on the west, plaza-facing flank two long steps (7.9m north-south) project 0.8m west of the basal facing. This outset staircase gives way to a summit composed of at least four rooms; three set in a north-south line overlooking the western steps and one immediately behind (east of) the central, western enclosure. The three western rooms are surfaced with earth and cover 3m<sup>2</sup>, 1.5m<sup>2</sup>, and 0.9m<sup>2</sup>, the largest compartment being the central one. Doorways initially linked the middle room with its northern and southern neighbors though the southern passage was eventually closed off. The same situation may apply to movement between the central and eastern rooms which might have been originally linked by a 1.2m-wide door that was later sealed. This would have made the 2m<sup>2</sup> eastern room one of the most secluded spaces on Str. 423-8-1st's summit. It is also the only enclosure surfaced with stones. It appears that this pavement was covered with a thin layer of earth that, late in the building's history, was burnt. Though no free-standing benches or shelves were recorded atop Str. 423-8-1<sup>st</sup>, it is possible that Room 2's broad (1.14m across) eastern wall (U.5) was wide enough to double as a wall support and bench. There are hints of another room lying immediately south of the western trio. Though cleared to only a minimal extent, this enclosure might have covered 2.4m north-south and overlooked the western stairs. Remnants of what may have been a surface-level edifice were recorded built against Str. 423-8-1st's north flank.

Most of the stones used in TS. 2 construction are unmodified river cobbles the naturally flatter faces of which were directed outwards. Several faced masonry blocks were recorded in U.4 and F.2, though they nowhere comprise the majority of the stones employed in raising these walls. A mud mortar was used to hold all of these rocks in place.

### Time Span 3

Following Str. 423-8-1st's abandonment, S.2 continued to accumulate, eventually covering most final-phase architecture. Capping S.2 by 0.08-0.19m is a moderately coarse-textured, hard-compacted, root-rich, dark brown soil (S.1). Embedded in S.1 and upper S.2 is a moderately dense concentration of rocks fallen from TS. 2 construction

(F.1). Feature 1 was noted for 0.7m west and at least 1.88m east of construction; its eastern limit was not encountered.

Structure 423-9

Structure 423-9 is located on the southeast flank of the Southwest Group’s eastern patio. It is ca. 3.5m north of Str. 423-8 and 7m across the plaza from Str. 423-6 which lies to the northwest. Excavations here in Subop. 423M, U, and AO uncovered ca. 45m<sup>2</sup>, revealing approximately three-quarters of the edifice; the northwest quadrant remains largely unexplored. Digging reached a maximum depth of 0.8m below modern ground surface within and beyond construction. A single major construction episode was revealed in the course of this work though there are faint hints of an earlier building lying beneath these later remains. All investigations conducted here were directed by John Douglass.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.2-4	-	LCLII?
2	Str. 423-9-Sub1	U.13	-	-	LCLII?
3	-	-	-	F.2	LCLII
4	Str. 423-9-1 <sup>st</sup>	U.1-12	-	-	LCLII/III, III
5	-	-	S. 1-2	F.1	

Time Span 1

The earliest activity attested to in the vicinity of Str. 423-9 was the seemingly natural deposition of S.3 and 4. The first of these soils to accumulate (S.4) is a softly compacted, tan sand that was exposed to a maximum thickness of 0.3m (its base was not encountered) and slopes up 0.05m south-to-north over the 1m it was exposed in this direction. Stratum 3, a fine-textured, loosely compacted, light brown soil, covers S.4 by 0.18-0.22m. It, too, rises south-to-north, this time ascending 0.18m across 2m in that direction. From this point northward S.3 slows its ascent somewhat, climbing 0.4m over 8.9m. At least 0.07m of S.2, a moderately coarse-textured, hard-compacted, brown soil, was deposited atop S.3 before the erection of Str. 423-9-1<sup>st</sup>. This is the distance intervening between S.3 and the bottom of the later platform’s southern basal facing.

The recovery of artifacts from lower S.2 points to a human presence in the area, at least during the last portion of TS.1.

### Time Span 2

The sole remains of what may have been Str. 423-9-Sub 1 consists of U.13, a 0.08m high stone wall that was largely buried beneath Str. 423-9-1<sup>st</sup>'s U.9. Unit 13 is aligned roughly 103 degrees along the 2m it was exposed. Its architectural significance is abundantly ambiguous; given its relatively low height it seems likely that it was a foundation that defined some portion of a surface-level building.

### Time Span 3

Covering U.13 is a deposit of fine-textured, softly packed, gray ash (F.2). Feature 2 was only identified beneath Str. 423-9-1<sup>st</sup>'s eastern summit room where it rises 0.27m over ca. 1m from south to north before leveling off for the remaining 1.28m it was traced northward. It looks as though F.2 comprised a low mound that covered at least part of Str. 423-9-Sub 1 and over which Str. 423-9-1<sup>st</sup> was erected; U.6 of that building, in particular, rides atop F.2, its base ascending noticeably from south to north. The precise relationship between S.3 and 4, on the one hand, and F.2, on the other, was not revealed though it seems likely that the last of these three entities postdates the laying down of the first two.

### Time Span 4

Structure 423-9-1<sup>st</sup> is a platform delimited on all sides by stone facings that are 0.4-0.48m high (U.1-4). On the north, east, and west these walls lead directly to the summit. In contrast, the southern basal facing (U.1) is succeeded 0.57m to the north by a second riser, U.7, which then ascends 0.2m to the summit. Unit 1 also diverges from what is known of the remaining facings in that it jogs 0.55m south from its east-west running line at the wall's approximate mid-point. The fill retained by these walls is a fine-textured, loosely packed tan soil (U.11).

The superstructure consists of two rooms arranged in an east-west line and separated from each other by a 1m wide wall (U.6). It appears that U.6 was originally 1.85m long but was extended 1.05m northward at some point late in TS.4. This addition may, among other things, have sealed a 0.34m wide door that connected the two summit enclosures. Blocking this entryway was possibly contemporary with, and integral to, the raising of the western room's floor (see below). Unit 6 is sufficiently wide that it may have doubled as a room divider and bench. The other sides of the rooms are bounded by ca. 0.2m high walls (U.7-10). It is noteworthy that the area bordering the rooms on the north is a paved surface measuring 1.86m across north-south. The east and south sides, the only two flanks cleared sufficiently to estimate their widths, encompass 0.6m and 0.9m, respectively. It may be that the expansive paved northern

summit surface was used as a work area associated with the two summit rooms. The eastern compartment covers 2.1x2.27 while its western neighbor appears to measure about the same on its north-south dimension (2.27m); its western margin was not uncovered. The eastern compartment is surfaced with earth and apparently sits 0.5m below its earth-and-stone paved counterpart in the western enclosure. This would put that floor only slightly above the surrounding ancient ground surface. Putting it another way, whereas the eastern room's floor is at the base of U.6 the western enclosure's living surface is near the top of that construction. Whether this discrepancy in heights was part of the building's original design or is the outcome of later modifications is unknown. We suspect that the latter is the case given that the sealing of the former doorway connecting the two compartments would have been necessary to retain the fill added in raising the summit floor on the west.

A schist slab resting on a foundation of small stones (U.12) was found 0.2m west of the platform, 0.55m north of Str. 423-9-1<sup>st</sup>'s southwest corner. Unit 12 is 0.5m wide north-south and was traced for only 0.6m to the west before excavations ceased. What this enigmatic construction signifies is unclear; it seems to have been raised atop ancient ground surface, though whether it is part of a building or some more modest feature is unknown.

Structure 423-9-1<sup>st</sup> is a stone-faced, earth-filled platform that stands 0.4-0.68m high, measures 5.4x6.15m, and is aligned roughly 103 degrees. The height discrepancy obvious here is likely due to the platform's location atop terrain that is rising from south to north. The summit is reached by two ascents on the south, downsloping side while on its other flanks the rise to the summit is direct, if somewhat undramatic. Two rooms are set in an east-west line atop Str. 423-9-1<sup>st</sup>; the eastern example covers 4.8m<sup>2</sup> while its western analogue likely encompasses roughly the same area. A broad (1m wide) stone-faced and -surfaced wall separates the enclosures, possibly doubling as foundation and bench. Near the end of TS. 4 this wall was expanded northward, blocking the passage that formerly connected these enclosures. It was probably about this time that the floor of the western room was raised to a height of roughly 0.5m above that of its eastern analogue. The expansive area north of these compartments measures 1.86m across and is paved with stones. This surface may have functioned as a staging area for activities associated with the two summit rooms. Remnants of a surface-level construction of unknown form and dimension lie immediately west of the platform. All walls and surfaces associated with Str. 423-9-1<sup>st</sup> are made primarily of angular rocks the naturally flatter faces of which are directed outwards. At least one faced block and several schist slabs were recorded in these units as well. All of the stones are held in place with a mud mortar.

### Time Span 5

Following the abandonment of Str. 423-9-1<sup>st</sup>, deposition of S.2 resumed, this soil eventually accumulating to as much as 0.38m. Topping S.2 is 0.09-0.14m of moderately coarse-textured, moderately hard-compacted, root-rich, dark brown soil (S.1).



Embedded in S.1 and upper S.2 is a moderately dense concentration of rocks tumbled from final-phase architecture (F.1). On the south, where F.1's full extent was revealed, the debris extends 2.75m away from TS. 2 architecture. A number schist slabs were recorded over the southernmost 1.1m of F.1, most tilted consistently down from north to south. These may be the remains of a stones-on-end feature located 1.65m south of the platform, their initial vertical settings having succumbed to gravity in the years following Str. 423-9-1<sup>st</sup>'s abandonment.

### Structure 423-11

Structure 423-11 is located on the south edge of the Southwest Group's central, largest plaza. It is approximately 18m south and across the patio from Str. 423-6 and 3m south of Str. 423-13. This building occupies the crest of a ca. 0.8m high south-to-north rise which marks the known margins of the site on the south. Excavations in Subop. 423L cleared roughly 44m<sup>2</sup>, digging reaching maximum depths of 1.03m and 1.08m below modern ground surface outside and within architecture, respectively. What had appeared, on the surface, to be one building turned out to be a complex of closely spaced platforms and surface-level rooms. The components of this warren were likely raised within a relatively short period of time though there are indications that the aggregate was subject to several renovations. The investigations on and around Str. 423-11 were overseen by Stephen Yates.

### Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.3-5	-	LCLII
2	Str.423-11-1 <sup>st</sup>	U.1-4, 6-8, 13 14, 17, 18, 20-25 27-29, 31, 32	-	-	LCLII
3 4	Str. 423-11-1 <sup>st</sup>	U.5, 9-12, 15, LCLII/III, III 16, 19, 26, 30, 33	-	F.2-	
4	-	-	S.1-3	F.1	

### Time Span 1

The initial period of activity uncovered in the environs of Str. 423-11-1<sup>st</sup> is marked by the deposition of a loosely compacted tan sand (S.4). Stratum 4 was

revealed south of the building where it is at least 0.17m thick (its base lies beyond the excavation limits) and rises 0.18m over 2m south-to-north. This layer was not found underlying architecture on the north. Here a fine-textured, moderately soft-packed, tan soil (S.5) takes S.4's place. Stratum 5 was uncovered to a maximum thickness of 0.43m before it disappeared beyond our excavations. This soil level rises from north to south in one small but pronounced jump, ascending 0.16m across 0.14m, 1.68m north of Str. 423-11-1<sup>st</sup> (U.8). Though this step-up may be natural it seems likely that it is the result of human modification of the terrain. On the south an estimated 0.34m of S.3, a fine-textured, loosely packed, gray, ashy soil was laid down atop S.4. Though this soil probably slopes up south-to-north following the general contours of its predecessors, such an ascent could not be detected. Cultural materials retrieved from lower S.3, S.4, and S.5, coupled with the high ash content of S.3, point to a human presence in the area when these layers were accumulating.

### Time Span 2

Units 1 and 2 are the southern facings of two terraces that slowed erosion down the southern slope above which Str. 423-11-1<sup>st</sup> was built. Unit 1 is 0.34m high and fronts an earthen-surfaced tread that runs 1.89m north to the next ascending riser, U.2. The latter stands 0.7m above U.1 and gives way to a stone surface that extends 1.84m northward where it ends in a 0.3m high vertical facing (the floor and rise are included in U.2). Unit 1 was exposed for only 1m east-west whereas U.2 was traced for 10m in this direction (oriented approximately 280 degrees). Unit 2 corners on the west with a wall heading almost due north (U.4). On the east U.27 corners with U.2 and extends 0.95m to the north where it corners with U.28. The latter construction extends 0.7m to the west before joining with U.29. Unit 29 was exposed in two discontinuous segments running 2.45m north from its junction with U.28; at this point U.29 was lost beneath later architecture (see TS. 3). The fill retained by these constructions is a fine-textured, softly packed, gray ash identical to S.3. All in all, U.1-4, and 27-29 comprise an extensive stone-faced and earth-filled terrace system whose broad surfaces likely served as work areas as well as impediments to downslope erosion. The large quantities of ash and artifacts recovered south of these terraces suggests that this slope was a favored area for jettisoning trash during TS.2.

Immediately north of U.3, the north edge of the uppermost southern terrace, is a 0.54m high platform (Str. 423-11-Sub1) defined by single ascents leading to the summit (U.6, 18, 20); that summit was not cleared. Unit 6, the eastern basal wall, abuts U.3 at what was probably the platform's southeast corner. A 0.18m high step-up (U.17) projects 0.95m north of the platform's northern basal facing (U.18), intersecting that wall 1.5m west of the edifice's northwest corner. Unit 17 encompasses 2m east-west and joins the platform at its northwest corner. The western basal wall (U.20) encounters a cross-wall (U.21) 1.1m south of its northwest corner. Unit 21 may define the platform's south edge, though it extends at least 0.2m west of U.20. Overall, Str. 423-11-Sub1 is 0.54m high, measures 3.5m east-west by 1.9m (on the east) to 1.1m (on the west) north-

south. This edifice is aligned roughly 281 degrees. The nature of summit construction was not investigated. A 0.18m high stone-faced projection extends 0.95m north of the building and runs for 2m east from Str. 423-11-Sub1's northwest corner.

Lying 2.8m northeast of Str. 423-11-Sub1 is a second low platform, portions of whose north, west, and south sides were uncovered (U.23, 24, and 25, respectively; Str. 423-11-Sub2). This building is aligned ca. 358 degrees along the 3.1m it was exposed on the west; only 0.6m of its southern and northern facings were revealed. Not enough of the summit was uncovered to determine the nature of any superstructure that may have graced this eminence.

The diminutive patio defined by Strs. 423-11-Sub1 and 423-11-Sub2 on the south and east is partially surfaced with a stone pavement (U.32). Unit 32 measures 1.2x2.15m and is 0.8m north of Str. 423-11-Sub1 and 1.4m west of Str. 423-11-Sub2. Its northern edge is defined by a 0.4m high facing (U.7) that projects 0.21m above S.5. The remaining sides were probably flush with the ancient ground surface. Fronting U.7 on the north is a low terrace bounded by substantial retaining walls on the west (U.14, 0.4m across), north (U.8, also 0.4m wide), and east (U.13, 0.8m across). This terrace ascends 0.18m above S.5, its earthen-floored tread extending 0.82m north of U.7, only 0.04m of which would have still protruded above the northern terrace. The northern terrace runs across the entire northern face of U.7 and was probably a late addition that covered the earlier entity. The fill contained by U.8, 13, and 14 is a fine-textured, moderately soft-compacted, tan earth indistinguishable from S.5.

By the conclusion of TS.2, Strs. 423-11-Sub1 and 423-11-Sub2 were two small platforms that defined a patio covering 2.8x5.8m on the south and east. These buildings encompass no more than 3.5m on a side. Most of the patio is surfaced with earth though an area of 2.6m<sup>2</sup> near the plaza's approximate center is paved with rocks. The complex is bounded on the south by two broad terraces that ascend the south-to-north natural slope. The aforementioned pavement seems to have been faced on the north by a low riser but this facing does not continue the full length of the patio's north flank. Late in TS.2, this facing was almost completely covered by another terrace facing that projects 0.82m north of its predecessor. The stones used in TS. 2 construction are largely unmodified rocks the naturally flatter faces of which are directed outwards; at least one faced block was, however, incorporated in U.6. The stones are bound together with a mud mortar.

### Time Span 3

This period witnessed the construction of several, fairly ephemeral edifices within the patio. The most substantial of these additions are two low stone foundations that define the west (U.15) and south sides (U.9) of what was seemingly a surface-level building situated off Str. 423-11-Sub2's southwest corner. The latter platform may define the new building's north flank. The area enclosed by U. 9 and 15 measures 1.45x2.1m and has an earthen floor. A stone pavement (U.19) of uncertain dimensions does run south from U.9.

Two low walls project 1.3m (U.11) and 0.75m (U.12) north of the U.8 terrace. Unit 11 is 0.45m west of U.12 while the latter runs north from the terrace's northeast corner. Unit 26, in turn, is a wall that extends 0.3m west from Str. 423-11-Sub2's northwest corner before turning south for 0.55m. This entity stops 0.25m shy (north of) U.12. It might be that U.26, 12, 13, and 24, along with Str. 423-11-Sub2's western facing, together delimited the north, west, and east sides of a very narrow but long (0.65x2.95m) earthen-floored space open on the south where it issues into the area delimited by U.9 and 15.

Three additional low stone walls run 0.95m east of U.6 (U.5) and 0.7m west from U.15 (U.10 and 16). The architectural significance of these very casual constructions is unclear, though they likely served as supports for imperishable walls.

Feature 2 constitutes the faint traces of what might have been a terrace facing raised atop U.1, the southernmost terrace in the U.1/2 dyad. Its presence is hinted at by a concentration of relatively flat-laid stones resting on a foundation of three schist slabs noted in the excavation section. Feature 2 stands 0.41m above U.1's tread and is situated 0.94m north of U.1's south face. If F.2 comprises the remnants of a late construction, its addition would have created three terraces on the Str. 423-11 complex's south side; U.1, measuring 0.34m high by 0.94m wide, F.2, standing 0.41m high and running 0.94m back to U.2, which still projected 0.28m above the putative F.2 tread. The fill backing F.2 (F.4) consists of fairly densely packed small to large rocks set in a brown soil matrix; the stones looked as though they were dumped in from the north. Lying 0.57m south of U.1 is a patch of burned earth (F.3) set on S.3 and at a level equivalent to the exposed base of U.1. Feature 3 measures 0.6m north-south (its east-west dimension was not discovered) and probably represents a heavily burned segment of the ancient ground surface.

Time Span 3, therefore, sees the partial filling in of the central patio through the erection of at least one, possibly several, surface-level buildings. The most thoroughly cleared of these edifices was raised off the west side of Str. 423-11-Sub2, its builders using that platform's western basal facing to define their structure's eastern flank. The southern end of this construction is an estimated 1.45x1.5m and gives way on the north to a 0.65m wide by 2.95m long (north-south) extension. The space thus defined was completely open on the east (the 1.45m separating U.9 and 25) and there is a 0.7m wide gap between U.13 and 15 on the west that may have been a doorway. A 0.25m wide fissure in the wall 1.55m north of the putative door may have provided ventilation, but certainly not an entrance. The east side of another surface-level building may have been uncovered 0.45m west of this edifice (U.11). On the south a third riser was possibly added to the terrace system formerly defined by U.1 and 2, creating a sequence of ascents that were 0.28-0.41m high by 0.94m wide. A patch of intensely burned earth located 0.57m south of the U.1 terrace points to the performance of activities on the slopes below the Str. 423-11 complex at least some of which involved the use of fire. The platforms and even most of the patio surface created during TS. 2 appear to have remained in use and intact during this interval.

Architecture raised now consists mostly of un-faced stones that are set in a mud mortar. The naturally flatter aspects of these rocks tend to be directed outwards.

Time Span 4

Following abandonment, S.3 resumed accumulation on the aggregate’s south side; no sign of S.3 was ever recorded on the north. Covering S.3 and 5 by 0.2-0.38m is a moderately coarse-textured brown soil (S.2). This layer, in turn, is blanketed by as much as 0.12m of S.1, a moderately coarse-textured, hard-compacted, root-rich, dark brown earth. Embedded in S.1 and 2 is a moderately dense concentration of rocks tumbled from final-phase architecture (F.1).

Site PVN 423, Central Group

The Site PVN 423 Central Group is 90m northeast and ca. 1m upslope from the settlement’s southwestern aggregate. The former consists of seven surface-visible constructions (Strs. PVN 423-14/20) arrayed around a patio that they enclose on all sides. Five of these buildings were extensively cleared, resulting in the exposure of approximately 240m<sup>2</sup>. The investigations were directed by E. Bell, S. King, K. Lomax, K. Sarnecki, and R. Smith.

Structure 423-15

Structure 423-15 seals the southwest corner of the Site PVN 423 Central Group patio. It is 7.2m south of Str. 423-17 and 19.6m west, and across the plaza, from Str. 423-20. Digging here within Subop. 423E and V uncovered 36m<sup>2</sup> in the course of clearing the building in its entirety. Excavations reached maximum depths of 0.97m and 0.53m below modern ground surface beyond and within construction, respectively. One major building phase followed by a significant period of renovation were identified in the course of this work, overseen by K. Sarnecki.

Time Spans

Time Span	Construction Phase	Units	Strata	Features	Dates
1	-	-	S.1-5	-	LPrecl, LCL I-III
2	-	-	S.6	F.1-2	LCLI, II/III
3	Str. 423-15-1 <sup>st</sup>	U.1-4	-	-	LCLIII/II
4	Str. 423-15-1 <sup>st</sup>	U.5-12	-	-	LCLIII/II
5	Str. 423-15-1 <sup>st</sup>	U.13	-	-	LCLIII/II
6	-	-	7-8	F.3	-

## Time Span 1

The earliest activity identified in the environs of Str. 423-15-1<sup>st</sup> is the seemingly natural deposition of S.1-5. Strata 1-3 are identified only on the north while S.4-5 appeared solely in a relatively deep probe dug off the building's south flank. The lowest deposits in each case (S.1 and 4) are softly compacted sands that are distinguished by their colors; S.1 is tan whereas S.4 is red-brown. Stratum 1 was revealed to a maximum thickness of 0.17m, its top sitting 0.32m above that of S.4. The latter was exposed to a depth of 0.1m; the bases of S.1 and 4 were not found. Stratum 4 was exposed in two discontinuous segments over which it was seen to rise 0.24m across 3m from south-to-north. No comparable ascent was noted in the more limited (1m<sup>2</sup>) area in which S.1 was uncovered.

Stratum 2, a hard-compacted, fine-textured, tan soil, blankets S.1 by as much as 0.18m while S.5, a softly compacted, moderately coarse-textured, brown soil, covers S.4 by 0.12-0.13m. Both S.2 and 5 are relatively flat-laid within the 1m<sup>2</sup> areas in which they were revealed at the north and south ends of the principal axial trench (Subop. 423E). A hard-compacted, fine textured, dark brown to black soil (S.3) accumulated for 0.06 to at least 0.17m atop S.2 on the north. Stratum 3 was traced for 2.75m over which distance it maintained a gently undulating surface, dropping 0.06m over 1m north-to-south before rising 0.09m across 1.75m in the same direction.

The artifacts found within strata pertaining to TS.1 imply that there was a human presence in the immediate area prior to deposition of the midden during the subsequent period (F.1 and 2).

## Time Span 2

During the next interval a substantial trash deposit was laid down south of what would become Str. 423-15-1<sup>st</sup>'s southern basal platform facing (U.2). This midden is made up of two superimposed layers (F.1 and 2). The basal exposed layer, F.1, is composed of a soft-compacted, fine-textured, gray ash with numerous included artifacts, primarily pottery sherds. Feature 1 ascends 0.37m over 1.8m from south to north, disappearing beneath Str. 423-15-1<sup>st</sup>'s southern basal facing (U.2). Feature 2, a hard-compacted, fine-textured, red-brown soil flecked with small fragments of *bajareque*, overlies F.1 by 0.11-0.23m and also rises from south to north. In this case the rate of ascent is 0.64m over 2.59m at which point F.2 disappears beneath U.2. Features 1 and 2 overlie S.4 but, based on their drop down to the south, they appear as though their deposition would have interrupted the deposition of S.5, or perhaps truncated that layer. In any event, the deposition of F.1 and 2 created a low rise atop which the south flank of Str. 423-15-1<sup>st</sup> would be raised. Whether they were introduced as fill to create that rise or the later builders simply took advantage of this local eminence is unknown.

Soon after F.2 was introduced a soft-compacted, moderately fine textured, brown soil (S.6) accumulated over part of this layer. Stratum 6 blankets S.5 by as much as

0.2m, running 2.74m north from the southern terminus of the axial trench (Subop. 423E) before pinching out against the southern slope of F.2. This layer also contains artifacts, suggesting that there was a human presence in the area when it was being deposited. Whether S.6 represents a continuation of the F.1 and 2 midden is uncertain; more likely it resulted from the natural deposition of soil over the lower, southern flank of the midden.

### Time Span 3

Structure 423-15-1<sup>st</sup> was built in at least two stages. The first involved erection of a surface-level building defined by substantial stone foundations on all four sides (U.1-4). Units 1-4 measure 0.45-0.9m across and stand 0.6-0.9m high (slightly higher on the north given that the southern footing [U.2] was set atop the low rise formed by F.1 and 2). The earthen-floored room contained by U.1-4 covers 1.6x3m and was entered through a doorway measuring 1.27m across set slightly west of the northern foundation's (U.4) center. Because the western footing (U.3) is considerably wider than its other counterparts (0.9m across as vs. 0.45-0.7m), it may have doubled as a support for a perishable upper wall and a bench or shelf. The expanded portion of U.3 measures 1.3m north-south, before narrowing to 0.6m across for the southernmost 0.2m of the enclosure.

By the conclusion of TS.3, Str. 423-15-1<sup>st</sup> was an earthen-floored, surface-level building that measured 2.9x4.5m, was aligned roughly 86 degrees, and entered through a doorway measuring 1.27m across set in its northern, patio-facing, side. The one room it contained was bounded by substantial stone foundations that stood 0.6-0.9m high and measured 0.45-0.9m across. The space they enclose covered 4.8m<sup>2</sup> and seems to have been bounded on the west by a stone-faced and -surfaced bench/shelf built into the western footing. This construction was 1.3m long by 0.9m wide.

Units 1-4 are built primarily of unmodified cobbles the naturally flatter aspects of which were directed outwards. These stones are all set in a mud mortar.

### Time Span 4

During this interval the aforementioned northern doorway was sealed, creating one continuous northern facing (U.4), and the room's interior was buried under earthen fill (U.11 and 12). Unit 11, the first to be laid down, consists of a soft-compacted, fine grained, ash with included sherds. Unit 11 extends 0.9m north from the north face of U.2 (the southern wall), rising 0.16m over this distance before dropping precipitously 0.28m across 0.55m south-to-north, disappearing at this point into the base of excavations. Unit 12, a hard-compacted, fine textured, brown soil with numerous small to medium-size rocks concentrated in its upper 0.2m, covers U.11, increasing in thickness from south to north as U.11 descends. Unit 11 probably consists of re-deposited midden material from some nearby source, most likely F.1, which it closely resembles. These changes strongly indicate that what had been a surface-level building during TS.3 was converted into an earthen-filled and -surfaced platform. Its bordering foundations (U.1-4) now acted as fill-retaining walls as well as supports for the perishable walls that

likely bounded the superstructure. The latter contained one room measuring 4.8m<sup>2</sup>, the enlarged section of U.3 on the west likely still serving as a bench or shelf as it had in TS.3.

Unit 4 was expanded 0.6m and 0.35m to the west and east, these extensions serving as anchors for stone footings (U.5 and 9) that were erected as part of an effort to define two rooms set on ground surface against the platform's north face. Units 5, 6, and 7 delimit the larger, northwestern enclosure while U.7 and 9 bound its smaller northeastern counterpart on the west and east, respectively. These foundations are 0.21-0.48m tall by 0.28-0.41m wide and likely supported perishable upper walls. The northwest room encompasses 1.57x2.85m, the westernmost 1.57x1.45m being paved with cobbles (U.13). A 0.43m-high by 0.59m-wide stone-faced and -surfaced shelf or bench (U.10) fills this enclosure's southeast corner, running 1.4m west from U.7, the room's eastern foundation. It is possible that U.10 also served as step leading up to the summit room immediately to the south. The northeast room measures 1.35x1.55m, is completely surfaced in stones (U.8), and is open on the north, facing towards Str. 423-17-1<sup>st</sup>. At 0.85m south of its north edge, U.8 steps up 0.06m to the south.

As TS.4 drew to a close, Str. 423-15-1<sup>st</sup> consisted of two distinct elements; an earth-filled and -surfaced platform fronted on the north by two rooms erected directly on ground surface. The building's overall dimensions are 4.8x5.5m and it retains its general orientation (86 degrees) from TS.3. The platform itself stands 0.6-0.9m tall and supports a room that encompasses 4.8m<sup>2</sup> and has what seems to be a bench or shelf built into its west wall. That construction is 1.3m long north-south by 0.9m wide. The compartments built against the platform's north face are set in an east-west line and cover 4.5m<sup>2</sup> (on the west) and 2.1m<sup>2</sup> (on the east). The eastern enclosure is completely paved with stones whereas the westernmost 2.3m<sup>2</sup> of the northwest room is surfaced in this fashion, the rest of its open space being left in dirt. A 0.43m-high, 0.59m-wide, by 1.4m-long bench or shelf fills the northwest room's southeast corner and may have doubled as a step-up into the southern superstructure.

The constructions raised or, in the case of the floors, laid down now were primarily made of cobbles set in a mud mortar. A few faced blocks are found in U.6 and 7 whereas masonry is a more common component of U.10, along with cobbles (the shelf/bench in the northwest room). Small cobbles and pebbles were seemingly used to create a façade, or cladding, covering U.4 where it looked out into the northwest and northeast rooms. This surfacing was absent in that portion of U.4 backing the U.10 shelf/bench. In all cases, the flatter aspects of the rocks used in construction now are directed outwards.

### Time Span 5

The final activity attested to at Str. 423-15-1<sup>st</sup> was the filling in of at least the northwest room with a hard-compacted, moderately fine-textured, brown soil (U.13). Unit 13 accumulated to a depth of 0.3m above the compartment's floor, leaving the top-



most 0.13m of the U.10 bench likely still protruding above the newly established earthen floor. Unit 6, the wall bounding the northwest enclosure on the north now likely served as a fill-retaining construction. It is not clear that the northeast room was also filled with earth at this time; there was certainly no wall built along the compartment's open north face to retain fill of any sort here.

Based on the above reconstruction, Str. 423-15-1<sup>st</sup> retained the same dimensions and orientation as it had during TS.4. While it still contained three rooms, the sizes of which continued unchanged from the preceding interval, they were now set at three different levels. The northeast enclosure was still at ground level, the floor of its northwest counterpart now sitting ca. 0.3m above ground surface, while the back, southern compartment was 0.61m higher still. The newly filled northwest room may have retained its stone-faced bench, though, if so, it was reduced in height to 0.13m.

### Time Span 6

Following Str. 423-15-1<sup>st</sup>'s abandonment, the building was blanketed by two types of soil. The first to be deposited is a hard-compacted, fine-textured, brown earth that accumulated to depths of 0.06-0.28m over S.3 on the north and S.6 and F.2 on the south. Stratum 7, in turn, was blanketed by 0.11-0.23m of a moderately fine-textured, dark brown humus (S.8). Embedded in S.7 and 8, but especially the former, is a dense concentration of debris that almost certainly fell from final-phase architecture (F.3). Feature 3 was traced for up to 2.3m away from Str. 423-15-1<sup>st</sup>.

### Structure 423-17

Structure 423-17-1<sup>st</sup> is 7.2m north of Str. 423-15-1<sup>st</sup> and 7m southwest of Str. 423-18-1<sup>st</sup> along the west side of the Site PVN 423 Central Group's main plaza. Digging here in Subop. 423B uncovered ca. 42m<sup>2</sup>, fully revealing all of Str. 423-17-1<sup>st</sup>. Digging was pursued to maximum depths of 0.32m and 0.8m below modern ground surface within and outside construction. Two major building phases were recognized in the course of this work, which was directed by S. King.

### Time Spans

Time Span	Construction Phase	Units	Strata	Features	Dates
1	-	-	S.1-3	-	
2	Str. 423-17-2 <sup>nd</sup>	U.1	-	F.1-2	LCLII/III?
3	Str. 423-17-1 <sup>st</sup>	U.2-12, 14-15, 18-19	-	-	LCLIII/II
4	Str. 423-17-1 <sup>st</sup>	U.13, 16, 17, 20-21	-	-	LCLIII/II
5	-	-	S.4-5	F.3	

## Time Span 1

The earliest activity attested to in the vicinity of Str. 423-17 is the apparently natural deposition of S.1-3. Stratum 1, the lowest exposed layer on the west, is a soft-compacted, red-brown sand that was revealed to a maximum thickness of 0.08m (its base was not encountered in our excavations). This layer retained a more-or-less even upper surface over the 1m<sup>2</sup> in which it was revealed 3.7m west of Str. 423-17-1<sup>st</sup>. Stratum 2, S.1's stratigraphic counterpart on the east, is a soft-compacted, moderately coarse-textured, tan soil that was exposed to a maximum thickness of 0.21m (its base was not revealed). Stratum 2 retains a relatively flat upper surface over the 3.56m it was exposed in two distinct segments from east to west. Stratum 3, in turn, was uncovered underlying Str. 423-17-2<sup>nd</sup> (TS.2) where that building's one uncovered component (U.1) emerges from beneath the north flank of Str. 423-17-1<sup>st</sup>. This layer consists of a hard-compacted orange-brown soil that was exposed to a thickness of 0.12m (its base was not encountered). Based on the stratigraphic relations among S.1-3, it appears that the natural ground surface over which Str. 423-17-1<sup>st</sup> was built rose approximately 0.09m over 12.3m east-to-west and 0.1m south to north. The recovery of a few artifacts from soils dating to this interval points to a limited human occupation in the immediate area during TS.1.

## Time Span 2

Blanketing S.1 on the west by 0.21-0.33m is a very soft-compacted, very fine-textured, gray ashy soil (F.1) that slopes gradually down 0.1m over the 1m it was uncovered from west to east. Feature 1, in turn, was covered by 0.14-0.25m of a soft-compacted, fine-textured, gray ash in which are embedded numerous pottery sherds and small rocks (F.2). Feature 2 was traced for 4.73m from the western margin of excavation to a point where the layer disappears beneath later construction (U.13). Over this distance, F.2's upper surface undulates slightly but retains a relatively even level throughout. The close similarity of F.1 and 2 suggests that they are part of a single deposit that becomes finer grained and more loosely compacted with greater depth. Most likely they are elements of an extensive midden deposited prior to the raising of Str. 423-17-1<sup>st</sup>.

It may be that Str. 423-17-2<sup>nd</sup> was erected at now. The one fragment of this building identified in Subop. 423B (U.1) is set on S.3 and is a 0.16m-high by 0.38m-wide stone wall that was traced for 1.65m where it runs at an angle of ca. 294 degrees out from beneath construction pertaining to TS.3 (U.6). Unit 1 was made of cobbles set in a mud mortar and with their naturally flat faces directed outwards (to the north). In fact, considerable care was apparently invested in selecting rocks of comparable sizes and with at least one clear flat aspect for use in this wall. If we encountered U.1's western terminus, as seems we have, then it is unlikely to have been a fill retaining wall for a low

platform. Though the situation is unclear, it seems more likely that Str. 423-17-1<sup>st</sup> was a surface-level building, U.1 being one of its stone foundations.

By the conclusion of TS.2, therefore, there was at least one surface-level building (Str. 423-17-2<sup>nd</sup>), oriented ca. 294 degrees, situated in the area soon to be occupied by Str. 423-17-1<sup>st</sup>. Possibly associated with this building was an extensive midden lying very approximately 3m to the west/southwest. A direct link between these elements was not established but their relative depths and relations to TS.3 architecture are equivalent, suggesting that they were roughly contemporary. It should be noted that the deposition of F.1-2 created an east-to-west rise in ground level of ca. 0.37m over 4.7m. As this distance is covered by Str. 423-17-1<sup>st</sup>, we have no direct information on how the western midden related to S.2 on the east. That Str. 423-17-1<sup>st</sup>'s basal architecture on the east is set 0.34m lower than its western analogues implies, however, that the later building was erected over a pre-existing rise, likely formed in part by the deposition of F.1-2.

### Time Span 3

During this interval Str. 423-17-1<sup>st</sup> was built. The first step in the process involved the erection of the core platform that covered 1.86x3.3m. This portion of the edifice is bounded by stone facings (U.2-5) that stand 0.4-0.65m high (taller on the north and east) and measure 0.39-0.42m across. They enclose an earthen-floored summit that covers 1.04x2.4m and consists of one room unencumbered by any built-in furniture. The fill contained by U.2-5 is a soft-compacted, moderately coarse-textured, brown soil (U.14). Unit 4, the eastern basal facing, is not set on S.2; in fact its base rests 0.29m above that level. Instead, U.4 is underlain by a very hard-compacted, moderately coarse-textured, red-brown soil (U.15). Unit 15 may well be fill laid in to provide a firm base for TS.3 architecture.

The next step was characterized by the addition of three small compartments, set in a north-south line on the edifice's east, patio-facing side. These enclosures rest atop a 0.34m-high, stone-faced eastern terrace (U.8) set on S.2. The fill backing U.8 on the west is the very hard-compacted, moderately coarse-textured, red-brown soil (U.15) found beneath U.4. The aforementioned cubicles are floored with earth (the top of U.15 in the case of the northeast and southeast rooms), bounded by stone foundations (U.6, 7, 9, and 10), and are open on the east where they face the patio. Units 6, 7, 9, and 10 are 0.3-0.58m high by 0.3-0.4m wide and likely supported perishable upper walls. The northeast and southeast enclosures cover 0.7x1.9m in each case while the central cubicle measures 1.05x1.9m. The latter space seems to have been filled with a brown dirt (U.19) to a point more-or-less equal with the top of U.4. Atop U.19 was placed a shaped stone that, when found, was deeply cracked (U.11). Unit 11 covers 0.4x0.6m and is situated near the middle of the central room. Most likely, U.11 marks a threshold in moving from the patio to the core platform that backed on the west the eastern cubicles. A stone step (U.12) measuring 0.45x0.45m abuts U.8 on the east and would have provided access to the central space's southeast corner. Interestingly, this putative riser is not set in line with U.11.

Units 6, 7, 9, and 10 abut U.4, the platform's east facing, suggesting that they were built after the latter construction. That U.4 rests on the U.15 fill which backs U.8, the eastern terrace facing, suggests that the interval between these building episodes was short. Most likely, U.8 was put in place at the same time that the platform was raised, the foundations dividing space atop the eastern terrace being added as the last step in this process.

Located 1.15-1.31m east of U.8 in line with the northeast room is a stone construction measuring 0.59m east-west by 0.34m north-south (U.18). Unit 18 is one stone (0.03-0.09m) thick and is set in the top of S.2, barely protruding above ancient ground surface. The behavioral significance of U.18 is unclear. There is no sign of burning nearby and it may have served as a staging place for activities requiring a stable, if spatially limited, surface.

As TS.3 drew to a close, Str. 423-17-1<sup>st</sup> measured 3.87-4.1m and was aligned roughly 196 degrees. It consisted of an earth-filled, stone-faced core platform that stood 0.4-0.65m high (slightly taller on the east and north) and measured 1.85x3.35m. The superstructure raised atop the platform consisted of one earthen-floored room that encompassed 2.5m<sup>2</sup> and lacked any signs of built-in furniture such as a bench or shelf. Fronting this construction on the east, patio-facing side is a set of three diminutive enclosures built in a north-south line atop a 0.34m-high stone-faced, earth-filled and – surfaced terrace. Each of these compartments was bounded by stone foundations and was open towards the east. The northern and southern spaces each measured 1.3m<sup>2</sup> while the central 'room' encompassed 2m<sup>2</sup>. The latter was apparently filled with dirt to roughly the height of the platform's summit, a faced stone measuring 0.24m<sup>2</sup> being set near the center of this elevated space. Said piece of masonry may well have been a threshold formalizing entrance into the western room. A stone step projects 0.45m east of the central space's southeast corner, possibly further facilitating passage from the patio to Str. 423-17-1<sup>st</sup>'s back (western) room. Located 1.15-1.31m east of the building, in line with Str. 423-17-1<sup>st</sup>'s northeast room, is a stone surface measuring 0.34x0.59m. The significance of this construction is unknown.

All walls raised now were fashioned overwhelmingly of cobbles set in a mud mortar. Unit 11, the putative threshold, consists of one faced stone while a possible piece of masonry was noted in U.4, the eastern platform facing, and several faced rocks were incorporated into U.8, the eastern terrace facing. In all cases, the stones were oriented so that their flatter aspects were directed outwards.

#### Time Span 4

During this interval changes were initiated to Str. 423-17-1<sup>st</sup> that were apparently never finished. Unit 13, for example, is a 0.41m-high wall that was raised 0.79m west of U.2 (the platform's western facing) and would have almost completely buried the latter beneath the earth-and-stone fill (U.20) that backed it to the east. Most likely, U.13 was introduced to expand Str. 423-17-1<sup>st</sup> 0.79m westward, but there was no sign that the

addition was finished. Unit 13's north and south ends are not formally finished nor do they articulate with any other constructions. Unit 17, in turn, is a 0.51m-high wall that continues the line of U.6 (the northern-most wall on the eastern terrace) at least 0.97m west towards U.13 (excavation was not carried far enough along U.17 to reveal its full length). Unit 17 was apparently added in an effort to expand the core platform 0.4m to the north. A moderately hard-compacted, fine-textured brown soil (U.16) underlies U.17 by 0.2m and was probably introduced as fill to level out the terrain over which the addition was built.

It may be that at this time the northeast and southeast rooms atop the eastern terrace were filled with earth and stones (U.21). It is difficult to tell at this remove if the material glossed here as U.21 represents fall from TS.3 construction or purposefully introduced fill. The quantity of the included rocks, however, tentatively points to the latter interpretation. There is no sign of a formal surface capping U.21 nor did we locate fill retaining walls that would have held U.21 in place by sealing off the open, eastern sides of the northeast and southeast rooms. It may well be that, like U.13 and 17, these constructions were not completed.

The additions that were in the process of being made to Str. 423-17-1<sup>st</sup> would, if completed, have resulted in a building that covered 4.1x4.66m and was oriented very approximately 4 degrees (based on the alignment of U.13, the best preserved of these late additions). Though not certain, plans seem to have been afoot to raise the floors of the eastern rooms to make them as high as the platform's summit floor, thereby erasing the differences in elevation that distinguished the eastern and western parts of Str. 423-17-1<sup>st</sup>. This work was seemingly never finished when the building was abandoned.

All walls raised now were made primarily of cobbles set in a mud mortar. Relatively little effort was apparently invested in choosing rocks with flat faces or to orienting those flat aspects outwards. Whether this reflects a change in building style or the incomplete nature of construction is uncertain.

### Time Span 5

Following Str. 423-17-1<sup>st</sup>'s abandonment, as much as 0.34m of a soft-compacted, moderately coarse-textured, brown to black-brown soil (S.4) was laid down over F.2 and S.2 and atop the building's basal construction. This layer was, in turn, covered by as much as 0.26m of a moderately coarse-textured, black-brown humus (S.5). Embedded in S.4 (primarily) and 5 is a moderately dense concentration of rocks (F.3) that likely fell from final-phase architecture. Feature 3 was traced for up to 1.2m from Str. 423-17-1<sup>st</sup>.

### Structure 423-18

Structure 423-18 comprises a complex made up of one platform, two flanking surface-level rooms, and associated features that together define the northern margin of the Site PVN 423 Central Group patio. This aggregate lies 3.2m northwest of Str. 423-19 and 7m northeast of Str. 423-17. Digging here within Subop. 423C, S, W, and Y uncovered ca. 76m<sup>2</sup>, and reached maximum depths of 0.53 and 0.7m below modern

ground surface within and beyond architecture, respectively. Approximately 35m<sup>2</sup> was dug in clearing Str. 423-18-1<sup>st</sup>, 14m<sup>2</sup> in exposing Str. 423-18-Sub-1, 21m<sup>2</sup> in revealing Str. 423-18-Sub2, and 6m<sup>2</sup> in uncovering Str. 423-18-Sub-3. One major construction period was recognized in the course of this work, which was directed by R. Smith.

### Time Spans

Time Span	Construction Phase	Units	Strata	Features	Dates
1	-	-	S.1	-	LCLII/III
2	-	-	S.2	-	LCLII/III
3	Str, 423-18-1st	U.1-10, 18, 25	-	F.1	LCLIII/II
4	Str. 423-18-1 <sup>st</sup> Str. 423-Sub1 Str. 423-Sub2 Str. 423-Sub3	U.11-17, 19, 39-44 U.20-24 U.26-36 U.37-38, 45	-	F.1	LCLIII/II
5	-	-	S.2-3	F.2	

### Time Span 1

The first activity attested to in the vicinity of Str. 423-18-1<sup>st</sup> was the seemingly natural deposition of a soft-compacted, tan, sandy soil (S.1). Stratum 1 was exposed in probes dug off the building's north, east, and west sides and was revealed to a maximum thickness of 0.23m (its base was not encountered). On the east, S.1 rises gradually 0.67m over 7.5m east-west; not enough of this level was revealed elsewhere to determine its rate of ascent, if any. The retrieval of artifacts within the portions of S.1 that were investigated tentatively hints at a human presence in the area while this soil was accumulating.

### Time Span 2

During this span at least 0.12m and 0.42m of a moderately hard-compacted, moderately coarse-textured, brown soil (S.2) was laid down north and west, respectively, of Str. 423-18-1<sup>st</sup> and Str. 423-18-Sub1. Stratum 2 directly overlies S.1 west of construction; its relation to any underlying earth levels on the north was not revealed whereas S.2 was not found to predate construction on the south and east. The recovery of cultural material from lower S.2 points to a human presence, during TS.2, nearby the eventual site of Str. 423-18 construction.

### Time Span 3

It is difficult to relate the construction histories of the various major components that together comprise Str. 423-18. At present, it appears that the first building effort here involved the erection of a low platform (Str. 423-18-1<sup>st</sup>) defined by stone facings that stand 0.4-0.65m tall and measure 0.53-0.6m across (U.1-4). The fill contained by these facings is composed of a moderately dense concentration of small to medium-sized rocks set in a brown soil (U.10). A stone pavement (U.25) runs at least 0.8m east from where it abuts the platform's eastern basal facing (U.1). It is not clear that we ever encountered U.25's eastern margin as it runs beneath construction (U.23) dating to TS.4.

The building's summit supports two rooms set in an east-west line and at different elevations. The eastern compartment has, for the most part, an earthen floor and encompasses 1.35x2.5m. A stone pavement (U.18) fronts the enclosure's western wall (U.5) to a width of 0.2m but apparently never extended further east into the room. The floor of the western compartment is 0.48m above that of its eastern neighbor and covers 2.1x2.2m. The easternmost 1.1m of this space is surfaced with stone (U.6) while the western half of the enclosure is floored with dirt. A stone-faced, L-shaped bench (U.7) stands ca. 0.19m above this floor and occupies almost the entirety of the western compartment's north wall. Unit 7's 'stem' is 1.95m long east-west, beginning in the room's northwest corner, and 0.9m wide. Its 'leg' projects 0.3m south along the enclosure's western wall and is 0.55m across. Access to the summit seems to have been facilitated by the construction of two narrow ledges, or steps, along the platform's north and northwest faces (U.8 and 9). Unit 8 is 0.19m wide, 0.17m tall, and runs for an inferred 3.65m along Str. 423-18-1<sup>st</sup>'s north face. This riser begins 0.35m west of the platform's northeast corner and terminates the same distance east of U.9. The latter construction is equally narrow and short and wraps around the edifice's northwest corner; i.e., U.9 extends 0.8m east-west before turning and running 1m south along Str. 423-18-1<sup>st</sup>'s western facing (U.3).

Feature 1, located off Str. 423-18-1<sup>st</sup>'s north flank, is a soft-compacted, fine-textured, gray ash that contains numerous artifacts, especially pottery sherds. This likely midden was traced for 10.8m north of the northernmost architecture associated with Str. 423-18-1<sup>st</sup> and was exposed to a depth of 0.33m where it blankets S.1 on the far north (the northern margin of F.1 was not encountered). Where it is found closer to the platform, F.1 reaches a thickness of, minimally, 0.55m (S.1 was not found here). Due to later construction (U.19) it is not clear if F.1 originally reached all the way to Str. 423-18-1<sup>st</sup>'s north facing or stopped short of that construction.

Overall, Str. 423-18-1<sup>st</sup> was, by the end of TS.3, a stone-faced, earth-and-stone-filled platform that stood 0.4-0.65m tall, covered 3.2x5.1m (measured across the center), and was aligned roughly 71 degrees. The superstructure contained two rooms placed in an east-west line and set at different elevations from each other. The eastern compartment measured 3.4m<sup>2</sup> and, though largely surfaced with earth, had a 0.2m-wide stone pavement running along its western interior margin. Its western analogue encompassed 4.6m<sup>2</sup>, was surfaced over its eastern half with stones, over its western portion with earth, and contained a stone-faced bench. This last construction stood 0.19m high and was L-shaped, encompassing a total of 2m<sup>2</sup>, taking up the western

room's northwest corner. A set of two discontinuous steps provided access to the summit from Str. 423-18-1<sup>st</sup>'s north side and northwest corner. They are both 0.19m wide by 0.17m high, the first running for 3.65m whereas the latter wraps around the platform's northwest corner, running 0.8m east-west and 1m north-south. The platform's east face was apparently fronted by a stone paving that was minimally 0.8m wide; no other stone surface bordering the edifice was recorded. An extensive midden composed of artifacts set in a gray ash was found north of Str. 423-18-1<sup>st</sup>.

All floors and walls raised now were made primarily of unshaped stones, including a number of volcanic origin, set in a mud mortar. Both cobbles and angular stones are well-represented in these constructions. The naturally flatter aspects of these rocks are directed outwards.

#### Time Span 4

During this interval, Str. 423-18-1<sup>st</sup> was modified and three substantial constructions were raised to the east and west of this platform. As noted in our discussion of TS.3, it is hard to parse out the details of this group's building history and it is very possible that TS.4 extended over a protracted number of years. All we feel comfortable in saying at this point is that the erection of Str. 423-18-1<sup>st</sup>'s core platform pre-dated the events described here.

*Structure 423-18-1<sup>st</sup>:* A third room, built atop a 0.35m-high, stone-faced terrace (U.17) was added off the southwest corner of Str. 423-18-1<sup>st</sup>. This compartment covers 1x1.3m and has a stone pavement set in earth that has been burnt (U.40). Unit 40 rests 0.77m below the level of the western summit room, and is bounded by rock foundations on the east, west, and south (U.11-14). These footings are 0.2-0.3m tall by 0.4-0.65m wide and are breached in the south by a 0.65m-wide doorway. The compartment's northern margin is delimited by two stone steps (U.15, 16) that ascend in increments of 0.14m and 0.2m towards the platform's summit from south to north. Unit 15, the basal riser, is 0.23m wide while U.16, the next ascending step, measures 0.5m across and terminates at Str. 423-18-1<sup>st</sup>'s south basal facing (U.4). Unit 41, a hard-compacted, moderately coarse-textured, brown soil, was introduced as fill to support U.15 and 16. It appears that entrance to Str. 423-18-1<sup>st</sup>'s summit was now being channeled from the patio through the newly constructed southern room.

On the north U.8, the former step, was covered by two fill units. The first, U.42, is a hard-compacted, moderately coarse-textured, tan soil that rises 0.18m over the 0.99m it was followed from north to south. This earth not only buries U.8 completely but covers 0.19m of the platform's northern basal facing (U.2). Covering U.42 by 0.18-0.29m, in turn, is soft-compacted, fine-textured, gray ash (U.43). Unit 43 is identical to the midden material comprising F.1 and the latter may well have been mined for fill. Retaining U.43 on the north is a 0.2m-high stone-faced terrace (U.19). Unit 19 lies 3.4m north of U.2 and is set 0.12m into the top of F.1. It may be that this northern terrace replaced the very narrow U.8 and 9 steps that originally fronted Str. 423-18-1<sup>st</sup> on



the north. Given the significantly greater width of the U.19 terrace, however, it seems likely that the latter construction served as more than a means of access to Str. 423-18-1<sup>st</sup>'s summit. It, probably, doubled as a raised work area.

Fill was also introduced along Str. 423-18-1<sup>st</sup>'s east and west flanks in association with the raising of Str. 423-18-Sub1 and 423-18-Sub3, respectively. On the east, U.39, a hard-compacted, moderately coarse-textured, light brown soil nearly identical to S.1 was laid down east of U.1 (the platform's eastern basal facing). Unit 39 covers U.25 by as much as 0.18m and underlies the western foundation of Str. 423-18-Sub1 (U.23) by 0.1m. On the west, a moderately hard-compacted, moderately coarse-textured, brown soil (U.44) fills the narrow gap (0.25m) between Str. 423-18-1<sup>st</sup> (U.3) and Str. 423-18-Sub-3 (U.37).

By the end of TS.4, Str. 423-18-1<sup>st</sup> was still an earth-and-stone-filled, stone-faced platform that retained its orientation from TS.3 (approximately 71 degrees). Additions made on the edifice's south side resulted in the creation of a stone-paved room set atop a 0.35m-high rock-faced terrace. This enclosure measures 1.3m<sup>2</sup> and was entered through a 0.65m-wide door set in its south wall. The compartment's north flank is bordered by two low stone steps that lead directly to the platform's western (highest) summit room. The newly added southern enclosure may have, thus, served as an anteroom through which traffic from the main patio was funneled to the core platform's summit. The earlier steps on the edifice's north side and northwest corner were now buried under fill. They were replaced on the north by a 0.2m-high, by 3.4m-wide stone-faced, earth-filled terrace. Only 1m of this construction's east-west length was revealed so we do not know whether it ran the full length of Str. 423-18-1<sup>st</sup> and how it might have articulated with that building. At present, we tentatively infer that the terrace's addition created an extensive, if low, work space on the platform's north side.

Altogether, Str. 423-18-1<sup>st</sup> was now a platform consisting of three rooms each of which was set at a different level and had distinct dimensions (3.4m<sup>2</sup>, 4.6m<sup>2</sup>, and 1.3m<sup>2</sup>). The addition of the southern room possibly gave the building an L-shape though we did not clear east of this enclosure to determine if other compartments might be located here. Assuming that what was uncovered of Str. 423-18-1<sup>st</sup> constitutes the entirety of the building, it covered 37.3m<sup>2</sup> and stood to a maximum height of 0.65m. The walls and surfaces constructed now were primarily made of unmodified stones set so that their flatter aspects were directed outwards or, in the case of floors, upwards. Cut blocks made up a minority component of U.12, 15, and 17. All of the rocks employed in TS.4 construction were set in a mud mortar.

*Structure 423-18-Sub1:* Structure 423-18-Sub1, located 0.5-0.8m east of Str. 423-18-1<sup>st</sup>, is an earthen-floored, surface-level building that covers 3.8m east-west by at least 2m north-south (its south flank was not uncovered) and is aligned 173-180 degrees. This construction is delimited by rock foundations (U.20-24) that stand 0.12-0.3m high and measure 0.18-0.72m across. At least one door, 0.5m wide, is located in the center of the northern perimeter and provided access to the building's interior. The latter measured 1.2m (minimally) x3.1m and contained no built-in furniture. The stones used in

constructing Str. 423-18-Sub-1's bordering foundations are primarily unmodified rocks the naturally flatter faces of which are directed outwards. A few cut blocks were incorporated in U.22 (east of the northern door) while one was recorded in U.20 (the eastern footing). Generally these rocks are laid horizontally though the stones comprising U.24 (west of the northern door) are arranged vertically. All of the rocks used in Str. 423-18-Sub1 are set in a mud mortar.

*Structure 423-18-Sub2:* This building, raised directly on ancient ground surface 2.3-3m west of Str. 423-18-1<sup>st</sup>, is oriented roughly 264 degrees. Its perimeter is delimited by rock foundations that are 0.11-0.38m tall by 0.23-0.65m wide (U.26, 27, 30, 32-35). The wall bordering Str. 423-18-Sub2's northwest corner for 0.9m east-west (U.27) was not well-preserved and its height and width were not clear. Structure 423-18-Sub2 has an 'L-shape.' The long 'stem' of the 'L' covers 2.2x4.75m and runs east-west. Its shorter 'leg' projects 1.05m south towards the patio from the structure's east end and measures 2.2m across (east-west; all of these figures are computed along Str. 423-18-Sub2's exterior). The earthen-floored interior was reached by passing through a 0.65m-wide portal in the 'stem's' southwest corner. The former space is divided into two compartments by a 0.24m-high by 0.49m-wide wall (U.36). These enclosures are set in an east-west line; the western space encompasses 1.1x2.5m while the eastern room includes the southern projection of the 'L' and measures 1.05x1.1 (on the north) and 0.8x1.1m (within the southern extension).

Structure 423-18-Sub2 seems to have been modified at various points in its history. Thus, U.36 abuts the northern and southern perimeter walls (U.30 and 35), suggesting that it was added after these footings were erected. This architectural relationship tentatively hints that Str. 423-18-Sub2 originally consisted of one L-shaped room that covered 5.5m<sup>2</sup>. In addition, U.33, which closes off the south side of the edifice's southern projection, abuts both of the flanking foundations, U.32 on the east and U.34 on the west. It may be that U.33 was built to seal off a doorway, measuring 0.8m across, that originally faced directly south into the main patio. By closing off this means of access, traffic into Str. 423-18-Sub-2 would have been restricted to the door set in the building's southwest corner.

At least one surface-level room was seemingly built off Str. 423-18-Sub2's north flank. The putative enclosure is located along the building's north footing (U.30), 0.55m west of Str. 423-18-Sub2's northeast corner. It is bounded by stone foundations on the east (U.31) and west (U.28 and 29). These walls are 0.15m high by 0.31-0.55m wide and include, on the west, an extension of U.30 (U.28) which projects 0.6m northward from that wall. Unit 28 is the widest of these perimeter constructions and is succeeded on the north by U.29, a 0.30m-wide foundation that continues U.28's east line for at least 0.45m to the north (the northern ends of U. 29 and 31 were not identified). The earthen-floored space contained by U.28-31 covers 1.05m (north-south [minimally]) by 2.15m east-west. No built-in furniture was recorded within the cleared portion of this space.

Structure 423-18-Sub2's footings consist primarily of unmodified rocks, set in a mud mortar, and with their flatter aspects directed outwards. Some masonry blocks appear among the more common unshaped stones in U.26, 30, 35, and 36.

*Structure 423-18-Sub3:* The core of this edifice was erected between Str. 423-18-1<sup>st</sup> on the east and Str. 423-18-Sub2 on the west. It consists of a block of tightly packed stones (U.37) set on end and is oriented 347-352 degrees. Unit 37 measures 1.89-2.1m east-west by 2.05-2.15m north-south (the entity widens slightly from west-to-east and north-to-south) and is 0.23-0.25m high. Within this dense aggregate of vertically arranged rocks are two gaps of uneven sizes and placed in an east-west line; the western example encompasses 0.3x1.35m while its neighbor, 0.2m to the east, is 0.3m across by 0.8m long. Both lacunae are free of rocks and run north-south, their north sides being more-or-less in line with each other.

Unit 38, another block of tightly packed stones, was added to U.37's southeast corner at some point in Str. 423-18-Sub3's occupation sequence. This construction, once again, consists primarily of vertically set rocks though its western border was delimited by a line of similar stones that were set horizontally. Unit 38's maximum dimensions are 1x1.35m, and it wraps around the northwest corner of the southern room added to Str. 423-18-1<sup>st</sup> during TS.4. Units 37 and 38 are joined to the southwest corner of Str. 423-18-1<sup>st</sup>'s core platform by a low stone wall (U.45). Unit 45 is integrated with Str. 423-18-Sub3 construction but abuts the platform's western wall (U.3). This relationship suggests that Str. 423-18-Sub3 was built after Str. 423-18-1<sup>st</sup>'s core platform.

The rocks used in these construction are unshaped and set in a mud mortar. Most are angular stones and cobbles though a few schist slabs were also recorded.

### Time Span 5

Following abandonment of the Str. 423-18 platform-and-room complex, deposition of S.2 resumed on all sides save north of Str. 423-18-1st, eventually covering most of the extant construction. North of the central platform S.2 was not recorded. As much as 0.14m of a hard-compacted, fine-textured, dark brown soil (S.3) was laid down atop S.2 and, north of Str. 423-18-1<sup>st</sup>, over F.1. Embedded in S.2 and 3 is a variably dense concentration of stones that likely tumbled from final-phase architecture (F.2). The F.2 rocks were especially densely concentrated on the south and west, lightly scattered on the east, and very rare on the north (beyond U.19).

### Structure 423-19

Structure 423-19, a surface-level building located 5.4m north of Str. 423-20 and 3.2m southeast of Str. 423-18, closes off the northeast corner of the central patio. The entirety of the building was cleared within Subop. 423O and T under the direction of E. Bell. Fully 32m<sup>2</sup> was exposed in the course of this work, digging being pursued to maximum depths of 0.7m and 0.3m outside and within construction, respectively. One

building phase that was subjected to at least two major renovations was recognized in the course of these studies.

### Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1	-	-
2	-	-	S.2, 3	-	LCLII/III
3	Str. 423-19-1 <sup>st</sup>	U.1-6	-	-	LCLIII/II
4	Str. 423-19-1 <sup>st</sup>	U.7-11	-	-	LCLIII/II
5	Str. 423-19-1 <sup>st</sup>	U.12-16	-	-	LCLIII/II
6	-	-	S.4	F.1	-

### Time Span 1

The first period of activity identified in the environs of Str. 423-19-1<sup>st</sup> is the seemingly natural deposition of an orange, sandy soil with numerous small rock inclusions including lots of gold-colored mica (S.1). Stratum 1 was exposed to a maximum thickness of 0.09m (its base was not encountered) and rises 0.27m over the 11m it was followed from east to west. Most of this ascent occurs beneath Str. 423-19-1<sup>st</sup>, S.1 running more-or-less flat for 2.98m east, and 2m west, of that edifice. The absence of cultural material within the admittedly limited portions of S.1 that we investigated tentatively suggests that there was no significant human presence in the area when this soil was being laid down.

### Time Span 2

Stratum 2, a very dark brown soil, accumulated to a maximum depth of 0.39m atop S.1 during this interval. This earth level rises 0.1m from east to west across the 11m it was uncovered and its upper surface seems to have served as the ground level above which Str. 423-19-1<sup>st</sup> was erected. A lens of dark brown soil with pebbles arrayed along its upper surface (S.3) was identified east of Str. 423-19-1<sup>st</sup> overlying S.2 to a maximum thickness of 0.15m. Stratum 3 was traced for 2.38m west from where it emerges from the eastern limits of our excavations, pinching out 0.53m east of TS.3 construction. Both S.2 and 3 yielded artifacts, including small fragments of *bajareque*, pointing to human occupation in the area as these soils settled out.

### Time Span 3

The first constructions associated with Str. 423-19-1<sup>st</sup> formed a rough rectangle delimited by stone foundations that are 0.3-0.75m wide by 0.25-0.3m tall (U.1-4). These footings probably supported perishable, most likely *bajareque*, upper walls. The

western foundation (U.4) widens from 0.65-0.9m across 1.45m north of Str. 423-19-1<sup>st</sup>'s southwest corner. This amplification continues for 1.35m northward before stepping back to U.4's original west line. The building's northeast corner is inset 0.3x0.3m, the only corner on the building that was treated this way.

The space contained by U.1-4 covers 1.2x2.9m, most of it taken up by a 0.18m-high, stone-faced, L-shaped bench (U.5); only an earthen-floored space encompassing 0.62x1.85m in the northeast corner of this enclosure is left open. Unit 5's western arm is 1.85m long by 0.58m wide while its shorter, squatter southern leg measures 1.05x1.2m. An apparent stone step (U.6) covering 0.38x0.55m is set 2.2m north of the building's southeast corner, more-or-less centered on the room's open interior floor space. There is no break in the eastern foundation (U.1) where it is abutted by U.6, suggesting that passage into Str. 423-19-1<sup>st</sup>'s interior was achieved by stepping up onto U.6 and through a door built into the wattle-and-daub wall supported by U.1.

By the conclusion of TS.3, Str. 423-19-1<sup>st</sup> was a roughly rectangular surface-level structure measuring 2.4x3.9m and aligned ca. 340 degrees. The edifice's northeast corner is inset 0.3x0.3m. These foundations are 0.3-0.75m-wide by 0.25-0.3m tall and define an interior space that covers 3.5m<sup>2</sup>. Fully 2.35m<sup>2</sup> of this space is taken up by a 0.18m-high stone-faced, earth-surfaced bench, leaving only 1.15m<sup>2</sup> of the room's earthen-floor visible in the enclosure's northeast corner. The room was likely reached through a door set in its east wall, a stone step measuring 0.38x0.55m abutting the eastern foundation at a point approximately centered on the room's open floor. The western footing is expanded 0.25m westward for a length of 1.35m slightly north of Str. 423-19-1<sup>st</sup>'s center. This may have been another entrance to the edifice's interior or a shelf accessed from outside the building.

All footings, the bench, and step are fashioned of angular rocks the naturally flatter aspects of which are directed outwards. A few soft volcanic stones are included in the walls along with the harder, angular examples. Relatively few chinking stones were used to fill in the gaps among the larger rocks and there were very few instances of clear horizontal coursing. All of the stones were set in a mud mortar.

#### Time Span 4

During this interval, Str. 423-19-1<sup>st</sup> was expanded westward by the addition of what appears to have been, initially, one earthen-floored room delimited by stone foundations (U.7-9) essentially identical to those raised during TS.3. These walls do not continue the north and south lines of Str. 423-19-1<sup>st</sup> exactly. Instead, U. 7 and 9 on the north and south, respectively, are set out 0.4m and 0.35m from the exterior faces of U.3 and 2, the original north and south footings. Unit 4, the initial western foundation, now divided the eastern and western enclosures, its expanded segment possibly acting as a shelf set against the western enclosure's east side. The western compartment probably encompassed 1.2x3.5m at first but was later divided into two parts by the erection of U.10 and 11. These small foundations, 0.12m high by 0.25-0.33m wide, delimit the southern and eastern sides of an earthen-floored cubicle that covers 0.9x1.1m and

occupies the north end of the western room. This addition would have reduced the western room's dimensions to 1.2x2.4m. It is unclear why U.11 was raised; it runs immediately adjacent to U.4's west face and seems to be superfluous in that U.4 could have been used to close this side of the new enclosure. It may be that U.11 was not intended to be a load-bearing foundation but was added to expand U.4's width 0.33m westward into the cubicle. In that case, U.11 and at least part of U.4 may have functioned as a shelf measuring at least 0.33m wide by 1m long north-south.

By the conclusion of TS.4, Str. 423-19-1<sup>st</sup> measured 4.4x4.6m and retained its earlier orientation of ca. 340 degrees. Its interior space was divided among three adjoining earthen-floored rooms. The largest of these compartments lay to the east and was largely unchanged from the way it appeared during TS.3. Encompassing 3.5m<sup>2</sup>, this space was largely taken up by a low, L-shaped, stone-faced bench and was entered over a step set against the edifice's east side. The newly added southwest and northwest enclosures covered 2.9m<sup>2</sup> and 1m<sup>2</sup>, respectively. A 0.25m-high, 0.25m-wide, by 1.35m-long stone-faced shelf is located along the east wall of the southwest room while a 0.12m-high by 0.33m-wide by 1m-long stone shelf was possibly set along the entire east side of the northwest compartment. It is unclear how passage within Str. 423-19-1<sup>st</sup> was channeled as no clear doors connecting these rooms having been identified.

The foundations raised now (U.7-9) are built much as were their counterparts from TS.3 (U.1-4). That is, of angular stones and a few soft volcanics, the naturally flatter aspects of which were directed outwards. A few chinking stones were used to fill in the gaps among the larger rocks. Units 10 and 11 are more casually built, being composed of angular rocks that were not apparently chosen for their flat faces. Chinking stones are rare in these two footings and no volcanic rocks were recorded. All of the stones used in TS.4 architecture were set in a mud mortar.

### Time Span 5

During this interval two earthen-floored, surface-level rooms were added, one on the north side of Str. 423-19-1<sup>st</sup> and the other against its south flank. The former's interior covers 0.8x1m and is bounded by stone foundations that are 0.3-0.8m wide by 0.12-0.16m high (U.14-16). Unit 15, the northern footing, is unusually broad (0.8m across) for a foundation at Str. 423-19-1<sup>st</sup> and it may have served as a support for a perishable upper wall as well as a shelf running 1.35m east-west. The northern room's west footing (U.14) continues 0.8m north of U.15; the architectural significance of this projection is unclear.

The southern compartment's interior measures 1x1.5m and is bounded on the south and east by stone foundations that are 0.25-0.35m wide by 0.12-0.23m high (U.12 and 13). Structure 423-19-1<sup>st</sup>'s southern footings (U.2 and 9) delimit the enclosure's north side while it is completely open on the west. This 1m-wide gap would have provided easy access to the room's interior.

By the conclusion of TS.5, Str. 423-19-1<sup>st</sup>'s core construction remained unchanged in its dimensions, orientation, and the arrangement of its interior spaces. The

addition of an earthen-floored, surface-level room on the north and another on the south of this core created two more enclosed spaces associated with the edifice. The northern cubicle's interior encompasses 0.8m<sup>2</sup> and may have had a 0.8m-wide by 1.35m-long shelf built into its northern wall. The southern room encompasses 1.5m<sup>2</sup> and was entered through a 1m-wide door on the compartment's west side.

The walls raised at this time are largely composed of angular rocks on which very few naturally flat faces were noted. Unit 12 is an exception as at least some of the rocks making up this foundation were chosen for their naturally flatter aspects most of which were oriented north, facing into the room. Units 14-16 (bordering the northern room) contain a few soft volcanic rocks while none of these were recorded within U.12-13. All of the rocks are set in a mud mortar. In general, U.12-16 look to have been casually constructed and lack the care in choice and placement of stones seen in the architecture the comprised Str. 423-19-1<sup>st</sup> during TS.3 and 4.

### Time Span 6

Following Str. 423-19-1<sup>st</sup>'s abandonment, all extant construction was covered by a fine-textured, dark brown soil (S.4). Stratum 4 accumulated to a maximum recorded thickness of 0.33m and contained a light scattering of stones (F.1) that probably fell from final-phase architecture. Feature 1 extended for as much as 1.73m away from the building.

### Structure 423-20

Structure 423-20 closes off the southeast corner of the Site 423 Central Group's main plaza. It is 5.4m south of Str. 423-19 and 19.6m east, and across the patio, from Str. 423-15. Excavations here within Subop. 423D and P under the direction of K. Lomax uncovered ca. 37m<sup>2</sup> in the course of revealing approximately 90% of the edifice. Digging was pursued to maximum depths of 0.95m and 0.76m below modern ground surface within and outside construction, respectively. One major building period was recognized in the course of this work.

### Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1	-	-
2	-	-	S.2	-	LCLII/III
3	Str. 423-20-1 <sup>st</sup>	U.1-14	-	S.D.1	LCLIII/II
4	-	-	S.3, 4	F.1	-

### Time Span 1

The earliest event recorded in the vicinity of Str. 423-20-1<sup>st</sup> was the seemingly natural deposition of a soft-compacted, tan sand (S.1). Stratum 1 was exposed to a maximum thickness of 0.17m (its base was not encountered) and dropped 0.24m over 12.1m from north to south. The latter estimate is based on two discontinuous exposures of S.1 separated by the bulk of Str. 423-20-1<sup>st</sup>. Only one artifact was recovered from the, admittedly limited, probes dug into S.1. As this one pottery sherd may well have worked its way downward from later levels, it seems reasonable to infer that there was no significant human occupation in the area when S.1 was being laid down.

### Time Span 2

Blanketing S.1 by as much as 0.3m is a hard-compacted, coarse-textured, brown soil (S.2). This layer rises 0.42m over 4.67m from south to north before being truncated by the construction of Str. 423-20-1<sup>st</sup>. On the north, S.2 ascends 0.1m across 0.9m north to south at which point it is interrupted by the erection of this building. These observations imply that Str. 423-20-1<sup>st</sup> was erected atop a low, probably natural, rise. Artifacts retrieved from S.2 point to a human presence in the vicinity while it was accumulating.

### Time Span 3

The first step in the construction of Str. 423-20-1<sup>st</sup> recognized in our investigations was the erection of its core platform. This earth-filled (U.14) entity is bounded on all sides by sizable stone facings that stood an estimated 0.90m tall and measured 0.44-0.58m across (U.1-4). The platform encompasses 2.97m north-south by 4.8m east west and has an inset northeast corner measuring 0.35m east-west by 0.85m north south. The earthen-floored summit covers 1.85x3.95m and may have had a low stone-faced bench (U.5) set against its east interior wall. Unit 5 is 1.85m long by 0.85m wide (maximum), its western facing stepping back 0.2m at a point 1m north of its southern abutment with U.3, the southern core facing.

Located atop ancient ground surface 0.04m south of the core's south facing (U.3) was a primary deposit (S.D.1) consisting of an entire but broken bowl sitting atop a complete jar rim. It appears that the orifice of a jar was recycled as a support for this round-bottomed bowl.

Fronting the core platform on the north is a ca. 0.23m high by 2.18m wide stone-faced terrace (bounded by U.6, 7, and 8 on its west, north, and east sides). This construction abuts the core's north facing (U.1) 1.6m east of the latter's northwest corner and runs for 3.8m before turning to extend an estimated 4.85m eastwards. The terrace's east flank (U.8) is poorly preserved and does not clearly resolve at its south end. We infer that it ran back west to intersect the core's southeast corner and formed a terrace ca. 0.75m wide on the building's east flank.

Units 9 and 10, in turn, define the north and east flanks of a stone-faced projection that intersects the aforementioned terrace near its northwest corner. This construction



stands 0.28m tall, projects 0.73m north of U.7 (the terrace's northern facing), and runs for 2.05m east-west. A stone surface (U.11) extends 1m north of Str. 423-20-1<sup>st</sup>'s northern projection.

South of Str. 423-20-1<sup>st</sup> are the remnants of at least one surface-level construction. Unit 12, located 1.85m south of the core platform, is a stone surface 0.6m wide with a pronounced indentation in its south side. This U-shaped bulge is an estimated 0.75m across at its southern open side and extends 0.45m north into the body of U.12. Unit 13, in turn, is a 0.05m-tall stone wall that measures 0.67m north south. It is 0.5m south of U.12 and may be part of the same construction as its northern neighbor. Not enough of U.12 and 13 were exposed to reveal whatever relation, if any, existed between them or how they may have figured in one or more coherent constructions.

Overall, Str. 423-20-1<sup>st</sup> in its final iteration was dominated by a stone-faced, earth-filled platform that covered 2.97x4.8m, stood 0.9m tall, had an inset northeast corner measuring 0.35x0.85m, and was aligned roughly 78 degrees. The earthen floored summit encompassed 7.3m<sup>2</sup> and had a low, stone-faced bench set against its east wall. The latter construction measured 1.8m long by 0.85m wide. Fronting the building on the north was a 0.23m-high by 2.18m-wide stone-faced terrace that intersected the core 1.6m east of its northwest corner and wrapped around the central platform's east side, ending, we infer, at the latter's southeast corner. The terrace narrowed considerably on the east, measuring only 0.75m across on this flank. Projecting 0.73m north from the northwest corner of the northern terrace is a 0.28m-high by 2.05m-long stone-faced step-out. This unit, in turn, is fronted by a stone pavement that is ca. 1m wide. All-in-all, it appears that Str. 423-20-1<sup>st</sup>'s summit was attained from the north, passing up and over a prepared floor, step-up, and broad terrace. A bowl was set atop a re-purposed rim from a broken jar, the latter resting on ancient ground surface, at a point 0.04m south of the platform. Such an association suggests that food might have been stored or prepared under the building's eaves on this flank. Signs of at least one surfaced-level construction were noted further south of the core platform though the relevant units were not sufficiently cleared to reconstruct the nature and dimensions of these buildings.

The vast majority of the facings and floors erected during TS.3 were fashioned using angular stones set in a mud mortar. Attempts were generally made to direct the flatter aspects of these rocks outward and, in many cases, smaller stones were used to fill in the gaps between the larger examples. Some river-worn cobbles were also incorporated into these walls as were a few faced blocks. Masonry was especially prevalent in U.10, the north face of the northern projection, though a few faced stones were recorded in U.1, 2, and 4 (the core platform's north, east, and west facings) as well as U.5 (the summit bench facing). In all cases, masonry was mixed with unmodified rocks.

#### Time Span 4

After Str. 423-20-1<sup>st</sup>'s abandonment, most of the building was covered by a hard-compacted, moderately coarse textured, brown soil (S.3). Stratum 3 obscures

underlying S.2 by as much as 0.25m, it being covered, in turn, by 0.1m of a hard-compacted, moderately coarse-textured, dark brown to black-brown humus horizon (S.4). Embedded in S.3 and 4 is a moderately dense concentration of stones (F.1) toppled from final-phase architecture. Feature 1 was traced for 0.6m away from TS.3 construction though it may well have continued beyond our excavation limits.

Northeast Group

Structure 423-23

Structure 423-23 occupies the west side of a small patio which is defined on the northeast and southeast by Str. 423-22 and 423-21, respectively. The former is 1m distant from Str. 423-23 whereas Str. 423-21 is 2.8m to the southeast. Digging at Str. 423-23 was conducted within Subop. 423N, a total of ca. 26m<sup>2</sup> being cleared in the course of exposing all of the building. Excavations were pursued to a maximum depth of 1.1m below modern ground surface outside construction; architectural fill was not investigated. Neil Ross directed the work at Str. 423-23.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.6, 7	-	
2	-	-	S.3-5	-	
3	Str. 423-23-1st LCLII/III	U.1-6	-	-	
4	Str. 423-23-1st F.2	U.7-16 LCLIII/II	-		
5	-	-	S.1, 2	F.1	

Time Span 1

This interval is marked by the natural deposition of S.6 and 7. The lowest of these earth layers, S.7, is a fine-textured, very hard-compacted, strong to pale brown silty soil that was exposed to a maximum thickness of 0.08m (its base was not revealed). Directly overlying S.7 is a very hard-packed, strong to pale brown sandy loam (S.6) that is 0.11m thick. Both S.6 and 7 run flat over the 1m they were exposed running north-

south. Neither layer contained cultural material, implying that there was no significant human presence in the immediate area when these strata were being deposited.

### Time Span 2

The next interval witnesses the seemingly natural introduction of S.3-5. Stratum 5, a hard-compacted, brownish-yellow, sandy loam, blankets S.6 by 0.2-0.21m and runs flat for the 1m it was revealed extending north-south. Covering S.5 is 0.16-0.18m of hard-compacted, strong to pale brown, fine clayey loam (S.4). Stratum 4 was revealed in two discontinuous segments north and south of Str. 423-23-1st. Based on these exposures, it appears that S.4 rises 0.03m over 9.9m north-to-south. Stratum 3, a medium to strong brown fine clayey loam, overlies S.4 by 0.12-0.2m. The top of this layer seems to have been the ancient ground surface atop which Str. 423-23-1st was raised. Like S.4, S.3 also rises very gradually from north-to-south, in this case ascending 0.09m over 9.9m in this direction. Artifacts found scattered throughout S.3-5 point to human occupation in the immediate area while these soils were being laid down.

### Time Span 3

Structure 423-23-1st was, during TS.3, a platform bounded on all sides by stone facings (U.1-4) that are 0.38-0.73m high and 0.5-0.55m thick. The greatest height differential is between the northern and southern basal walls (U.2 and 4, 0.38m and 0.73m tall, respectively). This discrepancy is due, in small part, to the aforementioned ascent of the underlying S.3, rising 0.09m from north-to-south. The remaining 0.26m may be due to differential preservation of U.2 and 4; portions of the latter's upper course are still in place while U.2 may have lost its uppermost rocks. Alternatively, U.4 may have been intentionally built lower than its northern counterpart, possibly providing entry onto the platform's summit. Given Str. 423-23-1st's relatively low height, it is likely that there were several places from which its summit room could have been easily reached.

The summit delimited by U.1-4 consists of one earthen-floored room encompassing 1.36x2.33m. Within this space are two additional stone constructions. Unit 6 occupies the summit compartment's southeast corner. This element runs 0.5m north-south and measures 0.3-0.4m across, widening as it extends southward. It appears to have been a ca. 0.1m high stone box, the south and east sides of which are delimited by U.4 and 3, and the interior of which is filled with small stones and pottery sherds. Unit 5, in turn, is a 0.1m-high by 0.3m-wide stone wall that originates in the room's southwest corner and extends 1.5m at an angle of 35 degrees. The architectural significance of U.5 and 6 are unclear. The latter may have served as support for a large vessel whereas U.5 was likely the foundation for a perishable wall that divided the summit into two compartments, the southern triangular in shape and the northern in the form of a rhombus. A 0.5m wide gap between U.5's north end and the eastern summit wall (U.3) would, then, have provided a passageway between these cubicles. Both U.5 and U.6

rest of the earthen summit floor and could have been added at any point in the building's history. It may be, therefore, that Str. 423-23-1st's superstructure originally consisted of one open room, U.5 and 6 having been added at a later date, possibly even during TS.4.

Bearing the above caveat in mind, Str. 423-23-1st may well have begun its use-life as a 0.38-0.78m tall stone-faced platform measuring 2.4x3.38m, and oriented roughly 1 degree. The summit originally supported a single earthen-floored room covering 3.2m<sup>2</sup>. Later additions transformed this space by the addition of a 0.1m-tall box covering ca. 0.2m<sup>2</sup> in the compartment's southeast corner and by the construction of a low foundation that projects 1.5m northeast into the room. The latter footing would have converted the summit enclosure into two adjoining compartments. The southern example contains the box, has a triangular shape, and covers approximately 1.2m<sup>2</sup> while its rhombus-shaped northern neighbor encompasses ca. 2m<sup>2</sup>. A 0.5m-wide gap at the northern apex of the southern cubicle would have provided a means of passing between the two rooms. The summit may have been reached from the south where the basal facing, U.4, is particularly low (0.38m high). Time Span 3 architecture consists primarily of unmodified river cobbles and angular stone (many consisting of tuff) set in an earth mortar. A few cut blocks were incorporated within U.3 (in the top course) and U.1 (in the basal course). Care was taken in most cases to orient the naturally flatter faces of the rocks outward.

#### Time Span 4

During this interval, Str. 423-23-1st was expanded to the east into the patio by the addition of a 0.32m-high terrace defined on the north and east by U.7 and 8. Unit 7 abuts the core platform 0.3m west of its northeast corner. This construction is 0.58m wide and runs 2.2m eastward where it corners with U.8. The latter facing extends 3.55m to the south where it formally ends without turning a corner west back towards the platform. The 1.4m-wide gap between U.8's southern terminus and the U.3 created a surface-level room paved with stones (U.16), measuring 0.9x1.4m, but unencumbered by architecture on the south. North of this room are two additional enclosures set in a north-south line and both raised atop the eastern terraces. The latter two compartments are divided by low (0.2m high) stone foundations (U.9 and 10). The central cubicle encompasses 1x1.5m and is surfaced with stones (U.15). A stone "box" (U.12), analogous in form and construction to U.6 occupies, the central room's southeast corner. Unit 12 covers 0.4x0.4m (0.25x0.3m on the interior), is 0.11m high on the interior, and rests atop the U.15 floor. The northern compartment is also paved with stones (U.11) and measures 0.7x1.6m. A 0.28m-high wall measuring 0.2m across (U.13) projects 0.8m into the northern cubicle from U.3 which defines the room's west side. Unit 13 divides the diminutive northern room into two nearly equal parts; a northern segment covering 0.3x1.6m and a southern portion encompassing 0.2x1.6m. Passage between these two spaces would have been through the 0.8m-wide gap separating U.13's east end from U.8.

A low stone step covering 0.25x0.35m (U.14) was appended to the core platform's southwest corner. Unit 14 may have provided an alternative, more informal way of entering the building to that offered by passage over the eastern terrace from the plaza.

By TS.4's conclusion, Str. 423-23-1st was a 0.38-0.78m tall platform fronted on the east by a 0.32m high terrace that ran for the full length of the edifice's east, patio-facing side. The structure retained its earlier orientation, ca. 1 degrees, but now covered 4.01x4.11m. The core platform's summit was largely unchanged from TS.3, though a low step built against its southwest corner may have provided access to what was now the back (western) room of the superstructure. Three new, stone-floored enclosures, organized in a north-south line, front this platform on the east. The northernmost examples rest on the terrace and cover 1.1m<sup>2</sup> (the northern example) and 1.5m<sup>2</sup> (its central counterpart). The northern compartment is divided into two very small spaces (0.5m<sup>2</sup> and 0.3m<sup>2</sup>) by the construction of a low wall that extends about half way across the enclosure from its western margin. The central room contains a low, stone box that encompasses 0.2m<sup>2</sup> on the exterior (0.1m<sup>2</sup> on the interior), set within its southeast corner. The southern room measures 1.3m<sup>2</sup>, was built on ground surface, and is completely open to the south. Formal entrance to Str. 423-23-1st's superstructure may now have been channeled through the central room on the building's eastern, patio-facing side. The platform's earthen-floored summit is an estimated 0.24m above that of the eastern compartments.

A dense concentration of stones (mostly cobbles) packed round with a medium-brown fine clayey loam was identified 0.14m north of U.7 (F.2). Feature 2 extends for 1.17m north-south but was not traced along its east-west dimension outside the original trench in which it was exposed. The architectural significance of this entity, if, it has one, is monumentally uncertain. It could easily be identified as tumble save that F.2's component rocks are flat-laid as well as being densely packed. It may be that F.2 is the poorly preserved remnant of a structure raised directly on ground surface immediately north of Str. 423-23-1st. If so, it is likely a 0.25m-high stone foundation for a perishable upper wall. Unfortunately, this interpretation can be neither confirmed nor disproved with the evidence in hand. At the very least, F.2's presence suggests the existence of modest constructions not visible on current ground surface extending north of Str. 423-23-1st.

Construction initiated during TS. 4 closely parallels that seen in the previous building episode; i.e., walls are primarily made of unshaped cobbles and angular chunks set so that their flat faces are oriented outwards. The floors in the eastern rooms are a mix of cobbles and slabs, some, but not all, of the latter being schist. The paving in the southern-most room (U.16) was apparently re-surfaced twice, new layers of rock being laid atop an earlier version of the floor. All stones are set within a mud mortar.

#### Time Span 5

Following Str. 423-23-1st's abandonment, it was largely covered by the natural deposition of S.2, a fine-textured, hard-compacted, medium to dark brown clayey loam. Stratum 2 ranges from 0.12-0.17m thick and is, in turn, blanketed by 0.16-0.24m of a fine-textured, hard-compacted, root-rich, medium brown clayey loam (S.1). Embedded within S.1 and 2 is a moderately dense concentration of rocks displaced from final phase architecture (F.1).

Test Pits

Sixteen test pits, each measuring 1m on a side, were excavated at 10m intervals along lines extending north of the Site PVN423 Central Group (Subop. 423AA/AE), between the Site 423 Central and Southwest Groups (Subop. 423AF/AM), and west of the Site 423 Southwest Group (Subop. 423BA/BD). The purpose of these excavations was to test for the presence of activity areas unassociated with surface-visible architecture and to understand better the history of soil deposition in the environs of the Site PVN423 constructions.

Suboperation 423AA is located 10m north of Str. 423-18, Subop. 423AB through AE succeeding it in 10m increments northward for a total of 50m. Suboperation AE, the northernmost test pit in this line, is 10m west of Str. 423-21 in the Site PVN423 Northeast Group. Suboperation 423AF, in turn, lies 10m southwest of Str. 423-15. The line of which it is the northwestern-most test excavation extends southwestward for 70m, ending with Subop. 423AM. Suboperation 423BA is 10m west of Structure 423-2 and its line of probes ends 30m to the west with Subop. 423BD. Together, these tests comprise a transect that extends from the Site PVN423 Northeast Group to a point 40m west of the last visible construction noted in this direction within the Site PVN423 Southwest Group. Digging in Subop. 423AA/AM and BA/BD was pursued to depths of 0.75-1.1m below modern ground surface.

*Suboperations 423AA-423AE*

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1, 2	-	
2	-	-	S.3, 4	-	

Time Span 1

The basal layer (S.1) exposed in the Subop. 423AA/AE line is an orange-brown, coarse-textured, soft-compacted sandy soil that ascends ca. 0.2m over 40m from south-to-north. Stratum 1 was probed to a maximum thickness of 0.3m before digging ceased; the stratum's base was not encountered in any of our tests. As cultural materials are absent from S.1, it appears that there was no significant human occupation in the area

when this soil was being deposited. Stratum 2, a tan, fine-textured, hard-compacted sandy soil, blankets S.1 by 0.1-0.37m in all five of the excavated pits. Though the upper surface of S.2 undulates slightly in the five places where it was exposed, it does not consistently rise or fall from south-to-north. A few artifacts were recovered from the uppermost 0.1m of S.2. This may imply that there was a slight human presence in the immediate environs of northern Site PVN423 during the later period of this soil's deposition. Just as likely, however, the cultural material in question may have infiltrated S.2 from upper layers.

Time Span 2

Stratum 3, a dark gray-brown, sandy soil, covers S.2 by 0.18-0.34m in all of the test pits except Subop. 423AE on the far north. In this case the distinction between S.1 and 2 was not clear. Stratum 3 retains a fairly even upper surface over Subop. 423AA/AD. Stratum 4 is a medium gray-brown, silty sand that is relatively rich in plant roots. This layer is 0.08-0.16m thick in Subop. 423AA/AD (it was not distinguished from S.2 in Subop. 423AE) and seems to be the humus horizon formed on the underlying S.3. The vast majority of all the artifacts found in this northern line of test pits derive from S.3 and 4. Fully 85% of these cultural remains (N=61) came from Subop. 423AA, the probe located 10m north of Str. 423-18. Artifact frequencies declined drastically immediately north of this excavation, 1, 4, and 4 items being retrieved from Subop. 423AB, AD, and AE whereas none were found in Subop. 423AC.

*Suboperations 423AF/AM*

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1, 2	-	
2	-	-	S.3, 4	-	
3	-	-	-	F.1	

Time Span 1

Stratum 1, the lowest soil deposit exposed in these tests, is a dark gray to yellow-brown sand that is generally coarse in texture. It was probed to a maximum thickness of 0.51m, its base not being encountered in our excavations. Stratum 1 varies somewhat in its degree of compaction, being hard-compacted in Subop. 423AF/AI and more loosely compacted in Subop. 423AJ/AM. Stratum 1 is also finer in texture in Subop. 423AJ, about halfway between the Site PVN423 Central and Southwest Groups, than it appears elsewhere in these test pits. Large river cobbles are mixed with the basal portions of S.1 in Subop. 423AK and 423AL but are absent elsewhere in our exposures. In general, S.1

descends roughly 1.1m from northeast to southwest over the 70m it was encountered in our probes, generally conforming to the current topography of the area. The absence of cultural material from S.1 points to the absence of human occupation in the immediate area when this soil was being deposited.

Overlying S.1 by 0.14-0.3m is a brown, hard-compacted, fine-textured silty sand (S.2). Stratum 2 generally follows the downward northeast-to-southwest trend of S.1 but was not identified in Subop. 423AJ and 423AM; a lens of this material extends 0.56m north into Subop. 423AK from its south wall but does not continue further northward across this excavation. It appears, therefore, that something occurred that resulted in the erasure of S.2 in these areas. The absence of cultural materials at the depths where S.2 was expected in Subop. 423AJ and 423AK tentatively imply that natural processes, such as erosion, led to the eradication or, in the case of Subop. 423AK, the truncation, of S.2. In Subop. 423AM, S.2 was seemingly removed in the course of digging a pit that eventually was filled by midden material (F.1). The very few artifacts recovered from the upper 0.1m of S.2 may point to a slight human presence in the vicinity late in the soil's deposition. Just as likely is the notion that these items derived from higher, more artifact-rich layers and percolated downward over time into S.2.

### Time Span 2

Stratum 2, in turn, is blanketed by 0.08-0.26m of a dark gray-brown, hard-compacted, medium-textured sand (S.3). Stratum 3 was not identified in Subop. 423AK where it blends indistinguishably into overlying S.4. The latter deposit consists of a gray-brown, hard-compacted, root-rich, silty sand measuring 0.14-0.25m thick. Strata 3 and 4 are absent in Subop. 423AM. The former, like S.2, may well have been removed in the course of digging the pit that came to contain F.1 whereas the S.4 humus horizon may never have formed in this specific environment. Strata 3 and 4, like their predecessors, also drop down about 1m from northeast-to-southwest. The artifacts retrieved from S.3 and 4 point to a human presence in the immediate vicinity while these layers were being deposited. Artifact frequencies do not decline with distance from surface-visible constructions here to the same extent as that seen in the Subop. 423AA/AE sequence. There is something of a drop-off in the numbers of items found in Subop. 423AF through 423AH (24, 15, and 9 artifacts found in Subop. 423AF, AG, and AH, respectively). The numbers, however, increase further to the southwest (rising to 15, 40, 18, and 132 objects in Subop. 423AI, AJ, AK, and AL; the last pit is ca. 20m northeast of the Site PVN423 Southwest Group). This patterning may well result in part from the downslope erosion of materials originally associated with the Site PVN423 Central Group. We cannot rule out the possibility, however, that there are activity areas interspersed between the Site PVN423 Central and Southwest Groups that we did not encounter in our test excavations. The precipitous rise in artifact numbers seen in Subop. 423AL likely is due to the proximity of this test to the large Site PVN423 Southwest Group.



### Time Span 3

Feature 1, a loosely compacted, dark gray-brown, ashy soil, was identified only in Subop. 423AM, ca. 10m northeast of the Site PVN Southwest Group. This layer was apparently accommodated within a pit dug at least 0.2m into the underlying S.1. Only a portion of the declivity's north flank was exposed in the course of our work and its full dimensions remain unknown. The uncovered segment of F.1 is 0.49-0.69m thick and contains numerous artifacts (N=341). There is little doubt that F.1 is part of a midden, possibly associated with the ancient use of the nearby buildings. As noted above, it is likely that any evidence of S.3 and 4 in this area was eradicated during the digging of the F.1 pit.

### *Suboperations 423BA/BD*

### Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Date</u>
1	-	-	S.1, 2	-	
2	-	-	S.3, 4	-	

### Time Span 1

Stratum 1, a medium gray-brown, loosely compacted, moderately fine-textured silty sand, is the first soil level known to have been deposited in this area west of the Site PVN423 Southwest Group. This layer was exposed to a maximum thickness of 0.32m, its base lying beyond our excavation limits. Stratum 1 seems to ascend very roughly 0.2m over 20m east-to-west before dropping markedly in the next 10m. Stratum 1 was not encountered in the westernmost test pit, Subop. 423BD, despite reaching 0.8m below ground surface by which depth S.1 had been found in Subop. 423BA, BB, and BC to the east. No artifacts were retrieved from S.1, indicating that there was no significant human settlement in the immediate area while this silty sand was being laid down. Covering S.1 by 0.13 to at least 0.38m is a brown, moderately fine-textured sandy silt (S.2) that varies in compactness from loose (in Subop. 423BA), to moderately hard (in Subop. 423BB and BC), to very hard (in Subop. 423BD). Like its immediate antecedent, S.2 rises from east-to-west, this time ascending approximately 0.3m over 20m in this direction before leveling off. The very few artifacts recovered from S.2 could result from human occupation while this soil was being laid down. Just as likely, they might have migrated downwards from upper layers that are richer in artifacts.

### Time Span 2

Stratum 3 blankets S.2 by 0.16-0.38m and consists of a dark gray-brown, moderately hard-compacted, silty, fine-textured sand. This layer is, in turn, covered by 0.16-0.26m of S.4, a medium gray-brown, moderately hard-compacted, root-rich, silty fine-textured sand. Stratum 4 is a humus horizon formed on S.3. Artifacts were found in some numbers from both layers, though their frequencies decline rapidly from east-to-west. Suboperation 423BA, 10m distant from Str. 423-2, yielded 293 artifacts whereas 17, 9, and 24 items were recovered from Subop. 423BB, BC, and BD, in turn. It may be that digging in Subop. 423BA encountered part of a trash deposit associated with Str. 423-2, though there was none of the ashy soil seen in the F.1 midden revealed in Subop. 423AM to the northeast.

### *Summary*

It appears that much of Site PVN423 was built over a basal layer (S.1 in Subop. 423AA/AM) that generally consisted of culturally sterile, coarse-textured sand that rose from southwest to north/northeast much as the current terrain does. Our limited tests west of the Site PVN423 Southwest Group suggest that this sand is either much deeper here or is replaced in this locale by a fine-textured, silty sand. This, like its coarser textured analogue to the east, is devoid of cultural material. The earliest known soils are then covered by a relatively fine-textured sand or silty sand. This level, generally designated S.2, contains a few artifacts in its uppermost 0.1m though it is not clear if these materials are contemporary with the soil's deposition or come from later, overlying strata. A definite human presence is attested to in the overlying dark gray-brown, silty sands found in all of the test pits save Subop. 423AM where they are replaced by midden material set in an ashy matrix. In general, artifact frequencies within these upper strata decline with distance from the main Site PVN423 structure groups. These changes are most marked north and west of the settlement while they are less pronounced in the seemingly open area between Site PVN423's Central and Southwest Groups. The latter patterning may result from the migration of artifacts into the intervening zone due to erosion, or to some as yet unidentified activity areas in this location, or to both.

*Note:* Suboperations 423AS, AT, AU, AV, and AW each consisted of one 0.5x0.5m test designed to secure soil samples for flotation processing from midden contexts scattered across the settlement. These probes are not described further here.