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## PVN OP 038 Excavation Report

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## Operation 38

Operation 38 encompasses 12 structures of various sizes occupying the summit and north-facing slope of a high terrace that overlooks La Sierra's monumental site core from the south. This terrace ascends roughly 2.6m above the relatively flat terrain on which the center's core was raised (cf., Str. 1A-58-Sub1 in Op. 30). The buildings that make up Op. 38 defined two plazas set in a north-south line. The northern example is delimited Str. 1A-56, 1A-56, 1A-58, Op. 38-Sub1 (Formerly Str. L), and Op. 38-Sub2 (formerly Str. K) while its southern neighbor is defined by Str. 1A-65, 55, Op. 38-Sub1, Op. 38-Sub3 (formerly Str. M), and Op. 38-Sub4 (formerly Str. N). Excavations were conducted here from April 16 to May 28, 1990 under the direction of K. Miller assisted by L. Collins and from May 12-June 13, 1988, that work being overseen by L. Collins as part of Op.27. Together, they oversaw the uncovering of ca. 197m<sup>2</sup> on and around six buildings; one monumental edifice (Str. 1A-58), and five smaller constructions.

### Operation 38-Sub1 (formerly Str. L)

Operation 38-Sub1 closes off the south side of the north patio and northeast corner of its southern counterpart. The building is 4.5m southeast of Str. 1A-65, 2m south of Str. 1A-56, and is built over terrain that is relatively flat. The land does drop off steeply to the east, beginning its descent ca. 2.5m in this direction from the edifice. Digging here in Subop. 38A uncovered approximately 33m<sup>2</sup>, excavations being pursued to maximum depths of 0.6m and 0.74m within and beyond construction, respectively. One major building phase was identified in the course of this work, investigations being directed by K. Miller.

### Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Dates</u>
1	-	-	S.2	-	
2	Op. 38-Sub1-1 <sup>st</sup>	U.1-9, 18	-	-	
3	Op. 38-Sub1-1 <sup>st</sup> Op. 38-Sub5-1 <sup>st</sup> Op. 38-Sub6-1 <sup>st</sup>	U.10-12, 17 U.13-14 U.2, 15-16	-	-	
4	-	-	S.1	F.1	

### Time Span 1

During this interval at least 0.23m of a tan clay (S.2) was deposited (the layer's base was not uncovered).

### Time Span 2

The core of Op. 38-Sub1-1<sup>st</sup> was erected atop S.2. This platform is bounded on all sides by stone facings that rise 0.12-0.32m (U.2-5). The space bordered by these basal walls measures 3.3x3.5m and

gives way after 0.2m (on the south), 0.83m (on the north), 0.68m (on the west), and an estimated 0.55m (on the east) to 0.24-0.28m-high ascents (U.6-9) leading to the summit. The latter area is featureless and encompasses roughly 2.18x2.25m. A 0.18m-tall wall (U.18) spans the 0.55m running east-west between the summit's eastern step-up (U.7) and the reconstructed line of the heavily disturbed eastern basal riser (U.5). Unit 18 may have divided two compartments raised atop the eastern terrace. If so, the southern cubicle covered 0.55x2.35m while its northern neighbor possibly encompassed 0.55x1m. No comparable foundations were identified on the summit.

By TS.2's conclusion, Op. 38-Sub1-1<sup>st</sup> was a 0.42-0.6m-tall, stone-faced platform that covered 11.6m<sup>2</sup> and was aligned roughly 11 degrees. Basal terraces measuring 0.2-0.83m across border the summit on all sides. The eastern terrace may have supported two rooms separated by a 0.18m-high footing. One of these putative enclosures takes up most of the eastern terrace and measures 1.3m<sup>2</sup>. The other immediate to the north covers 0.55m<sup>2</sup>. The featureless summit measures 4.9m<sup>2</sup>. There are hints of an earlier construction buried by TS.2 construction. This evidence is in the form of a 0.1m-tall wall (U.1) that was buried beneath the western basal terrace (U.2). Unit 1 parallels U.2 and was only exposed for a north-south distance of 0.6m. It may be the remnants of an earlier western basal facing, superseded by U.2, or of an unrelated construction blanked by TS.2 architecture.

All TS.2 architecture was fashioned primarily of river cobbles set in a mud mortar. The naturally flatter aspects of these rocks were directed outwards.

### Time Span 3

During this interval Op. 38-Sub1-1<sup>st</sup> was expanded 1m to the east while several small buildings (Op. 38-Sub5-1<sup>st</sup> and -Sub6-1<sup>st</sup>) were erected off the platform's north and west sides. The addition was accomplished by extending the southern basal facing (U.3) 1m to the east (that addition is designated U.10) where it cornered with what seems to have been the newly constructed eastern basal facing (U.11). Unit 11 is ca. 0.2m tall and its construction expanded the eastern terrace to 1.55m wide. As U.18 was not apparently continued to the east it may be that the supposed rooms this foundation possibly divided no longer existed.

Operation 38-Sub1-1<sup>st</sup> was also now fronted on the east by a 0.14m-high stone-faced terrace (U.12). Unit 12 was traced for 2.05m at an alignment of 32 degrees and comes within 0.15m of Op. 38-Sub1-1<sup>st</sup>'s newly established southeast corner. This terrace was apparently not connected to the platform and probably served to slow erosion down the steeply sloping eastern descent which borders Op. 38-Sub1-1<sup>st</sup> on the east.

Operation 38-Sub5-1<sup>st</sup> looks to have been an earthen-floored room raised 0.2-0.65m west of Str. 38-Sub1-1<sup>st</sup>'s western facing (U.2). This enclosure is bounded by stone foundations (U.13 and 14) on the east and north (the remaining sides of the construction were not investigated). These footings stand 0.1-0.2m tall and are 0.28-0.32m wide. Based on the portions of the building that were revealed, the interior measured at least 1.4x2.8m.

Lying 0.6m north of Op.38-Sub1-1<sup>st</sup>'s northern basal facing (U.5) are what appear to be the remnants of Op. 38-Sub6-1st. This may have been another room built on ancient ground surface, bounded on the south and east by stone foundations that are 0.1m tall by 0.2-0.36m wide (U.15 and 16). Operation 38-Sub6-1<sup>st</sup>'s west side is delimited at least in part by a 1.5m-long northward extension of U.2 (the western basal wall of Op. 38-Sub1-1<sup>st</sup>). Unit 2's northern extension continues for 0.9m north of Op. 38-Sub6-1<sup>st</sup>'s southwest corner, implying that the latter was entered through a door in its west wall. Operation 38-Sub6-1<sup>st</sup>'s interior measured at least 1.1x1.5m (its northern limits were not securely identified).

Unit 17, a 0.15m-tall wall that is 0.6-0.7m east of Op. 38-Sub6-1<sup>st</sup>, runs at least 1.25m north from its abutment with Op. 38-Sub1-1<sup>st</sup>'s north facing (U.5). Unit 17 may be the foundation for yet another surface-level room erected next to Op. 38-Sub1-1<sup>st</sup> during its last major construction phase. Units 17, 15, and the northward continuation of U.2 created an enclosed space directly fronting Op.38-Sub1-1<sup>st</sup>'s north side. This area encompasses 0.7x2.45m and might have been entered through the 0.6m-wide gap separating U.16 and 17.

By the conclusion of TS.3, Op. 38-Sub1-1<sup>st</sup> retained its basic form and orientation. After completion of the eastern addition, the building encompassed 3.3x4.5m (14.9m<sup>2</sup>) and was graced by a 1.55m-wide eastern terrace. Efforts, in the form of at least one stone terrace, were also apparently made about now to shore up Op.38-Sub1-1<sup>st</sup>'s east flank where it overlooked the steep eastern descent. At least two rooms (Op. 38-Sub5-1<sup>st</sup> and Op. 38-Sub6-1<sup>st</sup>) were seemingly erected directly on ancient ground surface (the top of S.2) west and north of the platform during TS.3. These compartments were bounded by stone foundations that were 0.1-0.2m tall by 0.2-0.36m wide. Operation 38-Sub5-1<sup>st</sup>'s interior encompasses, minimally, 3.9m<sup>2</sup> and the building is aligned ca. 19 degrees whereas Op. 38-Sub6-1<sup>st</sup>'s interior covers at least 1.7m<sup>2</sup> and is oriented roughly 279 degrees. Yet another room might have been raised east of Op. 38-Sub6-1<sup>st</sup>, north of and connected to Str. Op. 38-Sub1-1<sup>st</sup>'s north basal facing. Together Op. 38-Sub1-1<sup>st</sup>, 38-Sub6-1<sup>st</sup>, and the inferred building lying 0.6m east of that last construction (represented by U.17) may have defined an earthen-floored room covering 1.7m<sup>2</sup> which was entered through the aforementioned 0.6m-wide gap on the north.

Constructions during this span consisted largely of cobbles set in a mud mortar. A few cut blocks were identified in U.10, 11, 15, and 17.

#### Time Span 4

After Op. 38-Sub1-1<sup>st</sup>'s abandonment, the building and its surroundings were covered by as much as 0.44m of a brown, moderately coarse-textured, hard-compacted soil (S.1). Embedded in S.1 is a dense to moderately dense concentration of rocks (F.1) that likely fell from final-phase architecture.

#### Structure 1A-56

Structure 1A-56 closes off the south side of the north plaza and is 2m north of Op. 38-Sub1. The ground over which the building was raised ascends 0.8m over 11.4m from north-to-south. Excavations conducted within Subop. 38C and J exposed roughly 45m<sup>2</sup>, most clearing conducted on Str. 1A-56-1<sup>st</sup>'s

north and south sides. What little we know of the summit is based on a 1m-wide swath cut across the edifice in the north-south-running axial trench. Digging was pursued to maximum depths of 0.82m and 0.9m below modern ground surface beyond and within construction, respectively. One major building episode was identified in the course of this work which was supervised by K. Miller.

Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Dates</u>
1	-	-	S.4-5	-	
2	Str. 1A-56-1 <sup>st</sup>	U.1-14, 16	-	-	
3	Str. 1A-56-1 <sup>st</sup>	U.15-18	-	-	
4	-	-	S.1-3	F.1	

Time Span 1

The earliest activity recorded in Str. 1A-56’s vicinity for which we have evidence is the deposition of a light tan ash with white inclusions (S.5). Stratum 5 was exposed to a maximum thickness of 0.28m (its base was not uncovered) and it rose 0.5m over 2.64m from north-to-south. At this point S.5 was lost beneath TS.2 construction (U.10 and 11) but was uncovered immediately south of the former wall where it was found to be running more-or-less flat. Stratum 5, therefore, seems to have levelled out at 0.86m above and 4.94m south of its lowest exposed segment in the northern edge of the Subop. 38C axial trench. Directly south of Str. 1A-56-1<sup>st</sup>, S.5 was again found to be running flat 0.76m above the layer’s lowest exposed point on the north. In general, therefore, S.5 seems to have defined a north-to-south ascent north of Str. 1A-56-1<sup>st</sup> that leveled out beneath that building and subsequently varied in elevation only 0.1m over 7.25m north-south.

Overlying S.5 by as much as 0.41m is a tan clay (S.4). Stratum 4 was traced for 2.74m north of Str. 1A-56-1<sup>st</sup> over which distance it rose 0.57m from north-to-south. This layer was identified immediately south of Str. 1A-56-1<sup>st</sup> by which point its highest recorded point was 1.04m above its lowest exposed segment in the north wall of the Subop. 38C axial trench. Like its predecessor, S.4 apparently rose from north-to-south before levelling out in the area that would be covered by Str. 1A-56-1<sup>st</sup>. The latter, therefore, was apparently raised atop the south edge of a gradual north-to-south rise.

Time Span 2

The core of Str. 1A-56-1<sup>st</sup> was, at this time, a stone-faced platform the summit of which was paved with a mixture of stone and earth. Stone facings (U.1, 3, 4, 5, and, possibly, 12) define the building on all sides. The southern flank is clearest. Here, U.1 stands 0.5m tall and gives way directly to the summit. A 0.15m-tall stone step (U.2) projects 0.3m south of U.1 near the building’s center and runs for 2.85m east-west. The building’s north side is fronted by U.3, a facing estimated to be 0.35m tall.

Unit 3 was buried beneath TS.3 construction so its full east-west length and height could not be estimated with certainty. Structure 1A-56-1<sup>st</sup>'s east flank is fronted by a 0.1m-high step-up (U.4) that extends 5.25m north from its intersection with U.1 to form Str. 1A-56-1<sup>st</sup>'s southeast corner. Unit 4 is 0.6m wide and gives way on the west to a 0.2m-high wall (U.5) which then leads to the summit. The north edge of U.4 is not clear; it seems to project roughly 0.9m north of Str. 1A-56-1<sup>st</sup>'s putative northeast corner before turning west to intersect U.5. Similarly, where and if U.5 joins with U.1, the south platform facing, is unclear. Str. 1A-56-1<sup>st</sup>'s western margin is inferred by projecting the line of U.12 southward from its juncture with U.11. The latter is a 0.27m-tall terrace that was raised atop the aforementioned north-to-south rise north of Str. 1A-56-1<sup>st</sup>. Unit 11 does not extend for the full east-west width of Str. 1A-56-1<sup>st</sup> and does not seem to have run south to join the main bulk of the building on the east. This terrace was, however, traced for 4m to the west where it joins U.12. The latter was preserved to a height of 0.11m and was followed for 1.35m south before excavation ceased. We cannot be sure if U.12 continued south to define the platform's west flank. What appears to be Str. 1A-65's east basal wall (U.16) is 1m west of U.12, suggesting that Str. 1A-56-1<sup>st</sup>'s east-west extent was limited by this neighboring construction. Unit 16 is 0.36m tall and was traced for 1.75m over which it was aligned ca. 11 degrees.

A wall standing 0.37m tall (U.13) was found atop Str. 1A-56-1<sup>st</sup> running 1.6m north-south from a point ca. 2.4m north of the U.1 south facing. Unit 13 is at least 0.85m wide (its west side was not uncovered) and may have served to divide two rooms raised on Str. 1A-56-1<sup>st</sup>'s summit. This construction is sufficiently wide to have doubled as a wall support and bench; it could also have been a free-standing bench.

North of the platform are two broad, earthen-floored terraces (U.10 and 11) that apparently converted the sloping terrain into which they were built into relatively flat land. Units 10 and 11 also likely slowed erosion down this slope. The basal riser is the aforementioned U.11 which stands 0.27 m high and is 1.17m wide. Unit 10 rises approximately 0.23m above U.11's tread and extends 3.6m south to where U.3 rises to the summit. Atop the level terrain backing U.10 on the south what look to have been two earthen-floored rooms were raised. These compartments are divided by a 0.34m-tall by 0.3m-wide wall (U.9) that runs for 1.45m north-south. Approximately 0.7m and 0.2m separates U.9 from U.10 on the north and U.3 on the south, respectively. Movement between the two inferred northern compartments may have been through the wider northern passage between U.9 and 10. A 0.15m-high stone-faced platform projects 1.85m north of Str. 1A-56-1<sup>st</sup>'s core platform at a point 1.7m east of U.9. This construction is defined by a northward extension of the platform's eastern facing (U.5) on the east and by U.6 and 7 on the north and west, respectively. The platform measures 1.65m across east-west and is surfaced with rocks (U.8).

Structure 1A-56-1<sup>st</sup>'s south basal wall (U.1) runs for 3.25m west of the building's inferred southwest corner, ending in an intersection with U.14. The latter is a 0.58m-high wall that interdigitates with U.1 and probably formed the eastern basal facing of Str. 1A-65 or another building that went unnoticed during the initial mapping of Op. 38.

By the conclusion of TS.2, Str. 1A-56-1<sup>st</sup>'s core platform measured 4.5m by an estimated 7.15m east-west, stood 0.3-0.5m tall, and was aligned ca. 281 degrees. A 0.15m-high by 0.3m-wide stone step

located on the building's center-line provides access to the summit from the south. This step is 2.85m long east-west. The exposed portion of the summit encompasses 3.2m east-west by 4.5m north south (14m<sup>2</sup>); this is the area east of the north-south-running U.13 wall. Another compartment may have lain west of U.13 but excavations were not carried far enough here to evaluate that proposition. Unit 13, at 0.37m tall, 0.85m wide, and 1.6m long, may have been a bench. North of the platform are two stone-faced terraces that are 0.27m and 0.23m tall by 1.17m and 3.6m wide. Neither terrace ran back to join the Str. 1A-56-1<sup>st</sup> platform on the east though the basal riser may have cornered with the building's western facing (U.12). These constructions likely slowed erosion down the descent that Str. 1A-56-1<sup>st</sup>'s platform overlooked from the south. Raised atop the upper, widest terrace were at least two rooms set in an east-west line and divided by a 0.34m-high, 0.3m-wide, and 1.45m-long (north-south) foundation. The eastern of these compartments was open on the north, covered 3m<sup>2</sup>, and was bounded on the east by a 0.15m-tall stone-faced and –surfaced platform. The latter covers 3.1m<sup>2</sup> and may have served as a raised work surface or bench. The western analogue of this compartment was not uncovered. The ultimate effect of these constructions was to create an estimated four rooms set in two parallel east-west-running lines, one pair atop the platform while the other dyad was raised on the uppermost northern terrace immediately north of, and about 0.25m below, the platform. The westward continuation of Str. 1A-56-1<sup>st</sup>'s southern facing seems to have joined the edifice to a building lying immediately to the west, possibly Str. 1A-64.

Constructions raised during TS.2 were fashioned primarily of cobbles set in a mud mortar. There are some notable exceptions to this pattern, however. The 1.4m exposed portion of U.14 is constructed entirely of faced blocks as is the U.2 step and the western-most 8.83m of the basal southern platform facing (U.1); the remaining 1.67m of U.1 was fashioned using river-rounded stones. In the case of the cobbles in all TS.2 walls and facings, their naturally flatter aspects were directed outwards.

### Time Span 3

During this interval Str. 1A-56-1<sup>st</sup>'s southern platform remained largely unchanged. The primary modifications pertaining to this span involved the filling in of the rooms raised atop the uppermost northern terrace immediately north of the southern platform. Certainly the east, and most likely the west, enclosures in this line were largely buried now by 0.5m of light tan soil that contained numerous artifacts, primarily fragments of ceramic vessels (U.18). It is unclear if the 0.15m-high, stone-faced and –surfaced platform that defined the eastern room's east margin was covered at this time, though that seems likely. The 0.7m separating U.9 and 10 was filled, in turn, with a similar tan clay, though with somewhat fewer included artifacts (U.17). Unit 10, the uppermost northern terrace, may still have been exposed at this time, probably serving now as the northern facing for an expanded platform. The earthen surface of this northern extension of the platform was apparently unencumbered by foundations or built-in-furniture. The southern platform was seemingly distinguished from the northern addition by U.3. In addition, a 0.3m-high, 1.02m-wide north-south, by at least 1.75m-long east-west construction (U.15) was raised over the top of U.3 (U.15's west edge lies beyond excavation limits). Unit 15 joins the U.13 wall on the north and extends 0.9m east of that intersection. It may be that U.13 and 15 together created an 'L-shaped' bench in the northwest corner of the southern summit's eastern compartment.

The outcome of these modifications was to create a 0.3-0.5m-tall platform that covered 8.15m north-south by at least 7.15m east-west and was oriented approximately 11 degrees. The southern portion of the building was largely unchanged though what might have been a stone-faced bench that ran 1.6m north-south (U.13) and divided the eastern and (putative) western summit compartments was apparently transformed into an 'L-shaped' bench. This was done through the addition of a 1.02m-wide segment that intersected U.13 on the north and projected 0.9m to the east of the latter's east face. This addition would have had the effect of lengthening the main body of the bench to 2.62m. On the north, what had been the uppermost terrace facing (U.10) was seemingly converted into a northern basal wall that retained an artifact-rich earthen fill. This material buried the rooms raised atop the former terrace during TS.2 and produced a 3.4m-wide featureless, earthen-floored surface.

Walls and facings raised now were made of cobbles set in a mud mortar. The earlier tendency to orient the naturally flatter aspects of these rocks outward is not as evident in TS.3 architecture.

#### Time Span 4

Following Str. 1A-56-1<sup>st</sup>'s abandonment, S.4 and architecture on the north were covered by as much as 0.23m of a dark gray soil with some included small white stones and ash (S.3). On the south, S.3's stratigraphic position overlying S.4 is replaced by a very similar soil that contains numerous snail shells (*Pachychilus* sp.) but no ash (S.2). Stratum 2 was revealed to a maximum thickness of 0.21m where it buries the lower portions of U.1 and 2. Overlying S. 2 and 3 is 0.05-0.33m of dark gray-brown humus (S.1). Embedded in S.1-3 is a light to moderately dense concentration of rocks that likely fell from final-phase construction.

#### Structure 1A-57

Structure 1A-57, 1.7m east of Str. 1A-56, closes off the southeast side of Op.38's north patio. The building sits on the edge of the steep eastern descent that marks the limit of the high terrace here. The building was excavated in 1988 (Subop. 27E) and 1990 (Subop. 38B), both investigations were conducted under the direction of L. Collins. Fully 20m<sup>2</sup> were cleared in two trenches each of which were 1m wide. Suboperation 27E exposed what remained of Str. 1A-57-1<sup>st</sup>'s northeast basal facing whereas Subop. 38B uncovered remnants of the building's northwest flank. Digging was pursued to maximum depths of 1.08m and 0.57m below modern ground surface outside and within architecture, respectively. Architectural preservation was generally poor here and only one clear construction phase was identified.

#### Time Spans

Time Span	Construction Phase	Units	Strata	Features	Dates
1	-	-	S.6	-	
2	-	-	S.5	-	

3	-	-	S.3	F.1
4	-	-	S.4	F.2
5	Str. 1A-57-1 <sup>st</sup>	U.1-3	-	-
6	-	-	S.1-2	F.3

#### Time Span 1

During this interval at least 0.5m of a hard-compacted tan soil (S.6) was laid down immediately northeast of the area that would be occupied by Str. 1A-57-1<sup>st</sup> (S.6's base was not revealed in excavations). Stratum 6 has a slightly undulating upper surface, rising 0.16m over 0.48m from southwest-to-northeast before dropping 0.16m across 0.96m in the same direction.

#### Time Span 2

Stratum 6 was blanketed by 0.3m of S.5, a hard-compacted light brown soil that gradually dropped 0.14m across 4.4m southwest-to-northeast. The general conformations of S.6 and, especially, S.5 imply that Str. 1A-57-1<sup>st</sup> was erected atop a low northeast-to-southwest rise. Excavations were not carried to sufficient depths in Subop. 38B to locate either S. 5 or 6.

#### Time Span 3

During this interval what looks to have been a pit (F.1) measuring at least 0.66m northeast-southwest and 0.31m deep was dug into S.5 (F.1's southwest edge was not uncovered as it lies beneath Str. 1A-57-1<sup>st</sup>'s northeast basal wall [U.2]). Feature 1's northeast wall is concave and it seems that the declivity had an overall hemispherical shape. Projecting 0.25m down into underlying S.5 and 6 from about the middle of F.1 is a straight-sided, straight-based extension of this feature. The latter entity is 0.16m wide northeast-southwest. All of F.1 was filled with a fine-textured gray ash. A very similar soil (S.3) was uncovered in Subop. 38B where it was exposed to a maximum thickness of 0.23m (S.3's base was not exposed). Stratum 3, in general, rises 0.64m over 9.5m northwest-to-southeast. Structure 1A-57-1<sup>st</sup> was raised atop S.3 on the northwest. That F.1 is filled with an ash very similar to that which constitutes S.3 and that both directly underlie TS.5 architecture tentatively imply that they pertain to the same time span. It may be that whatever purposes F.1 served, it was the source of the S.3 ash.

#### Time Span 4

Another pit (F.2) was dug during this interval, this time into S.3. Feature 2 measures 2.4m across northwest-southeast, is at least 0.3m deep (its base was not found), and lies 3.8m northwest of Str. 1A-57-1<sup>st</sup>. Feature 2's southeast wall drops steeply (0.3m over 0.19m southeast-to-northwest) while its exposed northwest margin declines more gradually northwest-to-southeast (0.3m across 0.6m). At least 0.2m of a fine-textured brown soil (S.4) fills the bottom of F.2. Stratum 4 may have been

introduced after F.2 was abandoned. Given that this soil differs somewhat from earth levels under- and overlying it, however, we cannot rule out the possibility that the introduction of S.4 was somehow integral to F.1's use. Given that Str. 1A-57-1<sup>st</sup>'s northeast basal wall (U.2) is raised atop the same earth level (S.3) into which F.2 was dug, it may be that the pit and platform were contemporary.

#### Time Span 5

Structure 1A-57-1<sup>st</sup> was apparently raised atop a low (0.14-0.64m-high) rise (at least as measured from the northeast and northwest). The platform stood apparently 0.52m (on the northeast) to 0.6m (on the northwest) high and was aligned roughly 73 degrees. The fill (U.3) contained by U.1 on the northwest and U.2 on the northeast consists of a dense packing of small to medium-size cobbles set in a brown soil matrix. Structure 1A-57-1<sup>st</sup>'s basal dimensions and superstructure cannot be reconstructed from the evidence in hand. Units 1 and 2 were fashioned of cobbles set in a mud mortar.

#### Time Span 6

Following Str. 1A-57-1<sup>st</sup>'s abandonment the building was covered by as much as 0.46m of a hard-compacted, dark brown soil (S.1) on the northeast. On the northwest a similar, but lighter brown, soil (S.2) blanketed S.3 by 0.07-0.17m, thickening to 0.32m where it over-ran F.2. Stratum 2 pinches out against S.3 at a point 6.57m northwest of Str. 1A-57-1<sup>st</sup>'s northwest basal wall (U.1). Stratum 1 thereafter covers S.2 by 0.2-0.42m. Embedded in S.1 and 2 is a dense concentration of rocks (F.3) that tumbled from TS.5 architecture. Feature 3 was traced for 3.6m northwest of Str. 1A-57-1<sup>st</sup> and for 4.51m to the northeast of that building (the feature's limits were never reached in the last direction). So dense and flat-laid is F.3 northeast of Str. 1A-57-1<sup>st</sup> that it may be possible that these stones were purposefully laid down here to bury or extend the platform on this side. One fragment of a faced block was noted in F.3 off Str. 1A-57-1<sup>st</sup>'s northeast flank.

#### Structure 1A-58

Structure 1A-58 is perched atop the steep descent that defines the north edge of the high terrace which overlooks the ballcourt (Op. 30, Str. 1A-50 and 1A-51) to the south. This building closes off the north side of the north patio with Str. 1A-56 located 17.5m to the southwest. The building was investigated by digging two parallel trenches (Subop. 38D, G and H) separated by 10m that ran roughly north-south across Str. 1A-58's west and east sides. Some limited clearing was conducted to locate the edifice's southwest corner but, otherwise, excavations were restricted to the 1m-wide trenches that revealed Str. 1A-58-1<sup>st</sup>'s full north-south width. A total of 33m<sup>2</sup> was uncovered in the course of this work, digging being carried down to maximum depths of 0.28m and 1m within and outside architecture, respectively. These investigations, overseen by K. Miller, identified one clear construction stage though excavations did not probe final-phase construction enough to determine if earlier versions of the platform were obscured by later architecture.

#### Time Spans

Time                      Construction

<u>Span</u>	<u>Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Dates</u>
1	-	-	S.2-3	-	
2	Str. 1A-58-1 <sup>st</sup>	U.1-13, 19, 20	-	-	
3	Str. 1A-58-Sub2-1st Str. 1A-58-Sub3-1st Str. 1A-58-Sub4-1st Str. 1A-58-Sub5-1st	U.17 U.16 U.14-15 U.18	-	-	
4	-	-	S.1	F.1	

Note: Str. 1A-58-Sub1-1<sup>st</sup> refers to the terraces that ascend the steep slope bordering Str. 1A-58-1<sup>st</sup> on the north. These are described under Op.30 (see, Subop.27A).

### Time Span 1

The earliest activity attested to in Str. 1A-58-1<sup>st</sup>'s vicinity is the deposition of a light gray, fine-textured, ash that contains numerous pottery fragments (S.3). Stratum 3 was revealed to a maximum thickness of 0.2m south of construction where it was observed to drop 0.05m over 0.95m from south to north (S.3's base was not revealed). Stratum 3, in turn, was blanketed by 0.08-0.12m of a brown soil that contained numerous pebbles (S.2). Stratum 2's upper interface appears to have defined the ground surface above which TS.2 and 3 constructions were raised.

### Time Span 2

During this interval, Str. 1A-58-1<sup>st</sup> achieved its final form. The building is fronted on the south by a 0.15m-tall terrace that runs back to the north for 1.68m (U.2 as exposed in the western trench and U.20 in the eastern excavation). This construction is at least 12m long east-west (based on these two discontinuous exposures). How far it continues on the east is unknown but on the west it was not encountered in excavations pursued 3.5m west of its westernmost uncovered point. This riser is succeeded on the north by U.3 (on the east) and U.8 (on the west). These walls are each 0.66-0.69m tall but were built in somewhat different ways. The main body of U.8 rises 0.52m above a step-out that projects 0.27m to the south. There is no sign of a comparable step-out on U.3. Both of these facings, however, apparently rose 0.52m above the basal terrace (U.2 and 20) and delimit on the south a tread that is 1.69m wide north-south. Beginning 2.5m west of U.8's exposure in the western trench the line of this wall (now labeled U.10) was followed west for 3.15m where it turned a corner with U.7, the 0.4m-tall western basal facing of Str. 1A-58-1<sup>st</sup>. Units 9 and 4 (on the west and east, respectively) line up and mark the summit's south side. This ascent rises 0.14m above the U.3 and 8 terrace; U.4 and 9 are 1.9m wide. The considerable girth of these walls suggests that they comprise the basal facings of the core platform against which the two southern terraces were built. It may also be the case that U.4 and 9 are sufficiently wide and long (an inferred 13m east-west, minimally) to have served as an extensive threshold or, possibly, a bench overlooking the southern ascents. Structure 1A-58-1<sup>st</sup>'s fill underlying

U.3 and 20 consists of a light to moderate concentration of rocks set in a brown soil (U.19). On the north, a brown earth which is largely free of stones (U.13) backs the northernmost terrace (U.6).

The earthen-floored summit measures 2.4m across north-south and is fronted on the north by at least one step-up to the summit and one terrace built into the steep descent to the ballcourt (Str. 1A-50 and 1A-51) below. The ascents exposed in Op.38 are most probably the uppermost risers revealed in Subop.27A, a 1m-wide trench dug during 1988 from the base of the upper alluvial terrace southward to its summit and Str. 1A-58-1<sup>st</sup> (see Op.30). If so, then U.5 and 11 (the step-up to the summit) and U.6 and 12 (the terrace) correspond to U.10 and 9 in Subop.27A, respectively. Units 5 (on the east) and 11 (on the west) are 0.2-0.4m tall preceded on the north by a terrace that is 0.86m wide and 0.21m tall (U.6 and 12 on the east and west). Presumably, these stone-faced ascents continue the full east-west-length of the northern terrace descent, forming a backdrop to the ballcourt ca. 40m to the north.

Unit 1, a 0.18m-tall terrace, projects 1.51m south of the U.20 basal terrace exposed in the eastern trench. No constructions comparable to U.1 were recorded in the western trench.

As TS.2 drew to a close, Str. 1A-58-1<sup>st</sup> stood 0.93m tall on the south where it was ascended by at least two stone-faced terraces. The latter stood 0.15m (the basal riser) and 0.52m tall and measured 1.68-1.69m wide. A 0.18m-high by 1.51m-wide stone-faced terrace fronts the eastern-exposed segment of Str. 1A-58-1<sup>st</sup> but does not apparently continue the 10.5m westward to the area exposed in our western excavations. Structure 1A-58-1<sup>st</sup>'s earthen-floored summit encompasses 2.4m north-south and is bordered on the south by the upper portions of a wall that measures 1.9m across. This very broad construction element may have doubled as the core platform's southern basal facing, a formal threshold, or a bench which extended for at least 13m along the summit's south margin. On the north, the summit gives way to at least one 0.21m-tall by 0.86m-wide terrace that is probably part of an extensive system of risers that rose in increments from the level of the ballcourt (Str. 1A-50 and 1A-51) to the summit of the alluvial terrace that supported Str. 1A-58-1<sup>st</sup> and Op.38 generally. Overall, Str. 1A-58-1<sup>st</sup> was aligned roughly 285 degrees.

All constructions raised during TS.2 were fashioned primarily of cobbles set in a mud mortar and with their naturally flatter faces directed outwards. Units 2 and 20, the southern basal terrace, however, was fashioned almost completely of faced blocks over its exposed portions while masonry is a minority component of U.4, 9, and 8.

### Time Span 3

During this interval the fragmentary remains of three, perhaps four, small constructions were identified south of Str. 1A-58-1<sup>st</sup>. The temporal placements of these entities is unclear. The bases of U.14-17 are 0.12m or less above the bottoms of the platform's southern basal terrace, suggesting that Str.1A-58-1<sup>st</sup> and Str. 1A-58-Sub2-1<sup>st</sup> through –Sub4-1<sup>st</sup> are roughly contemporary. Unit 18 (Str. 1A-58-Sub5-1<sup>st</sup>) is set 0.37m above these constructions and may well have been raised later in the local occupation sequence. We have tentatively grouped U.14-18 in TS.3 based on their slightly higher stratigraphic position *vis a vis* U.2 and 8 and the subjective impression that these architectural elements postdate, if only slightly, the larger edifice lying immediately to the north.

Structure 1A-58-Sub4-1<sup>st</sup> is 0.94m south of U.8 and is represented by two low (0.15m-high) stone walls that are 0.45m wide (U.14 and 15). Unit 14 delimits Str. 1A-58-Sub4-1<sup>st</sup> on the north and was traced for 2.1m along an orientation of ca. 285 degrees. Unit 15 runs for 1m southeast along an alignment of roughly 173 degrees from its junction with U.14's east end; this intersection forms the structure's northeast corner. Unit 15 steps out 0.3m to the east before, presumably, continuing south (U.14's west end and U.15's southern terminus were not uncovered).

Structure 1A-58-Sub3-1<sup>st</sup> is 1.5m south of the southernmost point on U.15 and is represented by U.16. The latter is a 0.18m-tall by 0.28m-wide stone wall that was traced for 2.2m at an angle of approximately 288 degrees. Unit 16's west end lies beyond excavation limits while on the east we encountered what seems to be the edifice's northeast corner (the east wall was followed for 0.3m to the south and is included in U.16). Unit 17 (0.1m tall by 0.6m wide) of Str. 1A-58-Sub2-1<sup>st</sup> lies immediately east of U.16 and extends at least 2.5m to the east at an orientation of ca. 89 degrees. Unit 16's east end was not definitively identified. Units 16 and 17 are 1.6m and 1m south of the projected westward extension of Str. 1A-58-1<sup>st</sup>'s southern basal terrace (U.2).

Unit 18 stands 0.15m tall, is 0.28m wide, and is located 2.5m south of U.14, 1.25m west of the westernmost exposed portion of U.16, and 3.5m south of U.8. This construction was followed for 0.72m at an orientation of ca. 10 degrees. Unit 18's architectural significance is unclear. It may be part of the eastern wall of yet another modest construction within the Str. 1A-58-Sub2-1<sup>st</sup> through –Sub4-1<sup>st</sup> complex (hence its tentative identification as Str. 1A-58-Sub5-1<sup>st</sup>). Alternatively, U.18 could be a facing for a shelf or bench raised atop fill backing U.16 or 15 (the wall's base is equivalent to the tops of these constructions).

Relatively little can be said about this complex of three to four small constructions erected south of Str. 1A-58-1<sup>st</sup>. The low heights (0.1-0.15m) of their exposed perimeter walls hints that these edifices were raised directly on ancient ground surface and bounded by stone foundations. The possibility that U.18 is a bench or shelf, however, raises the possibility that at least some of these buildings were low platforms that supported summit architecture. Units 14-18 are all built primarily of cobbles set in a mud mortar. The stones are oriented so that their flatter aspects face outward, north for U.14, 16, and 17, east for U.15 and, less certainly, U.18.

#### Time Span 4

Following the abandonment of Str. 1A-58-1<sup>st</sup> and its near southern neighbors as much as 0.4m of a moderately coarse-textured, hard-compacted brown soil (S.1) was laid down. Embedded in S.1 is a light to moderately dense concentration of rocks that apparently tumbled from final-phase architecture (F.1). These stones were densely concentrated on Str. 1A-58-1<sup>st</sup>'s summit, less so off its north and south flanks.

#### Structure 1A-65

Structure 1A-65 is immediately west of Str. 1A-56. The construction was investigated during 1988 through the excavation of a 1m-wide (north-south) by 5.9m long (east-west) trench (Subop. 27B) set against the building's west side (clearing 5.9m<sup>2</sup>). Digging here revealed a limited portion of Str. 1A-65-1<sup>st</sup>'s west side and the full width of Str. 1A-65-Sub1-1<sup>st</sup>, an edifice lying 2.3m west of the former building. Digging was pursued here to maximum depths of 0.38m and 1.65m below modern ground surface within and outside construction, respectively. The work was supervised by L. Collins during 1988 (see also Str. 1A-56, above).

### Time Spans

Time Span	Construction Phase	Units	Strata	Features	Dates
1	-	-	S.5	-	
2	-	-	S.3-4	F.1	
3	Str. 1A-65-Sub1-2 <sup>nd</sup>	U.2	-	-	
4	Str. 1A-65-Sub1-1 <sup>st</sup>	U.3-4	-	F.3	
5	-	-	S.2	-	
6	Str. 1A-65-1 <sup>st</sup>	U.1	-	F.2	
7	-	-	S.1-2	F.4	

### Time Span 1

The earliest activity attested to here is the deposition of at least 0.12m of a soft-compacted, moderately coarse-textured, dark brown soil (S.5) that contained no artifacts in this very limited exposure (the layer's base was not revealed). Stratum 5 runs more-or-less flat over the 0.9m it was exposed heading east-west.

### Time Span 2

Stratum 5, in turn, was blanketed by 0.97-1.06m of a soft-compacted, fine-textured gray ash (S.3). Stratum 3's upper surface rises 0.2m over 1.5m west-to-east. Embedded in S.3, 0.28m below the latter's interface with overlying S.2, is a lens (S.4) composed of a soft-compacted, fine-textured, dark gray ash that is rich in organic material, especially small bone fragments. Stratum 4 is 0.45m-long east-west, maximally 0.12m thick in its center, and pinches out on either end. A moderately dense concentration of small stones (0.03m or less in diameter) comprises a layer (F.1) that overlies S.4. Feature 1 is 0.09m thick and was traced for 1.12m west from where the deposit enters the base of Subop. 27B on the east. Over this distance, F.1 drops 0.18m and rides 0.05m over S.4.

### Time Span 3

Structure 1A-65-Sub2-2<sup>nd</sup> is represented by U.2. The latter is a cobble construction that is sunk 0.14m into S.3 and rises 0.2m above that level. The limited portion of U.2 that was revealed in Subop. 27B tentatively suggests that it is 0.22m wide and formed an arc or semi-circle, measuring roughly 0.6m across, that was open to the east. Unit 2's base is at approximately the same depth as F.1, though the latter stops 0.36m shy (east) of that construction and their relationship, if there ever was one, is unclear.

### Time Span 4

Structure 1A-65-Sub1-1<sup>st</sup> may be a particularly ample cobble wall measuring 1.9m across and defined by U.3 and 4 on the east and west, respectively. This construction is 0.37-0.4m tall and is aligned ca. 99 degrees. Unit 3 rests atop U.2 on the east; the earlier construction was possibly re-appropriated as a foundation for Str. 1A-65-Sub1-1<sup>st</sup>'s east side.

### Time Span 5

Following Str. 1A-65-Sub1-1<sup>st</sup>'s abandonment the construction was submerged beneath an estimated 0.1m of a soft-compacted, moderately coarse-textured, brown soil (S.2). As S.2 resumed accumulating in TS.7, it is hard to ascertain how much of this soil was laid down now. The above-cited estimate is based on the stratigraphic position of architecture raised during TS.6 atop an ancient ground surface embedded in S.2.

### Time Span 6

The limited portion of Str. 1A-65-1<sup>st</sup> that was exposed consists of a 0.5m-high wall (U.1). Unit 1 was traced for 1m at an angle of ca. 105 degrees. It is unclear if U.1 constitutes a facing for a western terrace or leads directly to the building's summit. Unit 1, in turn, was completely covered by a 0.5m-high deposit of very densely packed, flat-laid cobbles (F.2). Feature 2 extends 0.68m west of U.1. Though F.2 ends clearly on the west that termination was not formalized by, say, a formal wall. It may be that F.2 was part of a late expansion to Str. 1A-65-1<sup>st</sup>'s west side that was not completed or was part of an effort to obscure construction on that flank.

### Time Span 7

Following Str. 1A-65-1<sup>st</sup>'s abandonment, deposition of S.2 resumed. An additional 0.3m was likely laid down now, capped in its turn by 0.1-0.12m of soft-compacted, moderately coarse-textured, dark brown earth (S.1). Embedded in S.1 and upper S.2 is a light concentration of rocks (F.4) that likely fell from TS.5 architecture.

### Operation 38-Sub2 (formerly Structure K)

Operation 38-Sub2 is 4.3m west of Str. 1A-58-1<sup>st</sup>; these two edifices occupy the crest of the steep descent that defines the north edge of Op.38. Excavations here in Subop.38G and I consisted of a 14.2m-long trench that cut across Operation 38-Sub2 east-west terminating on the east at Str. 1A-58-1<sup>st</sup>'s west basal wall (U.7). Much of Operation 38-Sub2's west flank was cleared though most of the summit was left unexcavated. Approximately 31m<sup>2</sup> was exposed in the course of this work, digging being pursued to maximum depths of 0.65m and 0.55m below modern ground surface outside and within architecture, respectively. One construction phase was identified in the course of this work. Investigations on and around Op. 38-Sub2 were directed by L. Collins.

### Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Dates</u>
1	-	-	S.2-3	-	
2	Op. 38-Sub2-1 <sup>st</sup>	U.1-20	-	-	
3	-	-	S.1	F.1	

### Time Span 1

The earliest activity attested to in Op. 38-Sub2-1<sup>st</sup>'s vicinity involved the deposition of at least 0.2m of a soft, fine-textured, light tan ash (S.3; the layer's base was not exposed). Stratum 3 contains pottery sherds and was only identified east of Op. 38-Sub2-1<sup>st</sup> where it was found burying the lowest uncovered 0.2m of Str. 1A-58-1<sup>st</sup>'s U.7. Its stratigraphic position west of the former building is taken by a tan clay that was exposed to a maximum thickness of 0.24m (S.2; the layer's base is beyond excavation limits). Operation 38-Sub2-1<sup>st</sup> was raised atop S.2 and, most likely, S.3.

### Time Span 2

Operation 38-Sub2-1<sup>st</sup> is a low platform built atop a gradual rise, the land ascending ca. 0.13m over 3.37m west-to-east before leveling out for approximately 5.6m. Unit 2, the western basal facing, rises 0.57m directly to the summit and was traced for 5m. This facing apparently joins U.11 on the south, their junction forming Op.38-Sub2-1<sup>st</sup>'s southwest corner. The building's northwest corner was not identified. Unit 12, standing 0.25m high, delimits Op.38-Sub2-1<sup>st</sup> on the east; the building's north basal wall was not uncovered. Fronting most of U.2 on the west is a 0.29m-tall terrace (U.1) that extends 5.4m north, from its inferred intersection with Op.38-Sub2-1<sup>st</sup>'s southwest corner, before turning east to join U.2. Unit 1 is 1.15-0.85m wide, the terrace's west face stepping in 0.3m to the east at 2.6m north of its southernmost exposed point. Two earthen-floored compartments (Rooms 1 and 2) are set in a north-south line 0.43m (Room 1) and 1.07m (Room 2) east of U.2. Room 2's floor is 0.36m below summit level and is bounded by stone walls (U.3, 4, 5, and 9) the tops of which are flush with the summit. Room 1's floor is comparably recessed below the summit and is bordered by U.6-9. The latter enclosure measures 1.8x1.85m while its counterpart, 0.35m to the south, covers 0.75x1.23m. Neither

compartment contains built-in furniture. We cannot rule out the possibility that another cubicle lies north of Room 1 though clearing of 2m<sup>2</sup> in this direction failed to find evidence of one. Unit 9 borders Rooms 1 and 2 on the east, separating the western and eastern portions of the summit. East of U.9 the summit is 0.21m lower than it is to the west and no clear rooms are in evidence here. Unit 10, a 0.2m-high wall, defines the southern border of the eastern summit; this space may have been open on the east towards Str. 1A-58-1<sup>st</sup> whereas the summit's northern limit was not identified. Though little more than a 1m-wide swath, running east-west, of the eastern summit was cleared, it may be that this area supported one earthen-floored enclosure (Room 3) that measured 3.4m east-west by an undetermined distance north-south. The fill underlying the eastern summit (U.16), western summit (U.17 and 18), and the western U.2 riser (U.19) consists of a light to moderately dense concentration of small to medium-size rocks set in a brown soil.

Built against the platform's south face (U.11) is a 0.21m-tall 'U-shaped' construction (U.13). Unit 13 intersects Op.38-Sub2-1<sup>st</sup> at a point 0.2m east of its southwest corner and projects 0.65m south from that intersection at which point it turns west. The latter portion of U.13 was traced for no more than 0.25m to the west. The upshot of this construction is to create, with U.11 and 1 on the north, an earthen-floored space that measures 0.65m north-south, an undetermined distance east-west, and may have been open on the west.

Unit 15 is a 0.12m-tall by 0.35m-wide wall that runs for at least 1.5m north-south parallel to U.2 which is 0.95m to the east. Unit 15's north end was not identified though it terminates on the south where it joins U.1 at the point where that terrace turns east to intersect the U.2 basal wall. It may be that U.15 was added to create a 0.75m-wide stone-floored (U.20) space that was sealed by U.1 on the south and U.2 on the east and measured at least 1.1m north-south. Whether that space was open on the north is unknown.

Unit 14, a 0.33m-high wall located 0.9m west of U.2, is likely part of an east basal facing pertaining to one of a complex of buildings lying immediately to the west. This wall was traced for 1.85m at an angle of ca. 9 degrees.

By the conclusion of TS.2, Op.38-Sub2-1<sup>st</sup> was a stone-faced platform that stood 0.25-0.57m tall, measured 6.75m-across east-west (not including the U.1 western terrace) by at least 6.45m north-south, and was aligned roughly 13 degrees. Operation 38-Sub2-1<sup>st</sup> is fronted on the west by a 0.29m-tall by 0.85-1.15m-wide stone-faced terrace (U.1). Unit 1 seems to have extended 5.4m north from its apparent intersection with the platform's southwest corner before turning back east to join Op.38-Sub2-1<sup>st</sup>'s western basal facing. The summit is divided into two segments by a north-south-running wall. On the west two featureless cubicles are set in a north-south line 0.35m apart, their earthen floors resting 0.36m below the summit. The northern compartment (Room1) covers 3.3m<sup>2</sup> while its southern neighbor, Room 2, encompasses 0.9m<sup>2</sup>. If a third room lies north of Room 1 it was not found. The eastern portion of the summit was not extensively cleared. It may be that this area supported an earthen floored enclosure (Room 3) that encompassed 3.4m across east-west by an undetermined distance north-south. A stone-floored cubicle covering minimally 0.8m<sup>2</sup> seems to have been raised off Op.38-Sub2-1<sup>st</sup>'s west side. This space is bounded by the U.1 terrace and the platform's western basal wall on the south and east, the west side being delimited by a 0.12m-high stone foundation.

All constructions raised during this interval were fashioned primarily with river cobbles that were set in a mud matrix. The naturally flatter aspects of these rocks were generally directed outwards. Unit 15 was fabricated largely of cut blocks while one piece of masonry was found near the center of U.1.

### Time Span 3

After Op.38-Sub2-1<sup>st</sup>'s abandonment, the building was largely covered through the seemingly natural deposition of as much as 0.47m of a gray-brown soil (S.1). Embedded in S.1 is a moderately dense concentration of rocks that likely fell from final-phase architecture (F.1). A particularly dense concentration of ceramic fragments was noted in F.1, extending for 3.8m east of U.12, Op.38-Sub2-1<sup>st</sup>'s eastern basal facing.

### Operation 38-Sub3 (formerly Structure C)

Operation 38-Sub3 consists of a several constructions built into the north face of the high terrace atop which most of the Op.38 buildings were raised. This complex is 11.5m northwest of Op. 38-Sub2 and about 25m southwest of Str. 1A-51, the platform that defines the western flank of the Op. 30 ballcourt. Only one of the edifices in Op. 38-Sub3's environs was identified during mapping (what would come to be designated Op. 38-Sub3-1<sup>st</sup>) while evidence of three closely spaced constructions (Op. 38-Sub3-Sub1-1<sup>st</sup>, Op. 38-Sub3-Sub2-1<sup>st</sup>, and Op.38-Sub3-Sub 3-1<sup>st</sup>) came to light during explorations of the original building. These excavations, carried out in Subop.38K, uncovered approximately 24m<sup>2</sup>, digging being pursued to maximum depths of 0.6m and 0.43m below modern ground surface within and beyond architecture, respectively. One clear building phase was recognized in the course of this work, with hints of an earlier building episode possibly indicated by a lone construction unit located off Op.38-Sub3-1<sup>st</sup>'s west side. All work in Op.38-Sub3's environs was directed by L. Collins during 1990.

### Time Spans

<u>Time Span</u>	<u>Construction Phase</u>	<u>Units</u>	<u>Strata</u>	<u>Features</u>	<u>Dates</u>
1	Op.38-Sub3-2 <sup>nd</sup> ?	U.1	-	-	
2	-	-	S.1	-	
3	Op.38-Sub3-1 <sup>st</sup>	U.2-5	-	-	
	Op.38-Sub3-Sub1-1 <sup>st</sup>	U.9-13			
	Op.38-Sub3-Sub2-1 <sup>st</sup>	U.6-7			
	Op.38-Sub3-Sub3-1 <sup>st</sup>	U.8			
4	-	-	S.1	F.1	

### Time Span 1

The earliest activity tentatively identified in Op.38-Sub3's environs is the raising of U.1. This entity was exposed in the base of excavation 0.15-0.75m west of Op.38-Sub3-1<sup>st</sup> where it was exposed for 3.35m running at an angle of ca. 16 degrees. Unit 1 terminates on the north in a stone that is faced on all sides while its southern limit was not exposed; we are not confident that its base was uncovered. What is clear is that U.1 directly underlay Op.38-Sub3-1<sup>st</sup>'s western basal wall (U.4), was at least 0.75m wide, and was buried by S.2. As U.1 does not form a clear corner with any other known construction on the north we surmise that it was originally part of a building that was raised on ancient ground surface and was subsequently covered by Op.38-Sub3-1<sup>st</sup>. Unit 1 was fashioned primarily of cobbles the flatter aspects of which face west. As noted, one faced block was included in the wall. This stone was nearly square (0.35x0.4m) and had a small indentation cut out of its northeast corner.

### Time Span 2

Largely covering U.1 and underlying all TS.3 construction is a fine-textured, soft-compacted, tan ash containing ceramic fragments (S.2). Stratum 2 was exposed to a maximum thickness of 0.07m (its base was not revealed) and rose 0.86m over 10.3m from north-to-south along the north face of the high southern terrace. It seems likely that at least parts of this ascent were blanketed with ash though the rise itself is not apparently composed of this material.

### Time Span 3

This interval witnessed the raising of four constructions that were built into the north face of the southern high terrace. Operation 38-Sub3-1<sup>st</sup> is a 0.7m-high platform that is defined on the west and east by vertical facings (U.2 and 4) that rise directly to the summit. On the north the building is fronted by a 0.2m-tall by 0.41-0.65m-wide stone-faced terrace (U.5). Unit 5 gives way on the south to a 0.5m-high ascent (U.3) that, in turn, leads directly to the summit. The latter was not cleared. It encompasses roughly 2.65x3.5m (9.3m<sup>2</sup>) though the building's southern limits were not identified. We suspect that Op.38-Sub3-1<sup>st</sup> was not formally defined by stone construction on this, its up-sloping flank. Overall, Op38-Sub3-1<sup>st</sup> covers 2.9 by 4.04m and was aligned approximately 24 degrees.

Op.38-Sub3-Sub2-1<sup>st</sup> appears to be another very similar construction lying 1.25-1.65m east of Op.38-Sub3-1<sup>st</sup>. The former is represented primarily by its western basal wall (U.6) which was traced for 4.15m south from its northwest corner with U.7. Units 6 and 7 stand 0.32m tall and the former is oriented roughly 9 degrees. It is unclear if U.6 and 7 are facings for terraces that front Op.38-Sub3-Sub2-1<sup>st</sup> on the west and north or are part of that building's basal facings.

Operation 38-Sub3-Sub3-1<sup>st</sup> is 0.5-0.7m west of Op.38-Sub3-1<sup>st</sup> and is represented solely by U.8, a 1m-high wall that was followed for 3m over which distance it was aligned ca. 22 degrees. Unit 8's northern and southern termini were not identified though its relatively great height implies that it served as Op.38-Sub3-Sub3-1<sup>st</sup>'s eastern basal facing.

Operation 38-Sub3-Sub1-1<sup>st</sup> is immediately east of Op.38-Sub3-1<sup>st</sup> and the two may have been joined. Unit 9, the former's northern-most terrace, might have originally intersected the latter's eastern basal wall (U.2). Whatever their relation, U.9 is 3.72m south and upslope from Op.38-Sub3-1<sup>st</sup>'s northeast corner, stands 0.35m tall, and is 1.28m wide. It is succeeded on the south by a 0.23m-tall ascent (U.10) that fronts a 1.25m-wide terrace. That riser is, in turn, succeeded by a step-up (U.11) to Op.38-Sub3-Sub1-1<sup>st</sup>'s summit. Unit 11 is an estimated 0.19m high and gives way to a summit measuring 5.15m-north-south. No constructions were identified in our 1m-wide exposure of the summit. Operation 38-Sub3-Sub1-1<sup>st</sup>'s southern margin is delimited by a 0.2m-tall basal facing (U.13) that leads directly to the summit. The fill (U.12) contained by these terrace and platform facings consists of a moderately dense concentration of small to medium-size, flat-laid rocks set in a brown soil. Overall, Op.38-Sub3-Sub1-1<sup>st</sup> stands 0.77m high on the down-sloping north side and 0.2m high on the south, measures 7.28m north-south, and was oriented very approximately 282 degrees.

In sum, Op.38-Sub3-1<sup>st</sup> and its three neighbors were probably parts of a dense cluster of constructions that were built into the north face of the high southern terrace. The facings for these constructions were fashioned primarily of river cobbles set in a mud mortar. The naturally flatter aspects of these rocks are directed outwards. A faced block was included in U.2 and another was recorded in U.10.

#### Time Span 4

Following the abandonment of the Op.38-Sub3 complex the area was blanketed by as much as 0.54m of a hard compacted dark brown soil (S.1). Embedded in S.1 is a light concentration of rocks (F.1) that likely fell from final-phase architecture.

#### Test Pits

*Suboperation 27E:* This trench measures 1m northeast-southwest by 2m northwest-southeast and is set at the base of the southern high terrace's east face. Suboperation 27E is 12m southeast of and below Str. 1A-57 that was also investigated, in part, through excavations directed by L. Collins in Subop. 27E. Though treated at the time as parts of the same suboperation, this test pit is distinguished here for separate treatment. Digging was pursued within this probe to a maximum depth of 2.64m below modern ground surface during 1988.

#### Time Spans

Time Span	Construction Phase	Units	Strata	Features	Dates
1	-	-	S.5	-	
2	-	-	S.4	-	
3	-	-	S.3	-	

4	Str. 1A-57-Sub1-1 <sup>st</sup>	U.1	-	-
5	-	-	S.2	-
6	-	-	S.1	-

#### Time Span 1

The earliest activity attested to in this excavation was the deposition of a hard-packed, fine-textured, dark brown clay (S.5). Stratum 5 contains numerous artifacts, including ceramics, lithics, and some faunal remains. The layer ascends 0.25m over 0.82m southeast-to-northwest into the face of the south terrace's east flank and is at least 0.25m thick (its base lies beyond excavation limits).

#### Time Span 2

Stratum 5 is blanketed by 0.28-0.43m of a brown, hard-packed soil containing numerous small (0.01m or less in diameter) pebbles (S.4). There are so many of these diminutive stones that S.4 has a gravelly texture. Stratum 4 rises 0.2m across 1.35m southeast-to-northwest.

#### Time Span 3

Fully 0.43-0.5m of a brown, hard-compacted soil containing numerous small to medium-size cobbles (S.3) was laid down over S.4. Like its predecessors, S.3 ascends 0.2m across 1.44m southeast-to-northwest.

#### Time Span 4

It was atop S.3 that a 0.36m-tall by 0.41m-wide cobble wall (U.1) was erected. Unit 1 was traced for a distance of 1m at an angle of ca. 30 degrees. The architectural significance of this construction is unclear. It may have been the facing for a low platform or a foundation from a surface-level building extending to the southeast beyond excavation limits.

#### Time Span 5

Structure 1A-57-Sub1-1<sup>st</sup> was subsequently buried by the deposition of a brown soil distinguished by the numerous ceramic fragments and medium to large cobbles it contains (S.2). Stratum 2 is 0.41-0.77m thick and rises 0.7m over 1.9m southeast-to-northwest.

#### Time Span 6

The last activity recognized in this trench is the laying down of a moderately hard-compacted, brown soil (S.1) that accumulated to as much as 0.98m over S.2. Stratum 1 contains numerous artifacts

but fewer rocks than its antecedents, ground surface here rising 0.5m across 2m from southeast-to-northwest.

*Suboperation 38F*: Located at the base of the high terrace's east flank, north of Subop. 27E, Subop. 38F is a trench measuring 1m north-south by 2.9m east-west. Directed by K. Miller, this excavation was pursued to a maximum depth of 0.55m below modern ground surface. No architecture was recorded 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>Dates</u>
1	-	-	S.3	-	
2	-	-	S.2	-	
3	-	-	S.1	-	

#### Time Span 1

During this span at least 0.3m of a light brown, moderately hard-compacted soil (S.3) was laid down (the layer's base was not encountered). Stratum 3 rises 0.31m over 2.9m from east to west into the body of the high terrace. Artifacts were found embedded in S.3.

#### Time Span 2

Fully 0.12-0.26m of a brown, fine-textured, hard-compacted soil (S.2) covers S.3. Like its predecessor, S.2 ascends from east to west, in this case rising 0.28m across 2.9m in that direction.

#### Time Span 3

Blanketing S.2 by 0.02-0.15m is a dark brown, moderately hard compacted soil (S.1) that marks the final deposition episode revealed in Subop. 38F. An apparent disturbance created a passage measuring 0.21m across through S.1. This possible animal burrow connects modern ground surface to the underlying S.2, the latter soil filling the disturbed area.