

# SOUTHWESTERN MONUMENTS

## SPECIAL REPORT

NO. 19

TONTO RUINS STABILIZATION  
MAY 27 TO JUNE 30, 1937



BY  
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NATIONAL PARK  
SERVICE

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# TONTO RUINS STABILIZATION

## MAY 27 TO JUNE 30, 1937

By William A. Duffen

Work began May 27 and continued until June 30.

The working crew consisted of the writer, who was in charge, two laborers and two burros, the latter being used for transportation of water and adobe from the ranger cabin up to the ruin.

This period of work was wholly upon the lower group, which was really in a bad state of repair, and consisted of the rebuilding of retaining walls, and cleaning of rooms which had been dug out at earlier times. In many cases the debris had just been milled over in the quest for "antiques". The slowest part of the job was the rebuilding of the rear wall of Room 2 (Stoner's map. See Southwestern Monuments Monthly Report for April, 1936, page 305).

The first unit of work accomplished was that of rebuilding the retaining wall in front of the cave, and the continuation of the same across in as near level manner as possible until it reached the remnant of the south wall of Room 1. This latter chore also added much strength to the front wall of Room 2. The dry masonry retaining walls now in place, we had a place to put the debris from the rooms.

The second work unit was removal of the aforementioned accumulation of trash in excavated rooms. All rooms of the ruin had been gutted before the ruin was put under protection of the National Park Service with the exception of Room 16 which we left undisturbed. Removal of this debris brought to light features that had not been reported to date as well as some very interesting artifacts. Room features will be included in the section of the report on room descriptions; artifacts were entered in the catalog of Tonto National Monument museum and will be described in a future Southwestern Monuments report.

In some cases only a couple of inches of dust would be found on the floor and in several cases as much as two feet of trash was removed. Even though the rooms had previously been "guttled" great care was taken by the writer in the removal of this material and as a consequence the artifacts were removed in good shape. In most cases the floors which have been left as such are in reality false floors which are the result of careless housekeeping by the ancient dwellers. The firepits will however in all cases be filled in save one which is in Room 15. This room will not be entered by visitors. However, its features may be observed from Room 16. This is a safety measure as well as one of exhibition, in that the room may be seen in its original floored condition with fire-pit, metate, etc.

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TONTO RUINS STABILIZATION (CONT.)

The third work unit was the removal of the old ramp that used to lead from the cave floor to Room 7. Its removal allowed much more space and was in reality unnecessary in the exhibition of the site. The slats of a cradle were uncovered at the base of this ramp.

The fourth chore was to get good adobe for the reconstruction of a wall of Room 2. It was necessary to go as far as Windy Point, several miles from the ruin, to obtain this material. The adobe then had to be handled a second time. The transportation of same from the parking lot to the ruin was a slow tedious one. The beasts of burden would balk when one pound too much was hoisted upon their lazy little backs. The trip up was then very slow, as only a burro can make it. Five-gallon oil cans were used as containers for getting water to the site. All materials now being in place, the last task was ready to begin.

This consisted of cutting down to bed rock and obtaining a good foundation on which was laid dry masonry on which to build the wall. The steps built by the Southern Pacific Railroad Company leading to the little court, or Room 11, were moved to the spot where the door once penetrated this room.

It was found necessary to build up the wall in courses not much over a foot in height and let this set before the next layer was put on. The wall was constructed a trifle higher than beam height and then stepped off gradually down to about a foot high, the stepping commencing just beyond the beam axis. The large beam that had for years lain in Room 10 was replaced for exhibition purposes as well as to strengthen the newly built wall and to support the roof timbers which had for so long projected into Room 10. They form the roof for Room 9, or hallway, and part of the roof of Room 10. This part of the work really added much to the appearance of the ruin. It was the writer's wish to clean up and strengthen so far as such work would stabilize the ruin and yet not polish it up to the extent of looking too new or artificial. He hopes that it will be satisfactory.

The construction of several steps of stone and adobe in several of the rooms was deemed necessary to preserve walls that must be stepped over by visitors.

The final bit of work was the policing up of the area traversed by the burros and the return of tools borrowed to complete the work.

The cooperation of local people and the Forest Service, who lent equipment, is to be highly commended.

## LOWER RUIN: ROOM DESCRIPTION

(Note: Room numbers taken from Victor R. Stoner, "A Reconnaissance of Tonto," Southwestern Monuments Monthly Report, April, 1936, opp. p. 306)

### Room 1

Only a bare remnant of this room remains today, and none of the floor level. The room had without doubt been built on the edge of the cave floor and partially on fill. When depredations were begun at this site it is possible that this was one of the first rooms to go.

### Room 2

In its original state this room was in all probability two rooms. A map of the lower ruin taken in 1920 shows the complete back wall standing, being pierced with a doorway at the point where the steps now lead visitors into a small open court. (Room 11). There were no floor features remaining. Room 2 was two stories in height, a fact substantiated by remnants of walls still erect at the south end.

### Room 3

Practically nothing remains of this feature. A rock which anciently had fallen from the roof of the cave had formed part of the back wall to this room. The crevice between the floor and stone was walled up with adobe masonry. There had been a door connecting this room and Room 4, but it has been destroyed. On top of the stone remains a bit of cross-wall. The dimensions are indeterminable as practically all of this room has sloughed over the cliff edge.

At the edge of the large rock is a small firepit made of small stone slabs set upright.

### Room 4

This room in its complete state was 19 feet long by an unknown width. Only a small amount of floor remains and that is in the southwest corner.

A small firepit, circular in form and clay lined, having a diameter of 10 inches and a depth of 6 inches is located 19 inches from the back wall and 12 inches from the south wall.

Due to the height of the door leading to Room 7 it was necessary for the dwellers to place a stone in front of it as a step. This feature remains.

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TONTO RUINS STABILIZATION (CONT.)

Room 5

Stoner's map errs in regards this room. The south wall should be shown to continue completely across shutting Room 6 off from Room 5. The east wall does not continue across in front of Room 5 but terminates as the corner of Room 6. There is nothing to show that this room ever had a front wall. It is sure that Room 5 was used as there is much smoke on the roof and walls. The roof was formed by the cave top itself and the south wall continued up to it. The floor consists of a natural ledge. This room was roughly 6 by 11 feet.

Room 6

This room belongs to the early period of occupation and was never more than one story in height. The south wall is 8 feet, 3 inches long. The north: 10 feet; the west, 12 feet; and the east, 10 feet, 7 inches.

A circular clay-lined firepit 20 inches in diameter by 8 inches in depth is situated 3 feet, 10 inches from the east wall and 3 feet 5 inches from the north wall.

There is a possibility that a door led into Room 16 but as no lintel marks remain we cannot be certain.

Room 7

Room 7 shows all evidence of having been two stories in height. Dimensions are: north wall, 10 feet 11 inches; south wall, 10 feet 2 inches; east wall, 12 feet 11 inches; west wall, 12 feet

This room had three exits: in the east, west, and south walls. In order to enter Room 15 it was necessary to make a step up of two feet.

A circular clay-lined firepit was situated two feet from the east wall and five feet 4 inches from the south wall. This feature was 10 inches in diameter by five inches deep.

The ceiling in this room had been about seven feet high. It is an interesting point to note that the ceilings were all of a good height in this ruin.

A fine example of a wooden lintel remains in the west wall. It is 15 inches wide by two and one-half inches thick by four feet three inches long. This door is two feet wide by two feet five inches high and 17 inches above the floor of Room 15.

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## TONTO RUINS STABILIZATION (CONT.)

### Room 8

A large part of the east wall of this room is made up of a large stone from the roof.

Room 8 measures along the east wall 12 feet 11 inches and along the west wall 11 feet one inch. The south wall is 10 feet four inches and the north wall 10 feet five inches.

This was a two story room. A door pierces the south wall entering into the hall which is of an undetermined width, while the height is two feet four inches. A blocked doorway exists between this room and Room 14. This was brought about probably by the addition of Room 8.

### Room 9

This hallway is probably the dividing line between the old and the newer construction units. As it exists now it measures 23 feet 10 inches along the north wall, 18 feet 10 inches on the south wall, with an average width of three feet four inches.

The roof also forms part of the roof of Room 10. Apparently Room 9 was never more than a single story.

### Room 10.

This room was very badly damaged and was the focus of a goodly part of the stabilization work carried on. Walls that were standing gave a width of 11 feet five inches along the back wall while the north wall measures 18 feet five inches. A beam which had for a long time lain on the floor of this room was replaced in the ceiling, and some of the walls were repaired.

A circular clay-lined firepit is located a couple of feet in from the north doorway.

Several fine artifacts came from this room.

### Room 11

The feature designated as such is a small alcove or patio and probably was not used as a room. There is an outdoor firepit without much form against the west wall. The floor is formed by the bare rock of the cave floor.

### Room 12

Room 12 on Stoner's map appears not to have been a room. The remnants of walls which exist probably were of a defensive nature.

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## TONTO RUINS STABILIZATION (CONT.)

### Room 13

This was a small room formed by building a wall across a natural recess in the cave wall. The great amount of smoke on the ceiling labels it a living room. Had it been a storage room and had it been destroyed by fire there would have been burnt deposits on the floor. They were missing. The debris was dust and decayed organic material.

No clay-lined fireplace was present but there is a small depression in the rock floor that gave up some wood ashes.

This room contains a very interesting type of door.

### Room 14

This room is the most complete in the entire ruin, having the roof intact.

The north wall measures 12 feet seven inches; the south, 11 feet seven inches; and the east wall is 15 feet three inches. The west wall is 13 feet three inches long.

This room was one story high and was one of the first to be built in the cave.

The hatchway leading to the roof is 17 inches wide by two feet nine inches long. The roof is six feet seven inches above the floor, which is a generous height for cliff dwelling rooms.

A doorway on the south side of the room measures 28 inches wide by three feet high, and exhibits a four-pole lintel.

On close examination it will be noted that the crotch in the center post has been padded with grass. Could it have been done to prevent the creaking of the timber as it lay in it?

### Room 15

Room 15 produced some of the good artifacts which were obtained. This room had been burned out and there was a goodly amount of trash in the back mixed with pack rat nests, composed largely of cholla cactus. This room, along with Room 14, is the oldest in the ruin. The floor is largely the natural floor of the cave.

A fireplace 12 inches in diameter by six inches deep is located three feet seven inches from the north wall and six feet two inches from the east one.

This room was one story, and the roof was six feet eight inches above

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## TONTO RUINS STABILIZATION (CONT.)

the floor. Dimensions of walls: east, 11 feet 10 inches; west, 12 feet seven inches; north, 12 feet three inches; south, 12 feet six inches.

### Room 16

Was this a room or an open court? The writer does not see how it could have been roofed over. There is a hole which might have well been one to hold a support post. but, the diameter of the post which this hole could have taken could not have supported the great weight that would have been produced by two beams at right angles. This hole is found on the rock ledge in the floor.

Room 16 is unexcavated, and should at some later date give some good information. Then, perhaps, the former existence of a roof can be proved or disproved.

The rough measurements on this room are: 15 feet nine inches north and south by 21 feet eight inches east and west.

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## HYPOTHETICAL RECONSTRUCTION OF BUILDING PERIODS

This reconstruction is based largely upon evidence presented by wall joints, blocked doorways, etc.

It appears that the first unit was composed of Rooms 14, 15, and 16. Later Room 6 was added and automatically brought Alcove 5 into being. At a later time Rooms 7 and 8 were added and two doorways that had been in the original part were blocked. Rooms 7 and 8 were two story affairs. A parapet was added to Room 15 where it overlooks Room 16. Rooms 14 and 15 appear never to have been more than one story in height. Room 16 appears never to have been roofed, but this fact will not be known until it is excavated.

Following the building of Rooms 7 and 8, the hallway or Room 9 was brought into being as were Rooms 10 to 13, inclusive. From all appearances Room 10 was a single story. The north wall of the hallway shows that it is a later addition in that the cross beams for the ceiling were set into holes which had been pecked into the wall. The roof of the hall extended on over and formed the north half of the Room 10 roof.

Room 11 was no room but an alcove having an outdoor fireplace.

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TONTO RUINS STABILIZATION (CONT.)

It does not seem logical that such a room as Number 12 could have ever existed. The wall remnants might have been no more than a defensive measure, and it would help keep the aboriginal kiddies who might have played in the alcove out of the canyon below.

Room 13 has much smoke blackening on the roof which would seem to set it off as having been living quarters in place of a storage room. Just when this was built is unknown. It could have been constructed at any time without altering the setup in any way.

Evidence of Room 1 is nil. No statement is safe.

Room 2 had been two stories high as is shown by a picture taken in 1920. The major part of this room has gone over the edge.

\*\*\*\*\*oo\*\*\*\*\*

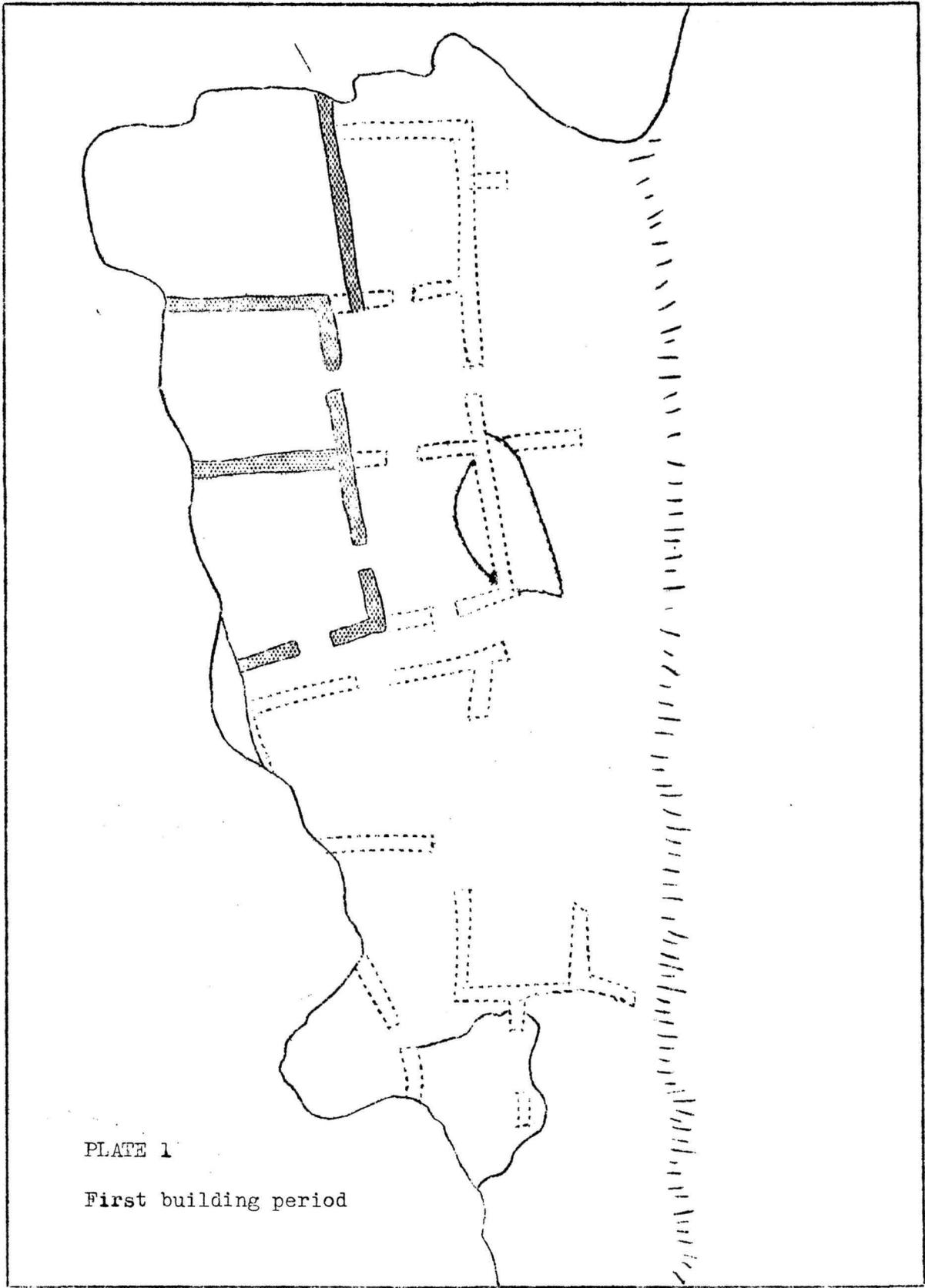


PLATE 1

First building period

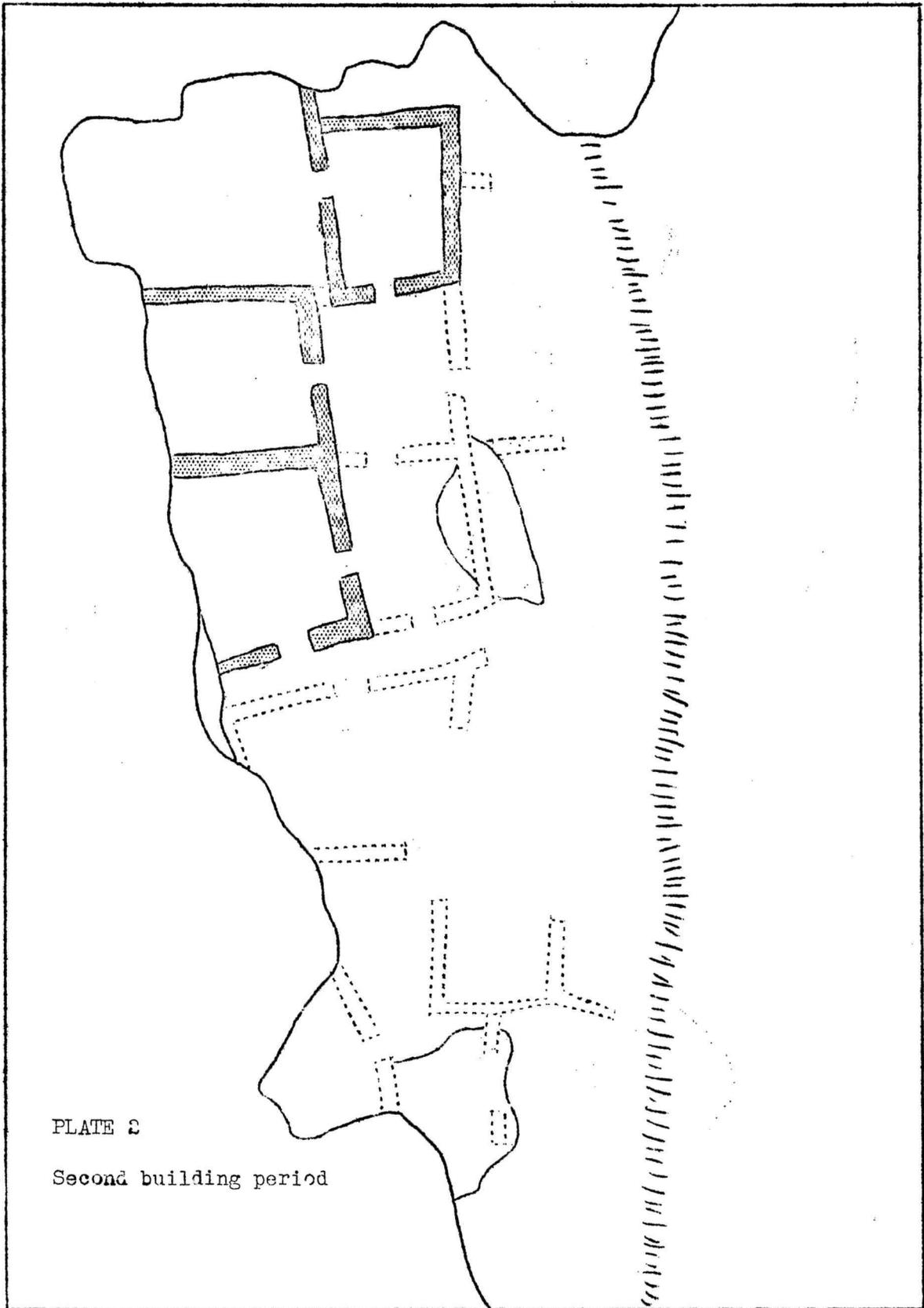


PLATE 2

Second building period

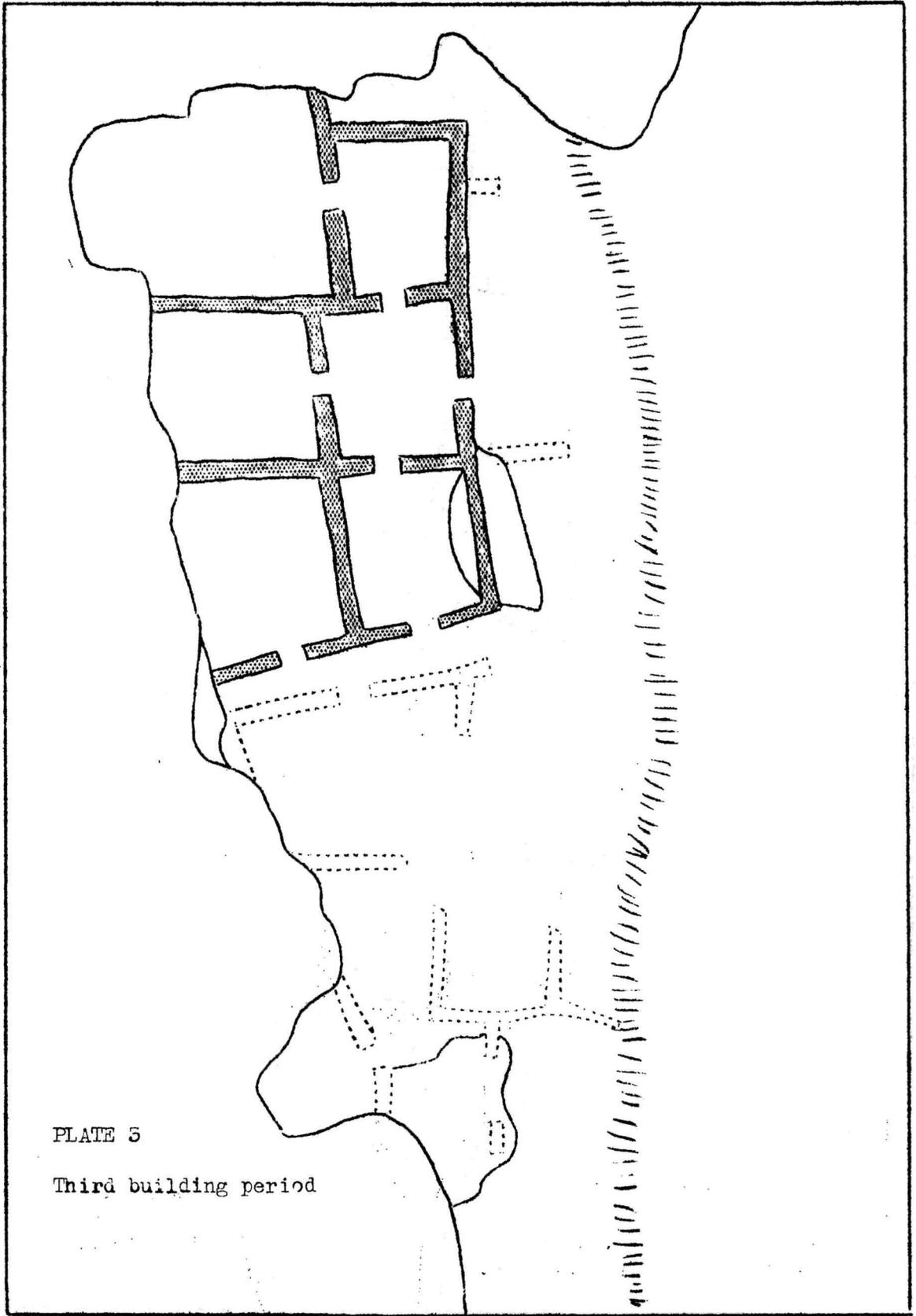


PLATE 5

Third building period

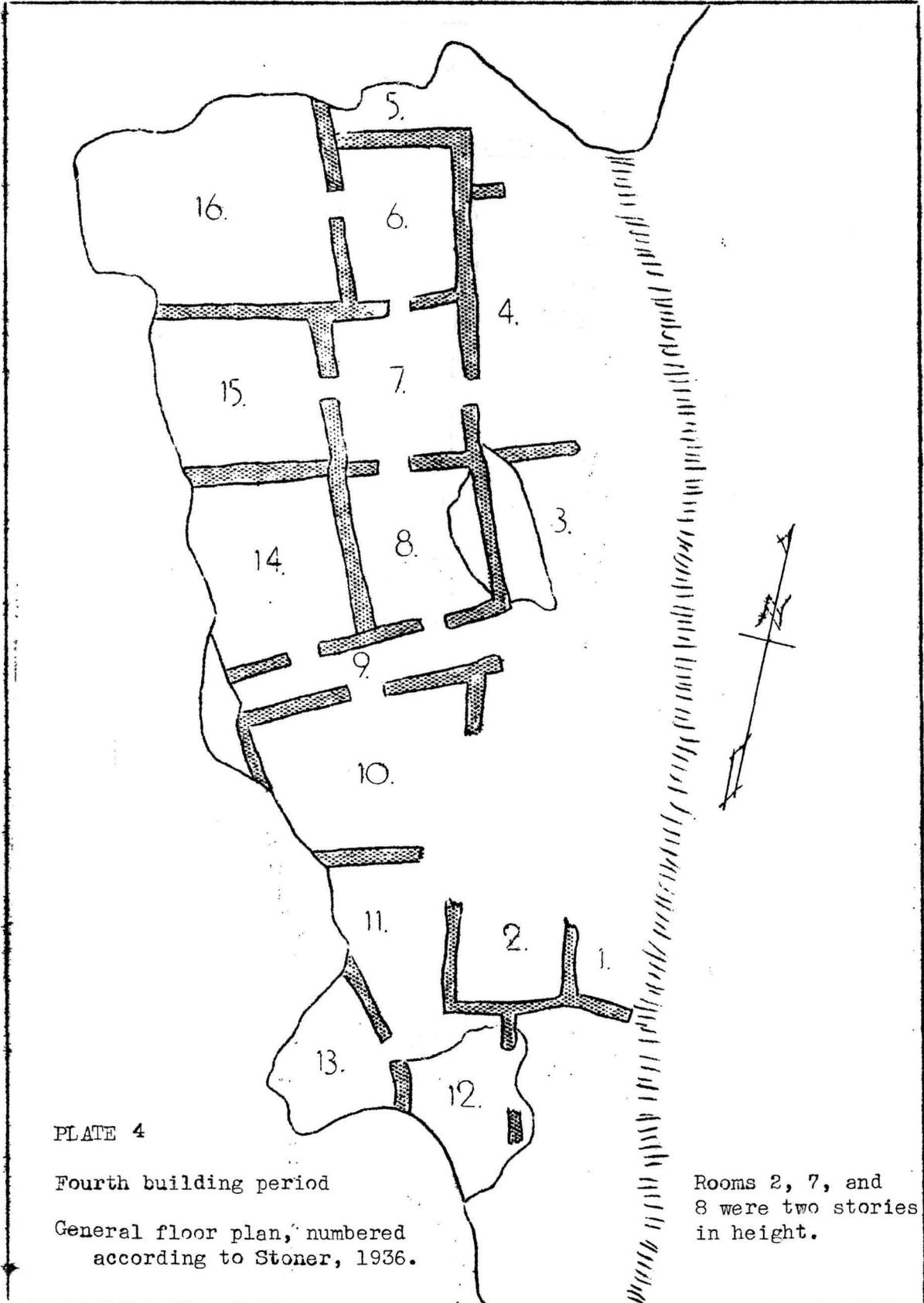


PLATE 4

Fourth building period

General floor plan, numbered according to Stoner, 1936.

Rooms 2, 7, and 8 were two stories in height.

