

IMTO – Italian Mission to Oman

University of Pisa

SUMHURAM

Preliminary Report

January – February 2015 (SUM15A)



PRELIMINARY REPORT (SUM15A)

January-February 2015

The first IMTO's campaign of 2015 (SUM15A), under the direction of prof. A. Avanzini, started on 3rd January and finished on 26th February 2015.

Excavation was performed in two areas with different goals.

In Area A, Eastern part, excavation was completed in two buildings. Furthermore four deep soundings were dug to clarify stratigraphic relations in the area.

In Area F four different operations took place to clarify stratigraphic relations and relative chronology of the city wall and MB2. Excavation to the North of the building named Monumental Building 2/BF5 exposed in a deep sounding the earliest deposits in the area.

To the West of MB2 excavation of street A43 was completed down to the first phase of occupation of the area between the MB2 and the city wall. Excavation concerned also the area South of MB2 where a complex stratigraphy was unearthed, reaching in a room the bedrock. Excavation continued also to the East of MB2.

Excavations were conducted on the field by Prof. Alexander Sedov, dr. Vittoria Buffa, dr. Alexia Pavan, Mr. Said al Mashani and Mr. Said al Amri, with archaeologists Silvia Lischi and Cleto Carbonara and senior students Giulia Buono, Carlotta Rizzo and Cristina Pappalardo.

Arch. Alessandro Massa was responsible of the architectural survey, the CAD digitalization and the updating of the plans of the city.

Arch. Sergio Martelli was responsible for documentation of pottery vessels and objects.

The restoration activities, under the direction of Arch. Valter Filatondi and Emiliano Mura, during the campaign, regards the restoration of part of the city walls and internal walls in the town

The work of IMTO has been possible thanks to the collaboration of the Office of the Adviser of His Majesty the Sultan for Cultural Affairs in Salalah and in Muscat, in particular Ghanem al Shanfari, Said al Mashani, Ali al Kathiri, Said al Amri, Said al Salmi, Hassan al Jabri. We thank them all, together with all the Museum's team, for their kind helpfulness.

Sumhuraam Preliminary Report SUM15A

January- February 2015

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- The restoration of the walls M47-M48 and the arrangement of the stone basin
- Other small works inside the city as reported below

Archaeological Report

Excavation in Area A: building BA15, rooms A209 and A211. (Trench supervisor: Giulia Buono)

The aim of this campaign was to complete the excavation of the Building BA15 started during SUM13C campaign.

Room A209

The excavation of the room A209 started during SUM13C campaign and it stopped at the level of US643 floor that was removed during this campaign. It had a thickness of 12 cm (Sup. elevation 29.36- Inf. elevation 29.24) and it was made of sandstone slabs covered of plaster.

Below it, three more floors were identified:

- US747 floor (Sup. elevation 29.24- Inf. elevation 29.23) was made of plaster. Below it, US749 constituted its preparation, made of loam and limestone chips (29.23-29.17).
- At an elevation of 29.17 the new floor US750, made of packed loam, was identified. The holes of wooden posts, discovered during SUM13C, continued in this layer.
- The earliest floor of the room (US752 floor), made of hard packed soil, grey in colour and very compact in consistence was reached at an elevation of 28.85. It had a slight slope from north to south (from the elevation of 28.85 to 28.78). It was covered by its accumulation, compact in consistence and reddish brown in colour. It is possible that the mudbricks (28.91) and a piece of broken plaster (29.01), covering a surface of 1.5x1.40 m, were fallen from the walls. During the excavation of the layer, the stone bases of the wooden posts were brought to light. The following findings were brought to light: the coin 919, a Tutufa Bardeyi shell type (Sh734) and two stone tools (S2734, 2739).



Room A209 before excavation (US643 floor, south view).

We decided to make a small deep sounding of 1.0x0.6 m, close to the corner between M518 and M620. The layer US762 (foundation filling) was made of loam, medium compact in consistence and brownish grey in colour. The bedrock was reached at an elevation of 28.53. Both walls were



Section in A209

constructed on it. Inside the layer an iron rod (MI253), a bronze nail (MB909) and a handstone (S2728) were discovered.



Room A209 after excavation with US752 floor (South view)



Bedrock in A209

Room A211

The room A211 was already digged during previous campaign (SUM13C and SUM14A), but the excavation stopped at the level US665 floor (29.14).

Below US665 floor, the new layer US764 was discovered. It was made of loam, medium compact in consistence and light brown in colour. The plastered floor was reached at an elevation of 28.87 m. The floor is preserved in the central part of the room. Where the plastered floor is not preserved, the layer is made of mudbricks along the walls and compact loam, reddish brown in colour. From the layer, the following findings were recorded : the coin 929, an iron rod (MI257), a stone tool (S2736), a fragment of soft-stone vessel (S2737) and an oil lamp (Sh738).



Room A211 before excavation with US665 floor (29.14)



Room A211 after excavation with US764 floor (28.87)

Area A, building BA12, excavations in rooms A190, A191, A195, A198, A199 and deep sounding in southern part of A192 (trench supervisor: Cleto Carbonara).

In the SUM15A campaign, the IMTO (Italian Mission To Oman) resumes the excavations in the building BA12. This building is located in the Area A, the residential quarter of Sumhuran, west of the building BA15 and south of building BA6.

The building BA12 was already object of excavation in the '50 years in the works performed by the AFSM (American Foundation for the Study of Man), and in three campaigns of the IMTO, SUM11C, SUM12C and SUM14A.

Room A190

Excavations of SUM15A start in the room A190. It is the south-western room of the building and it is delimited by the walls M540 to north, M541 to east, M542 to south and M185 to west.

Here the excavation in SUM14A stopped to the level of 29.11 (US539 floor). Below it has been recognized US728.



US728 in A190 before excavation

It is an accumulation layer consisting of loam light brown in colour and compact in consistence, mixed with several fragmentary mudbricks and few limestone blocks small in size. In it it has been also noted some sandstone slabs at the centre of the room. A large amount of bronze (flat fragments) come from the centre of the eastern side. At the base, the layer shows a more friable consistence in the centre of the room. The US also returned a large amount of animal bones and a good amount of pottery. In it have been found several bronze objects (MB888, MB889, MB890,

MB891, MB892, MB893), a bronze coin (Co897), fragments of a glass vessel (G222), two oil lamps (Sh709), and a whetstone (S2679).

Below US728 there is another layer (28.60) named US731. It is an accumulation layer consisting of loam brown in colour and loose in consistence mixed with limestone blocks and slabs big, medium and small in size. At the centre of the room there were light traces of burnt with some charcoals. In the south-western corner there was a little concentration of crumbled plaster. Excavations stopped to the elevation (28.37) for the emerging of the bedrock.



US731 in A190 before excavation.

US731 returned a good amount of pottery and animal bones. Also some objects have been found in it : a bronze nail (MB894), a bronze coin (Co898), and a stone tool, probably an unfinished loom-weight (S2682).



Bedrock in A190

Room A191

It is the north-western room of the building BA12 and is delimited by the walls M127 to north, M663 to east, M540 to south and M185 to west. This room was already excavated in the SUM14A campaign until the level of 30.20 (US672 floor).



A191 before SUM15A excavation

Below US672 floor, on which rested three whale vertebrae used probably as chair (B94, B95 and B96), was found another US. The new layer, named US732, is an accumulation stratum with a medium compact consistence and a light brown colour. It consists of loam mixed with several sandstone blocks and slabs small and medium in size. Few limestone blocks (small in size) and charcoals have been recognized. It covers the lower part of the whale vertebra (B97) in the south-western corner of the room, that was partially uncovered during the excavation of US672. Traces of ash have been noted near the vertebra. Layer also returned a good amount of stone tools, among which it is possible recognize seven handstones (S2685, S2687, S2688, S2692, S2693, S2694, S2695), two hammerstones (S2690, S2691), a whetstone (S2686) and a rubbing stone (S2689). Other objects are : an oil lamp (Sh710), two bronze rings and a bronze ornament (MB896, MB897, MB898), a bronze coin (Co899), and a limestone stela with the common South-Arabian motif of the representation of a stylized human face (S2684).



Eye stelae in US732



Stone tools in US732

In US732 have been found few crumbled bones and shells, and few pottery. At the base of the layer has been noted an earth packed soil to an elevation of 29.74 interpreted as floor.



US732 floor in A191

The US below, US740 is an accumulation layer that shows a medium compact consistence and a reddish brown colour. It consists particularly of loam with the presence of few limestone blocks small in size. The layer returned a good amount of crumbled animal bones and shells, few pottery and a whetstone (S2701). Also two bronze objects (MB899, MB900) and a bronze coin (Co900) come from this layer. In the south-western corner of A191 there was a concentration of limestone slabs with one face flat.



Limestone slabs in US740

The centre of the room and its southern part is characterized by the presence of several charcoals, linked to the activity of the fireplace in the centre of the room.



Fireplace in US740

Some crumbled mudbricks were found in the south-eastern corner of the room. The floor of US740 was reached to an elevation of 29.54 and consists of a compact level of packed loam and mudbricks.

After the removal of US740 floor, it was recognized the US741. It is an accumulation layer consisting of loam showing a friable consistence and a light brown colour. Some crumbled mudbricks and limestone and sandstone blocks and slabs small and medium in size have been noted in it. The northern part of the room is characterized by the presence of several traces of burnt with a good amount of charcoals and ashes. Going down with the excavation a row of limestone blocks is unearthed along the eastern wall of the room.



Stone alignment in A191

The layer returned a good amount of animal bones and crumbled shells and several pottery sherds. An handstone (S2705), a fragment of a stone vessel (S2716) and an oil lamp (Sh716). Was also found in US741. US rests on a floor made of packed loam found to an elevation of 29.24 with mudbricks along the western and southern wall.



US741 floor in A191

Area east of Room A191

The area placed to east of A191 is a narrow corridor between the eastern wall of A191, M663, and the wall supporting the staircase in the northern part of the building (numero scala).



A191 east before excavation

Here the first US excavated is the US672. It consists of loam loose in consistence and light brown in colour mixed with a lot of sandstone blocks and slabs medium and small in size. In it also few calcareous stones small in size and several crumbled animal bones and shells. The layer also returned some objects, among which : a whetstone (S2732), a pestle (S2733), an oil lamp (Sh732) and two Tutufa Bardeyi (Sh733).

Below it, to an elevation of 30.43 another layer was found. US756 is characterized by a dark brown colour and a medium compact consistence. Several traces of burnt with a lot of charcoals have been noted in it. This stratum returned several crumbled animal bones and shells and a bronze coin (Co914). The US756 covers a very compact level found to an elevation of 30.26. in the southern part of the corridor, in corrispondence of the opening in M663 there are three big and thick limestone slabs.



US756



US756 after excavation

Room A195

Is the south-western room of the BA12. It is delimited by the walls : M554 to south, M555 to east, M556 to north and M550 to west. This room was already partially excavated in the IMTO's campaign SUM12C until the level of US546 floor (29.69). After the removal of the plastered floor another layer was intercepted.



Room A195 before SUM15A excavation

US742 is made of loam light brown in colour and medium compact in consistence mixed with some limestone blocks small in size. Traces of burnt are in the north-eastern corner and in the southern part of the room. Some crumbled mudbricks have been noted along the eastern wall. Going on with excavation were found several plaster fragments coming probably from the covering of the walls. The US returned some objects. An iron rod (MI246), a bronze clamp (MB903), a bronze coin (Co906), and an handstone (S2708). Among the other finds there are several animal bones and shells and few pottery sherds. US742 rests on a packed soil found to an elevation of 29.02 interpreted as floor.



US742 floor

Room A198

A198 is the central room of the three placed in the eastern part of the building. It is delimited by the walls : M550 to west, M556 to south, M555 to east and M558 to north. It was object of a superficial cleaning in the SUM12C campaign until the level of 29.34.



Room A198 before SUM15A excavation.

In the SUM15 campaign the US759 was excavated. It consists of loam grayish-brown in colour and very loose in consistence. At a very high level the loam is mixed with some sandstone blocks small and medium in size. At the base the southern wall of the room has a projecting row of stones. Attested the total absence of materials and the finding of a modern metal tin it is possible to think that this room was already excavated by the American mission and then refilled.

Below the US759 another layer was intercepted. US760, to an elevation of 29.02, is a not very thick layer made of several limestone and sandstone blocks big and medium in size mixed with loose loam light brown in colour. Stratum returned only three pottery sherds. During the excavation of the layer, a sort of platform (M720) made of stones was brought to light. It occupies the northern half of the room. The foundation of the wall M558 was found at an elevation of 28.73. The excavation in A198 stopped to an elevation of 28.38 for the emerging of the bedrock.



US760



Bedrock and platform M270 in A198. (East view)

Room A199

A199 is the north-eastern room of the building BA12. It is delimited by the walls M550 to west, M558 to south, M555 to east and M127 to north. Before the SUM15A excavation the room was filled by many limestone and sandstone blocks collapsed from the walls. The inner face of the northern wall was completely destroyed.



US744 before excavation

The collapse of stones was named US744. It has a higher elevation in the northern part of the room (32.43) than in the southern one (29.78). US744 is an accumulation layer made of collapsed blocks and slabs in limestone and slabs. Blocks are mixed with loam very loose in consistence and brown in colour. The layer returned a stone tool (S2713), probably a small pillar, and some storage pottery sherds. US744 floor is not well preserved and was found to an elevation of 29.24.



US744 floor

Deep sounding in Room A192

A192 is the central ambient of the building BA12. It is a L-shaped corridor that was already excavated by the AFSM and in two campaigns of IMTO, SUM11C and SUM12C. During SUM11C, A192 was object only of a cleaning, while in the SUM12C was reached a floor (US542

floor) to an elevation of 29.30. The floor in A192 is not very well preserved. The earth packed soil is visible only in its southern part, with some mudbricks in the south-western corner.

To better understand the state of preservation of the southern enclosure wall of the BA12, we decide to do a deep sounding in the south-western corner of A192, in correspondence of the southern end of M185. In this area few traces of a wall are visible.

After the removal of the mudbricks a layer made of sandstone blocks and slabs small and medium in size mixed with a lot of limestone chips is interpreted as preparation of the floor. Below it there is a stratum named US748 consisting of loam brown in colour and very loose in consistence mixed with some calcareous stones small in size and several charcoals. Several traces of burnt with many animal bones and shells have been noted in the central part of the sounding. In the eastern part of the sounding was removed some sandstone blocks medium in size. US748 also returned some objects like a bronze coin (Co912), a bronze nail (MB906) and a fragment of a marble vessel (S2724). A good amount of pottery sherds come from US748. The major part are storage vessels. The deep sounding in the south-western corner of the BA12 stopped to an elevation of 28.61. for the emerging of a new wall it decides to enlarge the sounding eastward.



Emerging of the southern wall of BA12

The eastern part of the sounding is moved further south in order to follow the whole width of the new wall. Here a lot of sandstone and limestone blocks big and medium in size, interpreted as a collapse are removed. Of the eastern part of the wall is preserved only the last row, of which is still

visible only the exterior face. On the exterior face of this wall, named M707 are still preserved traces of plaster. South of the central part of the wall was found a group of stones with the upper surface well-smoothed, that should be a threshold.



Southern wall of BA12 (M707)



Probable threshold

Excavation in Area A: deep sounding in the street A113 (trench supervisor: Giulia Buono)

The street A113 was already excavated during previous campaign and the works stopped at the level US516 floor (29.15). During this campaign we decided to do a deep sounding close to the wall M101 (BA6) of 1.20x0.70 m to verify the elevation of the wall's foundation.

Two layer were identified in the sounding. The first one, below US516, was US766. It was made of sand, light brown in colour and loose in consistence. It could be interpreted as the re-fill of AFSM.

The second one, identified at an elevation of 28.82 was US771, made of medium compact loam, brownish-gray in colour. It could be interpreted as the first floor of the street A113. A well dressed squared limestone block was visible from the section (28.71). The bedrock, covered of limestone chips and mudbricks was reached at an elevation of 28.36.

The foundation of wall M101 was directly on the bedrock.



Deep sounding in A113. North view.

Excavation in Area A: deep sounding in street A248, to the south of buildings BA15 and BA12. (trench supervisor: Giulia Buono)

The purpose of this campaign was to understand the relation between the buildings BA12 and BA15. We decide to make a deep sounding of the dimensions of 2.0x1.40 m close to the southern walls M620 and M635 of building BA15 and M554 and M555 of building BA12.



Area in examen before excavation. South view.

The following stratigraphy was unearthed:

- US508 (Sup. elevation 30.10- Inf. elevation 29.54) was a layer already identified in Street A113 (such as US516) and it was composed of loam, compact in consistence and brownish grey in colour, with some limestone blocks fallen from the walls. The floor, made of hard packed soil was reached at an elevation of 29.65. It had a thickness of 5 cm.
- Below US508, US516 (Sup. elevation 29.54 m- Inf. elevation 29.19 m) was a layer composed of loam, from compact to medium compact in consistence and reddish brown in colour. At an elevation of 29.50, an offering table (S2756) was unearthed. The hard packed soil, grey in colour with white inclusions and small stones, was reached at an elevation of 29.44 (thickness of the floor 20 cm).

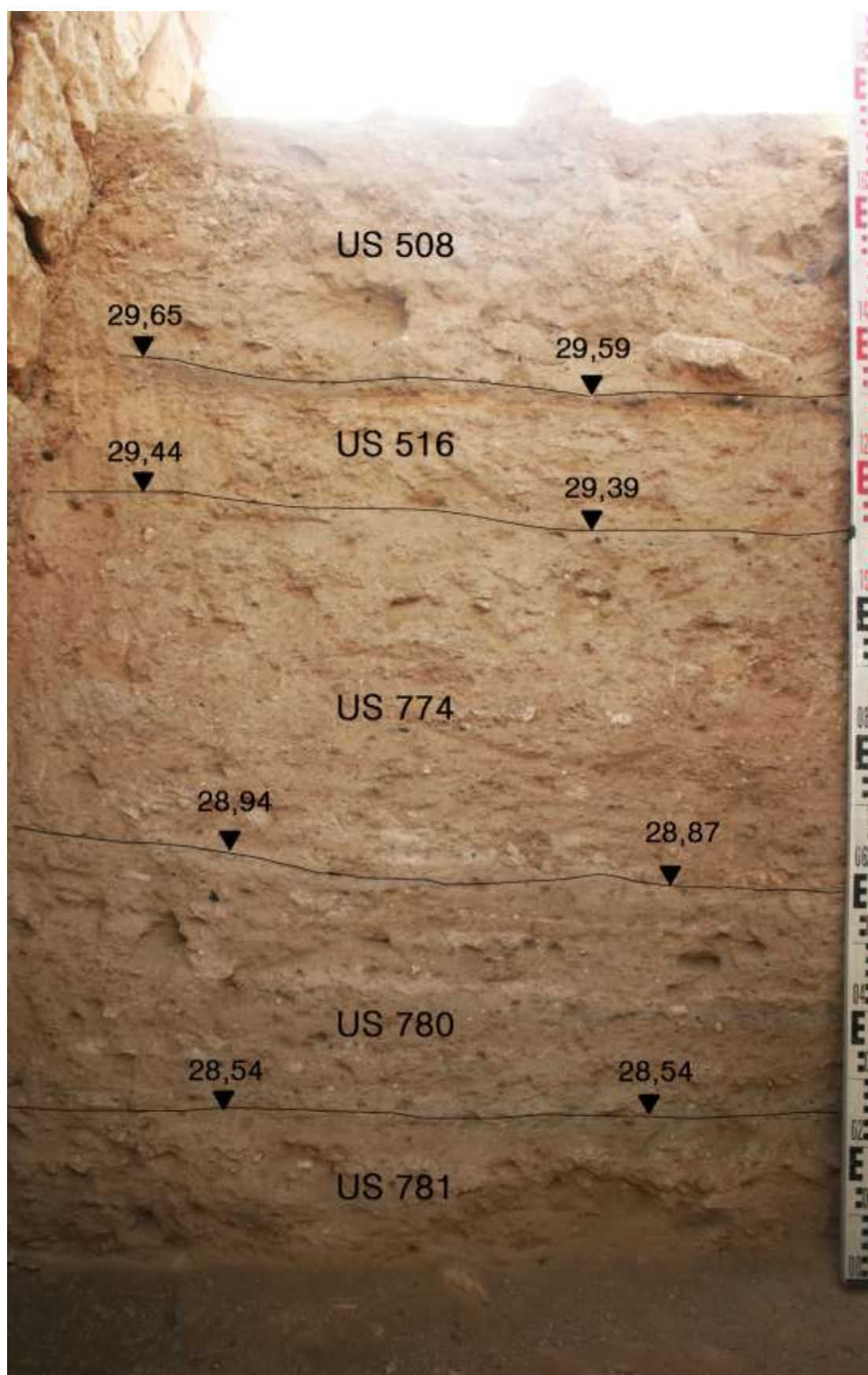


West view.

- US774 (Sup. elevation 29.19- Inf. elevation 28.67), covered by US516, was made of loam, very compact in consistence and brownish in colour. The floor, made of hard packed soil and mudbricks, brownish grey in colour, was reached at an elevation of 28.94 and it had a thickness of 20 cm.
- Below US774, US780 (Sup. elevation 28.67 m- Inf. elevation 28.49 m) was a layer made of loam, medium compact in consistence and brownish in colour. The floor, made of hard packed soil was reached at an elevation of 28.54 m (thickness floor 5 cm). It could be interpreted as the earliest floor of the street in front of these buildings. The coin Co933 was discovered in the layer.
- The last layer, US781, was the foundation filling that covered the bedrock and it was made of loam, loose in consistence and brownish in colour. During the excavation, soot traces were unearthed close to first row of the wall M635 of the building BA15. The bedrock was reached at an elevation of 28.20 m.



Soot traces in US781.



Section of the sounding. West view.



Area in exam after excavation.

Deep sounding in street A75, square i-10 (trench supervisor: Cleto Carbonara)

A75 is a street oriented north-south that from the main gate area leads to the residential quarter Area A. It decides to do a deep sounding (2.30x0.90 m) in the square i-10, in front of the wall M184. This wall closes the street A176 and is placed between the walls M106 to north, belonging to the building BA6, and M185 to south, belonging to the building BA12. The aim of the deep sounding is understanding when the street A176 was closed.



Deep sounding in A75 before excavation (US22 floor)

The deep sounding starts from an elevation of 29.44. The first layer removed is the US22 floor. This is a very thick earth packed soil grayish brown in colour and very compact in consistence which extends for all the southern part of A75. US22 floor returned several crumbled animal bones and shells and some pottery sherds.

US22 floor, to an elevation of 29.25, covers another layer. US769 is an accumulation layer consisting of loam medium compact in consistence and reddish brown in colour mixed with some calcareous stones small in size. In it have been found several crumbled bones and shells and a good amount of pottery sherds. US769 rests on an a packed soil (US769 floor) grayish in colour with traces of plaster in it, found to an elevation of 28.67 and well preserved only in the southern part of the sounding.



US769



US769 floor

Below it, has been recognized the US770. An accumulation layer made of loam compact in consistence and light brown in colour. Some mudbricks are in the southern part of the sounding. US770 returned few pottery sherds and few bones and shells. US770 floor was found to an elevation of 28.48 and consists of a well preserved earth packed soil grayish in colour.



US770 floor

Between US770 floor and the bedrock, found to an elevation of 28.23, there is US775, a layer consisting only of loam brown in colour and very loose in consistence with a large amount of limestone chips interpreted as the preparation of the floor. Along the southern side of the sounding, cut in the bedrock there is a very deep drain channel (M719). The drain channel was filled by US772. It consists of loam brown in colour and loose in consistence mixed with a lot of whitish pebbles. In some points the walls of the drain channel were covered by traces of plaster.

M184 that closes the street A175 ends at the level of the US22 floor and rests on a more ancient wall that to south leaning on the northern wall of the BA12, and on which rests the jamb of the southern wall of the BA6.



Bedrock in A75



Drain channel M708



BA6, BA12, BA15. Preliminary remarks (Vittoria Buffa)

The Area A, South of the Gate Complex, has been the subject of excavations since the beginning of IMTO project. The report of excavations of five buildings, BA1, BA2, BA3, BA4, BA5, and the streets bordering them, A8, A45, A75, built either along the city wall or the so-called Monumental Building 1 (MB1), have been published in Report 2.

Three buildings stand in the centre of area A, bordered by four streets, A75, A45, A113 and A248. One of them, BA6 is, for its size and grand entrance, the most prominent residential structure unearthed so far in Sumhram. Excavation proved that the three building, BA6, BA12, BA15, were at times connected to form a single unit. We suppose that this complex could have had a role in the administration of the town. To support this hypothesis comes the bronze plaquette with ASA inscription found in BA15.

During the SUM15A campaign three deep sounding were dug along external walls of the buildings in question to check their stratigraphic relations. One sounding along another external wall of one of the buildings was dug during the SUM05B campaign. Some results have been acquired.

1. Street A113. The sounding, 1.20 X 0.70 m, was dug from US516 floor, 29.10 m (equal to US22 floor in A45 and A75) to check at which level the eastern external wall M101 of building BA6 was set. It proved that M101 was set directly on the bedrock at the elevation of 28.45 m. The bedrock had been leveled with limestone chips and mud-bricks.



Street A113, sounding from East

2. Street A45. The sounding (2.00 x 1.00 m) was dug from US22 floor along the northern external wall of BA6, M57, during the SUM05B campaign. The foundation of M57 was found at the elevation of 28.45 m. Below the first row of blocks of M57 a row of mud-bricks and loam and small stones rested on the so-called foundation filling of limestone chips (discovered in most places in Sumhram above the bedrock). The bedrock was found at the elevations of 28.01, 27.89, 27.67. It has to be noted that in a sounding in room A63, dug during the SUM10C campaign, the internal face of M57 was found set at the elevation of 29.07 m, about 0.40 m higher than the external face.

3. Street A75. The sounding (2.30 x 0.90 m) was dug from US22floor, elevation of 29.40 m. The sounding was made in front of the western external wall of MBA6, M106, the western wall of street A57, M184 and the western external wall of BA12, M185. The bedrock was reached at the elevation of 28.28 m, covered at places by a layer of limestone chips (the foundation filling) of the average thickness of 10 cm. M185 was built on the bedrock. M184 seems to be set at the elevation of US22floor. It rested on an earlier wall (unnumbered) that started from the corner of M185 and continued below M106. It seems therefore that in an earlier phase, building BA6 comprised also the space occupied later by A57.



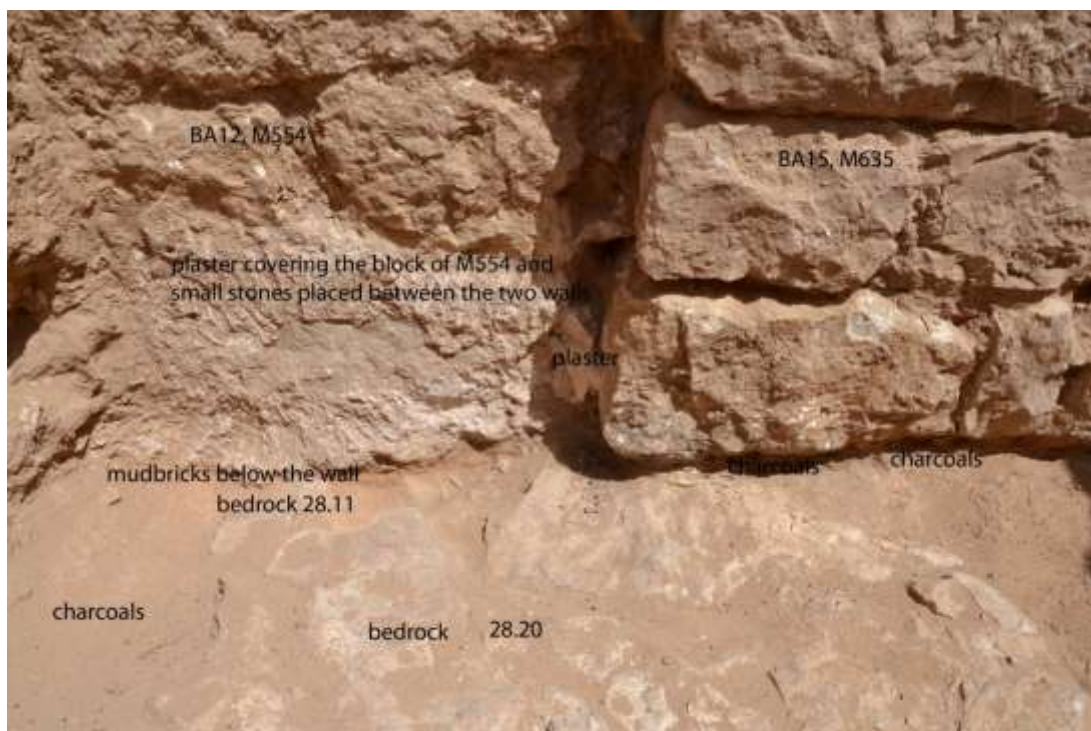
Street A75, sounding

The sounding also revealed an interesting cultural sequence related to the early phase of Area A. Over the foundation filling US775 covering the bedrock, the earliest floor (US770floor) was found at the elevation of 28.48 m. It seems likely that it has to be put in relation with one of the earliest floors in square A8, US76floor. A very interesting feature was discovered at the bottom of the sounding. A channel about 0.20 m wide (M719) was dug in the bedrock (or was built in a depression of the bedrock), running East-West. Its sides were lined with limestone slabs, at times covered by plaster. The eastern end of the channel, as we can see it now, goes under the first block of the wall (still unnumbered) discovered below M184. The channel has been excavated to the depth of 27.77 without reaching its bottom. Different questions arise from this finding. A channel dug in the foundation filling (covering the bedrock) was found in square A8. It is related to the earliest floor in the area, US76floor. It runs South-North and bends to flow alongside the northern face of wall M5 and to exit in the Gate Complex. This channel remained in use until the last phase in this area. The southern stretch of the channel in the US22floor has been identified just where the western end of M719 the sounding ends. Only an enlargement of the sounding will clarify if M719 has to be identified with the channel in square A8. Furthermore its coming out from under the earliest wall of A57 also needs further investigation in the deepest layers of A176, where excavation in SUM11C stopped at the elevation of 28.59 m, without reaching the bedrock. Above US770floor an accumulation US769 was found. It was covered by US22floor (the floor marking the renovation in Area A at the beginning of the 3rd constructional phase - see Report 2).



Street A75, channel in bedrock

4. Street A248. The sounding was dug in front of the southern wall of BA12, M554, and the southern wall of BA15, M635. The bedrock was reached at the elevation of 28.20 in the middle of the sounding and 28.11 in front of M554 of BA12, where a layer of some mud-bricks were placed to fill the shallow depression present there in the bedrock. Below wall M635 of BA15 a layer of charcoal was detected. The narrow gap between walls M554 and M635 was filled with small amorphous stones and a layer of thick plaster covered it as well as the lower part of M554. It seems likely that BA12 was built a short time before BA15. The earliest floor in the sounding, US780floor, was detected at the elevation of 28.54 m. It probably has to be put in relation with the earliest floor found in the sounding in street A75, US770floor at the elevation of 28.48 m.



Street A248, sounding

The soundings show that buildings BA12 and BA15 were built in the first (or the second ?) constructional phase identified in Area A. The study of the ceramics could eventually allow to be more precise on the attribution of the buildings to one or the other phase, and on a possible appreciable difference in time existing between the construction of the two buildings.

For building BA6 it was confirmed that its early phase (detected only in room A64a and lower deposits of A57) was built in the first (or second ?) constructional phase identified in Area A. The second phase of the building belongs to the 3rd constructional phase in Area A.

Excavation in Area F, Square A20 (trench supervisor: A. Sedov)

During the very short SUN15A season excavations at the SW corner of the square A20 were carried out. Ruins of structure (building BF8) constructed against the external wall M93 of the so-called Monumental Building 2 were discovered here in the previous seasons. From the E it was delimited by a street A217, and consisted of several rooms: room A216 (a staircase well), room 223 (with paved floor and adjacent staircase M633), room A224 (partially excavated), room A227 (partially excavated), room A228 (partially excavated).

Room A228

In the present season excavation of room A228 was completed. It is a rectangular room, 3.0x3.9 m in size, delimited from the S by remains of mud-brick platform with stone-foundation. A staircase M634 was constructed at the SE end of the platform. It leads on the top of platform and, probably, gave the access to the Monumental Building 2. The wall M603 delimited the room from the E, the wall M600 – from the N, and the wall M601 – from the W. Cultural deposits in the room were denoted as US687. At the elevation 26.050 a sort of floor (US687floor) was reached. US687 consisted of greyish very compact soil mixed with big amount of stones of different size, very few fragments of pottery, animal bones, shells, flecks of charcoal. Rectangular stone tool with cavities on the long sides, and two fragments of stone-vessels were found in US697.

Deep sounding

The SW corner of the room A228 was occupied with small deep sounding, made by C. Condoluci in 2013 (see “*Sumhuran. Preliminary Report. November-December 2013 (SUM13C)*”). In the present season the deep sounding was enlarged to 1.5x3.0 m in size (along the outer face of the wall M93) and circa 1 m deep. Part of mud-brick platform constructed against the wall M93 was demolished for this purpose. The main purpose of this enlargement was to verify the results of 2013 sounding and to get new data on stratigraphy of this part of the Area F, relative chronology of the construction of mud-brick platform M634, adjacent building BF8 and Monumental Building 2. The results can be summarized as follows.

- 1) The bedrock was reached in the deep sounding at the points 25.24-25.51. Depressions between stones of the bed-rock were naturally filled up with very compact whitish or whitish brown loam mixed with very small size stones (layers US632 and US629 in the Condoluci’s *Report of SUM13C campaign*). We can consider them as a “virgin soil”.
- 2) These layers were levelled with a sort of surface, which in the season SUM13C was denoted as US628floor.
- 3) Thin layer US628 (up to 0.2-0.25 m thick) covered the so-called US628floor can be considered as a sort of levelled filling before any constructions in the area have been started. It is rather soft loam mixed with low percentage of mud, yellowish in colour.
- 4) The foundation of mud-brick platform M634 as well as foundation of the outer face of the wall M93 was placed directly on the layer denoted as US628.
- 5) The lower part of the mud-brick platform M634 was made from very compact whitish brown layer of limestone chips mixed with brownish loam and scattered medium size stones. The layer slopes drastically northwards with thickness reduced from 0.6 m against the outer surface of the wall M93 to the 0.05 m at its northern end (US626 in the Condoluci’s *Report of SUM13C campaign*).
- 6) The upper part of the mud-brick platform M634 was made from very compact yellowish mud layer mixed with low percentage of loam (US621 according to Condoluci’s *Report of SUM13C campaign*). The northern side of the platform was strengthened with row of roughly cut stone blocks.

Preliminary conclusions

- 1) The “virgin soil” and bed-rock near the outer face of the wall M93 was reached at the point 25.24. It slopes northward and under the room A224 of BF8 was reached at the point 25.07.
- 2) The foundations of walls of BF8 in its southern side (near MB2) was placed on the “virgin soil” and bed-rock, while in its northern side (rooms A223 and A224) – on the accumulation of cultural deposits (US660) above the bed-rock.
- 3) The foundation of the outer face of the wall M93 of the Monumental Building 2 was placed partly on the bed-rock, partly – on a sort of levelled filling at the point 25.51.
- 4) The foundation of the mud-brick platform M634 constructed against the outer face of the wall M93 of MB2 was placed on the same level as the wall M93.
- 5) The constructions of the building BF8 and mud-brick platform M634 with staircase at its SE side were contemporary and might correspond with US55 in the square A20.
- 6) The wall M93 of the MB2 was built prior the construction of BF8 and M634.

It seems that in the trench at A20, which we can consider as deep sounding, we revealed a certain structure belonged to the one of the earliest phase of the city existence. It was erected at least previous US55 accumulation in the square A20 and was partially destroyed during the construction of the US54 floor. Later, during the period of accumulation of US54 deposits, and, probably, later, only part of the building BF8 was in use, namely the room A223 and adjacent staircase M633 with staircase well A216. In addition, the staircase M634 and adjacent mud-brick platform were in use to get the access on the top structures of the Monumental Building 2.

A piece of burnt frankincense was found in US687 in A228 against the wall M600.

Excavation in Area F, street A43 (trench supervisors: Carlotta Rizzo and Cristina Pappalardo)

Works of SUM15A in street A43 started on the 31th of January and stopped on the 21th of February.

Street A43 was already investigated in SUM14A and SUM14C. During this campaign we continued the excavation from the level reached in the last campaign (26,64).

As last mission, we follow the stratigraphy left *in situ*, in SUM14A, below M602. This is made by US623, US647, US635, US652. The purpose of this mission was digging the different layers until the last floor, named US652, but during the excavation we found two more layers made of accumulation and related floor, respectively named **US753** and **US767**.



Stratigraphy of A43 street below M602

Furthermore, in the last archaeological campaign of SUM14C, in the Area F, A43, a new stone wall (M692) was found. It delimits ambient A43 in two parts: northern and southern, in way to give easier comprehension to bounds of the excavation.

In the northern part of street A43, under US647, instead of US635, a new layer was found, named **US753**. This is an accumulation with related floor. The accumulation was made of medium compact reddish loam with traces of ashes, charcoals, stone of small sizes and smashed red mud-bricks. Also fragment of vitrified clay (sample 38) and iron slags (sample 39) were collected as samples.

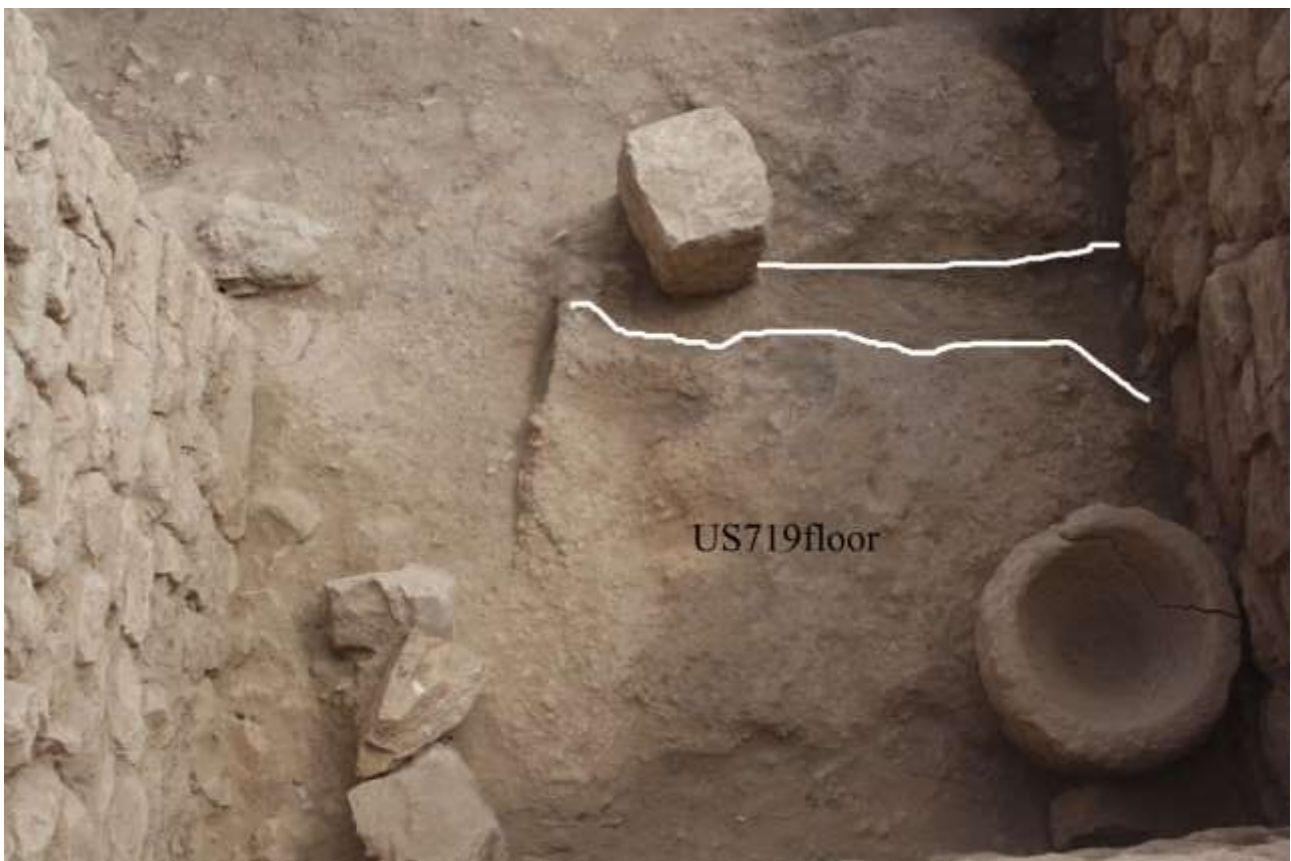
The floor, reached at an elevation of 26,43-26,53 was light grey in colour, argillaceous matrix with white inclusions and traces of gypsum and charcoals. The floor was very badly preserved and with a

not uniform thickness for the presence of different fireplaces. Some pottery, animal bones and marine shells were collected. Regarding to the pottery: 48 shards of amphorae and 2 glazed and 1 *Terra Sigillata Italica* was found.

The following items have been discovered in the layer: a clamp (MB907), two iron objects (MI250, MI252), two coins (Co917, Co922), a hand-stone (S2720), a stopper (CI709).

During the digging of US753, **US719** was investigated too. It was already investigated in SUM14C and not completely removed. Through the removal of its accumulation, the floor was reached at an elevation of 26,36. This was very compact in consistence, brownish red in colour with white inclusions. This floor was cutting by a pit (depth: 17cm) made of soft brownish loam (see picture below). The preparation of this floor was made of smashed red mud-bricks (sup. el. 26,24). Few pottery was collected, mainly storage vessels, as 11 amphorae. No objects was found.

During the digging of US719 also the circular limestone basin (S2727) individuated in SUM14C, was unearthed. The basin fill consisted of a layer, named **US761**, made of very compact greyish clay (sample 51). For the presence of an indistinct thin accumulation of soft soil and ashes with few animal bones (sample 52) on the top of S2727, it could be interpreted like a place for firing.



Pit in US719 floor

In the South part of A43, the work started with the removal of US724, a soft accumulation loam layer, reddish-brown in colour, investigated in SUM14C but not completely removed. The *stratum* covered all this part of the area and during this removal a new wall **M709** it has been put in light.

It is 91x107cm, oriented North-South, made by six rows (from the floor) of stone in medium and big size, well disposed on the external face (East part) and not so well on the internal face in which it is collapsed. The northern part leans to wall M692, delimiting a small “room” (E-M709; N-M692; W-M118).

At this layer belong six coins Co920, Co921, Co924, Co925, Co926, Co927, one *Tutufa Bardeyi* Sh728 and one stone tool S2743.

On West side US724 covered at an elevation of 26,24 a soil layer reddish brown in colour, medium soft, characterized by lenses of grey and dark ashes mixed with a lot of pieces of gypsum and reddish mud-bricks loosed. It was an accumulation layer named **US763** between M709 and the city wall M118.

After the removal of US753 in the northern side and US724 in the southern-east side, a new layer was individuated, **US767**. This is an accumulation with related floor, made by loose grey loam with several traces of charcoals, ashes and also stones of small size, maybe pertinent to fireplaces. Some animal bones and marine shells were found. Different kinds of samples were collected, such as iron slags, bronze slags, sulphur and vitrified clay (samples 53-54-55).

The floor was not uniform in thickness, in the highest part (the southern one) it was reached at an elevation of 26,37, in the lower one at 26,20. It was very compact in consistence, reddish in colour, clay matrix, with white inclusions and charcoals.

During the cleaning of the floor a post hole, made of very compact loam and reddish mud-bricks, (d. 13 cm, h. 27) was found at an elevation of 26,27.

US 767 floor is also preserved under US719 "pit" below M681=M686. Few objects were collected: two coins (Co923, Co930), a nail (MI254), two rods (MI255, MI256), a stone vessel (S2735), a lid (CI71). The pottery shards found belong to all categories and shapes, mainly storage, such as amphorae. Fine wares as *Terra Sigillata Italica* and *Wheeler Type I* were found.





US767 floor in southern part of A43

During the removal of US767, below the wall M685 we found a new layer named **US777**, made by brown soil and stones of small size, maybe the foundation filling of this wall. In this part the US777 is not completely removed. For more explication see the following paragraph about deep sounding.

Under US767, **US635** was brought to light. Its accumulation was very similar to US767. It was made of loose grey loam with several traces of charcoals and ashes. It was also characterized by the presence of several stones of small size and traces of gypsum. Different traces belonging to fireplaces were found in all the area. During the removal of the accumulation, the floor was brought to light, at an elevation of 26,12 circa. It is medium compact in consistence, reddish grey in colour with white inclusions and charcoals. The floor, left *in situ*, is not uniform in thickness and it is good preserved only in the eastern part of the street and below M692. In fact its limits are clearly visible (see the following picture) because it is cutting by several pits, mainly in the southern part of the street. Here were found, below M708, two definite pits: the first one (inf. elevation 26,00) filling by **US779** made by soft greenish brown soil with traces of charcoals and a lot pieces of vitrified clay (samples 95 and 109); the second one filling by gypsum and pieces of white plaster, not completely investigated.

The follow objects were collected: two coins (Co931, Co932); two iron objects (MI259, 260); three nails (MI258, MI261, MI262); a crucible (G226); some shell beads (Sh751); two shell pendants (Sh754); one stone vessel (S2751).

A consistent shards of pottery was found, belonging to different types, mainly storage like amphorae, straw temper storage vessels and also two Black and Gray types. Fine pottery was found as well like wavy rim, glazed and also *Terra Sigillata Italica*.



US635 floor after excavation

We decided to stop the excavation at this layer because during the removal of US635 accumulation, in the southern part we found traces of white plaster.

Following these ones, we enlarge to the western side under US763 to see its course. We found at an elevation of 26,08 four slabs pertinent to a structure, probably a water channel.

This is oriented East-West, with a slope of 0,36 cm from the highest part (E) to the city wall M118 (W), where it seems stop.

Two of the slabs present two ASA letters, respectively M and L, probably related to the mason or to give the correct orientation to the stone.



“channel” in A43



Detail of ASA letters

Further investigation in the south of A43

With the aim to understand the course of the “channel” in A43, we decided at the end of this campaign to enlarge also in the southern part of this area. Following the stratigraphy of the surface of Area F we finished to remove **US700**. This consisted of light brown sandy layer with traces of ashes and charcoals. On the western part below M118 there was a collapse made of medium and big well dressed stones.

Some objects were found such as two stone vessels (S2740, S2742); two crucibles (G225, G227); two oil lamps (Sh748, Sh752); a bone object (B100); an iron blade (MI263); some shell beads (Sh743).

Below US700, we brought to light **US782**, made by very loose soil reddish brown in colour with white inclusions and charcoals. The followings items were collected: an oil lamp (Sh757); a Tutufa Bardeyi (Sh758); a bead (G230).

During the investigation of this layer we unearthed a new wall made by well dressed stones, named **M718**. The wall need further investigation. US782 is not completely removed.



Wall M718

Deep sounding in A43

With the purpose of understand the foundation of the city wall M460 and that one of the small tower, M681=M686, we decided to make a deep-sounding (1,60x0,70 m) in A43 below M460 and M681=M686. In this part the floor of US635 is not preserved, but there was a layer with loose soil reddish brown in colour with a lot of stones of medium and small size named **US777** (sup. el. 26,13). This is the foundation of wall M681=M686 made also of green mud-bricks (sup. el. 25,71). Under US777 new layer was found named **US778**. It was made by loose reddish brown soil with some small stones and very few traces of ashes. Four fragments of storage vessels and few animal bones were found. At an elevation of 25,32 we found a very compact layer, reddish brown in colour with white inclusions, named US778 floor.

After the removal of US778 a new layer, similar to the last one, was found named **US783**. It was made by loose dark brown soil with organic matrix and some small stones. No fouds were collected. But a floor very hard packet soil in consistence was found at an elevation of 25,00. The last layer was the foundation filling of M460, **US784**, made of small white lime chips and loose soil (sup. el. 24,88). The bed-rock was found at an elevation of 24,63.

The deep-sounding brought to light the foundation of the city wall, M460. This doesn't lean directly to the bed-rock, but has a foundation made of lime chips and soil of about 25 thickness.



Before excavation

M708

In the southern part of A43, with the removal of US724 on the East side, a new wall has brought in light. It is named **M708** and it is made by five rows (h. 125cm from the floor) of stones in medium and big size, not well disposed on the external investigated face. It is semicircular in shape, oriented NE-SE, and leans to the western wall of MB2, M110, on the North side, and to M111 on the South-East.



Wall M708

Also the space between M110, M708, M111 has been investigated. Here was brought to light a new layer, named **US776**. It was made by sand light-brown in colour and medium soft in consistence. It is mixed with pieces of white plaster. It has the aspect of a wash deposit and covers the northern part of M111. Here the stones are covered by plaster and are very polished, with a small dip between them. Moreover a fragment of limestone basin is located above the north-east part of M111.

This layer was not completely removed and needs of further investigation.



US776

Preliminary observation

As discussed in SUM14C, the excavations of this year confirmed us that the situation in A43 street is more complicated than we suspected. In fact, the digging of the floors and related accumulations shows us that transit in the street wasn't habitual. The thin thickness of the layers, in special way of the floors, confirm us this hypothesis. Moreover, the bad preservation of the surfaces of the floors, especially of US635, it could be linked to a different use of the street. The huge presence of pits, fireplaces, iron and bronze slags, samples of vitrified clay, reveal that street A43 it could be also a working place.

During the last cleaning of all the area it was identify traces of gypsum, plaster and backed clay, probably related to a furnace (it needs further investigation).



Traces of furnace?

Archaeological excavation of the south-west area of the Monumental Building 2 (trench supervisor: Silvia Lischi)

During this campaign we continued the excavation in the surrounding of the Monumental Building 2 for understand the placement of the structure inside the settlement and its possible connections with other buildings and adjacent structures. Moreover, the survey of the surrounding area is essential to understand where it could be placed the entry.

The south area of MB2, and in particular the room A50, had already been excavated during the campaign SUM14A.

During SUM15A we was excavated extensively the US700, a surface layer of sandy matrix and loose, light brown loam with inside pottery fragments, bones, shells, iron slags and some object (Sh708, S2672, S2673, S2674, MI241, MB886, S2675, Co895, Co896, S2676, S2677).

The extensive excavation of this layer has linked the area to the east of MB2 (already partially excavated during the campaigns SUM14A, SUM14B and SUM14C), with the south of which we are dealing and the west area. To the west is of particular interest the connection with the stratigraphy of A43, interpreted as a street, under archaeological investigation from SUM13C.

The interface of US700 has an elevation is around 28.20 m to the south and 28.65 m to the east. The elevation and the type of materials found allow find the similarities between the US700 and the US623 (28.00) found to the west of MB2, in A43.



*Area South of MB2 (east view):
before excavation of this
campaign.*



*Area South of MB2 (south-east
view): after excavation.*

Room A50

The room is defined by the walls M674 to the east, M111 to the south, M678 to the west and M110 to the north. This room was excavated during SUM14A by Sarath Chandrababu. He removed part of the first layer, called US654.

US654: accumulation layer, starting removed by Alexia Pavan during this campaign, the layer consisting in light brown loam with pottery shards, bones, shells and objects inside (MI242, MI243, MI244, MB887, S2680, S2681, S2683). Under US654 accumulation we found the US654 floor. The floor was found at a level 27,87 m. Contemporary to this floor is the step that leaning on M674, called M702.



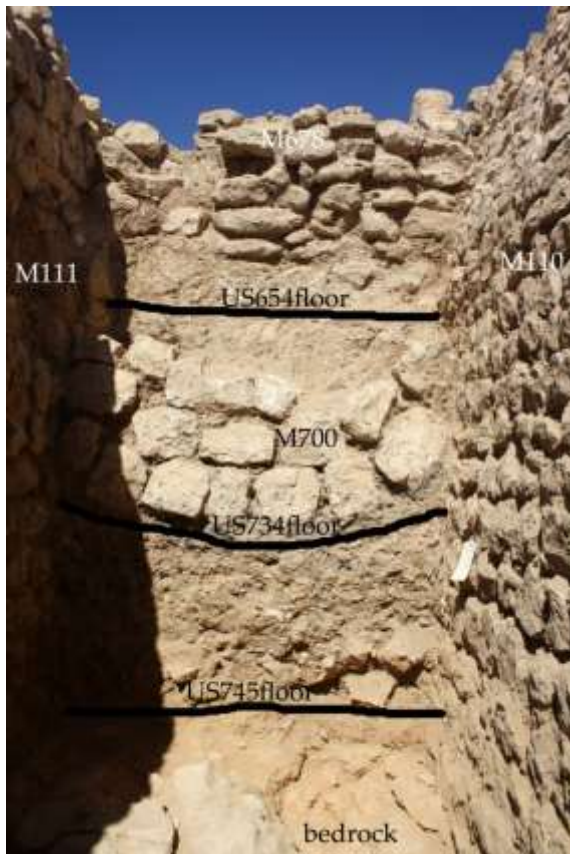
A50 (west view): during excavation, US654 floor.

US734: layer consisting in light brown soft loam with many pottery shards, bones, shells, and objects (MB902, MI245, S2699, Sh714, S2700, Co901, Co902, Co903, Co904, MI247, Sh718, S2709, Sh719, Sh720, Sh721, S2711). Removed this accumulation layer we found a new limestone wall, called M700. This wall is contemporary with the floor found under the US734 accumulation because leaning on the same floor, US734 floor. During this phase the room A50 was defined by M674 to the east, M111 to the south, M700 to the west and M110 to the north. The floor was found at a level 27,08 m.

US745: accumulation layer composed by masonry blocks medium in size and accumulation earth (Co907, S2710, Sh722, G223, Co918, S2722). For the type of masonry blocks found seems possible to assume that they are part of the collapse of the outer side of M110 (south perimetral wall of MB2). Below this layer of collapsed wall we find an accumulation that leans directly on US745 floor. The floor was found at a level 26,37 m. In this layer were found fragments of pottery, bones,

shells and objects although in smaller amounts than the previous one. It seems possible to say that this is the first floor of the area, in fact leans directly on the foundation filling, called US768. During this phase the room A50 does not seem to have a closure to the west and probably also to the east, while it is certain that it was already present M111 to the south, because it has the foundation at the same level of M110. It might then have been a room of passage.

US768: foundation filling layer composed to limestone chips, fragments of mudbrick and compact earth. In this layer there were not found any materials. The bedrock was found at a level 25,77 m. The walls M110 and M111 leans directly on the bedrock.



A50 (east view): section with wall and floor.

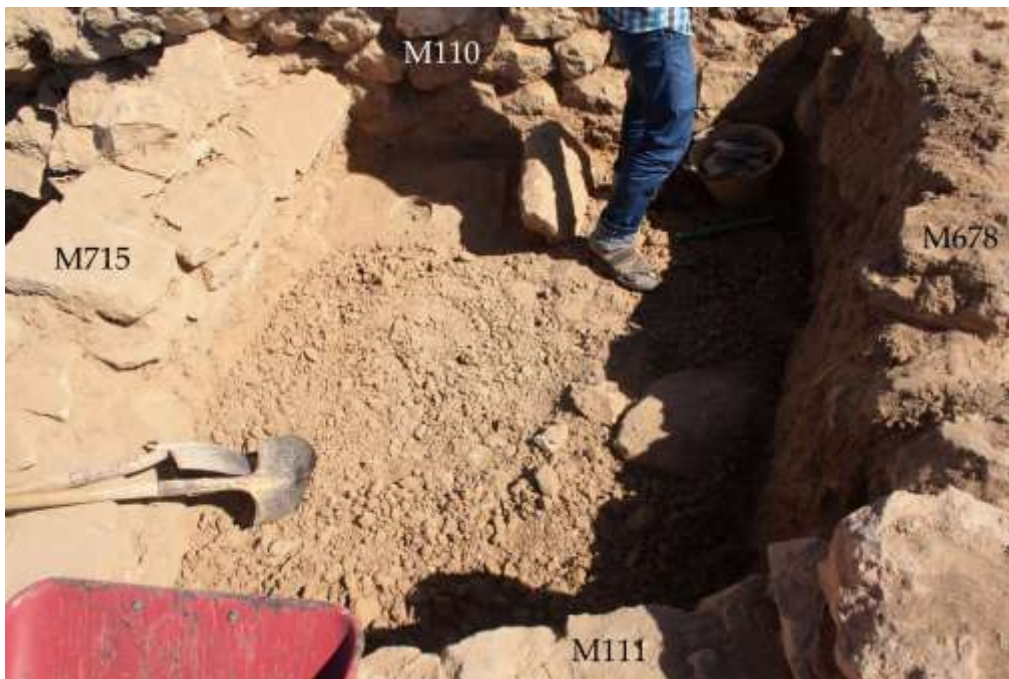
During the next campaign it will be important remove the step of the M702, and the section under this, for understand where is the foundation of M674.



A50 (south view): after excavation.

Room A245

This room is located to the west of A50. It's defined by the walls M678 to the east, M111 to the south, M715 to the west and M110 to the north.



A245 (south view): during excavation.

Here, under the surface level (US700), we found the layer called US751.

This layer is reddish in color and medium compact, inside we found many fragments of plaster and gypsum. Very few materials we found inside the layer (S2717). Under this accumulation layer we found the US751 floor. The US751 floor is composed to the stone slabs near the perimetral wall and to the plaster in the center of the room, sometimes bad preserved. In the center of the room the plaster forms a basin that have a foundation at a height of 27.43 m. The point of the foundation of the basin in the plaster is the same as the foundation level of M715. The US751 floor was found at a level 28,29 m.

There are two limestone slabs that leans on the floor and definitely not are in situ, one with a drainage channel and the other, in addition to the drainage channel, also has a central hole.



A245 (south view): after excavation.

Room A246

This room is located to the east of A50. The perimetral wall are M676 to the east, M675 to the south, M674 and M111 to the west and M110 to the north.

The surface level removed during SUM14A campaign, under this we found US754.



A246 (east view): before excavation.

US754: accumulation layer light brown in color and medium compact. Inside we found few pottery fragment, bones and many shells (Co913). Under this accumulation layer we found the US754 floor, very compact. This floor is contemporary with the sandstone staircase (M703) composed of three steps that was removed to allow the excavation of the entire room. The US754 floor was found at a level 28,08 m.

US755: this layer is very loose and light brown in color, inside very few materials (S2721, S2723, Sh726, Sh740, B101, MB913, Sh749, Sh750). The layer was found at a level 27,31 m.



A246 (south-east view): US755 floor, during excavation.

US757: very loose layer, reddish in color. Inside we found many charcoals and bones, few pottery shards and many shells (Sh723, Sh737, Sh744, MB912, Sh753, S2749, Sh755, S2753). Under this accumulation layer we found the US757 floor, reddish and compact. The US757 floor was found at a level 26,79 m. On the same floor leans the wall called M676.

US765: medium compact accumulation layer, reddish brown in color. Inside we found many fragments of plaster, few pottery shards, bones, many shells and few objects (S2729, Sh730, Sh736, MB914, Co934). Under this layer we found the plaster floor, called US765 floor. This floor was found at a level 26,19 m and cover the lower part of the perimetral walls.



A246 (north view): after excavation.

Archaeological excavation of the east area of the Monumental Building 2 (trench supervisor: Said Al-Hamri and Silvia Lischi)

During this campaign we continuous the excavation in this area started During SUM14B and continued during SUM14C. The inability at the time to extend the excavation has not allowed us to understand the relationships between the various rooms found in the area.

Room A236

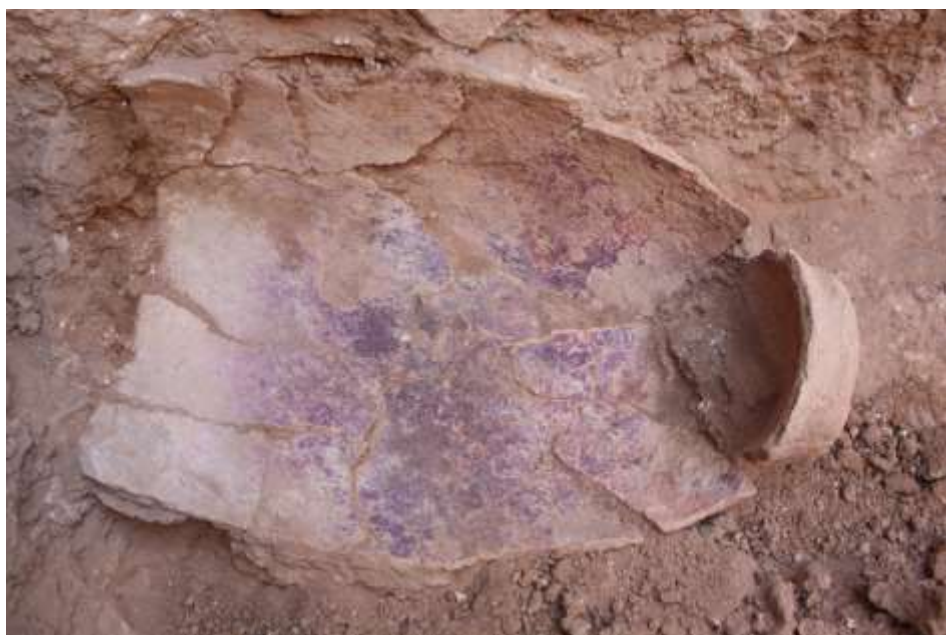
The excavation of this room is started during the campaign SUM14B. During SUM15A has provided for the removal of US702, accumulation layer of loose loam greyish-brown in colour. Limestone blocks small in size and charcoals as from the northern part of the room. Blocks of bigger size was found along the eastern side of the room. In correspondence of the southern end of M636, at the center of the eastern side of the ambient, the US returned several fragments of mudbricks. Going down with the excavation it Has Been Noted the presence of limestone blocks in big size. This blocks probably linked with the collapse of M699, oriented east-west, the ambient That divides into two smaller rooms, A236a to A236b north and to south. US702 also returned a large amount of animal bones and a good amount of pottery.

Room A236a

The room is defined by the walls M710 to the south, M109 to the west, M650 to the north and M636 to the east. After remove the US702 we found:

US729: accumulation layer consisting in medium compact loam brown in color. Inside we found charcoals, pottery shards, shells and bones. Under US729 accumulation we found the US729 floor.

US730: accumulation layer reddish in colour and medium compact. Inside this layer we found many pottery shards, bones and shells and some objects. Under the accumulation layer we found the US730 floor. The floor was found at a level 27,02 m. That leans on this floor we found a complete deep bowl/ hole mouth jar in the corner between M636 and M650. This pottery on the internal surface is completely covered by purple residues.



A236a (west view): deep bowl with purple residues inside.

US733: accumulation layer of compact reddish brown loam, many fragment of plaster we found inside. Inside the layer we found many pottery shards, shells, bones and objects. Under the accumulation layer we found US733 floor. The floor was found at a level 26,16 m. The floor is cut by two circular holes completely filling by sea sand with little fragments of shells. The big one found near M710 has US735 identifying cutting and filling is US736. The small one found near M109 has US737 that identifies the cut and fill is US738.



A236a (south view): US733 floor with one pit.

US739: accumulation layer of compact dark brown loam. Inside we found many fragments of plaster, mudbricks, many ashes and charcoals. Under this layer we found US739 floor. During this phase the wall M650 and M636 are over. On this floor we found three bases of column, one in the center of the room and the other two in the corner with M109, M650 and M650, M636. The floor was found at a level 25,84 m.



A236a (south view): US739 floor with bases of column.

Room A236b

The room is defined by the walls M672 to the south, M109 to the west, M710 to the north and the section to the east. After remove the US702 we found:

US743: accumulation layer of medium compact brown loam, loose in some parts. Inside we found pottery shards, shells, bones and objects. Under this accumulation layer we found US743 floor. The floor was found at a level 26,15 m.

US746: this accumulation layer of medium compact loam, with fragments of mudbricks and many charcoal, was reddish brown in color. Near the wall M109 we found a fireplace. Inside we found pottery shards, shells, bones and objects. Under the accumulation layer we found US746 floor. The floor was found at a level 25,85 m. On this floor, near the fireplace in the corner between M109 and M710 we found a complete flask.



A236b (east view): after excavation.

In the east part of the room we removed before US700 accumulation. Under the accumulation layer we found US700 floor. The floor was found at a level 28,23 m.

Under the floor we found US701 accumulation and US701 floor at a level 27,94 m.

Room A235

The room is defined by the walls M669, M711 to the south, M109 to the west, M672 to the north and M705 to the east. After remove the US701 accumulation we found two new walls M705 and M706, and a new small room A247. Under this accumulation layer we found US701 floor at a level 27,68 m.



A235 (east view): before excavation.



A235 (west view): after excavation.

Room A221

The room is defined by the walls M636 to the west, M650 and M381 to the north, M637 to the east and M638 to the south. Inside this room we removed US662 accumulation, light brown in colour and medium compact. Under this accumulation layer we found US662 floor, contemporary with a door in M636 near the corner with M650. The floor was found at a level 28,76 m.

Under this floor we starting to remove US758. This layer covering M716, that seems connecting with M650. This layer was not finished digging.




A221 (south view): before excavation.




A221 after excavation


Object Index Card

Registration Nr. SUM15A, US745, 2 S2710			
Provenance Area F, A50, US745			
Drawing code Nr.			
Definition Incense burner Type I	State of preservation Good	Measures w. 16 h. 28 th. 11	Shape Truncated-pyramid base
Material Limestone	Preserved part Complete		Section
Description <p>Complete limestone incense burner with truncated-pyramid base (9 x 13.8 x 8) surmounted by a projecting cuboid element (14 x 16 x 11) showing a bas-relief decoration on the frontal and lateral sides. The decoration on the back side is incised. The upper recess is rectangular in shape and trapezoidal in section (11 x 6 x 2.5). The bottom shows several chisel marks. Rim is squared (th. 2.2) and preserved only on the left part. At each corner had to be merlons only partially preserved on the left corners. Between the base and the cuboid element there are two rectangular elements with a bas-relief decoration.</p> <p>Decoration: the upper cuboid element shows on the frontal face a frieze of dentils. Below it the astral motif of the crescent moon and the disc on a trapezoidal base (decorated with horizontal incised lines) placed in a squared panel between two false-windows. The lateral sides are decorated with projecting and recessing vertical rectangular panels on a frieze of three dentils. The back face shows a series of incised oblique lines to form a motif of lozenges. Below it there is a frieze of dentils.</p> <p>The first central rectangular element (3 x 13.5 x 8.8) has triangles on the frontal face. The other three sides show the motif of dentils. The second central element (4.3 x 12 x 7.5) has dentils on all the four faces.</p> <p>The base has a well smoothed surface. On the frontal face there is incised the ASA letter "m". Traces of red painting (hematite) are on the upper cuboid and on the central elements.</p>			
Responsible C.C.		Date 29/01/15	


Object Index Card

Registration Nr. SUM15A, US732, 6 S2684			
Provenance Area A, BA12, A191; US732			
Drawing code Nr.			
Definition Eye stelae	State of preservation Fair	Measures l. w. 18.1 h. 26 th. 5 diam.	Shape Rectangular
Material Limestone	Preserved part Almost complete		Section Sub-rectangular
Description <p>The stelae has a rectangular shape. The upper side is completely missing. The other three sides are only partially preserved. The frontal face is flat and well-smoothed. The back face is rough and shows pointed chisel marks.</p> <p>The oval-shaped eyes (w. 3.5; h. 2.6) are made of an incised line 0.3 cm wide. The tall triangular nose is made of two vertical and one horizontal incised lines 0.3 cm wide. The mouth is simply marked by an horizontal incised line 1 cm long and 0.2 cm wide.</p> <p>The so called <i>Eye stelae</i> are well known in South Arabia mainly in funerary contexts. In Sumhuran are already known two parallels for this kind of stelae:</p> <p>SUM08B, US275, 16, S1192 SUM12C, US556, 4, S1931.</p> <p>The same decoration in Sumhuran was found also on a composite incense burner: SUM14A, M25, S2493.</p>			
Responsible C.C.		Date 20/01/15	


Object Index Card

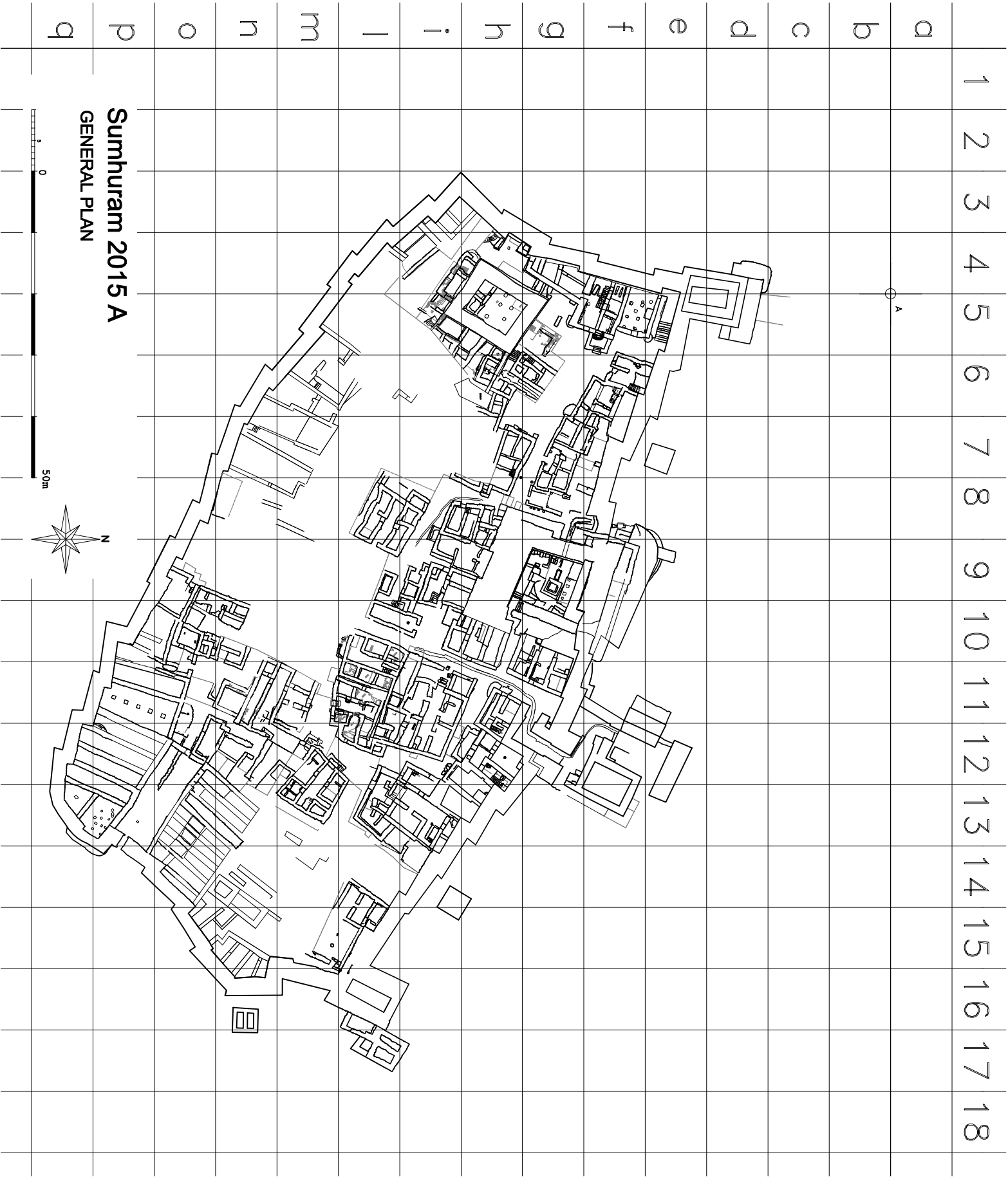
Registration Nr. SUM15A, US662, 12 S2718			
Provenance Area F, A221, US662			
Drawing code Nr.			
Definition Incense burner	State of preservation Good	Measures l. w. h. 6.5 th. diam. 11.8	Shape Circular
Material Limestone	Preserved part Complete		Section
Description <p>Complete circular-shaped limestone incense burner. The object is set on three triangular-shaped legs (w. 4.3; h. 1.7) joined in the centre of the base in star shape. In the space among the legs there are splintering marks. External wall is straight and covered by a whitish patina. The upper recess is defined by a slightly rounded rim (th. 1.2) and has a circular shape with a trapezoidal section. The receptacle is filled by a totally burnt substance that probably could be frankincense.</p> <p>Decoration: the external wall is decorated by the common motif in Sumhuram of engraved obliquely intersected lines, forming a grid of rhomboidal and lozenge elements, that covers also the legs. Traces of red painting (hematite) are also visible.</p>			
Responsible C.C.		Date 05/02/15	

Object Index Card

Registration Nr. SUM15A, US662, 15 S2725			
Provenance Area F, A221, US662			
Drawing code Nr.			
Definition Incense burner (Type III)	State of preservation Good	Measures l. w. h. 6.9 th.	Shape Circular
Material Limestone	Preserved part Complete	diam. 11.6	Section
Description Complete limestone incense burner circular in shape. The object rests on four triangular legs (l. 3.8; w. 4.9; th. 0.8). The space among the legs is well smoothed. The exterior wall is straight and smoothed. The upper recess is circular in shape and trapezoidal in section (diam. 8.8; dp. 1.7). On its bottom and wall there are some traces of burnt. Rim is squared (th. 1.4). Decoration: it covers the exterior wall of the object and of the legs. The decoration consists of incised intersected lines forming rhomboidal and lozenges elements. The exterior wall also shows traces of red painting (hematite).			
Responsible C.C.		Date 09/02/15	

Object Index Card

Registration Nr. SUM15A, US662, 16 S2726			
Provenance Area F, A222; US662			
Drawing code Nr.			
Definition Incense burner (Type III)	State of preservation Good	Measures l. w. h. 5.3 th. diam. 11.8	Shape Circular
Material Limestone	Preserved part Complete		Section
Description Complete limestone incense burner circular in shape. Base is flat and well smoothed. Exterior wall is straight and smoothed. The upper recess is circular in shape and trapezoidal in section (diam. 8.4; dp. 1.4). On its bottom there are some traces of burnt. Rim is rounded (th. 1.4). The object is covered by a yellowish patina.			
Responsible C.C		Date 09/02/15	



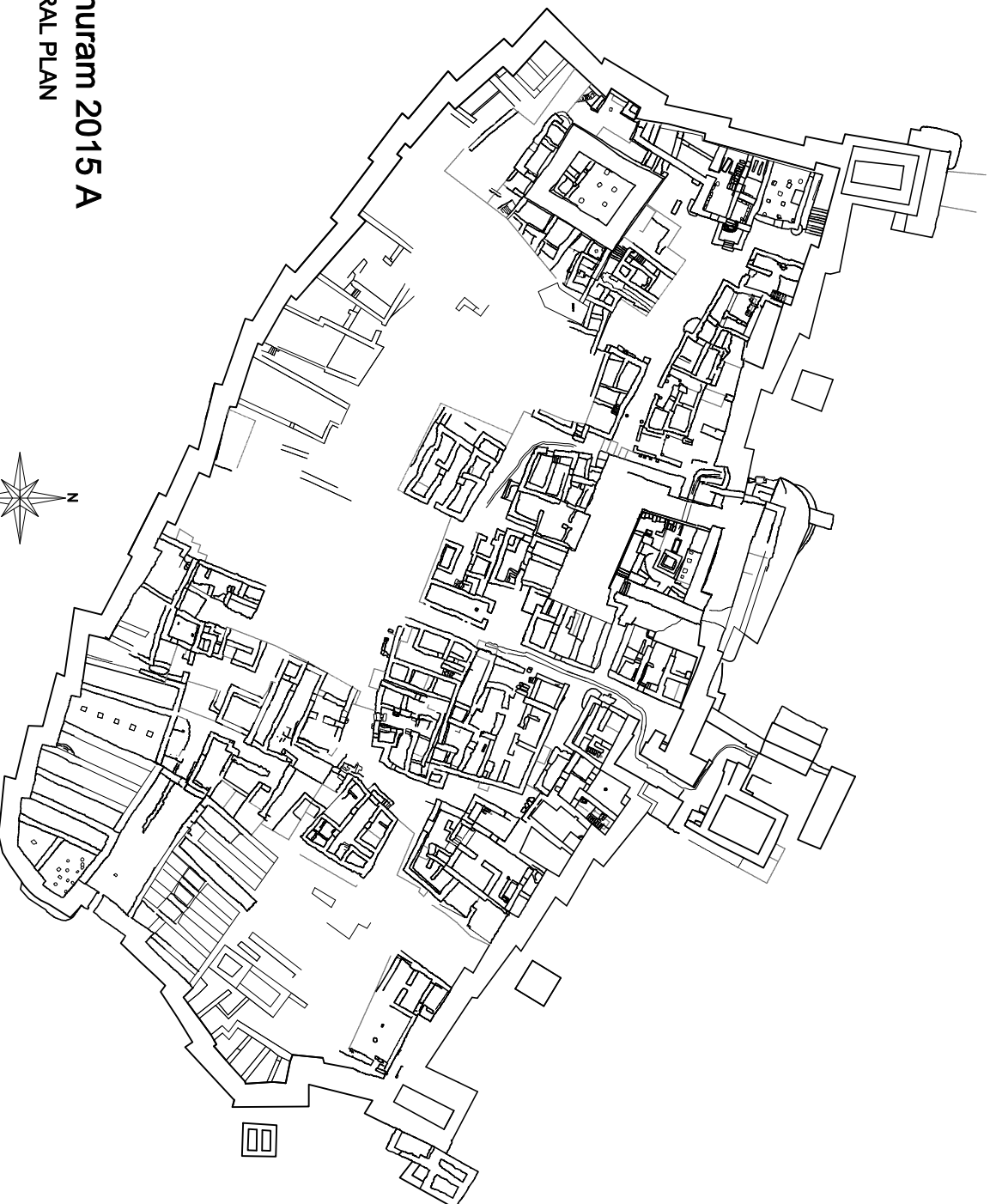
Sumhuram 2015 A
GENERAL PLAN

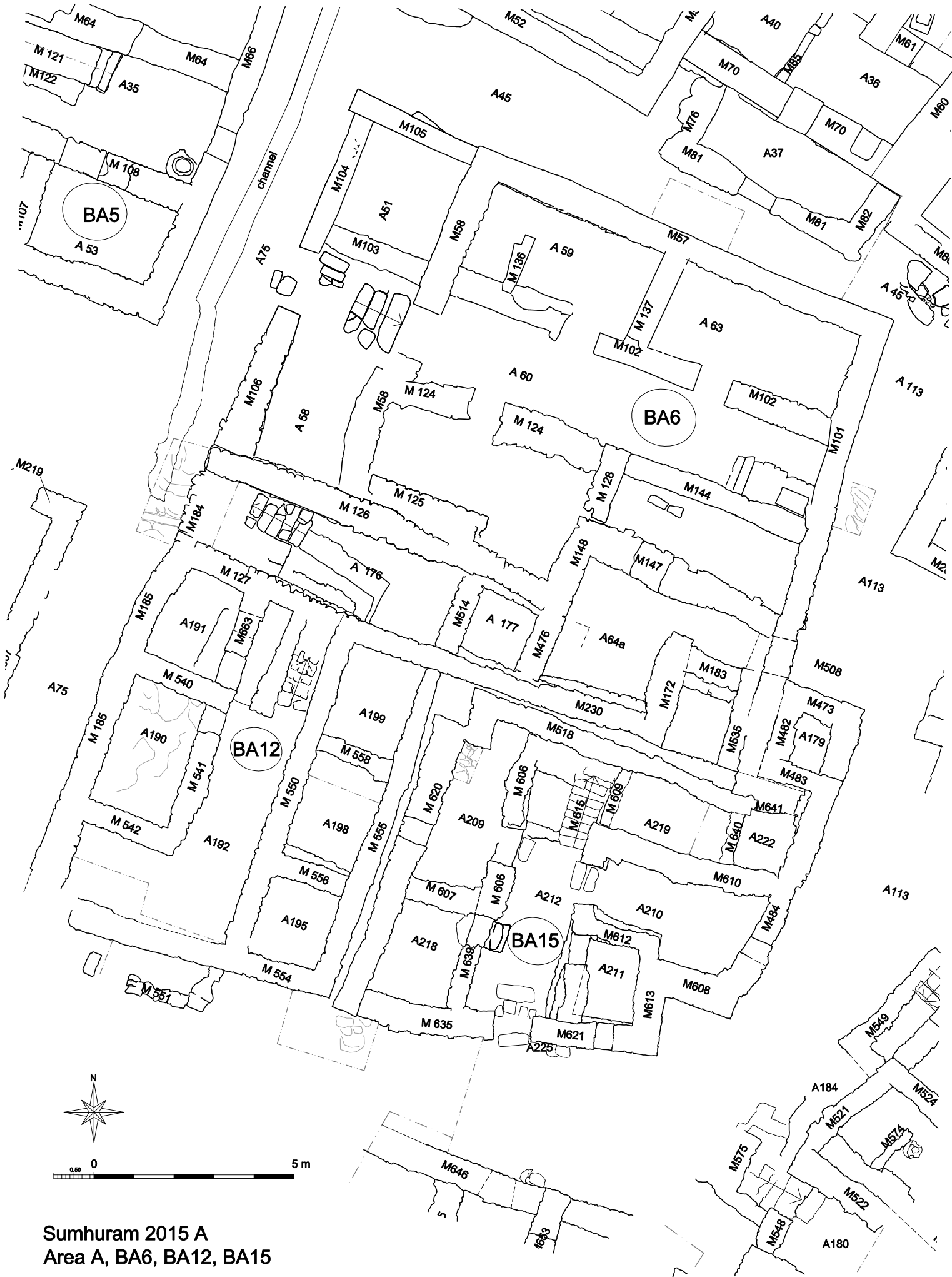
Sumhuram 2015 A

GENERAL PLAN

1
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50m

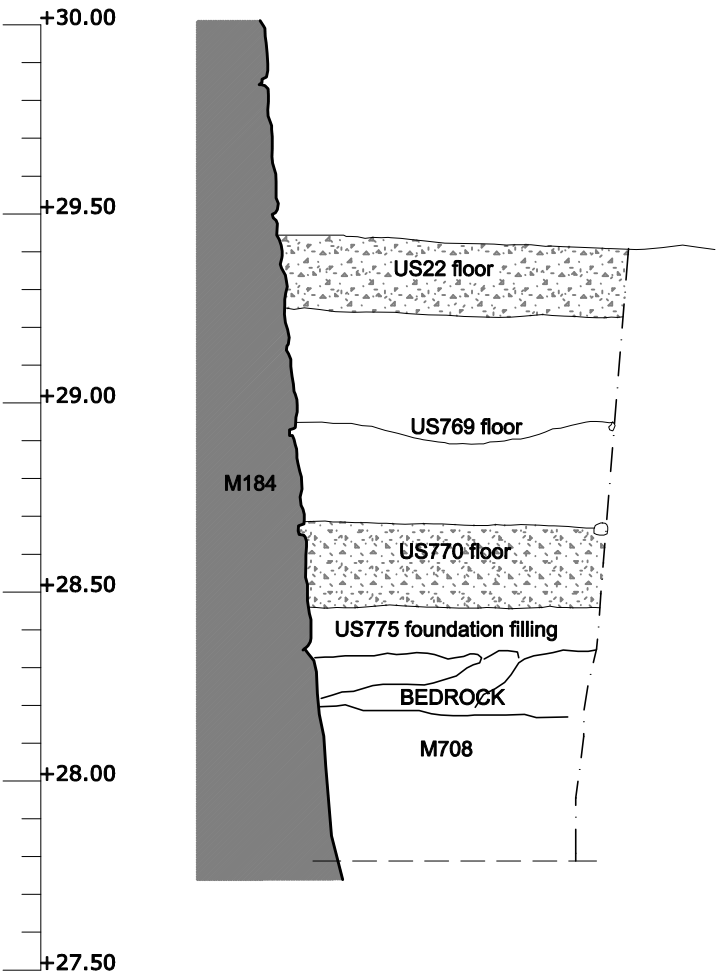


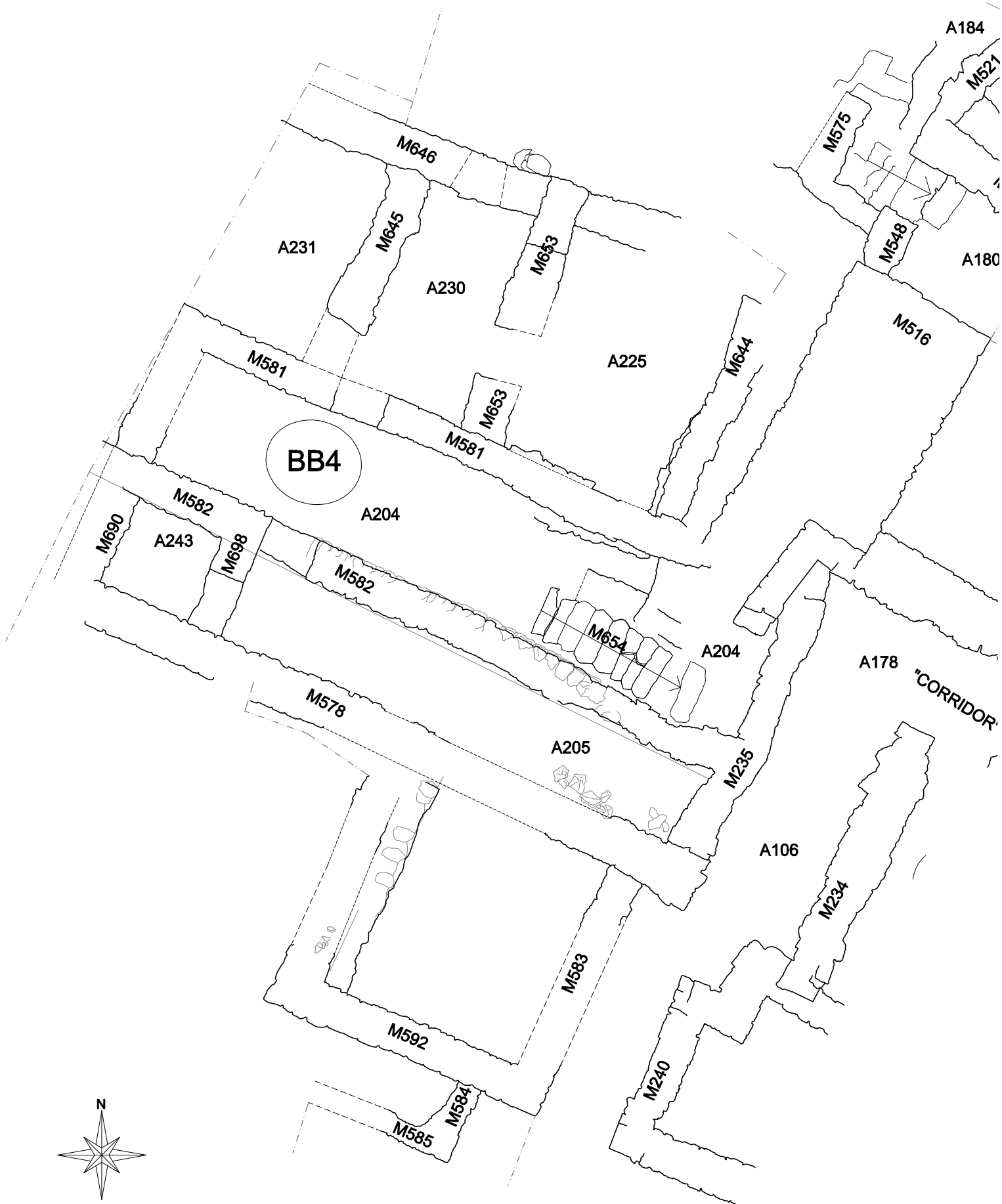


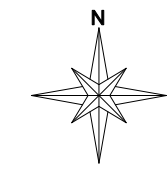
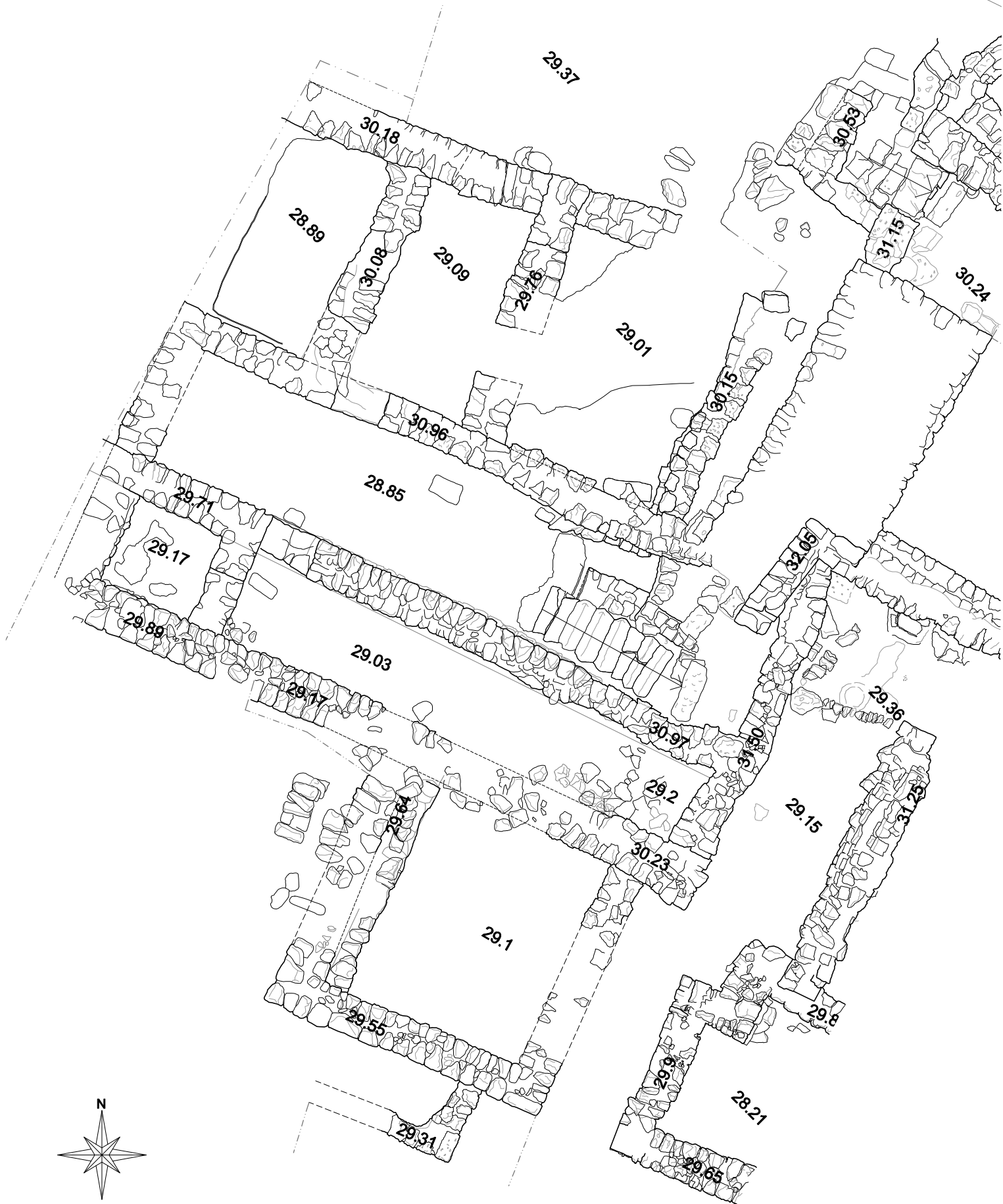
Sumhuram 2015 A
Area A, BA6, BA12, BA15

Sumhuram 2015 A

A75

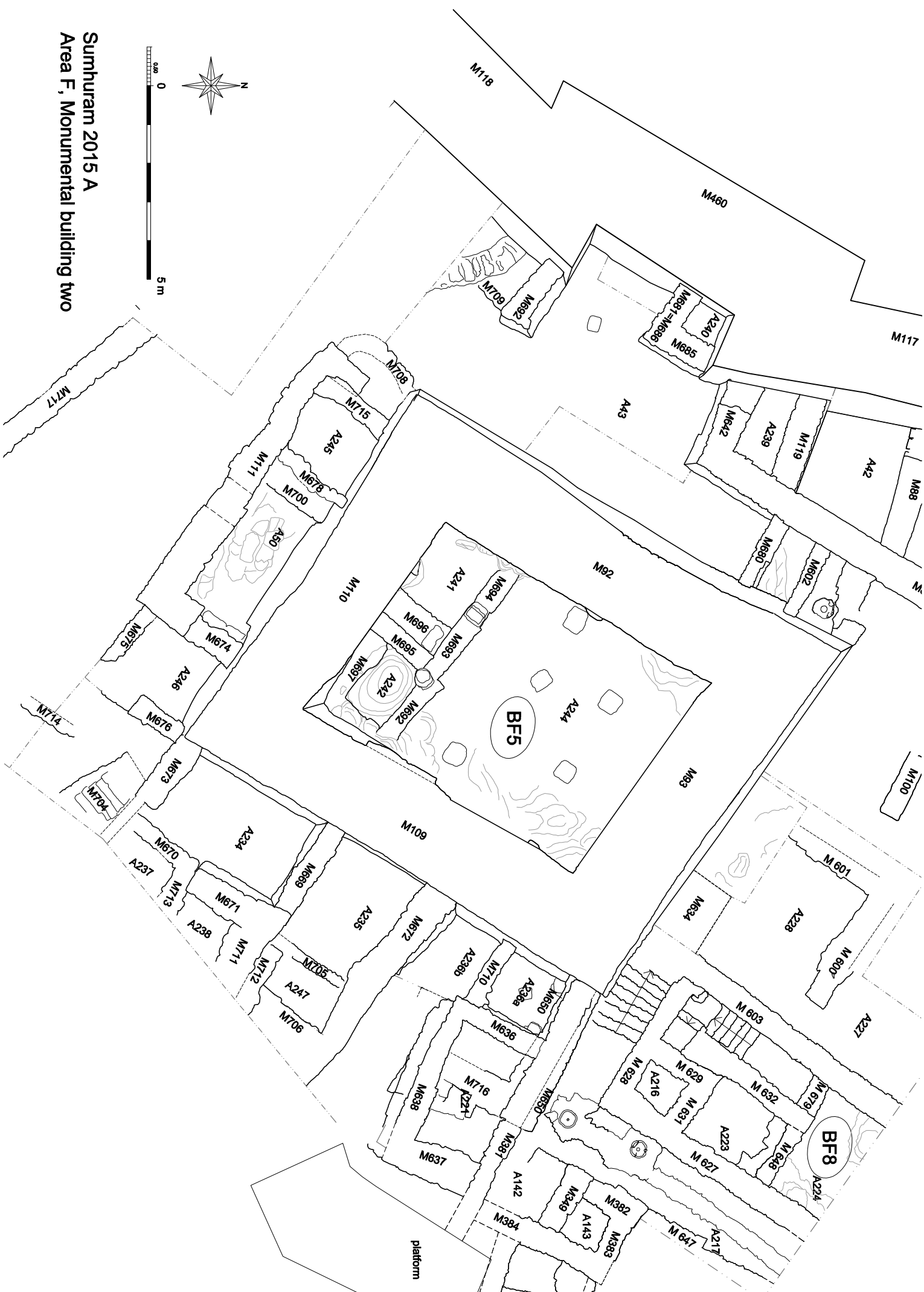






0 5 m

Sumhuram 2015 A
Area B, Building BB4



**Sumhuram 2015 A
Area F, Monumental building two**



Sumhuram 2015 A
Area F, Monumental building two

0 5 m

N

platform

**RESTORATION WORKS AT SUMHURAM
(ARCHAEOLOGICAL PARK OF KHOR RORI)
(Sultanate of Oman)
CAMPAIGN from January to February 2015**

IMTO
Italian Mission To Oman



Technical Report

10th January – 26th February 2015

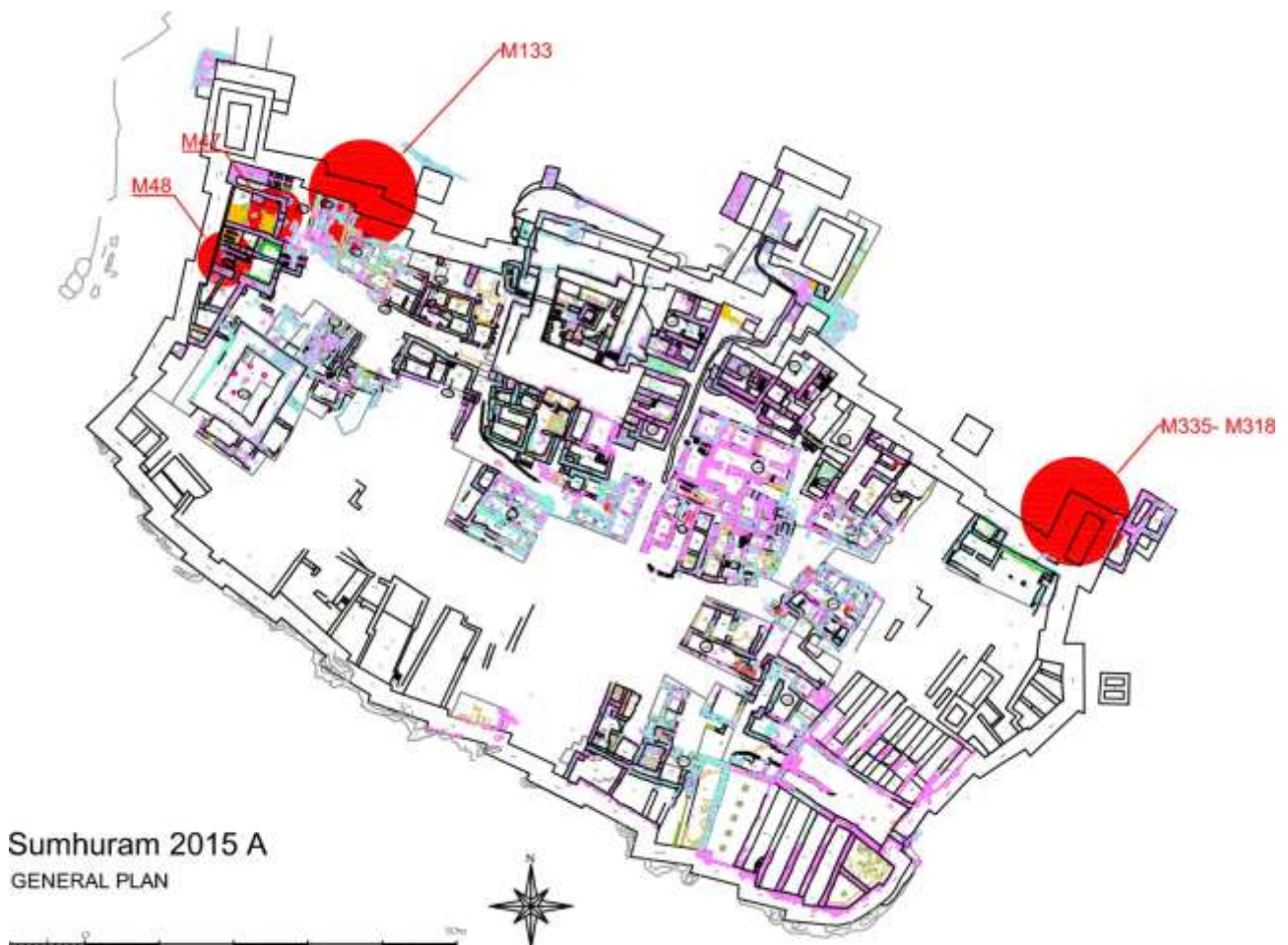
Valter Filatondi – Emiliano Mura

Introduction

The restoration activities, during the campaign, regards the restoration of the following walls:

- The rising up of the walls M335-M318 located at the North-East side of the city walls;
- The rising up of the wall M133 located at the North-West side of the city walls;
- The restoration of the walls M47-M48 and the arrangement of the stone basin.
- Other small works inside the city as reported below.

The following map shows all the locations:



Worker Teams

Two teams of workers have engaged to work out all the needed operations to complete the reconstruction of the above-mentioned areas. One team of eight people was engaged to prepare the mortar and the second one of twelve people has engaged for the restoration of the walls.

Working progress status

In order to check the advancement of the works, we daily took a significant number of pictures of the areas. The number of the pictures and the point of viewing from which they are taken from, are those considered necessary for a good comprehension about the working progress status.

Mortar preparation

The mortar we used for the connection between the stones is the same used during the previous campaigns:

- **80** grams of brown colour with **200** grams of yellow colour.

The oxide colours, mentioned above, plus 4 buckets of sand composes the mix of the mortar with eight scoops (**600grams**) of lime powder.

The percentage of lime on sand is 1:6, and then we have two different kinds of mortar:

- **Stone mortar**, used for the external leaves of stones, obtained by the mix of sieved sand, hydrated lime, brown and yellow oxides for the chromatic tone.
- **Filling mortar**, used for the back filling of the structure, made with the same components, except the use of raw sand instead of sieved sand without any brown and yellow oxides.

Rising up of the walls M335 – M318

(Supervision arch. Valter Filatondi)

On 10th January 2015 the situation on site was the following.



On 28th January 2015, after the restoration, the situation on site was the following.



Rising up of the walls M133

(Supervisor arch. Valter Filatondi)

On 10th January 2015 the situation on site was as in the picture below. We were thinking to restore also the contiguous walls M134 and M135 on the left side, but that those walls must be dismantling and reconstructing from the foundation. It will be done in the next campaign.



The wall M133 after restoration.



Rising up of the walls M133

(Supervisor arch. Valter Filatondi)

The inner side of the wall M133 was collapsed as shown on the picture below.



On 12th February 2015, after the restoration, the wall was as shown below.



Rising up of the wall M48
(Supervision Emiliano Mura)

On 07th February 2015, the situation on site was as shown below.



On 11th February 2015, after the restoration, the situation on site was the following.
The limestone basin was removed and after cleaning relocated.



Rising up of the wall M84
(Supervision Emiliano Mura)

On 09th February 2015, the situation on site was as shown below.



On 10th February 2015, after the restoration, the situation on site was the following



Rising up of the wall M36
(Supervision Emiliano Mura)

On 11th February 2015, the situation on site was as shown below.



Wall facing East



Wall facing West

On 12th February 2015, after the restoration, the situation on site was the following



Wall facing East



Wall facing West

Rising up of the wall M47
(Supervision Emiliano Mura)

On 14th February 2015, the situation on site was as shown below.



Wall facing East



Wall facing West

On 19th February 2015, after the restoration, the situation on site was the following.
The wall corner (M95) was deleted.



Wall facing East



Wall facing West

Rising up of the wall M78
(Supervision Emiliano Mura)

On 22th February 2015, the situation on site was as shown below.



Wall facing North



Wall facing North



Wall facing South

On 25th February 2015, after the restoration, the situation on site was the following.

The circular wall corner (M95) was removed.



Wall facing North



Wall facing North



Wall facing South