

## Appendix I

### Isan in the prehistoric era

Isan or Esan covers a vast area of Northeast Thailand where significant cultural heritage originated during the prehistoric period. The archaeological evidence has revealed this region has been human inhabited since the late hunting and gathering period through the transition of the late Paleolithic to the Mesolithic era when the agricultural revolution occurred. Ban Chiang is considered the first prehistoric settlement in Thailand and is one of the world's great bronze manufacture. Ban Chiang culture is regarded as one of Thailand's most important cultural heritage. The unique and most well-known artifacts of Ban Chiang are the red painted potteries, known as “Ban Chiang pot” or “painted Ban Chiang pot.” The archaeological studies have revealed the socio-cultural rankings in Northeast Thailand during the prehistoric period could be classified as follows.



*Stone tools on display at Ban Chiang National Museum*

#### **Hunting and gathering society**

Hunting and gathering society was dated between 5,000 – 14,000 years ago, which was the transition of the Paleolithic to Mesolithic era. There are no strong archaeological evidence from this period having been found in Northeast Thailand. However, some artifacts from this period have been discovered near the Mekong River in Chiang Kan District, Loei Province and Don Tan District, Nakhon Phanom Province. These artifacts are chipped stone tools and potteries. These chipped stone tools are similar to the artifacts from the Hoabinhian culture, one of the Southeast Asia cultures. Some evidence from the later period between 5,000 and 5,600 years ago or the Neolithic to Bronze Age transition period discovered<sup>i</sup> signify the commencement of agricultural communities at Non Nokta and Ban Chiang.

<sup>i</sup> A. Kit-Ngam, and S. Natapintu, Ed., Adeed Esan, (Bangkok: Silpakorn Division), pp.15-16.



*Wat Pho Sri, Ban Chiang archaeological site*

### **Village farming society**

Village farming society in the Neolithic and the Bronze Age was dated between 2,000-5,000 or 5,600 years ago<sup>ii</sup>. The prehistoric archaeological evidence found in Northeast Thailand is mostly related to the Neolithic era. Polished stone tools such as stone axes made of bronze and iron have been found in Ban Chiang and Ban Na Dee Archaeological Sites in Nong Han District, Udon Thani Province. These artifacts are characterised as Ban Chiang cultural heritage. The farming and animal husbandry evidence have also been discovered, for example, metal tools such as metal moulds, potteries, pottery moulds and weaving tools such as terra cotta spindle whorls and textile printing rollers. Ornaments such as bracelets, small bells and stone beads have also been found. Nevertheless, the most important Ban Chiang culture discovery is the red painted potteries in the unique pattern having been found in many areas in the region. These artifacts were used in the burial rituals to store belongings of the deceased. These potteries in the unique shape and pattern, the artifacts and ornaments are defined as “Ban Chiang culture.”

The archaeological excavations showcasing the discovery of the Ban Chiang and Non Nok Ta archaeological sites have confirmed the development of Northeast Thailand and the arrival of agricultural society around 5,000 or 5,600 years ago. Further studies have revealed that the chaff are found in the potteries made with clay and sand. The potteries could be burnt in a kiln at a high temperature. Agricultural metal tools made of bronze and iron from 2,500-3,600 years ago have also been discovered in the area. The irrigation system, evidence of wild animals domesticated for farming and food resources have also been found. This could be assumed that the Ban Chiang and Non Nok Ta archaeological sites were once the farming communities. People from these communities made metal tools 3,000-5,000 years ago and the iron tools 2,500-3,600 years ago<sup>iii</sup>.

<sup>ii</sup> Ampan Kit-Ngam and Surapon Natapintu, ED. Adeed Esan (BKK: Silpakorn Division), pp.16-17.

<sup>iii</sup> Ampan Kit-Ngam and Surapon Natapintu, ED. Adeed Esan (BKK: Silpakorn Division), p.18.



*Ban Chiang painted pottery on display at Ban Chiang National Museum*



*Ban Chiang painted pottery on display at Bangkok National Museum*

In relation to development of the societies in Northeast Thailand, it could be assumed that the Isan communities were not isolated but interacted and communicated with the outside world. There are pieces of evidence that support this assumption. Firstly, the Isan region had a large rock salt mine. Secondly, the area was famous for the metal works and tools production. These are the two main factors that brought outsiders to the area. Exchanges of commodities and trading between Isan people and the outsiders have been confirmed through discoveries of artifacts such as coppers, tins, stone beads, glass beads, giant clam shells found at many sites in the region. As a result of the affiliation with the outsiders, foreign civilisation, including the religious culture, particularly the Indian culture, was brought into the area. It could be said that the Isan society was embraced with urban civilisation. The earliest culture arrived to this area could be the Dvaravati culture. The Dvaravati culture originated during the 7<sup>th</sup> century in Central and Eastern Thailand where moated towns were extensively built reflecting the Dvaravati influence.



*Bronze tools on display at Ban Chiang National Museum*



*Bronze ornaments on display at Ban Chiang National Museum*

Examples of important prehistoric evidence in Northeast Thailand are the prehistoric paintings that are found at the Non Nok Ta archaeological site, Ban Na Dee and Ban Chiang archaeological sites.

### **Non Nok Ta archaeological site**

Non Nok Ta archaeological site in Kud That Sub-District, Nong Han Dam District, Khon Kean Province is the prehistoric archaeological site containing significant archaeological evidence of the prehistoric burial sites and artifacts. The archaeological sequences are significantly divided into three periods. First, the early period estimated to be around 3,500-5,500 years ago, some important evidence found involves cultivation management and animal farming. Potteries have been found buried in the grave sites. Chaff from cultivated rice was mixed with clay to create the potteries. Animal bones such



as cow, dog and pig, polished stone tools and some copper and bronze tools have also been discovered at the burial sites. The potteries from this period were neatly made, in comparison with the previous era. The potteries have more complex scratch patterns and cord marked decorations. Second, the middle period around 1,800-4,500 years ago is when bronze was commonly used. Some metal and stone moulds for making tools have been found. During this period, the potteries were more developed in terms of shapes and decoration styles. Third, the late period, estimated to be around 1,000 years ago, the stratigraphic layers show that the area was abandoned during this period. No burial sites have been found. This could suggest that the cultural tradition converted to the religious culture. Iron tools made in this period have also been discovered.

#### **Na Dee archaeological site**

Na Dee archaeological site in Pang Ngu Sub-District, Nong Han District, Udon Thani Province is of the Ban Chiang culture. The archaeological excavations and research have been conducted at this site showing the results of great resources of the Northeast origin. Burial sites and artifacts that could be belongings of the deceased have been found. Bronze and iron tools from 1,800-3,450 years ago have also been discovered. It is assumed that bronze ornaments were made at this site as metal crucible and moulds made of terra cotta or stone have been found. It could be the first bronze culture in Thailand. Moreover, clay anvil stones and pattern making pieces similar to those found at Ban Chiang have also been discovered. It could be said that this community was in contact with other communities 1800 years ago.<sup>iv</sup> However, the community and its original rituals disappeared prior to the arrival of other cultures in this area.

#### **Ban Chiang culture, Ban Chiang archaeological site**



*Pho Sri Nai Temple archaeological site, Ban Chiang*

Ban Chiang archaeological site is recognised as the prototype of the Ban Chiang culture. It is one of the world's most significant prehistoric cultural sites. Ban Chiang archaeological site has been announced as the World Heritage Site. It covers the area of Ban Chiang in Ban Chiang Sub-District, Nong Han District, Udon Thani Province. There are a number of archaeological sites with similar or shared patterns of culture such as Ban Na Dee, Ban Sang Ku and Ban Kok Khon. The Ban Chiang culture has also been found in other provinces in Northeast Thailand such as Sakon Nakhon, Nakhon Phanom and Khon Kean. The outstanding characteristics of the Ban Chiang culture are the red painted potteries with the unique shape and decorated patterns. It has become the world's famous "Ban Chiang painted pottery" or "Ban Chiang pottery."

<sup>iv</sup>Ampan Kit-Ngam and Surapon Natapintu, ED. Adeed Esan (BKK: Silpakorn Division), pp.262-263.





*Printing rollers on display at Ban Chiang National Museum*



*Bronze tools, ornaments and stone beads on display at Ban Chiang National Museum*

The Ban Chiang culture is considered the prehistoric agricultural society that could be dated as early as 5,000 or 5,600 years ago (3,600BE) and up to 1,800 years ago. In the early period, societal characteristics and culture helped form this community. There were home construction, agriculture and animal husbandry, dry-rice cultivation, tools and equipment used in rice farming. Animal bones that could be pets or livestock such as dog, cow, buffalo, pig and chicken have been found. Potteries were made of the mixture of clay and chaff using advanced technology. They were burnt at a high temperature in a kiln. Most importantly, they painted in red. The red painted potteries were developed from painting on off-white and red surfaces. They were glazed with the red paint and then polished. This community also manufactured metal tools from copper, bronze and iron. The tools and equipment were for agricultural, animal husbandry and textile weaving tools such as spindle whorls and textile printing rollers. Ornaments such as bracelet, earrings and beads have also been discovered.

The middle period (457 BC-43 AD or 243 BC) (800 / 1,000-1,800 years ago) adopted a wet-rice cultivation. This is confirmed by the water buffalo horns found in the area. The evidence from burial sites suggests that production of potteries, iron tools and metal tools used more developed technology. In the late period (43 AD/243 BC-200-300 AD) (800 / 1,000-1,500 years ago), the society, culture and technology were further developed. Pottery making in particular became more industrial alike. The unique design and decorative patterns were made using the red paint in the distinctive Ban Chiang pattern. The downfall of Ban Chiang occurred in the 3<sup>rd</sup> century. However, the Ban Chiang culture became quite influential and widely spread to other areas such as Non Mueng archaeological site in Khon Kean Province and Ban Tan Prasat in Nakhon Ratchasima Province.

Significant belief in the Ban Chiang culture involves the burial rites. Red-painted potteries, tools, ornaments and pet bones supposedly were dedicated to the deceased. These show a more complex society and culture of Ban Chiang.

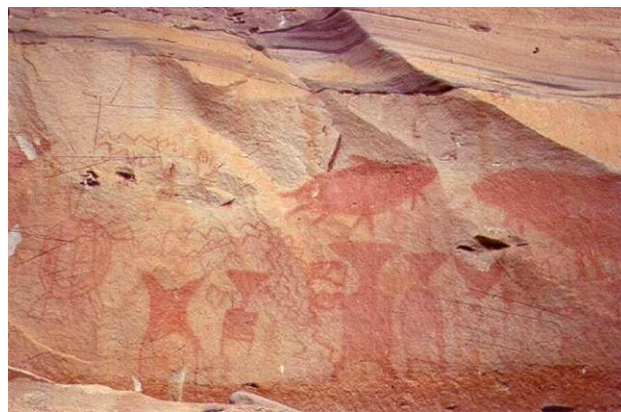
### **Prehistoric paintings**

Majority of the prehistoric archaeological evidence found in the Northeast are paintings, which are mostly found on the cliffs. For example, on the Phu Pan Mountain Range in Ban Pue District, Udon Thani Province, the paintings are found at nearly 100 sites. Examples of the well-known paintings are at Khoa Chan Ngam, Si Kew District, Nakhon Ratchasima Province, and on the cliff on the bank of Mekong River at Khong Jaem District, Ubon Ratchathani Province.



*Cave painting of human figures on the Phu Phrabat, Ban Pue District, Udon Thani Province*

The holistic pattern and painting techniques used are similar to those prehistoric paintings found globally. The paintings were painted on limestone walls. After the paint dried, the pigments were stuck on the stone preserving the condition of the paintings. The red paint was made of red clay. The paintings are human figures, hand palms, tools such as weapons, music instruments, hunting and catching tools, animals such as cow, buffalo, dog and fish, and geometric or abstract patterns.



*Paintings at Pa Tam, Khong Jaem, Khong Jaem District, Udon Thani Province*

It is believed that the paintings were made to record events, expression, the plays and the significant other. They were drawn and painted during the rituals. For example, the paintings at Khoa Chan Ngam display a group of people dressing up and holding weapons. They depict the drums which could possibly signify the rituals, celebrations or hunting. The paintings at Pa Tam display large fish and catching tools such as Toom. The painting could be about the Mekong giant catfish (*Pangasianodon gigas*) catching ceremony. These paintings could be painted for either prosperity or the purpose of worshiping. Other paintings also at Pa Tam show the drawing of buffaloes in the rice field. These suggest they were painted to express the concept of prosperity and to record the evidence of how tamed animals were used for rice cultivation.



*Paintings at Khoa Chan Ngam, Si Kew District, Nakhon Ratchasima Province*

The age of the paintings could be determined by comparing the paintings styles and techniques used with the nearby archaeological sites or similar cultural development. Interestingly, the sites where most paintings having been found were farming communities or places known for cultivation and animal husbandry. The paintings could be from as early as 3,500 years ago but not later than 1,500 years ago. It is believed that the rituals and beliefs continued to be inherited until the major societal change event occurred. This could be after adoption of the religious culture, particularly Buddhism in Thailand and in the Northeast around the 7<sup>th</sup> century, resulting in disappearance of the previous beliefs.



## **Appendix II**

### **Prehistoric paintings at the Phu Phrabat**

#### **1. Definition and meaning of rock art**

Rock art is defined as an artwork created by human that presents the aesthetic, supremacy and spiritual thought through the artwork, which are parts of the cultural landscape. Rock art could be created by various techniques such as painting, drawing, scratching, stencilling and imprinting as well as sculpting reliefs on the surface of rock shelters, caves and rock pillars (Tacon et al., 2014). Rock art has been discovered at more than 100,000 sites globally excluding the Antarctica continent (Neville et al., 2015: 6).

The terminology of rock art in Thai is relatively vague. Different terms have been used by Thai scholars, such as “cave art,” “rock painting,” “art on rock,” “ancient art on stone” and “rock art.” Each term potentially creates confusion and misunderstanding among scholars and people in general. In order to prevent confusion in explaining the findings and evidence involving rock art, in this Dossier the term “rock art” is defined as artworks on the stone surface, and “rock painting” refers to paintings on the stone surface. Most prehistoric rock art at the Phu Phrabat is rock paintings.

According to the definition of rock art for this Dossier, there are at least 96 archaeological sites having been discovered at the Phu Phrabat Historical Park with the presence of rock art. This makes the Phu Phrabat area the world’s largest site of rock art in terms of the number and density. The Phu Phrabat is the area where both prehistoric and historic sites coexist.

#### **2. General details about the Phu Phrabat Historical Park**

The Phu Phrabat is the name of the small sandstone mountain that is located 11 kilometres west of Ban Phue District in Udon Thani Province. The Phu Phrabat lays on the eastern side of the Phu Pan Mountain Range and is on the western side of Udon Thani Province. Its height is 320 – 350 metres above the sea level and 120 – 160 metres above the land.

The area on the Phu Phrabat is the forest consisting of a combination of the evergreen, deciduous and mixed forests. This forest has a variety of hardwood trees, for example Siamese Sal, Burmese Sal, Afzelia, Padauk and Rosewood. It is the origin of several streams, such as Huay Hin Lad, Huay Dan Yai, Huay Hin Rong and Huay U-Sa. These streams meet with Huay Nam Mong near Ban Tew and later flow into the Mekong River at the eastern side of Ta Bo District in Nong Khai Province. The Royal Forest Department has registered the Phu Phrabat area as part of the Pha Khue Nam National Reserved Forest (Methadol Wejakna, 1992: 13-14).

The unique, geological feature of the Phu Phrabat is a large number of rocks and sandstone sheds (shelters) scattered around the area. Geologists explain that these rocks and sandstone sheds were formed by the radical erosion of gravity during the Mesozoic-Cretaceous period. Erosion by wind and water also helped form the peculiar rocks and sandstone sheds in unique shapes on the Phu Phrabat. The erosion process of sedimentary rocks created different levels of rock duration. The least durable rocks were eroded and weathered producing cavity within the rock structures and creating unique shapes of the rocks. These grottos on the Phu Phrabat were used by human in different periods. Traces of human activities have been found confirming that human continued to use the spaces inside the caves and rock shelters for various activities. Local Isan people call a cave or stone shed “Tam.” This is the origin of the names of various stone sheds, such as Tam Wau, Tam Khon, Tam Din Pieng and Tam Tao.

The Fine Arts Department has conducted archaeological surveys on the Phu Phrabat since 1972. The surveys have been done in two stages: (1) the prehistoric sites focusing on rock paintings at rock shelters; and (2) the historical construction where rock shelters were modified into religious

monasteries. The sites were registered and announced as ancient monuments in the Royal Thai Government's Gazette, Volume 98, dated 28 April 1981. The department has been granted permission by the Royal Forest Department to use 5,488 square kilometres of the area in the national reserved forest to develop the Phu Phrabat Historical Park. The Phu Phrabat Historical Park unofficially opened for public as an archaeological learning resource in 1991 and, a year later, officially opened on 26 June 1992.

### **3. History of the studies of rock art at the Phu Phrabat**

The studies of rock art at the Phu Phrabat and the surrounds were mainly conducted by the Fine Arts Department in collaboration with other government agencies and Thai and international scholars. The first survey began in 1969. The 7<sup>th</sup> Regional Office of Fine Arts explored rock painting sites on the Phu Phrabat and the Phu Pankam in Ban Phue District, Udon Thani Province. Four rock painting sites have been discovered. They are Tam Lai, Tam Gai, Non Sow Ae 1 and Non Sow Ae 2.

In 1973-1976, the Fine Arts Department and the former National Energy Bureau (now the Department of Alternative Energy Development and Efficiency) jointly implemented the Pa Mong Archaeology Project to explore archaeological sites in Udon Thani and Loei Provinces. The project focused on the area that could be affected by floods during construction of the Pa Mong Dam. Eighteen rock painting sites have been discovered in the area of the Phu Phrabat and its surrounds. They are Phu Toom (or Phu Huag), Tam Nai Bang, Tam Nai Amporn, Tam Tao 1-4, Tam Khon, Tam Wau, Tam Geung, Tam Gai, the rock shelter north of Wat Phra Phuthabat Buaban, the rock shelter next to Tam Phraya Naga at Wat Phra Phuthabat Buaban, Tam Chang, Wat Pho Ta, Heep Sop Tao Baros, the rock shelter next to Bo Nam Nang U-Sa and the rock shelter near Kok Ma Tao Baros (Payao Kemnak, 1996: 2-8).

In 1977-1987, an important survey was conducted on the Phu Phrabat by the Fine Arts Department as part of Thailand and Northeast Thailand Archaeology Projects. More than 164 rock painting sites have been discovered. Over 81 sites are located on the Phu Phrabat and its surrounds in Ban Phue District. Of the 81 sites, 64 sites are the prehistoric rock paintings (Payao Kemnak and Monchan Namthip, 2010: 10-12).

In 2021, the 8<sup>th</sup> Regional Office of Fine Arts, Khon Kaen, conducted the Rock Art Survey Project in the area of the Phu Goa, Phu Pankam and Phu Wieng. The studies discovered 93 prehistoric rock painting sites in the area of the Phu Phrabat and its surrounds.

In addition, there are more than 10 archaeological research studies related to the Phu Phrabat's rock paintings conducted by Thai and international students for their undergraduate and postgraduate studies. Most research focuses on the studies of semiotics meanings, interpretation of rock paintings, cross-regional comparison of rock paintings and the use of the Phu Phrabat as the holy sanctuary for the ritual practices since the prehistoric period.

*Number of rock painting sites at the Phu Phrabat Historical Park and the surrounds in Ban Phue District, Udon Thani Province*

At least 391 rock art sites have been discovered across Thailand, and could be from two periods:

- The prehistoric period: At least 331 sites have been discovered. The paintings were made by two techniques of petroglyphs and pictographs.
- The historic period: About 60 sites have been discovered. The paintings were not only made by petroglyphs and pictographs but also stucco, adorned glass and pottery fragments.

At least 96 rock art sites from both prehistoric and historic periods have been discovered at the Phu Phrabat Historical Park and its surrounds, equating to almost a quarter (24.6 per cent) of all rock art sites found in Thailand. This discovery makes the Phu Phrabat one of the most densely rock art sites in Thailand and Southeast Asia. Most rock arts are pictographs from the prehistoric period. The rock arts

on the stone walls from the historic period are white paints and carvings on the stone walls, which are significantly related to the religious beliefs.

These 93 prehistoric rock painting sites on the Phu Phrabat and its surrounds in Ban Phue District are grouped by locations:

**The Phu Phrabat Historical Park consisting of**

- Rock paintings at Ban Pak Bung, Klang Yai District: One group of rock paintings has been discovered:

Group 1: Non Hin Klieng group consisting of three sites:

1. Tam Non Hin Klieng 1
2. Tam Non Hin Klieng 2
3. Tam Sung

- Rock paintings on the Phu Phrabat at Wat Phra Phuthabat Bua Bok in Muang Pan District: Six groups of rock paintings have been discovered:

Group 2: Din Peng group consisting of eight sites

4. Tam Din Pieng 1
5. Tam Din Pieng 2
6. Tam Din Pieng 3
7. Tam Din Pieng 4
8. Tam Din Pieng 5
9. Tam Din Pieng 6
10. Tam Nai Duang Jit 1
11. Tam Nai Duang Jit 2

Group 3: Wat Pho Ta – Wat Look Koei group consisting of 23 sites

12. The rock shelter east of Wat Look Koei
13. Tam Phra
14. Wat Pho Ta<sup>v\*</sup>
15. The rock shelter east of Wat Pho Ta
16. Heep Sop Tao Baros
17. Tam Mue Dang
18. Tam Chang<sup>\*</sup>
19. Hor Nang U-Sa
20. Ku Nang U-Sa
21. The rock shelter near Bo Nam Nang U-Sa
22. The rock shelter near Kok Ma Tao Baros
23. Tam Wau
24. Tam Khon
25. The rock shelter near Huay Tam Chang
26. Heep Sop Pho Ta
27. The rock shelter south of Wat Pho Ta
28. Tam Phra Ajan Kam Huang
29. Tam Tao
30. Tam Pha Mue
31. Tam Phra Sieng

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<sup>v</sup>Refers to the sites where both prehistoric and historic rock paintings have been found. Only the analysis of the rock paintings from the prehistoric period is addressed in this Dossier.



- 32. Tam Nai Nong Kran
- 33. The rock shelter near Kok Ma Noi
- 34. The rock shelter at Huay Hin Lad

Group 4: Wat Phra Phuthabat Bua Bok group consisting of five sites

- 35. The rock shelter south of Tam Phaya Nak
- 36. The rock shelter at the centre of Wat Phra Phuthabat Bua Bok 1
- 37. The rock shelter at the centre of Wat Phra Phuthabat Bua Bok 2
- 38. Tam Poon
- 39. Tam Phaya Nak

Group 5: Tam Huay Hin Lad group consisting of two sites

- 40. Tam Hin Lad
- 41. The rock shelter near the irrigation area

Group 6: Non Sow Ae group consisting of seven sites

- 42. Lan Sao Ae 1
- 43. Non Sao Ae 1\*
- 44. Non Sao Ae 2\*
- 45. Tam Sum Meg (Nine Bang)
- 46. Tam Nine Jun To (Non Sao Ae 3)
- 47. Tam Pravinus 1 (Lan Sao Ae 2)
- 48. Tam Pravinus 2 (Lan Sao Ae 3)

Group 7: Dan Yai Rock Shelter group consisting of eight sites

- 49. Dan Yai Rock Shelter 1
- 50. Dan Yai Rock Shelter 2
- 51. Dan Yai Rock Shelter 3
- 52. Dan Yai Rock Shelter 4
- 53. Dan Yai Rock Shelter 5
- 54. Dan Yai Rock Shelter 6
- 55. Huay Hin Rong 1
- 56. Huay Hin Rong 2

- Rock Painting at Ban Muang Pan, Muang Pan District. One group of rock paintings has been discovered:

Group 8: Phrabat Lang Tao group consisting of five sites

- 57. Tam Kaeng or Kwang
- 58. The rock shelter near Phrabat Lung Tao 1
- 59. The rock shelter near Phrabat Lung Tao 2
- 60. The rock shelter near Phrabat Lung Tao 3
- 61. Pa Sawan

**Ban Phue District area (outside the Phu Phrabat Historical Park) consisting of**

- Rock paintings at Ban Pai Lom, Muang Pan Sub-District. One group of rock paintings has been discovered:

Group 9: Wat Phra Phuthabat Buaban group consisting of

- 62. The rock shelter northeast of Wat Phra Phuthabat Buaban – Buot Phra Bhu (the rock shelter near Buot Phra Bhu)

- Rock paintings at Ban Mai, Muang Pan Sub-District. One group of rock paintings has been discovered:

Group 10: Tam Khao Pleug Monastery group consisting of five sites

63. Tam Khao Pleug 1 (Tam Noi)
64. Tam Khao Pleug 2 (Hin Nob Kan)
65. Tam Khao Pleug 3 (Lai Sen Kid Rock Shelter)
66. Tam Khao Pleug 4 (Nok Noi Rock Shelter)
67. Tam Khao Pleug 5 (Tam Khao Pleug)

- Rock paintings at Ban Klang, Klang Yai Sub-District. Two groups of rock paintings have been discovered:

Group 11: Tam Tao group consisting of 11 sites

68. Tam Tao 1
69. Tam Tao 2
70. Tam Tao 3
71. Tam Tao 4
72. Tam Tao 5
73. Tam Tao 6
74. Tam Tao 7
75. Tam Tao 8
76. Tam Nai Amporn 1
77. Tam Nai Amporn 2
78. Tam Nai Amporn 3

Group 12: Tam Lai group consisting of two sites

79. Tam Gai
80. Tam Lai or Tam Phu Pa Pueng

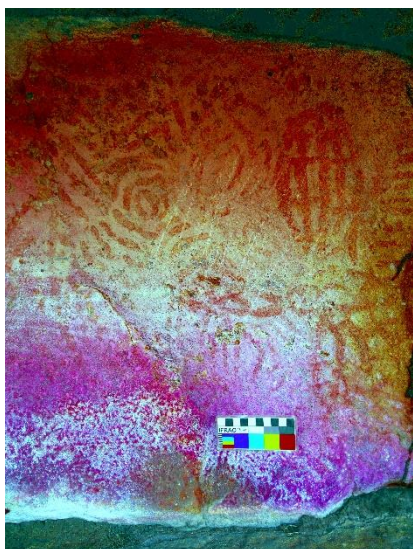
- Rock paintings at Ban Na Luang, Klang Yai Sub-District. Two groups of rock paintings have been discovered:

Group 13: Phu Toom group consisting of one site

81. Phu Toom or Phu Huag

Group 14: Tam Phra Na Luang group consisting of 12 sites

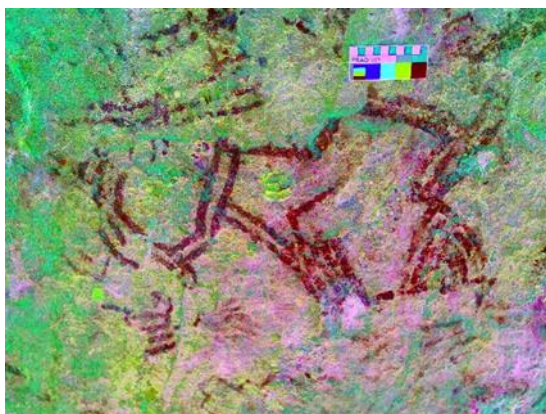
82. Tam Phra Na Luang 1
83. Tam Phra Na Luang 2
84. Tam Phra Na Luang 3
85. Tam Phra Na Luang 4
86. Tam Phra Na Luang 5
87. Tam Phra Na Luang 6
88. Tam Phra Na Luang 7
89. Tam Phra Na Luang 8
90. Tam Phra Na Luang 9
91. Tam Phra Na Luang 10
92. Tam Phra Na Luang 11
93. Ban Sa Klong Pattana



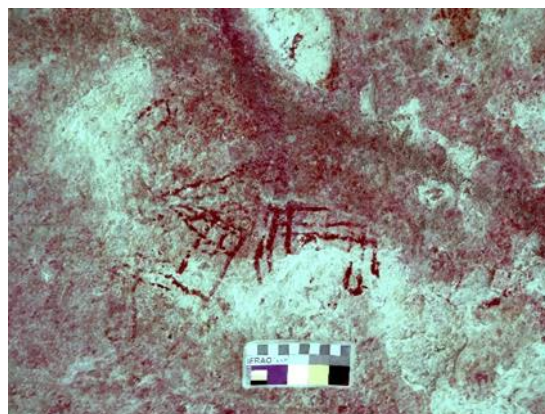
*Tam Din Pieng 3*



*Non Sao Ae 1*



*Non Sao Ae 2*



*The rock shelter south of Tam Phaya Nak*



*Dan Yai Rock Shelter 4*



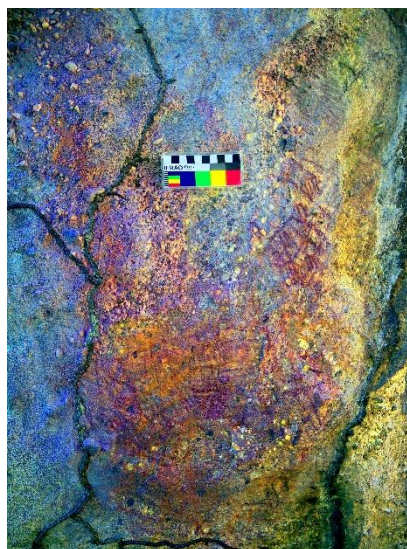
*Huay Hin Rong 2*

*Examples of rock paintings at the Phu Phrabat Historical Park  
(adjusted with a computer program)*

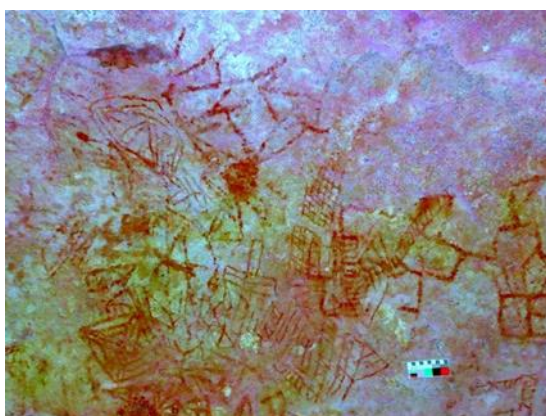




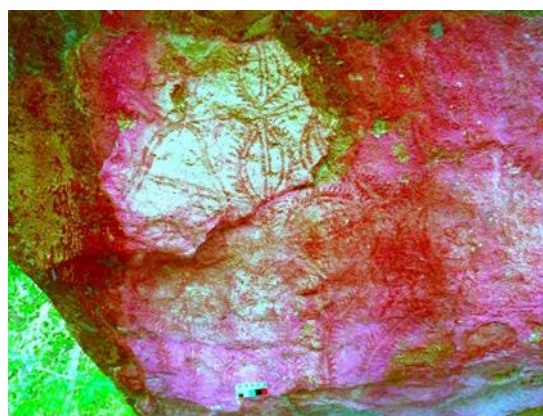
*The rock shelter northeast of Wat Phra  
Phuthabat Buaban*



*Tam Khao Pleng 2*



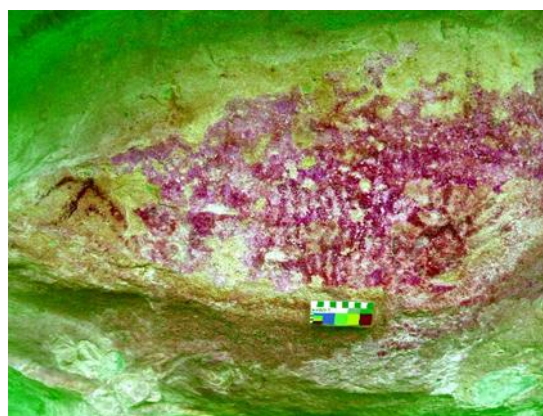
*Tam Khao Pleng 3*



*Tam Gai*



*Tam Tao 1*



*Ban Sa Klong Pattana*

*Examples of rock paintings in Ban Phue District (outside the Phu Phrabat Historical Park)  
(adjusted with a computer program)*

#### 4. Geography and locations of rock paintings

The study of rock paintings at the Phu Phrabat archaeological sites indicates that the sites were chosen based on either the relations of the surroundings, the geographic features or the ancient beliefs and rites.

The study reveals key characteristics of the chosen sites, which are:

1. The sites are located on the open stone yard. There are stones in various shapes standing in a group creating a magnificent and outstanding scenery or a landmark.
2. The sites are located not far from natural water sources of small streams that flow from west to east along the mountain slope. The streams do not always have water all year round but have a lot of water only in the rainy season up to the beginning of winter. During the dry season, these streams become large swamps providing water for consumption. These sites were possibly used as a temporary living area or a place to partake in activities during the prehistoric period.
3. The stones' appearance is similar to a well-ventilated stone shed when having enough light. Most paintings are in safe locations and protected from sunlight and rainwater. These stone sheds could be temporarily used as shelters days and nights. At present, local people still use these shelters as a resting place to watch their cattle searching for food in the forest, particularly in the rainy season when edible forest products are in the season, such as Krabok (native almonds), hog plums, Mak Liam and bamboo shoot.
4. The areas where most rock paintings have been discovered tend to have smooth stone surface with fine grains. It is likely to be a location that does not expose to direct sunlight and rainwater. The paintings were drawn on both rock walls and shelter ceiling.<sup>vi</sup>
5. The aerial photographs and interview findings discover that most rock painting sites are located along the natural pathways used by locals for decades to travel from their villages to worship at the Phu Phrabat. The main pathway is located between Ban Mai and Ban Muang Pan in the northern direction. The locals used this pathway to travel to worship Phra Phuthabat Bua Bok located. Through this pathway, the locals walked through the rock paintings at Phrabat Lung Tao group, Dan Yai Rock Shelter group and Non Sao Ae group. These natural pathways have been used by the locals as a cattle-buffalo herding route and as a path to collect forest products. These pathways provide easy access with no steep slope. More importantly, there are water sources along the pathways.

The study also suggests that there is repetitive use of the stone shelters, particularly in the area where the paintings are distinctive and unique. During the historic period in particular, the area was used as monasteries and ritual venues. The significant sites are Wat Pho Ta-Wat Look Koei group, Wat Phra Phuthabat Bua Bok group, Phrabat Lung Tao group, Non Sao Ae group and Wat Phra Phuthabat Buaban group. These sites have shared features. For example, they have rock shelters in unusual shapes surrounded by the open sandstone yard suitable for ceremonial use by a large group of people. In the present time, the stone yard is still used for significant community ceremonies. For example, Lan Sao Ae has been used by performers as a change room before proceeding the annual procession to worship Phra Phuthabat Bua Bok. Hence, this stone yard is called Lan Sao Ae. "Ae" means being gorgeous or adorned in the Northeast dialect.

#### 5. Artwork techniques

The prehistoric paintings in Thailand were painted in three colours: red, black and white. The techniques used are drawing, painting, stencilling, imprinting, paint splatting and dotting. The prehistoric paintings

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<sup>vi</sup> Rock wall refers to the surface of the rock that stands 90 degrees of the ground, and can be seen at the eye level while standing. As people see the rock shelter looking like a mushroom, the rock wall is a metaphor of mushroom stalk. They are sometimes called legs of the rock shelter. The shelter ceiling refers to the surface under the shelter that looks like a mushroom cap. To view the rock paintings at the rock shelters, people need to look up or be inside the shelter. Most rock paintings cannot be seen from outside.



found at the Phu Phrabat were made with four techniques, including drawing, painting, imprinting and dotting.

### 5.1 Drawing

The drawing technique used at the Phu Phrabat is regarded as one of the most remarkable techniques. About 95 per cent of the Phu Phrabat paintings employed the drawing technique. Lines were drawn in abstract or symbolic designs. The unique line pattern characterises the community identity, which is different from other regions in Thailand. The lines are fine, approximately 0.3-1.0 centimetre thick. The drawings used a mixture of straight lines, curve lines and wave lines to create a complex design. The drawings of parallel lines were also popular. A few drawings have thicker lines of at least 1-1.5 centimetres thickness. Paintings at the sites that display drawings of the fine lines also have a mixture of dots with the line patterns in the drawings.

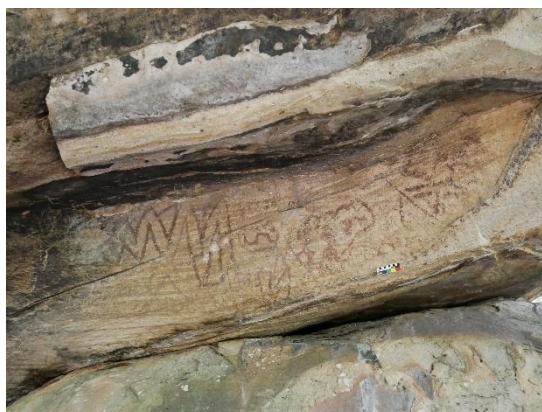


*Tam Din Peng 2*



*Tam Nai Duang Jit 1*

*Examples of abstract line drawings with 0.3-1.0 centimetre thickness which is the most outstanding feature of paintings from the Phu Phrabat group and the surrounds in Ban Phue District*



*Examples of the lines from Tam Sung that are thicker than one centimetre, which are rarely found at the Phu Phrabat group*

### 5.2 Painting

The painting technique is hardly found at the Phu Phrabat group. This technique involves painting on a large surface to create figures. The sites with paintings created by this technique are Tam Wau and Tam Khon.

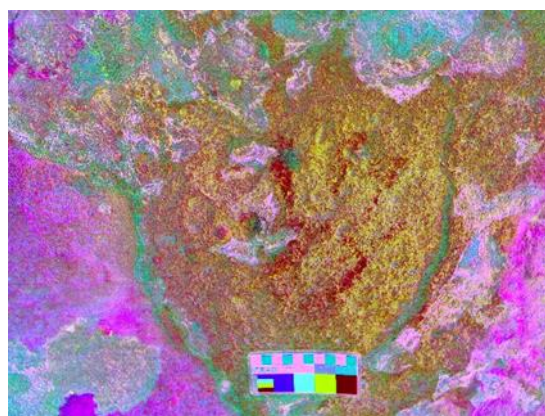




*Paintings at Tam Wau using the painting technique*

### 5.3 Imprinting

The imprinting technique was used to create the hand palm printing only. This technique has been found at two sites – Tam Mue Dang and Tam Pha Mue. The red paint on human palms was imprinted on the stone surface.



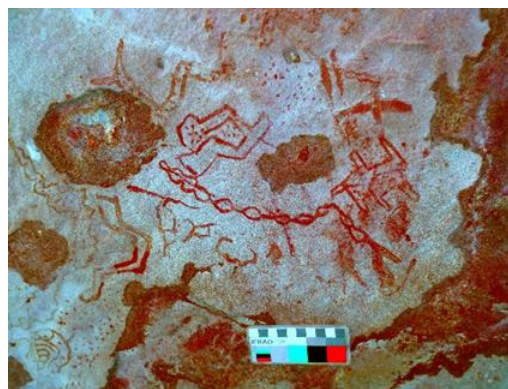
*Palm printing paintings at Tam Mue  
(Left is the original, and right is adjusted with computer program)*

### 5.4 Dotting

Dotting is a touch of paint in small round dots either in a dash line or scatter. This technique is often found with abstract drawings or symbolic designs. The sites where the dot technique has been found are Tam Non Hin Klieng 1, Tam Din Pieng 5 and Tam Phra Na Luang 2.



*Tam Non Hin Klieng 1*



*Tam Phra Na Luang 2*

*Examples of paintings with the dotting technique and line drawings*

## 6. Meanings of rock paintings at the Phu Phrabat

The paintings at Phu Phrabat can be categorised into two groups.

### 6.1 Figurative or realistic

The paintings that display the naturalistically imitative form of expression are easier to explain their meaning and interpretation. The paintings' certain shapes confirm what they are. In comparison with the abstract designs, figurative paintings at the Phu Phrabat are rare.

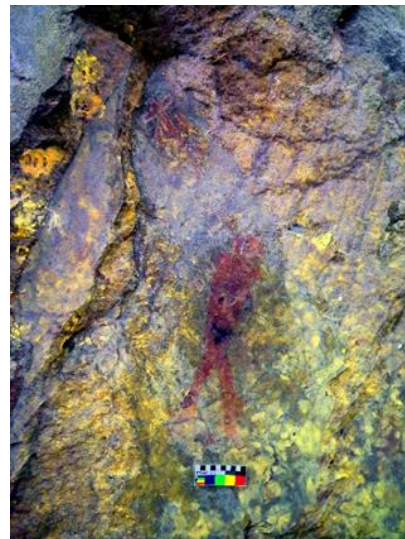
- **Human figures** have been found at five sites: Tam Khon; Tam Phra Ajan Kam Huang; the rock shelter at the centre of Wat Phra Phuthabat Bua Bok 1; Tam Non Hin Klieng 1; and Wat Pho Ta.
  - *Tam Khon* consisting of 10 human figures that can be grouped into two clusters.

Human figures cluster 1 is on the northeast wall depicting seven human figures. The techniques used are silhouette or shadow painting and outline drawing. The paintings clearly show muscles, particularly the bulging calves. These figures stand sideways and face straight and spread arms and legs. The five fingers of each hand are clearly displayed. Some figures depict male sexual organs. Some show different gestures. The human figures are significant to the interpretation of the paintings at the Phu Phrabat. Drawing of the male sexual organ could mean: (1) performing rituals to please gods, and prosperity would be given in return. This belief was commonly found in the primitive society where adequacy of food, vegetables and meat was a priority; (2) stimulating sexual arousal among villagers to increase population. It was, however, for a ritual aspect rather than a real sexual desire; (3) motivation for sexual desires derived from the subconscious mind of the drawers; and (4) prosperity.

Human figure cluster 2 is on the west rock wall comprising of three figures. Used the silhouette painting technique, the paintings show muscles of the human figures. The figures stand sideways. Two figures show a walking gesture. The other figure turns its back and holds an object that looks like a ladder or a stick in its hand. The figures are in red and white.



*Human figure cluster 1 at Tam Khon*



*Human figure turns its back and holds an object that looks like a ladder or a stick*

- *Tam Phra Ajan Kam Huang* displays two human figures. The techniques used are a simple drawing like stick figures and an outline drawing. The figures are in a standing position with bent arms and legs like they are moving. They could be related to a ritual dance.





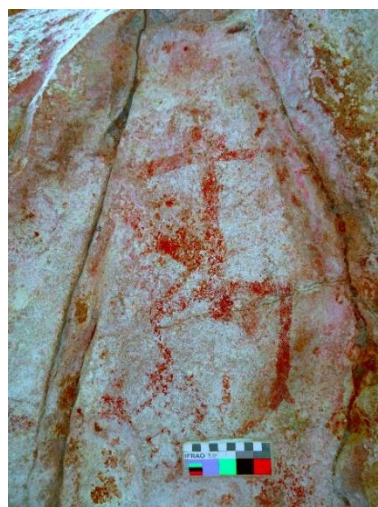
*Human figure at Tam Phra Ajan Kam Huang*

- *The rock shelter at the centre of Wat Phra Phuthabat Bua Bok 1 displays one human figure drawn with a stick figure technique. The figure shows its spreading arms and legs.*



*Human figure at the rock shelter at the centre of Wat Phra Phuthabat Bua Bok 1*

- *Tam Non Hin Klieng 1 displays one human figure drawn with a stick figure technique. The figure shows its spreading arms and legs.*



*Human figure at Tam Non Hin Klieng 1*

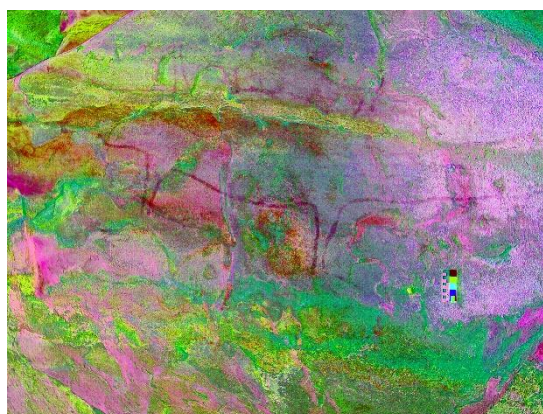
- *Wat Pho Ta* displays one human figure drawn with a stick figure technique. The figure shows its spreading arms and legs and possibly with woman's breasts.



*Human figure at Wat Pho Ta*

- **Animal figures** have been found at two sites at the Phu Phrabat Historical Park.
  - *Tam Wau* displays 10 figures of cows, deer and unidentified animals. These paintings could be interpreted as wild animals in the forest because animals, particularly the cattle, lived in a big herd in the forest. The spots where the paintings of humans and animals were found in Tam Wau and Tam Khon, had shown that they were painted on different walls. This could be presumed that the painters would like to present the hunting scene. These human figures meant to represent the humans heading out to hunt.
  - *Tam Kaeng or Kwang* displays one painting of a deer figure. It is assumed that the painting could be related to hunting rituals.

Other four animal paintings have been discovered in Ban Phue District. At Tam Phra Na Luang 4, there are three animals, each having four legs and a horn. At Tam Tao, there is the line drawing of a reptile that could be *Varanus Salvator* (the Asian water monitor lizard). At Tam Lai, the drawing of fish in a parallelogram shape has been found. Tam Khao Pleug 5 also finds a four-legged animal drawn with the outline drawing technique.



*Line drawing of a reptile found at Tam Tao 1*

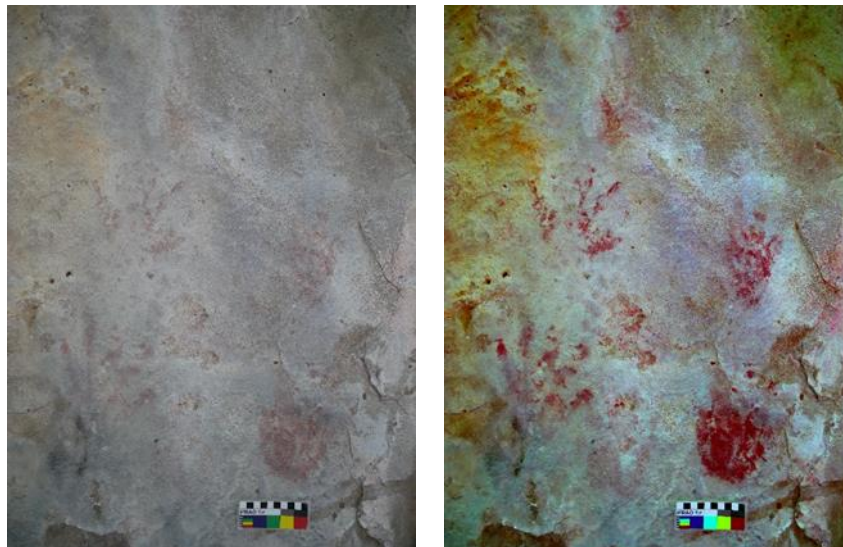




*An outline drawing of a four-legged animal found at Tam Khao Pleug 5*

- **Human palms** Two human palm imprints have been found at two sites, Tam Mue Dang and Tam Pha Mue. A human palm was simply imprinted on the stone surface using red paint. One of the Phu Phrabat Historical Park Officers indicated that there are approximately 15 human palms imprinted on the walls of Tam Pha Mue. Majority of the paintings faded. Only a few remain in a good condition that can still be clearly seen.

There have been attempts to study the meanings of human palms imprinted at many places around the world. Human palms could be interpreted as: the signature of the drawers; a record of the visitors to the place; a record of significant events; an exchanging message between people from the same community; a message communicating with the ancestor spirits who could be the owner of the paintings; a story recording the myth of a sacred place; a record of number of people who stayed overnight at the place; or a symbol showing respect to the place. However, the interpretation of the meaning of the human palms imprinted on the wall of Tam Mue Dang is still unknown.



*Human palm imprints at Tam Pha Mue*

*(Left is the original imprint on the stone wall, and right is the image adjusted with a computer program)*

## 6.2 Visual or abstract drawings

Visual or abstract drawings involve various lines and patterns that are mixed together until the exact shape disappears. This technique is popular among Indigenous peoples from different parts of the world. Without the agent to connect the past with the present, it is difficult to understand the real meanings of

the drawings. In Thailand, most visual or abstract drawings are found at the Phu Phrabat area and in Ban Phue District, Udon Thani Province. They are found at all Phu Phrabat archaeological sites.

Several scholars have interpreted the abstract drawings from the Phu Phrabat area. They suggest these abstract drawings could possibly be related to some rituals performed by prehistoric people, for example:

*Payao Khemnak* suggests that the abstract drawings found on the Phu Phrabat could be drawn by an artist who attempted to convey a certain meaning of something. However, the drawings could only be understood by either people from the same society or a group of people with shared culture. The meanings of the drawings could also change over time. As a result, it is not possible to understand to the real meanings of the drawings (Payao Khemnak and Monchan Namthip, 1990: 60-64).

*Thorraddon Kulklieng*'s research suggests that the drawings from the Phu Phrabat could be related to the entoptic phenomenon. In Southeast Asia, when ancient people performed a ritual to communicate with the spirits through a shaman, the communication was often related to success and prosperity, for example, asking for the rain, forecasting the seasons or overcoming natural disasters such as drought or floods. In comparison with the beliefs involving a shaman from other places, the ritual practice is universal and could be found in many cultures, particularly when communities entered the Metal Age or started agriculture. When the shaman entered the meditation state (that was likely to occur as a result of either substance use or reduction of blood oxygen level through dancing ceremonies or inhaling smoke), the shaman would see shapes, smell, hear or experience supernatural experiences beyond their normal perception. *Lewis Williams*, another researcher, points out that the origin of geometric and various symbolic patterns could happen when the shaman entered the meditation state. A study of the ethnic groups reveals that the main purpose of drawings could be to convey the meditation experience to people from the same community to ensure a mutual understanding through representation of various symbols. The symbolic patterns on the stone shed could be for preventing the evil spirits from harming people or the area where the symbols are found (Thorraddon Kulklieng, 2020: 182-183).

## 7. Dating the paintings

Currently, there are three key methods used to determine the age of rock art:

- Relative dating is a comparative study that rock paintings found at the site are compared with those from other archaeological sites or other archaeological evidence from the same period.
- Absolute dating is a study of the evidence on the paintings that has already been determined, such as an image of rock tools, animals and different types of ships.
- Direct dating is a study to directly determine the age of rock paintings by using scientific methods, such as AMS Dating, Weathering – Micro-erosion analysis, Amino Acid Racemisation, Lichenometry and Micro-lamination. For example, the age of the rock paintings at a group of limestone caves can be determined by analysing the microscopic layer of sedimentary rocks.

A comparative study or a relative dating method has been used to determine the age of the rock paintings on the Phu Phrabat. Most Phu Phrabat rock paintings could be dated in the prehistoric period around 1,500-3,500 years ago when an agricultural community was formed. Studies of the archaeological evidence excavated in Northeast Thailand have also confirmed the evidence of cultivation and farming taken place around 3,500 years ago, for example, at Ban Chiang and Non Nok Ta archaeological sites. The white-brush paintings could be dated in the historic period around 200-1,500 years ago, when a group of religious people returned to the Phu Phrabat area. However, it is relatively difficult to pinpoint if a group of people who created the prehistoric rock paintings and a group of religious people in the Phu Phrabat area was the same group of people who continuously lived in the Phu Phrabat area. Further evidence that shows the links between the artists from these two periods is not yet found.

By applying a style<sup>vii</sup> analysis method and an overlaid painting technique to analyse the rock paintings from each site on the Phu Phrabat, it is found that the rock paintings could be created in several periods. The sites that display evidence of rock paintings from multiple periods are:

### **Tam Wau – Tam Khon**

Using the analysis of the painting styles, techniques used, colours and the overlapping images of the paintings, it is possible that the paintings at Tam Khon were created in at least three periods.

*Group 1:* The paintings were drawn and painted in red colour. They are shadow images of cows and a group of seven human figures that clearly show their shapes and muscles. All paintings could be related to the rituals or hunting. At the earliest period, the painting technique was mainly used to create the paintings. A much smaller silhouette paintings of human figures from the later period have been discovered on the ceiling of a stone shed. The human figures painted in red and white depict a gesture of holding a wooden object or a ladder.

*Group 2:* Thin red symbolic lines were drawn in the form of curved and parallel lines. The pattern and style is outstanding. The style is common to the Phu Phrabat rock paintings. The shade of red colour that appeared in the lined pattern is different from the shade of the red paint on the human and cow figures.

*Group 3:* White symbolic lines were painted in the much later period during the historic period. Some white lines were drawn over the red lines in Groups 1 and 2. These paintings are similar to those paintings found at Non Sow Ae 2 that are also in white colour and from the historic period.

According to the styles and techniques used to draw the paintings, it can be assumed that the paintings at Tam Wau and Tam Khon were drawn in at least three periods, and first drawn in the prehistoric period. Further study of the styles and colours of the human figures is needed to group the human figures and confirm if they were drawn from two different periods.



*Red line figures in Group 2 at Tam Khon*

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<sup>vii</sup> Style in archaeology refers to the way of doing something that involves the selected and alternative choices. Style is a unique characteristic of behaviours or doing. It is natural but time and place specific. It is considered non-verbal communication expressing through explicit doing that has a common identity. It includes mental activities, feelings and living (Hegmon, Michelle. "Archaeological Research on Style." **Annual Review of Anthropology**, Vol.21, 1992, pp.517 – 536.)





*Red line figures in Group 2 at Tam Khon*

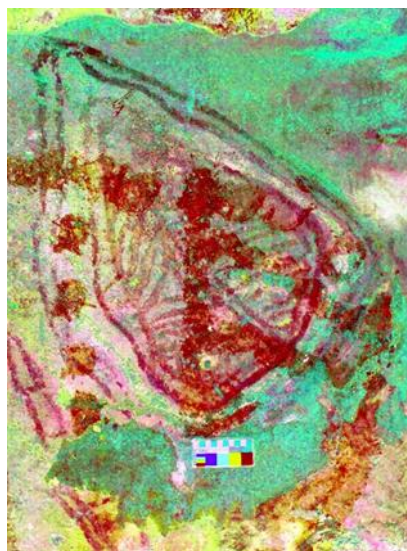
### **Tam Din Pieng 5**

Two red paintings from at least two periods have been found at Tam Din Pieng 5. One painting is in light red and has an abstract design. The other painting is a group of red dots. It is assumed that these two paintings were painted in the historic period.

There are also prehistoric paintings displaying more than one shade of red colour and overlapping other paintings. These paintings are found at the rock shelter near Bo Nam Nang U-Sa and the stone shed at the centre of Phra Phuthabat Bua Bok 1.



*Tam Din Pieng 5 lines and dots painted in two shades of red colour*

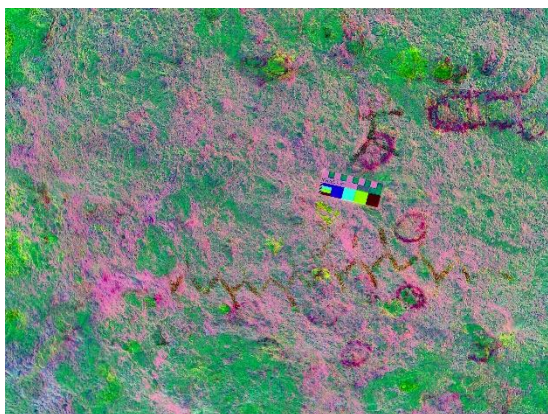


*The rock shelter near Bo Nam Nang U-Sa displaying the paintings of overlapping images painted in two shades of red colour*

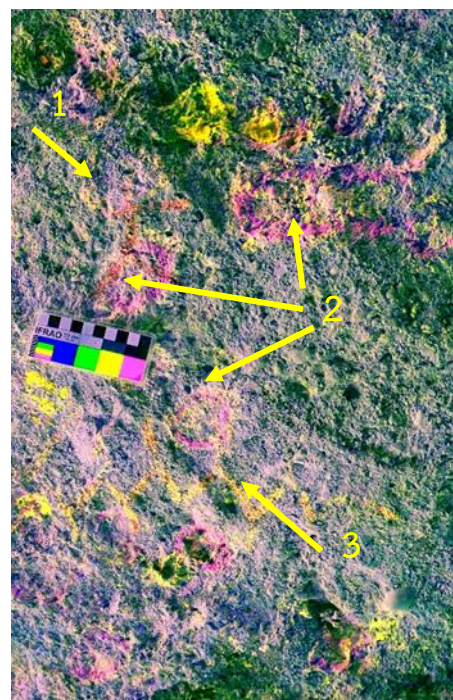




*The original photograph of paintings at the rock shelter near Bo Nam Nang U-Sa*



*Paintings at the stone shed at the centre of Phra Phuthabat Bua Bok 1*



*Paintings of overlapping images in three shades of red colour: Shade 1 human figure; Shade 2 circle and oval figures; and Shade 3 serrated lines*

### **Non Sao Ae 1 and Non Sao Ae 2**

Paintings from at least two periods have been discovered at Non Sao Ae 1 and Non Sao Ae 2. The paintings from the prehistoric period are fine continuous line drawings in red. This style is regarded as the most common style found at the Phu Phrabat. The drawings are parallel or mixed lines drawn continuously on the walls and the ceiling of the stone sheds. There are also historic paintings of human figures, the sun, animals (an elephant, a peacock and a horse) and other symbolic designs in white colour drawn over the red paintings.





*Rock paintings at Non Sao Ae 1*



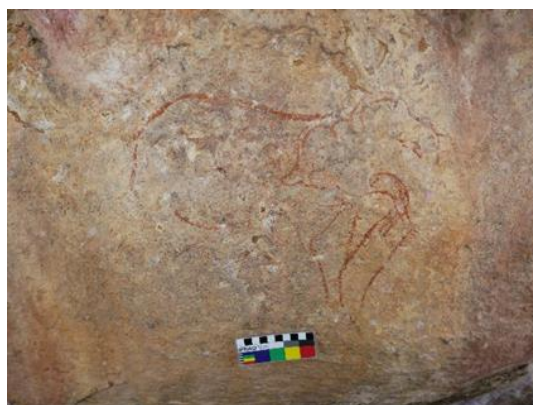
*Rock paintings at Non Sao Ae 2*

### **Tam Chang**

At Tam Chang, abstract paintings in red colour from the prehistoric period and the outline drawing of an elephant also in red colour but from the historic period have been found. It is assumed that they were created in the same periods as the paintings found at Wat Look Koei.



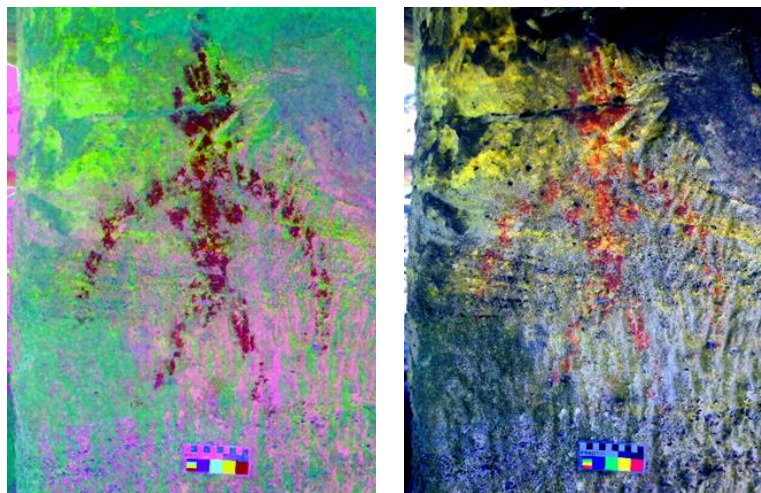
*Abstract figures painted in red from the prehistoric period at Tam Chang*



*The outline drawing of an elephant painted in red colour from the historic period*

### **Wat Pho Ta**

One prehistoric painting is found at Wat Pho Ta. The red painting displays a human figure with spreading arms and legs. There are traces of utilising a chisel or a sharp metal tool to extract the stone surface in the historical period to modify the area. This finding has confirmed this rock shelter was used in several periods.



*Human figure painting from the prehistoric period at Wat Pho Ta*

### Appendix III

#### The Dvaravati culture in the Isan region

Northeast Thailand or the Isan region covers a vast area of the country. This region could be the source of civilisation having accumulated for centuries. Several research and studies about this region have provided an understanding and specific knowledge about the cultures once existed there in various periods, such as the prehistoric culture of Ban Chiang and the Khmer culture in Thailand. However, the knowledge about the Dvaravati culture in the region involving the transition state from the late prehistoric and early historic period is still unclear.

The studies about the Dvaravati culture in Northeast Thailand (the Isan Dvaravati culture) reveal that the Isan Dvaravati art could be categorised into two major periods. The early period is around the 7<sup>th</sup> – 10<sup>th</sup> centuries. The art from this period is considered as the true Dvaravati art (simultaneously with the Dvaravati art in Central Thailand). It was also in the Khmer Pre-Angkor period when the Khmer occupied the Southern Isan (Lower Isan) region. The late period of the Isan Dvaravati art is from around the 9<sup>th</sup> – 11<sup>th</sup> centuries, which is regarded as the local Isan Dvaravati art dominantly in the Northern Isan (Upper Isan) region.

Dissemination of the Dvaravati culture could be derived from various sources. The Isan region was importantly the source of civilisation since the prehistoric period, especially the late Metal Age in the Ban Chiang culture. However, development of the community when entering the historic period was dependant on how people interacted and communicated with the outside world. Adoption of Buddhism and Hinduism is another key contribution to significant changes of the living cultures in the region. The religious influences from Central and Eastern Thailand and the Khmer Empire were a driving force for the Isan region to enter into the historic period.

Most archaeological sites or ancient towns in the Lower Isan region are located near the Moon River basin, for example Muang Phimai and Muang Sema in Nakhon Ratchasima Province, and Lam Plai Mat District in Buriram Province. Ban Than Prasat Sub-District in Phimai District has been excavated and found evidence of human habitation in the Bronze Age during the prehistoric period. Evidence of the Dvaravati culture from the 7<sup>th</sup> century is also found.

The archaeological evidence discovered at Muang Sema in Sung Noen District, such as stupas, stupa foundations, fragments of the Buddha images in the Dvaravati period and boundary stone markers (the Sīma stones) at Wat Sīmaram, confirms development of the human inhabitation in these locations during the Dvaravati period. Buddhism was adopted around the 8<sup>th</sup> – 9<sup>th</sup> centuries. In 937AD, this area was the location of the Srijanasa Empire as stated in the Bo E-ga stone inscription inscribed in Sanskrit and Pre-Angkor Khmer languages.

In addition, inscriptions in Sanskrit and ancient Khmer languages from the 8<sup>th</sup> – 9<sup>th</sup> centuries have been discovered at Ban Hin Kon archaeological site in Pak Thongchai District, Nakhon Ratchasima Province. The inscriptions describe about a local king of the Isan region who ordained as a Buddhist monk known as Sri Racha Bhiku. He built four boundary stone markers (the Sīma stones) dedicating to Buddhism. These findings show that the town had its own culture and could be the Srijanasa Empire. Adoption of Buddhism at the empire could occur prior to the arrival of Hinduism. Hence, most religious artworks discovered at Ban Hin Kon archaeological site are related to Hinduism, and some are in Mahayana Buddhism.<sup>viii</sup>

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<sup>viii</sup> Siripoj Luomanacharoen. Prakhon Chai bronze: Early historic artistic evidence from the Korat Plateau. Master's Degree Thesis, Silpakorn University, 2003, pp.49-50.



### 1. The relationships between the Dvaravati culture in the Lower Isan region and Central Thailand

Findings from the studies suggest that communities from this period adopted the Indian civilisation. Discoveries of artifacts and archaeological sites highlight similarities with those found at the basin of Mekong, Moon and Chi Rivers. Scholars believe that Isan communities were part of the Chenla Empire that had Isanapura as its capital, and was situated east of the Dvaravati Empire.

One of the most important pieces of evidence are the stone inscriptions No.117 and 118 and Bo E-Ga stone inscription. These inscriptions have been discovered in Ayutthaya Province but are likely to be moved from Northeast Thailand. The inscriptions mention the “Srijanasa Empire.” Professor George Cœdès is the first person who assumes that the Srijanasa Empire was situated on the Korat Plateau, based on the location where the inscriptions have been discovered. It is believed that the Srijanasa Empire was not part of the Khmer Empire as it was founded in the 7<sup>th</sup> century or earlier. Professor Cœdès’ assumption was developed from the calligraphical study of “Upadhamani” letters on one side of the stone inscription No.118. These letters faded out some time in the 12<sup>th</sup> century. He points out that Buddhism was adopted and followed by people in the early period of the Srijanasa Empire until the 15<sup>th</sup> century. The inscription also mentions about the demigod who was given the land outside Kampot Thet (Cambodia) and made a Shiva Lingam. This suggests that the Khmer art already had an influence on people in the Isan region. This evidence makes Professor Cœdès believe that both Buddhism and Hinduism were adopted at the Srijanasa Empire.<sup>ix</sup>

Professor Jean Boisselier’s view about the Srijanasa Empire is built upon Professor Cœdès’ assumption. Professor Boisselier believes that the inscription found at Ban Hin Khon archaeological site could be from the Srijanasa Empire. The empire was probably founded in the 8<sup>th</sup> century and existed in the 9<sup>th</sup> – late 11<sup>th</sup> centuries.

The name of the Srijanasa’s King in 937AD appears on the inscription. The Srijanasa Empire adopted Buddhism in the 7<sup>th</sup> century and religiously converted to the Shaivism Sect of Hinduism in the early 10<sup>th</sup> century. Khmer and Sanskrit languages were mainly used but some ancient Mon scripts were also found. This indicates that the ancient Mon language was used prior. The art in the Isan region could be the art of the Korat Plateau, which affiliated with the Dvaravati culture. It is considered the Srijanasa art. However, some statues in Mahayana Buddhism found in the Isan region were influenced by the Khmer art in the Pre-Angkor period.<sup>x</sup>

Several pieces of important evidence discovered at Muang Fai are of the Dvaravati art. The Buddha image in the attitude of being protected by a Naga, for example, was made in the early Dvaravati art around the 7<sup>th</sup> – 8<sup>th</sup> centuries, which is comparable with the statues found in Southern and Eastern Thailand. Muang Fai is regarded as an ancient town having the same town plan as those Dvaravati towns in Central and Eastern Thailand covering the area of Prachinburi Province to the headwaters of the Moon River. The discovery of the Buddha images at Muang Fai signifies that Muang Fai adopted Buddhism and was influenced by the Dvaravati culture from Central and Eastern Thailand. Excellent evidence from Muang Fai is a bronze standing Buddha image in the Dvaravati art (see Figure 1) and the Bodhisattva statues and Buddha images in Mahayana Buddhism, such as Maitreya Bodhisattva (see figure 2). They are currently on display at Bangkok National Museum. The Buddha images and statues were influenced by the Dvaravati art from Central Thailand and the Khmer art in the Pre-Angkor and Kulain periods around the 7<sup>th</sup> – 8<sup>th</sup> centuries. The discovery of Buddha images and Bodhisattva statues confirms that both Theravada and Mahayana Buddhism were adopted by Muang Fai community.

<sup>ix</sup> Gorge Cœdès, “Stèle de Bô Ika K. 400”, *Inscriptions du Cambodge V. VI*, Paris: Bulletin de l’Ecole Française d’Extrême-Orient, 1954, pp.83-85.

<sup>x</sup> Jean Boisselier, *La Sculpture en Thaïlande*. Fribourg: Office du Livre, 1975, p.111.



*Figure 1: The Buddha image in the attitude of giving a sermon, on display at Bangkok National Museum*



*Figure 2: Maitreya Bodhisattva statue found at Muang Fai, on display at Bangkok National Museum*

## **2. The art in Dvaravati culture from Central Thailand and relationships with the Khmer art in the Pre-Angkor period in the 7<sup>th</sup> – 9<sup>th</sup> centuries**

### **2.1 The Buddha images in the early Isan Dvaravati period**

The Dvaravati Buddha images or the early style of Buddha images discovered in the Isan region are most likely found in the Lower Isan area of Ubon Ratchathani, Nakhon Ratchasima and Buriram Provinces. Some display characteristics of the Khmer Pre-Angkor art and the Dvaravati art from Eastern Thailand found in Chanthaburi and Prachinburi Provinces. They could be related to the assumptions regarding the Srijanasa Empire on the Korat Plateau. One of the oldest Buddha images is, for example, the stone Buddha image in the attitude of being protected by a Naga found at Wat Uthai Makkaram. Professor M.C. Subhadradis Diskul, a well-known Thai archaeologist, analyses the appearance of this Buddha image and suggests that the statue obviously shows the Indian Amaravati influence, which was the origin of this attitude. Its age could be around the 7<sup>th</sup> century<sup>xi</sup> (see Figure 3). Professor M.C. Diskul also proposes that the statue is related to the Dvaravati art in Central Thailand, and has the same style as the statues from the Khmer Pre-Angkor period.<sup>xii</sup> For example, the statue has relatively flat and large hair curls similar to the Buddha head displaying at Phnom Penh Museum in Cambodia (see Figure 4).

<sup>xi</sup> Pisit Charoenwongsa et Subhadradis Diskul, *Archaeologia, Mundi: Thaïlande*, Genève: Nagel, 1976, pp.107-108.

<sup>xii</sup> M.C. Subhadradis Diskul, *Arts in Thailand*, 9<sup>th</sup> ED. (Bangkok: Amarin Printing Group, 1991), pp.



*Figure 3: The stone Buddha image in the attitude of being protected by a Naga found at Muang Fai, Lam Plai Mat District, Burirum Province, on display at Wat Uthai Makkaram, Hin Dad Sub-District, Huay Talaeng District, Nakhon Ratchasima Province*



*Figure 4: The Buddha head in the Khmer Pre-Angkor period, on display at Phnom Penh Museum, Cambodia*

Another period that the Buddha images were made could be between the 8<sup>th</sup> – 9<sup>th</sup> centuries. The Buddha images from this period were greatly influenced by the Dvaravati art from Central Thailand, for example, sandstone Buddha images displaying at Maha Viravong National Museum (see Figures 5-7) and Ubon Ratchathani National Museum. These Buddha images have a round face, large hair curls and wear opened left shoulder robe. The robe wearing style is similar to the Buddha images in the Dvaravati art from Central Thailand and the Khmer art in the Pre-Angkor period. The robe hangs down at the front in the “U shape.” However, the gesture of giving a sermon with both hands raising to the chest level is not found in the Khmer art. This gesture is specific to the Dvaravati art from Central Thailand.



*Figure 5: The Buddha image in the attitude of meditation, on display at Maha Viravong National Museum*



*Figure 6: The standing Buddha image with both hands in the gesture of giving a sermon, on display at Maha Viravong National Museum*



*Figure 7: The standing Buddha image with both hands in the gesture of giving a sermon, on display at Maha Viravong National Museum*



*Figure 8: The standing Buddha image with both hands in the gesture of giving a sermon, on display at Ubon Ratchathani National Museum*



*Figure 9: The standing Buddha image on Panusabodhi, on display at Phimai National Museum*

Another significant Buddha image that displays the Dvaravati art from Central Thailand is the standing Buddha image on the Panusabodhi (a mythical creature of mixed animal), which is currently on display at Phimai National Museum (see Figure 9). This Buddha image displays both hands in the gesture of giving a sermon. There are two human figures, each holding a whip and standing on each side of the Buddha image. These human figures presumably are the Indra God and the Brahma God. The gesture



of the Buddha image standing on the Panusbodhi has a new interpretation that the Buddha is like the shining light and above all creatures. Most statues have holes presumably for attaching to the Dhammachakra (the Wheel of Dhamma) symbolising the announcement of the Buddha's sermon. The Dhammachakra with crouching deer and standing Buddha images on the Panusabodhi are commonly found in Central Thailand. They are features specific to the Dvaravati culture. The discovery of the standing Buddha image on the Panusabodhi in the Isan region and the Dhammachakras at Muang Sema, Nakhon Ratchasima Province clearly reflects the region's relationships with the Dvaravati culture in Central Thailand.

## **2.2 The bronze Buddha images at Lam Plai Mat District, Burirum Province**

The bronze Buddha images found in Central Thailand are usually small, whilst the bronze Buddha images and Bodhisattva statues found in the Southern Isan region are large. Large statues are very rare in the Dvaravati culture, hence, are significant evidence unique to the Southern Isan region. These bronze images are the evidence demonstrating the Isan region was the largest bronze manufacturer, particularly at Muang Fai, Lam Plai Mat District and at Prakonchai, both in Burirum Province. The statues display the same characteristics as the statues in the Khmer art in the Prei Khmeng and Kampong Preach styles (the 8<sup>th</sup> – 9<sup>th</sup> centuries).

The standing Buddha image with both hands in the gesture of giving a sermon found at Lam Plai Mat District in Burirum Province (see Figure 1) is the largest bronze Buddha image in the Dvaravati art. The statue has similar features of the Dvaravati art from Central Thailand, particularly a round face, connected eyebrows and a slender body figure. The statue also wears the robe in “U-shape” hanging down to the feet whilst in the local Isan style, the robe usually hangs over at the knee level. The statue has both hands raised to the chest level displaying an important characteristic of the Dvaravati art from Central Thailand. Many bronze Buddha images with the same characteristics have been discovered and are currently on display at Bangkok National Museum (see Figures 10 and 11).



*Figure 10: The standing Buddha image with both hands in the gesture of giving a sermon, on display at Bangkok National Museum*



*Figure 11: The standing Buddha image with both hands in the gesture of giving a sermon, on display at Bangkok National Museum*



*Figure 12: The Buddha image in the attitude of mediation, on display at Phimai National Museum*

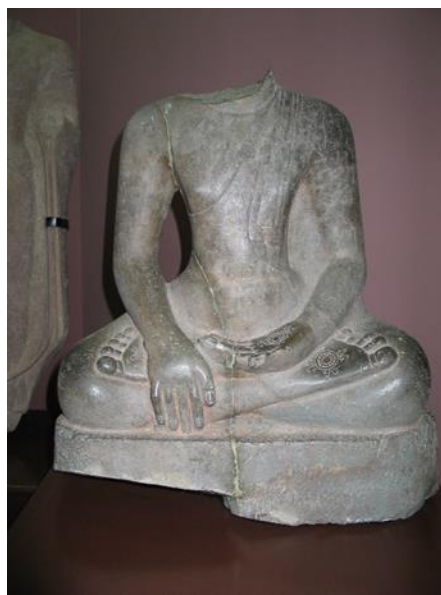
The discovery of several Buddha images from the Dvaravati period in the Lower Isan region enables comparison with the Buddha images from Central, Eastern and Southern Thailand. They are the old Dvaravati style and could be made in the 7<sup>th</sup> – 8<sup>th</sup> centuries. Muang Fai, an ancient town where the statues have been found, have the same town plan as the Dvaravati towns in Central Thailand. Buddhism could be the main religion at Muang Fai and could possibly be the Dvaravati influence from Central and Eastern Thailand covering the area of Prachinburi Province to the headwaters of the Moon River. The bronze standing Buddha image in the Dvaravati art (see Figure 12) has been discovered with several sandstone Buddha images and Bodhisattva statues in Mahayana Buddhism (see Figure 2). They display an influence of the Khmer art in the Prei Khmeng and Kulain styles from the 7<sup>th</sup> – 8<sup>th</sup> centuries. The discovery of Bodhisattva statues also suggests that there were several religious beliefs existed in the Lower Isan region, thus, it is challenging to pinpoint whether the main Buddhist belief in the Lower Isan region was Theravada or Mahayana Buddhism.

### **2.3 The Lower Isan Dvaravati in the 10<sup>th</sup> – 11<sup>th</sup> centuries**

Several sandstone Buddha images discovered at Nakhon Ratchasima Province are the seated Buddha images with crossed legs uniquely showing large soles. The hands are relatively large. The outer robe is folded in many layers over the left shoulder hanging down with the split ends. These Buddha images are currently on display at Bangkok National Museum (see Figure 13) and Phimai National Museum (see Figure 14). The Buddha images with specific features reflecting an influence of the Indian Pala art could be adopted in the Lower Isan around late 10<sup>th</sup> – 11<sup>th</sup> centuries. These are the bronze Buddha images founded at Roi Et, Khon Kean and Maha Sarakham Provinces. Many Buddha images with crossed legs are small votive tablets in the Fa Daet Sung Yang School of Art. These Buddha images have the facial appearance comparable with those in the Dvaravati art from Central Thailand and the Khmer art in the Pre-Angkor period.



*Figure 13: The Buddha image in the attitude of Subduing Mara, on display at Bangkok National Museum*



*Figure 14: The Buddha image in the attitude of Subduing Mara, on display at Phimai National Museum*

Most Buddha images discovered at Ban Than Prasat in Nakhon Ratchasima Province (see Figure 15) have features different from those in the late Dvaravati and Haripunchai art. They have cone-shaped hair curls, bulging eyes and a moustache-like line over the upper lip. These features presumably are an influence of the Khmer art. However, some Buddha images look similar to those in the late Dvaravati art found in Central Thailand and the Haripunchai art. They could be made in the later period around the 10<sup>th</sup> – 11<sup>th</sup> centuries.<sup>xiii</sup>



*Figure 15: The Buddha head, on display at Phimai National Museum*

<sup>xiii</sup> Sakchai Saising (2019). Dvaravati art: The early religious culture in Thailand. (2<sup>nd</sup> ed.) Bangkok: Muang Boran), pp.256-257.



### 3. The Upper Isan Dvaravati culture

The Chi River basin covers the area of Chaiyabhum, Khon Kaen, Maha Sarakham, Udon Thani, Kalasin and Yasothon Provinces. There are moated ancient towns found in these provinces. The most well-known ancient towns are the Fa Daet Sung Yang ancient town in Kalasin Province and the Na Dun ancient town in Maha Sarakham Province.

The art in the Upper Isan region is considered the local Dvaravati art. They were less influenced by the Khmer art and could be dated around the 10<sup>th</sup> century. It is believed that the Dvaravati civilisation from the Ancient Town of Si Thep in Phetchabun Province was adopted in the Upper Isan region. Once arrived in the Upper Isan region, the Dvaravati artistic style was further developed into a more unique style showcasing more local features. The new style was popular locally and not found elsewhere. For example, the Sīma culture was not found in Central Thailand. The local Dvaravati art was popularly applied into the reclining Buddha images (the attitude of entering the nirvana) built on the cliff in the Upper Isan area. At the Phu Wiang in Khon Kaen Province, for example, pieces of the Dvaravati Buddha image and the reclining Buddha image have been found on the cliff line. These Buddha images show the facial appearance in the local Dvaravati art.



*Figure 16: The Buddha head from Fa Daet Sung Yang, on display at Phimai National Museum*

The Buddha images in the Upper Isan region in the early period were mostly influenced by the Indian Gupta art. They were later influenced by the Dvaravati art from Central Thailand and subsequently the local artistic style. Significant evidence is the Buddha images found at Fa Daet Sung Yang (see Figure 16). Although the Buddha images generally exhibit characteristics of the Dvaravati art from Central Thailand, they have a distinctive style that presents features of the local Dvaravati art. For example, the Buddha images have prominent brow ridge and a smiling expression with both corner lips being lifted high. These features are different from the Dvaravati art from Central Thailand, which displays a thick mouth and straight line lips. The positive relationships with the Dvaravati Empire in Central Thailand could occur around the 7<sup>th</sup>–9<sup>th</sup> centuries.

Around the 9<sup>th</sup>–11<sup>th</sup> centuries, when the Khmer influence became dominant in the Lower Isan region, the local artistic style in the Upper Isan area was still strong until the 10<sup>th</sup>–11<sup>th</sup> centuries as seen from many sculptures from this period. At the time when the Dvaravati art's popularity in Central Thailand declined, the art in the Upper Isan region became a complete, locally owned style having own unique patterns and concept of artistic creation. The Upper Isan sculptures in this period are, for example the

reclining Buddha images commonly found on the cliff and the Buddha images in the attitude of Subduing Mara with the left hand (instead of the right one) placing over the knee.

### **The Buddha images with unique characteristics found at Fa Daet Sung Yang**

One of the most important centres of the Dvaravati civilisation in the Upper Isan region is the Fa Daet Sung Yang ancient town. This ancient town was surrounded by moats similar to other Dvaravati ancient towns in Central Thailand. Many artifacts have been discovered, including the most important evidence of the carved Sīma stone slabs depicting the Buddhist scenes. The sculptures have several features similar to those in the Dvaravati art from Central Thailand, for example, the local style face, connected eyebrows, bulging eyes and large hair curls. However, key differences are the features that display the unique style of the Fa Daet Sung Yang School of Art, including a smiling expression with both corner lips being lifted high and the slanted eye corners (see Figure 17). This artistic style beautifully displays a softer or more gentle facial expression than sculptures in the Dvaravati art from Central Thailand that display thick, flat and straight-line lips. The sculptures found at Fa Daet Sung Yang display an influence and adaptation of the Dvaravati art from Central Thailand into their own unique local artistic style. This event occurred around the 9<sup>th</sup> – 10<sup>th</sup> centuries.

### **The bas-relief Buddha images on the rock wall or the cliff**

Sculptures commonly found in the Isan region are the bas-relief Buddha images, in either a sitting or reclining position, on the rock wall or the cliff in Chaiyabhum, Kalasin, Udon Thani, Khon Kaen and Sakon Nakhon Provinces. These sculptures exhibit truly local craftsmanship of creating unique sculptural features displaying a disproportionate figure and facial components without an influence from other art, including a round face, large eyes and small lips. The gestures of the Buddha images are often not adhered to any traditional gestures in Buddhism. For example, the Buddha image in the attitude of Subduing Mara discovered at Wat Phu Phra in Chaiyabhum Province has the left hand, instead of the right hand, placing on the knee.



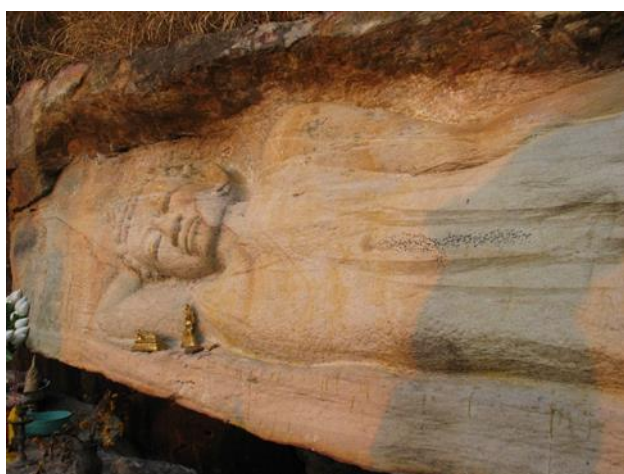
*Figure 17: Phra Chao Ong Tue at Wat Sila Art Phu Phra in Ban Na Gai Sao, Na Seaw Sub-District, Muang District, Chaiyabhum Province*

A common Isan belief involves constructing a reclining Buddha image or the Buddha image in the posture of entering the nirvana on a mountain. The reclining Buddha images can be found on the Phu Por in Sahaskhun District, Kalasin Province (see Figure 18), at Wat Cheong Dai Thepparat in Muang District, Sakon Nakhon Province and Wat Pra Non Phu Wiang in Phu Wiang District, Khon Kaen Province (see Figure 19). Inscriptions in the Pallava and Mon scripts have also been discovered on the

side of the reclining Buddha at Phu Wiang (see Figure 19a). In comparison with other inscriptions on the Sīma stone slabs, this statue could be dated around late 9<sup>th</sup> century. The Buddha images displaying the local characteristics could adopt the local artistic style in the 10<sup>th</sup> century. During the 11<sup>th</sup> – 12<sup>th</sup> centuries, the art continued to develop without an influence of the Khmer art. However, some artifacts also display an influence of the Khmer art that started to mix with the local art around the 11<sup>th</sup> century.



*Figure 18: The reclining Buddha image on the Phu Por in Sahaskhan District, Kalasin Province*



*Figure 19: The reclining Buddha image at Wat Pra Non Phu Wiang, Phu Wiang District, Khon Kaen Province*



*Figure 19a: The Pallava inscription*

#### **4. The Buddha images on the Sīma stone slabs**

The Isan Dvaravati art involves a culture of using the Sīma stones to mark boundaries. Very large Sīma stones or the Sīma stone slabs in particular have low-relief sculptures. These sculptures are stupas, Puranakata pots or the Buddhist scenes. Sculptures of the Buddhist scenes on the Sīma stone slabs are unique to the Isan Dvaravati art. These sculptures depict a story of the Buddha's life and the Jataka stories such as Tosachart Jataka (the 10 Jataka tales). Some sculptures are the narrative stories of, such as the Gajalakshmi (Lakshmi with elephants) and the scenes from Ramayana, but they are not commonly found. This Dossier will only discuss the narrative stories involving the Buddha.



### The Buddha's life

The purpose of carving a narrative sculpture to tell a story about the Buddha's life or the Jataka on the Sīma stone slabs to mark the boundaries could be the same as creating the wall paintings in the later period to tell stories and teach Buddhists to participate in religious ceremonies and make good karma like the Jataka stories. Some Sīma stones are relatively small, therefore, have limited space for carving. It is difficult to carve a story on small Sīma stones, hence making it challenging to interpret the sculptural story on these small Sīma stones. Some stories could be more popular than others in a specific period. However, it is unlikely that people from other periods would know about the stories.

Many scenes involving the Buddha's life have been found on the Sīma stone slabs but they could not be interpreted. Most scenes are related to the Buddha giving a sermon. For example, the Sīma slab found at Ban Nong Pan in Kamalasai District, Kalasin Province has a sculpture depicting the Buddha sitting on the Muchalin Naga giving a sermon to two people (see Figure 20). Sculptures on the Sīma slab discovered at Muang Fa Daet Sung Yang in Kalasin Province depict the Buddha giving a sermon to Rahula (see Figure 21). Another Sīma slab from Muang Fa Daet Sung Yang, currently on display at Khon Kaen National Museum, has sculptures of the Buddha giving a sermon to Sothiya (see Figure 22).

One of the most beautiful and significant sculptural Sīma stone slabs in Thailand has been discovered at Muang Fa Daet Sung Yang in Kalasin Province and is currently on display at Khon Kaen National Museum (see Figure 23). The sculptures depict the scene of the Buddha returning from Kabinlapat City. The sculptures show the Buddha in a seated position with both feet resting above Lady Pimpa's hair devoting to prevent the Buddha's feet to touch the ground. This gesture is regarded as the way to pay the utmost respect to another person. These narrative sculptures are common in the Mon and Burmese art, which is likely to influence the Isan region.



*Figure 20: The Sīma stone slab, discovered at Ban Nong Pan, Kamalasai District, Kalasin Province, depicting the Buddha sitting on the Muchalin Naga giving a sermon to two people, on display at Khon Kaen National Museum*



*Figure 21: The Sīma stone slab discovered at Muang Fa Daet Sung Yang, Kalasin Province, depicting the Buddha giving a sermon to Rahula, on display at Khon Kaen National Museum.*



*Figure 22: The Sīma stone slab, found at Muang Fa Daet Sung Yang, Kalasin Province, depicting the Buddha giving a sermon to Sothiya, on display at Khon Kaen National Museum*



*Figure 23: The Sīma stone slab, discovered at Muang Fa Daet Sung Yang, Kalasin Province, depicting the Buddha returning from Kabinlapat City, on display at Khon Kaen National Museum*

### **The iconographical analysis of the bas-reliefs on the Sīma stones**

Most Buddha images discovered in the Upper Isan region, particularly at Fa Daet Sung Yang display unique style, patterns and features. They have a round face with bulging eyes, a flat nose, a protruding mouth, thick lips, large hair curls with pointing triangle shape top, large hands and large feet. These features are considered the true local Dvaravati art from the Upper Isan region. The carving techniques used are different from other art showing the local pattern of the Buddha's toes spreading like fingers. Other Buddha images in a seated position with loosely crossed legs are generally in the Dvaravati art.

### **U-Sa Baros: From a folklore to the legend of the land**

There are several versions of the folklore of U-Sa Baros having been verbally told for generations. Some versions refer this folklore as Phra Gud – Phra Paan and have some parts with different content. The U-Sa Baros folklore in this appendix will focus on only a plot relevant to the two main characters (Nang U-Sa and Tao Baros) and the rock shelter ancient monuments at the Phu Phrabat Historical Park.

Once upon a time, there was a big city near the Phu Phrabat area called “Muang Paan.” It was ruled by the chief named “Tao Kong Paan.” He later adopted a girl called “U-Sa.” U-Sa was born from a lotus flower on the mountain range, and a rishi (hermit), who was the teacher of Tao Kong Paan, brought her up in the jungle as his daughter. Nang (mistress) U-Sa grew up very beautiful and her body had the beautiful scents. Many princes from several cities sought permission from Tao Kong Paan to marry her but he denied all proposals and kept Nang U-Sa in a newly built tower on the mountain for studying with the hermit named “Junta.” One day, Nang U-Sa went to swim in a nearby pond and picked some flowers to make a garland in the shape of Honsa (a mythical bird). She incanted a spell of random wish on the magical garland for her true love and casted the garland into the river. The garland reached Muang Pakowiang Ngua, and the son of this city's ruler, Tao Baros, picked it up from the river. Tao Baros started searching for the garland's owner and travelled to Muang Paan with his followers.

Tao Baros' and his followers' horses stopped abruptly near a menhir and refused to travel further. Tao Baros decided to walk to continue the search. His followers were left with the horses to wait for his

return. Tao Baros wandered in the forest and saw Nang U-Sa bathing in the river. He realised that she was the garland's owner. They fell in love and had sexual relations without the consent of Tao Kong Paan. (In other versions, the plot was changed to other scenes that Tao Baros was on the hunting expedition and fell asleep under a banyan tree that he paid respect and offered a ceremony to the guardian god who resided in the banyan tree. The guardian god then took him to see Nang U-Sa and they had sexual relations for seven nights. After that the guardian god brought him back to the banyan tree. When Nang U-Sa woke up and did not see Tao Baros, she grieved and bitterly longed for him. Her chaperon named Nang Samunyavises drew pictures of different princes for Nang U-Sa to identify her lover. She recognised Tao Baros in one of the pictures and passed her love message to Tao Baros. When he found out where she lived, he rushed to see her and secretly stayed with her in the tower.)

Later, Tao Kong Paan knew about Nang U-Sa's relationship with Tao Baros. He was upset and wanted to kill Tao Baros. His officials refrained him from killing Tao Baros and reminded him of the mighty power of Tao Baros' father and Muang Pakowiang Ngua. Tao Kong Paan adopted the ploy by challenging Tao Baros to race against time to build a temple and complete in one day. The race was to start at dawn and finish at the rising of Dao Prakaipruek or Dao Pek (a morning star). The one who failed would be executed. Tao Kong Paan had a lot of workers built a temple at Muang Kong Paan (Wat Pho Ta). Tao Baros and his followers were very slow. Nang Samunyavises, Nang U-Sa's chaperon, used a trick to help Tao Baros by giving him a lantern to hang on the top of the tree at night. When Muang Paan building crew saw the light from the lantern, they assumed that the morning star already raised, which meant the end of competition time. They stopped building the temple. Tao Baros and his followers continued building the temple and finished it at the rising of the actual morning star. Tao Kong Paan lost the race and was executed.

When Tao Baros return to Muang Pakowiang Ngua with Nang U-Sa, upon their arrival Nang U-Sa found out that Tao Baros already had many wives before taking her as his wife. His other wives and concubines set up a plan with the court's astrologer to foretell that Tao Baros would suffer as a result of bad omen. The only way to escape this spell was that he had to wander alone in the jungle for one year. Tao Baros went to the jungle leaving Nang U-Sa to stay in Muang Pakowiang Ngua by herself. She was attacked and accused by those jealous women. She returned to Muang Paan and grieved from being abandoned. When Tao Baros returned home and knew the news about Nang U-Sa, he rushed to Muang Paan and found out that Nang U-Sa died. He buried her body at one of the menhirs. He died afterwards from grieving over her death. His followers buried him next to Nang U-Sa's tomb.



**Appendix IV**  
**Location of ancient monuments The Phu Phrabat Historical Park and the Sīma Cultural Site at**  
**Wat Phra Phuthabat Buaban**

Table of Ancient Monuments

Site	Group No.	Name/ Identified No.	Figure No.
The Phu Phrabat Historical Park	<b>Group One:</b> The natural rock shelters surrounded by the Sīma stones according to the Sīma cultural belief	1.1.1 Tam Rishi (The hermit cave)	Fig.1.1.1
		1.1.2 Nok Krata Rock Shelter (The quail rock shelter)	Fig.1.1.2
	<b>Group Two:</b> The modified natural rock shelters surrounded by the Sīma stones.	1.2.1 Kok Ma Noi (The small horse stable)	Fig.1.2.1
		1.2.2 Wat Look Koei (The son-in-law’s temple)	Fig.1.2.2
		1.2.3 Tam Phra (The monk’s cave)	Fig.1.2.3
		1.2.4 Hor Nang U-Sa (Nang U-Sa’s tower)	Fig.1.2.4
		1.2.5 Ku Nang U-Sa (Nang U-Sa’s ashes storage tomb	Fig.1.2.5
		<b>Group Three:</b> The natural rock shelters modified to create venues for ceremonial use	1.3.1 Kok Ma Tao Baros (Lord Baros’ horse stable)
	1.3.2 The rock shelter near Kok Ma Tao Baros		Fig.1.3.2
	1.3.3 The rock shelter east of Kok Ma Noi		Fig.1.3.3
	1.3.4 Heep Sop Pho Ta (The father-in-law’s coffin)		Fig.1.3.4
	1.3.5 Wat Pho Ta (The father-in-law’s temple)		Fig.1.3.5
	1.3.6 Bot Wat Pho Ta (The ordination hall at Wat Pho Ta)		Fig.1.3.6
	1.3.7 Heep Sop Nang U-Sa (Nang U-Sa’s coffin)		Fig.1.3.7
	1.3.8 Than Phra Sung (The high altar for enshrining the Buddha image)		Fig.1.3.8
	1.3.9 The rock shelter west of the ceremonial stone courtyard		Fig.1.3.9
	1.3.10 Tam Chang (The elephant cave)		Fig.1.3.10
	1.3.11 Heep Sop Tao Baros (Lord Baros’ coffin)		Fig.1.3.11
	1.3.12 Chang Khao Nai Pran (The hunter’s granary)		Fig.1.3.12
	<b>Group Four:</b> Ancient monuments, with no rock shelters, modified to create venues for ceremonial use or other purposes	1.4.1 The ceremonial stone courtyard	Fig.1.4.1
1.4.2 Bo Nam Nang U-Sa (Nang U-Sa’s well)		Fig.1.4.2	
The Sīma Cultural Site at Wat Phra Phuthabat Bua Ban (Buot Phra Bhu)	2.1 Group One		Figure of Group One and Group Two
	2.2 Group Two		

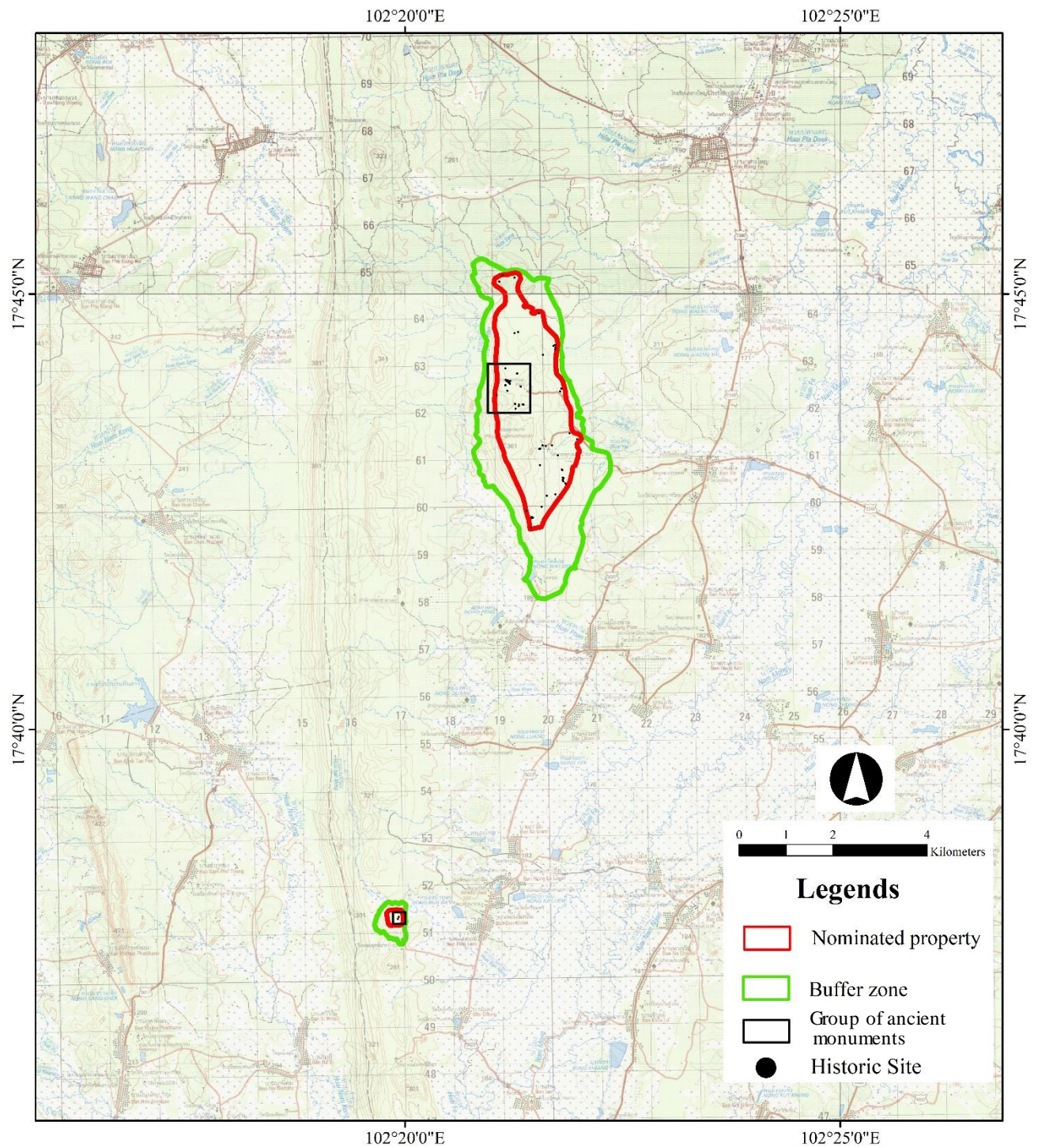
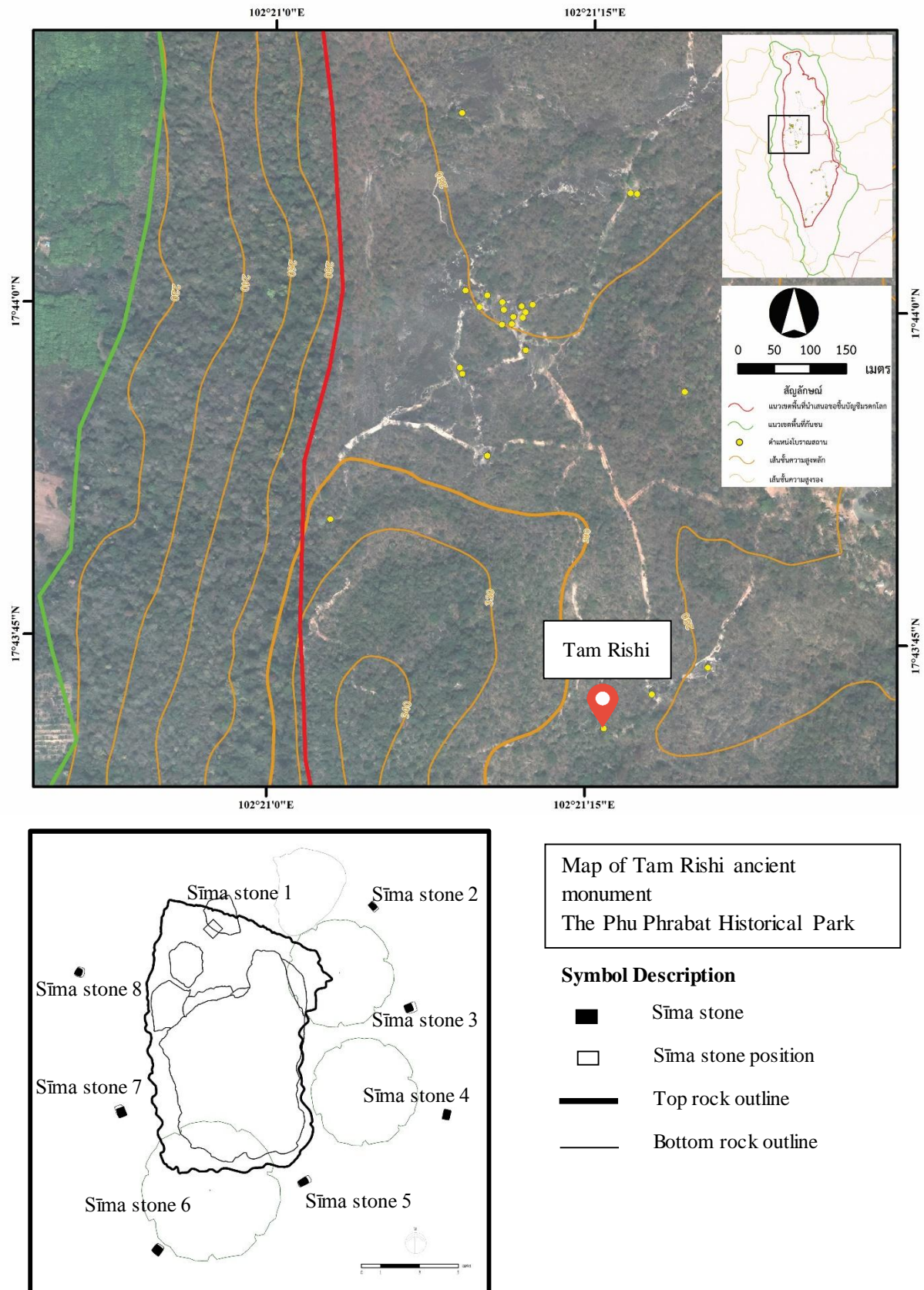


Figure 2-1 Map showing location of ancient monuments







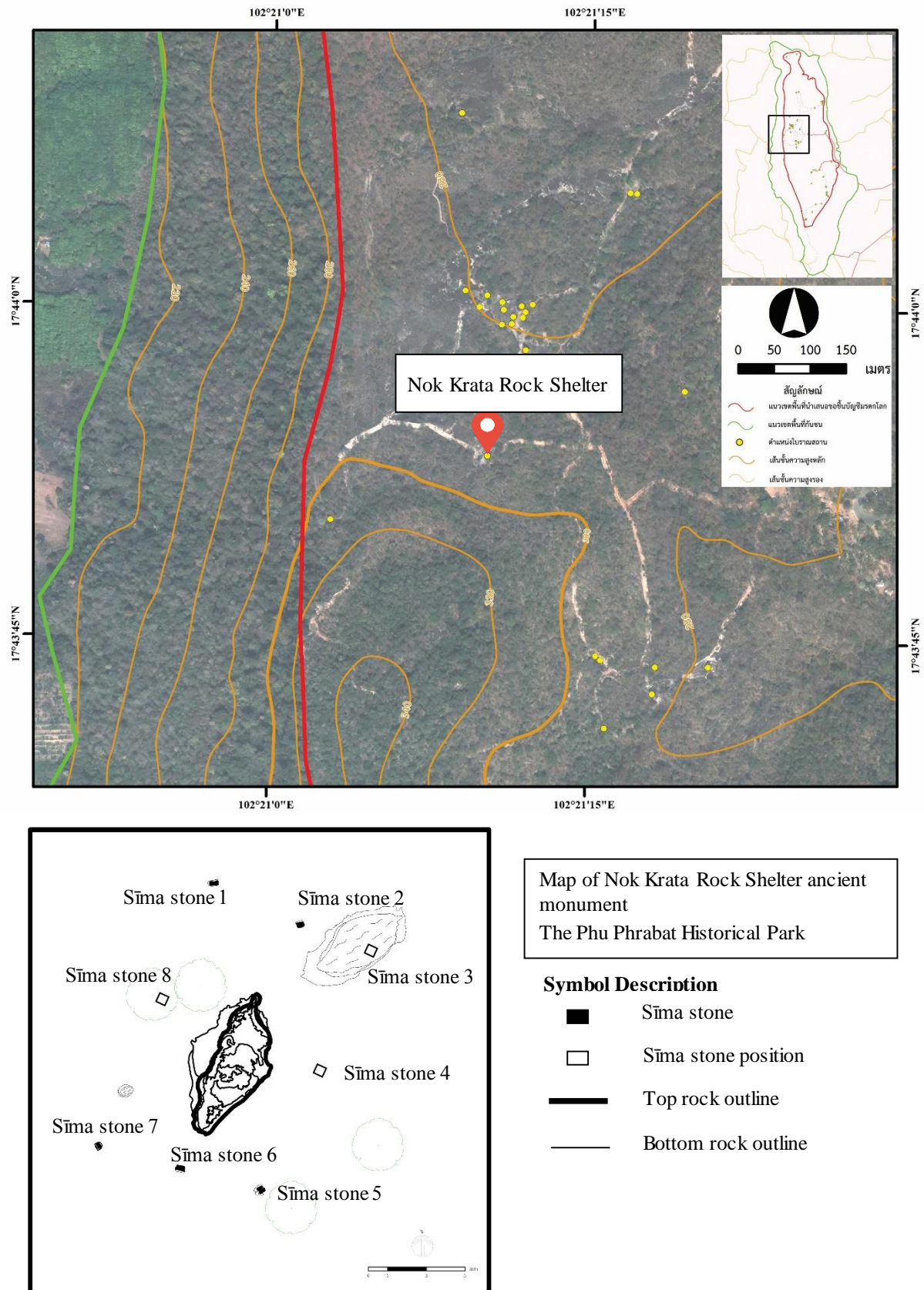
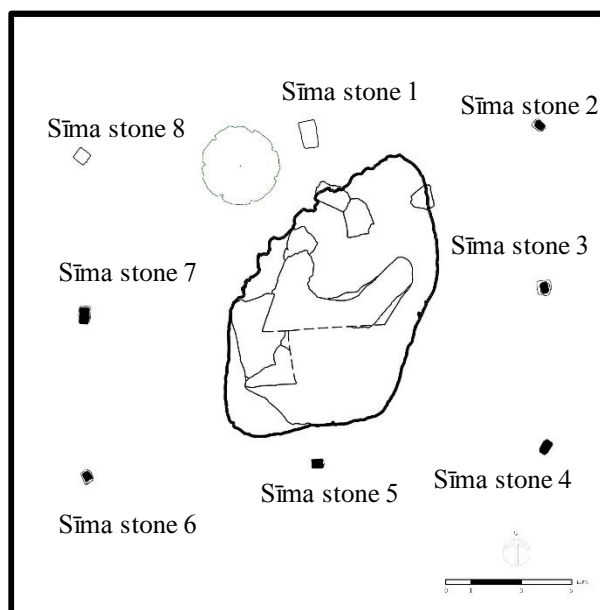
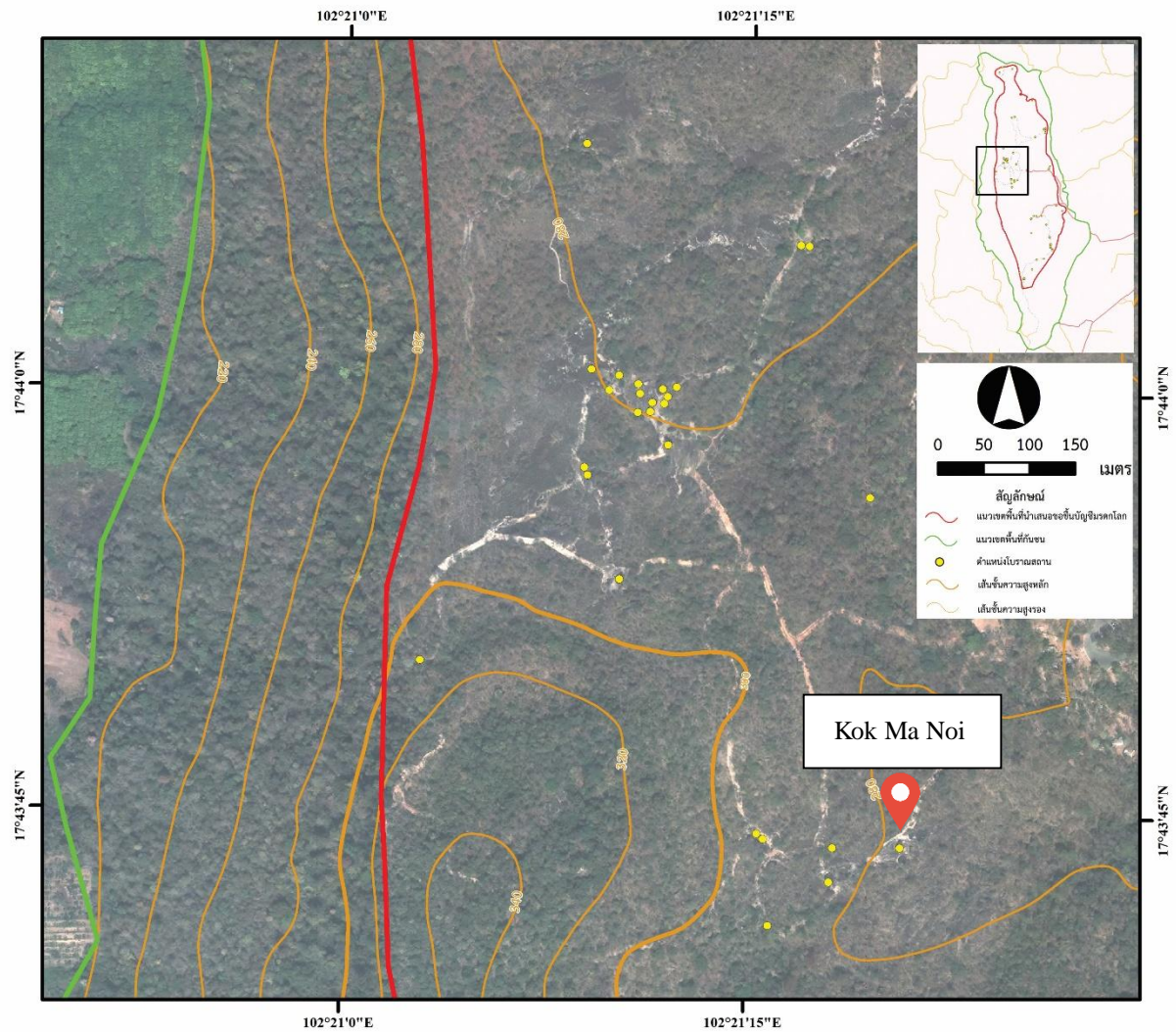


Figure of 1.1.2: Location of Nok Krata Rock Shelter ancient monument, the Phu Phrabat Historical Park



Map of Kok Ma Noi ancient monument  
The Phu Phrabat Historical Park

#### Symbol Description

	Sīma stone
	Sīma stone position
	Top rock outline
	Bottom rock outline
	Rock modification by human

Figure of 1.2.1: Location of Kok Ma Noi ancient monument, the Phu Phrabat Historical Park



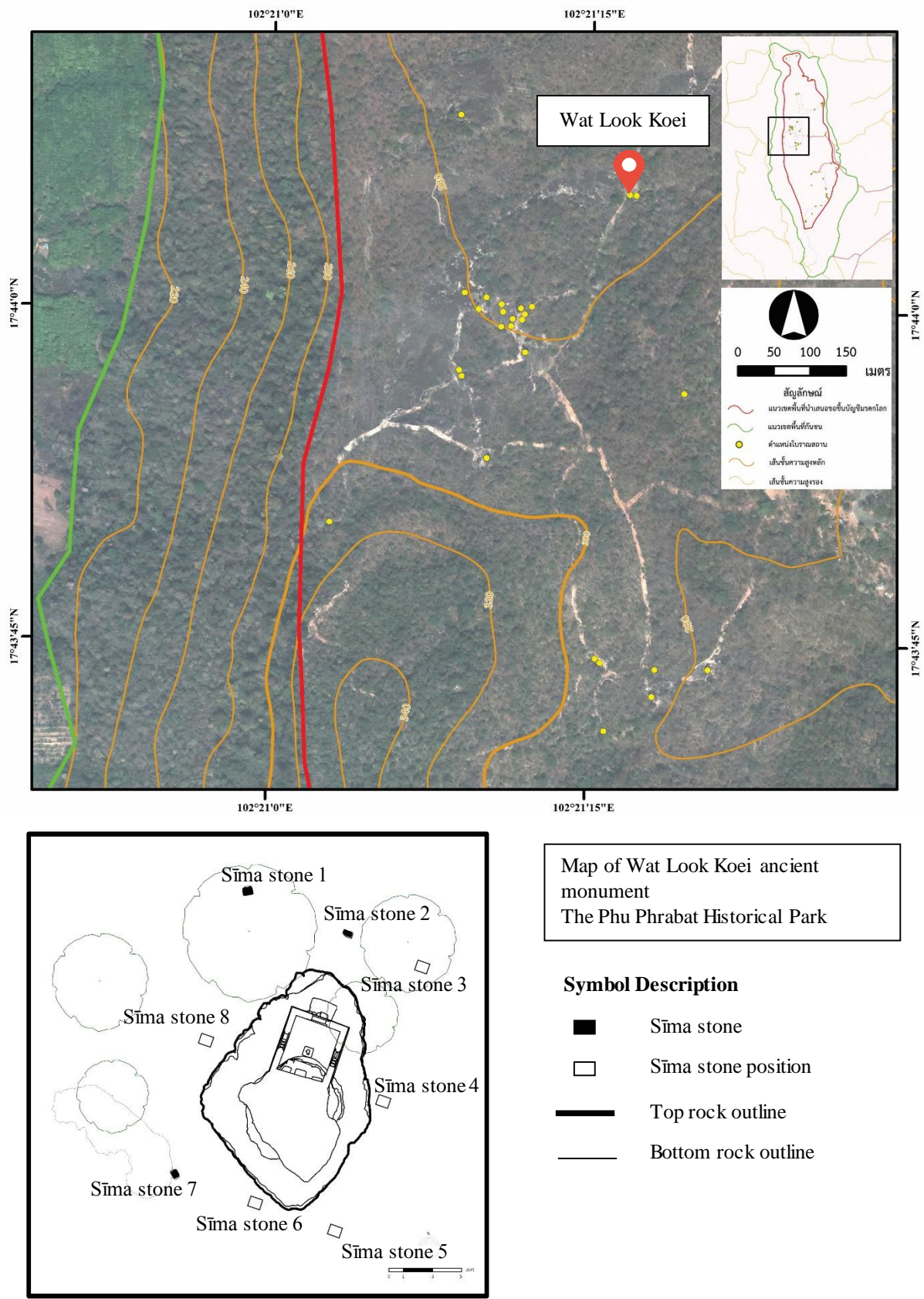


Figure of 1.2.2: Location of Wat Look Koei ancient monument, the Phu Phrabat Historical Park



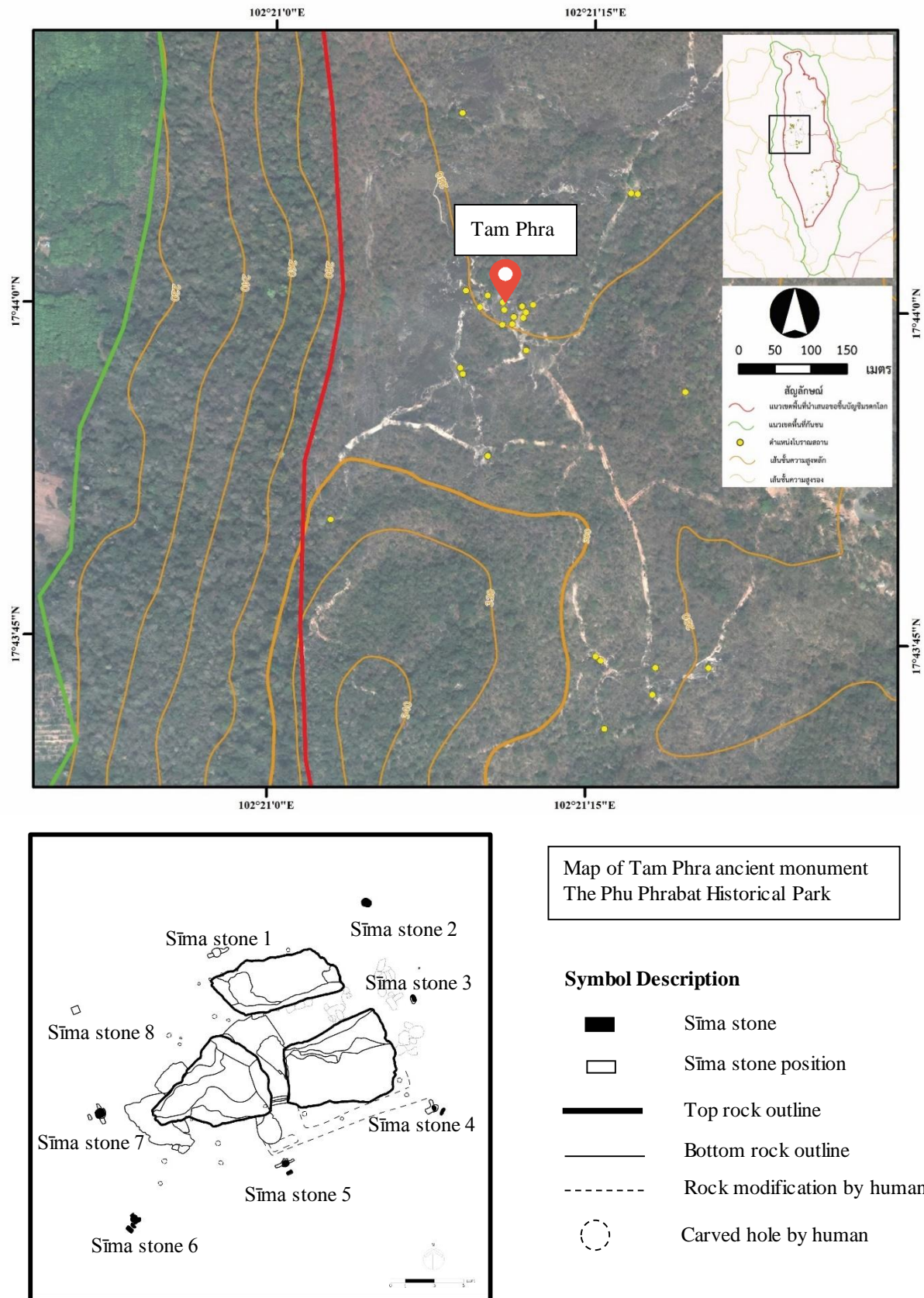


Figure of 1.2.3: Location of Tam Phra ancient monument, the Phu Phrabat Historical Park

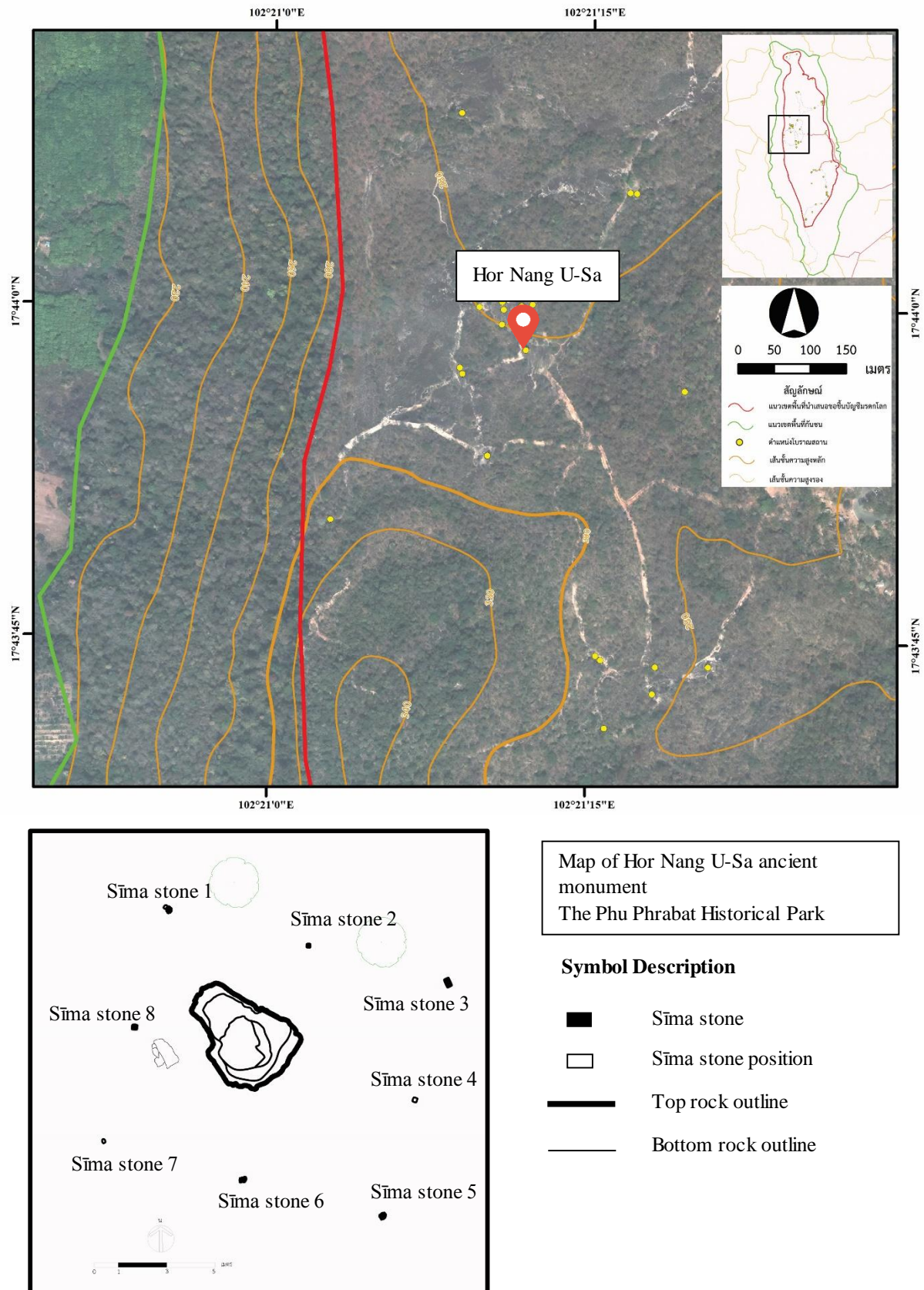


Figure of 1.2.4: Location of Hor Nang U-Sa ancient monument, the Phu Phrabat Historical Park



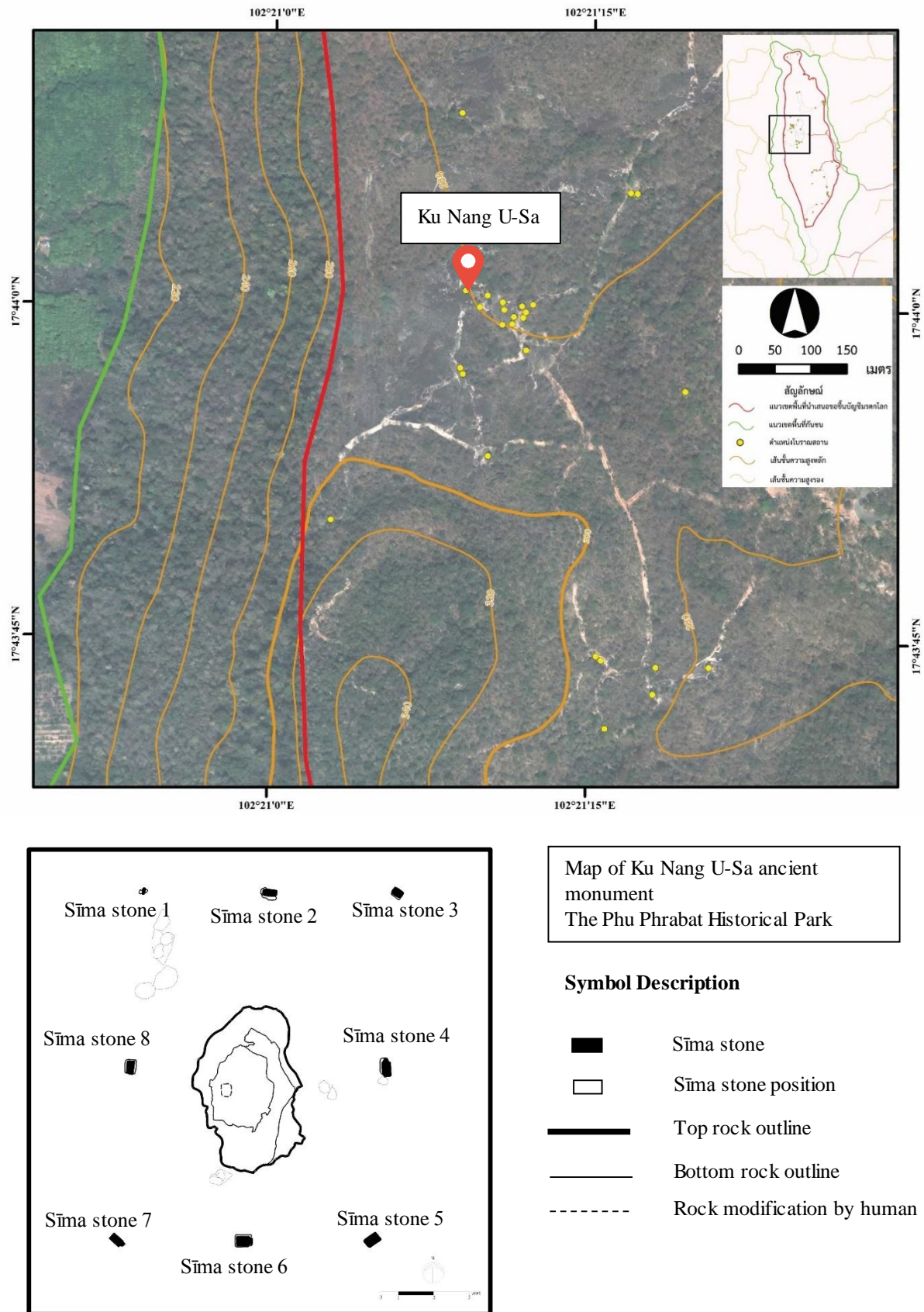


Figure of 1.2.5: Location of Ku Nang U-Sa ancient monument, the Phu Phrabat Historical Park



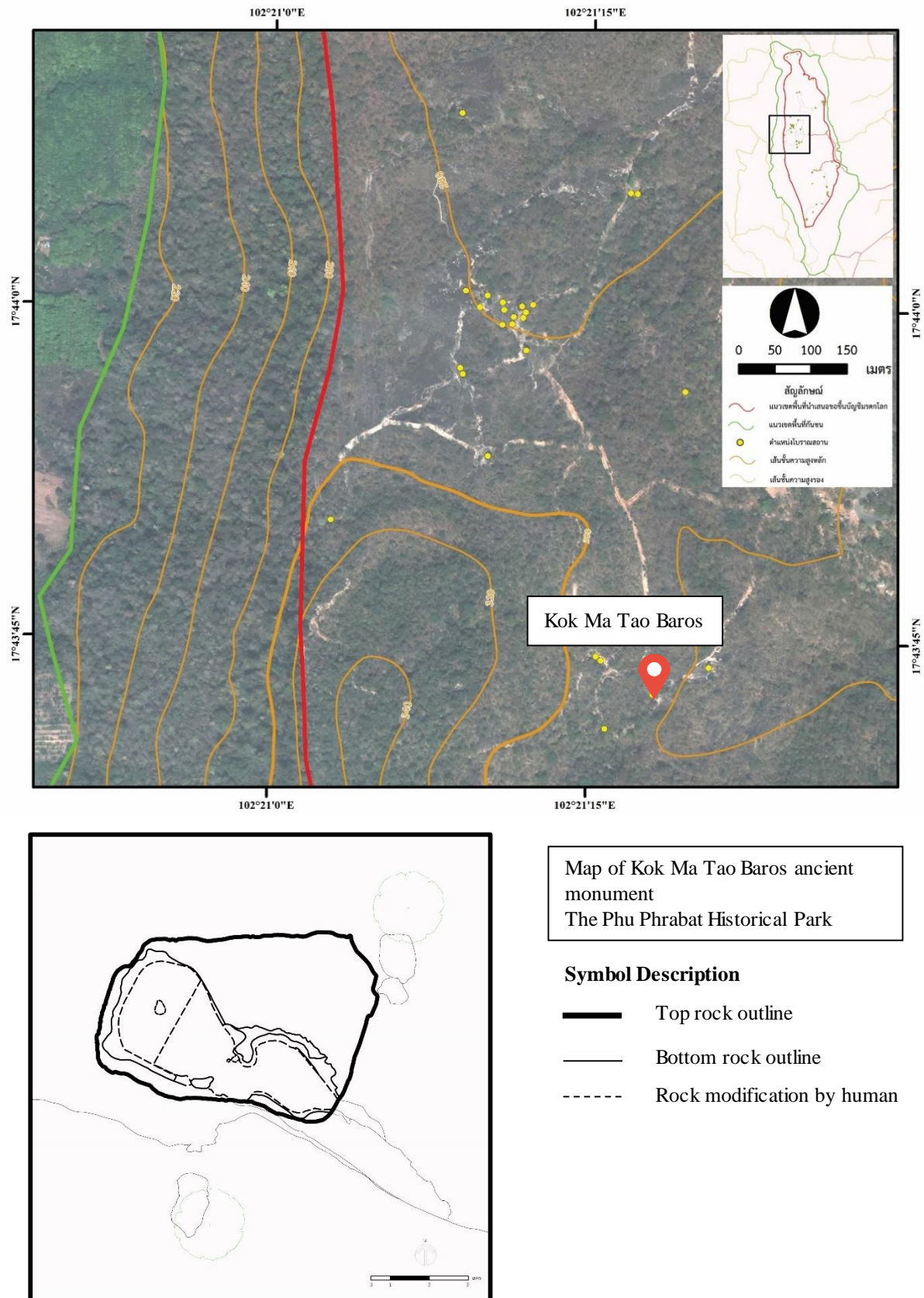


Figure of 1.3.1: Location of Kok Ma Tao Baros ancient monument, the Phu Phrabat Historical Park

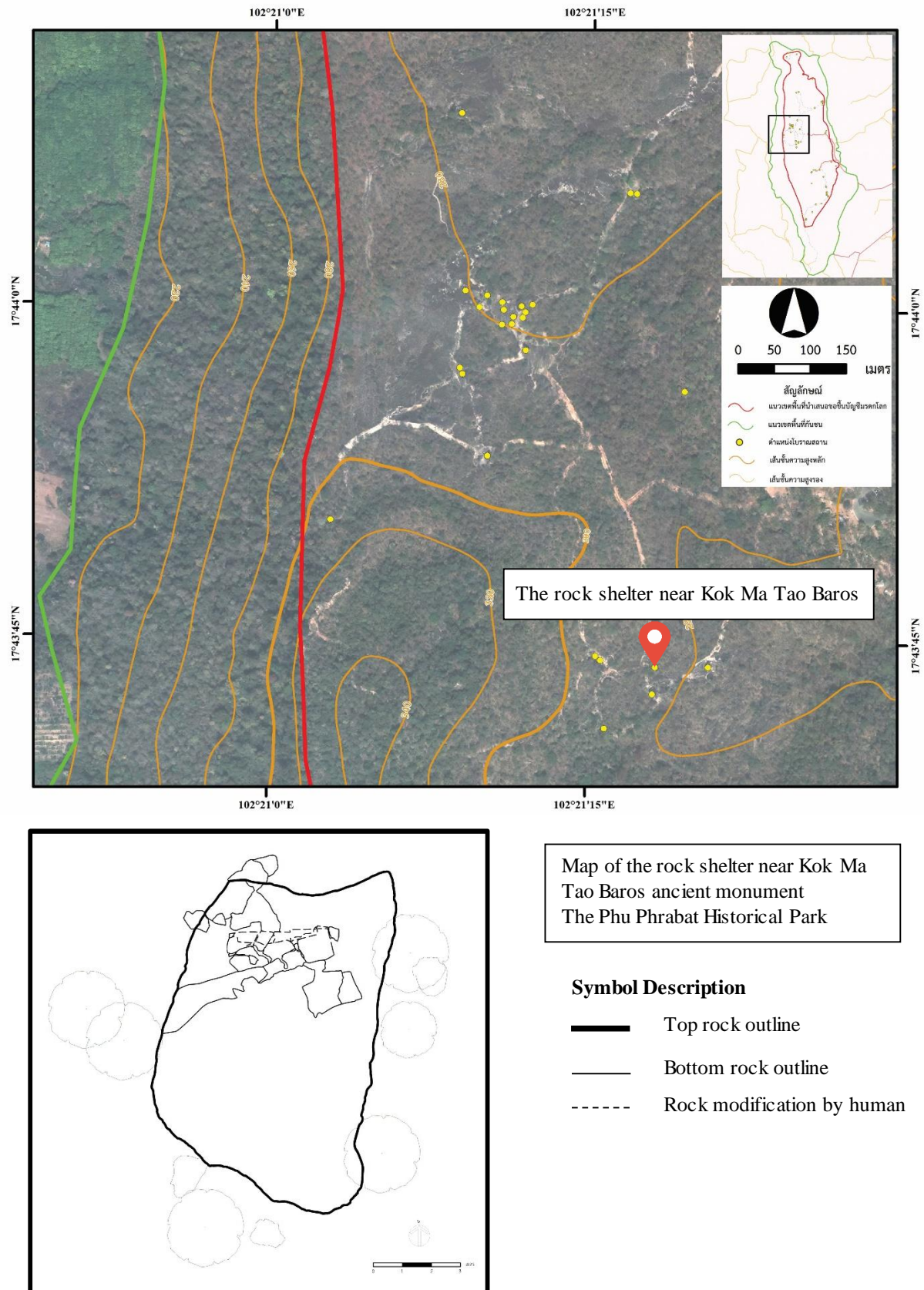


Figure of 1.3.2: Location of the rock shelter near Kok Ma Tao Baros ancient monument, the Phu Phrabat Historical Park



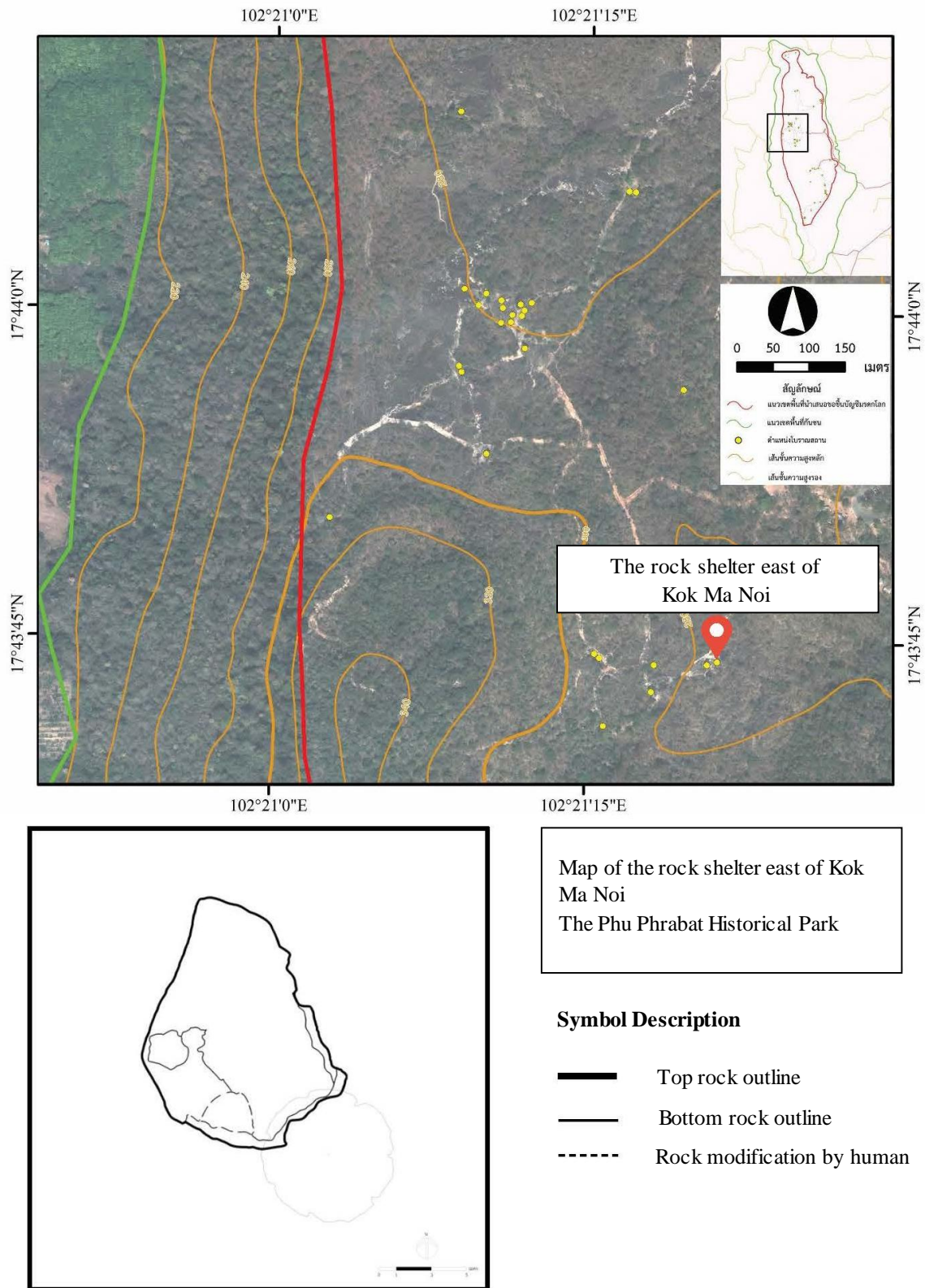
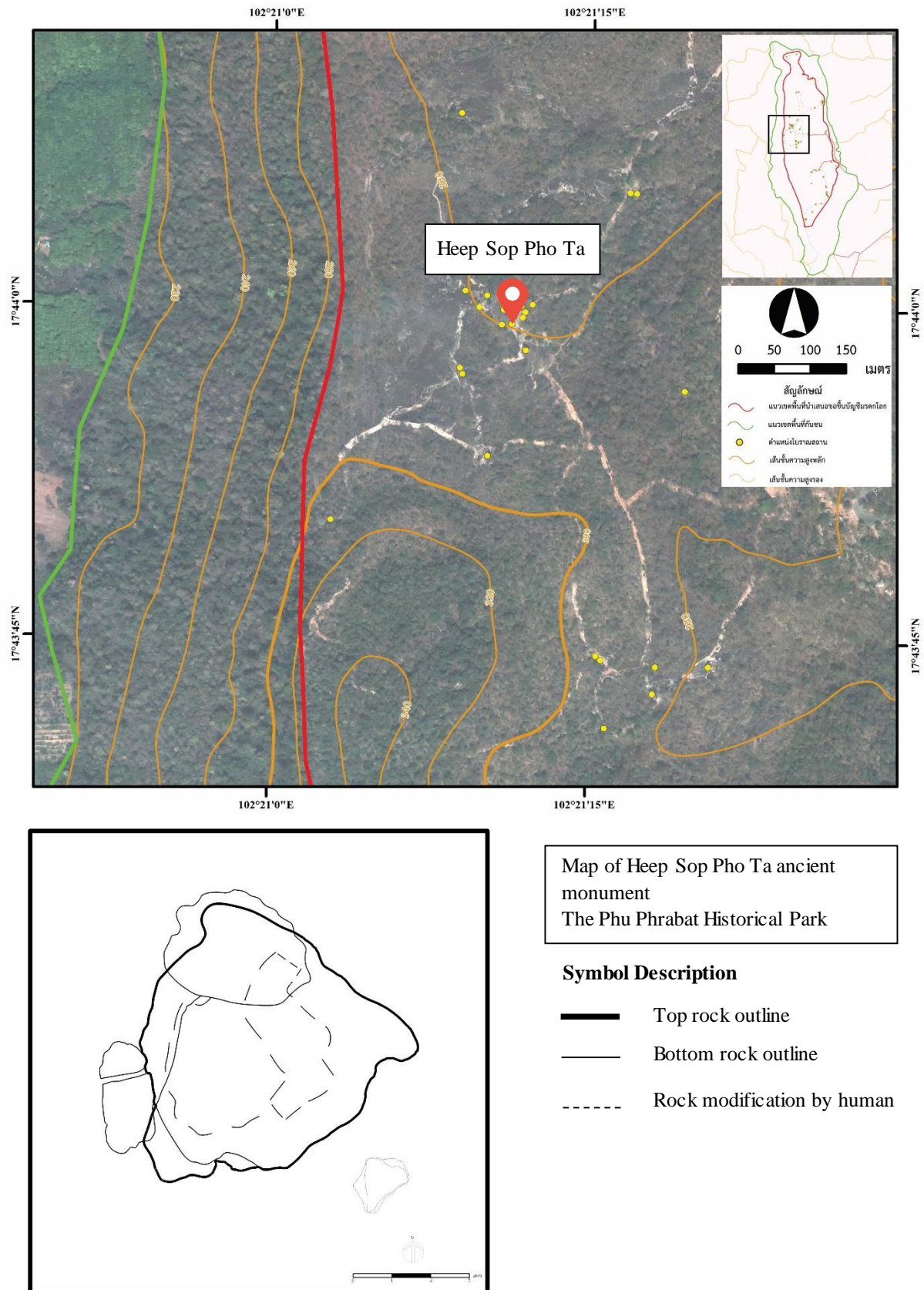


Figure of 1.3.3: Map of the rock shelter east of Kok Ma Noi, the Phu Phrabat Historical Park





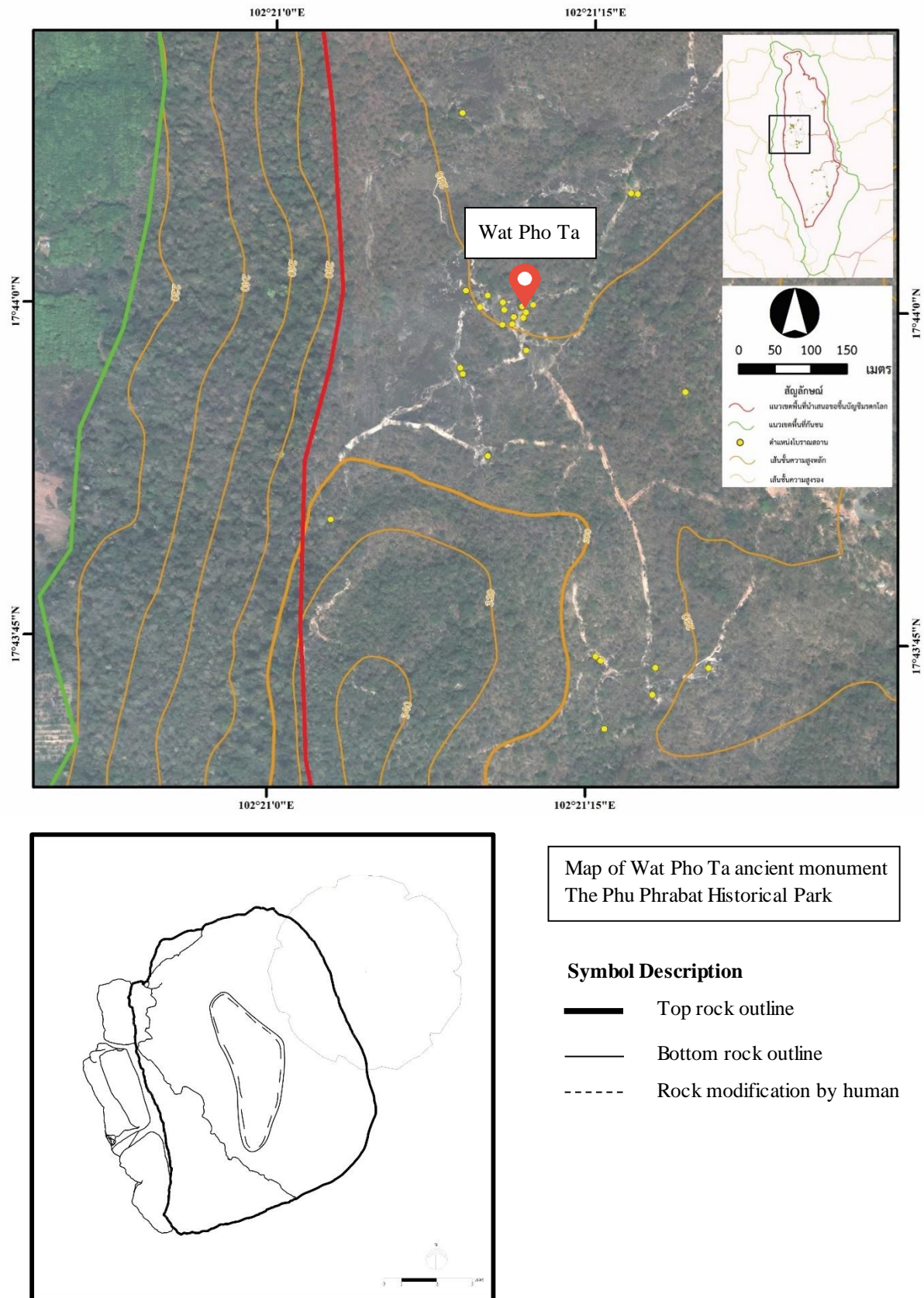
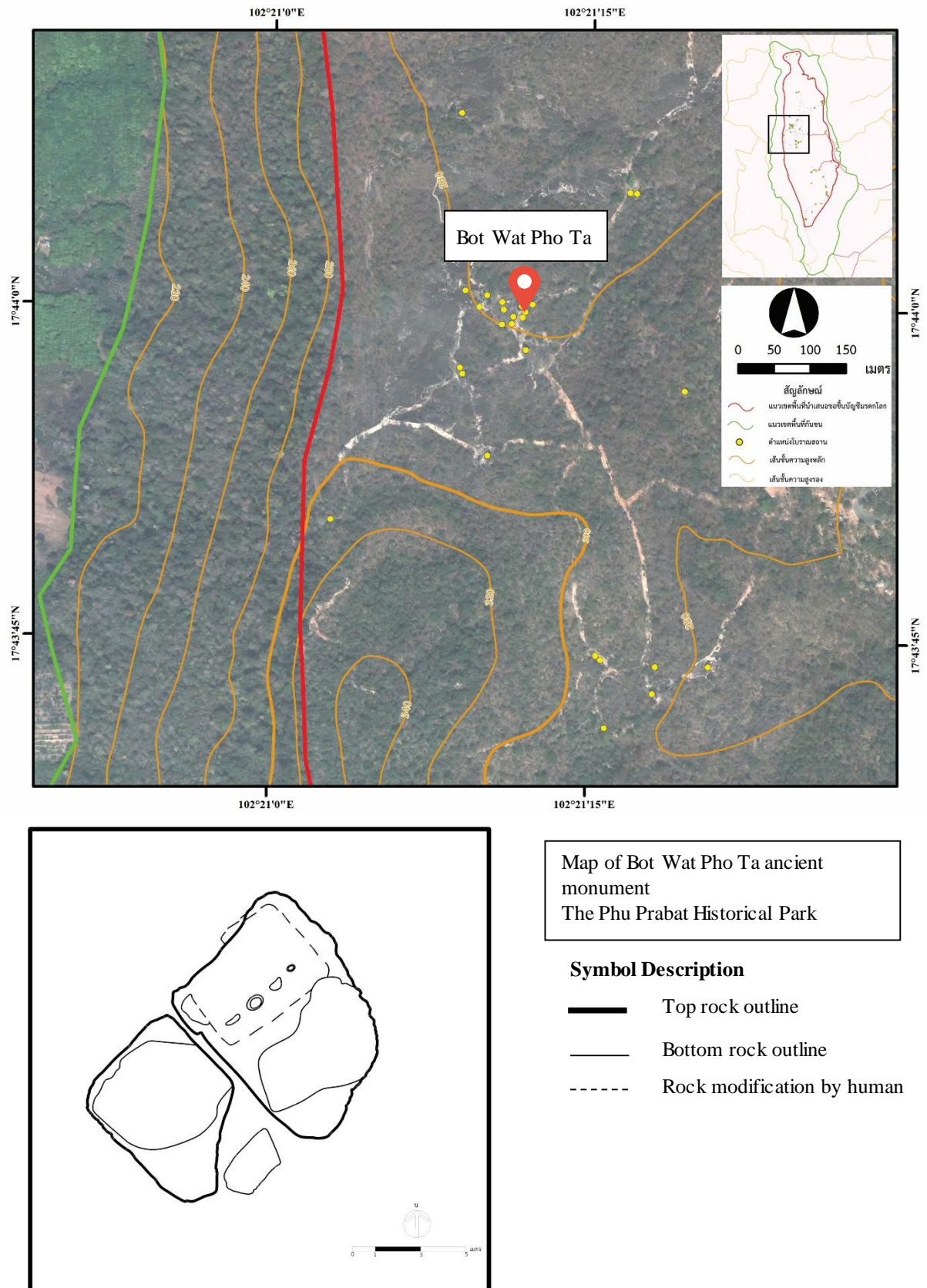


Figure of 1.3.5: Location of Wat Pho Ta ancient monument, the Phu Phrabat Historical Park







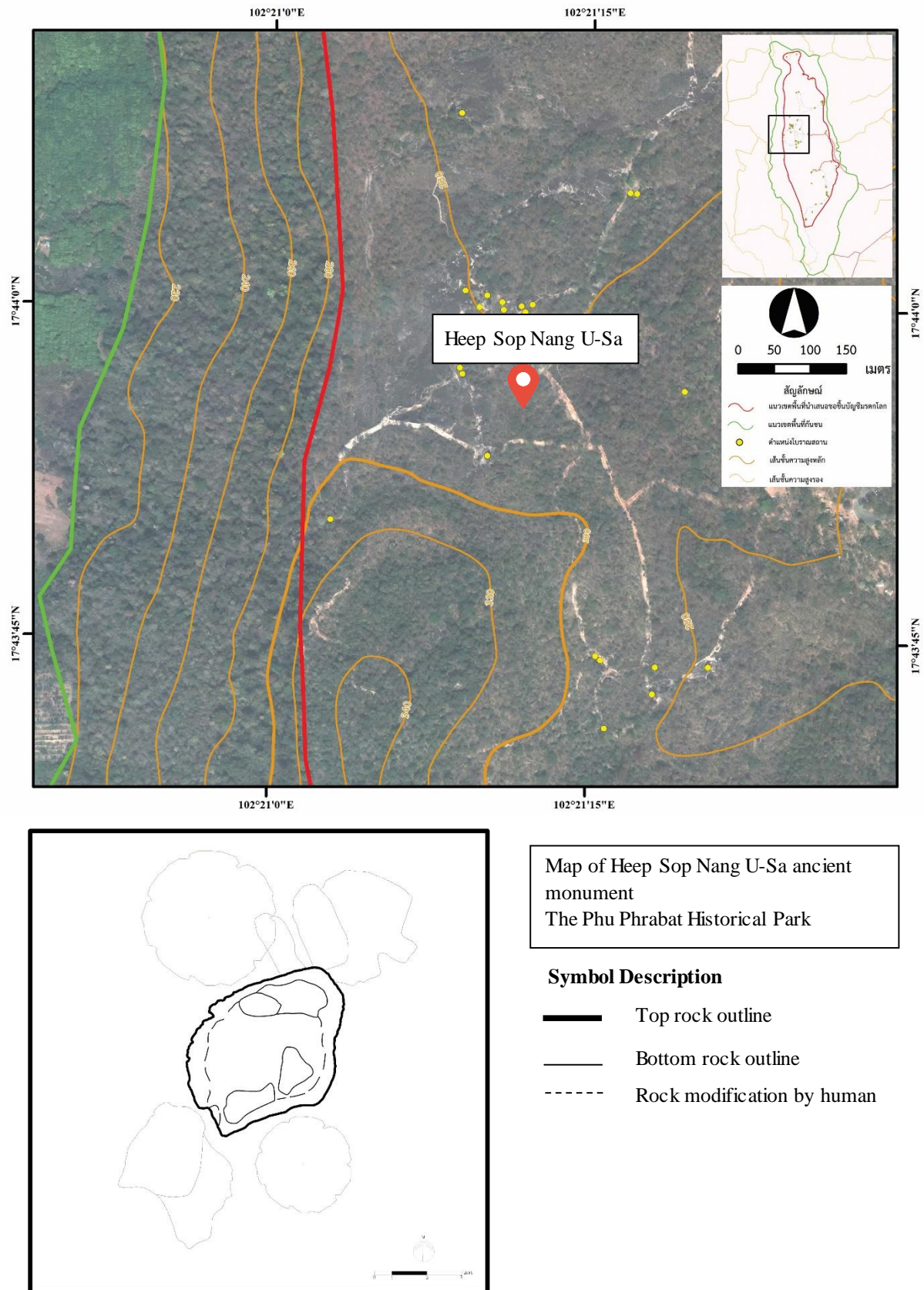


Figure 1.3.7: Location of Heep Sop Nang U-Sa ancient monument, the Phu Phrabat Historical Park

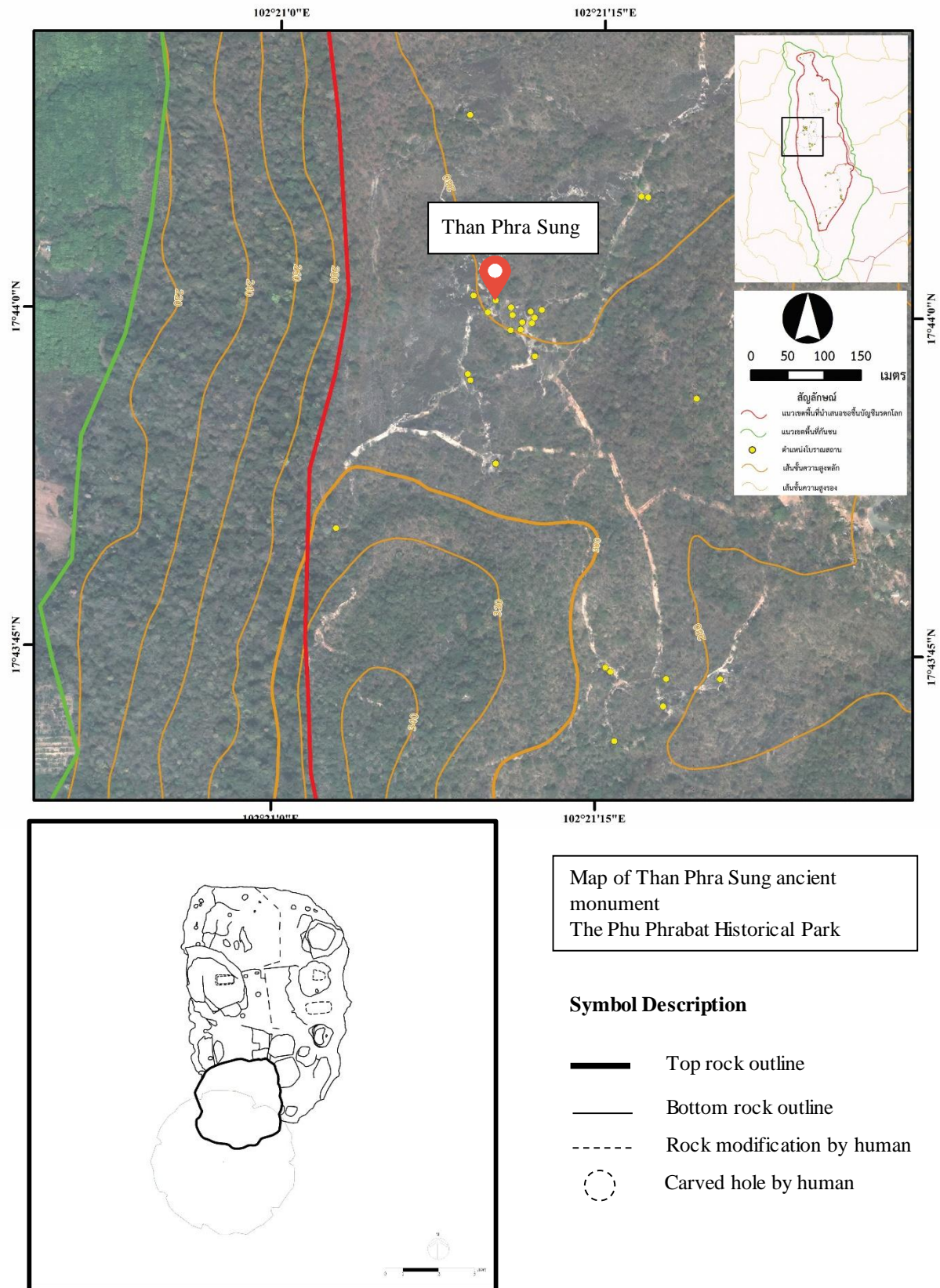


Figure of 1.3.8: Location of Than Phra Sung ancient monument, the Phu Phrabat Historical Park



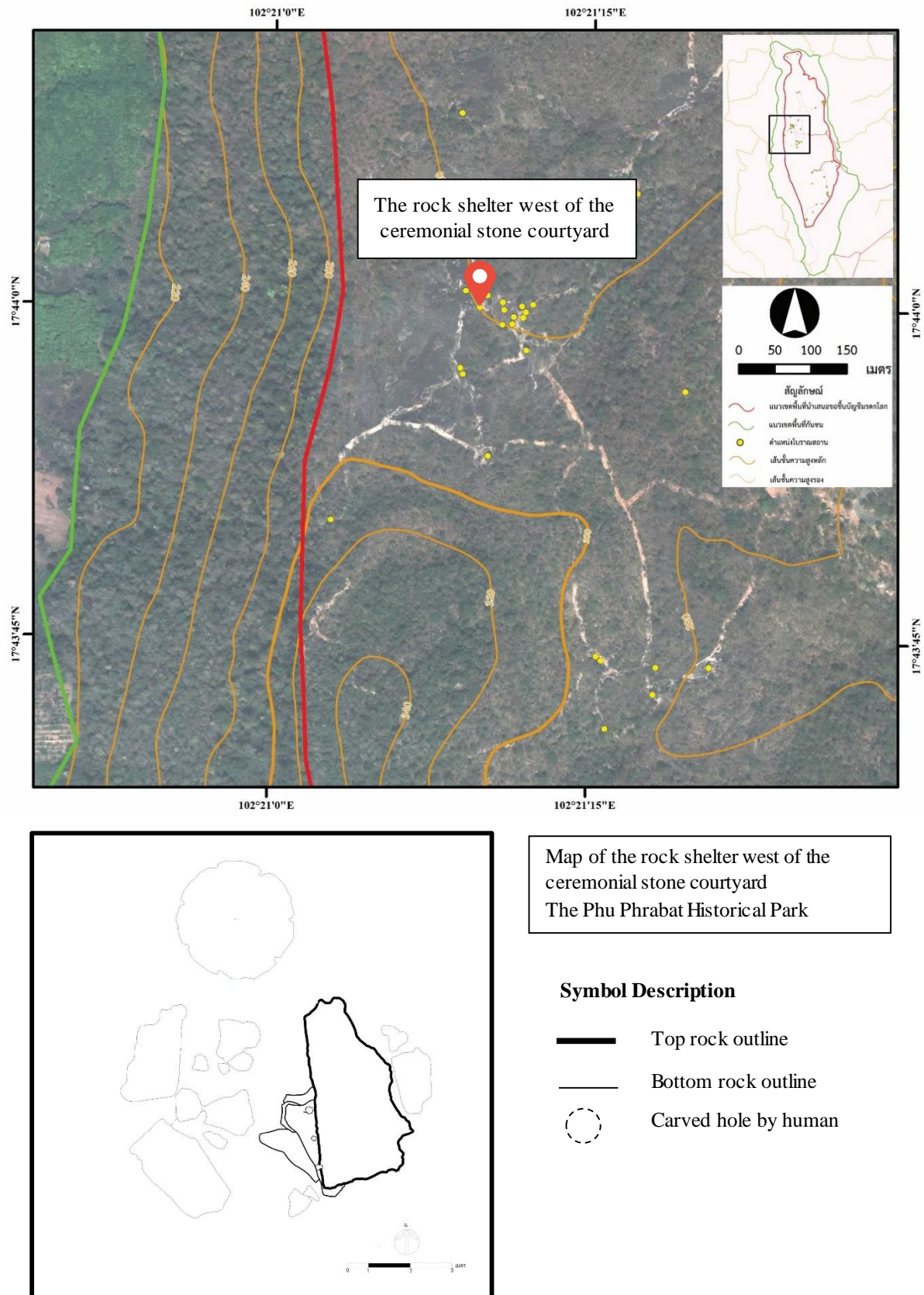


Figure of 1.3.9: Location of the rock shelter west of the ceremonial stone courtyard, the Phu Phrabat Historical Park



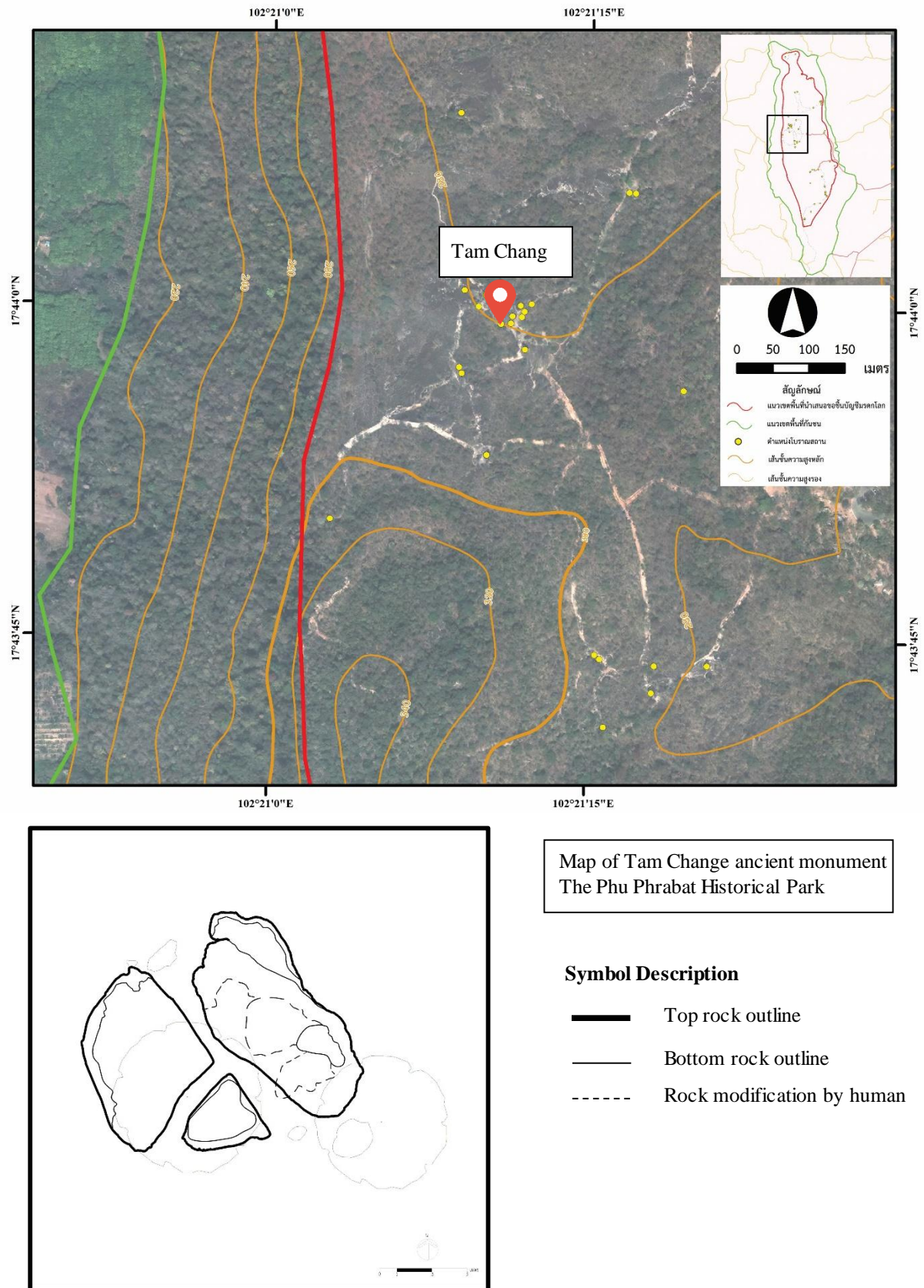


Figure of 1.3.10: Location of Tam Chang ancient monument, the Phu Phrabat Historical Park

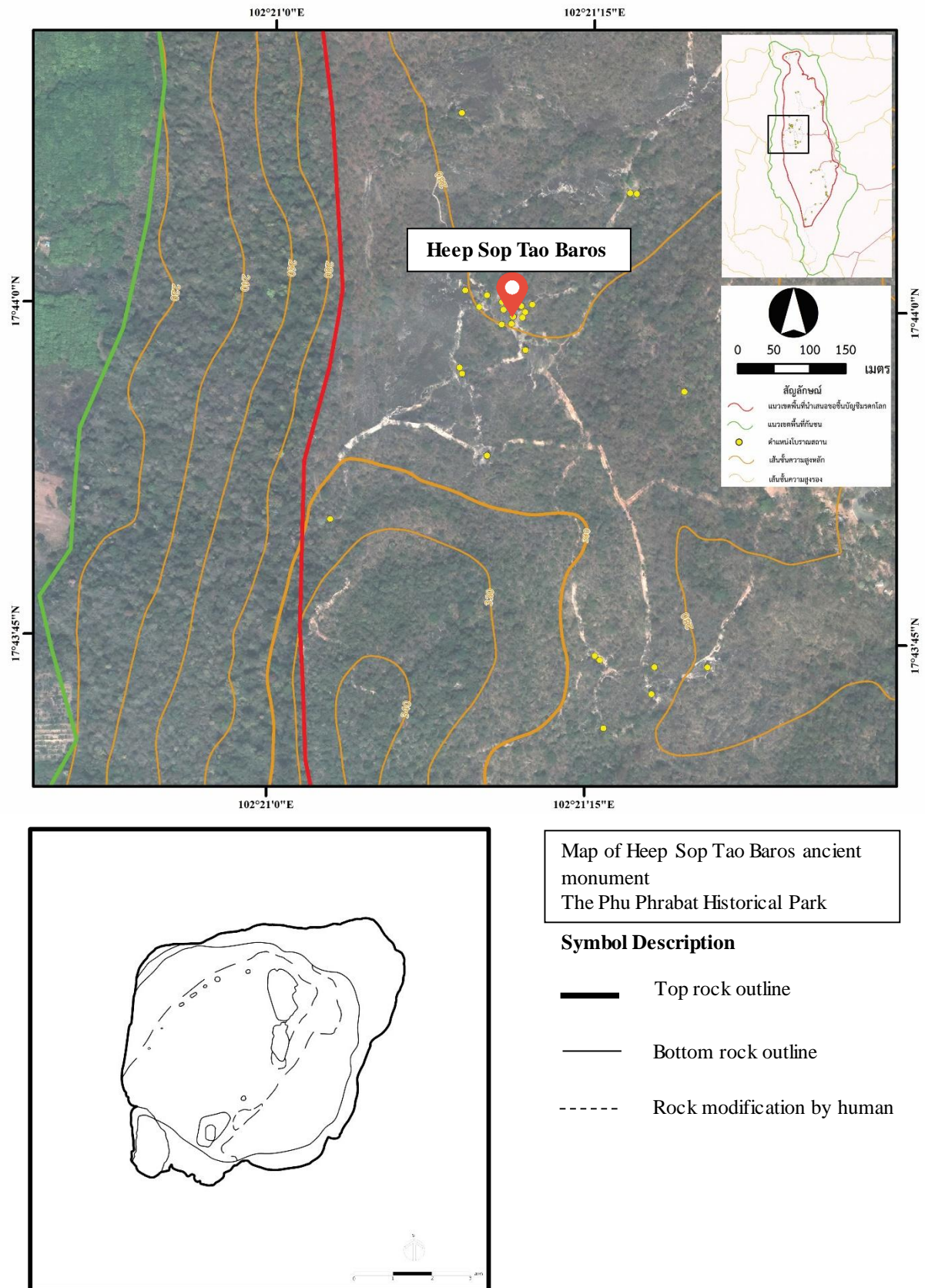


Figure 1.3.11: Map of Heep Sop Tao Baros, the Phu Phrabat Historical Park



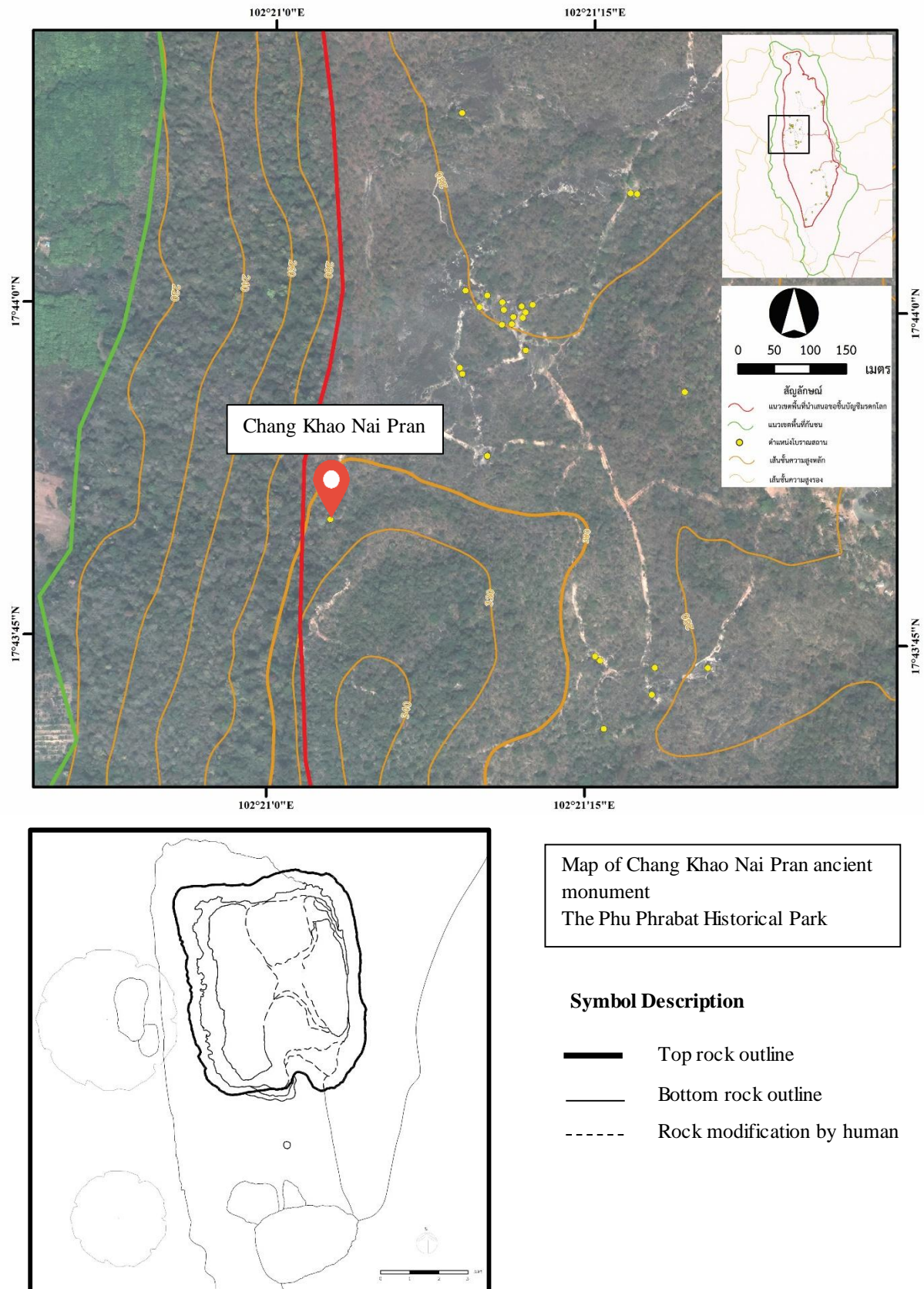


Figure of 1.3.12: Location of Chang Khao Nai Pran ancient monument, the Phu Phrabat Historical Park



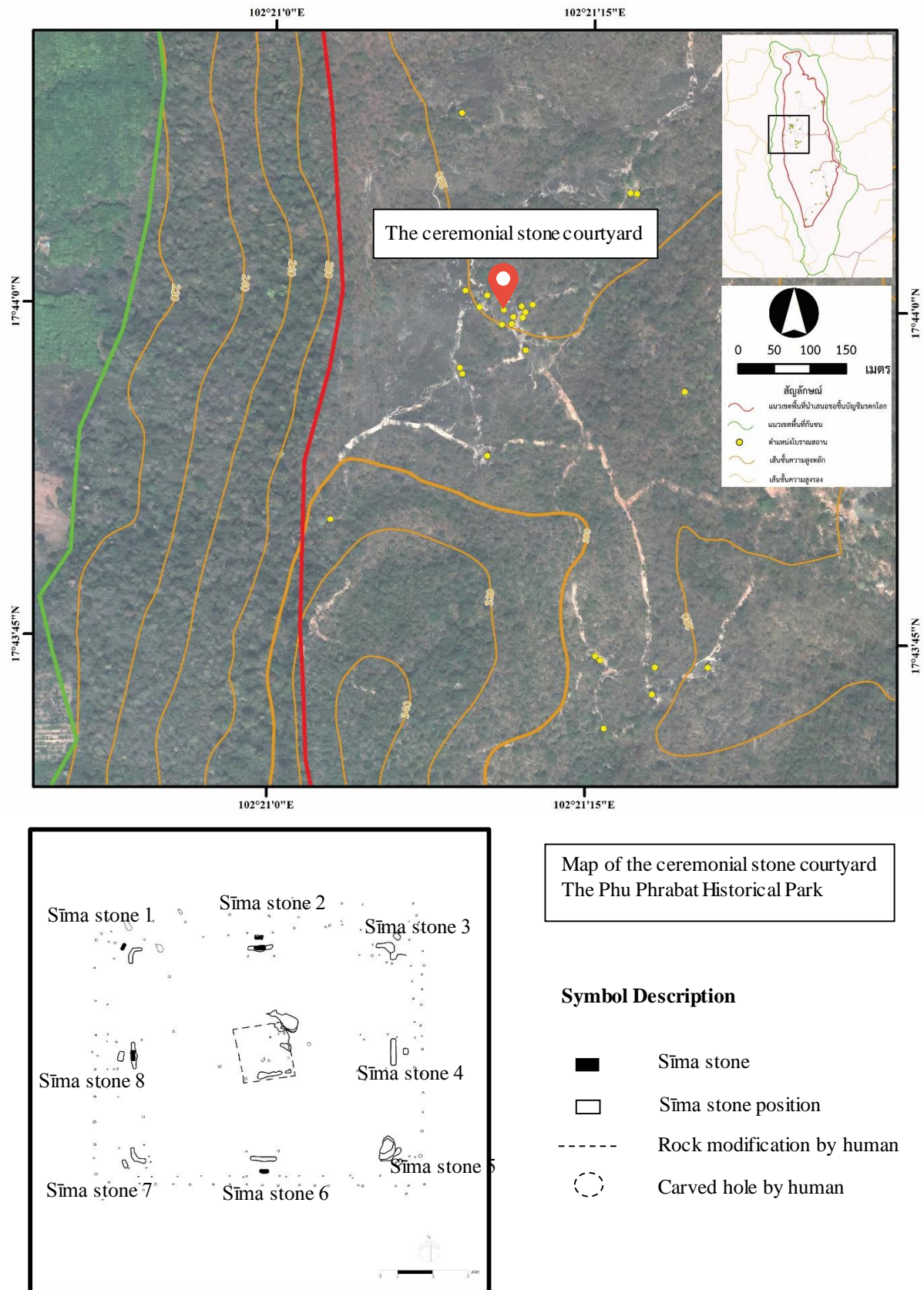


Figure of 1.4.1: Location of the ceremonial stone courtyard, the Phu Phrabat Historical Park

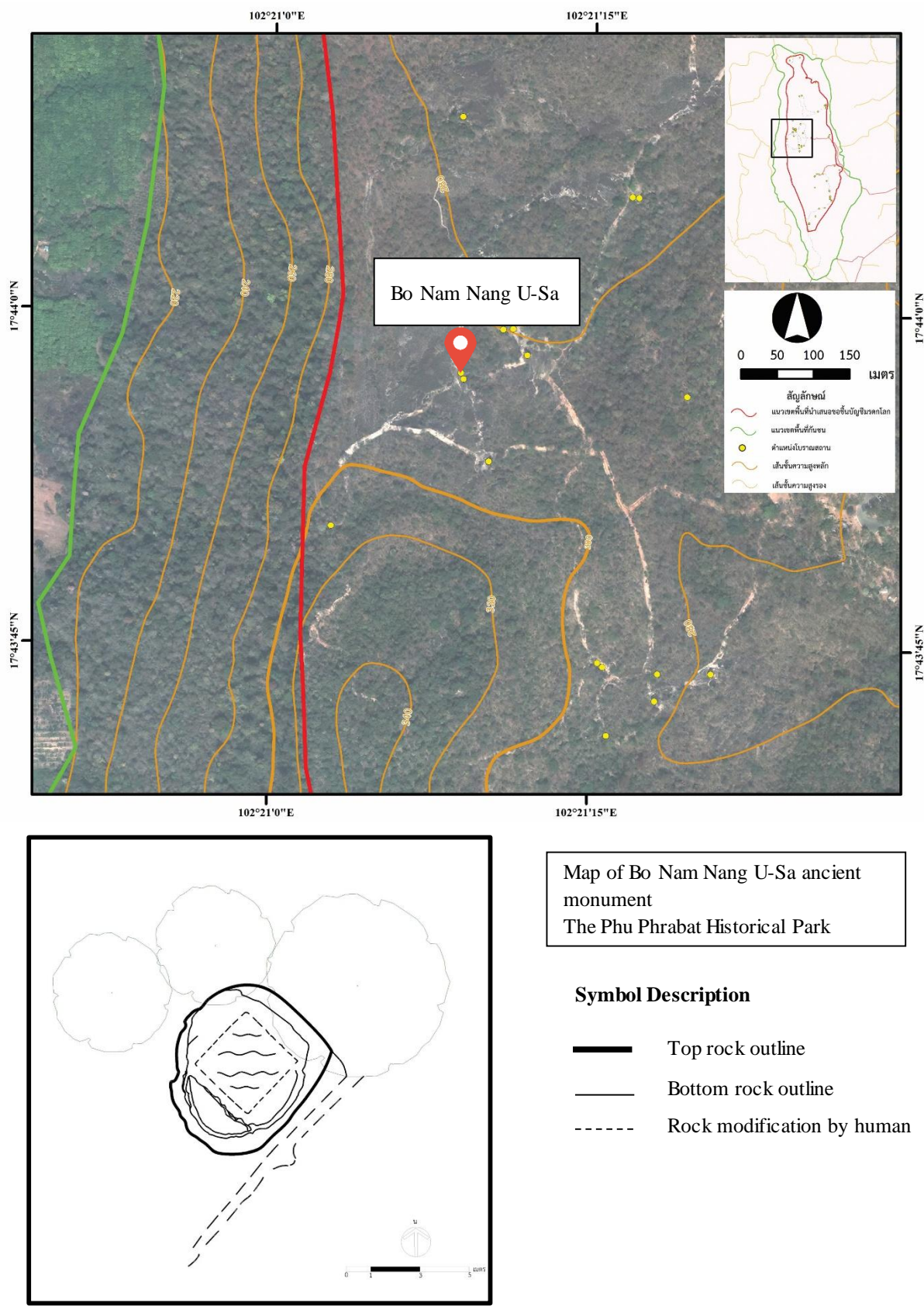


Figure of 1.4.2: Location of Bo Nam Nang U-Sa ancient monument, the Phu Phrabat Historical Park



## 2. The Sīma Cultural Site at Wat Phra Phuthabat Buaban (Buot Phra Bhu)

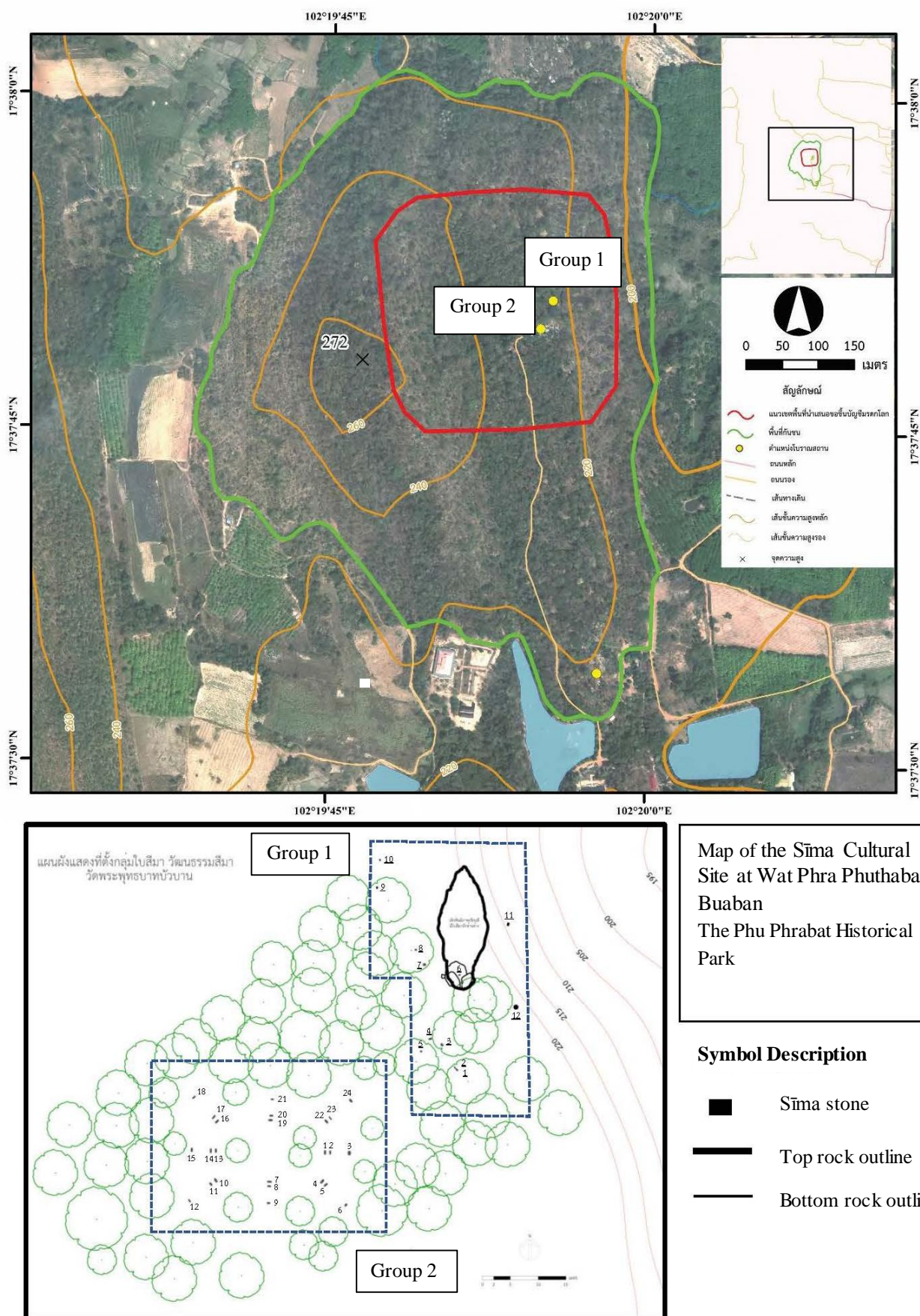


Figure of Group one and Group two: Location of the Sīma Cultural Site at Wat Phra Phuthabat Buaban



## Appendix V

### Memorandum of Cooperation on Cultural Heritage Management and Protection of the Phu Phrabat Historical Park



บันทึกข้อตกลงความร่วมมือว่าด้วยการกำหนดรูปแบบการบริหารจัดการแหล่งมรดกวัฒนธรรม  
อุทยานประวัติศาสตร์ภูพระบาท ตำบลเมืองพาน อำเภอบ้านผือ จังหวัดอุดรธานี  
ระหว่าง  
กรมศิลปากร กรมป่าไม้ จังหวัดอุดรธานี อำเภอบ้านผือ องค์การบริหารส่วนตำบลเมืองพาน  
และ เทศบาลตำบลกลางใหญ่

บันทึกข้อตกลงฉบับนี้ทำขึ้น ณ ที่ว่าการองค์การบริหารส่วนตำบลเมืองพาน อำเภอบ้านผือ จังหวัดอุดรธานี เมื่อวันที่ ๓๐ เมษายน พ.ศ. ๒๕๖๕ ระหว่างกรมศิลปากร โดยนายกิตติพันธ์ พานสุวรรณ อธิบดีกรมศิลปากร ตั้งอยู่เลขที่ ๘๑/๑ ถนนศรีอยุธยา แขวงวชิระ เขตดุสิต กรุงเทพฯ ๑๐๓๐๐ เป็นผู้มีอำนาจกระทำการในนามกรมศิลปากร ซึ่งต่อไปในบันทึกข้อตกลงนี้เรียกว่า “กศก.” ฝ่ายหนึ่ง กรมป่าไม้ โดยนายสุรชัย อจลบุญ อธิบดีกรมป่าไม้ ตั้งอยู่เลขที่ ๖๑ ถนนพหลโยธิน แขวงลาดยาว เขตจตุจักร กรุงเทพฯ ๑๐๙๐๐ เป็นผู้มีอำนาจกระทำการในนามกรมป่าไม้ ซึ่งต่อไปในบันทึกข้อตกลงนี้เรียกว่า “ปม.” ฝ่ายหนึ่ง จังหวัดอุดรธานี โดยนายสยาม ศิริมงคล ผู้ว่าราชการจังหวัดอุดรธานี ตั้งอยู่ที่ศาลากลางจังหวัดอุดรธานี ถนนอธิบดี ตำบลหมากแข้ง อำเภอเมืองอุดรธานี จังหวัดอุดรธานี ๔๑๐๐๐ เป็นผู้มีอำนาจกระทำการในนามจังหวัดอุดรธานี ซึ่งต่อไปในบันทึกข้อตกลงนี้เรียกว่า “อด.” ฝ่ายหนึ่ง อำเภอบ้านผือ โดยนายวิมล สุระเสน นายอำเภอบ้านผือ ตั้งอยู่ที่ว่าการอำเภอบ้านผือ ทางหลวงจังหวัดหมายเลข ๒๐๒๑ ตำบลบ้านผือ อำเภอบ้านผือ จังหวัดอุดรธานี ๔๑๑๖๐ เป็นผู้มีอำนาจกระทำการในนามอำเภอบ้านผือ ซึ่งต่อไปในข้อตกลงนี้เรียกว่า “อ.บ้านผือ” ฝ่ายหนึ่ง องค์การบริหารส่วนตำบลเมืองพาน โดยนายเอกพล ศรีทอง นายกองค์การบริหารส่วนตำบลเมืองพาน ตั้งอยู่ที่ทำการองค์การบริหารส่วนตำบลเมืองพาน อำเภอบ้านผือ จังหวัดอุดรธานี ๔๑๑๖๐ ซึ่งต่อไปในบันทึกข้อตกลงนี้เรียกว่า “อบต.เมืองพาน” ฝ่ายหนึ่ง และเทศบาลตำบลกลางใหญ่ โดยนายมงคล มีลา นายกเทศมนตรีตำบลกลางใหญ่ ตั้งอยู่ที่สำนักงานเทศบาลตำบลกลางใหญ่ เลขที่ ๓๒ หมู่ ๙ บ้านกลางใหญ่ อำเภอบ้านผือ จังหวัดอุดรธานี ๔๑๑๖๐ ซึ่งต่อไปในบันทึกข้อตกลงนี้เรียกว่า “ทต.กลางใหญ่” ฝ่ายหนึ่ง

ทั้งหกฝ่ายได้ตระหนักถึงความสำคัญของความร่วมมือระหว่างกันในการอนุรักษ์ พัฒนา ตลอดจนบริหารจัดการพื้นที่ภายในเขตอุทยานประวัติศาสตร์ภูพระบาท ตำบลเมืองพาน อำเภอบ้านผือ จังหวัดอุดรธานี เพื่อนำสู่การเสนอขึ้นบัญชีมรดกโลก จึงได้ตกลงร่วมกันจัดทำบันทึกข้อตกลงในการดำเนินงานเพื่อให้เกิดความร่วมมือในการสนับสนุนซึ่งกันและกันของทั้งหกฝ่าย โดยมีรายละเอียดดังต่อไปนี้

ข้อ ๑. กศก. ปม. อด. อ.บ้านผือ อบต.เมืองพาน และ ทต.กลางใหญ่ ตกลงที่จะกำหนดแนวทาง และขอบเขตของความร่วมมือในการสนับสนุนและร่วมกันอนุรักษ์ พัฒนา ตลอดจนรักษาไว้ซึ่งความเป็นของแท้ และดั้งเดิม รวมทั้งความครบถ้วนสมบูรณ์ของแหล่งมรดกโลกทางวัฒนธรรมอุทยานประวัติศาสตร์ภูพระบาท

- ๒ -

ข้อ ๒. กศก. ปม. อด. อ.บ้านผือ อบต.เมืองพาน และ ทต.กลางใหญ่ ตกลงร่วมกันที่จะจัดตั้ง คณะทำงานขึ้นมาคณะหนึ่งหรือหลายคณะตามความเหมาะสม ซึ่งคณะทำงานดังกล่าวจะมีองค์ประกอบเป็นผู้แทน จากแต่ละฝ่าย โดยคณะทำงานที่จัดตั้งขึ้นมานั้นเพื่อดำเนินการใด ๆ ภายใต้กรอบวัตถุประสงค์และรายละเอียด ของบันทึกข้อตกลงความร่วมมือฉบับนี้


ข้อ ๓. กศก. ปม. อด. อ.บ้านผือ อบต.เมืองพาน และ ทต.กลางใหญ่ ตกลงร่วมกันเป็น ผู้ดำเนินการจัดกิจกรรมต่าง ๆ ที่เกี่ยวกับการอนุรักษ์มรดกทางวัฒนธรรมในพื้นที่อุทยานประวัติศาสตร์ภูพระบาท โดยสนับสนุนด้านข้อมูล บุคลากร ซึ่งกันและกัน รวมทั้งให้ความร่วมมือในการดำเนินการเพื่อให้บรรลุวัตถุประสงค์ ของการนำเสนอแหล่งมรดกวัฒนธรรมอุทยานประวัติศาสตร์ภูพระบาท สู่การนำเสนอขึ้นบัญชีมรดกโลก

ข้อ ๔. กศก. ปม. อด. อ.บ้านผือ อบต.เมืองพาน และ ทต.กลางใหญ่ ตกลงร่วมกันดำเนินการ ตามบันทึกข้อตกลงความร่วมมือว่าด้วยการกำหนดรูปแบบการบริหารจัดการแหล่งมรดกวัฒนธรรมอุทยาน ประวัติศาสตร์ภูพระบาท ตามบันทึกข้อตกลงฉบับนี้อาจต่อเนื่อง นับตั้งแต่วันที่ ๓๐ เดือนเมษายน พ.ศ. ๒๕๖๕ ซึ่งเป็นวันที่ กศก. ปม. อด. อ.บ้านผือ อบต.เมืองพาน และ ทต.กลางใหญ่ ได้ร่วมกันลงนามในบันทึกข้อตกลงฉบับนี้ และให้ถือว่าบันทึกข้อตกลงฉบับนี้มีผลใช้บังคับตั้งแต่วันที่ทั้งหกฝ่ายได้ลงนามร่วมกันเป็นต้นไป

ข้อ ๕. ในกรณีที่ฝ่ายหนึ่งฝ่ายใดประสงค์จะยกเลิก แก้ไข เปลี่ยนแปลง หรือเพิ่มเติมเงื่อนไข รายละเอียดในบันทึกข้อตกลงความร่วมมือฉบับนี้ ให้ฝ่ายที่มีความประสงค์ทำหนังสือแจ้งไปยังทั้งห้าฝ่าย และทั้ง หกฝ่ายจะทำการหารือร่วมกันในการยกเลิก แก้ไข เปลี่ยนแปลง หรือเพิ่มเติมเงื่อนไขรายละเอียดตามความ เหมาะสม

บันทึกข้อตกลงนี้ทำขึ้นเป็นหกฉบับเป็นภาษาไทยและภาษาอังกฤษ มีข้อความถูกต้องตรงกันทุกประการ และใน กรณีที่มีปัญหาในการตีความให้ถือฉบับภาษาไทยเป็นที่สุด ผู้แทนทั้งหกฝ่ายได้อ่าน รับทราบ และทำความเข้าใจ เงื่อนไขในบันทึกข้อตกลงฉบับนี้โดยตลอด เห็นว่าถูกต้องตรงตามความประสงค์ และเพื่อเป็นหลักฐานแห่งการนี้ ผู้แทนที่มีอำนาจทั้งหกฝ่ายจึงได้ลงลายมือชื่อพร้อมประทับตรา (ถ้ามี) ไว้เป็นสำคัญ และเก็บไว้ฝ่ายละหนึ่งฉบับ

(ลงชื่อ)  
  
 (นายกิตติพันธ์ พานสุวรรณ)  
 อธิบดีกรมศิลปากร

(ลงชื่อ)  
  
 (นายสุรชัย อจลบุญ)  
 อธิบดีกรมกีฬา

(ลงชื่อ)  
  
 (นายสยาม ศรีมงคล)  
 ผู้ว่าราชการจังหวัดอุดรธานี

(ลงชื่อ)  
  
 (นายวิมล สุระเสน)  
 นายอำเภอบ้านผือ

- ๓ -

องค์การบริหารส่วนตำบลเมืองพาน  
(ลงชื่อ)  
(นายเอกพล ศรีทอง)  
นายกองค์การบริหารส่วนตำบลเมืองพาน



เทศบาลตำบลกลังใหญ่  
(ลงชื่อ)  
(นายมงคล มีลา)  
นายกเทศมนตรีตำบลกลังใหญ่







**MEMORANDUM OF COOPERATION  
BETWEEN  
THE FINE ARTS DEPARTMENT,  
THE ROYAL FOREST DEPARTMENT,  
UDON THANI PROVINCE,  
BANPHUE DISTRICT,  
MUANG PHAN SUBDISTRICT ADMINISTRATION ORGANIZATION, AND  
KLANG YAI SUBDISTRICT MUNICIPALITY  
ON CULTURAL HERITAGE MANAGEMENT AND PROTECTION OF  
PHU PHRA BAT HISTORICAL PARK**



This Memorandum of Cooperation is made on the 30<sup>th</sup> day of April 2022 between between **the Fine Arts Department** (hereinafter called “**FAD**”), represented by its Director-General, *Mr. Kittiphan Phansuwan*, having its principal office at 81/1 Sri Ayutthaya Road, Dusit, Bangkok, of the one part, **the Royal Forest Department** (hereinafter called “**RFD**”) represented by its Director-General, *Mr. Surachai Achalaboon* having its principal office at 61 Phahonyothin Road, Chatuchak, Bangkok of the one part, **Udon Thani Province** (hereinafter called “**UDN**”), represented by its Governor, *Mr. Sayam Sirimongkol*, having its principal office at Udon Thani Provincial Hall, Athipbodi Road, Mueang Udon Thani District, Udon Thani, of the one part, **Banphue District** (hereinafter called “**BPD**”), represented by its District Chief Officer, *Mr. Wimon Surasen*, having its principal office at Banphue District Office, Provincial Highway No.2021, Banphue District, Udon Thani, of the one part, **Muang Phan Subdistrict Administration Organization** (hereinafter called “**Muang Phan SAO**”), represented by its Chief-Executive, *Mr. Aekapol Srithong*, having its principal office at Muang Phan Subdistrict Administration Organization Office, Muang Phan Sub district, Banphue District, UdonThani, of the one part, and **Klang Yai Subdistrict Municipality**, (hereinafter called “**Klang Yai SM**”), represented by its Mayor, *Mr. Mongkol Meela*, having its principal office at Klang Yai Subdistrict Municipality Office 32 Moo 9 Ban Klang Yai Subdistrict, Banphue District, UdonThani, of the one part.

All of the parties have realized the importance of cooperation between each other in the conservation, development, and heritage site management of the Phu Phra Bat Historical Park, Muang Phan Subdistrict, Banphue District, Udon Thani Province, and also agreed to prepare a memorandum of Cooperation on the implementation of the cooperation in the mutual support of all parties, whereby it is agreed as follows:

**Article 1.** Have agreed to establish guidelines and scope of cooperation between FAD, RFD, UDN, BPD, Muang Phan SAO, and Klang Yai SM to support and jointly preserve, develop and maintain the authenticity and the integrity of cultural heritage sites in the Phu Phra Bat Historical Park.

**Article 2.** Also agreed to form the committee or committees, as appropriate, in which the committee will consist of representatives from each party to perform various activities under the objectives and details of this memorandum of cooperation.

**Article 3.** All of the parties have agreed to jointly conduct various activities related to the preservation of cultural heritage in the vicinity of Phu Phra Bat Historical Park. All of the parties will provide each other's with information and personnel to achieve the objective of submitting the cultural heritage of Phu Phra Bat Historical Park for presentation on the World Heritage List.

- 2 -

**Article 4.** FAD, RFD, UDN, BPD, Muang Phan SAO, and Klang Yai SM have agreed to jointly implement this Memorandum of Cooperation on the preservation of cultural heritage in the Phu Phra Bat Historical Park continuously since the 30<sup>th</sup> day of April 2022, which is the day that all parties have jointly signed this Memorandum of Cooperation and shall enter into force upon the signing date thereafter.

**Article 5.** If one of the parties wishes to terminate, amend or add any additional term in this Memorandum of Cooperation, the relevant party shall notify the other Parties thereof in writing. All parties will discuss the termination, amendment, and addition as appropriate.

This Memorandum of Cooperation shall be prepared with six originals in Thai and English. All texts are being equally authentic. In case of divergence of interpretation, the Thai text shall prevail. All Parties have read and understood all details in this Memorandum of Cooperation and have hereto appended their respective signatures and affixed their seal (if any) in the presence of witnesses and kept one copy each.

IN WITNESS WHEREOF, the undersigned, being duly authorized thereto, have signed this Memorandum of Cooperation.

ON BEHALF OF  
The Fine Arts Department



Mr. Kittiphan Phansavan  
Director-General

ON BEHALF OF  
The Royal Forest Department



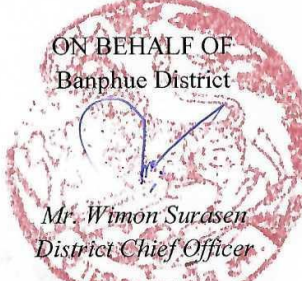
Mr. Surachai Achalaboon  
Director-General

ON BEHALF OF  
Udon Thani Province



Mr. Sayam Sirimongkol  
Governor

ON BEHALF OF  
Banphue District



Mr. Wimon Surasen  
District Chief Officer

ON BEHALF OF  
Klang Yai Subdistrict Municipality



Mr. Aekapol Srithong  
Mayor

ON BEHALF OF  
Mueang Phan Subdistrict Administrative Organization



Mr. Mongkol Meela  
Chief-Executive