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# Archaeological Excavations on the SCPX Pipeline, Azerbaijan 2013-2018

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The South Caucasus Pipeline Expansion (SCPX) is a pipeline built to carry gas from the Caspian Sea basin across Azerbaijan through Georgia for onward transmission to Turkey and Europe. Completed in 2018, the SCPX follows the line of the earlier BTC and SCP pipelines across Azerbaijan. The project included an archaeological programme that supplemented the discoveries of the earlier two projects. The results were very similar, but were significantly different from the earlier work.

The SCPX work was carried out on 48 locations using a team of national and international archaeologists. Chalcolithic material was again found at Poylu, Xocaxan and Aılı Dərə. The Kura Araz culture of the early Bronze Age was indicated with burials at Soyuqbulaq and Tovuzçay. The Xocalı-Gədəbəy culture of the late Bronze Age early Iron Age is well represented with a cemetery found at Tovuzçay II and the kurgans at Borsunlu Camp. Antique period jar grave cemeteries were found in the Yevlax area at Əmirarx, Bəyimсарov, Səmədabad and Yaldili. Medieval settlement sites were excavated at Əmirarx, Faxralı, Lək and Hacıalılı. The major discovery of the project was the medieval castle at Kərpiclitəpə. This was a rectangular structure with towers at each corner and evidence of occupation that probably ended with the Mongol invasion.

The report is structured as an introduction to the project, with a brief summary of excavations. The detail for each site can be accessed in the report by links to the archive on the ADS website in a similar form to the BTC/SCP project report. The reader can thus access all the information for each site together with detailed analysis of radiocarbon and other analyses of the sites for all the work in that area from the various projects. Taken as a whole, the work on the three projects provides a means to comprehend part of the very broad early history of northwest Azerbaijan.

## **Xülasə**

Cənubi Qafqaz Boru Kəmərinin Genişləndirilməsi (CQBKG) qazın Azərbaycan ərazisindən keçməklə Xəzər dənizi hövzəsindən Gürcüstana, oradan isə Türkiyəyə və



Avropaya nəql edilməsi üçün inşa edilmiş boru kəməridir. 2018-ci ildə tamamlanmış CQBKG boru kəməri Azərbaycan ərazisi boyunca ondan əvvəl inşa edilmiş BTC və CQBK boru kəmərlərinin marşrutu boyunca uzanır. Bu layihə əvvəlki iki layihənin aşkar etdiyi tapıntılara əlavə olan bir arxeoloji proqramı əhatə edirdi. Nəticələr çox oxşar olsa da, lakin əvvəlki işlərdən əhəmiyyətli dərəcədə fərqlənir.

CQBKG ilə əlaqədar işlər yerli və xarici arxeoloqlardan ibarət komandanın iştirakı ilə 48 yerdə aparılıb. Poylu, Xocaxan və Aılı Dərədə yenidən xalkolit (eneolit) dövrünə aid material aşkar edilib. Erkən Tunc dövrünə aid Kür-Araz mədəniyyəti barədə məlumat Soyuqbulaq və Tovuzçayda aparılmış arxeoloji qazıntılar zamanı tapılmış məzarlıqlarda yer almışdır. Son Tunc dövrü, erkən Dəmir dövrünün Xocalı-Gədəbəy mədəniyyəti barədə məlumatlar II Tovuzçayda tapılmış qəbiristanlıq və Borsunlu düşərgəsindəki kurqanlarda yaxşıca öz əksini tapıb. Yevlax ərazisində Əmirarx, Bəyimşarov, Səmədabad və Yaldilidə antik dövrə aid küp qəbiristanlıqları aşkar edilib. Əmirarx, Faxralı, Lək və Hacıalılıda orta əsr yaşayış məskənlərində qazıntı işləri aparılıb. Layihə çərçivəsində əsas arxeoloji tapıntı orta əsrlərə aid Kərpiclitəpədə aşkar olunmuş qaladır. Bu, düzbucaqlı bir quruluşa malik, hər küncündə qüllələri olan, çox güman ki, monqol istilasası zamanı dağıdılan yaşayış məntəqəsinin qalıqlarıdır.

Bu hesabat qazıntıların qısa xülasəsi verilməklə layihəyə giriş kimi tərtib edilib. Hesabatda hər bir abidəyə aid ətraflı məlumatı BTC/CQBK layihəsinin hesabatına oxşar formada ADS veb-saytıdakı arxivə keçidlər vasitəsilə əldə etmək olar.

Beləliklə, oxucu müxtəlif layihələr çərçivəsində bu ərazidə aparılmış arxeoloji qazıntılarla əlaqədar ətraflı radiokarbon analizləri və digər tədqiqat işləri ilə birlikdə hər bir abidəyə aid bütün məlumatları əldə edə bilər. Ümumilikdə, üç layihə çərçivəsində aparılmış işlər Azərbaycanın şimal-qərbinin çox geniş əhatəli erkən tarixinin bir hissəsini araşdırmaq imkanı verir.

# 1. Introduction

[Interactive map: Sites mentioned in this issue](#) [ONLINE ONLY]

The South Caucasus Pipeline Expansion (SCPX) is a pipeline built to carry gas from the Caspian Sea basin across Azerbaijan towards Georgia for onward transmission through Turkey. It was built to carry larger volumes of gas than the original South Caucasus pipeline (SCP), which has been operational since 2006. The SCPX pipeline was built in the period 2015 to 2018. The expanded section of the pipeline commenced commercial deliveries to Turkey in June 2018 and to Europe in December 2020. The route taken broadly followed the line of the BTC and SCP pipes although with localised deviations for various engineering reasons, including archaeology. BP Exploration (Shah Deniz) Ltd awarded the construction of the SCPX project to SAIPEM-AZFEN JV and in 2020 transferred all technical operations of the pipeline to SOCAR Midstream Operations Ltd.

The archaeological impact was guided initially by the discoveries made on the BTC and SCP pipelines (Taylor and Maynard [2011](#); Taylor *et al.* [2011](#)). These provided a template to understand the nature and distribution of archaeological sites across



more than 400km of the landscape of Azerbaijan. This led to the creation of a cultural heritage management plan outlining the different stages of work. Following survey in Stage 1, the initial excavation work in Stage 2 was aimed at examining those areas where the earlier pipelines had encountered significant archaeological features and then to record any features affected. Stage 3 was the monitoring of construction activities and recording and excavation of new discoveries. Stage 4 was the analysis and reporting of that material.

This report is a summary of the work of the detailed reports prepared by the [Azerbaijan Institute of Archaeology and Ethnography](#) covering work on the project. It follows on and makes much reference to the earlier similar report for the BTC project (Taylor and Maynard [2011](#)). The structure allows the period summaries to be examined, which link through to the individual sites from that period. The site details can be found by linking to the Archaeology Data Service (ADS), which contains the specific reports for each site (Maynard [2011](#)). The corresponding site details for BTC sites can be found by linking to the similar detailed reports on the BTC page of the ADS.

## 1.1 Background

The BTC and SCP pipeline were constructed about 28m apart and parallel with each other. The later SCPX pipeline was also 28m from the earlier pipes, but was sometimes to the left or right. Occasionally the pipeline deviated some distance away because of various engineering reasons, or to avoid obstructions including archaeological features. Although both BTC and SCP started at Sanqaçal terminal and continued to the Georgian border, the SCPX pipe began some 28km to the west of Sanqaçal, so was shorter.

It is difficult to distinguish results in the BTC and SCP projects as the work was often conducted at the same time. However, the SCPX project compares well with the earlier work. In general, the SCPX evidence is in the same locations indicated by BTC, but it was often reduced in scale or significance. There were exceptions to this, for example at Yaldili, where results were largely the same as the earlier work had indicated. Other sites were on a much larger scale than anything encountered on the BTC/SCP project. [Kərpiclitəpə Castle](#) is the main example of this. Table 1 shows a correlated list of the sites on BTC/SCP and the SCPX projects.

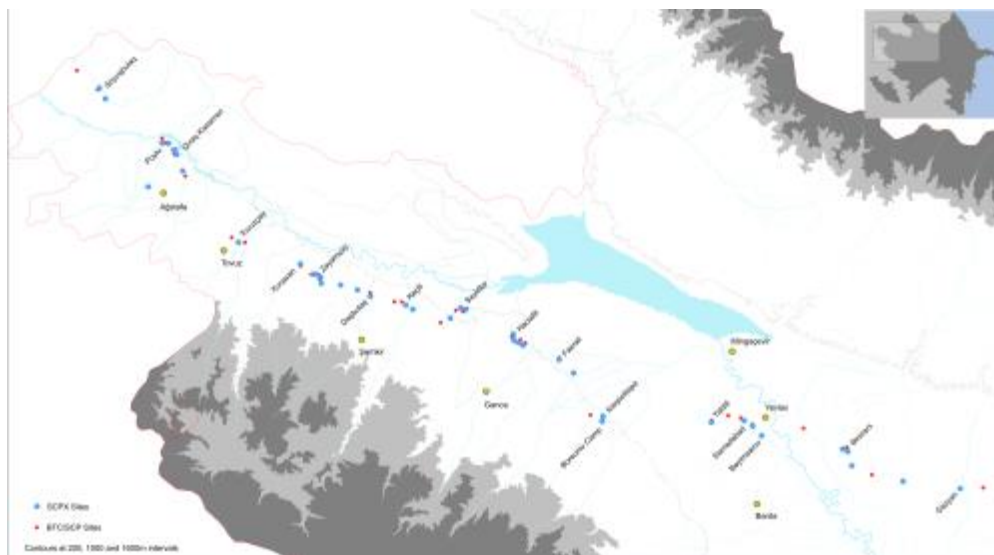


Figure 1: BTC/SCP (red) and SCPX (blue) projects, archaeological sites on pipeline route. Image credit: David Maynard and project team

[Table 1](#): Correlation between BTC/SCP and SCPX sites. Coordinates in Gauss-Kruger Zone 8 Pulkovo 1942. The shaded cells indicate that no information was identified in the respective pipeline project (either because an alternative route was selected, or the site did not extend into the project area).

## 1.2 The team

The work was undertaken by an archaeological team from the Institute of Archaeology and Ethnography, Azerbaijan National Sciences Academy, including Qoşqar Qoşqarlı, Nəcəf Müseybli, Şamil Nəcəfov, Vaqif Əsədov, Anar Agalarzadə, Dmitriy Kiriçenko, Müzəffər Hüseynov, Ceyhun Əliyev, Azad Zeynalov, Fərhad Fərmanov, Seymur Fərmanlı and Əhliman Əbdürəhmanov.

Various experts from BP assisted, including David Maynard, Justin Bedard, James Gallison, Greg Lockard, Jeff Hokanson and Richard Moore. Mahammad Novruzov and Şahin Əliyev acted as site managers for BP. BP Exploration (Shah Deniz) Ltd supplied all the resources needed to undertake the work and thanks must be given to Rahimli Guivami, Aynur Karimova, Narqiz Əliyeva, Esra Eroglu, Emin Ibrahimov, Louis Ngwa and Maria Scarlett and many other staff from BP and the construction contractors SAIPEM-AZFEN JV.



## 2. Sites

### 2.1 Gazyan Antique cemetery, KP149.8

[Digital Archive](#)

This was an Antique period cemetery excavated in 2017 during trench excavation in Ujar district (Hüseynov [2018a](#)). The site is a single discovery with no further information obtained during work on the BTC and SCP pipelines. Two jars were discovered at this location. One was completely damaged during trenching operations. The remaining jar was a large burial vessel containing a human body that was largely disturbed, although the leg and pelvic bones were intact. A number of ancillary vessels were found. The jar lay in a north-east to south-west orientation. A total of 11 pottery vessels accompanied the burial as grave goods.

### 2.2 Ramal Antique cemetery, KP169.6

[Digital Archive](#)

This vessel was discovered in September 2016 during pipe trench excavation in Ujar district (Agalarzadə [2018a](#)). A single large burial vessel was found here containing parts of a human skeleton. There were also a number of smaller vessels. These comprised a perforated vessel to filter liquids, a pitcher and an obsidian flake.

### 2.3 Ashagi Ləki Antique cemetery, KP178.3

[Digital Archive](#)

During construction of the SCPX pipeline, three jar graves were found in this location (Agalarzade [2018b](#)). This area is south of a large area of similar vessels excavated in the BTC project.

**Grave 1:** was orientated north-west to south-east, with grave goods consisting of six pottery vessels.

**Grave 2:** lies in an east to west direction and was partly damaged by construction. Additional vessels include an earthenware flask with two handles. There were also the remains of an iron sickle.

**Grave 3:** lies north-west to south-east, accompanied by three bowls and cups.

### 2.4 Əmirarx Antique cemetery, KP181.9

[Digital Archive](#)



The site was identified during deep excavation for the SCPX pipeline to pass under the existing BTC and SCP pipelines (Əsədov [2018a](#)). Initial topsoil clearance had not identified the site because of the extreme depth of soil (over 1m) covering the features. Because of the method of discovery, all the burials were damaged to some degree or other. It is possible additional graves had been removed by machinery prior to the site being identified. The cemetery almost certainly extends beyond the excavation area. In 2003, during construction of the BTC and SCP pipelines further jar graves of the same type were found in an area approximately 350m to the north (Taylor and Maynard [2011](#)).

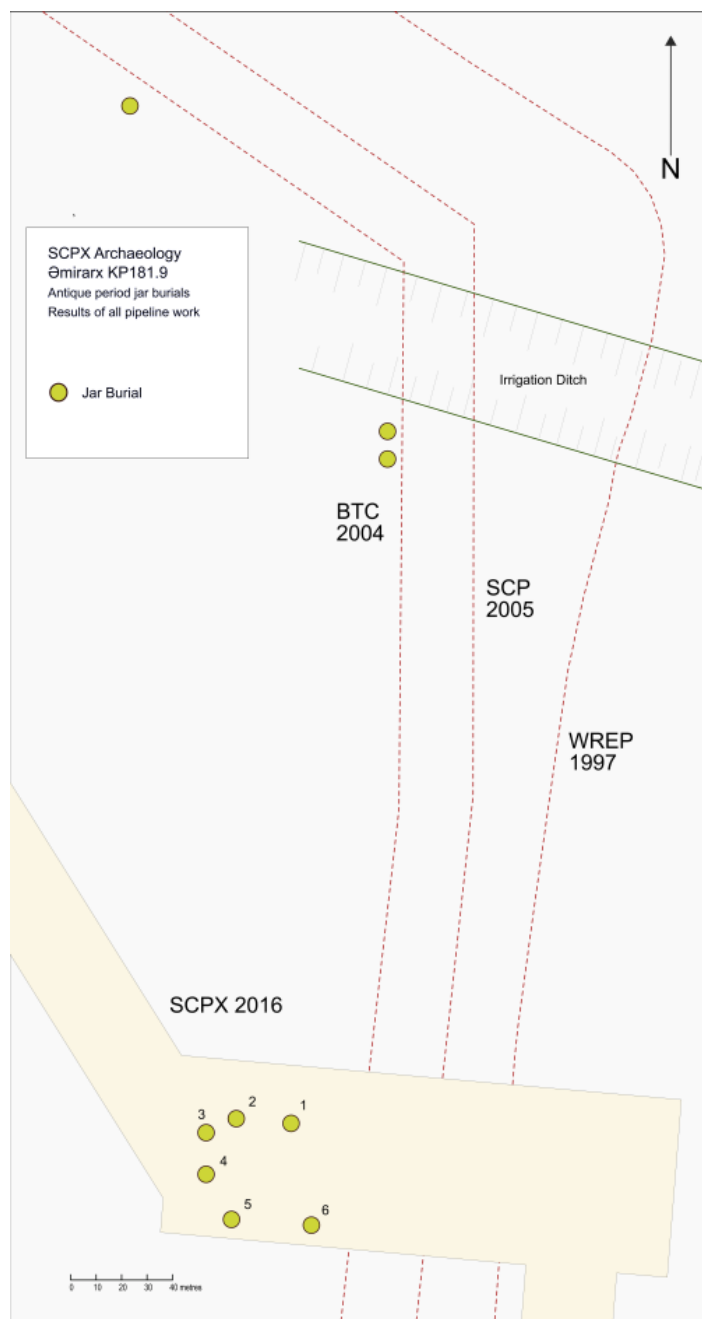


Figure 2: Əmirarx Antique cemetery site plan. Image credit: David Maynard and project team



**Grave 1:** was discovered at a depth of 1.8m below ground level. This was heavily damaged by machinery. Many parts of a large jar were discovered.

**Grave 2:** upright vessel was discovered at a depth of 4.5m below ground. Cattle bones were also associated with the burial.

**Grave 3:** discovered at a depth of 3.8m.

**Grave 4:** only part of this vessel was discovered owing to difficult working conditions, as the area was flooded by groundwater.

**Grave 5:** this jar was found at a depth of 3.8m. Only fragments of the vessel were found. Some small bone fragments and pieces of other pottery vessels were scattered in the area.

**Grave 6:** parts of a large vessel and other pottery were discovered at a depth of 2.1m at the edge of the excavated area.

## 2.5 Əmirarx medieval settlement, KP182.5

### [Digital Archive](#)

The site was identified as a spread of surface pottery during site surveys. An excavation was carried out here in 2015 over an area of 96m by 4m (Əsədov [2018b](#)). This identified a medieval settlement containing furnaces and tandir ovens with large amounts of ceramic, metal and stone items. The main excavated features were 24 hearths and 8 tandir ovens, with no evidence of other domestic structures.

The features appear to be grouped in 3 or 4 zones with a tandir surrounded by smaller hearths. It is possible that these represent activity areas of different dates. The site appears to be a seasonally occupied medieval site.

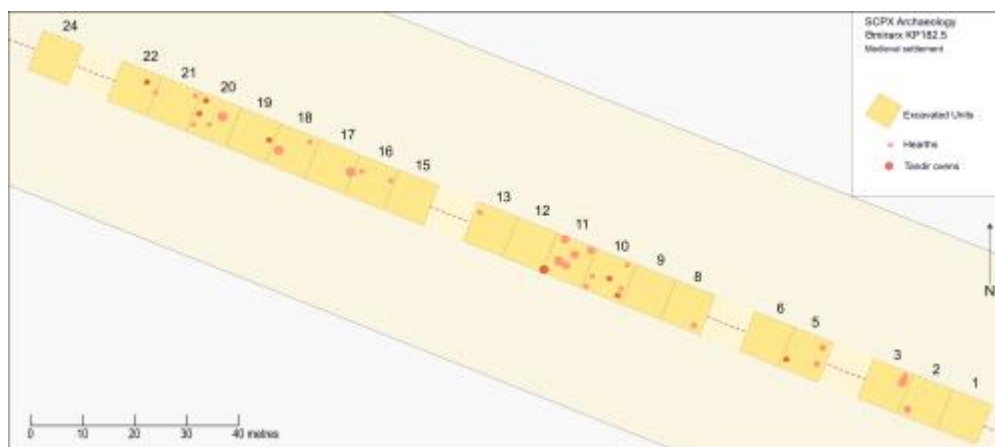


Figure 3: Əmirarx medieval settlement site plan. Image credit: David Maynard and project team



## 2.6 Bəyimсарov Antique cemetery, KP206.1 and KP206.8

### [Digital Archive](#)

The site was discovered during pipeline construction (Əsədov [2018c](#)). The main area was found during topsoil stripping ahead of trenching in late August 2016. The second area was found during trenching in February 2017. Ten burials formed of jar graves with associated burial goods were found in Area 1, while Area 2 consisted of a single grave. Field walking in the area outside the pipeline working area found extensive deposits of similar pottery, suggesting that there is a larger cemetery in this area. This site is unusual in that the graves were not deeply buried. The site is located in part of Bəyimсарov village of Tartar District. No information was reported during construction of the previous pipeline projects in this area.

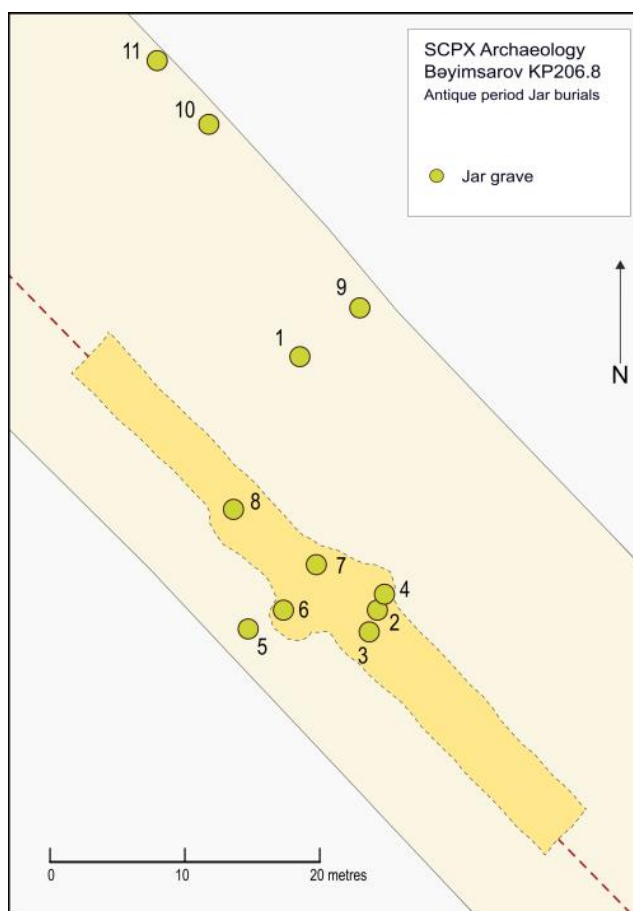


Figure 4: Bəyimсарov Antique cemetery site plan. Image credit: David Maynard and project team

**Grave 1:** large jar vessel lying in a north-east to south-west direction. A total of 13 associated vessels were found around it and inside the jar grave vessel. Inside the burial jar was the skeleton of a male.





**Grave 2:** largely damaged by machinery. There was evidence of a body inside, together with four vessels associated with the burial.

**Grave 3:** was orientated in a north-east to south-west direction and damaged by machinery. The burial jar contained the remains of an infant; five small vessels were placed a row in an east to west direction outside the mouth of the burial vessel. Two sets of agate beads were found in the burial jar.

**Grave 4:** had a jar placed on its side in an east to west direction, but damaged by machinery. Only one item, a small bowl, was found to the south of the jar.

**Grave 5:** was laid in an east to west direction and contained 13 vessels of various types. A human skeleton in the jar lay in an east to west direction. Fragmentary remains of bronze objects were discovered that resemble earrings laid around the skull.

**Grave 6:** lay on its side in an east to west direction. The mouth of the vessel was covered by a large lid with a single handle, similar to one of the burials at the Yaldili cemetery. Animal remains were found adjacent to the base of the vessel. Seven vessels of various types were found associated with the burial. Remains of bronze decorative items were found inside the burial jar.

**Grave 7:** a jar grave laid in an east to west direction. An additional three pottery vessels were found outside the jar. The remains of a child were found inside the jar. This was accompanied by parts of a bronze bracelet, a bronze ring, bronze beads and some sort of iron object.

**Grave 8:** the burial jar was placed sideways in an east to west direction. There were eight vessels outside the jar. A female skeleton was placed inside the burial jar with the head laid to the west and legs to the east. This was associated with a bronze bracelet, an iron knife blade and also a bronze torc around the body's neck.

**Grave 9:** this was found on the northern extent of the pipeline construction width and consisted of a large burial vessel. It had been largely damaged by construction activity.

**Grave 10:** the burial jar lay on its side in a north-west to south-east direction. Four additional vessels were found outside the jar. Cow bones were found in front of the jar's base outside the vessel. A male skeleton was found inside the jar, five pottery vessels were found inside. An iron dagger blade was located on one side of the pelvis, while an iron sword or dagger handle was found on the other side. Other objects include an iron sickle along with small iron nails and part of a bronze ring.

The Stage 2 excavations, 700m to the east, recorded one grave.

**Grave 11:** was a burial vessel laid on its side in a west to east direction. Within the jar was a human skeleton associated with six pottery vessels inside the burial vessel. Several iron objects were found inside the burial vessel.



A total of eleven jar graves were discovered in this work. All the jars were placed on their side in the ground. These were laid in the north-east to south-west, west to east and north-west to south-east directions.

## 2.7 Səmədabad I Antique cemetery, KP209.2

### [Digital Archive](#)

An Antique period cemetery was examined in this area. Səmədabad I at KP209.2 recorded a total of 9 graves (Əsədov [2018d](#)).

During construction of the SCP pipeline, three burials of similar date was found in this area. Unfortunately, the data was not sufficiently clear to show where the deeply buried material on the SCPX project was located. Unsuccessful attempts were made by trial trenching to establish this location in 2016.

The work was carried out in three stages: October 2016 Stage 1; August 2017 Stage 2; September 2017 Stage 3.

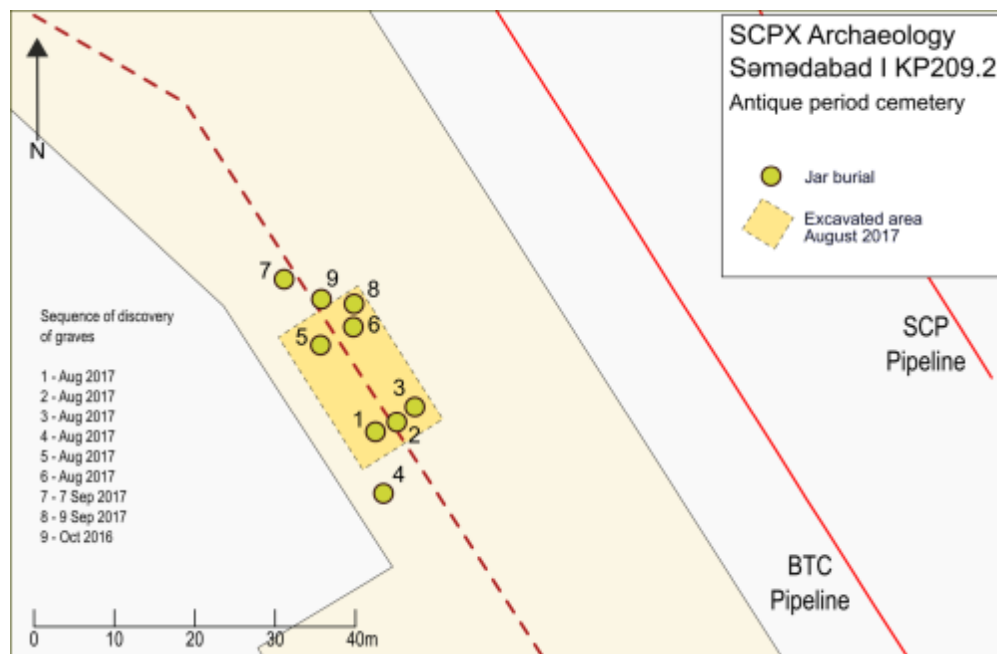


Figure 5: Səmədabad I Antique cemetery site plan. Image credit: David Maynard and project team

**Grave 1:** jar grave with the burial jar lying on its side facing a north-west to south-east direction. A total of 29 pottery vessels were placed around the burial jar. A human skeleton and burial objects were found inside the vessel. A bronze necklace was found by the skull of the body together with a glass ornament.

A single radiocarbon date was obtained from a tooth from the grave. This gave a result of  $2120 \pm 40$  BP (Beta 220993). This can be calibrated (95.4% confidence) as 350 to 310 cal BCE and 210 to 40 cal BCE (Maynard [2022](#)).



**Grave 2:** no burial vessel was found, as it had been damaged by machinery. Some parts of the jar were found on the spoil heap adjacent to the grave. A total of 16 pottery vessels were found in one group laid in front of the burial jar. Bones of sheep and goats were found inside some of these vessels.

**Grave 3:** a burial jar placed on its side in a north-west to south-east direction. A series of associated vessels were lined up in a row by the mouth of the jar. The larger vessels were placed in three to four rows near the jar's south-west side. There were 26 of these in total. A boar's carcass was placed over the vessels. Bones of sheep also found close to the burial vessel's base. Within the vessel were the skull and leg bones of a middle-aged male. He was accompanied by iron knife blades and glass beads.

**Grave 4:** this was an earth burial with no jar. The chamber was cut into the soil in a north-west to south-east direction. Bones of a child were found inside the burial pit. A total of 27 small pottery vessels lay in three directions north-west of the skull. A dog burial was also placed to the south-east.

**Grave 5:** this was heavily damaged as a result of the use of machinery. A burial jar lay in a north-west to south-east direction. This was accompanied by 14 separate vessels, together with pieces of iron rod, an iron ring, several sets of bronze and glass beads inside the burial vessel.

**Grave 6:** this grave was damaged as a result of the use of machinery so the nature of the grave could not be identified. Some vessels outside the burial remained intact, indicating an original orientation of north-east to south-west. In total, eight vessels were recovered from the burial.

**Grave 7:** an earth grave was partly damaged by machinery. Three rows of pottery vessels were laid out in a north to south direction. These comprised 19 different vessels and were accompanied by two bronze bracelets, beads of glass, a bronze chain ring and an iron ring.

**Grave 8:** this jar grave was heavily damaged by machinery. Approximately twelve vessels were recovered, although the area is heavily damaged. Other finds included an iron sickle, iron lance tips, an iron knife blade, as well as beads of agate and glass.

**Grave 9:** the burial jar was laid on its side in a north-west to south-east direction. There was a total of 16 pottery vessels found outside the vessel. The burial jar contained small fragments of a child's body together with bronze bracelets and a bronze ring.

## 2.8 Səmədabad II Antique cemetery, KP211.5

### [Digital Archive](#)

During the construction of the BTC and SCP pipelines, a total of three burials were found in this area (Mustafayev [2006](#)). A trial excavation in 2015 on the line of the



SCPX pipe attempted to identify evidence in this area (Nəcəfov [2018a](#)). In the event, the material lay outside the line of the SCPX pipeline in the area adjacent to the existing pipelines.

During the digging of a trench to drain water from the site in early 2018, Graves numbered 10 and 11 were found (Əsədov [2018d](#)). The trench lay in the area between the BTC pipeline and the SCPX work. Combined with the three graves found during the BTC project, these two graves indicate a small cemetery in this area.

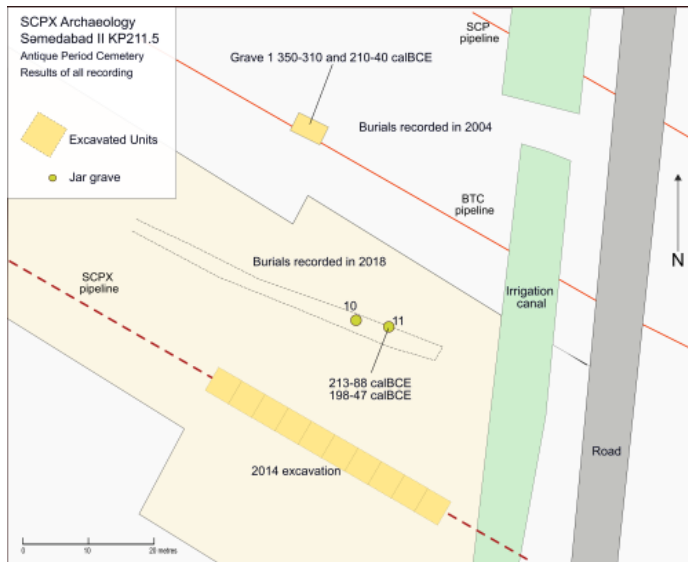


Figure 6: Samedabad 2 Antiquity cemetery site plan. Image credit: David Maynard and project team

**Grave 10:** this earth grave was mostly damaged by the use of machinery. A total of 19 pottery vessels were found, with parts of a human skeleton. The orientation of the burial pit lay in a north-west to south-east direction.

**Grave 11:** this jar grave was also damaged by machinery. The jar lay in a west to east direction with a total of 25 pottery vessels of different types in the grave, along with an anthropomorphic clay figure of a woman, two elongated clay items, three bronze bracelets and green glass beads.

Two radiocarbon dates were obtained from bone in the grave (Maynard [2022](#)). This gave results of:

Grave	Beta	Conventional age	Calendar calibration (95.4% probability)	Material
Grave 11	488815	2120±30 BP	(95.4%) 213-88 cal BCE	Bone
Grave 11	488816	2100±30 BP	(95.4%) 198-47 cal BCE	Bone



The figurine is a rare survival, and is described in greater detail in Kiriçenko and Agalarzadə (2019). Other similar figurines are recorded from a number of sites in Azerbaijan, as described in the report by the National Museum of History of Azerbaijan (NMHA 2010).



Figure 7: Samedabad II Grave 11 female anthropomorphic clay figure. Image credit: Dmitriy Kiriçenko

## 2.9 Yaldili Antique cemetery, KP219.0

### [Digital Archive](#)

This work followed on from similar material found initially on the BTC pipeline in 2004 and then on the SCP pipeline in 2005. A total of nine graves were found in this work (Taylor and Maynard 2011). The SCPX project found a further 12 graves, 9 in the 2015 preconstruction work and 3 during pipeline construction (Əsədov 2018e). The graves are numbered in sequence following the BTC and SCP work (Table 2).

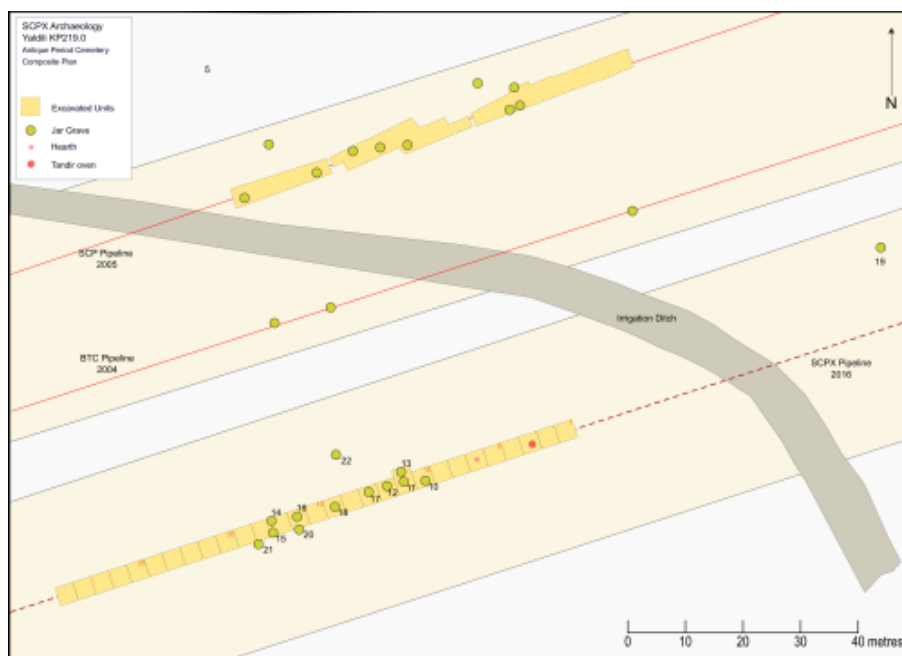


Figure 8: Yaldili Antique cemetery site plan. Image credit: David Maynard and project team

[Table 2](#): Yaldili cemetery features

Large numbers of bracelets placed on arm and leg bones of the burial, seen in Grave 14, can indicate the period of use. The archaeological excavators of the large cemeteries at Mingachevir, concluded that the graves where this was seen (for example, a total of 56 such items were seen on one body), date to the early and middle periods (3rd-2nd centuries BCE) (Gaziyeu [1960](#), table 27). Leg rings were not found in the latest jar graves.



Figure 9: Yaldili Grave 14. Image credit: David Maynard and project team



A total of 12 jar graves were discovered during this work. The burial jars were laid in the ground on their sides, as is found in nearly all such cemeteries. The direction in which the bodies are placed is generally consistent in each cemetery and is typically to the east, north-east or south-east.

The bodies placed inside the vessels also lie in the same direction as the jar itself, with heads placed in the direction of the jar's mouth and legs to the base. All the bodies in the jars were laid on their left sides, with the exception of Grave 21 where the body lay on its right and was tightly folded.

## 2.10 Kərpiçlitəpə medieval castle, KP247.2

### [Digital Archive](#)

The site is a medieval fort located beside a tributary of the Gorançay River in Goranboy region, east of Borsunlu village (Nəcəfov [2018b](#); Maynard [2020](#); Stone [2022](#)).



Figure 10: Kərpiçlitəpə interpretative site plan. Image credit: David Maynard and project team

The main structure is a rectangular earth-walled rampart with decorative brick façades. The fort appears to have a square plan with walls 31m long. Each corner contains a round projection forming a tower with a diameter of 6.5m. Within the northern wall is an entrance set in a projecting tower. If the fort was built in a mirrored format, there may be a similar entrance in the south wall. The façade of



brick and stone was built in two phases without a long period between the two. North of the main structure is a large rectangular brick kiln of fired clay, containing many bricks from the final firing. As use for the kiln ceased on completion of the main structure, the kiln was filled in, the area levelled and used for industrial processes.



Figure 11: Kərpiclitəpə aerial view of site, 2018. View to east. Image credit: BP



Figure 12: Kərpiclitəpə north-west tower in foreground, 2017. View to south. Image credit: David Maynard and project team





Figure 13: Kərpiclitəpə kiln as excavated. View to south-west. Image credit: David Maynard and project team

The interior of the fort was used for a series of furnaces and tandir ovens, several associated with brick structures. This activity was found both inside and outside the fort and appeared to continue after the fort ceased to function and fell into disrepair. The latest phases of activity on the site saw a series of rectangular buildings with earth walls and stone foundations laid out in the same orientation as the fort. These buildings also had many tandir ovens.

During the latest phase of activity, there were major episodes of robbing bricks from the façade of the wall. This can be seen in the many broken bricks strewn over the site and large robbing pits along the wall façade that created difficulties in the interpretation of parts of the site.

The extensive excavations here during and after construction of the pipeline revealed many aspects of the development of the site that cannot be easily summarised here. The site revealed many artefacts including specialised tools and numerous coins, including a coin hoard. There was an extensive radiocarbon dating programme and analysis of charred seeds. Full details of these can be found in the ADS archive.



Figure 14: Kərpiclitəpə decorated bone object. Image credit: David Maynard and project team



Figure 15: Kərpiclitəpə woven fabric in coin hoard corrosion product. Image credit: David Maynard and project team



## 2.11 Borsunlu Camp Kurgan cemetery

### [Digital Archive](#)

Nine kurgan burial mounds were excavated ahead of the construction of a camp facility for the SCPX project in late 2015 (Əsədov [2018f](#)). Material found here indicates an early Iron Age date. The sites were excavated inside the camp area, while a series of larger kurgan mounds were recorded outside the camp fence. A series of enigmatic stone alignments were also traced in this area, consisting of lines of placed stone that may have demarcated areas of land use. These have not been dated.

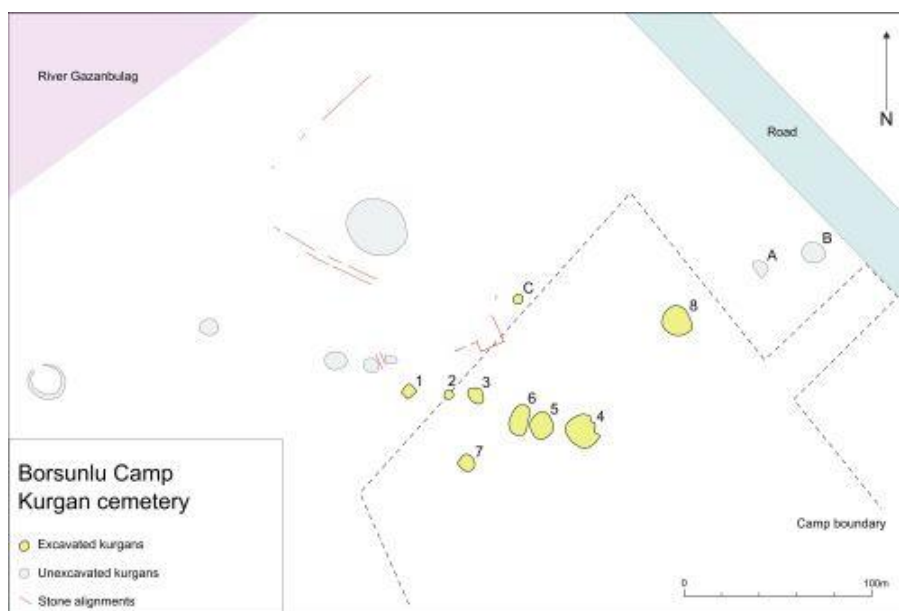


Figure 16: Borsunlu Camp site plan. Image credit: David Maynard and project team

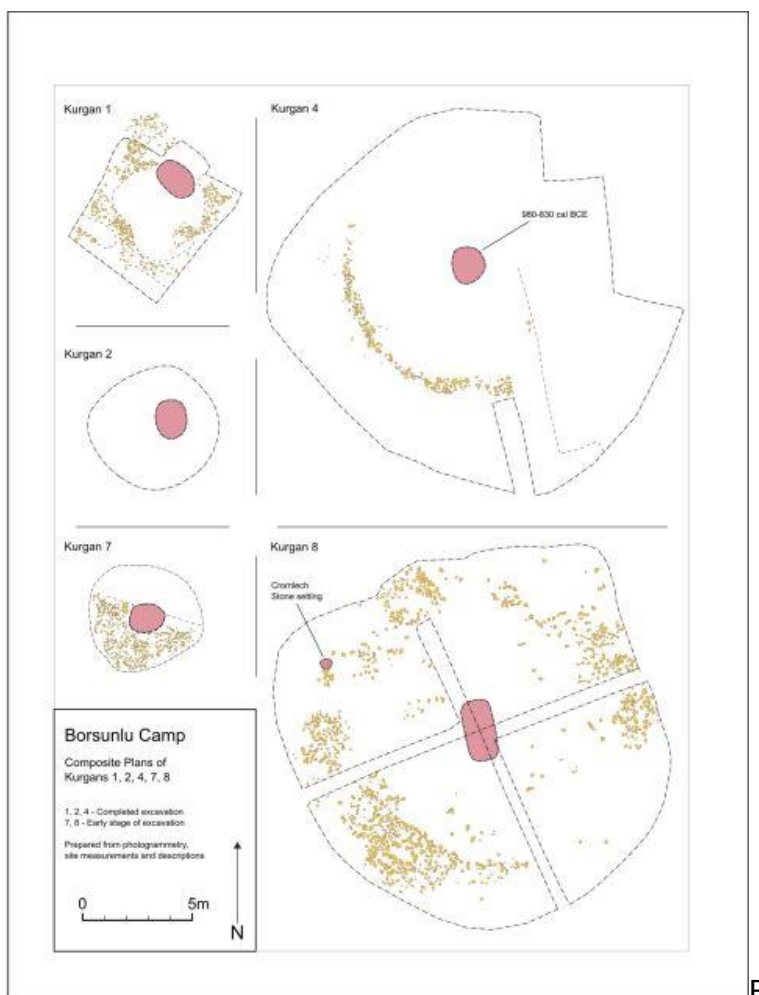


Figure 17: Borsunlu Camp details of kurgans. Image credit: David Maynard and project team

**Kurgan 1:** had a stone cover with a diameter of 4m. This covered the burial pit containing a ceramic pitcher, red and black agate beads, an iron rod and an obsidian flake. Human skeletal parts were also identified.

**Kurgan 2:** had a stone cover of 4.6m diameter. The burial pit contained a child burial and one pottery vessel, two bronze bracelets and a bronze ring. There were paste, agate and bronze beads together with a further two bronze rings.

**Kurgan 3:** this had a circular stone cover with a diameter of 8m. Two pottery pitchers were found within it. No trace of a burial pit or burial was found in the kurgan.

**Kurgan 4/:** this is the largest of the kurgans examined, 17.8m north to south and 19.9m east to west. The burial pit was found with a few fragments of human bone; five pottery vessels were also found.



Figure 18: Borsunlu Camp Kurgan 4. View to east. Image credit: David Maynard and project team

A radiocarbon date was obtained from the feature.

Grave	Beta	Conventional age	Calendar calibration (95.4% probability)	Material
Kurgan 4	46499	2760±30 BP	(95.4%) 982-830 cal BCE	Bone

This date is very similar to those obtained from the [Tovuzçay II cemetery](#).

**Kurgan 5:** stone cover was 15m north-south and 12.5m east to west. The burial pit containing scattered bones of a young adult were found with four pottery vessels, a bronze bracelet, agate and paste beads.

**Kurgan 6:** this had a stone cover of 16m north-south and 9m east to west. A central burial pit contained scattered human bones, seven pottery vessels, bronze buttons and paste beads.

**Kurgan 7:** this had a stone cover of 5.8m north-south and 2.9m east to west; the burial chamber contained no human remains but included seven pottery vessels.

**Kurgan 8:** this had a circular stone cover 16.6m in diameter. The burial pit held no human remains but contained agate beads, a bronze bracelet, bronze rings and an iron knife blade.



Figure 19: Borsunlu Camp Kurgan 8. View to south. Image credit: David Maynard and project team

**Kurgan 9 (also C):** This had a round stone cover 5m in diameter. No human remains or a burial pit were found, but the kurgan did contain two pottery vessels, a necklace of twisted bronze rolled sheets, a bronze bracelet and paste beads.

## 2.12 Bəşirli Iron Age burial, KP262.4

[Digital Archive](#)

This was a single grave dating from the 9th to 8th century BCE (Hüseynov [2018b](#)). Material was exposed by machine in November 2016. The grave contained a child burial, 11 pottery fragments, a bronze needle, a bronze awl and beads. It is possible that there are further graves in the area.

## 2.13 Faxrali Medieval settlement, KP267.4

[Digital Archive](#)

The Faxrali site was excavated late 2013 and early 2014 (Nəcəfov [2018c](#); Maynard [2014](#)). The work took place over a distance of 136m by 4m along the route of the SCPX pipeline. The site was known from previous discoveries on the SCP and BTC pipelines, resulting in excavations in 2004 and 2005 (Taylor and Maynard [2011](#)).

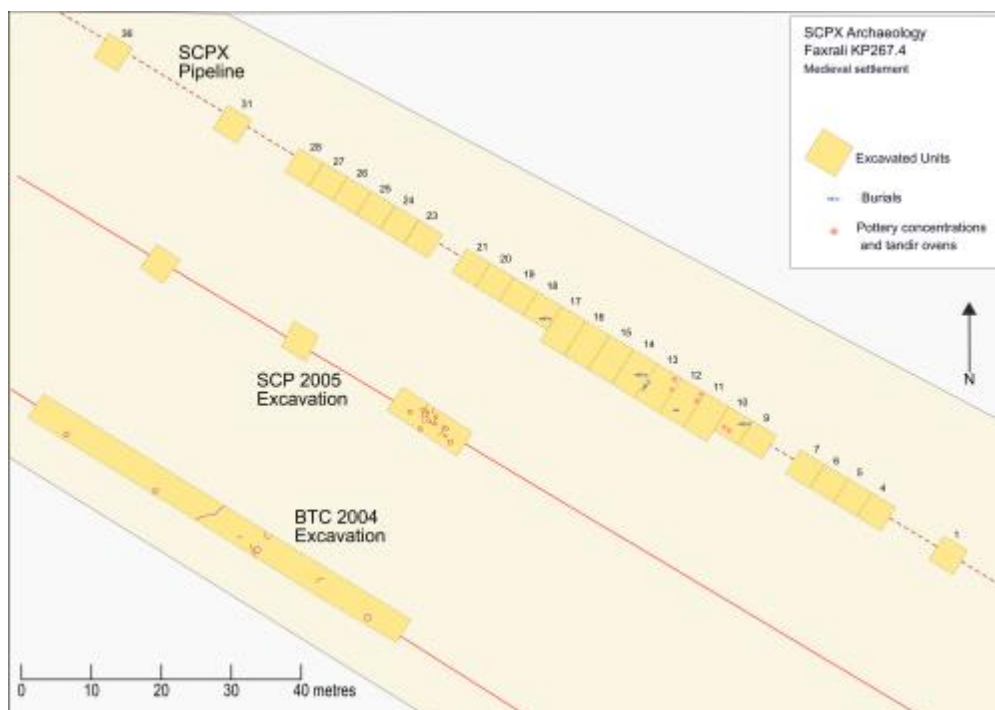


Figure 20: Faxrali site plan. Image credit: David Maynard and project team

The excavation opened up a total of 26 pits dug by hand, pits 1, 4-7, 9-21, 23-28, 31 and 36. Most pits were 4m by 4m in size, except 11-17, which were 4m by 6m. Most pits were dug to a depth of 0.8m.

The BTC work in 2004 revealed three tandir ovens and a dense spread of pottery. Later work on the SCP pipeline in 2005 identified a similar spread of material that covered a smaller area. The deposits, however, were deeper and more complex. These included ovens and remains of a post-hole structure associated with a deep pit. Possibly these were the result of partially roofed working areas.

The SCPX excavations revealed a number of small tandir ovens and deposits of ash, probably from raking out the ovens. No evidence of structures was found and the concentration of ceramic material was considerably less than in the previous examined areas.

## 2.13.1 Cemetery

Five human burials were located. All except one lay on their backs with feet facing towards the east. One grave from Unit 13 was very unusual in that the burial position was face down with the legs and feet splayed outwards facing south-west. This fits with no known traditions. The fact that it lay in an established cemetery, although possibly at its margins, implies that it is of the same period as the rest of the cemetery. All the bone from the site was very fragmentary because of the effect of the soil; this also suggests that all the burials are of the same approximate age.

[Table 3](#): Faxrali cemetery details



Of the five burials, one was a child approximately 0.5m long, while the others were adult (Table 3).

The burials appear to represent a Christian-era cemetery at this location. This would equate to the Albanian period and indicates that it was in existence in the 4th to 8th centuries CE. The dispersed nature of the burials is unusual. This possibly represents the outlying edges of a cemetery. The focal point of the cemetery was likely to be north of the excavation area, as no burials were located during BTC or SCP work. The presence of a non-standard burial technique, which may reflect the disapproval of society for an individual, could also indicate the very edge of a cemetery.

## 2.14 Lək I Antique period settlement, KP277.0

### [Digital Archive](#)

During the construction of the SCP in 2005, an Antique period settlement was found in this area (Taylor and Maynard [2011](#)). As part of the SCPX project, an area 48m by 4m was opened up in the vicinity of the previously excavated area. Additional information was found in this excavation consisting of 14 hearths, 4 tandir ovens, a pit and the area of a possible building (Əsədov [2018g](#)).

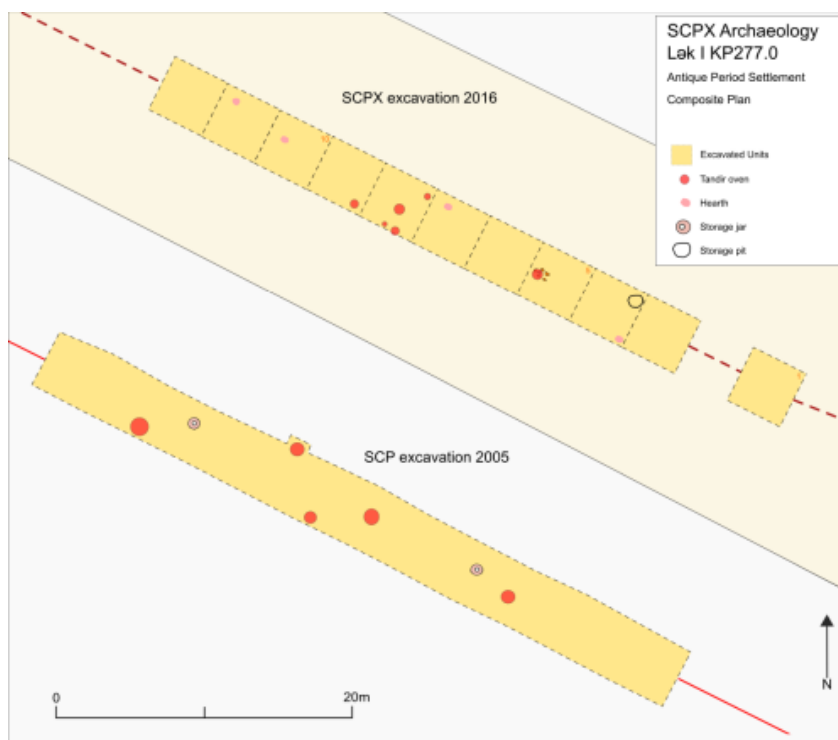


Figure 21: Lək I site plan. Image credit: David Maynard and project team





## 2.15 Lək II Albanian settlement, KP278.1

### [Digital Archive](#)

Attention was drawn to this area by the discovery of an Albanian period settlement during construction of the SCP pipeline in 2005. In 2015, excavation of an area 36m by 4m was carried out here (Əsədov [2018h](#)). Features were limited to a large hearth and a spread of burnt soil, charcoal and pottery. Material from the site confirmed use of the site from the 4th to 8th centuries CE.

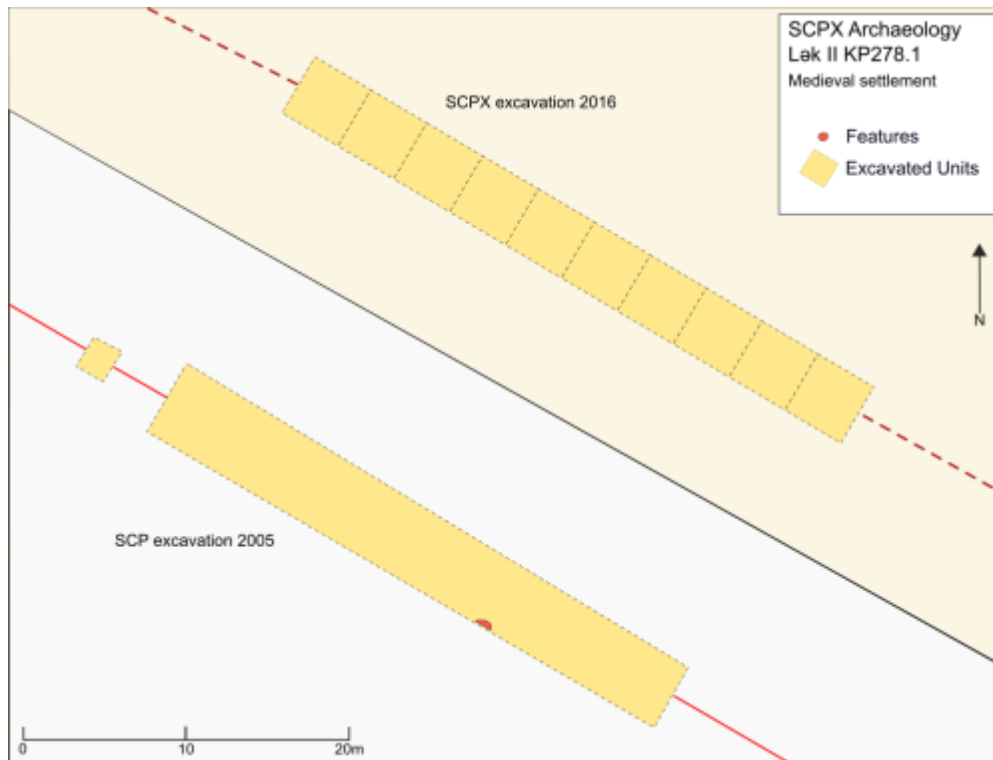


Figure 22: Lək II site plan. Image credit: David Maynard and project team

## 2.16 Hacialili II Medieval settlement, KP279.3

### [Digital Archive](#)

This was excavated in 2015, following the work on the SCP pipeline in 2005 (Taylor and Maynard [2011](#)). An area of 28m by 4m exposed a large circular pit with a number of smaller storage pits inside it. A single hearth was associated with it (Əsədov [2018i](#)).

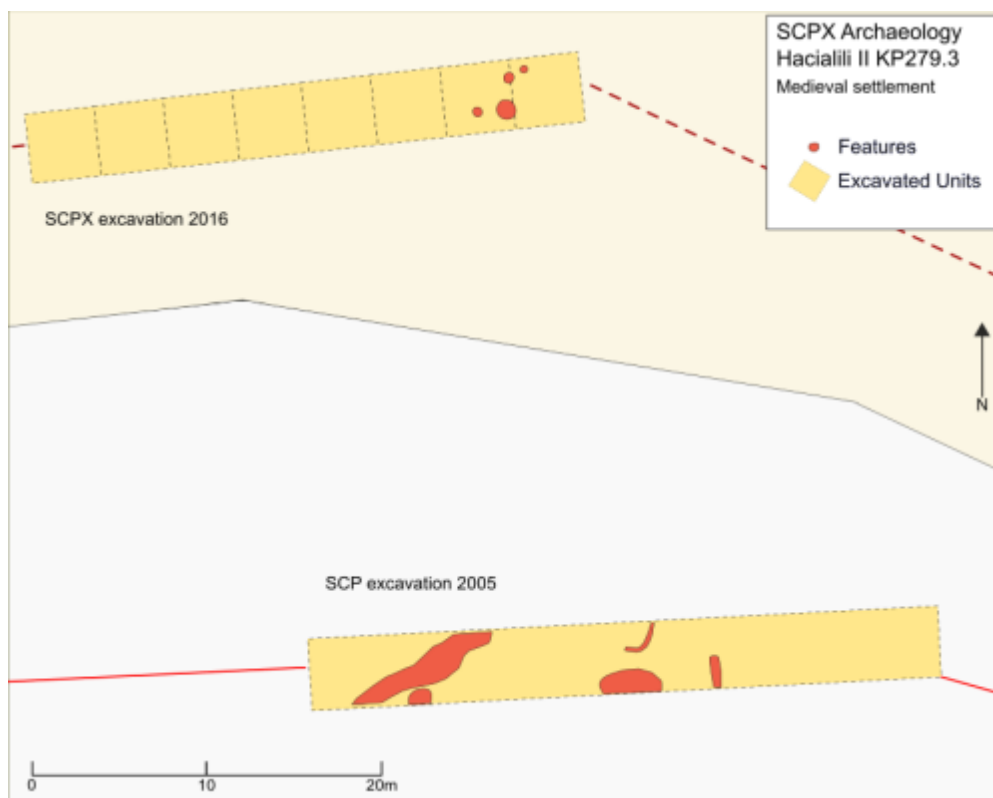


Figure 23: Hacialili II site plan. Image credit: David Maynard and project team

## 2.17 Hacialili I Medieval settlement, KP280.0

### [Digital Archive](#)

Medieval occupation was found on the SCP pipeline in 2005, leading to an excavation in 2015 (Əsədov [2018j](#)). This was a trench 36m by 4m. The earliest evidence from the site was the grave of a man lying in an east to west direction, facing west. This burial was accompanied by a small pottery flask and an iron arrow head. The only other feature identified was the remains of a structure formed of fired brick. All the material dates to the early medieval, in the period 2nd to 8th centuries CE.



Figure 24: Hacialili I site plan. Image credit: David Maynard and project team

## 2.18 Hacialili III Medieval settlement, KP280.3

### [Digital Archive](#)

During construction of both the BTC and SCP pipelines, dense settlement of medieval date was recorded (Taylor and Maynard [2011](#)). The SCPX excavation covered an area of 68m by 4m in 2015. Main results on site included five pits for domestic storage, a total of 24 tandir ovens that were grouped together in specific areas, showing that activity on site was divided into different zones. The material was all dated to the period 9th to 12th centuries CE (Nəcəfov [2018d](#)).

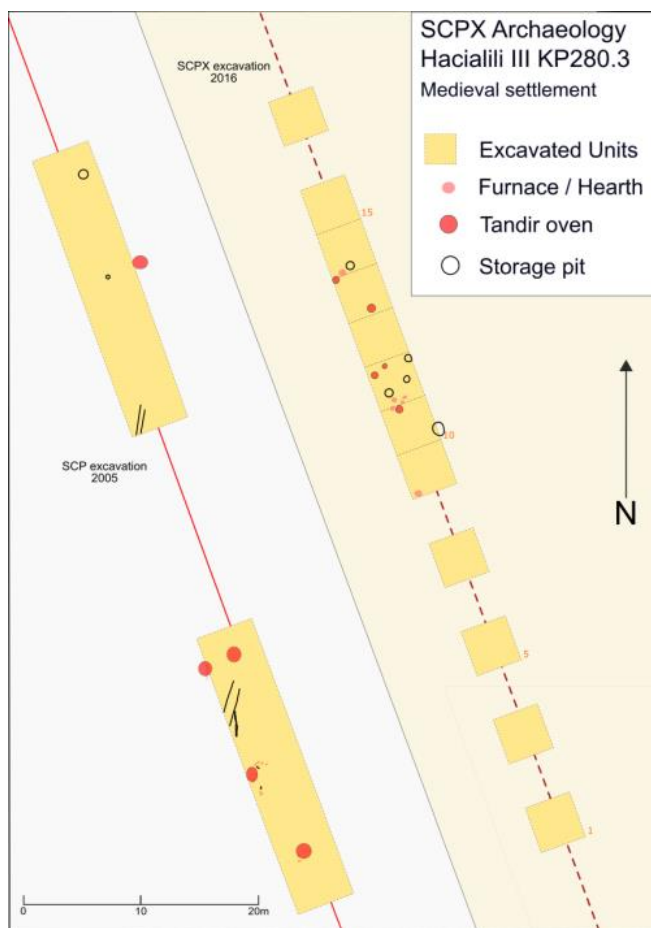


Figure 25: Hacialili III site plan. Image credit: David Maynard and project team

## 2.19 Seyidlər II Bronze Age settlement, KP295.5

### [Digital Archive](#)

The ridge west of the Qoşqarçay River was identified during the BTC and SCP project as having a high density of archaeological material with domestic settlement of the Bronze Age found in all areas examined. The SCPX route was selected to be laid over 100m to the north of the previously identified areas, but it also contained material of that date ([Figure 27](#)).

The excavation in 2015 examined an area 128m by 4m long (Əsədov [2018k](#)). Domestic settlement evidence was found throughout the middle section of this excavation with Bronze Age pottery in abundance, but few signs of evidence for below-ground features.



Figure 26: Seyidlər II site plan. Image credit: David Maynard and project team

At the west end of the excavation four graves were found, with grave goods indicating a Late Bronze Age/Early Iron Age date. Results are shown in Table 4.

#### [Table 4](#): Seyidlər II grave details

The absence of human bodies has been noted from other cemeteries of this date, for example at Zəyəmçay and Kura Araxes graves in mound 6 at the Sitalçay burial mounds in Khizi District. These are known in Azerbaijan research as cenotaph or memorial graves.

## 2.20 Seyidlər Jar Graves, KP295.85 and KP296.2

### [Digital Archive](#)

In April 2017, during trenching operations for the SCPX pipeline, a number of jar graves were noted in the side of the trench (Nəcəfov and Əliyev [2020](#)). These were quickly recorded, producing evidence for three Antique period jar graves (Table 5). All three had been partially damaged by machinery.

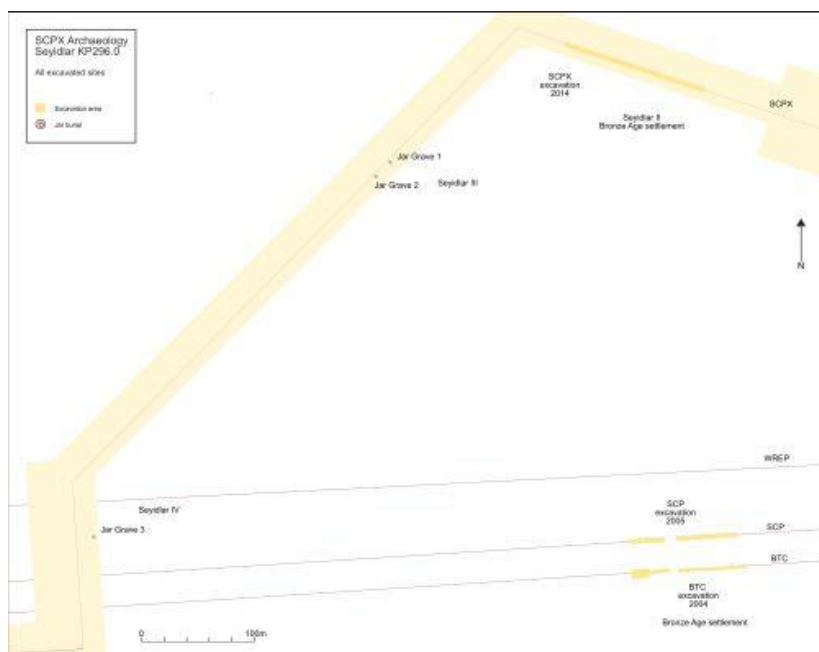


Figure 27: Seydlar all excavated areas. Image credit: David Maynard and project team

No human remains were found, but may have been lost in the construction damage.

[Table 5](#): Seydlar jar grave details

Graves 1 and 2 were 3m apart, while Grave 3 lay 400m to the south.

## 2.21 Seydlar II medieval occupation, KP297.5

[Digital Archive](#)

During construction of the SCP pipeline in 2005, evidence of Antique period domestic settlement was identified. A sample excavation was carried out on the line of the SCPX in 2015 (Nəcəfov [2018e](#)). This identified only a few sherds of medieval pottery of the 9th to 12th centuries CE.

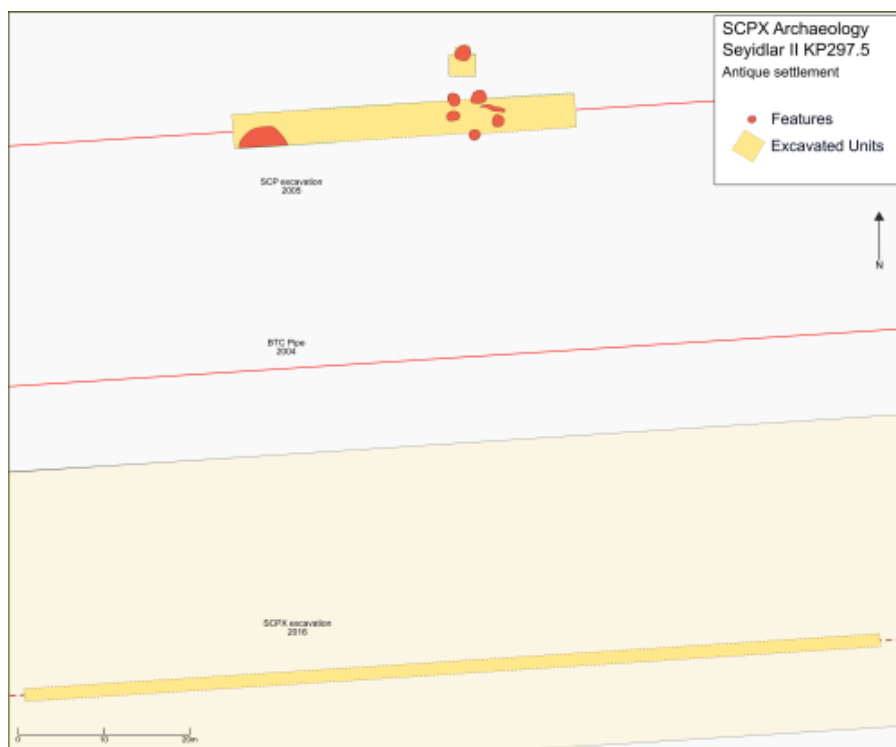


Figure 28: Seyidlər II site plan. Image credit: David Maynard and project team

## 2.22 Qaracəmimli medieval occupation, KP299.9

### [Digital Archive](#)

Evidence of medieval occupation was found in this area in 2005 during construction of the SCP pipeline. In 2016, a sample excavation was carried out here for the SCPX pipeline (Əsədov [2018](#)). Three hearths were found, along with medieval pottery of the 11th to 12th century CE.



Figure 29: Qaracemirli site plan. Image credit: David Maynard and project team

## 2.23 Mahmudlu Bronze Age kurgan, KP310.7

### [Digital Archive](#)

A Late Bronze Age/Early Iron Age kurgan burial was found on the SCPX pipeline in 2017 (Əsədov [2018m](#)). The site lies on the gravel terrace east of and overlooking the Shamkir River. The grave contained two bodies, a young man and an old man. Bones were disarticulated, presumably before burial. The grave contained 18 pottery vessels of varying types, a bronze bracelet and two decorated bone beads.

The burials were covered by a stone setting.

## 2.24 Keçili Bronze Age kurgan, KP311.8

### [Digital Archive](#)

This was a kurgan formed of a shallow circular stone spread overlying a burial excavated in 2017 (Kiriçenko [2018a](#)). The grave contained a single body with two





pottery vessels. A Middle Bronze Age date is suggested by radiocarbon analysis of bone.

Beta 464795,  $3440 \pm 30$ BP, calibrated to 1785-1664 cal BCE.

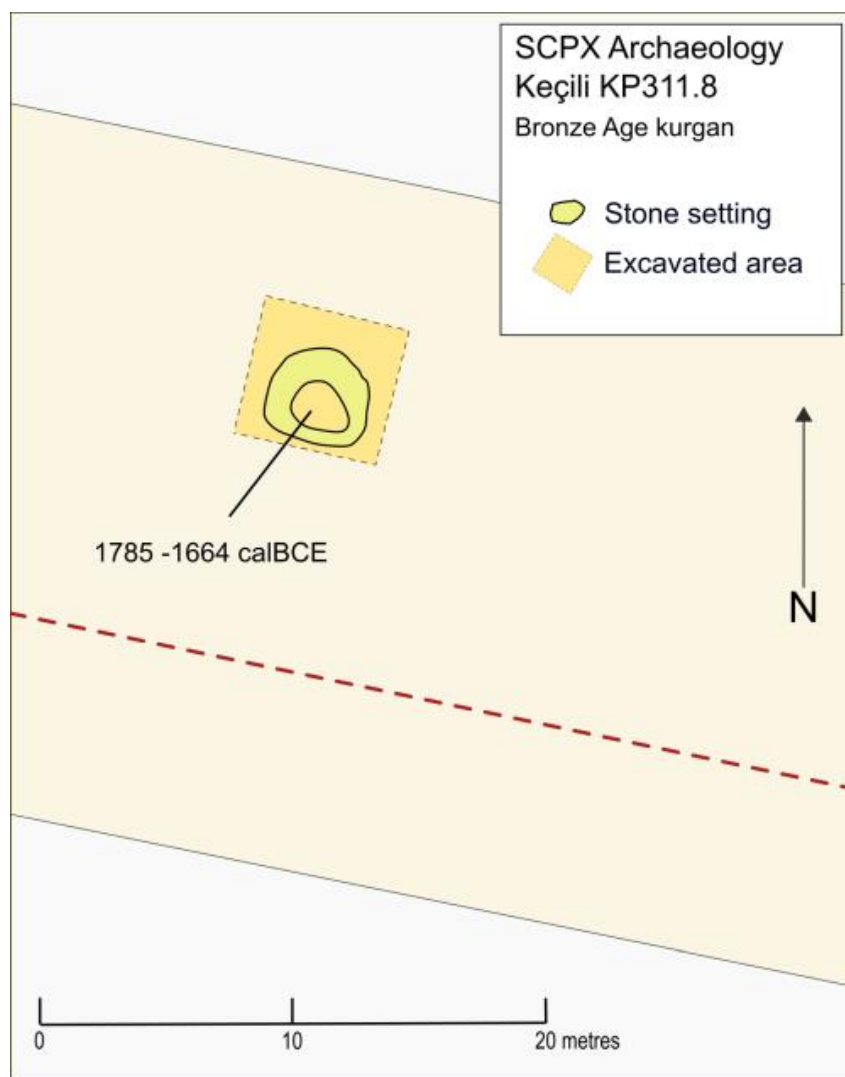


Figure 30: Keçili site plan. Image credit: David Maynard and project team



Figure 31: Keçili. View to south. Image credit: Dmitriy Kiriçenko

The site lay close to two kurgans excavated during construction of the SCP pipeline just to the north (Müseybli [2008](#)).

## 2.25 Daşbulaq medieval settlement, KP322.0

### [Digital Archive](#)

Excavations on both the BTC pipeline in 2004 and SCP pipeline in 2005 found extensive medieval settlement remains (Taylor and Maynard [2011](#)). The SCPX pipeline lay 60m to the south of both these pipelines, though separated by the Western Route Export Pipeline. The distance from the centre of occupation shown by the previous work was confirmed by the SCPX excavations in 2014. Two areas were excavated; a 30m by 4m and a 12m by 4m trench were examined on either side of the road that leads to the modern village of Daşbulaq (Nəcəfov [2018f](#); Maynard [2021](#)).

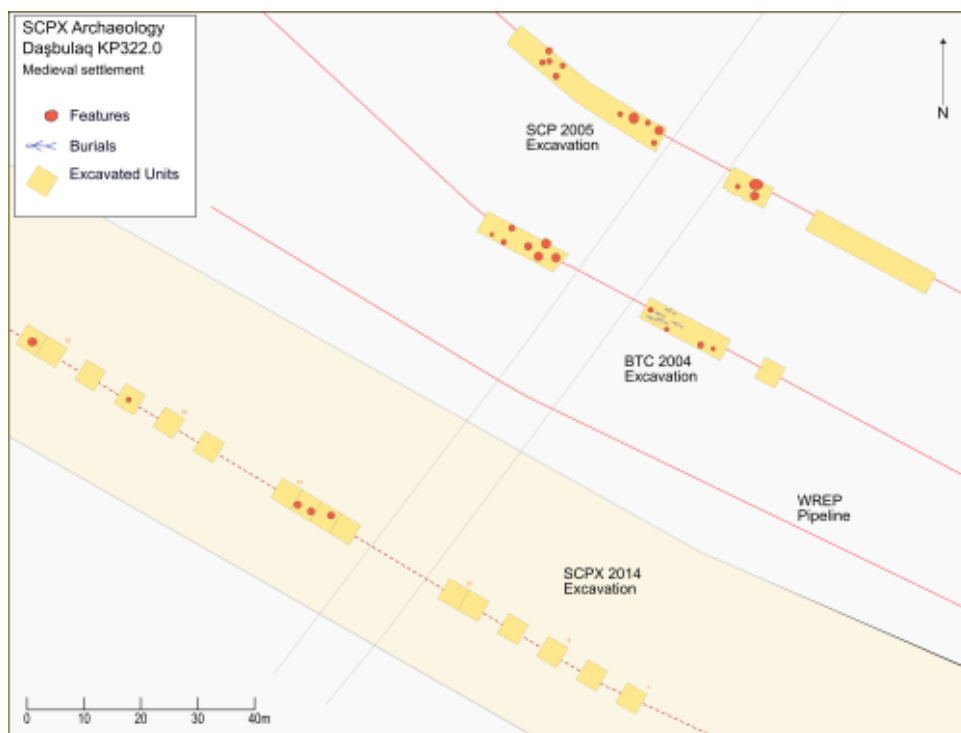


Figure 32: Daşbulaq site plan. Image credit: David Maynard and project team

Results were relatively limited; no materials were found to the east of the road while a household pit and a tandir oven was found west of the road. Medieval pottery was found throughout the area. This was confirmed both by results from the excavations and from the surface collection programme. It appears that a brick-built structure, evidenced by the concentration of fired bricks in this area, may have been affected by construction of the Western Route Export Pipeline.

## 2.26 Dəllər Cəyir Kurgan cemetery, KP322.6

### [Digital Archive](#)

The site was identified during pipeline construction activities in 2016 (Əsədov [2018n](#)). The site consists of six spreads of stone, indicating kurgan burial mounds. These mostly lay north of the pipeline route. Two of the kurgans were excavated since they lay inside the impact zone of the pipeline.

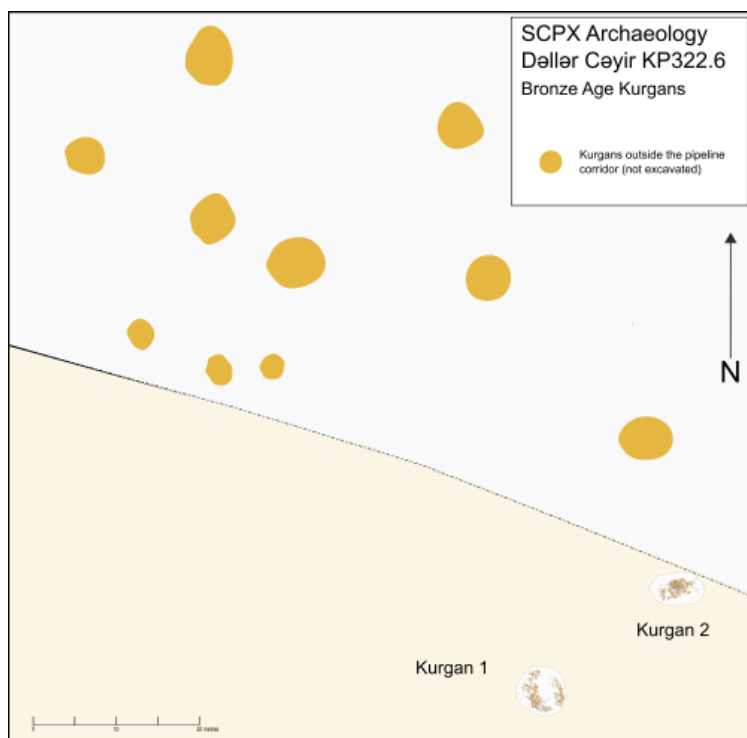


Figure 33: Dəllər Cəyir site plan. Image credit: David Maynard and project team

**Kurgan 1:** was 3.8m by 4m, covering a burial pit of 1.3m by 0.95m. Fragmentary remains of a body were accompanied by sherds of at least three pottery vessels. The nature of the deposits suggests that either the burial was disturbed at a later date, or that fracturing of the remains was part of the burial rite.



Figure 34: Dəllər Cəyir Kurgan 1. View to east. Image credit: David Maynard and project team



**Kurgan 2:** a 6m by 5m stone spread with no identified burial pit, suggesting that this was intended as a memorial site.

The nature of the material from this site suggests a Late Bronze Age/Early Iron Age date.

## 2.27 Sarıtəpə Antique period occupation, KP327.3

[Digital Archive](#)

During trenching operations in 2017, a large storage jar was identified in the side of the trench (Hüseynov [2018c](#)). This was buried upright and accompanied by a smaller storage vessel. No other information was observed in this area. The evidence suggests that there is an Antique period settlement located in the vicinity. The size and nature of this is currently unknown.

## 2.28 Zəyəmçay Bronze Age settlement, KP335.4

[Digital Archive](#)

During work on the BTC pipeline in 2003, evidence of a Bronze Age settlement was found in this area. The SCPX pipeline lay approximately 30m south of this. An excavation area of 60m by 4m was opened up in 2014 to determine the nature of deposits in this area (Nəcəfov [2018g](#)).

Fragments of a jar set upright, mounted on a footing of large stones was the only in situ feature located. Bronze Age pottery was found in nearly all excavated areas.



Figure 35: Zəyəmçay settlement site plan. Image credit: David Maynard and project team

## 2.29 Zəyəmçay Late Bronze Age Early Iron Age cemetery, KP335.8

### [Digital Archive](#)

During the BTC and SCP project, a large Bronze Age cemetery was excavated in this area (Taylor and Maynard [2011](#)). The cemetery was located on a narrow ridge running east to west. The SCPX pipeline was routed to run in a small valley south of the ridge. Trial excavations on a line in this area, 80m by 4m wide, revealed only one find, a tandir oven, presumably of medieval date. A few isolated Bronze Age pottery sherds were recorded (Nəcəfov [2018h](#)).

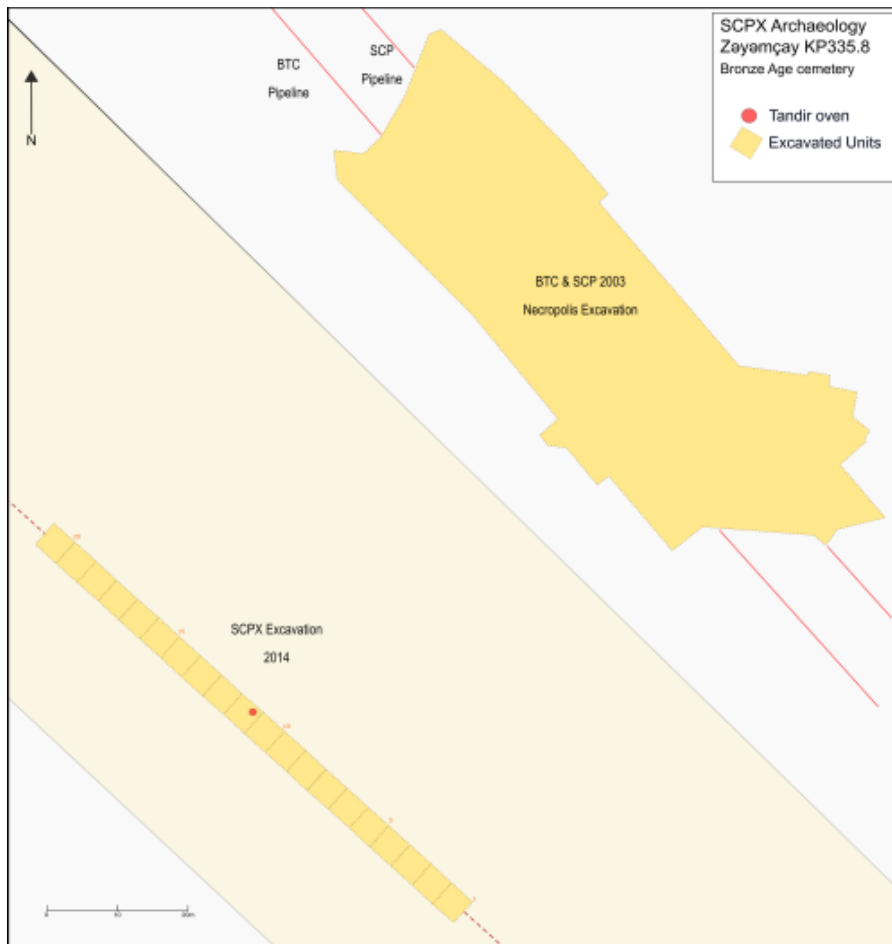


Figure 36: Zəyəmçay necropolis site plan. Image credit: David Maynard and project team

## 2.30 Zəyəmçay Muslim cemetery, KP336.0

### [Digital Archive](#)

During construction of the BTC and SCP pipelines in 2004, a cemetery containing 74 graves was identified and excavated. It was clear that this cemetery extended further to the south-west (Taylor and Maynard [2011](#)). Before construction of the SCPX, work began in 2015 to examine an area south-west of the earlier identified cemetery. Further evidence of an organised cemetery was found at this point. The process of recording and re-burial in another location resulted in 213 burials, before the pipeline route was altered as part of the redesign of the crossing of the Zəyəmçay River (Nəcəfov [2018j](#)).

The alignment of graves suggests that they were laid to the north of the bridge over the Zəyəmçay and, possibly, respected a putative road running east from that bridge. All the graves follow well-established Muslim traditions for the position and attitude of the body and were covered with a limited range of forms of stone setting. The stones were obtained from the bed of the nearby Zəyəmçay river. The most common form of grave cover were stones with long axes laid to form a transverse cover crossing the line of the grave pit in a regular form, typically, 7 or 8 in number. Some



graves were marked by oval sets of small stones marking the burial plot, while others had a random positioning of stone. The majority of child burials had no stone grave covers.

These burial practices have been seen elsewhere is Azerbaijan. In some cases, wooden timbers laid in a transverse manner across the grave have been seen. This practice may account for the large numbers of graves that had no apparent grave cover in this site.



Figure 37: Zəyəmçay medieval cemetery and Kurgan 1 site plan. Image credit: David Maynard and project team





Figure 38: Zəyəmçay Grave 27 possible grave marker. Image credit: David Maynard and project team

Table 6 shows the form of the graves examined.

[Table 6](#): Zəyəmçay grave details

## 2.31 Zəyəmçay Kurgan I, KP336.1

### [Digital Archive](#)

During work on the Zəyəmçay Muslim cemetery, a stone spread was identified that was later confirmed as an earlier Bronze Age kurgan burial (Nəcəfov [Najafov2018i](#)). This was located on the east terrace above the Zəyəmçay River, similar in topographic position to the other sites worked in this area (Zəyəmçay Kurgans 2, 3, 4, 5 and 6). The stone spread had an outer diameter of 6.7m. Under the stone cover was a burial pit 1.2m by 1.4m wide. Within this were the remains of a human body together with animal bones, although all the bones were disarticulated and spread about. Grave goods consisted of two pottery vessels, 94 glass beads and a cowrie shell bead.



Although the kurgan is described as being of Late Bronze Age/Early Iron Age date, the fine nature of the thin-walled pottery vessels suggest that it is more likely to be later Early Iron Age.

## 2.32 Zəyəmçay Kurgan II, KP336.2

### [Digital Archive](#)

This kurgan was located on the east bank of the Zəyəmçay River on a terrace overlooking the river. The excavations were conducted in 2017 after the site was located during construction of the SCPX pipeline (Kiriçenko [2018d](#)).

The feature contained no evidence of human remains, but, instead, the burial pit contained a dog and several cattle leg bones. These features were accompanied by a 99cm long bronze rapier (Kiriçenko [2020a](#); [2020b](#)), fragments of 12 pottery vessels and 15 complete vessels, together with several stone tools and what is identified as a stone 'venus' figure. The burial pit was covered by a stone cairn.

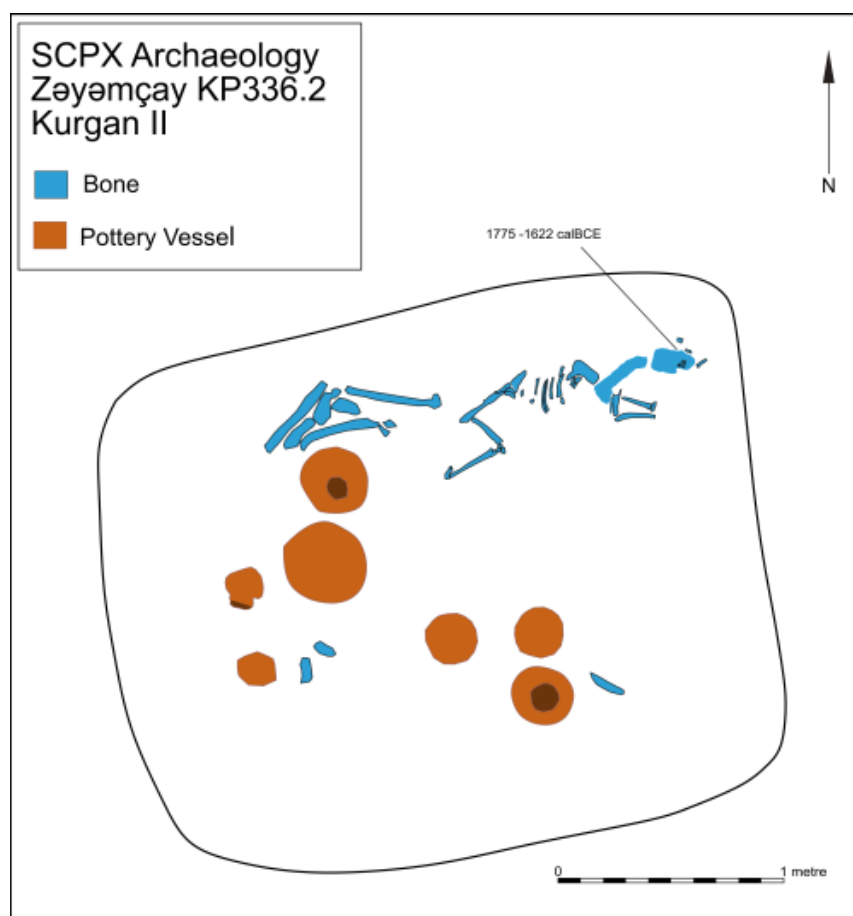


Figure 39: Zəyəmçay Kurgan II site plan. Image credit: David Maynard and project team



Figure 40: Zəyəmçay Kurgan II. View to north. Image credit: Dmitriy Kiriçenko

Bone from the burial pit was analysed for a radiocarbon date (Maynard [2022](#)).

Grave	Beta	Conventional age	Calendar calibration (95.4% probability)	Material
Kurgan 2	498810	3420±30 BP	(86%) 1775-1622 cal BCE (8.0%) 1873-1846 cal BCE (1.5%) 1815-1804 cal BCE	Bone

This places the site in the Middle Bronze Age.

## 2.33 Zəyəmçay Kurgans III and IV, KP336.6

### [Digital Archive](#)

Both sites were found adjacent to each other on the west bank of the Zəyəmçay River, 200m west of the present river course. The site was discovered during topsoil stripping and excavated in 2016 (Əsədov [2018o](#)).

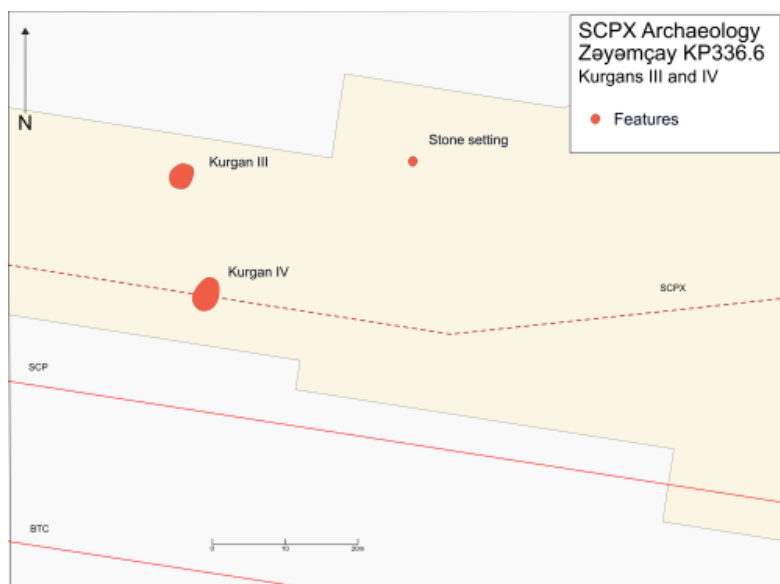


Figure 41: Zəyəmçay Kurgans III and IV site plan. Image credit: David Maynard and project team

**Kurgan III:** had a circular spread of stones edged with a stone kerb having a diameter of 6.25m. Within this, after the removal of the upper layer of stones, was a rectangular burial pit 1m by 1m and approximately 1.5m deep. The only objects in the pit were disturbed human bones. A single pottery sherd was found in the body of the stone spread.

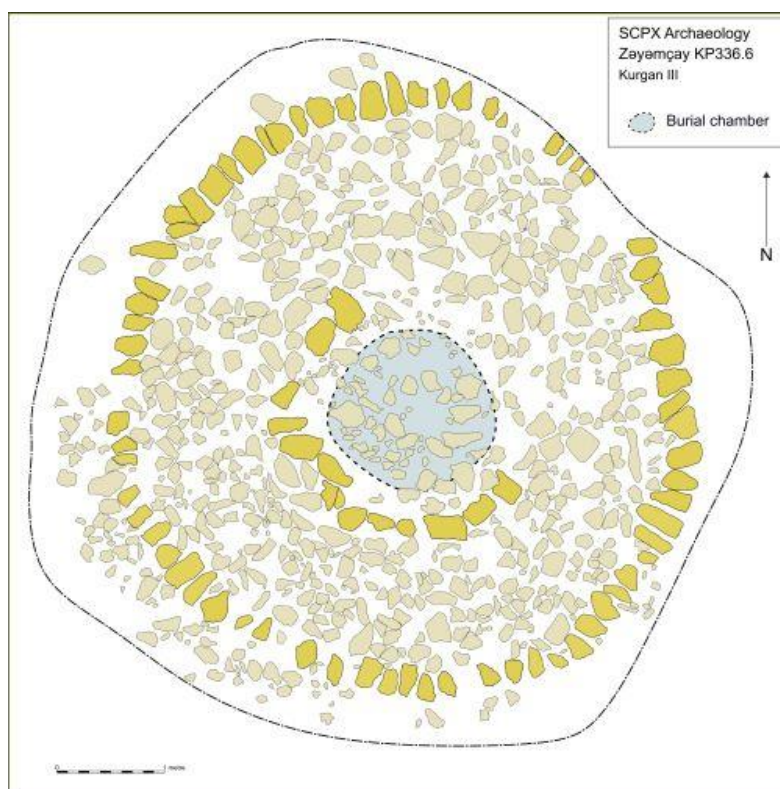


Figure 42: Zəyəmçay Kurgan III plan of stone cover. Image credit: David Maynard and project team

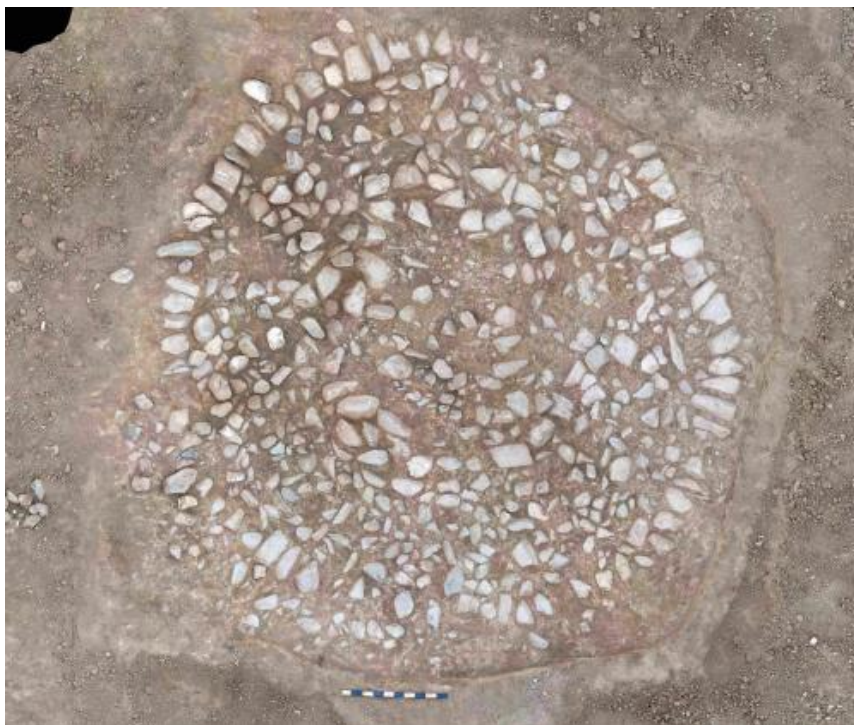


Figure 43: Zəyəmçay Kurgan III vertical photograph. Image credit: David Maynard and project team

**Kurgan IV:** lay approximately 17m south of Kurgan 3. The feature was covered by a stone spread 6.75m north to south and 8.4m east to west. This covered a 1.4m by 1.3m wide and 0.9m deep burial pit. Small pieces of degraded human bone were accompanied by a pottery vessel, a spiral bronze bracelet and several pieces of obsidian.

Kurgans III and IV are both regarded as being of Late Bronze Age date.

## 2.34 Zəyəmçay Kurgan V and VI, KP337.1

### [Digital Archive](#)

The kurgans were located during topsoil stripping for the SCPX pipeline in the Zəyəmçay river valley (Əsədov [2018p](#)). The features lay about 670m west of the present river course. They lay close to the transition between the river plain and the hills west of the river. During construction of the SCP pipeline in 2005, a kurgan burial was excavated about 30m to the south-west (Hüseynov [2007](#)).

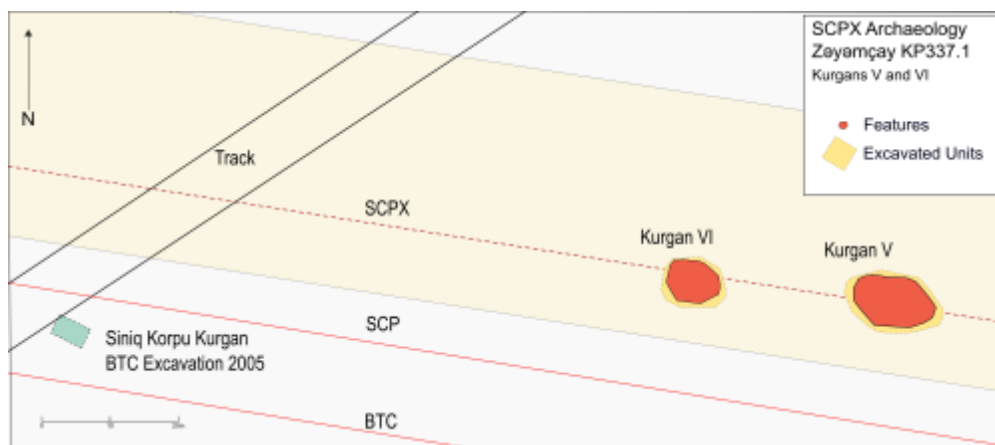


Figure 44: Zəyəmçay Kurgans V and VI site plan. Image credit: David Maynard and project team

**Kurgan V:** was formed of a fragmentary stone cover approximately 10m in diameter. Within this were several burial chambers (Table 7).

[Table 7:](#) Zəyəmçay Kurgan V details

**Kurgan VI:** consisted of a 7.3m north to south and 8.6m east to west sparse stone cover. There was a single centrally located burial pit containing a partially flexed male body surrounded by 11 pottery vessels.

The form and artefacts in the kurgans indicate an Early Bronze Age date for Kurgan V and a Middle Bronze Age date for Kurgan VI.

## 2.35 Ağılıdərə Chalcolithic and Bronze Age settlement, KP337.6

[Digital Archive](#)

A Chalcolithic/Early Bronze Age settlement was recorded here during construction of the SCP pipeline in 2005 (Taylor and Maynard [2011](#)). Excavations on the SCPX pipeline route concentrated on an area of 80m by 4m in 2014. Chalcolithic material was again encountered in this excavation, although reduced in scale and only found in an 8m long area (Nəcəfov [2018](#)).

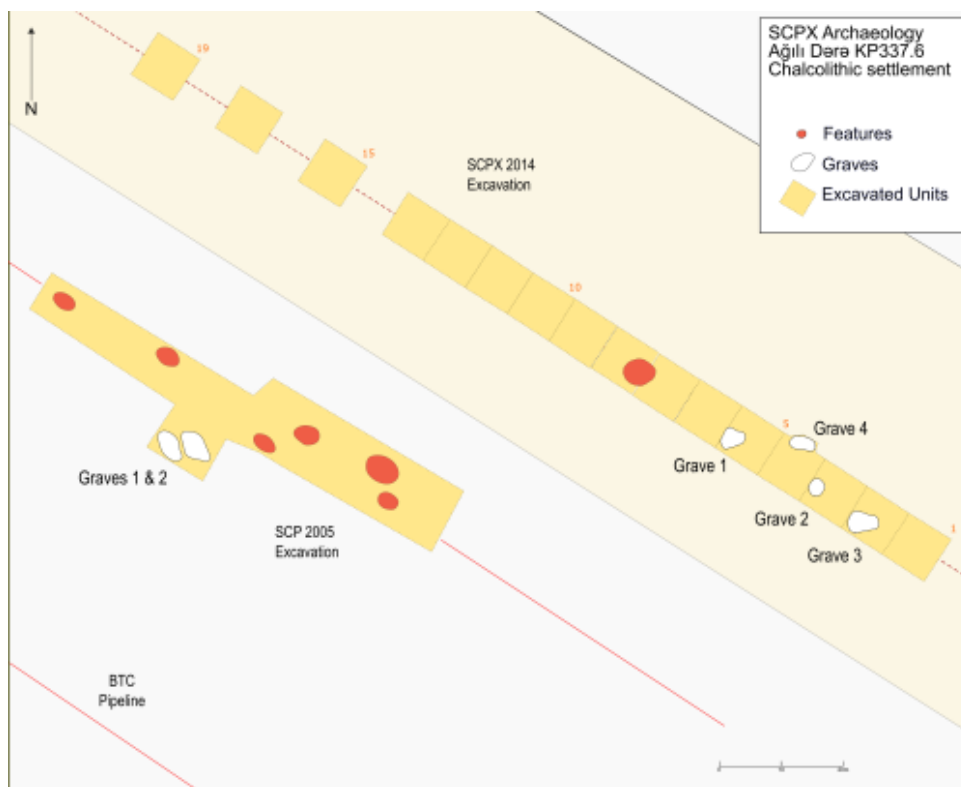


Figure 45: Ağılı Dərə site plan. Image credit: David Maynard and project team

The reduced level of Chalcolithic material in this area suggests that the focus of settlement lay under the SCP and BTC pipelines, or even further to the south.

Four Late Bronze Age Early Iron Age graves were also found, which aligns with the discovery of two similar graves in 2004 (Table 8).

#### [Table 8: Ağılıdərə details of graves](#)

The graves are similar to the Zəyəmçay necropolis material excavated on BTC and SCP in 2003. Certainly the two sites are in a very similar topographic location.

## 2.36 Xocaxan Bronze Age burials, KP339.9

### [Digital Archive](#)

Construction monitoring of the SCPX pipeline in 2014 located an area with a number of burials (Kiriçenko [2018b](#)). After cleaning the following was revealed:

**Grave 1:** a Leylatəpə culture, Chalcolithic grave contained a mature man and a child associated with two pottery vessels and also associated with a small kurgan covering the burial pit.

**Grave 2:** contained remains of burials consisting of three men and a woman found with fragments of three pottery vessels.



**Grave 3:** was a square-shaped pit containing five human burials. Eight pottery vessels and a bone spindle whorl were found in the grave.

Both Graves 2 and 3 contained material of the Kura Araz, Early Bronze Age date.

## 2.37 Xocaxan Chalcolithic settlement, KP340.6

### [Digital Archive](#)

During work on the BTC and SCP pipelines in 2005, a Chalcolithic and Early Bronze Age settlement was identified here. Consequently, the route of the SCPX pipeline was subject to an excavation in 2014 (Nəcəfov [2018m](#)). An area of 112m by 4m was examined. A total of three furnaces, one oven and two pits were found containing Early Bronze Age pottery.

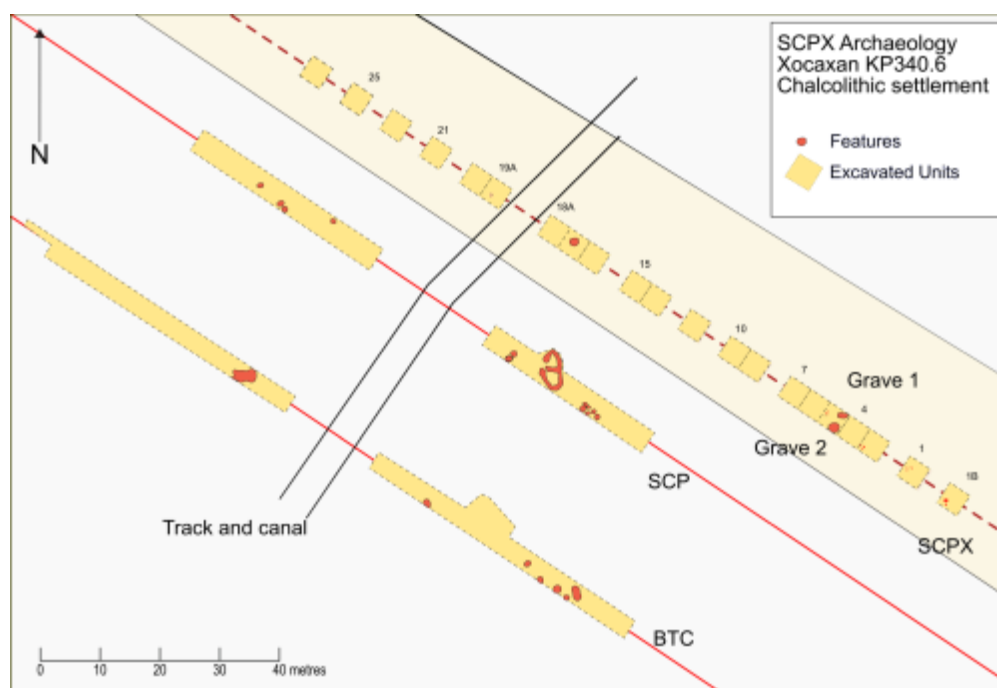


Figure 46: Xocaxan Chalcolithic settlement site plan. Image credit: David Maynard and project team

Two graves were also found: Grave 1 contained a child in a ceramic vessel and Grave 2 had Chalcolithic material as grave goods.

Taken as a group, the results shows that a late Chalcolithic settlement that continued into the Early Bronze Age lies in the area of the earlier (2005) pipelines. There is also later medieval activity across the area, again with most of the features of this date occurring in the vicinity of the SCP pipeline.





## 2.38 Tovuzçay II Late Bronze Age Early Iron Age cemetery, KP358.2

### [Digital Archive](#)

Tovuzçay II is located on a high bank west of the Tovuzçay River. During 2004 the Tovuzçay I site was identified on the BTC and SCP pipelines. This revealed 89 graves of the Late Bronze Age Early Iron Age date attributed to the Xocalı-Gədəbəy culture.

The SCPX route was 250m south of the earlier line but it also encountered a similar Late Bronze Age Early Iron Age cemetery (Müseybli and Nəcəfov [2018](#)). The work undertaken in the period 2014 to 2018 excavated 138 graves (Table 9). The majority were covered with stone caps. Only a few were earth graves.

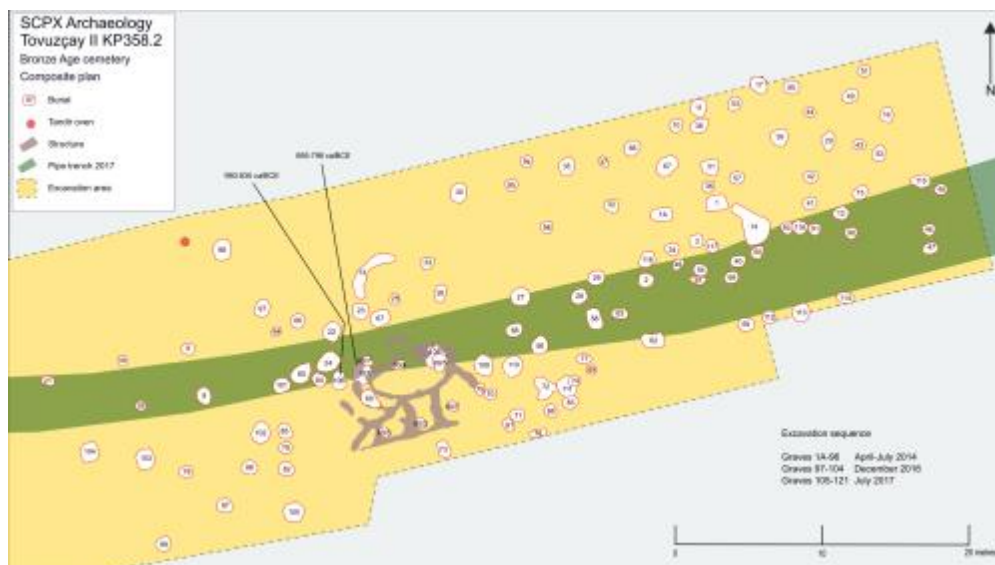


Figure 47: Tovuzçay II site plan. Image credit: David Maynard and project team

[Table 9](#): Tovuzçay II details of graves. The analysis of the ceramic and metal items in the cemetery shows these graves date to the developed stage of the Late Bronze Age (12th-11th centuries BCE) and Early Iron Age (10th-8th centuries BCE).

Grave 97 was a relatively rich burial that also contained three cylindrical seal beads made of paste. These are further discussed by Kiriçenko ([2021b](#)) who describes known parallels for this type, most closely matched by finds from Hasanlu IVB, Iran.

A single burial (Grave 120) of the Early Bronze Age, Kura Araxes culture was identified in 2018 some 150m west of the main cemetery. For further details and discussion see Kiriçenko ([2021a](#)).

Radiocarbon analysis was conducted on material from Graves 106, 107 and 120 (Maynard [2022](#)). The results of these tests are as follows:



Grave	Beta	Conventional age	Calendar calibration (95.4% probability)	Material
Burial 106	483547	2760±30 BP	(95.4%) 990-826 cal BCE	Tooth
Burial 107	483549	2670±30 BP	(95.4%) 900-794 cal BCE	Tooth
Burial 120	498813	3910±30 BP	(95.4%) 2470-2295 cal BCE	Bone

## 2.39 Xunan Bronze Age settlement, KP359.6

### [Digital Archive](#)

During work on the BTC pipeline in 2004, a series of large pottery storage vessels were found here. Radiocarbon dating confirmed a late Bronze Age date (Maynard [2022](#)).

The SCPX pipeline ran parallel to this area, 28m to the south. In 2014, a series of trial trenches were opened up in the area to determine if the settlement extended into the line of the SCPX pipeline (Nəcəfov [2018n](#)). Although sherds of Late Bronze Age/Early Iron Age pottery were found, no other evidence was discovered here.

## 2.40 Həsənsu Antique period settlement, KP379.5

### [Digital Archive](#)

During construction of the SCPX pipeline in 2017, a number of large jars were discovered. Subsequent archaeological excavation encountered three furnaces or hearths around the pottery vessels (Əsədov [2018q](#)). Finds consisted of Antique period pottery, quernstones and a ceramic spindle whorl.

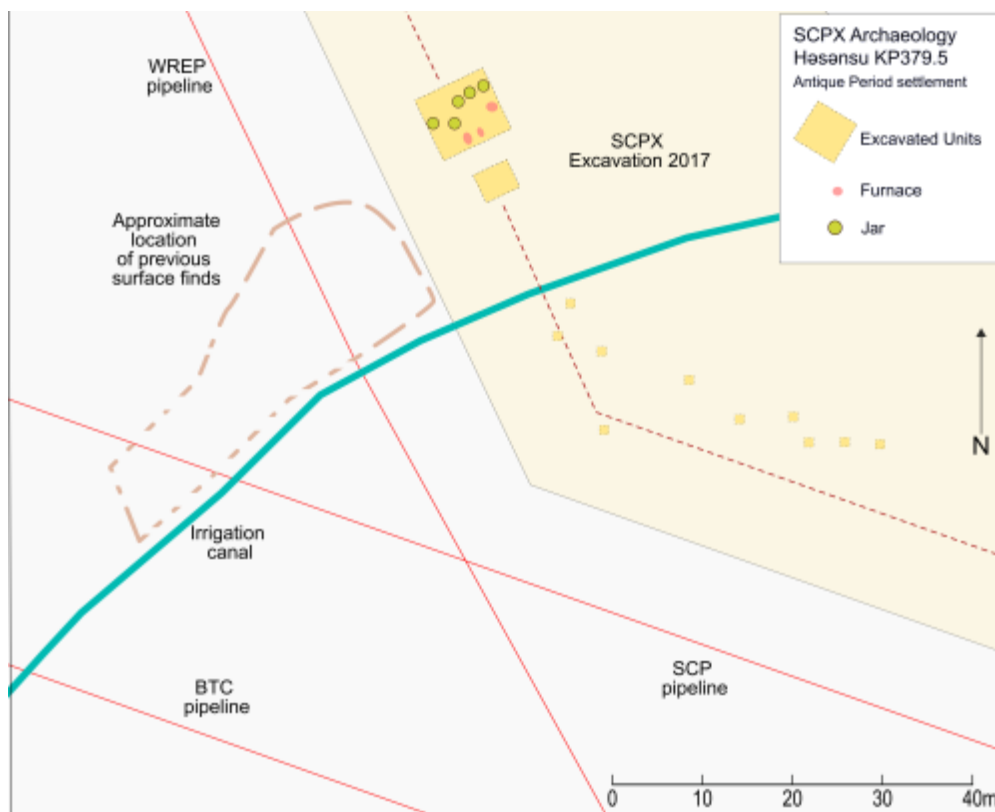


Figure 48: Həsənsu Antique settlement site plan. Image credit: David Maynard and project team

## 2.41 Qıraq Kəsəmən pottery vessel, KP384.7

### [Digital Archive](#)

During topsoil stripping for the SCPX pipeline in 2017, a single large pottery vessel was found (Nəcəfov [2018o](#)). This is dated to the late middle ages (17th to 18th century).

## 2.42 Qıraq Kəsəmən II Antique settlement, KP386.8

### [Digital Archive](#)

An Antique period settlement was found here during construction of the SCPX pipeline in 2005. An excavation undertaken in 2014 examined an area of 112m by 4m (Əsədov [2018r](#)). Three hearths and two furnaces were identified. In addition, three graves were recorded.

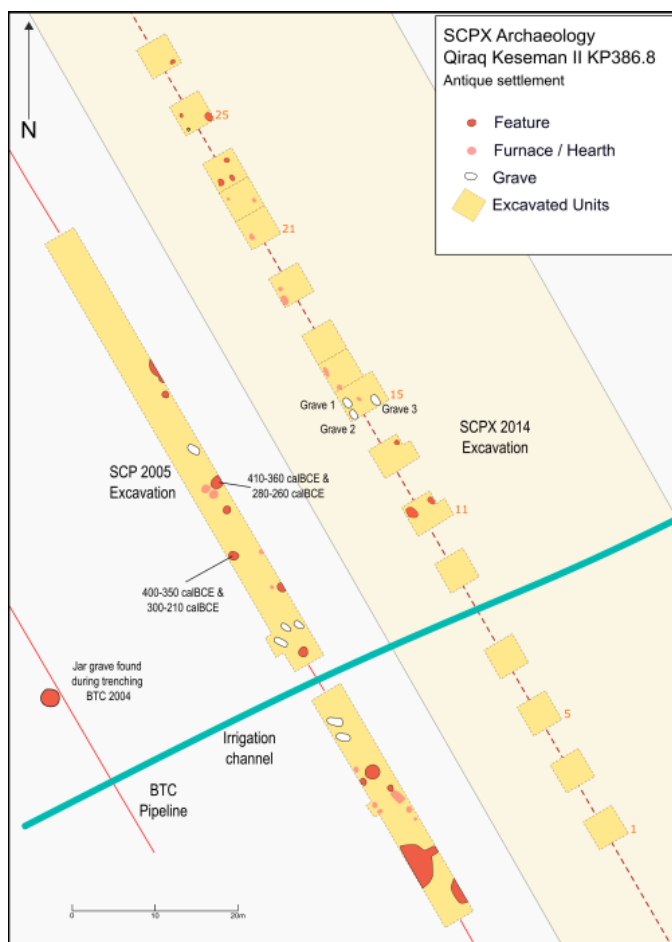


Figure 49: Qıraq Kəsəmən II site plan. Image credit: David Maynard and project team

**Grave 1:** was disturbed but contained pottery vessels

**Grave 2:** consisted of a skeleton in the east-west direction with face to the south,

**Grave 3:** had a skeleton lying in a north-west to south-east direction, head to the east, a handled jug and an iron knife blade.

Pottery from the site indicates occupation in the 4th and 3rd centuries BCE. The graves all appear to be of the earliest Antique period, probably of the early 5th to 4th century BCE.

## 2.43 Poylu II Chalcolithic and Late Bronze Age settlement, KP389.2

### [Digital Archive](#)

Poylu II settlement was first identified and excavated during construction of the SCP pipeline in 2005 (Taylor and Maynard [2011](#)). The SCPX pipeline worked on an area of 108m by 4m during 2015 (Əsədov [2018t](#)). The SCP area had contained many



Chalcolithic features, later Late Bronze Age activity and a series of Antique period features.



Figure 50: Poylu II site plan. Image credit: David Maynard and project team

The results of the SCPX excavation showed a number of Chalcolithic features such as hearths and ovens in the eastern part of the excavation area (Table 10). This was smaller in scale than the area to the south.

**Table 10:** Poylu II excavated features

The Chalcolithic part of the site is in the middle section of the excavation area (Units 11 to 18). The Chalcolithic finds included one tandir oven, ten furnaces and seven graves. All the graves were of children and most were placed inside pottery vessels.

Radiocarbon dates and excavated finds suggest that the north-west part of the excavation (Units 19 to 27) contained Late Bronze Age material (Maynard [2022](#)).

Feature	Beta	Conventional age	Calendar calibration (95.4% probability)	Material
Large jar, Unit 24	483543	2930±30 BP	(95.4%) 1222-1016 cal BCE	Charcoal
Furnace 1, Unit 24	483544	3010±30 BP	(75.9%) 1316-1157 cal BCE (15.1%) 1386-1339 cal BCE (4.5%) 1147-1127 cal BCE	Charcoal



These results provide an interesting confirmation of the radiocarbon dates obtained from samples of the SCPX excavation of 2005. Figure 51 shows the calibrated results for all radiocarbon samples from the site.

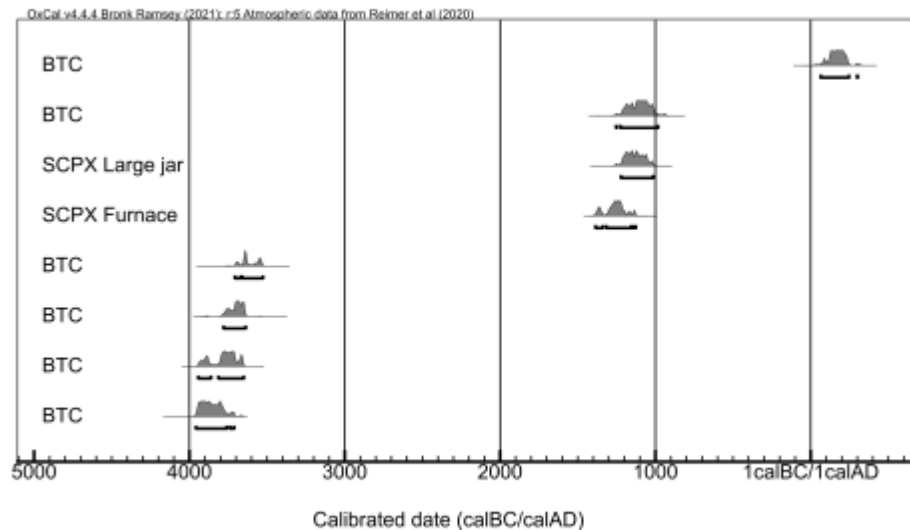


Figure 51: Poylu II calibrated radiocarbon dates. Image credit: David Maynard and project team

## 2.44 Poylu I Chalcolithic settlement, KP389.6

### [Digital Archive](#)

Poylu I settlement was first identified during construction of the SCPX pipeline in 2005. The SCPX excavation covered an area of 32m by 4m (Əsədov [2018s](#)). Evidence of Chalcolithic and Late Bronze Age/Early Iron Age settlement was found here, together with medieval pottery.

Owing to high groundwater levels excavation was difficult. Features were limited in number and consisted of stone settings and hearths.

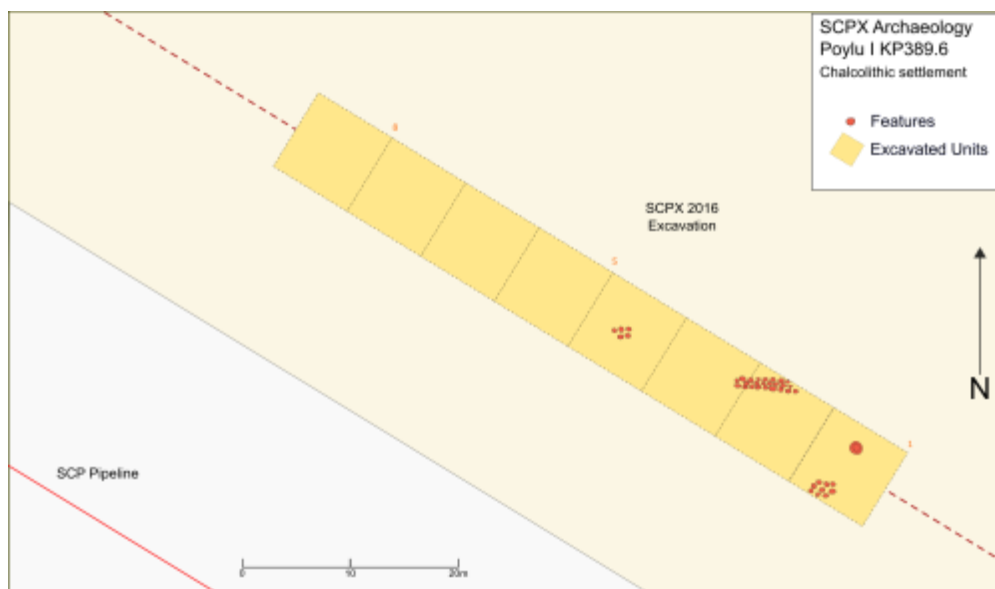


Figure 52: Poylu I site plan. Image credit: David Maynard and project team

## 2.45 Ağstafaçay Camp. Multiperiod settlement

### [Digital Archive](#)

The site was selected for a potential camp to house the SCPX team at Akstafachai, north-west of Akstafa town. Owing to the large number of surface finds across the site, it was decided to conduct a series of trial trenches followed by a larger excavation in the area of the camp (Əsədov [2018u](#)). This was carried out in the spring of 2016, before a different location was selected for the camp facility.

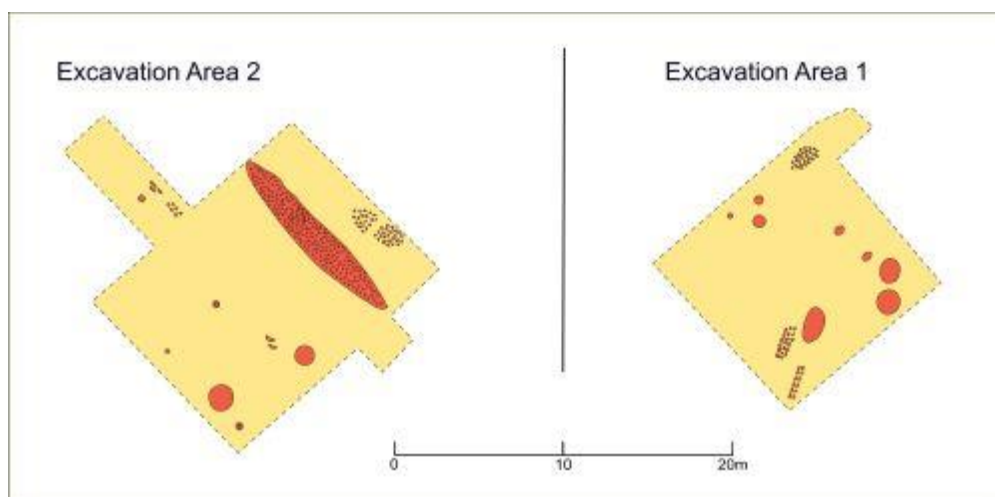


Figure 53: Ağstafa Camp site plan. Image credit: David Maynard and project team

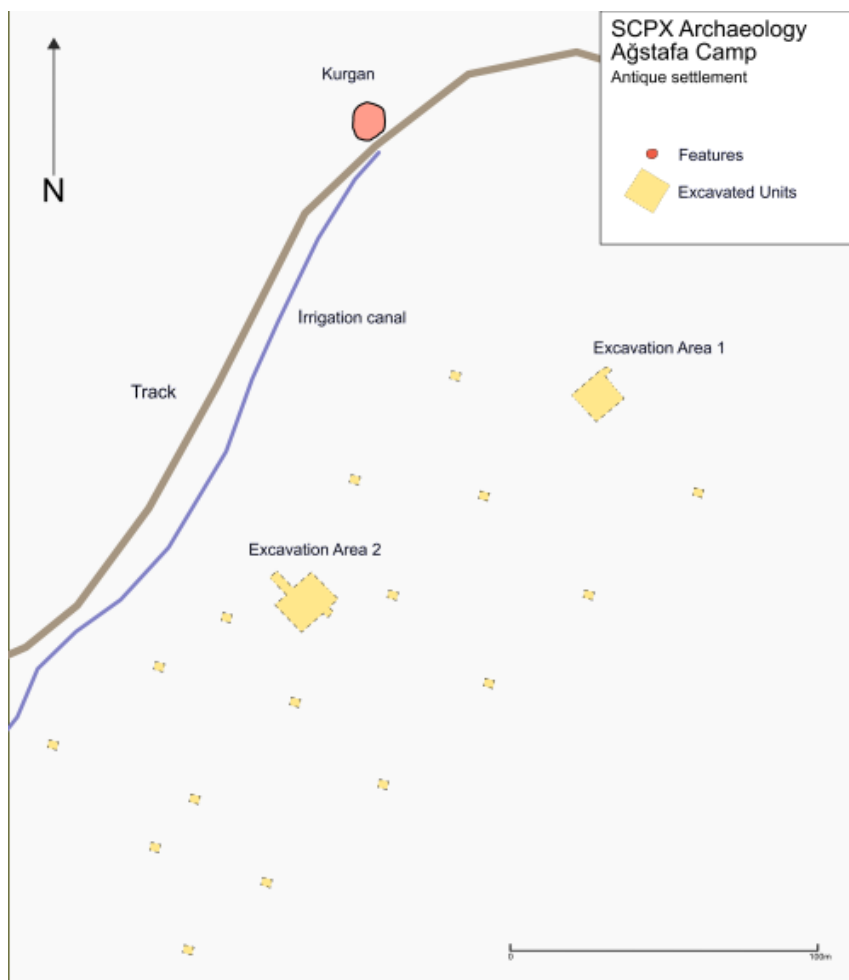


Figure 54: Ağstafa Camp Excavation Areas 1 and 2. Image credit: David Maynard and project team

The main excavations comprised two areas.

**Excavation Area 1:** revealed flooring, pits and two household pits.

**Excavation Area 2:** revealed five tandir ovens, one furnace, eight hearths, eight household pits and two graves.

The material principally consists of Antique period pottery, but also Chalcolithic, Late Bronze Age Early Iron Age and medieval material.

## 2.46 Poylu III Late medieval settlement, KP390.1





A late medieval site was located during topsoil stripping for the SCPX in 2017. The work was conducted in two areas (Kiriçenko [2018c](#)).

**Area 1:** was 24m by 4m and exposed a series of stone surfaces and two pits.

**Area 2:** was 16m by 4m, which revealed the stone footings of a rectangular building 10m by at least 5m with a smaller adjacent building to the east with dimensions of at least 5m by 5m. The date of the site appears to relate mostly to the 19th century CE, although there are sherds of Late Bronze Age pottery and later medieval pottery.

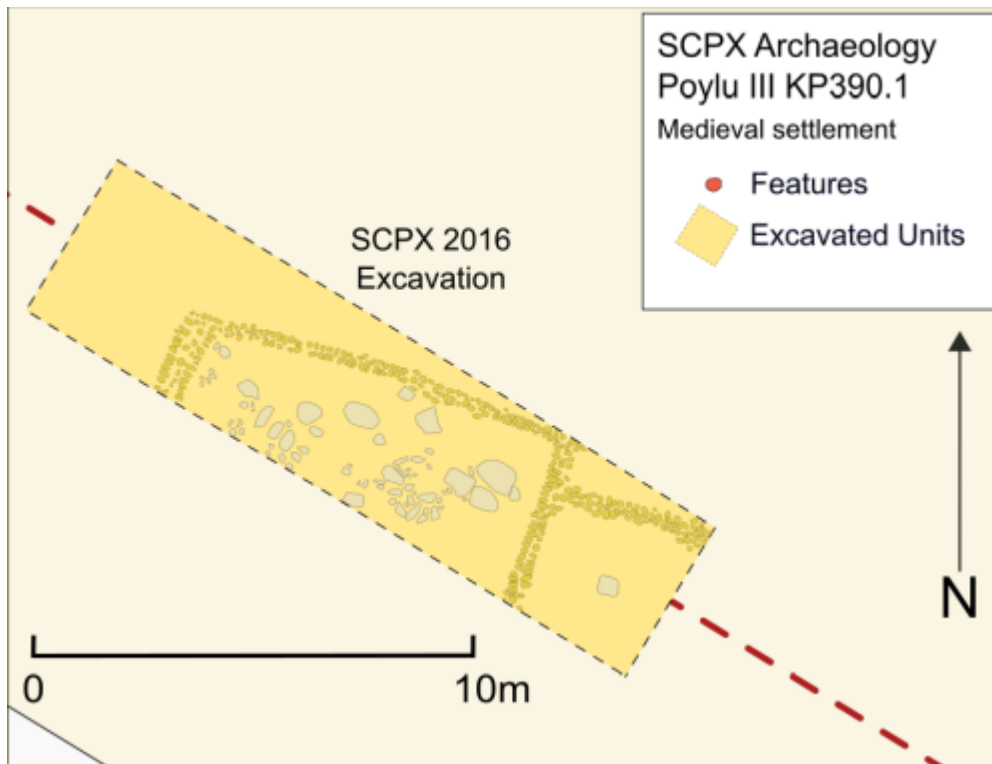


Figure 55: Poylu III site plan. Image credit: David Maynard and project team

## 2.47 Soyuqbulaq II Early Bronze Age Kurgan, KP409.3

### [Digital Archive](#)

During construction of the SCPX pipeline in 2017, a kurgan burial was located and excavated at this location (Müseybli [2018](#)). There was a stone cover of 7.8m north to south and 9m east to west.

Within the stones collected for the kurgan cover were four stone tools identified as being of the Acheulian period of the Middle Palaeolithic. These tools appear to have been thrown into the kurgan cover along with the other stones. They seem to have come from an open-type Palaeolithic era camp in the surrounding area. Open-type



Palaeolithic camps are characteristic of Azerbaijan's western regions, in particular the Akstafa district. They are also known further to the west in Georgia.

The kurgan contained a burial pit with a human body lying on its left with the head to the south and arms and legs folded. There were two pottery vessels in the pit along with a bronze knife or dagger and thin strips of bronze. All the pottery and artefacts are characteristic of the Early Bronze Age, confirmed by a radiocarbon date.

Feature	Beta	Conventional age	Calendar calibration (95.4% probability)	Material
Soyuqbulaq II	483546	4380±30 BP	(80.7%) 3041-2911 cal BCE (14.7%) 3093-3049 cal BCE	Bone

## 2.48 Soyuqbulaq I Chalcolithic kurgan cemetery, KP412.1

### [Digital Archive](#)

This site was discovered during construction of the SCP pipeline in 2005. The kurgan cemetery is significant in that it is the earliest known use of the kurgan form of burial identified in the Caucasus, as shown by the finds and later confirmed by radiocarbon dating (Müseybli [2020](#)).

The numbering of features follows from the earlier work. Two kurgans were excavated (numbers 22 and 23).

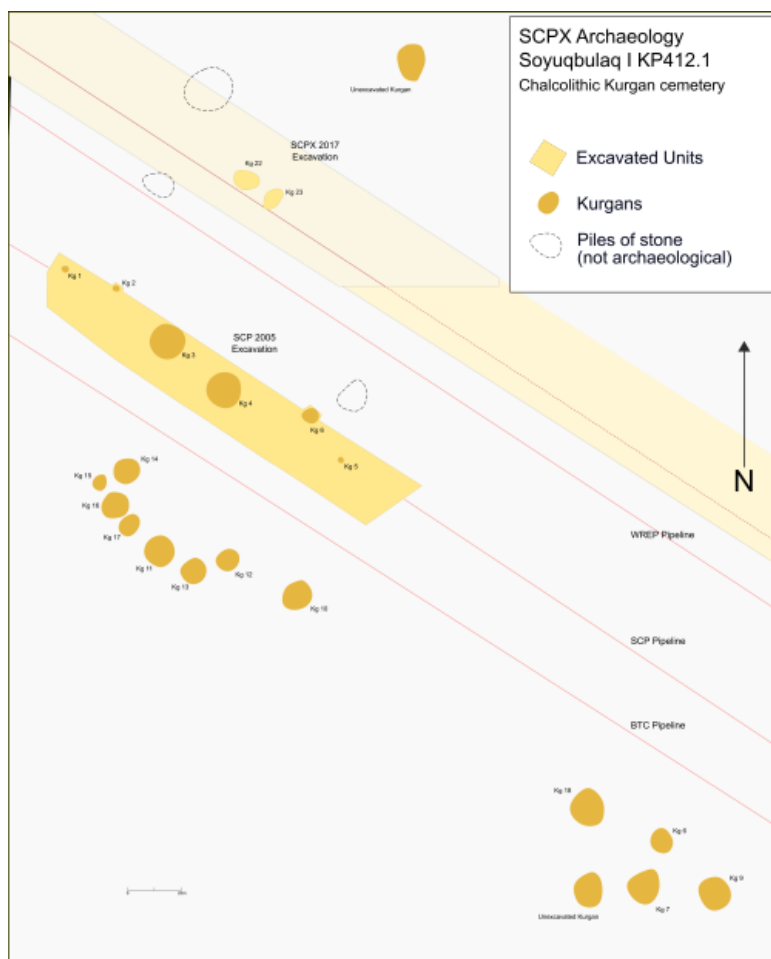


Figure 56: Soyuqbulaq I site plan. Image credit: David Maynard and project team

The SCPX route is to the north of the earlier pipeline and occupied an area used for modern ploughing, which had removed all above-ground evidence. The kurgan graves excavated in 2005 all lay on the crest of a small prominence and were apparently intended to be visible from a long distance to the south. Kurgans 22 and 23 must lie at the northern extent of the cemetery.

**Kurgan 22:** was a thinly spread cover of stones over a burial pit. A rim sherd, a human femur and tibia and a number of beads were the only finds in the burial pit.

**Kurgan 23:** was a thin scatter of stones that covered a burial pit. This contained parts of a skull and other disarticulated human bones, together with parts of a pottery vessel. Within the area of the kurgan was a largely complete pottery vessel lying in a stone setting (Grave 4). This is very similar in form to the other jar burials associated with the Leylatepe culture of the Chalcolithic. There were no bones within the vessel, which is regarded as being of the memorial or cenotaph form.



## 2.49 Böyük Kəsik Chalcolithic settlement, KP418.9

### [Digital Archive](#)

During construction of the BTC pipeline in 2004, a major Chalcolithic settlement was discovered and excavated. The route of the SCP pipeline constructed in 2005 showed very little evidence, while a subsequent excavation south of the BTC pipe in 2005 recorded substantial deposits (Taylor and Maynard [2011](#)).

The SCPX pipeline was routed along the far (north) side of the SCP pipeline, so it was expected that little evidence would be found. In order to confirm this, a machine dug trench 40m by 4m wide was opened along this route in 2016. As anticipated, no archaeological features were identified (Nəcəfov [2018p](#)).

At the same time, a surface collection survey was carried out over the whole area. This involved the identification, collection and recording of positions by GPS of Chalcolithic pottery lying on the ground surface. This appears to show the full extent of the settlement.

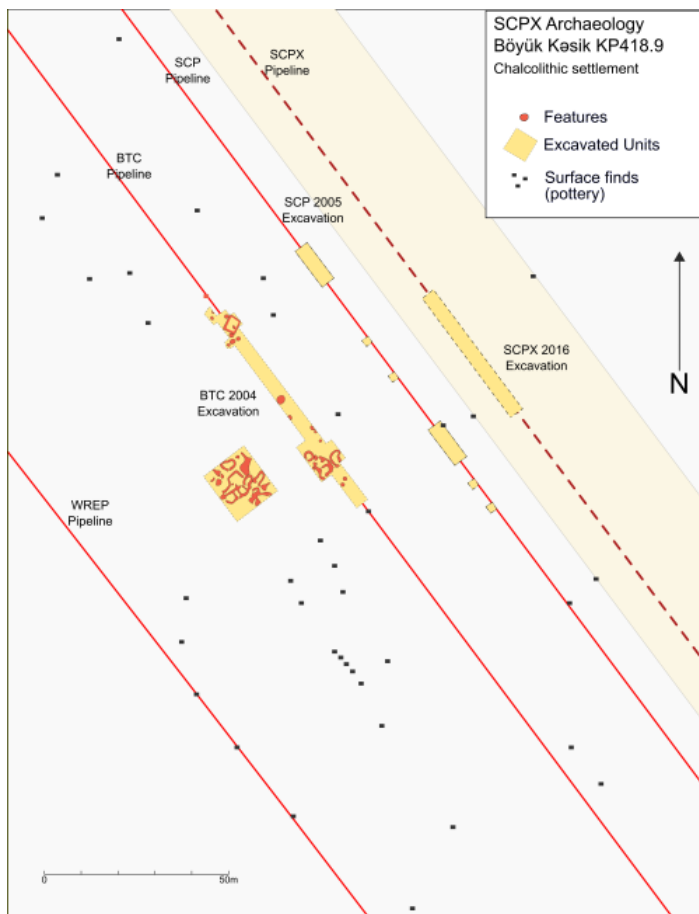


Figure 57: Böyük Kəsik site plan. Image credit: David Maynard and project team



### 3. Conclusions

It is interesting to compare the results of the two projects. All three projects broadly ran parallel, about 28m apart from each other. In general, the SCPX evidence is in the same locations as indicated by BTC, but it was often reduced in scale or significance. There were exceptions to this, for example at Yaldili the results were largely the same as the earlier work had indicated. Other sites were of a much larger scale than anything encountered on the BTC/SCP project. Kərpiclitəpə Castle is the main example of this.

In general, it could be said that the BTC project featured Chalcolithic, Late Bronze/Age Early Iron Age cemeteries, Antique period cemeteries and medieval cemeteries. The SCPX project had perhaps less emphasis on the Chalcolithic while Late Bronze Age/Early Iron Age cemeteries were equally represented. Antique period cemeteries were again well represented while there was much stronger emphasis on the medieval period.

Since the BTC archaeological work was undertaken, there have been great advances in the understanding of archaeological sites in the middle Kura Valley in Azerbaijan. Further excavations have taken place at Goytepe on the Neolithic settlement (Guliyev and Nishiaki [2012](#)). The Neolithic settlement and later site at Mentesh was excavated (Lyonnet *et al.* [2016](#)). Further parts of Soyuqbulaq kurgan cemetery were looked at by Lyonnet *et al.* ([2009](#)). The early part of the Bronze Age has not seen major work in the region, although a Late Bronze Age/Early Iron Age cemetery was examined at Tepe 5 by Gruber ([2020](#)), who compared it with results from the BTC Zəyəmçay and Tovuzçay cemetery excavations. Although significant work has taken place on the Achaemenid palace at Qaracəmirli (Knauss *et al.* [2010](#)), no major investigative work has taken place that would help understand the Antique and Albanian periods. The medieval period has seen the large-scale excavation and preservation of Shamkir Gala (Dostiyev [2012](#)). There has also been work on the medieval period at Bərdə and Qarətəpə by the Oxford University team (Wordsworth [2015](#)).

These projects have increased the available background information for many of the sites that are considered in this project. The combined impact of the study of the archaeological sites examined in both construction projects can be seen in the use of large numbers of radiocarbon dates that can now be applied to provide a fixed framework for the understanding of both re-examination of earlier archaeological studies and to analyse new discoveries.

Both projects undertook limited palaeo-environmental work. Poole ([2005](#)) looked at charcoal on several sites on the BTC. David Stone ([2022](#)) analysed material from the SCPX Kərpiclitəpə castle site. This last site has the potential to integrate all the techniques of close radiocarbon dating, analysis of crop residues and deep stratigraphy with a rich material cultural. An example of this is the group of coins in a pit that were wrapped in a cloth, the pattern of the weave of which could be seen in the corrosion product on the outside ([Figure 15](#)). Charred seeds from the site include



those of cotton (Stone [2022](#), 7), which indicates crops grown for cloth production. Bayesian analysis using a combination of the radiocarbon date for Sample 59 and the coin identified of Qizil Arslan (1186-1191), give a modelled result of 1187-1260 *cal CE* for the deposition of objects into this pit (Maynard [2022](#)).

These are small beginnings in the adoption of these techniques, but they represent the potential for much greater and more coherent understanding of the economic history and lifestyles of the inhabitants of the area.

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