

STONE MONUMENT ENSEMBLES AND THE CLIMATE CHANGE IMPACT

Project ID: 101098422



MILESTONE 3

On-site landscaping and archaeological work on
stećci sites in B&H



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MILESTONE 3 On-site landscaping and archaeological work on stećci sites in Bosnia and Herzegovina

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1. EXECUTIVE SUMMARY

This report describes task 3.2 On-site landscaping and archaeological work on stećci sites in B&H, led by UNSA.

Prior to the project launch, the STECCI UNSA team visited the two necropolises (Križevići and Kopošići), which were planned as focal points for *in-situ* conservation, summer academies and work with local communities, particularly in terms of citizen science and sustainable tourism strategies. It became evident that the necropolises would require technical, pedological and vegetation landscaping during the first stages of the project. Apart from this, Task 3.2 includes visual stećci archaeological inspection within both sites. The creation of a situational plan and digital relief models using total station are also foreseen. It was also planned that stećci that are sunk would need to be dug out and thus made available for conservation work to follow, but the only intervention needed was to return one toppled stećak to its original position at Križevići necropolis.

Preparations for the public procurement, which began last year and intensified in February 2024, started with the collection of necessary documentation required for each individual site planned for landscaping, such as consents from relevant ministries, owners of neighboring parcels, etc.

The implementation of the planned activities on vegetation, technical and pedological landscaping in two separated areas in Bosnia and Herzegovina was done in three stages:

1. Preparatory activities.
2. Implementation of the public procurement procedure, and
3. Completion of planned landscaping activities.

The activities by stages are described in detail for each individual site.

Negative deviation

The delay relative to the projected dates at the Križevići site happened due to a lack of responses to the tender, despite potential bidders (10) retrieved the tender documentation via the official Public Procurement System. Consequently, the landscape work at the Križevići site had to be postponed and completed under immediate repeated procedures, with the acceptance of one bidder. Therefore, task 3.2 was completed with a delay of three months in total.

Positive deviation

In collaboration with Olovo Municipality, the chosen bidder for Kopošići site additionally arranged the access road to the necropolis, stretching about 500 m more, at their own expense. The work, not defined by the contract, is viewed as a positive project deviation.

2. LANDSCAPING AT NECROPOLIS KOPOŠIĆI

2.1. SITE DESCRIPTION

The Kopošići Necropolis includes the northern part of the cemetery located in the area of the Kopošići settlement, Ilijaš Municipality. The necropolis with the remaining part of the cemetery is located on a south-southeast oriented slope, at an altitude of 966 m. The wider area of the necropolis is overgrown with forest vegetation dominated by communities of hornbeam and black ash with mountain beaches.

Within the mentioned forest species, there is a layer of bushes and shrubs, which in fact represent the developmental shoots of the same. The cemetery with the necropolis is mostly overgrown with grass vegetation of mesophilic mountain meadows, the height of which is more than 30 cm.



Figure 1. Stećci in the Kopošići necropolis before Landscaping activities

Access to the site:

The location can be accessed via the regional road Sarajevo - Ilijaš - Donja Misoča - Nekropola Kopošići - Nasići.

The access road is paved up to the coordinates:

$\varphi = 43^{\circ}58'40.18''$ N and $\lambda = 18^{\circ}19'12.29''$ E.

The locality is accessed from the indicated coordinates by a macadam road with a length of about 6.4 km. The total area of the necropolis in Kopošići (including the immediate contact area) planned for landscaping is 3,224 m².

The development area includes the following cadastral parcels (CPs):

- CP 1593 – 1,111.0 m²,
- CP 1594/1 – 2,113.0 m²,

Landscaping included vegetation, technical and pedological landscaping activities around the necropolis, in accordance with the following general specifications:

- Vegetation management includes mowing of grass cover in the cemetery and cutting, cleaning and removal of woody and herbaceous vegetation and bushy vegetation around immediate surroundings.
- Technical arrangements include the procurement and installation of technical infrastructure and minor construction works within the immediate access road and footpaths within the necropolis.
- Pedological management includes cleaning of the surface pedological layer around the necropolis and its immediate surroundings.

Note: The contractor is obligated to perform additional pedological management annually, during the period of 2024 to 2027, in agreement with the investor.

2.2. PREPARATORY ACTIVITIES

The UNSA project team participated in fieldwork at both locations and gathered documentation for administrative purposes, as part of the preparatory efforts.

The level of legislative protection and administrative control over the project sites determined the nature and category of necessary administrative documents (for Kopošići and Križevići).

As the Kopošići Necropolis is designated a nationally protected cultural and historic site, authorization from the Ministry of Spatial Planning of the Federation of Bosnia and Herzegovina was essential for the execution of all planned project activities. This included authority approvals for landscaping, condition assessment, and in situ conservation, all in alignment with the Regulation on the performance of preliminary, investigative type of work on national monuments.

Accordingly, the following approvals and permits (APPENDIX 2 - Permissions for the demo sites BIH) had to be diligently prepared and obtained to fulfill the requirements stipulated by the Regulation:

- Expert opinion of the Institute for the Protection of Monuments at the Federal Ministry of Culture and Sports (No.: 07-36-4-919-1/24 RS, dated February 07, 2024)
- Certificate of the Service for Property Legal Affairs, Geodetic Affairs and Cadastre of Ilijaš Municipality (No.: 06/2-26—688/24, dated February 28, 2024).
- A copy of the cadastral plan according to the new survey, of the Service for property and legal affairs, geodetic affairs and the cadastre of Ilijaš Municipality, with graphic and textual data on the ownership of the cadastral plots to which the subject area "Necropolis Kopošići" belongs (No.: 06/2-26-1782/2024-2, dated May 15, 2024)
- Land registry extract from the municipal court in Sarajevo on the ownership of cadastral plots according to the old survey (No.: 25039/24, dated February 29, 2024).
- Consent for pedological, technical and vegetation management on plot C.p. 1593 (cemetery) obtained from the owner: Archdiocese of Vrhbosanska, RKT Parish Office of Saint Elijah the Prophet - Čemerno (No.: 4/24, dated January 06, 2024).
- Consent for pedological, technical and vegetation management on plot C.p. 1594/1 (garden) obtained from the owner: Ilić (Šime) Velimir) (Declaration of consent certified by an authorized court interpreter, OV-2600/2023, dated November 27, 2023).
- Consent from KJP "Sarajevo Šume" d.o.o. for the performance of vegetation, technical and pedological landscaping works on the surrounding plots, which are owned by this company (No.: 0103-1183-2/24, dated April 1, 2024).
- Memorandum on cooperation between UNSA - Faculty of Science and the Municipality of Ilijaš on the implementation of project activities on the STECCI project (signed on March 17, 2022).

- Memorandum on cooperation between UNSA - Faculty of Science and the Cantonal Institute for the Protection of Cultural, Historical and Natural Heritage (signed on March 17, 2022).

Fieldwork at the Necropolis Kopošići took place at different times. Fundamentally, this task included collaborations with representatives from the "Foundation for the Old Bosnian City of Dubrovnik, Ilijaš". This organization is responsible for spearheading numerous initiatives aimed towards the protection and preservation of the Old City of Dubrovnik and the Kopošići Necropolis.



Figure 2. Kopošići Necropolis - visit of STECCI expert team members to the Necropolis for the 10th jubilee event dedicated to the International Day of Monuments and the Old Bosnian City of Dubrovnik and the Kopošići Necropolis
(Date of event: 08/06/2024.)

The collaborations were primarily targeted at aligning the activities carried out under task 3.2, with their efforts focused on the development of the broader Necropolis area. Field activities were also utilized to record the status of the site, providing essential data for describing and delineating the expected activities that potential bidders would need to undertake within the public procurement framework managed by UNSA.

2.3. IMPLEMENTATION OF THE PUBLIC PROCUREMENT PROCEDURE

The public procurement for the Kopošići Necropolis was commenced as a segment of the public procurement initiated by UNSA, entitled: "Procurement of Services: Vegetation, Pedological and Technical Management Arrangement of the Kopošići and Križevići Necropolises - Open Procedure." LOT 1 pertains specifically to the Vegetation, Pedological and Technical Arrangement of the Kopošići Necropolis.

The public procurement documentation was prepared in accordance with the Law on Public Procurement of Bosnia and Herzegovina and encompasses several thematic chapters: general information regarding the public procurement, specifics about the subject of public procurement, conditions required for bidder qualification, details about the offer, and other pertinent legal provisions.

Within the public procurement documentation, particular emphasis is given to the thematic chapter (LOT 2) "Technical Description for the Vegetation, Pedological, and Technical Arrangement of the Križevići Necropolis." This chapter furnishes all necessary details pertaining to the implementation of landscaping activities at this Necropolis.

The public procurement procedure was initiated by the Decision on the initiation of the public procurement procedure number: 0101-4703-1/24 dated June 5, 2024. It follows the usual national legislation.

Note: According to the data of the municipal cadastre, the land in the area of the necropolis (KP 1593) belongs to KJP "Sarajevo-šume" d.o.o. Sarajevo, PJ Srednje (from which consent for Landscaping was obtained). The parcel marked KP 1594 is privately owned and written consent for the implementation of Landscaping was obtained from the owner.

2.4. IMPLEMENTATION OF PLANNED LANDSCAPING ACTIVITIES.

The implementation of the planned activities on vegetation, technical and pedological arrangement are defined as part of the project task T3.2 On-site landscaping and archaeological work on stećci sites in B&H.

The implementation period for this project activities was designated from June 29th to July 16th, 2024.

The initial stage, involving the commencement of the public procurement process, began in the early part of May 2023. This stage was initiated after obtaining all the permissions which include, but are not limited to, approvals from responsible regulatory agencies, proprietary authorizations from owners, among others.



Figure 3. Condition assessment at Kopošići site, 23.06.2024.

The University of Sarajevo, a public institution, operates under the legal framework of the Law on Public Procurements of Bosnia and Herzegovina. This legal stipulation necessitated the preparation of comprehensive tender documentation and substantial

planning for the issuance of the tender. This preparatory phase, which was intensive in terms of administrative diligence, spanned roughly a month and a half.



Figure 4. Bioassessment at Kopošići site, 10.08.2024.

Complete documentation for conducting public procurement, which upholds transparency and maintains a detailed record of the procedure, has been compiled in (APPENDIX 1 - Public procurement documentation).

Because of the imperatives outlined above, the selected bidder was obliged to commence the implementation phase promptly after the formalization of Contract No. 0101-4703-9/LOT1/24 on July 12, 2024.

An assessment of the concluded activities demonstrates full compliance with the provisions and requirements stipulated in the Grant Agreement which, among other things, ensures the legitimacy and successful execution of the project.

2.4.1. VEGETATION LANDSCAPING

Vegetation management in the described wider area of the Kopošići Necropolis includes works on sanitary clearing and cleaning of woody vegetation and plants and bushes that are formed within the forest cover, as well as mowing the grass in the meadow area. Sanitary cleaning of the woody vegetation was realized as a prerequisite for the arrangement of walkways and the installation of furniture for rest and recreation for future visitors to the necropolis.

The Kopošići necropolis is situated in the northern part of the Catholic cemetery (which is owned by the Parish of St. Elijah the Prophet), where only a grass cover has been identified as vegetation. Accordingly, the vegetation management of the entire cemetery (c.p.1593) included only mowing and removal of the mowed grass cover.



Figure 5. The state of Kopošići necropolis (c.p.1593) during condition assessment – after the vegetation management was completed.

Sanitary cutting and clean-up of smaller trees, plants, and shrubs, along with the removal of stumps, were conducted on the cadastre parcel number 1594/1.

This parcel encompasses a south-southeast-facing slope, which spans between the northern-northwestern Necropolis and the southern-southeast local macadam road. The slope is densely covered with oak-hornbeam forest, shrubby and herbaceous vegetation. On this particular parcel, a walkway approximately 3 meters wide has been developed, which spatially aligns with the southern border of the cadastre parcel 1594/1. The process of clearing and trimming herbaceous vegetation, which includes wild raspberry plants among others, was also executed along the local gravel road that runs parallel to the fence bordering the northern side of the cemetery.

Methodology:

- Manually, using an adequate tool for cutting woody vegetation and mowing grass cover.

Total area under forest cover planned for the described vegetation management of the necropolis: approx. $P = 2,113 \text{ m}^2$. The total area under the grass cover planned for the described vegetation management of the necropolis: approx. $P = 1,111 \text{ m}^2$.

The subcontractor will be obliged to carry out additional vegetation management once a year, in the period 2024 - 2027, in agreement with the UNSA team. The first implementation period was June 2024.



Figure 6. Vegetation and pedological landscaping activities on zones around of entire of Kopošići necropolis



Figure 7. Landscaping activities before and after near Kopošići necropolis (c.p. 1594/1).
The left column shows the state before landscaping, right column shows the state after.

2.4.2 TECHNICAL ARRANGEMENTS

The Technical arrangement included the following activities:

1. Production, transport and placement of 1 info board,
2. Production, transport and installation of 2 road signs.

Description of the info board: wooden info board with a usable area of 200 x 150 cm, with a wooden roof (canopy) and glass door. The info board should have a concrete foundation for placing the metal feet of the supporting columns of the info board. The height of the useful surface should be min. 70 cm. The info board does not include the creation of inscriptions.



Figure 8. Part of the technical infrastructure established near Kopošići necropolis.

The material for the info board includes beam, easel, lath, board, roofing tile, glass, door hinges, lock for a wooden window, metal cups for wooden beams, metal cups for two info board supports, screws, sandolin and concrete for metal support cups. Description of the road signs: dimensions of the road sign: 100 x 70 cm. The wooden road signs contain a direction indicator with the inscription *Nekropola stećaka "Kopošići"*.

The road signs were located along the road, near the quarry, and along the road in immediate vicinity of necropolis.

2.4.3 PEDOLOGICAL LANDSCAPING

Pedological management of the location at c.p. 1359/1 includes arrangement of the pedological cover in the part related to:

- an access road that includes the construction of steps. The access road connects the local road with the entrance to the necropolis. The length of the road is approx. 200 m. The average width of the road is 2.0 m. The total area for pedological landscaping of the forest road equates to $P = 400 \text{ m}^2$.
- Creating a path - a walkway for visitors to the necropolis. This task involves moving earth and filling the path with stone-gravel material. The total length of the path-walkway is approximately 120 m. The width of the path is 1.5 m. The total area specified for the creation and arrangement of walkway paths is $P = 180 \text{ square meters}$.



Figure 9. Part of the path-walkway, arranged for visitor access to Kopošići necropolis, as part of task 3.2

Methodology: Executed manually, utilizing appropriate construction tools and materials. As per agreement with the UNSA project team, the subcontractor is obligated to conduct annual pedological cleaning and arrangement of the aforementioned pedological entities, during the years 2024 to 2027. Additionally, a detailed situational map of the necropolis was produced utilizing total station measurements and differential GPS technology. Stećci were accurately measured, photographed, and comprehensively documented. The completion of these tasks was accomplished in June 2024.



Map 1. Situational plan of the cadastral plots in the Kopošići Necropolis area.



Map 2. Situational plan of the necropolis inside of cemetery.

3. LANDSCAPING AT NECROPOLIS KRIŽEVIĆI

3.1. SITE DESCRIPTION

The Križevići Necropolis is situated in the area of the Križevići settlement, Municipality of Olovo. It is located on a south-facing slope, at an altitude of 606 - 615 m. The center and north of the necropolis are covered with forest plants, mostly white hornbeam and black ash with mountain beech trees, with a layer of bushes and shrubs. The south of the necropolis is covered with grass that you'd find in mountain meadows, and this grass can grow up to 30 cm tall.

Site access: The locality can be accessed by the regional road Olovo - Križevići - Meorača. The road leads to the coordinates: $\varphi = 44^{\circ}08'45.43''$ N and $\lambda = 18^{\circ}31'27.20''$ E. The locality is accessed from the indicated coordinates via the contact slope, i.e. a narrow macadam path, 350 m long. The total area of the necropolis in Križevići planned for landscaping is 5000 m².



Figure 10. Necropolis of Križevići - part of the tombs located in the part of the necropolis overgrown with forest vegetation

Note: According to the data of the municipal cadastre, the land in the area of the necropolis belongs to JP Šumsko-Privredno Društvo ZE-DO Kantona Zavidovići doo, PJ Olovo (from which consent for Landscaping was obtained).



Figure 11. Križeviči Necropolis - section of tombs located in an area of the necropolis overgrown with meadow vegetation

Landscaping at the Križeviči Necropolis included vegetation management, technical and pedological landscaping activities, in accordance with the following specifications:

- Vegetation management includes mowing and removal of grass cover on the part of the site that is not overgrown with forest and sanitary cutting, cleaning and removal of woody and herbaceous vegetation and bushy vegetation on the area of the site that is overgrown with forest vegetation.
- technical arrangement includes the acquisition and installation of technical infrastructure and minor construction works on the arrangement of the fence along the immediate access road to the necropolis.
- pedological arrangement includes earthworks for the arrangement of the surface pedological layer in the area of the access road and pedestrian paths for walking inside the necropolis and its immediate surroundings.

3.2. PREPARATORY ACTIVITIES

In a similar manner to the previous site, the UNSA project team carried out fieldwork and collected relevant paperwork to secure authorization for the landscaping at the Križeviči Necropolis. The type and content of these administrative documents hinged on the level of legislative protection and administrative jurisdiction over the site.

The Križeviči Necropolis is a cultural and historical monument, protected at the cantonal level. Therefore, undertaking planned project activities (including landscaping, condition assessment, and in situ conservation) required obtaining approval from the Ministry of Education, Science, Youth, Culture and Sports of the Zenica-Doboj Canton. Hence, to secure permission for vegetation, technical, and pedological management activities, the following consents, permits (APPENDIX 2 - Permissions for the demo sites BIH) needed to be prepared and obtained:

- Extract from the cadastral book insert with text data on the ownership of the cadastral plots to which the area in question "Nekropola Križeviči" partially belongs, issued by the competent service for economic affairs of Olovo Municipality (No.: 04-26-11-12-248/24 dated February 23, 2024):
- C.p. 2596 (K.o. Solun I) – forest 4th Class (ownership: ŠIP "Stupčanica" d.d. Olovo), (No.: 04-26-11-12-248/24-2).
- C.p. 2598 (K.o. Solun I) - meadow 5th Class (ownership: ŠIP "Stupčanica" d.d. Olovo), (No.: 04-26-11-12-248/24-2)
- C.p. 2595 (K.o. Solun I) - meadow 4th Class (ownership: Merdan (Edhem) Alem), (No.: 04-26-11-12-248/24-3)
- Decision of the Ministry of Education, Science, Youth, Culture and Sports of the Zenica-Doboj Canton approving the UNSA - Faculty of Science to carry out preventive conservation of stećci, pedological, technical and vegetation arrangement of the Necropolis of Gradina/Meorača in Križeviči near Olovo, digital 3D and lidar non-destructive recording of the stećci and necropolis and monitoring the influence of climatic factors on the degradation of the stećci (No.: 10-34-2291-2/24, March 19, 2024);

Consent of JP Šumsko privredno društvo ZE-DO Kantona Zavidovici doo, PJ "Šumarija Olovo" for the implementation of pedological, technical and vegetation management activities at the Križeviči Necropolis (No.: 08-2420-2023, dated March 13, 2024);

- Memorandum on cooperation between UNSA - Faculty of Science and the Municipality of Olovo on the implementation of project activities on the STECCI project (signed on March 25, 2022);
- Letter of support to the UNSA - Faculty of Science by the Ministry of Education, Science, Youth, Culture and Sports of the Zenica-Doboj Canton (signed on April 11, 2022).



Figure 12. Field tour of Križeviči necropolis and landscaping consultations with the manager of the selected bidder.

Field work at the Križeviči Necropolis was carried out in various separate timeframes. Collectively, the work engagement of the UNSA project team entailed collaboration with representatives of the Ministry of Education, Science, Youth, Culture, and Sports of the Zenica-Doboj Canton. The Ministry is operationally responsible for numerous activities aimed at the protection and preservation of the stećci remains at the Križeviči Necropolis. One direct outcome of collaborating with the Ministry's officials was obtaining approval for all activities related to Landscaping, Condition Assessment, and *in situ* Conservation.

Active on-site communication was also established with representatives of the Olovo Municipality, primarily considering their role in contributing to all planned development activities in the broader Križevići Necropolis area. As per this collaboration, the Municipal Civil Protection Service will directly participate in the construction of the neighborhood road leading to the Necropolis. The field activities also served to document the current conditions at the site, which helped detail and define the work the subcontractor is expected to perform within the scope of public procurement, facilitated by UNSA.

3.3. IMPLEMENTATION OF THE PUBLIC PROCUREMENT PROCEDURE

The public procurement for the Križevići Necropolis was initiated as part of a procedure launched by UNSA entitled: Procurement of services: Vegetational, pedological and technical arrangement of the Kopošići and Križevići necropolises - Open procedure. LOT 2 – Vegetation, pedological and technical arrangement of the Križevići necropolis.

The procurement documentation was harmonized with the Law on Public Procurement of Bosnia and Herzegovina and contains the following thematic chapters: general information about the public procurement, information about the subject of public procurement, conditions for bidder qualification, information about the offer and other legal provisions. In the tender documentation, the following thematic chapter is particularly emphasized: Technical description for the vegetation, pedological and technical arrangement of the Križevići Necropolis, which contains all the necessary information for the implementation of Landscaping activities on this Necropolis.

Unlike the success of the tender procedure for LOT 1, for the LOT 2, the tender procedure had to be repeated. Namely, the delay relative to the projected dates at the Križevići site happened due to a lack of responses to the tender, even though the potential bidders (a total of 10) retrieved the tender documentation via the official Public Procurement System, which was a result of our efforts to inform well-known companies. Consequently, the landscape work at the Križevići site had to be postponed and completed under immediate repeated procedures, with the acceptance of one bidder. Therefore, the delay of the landscaping work accomplishment was three months in total. This is recognised as a project's Negative deviation.

3.4. COMPLETION OF PLANNED LANDSCAPING ACTIVITIES

The implementation of the planned activities on vegetation, technical and pedological landscaping of the Križeviči Necropolis is defined by project task T3.2 On-site landscaping and archaeological work on stećci sites in B&H.

The implementation period: September 26 – December 3, 2024.

The public procurement procedure was initiated in early May 2023, after the collection of all necessary permits such as approvals from the responsible agencies, owners, and others. Given the University of Sarajevo as a public institution is subject to the Public Procurement Law, the entire process of preparing tender documentation and issuing the tender took at least 1.5 months. The documentation for conducting the public procurement procedure is compiled in APPENDIX 1 - Public procurement documentation.

For the reasons stated above, the selected bidder began work immediately after signing Contract No. 0101-7472-8/24 or more precisely on September 29, 2024. The accomplished activities are fully in accordance with the Grant Agreement. Considering that the Križeviči Necropolis is located in a hard-to-reach mountainous area, the landscaping works lasted for over a month. Alongside manual labor, a small excavator was used on-site inside the necropolis for straightening stećaks and preparing paths.

Besides the works defined by the contract, the selected bidder, at their own expense and in cooperation with the Olovo Municipality, worked on the additional arrangement of the access road to the necropolis, with a total length of about 500 m, which is considered as a positive deviation within the project.

It is important to stress that UNSA, in cooperation with the respective Municipality of Olovo and local Forestry departments (the landowners of the necropolises), had already undertaken necessary activities for the basic access preparation of the terrain for Condition Assessment, tasks starting with February 2024. The pre-landscaping field work was completed by the second week of July, 2024. Specifically, at the Križeviči site, preliminary landscaping includes basic terrain arrangement on and around the necropolis, in order to make the condition site Križeviči accessible for the Condition assessment activities (Task 3.1).

3.4.1. VEGETATION MANAGEMENT

Vegetation management included work on sanitary management of wood, bushes and plants vegetation that have developed within the part of the necropolis overgrown with forest vegetation, in line with the Condition assessment recommendations for this site in particular. Notably, this assessment yielded critical findings regarding the destructive influence exerted by tree roots on the site, underscoring the necessity for appropriate measures to mitigate such damaging impacts (Figure 13).

Such identified issues serve as a decisive element in formulating subsequent preservation strategies. Therefore, this activity prevents further physical destruction by the stems and stecci's physical displacement from the basic position, which is caused by the action of the root system.



Figure 13. The damaging effect of roots on the Križeviči necropolis stećak



Figure 14. The prevailing forest environment of the Križeviči necropolis

Vegetation management also includes cleaning and mowing the grass cover that covered the southern part of the necropolis.

Total area under forest cover planned for the described sanitary wood vegetation arrangement of the necropolis: approx. $P = 3,350 \text{ m}^2$. The total area under the grass cover planned for the described sanitary vegetation arrangement of the necropolis: approx. $P = 1,350 \text{ m}^2$.

Also, a detailed situational plan of necropolis using total station and differential GPS was made. Each stećak was photographed.



Figure 15. Basic vegetation management completed within the initial forestry section of the necropolis, to allow work within task 3.1



Figure 16. Vegetation management within the upper first forestry section of the necropolis



Figure 17. Vegetation management within the upper second forestry section of the necropolis



Figure 18. Sanitary tree cutting inside of forestry part of necropolis – completed prior the condition assessment.

3.4.2. TECHNICAL ARRANGEMENTS

Technical arrangements at necropolis Križevići included the following activities:

1. Production, transport and placement of 1 info board,
2. Production, transport and installation of 2 road signs.

Description of the info board: wooden info board with a usable area of 200 x 150 cm, with a wooden roof and glass door. The info board has a concrete foundation for placing the metal feet of the supporting columns of the info board. The height of the useful surface is ca. 70 cm.

Description of the road signs: dimensions of the road sign: 100 x 70 cm. The road sign contains a direction indicator. The signs include the following inscription: Nekropola stećaka "Križevići. The road signs are located along the road, one near the quarry, and the other in immediate proximity to the necropolis.



Figure 19. Walkthrough arrangements. The gap was bridged with tree trunks to allow for safer movement.

3.4.3. PEDOLOGICAL LANDSCAPING

The pedological arrangement of the location includes the arrangement of the pedological cover in the part related to:

- forest road (which is located right next to the necropolis). The length of the forest road next to the necropolis is approx. 200 m. The average width of the road is 1.5 m.

Total area for pedological landscaping of the forest road: $P = 300 \text{ m}^2$.

- arrangement of 4 paths - walkways along which visitors to the necropolis will move. In addition to working on the route, this part of the arrangement includes filling the tracks with stone-gravel material.

The total length of the paths-walks is approx. 300 m. The width of the paths is 1 m.

Total area for the establishment and arrangement of paths-walkways: $P = 300 \text{ m}^2$.

Methodology:

- manually, using adequate construction tools and construction materials;
- construction machinery - excavator

In accordance with the investor's agreement, the subcontractor is obliged to do the pedological arrangement and cleaning of the pedological objects on a yearly basis, in the time period between 2024 and 2027.



Figure 20. Part of the access road arrangements



Figure 21. Part of the access immediately next to the left side of the Križevići Necropolis



Figure 22. Part of the pedological management at the site

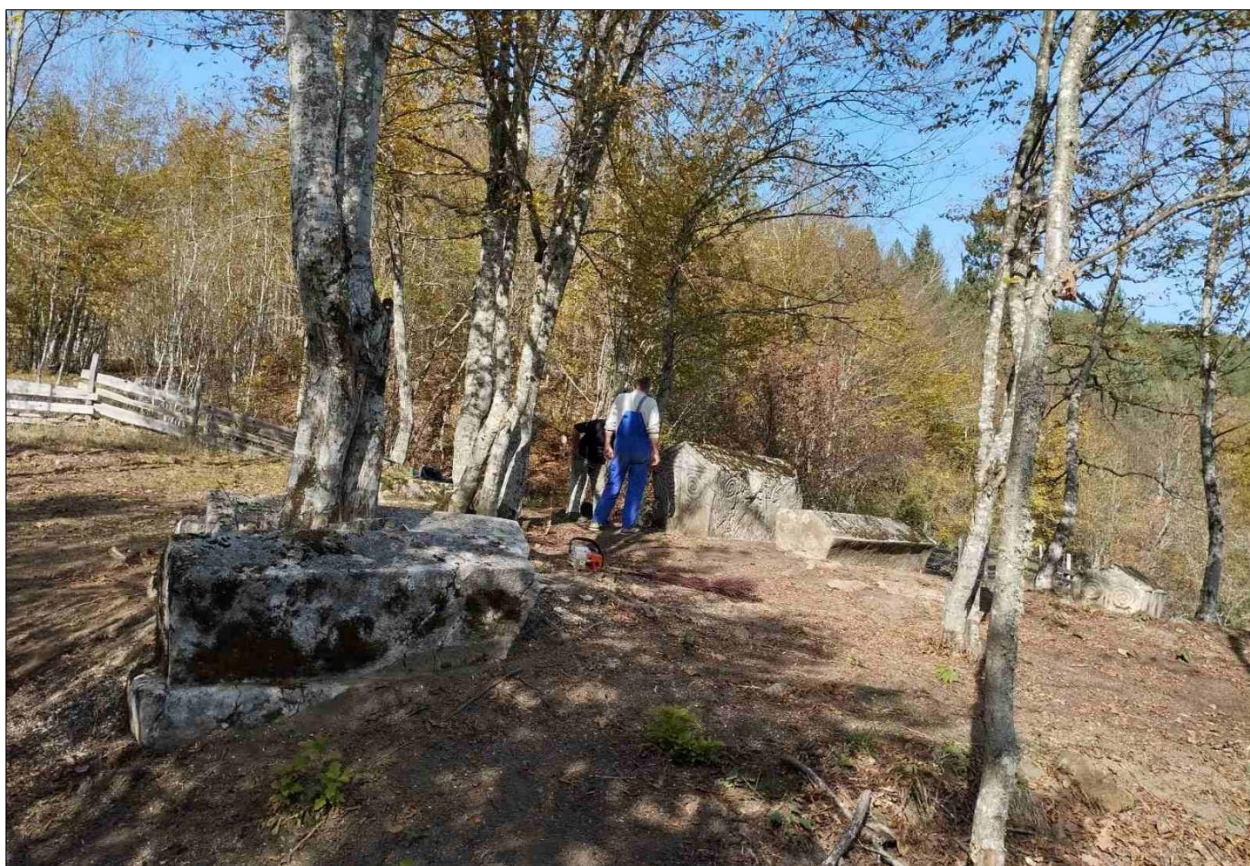


Figure 23. Part of the pedological management at the site



Figure 24. Pedological work on the arrangements of the gravel access road to the necropolis



Figure 25. Results of the pedological arrangement around the tombs

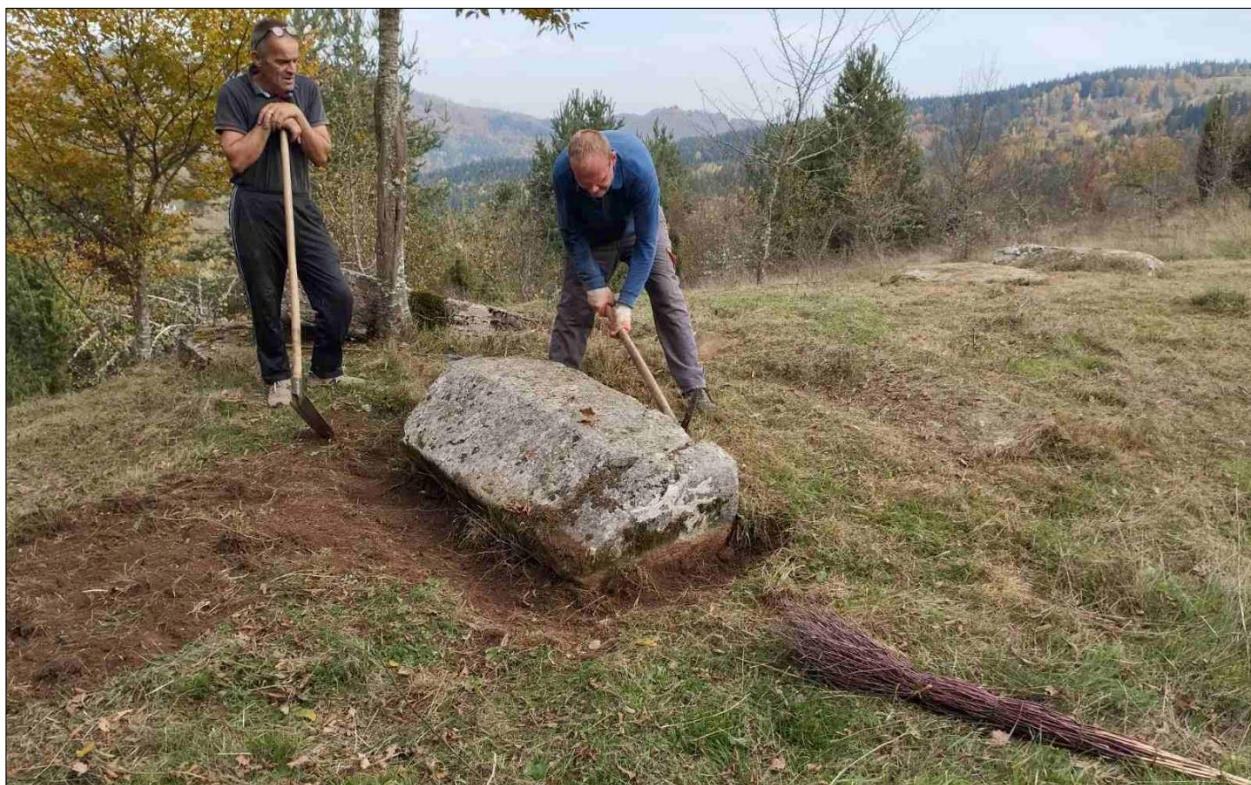
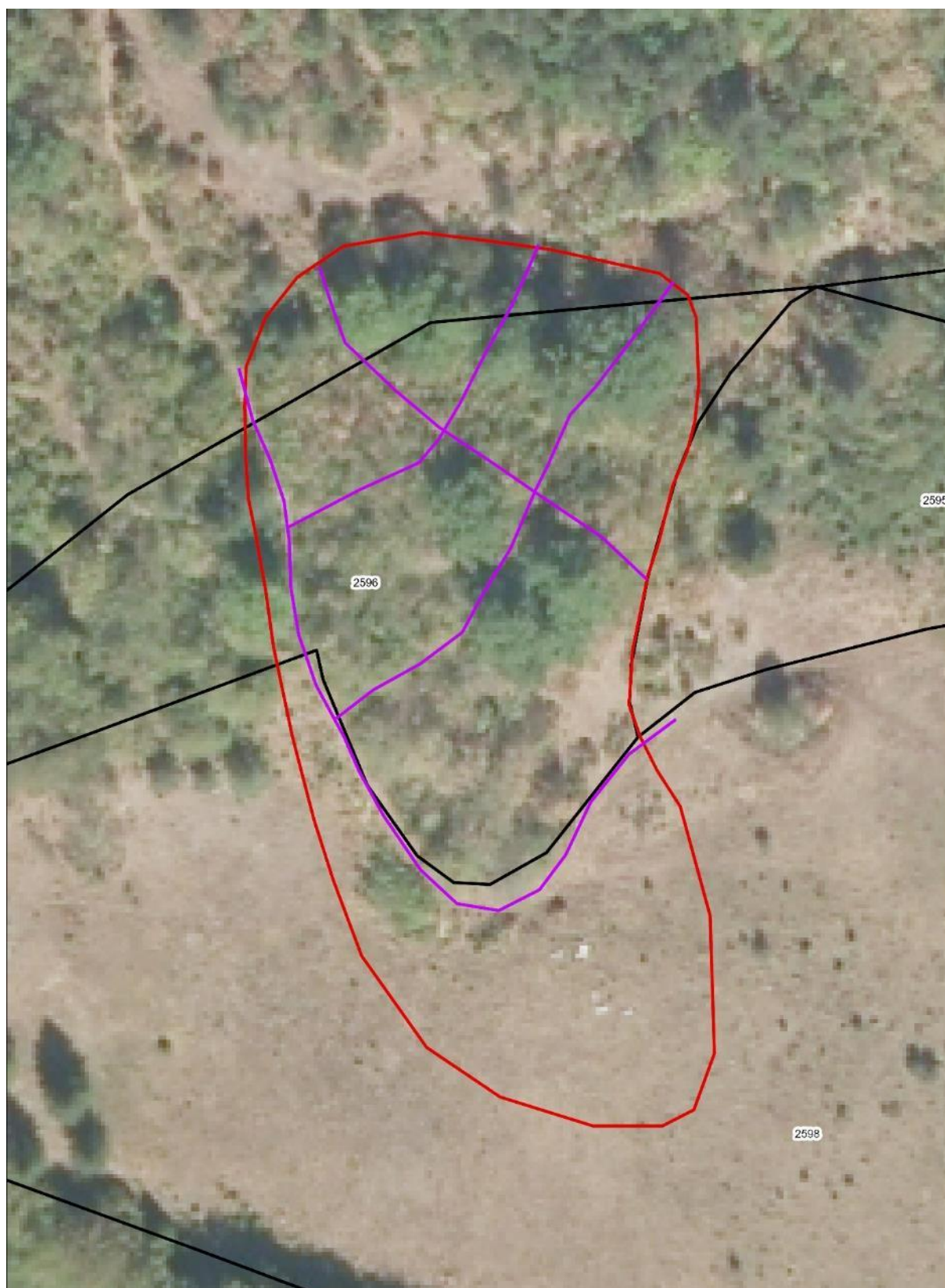


Figure 26. Part of the pedological arrangement around the tombs



Map 3. Situational plan of the cadastral position of the Križeviči Necropolis on the Ortho-photo image



Map 4. Situational plan of the Križeviči Necropolis

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**APPENDIX 1. COMPLETE DOCUMENTATION FOR CONDUCTING PUBLIC
PROCUREMENT**