



7 Most Endangered 2021

Programme run by Europa Nostra,
The European Voice of Civil Society committed to Cultural Heritage,
in partnership with the European Investment Bank Institute

Ermita rupestre de San Juan de Socueva Cantabria, Spain

Technical Report

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0. Summary

In summary, a very interesting initiative dealing with the recovery of a masterpiece of medieval architecture, with evident European interest due to its historic significance, its peculiar characteristics and its diverse potential uses.

The initiative has been appraised by EIBI experts and the following summary points and recommendations have been agreed with the expert from Europa Nostra, the nominator of the Site and the Cantabrian Department of Culture.

1. The Site of San Juan de Socueva (the Site, located in the municipality of Arredondo, Cantabria), whose dating goes back to the VII century, has an undisputed value that must be conserved for future generations and may generate further historic studies, all the more as this Visigoth period is still lacking a serious and comprehensive investigation.
2. The area surrounding the Site (consisting of the Site itself and some adjacent prehistoric caves) is environmentally protected and contains relevant archaeological values. It must therefore be preserved.
3. Currently, the Site and its nearby surroundings are very deteriorated and therefore a rapid intervention is deemed to be urgent.
4. The Diocese of Cantabria is the current owner of the Site. The Department of Culture of the regional Cantabrian Government is taking in charge the immediate restoration of the Site. The Municipality of Arredondo is responsible for maintaining the Site and ensuring its safety. A thorough agreement involving the three institutions on urgently implementing the necessary interventions to prevent further deterioration of the Site and ensuring its future sustainability needs to be reached.
5. A technical project (recently prepared for the Department of Culture) proposing a restricted intervention respectful of the different construction techniques, seems to be in accordance with the UNESCO guidelines. However, the project is limited to the Site and does not include the preservation of the neighbour caves, where several archaeological remains are located. Some minor non planned works (e.g., permanent safety measures) may be necessary, likely increasing the foreseen budget.
6. The Cantabrian Government (through its Department of Culture) is ready to finance the works related to the project and to regularly transfer funds to the Municipality in order to undertake the maintenance of the Site.

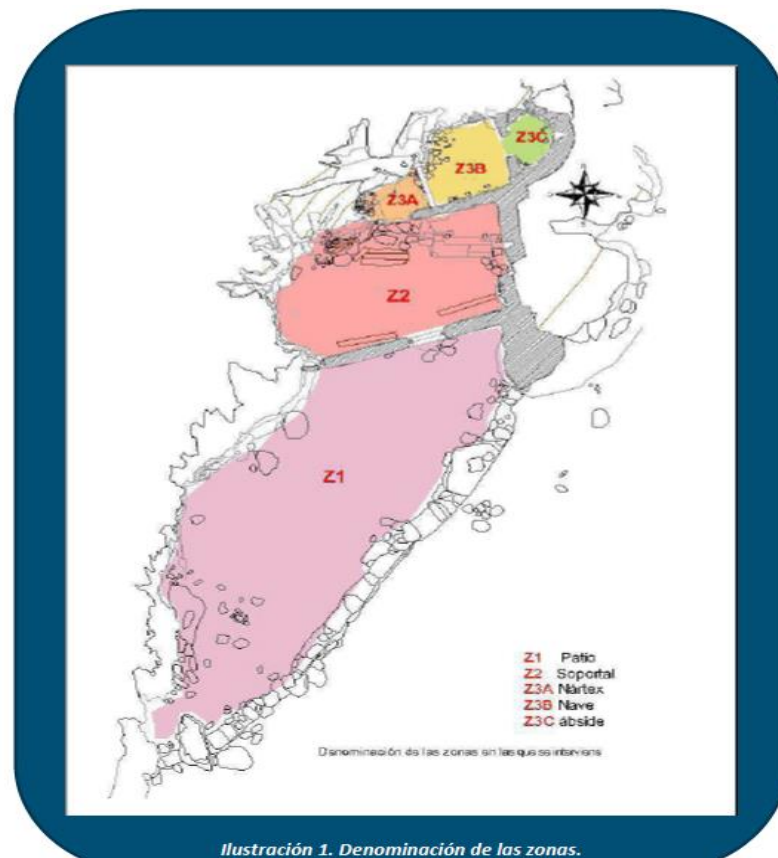
7. The geographic area around the small town of Arredondo belongs to the so called “emptied Cantabria”, where the population is constantly declining. The EIBI experts consider that the rehabilitation of the Site could be used as a driving force for the future sustainability of this rural environment.
8. The EIBI experts recommend launching a dedicated study that should include: (i) clear proposals on the sustainable use of the Site and its surroundings; (ii) a detailed set-up about the future management and operation of the Site after its rehabilitation; and (iii) the preparation of an awareness campaign to disseminate the importance of the Site. In parallel, some complementary historic studies could be envisaged.
9. The Municipality of Arredondo has expressed its interest in promoting the Site and has offered the possibility of devoting certain space on the second floor of their building for this purpose. Preparing a comprehensive exhibition, including a 3D presentation and other complementary materials, might be considered.
10. Due to the fact that the regional Government of Cantabria is going to build a new museum replacing and expanding the existing “Museo de Prehistoria y Arqueología de Cantabria”, the EIBI experts suggest considering the possibility of including there a room specifically dedicated to the site (maybe even reproducing it), which would significantly enhance its visibility to the public in general.

1. Purpose and location

The Site

The Chapel of San Juan de Socueva site (“the Site” hereinafter) is a semi-rupestrian construction integrated in a large karstic limestone massif and located in the south-eastern area of the Ruesga valley, near the town of Arredondo in the Asón-Agüera area, forming part of the Region of Cantabria, Spain. At the same cliff, besides the Site's cavity, there are other caves that have been inhabited by humans probably since prehistoric times, as some archaeological remains reveal. The Site's spot consists of several components as follows (ref. attached picture):

1. The external Courtyard (Z1), a stone walled open-air area of some 20 m².
2. The Portico (Z2), a semi-internal area of some 12 m², protected by a tiled roof and a wooden frame. Among other pieces, it contains a XIX century Neoclassical Altarpiece. In the central niche of this Altarpiece a modern image of St. John the Baptist was hosted but nowadays it is placed in the nearby Site of La Magdalena.
3. The internal Chapel itself, principally excavated inside the rock, is divided into three small lodgings: Nartex (Z3A), Nave (Z3B) and Apse (Z3C). The latter, which contains a stone massive Altar, is canonically oriented towards the East through a narrow loophole and, according to the Visigoth tradition, its entrance contains a triumphal horseshoe arch.



Different methodical analyses have determined that both the Apse, the southern wall of the Chapel and its entrance door frame belong to a Visigoth period, between 660 and 680; while other exterior elements extend to the first decades of the following century. This means that the sequence of events of this Site was brought forward over more than two centuries, and it may therefore be the oldest known religious construction in Cantabria.

However, unfortunately the history of this period remains poorly documented and several heritage conservation associations, like ACANTO and the Sautuola Institute of Prehistory and Archaeology, try to carry out studies and research works that, in spite of the scarcity of funds, use to produce excellent but limited results. Overall, carrying out further in-depth updated studies is highly recommendable.

Location and access

The Site is inserted into a semi-cave on a karstic massif nearby the small town of Socueva, forming part of the municipality of Arredondo (Cantabria), some 50 km south-east from Santander (ref. Annex A). The Site, oriented to the South, profits from an impressive open view over the valley of the river Asón.

The normal access from Arredondo consists of two sections¹:

1. A rough and narrow road (some 2 km), which ends at a small parking space with a maximum capacity of 6 standard vehicles.
2. A rustic pedestrian pathway (some 1 km), plenty of rocks and other obstacles, not available for persons with limited/reduced mobility.

Due to the characteristics of the mountain setting, the improvement of both the parking space and, in particular, the pedestrian pathway would require a significant effort and a very high investment, which would be very unlikely justified at the present moment. Therefore, the access to the Site will remain materially restricted and difficult for a vast majority of people. Meaning that, in practice, the number of actual visitors will remain very limited.

2. Context and history

After four centuries of Roman domination, the successive waves of barbarian peoples hardly had an impact on Cantabria, whose territory, sparsely populated, showed a certain power vacuum. Nor does the Visigoth presence seem to have been deep and

¹ There is an ancient pedestrian pathway that connect the bottom of the valley with the Site and contains several archaeological remains but, due to its length and difficulties, it is almost never used in practice-

effective and it was not consolidated until Leovigildo's invasion at the end of the VI century (notwithstanding, remains from that period are still very scarce). The Reconquest, which began around the Picos de Europa in 718, made possible the creation of a defensive bastion in the Liébana region and welcomed population fleeing from the Muslim area, repopulating the region from West to East and founding numerous monasteries that would be the origin of many inhabited places.

The administrative organization of the region began in the VIII century. Indeed, the region of Liébana was managed at that time by a Count under the command of the King of León; while the rest of the territory depended on the Counts of Castilla. It can be affirmed that the process of acculturation culminated during the X century with the implementation of the laws and customs of Hispano-Visigoth references, which were the ones the Christian monarchies of the Reconquest decided to apply. During this process, several waves of people from the Central Iberian Plateau also played a decisive role, contributing to the repopulation of the Cantabrian valleys and the generalization of Christianity.

The singularity of cave Chapels present in Cantabria since that period extends to other places in the foothills of the Cantabrian Chain, from León to La Rioja. However, it is in particular this region (as well as in the nearby areas of Palencia, Burgos and Álava) where it reaches greater wealth. The expansion of this architecture, usually excavated in Waldense sandstone (formed in the Tertiary era, easy to carve with simple tools), constitutes a particularity that can be related to a large extent with the repopulation of these regions, namely during the early Reconquista period, although it profited from the existence of some previous spots originated during the previous Visigoth period (as it seems to be the case of San Juan de Socueva).

The Chapel of San Juan de Socueva has not ceased to have its religious function since its origin until today, as far as the cult dedicated to St. John the Baptist is deeply rooted in the community throughout the valley of the river Asón and still remains alive. The Chapel is currently a privately owned asset, in the hands of the Diocese of Santander.

Since 1985, the Site is included in the Registry of Cultural Assets of Cantabria, declared a Monument with the category of Asset of Cultural Interest (BIC, “Bien de Interés Cultural”). At the same time, it forms part of a protected environment defined by the Cantabrian Cultural Heritage Law. On top of that, the Site is in the Hispania Nostra’s Red List of heritage in danger since 2007.

3. Current situation

Background

Due to the lack of proper maintenance and the physical difficulties reaching the Site, the state of the Site is rapidly deteriorating. Nevertheless, several technical studies of different nature have been carried out over around three decades, like:

1. 1992.- Cleaning, tidying up and re-composition of the Altar carried out by the Cantabria Association for the Protection of Underground Heritage.
2. 2003.- Preliminary project for the restoration and protection of the Site of San Juan de Socueva and archaeological elements of its environment.
3. 2017.- Proposal for provisional stabilization of the three most inclined pillars of the entrance porch, until the global restoration of the Site is addressed.
4. 2018.- Health and Safety Coordination of the conditioning works of the third floor of the house of culture of Torrelavega and the Site of San Juan de Socueva.
5. 2020.- Publication of the wide-ranging research book “La Iglesia rupestre de San Juan de Socueva”. Edited by ACANTO and the regional Government of Cantabria.
6. 2020.- Documentation of cave Site of San Juan de Socueva: Three-dimensional scanning and archaeological study of manifestations incaves.

The most recent achievement has been the preparation of a comprehensive restoration project (hereinafter, “the Project”) prepared by a specialized team of experts for the Cantabrian Department of Universities, Equality, Culture and Sport (“Department of Culture”, hereinafter). The Project, together with the application form submitted to Europa Nostra, is the main document used as reference for preparing this report.

The Site’s spot includes the Site itself and several nearby caves, which are of great cultural, architectural, landscape, religious, archaeological, ethnographic, local, national and European importance. Nevertheless, the Project is limited to the restoration of the Site and leaves aside several important elements, like: the analysis and preservation of the surroundings (in particular the caves) or the installation of some permanent security measures to prevent vandalism or misuse.

Courtyard and Portico

According to the multidisciplinary team that prepared the restoration project, the Site is covered by a large amount of vegetation to be cleaned in order to get a good and complete view of each individual part and the entire set. This makes impossible to access the exterior walls and check their condition, as well as completing precise conservation and restoration proposals. Inside the wall, there are graffiti made in recent times, which are the consequence of a lack of culture and bad/poor appreciation of the values of the Site.

On top of the Site, there are some "vias ferratas", installed for climbing the external rock massive, which must be dismantled in order to avoid both the presence of sportsmen and the visual contamination of the Site. All those disturbing elements must disappear before proceeding with the main works.

The general state of conservation of the Portico is really worrying because it is not physically protected against undesirable intrusions by people that could either take away several elements (such as the holy water font), or to deteriorate others (such as the Altarpiece), or even to place inappropriate objects on its walls, as well as graffiti. In front of the southern internal wall there is a modest XIX century Neoclassical Altarpiece, in the central niche of which it was a modern image of the patron saint (St. John the Baptist) now housed in the nearby Site of La Magdalena, in the Socueva town. The Altarpiece is in a very poor condition as, among other damages, its painting is very deteriorated and the capital of one of the lateral columns is missing.

In summary, the current state of the Portico, its interior and its surroundings (including the Courtyard) is in general regrettable. On top of that, the tile roof of the entire Portico risks of collapsing at any moment, so it is necessary to shore it up.

The Chapel

The actual interior of the Site itself (namely, "the Chapel") is in better conditions, but very sensitive to visitors because of it is a narrow space. The entrance to the Nartex (and the Chapel in general) is made through a door that only retains the original frame. The rendering of the walls is also original, although holds some dirt traces in need to be carefully intervened.

The entrance door to the Nave, which is substantially square, still has a wooden frame that would have housed two leaves of similar width, one fixed and one mobile. This entrance is sheltered by a wooden structure embedded in the rock, with a turned enclosure on its front and beams whose corbels are decorated with scrolls from the Baroque period.

The square-shaped Nave (whose north wall is the natural rock while the south wall is made of reinforced and plastered masonry) gives access to the Apse through an arch-shaped door. This is a horseshoe arch, formed by stone pieces whose saltmarshes have been cut out to form a horseshoe silhouette below the diameter (i.e., according to the layout of the typical Visigoth style). On the intrados of the arch, there seems to be various old graffiti signs that are very deteriorated and may be inscriptions, similar to reddish and bluish stains that are repeated in other parts of the nave.

The interior of the Apse is very small. At the rear wall to the Apse, which is canonically oriented towards the East, there is a narrow loophole that gives light to the interior of the Apse and a stone massive Altar. The latter consists of a tenant,

originally monolithic and cylindrical, with a cavity at the top that would have been used to deposit the relics, highlighted in its square contour to fit the horizontal slab of the Altar.

In general, the stability of the rock massive holding the Site is apparently good, as it is a natural cavity. However, the setting of the stone walls forming the southern wall of the entire Chapel risk of being deteriorated if non-appropriate works are undertaken, because it is basically the human hand who can most damage the sustainability of the Site.

4. Description of the project

Basic principles

A multidisciplinary team of experts (the “project team”, hereinafter) has participated in the preparation of the Project that the Cantabrian Government is planning to implement. It must be noted that a work of these characteristics is not only aimed at maintaining the property, but also at generating scientific knowledge related to all elements involved in its execution. As a result, the Project proposes a set of pertinent actions for the recovery of the Site explained in a complex document that brings together 188 actions in the fields of conservation, restoration, archaeology, history and construction works (ref. summary in Annex B).

Against this background, the Project establishes three clear and well-defined phases (i.e., investigation of the current status of the Site, execution of works and preparation of desk documentation). However, first of all it is urgent and essential to shore up the wooden Portico and the physical enclosure with a grille, at least provisionally, until the process of analysis, research, diagnosis and conservation or restoration is completed.

The three project phases must be ideally executed by the same team, working in a coordinated manner and contributing to the necessary multidisciplinary character of the intervention. The project team recommends that the execution of the project phases are carried out successively, addressing one phase until the previous one is finalized in such a way that the results of each phase are taken into consideration by the next one.

In parallel, the project team considers appropriate to outline a communication strategy to add value and transmit the importance of San Juan de Socueva to relevant stakeholders and civil society in general. Addressing this process would allow for a better management of the interpretation and dissemination of the cultural values of the Site and its surroundings that, in turn, would result in ensuring the long-term sustainability of the Site.

Intervention criteria

The Project proposes a global intervention that not only preserves the integrity of the Site, but essentially safeguards its cultural values and the authenticity, as well as of its surroundings. All actions will be aimed at consolidating what already exists, without introducing, as far as possible, elements that may mislead the authentic perception of the historic ensemble.

The project team proposes to adopt a series of basic criteria internationally accepted as good practices, which are considered essential for the execution of any intervention on a cultural heritage asset, such as:

1. Minimal intervention, ensuring that no other materials than those strictly necessary for the conservation of the different elements of the Site are introduced.
2. Respect for all the basic formal characteristics of the Site, such as technical, constructive, spatial, functional or other aspects.
3. Prioritization of the conservation of all original elements, respecting the contributions from other historical periods that may exist, if they do not clearly contribute to the degradation of the Site.
4. Use of materials and products compatible with each object to be intervened, characterized by their steadiness and, as far as possible, to allow reversibility.
5. It will also be ensured that these materials do not interfere with possible analyses or studies that may have to be carried out in the future. The application of any product will require in any case taking samples and making preliminary tests to determine their suitability.
6. Clear identification of additions made, always avoiding the introduction of foreign elements that may suppose any historical fake.
7. Carrying out preferably reversible actions so that, if necessary in the future, the previous state of any element may be recovered.

Components of the project

Phase of preliminary works

This chapter groups together the actions to be carried out during the diagnosis phase that are aimed at characterizing the entire Site. These actions have to be based and structured according to the criteria of ICOMOS/UNESCO (*Principles for the Analysis, conservation, and restoration of architectural heritage structures, 2003*).

Diagnosis phase

The results of this phase will constitute the guiding principles for taking final decisions during the execution of the works phase.

Execution phase

Given the characteristics of the Site, any action must be accompanied by preventive archaeology surveillance, with the aim of monitoring and controlling the implementation phase of the project. Moreover, any excavation works affecting the soils of the Site must be carried out under archaeological supervision.

In general, all works have to be coordinated by a person with a degree in conservation-restoration, who will actively collaborate with the architecture and archaeology teams, both in the monitoring and decision-making, the carrying out of archaeological surveys, the documentation of wood graphite, the identification of old graphite, the obtention of samples of rupestrian art and the rehabilitation of the roof shelf among other works.

Desk work phase

It consists of the study and classification of the gathered materials and, if necessary after being appropriately treated, storing them in a pertinent institution. It is also recommended to carry out further analysis not contemplated by the project that would contribute to a better knowledge of the assets, to regulate their conversation and to help in making sound decisions for future potential interventions.

5. Implementation

The Department of Culture is the institution in charge of the implementation and financing the works for conservation and restoration of the Site.

Recommendations by the project team

To implement the project under optimal conditions, the first recommendation is to undertake an integral intervention in the whole area. Nevertheless, as a preliminary and urgent action, the project team proposes cleaning the Site and eliminating superfluous vegetation around it before proceeding with anything else.

Unfortunately, the richness of the archaeological surrounding is not captured by the Project. This means that focusing exclusively the intervention on the Site is likely to somehow jeopardize the heritage value of the nearby ensemble. In this sense, it is

wise to note that the rest of the archaeological remains (namely in the near caves) enjoy the same safeguard rules than the existing legislation on archaeological protection of BICs provides

According to the existing regional regulations, a second general endorsement concerns the execution of works and the need of implementing an archaeological follow up and surveillance during all steps of the implementation phase. Other complementary recommendations are as follows:

1. Although it does not form part of the legal declaration of the Site as a BIC, it would be important to include the old path from the neighbourhood of the small town from Socueva to the Site, which has some XIX century remains.
2. The topographic and photogrammetric survey of the Site has been done without the previous cleaning of the vegetation, so this work would likely need to be updated when the latter is done.
3. It is remarked that the intervention needs a multi-disciplinary team of experts with a wide experience in heritage interventions and traditional architecture.
4. The existence of climbing routes (“vias ferratas”) is against the current environmental protection legislation and cause visual negative impacts on the surroundings of Site. The Municipality has already been informed. On the one hand, a signal forbidding these activities has been installed and, on the other hand, dismantling the climbing routes is their duty.
5. Organizing technical, scientific and progress dissemination visits during the restoration would probably bring interesting complementary knowledge and interesting results.
6. Furthermore, the results of other ongoing research activities², which could bring updated information on different elements of the Project, are expected soon.

The EIBI experts consider that the three institutions involved in the project (i.e., the Government of Cantabria, the Municipality of Arredondo, and the Catholic Church) should agree on preparing a Study on the sustainability and future uses of the Site and its surroundings. The Department of Culture might finance this study whose conclusions would be essential for the future understanding of the Site’s area (more details in section 10). Moreover, this study could also benefit from the grant the EIBI is ready to mobilize in order add some relevant value to the intervention, under the 7 most endangered sites program.

² Notably: (i) the Department of Culture has recently contracted a new archaeological study of the walls of the Chapel that would likely bring additional information to the Project; and (ii) a yet unpublished monograph (“*San Juan de Socueva. Un monumento del final de la Tardoantigüedad en las montañas de Cantabria*”) prepared by a team of well reputed archaeologists is expected to contain some interesting complementary data on the Site.

Schedule for implementing the project

The project team has estimated a time schedule, which is deemed a bit too short in the opinion of the EIBI experts. However, not having access to better/more detailed information, this proposed schedule is retained and described as follows.

First, it must be noted that a work of these characteristics is not only aimed at maintaining the heritage, but also at generating scientific knowledge in all branches involved in its execution. Archaeology, art history, conservation, restoration and architecture are disciplines inherent to interventions on any cultural heritage asset. Taking this into account, the project team has established three clear and well-defined phases, which must ideally be executed by the same team, working in a coordinated manner and contributing to the necessary multidisciplinary character of the intervention, as follows:

1. Preliminary works and Diagnosis: to carry out this phase, a period of 6 months is estimated.
2. Execution Phase: for this phase, a period of 4 months is estimated
3. Desk work: a period of 2 months is estimated for this phase.

In parallel, the project team considers appropriate to outline a communication strategy to add value and transmit the importance of the Site to the civil society. Addressing this process would allow for a better management of the interpretation and dissemination campaign of the cultural values of the Site and its surroundings that, in turn, would result in a better conservation of the Site.

Tendering the project

The Department of Culture envisages at least six months to successfully tender the project, resulting that in total a period of 2 years would be reasonably necessary for completing the project works. In the meantime, all involved institutions (including main stakeholders) must agree on the uses and operation of the Site, as well as on a conservation strategy for protecting its surroundings.

6. Environmental and social impacts

Environmental aspects

The Site (officially called *Bien de Interés Cultural*, “*Iglesia rupestre de San Juan*”, *en Socueva, municipio de Arredondo*) forms part of an environmentally protected zone, of which the most updated declaration dates from October 2012.



According to the regional law 21/2013 on environmental protection, the project does not need any formal environmental impact assessment process. This has been officially confirmed on 21st December 2021 by the Head of Service of Cultural Heritage of the Cantabrian Government.

Nevertheless, standard good practices related to the treatment/recycling of waste, as well as a careful implementation of works in general, must be respected. A dedicated container will be placed nearby the Site during the construction period. In parallel, labour standards and safety & health procedures need to be respected. Finally, after the rehabilitation of the Site, regular maintenance (in principle, under the responsibility of the Municipality of Arredondo) will ensure a proper and safe care of the entire Site, as well as of the access pathway.

Social impacts

The municipality of Arredondo forms part of the Asón-Agüera district. This district is situated in the eastern part of Cantabria and consists of two very different parts: (i) the area close to the coast, with higher population density and holding beaches that basically attract people from Cantabria and the nearby region, in special from the metropolitan area of Bilbao; and (ii) the interior rural area, where the municipality of Arredondo is located and whose population density is only around 27 inhabitants per km² (10 inhabitants per km² in Arredondo).

This interior area is very sparsely populated and belongs to what is denominated the “empty Cantabria”. Indeed, Arredondo is a rural municipality whose population has decreased in the last twenty-five years, from 670 to 470 inhabitants, where agriculture and livestock deploy 40% of its labour force. Low economic growth, difficult access to public services and jobs, as well as an aging demography, characterize this sparsely populated area. On the positive side, the whole region is well covered by Internet services.

The nature in Arredondo is untouched and offers many possibilities for active leisure, and consequently generate jobs in the service sector. As mentioned before, the most frequent jobs are related to livestock rearing, restaurants and other activities in low value-added service sectors. Thus, in the future new economic opportunities could be greatly generated by a sustainable use of the Site.

7. Investment costs

Preliminary works

The Department of Culture has already invested some funds and time in the conservation and conservation of San Juan Socueva. The information provided shows expenditures amounting about EUR 31 400, consisting of the actions described in the following table.

Document/action	Delivery date
Diocese´s authorization	13/05/2020
Starting Works document	14/05/2020
Award of the Archaeological report on paintings and engravings in the Site	02/11/2020
Award of the 3D scan of the Site	29/10/2020
Award of the Project for the execution of restoration and conservation work	30/12/2020
Award of the study of walls or wall archaeology	Pending

Summarized budget of the approved project

The implementation of the Project for the restoration and conservation of the Site of San Juan de Socueva in Arredondo has an estimated budget raising EUR 110 000 (VAT included).

However, in order to guarantee the long-term sustainability of the Site, other elements should be added to this budget, like the costs necessary to clean the superfluous vegetation, the removal of the climbing routes, the securitization of the Site and its

surroundings, as well as a light improvement of the access path to the Site (which should be done before the main works start, to facilitate the labour of workers).

Overall, the EIBI experts consider that both the budget and the time schedule estimated to implement the proposed Project should be reviewed and, most likely, enlarged.

8. Operation and maintenance

The operation and maintenance of the Site goes beyond adequate standard activities. The project team has identified the following tasks:

1. The Municipality of Arredondo will be in charge of keeping the place clean of vegetation and ensuring that the Site is free from vandalism, while remaining safe for acceptable visitors. The Government of Cantabria will financially support this task by mobilizing regular transfers of funds.
2. Management of the Site. This would include the selection and contracting of professional guides, the organisation of visits and the dissemination of information. The Diocese is the current owner of the Site³ and it is reasonable that it takes in charge this task. The Department of Culture, which includes Education, could also manage and finance this activity. The EIBI experts consider this activity essential to guarantee the sustainability of the Site.
3. Communication campaigns and tourism promotion. The Municipality and the Department of Culture must design and launch the promotion of the area for reaching an effective responsible/cultural tourism attraction, keeping in mind the sustainable development of the entire area.
4. The Department of Culture has a website with information on every Cantabrian district and the tourism possibilities. It is thus easy to update the Site news. Other campaigns and dissemination to show the artistic and historical value of the Site are desirable, including guiding tours addressed to young students.
5. Potential complementary tasks (currently not clearly defined) would involve the managing of a potential virtual Site to be set in the municipality or in the new Cantabrian Archaeological Museum and the promotion of the study of the surrounding area, which is believed to contain many archaeological data of the past, including the palaeolithic era.

The first task is already acknowledged by the Government of Cantabria and the Municipality and the necessary funds are already committed. However, concerning the other tasks, responsible institutions and financing instruments are to be

³ According to recent media news, it seems that the Municipality of Arredondo has the intention of claiming for the ownership of the site. This would generate a legal dispute with the Catholic Church, which would last a long time. In any case, whatever the final result be, the rehabilitation of the Site should not be affected in the short time.

respectively identified and agreed. It is therefore recommended that this process is done before the end of the Project restoration works by conducting a cost/benefit analysis leading to a sound prioritisation of the tasks.

9. Economic and Financial aspects

The investment in the conservation and restoration of the Site is a rather small work that, given its characteristics, does not require a proper business plan. The restoration Project is already drafted and approved, the implementation body is the Department of Culture, the maintenance body is the Municipality of Arredondo. The funds are already committed and the involved institutions (the Municipality, the Department of Culture and the Diocese) have agreed on the urgent character of the intervention.

However, the future use and sustainability of the Site and its surroundings are not clearly defined yet. Therefore, it is urgent to define and agree these issues to guarantee that the Site does not deteriorate in the future and collaborates to the development of Arredondo and its surroundings. In addition, this would also ensure the proper conservation of the archaeological remains and promote their study.

A relevant global goal is the stabilisation of the population to safeguard the traditional economy and protect the environment by offering new job opportunities to the younger population. The Department of Culture is making a considerable effort to restore the Site respecting its original character as it is well described in the approved project. However, there are some basic issues to be discussed and agreed upon for the sustainability of this asset and for the development of the local area and, in turn, the inclusion of the whole Site in a protected archaeological area. This could generate academic work for the University of Cantabria and other cultural institutions. In this respect, the EIBI experts propose to undertake the following tasks:

1. Decision on the use of the Site, which cannot be massively visited due to the risk of deterioration and the loss of valuable archaeological information. A sound proposal is that the Site could only be visited by appointment and accompanied by official guidance.
2. The management, maintenance and operation of the asset is not completely clear at the current stage. It seems that the Municipality will maintain the area, keeping it clean of vegetation. It is to be decided who will take care of the selection of the guides and give visiting permissions.
3. Access to the Site. The access must be designed and implemented in a reasonable and careful way to safeguard the surrounding environment. This work is not part of the proposed Project. Currently, the access is poor and somehow dangerous. This is another reason for not allowing massive visits to the Site. Moreover, the investment to create a bigger parking and a good comfortable pathway would be very high and seriously damage the environment.

4. The Site and its surroundings are part of an archaeological area and must be protected and become the object of further studies. The Municipality and the Department of Culture must protect and promote further analysis of the area. This could be an opportunity for students to write Ph.D. thesis, publication of academic papers, making the area better known to scientific community and opening new opportunities for the development of the rural Arredondo.
5. The Department of Culture and the Municipality could use new virtual image techniques to show the Site without risking any damage. In that respect, the Municipality has enough space in the townhall to install an exhibition of the area, including the Site, with educative purposes.
6. The three institutions involved in the protection of the Site must agree in the steps to be taken. This agreement is essential for the sustainability of the Site. Civil society and main stakeholders can also be part of discussions leading to the final solution.
7. The economic and social sustainability of the area would involve the collaboration of other departments of the Regional Government, such as those dealing with Tourism and Education, since some initiatives are part of their competences.

The EIBI experts recommend that the Department of Culture carries out several feasibility and technical studies to ensure an adequate use of Site and its surroundings for ensuring the sustainability of the area. This would include, at least, the following steps:

1. Identification of future sustainable uses of the Site.
2. Appointment of a manager that oversees the uses and ensure the safety of the Site.
3. Designing of a respectful cultural tourism strategy.
4. Promotion of scientific studies by the University of Cantabria and others.
5. Realisation of socio-economic studies to measure the impact of this cultural heritage in the area, including the preparation of a marketing study with, at least, the following tasks:
 - Analysis of potential demand, including tourist, scientists, and local visitors.
 - Definition of tariffs and identification of potential subsidies.
 - Characterisation of the main types of both recreational and training events to be organised.
 - Preparation of dissemination materials using different physical or digital/electronic support, and media.
 - Inclusion of the in national and international cultural databases and networks.
- 6 Estimation of costs and benefits, including the potential collection of funds for the maintenance and operation of the Site and its surroundings.

10. Funding possibilities

The Department of Culture is financing the realisation of immediate works related to the restoration of the Site (the Project), whose final and precise final volume is not known, but it is guaranteed under a general budget dedicated to maintenance in the Department of Culture. In addition, should the Government of Cantabria receive some EU funds during the current period 2020-2027, part of them could be allocated for implementing the Project.

The Municipality will take in charge the cleaning and the safety of the area, as mentioned above. However, the sustainable use and operation of the Site are not decided for the moment.

For the remaining issues signalled in this report, the Regional Government may ask the collaboration of private institutions (e.g., banks, companies with roots in the region) and financial support from individuals, associations or foundations of "indianos" (who are currently involved in documenting the historical emigration to Latin America and Mexico). Using other EU funds and complementary loans could also be a possibility. The institutions envisaged so far are: Fundación Marcelino Botín, from Santander, Fundación Caja Cantabria, Solvay company, Iberdrola, as well as academic entities of recognized prestige such as the Real Academia de Bellas Artes de San Fernando, in Madrid.

Relevant stakeholders must be involved in the conservation, restoration and the final use of the entire Site for guaranteeing its sustainability. This would require the participation of all interested parties including the conservationist associations in the region of Cantabria and Hispania Nostra (active participant in this report). In parallel, the Department of Culture, has already initiated contacts with the civil society, in particular the local population and its representatives.

In summary, it is essential to take their opinions into consideration in order to identify the optimal use and management of the Site once the Project is completed and to enhance the whole archaeological Site. This will facilitate the definition of an enhanced proposal that will favour the sustainability of the monument and its surroundings from all aspects: natural, artistic, economic, and social.

Annex A

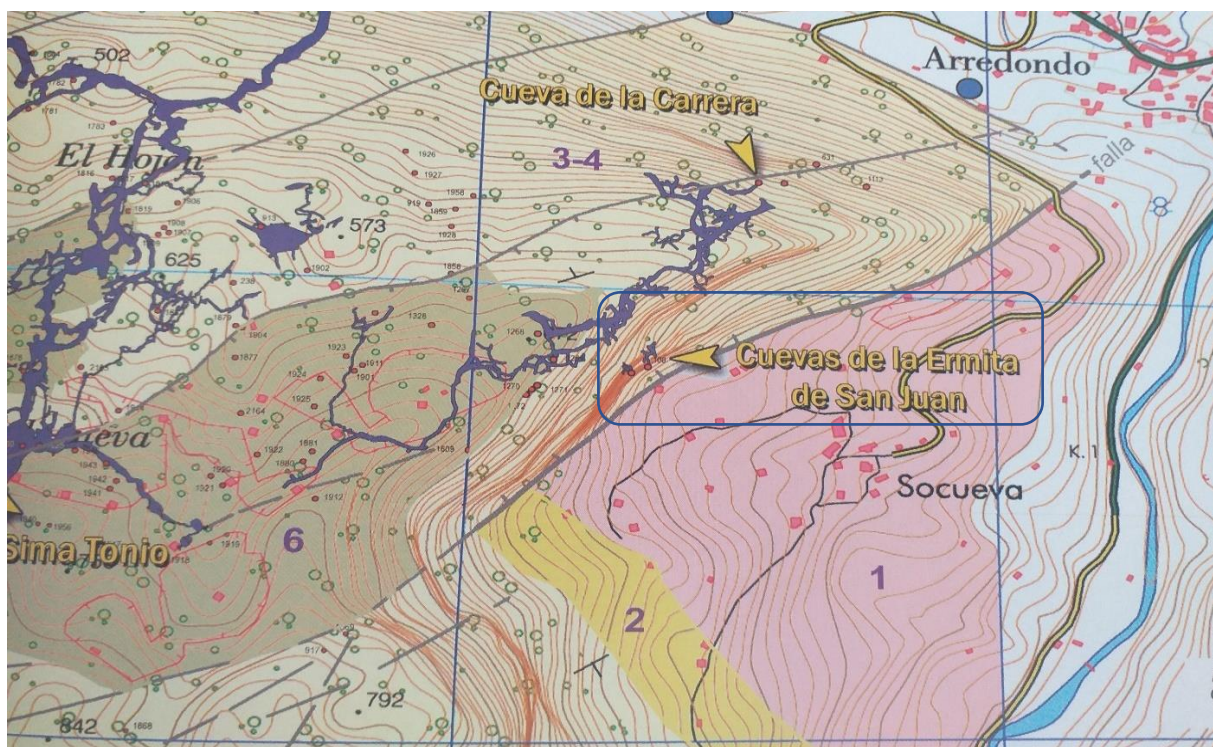
Location and Pictures

Credits of the maps and pictures:

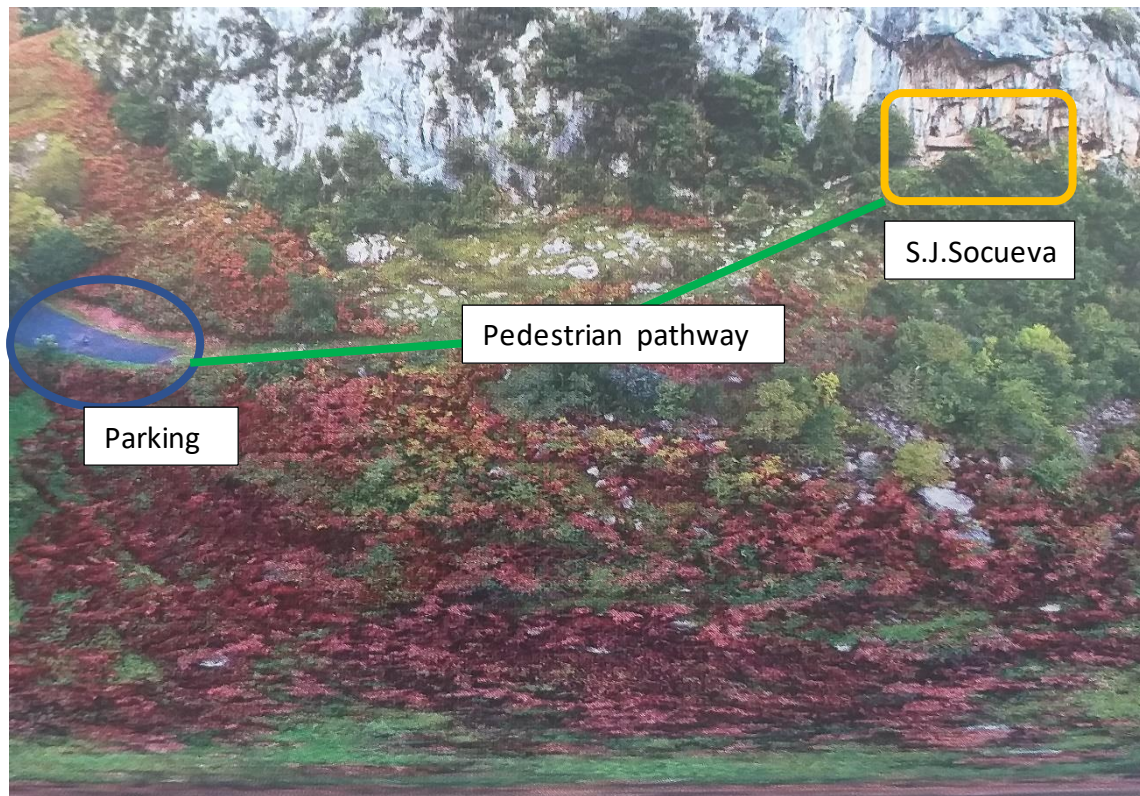
1. El Diario Montañés (local newspaper)
2. Google-maps
3. Miguel de Arriba
4. Pilar Bahamonde
5. Turismo de Cantabria
6. Wikipedia



Location (general map)



Location of the Site on the rock massif



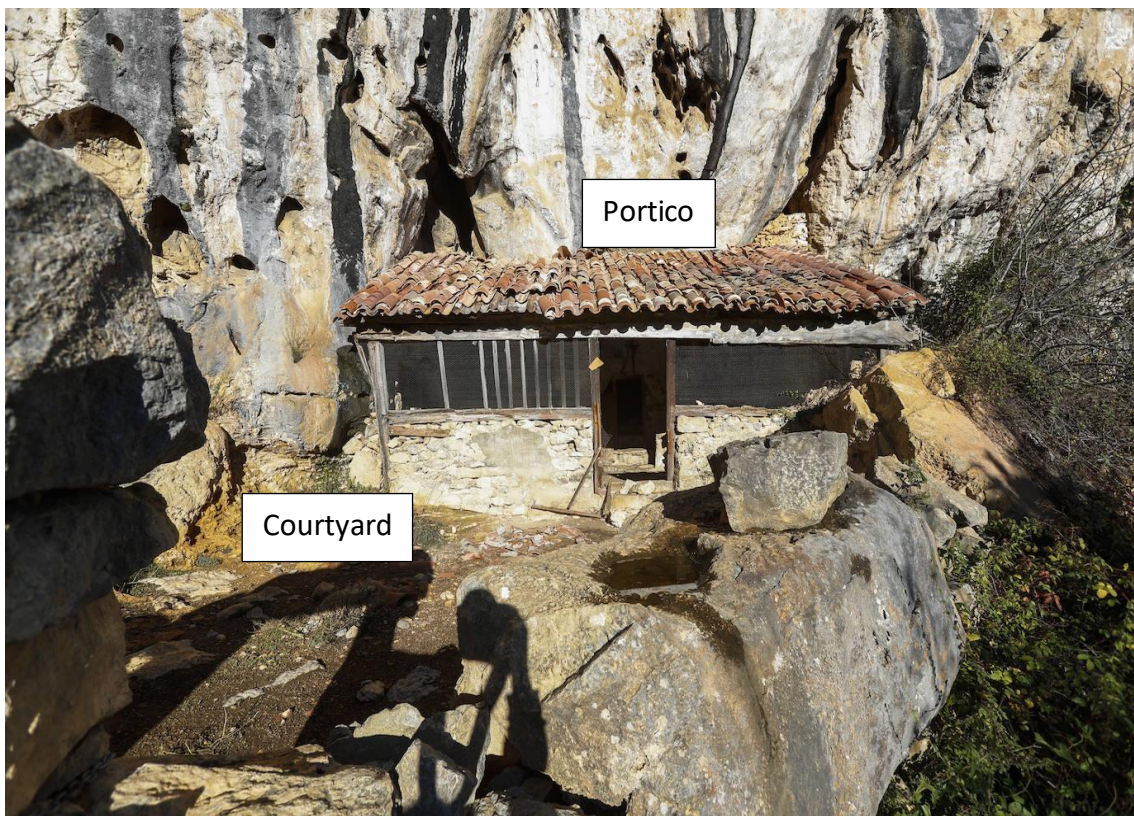
Access (last tranche)



Pedestrian pathway



View of the cliff, with the Site on the left side and other caves on the right side



The Courtyard and Portico



Interior of the Portico, with a XIX century Altarpiece



The Altarpiece and entrance to the excavated Chapel from the Portico



View of the interior of the Chapel from the Nartex



Interior of the Nave



Nave and entrance to the Apse, with Visigoth arch and internal Altar

Annex B

Scope of most relevant works identified by the project team

In summary, according to the Project, the most relevant works to be carried out are as follows:

Courtyard

Two large cracks that run from top to bottom of the stone wall show some buckling with no signs of imminent collapse. However, it would be necessary the placement of witnesses that allow assessing more precisely the need for a deeper intervention.

The access is through the entrance located on the south wall, built using irregular masonry gritted with clay and covered by a clay plaster. This plaster presents a risk of detachment and has numerous cracks, in addition to a good number of graffiti that will necessarily be removed.

Portico

The unstable state of this structure makes necessary to dismantle it and assembly in its original position (once it has been determined which materials are suitable for reuse). Possibly 4 of the 12 transverse joists of the structure cannot be reused, and neither can most shingle boards highly affected by humidity. The wood of these elements is very deteriorated by the action of fungi and wood-eating insects and by exposure to the elements.

In the northeast corner of the Portico there is a classicist Altarpiece. The state of conservation of this Altarpiece is not good, but, since its restoration is not an object of the project, the proposal is limited to safeguard and stop the deterioration of the object. This includes a basic cleaning to remove deposits and superficial stains. In a second phase the use solvents to remove those more adherent deposits, recent paintings, remains of wax, etc. Then, since the wood is quite deteriorated by the attack of wood-eater insects, a specific product against the larvae attack is to be applied, both on the surface and by injection.

Nartex (first chamber of the Chapel)

The Nartex in Romanesque basilicas is the entryway located between the Courtyard and the naves of the temple, from which it is separated by fixed divisions, intended for penitents and catechumens.

There are three steps of quite recent construction. Next to the doorway, although displaced from its position, there is a wooden door of indeterminate period. Whilst

the surface of the door reverse shows natural wood, on the front it presents a layer of reddish paint altered by the presence of some more or less recent graffiti made per incision. It is proposed to make a basic restoration of this door to relocate back to its functional position

As for the walls, most of this space is closed by the shelter rocky, while masonry is used to close the west wall, up to mid height, and the south wall, in which the access opening opens. On the natural rock walls, especially in the areas closest to the ground, a patina of biodeterioration is observed greenish in colour, due to the presence of algae. The recommendation is to use of a biocide to tackle this problem, but this work must be carried out with extreme caution because it is an area likely to contain some type of rock manifestation or paintings not catalogued.

Nave (second chamber of the Chapel)

The Nave is accessed through the Nartex. There is a doorway to access to the Nave with no structural purpose. In the nave there are a series of problems common to other places of the Site, fundamentally, with regards the stability of the walls. In addition, the loss of material in the base of the walls is a general problem. This means that the walls need to be patched up to guarantee the stability of the nave.

There are traces of lime on all the walls, but only on the wall of the horseshoe arch there is a proper lime plaster, evenly spread to a height of about three meters. The clay liners are strongly fractured by the shrinkage of the material, so there are many areas with risk of detachment. The lime plasters in the arch wall show numerous losses of material and there are also some graffiti (made by incision) due to recent acts of vandalism.

Some cavities in the eastern wall seem to correspond to the points of support of some type of wooden structure or curtain located in that place as a of iconostasis. When working in this area, it will be necessary to consider the walls analysis carried out by the archaeology team, counting on their criteria technical to fill these spaces.

The pavement of the room is constituted, as in the rest of the Site, by the same rock as of the rock shelter one, covered by a layer of earth. Currently, it has many cavities and areas at different levels, so that, once the archaeological intervention in this area is completed, it is necessary to fill the main irregularities, covering the areas with a geotextile sheet and, over it, washed sand and gravel (or a suitable similar system).

Apse (third chamber of the Chapel)

The Apse (1.37 x 2.07 m) shows a construction technique identical to that of the east wall of the nave: the masonry, as always irregular, is laid without mortar. On the inside masonry, a clay coating was applied and, over this, a layer of plaster of lime,

thickest around the horseshoe arch, where this material is used to shape the impost. Both clay and plaster have innumerable cracks and fractures, displacements, separation of the support. They also show some blackish spots, produced by the burning of candles mainly in the horseshoe arch. When intervening to consolidate and fix these renderings and eliminate stains, it is necessary to remember the need to preserve the old graffiti, present in the arch of horseshoe and next to the embrasure that illuminates the room.

Regarding the structural alterations, it is noted a wide crack running along the upper part of the Apse head, starting at the junction between the head and vault, to pass to a formed speleothem, which is located on the clay that covers the wall, constitutes a proof of the age of the construction. In addition to this crack in the upper part of the Apse, there is another opening located above the horseshoe arch, in the junction area between the facing and the cantilever rock, plus some other holes in the wall, which would also need to be sealed.

The stone Altar is situated in the centre of this small room. It is made up of a pillar square section with chamfered edges, on which it is laid without mortar the table of the Altar. This Altar, which was fragmented and thrown on the ground, was located in its current position after being recovered by the Cantabrian Association for the Defence of Underground Heritage (ACDPS), which proceeded to cement the two fragments into which the pillar was divided and to relocate the set, secured with a base also made of cement, in the place where it is located today. There are no indications about what it would be the real location of the Altar beyond the locations shown of other constructions with similar characteristics. Therefore, it is recommended that the research work forming part of this project provides the necessary information to determine its original location and the system used for anchoring it to the ground.

The pavement is rock, covered with earth, which forms a rather irregular surface. No intervention is proposed, beyond collaboration with the team of archaeology, which proposes carrying out a cleaning and/or excavation to try to locate any perforation or sign that allows to determine the original position of the Altar.

Annex C

Mission details and documents consulted

The expert mission took place on 14th-15th December 2021.

Here below an overview of the main participants and stakeholders who took part in the Site visit and various meetings

Europa Nostra / EIB-Institute	Aurelio Riancho, Advisor to Europa/Hispania Nostra Lourdes Llorens, Advisor to the EIB Institute Mario Aymerich, Advisor to the EIB Institute
Future for Religious Heritage	Pilar Bahamonde, Nominator of the Site
Department of Culture (forming part of the Cantabrian Government)	Zoraida Hijosa. General Director Lucia Ceballos. Head of the Cultural heritage service Enrique Campuzano. Advisor
Hispania Nostra	Alis Serna Gancedo. Archaeologist, expert in San Juan Socueva
Municipality of Arredondo	Evaristo Canales. Member of the Municipal Council

Main documents consulted

1. ERMITA DE SAN JUAN DE SOCUEVA. Nomination form. The 7 most endangered 2021.
2. LA ERMITA RUPESTRE MAS ANTIGUA: San Juan de Socueva (Arredondo). Enrique Campuzano Ruiz Doctor en Historia del Arte, Director del Museo Diocesano de Santillana del Mar.
3. LA IGLESIA RUPESTRE DE SAN JUAN DE SOCUEVA. Edited by ACANTO and the regional Government of Cantabria. 2020.
4. Memoria del proyecto RESTAURACIÓN Y CONSERVACIÓN DE LA ERMITA DE SAN JUAN DE SOCUEVA, EN ARREDONDO (CANTABRIA). Annibal González de Riancho Mariñas, Arquitecto. 2020.