

Baku-Tbilisi-Ceyhan  
Pipeline Company



Georgian National Committee of  
The International Council of  
Monuments and Sites



ICOMOS GEORGIA

# **CONSERVATION AND RESTORATION OF THE CHURCH OF ST GEORGE IN TADZRISI MONASTERY**

## **FINAL REPORT**

TBILISI 2005

**Georgian National Committee of the International Council of Monuments  
and Sites**

Conservation and Restoration of the Church of St George in Tadzrisi Monastery

**Grant Maker: Baku-Tbilisi-Ceyhan Pipeline Company**

**Grant Holder: Georgian National Committee of the International Council of  
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## CONTENTS

Summary	4
Introduction	5
Historical Context and Significance Statement	7
Work Group	10
Safety Plan	14
Cleaning Methodology	16
Description of Work Done	18
Results of Work Done	35
Bibliography	48
Appendix 1. Drawings:	
Appendix 2. Photos	

## SUMMARY

This document serves as a technical report on the conservation and restoration of St George's Church, the main building of the Tadzrisi Monastery, located in the village of Tadzrisi, Borjomi District, Georgia. Work was completed by the Georgian National Committee of the International Council of Monuments and Sites (ICOMOS Georgia) in 2005. The project was funded by the Baku-Tbilisi-Ceyhan Pipeline Company (BTC) under a grant agreement in association with the construction of that pipeline.

The church is part of a much larger historical site, the Tadzrisi Monastery complex, which was mapped and recorded by ICOMOS during the BTC-funded Monuments Phase III study in 2003.

St. George's Church at Tadzrisi is a cultural heritage resource of national importance. The site dates to the Medieval Period (900 to 1400 AD) and is affiliated with individuals important in Georgian history such as St. Gregory of Khandzta (Grigol Khandzteli) and George Athonite (Giorgi Mtatsmindeli). The church has architectural significance as well and is a good example of a Georgian tripartite basilica. The surrounding monastery complex is largely undisturbed and intact and holds tremendous archaeological research potential. Excavations and analysis could produce otherwise unobtainable information about life in a Medieval Period monastery in this region and the country as a whole.

At project inception, the St. George's Church was in use by the local community despite the fact that the walls were in partial ruin and the roof was absent. The grant agreement provided funding for limited archaeological excavations to expose the base of the structure; conservation, stabilization, and partial restoration of the walls; and construction of a new roof over the building in a historically accurate and structurally sound fashion.

This report includes a discussion of site significance and historical background, conservation methodology, the details of undertaken archaeological excavations and analyses, scale drawings documenting conservation and restoration work, and project photographic documentation.

## INTRODUCTION

The Baku-Tbilisi-Ceyhan pipeline (BTC) has been designed in late 1990s to carry Caspian oil from Azerbaijan, through Georgia, to Turkey for onward delivery to world markets. BTC is being developed by an international consortium, known as the BTC Pipeline Company (BTC Co), and led by the BP. Later the South Caucasus Gas Pipeline (SCP) was designed as well to carry gas from Caspian Sea Coast to Azerbaijan, Georgia, Turkey, and other countries. It has been planned to follow the route of the BTC oil pipeline. Thus, BTC and SCP create energy corridor that unlocks a vast store of energy from the Caspian Sea.

The Georgian section of the corridor covers 250 km and passes through seven districts of Georgia: Gardabani, Marneuli, Tetritskaro, Tsalka, Borjomi, Akhaltsikhe, and Adigeni. The BTC Company made extensive efforts to mitigate the impacts of the construction works on the cultural heritage. One of the BTC project's Heritage Commitments is to assist in the preservation of significant cultural properties (World Bank OPN 11.03 Management of Cultural Properties in Bank-Financed Projects).

Well before construction began, a comprehensive survey was carried out to identify and avoid cultural heritage sites. Centre for Archaeological Studies (CAS) and Georgian Cultural Heritage Protection Department (CHPD), in collaboration with URS Corporation, prepared Cultural Heritage Management Plan (funded by the BTC Company), which defined the following pre-construction phases:

- Phase I – Identification of resources that may be impacted by the pipeline construction;
- Phase II – Evaluation of resources to determine necessity of mitigation measures;
- Phase III – Implementation of mitigation measures.

In 2005, the BTC decided to fund the conservation and restoration works on an important architectural monument, located close to the pipeline, and listed during the Phase III works. After discussions by BTC Cultural Heritage Team, URS expert and CHPD, the Church of St George in Tadzrisi Monastery was chosen for conservation and restoration works. The decision was reached with the following justification:

- Historic significance: association with famous individuals in Georgian history;
- Architectural significance and artistic value;
- Attachment of local population to this place of worship. The project could serve to improve relations with villagers who were critical of the BTC project.
- The site can be an integral component of Georgia's future economic growth strategies, using heritage tourism as a basis of development.

The Project implementation was entrusted to ICOMOS Georgia, an organisation founded in 1993 as a National Committee of International Council on Monuments and Sites (ICOMOS). Members of ICOMOS Georgia team are professional architects, restorers, engineers, architectural historians, and archaeologists of many years standing. They have carried out conservation and restoration works on a number of architectural monuments, including Medieval churches in various regions of Georgia and old dwellings in Tbilisi.

The Tadzrisi Monastery is located directly southwest of the village of Sakire and south of the village of Tadzrisi. The closest boundary of the site is approximately 130 metres south of the BTC right of way. The site consists of the remains of two stone church structures surrounded by ruins of other monastic buildings. The Church of St Mary is a small (5.4 m by 4.3 m) single-nave structure. St George's Church, which is the main building of the monastery complex, is larger (12.6 m by 13.2 m). It is a tripartite building with the central nave and annexes. The church has been neglected for many years and is in extremely poor condition without roof. There are serious decay problems with some collapse of walls, surface erosion as well as the loss of blocks and stones leaving gaps in the facades. Rain penetrates the structure at these locations and speeds decay. The tops of the wall structures have also decayed, allowing continuous flow of water and aggravating damage below. Some vegetation is also present on and adjacent to the structures, causing further deterioration.

The objective of the Project was to conserve and stabilize the main building of the Tadzrisi Monastery - St George's Church. The planned work included preparing and cleaning the site area; stabilizing, conserving, and partly restoring the base, walls, and architectural details of the church; and making a roof.

## HISTORICAL CONTEXT AND SIGNIFICANCE STATEMENT

The historic significance of Tadzrisi is determined by the fact that its origin is connected with the activity of the followers of St Gregory of Khandzta (Grigol Khandzteli, 759-861), the most eminent Georgian religious leader in the Early Middle Ages. Around 780, St Gregory arrived in Klarjeti Province (historic South Georgia, now in Turkey) and began the construction of monasteries in that desolate land. Soon the group of disciples gathered around him and they, in their part, proceeded with building monasteries in Klarjeti and other regions. In 830s, two of St Gregory's disciples, monks Theodore and Christopher left Klarjeti and went to mountainous region Tori (coincides with the present Borjomi District). At that time, the region was sparsely populated and apparently, there were no monasteries. Theodore and Christopher founded two monasteries, Nedzvi and Kviriketsminda, in the north-easternmost section of the Borjomi Gorge, in the vicinity of the present town Akhaldaba. The monasteries become hotbeds of a new building activity, which lasted until the late tenth century and resulted in establishing some ten monasteries throughout the Borjomi Gorge. Tadzrisi, chronologically the latest among them, was a nunnery. No information can be found in the written sources about its foundation. Judging from its architectural peculiarities, it should have been founded in the last decades of the tenth century.

In comparison with the earlier monasteries of the Borjomi Gorge, Tadzrisi shows essential difference. The monasteries constructed in the ninth and early tenth centuries were located in narrow ravines or steep mountain slopes. This obviously is a reflection of perilous times when devastation could occur through Arabs' punitive raids and forays, making the careful selection of these sheltered sites quite necessary. Tadzrisi illustrates the new concept of sitting arisen from an improved defensive system and secured borders from the middle of the tenth century. The security of monasteries was no longer determined by their location, but by the fortresses and towers controlling both the main and secondary roads. The Tadzrisi monastery is built in open, easily accessible valley. Not far from it, there are some other monasteries as well (Gujriskhevi, Mitsis-Sakdari). Neighbouring Sakire fortress dominating over the vicinity had to give the sense of security to monks and nuns.

The different location caused different economic conditions. Evidently, Tadzrisi was much richer in chapter-lands than other monasteries of the Borjomi Gorge. Economic advantage favoured rapid development of the monastery. According to narrative sources, George Athonite (Giorgi Mtatsmindeli), later the abbot of the Georgian monastery at Mount Athos, was growing up here from 1016 to 1019 under the observation of his sister Theckla. He was an eminent theologian, writer, translator, and public figure, and made significant contribution to

the various genres of the Georgian literature including hagiography, hymnography, dogmatics, as well as to the church law. “The fact that his father Jacob, an influential dignitary, entrusted his children to the care of Tadzrisi nuns, confirms the high prestige of the Tadzrisi monastery. Obviously, it was held in respect and had a fair name” (see: D. Khoshtaria, 1986).

After the Ottoman Turks had conquered the Tori Province (Borjomi Gorge) in 1550s, Tadzrisi was deserted. Monastic buildings gradually fell into decay and collapsed. In the eighteenth century, the region was reunited by the Kingdom of Georgia, but Tadzrisi and other monasteries have not been restored. It remains ruined up to now. Nevertheless, it is still the place of worship. The villagers arranged open-air sanctuaries in the church and the chapel and often come here to pray. The patron saint’s day, St George’s festival is celebrated here by the residents of Tadzrisi and surrounding villages.

The monastery is located on a hill in the southern outskirts of the village Tadzrisi. Its core occupies an area in the middle of the hill, which is covered with dense vegetation. There is a cemetery around the monastery, with nineteenth- and twentieth-century graves.

The monastery consists of the main church dedicated to St George, a chapel, an abbot’s house, monks’ cells, and various subsidiary buildings. Later a fortress was built nearby. The whole group of structures was enclosed within a circuit wall.

Judging from its architecture, the Church of St George can be dated from the late tenth century, though it is evident that later it was renewed. The tripartite plan of the church belongs to the so-called *drei-kirchen basilica* type, which is believed to be formed in Georgian architecture, as is unknown outside Georgia. The church displays features which follow local building practice on the one hand, and artistic and structural tendencies common with the Medieval Georgian architecture in general on the other. The church has been studied and dated by David Khoshtaria in his work “Tenth Century Monastic Churches in the Environs of Tadzrisi and Sakire” published in 1986.

The smaller church (or chapel) dedicated to St Mary stands to the north of the Church of St George. Architectural features date it back to the fifteenth century. Ruined monastic buildings are mainly situated to the west and north-west of the churches. They are compactly planned oblong rectangular structures built of coarsely cut big blocks, without using mortar. Now they are mostly covered with soil and only contours of their plans can be traced.

The group of structures, which was identified as the abbot’s house, is situated to the south-west of the churches. They have also survived on a level of plan, though some parts of walls have been preserved to the height of two metres. They are built of coarsely hewn stones on lime mortar. A large tripartite hall with slightly rounded corners is distinguished in this group. Adjacent rectangular rooms are smaller. The house has an enclosure and looks like an independent architectural complex. The presence of the abbot’s house must be stressed specially; it is an uncommon thing among the preserved Georgian monasteries.



Ruins of the fortress constructed in the thirteenth century can be seen to the north-west of the monastery on the top of a hill, which is divided from the monastery with a narrow ravine. The walls of the fortress follow the round top. They are built of big stones, which are well-matching each other though of irregular shapes. Several rooms can be traced in the fortress. There is also a two metres deep pit. The fortress and the monastery had a common enclosure, fragments of which are still have been recorded at the bottom of the hill, near the village road.

Thus, the buildings preserved in the Tadzrisi monastery date back to different periods ranging from the tenth to the fifteenth century. Having different function and belonging to different times, they illustrate various stages of the history of Tadzrisi.

## WORK GROUP

The Project implementation was entrusted to ICOMOS Georgia, an organisation founded in 1993 as a National Committee of International Council on Monuments and Sites (ICOMOS). The project will be executed by an interdisciplinary team of experienced and qualified professionals: architects, restorers, engineers, architectural historians, and archaeologists. They have carried out conservation and restoration works on a number of architectural monuments, including Medieval churches in various regions of Georgia and old dwellings in Tbilisi.

Merab Bochoidze, Project Director, will be responsible for seeing that this project is completed in accordance with the terms of the grant agreement, to a high technical standard, on time, and within budget. He will oversee all personnel and staffing; budgetary and administrative issues; technical proposals, reports, and other project deliverables. He is the primary point of contact for this project. Lali Akhalaia, Project Field Coordinator, will be responsible for overseeing all field activities.

### **Key Experts:**

**MERAB BOCHOIDZE** – Project Director, architect-restorer, president of the ICOMOS Georgian National Committee since 2002. His professional experience includes: Revitalisation programme for the Betlemi historic district, Tbilisi, funded by UNESCO Cultural Heritage Division and Norway Funds-in-Trust (director, 2004-2005); Development of the Conservation Plan and Intervention Guidelines for Betlemi Micro-quarter, funded by UNESCO Cultural Heritage Division (director, 2004); Emergency stabilisation of Tbilisi Synagogue; funded by Jewish Heritage Programme through the World Monuments Fund (director, ongoing project); Emergency stabilisation works in Betlemi Micro-quarter; funded by Samuel H. Kress Foundation through World Monuments Watch programme (director, 2002-2003); Conservation of the Church of Archangels in Ikorta supported by the FPCHG (WB and GoG joint programme) and World Monuments Watch (project leader, 1999-2003); Preliminary work for conservation of Chazhashi Village, Upper Svaneti (World Heritage Site), funded by the Getty Grant Programme (project leader, 1999-2001); Conservation of Pitareti Monastery funded Samuel H. Kress Foundation through World Monuments Watch programme (project leader, 1996-1998), etc. He also took part in the BTC Cultural Heritage Management Plan Phase II and Phase III works as a team leader.

**LALI AKHALAIA** – Project Field Coordinator, archaeologist. She was working in the State Museum of Georgia and the Department for Protection of Cultural and Historical Monuments of Georgia. His professional experience includes: Exploration of cyclopean buildings of Georgia (Trialeti, Javakheti), funded by the Open Society - Georgia Foundation (team member, 1999-2000); Preliminary work for conservation of Chazhashi Village, Upper Svaneti (World Heritage Site), funded by the Getty Grant Programme (team member, 1999-2001), as well as a number of archaeological excavations in various regions of Georgia. She also took part in the BTC Cultural Heritage Management Plan Phase II and Phase III works.

**IRINA ELIZBARASHVILI** – Ph. D. (1992), architectural historian. She was working in Chubinashvili Institute of History of Georgian Art and the Department for Protection of Cultural and Historical Monuments of Georgia. From 1995, she is the member of ICOMOS Georgia team. She has taken part in several scientific conferences and published 12 articles dealing with different aspects of Medieval Georgian architecture. Her contribution to the study of so-called two-nave churches was particularly significant. She participated as an architectural historian in almost all of ICOMOS Georgia projects.

**ETERI MAKHATELASHVILI** - architect-restorer. From 1984 to 1999, she was working as a conservation architect in the Centre for Restoration of Architectural Heritage of the Main Board for Protection of Cultural and Historical Monuments of Georgia. From 1999, she is the member of ICOMOS Georgia team. Her professional experience includes: Revitalisation programme for the Betlemi historic district, Tbilisi, funded by UNESCO Cultural Heritage Division and Norway Funds-in-Trust (architect, 2004-2005); Development of the Conservation Plan and Intervention Guidelines for Betlemi Micro-quarter, funded by UNESCO Cultural Heritage Division (architect, 2004); Preliminary work for conservation of Chazhashi Village, Upper Svaneti (World Heritage Site), funded by the Getty Grant Programme (architect, 1999-2001), etc. She is the author of restoration projects of 27 monuments and sites, including fortified mountain village Shatili (1999). She also took part in the BTC Cultural Heritage Management Plan Phase II and Phase III works.

**LIA BOKUCHAVA** - Architect-Restorer. She was working in the Department for Protection of Cultural and Historical Monuments of Georgia. In 1999, she became the member of ICOMOS Georgia team. She was author and/or co-author of numerous conservation and restoration projects, including conservation of the Church of Archangels in Ikorta supported by the FPCHG (WB and GoG joint programme) and World Monuments Watch (Project Leader, 1999-2003).

**GIORGI GUGESHASHVILI** – Architect. From 1997 to 2000, he was working as an architect and a book designer in private companies. From 2000, he is the member of ICOMOS Georgia team.

**GIGLA CHANUKVADZE** – Design Engineer. From 1970 to 1999, he was the head of the laboratory at the Seismology Institute of the Georgian Academy of Sciences. He took part in earthquake consequences mitigation works in Spitak, Armenia (1989) and Racha Region (1991). Then he was working for private architectural restoration company Khertvisi as a design engineer. From 2002, he is the member of ICOMOS Georgia team. He is the author of 43 published scientific works and 12 inventions.

**GIVI KHURTSILAVA** – Restoration Engineer. From 2002, he is the member of ICOMOS Georgia team. His professional experience includes: Revitalisation programme for the Betlemi historic district, Tbilisi, funded by UNESCO Cultural Heritage Division and Norway Funds-in-Trust (engineer, 2004-2005); Emergency stabilisation of Tbilisi Synagogue; funded by Jewish Heritage Programme through the World Monuments Fund (engineer, ongoing project); Emergency stabilisation works in Betlemi Micro-quarter; funded by Samuel H. Kress Foundation through World Monuments Watch programme (engineer, 2002-2003); Conservation of the Church of Archangels in Ikorta supported by the FPCHG (WB and GoG joint programme) and World Monuments Watch (engineer, 1999-2003); Preliminary work for conservation of Chazhashi Village, Upper Svaneti (World Heritage Site), funded by the Getty Grant Programme (engineer, 1999-2001); Conservation of Pitareti Monastery funded Samuel H. Kress Foundation through World Monuments Watch programme (engineer, 1996-1998),

**PAATA GAPRINDASHVILI** – archaeologist. He was working in the Centre for Archaeological Studies and Tbilisi State University. He has explored the so-called Darian Culture and published several articles on this subject.

**TEMUR BURKIASHVILI** – plaster specialist.

### **Key Masters:**

Guram Nachkebia – Senior Restorer-BUILDER

Murad Rukhadze - Restorer-BUILDER, Mason, Carpenter

Gizo Mchedlidze - Restorer-BUILDER, Scabbler

Gia Iremashvili – Mason, Scabbler

Badri Grigalashvili – Roofer

**Assistant Builders:**

Alexand Naskidashvili

Vardo Akiashvili

Lado Akiashvili

Temur Naniashvili

Giorgi Grigalashvili

**Local Assistant Builders:**

Kukuri Chutverashvili

Guram Beshkenadze

## **SAFETY PLAN**

The safety plan is designed to conduct the whole work in such manner that everybody's health and life will be protected. Project participants will follow the safety arrangement and precautions set forth in Georgian legislation and BP Golden Rules.

### **Job Site Arrangement**

- Before starting work, the site will be cleaned of vegetation and protected with a temporary fence.
- The temporary fence will be made of wood. Because of the uneven relief, a fence consisting of wooden pillars and three horizontal crossbeams is preferable. The enclosed area will have two entrances from the east and the west, with corresponding signs.
- The small wooden structure to the southwest of the church will be repaired and used as a subsidiary room in the period of work.
- Outside the area of the monastery, a temporary wooden toilet will be erected.
- The site will be provided with fire extinguishers.

(See fig. 1 for Job Site Arrangement)

### **Access and Scaffolding Plan**

- After completing cleaning the area, wooden scaffolding will be erected. The character of the monument and relief makes use of prefabricated scaffolding impossible. Softwood timber will be utilized for the scaffolding construction.
- The scaffolding will be designed in accordance with safety requirements. It will include safety barriers to minimize falling hazards.
- Special methods will ensure firmness / stability of the scaffolding without resting it against the church walls. (See fig. 2 for scaffoldings)
- After erecting the scaffolding, it will be tested and accepted by the engineer. After every working day, the scaffolding will be cleaned and checked.
- By means of scaffoldings, personnel will have access to the church in order to conduct stabilization and roofing works.
- Personnel using scaffolding will wear harnesses attached to a secure anchor.

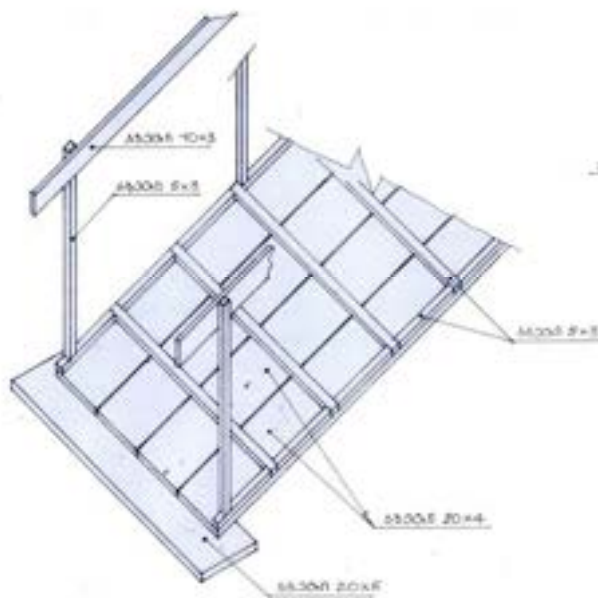
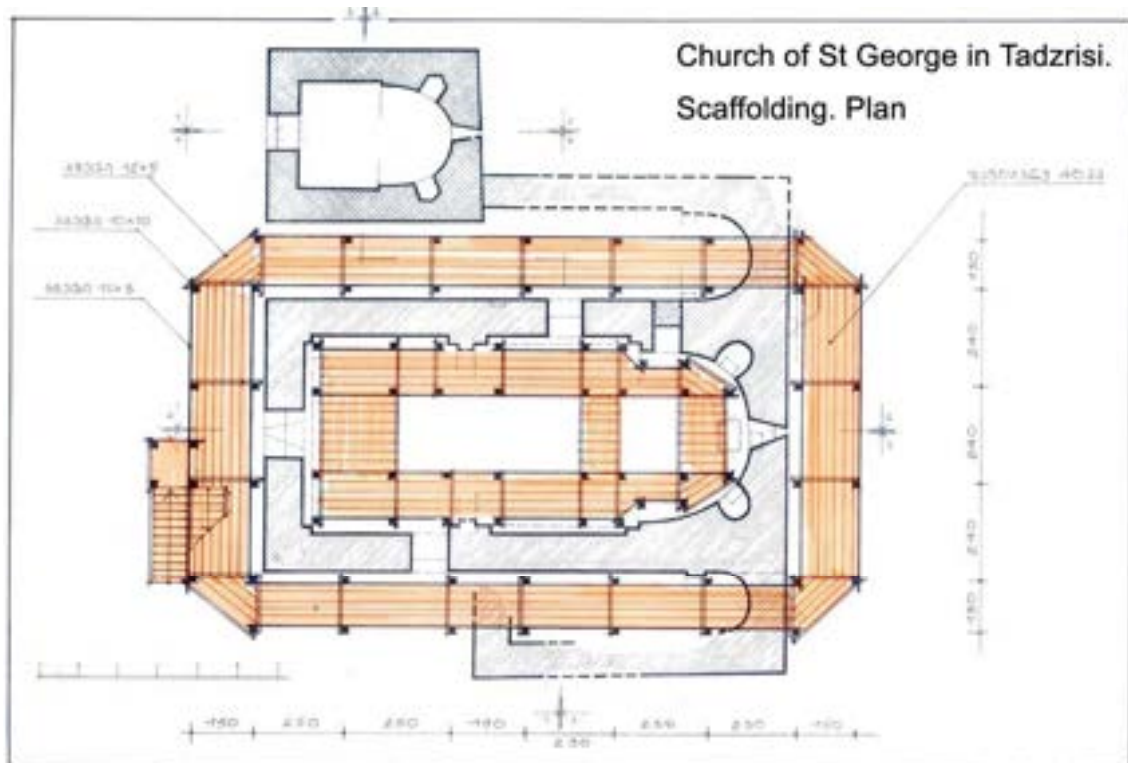
### **PPE**

Taking into consideration HSE policy and standards of the Company, we expect that the whole field personnel will have PPE, including hardheads (in case of risk), protective glasses (in case of risk), high-visibility jackets, and safety boots.

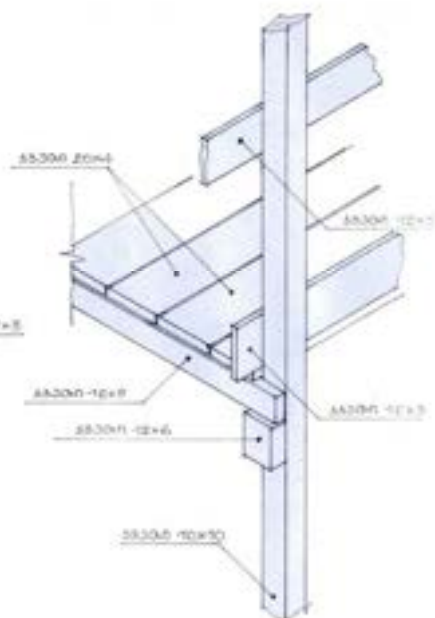
### **Traffic Safety**

All project vehicles will be with left-side rudders. They will be provided with:

- Safety belts
- First-aid set / medicine chest
- Fire-extinguishers
- Electric torch
- Lifting jack and spare wheel
- High-visibility jacket
- Warning signs
- Winch
- Appropriate documentation

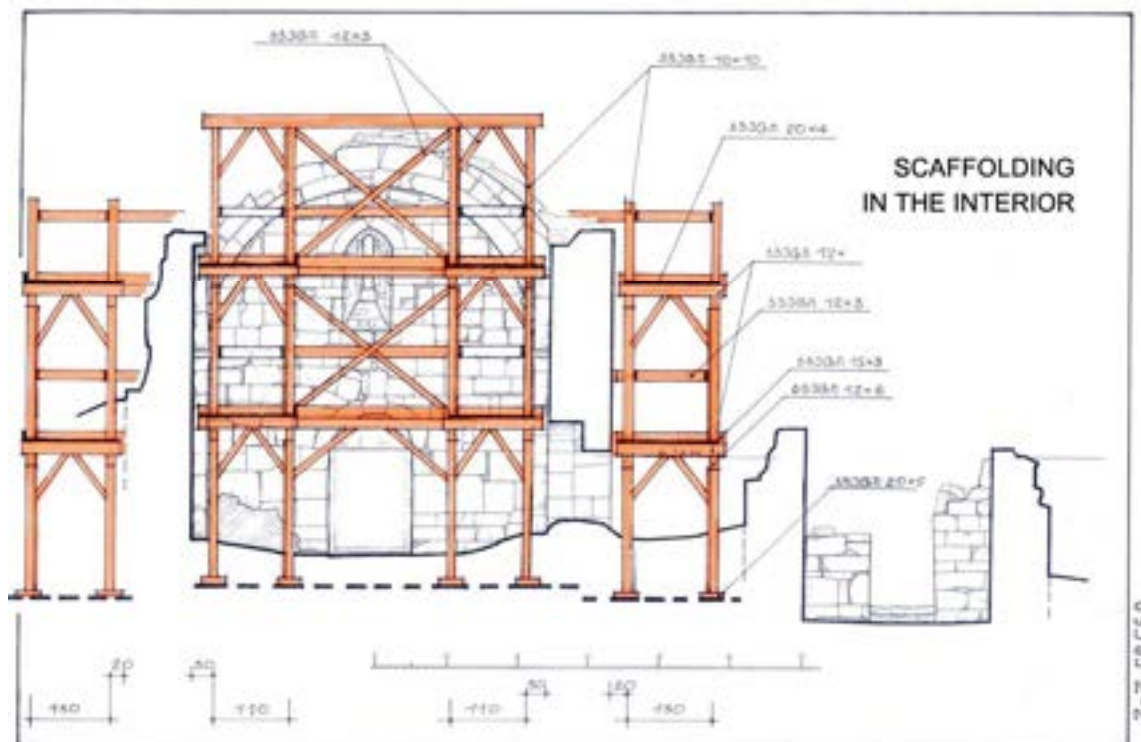
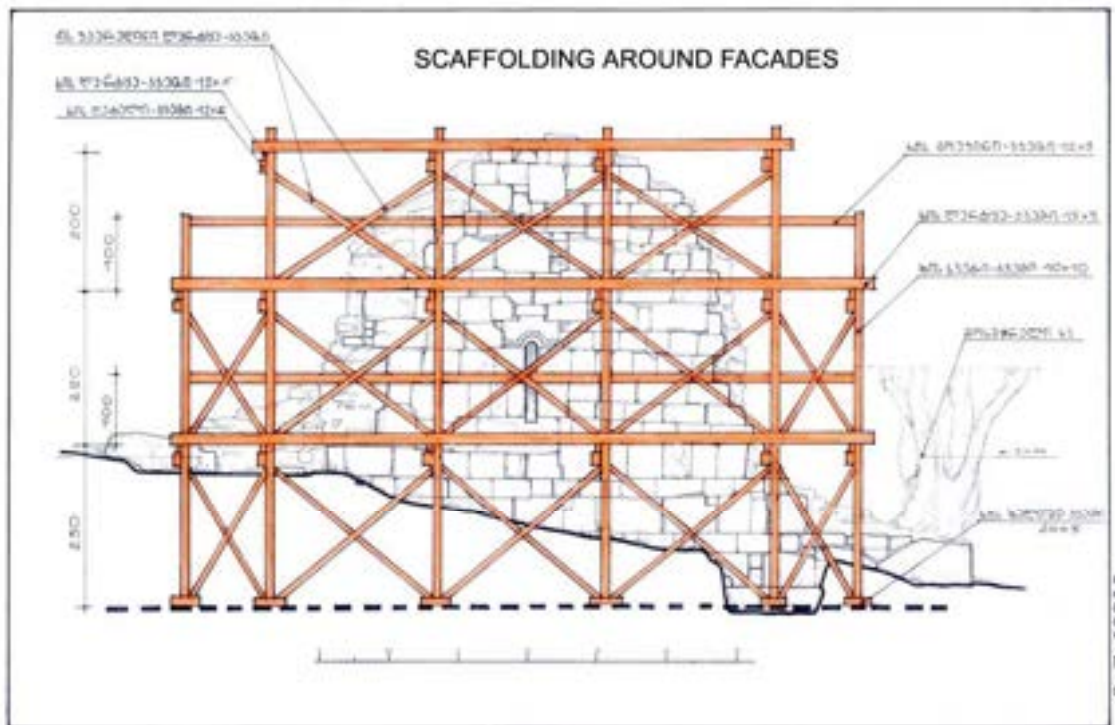


Ladder to scaffolding



Scaffolding detail





## CLEANING METHODOLOGY

In order to correctly prepare the conservation project methodologically, it is necessary to clean the lower portions of walls including the plinth, as well as to record and analyse architectural fragments that will be revealed in the process of cleaning.

The site will be cleaned in accordance with the instructions of the architect and the conservation engineer, under immediate supervision of the archaeologist.

Tall grass and bushes completely cover the site. Hundred-years-old trees partly cover the façades of the church. One such tree grows above the northeast corner of the northern annex of the church. Lower portions of the all four façades are overlaid with 120-140 cm height debris and earth. Similar material covers remnants of walls of the southern and northern annexes.

1. The 4 to 5 m wide area on the all four sides of the church will be cleaned of brush, grass, and trees. The trees, which jeopardize or will jeopardize in future the façades, will be felled and uprooted. The area will be cleaned of 20 to 30 cm thick sedimentary layer and fallen stones. In case of finding architectural details, they will be marked and recorded.
2. In order to ensure the accuracy of recording architectural details and archaeological features such as pottery, metals, bones, etc, a grid of two m<sup>2</sup> squares will be established across the work area. The grid will be tied into a permanent datum point.
3. There is a stone concentration at the western façade of the church (presumably these stones had been taken some time by local residents from the interior of the church). This section will be cleaned moving to the west on 6 to 7 m. It is expected that facing stones of the church may be found here. After marking and recording, the stones will be disposed to the west of church, on an even place. Soil will be disposed in a gully to the north-west of the church.
4. At the same time, cleaning of the area to the south of the church including the southern annex will commence. The walls will be cleaned down to the plinth level. After recording and marking, architectural fragments from this section will be placed on a safe place to the south of the church. Soil will be removed and disposed 5 to 6 m to the east of the church and in a depression 2 m to the north-east of the northern annex.
5. During the next stage, the 4 m wide area adjacent to the east and north façades will be cleaned, including the remnants of the northern annex. Architectural fragments that may come to light here, after recording and marking, will be placed in secure locations

to the east and west of the church. Soil will be mainly disposed in a depression to the north-east of the church.

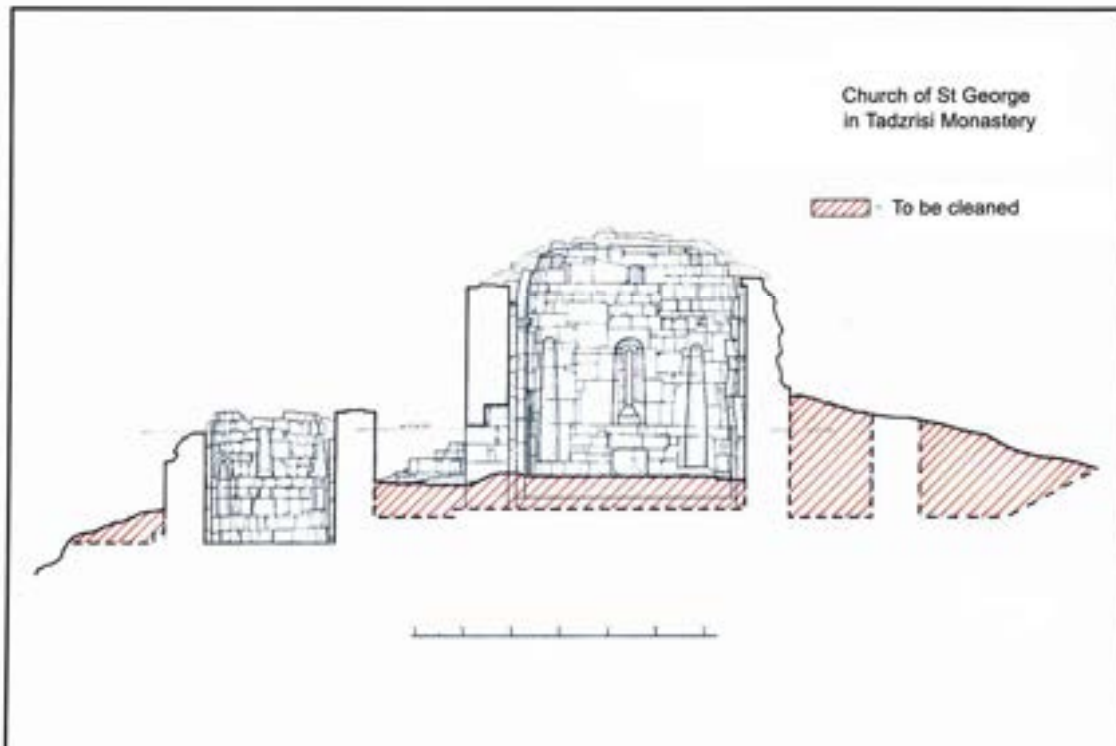
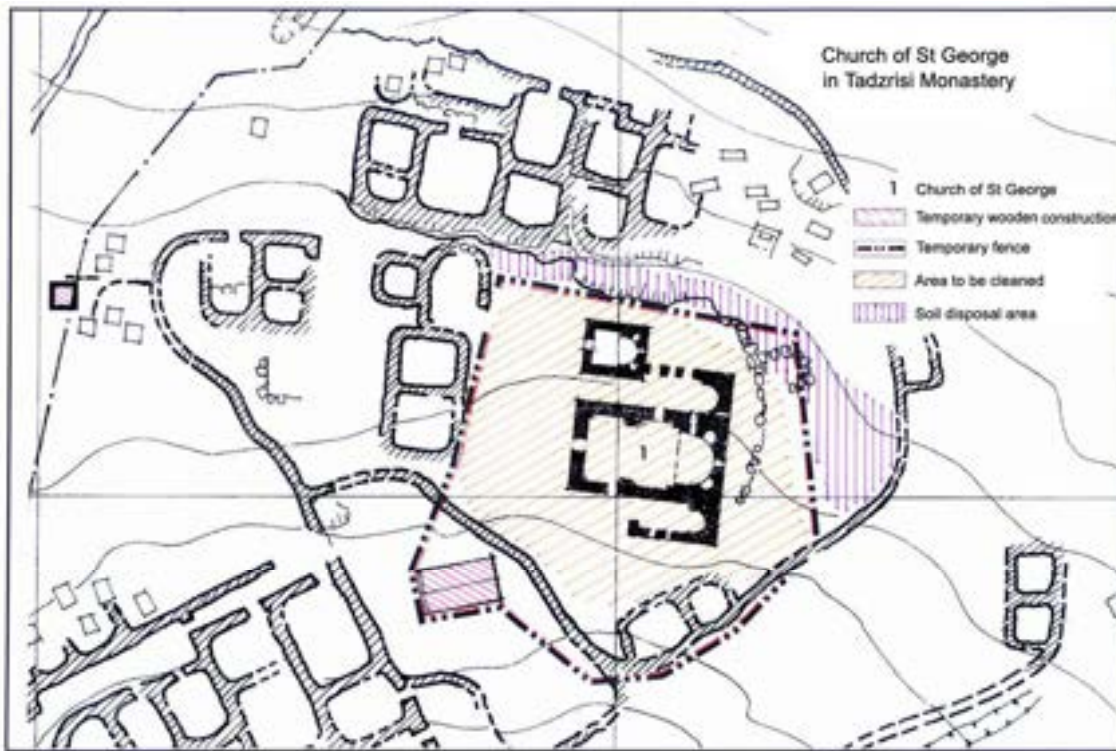
Simultaneously, the interior of the church will be cleaned down to the floor level.

In 2003, during Phase III works, a test trench was dug next to the southeast corner of the church. At a depth of 140 cm, the cover stone of a Medieval cist was found.

Placing graves close to facades of churches was usual practice in Medieval Georgia, as it witnessed from excavated sites in almost all regions of the country. In some cases, graves – either cists or pits - have been revealed even higher than plinth level. Such graves may appear in Tadzrisi as well. Thus, cleaning will be carried out by means of picks, crowbars and shovels up to the 130 cm level. Below this level, the work will be continued as carefully as possible using hoes, small picks, brushes, and knives.

If burials appear above the plinth level, they will be recorded in accordance with the standard practice (detailed description, mapping, photography, drawings, etc). Skeletons will be reburied. As a rule, burials will be avoided as much as possible, they will be disturbed only if it will be necessary for unearthing the plinth along its whole perimeter.

All archaeological materials and accompanying documentation, after processing and recording, will be conveyed to the Borjomi District museum for long terms storage and curation.



# **DESCRIPTION OF WORK DONE**

## **FIRST STAGE**

### **Chapter One**

#### **Preparatory and Research Works**

##### **Working Period: April 22 2005 – May 03 2005**

- Experienced specialists having expert knowledge in their fields have been selected for the Project team (Appendix 1: List of participants and CVs).
- Project team has started archival work including the study of technical reports, publications, photos, and other project-related data.
- Cleaning methodology has been developed including the plan of removing soil, stones, and vegetation from the area around the church (Appendix 2).
- Safety plan has been developed (Appendix 3).
- Site preparation plan has been developed and scaffolding designs have been made (Appendix 4).

On May 03, all above-listed documents together with the request for the first transfer have been delivered to the BTC Company.

##### **Working Period: May 04 2005 – May 11 2005**

- Reviewing technical reports and other data has been completed.
- Request addressed to the Georgian Archaeological Committee has been made in order to get permission for site preparation and cleaning works.
- Art historian has started studying historic context of Tadzrisi monastery.
- Architects have started pre-project works, including the analysis of the building and its architectural analogues. Work on the graphic reconstruction of the church has been started.

##### **Working Period: May 12 2005 – May 19 2005**

- Work on the Conservation and Restoration Project has started.

- Georgian Archaeological Committee issued the permission for conducting cleaning works.
- First transfer (22 percent of the total amount) was made on May 18.
- Mobilization works on the site started on May 18
- Two participants of the Project, field coordinator Lali Akhalaia and restorer builder Guram Nachkebia attended two-day first aid training on May 19 and 20.

**Working Period: May 20 2005 – May 27 2005**

- Work on the Conservation and Restoration Project is in progress. It includes the analysis of the current state, identification of chronological layers, preparing designs, etc.
- Mobilization works completed on May 20.



Work on the Conservation and Restoration Project is in progress



## Chapter Two

### Cleaning and Project Works

**Working Period: May 20 2005 – May 27 2005**

Field team departed for Tadzrisi and settled there on May 21.



May 22

- The team has held a meeting with the local authorities, the village mayor, and the head of local council. They have been informed once again about the purpose of the Project. Local representatives had favourable reaction and expressed their gratitude for saving the church.
- BTC safety officer visited the team and gave the safety training.
- Site cleaning has started. The trees next to the north-east and north-west corners of the church, which had damaged and were still jeopardizing the building, have been felled. The branches have been cut and sorted. Bigger ones have been disposed to the north and north-east of the church in order to enlarge the existing area and to get additional space, which is necessary in work process. Smaller branches have been collected and disposed separately.

- The team has repaired the wooden hut located to the south-east of the church. Its rotten roof has been changed, supporting elements have been reinforced, and the hut has been covered with waterproof cloth for temporary use.



May 23 and 24

- The team has started cleaning the area of stones, which are scattered and/ or piled on around the church. They are being sorted, removed, and disposed in a special place.
- The area, which is to be cleaned first, has been marked. The team has begun removing sedimentary soil. Revealed stones are also being sorted and disposed in a special place. Soil is being removed and disposed in the preliminarily determined depressions in accordance with the Site Preparation Plan.
- Stumps have been uprooted.

May 25, 26, and 27

- Cleaning of the territory adjacent to the east, north, and west facades of the church is going on in accordance with the preliminarily designed plan.
- During cleaning, the team has found several facing stones to the east and the north of the church. To the west of the church, three burials have been revealed. They have been processed archaeologically.





**Working Period: May 28 2005 – June 04 2005**

#### OFFICE AND LABORATORY WORK

- Work on the conservation and restoration project is in progress. The project is developing step-by-step taking into consideration the results of the new detailed measurement / surveys, photos, and materials revealed during cleaning works. The team has made a graphical reconstruction of the building that is the backbone of the conservation project.
- Samples of the mortar from the church walls have been delivered to the project technologist for the analysis.

#### FIELDWORK

- Cleaning of the building is going on in accordance with the Site Preparation Plan. Areas adjacent to the south and north façades and south-eastern corner, as well as the interior of the church, are being cleaned of soil and vegetation.
- During this work, to the south and east of the church, several facing stones and architectural fragments have been discovered. They have been recorded (photos, drawings) and kept nearby. After cleaning the interior of sedimentary soil and stones, the floor level has been revealed.





**Working period: June 05 – June 11 2005**

#### OFFICE WORK

- Work on the conservation and restoration project is in progress.

#### FIELD WORK

- The team has cleaned the area to the south of the central nave. This task required removing a quantity of sedimentary soil both inside and outside the south annex.
- Earthworks revealed important materials, including numerous fragments of tiles of different periods and several facing stones.
- Cleaning work to the south-west of the church has been completed. The gravestone next to the south-western corner has been lowered down the level of the plinth.
- The team made two test trenches in the interior of the central nave, one at the south-western inner corner and another in the sanctuary. Owing to them, the initial floor level has been determined.
- The cleaned area around the church was worked up in such a way that water will not flood the area during rain.

On June 11, the stage of cleaning works was completed.

As a result of the cleaning works, the church appears in its initial size before spectators. It became clear that the building is much bigger, than it seemed before cleaning. The volume of the conservation work, which is to be done, has been defined. It became evident that the monument is in extremely poor condition and requires conducting considerable amount of conservation works.

On this stage of work, the team made new precise measurement / survey of the building and drawings of the newly revealed walls and architectural details. Unearthed stones have been sorted and labelled. Numerous photos have been taken.

These new materials significantly contributed to the developing of the conservation project, basing on which physical rehabilitation and conservation works will be carried out.

The work was going on by instructions of the project director and engineer and under the archaeological supervision of the field coordinator.

Together with the ICOMOS team, local residents also contributed to the physical works

Cultural heritage field officers of the Company have given the ICOMOS team every support. Due to their help, problems arisen during fieldwork have promptly been overcome.

















## **SECOND STAGE**

### **Chapter Three**

#### **Conservation and Restoration Works**

**Working period: June 13 - June 20, 2005**

##### **OFFICE AND LABORATORY WORK**

- Walls and architectural details revealed during the cleaning works have been analysed and drawn. The conservation project has been updated basing on the more accurate measurements, which have been made after cleaning the building (Appendix)
- Architectural drawings have been delivered to construction engineer in order to prepare the project of roofing.
- Mortar and plaster expert has analysed mortar samples in order to determine the compound (see Appendix).
- Field mobilization is going on. The team is preparing for installing scaffolding and starting conservation works.
- On June 17, the field team departed for Tadzrisi and settled there.

##### **FIELDWORK: June 18 to 20**

**June 18 – 20**

The BTC safety officer came to the site and conducted the training on arranging scaffolding. He saw ICOMOS drawings of scaffolding and gave favourable evaluation. The training was useful from the safety point of view.





- The facing stones of the southern façade have been marked and numbered both *in situ* and on the drawing. Then numbered stones have been removed and put nearby in a safe place. The wall has been superficially cleaned of vegetation, sediment, and weathered mortar.
- Facing stones of other facades have been numbered on drawings. Later this numbers will be indicated *in situ* as well.
- Mason and stone specialist started picking suitable stones and preliminarily processing, that is hewing surfaces and sides. This work is mainly manual, but the team also uses a stone-cutter machine.
- Construction of scaffolding has been started in accordance with the agreed drawings. On the first place, they have been erected at the western façade.
- Additional cleaning work has been carried out on the area adjacent to the eastern façade. This area has been levelled and prepared as a material disposal place.
- A huge stump has been uprooted at the south-eastern corner.

On June 20, field coordinator Dawn Alexander visited the site together with field monitors to discuss the problem of power supply. It was decided that the team would install posts and electrical cable themselves, without the Company's help. In accordance with the Company's requirements, the cable will be at the height of not less than six meters









In this period, there were many visitors. Local residents were particularly active showing great interest in the project.



**Working Period: June 21 2005 – June 28 2005**

OFFICE AND LABORATORY WORK

The ICOMOS team has completed working on the Tadzrisi Conservation Project. The following documentation has been prepared:

- Art historical research that includes architectural analysis, historical background, assessment of cultural value, and methodological recommendations for conservation project development, as well as the evaluation of the completed project (appendix).
- Conducted cleaning works revealed previously hidden parts of walls and many architectural details. It make possible to execute more precise and detailed drawings, which show in full measure the architecture of the church (appendix).
- On the base of research and analysis, the graphical reconstruction of the initial aspect of the church has been made (appendix).
- Architectural drawings of the physical stabilization and conservation project have been developed (appendix).
- Protective roofing system of the church has been processed including engineering technical documentation (appendix).
- The original mortar of the church has been analysed in order to identify its composition and to develop technological recommendations for determining the formula of mortar, which will be used during conservation and restoration of the building (appendix).
- The archaeological report of the cleaning works has been done including drawings and photos (appendix).
- New drawings made in A1, A2, and A3 format have been scanned and kept in electronic version. The project album containing a complete set of the project documentation including photos and drawings has been made.

## FIELDWORK

Mobilization works on the site are in progress:

- Lime, a traditional mortar material, was bought in Tbilisi, transported to Tadzrisi, and unloaded on the site. The quarry of reddish stone, the material suitable for cornices, was found in Kodiana. Stones have been selected and prepared for transportation.
- According to he agreement with the BTC representatives, the team provided power supply of the site. With the help of the local electrician, posts were erected and electrical cable was installed at a height of 7 m, thus meeting the Company requirements.

- Construction of the timber scaffolding is completed in accordance with the preliminarily agreed schemes.
- Selection and hewing of suitable stones is in progress.
- After the façade masonry had been numbered, unsteady and weathered stones have been removed from the facades of the church and placed nearby. After removing façade masonry, the walls have been cleaned of vegetation, sedimentary soil, and weathered mortar.
- The team has started the restoration of the masonry on the southern façade. Previously removed and numbered stones are used in this work.



**Working Period: June 29 2005 – July 05 2005**

#### OFFICE AND LABORATORY WORK

June 29

The Tadzrisi Conservation Project was approved by the Special Council For Art and Architecture of the Patriarchate of Georgia.

July 04

The Tadzrisi Conservation Project was approved by the Special Council of the Ministry of Culture, Sport, and Cultural Heritage.

(In the both cases the project was approved by a solid vote)

#### FIELDWORK

Physical works for the conservation and restoration of the church has been started:

- The team has completed removing unsteady and weathered stones from the facades of the church. These stones have been placed nearby. After removing façade masonry, we cleaned the walls of vegetation, sedimentary soil, and weathered mortar, and then washed with water.
- In the interior, after preliminarily numbering facing stones, the team removed badly damaged southern corner of the apse and the adjacent portion of the southern wall. A tree grown in this corner was cut and its forked roots going deep into the southern wall were extirpated
- The team has started cleaning and adjusting facing stones, which had been removed earlier because of their unsteadiness from the northern, western, and eastern facades. These stones were being put back in their places and mortared.
- Restoration of facing masonry on the northern annex and adjacent northern wall of the central nave has been started.
- The team began manually hewing reddish stones brought from Kodiana, which are intended for cornices.
- Masons were selecting and hewing stones for facing stonework.







On July 2, the representatives of the UNESCO Cultural Heritage Division visited the site.

### **Working Period: July 06 2005 – July 12 2005**

#### **OFFICE AND LABORATORY WORK**

Final paper work is going on. Loading into computer and sorting of photos, which reflect the process of the conducted work, is in progress.

#### **FIELDWORK**

The most part of the weathered and unsteady stones, which had earlier been removed from the northern, western, and eastern facades and cleaned, have been placed back and mortared.

In the interior, the team has started restoring badly damaged southern corner of the apse and the adjacent portion of the southern wall. Earlier removed and cleaned old stones are applied in this work.

The masonry works at the northern annex have been completed.

Restoration of the facing masonry on the northern wall, south-western and north-eastern corners is going on.

Filling of the joints with lime mortar on the newly restored masonry in the north-eastern part of the church has been started.



July 09

The crew has selected local reddish stones on Kodiana and transported to the stone-cutting workshop in Dviri, where they will be cut into blocks.

July 11 and 12

Mobilization works are in progress. New consignments of lime and black sand have been ordered, damaged equipment has been changed, and vehicles have been repaired.

At the same time, stones are being cut in the stone-cutting workshop in Borjomi. They will be used for restoring pilasters and arches.

**Working period: July 13 2005 – July 19 2005**

## FIELDWORK

July 13

- Construction materials---different sorts of lime, reinforcement bars, which will be used for belt and other materials have been transported from Tbilisi. They have been unloaded and deposited around the church at the safety places. The stones, which had earlier been selected on Kodiana and brought to the site, now have been transported to the stone-cutting workshop in Dviri under the direct supervision of the construction



engineer and the stone specialist. Here they will be cut into oblong blocks and subsequently used for the cornice of the church.

- The main part of the team is continuing the conservation and restoration works:
- Previously numbered and removed stones of the facing masonry have been washed, cleaned, and placed back using lime mortar.
- The restoration of the facing masonry on the southern façade of the church is progressing. The team has rebuilt south-western and south-eastern corners.
- At the same time, the team has started filling joints with the special mortar on the newly restored northern façade.

#### **Working Period: July 20 2005 – July 26 2005**

##### **FIELDWORK**

- Restoration of the facing masonry on the southern, eastern, and western façades of the nave is progressing. The lower stone of window and its jambs have been made on the southern wall.
- Restoration of the eastern and western gables has been started in accordance with the identified levels and canting angles.
- Cutting of stones, which are intended for arches, pilasters, and cornices, is going on in the stone-cutting workshop in Dviri.

The church is often visited by local residents and by people who spend summer in Tadzrisi and Sakire.

#### **Working Period: July 27 2005 – August 02 2005**

##### **FIELDWORK**

- Restoration of the facing masonry of the southern façade of the nave is in progress. Two window lintels have been installed on the southern wall. One of them is an old lintel stone found during cleaning works, and another has been made in the likeness of the old one



- Restoration of the eastern and western gables is going on in accordance with the identified levels and canting angles.
- The window jambs and lintel have been restored on the eastern façade of the southern annex. The lintel, which has three crosses carved on its surface, is an old one found broken to two pieces during cleaning works. It has been pasted together and the joint has been filled with special mortar.
- Filling joints of with the special lime mortar is in progress both on the newly restored and old facing masonry of the eastern wall.
- The stones, which had been cut in the oblong blocks in a stone-cutting workshop, were brought from village Dviri for further hewing on the site.

On July 29, the next stage of the cleaning works has been started to the west of the church under the archaeological supervision of the field coordinator.



On July 28, a shooting group of the Company visited the site.

From July 28 to 30, two conservation experts from Italy, Luiza De Marco of the Genoa University and architect Claudio Spinella, visited the site. They surveyed the monastery and its

environment, and appreciated the restoration methodology as well as the work process. They emphasized the importance of the conservation of St Mary's chapel, which now looks too poor in comparison with the restored St George's church.

#### **Working Period: August 03 2005 – August 10 2005**

- Restoration of the facing masonry of the southern wall of the nave has been completed.
- Restoration of the eastern and the western gables is in progress.
- Reinforced concrete belt has been made on the southern, eastern, and western walls.
- Interior lintels of the two windows of the southern wall have been restored.
- The collapsed parts of the southern wall have been rebuilt Unsteady stones had been previously removed and then have been re-used together with newly hewn stones.
- On August 6, the second stage of cleaning works to the west of the church has been completed.

On August 7, the team members went to Tbilisi. On August 8 and 9, the mobilization works were in progress. On August 10, the team went back to Tadzrisi.

At the moment, some 55-60%, i. e. the most part of the physical stabilization and conservation works has been done.

#### **Working Period: August 11 2005 – August 24 2005**

- Restoration of gables has been completed.
- The interior of the church has been cleaned of debris piled up during construction work (old weathered plaster, fallen stones, mortar, soil, etc).
- Two pilasters of the longitudinal walls have been restored with smoothly hewn ashlar.
- A wooden formwork was erected for the conch (semidome) of the apse and its facing arch. The formwork consists of semicircular timber bows and is veneered.
- New stones for the facing arch of the conch have been hewn manually.
- Restoration of the cornice was going on using newly hewn oblong reddish stones.
- Restoration of the conch of the apse and its facing arch has been started.

- Filling of joints between stones with special lime mortar has been completed on the lower parts of façades.



**Working Period: August 25 2005 –September 04 2005**

- Restoration works on the conch (semidome) of the apse and its facing arch have been completed. The arch has been rebuilt with new smoothly finished stones, also using two old stones found during cleaning works in the interior of the church. The conch has been restored on the formwork, in two courses of stones. The conch and the arch are linked with each other by means of metal holdfasts and anchors.





- The cornice of the southern wall has been restored with newly hewn oblong reddish stones, which had previously been cut in stone-cutting workshop.
- Two springing stones of the collapsed supporting arch of vaulting on both its sides have been restored. They are rested on the recently rebuilt pilasters of longitudinal walls.
- Conservation works on the southern annex of the church were in progress. Specifically, its eastern wall and the eastern part of the south wall have been processed and conservation layer has been made. Conservation of the western wall and the western portion of the southern wall of the annex has been started.
- Filling of joints between stones on facades with special lime mortar has been completed.
- The final stage of the cleaning works of the area has been started.



On September 05, the team members went to Tbilisi for a few days to relax and to get ready for the next mobilization to the site.

#### **Working Period: September 10 2005 –September 16 2005**

- The cornice of the eastern gable has been restored with newly hewn oblong reddish stones, which previously had been cut in stone-cutting workshop. The old authentic stones, which had been cleaned from old plaster and moss, have been used in the restoration of the gable as well.



- Conservation works on the southern and western walls of the southern annex have been completed. Special protective layer of lime mortar has been made on the walls.
- The team has started filling joints with lime mortar in the interior of the church.
- The team has started preparing rafters and timbers and assembling them in order to make roofing system.
- The scaffoldings have been taken off from the northern wall. The area at the northern wall has been cleaned and prepared for pavement.
- The team is completing the final stage of the cleaning works on the area to the south of the church.

#### **Working Period: September 17 2005 - September 23 2005**

- Restoration of the cornices has been completed. The cornice of the western gable has been restored with newly hewn oblong reddish stones, which had been previously cut in stone-cutting workshop. The old authentic stones, which had been cleaned from the old plaster and the moss, have been used as well.
- The floor in the northern annex has been paved with stone shale pieces. The joints between the pavement slabs have been filled with lime mortar.

- Conservation of the southern and the northern annexes has been completed; Joints are filled and the upper surface is covered by special protective layer of lime mortar.
- Filling of joints between stones with lime mortar is in progress in the interior of the church.
- The scaffoldings have been taken out of the western and the eastern walls of the church
- The team has completed erecting timber frame of the roofing. Side tie-beams / deck stringers have been installed above cornices and tied with the belt of the church by means of special cramp-irons. Trusses have been made and linked with each other by means of bottom and top chords. The roofing frame is made of planed timber covered with protective light transparent varnish.
- In the southern annex, the final stage of the cleaning works has been completed. The ground level has been lowered and prepared for paving.
- The team has completed the final stage of the cleaning works in the area to the south of the church.



#### **Working Period: September 24 2005 –September 30 2005**

- Construction of the roofing wooden frame has been completed. The roofing frame is made of planed timber, which covered with protective light transparent varnish.
- Filling joints with the lime mortar has been completed in the interior of the church.

- The scaffoldings have been taken out of the western and the eastern parts of the church.
- The thresholds of the western and the northern doors have been restored.
- The embrasure of the southern door of the nave has been cleaned of the built-in wall.
- The embrasure of the southern door of the southern annex has been cleaned of the built-in wall. The western jamb of the newly opened door has been restored.
- The western part of the church and the apse have been cleaned of sediment and prepared for paving. The sanctuary stone in the apse has been lowered on 26 cm and put at its initial level.
- Distorted footstep of the ambo in the apse have been removed and then rebuilt.
- Plinth surfaces and bottoms of niches and windows have been treated with lime mortar.
- The team started making pavement of stone shale pieces in the apse and the southern annex.
- On September 25, tinmen began the roofing works using tin plates. By the end of this working period, the roof has been made on the southern slope.



#### **Working Period: September 30 2005 –October 06 2005**

- The team has completed paving works. Pavement has been made in the ambulatory to the west of the nave. In the nave itself, the floor has been made of lime mortar. The new floor includes some well-preserved fragments of the initial lime floor.
- The threshold of the southern door of the nave has been restored. Joints between shale pieces on the recently paved floor have been filled with lime mortar.
- Roofing works have been completed.
- The construction engineer and the architect have made the project of two wooden doors. They will be made in carpenter's workshop in Tadzrisi.



On October 5, the ICOMOS team has completed all conservation works in Tadzrisi and went to Tbilisi.

**Working Period: October 18 – October 21 2005**

- Several members of the ICOMOS team have installed three doors in the church. Two of them have been made of wood in Tbilisi and then provided with forged metal details on the site. The third door is a latticework and has an open structure. Wooden doors have been covered with special varnish, and the bars have been painted in black paint.

The work has been carried out under the direction of the project director, by instructions of the construction engineer, and under the supervision of the archaeologist.

Local residents were routinely taking part in the project, namely two masters from the stone-cutting workshop, two labourers, a carpenter, and a driver were involved in the work.



# RESULTS OF WORK DONE

## 1. RESULTS OF ARCHAEOLOGICAL INVESTIGATION

From May to October 2005, the ICOMOS Georgia with the financial support of the BTC Company carried out cleaning, conservation, and restoration works on the Church of St George in Tadzrisi (Borjomi District), near KP 201 of the BTC pipeline, in 130 metres from the ROW.

In order to prepare a conservation project and start physical work in proper time, it was necessary to clean the site and to disclose the building down to the plinth level. The most part of the archaeological work both inside and outside the church was conducted between May 22 and June 10. Later, during conservation and restoration works, the area to the west of the church was cleaned and the lower part of the western wall of the southern annex was revealed under archaeological supervision. We also controlled ground lowering around the church and making drainage system.

The area around the church is occupied by the cemetery, which was intensively developing in the nineteenth and early twentieth centuries. There are gravestones with the images of crosses and tools. Children's gravestones in the form of a wooden coffin occur as well.

On the first stage of the clearance work, huge trees growing very close to and even on the façades have been felled. The site has been cleared of bushes. Roots damaged the wall facing; many stones were unstable both in the interior and on the façades. Stones have been marked and then collected along the respective façades in order to make them easily available for reusing in restoration.

To the north and north-east of the church, some kind of a timber dam has been made by means of the felled trees, in order to enlarge the existing area and to get additional space necessary in work process. Later, building materials have been disposed there. The area has been used for stone cutting as well.

When lowering earth level close to the façades, it became necessary to remove some nineteenth and early twentieth century gravestones. After clearance work was finished, all stones except for one located exactly on the remnant of the wall of the southern annex have been put back on their initial places.

We start describing clearance process from the northern side. Along the northern façade, in squares B<sub>6-9</sub> and C<sub>6-9</sub> (see plan), sedimentary soil has been removed at a depth of 60 to 140 cm and at a width of 200 to 250 cm. Three lower masonry courses of the northern wall of the northern annex have been unearthed. A huge stump next to the north-eastern corner has been uprooted. After removing the stump, a decorated window lintel and jamb stone have been

revealed in its roots. Later they have been reused in the restored apse of the northern annex, in their initial place.

At a depth of 110 to 120 cm, seven cists have been unearthed. Those found in squares B<sub>7,8</sub> and C<sub>7,8</sub> have been conserved intact as they had not hampered cleaning work at the bottom of the wall. As for others, we were forced to open cists in C<sub>6</sub> and C<sub>9</sub> squares and to rebury the dead – otherwise we could not reveal the north-eastern corner of the annex and the lower part of the northern wall.

In the removed sedimentary soil, there were debris and many facing stones. In C<sub>6,7</sub> square, at a depth of 50 to 55 cm, a 30 cm thick layer with mortared rubble appeared. It also contained big fragments of pantiles and plane tiles with adhered lime mortar. A small oil-lamp with stem found here dates from the twelfth and thirteenth centuries. It is similar to the ones known from excavations at Tamala church and Betlemi monastery (see B. Mchedlishvili, B. Nikolaishvili, 1986; B. Nikolaishvili, 1985). An 80 to 120 cm thick layer of debris and soil has been removed from the northern annex and thus it has been cleaned up to the floor level. Surviving part of its apse and an altar stone standing close to the wall have been revealed. The lower rows of the northern façade masonry of the nave and the threshold of the door have come to light. Many facing stones and twentieth-century everyday-life objects have emerged from the removed layer.

Along the eastern façade, in squares B-G<sub>10,11</sub>, sedimentary soil has been removed at a depth of 30 to 190 cm and at a width of 300 to 350 cm. Immediately close to the wall the soil depth came to 40-70 cm in the northern part and 140-190 cm in the southern part. During cleaning, debris and facing stones have been found, as well as some fragments of the late Medieval ceramic bowls. In square I<sub>9</sub>, at a depth of 50 cm, a decorated window lintel and jamb stone have been revealed. Later they have been inserted into the restored eastern façade of the southern annex. In squares G,H,I<sub>10</sub>, at a depth of 30 to 60 cm, the layer with badly damaged burials has appeared - parts of skeletons mixed with stones and interlaced with walnut roots. Actually, neither burial structure nor positions of individuals could be identified. Only after removing skeletons it became possible to establish that there were six individuals. Below this disturbed layer, in squares F,G,H,I<sub>10</sub>, at a depth of 110 to 135 cm, ten cists have been more or less fully revealed and recorded. They were positioned in two courses one over the other. Upper cists situated at a depth of 110 cm were partly damaged by walnut roots though the positions of individuals were recognizable. Lower cists were better-preserved at a depth of 130 to 135 cm. Their covering slabs formed bottoms of upper cists. Heads of all individuals were set against the church wall. All of these cists were situated above the level of the church plinth. At a depth of 195 cm, i. e. 10 to 15 cm below the plinth level, there were some more cists along the eastern façade. We have left them intact, as according to the Site Preparation Plan our task was to clean church walls to the plinth level.

Particular difficulties arose while cleaning the southern annex interior and the area adjacent to its southern façade. They were caused by the density of the Medieval and Modern graves, and by the thickness of the debris and soil layer. Inside the annex, soil has been removed at a depth of 160 to 200 cm. The lower part of the interior has been revealed including the floor plastered with lime mortar, surviving portion of the southern wall, and the lower courses of the masonry of the nave's southern façade. The floor in the apse is 25 cm higher than that in the rest of the annex, and is also plastered. Due to the cleaning work, a crypt under the apse has come to light. The threshold of the southern door has become clearly visible. While cleaning the annex, we have found burials of different periods and various structures at a depth of 80 to 160 cm. Bones were mixed with sedimentary soil, debris, and roots. At a depth of 100 cm, there were remains of wooden coffins as well. This layer of graves destroyed the southern wall of the annex – in some cases individuals had been buried even in the masonry of the wall (squares G<sub>3,4,5</sub>). Many facing stones have been found in the interior. In square I5, at a depth of 110 cm, an ornated architrave of the southern door has been unearthed. Broken pieces of the tenth- and eleventh-century pottery found in the same square at a depth of 180 cm merit special mention. These are fragments of vessels of very thin light brown fabric and a bottom of a yellowish glazed bowl.

Outside the southern annex, on the line of squares J,K<sub>2-10</sub>, sedimentary soil has been removed at a depth of 160 to 200 cm and at a width of 200 to 230 cm. A 40 to 70 cm thick cultural layer has been recorded, which contains lime mortar, facing stones and tiles of the both types in large quantities. This layer extends to the south, where excavation has not been carried out. It was the largest concentration of tiles; at other façades, they have been found in much lesser quantities. Several pieces of tiles with inscriptions have been discovered here. In this layer, some fragments of Medieval pottery have also appeared. On the line of squares J,K<sub>3-9</sub>, at a depth of 100 cm, we have again recorded fragments of wooden coffins. On the line of squares J2-8, at a depth of 120 to 140 cm, cists attached immediately to the southern wall have been revealed. They are situated at 30 to 35 cm above the plinth level and are cut into the layer with tiles. Cists have been recorded also on the plinth level and even below. This section of the church was not cleaned to the plinth level due to the presence of burials.

Along the western façade, in squares B-G<sub>2,3</sub>, sedimentary soil has been removed at a depth of 100 to 130 cm and at a width of 300 to 600 cm. The plinth of the western façade and the remnants of the western wall of the southern annex have been revealed. After uprooting in square E<sub>3</sub>, a big basalt block plaited into roots has been discovered. It has finely carved ornaments on one of its sides. The block is the part of an architectural element recorded earlier on the earth surface. After removing sedimentary soil, in squares I<sub>2,3</sub>, a layer with tiles has appeared at a depth of 60 cm, in which two fully preserved plane tiles have been found. After removing this layer, on the plinth level, fragments of painted jug of thin fabric have been

revealed. The fragments have been glued and thus, an excellent sample of the middle Medieval handled jug has been restored.

Debris, cobbles, and some facing stones have been taken away from the interior of the nave. Sedimentary layer has been removed to the floor level, at a depth of 60 to 70 cm. This layer contained many twentieth-century objects of everyday life including uninteresting pottery. As a result of clearance, fragments of the floor plastered with lime mortar have been revealed, as well as a ledge-bench at the foot of the eastern portion of the southern wall. The contour of the apse has become clearer. Its floor is 20 cm higher than that in the rest of the nave.

However, the sedimentary layer in the interior was much thicker than it had been expected - the collapse of the vaulting should have produced a huge volume of debris after all. This fact suggests that some time local residents cleaned the interior of fallen stones in order to rid of obstacles the way to the sanctuary. They took out of the church the most part of stones and moved others closer to the longitudinal walls thus making the sanctuary accessible.

As it was said above, clearance work has revealed ceramic artefacts. There are fragments of both crude cooking crockery and fine tableware, including full profiles.

The first group of ceramics consists of cooking crockery made of coarse-grained fabric. These are fragments of brown and light brownish-pink pans, rims, and handles of grey vessels (presumably pitchers), rims and sides of grey and pinkish jugs, two of which have projections on their rims.

Other group is formed of high-quality fine-grained ceramics of very thin fabric. These are fragments of yellowish-pink vessels and yellowish-light brown jugs, as well as the fully preserved jug. It is pear-shaped, with narrow neck and projecting rim. The upper end of a thin handle joins the main body exactly at the rim. The jug is painted in black and red colours (pl. XV). Similar jugs have been recorded in archaeological sites in Dmanisi, Gudarekhi, and Tbilisi. Recently, they have been found in large quantities in rock villages of Khrami Gorge. They date from between the eleventh and thirteenth centuries (see: N. Bakhtadze, 1991, p. 55, 60, pl. VIII, XIV, XX, see also relevant bibliography in the same book). In the same group should be considered yellowish-pink and grey bowls and cups of different sizes. Their analogues found in many investigated sites date between the eleventh and fifteenth centuries (see: N. Bakhtadze, 1991, p. 42, 43, 60, 74, pl. IV, V, XII, XIII; G. Rcheulishvili, 1990, p. 55, 56; Sh. Mamuladze, 1993, p. 132, 133, pl. 71).

Plane tiles and pantiles form the largest group of the ceramic production collected during cleaning works. Undoubtedly, it is evidence of the fact that the whole church was roofed with tiles. By processing technique and sizes of some details, two sub-groups can be identified. The first one includes tiles made of fine-grained clay and fired in brown or pinkish colour. Thick layer of special red dye covers their surfaces. Dimensions of plane tile are: length – 37 cm,

width in the widest part - 24 cm, width in the narrowest part – 18 cm, thickness – 2,2 cm, height of bent side – 3,5 cm. Dimensions of pantile are: length – 39 cm, thickness – 1,8 cm, height of bent border – 2 cm. Taking into consideration analogues (see: J. Jgamaia, 1980, p. 36-39), these tiles should be dated back to the tenth century.

Tiles of the second subgroup are also made of fine-grained clay with a touch of sand and fired in brownish or brick-red colour. Their surface is rugged. Most of plane tiles have grooves under bent borders along the full length. Plain tiles are 1,2 to 1,7 cm thick with 1,3 to 2 cm height bent sides.

Tiles with inscriptions merit special attention. The inscriptions are made in *nuskhuri* letters, one of the forms of the Medieval Georgian script. According to experts, who showed a keen interest in the inscriptions, the findings are significant both from paleographical and historical points of view. We would like to thank Dr Helene Kavlelashvili, the researcher from the Georgian National Museum, who has conducted a preliminary study of inscriptions and determined their dates.

The first inscription is written in two lines on the central part of a large tile, which is 2 cm thick and has 4 cm height bent sides. It is painted with red dye. The inscription was carved deeply by means of a sharp tool on crude clay, before firing the tile. The tile was broken to three pieces. Luckily, we succeeded in finding all three fragments and thus brought together the whole inscription. It says: “Christ spare Kvirike”.

The second inscription has been preserved on a small fragment, which had to be the upper right portion of a dark brick-red tile. It is 1,4 cm thick and has 2,4 to 3 height bent sides. Letters were written superficially, by means of a blunt tool, on crude clay, before firing the tile. Only endings of four lines have survived and it is difficult to understand the sense of the inscription. At present, we can only say that there is “Grigol” (Gregory) in the first line and “his” in the second.

Prof. Zaza Alexidze, the director of the Institute of Manuscripts, and Dr Helene Kavlelashvili, the researcher from the Georgian National Museum, which are the leading Georgian experts in paleography, have carried out a preliminary study of these inscriptions. They have dated the first inscription from the tenth century and the second one from the fifteenth century.

According to special works dealing with Medieval tiles, some 20 tiles with inscriptions have been recorded in Georgia. In most cases, they are made in relief and are short, usually consisting of few words written in one line. As a rule, the inscriptions are written in *asomtavruli* letters (another form of the old Georgian script, different from *nuskhuri*). Before the discovery in Tadzrisi, only one tile was known with the inscription written in *nuskhuri*. It is a five-line well-preserved text from Matani church, which mentions certain Amona,

seemingly the person, which financed the restoration of the church's roofing (see: J. Jgamaia, 1980, p. 47, pl. XX).

Therefore, the discoveries in Tadzrisi have enriched the scanty collection of *nuskhuri* inscriptions on tiles with two new samples. Additionally, they are important as they belong to the group of more-than-one-line inscriptions.

The inscriptions from Tadzrisi show high calligraphic quality and thus provoke the interest of scholars studying different aspects of Georgian script, such as the forms of letters, the rules of abbreviation, etc. Persons mentioned in the inscriptions also excite curiosity. Every new information about donators and clergymen of the Tadzrisi Monastery deserves particular attention, as narrative sources say little about its history. According to the Helene Kavlelashvili's supposition, these two men made essential contribution to the construction activity in Tadzrisi. Most likely, they should have been donators of the roofing works. The tenth-century supplicatory inscription of Kvirike (Ciriacus) should apparently be attributed to the initial roofing of church while the fifteenth-century inscription refers to its later repair.

The tiles with inscriptions have been found to the south of the church, in a cultural layer containing dozens of Medieval tiles. Thus, we attach particular importance to the expansion of the cleaning work in this area, where archaeological investigation may reveal more tiles with inscriptions. It would significantly contribute to the study of the history of the monastery.

Burials revealed along the façades of the church contain no artefacts and belong to one and the same type. Their long sides are lined with 3, 4, 5, or 6 stone slabs and short sides with single slabs. For cover of cists 3, 4, or 5 flat slabs are applied. The burials are 190 cm length and 50 to 90 cm width. In the process of reburying, it became clear that wider graves had been used for several times (squares C<sub>6</sub>, C<sub>9</sub>, H<sub>10</sub>, J<sub>6</sub>). Skeletons were mixed, so that when removing bones from upper graves those from lower graves were appearing. Fragments of skulls have been found in the middle of grave while pelvis bones have turned up in eastern end of the grave, etc. Similar situation is recorded in almost all Medieval monuments excavated in Georgia (see: L. Chilashvili, 1991, p. 74, 89; R. Ramishvili, 1970, p. 182; B. Jorbenadze, 1983, p. 159, 160; Sh. Mamuladze, 1993, p. 122, see also relevant bibliography in the same book).

In Georgia, during excavations of Medieval cemeteries in general and of those located around churches in particular artefacts have almost never been found. Naturally, it makes more difficult their dating. In our case, as it was said above, the graves are cut into the layer with tiles, which date from the tenth and fifteenth centuries owing to the inscriptions. Therefore, we suggest that the graves above the plinth level could only be made after the fifteenth century.

All archaeological materials obtained during cleaning work in Tadzrisi were delivered to the Borjomi Regional Museum after recording.

## **List of Plates**

I – Plan;

II – 1. Section 1-1;

2. View to the graves located near E, S, and N Facades;

3. View from NW.

III – N Façade of the church

1. Before cleaning;

2. First stage of cleaning of the façade;

3. Façade after cleaning;

4. The last stage of cleaning of façade.

IV N annex of the church –

1 Interior before cleaning;

2. First stage of cleaning;

3. Middle stage of cleaning;

4. Annex after cleaning.

V - E Façade of the church-

1. Before cleaning;

2. After cleaning;

3. First stage of cleaning of the façade;

4. Next stage of cleaning of the façade, before revealing of graves.

VI - E Façade of the church –

1. The graves revealed near the façade, damaged graves of upper layer.

2. View to two layer lower layer graves;

3. The stone grave.;

4. View of façade after final cleaning.

VII - S Façade of the church and annex:

1. View on S Annex before cleaning.

2. First stage of cleaning of Annex interior

3. Cleaning of annex apse.

4. The graves of 19<sup>th</sup> – 20<sup>th</sup> cc found in the depth of 110 cm in the annex apse.

VIII - S Façade of the church:

1. First stage of cleaning of S Façade.

2. Middle stage of cleaning of the façade.

3. View on SE angle on the middle stage of cleaning.

4. Graves revealed near the S façade.

IX – 1. View on S annex and S wall after the stage of cleaning.

2. Cleaning of lower structure of S wall of annex during the process of restoration.

3. The last stage of cleaning of S façade, the grave near the wall.

X - W Façade of the church before cleaning:

1. View before cleaning.

2. First stage of cleaning of façade, in the left corner the SW corner of the small church is well seen.

3. Mid stage of cleaning of façade.

4. The stage of cleaning of façade, when the scaffolding was available.

XI - 1. View on W and N facades before scaffolding.

2. Cleaning of the territory near the W façade during the restoration process.

3. Second stage of cleaning, view on the SW part of S annex.

4. View from the church to the SW, on the graves.

XII – The interior of main nave of the church:

1. Before cleaning.

2. After the first stage of cleaning.

4. The process of revealing of the first strata of the apse.

XIII - The architectural details found during the process of cleaning.

XIV - 1,2. The tiles found during the process of cleaning.



3. The tile with the inscription of 10<sup>th</sup> c.

4. The tile with the inscription of 15<sup>th</sup> c.

XV – pottery found during the process of cleaning:

1. Painted jug,

2. The bowl.

3. Lamp.

4. The fragment of the bowl covered with the yellow enamel.

XVI - 1-3 The profiles of clay bowls found during the process of cleaning.

1. The profile of big bowl.

2, 3. The profiles of fragments of yellowish jugs.

4, 5. The profiles of fragments of pots .

6. Reddish colored bowl.

XVII - 1. 1,2. Handles of pots.

3-6. Bottoms and hills of bowls;

2. Profiles of clay mugs;

3. Profiles of clay pots.

4. 1,2. Big pots.

XVIII - 1. The clay big bowls.

2. The profiles of bowls.

3. The example of plane tile;

4. The example of rugged tile.

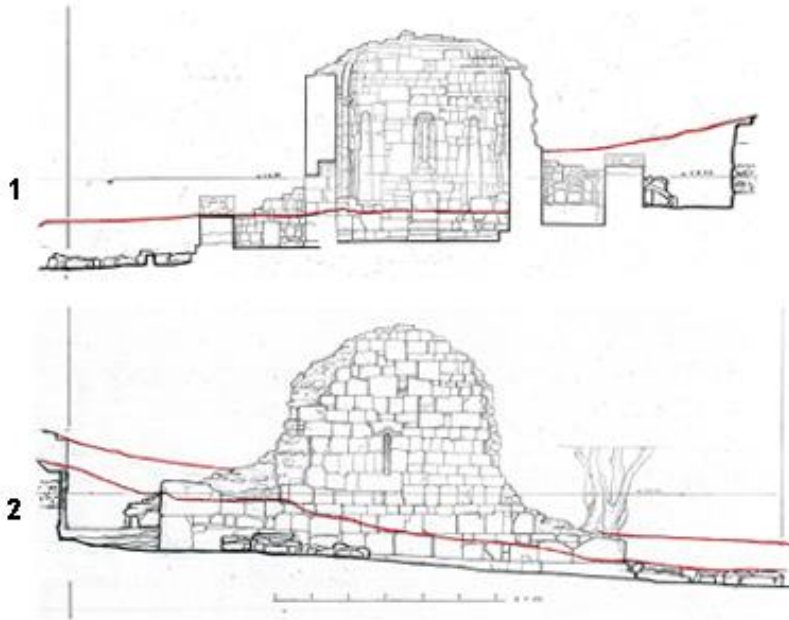
XIX – Views after restoration:

1. View from SE.

2. View from NW.



## II



# III

1



2



3



4





## IV



V



1



2



3



4



# VI

1



2



3



4



## VII

1



2



3



4





# VIII



1



2



3



4

# XI



1



2



3



4



# IX



1



2



3

X





# XI



1



2



3



4



## XII



# XIII



1



2



3



4



# XIV



1



2

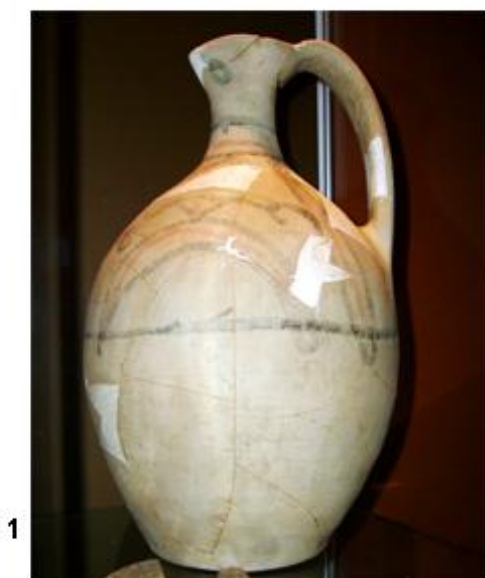


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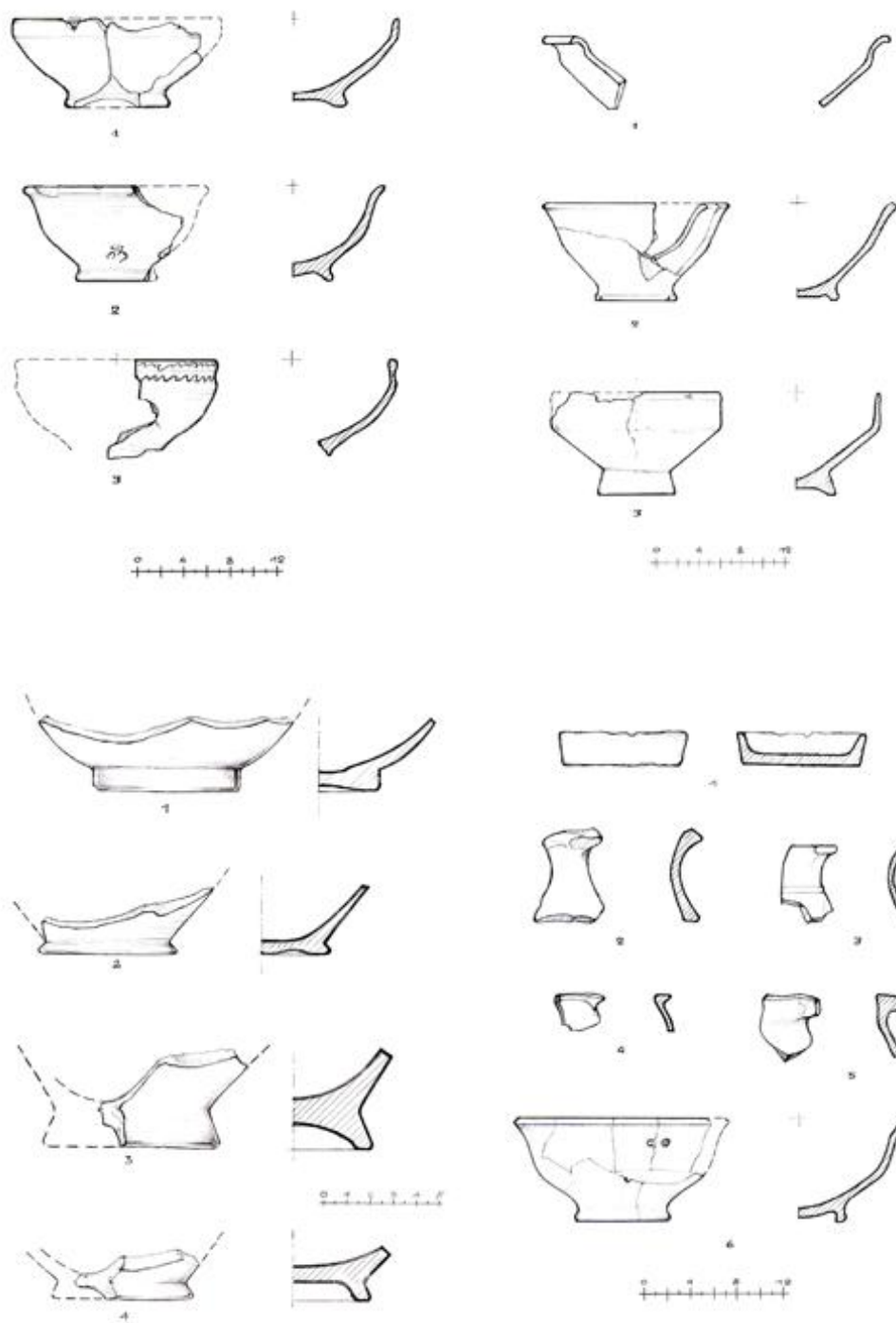


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# XV

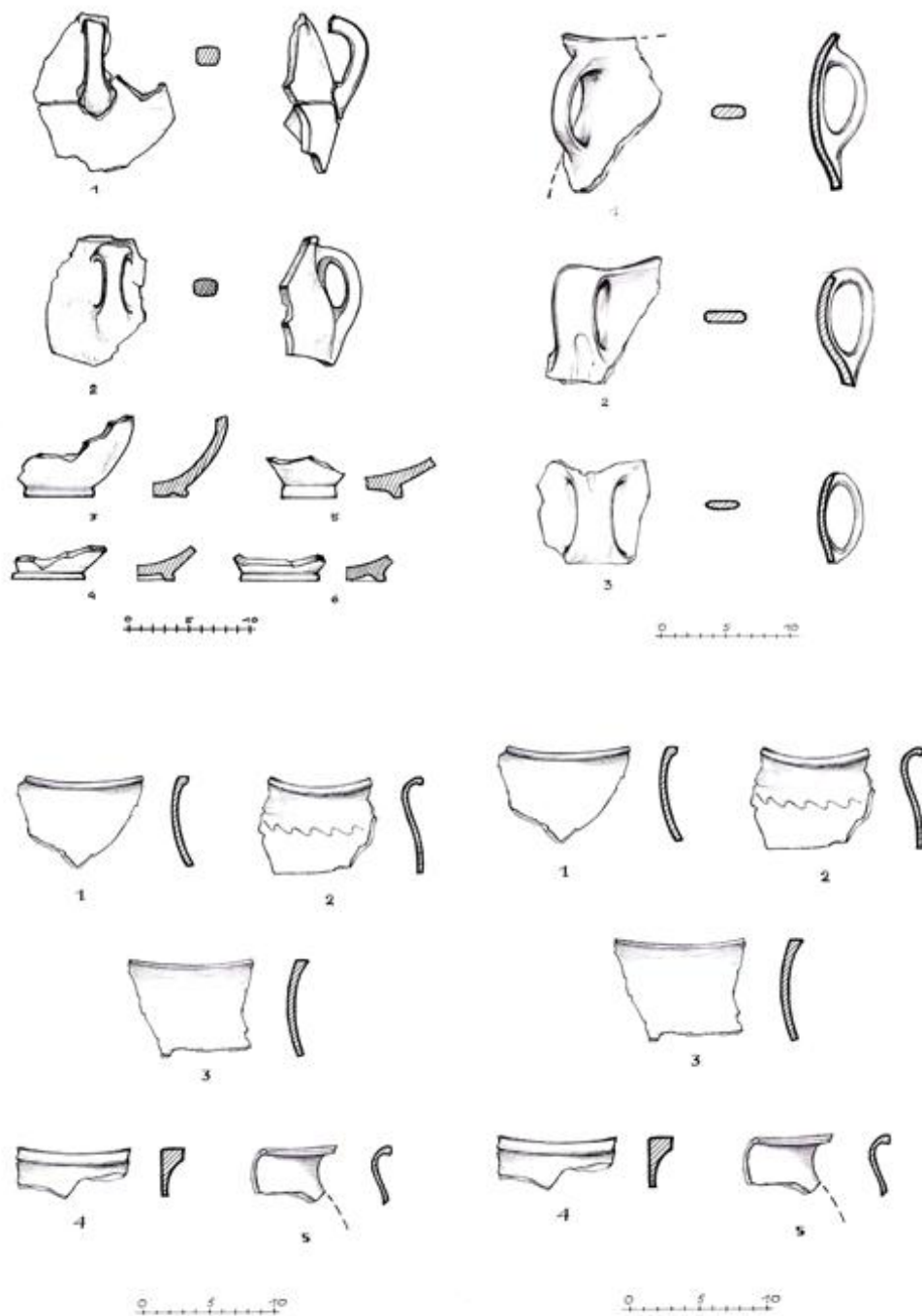


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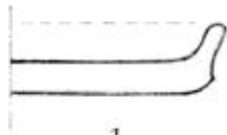




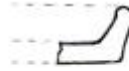
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# XVIII



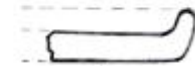
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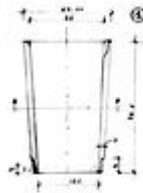
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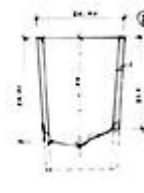
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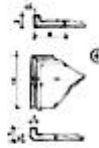
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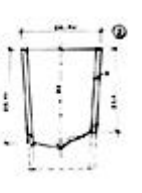


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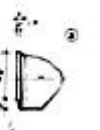
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1



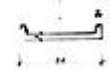
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1:10, 1:20, 1:40



# XIX



## 1. RESULTS OF CONSERVATION AND RESTORATION WORK

St. George's Church is a large tripartite basilica (17 x 13 m), both from inside and outside faced with light yellowish-grey sandstone blocks, which are bound in more or less regular courses with a frequent use of filling. The central nave is wider and higher than southern and northern annexes. It has a sanctuary in the form of an apse in its east side. Two high and deep niches flank a window in the middle of the apse. They grow narrow and have arched tops. An altar stone in the centre of the sanctuary stands very close to the semicircular wall of the apse.

The nave was connected with the northern annex by means of two doors. The both are made in the eastern part of the northern wall. The first one provided direct connection of the sanctuary with the annex – now it is mured; the second door is made close to the first. The door connecting the nave with the southern annex pierces the western part of the southern wall. The main entrance to the nave is made in the middle of the western wall. All doors have similar shape with an arch inside and an architrave outside.

The nave is divided into two bays of different width through the pair of pilasters, which formerly supported the arch of the barrel vault. Sets of strips flank pilasters from the both sides. The eastern set branches to the east to form blind arches. Presumably, the pair of blind arches was in the western bay as well, but they disappeared after the repair of the church. South-western and north-western corner pilasters support a blind arch of the western wall. There is a window in the upper portion of this wall, above the entrance of the nave. The both windows are high and narrow on the façade and significantly widen inward. A pointed arch terminates the western window. From the outside, the both window lintels have carvings. The eastern one is decorated with a plain adornment in the shape of a brow. Above the western window, there is a cross inscribed into a circle.

Before the cleaning works started, only the nave and eastern wall of the northern annex were visible above ground. The southern annex was completely covered with sedimentary soil and vegetation.

The plan and the most part of the walls including decoration undoubtedly belong to the late tenth century. The fifteenth-century repair concerned the upper portions of the western, southern, and northern walls both from inside and outside. The renewed masonry differs from the initial one as it is more irregular and the stone courses are uneven.

The above-mentioned restoration of the western parts of the longitudinal walls without blind arches also is the consequence of the renewal. It resulted in some inaccuracies of the interior treatment as well, such as the lack of coincidence between the northern flank of the apse and the north-eastern corner pilaster, different levels of the capitals of the longitudinal blind arches, lowered blind arch of the western wall, etc.

Physical work started with cleaning of the site on May 20 2005. In the cleaning process, there were two main problems. The first was the presence of big trees on the site. Tree falling and uprooting required great efforts. Numerous old graves created another problem. As it was said above, the church stands in the middle of the cemetery. Thus, the graves had been expected, but their quantity has exceeded all expectations. The whole area around the church as well as its interior was filled of several layers of graves. Naturally, it vastly complicated the cleaning process. Nevertheless, despite difficulties, the site has been cleaned of sedimentary soil, trees and bushes.

As a result of cleaning:

- The ground level in and around the Church of St George has been lowered;
- On the eastern façade, the plinth and several courses of the facing of the southern annex have been revealed;
- Next to the south-eastern corner, a decorated lintel of window has been found. It has an adornment in the form of a brow, a cross inscribed in a circle, and two rosettes on the both sides of it.
- Two arcuated stones, which formerly served as interior terminations of windows have also been found in the same place;
- Soil removal in and along the southern annex has made clear the initial plan of the church. Previously hidden southern wall of the southern annex has been unearthed. It goes along the whole length of the church and turns west thus indicating that there was an ambulatory. At the same time, the southern wall does not stop in the south-west corner, but continues to the west;
- The western wall of the ambulatory is completely destroyed and can be only partly traced on the plan level;
- Cleaning of the northern annex has revealed a stepped plinth. It became clear, that the southern wall of the Church of St Mary stands above the remnants of the northern wall of the northern annex;
- Cleaning of the interior of the northern annex has revealed the lower course of the masonry of the wall, which previously divided it into two parts;
- The shape of the apse in the northern annex has become clearly visible;
- A window lintel with a decoration in the form of brow has been found in the north-eastern corner of the northern annex;
- In the southern annex, which was completely covered with soil before clearance, a deep horseshoe-shape apse has been revealed and a crypt has been found under the apse. The initial floor level has been identified;
- After soil removal, the door from the southern annex to the nave has been opened;



- Near the southern entrance, a huge architrave stone has been discovered. It is adorned with carved 8-shape interlaced bands. Next to this stone, the altar stone of the southern annex has been found;
- In the newly cleaned southern wall of the southern annex, the jambs of door have been revealed;
- In the interior of the nave, the initial floor level has been identified. Fragments of the original lime-plastered floor have been revealed. It was ascertained that the floor in the apse is 20 cm higher than in the rest of the nave. The lower courses of the masonry of the northern wall and the threshold of the northern door have been revealed. In cleaning process, many twentieth-century objects of everyday life have been found.
- In the cleaning process, several smoothly cut oblong stones of the initial cornice have been found. One more discovered architectural detail, which has rows of small horseshoe-shape arches on its three sides, is presumably the fragment of either altar screen or stele.

In the issue of cleaning and subsequent study of the Church of St George, the chronology of the building layers has been specified. Investigation of the masonry technique made possible to clearly identify tenth- and fifteenth-century stonework. The study has ascertained some other consequences of the fifteenth-century renewal as well. The blind arch of the western wall has been lowered. The northern corner of the sanctuary has been rebuilt. It resulted in the lack of coincidence between the northern flank of the apse and the north-eastern corner pilaster. The upper portions of the pilasters have been rebuilt as well. It resulted in the different levels of the capitals of the longitudinal blind arches. The capitals in the western sections are on the level of the imposts of the vaults supporting arch, the ones in eastern sections are lower.

The fact that there are capitals on the western sides of the pilasters suggests that there had to be blind arches in western portions of the longitudinal walls as well. Obviously, they have been replaced with plain walls during the restoration. The present treatment of the southern and northern walls is unprecedented in the Georgian religious architecture – in single-nave churches with a pair of pilasters, blind arches either are made in the both parts of the longitudinal walls or are not made at all. There are no other samples with merely one pair of blind arches. Initial composition in Tadzrisi had to include two pairs of blind arches of the longitudinal walls. It has analogues in dozens of Georgian churches built between the ninth and eleventh centuries, such as St Mary in Variani, St Ciriacus in Dumatskhovo, St George in Arbo, St George in Urtkhi, St Stephen in Shindori, Kvirastskhoveli (St Thomas) in Shindisi, St George in Sukiti, St Mary in Brotsleti, St George in Arbo, St George in Niabi, etc. What is especially important, one-sided blind arches are unjustified from technical point of view.

Among the revealed materials, a huge architrave stone merits particular attention. Part of the stone was lying partly covered with sedimentary soil to the west of the church, close to the St Mary's Chapel. During cleaning works, another part was found nearby, in the roots of a big tree. Thus, the whole architrave has been reunited. It has the carved image of three crosses on its front side – a flourishing cross in the middle and equilateral crosses inscribed into circles (so-called Bolnisi Cross) on each side.



The composition of three crosses became widespread in Georgian church decoration from the early ninth century. Images similar to Tadzrisi can be seen in many the ninth- and tenth-century churches. Apparently, this huge architrave stone was covering the western door of the ambulatory, which is now destroyed, but can be partly traced on the plan level.

One more architrave stone has been found in the newly cleaned southern annex. Its front side is adorned with the frieze of carved 8-shape interlaced bands. Lower corners of the stone are cut out rectangularly that indicates its function – it was placed above the door and supported by jambs. Resembling ornamental friezes are recorded in the churches of Kumurdo (964) and Zegani / Zaki (mid-tenth century).



After cleaning the southern annex and removing later masonry from its southern door, the exact width of this door has been defined. The size of the architrave and the place of find suggest that it belonged to that very door.

The window lintels are one more significant discovery made during cleaning work. One of them has an adornment in the form of a brow, a cross inscribed in a circle, and two rosettes on the both sides of the cross. The decoration recalls that of the afore-mentioned architrave and of the western window of the church. Undoubtedly, the lintel was a part of the church decoration. It has parallels in many tenth-century Georgian churches, such as Vani in Javakheti, Disevi, Kobeti, Kvabiskhevi, Prisi, etc. Its complicated versions can be seen above the western window of Satkhe church and southern window of Armazi church. The fact that the lintel has been found close to the south-eastern corner of the church naturally suggests that it belonged to the eastern window of the southern annex. In the restoration process, it was adjusted to the window and thus successfully reused. The lintel found near the north-eastern corner of the church with double-brow decoration undoubtedly belonged to the eastern window of the northern annex. During the restoration, it has also been put above the window. As for the eastern window of the nave, which has survived in its initial place, it has a plain decoration in the form of a brow.



Thus, among the adornments of the three eastern windows of the church, that of the southern annex is the richest. It might be caused by the special significance of the annex, determined by the presence of the crypt in its apse.

Several cornice stones of a plain rectangular profile have been found during cleaning work. They helped to solve the problem of restoration of the cornice – new stones have been made according to the old ones.

Newly discovered architectural details date from the late tenth century and thus correspond to the church date proposed earlier by David Khoshtaria (see his work “Tenth

Century Monastic Churches in the Environs of Tadzrisi and Sakire”, *Matsne, Series of History*).

During centuries, the monastery underwent significant changes. Supposedly, in the thirteenth or fourteenth century the vaulting of the church collapsed together with the upper portions of the walls. Side annexes were almost completely ruined. Soon after these, the church was renewed. Apparently, the initiators of restoration thought little about the artistic quality of the work. They aimed at renewing the building as soon as possible in order to make it suitable for functioning and recommence service. They invited second-rate masters to carry out the work. Such attitude resulted in artistic and structural deterioration of the building. Nevertheless, the restorers succeeded in rehabilitating the body of the church and saving it from going to ruin



At the time of renewal, the chapel of St Mary, a small single-nave structure, was constructed to the northern annex of the St George’s church. Cleaning work made clear that the southern wall of the chapel is built over the northern wall of the northern annex. The apse of the chapel repeats in a smaller scale the apse of the church. Builders of the chapels reused fallen cornice stones of the church. All these confirm the fact that the chapel was erected after the church had collapsed. It may be dated from the fifteenth century. Presumably, it is contemporary to the church renewal.





One more important detail should be mentioned here: during cleaning work, a fragment of a stone pillar and a keystone of an arch have been found on the site. One can only speculate about where they have to be situated originally. It is obvious, that complete clearance of the whole monastery may reveal many interesting details and structures.

However, the materials obtained during the cleaning work do not allow making a complete reconstruction of the tenth-century church (including vaulting, etc). It should be taken into account that some 40% of the surviving walls are made at the time of the fifteenth-century renewal. This is the essential part of the history of Tadzrisi and must be preserved. Thus, it was considered methodologically unjustified to restore the church completely. Therefore, the ICOMOS team decided to carry out partial restoration and conservation.

The conservation and restoration have been conducted in accordance with the project. The work done included: clearance of the site, removal and restoration of weathered and unstable masonry, rebuilding of lacking forms, restoration of supporting arches, and stabilization of southern and northern annexes. The project implied reusing newly discovered architectural details, such as lintel and cornice stones, in their initial places.

The interior has been cleaned. In the nave, the floor has been made of lime mortar. The new floor includes some well-preserved sample fragments of the initial lime floor. A temporary roofing of double-painted tin plates on the timber frame has been made over the nave. Upper surfaces of the walls of the annexes have been covered with special protective mortar. The used restoration methodology made possible to avoid a rough intervention into the fabric of the building and to protect chronological layers.

Due to the conducted cleaning work, initial plan and proportions of the Tadzrisi church have been revealed. All discovered architectural details have been reused within the limits of the possible in the restoration of the church.

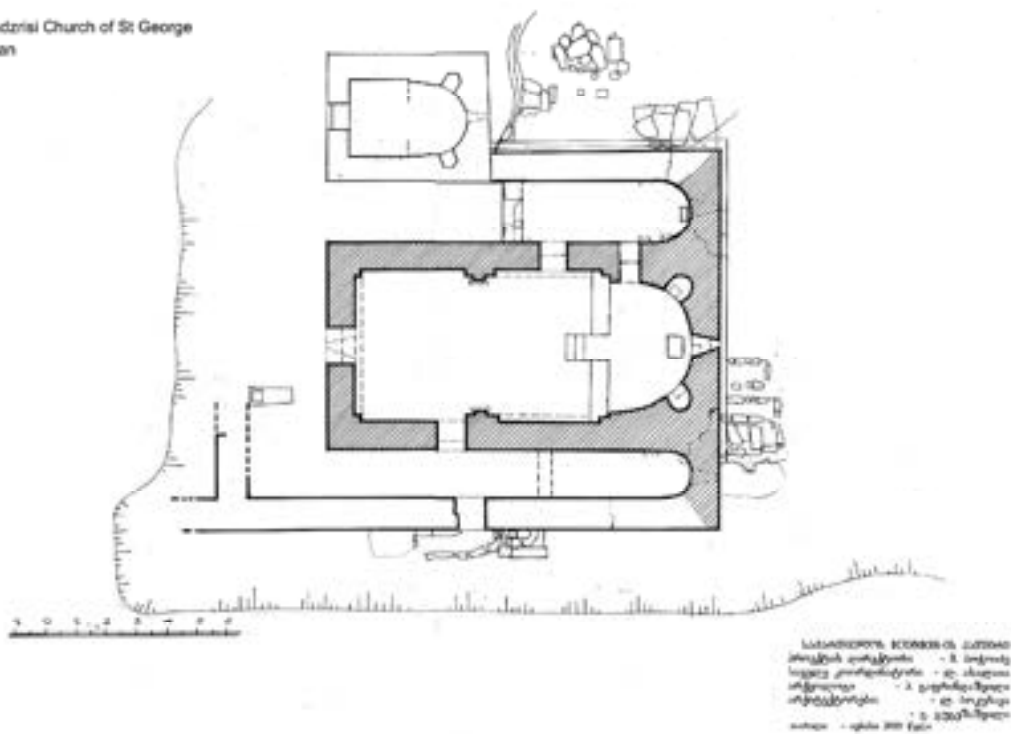
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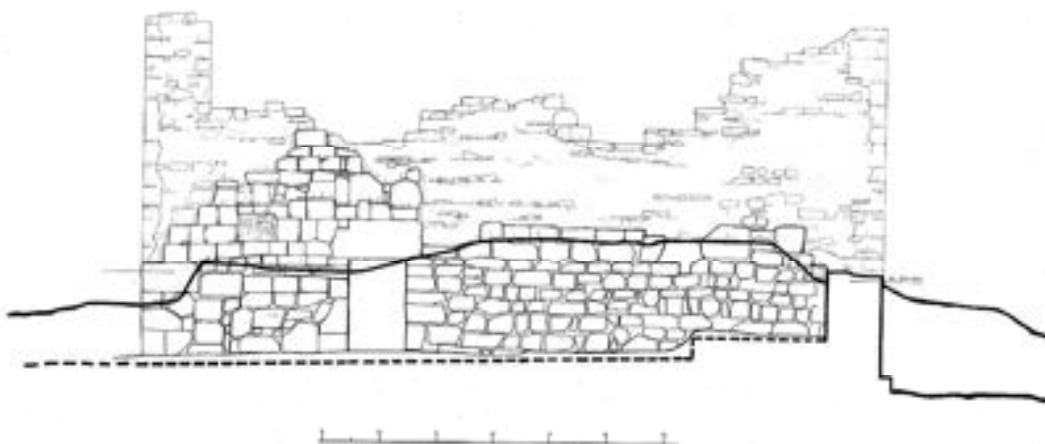
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## Appendix 1 Drawings

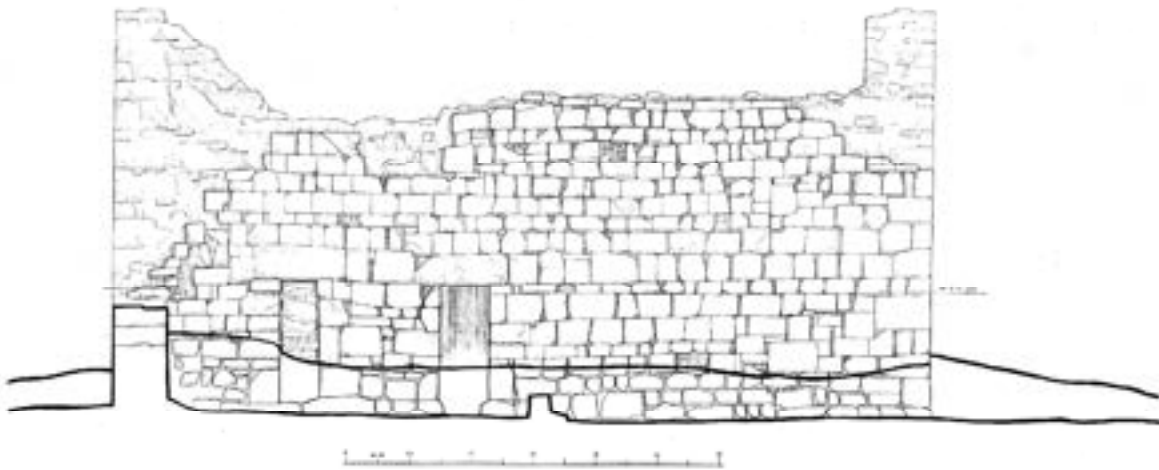
Tadrisi Church of St George  
Plan



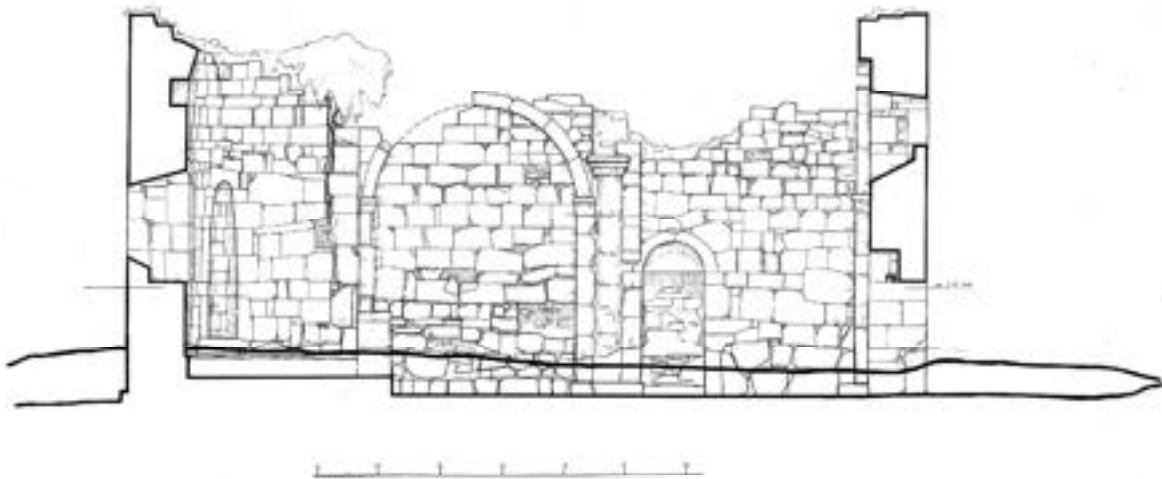
Tadzrisi Church of St George  
Southern Facade



Tadzrisi Church of St George  
Northern Facade

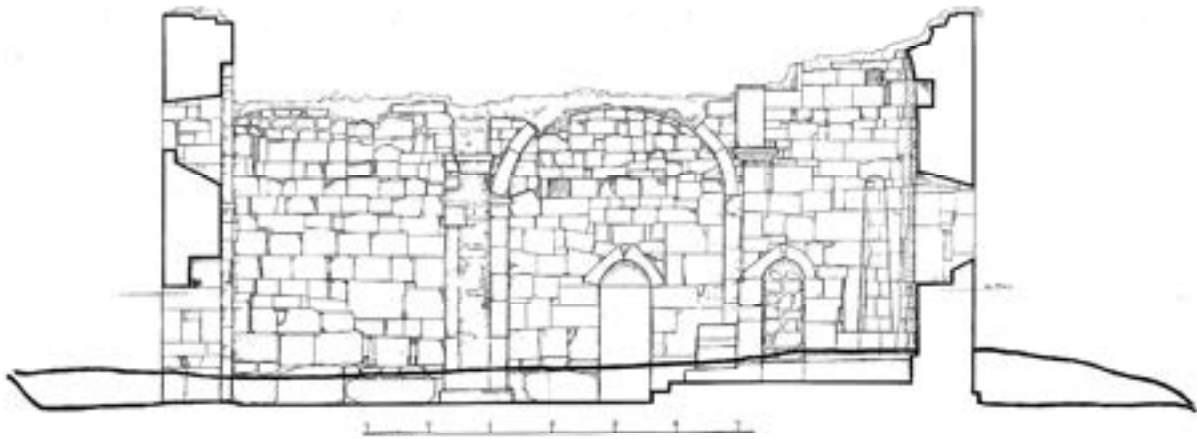


Tadzrisi Church of St George  
Longitudinal Section, Looking South





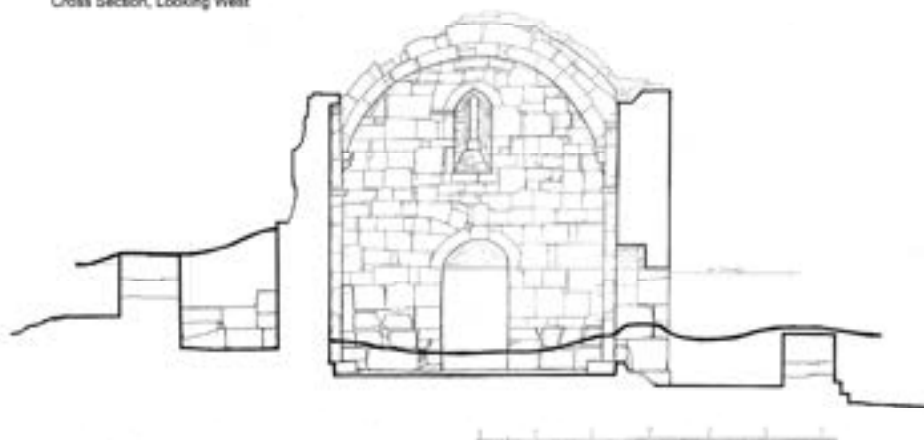
Tadzrisi Church of St George  
Longitudinal Section, Looking North



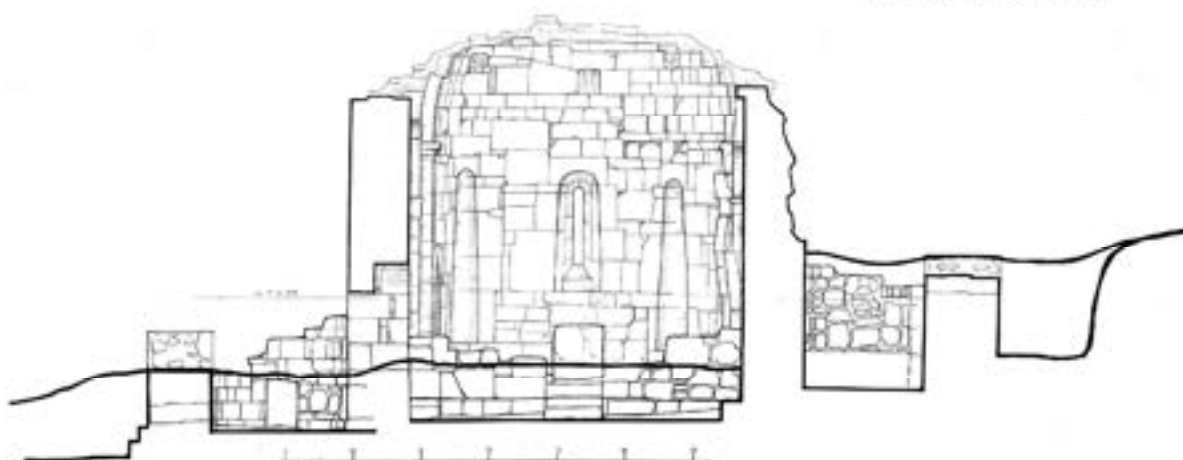
Tadzrisi Church of St George  
Eastern Facade



Tadrisi Church of St George  
Cross Section, Looking West



Tadrisi Church of St George  
Cross Section, Looking East



Tadzrisi Church of St George  
Architectural Details Discovered During Cleaning Works

Խաչքարի և առաքանի զննում  
(Խաչքար և առաքանի-պատկերներ և խաչքար)

Ձ. 1-10

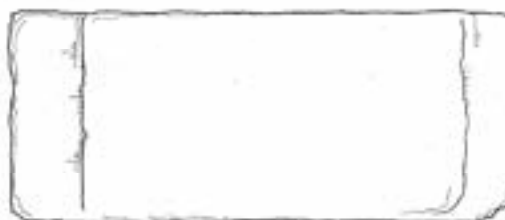


Խաչքարի զննում  
(Խաչքար և առաքանի)

Ձ. 1-10

Խաչքարի և առաքանի զննում  
(Խաչքար և առաքանի)

Ձ. 1-10



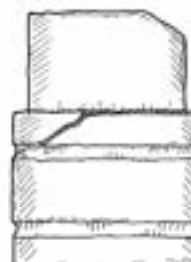
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(Խաչքար և առաքանի-պատկերներ և խաչքար)

Ձ. 1-10



Tadzrisi Church of St George  
Architectural Details Discovered During Cleaning Works

Ձ. 1-10 333



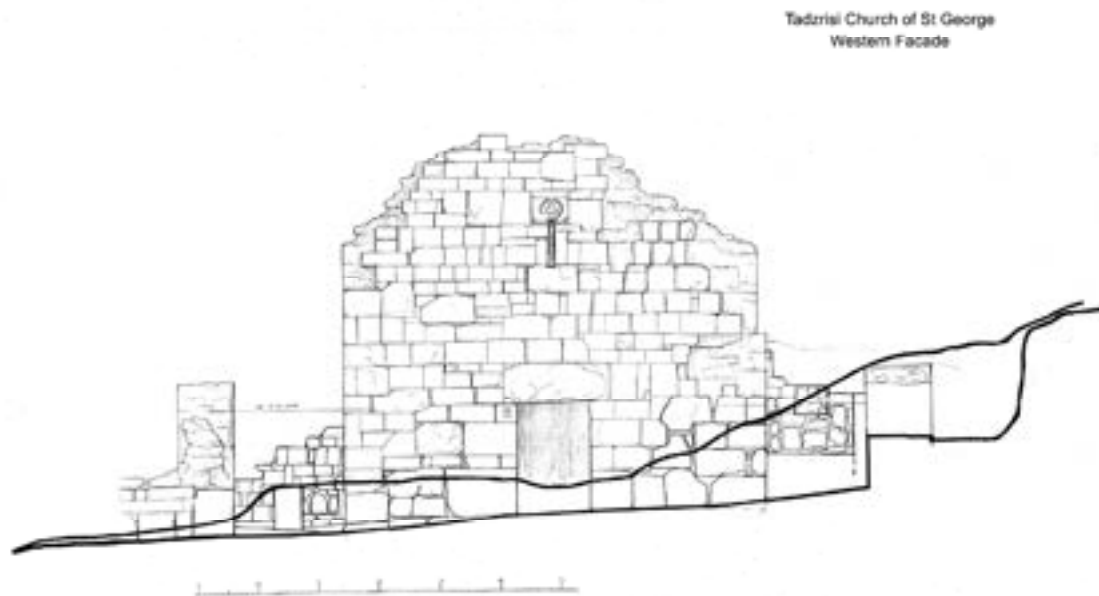
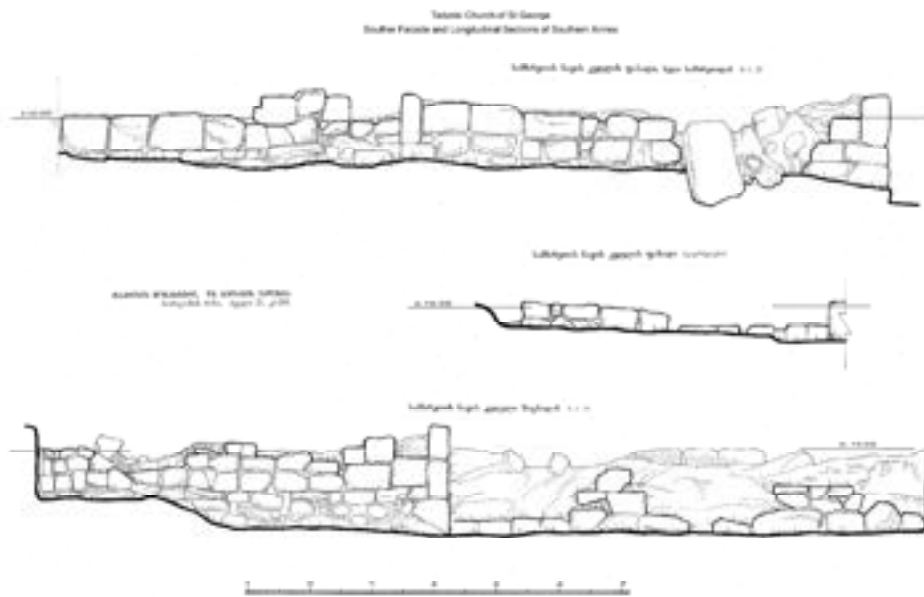
Ձ. 1-10 333



Ձ. 1-10  
333



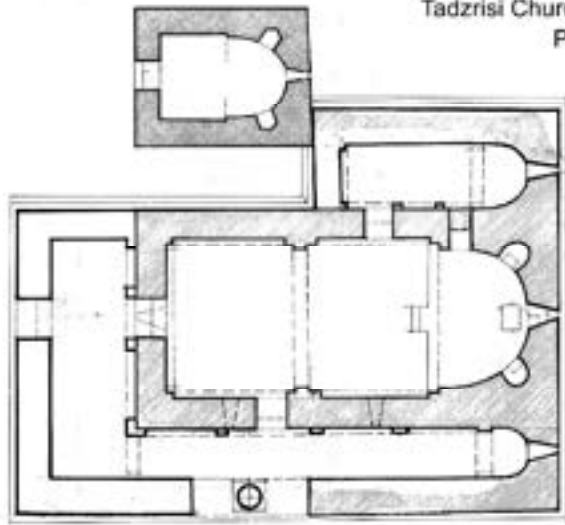
Ձ. 1-10



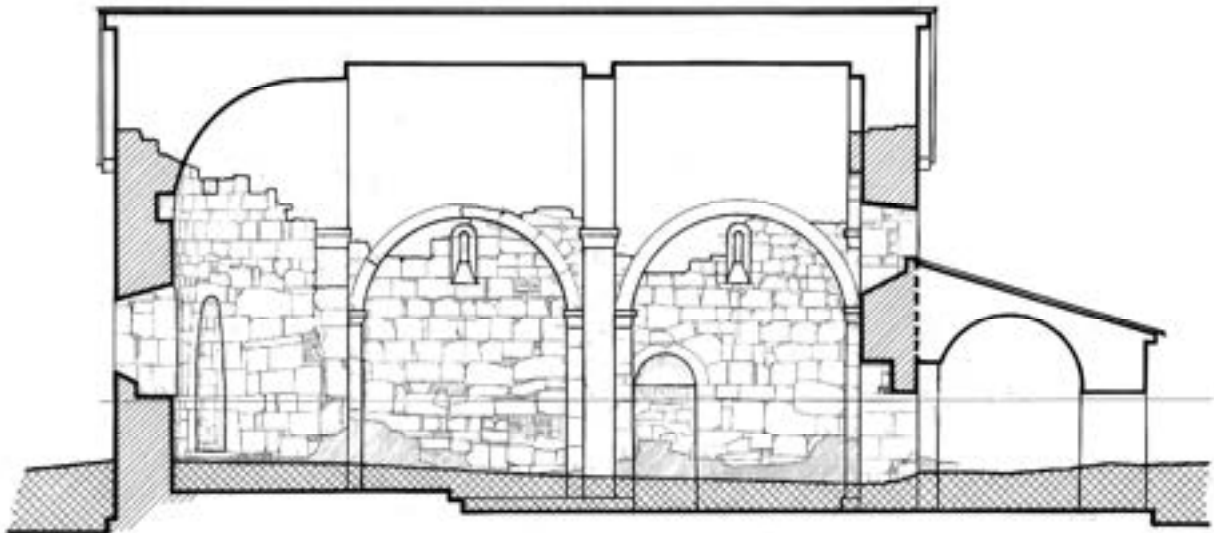
## Graphical Reconstruction



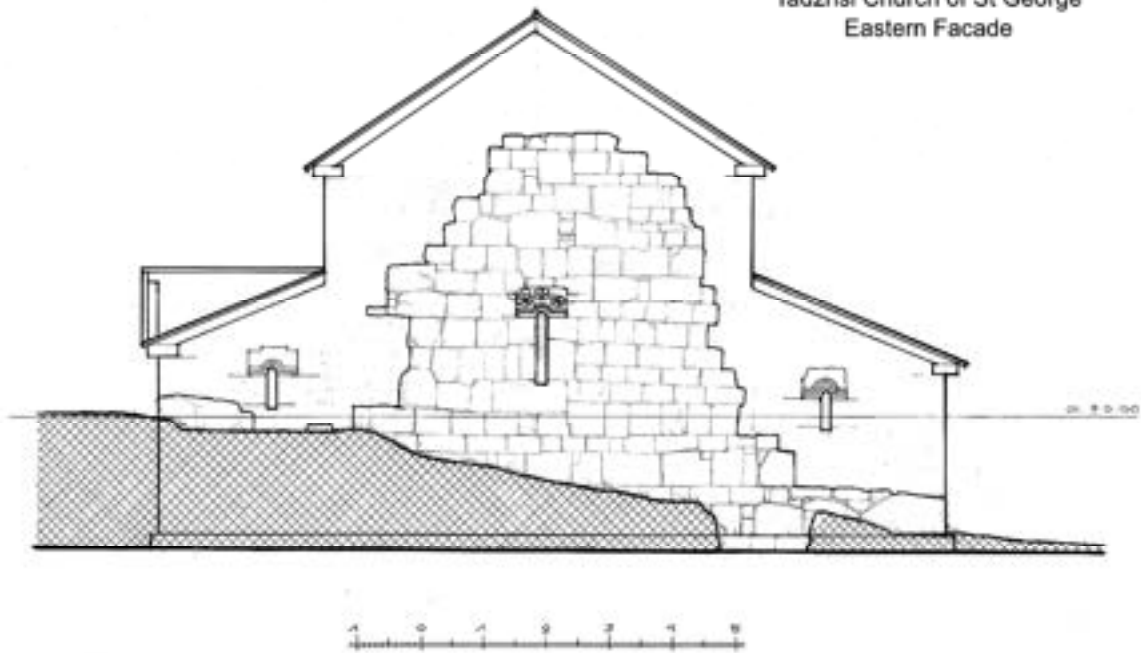
Tadzrisi Church of St George  
Plan



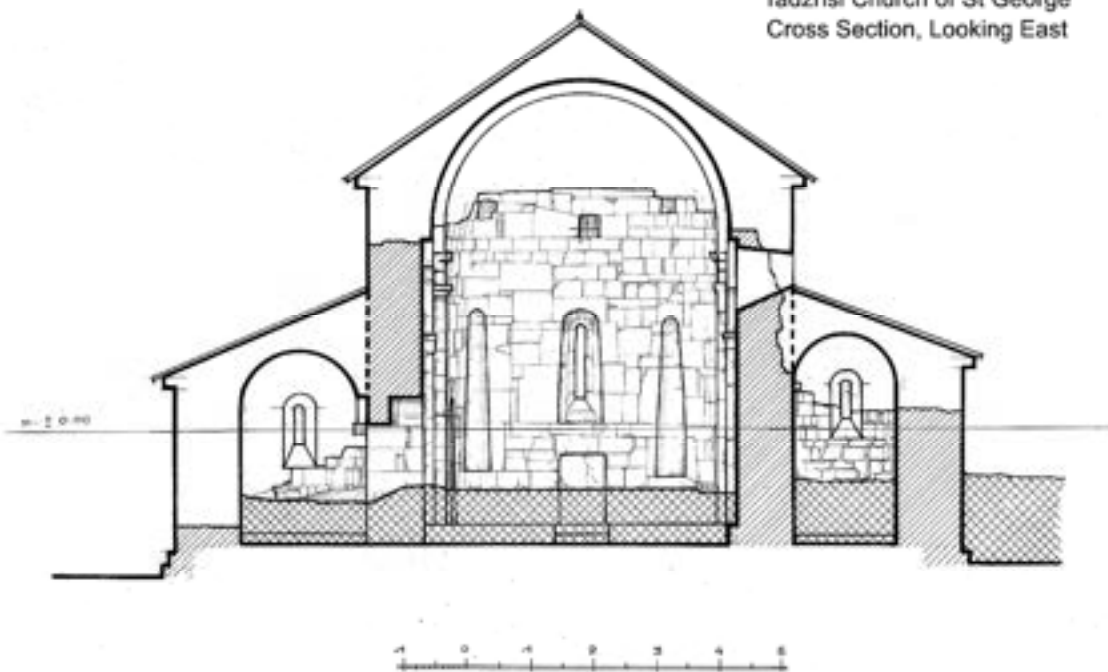
Tadzrisi Church of St George  
Longitudinal Section, Looking South



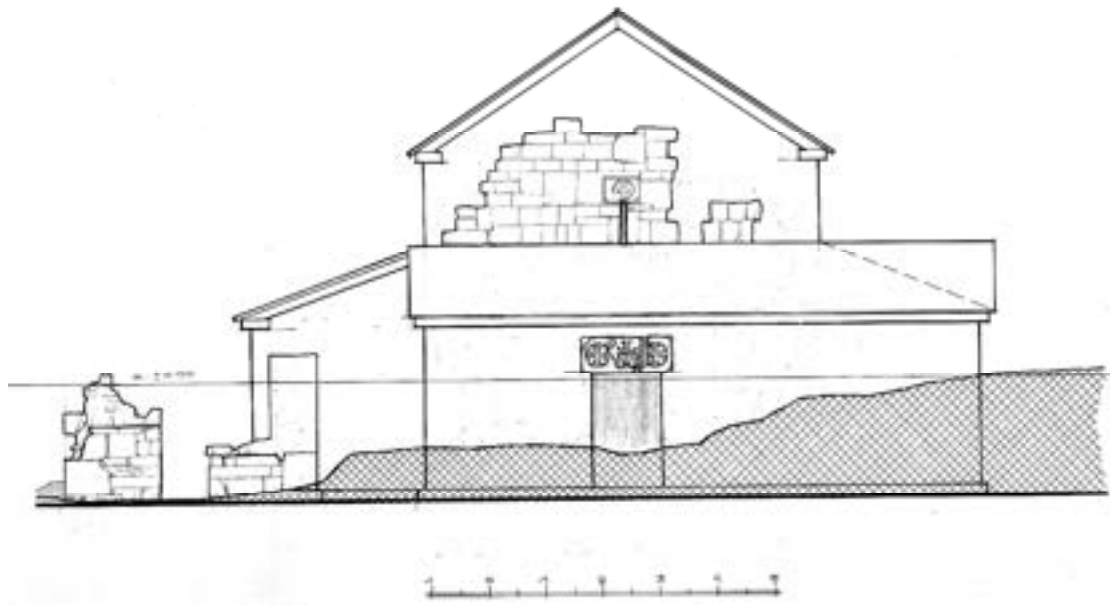
Tadzrisi Church of St George  
Eastern Facade



Tadzrisi Church of St George  
Cross Section, Looking East



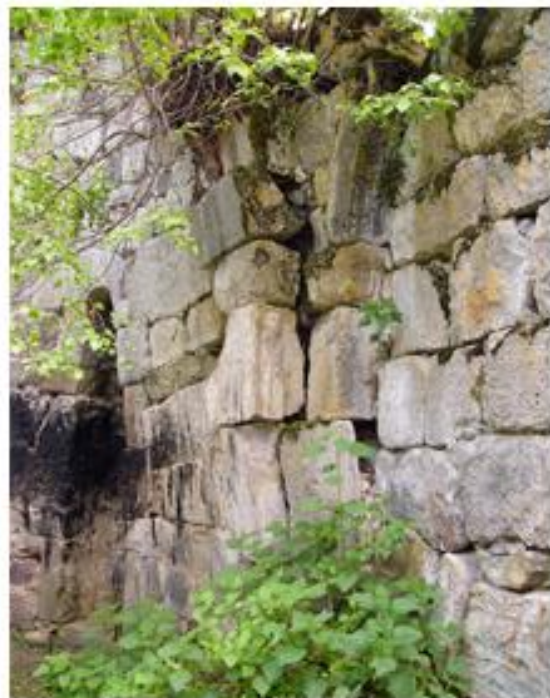
Tadzrisi Church of St George  
Western Facade



# Before Restoration



**The fragment of apse.**



**The S corner of the apse.**



**The S corner of the apse .**



**The door on the S wall.**



# Before Restoration



interior, view to W.



Interior, the fragment of the S wall.



# Before Restoration



Interior, view to E



Interior, view to the N wall.



# Before Restoration



E fragment of the N facade



The fragment of th N facade.



# Before Restoration



**View from SE**



**View from NW**



# Before Restoration



**View from SE**



**Window of E facade**



**Window of W facade**



**View from W**



# The process of restoration and conservation





## The process of restoration and conservation



# The process of restoration and conservation





# The process of restoration and conservation

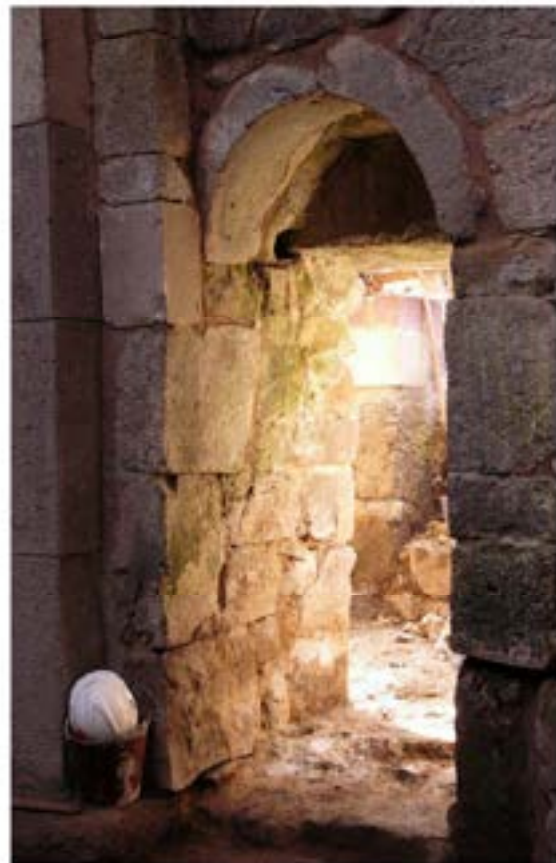


# The process of restoration and conservation





# The process of restoration and conservation



# The process of restoration and conservation





## The process of restoration and conservation



# The process of restoration and conservation





# The process of restoration and conservation



## The process of restoration and conservation





# The process of restoration and conservation



# The process of restoration and conservation





# The process of restoration and conservation





# The process of restoration and conservation





# The process of restoration and conservation





# The process of restoration and conservation





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## The process of restoration and conservation





# The process of restoration and conservation





# The process of restoration and conservation





# The process of restoration and conservation





# The process of restoration and conservation



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# The process of restoration and conservation





# The process of restoration and conservation



# The process of restoration and conservation





# The process of restoration and conservation





# Roofing

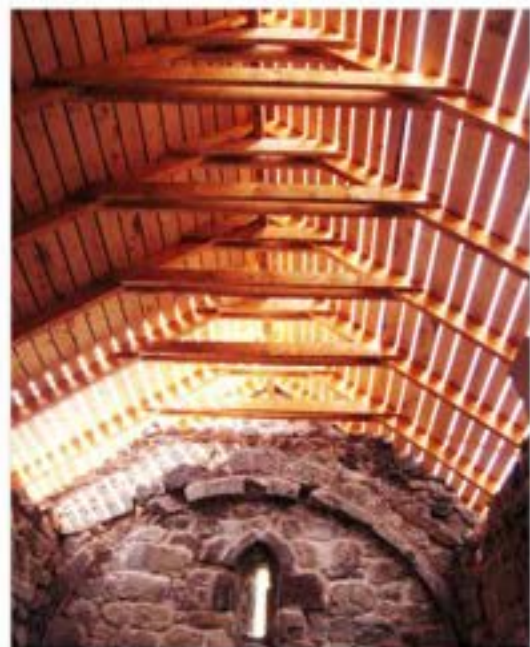


# Roofing





# Roofing





# The church after restoration



**SW fragment of Interior**



**NW fragment of interior**



# Church after restoration



**Interior, SE detail**



**Interior, NE fragment**

## Church after restoration



Interior, looking east



# Church after restoration



**Central window on E facade**



**S window on E facade**



**N window on E facade**



**Window on W facade**



## Church after restoration



**Western annex looking N**



**N orthern annex**



## Church after restoration



**Western door**



**Fragment of S facade**



**Western annex looking S**



**Northern door**



**Western door**



**The fragment of SW corner**



## Church after restoration



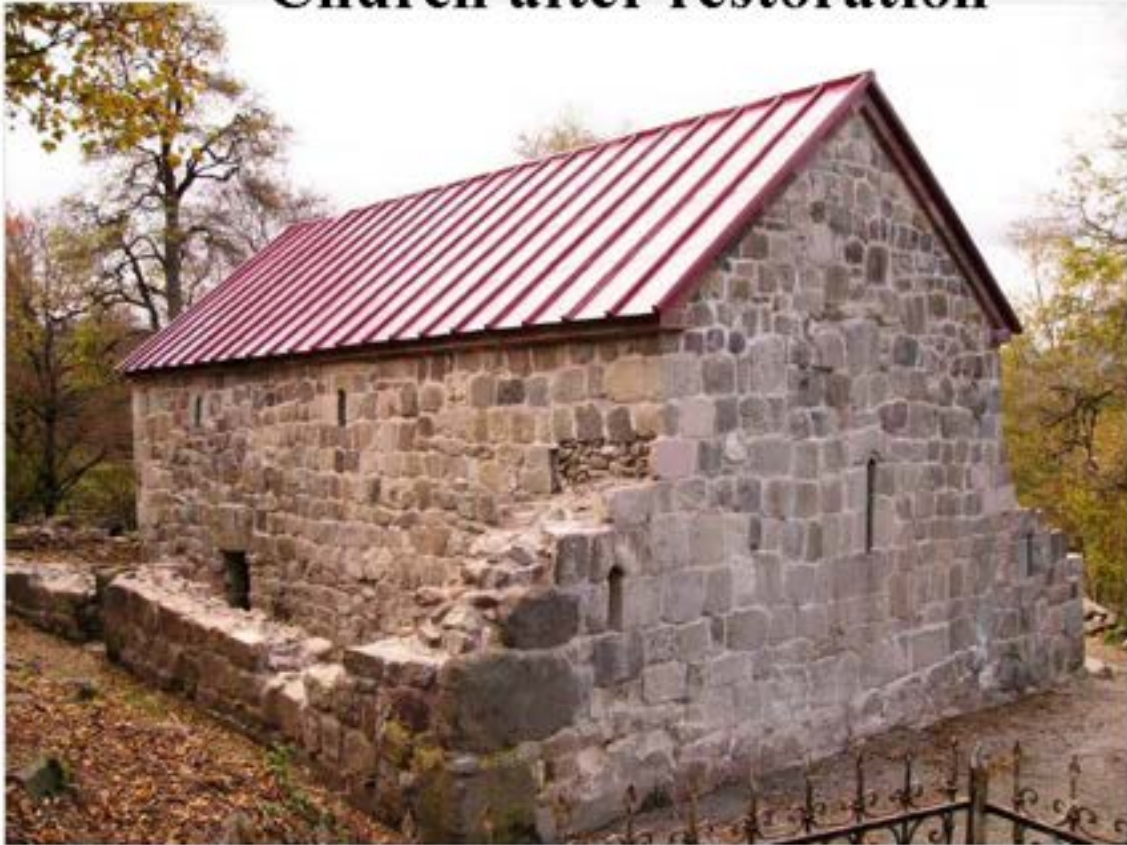
**View from NW**



**View from SW**



## Church after restoration



**Looking from SE**



**Looking from NE**

## Church after restoration



Looking from S E



# The church after restoration



**Interior view on roof**



**Interior , floor**