



THE WORK FOR HISTORIC SITES

- The Association of Architects Milde + Möser was founded by Prof. Dr. Dr. Kurt Milde and Dipl.-Ing. Jörg Möser in April 1991. The initial work was performed at this time in East Germany in Dresden and Pirna.
- Since then, the head office has been located in Pirna, close to Dresden on the river Elbe. The office has 12 employees and a large number of external co-operating partners and specialists.
- Approximately 80 % of the company's income comes from monument protection projects. The Association of Architects carries out its work in the form of a partnership. Most of the work in the office is comprised of renovation and changed utilization of high-grade monument buildings.
- The spectrum covers from small farm buildings, heavy timber buildings, townhouses, large palaces of the Saxonian monarchy, and to public buildings for government and administration.
- The scope of the projects ranges from the medieval substance of the 13th Century to the early 20th Century. In addition, the Association of Architects has designed new apartment buildings, offices and commercial buildings on a large scale.

- Approximately 100 projects have been executed since 1991. Additional design work and many expert studies deal with history of art, monument protection and concepts for design of individual buildings or entire complexes up to a size of over 10.000 m² useable area.
- Several international projects have been concluded for Construction detailed plans on preservation and restoration of monuments and UNESCO- listed historic sites
- Management for comprehensive, touristical and ecological development of historic urban areas

PARTNERS' CURRICULUM VITAE

Prof. Dr. Dr. Kurt Milde (died in 2007)

Dipl.-Ing. Jörg Möser

- Jörg Möser is a trained architect specialized in monument protection. After teaching at the Technical University Dresden, he co-founded the Association of Architects in 1991. Since then, he has been responsible for office management, project management and project co-ordination.
- He has relevant experience in monument protection, renovation of old buildings and construction of new building.
- In addition to his main task of project control and management he was responsible for several historic reconstruction projects. Assignments from various universities dealt with building surveys, building research and architecture in the historical context.
- He publishes and lectures widely in the field of building research and practical monument protection. Jörg Möser is a member of the Institute for Preserving Renovation of Historical Buildings (Institut für bewahrende Erneuerung historischer Bauwerke - IBE) and co-initiator of the research project "Historical House and Town Research in the Bohemian-Saxonian Area" in co-operation with various universities and Universities of Technologies.
- He is a member of:
 - o The Wartburg Society for Research of Castles,

- The Fritz-Schumacher-Society e.V.,
- Founder and Head of the Society for Historical Town Research Bohemia and Saxony

Employees of the Association of Architects Milde + Möser

- In addition to the three partners, the Association of Architects are presently employing:
- Ten architects with a five-year architect's degree from a University of Technology (equivalent to a Master of Science):

Co-operations

- Permanent co-operations and joint ventures exist with specialists, restorers and technical engineers for structural design, utility systems, construction physics and fire protection.
- Furthermore, permanent cooperation relationships exist with
- The University of Technology Dresden, The Institute for Building History, Monument Protection and Theoretical Architecture in Research (with supports, presentations of papers and scientific events)
- The College for Science and Technology Dresden,
- The Monument Protection Department Germany



THE WORKING PHASES IN OUR ASSOCIATION

The working phases in approaching Monument Protection Projects

1. Projects First Inspection and Definition of Design Targets

The first encounter of the architect with a historic monument is generally comprised of a thorough survey and, at the same time, an analysis of the construction program and the targets of the owner. The building and its components will be surveyed, and documented in sketch form for future orientation. This survey serves as summary of existing conditions, a global description of the condition of the building, the structure, functional potential and deficits of a building as well as special artistic building finishings.

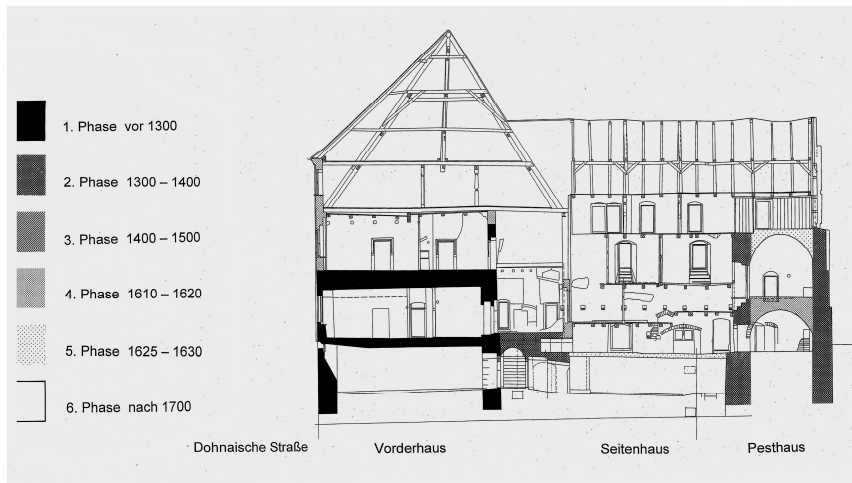


In the process, work plans will be staked out for preliminary investigations and design targets and their implementation chances weighed. Sketches, descriptions and photos of specific building parts and an orientation system in the building (terminology of rooms and building elements) are to be developed. In addition, initial design thoughts can be based upon the existing floor plans.

2. Survey of Existing Conditions as Documentation and Design Instrument

The second step in the intellectual and analytical study of a building, that has frequently undergone major changes, alterations and damages

caused by weather influence and deterioration from age, is the exact measurement and proper survey of all visible signs, traces and damages. The survey of existing conditions serves firstly, as a basis for all subsequent planning and technical designs, and secondly, as the art-historic documentation of the condition of a monument and, finally, as an instrument for a construction project, that will adequately consider the substance and components of a valuable structure.



Content:

- Documentation of the building structure (all components, consisting of floor plans, sections, elevations and detail drawings, at a scale of M 1:50 to M 1:10)
- Linkage of all building parts and floors in drawings and descriptions
- All bearing structures with all their peculiarities, construction principles, static systems, slab span directions and connection of walls and their openings, slabs, columns, roof construction and, if possible, foundations, etc.
- Traces of changes or disturbances of the building structure in the past
- Used building materials and their condition after long use and wear
- Description and compilation of technical problem zones for renovation and future use,
for instance with regard to fire protection, sound insulation, damp-proofing, thermal protection, etc.

Surveys of existing conditions can consist of drawings, manually drafted with pencil on cardboard or with technical procedures such as laser or

electronic tachymeter theodolit, with a computer and graphically processed. The second method is a precondition for design with CAD-computer drawings.

3. Documentation of Damages and Constructive Findings

Documentation of a building structure is comprised not only of an exact survey but mapping and description of all findings as well, that could be important for future evaluation and design.

This documentation is often prepared in the course of the survey of existing conditions and preparation of as-built drawings or, at a later date, as an independent working step based upon existing drawings, possibly as completion of geodetic survey drawings.

Type, scope and quality characteristics of existing conditions will be recorded. These can be different on each building. Existing traces of alterations on walls, vaults, doors and windows as well as changes on floors, ceilings and decorative elements will be drawn and photographed.



Furthermore, all visible damages resulting from atmospheric influences, aging, former improper repairs and other causes will be recorded on drawings and will be described. Damages to stones, wooden beams, plaster layers, etc., will be recorded and first conceptual steps taken for their renovation.

4. Preparation of Room Schedule and Detail Investigations

A systematic recording per room is required for a future, complete design and specification of the renovation work as well as a scientific

documentation of building parts and finishes is divided into the following elements

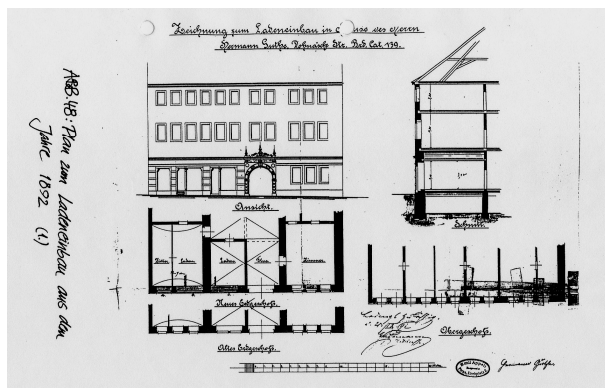
- Walls, Floor, Ceilings, Finishing elements and Special equipment finishes.

This is based upon a scheme that takes the existing conditions in the building into consideration. It allows proper and systematic roomwise recording of all data, that could be important for the future design, without the risk of omissions. Excerpts from the construction survey, exact developed wall measurements or sketches, photos and descriptions will be incorporated into the room schedule.

This work phase also includes various other special investigations of major building parts and finishes, which can vary in each building, comprised of evaluation of wood defects, chemical tests of coatings, dendrochronologic investigations of the age of used wooden parts, etc.




5. Documentary Studies

Documentation of the building structure and its parts often raises questions regarding the former shape of rooms, constructive features, openings or decorative elements, which cannot be answered despite intensive occupation with the existing condition.



In this case, information should be obtained from available documents. Construction files from the city archive, tax schedules, inventories, wills and construction invoices provide information about:

- Sale of a building - with information on value and size of a building at a certain time
- Number of inhabitants - revealing the number of required rooms, their size and finishes

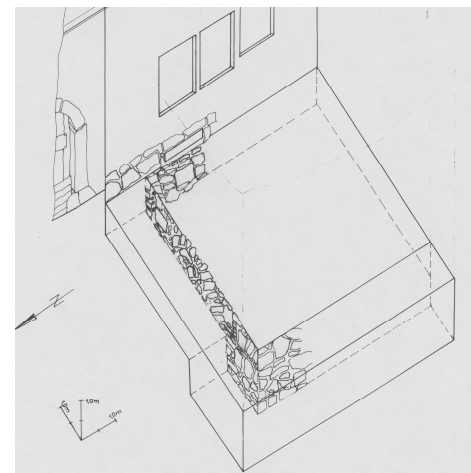
FASANENSCHLÖSSCHEN MORITZBURG					Architektengemeinschaft Milde + Möser		
DOKUMENTATION DER AUSSTATTUNGEN UND RAUMFASSUNGEN					RAUMBUCH		
01466 Moritzburg, Schlossbetrieb Moritzburg					Blatt 22		
Objekt, Bauteil, Geschoss,	Raumnummer	Wandnummer	Aufnahmedatum	Bearbeiter	Lfd. Nr. Bauteil	Beschreibung	Maßnahme
Fasanenschlösschen, Erdgeschoss	0.05	a	12.10.2000	L.Anke	1. Wand a	Fachwerkwand aus gezapften Holzständern, etwa 14 x 14 cm, Aufbackstein aus Backsteinen mit Kalkmörtel ohne Auffüllkeilen, keine Dendrodatering möglich, Grober Kalkputz, (keine Putze des Vorgängerbaues) darüber kein Anstrich, bündig mit Lattengestellen für Wandbespannungen, Despannung mit Gewebe, Papier und Strohtapeten (s. Restauratorisches Gutachten) Sockelbereich Lambri's mit Kassettenfüllungen Vergoldungen als Poliment- Vergoldungen (~ 1780, s. Restaurator) Erhaltungszustand befriedigend	Restaurierung der Ausstattung, s. gesonderte Aufstellung
			Wand 0.05 a	Tür 0.06 II	Einflügelige Holz- Rahmen- füllungsstür mit drei eingeschobenen Füllungen, Futterrahmen mit profiliertem Blendrahmen; Ausführungsart entspricht bauzeitlichen Türen um 1775, Poliment- Vergoldungen, originale Beschläge	Aufarbeitung und Restaurierung gemäß Rahmenkonzeption	
				Decke	Stuckdecke mit äußerem Fries und reichem Ornamentstuck mit Vergoldungen, teilweise als Lüsterung, (s. Restauratorisches Gutachten) Schraubung und Schräglage in gutem Zustand Originaler Bauzustand, etwa 1775	Keine Stuck- reparaturen notwendig, Restaurierung nach Konzeption	
Photo - Entzerrtes Mesabild Wand a	Querschnitt und Grundriss	Fragment Strohtapete + Historische Aufnahme			Fußboden	Tafelparkett mit Hartholzstäben und weichen Feldern, umlaufender Fries Zustand befriedigend Baualler muss noch ermittelt werden	Aufarbeitung und Holzrestaurierung in situ
							

- Procured building materials - providing type of former building parts and finishes,
- roofing, building constructions etc.
- Taxes to be paid - frequently giving the number of storeys and their sizes
- Inherited furnishings revealing size and design of important rooms
- Owners - and their privileges and rights in a city

Frequently, direct information about planned and performed building work is found in a building, that explains certain traces and remnants of building parts, which is very important for repair and restoration of old structures and statical systems.

6. Archeological Excavations

Almost every renovation project in a historic structure also necessitates underground work for new foundations, pipelines and damp-proofing. However, much historical evidence rests below foundations, that is not at all or only partially recognizable above ground. Questions regarding form, bearing structure or building technologies of old buildings can very often only be explained by following the traces below ground. Monument protection work demands the exercise of utmost care, so that traces and existing conditions are not carelessly disturbed by construction work.



Archeological excavations will be performed by specialists, supported by appropriate authorities. Soil at selected areas will be surveyed in exact stratigraphic delineated sequence of strata, mostly along building parts. Information obtained will be incorporated into the building survey and the documentation of the existing conditions as well as into monument protection conditions and renovation goals.

7. Restoration Color Tests

Completely or partially colored trims on walls, ceilings, doors and other building parts in a historic building must be retained, unless all building parts were changed recently.

These design elements are almost always covered by many layers of old paint finishes, plasters or other materials. Together with the old building parts, they represent a historic value that should be protected considering monument preservation.

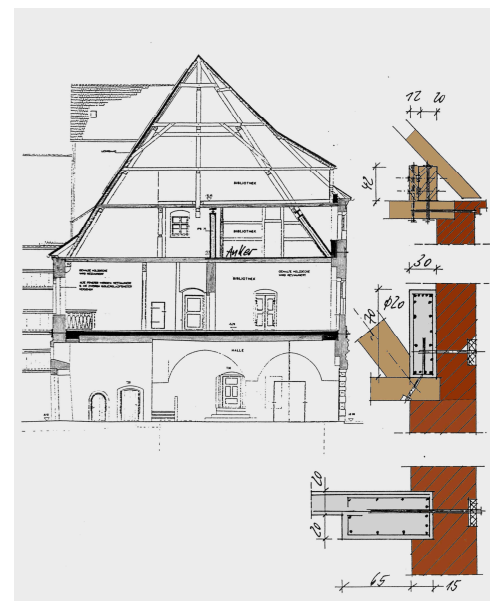
They can represent an immense enrichment of the architecture. These findings and remnants of old paintings, paint finishes, plaster finishes, coverings and other room designs will be systematically investigated and documented by the restorer. The knowledge of room finishes contributes considerably to the identification of old building conditions and alteration phases.

The findings will be prepared for a careful retention and protection or for integration into the future room design.

6. Static Evaluation

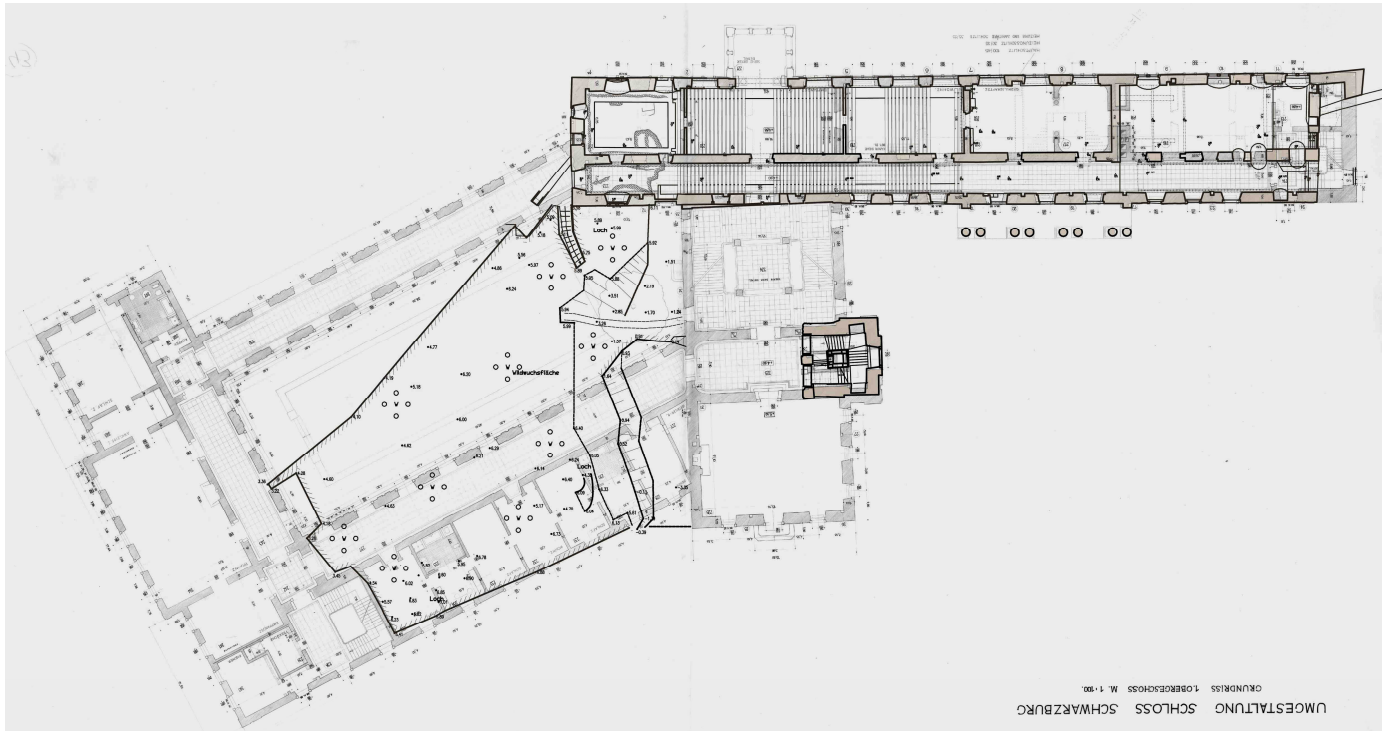
Paramount for a cost effective, technically faultless and careful renovation and alteration of a building is the exact knowledge of bearing building parts such as foundations, rising walls, ceilings, stairs and the roof construction. It is often impossible to evaluate existing construction with modern technical rules and laws and cost effectively repair it with current methods, without risking the total loss of old buildings or parts of them.

Historic structures must be specially investigated by an expert and documented in accordance with special criteria. Causes of damages, the



existing stability, quality and potential of a construction material or building part play the most important roles.

This is of particular importance, if only some sections of historic structures exist due to age, destruction or alteration. They could be restored most effectively by using the original construction principle. Experts with special experience and qualifications are indispensable for these evaluations.



7. Evaluation of Construction History and Definition of Monument Protection Goals

After documenting the existing buildings and investigating and documenting them in applicable disciplines, it is important, that these findings are compiled in a guide, practical for both design and construction work. This can only reflect part of all information of one building (during construction work, recording shall be continued with the same thoroughness).

In the course of scientific evaluation of as-built conditions, the building history should be uncovered as far as possible. Former building and use conditions and lost building sections should be made visible to develop the basis for architectural work and necessary restoration.

Building and historic art findings will be evaluated and the results summarized considering building age and building phasing plans. Lost or damaged building parts can, thereby, be reconstructed and findings of old building technologies and utilizations and certain artistic finishes can be made available. Renovation goals and the framework conditions for quality and scope of projected construction work, must be determined in a *monument protection goal* for the future treatment of the building. This also serves as a basis for legal approvals.

8. Design Work

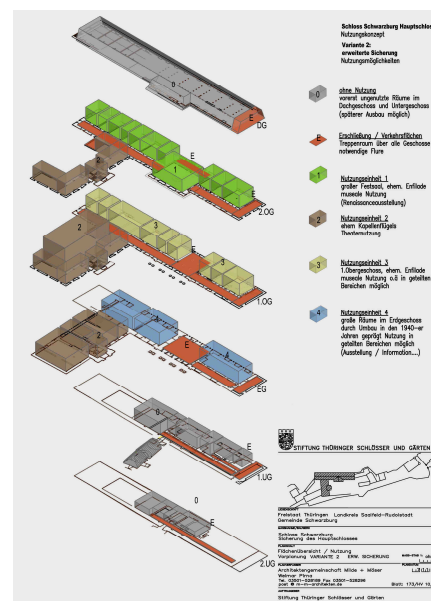
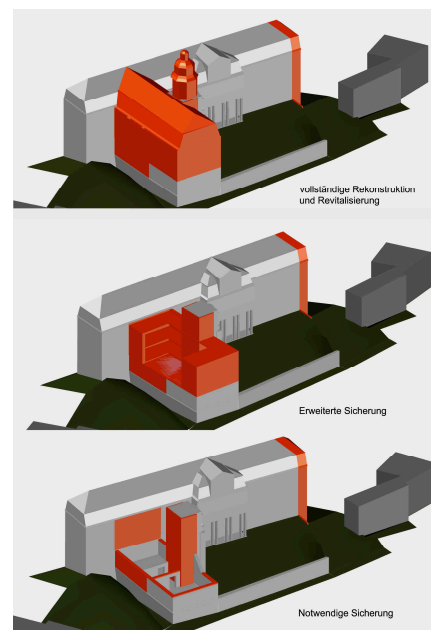
The scientific evaluation and formulation of renovation requirements is followed by the intensive design phase. A symbiosis of all design requirements with early integration of specialists can be achieved during preparation of drawings for renovation, alteration or extension, based upon detail knowledge of existing historic conditions.

For this, the architect is confronted with the task of respecting, rescinding and further developing the existing historic architectural quality (with reference to function and aesthetics).

At the same time, he has to create a modern, technically optimized and aesthetically sophisticated design solution, which is cost effective and compatible with monument protection, and in addition, is in accordance with all applicable laws and regulations.

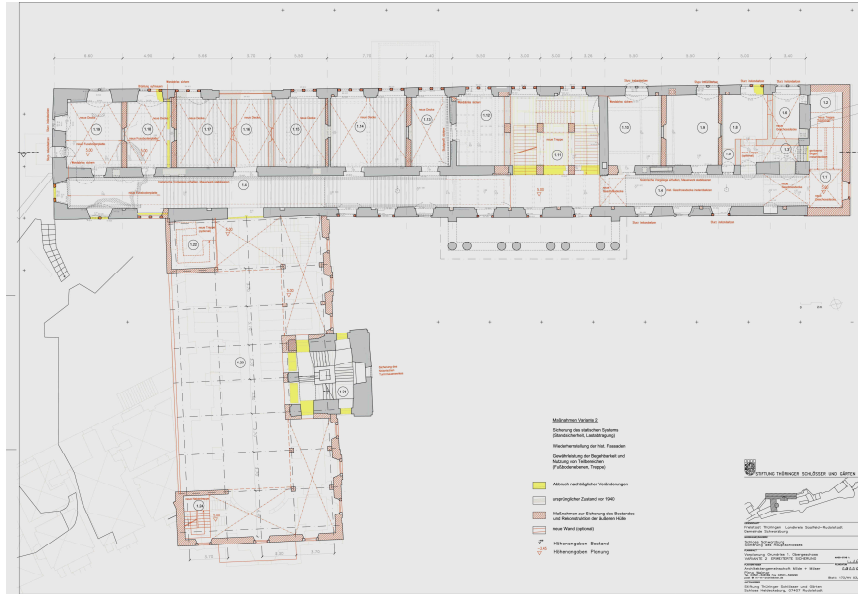
The design process extends over various levels and ranges from the first conceptual total design to detailed design for modern or reconstructive solutions during construction.

- Concept Design
- This consists of general designs for an order of functions, building parts to be restored and/or to be newly constructed with an estimate of construction costs, descriptions, area computations, coordinated with overlapping interests.
- Preliminary Design
- In this phase, the initial concepts are to be developed in detail and coordinated with building laws, technical rules and specific requirements for static, building physics, etc. Future construction



costs, areas and building details are to be exactly determined. Requests for official permits are to be prepared.

- Additional detailed designs and revisions follow in the working drawing phase and specific construction of the building.



9. Permits and Utility Projects

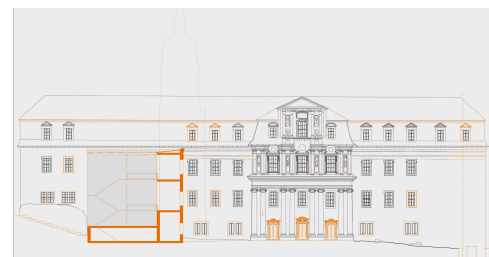
Almost every building construction project requires permits from various authorities. This especially applies to changes on monuments, which are governed by State monument protection laws in Germany. Preliminary design documents are to be filed for approval with the applicable authorities. Various descriptions, expertise's and comments must additionally be prepared. All documentations must also be checked for adherence with buildings laws, technical regulations and specific requirements.

Technical and Specific Projects

Special projects for bearing structures, heating systems, air conditioning, electrical installations and security systems, etc., will be simultaneously prepared by engineers, to be incorporated by the architect into working and construction drawings for implementation.

10. Working Drawings and Construction Details

Design concepts, technical systems and all construction details shall be depicted in exact drawings and described for implementation of the de-



sign on the construction site. This includes steps for careful intervention into historic walls and ceilings, which shall be exactly specified, all materials, details and phases of construction shall be determined. Minor design details such as stair railings, floors, etc. must be clarified.

Numerous details and design solutions will be clarified at the site in the course of construction work and often altered or changed, based upon new findings and existing building conditions. Contributions by the architect are, therefore, indispensable during the construction phase in the interest of a cost effective, architecturally valuable and careful monument protective solution. Architectural details or construction solutions are often developed in the course of discussions with all participants at the construction site.

11. Bidding, Award of Construction Services

Construction solutions shown on the drawings or verbally determined will be separately described in working steps, according to type of work and the specific construction trade section and their calculated scope.

These specifications allow each construction firm to calculate and submit its sub-contracted services to the architect, broken down into labor, machinery and material requirements. These specifications are the basis for exactly calculated and comparable proposals to be prepared by the construction firms.

Proposals submitted by several firms will be evaluated and compiled as total sum for the entire building, consisting of services from all trade sections. A proposal for each trade section will be recommended to the Client for awarding the work to the most appropriate firm for contracts to be prepared.

All invoices are to be reviewed and compared with the proposals upon completion of construction work. This allows continuous supervision and control of total construction costs for the project.

12. Construction Supervision with Cost and Quality Management

Construction supervision of renovation work on a monument is of special importance. It requires intensive effort on behalf of the architect, more than in a comparable new building project, to secure architectural

quality, cost budget, time schedule and, especially, guarantee maximum protection and restoration of historically valuable building substance.

The architect must perform various tasks simultaneously:

- Preparation of construction phasing plan for all participating construction firms and engineers with start and end dates as well as logistic interdependence
- Coordination of workers at the construction site, especially interaction between various services
- Control of the quality of work, time schedule and billing of contractors
- Cooperation with authorities regarding controls and certificates
- Cost management for all project costs
- Coordination of engineers and other participants
- Supervision of work on historic building parts and continuous influence upon their protection
- Responding by means of drawing changes and extra services to new and/or other as-built conditions of the building substance, not evident in the preparatory phase.

The work of the architect is comprised of comprehensive organization, design and monitoring of the construction project from the first concepts to final handing-over and total billing.

The architect is always the universal coordinator *of all* project participants. Therefore, he/she owes the Client an overall service in adherence to all design aspects.

