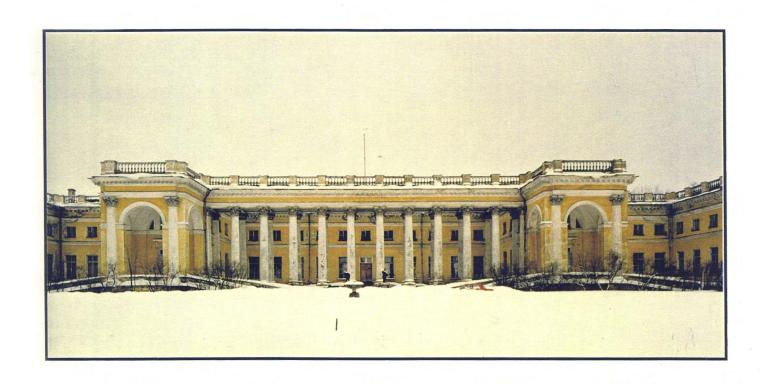
THE ALEXANDER PALACE

TSARSKOE SELO, St. Petersburg, Russia

PRELIMINARY ASSESSMENT REPORT FOR RESTORATION AND ADAPTIVE RE-USE



THE WORLD MONUMENTS FUND

in Association with Page Ayres Cowley Architects, LLP, Henry Joyce, and The Alexander Palace Association

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TSARSKOE SELO, St. Petersburg, Russia

PRELIMINARY ASSESSMENT REPORT FOR RESTORATION AND ADAPTIVE RE-USE

Mission I: February 9-15, 1995

Mission II: June 26-29, 1995

Mission III: July 22-26, 1996

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in Association with Page Ayres Cowley Architects, LLP, Henry Joyce, and The Alexander Palace Association

June 1997

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Enfilade, circa 1945 showing war damage (courtesy Tsarskoe Selo Museum)

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Cover: The Alexander Palace, February 1995. Photograph by Kirk Tuck & Michael Larvey.

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The founder of the Alexander Palace Association is Robert Atchison. Mr. Atchison's knowledge of the Alexander Palace and his personal contacts initiated the development of the project to conserve this important site.

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Executive Summary

Introduction

This project was undertaken to determine the feasibility of adapting the magnificent eighteenth-century Alexander Palace for use as a museum devoted to interpreting the history and lives of Russia's last Imperial Family: Tsar Nicholas II, Tsarina Alexandra, and their children Olga, Tatiana, Marie, Anastasia, and the Tsarevich Alexis. Throughout the Tsar's reign, from 1894 until 1917, the Alexander Palace was the principal family residence¹. It was from this location that Nicholas II directed the affairs of state during the Russo-Japanese War, the revolts of 1905, the First World War, and the pivotal events culminating in his abdication and the overthrow of the Russian monarchy.

General Background

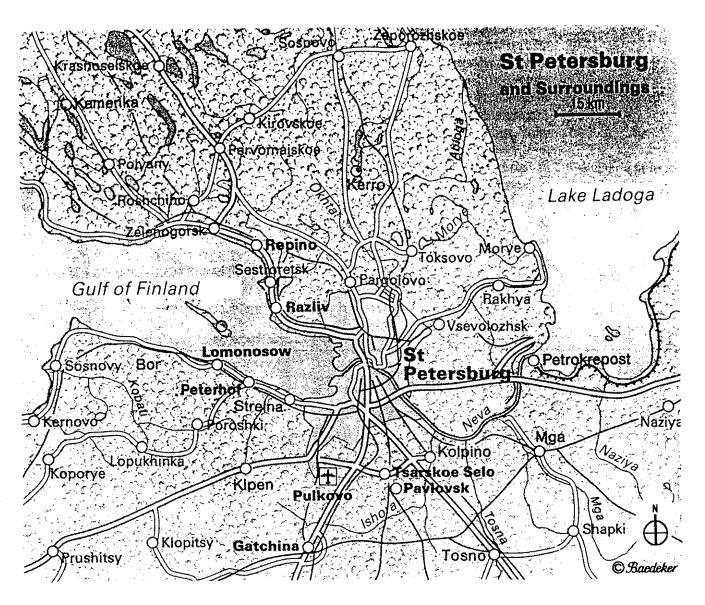
Located approximately twenty-five kilometers from St. Petersburg, the Alexander Palace is situated on land granted by Peter the Great to his wife, the future Catherine I. This estate later became known as *Tsarskoe Selo* or "Tsar's Village." Besides the Palace, several other architectural and landscape commissions were undertaken in the immediate area under the patronage of the Romanovs between 1710 and 1917. Today this architectural and landscape ensemble constitutes one of the world's finest groups of royal buildings.

Origins

The Alexander Palace was built between 1792 and 1796, commissioned by Catherine the Great as a gift for the future Alexander I, her eldest grandson. She chose the Italian-trained architect Giacomo Antonio Domenico Quarenghi (1744-1817), one of several foreign architects working in Russia under her patronage. Quarenghi, already well known for his urban and civic projects in St. Petersburg, designed the Palace in the fashionable neoclassical style and sited it near the earlier Catherine Palace, which had been built for Catherine I by Bartolomeo Rastrelli in the exuberant Rococo style. Situated in a park reminiscent of the English landscape tradition of Humphrey Repton (1752-1818) and John Nash (1752-1835), the Alexander and Catherine Palaces complement each other.

Building History

The Alexander Palace was home to both Alexander I and his successor and brother Nicholas I during the first half of the nineteenth century. Nicholas II spent a great deal of time at the palace while growing up and lived there virtually every summer following his accession to the throne in 1894. He and his wife Alexandra later chose to make the Alexander Palace



Location Map of St. Petersburg and Surroundings. Reproduced courtesy of Baedeker's, 1994.

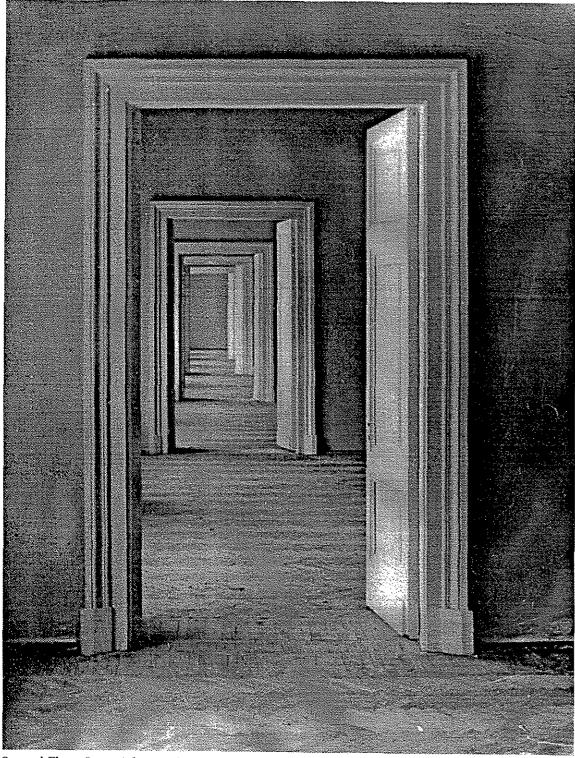
their family's permanent residence. In their time Nicholas and Alexandra made significant contributions to the building, including a suite of Art Nouveau rooms of outstanding artistic quality in a style unknown in other royal palaces of Europe.

In early 1917, during a period of great domestic unrest at the height of the First World War, Nicholas was forced to abdicate the throne. Following the abdication, the family was kept under house arrest at the palace by Russia's provisional government until their evacuation in August 1917 to the western Siberian town of Tobolsk. After the seizure of power by the Bolshevik government, Nicholas and his family were taken to the town of Ekaterinburg in the Urals and executed in July of 1918.

For 24 years after the departure of the Imperial Family, the palace was open as a museum. In 1941, the rapid advance of the German army on Leningrad forced the museum to close, and its staff evacuated a large part of the collections of the museum to storage facilities east of Leningrad. Other parts of the collections which remained behind in the palace were looted by the German and Spanish soldiers who occupied the palace during the 900-day siege of Leningrad.

The Alexander Palace survived World War II with some structural damage, according to military records, unlike the Catherine Palace, the Palace of Pavlovsk, and the Great Palace at Petrodvorets (Peterhof), which were almost completely destroyed during the German occupation and have since been reconstructed. Although the exterior was damaged, the majority of the Alexander Palace's interiors were reported as unharmed, with the exception of some rooms which received shell damage and whose decorative furnishings were removed for safekeeping. Many of the paintings, furnishings, and personal artifacts, including a considerable collection of clothes and military uniforms once belonging to the Imperial family, were also saved. These objects have been conserved and stored in several state museums and historic sites, and it is not yet known how many of the architectural interiors remain in the Imperial Suite. However, the few rooms visited to date suggest that some of the important Art Nouveau rooms survive largely intact.

Since 1946 the palace has been used for government and military administrative facilities. As such, the building was altered fifty years ago to accommodate a variety of classroom and administrative uses for the military. Upgrading of electrical and mechanical services appears to have been minimal, and general repairs and maintenance have been limited to the interior over the intervening years.



Second Floor, Imperial Wing (courtesy Bob Atchison Collection)

WMF Involvement

Mission I

The World Monuments Fund (WMF) undertook a preliminary reconnaissance mission to the palace, at the invitation of the Alexander Palace Association, in February 1995. The purpose of this mission was to examine the feasibility of repairing the structure of the building, authentically recreating the interiors, and returning to the palace its original furnishings, including Faberge objects and other pieces now housed in various Russian museums, in order to interpret the life of the Tsar and his household during the era of the early twentieth century. Lastly, The rigorous five-day fact-finding mission included visits to related historic sites and conservation studios, as well as meetings with representatives from the St. Petersburg Mayor's office, the Russian Navy, and museum officials.

The tour of the Alexander Palace during Mission I was limited to six rooms, most of which were located in the Imperial Family's living quarters. The rooms visited were representative of the different architectural period styles which exist in this section of the palace and provided valuable initial observations about the physical status of the building and possible interpretive themes. It was not possible during this brief tour to gain a detailed understanding of the structural integrity and condition of the palace, although the fact that the building is entirely occupied suggests that its structure is sound. Preliminary inspection of the exterior suggested that there are substantial repairs to be made to the stucco, cornices, balustrades, roof covering, and rain water disposal system.

During this first mission, visits were arranged to some museums with artifacts from the Alexander Palace in order to learn about the extent of the collection that could be returned to restored rooms. Initial conclusions suggest that a significant repository of objects from the Imperial apartments survive in these museums, and the authenticity of these collections is well documented through curatorial reports tracking their removal from the Palace prior to World War II. A wealth of photographic documentation of the interiors also survives from the time of Nicholas II. Later photography undertaken in the 1930s records the Palace interiors prior to the stripping of decorations and furniture for storage before the German invasion.

Mission II

During a second World Monuments Fund visit to St. Petersburg in June and July of 1995 by members of the WMF team, a draft version of the present report in draft form was presented to Russian officials with purview over the potential project. Admiral Vladimir

Grishanov, director of the naval institute resident at the palace, expressed concerns about the difficulties of maintaining the property, especially roof repairs and high operating costs, and that the Navy had decided to relocate the institute to new facilities.

During the course of the following year Dr. Ivan Sautov, General Director of the Tsarskoe Selo Museum-Preserve, visited WMF in New York. During these discussions, progress was made in conceptualizing the project and mobilizing a comprehensive conservation effort. It was decided that initial restoration intervention at the Alexander Palace would focus on exterior repair and restoration, particularly the repair or replacement of the roof.

A significant opportunity for launching work on the palace came in February 1996, when the Alexander Palace was recognized as one of the world's 100 Most Endangered Sites by a committee of international experts convened under WMF's new program, the World Monuments Watch. As a result, the American Express Company, the founding sponsor of the World Monuments Watch program, awarded a grant of \$100,000 to be directed toward emergency repairs to the palace roof.

Mission III

In July 1996 WMF conducted a third visit to the Alexander Palace. This mission accomplished the following:

- A detailed survey of the palace exterior and roof;
- A visual examination of additional rooms within the building and the exterior of the adjacent kitchen building.
- A review of archival materials in the offices of the St. Petersburg Commission for the Preservation of Historic Monuments which included pre-1917 photos of the palace and diagrams detailing the proposed post-war restoration; and
- A contract between the Museum-Preserve of Tsarskoe Selo and the Finnish restoration firm IPR Group-Paanurakenne for the partial replacement of the roof over the southeast wing of the palace.

Further study of the architecture and structure of the Alexander Palace will be required to gain a complete understanding of its overall condition in order to make recommendations for rehabilitation and restoration.

Purpose of this report

This present report provides for a statement of probable construction cost. Based on our limited knowledge of the conditions of the building at this time, it is not possible to provide more than a general concept for how the project might be developed. This document, however, represents an important phase in the conservation and repair of this palace.

The primary goals of this preliminary assessment report are to describe the unique history and circumstances of this palace, outline initial observations, and suggest future tasks. The report has been prepared to serve the conceptual framework of the project in the following ways:

- To **define the scope** of the restoration challenge for consultants and project organizers who will plan and guide the next stages;
- To determine the extent of the architectural repair work and replacement of mechanical and electrical systems needed for the operation of a museum environment;
- To propose a methodology for the repair and re-installation of period rooms;
- To set forth a plan for the registration and cataloging of art objects;
- To establish guidelines for museum-related research;
- To propose a **schematic educational and interpretive program** for the historic interiors and exhibitions;
- To determine the requirements for future administrative, curatorial, and research facilities; and
- To establish a preliminary project budget.

This preliminary assessment is intended to compile in one report all data obtained as of October 1996 regarding the physical condition of the structure. As a result, given the limitations, it is to be considered as the first step of a larger and more comprehensive report about the building, its contents, and possible adaptive re-use. It is intended that future reports and studies will present in greater detail approaches to the restoration of the building and a fuller explanation of projected construction and implementation costs. In the meantime, due to limited access to the building and the brevity of the initial site visits, the plan of action to conserve the Alexander Palace is stated herein only as a set of general concepts.

With the publication of this report, a comprehensive prospectus for an international

fundraising and restoration campaign can be inaugurated which will also serve to nurture professional and artistic ties between the United States and Russia in the field of historic preservation. The project, once completed, will be an outstanding example of building preservation, historic house interpretation, and the application of new technologies to restoration and museum adaptation. It is expected that the Alexander Palace Museum will promote domestic and international tourism and become a valuable historic resource and center for the study of Russian history and decorative arts. Ultimately the Palace will return to its rightful place as a cornerstone of the inspired artistic creation that is Tsarskoe Selo and will be recognized internationally as a treasure of the world's cultural heritage.

I. Historic Background

The Romanov Imperial Family

The period following the end of the Riurik dynasty until the rise of the Romanov family is known in Russian history as the Time of Troubles. This period, from 1598 until 1613, was dominated by political and economic upheaval, the occupation of Moscow by Polish invaders, and the overthrow of several pretenders to the throne. In 1613 a special representative council, the *Zemsky Sobor*, was convened to end the social disorder through the appointment of a new Tsar. The sixteen-year-old aristocrat Mikhail Fyodorovich Romanov, a descendant of the first wife of Ivan the Terrible, was elected. Historians have described him as a "compromise candidate" who enjoyed an advantage because of his sympathetic view towards the service nobility. His reign inaugurated a three hundred year dynasty during which the Russian Empire became the largest unified state in the history of the world.

The Romanov Dynasty

Michael Fyodorovich Romanov	1613 - 1645
Alexei Mikhailovich	1645 - 1676
Fyodor Alexeevich	1676 - 1682
Ivan V Alexeevch	1682 - 1696
Sofia Alexeevna ²	1682 - 1689
Peter Alexeevich (The Great)	1682 - 1725
Catherine I	1725 - 1727
Peter II Alexeevich	1727 - 1730
Anna Ioannovna	1730 - 1740
Ivan VI Antonovich	1740 - 1741
Elizaveta Petrovna	1741 - 1761
Peter III Fyodorovich	1761 - 1762
Catherine II Alexeevna (The Great)	1762 - 1796
Pavel Petrovich	1796 - 1801
Alexander I Pavlovich	1801 - 1825
Nicholas I Pavlovich	1825 - 1855
Alexander II Nikolaevich	1855 - 1881
Alexander III Alexandrovich	1881 - 1894
Nicholas II Alexandrovich	1894 - 1917

The sixth Romanov ruler, Pyotr Alexeevich, was the first Russian ruler to declare himself Emperor. History conferred upon him the name "Peter the Great" in recognition of his consuming struggle to wrench Russia away from its feudal past and thrust it into the commerce and culture of modern Europe. In 1703 Peter established the city of St. Petersburg on the Neva River by the Baltic Sea and, soon afterward, moved the Russian capital from Moscow to his "window to the West."



Archival photo of the children of the last Czar, Nicolas II: Olga, Tatiana, Marie, Anastasia, and the Tsarevich Alexis, circa 1915. Reproduction courtesy of the Beinecke Rare Book and Manuscript Library, Yale University.

Tsarskoe Selo, or "the Tsar's Village"

In 1708 Peter the Great gave to his wife, Empress Catherine I, the estate outside of St. Petersburg that was to become known as Tsarskoe Selo, or "the Tsar's Village." A number of Imperial palaces and other buildings were constructed there during the Romanov period until the overthrow of the monarchy in 1917. Over time a town developed around the Tsar's estate. The town was renamed Detskoe Selo (children's village) following the revolution, and the name was changed to Pushkin in 1937 by the Soviet government, in homage to Russia's greatest poet, Alexander Pushkin, who spent his youth at Tsarskoe Selo and was educated at the Imperial Lycée there. Since the 1991 dissolution of the Soviet Union, the town has returned to its original name. Tsarskoe Selo, today a suburb of St. Petersburg, claims approximately 80,000 inhabitants in an area of about fifteen hundred acres. In the final years of the twentieth century, Tsarskoe Selo, despite its assortment of modern buildings ranging from five-story apartment blocks to numerous dachas, still incorporates the extensive park land and gardens of the two hundred year Romanov era. The model for Tsarskoe Selo is the royal palace complex of Versailles outside Paris, together with its palace, park, trianons, associated structures and town, once the center of French government and court life. Tsarskoe Selo, though significantly smaller, is nonetheless comparable to Versailles in scale, grandeur, and relative importance in the history of the Russian state.

The settlement began with a series of small farms which were amalgamated by Peter as he set about building his estate in the area. Today the Tsarskoe Selo historic complex includes about one hundred old buildings, of which two are large palaces: the Alexander Palace and the earlier and larger Catherine Palace, begun in 1717 during the reign of Peter the Great. The original Catherine Palace, constructed of wood, was demolished; on its site, in 1742, a new building was erected by architect Mikhail Zemtsov for Peter's wife Empress Elizabeth, using part of the earlier foundations. Around a new centralized building, four pavilions were added by Zemtsov's students Andrei Kvasov and Saava Chevakinsky. By 1745 the Catherine Palace was completed, and Chevakinsky became the chief architect of Tsarskoe Selo. His more recognizable contributions at the Catherine Palace included the five-domed Church of the Resurrection and the conservatory which would later be redesigned as the palace's Portrait Gallery.

Almost completely destroyed during World War II, the Catherine Palace has since been rebuilt. The majority of restoration and reconstruction work is finished, with the notable exception of the Amber Room, whose lavish interior amber decoration was removed by the German army during their occupation of the palace and subsequently disappeared. That room is currently being reconstructed, while other rooms outside the state apartments have

not yet been restored.

Tsarskoe Selo today is one of Russia's most popular tourist attractions, and the Catherine Palace is the centerpiece of the extensive park complex, surrounded by ponds, canals, follies, and shaded paths open to the public. Not far from the Catherine Palace is the Alexander Palace, the neoclassical masterpiece built by Catherine the Great and home of Russia's last Tsar, Nicholas II, now separated from the park by a military security fence.

The Alexander Palace's Patron, Catherine II

Catherine II, the Russian empress who commissioned the Alexander Palace, was known as 'the Great' mainly due to her successful annexation, in the last part of her reign, of vast Polish territories and the Crimea. Catherine was born in the then-German city of Stettin in 1729 as Princess Sophia Augusta Frederica of Anhalt-Zerbst and arrived in Russia at age fifteen, at the invitation of Empress Elizaveta Petrovna, to become the wife of the future Emperor Peter III. Catherine assumed the throne in 1762 during a palace coup against her husband, which resulted in his murder by a palace guard only months after his accession. Catherine ruled until her death in 1796. For several years before her death she had planned that her eldest grandson, Alexander, would become Tsar and in 1792 commissioned the new Alexander Palace for him. However, she died before finalizing the succession, leaving her son Paul to rule from 1796 until his murder in 1801, in a military revolt similar to that which had claimed his father's life, after which Alexander I finally assumed the throne. He ruled until 1825.

In the first part of her reign Catherine was intrigued with the ideas of the French Enlightenment, including its growing disillusionment with organized religion and call for a more humane attitude toward the government of men. The empress enthusiastically corresponded with Diderot and Voltaire, and even entertained Diderot in St. Petersburg.³ French was the established language of Russian court life and French tutors were hired for Catherine's grandson Alexander, as in her youth Catherine had been taught by French governesses and tutors. The Empress bought fine French paintings, drawings, Sevres porcelain, and brought the important French sculptor Etienne-Maurice Falconet to St. Petersburg to cast the remarkable life-size bronze equestrian statue of Peter the Great, which still stands as one of the city's most recognizable monuments. However, by the time Diderot visited St. Petersburg, Catherine's passion for French reforming ideas was beginning to cool. Finally she banned Diderot's great work, the *Encyclopédie*, and after the French Revolution the Empress turned away from her former enthusiasm for intellectual debate. Nonetheless, the influence of cosmopolitan and urbane French culture left an enduring mark on the trappings of Russian court life.

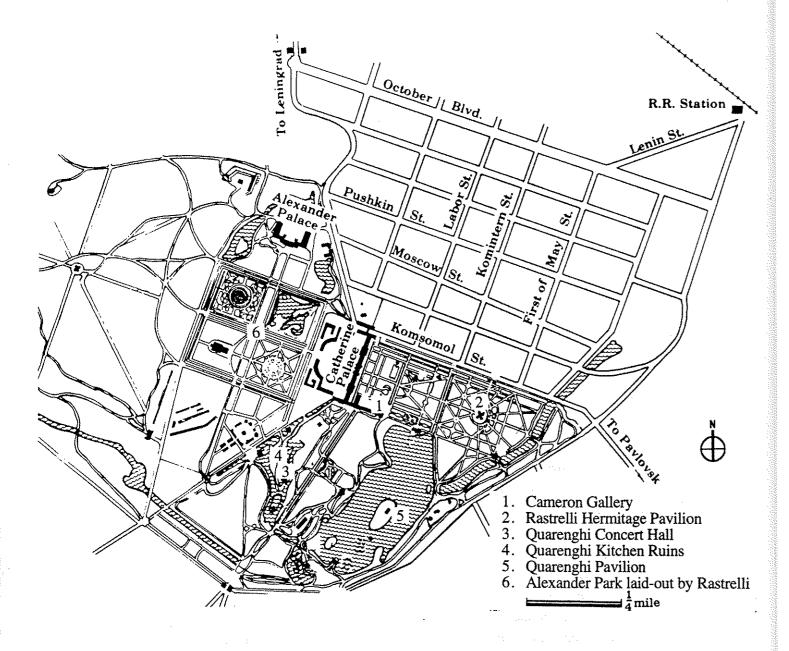
Catherine's political allies were Austria and, at least until the 1780s, England. It is said that she described herself as "frank and original as any Englishman" and she read the pro-British *De l'Esprit des Lois*, by Montesquieu. From 1779 the British architect Charles Cameron (1743-1817), a close follower of Robert Adam, worked for Catherine and lived in Russia for the rest of his life. For the empress he decorated several apartments in Rastrelli's Catherine Palace at Tsarskoe Selo and designed the Agate Pavilion and the Cameron Gallery there. Between 1782 and 1785 he built the great palace of Pavlovsk for Catherine's son, later Paul I. The park at Pavlovsk is in the Romantic English style and includes Cameron's Doric Temple of Friendship, the first of its kind in Russia. Her interest in classicism also led her to invite Italian architects to build for her, including Antonio Rinaldi, who built several monuments celebrating military glory, and Giacomo Antonio Domenico Quarenghi, who designed the Alexander Palace. Other buildings by Quarenghi in the Alexander Park at Tsarskoe Selo include the Chinese Village, the Greenhouse, the Kitchen Ruin, and the Hermitage.

Architectural and Landscape Design

The Alexander Palace (constructed 1792-1796) is one of several fine and imposing eighteenth-century Romanov palaces outside St. Petersburg designed by Quarenghi. Its history is compelling in part because so many well-known Russian architects are associated with its evolution and planning. The Alexander Palace is inextricably linked to the Catherine Palace and Park, which is sited on an intersecting perpendicular axis that connects the buildings using formalized planning principles. The origins of the Alexander Palace and the Park begin with the early settlement of the region laid out by Peter I.⁴ He engaged the services of a Dutch gardener, Jan Roozen, who cultivated the land as terraces referred to as the Upper Park and the Lower Park, which would later be developed as the Catherine and Alexander Parks. The Empress Elizabeth retained Bartholomeo Rastrelli (1700-1771) to make alterations to the Catherine Palace Park. In addition to the baroque modifications to the Palace, Rastrelli also re-worked the vast gardens, which he organized following the formal French concept of geometrical planning. The *parterres* and *allées* of trees which exist today at the Alexander Park are Rastrelli's innovations.

Origin of the Design

By the middle of Catherine II's reign, scholarly interest in classicism and antiquity had formulated a new Russian architecture often referred to as Alexandrine Neoclassicism.⁵ Catherine II endorsed this shift in aesthetic tastes and entrusted the continuing development and alterations at Tsarskoe Selo to Vasily Neyelov (1722-1782). Neyelov and his sons were commissioned to visit England to study Inigo Jones and other architects working in the



Site Plan of Tsarskoe Selo showing the relationship of the Alexander Palace and Park to the Catherine Palace and Park and other notable buildings.



Alexander Palace garden elevation, rendering by Quarenghi circa 1792.



Alexander Palace garden elevation photo, circa 1995.

Palladian style. On their return, they were entrusted with enhancing the landscape by the construction of architectural follies and pavilions and the laying out of 'natural' park landscapes which emulated English Palladianism and the Picturesque, as promoted by Humphrey Repton. It was at this time that Catherine also invited foreign architects and designers to educate and assist Russian architects in the understanding of classical architecture. The most influential of these guests was Charles L. Clerisseau (1721-1820).

Catherine's patronage of art and architecture continued as she retained two of the leading architects in the classical idiom, Charles Cameron (1730-1812) and Giacomo Quarenghi (1744-1817), for her most important palace commissions. Both architects were involved in the design and planning of the Alexander Palace and Park. To Cameron she gave the commission of the Pavlovsk Palace and several pavilions in the Catherine and Alexander Park. To Quarenghi she gave the commission of the Alexander Palace. Quarenghi, like Clerisseau and Cameron, came to Russia at the invitation of Catherine II in 1779'. Within a few years he had completed several modest commissions at Peterhof, the English Pavilion, and its surrounding landscape. Quarenghi received great praise for this project, which launched his career as the leading neoclassical architect in Russia. His work is identifiable by his extensive use of the Diocletian window, colonnades and the use of blind porticos. This can be seen in several of his civic commissions in St. Petersburg which exemplify the quality of his work, including the Bourse (1783-87), the State Bank (1783-89), the menage of the Horse Guards Regiment (1804-07), the Hermitage Theater (1783-87), and the Smolny Institute for the Education of Young Noblewomen (1806-08). The Alexander Palace, however, is considered by many to be his masterpiece. Quarenghi could also easily be regarded as both landscape architect and planner.

The siting of the Alexander Palace and its relationship to the Park reveal his skill at manipulating scale and form. The building is set in its own park facing a Romantic pond shaped in a 'natural' form, in the style promoted in English parks of the period by Humphrey Repton, whose work is undoubtedly the source for the northwest section of the Alexander Park. The Alexander Palace, with its broad entrance colonnade and flanking temple-fronted wings, is an impressive neo-Palladian ensemble. In contrast, the formal enfilade of the palace's center section, by Western European standards of its day a little retardataire, looks out onto a magnificent avenue of trees that recall the baroque landscape manner of the Catherine Palace towards which the avenue leads. The palace plan of two wings joined by a suite of state apartments in the traditional Renaissance royal palace style has its precedent in Hatfield House in Hertforshire, England, built by Robert Cecil, First Earl of Salisbury, and the Palace at Versailles built for Louis XIV. This practical form accommodates the apartments in one wing for the monarch and in the other for his consort.

Nineteenth Century Modifications

The Palace remained unchanged until 1826, the beginning of the reign of Nicholas I, when Vasilii Petrovich Stasov (1769-1848) was commissioned to redesign the interior of the south-western wing, which contained the private apartments of the Tsar. Stasov was one of several architects, like Carlo Rossi and Thomas de Thomon, who remained faithful to neoclassicism in the early Nineteenth Century. Stasov, born and trained in Moscow, had a very successful practice and produced numerous projects in St. Petersburg. Among his better known works are the Cathedral of the Trinity (1828-38), the Court Stables (1817-23), and several redecorations of many palaces, including the Winter Palace, where his alterations fit well into his predecessors' design.⁸ It is not yet known whether any of his interiors survive at the Alexander Palace.

In 1837, Nicholas I commissioned Konstantin Ton (1794-1881) to undertake renovations to the Crimson Drawing Room. Ton, a graduate of the Academy of Arts in St. Petersburg and later designer of Moscow's immense Cathedral of Christ the Saviour, was strongly influenced by medieval Russian architecture. His architectural designs for churches reflected 'national' or 'traditional' architectural tastes which were easily adopted by the Russian Orthodox church as an acceptable architectural style for Russia. Nicholas apparently became familiar with these design ideals and endorsed them, as they fit well with his policies of imperial autocracy.'

In contrast to the Catherine Palace, which had by this time become a virtual museum, used primarily for ceremonial functions, the Alexander Palace was a home to the Imperial Family which changed with the personal tastes of the rulers. Many innovations to the palace were made throughout the nineteenth century to make it more comfortable and confirm to the changing needs and tastes of its residents. In this regard, it was the site of many of the 'firsts' of technological development in Russia, including the country's first telegraph transmitter and radio station.

Twentieth Century Alterations

Innovation in design and decoration returned to the Alexander Palace when Nicholas II and Alexandra renovated the southeast wing, which would become their private apartments. To refashion their living quarters, they selected court architect Roman Meltser (1860-1943), an architect and designer trained at the Academy of Arts in St. Petersburg, whose tastes were rooted in the Finnish and Russian vernacular. He was also familiar with the work of British Architects Charles Voysey and H. M. Baillie Scott. This British connection was strengthened by Alexandra's familiarity with current fashion in England, having spent much of her time there with her grandmother, Queen Victoria, prior to her marriage to Nicholas.

Roman Meltser, son of Friedrich Meltser, was well equipped to serve his patron, having access to his family's manufacturing company which specialized in interior furnishings. His contributions to the Alexander Palace and the Winter Palace in the Art Nouveau style are without comparison in other royal residences, as it is unusual that an entire suite would have adopted the latest fashions at the turn of the century." The high-style furnishings and decorations were produced in Russia or taken directly from Paris, London, and Darmstadt. It should be noted that Empress Alexandra's brother Grand Duke Ernst Ludwig was one of the promoters of the Art Nouveau style in Germany. His patronage of the artists' colony at Matildenhöhe in Darmstadt was a primary source of the development of modern European architecture and interior design. Miles van der Rohe and Peter Behrens were significant contributors to this colony.

Grand Duke Ernst-Ludwig advised his sister on the purchasing of furniture of art for their rooms in the Palace, whose decoration was thus strongly influenced by the Darmstadt style and German Jugendstil. These period rooms represent the best of art and architectural design of this creative period. Shortly after the collapse of Imperial Russia, Meltser emigrated to New York City and continued to practice as a designer and decorator, principally for the theater. Two of the theaters in whose design he participated survive as the Brooks Atkinson Theater and the Royale Theater.¹²

Between the World Wars, with the Imperial wing still furnished much as it had been at the time of Nicholas and Alexandra, the Palace was shown as a museum. It opened to the public on June 9, 1918. During this time, as was generally the case with former Imperial residences, the Soviet government expropriated pieces from the Alexander Palace collection for sale abroad to raise hard currency. Many of these pieces were sold in the Hammer sales of the 1930s in U.S. department stores. Other pieces entered the collections of elite American and European collectors. From 1924 to 1938, parts of the palace museum were progressively closed to the public and converted to government use, although the central enfilade rooms and former living quarters remained open. The museum continued to function until the beginning of World War II, when the palace interiors were hastily packed and evacuated to storage facilities in Siberia.

The Alexander Palace was spared the massive destruction that befell other Imperial palaces surrounding Leningrad. Its use as a hospital for SS officers afforded the building protection from the heaviest bomb damage.

After the war, amid heated controversy over the future use of the palace, the Soviet Ministry

of Culture and the Leningrad Commission for the Preservation of Historic Monuments made detailed plans to restore the palace and convert it to service as a museum devoted to Alexander Pushkin and other Russian literary figures. This work was still incomplete when Joseph Stalin signed an order in 1951 handing control of the building to the Soviet Navy for use as a military research institute. As a result, the building was altered to accommodate a variety of classroom and administrative uses, and many of its Imperial furnishings and interiors were removed to other museums. Since the transfer of control, upgrading of electrical and mechanical services appears to have been minimal, and general repairs and maintenance have been largely limited to the interior over the intervening years.

As of October 1996, the palace remains occupied by this naval unit, although military officials have stated unofficially that the staff is eager to move to more suitable facilities within the town of Pushkin. A vacant building formerly belonging to the Ministry of Agriculture has been designated for the use of the naval institute, and its transfer now awaits an executive order from President Boris Yeltsin and the release of funds to facilitate the move. While extensive research has not yet been conducted into architectural modifications that took place at the palace after the war, it is expected that with access to military maintenance records, this research may be possible in the near future as the military facility prepares to relocate.

II. Existing Conditions

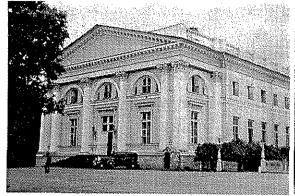
Overview

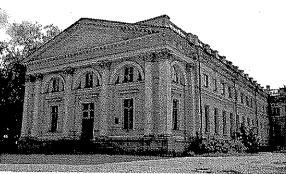
Brief inspections were made of the exterior of the Palace building on February 14 and 21, 1995, and a more extensive visual survey was conducted on July 22, 1996. Both survey missions to date have included surveys of interior spaces, which are indicated on the diagrams in Appendix E. Because of questions concerning military security at the building, a complete survey, including scientific testing and probing, will await the relocation of the naval institute.

Prior Conservation Campaigns

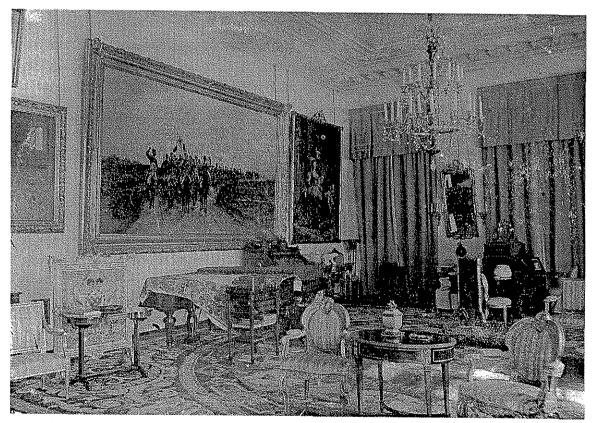
The Alexander Palace has already undergone several interior and exterior improvement and redecorating campaigns. Some of these have been documented and are referred to in military archival records. The last substantial series of exterior improvements took place between 1946 and 1949. It is understood from interviews conducted at the palace with the Chief of Engineering Services that the previous work concentrated on structural repairs caused by explosives and concussion damage by munitions. The extent and location of repairs are not yet known, but archival photographs taken immediately after World War II suggest that the centrally-located Semicircular Hall and adjacent rooms received substantial damage. Evidence of this can be seen today in the pattern of diagonal cracking which exists in the load-bearing central wall. In many of the repairs, inferior cementitious materials were used to repair exterior spalled surfaces and to patch missing interior scagliola (see * 11 and 18).

Observations made to date have not been thorough enough to determine the overall condition of the building regarding its structural integrity, condition and the adequacy of electrical wiring, heating, and plumbing. Each of the six rooms visited during Mission I showed similar signs of water penetration at the outside walls where plaster surfaces had discolored and damaged the applied ornamental cornices (see* 21). Floors appear to have been replaced; however, perimeter borders of the New Study and the Tsar's Reception Room may be original. Comparison with archival photographs indicate that the Portrait Hall floor may also be original.





(left) Entrance to the Imperial (southeast) wing. Photograph ca. 1910 by Anna Vyroubova. Reproduction courtesy of the Beinecke Rare Book and Manuscript Library, Yale University. (right) Entrance to the Imperial (southeast) wing. Photograph 1996.



Formal Reception Room of Tsarina Alexandra. Photograph ca. 1910 by Anna Vyroubova. Reproduction courtesy of the Beinecke Rare Book and Manuscript Library, Yale University.

Survey Results: Exterior

Exterior Stucco

The preliminary exterior surveys indicated that the building is in fair to poor condition. Closer inspection of representative areas where stucco has fallen away from the brick substrate suggests that extensive deterioration is now affecting the structural integrity of the exterior wall surface (see * 11 and 12). This is also evident where past repairs are no longer weather resistant and are at the end of their useful life. Other deterioration is evident in the fading and flaking of the pigmented stucco coat. In spite of the cold outside air temperature during the 1995 visit (ranging from 5-20° F.), green algae was growing between stucco layers and holding moisture against the masonry. The unevenness of recent exterior painting attempts indicate that surfaces were not properly prepared, or that the coating materials were not compatible with existing pigmented stucco. It is also likely that a waterproofing sealant was applied to the stucco surfaces. Some of the surfaces have received dense cementitious coating products which served to seal the exterior skin of the building. At the time of their application, these cementitious coatings were no doubt considered the answer to failing masonry and stucco, as was the case in the United States. In the present day, tests conducted on similar buildings of the same construction and age which received this treatment years ago indicate that the masonry cannot "breathe," and that dampness is thereby trapped behind the cement coatings. While these coatings serve to seal openings in the surface and improve appearance in the short term, they conceal micro-cracks which continue to occur beneath the newer coating. Consequently, when cracks finally develop at the surface, they appear suddenly and extensively. This is the case at the Alexander Palace directly beneath the eaves and adjacent to leaders — areas which are in the worst condition (see * 11 and 12). While there was clearly work carried out in recent years to preserve the majority of the original fabric, certain areas today are showing signs of distress and may need a different repair methodology, as cementitious coatings may no longer work to prevent moisture from entering the masonry.

The exterior of the palace, as with many other buildings of this period, share the same construction methods and materials, namely load-bearing masonry with an applied stucco finish and ornamentation. When cementitious coatings have been used in the repair of stuccoed masonry surfaces, in many cased a different kind of deterioration occurs which most often manifests itself by micro-cracks which permit water to enter behind the hard surface. During freeze-thaw cycles, the moisture trapped inside the wall construction pushes the stucco from its masonry substrate, causing further enlargement of cracks. When this pattern of deterioration occurs at locations where metal components are set into the structure, as found at cast-in-place or applied decorative features such as cornices, dentils,

consoles, window surrounds, sills and lintels, the rate of deterioration of the cementitious and masonry structure increases, and corrosion of ferrous metal is imminent. Stuccoed buildings like the Alexander Palace, located in the Baltic region where weather conditions are often extreme, usually require extensive and frequent repairs and maintenance to prevent substantial loss and failure of material.

There was not sufficient time during the preliminary survey missions to make a comprehensive assessment or to annotate the range and characteristics of delamination which is occurring on the stuccoed facades. However, to give an indication of the areas most affected by freeze-thaw damage and material loss and to estimate the components of the building which will require immediate attention to prevent further loss to the stuccoed surface, diagrammatic elevations have been prepared. The conditions observed are therefore generally described below, along with likely causes of the deterioration.

Water Damage

The stuccoed exterior walls of the Palace appeared to be in poor to fair condition depending on orientation and proximity to storm drainage disposal piping. Only in the uppermost areas, directly beneath the overhanging cornice and at locations where the roof drains penetrate the overhang, are there signs of extreme damage to wall structure. This can be seen in illustration 11, where moisture has migrated downwards and saturated walls, providing a "waterline," or uniformly discolored segregation of the uppermost portion of the facade.

Similarly, rising damp from the ground was evident and creates a comparable pattern of moisture presence at the base of the building. The visual assessment of the interior revealed that moisture has also penetrated to interior plastered wall surfaces causing cracks, flaking paint, and powdering of plastered surfaces as seen in the Crimson Drawing Room (* 21). In some extremely saturated areas, discoloration to certain interior surfaces is already visible. These symptoms are typical to damp conditions. At specific interior and exterior locations, applied ornament has fallen or threatens to fall due to corrosion of the iron armature as a result of excessive moisture. On the exterior, examples of this can be seen at the consoles below cornices and eaves which have come loose from their mounts (see illustrations 21 and 17 respectively). This is due to moisture being held below the perimeter gutter. A further problem visible at the roof perimeter is the lack of connecting leaders to built-in or overhanging gutters.

Roof Conditions

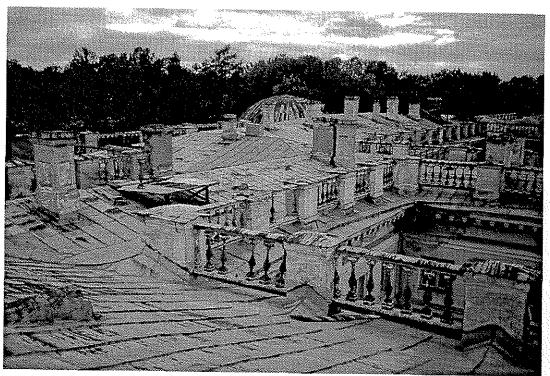
The roof of the Alexander Palace, briefly surveyed during the visit in July 1996, is vast and in poor condition. The wooden ornamental balustrade surrounding the roof, dating from roughly 1910, is severely deteriorated and missing altogether in certain areas (* 12); some repairs with galvanized straps were noticed. The galvanized standing-seam metal roof covering shows rust over approximately 40 percent of its exterior surface. Dents and bent-over seams are abundant and most likely result from careless shoveling of snow during winter. Small (approximately 60 cm. x 1.5 m) semicircular roof vents with wooden louvers are mostly flattened on their top edges, though they appear to be sound at their junctures with the roof surface. Glass covers are in place on a number of these vents.

Almost all roof penetrations which consist of stuccoed masonry chimneys, flues, and firewalls are very poorly flashed, there being almost no effective counter-flashing in place. Crickets and other diverters are only in fair condition, their standing seams having been partially flattened during snow-shoveling operations. Masonry chimneys and balustrade supports all suffer from spalling stucco, poor flashing, substandard repairs, and little or no cap flashing.

Attic Area

Representatives of the World Monuments Fund carried out an initial examination of the principal attic space in the east half of the palace during the July 1996 survey. During this tour the attic was viewed from a central walkway placed over the semi-cementitious material which is used as insulation. Dim lighting and lack of access beyond the walkway limited the amount of visible detail. Considering these constraints, however, the surveyors noticed that roof framing — that is trusses, rafters, purlins, and flooring — appeared to be in relatively good condition. It was evident that there had been several repairs and structural interventions over recent decades. For example, a large lattice truss was noticed over the Semicircular Hall, and tie rods and cables were installed at corners.

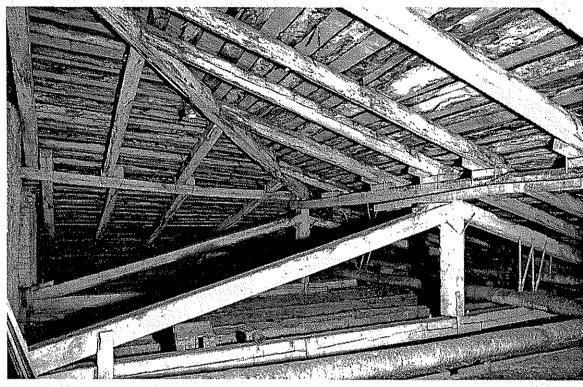
Most rafters and purlins appeared to be in good condition, and, judging from those observed and probed, it appears that these materials are 80-90 percent intact and reusable. The few rafter "tails" noticed which were fitted into exterior wall caps appeared sound, though access and illumination levels were not adequate for a close inspection. A number of open joints and very poorly detailed flashing at chimney collars had resulted in wood deterioration in almost all such areas. This is due to the almost complete lack of counterflashing used in construction of the present roof covering.



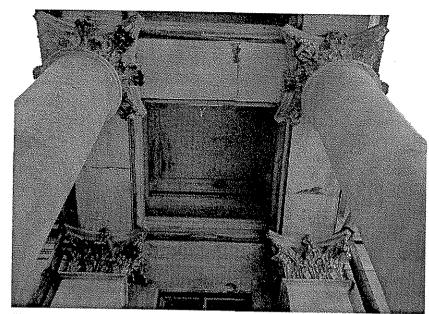
General view of damaged condition of Alexander Palace roof, circa 1995.



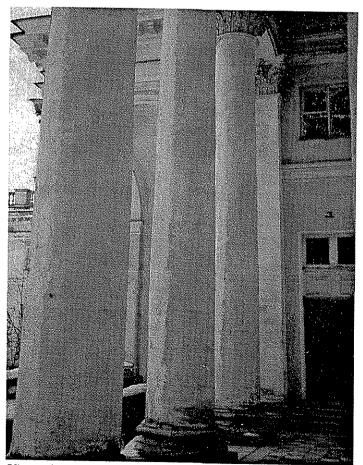
Typical damaged pressed tin vent prior to repairs on Alexander Palace roof, circa 1995.



Typical view of Alexander Palace attic just below roof level, showing condition timbers and trusses.



View of colonnade showing cracked lintels, February 1995.



View of colonnade, partially repainted, February 1995.

Numerous small semicircular layered roof vents occur at regular intervals in the roof. Most were somewhat deformed, probably a result of snow-shoveling operations. Steam piping is poorly insulated, and a relatively minor amount of debris has accumulated in the attic areas. No household implements were noticed in the attic area, though a stalk of approximately 50 turned wooden balusters was noticed near the roof hatchway.

Central Colonnade

The central colonnade at the primary elevation of the Alexander Palace is in fair condition. Vertical support elements such as the stuccoed column shafts and metal Corinthian capitals appear to be in sound condition, with only minor cracks and material loss. In the coffered ceiling the cast-in-place structure, which forms short-span lintels, displays cracks (* 13) which require further analysis to differentiate between possible structural failure or superficial cracking. This indicates that moisture has entered the concealed iron and wood roof/ceiling framing, and therefore that corrosion is probably affecting roofing joints and various concealed structural connections.

Survey Results: Interior

Methodology

The objectives of the February 1995 mission were to begin to assess the present physical condition of the palace interiors, to establish their conservation needs, and to relate the condition of the rooms to surviving collections of furnishings and museum display material stored off-site.

Upon initial inspection, the documentation of the Alexander Palace interiors appears largely complete. The extent of the apparent survival of art and decorative art collections and the wide range of archival materials should help to ensure the historical integrity of the restoration. The handful of rooms that have been made accessible to surveyors to date remain surprisingly intact, considering the range of uses to which they have been put since the end of World War II. Three rooms from the apartments of Nicholas II and Alexandra have been inspected: the Tsar's Reception Room, the Tsar's New Study, and Alexandra's Reception Room. Of the central enfilade of formal chambers, only the Semicircular Hall and the Crimson Room have been visited by the WMF survey teams.

The criteria for judging the condition of the rooms and establishing the ability to return the rooms to their original appearance were based on the following basic principles:

- The conformance of the rooms' configuration to the original layout
- The condition of surviving wall finishes (textiles, scagliola, ornamental plaster and/or woodwork)

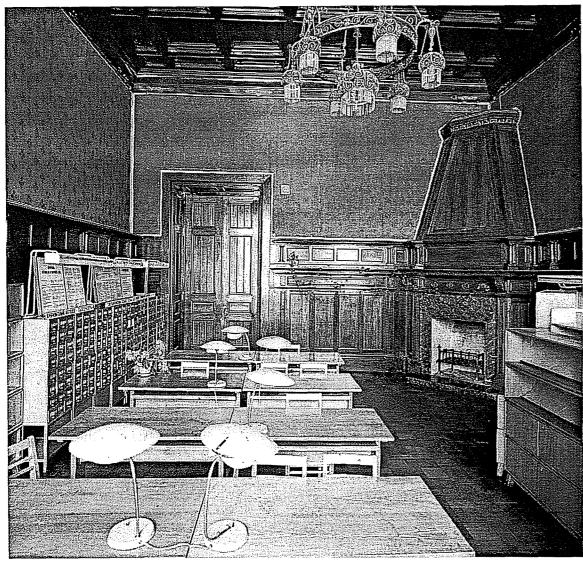
These rooms were evaluated in terms of their overall condition and in terms of the degree to which each was intact. The categories used were the following:

Good to Excellent 75% and above Fair 75% - 50% Poor 50% - 25%

Initial observations of the rooms visited are provided below:

Tsar's Reception Room

The Tsar's reception room is a fine interior dating from 1895 and designed by Roman Meltser, now used as a Naval institute library. Although empty of original furniture, the room makes a startling impact. The interior appears to retain its original turn of the century



Tsar's Reception Room, February 1995. Photograph by Kirk Tuck and Michael Larvey.

wood-paneled ceiling and virtually all of its wall paneling and fireplace decoration. Most impressive of all, it appears that the room's original stamped gold fabric wall covering above the paneling remains in good condition. Further research will be needed to verify the dates of manufacture and installation of the wall covering. The doors, covered ceiling and original window hardware is still in place. Evidence of some repairs to the wood wall panels was observed, and is documented from archival photographs as damage done during the German occupation and restored after the war. The central area of the floor appears to have been replaced. The original Syle Moderne Russian bronze and glass chandelier was reinstalled after the war. Iron fixtures in the fireplace seem to be original to the room.

The overall impression of the Reception Room was of a room which miraculously survives with about 80 percent of its original wall, floor and ceiling surfaces. The room's inventories, in the Tsar's period and later, will need to be analyzed. Many of the Imperial rooms were photographed in the Tsar's day, or at least before they were packed up prior to World War II. It is probable, therefore, that photos exist which could be used for the planning of the room's reinstallation.

Tsar's New Study

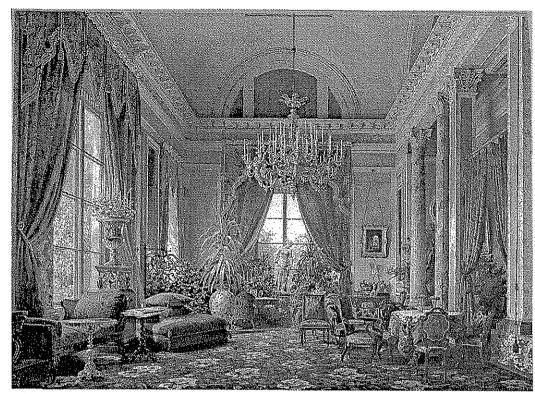
The New Study, now empty and apparently unused by the Navy, is another high quality Art Nouveau interior designed by Roman Meltser about 1900. This is one of the palace's largest interiors, which the architect made even larger by adding "stolen space" from the upper half of the adjacent corridor as a 15 foot wide and 30 foot long mezzanine gallery. The gallery connects to Alexandra's Maple Room on the other side of the corridor. The New Study mezzanine transforms the room from a vertically-centered, eighteenth century, neoclassical space into a distinctly twentieth century interior with a broad and horizontally-focused spatial quality (perhaps influenced by Asian interior architecture as it was sometimes interpreted in the west at that time). This modern space configuration sets the study in distinct and intriguing contrast to the other palace rooms. The study retains its extremely fine wood-paneled Art Nouveau ceiling and its fine, squat marble pillars along the balustrade of the mezzanine gallery. The wooden staircase up to the mezzanine has been replaced (post World War II) with a creditable replica. The original 1900 wall finishes are badly scarred. However, extensive physical evidence survives, as do historic photographs. Reconstruction is therefore possible. The overall impression of the condition of this room was fair.

Crimson Drawing Room (northwest interior of the formal enfilade)

The Crimson Drawing Room is an extremely fine eighteenth or early nineteenth century neoclassical interior which has certainly seen better days. Presently the room is used for



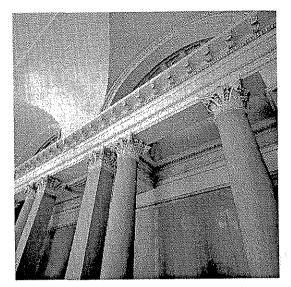
Czar Nicolas II's New Study circa 1910. Reproduction courtesy of the Beinecke Rare Book and Manuscript Library, Yale University.



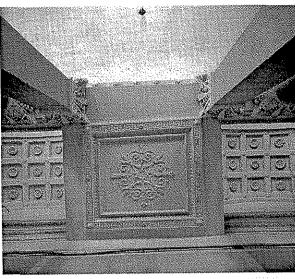
The Crimson Room. Watercolor by Luigi Premazzi, 1863. Reproduced courtesy of the State Museum-Preserve Tsarskoe Selo.



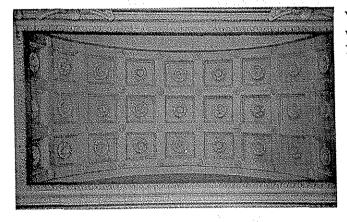
The Crimson Room, February 1995. Photograph by Kirk Tuck and Michael Larvey.



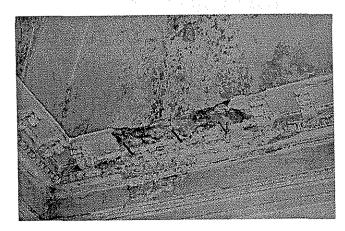
Interior detail of the Crimson Room showing columns re-coated with stucco in lieu of scagliola as exists at the walls, February 1995.



Interior of the Crimson Room showing the ornamental ceiling. Note that the center medallion is detached from its key (circular line around the central feature), February 1995.



View of Crimson Room coffered barrel vaulting in excellent condition, February 1995.



View of corner of the Crimson Room ceiling cornice, which has suffered from water damage, February 1995.

storage of broken classroom chairs and desks, piled in disorganized heaps. The thirty-five foot high space has a coved ceiling into which rise the magnificent north and west archtopped windows. Their sills are badly deteriorated. Only the east and west walls appear to retain their original green and cream scagliola surface, while the rest of the room's wall surfaces, including an impressive six-column screen, is stuccoed in green as though a fast and cheap replacement of the original scagliola. The ceiling, with its coffered bay, is intact but looks fragile. Although the scagliola remains, as does the ornamental plaster, considerable stabilization will be required, and its overall impression is therefore poor.

Semicircular Hall

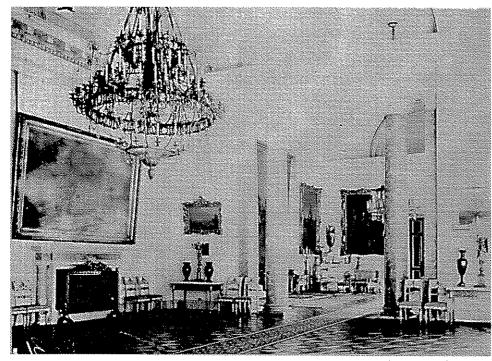
Today the Semicircular Hall is used as an auditorium. In Quarenghi's original plan the hall, shown as the center of the grand enfilade of five formal halls, is drawn with doorways, north and south, opening into its adjacent interiors. However, in twentieth century photographs the hall is shown thrown together with its enfilade rooms as a dramatic ensemble of vaulted interiors separated by giant columned screens. Today the Semicircular Hall is completely closed off from the enfilade. The screened and vaulted spaces have been boarded up as interior partitions. However, the white scagliola of the east and west walls survive, and a pair of carved marble fireplace mantels, in situ, are enclosed in boxes to protect them. The overall condition is fair. It should be remembered that this room was modified and used as a small movie theater for Nicholas II and his family. The projector was housed in a small connecting room to the east, with a window in the wall which survives and is presently blocked up.

Alexandra's Formal Reception Room

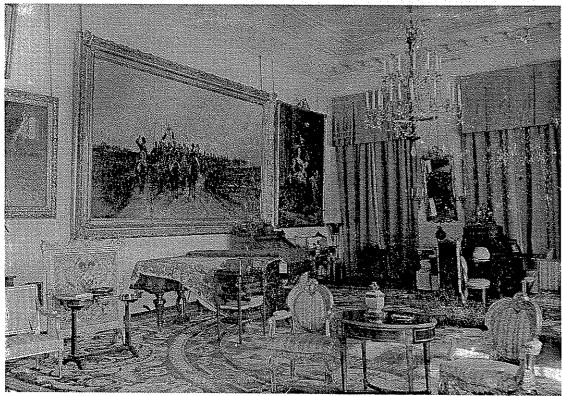
The Tsarina's formal reception room is now used for drafting instruction. One hundred years ago the room was furnished with portraits recalling the way in which it might have looked in the eighteenth century. The condition of the room is fair, with virtually all of the white scagliola intact. Where damaged, it is repairable. Only the ceiling molding has suffered from water damage, and several of the cast ornamental brackets have fallen away, exposing the corroded iron anchorages. One door leading to the Maple Room has been added. This may be a convenient intervention for access which could remain.

Tsar's Vestibule

This area was originally used as an entrance. Smaller passages, pantry and a cloakroom were once located symmetrically to the entrance door. These partitions have all been removed and one large space exists today. A vestibule has been built in front of the door and is not original as are the ceiling and cornice molding which follow the spirit of



Formal Reception Room of Tsarina Alexandra. Reproduction courtesy of the Tsarskoe Selo Museum.



Formal Reception Room of Tsarina Alexandra. Photograph ca. 1910 by Anna Vyroubova. Reproduction courtesy of the Beinecke Rare Book and Manuscript Library, Yale University.

neoclassical design. This space has no relation to the functional plan as used by Nicholas II as the partitions that were installed have been removed. However, this space conforms to the Quarenghi plan and is in fair condition.

Off-Site Collections

Preliminary assessment of the collection of Alexander Palace objects stored at the Palace of Pavlovsk and the Catherine Palace are provided below. The objectives of the visit to the two museums was to:

- assess the present situation of the Alexander Palace collections stored or displayed off-site, determine the extent of those collections, and assess their immediate needs;
- assess the feasibility of establishing a centralized physical inventory and registration of the collections according to current museum standards; and
- · suggest requirements, procedures and policies for the future.

The following observations are based on brief visits to Pavlovsk, where several objects from the Alexander Palace are currently part of the furnishings of the formal and private apartments. Additionally, the survey team visited the third floor of Pavlovsk, where a permanent display of a large collection of late nineteenth and early twentieth century decorative art objects is exhibited. Many of the displayed artifacts are from the Alexander Palace.

The 1995 survey mission also included a visit to the state rooms of the Catherine Palace, where several objects once at Alexander Palace are currently shown. A visit was made to the Catherine Palace storage rooms, where considerable collections of historic clothes of Nicholas II, Alexander, and their children are held, as well as paintings — mainly nineteenth century portraits — from the Alexander Palace. The paintings conservation studios of the Catherine Palace were observed.

The objects in the palaces were viewed on a general basis to establish their overall conservation, preservation, handling, and registration needs. On the whole, the objects from the Alexander Palace appear to be in stable condition, with some obvious and natural areas of deterioration (i.e. worn and soiled areas). In general, the collections appear to be protected from over-handling by the public or staff. Objects do not appear to be over-treated or cleaned. Paintings seem to be in very good condition. There was no evidence of the packed cases where large numbers of objects from the palace are said to have been stored since World War II.

Objects at Pavlovsk

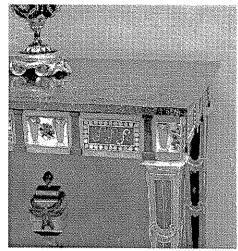
Three neoclassical hall lanterns in the vestibule of the palace were at the Alexander Palace during the reign of Nicholas II. On the ground floor in the private apartments is an exceptionally fine writing desk by, or in the manner of, David Roentgen (1743-1807) of about 1780, in very good condition. On the third floor there are about two hundred artifacts from the Alexander Palace: several paintings (including one by Alma Tadema), several sculptures, a group of twelve or more Art Nouveau Galle glass vases probably from Alexandra's Mauve Room, several very good Art Nouveau gilded metal vases, and suites of seat furniture. The overall condition of this collection is good.

Objects at the Catherine Palace

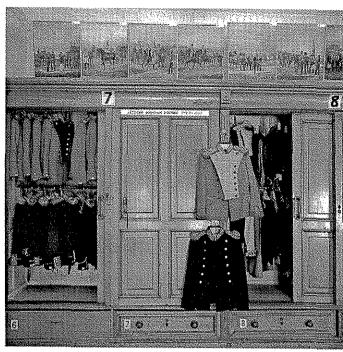
In the state rooms of the Catherine Palace a fine full-length portrait of Nicholas I by Kruger was on display. The painting, in excellent condition, was once been part of the arrangement of portraits in the formal enfilade halls of the Alexander Palace. Also in the Catherine Palace, in the 1780s rooms designed by Charles Cameron for Catherine the Great, were two exquisite neoclassical pier tables decorated on all surfaces with lapis lazuli, along with floral details in other semiprecious stones. Tables using lapis in this quantity are distinctively Russian, and are rarely found in other countries; they are objects of unique artistic and historical merit. They were once part of the furnishings of the Alexander Palace. A group of French neoclassical gilded wood chairs, attributed to the menuisier George Jacob (1739-1814), is in superb condition. Lastly, on the ground floor of the Catherine Palace, a magnificent large-scale porcelain urn and stand was on display, with its gilded bronze attachment of flowers, disassembled. The very unusual piece of great refinement, following a design of Karl Frederich Schinkel, appears in a watercolor of the Alexander Palace's Crimson Drawing Room, painted by Luigi Premazzi in 1863, where it stands impressively in front of a window. It appears to be well preserved.

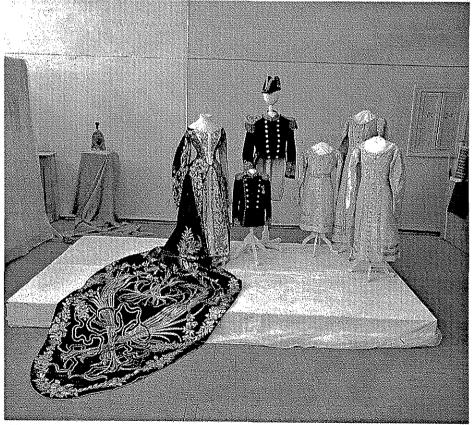
Storage of Historic Clothes at the Catherine Palace

In the Catherine Palace storage rooms is a very large collection of historic clothing once worn by Nicholas II and his family. Many of the Tsar's military uniforms were kept in wardrobes which had once been part of the fitted closets of the Nicholas' private rooms in the Alexander Palace. Above the closets were small oil paintings of different regiment officers shown on horseback in their uniforms. Some of the Tsar's navy uniforms are also extant. Several of the Tsarevich's uniforms are preserved, including a traveling chest with his uniform of the 12th Eastern Siberian Shooting Regiment, along with his sword, gloves and epaulets.



Neoclassical Russian lapis lazuli pier table. Once at the Alexander Palace, now displayed at the Catherine Palace.





Clothing, uniforms and wardrobe of Nicholas II and family, now in storage at the Catherine Palace, February 1995. Photographs by Kirk Tuck and Michael Larvey.



Equestrian portrait, heavily restored, which was once part of the Alexander Palace collection. photo 1995.



Historic tea service part of the Alexander Palace collection, in excellent condition. Photographs by Kirk Tuck and Michael Larvey, 1995.

Along with clothes of the Tsarina Alexandra are ball gowns of Anastasia, Olga, and Maria. Shown on a special display mannequin was the ball gown and velvet train of the Grand Duchess Ksenia. All of the clothes inspected appear to be remarkably well preserved and kept in good storage conditions.

Catherine Palace Paintings Conservation and Storage

The February 1995 survey team was given a privileged opportunity to see some of the facilities where paintings are conserved at the Catherine Palace and where mural and ceiling paintings burned during World War II have been replicated. In one of the studios a 12' x 15' equestrian portrait from the Alexander Palace, crated since before the war, had been unpacked for the group's examination. As a splendid original object it is probably representative of many Alexander Palace artifacts that remain crated. The picture, as seen in the accompanying photo, is not in perfect condition. However, about 99 percent of the paint is intact and can be conserved. Two large study storage rooms were observed; a photograph of one of them is shown here. Most of the paintings had been conserved and are in excellent condition, clean, and free of dust. In the collection are five full length royal portraits which were part of the Alexander Palace collection.

Objects viewed from the storage collection included a glass tea service made about 1900 at the Imperial glass factory and used by Nicholas II and the Tsarina at Alexander Palace for morning tea. The group also saw a two person tea service, manufactured at the Tsar's porcelain factory. Each piece in this set is painted with a vignette of an Alexander Palace park scene. On the tray is a view of Cameron's Palladian bridge in the Alexander Park.

III. Proposed Conservation Treatments

Overview

Conservation issues at the Alexander Palace can be divided into the following components:

- restoration of the building exterior;
- rehabilitation of the building structure, including the insertion of upgraded mechanical, electrical and plumbing systems;
- restoration and rehabilitation of interior architectural details, furnishings, and fittings;
- reinstallation of decorative objects and furnishings and interpretation of the 'story' of the building; and
- restoration of the landscape at the entrance and rear garden.

The optimum approach toward restoration of the Alexander Palace would allow for the above mentioned project components to be approached in a single coordinated building restoration campaign. For this to occur, the whole building would need to be made available at the time of undertaking, and full project funding would need to be in place or firmly pledged.

At the time of this writing, neither of these two assumptions can be made, since the structure presently accommodates important Russian military facilities which may continue to occupy the building in the foreseeable future. Additionally, funds for the restoration of the Alexander Palace must be raised through the efforts of a centrally coordinated consortium of public and private agencies committed to preserving this structure. These two key factors have been taken into account in the preparation of this report, which stands as a preliminary compilation of material gathered and organized as a basic framework for planning the conservation and presentation of the building. A discussion of plans and other ideas for this proposed project follows.

Options for Exterior Conservation and Restoration

Although defects and significant deterioration are visible today at the Alexander Palace, not all of the problems require immediate attention. Many of the items discussed in this report are localized conditions, and a considerable amount of preventative maintenance of these areas can serve to hold off extensive repairs and replacement elsewhere. This is particularly true of portions of the interiors which will not be open to the public. If this course of action is selected in these areas, temporary protective coverings can be applied without affecting use and appearance. On the exterior, given the nature of the deterioration, repairs need to be made with regard to the remaining life of original fabric which is presently intact, the service life of previous repair work, and the durability of continued temporary repairs. Also to be considered will be the extent of comprehensive rehabilitation required to correct original design defects, removal of previous incompatible repairs, making interventions that are consistent with the age and character of the palace, and the cost implications of each of these possible actions.

For many of the issues presented in this report, even temporary protection will serve to extend the life of several original decorative finishes and components. As is it not known precisely when material failure or loss will occur, a time frame for implementation of protective measures has been assigned, along with an annotated ranking of urgency by building component as follows:

A = First priority 1 - 2 years (protective measures to be undertaken)

B = Second priority 2 - 5 years

C = Third priority 5 - 10 years

Beyond this schedule, predictability becomes meaningless. Each building component addressed in this report is further discussed in light of recommendations for either temporary or long term repair. The apparent urgency for these interventions are addressed as well.

Roofing and Flashing (Priority A)

The galvanized metal roof covering has reached the end of its serviceable life. The most recent extensive roof repair was carried out in 1946. Tree branches and nearby trees which threaten the roof should be removed. The entire roof covering should be removed down to the original structural substrate. Any deterioration to the roof structure should be repaired and made ready to receive a new roof covering system. Flashings should be cut out and replaced and new reglets cut into stuccoed wall surfaces to provide a clean and weather-

tight joint. All tarred surfaces should be cleaned back to the original substrate to permit the new roof material to fit level and without previous layers telegraphing through. It would be opportune to check that the roof, once exposed, remains laid to fall towards perimeter gutters and drains so that any corrective measures can be made prior to re-covering the roof. The perimeter flashings should be removed and the fascia inspected for water damage. After repair of fascias as required, new gutters and other elements of the roof waterhandling system can be reinstalled.

Chimneys, Parapet Walls, and Roof Balustrade (Priority A)

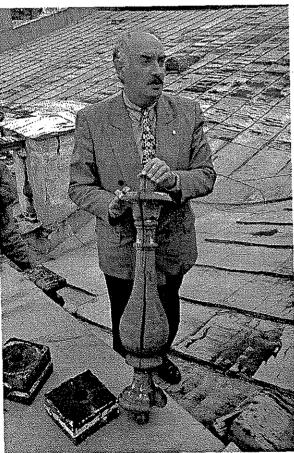
As with the stuccoed walls mentioned below, the roof parapet sections which stand between the balustrades are in poor condition. There is substantial loss of stuccoed surfaces. There are almost certainly instances where moisture intrusion is occurring in these areas, particularly at joints between dissimilar materials, on high-wear surfaces, and where roof repairs have occurred. Visual inspection of the attic space indicated that wood roof trusses are in good repair. However, because the attic survey was limited in scope, it is possible that there is some water damage to timber framing that will need repair.

Stuccoed Walls (Priority A)

Once the roof covering has been replaced, the uppermost portions of the exterior walls adjacent to the roof drains at the eaves project should be repaired. Work envisioned will require removal of the present stuccoed surface to the brick substrate. A three layer coating system should be re-applied and troweled level with surrounding surfaces. Where the repair work encounters materials to be retained, the cut should be clean and the patched area undercut so that the replacement layers are not feathered over existing material. This will reduce the possibility of cracking. Additionally, the use of pre-packaged cementitous coatings should be limited and, instead, a breathable masonry coating to match the existing wall color should be applied. As there is rising damp which is affecting the exterior paint and migrating through the walls, the base of the walls should be cleared of vegetation and wall drains installed to remove accumulations of debris at wall bases away from the building. If possible, a damp proof course should be inserted, preferably through-wall, or otherwise, by injection, to contain dampness in foundation materials. Stucco surfaces should be re-applied and expansion joints provided along the length of the wall in order to prevent cracking due to thermal expansion. The ashlar stone should also be repointed in its entirety, as there are many open joints. As with other re-surfaced walls, breathable paints and coatings should be applied to prevent moisture from being trapped within the walls.



Alexander Palace balustrade showing numerous damaged and removed turned elements, 1995.



Ivan Petrovich Sautov, Director of the State Museum-Preserve Tsarskoe Selo with damaged balustrade element on Alexander Palace roof, 1995.

Colonnade (Priority A)

Repairs to the roof framing and roof covering of the Colonnade will be essential. Each metal capital should be checked for water tightness and inspected for possible galvanic action which often occurs when dissimilar metals are used contiguously.

Carriage Ramps and Porticoes (Priority B)

Parapet walls protecting the sides of the curved carriage ramps are in poor condition; their core brick masonry material is saturated and friable. Perhaps as much as fifty percent of the brick can be salvaged in the extensive rebuilding of the parapet walls. The secondary porticoes which are served by these ramps are in fair to good condition, though each requires improved water protection and stucco repair. The condition of the doors at each portico and their operation were not observed, due to inaccessibility.

Windows (Priority B)

The double glazing system used on most windows of the Alexander Palace, consisting mostly of two operable sets of sash, has served well over the years. The wide space between the window units permits adequate air flow to retard deterioration caused by condensation. The condition of the interior French windows of the six rooms made available for inspection during the 1995 survey varied in condition. Some are reparable, while others will require replacement. Exterior storm windows follow a similar pattern. Their condition will vary with respect to their exposure to wind and sunlight.

All of the above mentioned recommendations will require verification when a more thorough inspection of the building is possible. The full extent of defects and deterioration can only be accurately determined by careful examination of the entire building. Notations made from this preliminary and limited inspection should be compared to archival documentation to learn more about the nature and the location of the repairs over time. It may be important to know if damage and deterioration has been caused by war damage, inadequate previous repair, or the natural process of deterioration over time. When this information is collected, it can be quickly mapped on a series of overlay drawings which were prepared as a result of Mission I for this purpose. Such research and documentation will show locations of previous repairs, confirm the different alterations undertaken at the Palace between 1826 and the present, and serve as the basis for contract documents for restoring the exterior of the building.

Recommended Methodology for Interior Restoration

These recommendations are offered as an initial plan which will need refining through further planning and specification as the project nears implementation. The recommendations for the off-site Alexander Palace collections are as follows:

Registration — Confirmation, Identification, and Location of Collections

The proposal is to implement an economical and efficient program to document the extent of the surviving Alexander Palace collections. The basic methods are:

- 1. Using a readily available inventory software package, the basic registration tool is ready to record a physical registration that includes identification, location, and tagging of each object at the Catherine and Pavlovsk Palaces and any other palaces and museums where former Alexander Palace objects have initially been identified and may be identified in the future. This physical confirmation of the off-site Alexander Palace objects is recommended as the first phase to assess the general size, media, and type of the collections, along with their present location. To accomplish these objectives, each work of art in each location would be described within that designated location and provided with a unique number. During this initial process, each object would be tagged so that its newly assigned number becomes attached to the work (for objects on display this can be done discreetly). The information may be entered on a laptop computer for convenience as the work progresses room by room.
- 2. The product of this registration will be a physical location of the entire Alexander Palace collection as it is presently determined. To this inventory, additional works can be added as they are located.
- 3. The basic verification of the collection should include:
 - the location (palace/museum, room, area etc.)
 - the newly assigned number
 - the type of object (i.e. chair, rug, cup etc.)
 - the media of the object (i.e. wood, textile, ceramic etc.)
 - a black-and-white photograph of the object.

The recording of all extant Alexander Palace objects should be the foundation of the new Alexander Palace Museum. To this information can be added and correlated all existing records describing and documenting the collection. Each room in each location involved should be located on a floor plan of the location, and each room numbered. To create a controlled vocabulary, each term for 'type' and 'media' should be strictly controlled. Finally, each object should be photographed, and all rooms and locations should be photographed during the physical accessioning process.

The project staff should follow consistent and simple registration procedures so that any museum or project staff member could participate and achieve the goal of the inventory. The numbering system should have at least three to four parts: the year of the initial survey (i.e. 1996), then a decimal point, the sequential count, a decimal point, another number indicating the quantity, if the object is part of a set, and another decimal point. At the moment of registration, the number would then be tagged to the object. At a future date the number would be placed permanently on the object.

The time frame for the project would be dependent upon the number of people participating. The final product of the registration survey will be a primary tool for all future planning, budgeting, preservation of the collections, research, installation, and interpretation.

Research Files

The large body of research data about the life of the palace to be worked through by the historians, museum staff and project members will be computerized under a series of cross-referenced file categories. The main files will be:

- Subject file To include issues such as building practices, furniture, government, horticulture, hygiene, etc.
- Name file Arranged alphabetically by surname, this will allow researchers access
 to information on all individuals associated with the palace.
- Inventory Lists and descriptions, with digitized photos, of all objects ever at the Alexander Palace.

IV. Proposal for the Alexander Palace Museum Project

Project Proposal

Visitors will see the palace and gardens as they were fashioned and maintained by the last Romanovs. As a museum collection, the palace, gardens and furnishings assumed their last significant form as a domestic setting in the 1890s and 1900s. The standard tour should be located within that period, and the principles noted will guide the way in which the story will be framed for visitors.

Preservation Philosophy

The present report and recommendations for the Alexander Palace's preservation and interpretation as an historic property marks the potential for a new stage in the building's twentieth century life and its future in the twenty-first century. It is intended that this museum project will be based upon an application of the very finest contemporary models for historic house preservation, curatorial management, and interpretation.

These models are drawn from an international group of museum projects, including work in Russia, France, England and the United States of America, where in the last thirty years the majority of the highest quality work in house museum preservation and interpretation has been undertaken. In Russia the rebuilding of Peterhof, Pavlovsk and the Catherine Palace at Tsarskoe Selo are restorations and reconstructions of extraordinary accomplishment. In France the ongoing restoration of the Palace of Versailles, led by Gerald Van Der Kemp, has set a standard of fundraising, research, and interpretation that has for some time been a world-renowned model. In England the National Trust, the Property Services Administration, and English Heritage have led the way in the interpretation of many significant royal and country estates including Hampton Court, Petworth, Blenheim Palace, and Erddig in Wales, where the interpretation of the servants' lives is a central theme.

In the United States, the presentation of former presidential residences—including Mount Vernon, the home of George Washington, and Monticello, designed by Thomas Jefferson—and the re-interpretation of the Governor's Palace at Colonial Williamsburg, completed in the late 1980s, have brought some of the highest quality research and interpretation to a vast audience of visitors. Colonial Williamsburg was originally funded by John D. Rockefeller, Jr., whose own house, Kykuit, outside New York City, now a property of the National Trust for Historic Preservation in the United States, is one of the latest projects to have been restored and interpreted as a house museum. The site opened to visitors for the first time in 1994.

Over the last three decades, in historic house preservation and interpretation projects, museum professionals have become increasingly concerned with their responsibility for the authenticity of what visitors learn from house museum experiences. In this way historic houses have retreated from their traditional role as "treasure chests of beautiful rooms" to take on an explicit role in teaching history across several disciplines: the history of art and architecture and social, political and even economic history. It is possible to teach complex histories in the historic house setting in a unique way not reapplicable in other museums. These histories can be compelling because they embody direct human experience, particularly domestic experience with which most visitors, on one level or another, can identify. It is critical that the Alexander Palace museum show some of the range of human experience lived by many people at the palace. With social perspective comes the understanding of relationships between different types of people in the early twentieth century. As Edward A. Chappell, Director of the Architectural Restoration Department at Colonial Williamsburg Foundation, has written:

It is past time for the once disenfranchised to be fully represented, not as a colorful backdrop to the attractive main story, but as individuals who dealt with historical circumstance, often with strength and eloquence.

Even unfurnished interiors can powerfully evoke lives once lived there (this is certainly the case with the Alexander Palace), but with furnishings re-assembled the careful cultivation of this special character can be extraordinarily dynamic. Indeed, one of the questions which must be asked at the Alexander Palace is how essential it is to develop whole environments, rather than fragments.

The principles guiding the architectural conservation of the building will also be of paramount importance at this site. Although the Palace interiors were redecorated to suit the tastes of the Tsars and fashion, the exterior of the building has remained virtually unchanged from Quarenghi's original conception.

Consequently, the Palace exhibits an exterior designed at the height of refined neoclassicism and an interior reflecting later period styles, some being almost the antithesis of neoclassicism. With the wealth of physical artifacts, these serve to confirm that the Alexander Palace can be returned to a specific period without speculative reconstruction. Consistent with Articles 9 and 12 of the 1966 ICOMOS (International Council of Monuments and Sites) Venice Charter, any work to the Palace should comply with this basic principle:

... the process of restoration is a highly specialized operation. It's aim is to

preserve and reveal the aesthetic and historic value of the monument and is based on respect for the original material and authentic documents. It must stop at the point where conjecture begins, and in this case, moreover any extra work which is indispensable must be distinct from the architectural composition and bear a contemporary stamp . . . [and] Replacements of missing parts must integrate harmoniously with the whole, but at the same time, must be distinguishable from the original so that any restoration does not falsify the artistic or historic evidence.

To restore the architectural intelligibility of the exterior, the Alexander Palace 'extras' will be limited to restoring building components lost through war, deterioration and incompatible previous repairs. These might include, on the exterior, reinstating chimneys, balconies, or cast-iron railings, to name a few. On the interior, interventions will be invisible as structural repairs, replacement mechanical and electrical systems will be concealed behind finishes and furnishings in a conscious effort not to interfere with the visitor's experience of the period rooms and the exhibition galleries.

The conceptual framework for the interpretation of the Alexander Palace should encompass three principal themes:

- The Palace as a house museum concerning the life of the last Romanov Tsar, Nicholas II, and his family who lived there.
- The Palace as a museum to tell the story of the lives of the almost two thousand ordinary people who lived and worked at the Palace in the service of the Tsar.
- The Palace as a history museum to tell the story of the Tsar who ruled Russia from his study. After his March 1917 abdication, and immediately prior to the Bolshevik Revolution, the Tsar continued to reside at the Palace with his family under guard until they were taken in August of 1917 to Tobolsk.

The following are three suggested guiding principles for preserving the integrity and meaning of this historic palace:

1. Preservation comes first.

It is the first duty of all museums to preserve their historical collections. Wherever conservation and instruction come into conflict, stewardship of non-renewable resources must take precedent over their use for interpretation. It is important to remember that all historical periods in the history of an artifact or collection of artifacts are of equal importance and that house museums do not have to be shown

to visitors exactly as the last resident left the property. Once collections have been preserved and documented in a permanent manner — photographs, drawings and other media — then the museum's interpreters can do their job. After all, what is said in the last years of the twentieth century is not necessarily what future generations will say. What is presented now is not irreversible; indeed, it is almost certain that future interpreters will do the job differently.

2. Be clear about what is thought and said.

Visitors will expect the museum staff to answer a barrage of questions of an encyclopedic nature concerning art, architecture, gardens, Russian history and the Romanov family. Interpreters will be trained in the most thorough way possible, but ultimately the project team of the Alexander Palace restoration must decide on two or three subjects of greater importance than others. It will be the museum's task to make those subjects the principal elements in the interpretive story line, leaving other topics to recede into the background position. The Alexander Palace will not want to be just a pleasant and interesting walk-in encyclopedia. Visitors come to museums expecting to be told something worth knowing about the past which will enlarge their understanding of the present and help them to think for themselves about meanings, ideas, and relationships in the past and present. Visitors may reject what interpreters say, or find other meanings, or not listen at all; on the other hand, many of them will listen and think. They will hear interpreters explain how and why something in the history of the Alexander Palace, the Romanovs, and Russia has changed in ways that have led up to the present or that at least informed present choices. That is what makes historical themes out of mere topics. For museums it is the vital difference between being a real educational institution or just another attractive showcase for artifacts and an encyclopedia of facts.

Teach only what visitors can see.

Museum interpretation is fundamentally a visual experience. Visitors expect to learn by looking. Seeing is the primary stimulus to believing; therefore, it is imperative never to try to teach the invisible. The project team must choose themes that interpreters can demonstrate or illustrate with the collections. If it cannot be shown, it should not be taught. Words by themselves are wasted. The question that must be asked is: "What will be the theme or story line for the Alexander Palace's basic tour for first-time adult visitors who bring themselves and their families or friends to 'see what there is to see' at the museum in the space of a couple of hours? What should we teach?" History museums use a curriculum no less than history courses at universities.

Comprehensive schemes for realizing the furnishing of interior spaces will be developed during the research project and cannot be formulated prior to it, the aim being objective criteria. As little as possible should be subject to contemporary taste.

Target Period for Restoration

One of the first steps in this project will be to establish a specific period in the life of the Palace as the goal for the main interpretive theme of the museum. The most logical period to highlight would be that between the birth of the Tsarevich in 1904 and the departure of the Tsar in 1914 for the front during World War I. This time window will ultimately become more defined as research proceeds. For example, a period with significantly more surviving documentation, letters and photographs, etc., than another would almost certainly be a prime potential era for interpretation.

The team's focus will be to construct a detailed picture of the social customs, attitudes, and day-to-day activities which underlay decisions about the planning, decoration, and furnishing of the interiors from 1790 until 1917. Its use since 1917 will also be studied and will furnish the team with important information. The palace will be treated as a repository of evidence — a living record of human lives which reflects the culture, aesthetic conventions, and aspirations of its time.

Utilization of Interior Spaces

The large scale of the palace, with about 70,000 square feet on the principal (ground) floor, permits an unparalleled opportunity to interpret not just the historic rooms which comprise about two-thirds of the first floor, but also, where few historic houses have the space, to use secondary rooms not related to the main story of the building for the interpretation of the broader history of Nicholas II's rule from the palace and the events leading to the Russian Revolution. The principal floor comprises about forty-five rooms; of these, a little more than half — roughly 25 rooms or 40,000 square feet — can be used for museum facilities. This includes, in the southeast wing, the private suite of Nicholas and Alexandra and in the northwest wing the formal neoclassical reception rooms, which the family also used.

Historic Interiors: Primary Significance

One half of the main floor — a further 30,000 square feet, including the northeast rooms and the northwest block — are interiors of secondary importance which are not directly part of the early twentieth century history to be told at the site. An area of approximately 10,000 square feet of the north wing, therefore, is ideally suited to adaptation for use as high-

quality historic exhibition spaces using the best interpretive techniques, in a manner that has not yet been realized in Russia's museums. Other spaces can provide for a 200-seat auditorium, several classrooms, and workshops. The remaining 15,000 square feet would be committed to the creation of the very best quality visitor service facilities, including a museum shop and restaurant.

Those rooms of greatest historical and artistic merit are the interiors of the southeast and southwest wings, consisting of the living apartments of Nicholas and Alexandra and the formal rooms. The decision about the number of rooms to be interpreted as historic interiors will be determined, as research progresses, by the interface between:

- the number of spaces which survive and can be reasonably re-installed,
- the number and range of the surviving collection objects and furnishings, and
- the route which visitors can most appropriately walk through the palace.

The historic rooms of primary significance—and therefore, logically, the rooms to open and interpret—in the order in which visitors might see them, are set out below. A floor plan of the Alexander Palace is included in Appendix E.

The southwest suite of formal rooms:

Crimson Drawing Room Marble Hall Semicircular Hall Portrait Hall Mountain Hall Great Library Library (large) Formal Reception Room

The living apartments of Nicholas II and Alexandra:

Alexandra's Maple Room
Alexandra's Palisander Room
Alexandra's Mauve Room
Nicholas and Alexandra's Bedroom
Alexandra's Dressing Room
Alexandra's Bathroom and stairs to second floor
Room for ladies-in-waiting
Passage and stairs to second floor
Vestibule
Tsar's Reception Room
Tsar's Working Study
Tsar's Bathroom
Tsar's Dressing Room
Valet's Room
Tsar's New Study

Northeast rooms flanking the entrance to the Semicircular Hall:

Library (small)
Pantry
Pantry
Vestibule (small)
Film projector room
Former bathroom
Red Drawing Room

Museum Support Facilities

Some 30,000 square feet of interior space located in the northwest wing of the Palace are proposed for functions which support the primary interior restoration and presentation area located in the southeast portion of the building. This zone of the building played a limited role in life at the Alexander Palace between 1894 and 1917. Therefore, this area seems to be the most suitable location for museum exhibition and visitor services functions. The spaces of 'secondary' significance located in the northwest area of the palace are outlined below:

Changing Exhibition Galleries

In the late twentieth century, museum visitors are ready to be thoughtfully engaged and to be challenged to think about major issues, past and present. At the Alexander Palace, with its rich historical associations, there are many stories about Russian life which can be excitingly portrayed. Changing exhibition galleries are a tremendous opportunity to introduce visitors to new material and to various ways of perceiving its meaning.

Video Interpretation Room/Auditorium

Multi-purpose auditoriums are beneficial to orient the visitor and provide organized seating for special presentations. Typically, these are located at the room closest to the beginning of the historic interiors. 5,000 square feet would allow the space also to function as an auditorium for lectures and workshops. A standard format at many historic sites worldwide is the use of a short (seven or eight minute) interpretive video introduction seen by visitors on site, prior to their visit to the historic area. In this way, basic contextual information about site history is disseminated concisely and effectively.

Exhibition Galleries for Historic Clothes

The Alexander Palace collection includes large numbers of Nicholas's many impressive and colorful military uniforms, as well as those of the Tsarevich. There also still exist fine clothes of the Empress and her daughters. Changing exhibitions using sealed cases will ensure the protection of the collection.

Museum Shop

Shopping at museums is now an accepted concept in marketing museums. Museum shops

provide two important functions: they allow for the receipt of revenue from books and souvenirs and serve as an outlet to promote exhibition publications and authorized objects for sale. An attractive visitor-friendly shop will be an essential component of the visitor amenities of the museum. The store should be efficient, have adequate storage, and be adequately secure.

Restaurant

A visit to the Alexander Palace and the Catherine Palace is a day-long trip for most visitors. The addition of food service will give rest to visitors, provide revenue, and encourage return visits. The Alexander Palace provides the opportunity for locating a restaurant in an historic setting which can be accessed from a secure part of the garden so that special summer events can benefit from this space. Of particular interest in this regard is the kitchen building adjacent to the palace; this two-story facility contains roughly 15,000 square feet, more than enough space to house a restaurant; and it has the added attraction of having been constructed specifically for the preparation of meals for the Imperial Family.

Ticket Sales

Upon entering the museum, simple signs over the front of the ticket desk will clearly explain its function, even in crowded conditions. Ample space should be provided to accommodate large numbers to process group tours.

Coat Check

Part of basic security is 'disarming' the visitor of unassuming but potentially dangerous personal belongings which can damage historic objects: umbrellas, damp and wet clothing, and cumbersome bags. It is essential that adequate and appropriate space at the front door be set aside for this purpose.

Public Toilets

Numerous toilet facilities should be provided, preferably at two locations: adjacent to the restaurant and near the coat check. A suitable location would probably be basement rooms directly under the coat room and shop, where there are existing stairs from the vestibule.

Historic Rooms Not Yet Designated

As a possible alternative to the interpretation of the northeast rooms listed above, visitors could be shown basement rooms, to the extent that they bear historical significance. The interpretation of servant areas will also be an essential component of the museum, as well as possibly some upstairs rooms, which could be shown as historic interiors.

Special Considerations for the Museum Environment

One of the most pressing needs at the Alexander Palace is to assure the integrity and longevity of the structure and the collection that will be displayed there. As is noted elsewhere in this report, the building is deteriorating from various problems relating to moisture. Repair of the water-handling system, in particular gutters and leaders, is a high priority.

Buildings of this period were built well for their use; that is, the building materials used were responsive to the demands of their physical environment. Wood stoves located in principal interior spaces of a building provided a nominal comfort level by means of radiant heat, but construction of the period usually allowed considerable heat transfer and leakage. As a result, materials used in the construction of a building adapted more freely with the environment. They were not expected to serve as the highly efficient thermal barrier that is expected of similar construction systems today. At the Alexander Palace there is no known building insulation. Retention of inside air temperature relies upon the thickness of the existing walls and on continued use of room fireplaces or, as was the case in later years, steam heating. The steam heating system was installed as part of the modifications ordered by Nicholas II. Modern expectations of indoor comfort creates additional strains on a structure. The application of insulation and contemporary linings to interior walls in rooms raises inside air temperatures and seals the structure. The walls thus become subject to temperature and humidity gradations across them, accelerating their deceleration. Depending on the future functions of the palace's rooms, upgrading the exterior may become an important issue.

Humidity

Historic buildings which are typically treated as artifacts in and of themselves often require special upgrading considerations, though it is the decorative art objects and fragile finishes within which require even greater environmental control requirements. As has been widely noted in nearly all references on museum environments, the rate at which museum objects deteriorate is directly related to their environment. The *Museum Property Handbook* published by the United States Department of the Interior states that:

Relative humidity is one of the most important environmental factors to control. High relative humidity increases the rate of chemical deterioration..., swelling and warping of wood and ivory, softening and sticking of adhesives, cracking of paper, and slackening of stretched canvas paintings. At the other extreme, very low relative humidity levels cause shrinkage, warping, and cracking of wood and ivory; embrittlement of paper and adhesives, tendering of textiles, and the

embrittlement of basketry.13

Moisture is but one consideration. Temperature is, of course, another important factor, as is exposure to light, dust, and pollution.

The detailed analysis of the environment within the Alexander Palace and ways to control it should be the subject of a separate study. A first analysis would help to determine the most appropriate modifications required, if any, to the existing central heating system. Typically, the desirable temperature range is between 65° F. and 85° F.; it is assumed that, at present, relative humidity deviates considerably between the winter and summer months. Given the often separate environmental needs of the building and of the collections housed inside, it will be necessary to find a range of conditions that will ensure the preservation of the interior furnishings and collection, as well as the appearance of the building. These considerations must not only be theoretically sound, but also attainable in a practical and economic sense. This 'compromise' line of thinking was articulated at an international conference of specialists held in New Orleans, Louisiana, in September 1991, sponsored by the Association for Preservation Technology (APT) in conjunction with the U.S. National Park Service.¹⁴

Temperature Control

Replacement heating systems in house restoration projects should be installed as unobtrusively as possible. Such systems should have a minimum of impact on both the structure of the house and on its appearance. The restoration process should include the greatest concern for fragile furnishings and finishes which for many years may have endured considerable humidity and temperature swings. Therefore, it is important, in effecting any changes to an historic building's interior environment, that the furnishings should be allowed to adjust to the new conditions. This can be accomplished by very gradually increasing the intensity of air conditioning until carefully-considered optimal levels are attained. Under ideal circumstances, furniture and decorative art objects would be conserved prior to their being placed in their new interior environment.

Light

Ultraviolet filters should be used at windows of rooms containing fragile furnishings, finishes, and displays. One method of doing this is to cut treated ultraviolet light-inhibiting Plexiglas to fit over glass panes within window systems. These individual panes can be held in place with small glazing wedges. This treatment will not control ingress of soot or significantly increase the thermal performance of windows, but it is an efficient solution that is easy to install. The use of ultraviolet filters will dramatically reduce the fading of all

materials in a room, including printed wall coverings, fabrics, and wood surfaces.

The effective preservation of original paper documents, books, letters, photographs, and similar materials usually requires added measures of protection. Such materials are most likely printed on high-acidity papers and are susceptible to discoloration and breakage due to deterioration of paper fibers. These items should be housed in special exhibit cases or removed to an even more highly regulated environment in the building designed to guard against slight temperature, light, and humidity changes. Framed works on paper and textiles should be protected and presented using acid-free card stock mounts, and pictures should be glazed, where appropriate, using glass that protects against ultraviolet radiation.

Code Compliance

Rehabilitating historic structures for modern building code compliance is one of the chief challenges in the building conservation field today. A number of special considerations must be made relative to the protection of the building, its contents and, of course, people using the building.

Three basic special standards should be considered in any upgrading of a structure such as the Alexander Palace to satisfy current building code requirements. These standards require that:

- there be the least possible disturbance to the historic fabric of the building during the rehabilitation process,
- the interpretive value of the house not be compromised by physical intrusions, and
- the appearance of the Palace during the Tsar's occupancy be faithfully retained.

Modifications required to bring this building in to complete compliance with applicable modern building codes would probably be detrimental to this purpose, and it is therefore recommended in these special circumstances that a relaxation of code compliance requirements be allowed. Common sense and consideration of creative alternative solutions should prevail where extensive changes for code compliance threaten the historic and architectural integrity.

The exterior of the Alexander Palace will likely require the most extensive restoration and reconstruction work because of its present poor condition due to weathering and the fact that some original materials and components have been removed during previous renovations or by war damage. The goal in restoring the exterior of the Alexander Palace will be to recreate its appearance as it existed at the time of Nicholas II. In addition to

correcting non-matching details and removing deteriorated and damaged wood components and masonry, other recommendations are proposed herewith for conserving remaining original materials and upgrading the building envelope to tolerate the proposed new museum environment within. The modifications, with the exception of replacement wall insulation, will be designed to be compatible and, where possible, reversible. These components will include exterior handrails, the repair of existing protective glazing to reduce thermal loss, the addition of ultraviolet protection to windows, use of higher grade wallpapers and glues, and application of paint systems to extend the life and improve maintenance of both decorative and protective painted finishes.

To assure that these interventions are compatible with new environmental control systems that are recommended for this building, it is suggested that additional data be taken to record and monitor the existing wall constructions. Monitoring of the wall cavities and selected wall surfaces will determine the amount of wall insulation required to prevent condensation from forming on the interior. Where wall insulation cannot be added, isolation barriers or spacers should be provided between the objects to be affixed or placed adjacent to inside of exterior wall surfaces.

V. Next Steps

Much remains unknown about the actual condition of the Alexander Palace, the rooms intended for restoration, and the costs associated with carrying out this work. Also, because of the present complex collections storage arrangements, a considerable amount of work needs to be carried out to define the scope of the project. Lastly, little information about the new museum requirements for the proposed museum has been confirmed. This will be necessary to integrate into any master plan for this project. Schematic plans should be produced which locate the relationships of the historic rooms and exhibition spaces to the staff areas. Specific space assignments should be allocated for curatorial offices, objects receiving areas, conservation studios, photography labs, a research library, study rooms, and other uses associated with the operation and administration of a museum of this size.

Priorities for Future Action

This report has identified the following priorities which must be addressed to complete a preliminary master plan for use in both fundraising and project implementation:

- Architectural Survey. A thorough survey of the building, from basement to attic, to prepare base drawings for a schematic design for the museum and to confirm the scope of restoration and repair work.
- Archival Research. All archives and primary sources relevant to the palace must be located, recorded, and inventoried. Building records, household accounts and inventories, diaries and letters, etc., beginning with the earliest period of the palace's first planning and occupation through to the period of its last residents must be researched. Many diaries and letters of the 1894-1917 period have been published in English (see bibliography). This is needed both for understanding the levels of architectural conservation intervention and for the reconstruction of the period rooms.
- *Interpretation of archival sources*. With primary sources it will be possible to record the basic ways in which traditions were established for the use of the building, from its first construction through 1917. This is required to establish the interpretive framework of the museum.

While the majority of the tasks identified above are in progress, other work can be undertaken in St. Petersburg. These projects will be needed to assist curators and architects who will be assigned the mission of restoring this structure. A preliminary list of the

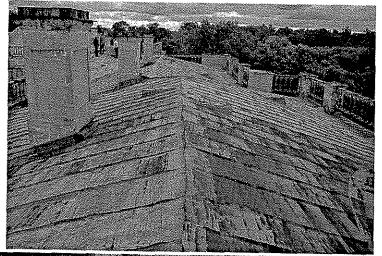
additional tasks is provided below:

- Analysis of the original commission; Catherine's intentions and motivations; her son's and grandson's involvement, if any; Alexander's requirements; etc.
- Analysis of the building plans and specifications and changes to the physical disposition of the exterior and the interiors through 1917.
- Translation and analysis of inventories and cross-referencing of inventories with surviving Imperial collections.
- Creation of a photo inventory of individual objects per room, as seen in archival photos from 1894 through World War II.
- Combination and cross-referencing of the above object photo inventories and written records to create a document for the basis of an international search for lost Alexander Palace furnishings.
- Creation of a registration document of existing Alexander Palace collections currently located off-site.

Emergency Measures: Ongoing Roof Repair

Even with limited access to the Alexander Palace, it has been noticed that a number of urgent repairs are necessary to the exterior of the building. In response to these urgent issues, and as a demonstration of the commitment of the project partners to the building's restoration, a contract was negotiated in July 1996 with the Finnish restoration firm IPR Group-Paanurakenne to replace the roof of the southeast wing of the palace, over the former living quarters of Nicholas II and Alexandra. That work is underway at the time of this writing and is currently scheduled for completion in May 1997. In conjunction with the present planning efforts and emergency repairs to the building, representatives of the Russian Navy have stated their interest in eventually removing their offices to a more suitable building in the town of Tsarskoe Selo. These concrete actions, with continued persistence by all parties involved, should result in the positioning of the project for a phased or comprehensive restoration within the next five years.

The following illustrations document the nature of the repairs being undertaken on the Alexander Palace roof.







Recent repairs to the Alexander Palace roof undertaken with a grant from the World Monuments Watch program: before, during, after. photo 1995-97.

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Archival Sources

The Beinecke Rare Book and Manuscript Library at Yale University. Special thanks to Curator Francois Giroud for permitting two volumes of Romanov albums to be viewed. These albums of photographs by Anna Viroubova were donated to the University in 1939.

The British Architectural Library, The Royal Institute of British Architects, 66 Portland Place, London.

Royal Institute of British Architects, Heinz Gallery, 21 Portman Square, London.

Photo Credits

The photos used in this report were provided for research purposes by the Robert Atchison collection, the Beinecke Rare Book and Manuscript Library at Yale University, the British Architectural Library, Royal Institute of British Architects, Kirk Tuck and Michael Larvery, WMF staff, and the State Museum-Preserve of Tsarskoe Selo.

Appendix A: Architectural Drawings

Prepared by Page Ayres Cowley Architects, LLP, for the World Monuments Fund using AutoCAD design software for the Macintosh March 1995, revised September 1996

Contents

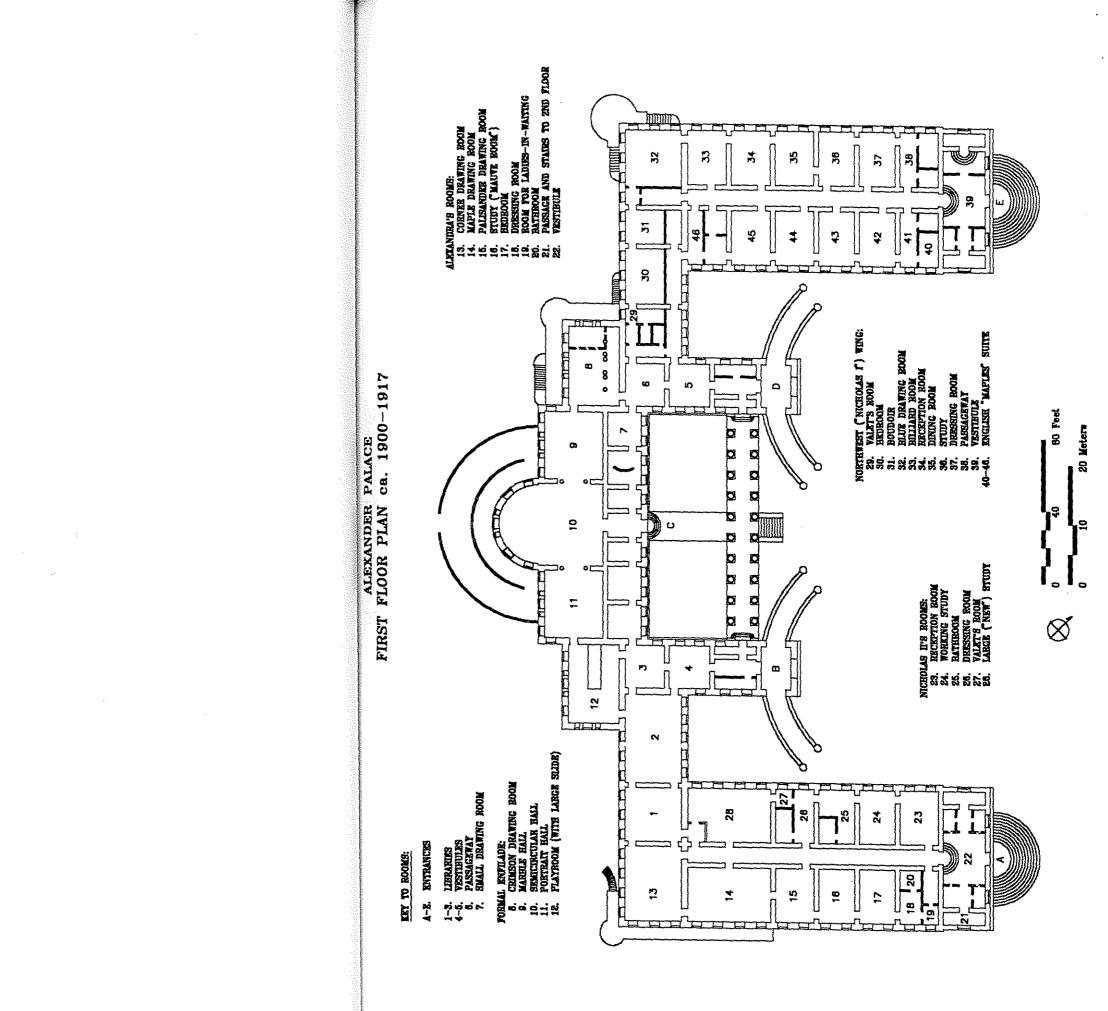
1. Plans

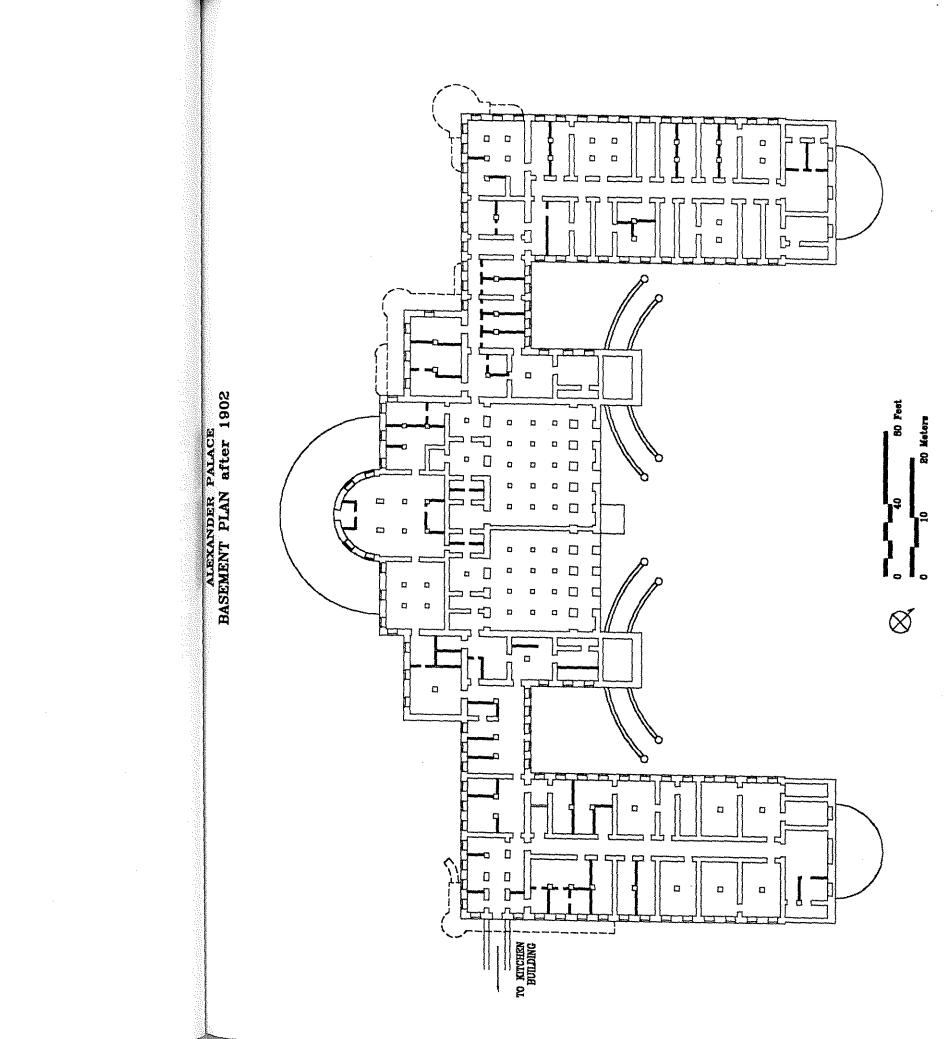
Basement
First floor
First floor, showing observed building alterations as of February 1995
First floor, showing observed building damage as of February 1995
Mezzanine
Roof
Kitchen building, second and third floors

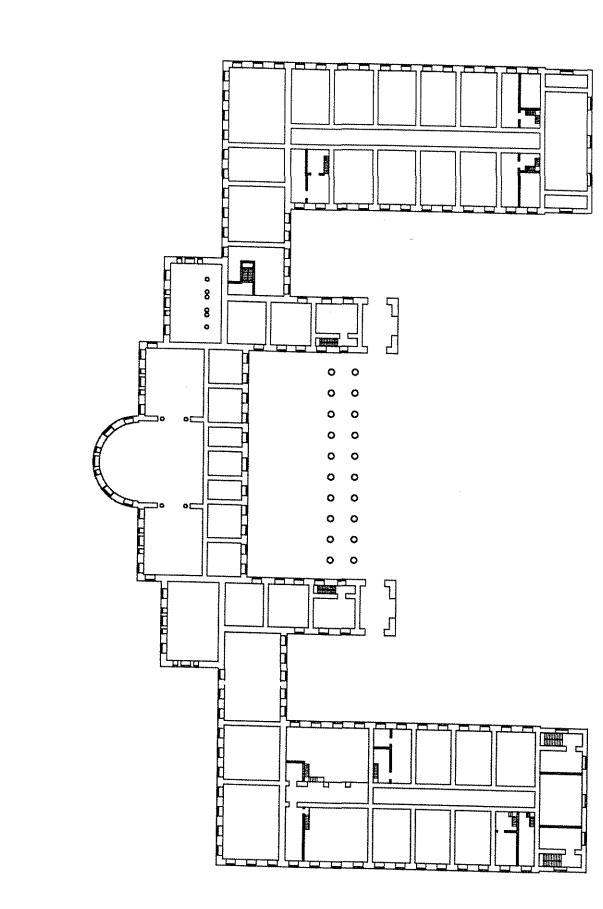
- 2. Elevations, showing observed building damage as of February 1995
 Northeast facade (colonnade and main entrances)
 Southwest facade (facing park)
 Southeast and Northwest facades (sides)
 Wing elevations, facing courtyard
 Wing elevations, lateral sections
- 3. Museum Concept Plan First floor space allocation and visitor path

Note

The following diagrams are intended to provide an overview of the scale, major features, and significant damage to the Alexander Palace as of July 1996. They are not intended to provide conclusive or exhaustive detail on current conditions or past use. Because of the building's current use by the Russian Navy, access to interior spaces during site visits to date has been limited in time and in scope. Floor plans have been prepared without the benefit of thorough research into relevant documentary and photographic archives pertaining to the building's history and use. This archival research, necessary to a thorough and historically accurate restoration, is a primary goal in the next phase of the Alexander Palace restoration project.

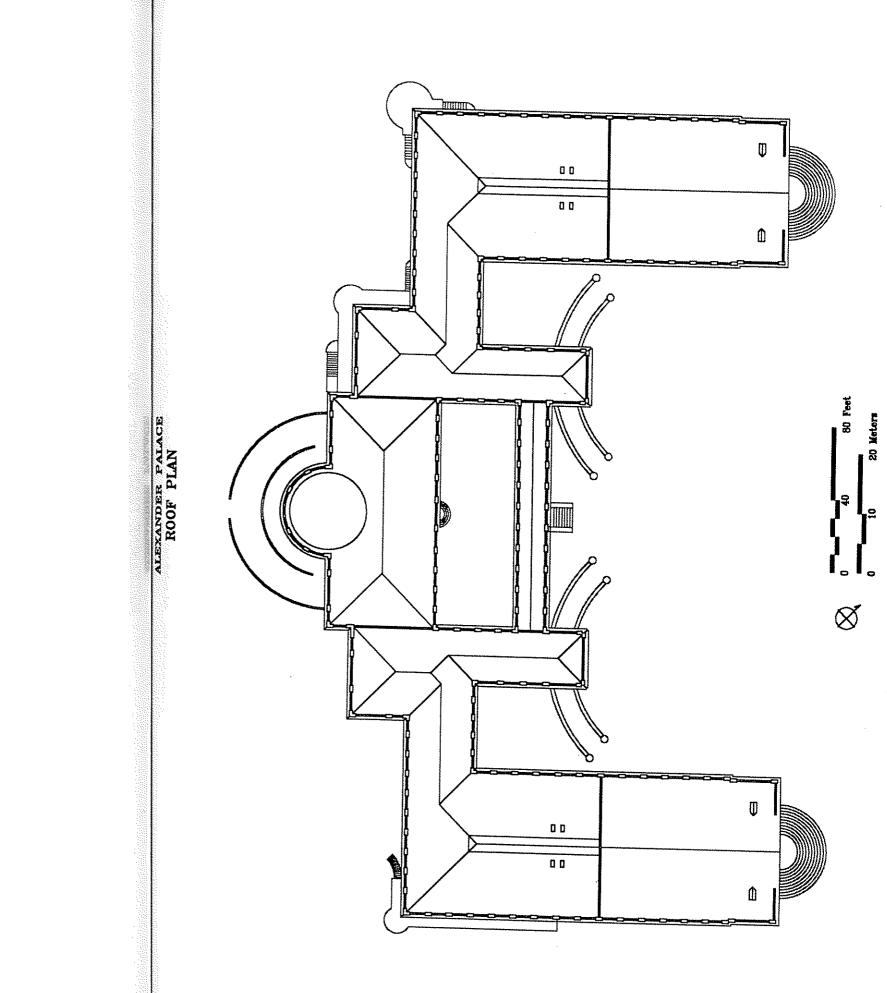


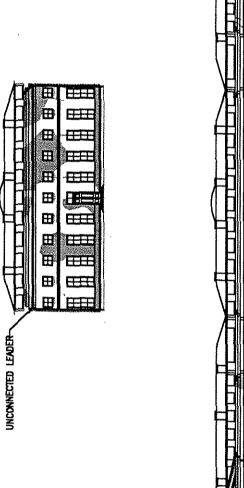




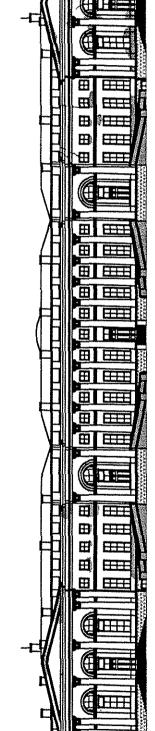
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MEZZANINE PLAN after 1900



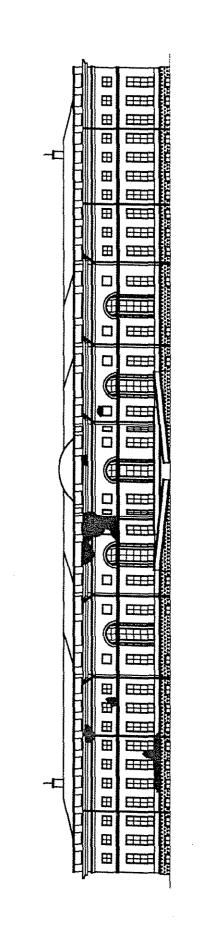


NORTHEAST ELEVATION - OBSERVED CONDITITIONS February 1995



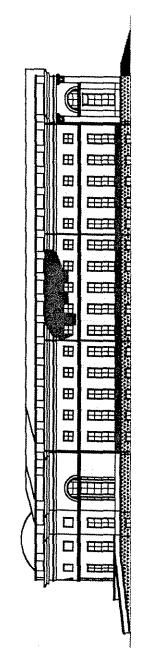
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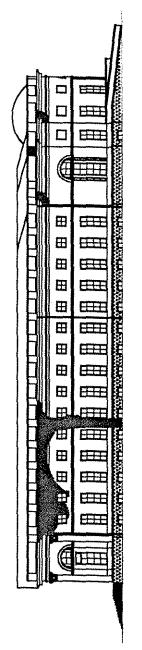
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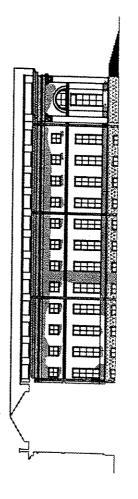
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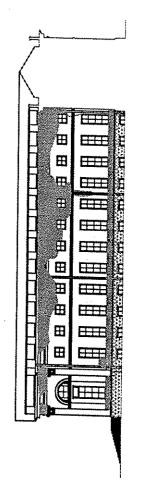




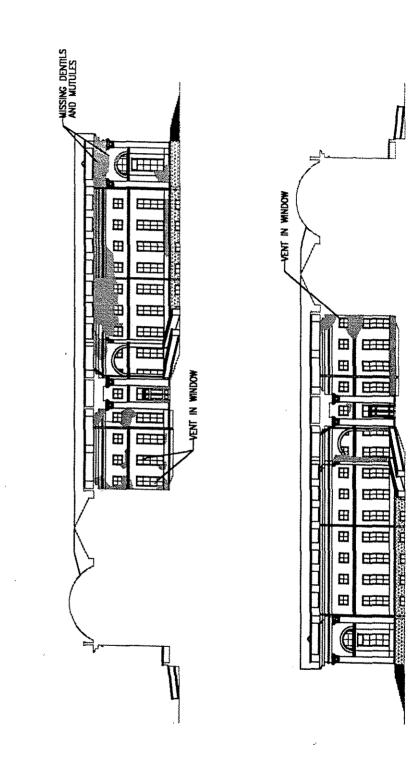
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ENTRANCE COURT WING ELEVATIONS - OBSERVED CONDITIONS February 1995



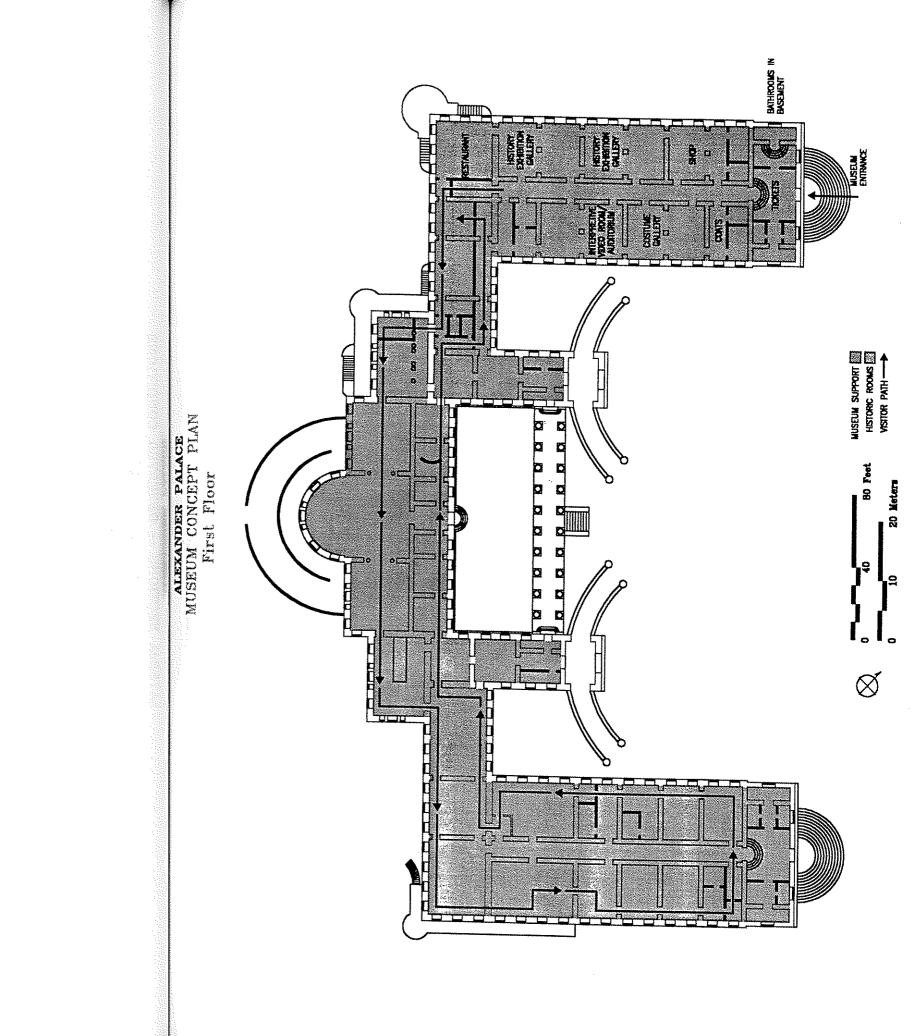


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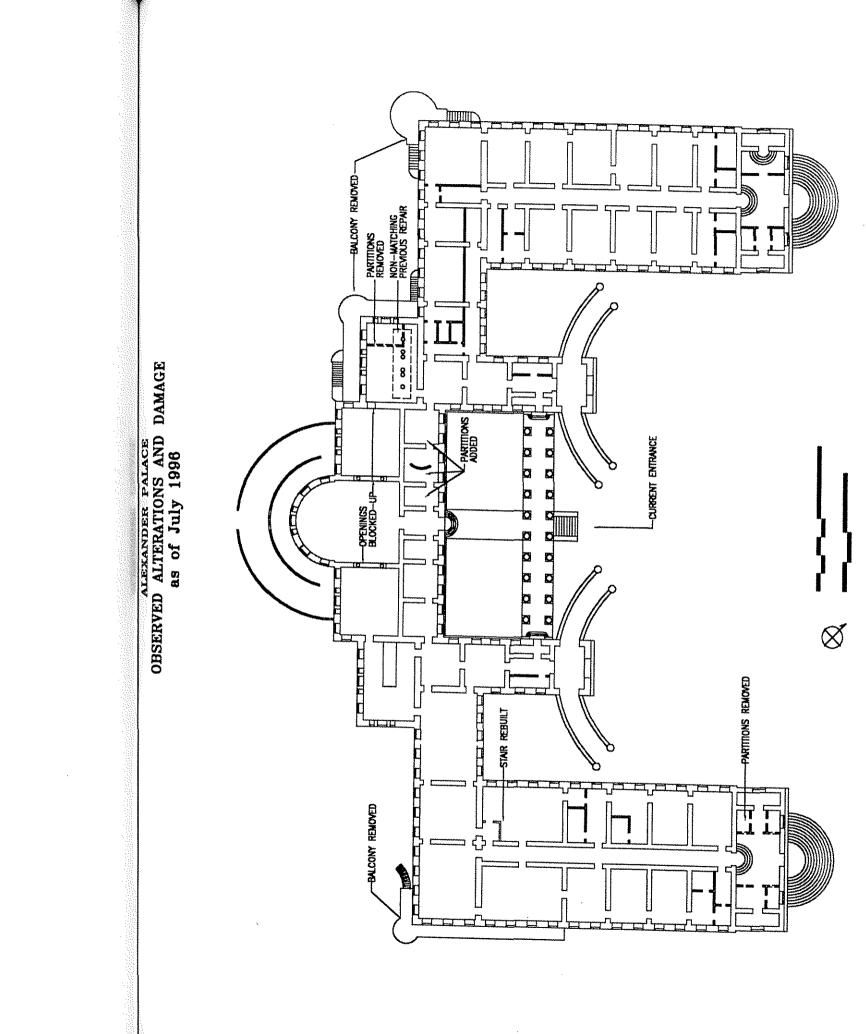


LATERAL SECTIONS - OBSERVED CONDITIONS
February 1995

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Appendix B: Budget Cost Estimates

An accurate appraisal of the costs for restoring the Alexander Palace remains to be determined. This is due to lack of access to most of the interior spaces of the Palace due to security restriction of the present users and the lack of a final plan for the use and display of the site.

Based on construction estimates done on comparable buildings in the St. Petersburg area, and roof restoration costs to date at the Palace, the costs of rehabilitation and restoration of the structure (excluding any new furnishings and fittings necessary for museum use) would likely range from \$12 to \$18 million (US). This assumes that the restoration would occur in one major construction campaign.

A state-of-the-art restoration would involve the careful conservation of each surface and detail of the large palace. The estimated cost of completing the most essential needs of the building today – a new roof and repaired balustrade – is approximately \$750,000 (US). The experience with the recent urgent roof repair work has proven invaluable on a number of accounts – the main one being that a system of restoring the buildings is being established.

Ultimately, the best format for a detailed cost estimate for restoring and presenting the Alexander Palace should follow the example presented in the following pages.

Statement of Probable Construction Cost Alexander Palace, Tsarkoe Selo, Russia

World Monuments Fund

Page Ayres Cowley Architects in association with Henry Joyce

k	Quantity	Unit Cost	Cost	Total
rior				
Roof and Flashings:				
Scaffolding and protection				
- · ·	20.500		ļ	
Remove existing roofing [sf]	72,500	l	7	1
Remove flashing and reglets [lf]	2,290		**************************************	
Disconnect gutters & leaders, provide temporary drainage	90.500		***************************************	
Lay new EPDM cold set roof covering [sf]	72,500	Į.	***************************************	****
Install new stainless steel flashing [lf]	1,725		4	
Provide new stainless steel conductor heads and screens				
Reinstall gutters with screens			İ	
Restucco chimneys [sf]	3,096			
Rebuild chimneys [each]	35			
Inspect chimney caps to sealed flues				
Repairs to active flues				
Reconstruction of balustrades [lf]	1,725			
Subtotal				
Contingency @ 20%				
Total				
Total				
Exterior Walls:				
Scaffolding and protection				
Inspect all eave dentils and mutules	1			
Remove loose and defective units				
Install new stainless steel headers and leader straps				ľ
Install new leaders [lf]	1,152			
Remove stucco at cracked and damaged areas [sf]	7,167			
Brick repairs	- Constitution			
Restucco exposed areas [sf]	14,886			
Repair cracked lintels [lf]	111			
Repairs to masonry bases, capitals				
Repoint base [sf]	10,178		****	
Rebuild ramp walls [lf]	320	1	***************************************	***************************************
Reset colonnade pavers [sf]	1,850		-	

Task	Quantity	Unit Cost	Cost	Total	5-1
Subtotal					
Contingency @ 20%					
Total					- 1
Windows:			Weepper		
Basement 6' x 4' [each]	115				
First Floor 6' x 12' [each]	137			***************************************	
Second Floor 6' x 6' [each]	115		777		
Subtotal					
Contingency @ 20%					
Total					
Doors:	TOTAL PROPERTY AND ASSESSMENT OF THE PROPERTY AND ASSESSMENT OF THE PROPERTY AND ASSESSMENT OF THE PROPERTY OF THE PROPERTY ASSESSMENT OF THE PROPERTY OF THE PROPERTY ASSESSMENT OF THE PROPERTY OF THE PROPER				
First Floor 6' x 12' [each]	6				
Subsect 2					
Subtotal					
Contingency @ 20%					
Total					
	-				
Total Estimated Exterior Construction Cost			7187		
*					
Interior	1000				
001 Reception Room of Alexandra Deodorovna					
Restore flooring [sf]	1,450				
Restore scagliola plaster walls [sf]	2,750]	
Restore plaster ceiling [sf]	1,450				
Restore doors and hardware [each] Restore casement windows [each]	8		***************************************		
Restore clasement windows [each] Restore chandelier[each]	//				
Furnishings/Textiles	1				
010 Portrait Hall	-			A CONTRACTOR OF THE CONTRACTOR	
Restore flooring [sf]	1,440				
Restore scagliola plaster walls [sf]	2,750				
Restore plaster ceiling [sf]	1,440				
Restore doors and hardware [each]	6		***************************************		
Restore casement windows [each]	6		P-V-date representation of the state of the		
Restore fireplace [each]	11				
Restore chandelier[each]	1				
Furnishings/Textiles					
011 Semi-circular Hall					

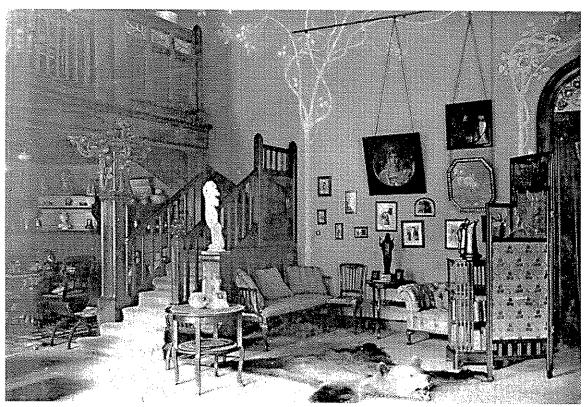
sk	Quantity	Unit Cost	Cost	Total
Restore flooring [sf]	2,750			
Restore scagliola plaster walls [sf]	3,780			***************************************
Restore plaster ceiling [sf]	2,750			***************************************
Restore doors and hardware [each]	2			**************************************
Restore casement windows [each]	7		i	***************************************
Restore chandelier[each]	1			***************************************
Furnishings/Textiles				***************************************
025 Palace Church	1			Allenning
Restore flooring [sf]	1,350		A44	
Restore scagliola plaster walls and columns [sf]	2,700		ensywww.	
Restore plaster ceiling [sf]	1,350		***************************************	
Restore doors and hardware [each]	6		******	
Restore casement windows [each]	8		over the same of t	
Restore fireplace [each]	1			
Restore chandelier[each]	1		***************************************	
Furnishings/Textiles			*****	
057 Tsar's Vestibule	***************************************			
Restore flooring [sf]	1,210			
Restore scagliola plaster walls [sf]	2,770			
Restore plaster ceiling [sf]	1,210			
Restore doors and hardware [each]	16			
Restore casement windows [each]	2			
Remove wood vestibule	1		1	
Restore chandelier[each]	1			
Furnishings/Textiles	_			AAAA
063 Tsar's Reception Room				
Restore flooring [sf]	800			
Restore linen wall coverings and paneling [sf]	2,050			
Restore wood ceiling [sf]	800			
Restore doors and hardware [each]	4			
Restore casement windows [each]	2			
Restore fireplace [each]	1			
Restore chandelier[each]	1			
Furnishings/Textiles	_			· 1
	ļ			·
ilding Systems				
Structural				
			and desired the factors.	
HVAC				
	Australia		***************************************	
		-		
Electrical				

Task	Quantity	Unit Cost	Cost	Total
Plumbing				
r tumonig				

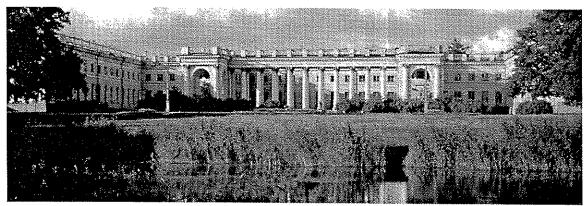
Notes

- Contingencies are included reflecting the different levels of predictability in special restoration projects along with an overall contingency to compensate for unknown factors of coordination between areas of work and those areas of work which have not been properly identified at this stage
- 2) Interior costs are based on a cost per square foot using rates applied for first rate custom furnishings and fabrics. Costs are provided only for those rooms observed during the first site visit. Subsequent to additional survey, additional cost information can be provided.

Appendix C: Archival Photographs



Maple Room, Reproduced courtesy of the State Museum-Preserve Tsarskoe Selo.



Elevation, n.d., Reproduced courtesy of the State Museum-Preserve Tsarskoe Selo.



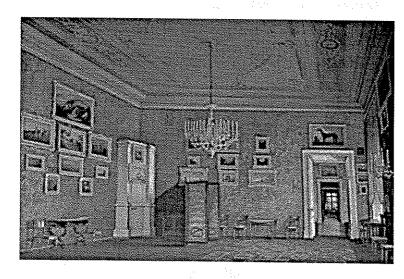
Alexandra in the Maple Room, Alexander Palace.



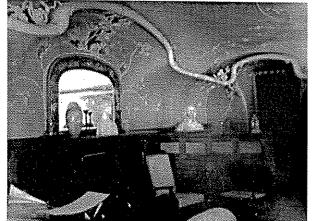
Alexi in the Mauve Room, Alexander Palace. Reproduction courtesy of the Beinecke Rare Book and Manuscript Library, Yale University.

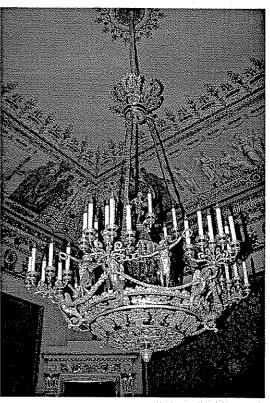


Watercolors of Alexander Palace interiors circa the reign of Alexander II.

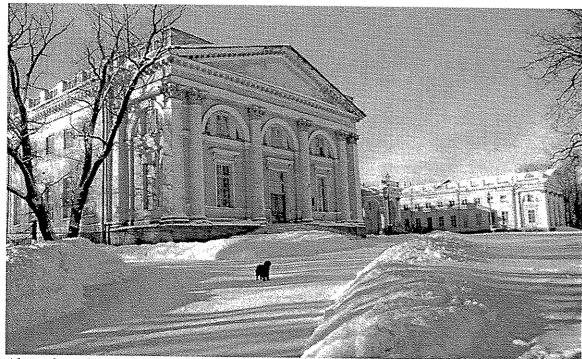


Maple Room, Alexander Palace, n.d.





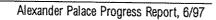
(left) Archival photograph of chandelier in place at the Alexander Palace. (right) Chandelier from the Alexander Palace now in the Pavlosk Palace, photo 1995, WMF.

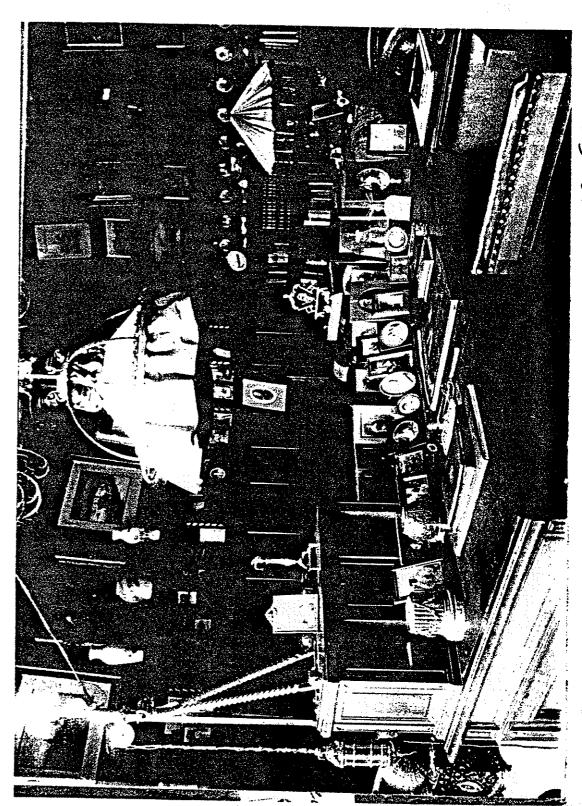


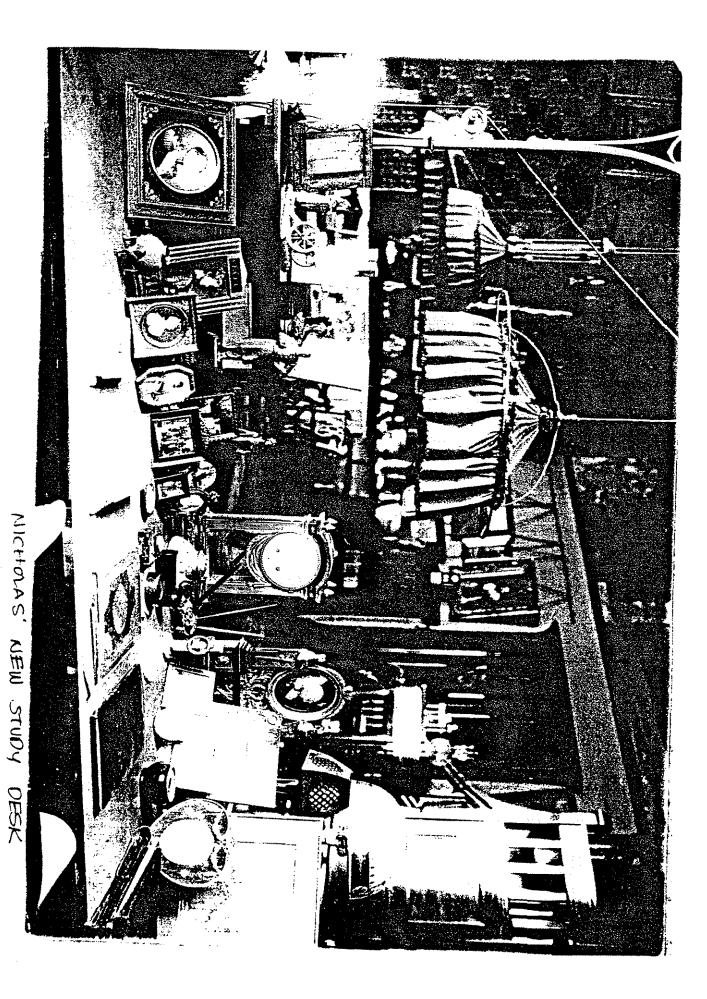
Alexander Palace, February, 1995, photo: WMF.



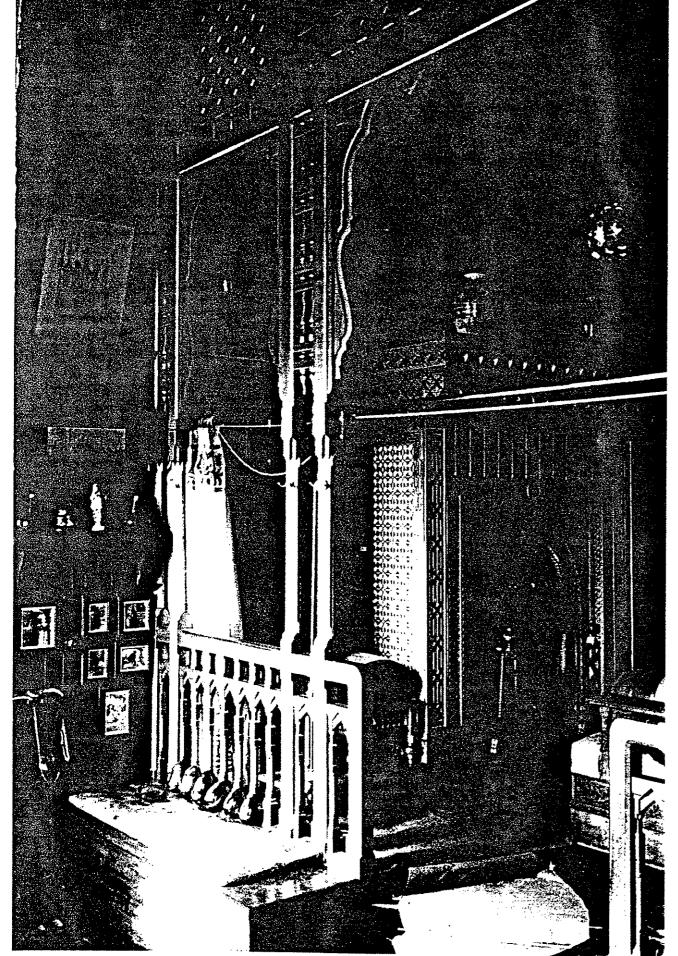
Alexander Palace, bridge in Park, 1996, photo: WMF.





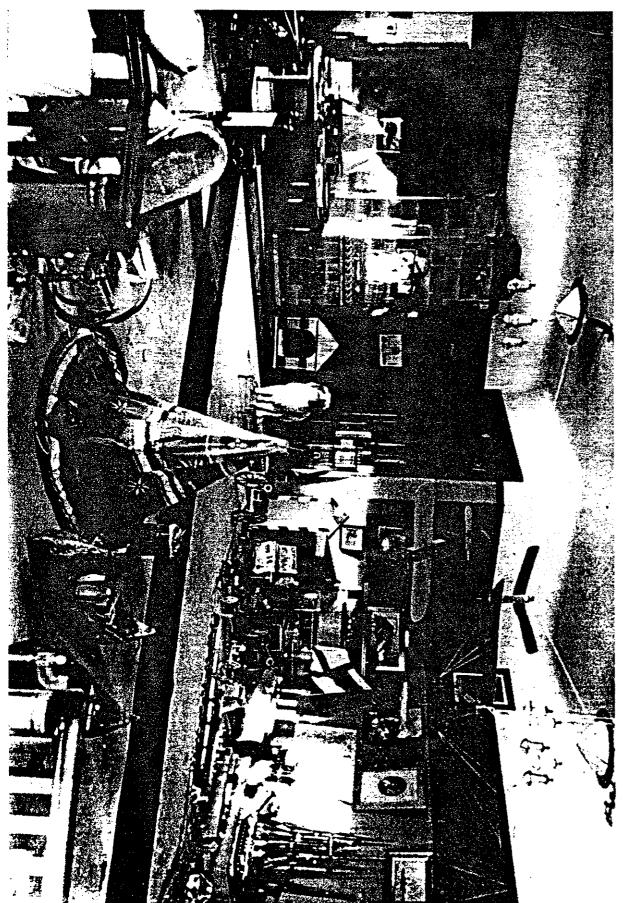


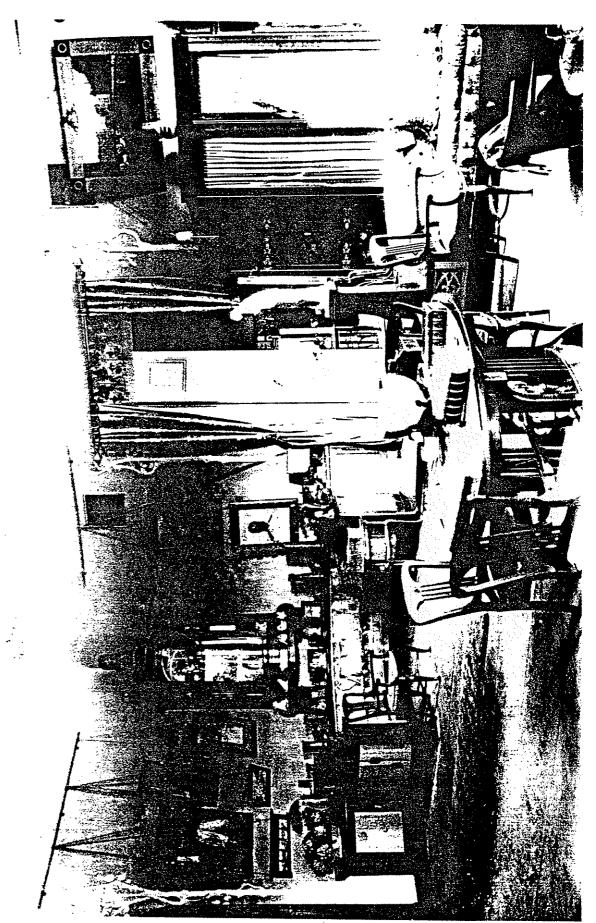
MORKING STUDY



NICHOLAS BATHROOM



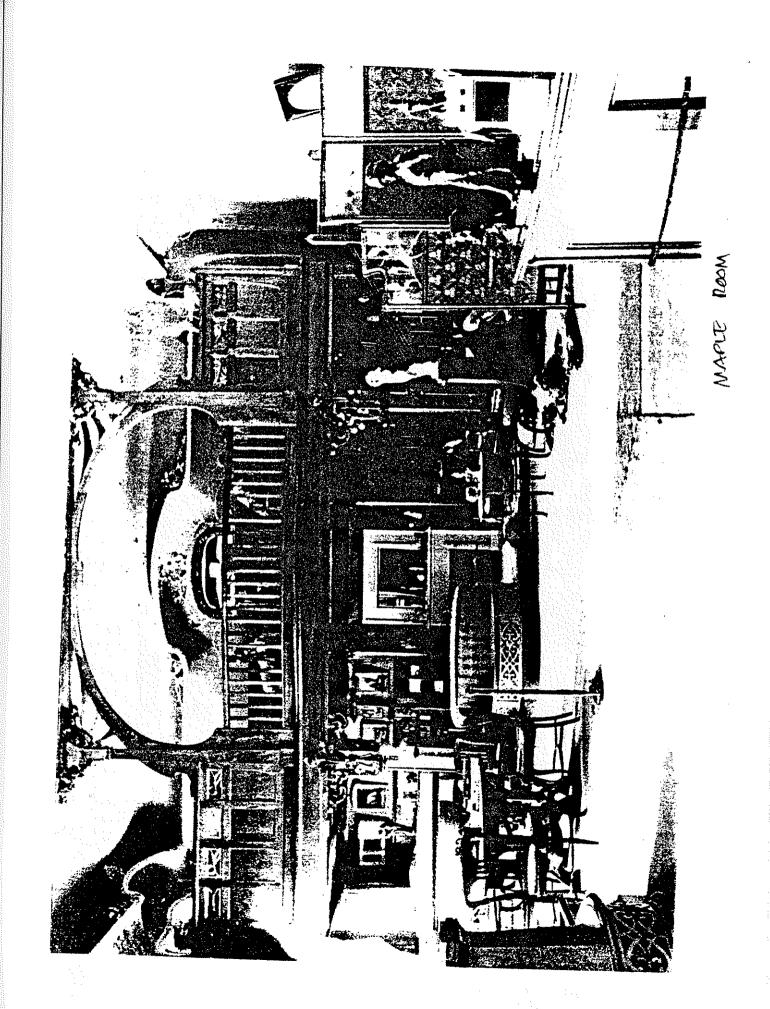


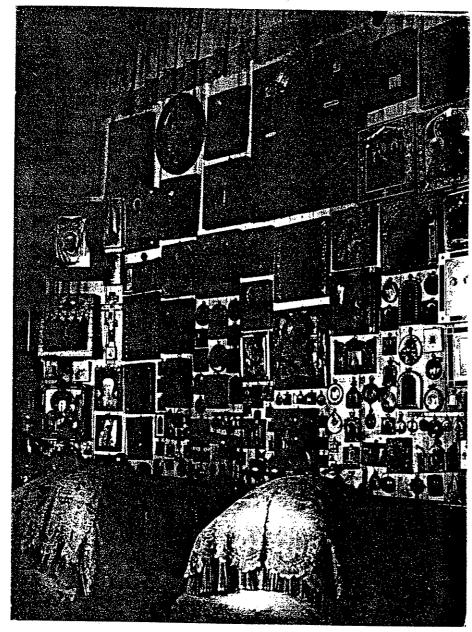


MAPLE NOOM - DOOR 15 PALLISANDER

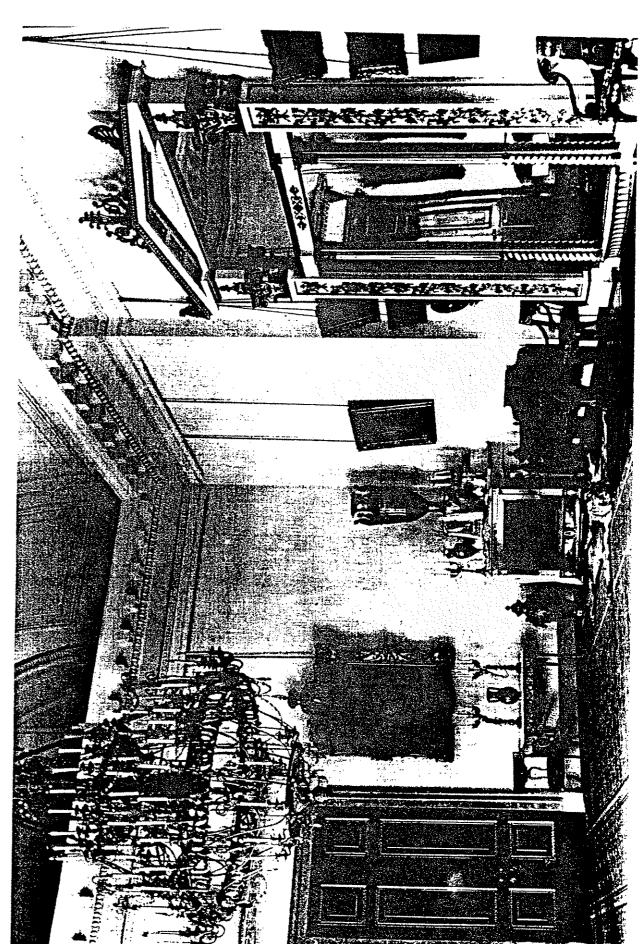


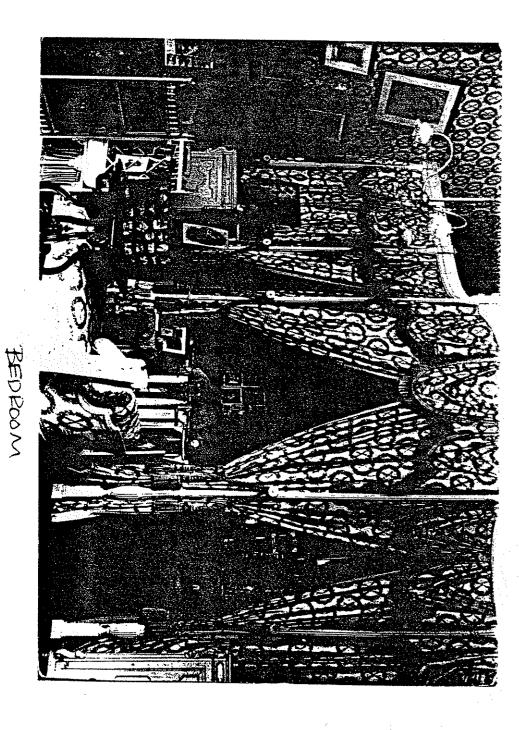
MAPLE BROM





BEDROOM IKON WALL-LEFT





Appendix D: Technical Report for Conservation of the Southeast Wing Roof

CITY OF ST. PETERSBURG. COMMITTEE FOR CULTURAL AFFAIRS

TSARSKOE SELO

Baron Lobstein World Monuments Fund 949 Park Avenue New York, NY 10028 212-517-9367 fax 212-517-9494

Dear Mr. Baron!

In response to your letter of February 3, 1997, we write to you regarding the contract between the State Museum-Preserve Tsarskoe Selo and the contractor Paanurakenne (attachment 1), which obligates the contractor to complete the repair of the right wing of the Alexander Palace, over an area of 2,089 square meters (sections XXIX - XXV on the accompanying diagram, attachment 2) for a fee of US \$100,000.

On January 1, 1997, work had been fully completed on section XXVII. This work included the repair of two triangular trusses and their horizontal purlins through complete removal and reinforcement, as well as the replacement of sections, central supports and cross braces. All rafter tails were completely replaced to the major supporting beams. Roof lathing was completely replaced, and new galvanized steel roof plating was laid. Dormer windows and ventilation openings were installed (see photos, attachment 3). Along longitudinal walls the squared beam supporting the rafter structure was replaced (see attachment 4), and the brickwork underneath was replaced along the entire breadth of the cornice area to a depth of 0.5 meter.

Across the entire work area, approximately 70 percent of masonry parapet posts and chimneys were repaired. Balustrade railings were removed, along with 358 cracked wooden balusters (see diagram, attachment 5).

This work was carried out on the basis of a conditions survey commissioned by the Tsarskoe Selo Museum-Preserve from the state restoration institute *Lenproektrestavratsia* (see condition report, attachment 6).

The type and extent of completed work differs in several cases from the recommendations of this report because of the impossibility of reviewing all defects in the roof material without first dismantling the relevant structures and removing the roof covering.

Because of the lack of funding, similar surveys have not been carried out on other areas of the roof, and the conditions in those areas have therefore not been evaluated.

Inasmuch as the scale of necessary work has increased in comparison with the originally planned work, we have re-evaluated the cost of repair and restoration work on the agreed-upon section of roof (including rafters, roof covering, chimneys, parapets,

insulation of heating pipes, tin plating, drain pipes, brick work, *et al*) at \$60 per square meter. At that rate, the originally contracted fee of \$100,000 would cover the repair of 1,666 square meters of roof area.

For the completion of work over the entire contracted area (attachments 1, 2), an additional sum of \$25,340 will be required, resulting in a total cost of \$125,340.

Subtracting the sum of \$40,000 which has already been received by Paanurakenne, the balance to be paid for completion would be \$85,340.

In consideration of the necessity for archival research, building surveys, outside recommendations and work permits, the hiring of consultants, photodocumentation, and the duties of administrative oversight, I request that a separate fee be paid to the Tsarskoe Selo Museum-Preserve amounting to not less than 10 percent of the total project fee.

Attachments:

- 1. Contract for the completion of repair work by Paanurakenne
- 2. Roof segmentation diagram
- 3. Set of photographs
- 4. Transverse section diagrams
- 5. Facade parapet diagram
- 6. Technical recommendations based on roof condition survey, with explanatory notes and diagrams
- 7. Letter to Mr. Štubbs from Paanurakenne

Respectfully,

Ivan Sautov

Attachment 1: Contract between Tsarskoe Selo Museum-Preserve and Paanurakenne

CONTRACT 38

Roof work and restoration of rafter systems of the Alexander Palace of the State Museum-Preserve Tsarskoe Selo

We agree, as of the date of signing, to complete roof work and restoration of the rafter systems of the Alexander Palace of the State Museum-Preserve Tsarskoe Selo in accordance with the attached description and diagrams indicating the boundaries of work to be completed.

FEE

\$100,000 (U.S.)

TERM OF WORK

15 August 1996 - 30 November 1996

TERMS OF PAYMENT

30th week of 1996, upon signing

\$40,000

38th week of 1996, 50% completion

\$30,000

47th week of 1996, 100% completion

\$30,000

GUARANTEE

1 year

Contract produced in Russian, English, and Finnish

translations.

St. Petersburg, 26 July 1996

With attachments Nos. 1 & 2

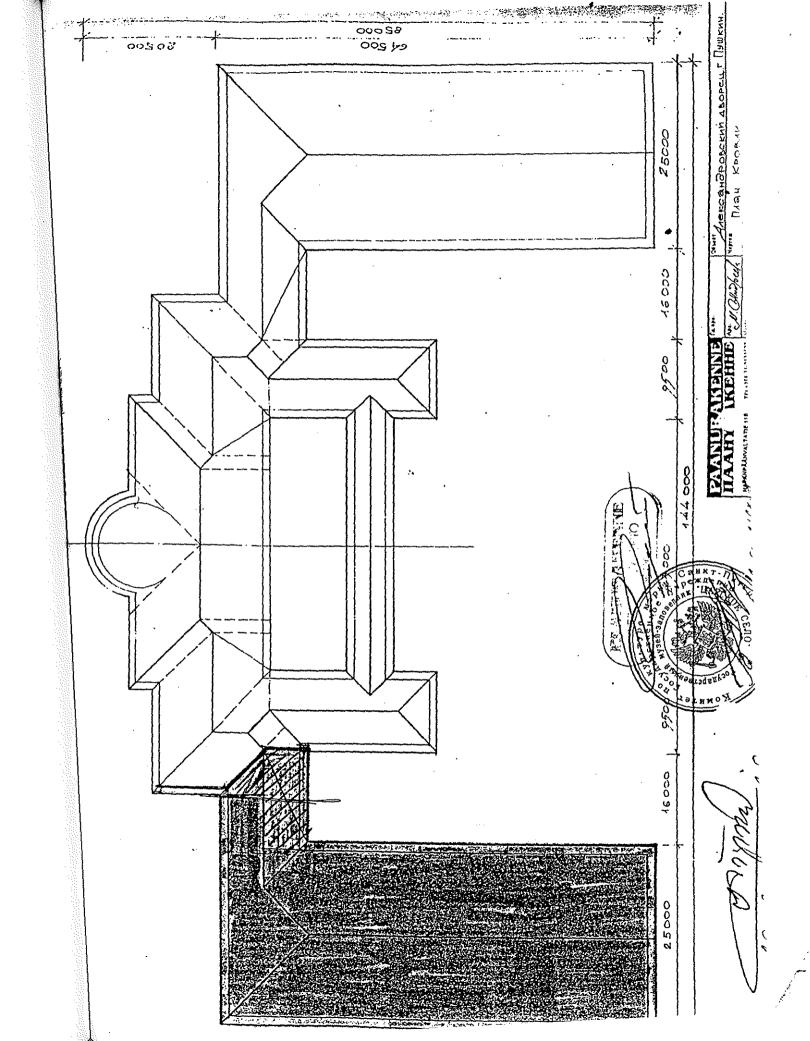
STATE MUSEUM-PRESERVE TSARSKOE SELO IPR GROUP

PAANURAKENNE OY

Tampere, Finland

Ivan P. Sautov

Eero Haapalehto



DESCRIPTION OF WORK METHODS: ROOF WORK AND RESTORATION OF RAFTER SYSTEMS OF THE ALEXANDER PALACE OF THE STATE MUSEUM-PRESERVE TSARSKOE SELO

1. GENERAL

1.1 This contract is for fully-guaranteed work to include roof work and restoration of rafter systems of the palace in accordance with the attached diagrams.

Boundaries of contract work and work area indicated on general plan

- 1.2 Client provides:
 - Connection to necessary utilities (electricity, water, plumbing)
 - Access to construction area indicated on general plan
 - Permits from relevant authorities
- 1.3 Responsibilities of contractor include:
 - Labor
 - Materials
 - Protective materials
 - Removal of debris
 - Necessary instruments
 - Scaffolding
 - All available and relevant plans and drafts for repair of roof, rafter systems, and heating insulation
 - Insurance
 - Fire extinguishing equipment
 - Payment for utilities (not to exceed \$500 U.S.)

2. ROOF

- 2.1 Protective tin covering on roof, cornices, and decorative elements shall be made from 0.6 millimeter galvanized steel plating
 - Double seams
 - Plating width to depend on construction, usually 610 millimeters
 - Seams sealed with Runotex, caulking
 - Reinforcing rivets placed 5 per square meter
 - Before fastening, steel reinforcement under roof plating to be painted
 - In certain localities, form PT85-10381 is required and must be included as an attachment to this contract
 - Restoration of drain pipes

3. RESTORATION OF PARAPET POSTS AND OTHER STUCCOED ROOF **PROTRUSIONS**

- 3.1 Removal of damaged stucco
- 3.2 Stucco work to be carried out in three stages:
 - Base coat and filling of cracks, 30 millimeter thickness
 - Smoothing coat, 3.0 millimeter thickness
 - Thin stucco, 0.6 millimeter thickness
 - Fescon, lime-cement mixture or equivalent to be used
- 3.3 Exterior stucco to be painted with Kivicil, silicate paint by the following procedure:
 - Smoothing lime-cement coat
 - Primer coat
 - Finishing coat
- 3.4 Iron elements to be cleaned using a CT-2 wire brush
 - Base coat of Rostex, anticorrosive paint
 - 2 finishing coats of Panssari, paint

4. SCAFFOLDING AND PROTECTIVE APPARATUS

- 4.1 Scaffolding to be constructed according to necessity, depending on the individual project
- 4.2 Scaffolding to be covered with general protective cover, with protected passageway through to building interior

To provide for walkway safety, site entrances to be protected on top and sides with plywood boards

PROTOCOL

Results of negotiation session regarding conduct of repair-restoration work on the roof and rafter system of the Alexander Palace

26 July 1996, Pushkin

In negotiation session, the State Museum-Preserve Tsarskoe Selo, represented by Ivan Petrovich Sautov; Military Unit 10729, represented by installation commander Anatoly Afanasievich Baranenko; the World Monuments Fund, represented by Baron Lobstein; and the firm IPR Group, represented by president Eero Haapalehto, having examined the issues of organization of the above repair-restoration work, determined the following responsibilities of the contracting parties:

- 1. The State Museum-Preserve Tsarskoe Selo (client) will prepare the ARZ for the commissioned work by 1 August 1996, including a list of all work elements to be performed and all anticipated related demands in connection with that work in the process of its completion.
- 2. Military Unit 10729:
 - Will provide connections to electricity, water, and plumbing systems
 - Will provide assistance in completing necessary documents for access of company specialists and workers to the site
 - · Will provide oversight with regard to work hours during the work period
 - Will provide access to the work area as indicated on the general site plan
 - Will draft instructions for the company with regard to the repair-restoration work
- 3. IPR Group (contractor):
 - Will complete documents for worker access to the site in accordance with accepted procedure
 - Will coordinate project implementation with the Projects Division of the Ministry of Defense
 - Will set up temporary barriers on the building roof and in the attic to prevent access of workers beyond the project zone
 - Will organize security measures for the site, including fire extinguishing equipment
 - Will cooperate with the commander of Military Unit 10729 in fulfilling necessary work conditions as set by the Unit.

The parties came to the agreement that, in addition to the items in the existing contract, IPR Group will upgrade insulation on ventilation and heating pipes in the building attic within the work zone.

Note: The parties to this negotiation session will determine, by separate agreement the implementation and financing of special post-project verification* before the completion of the contracted work.

of the State Museum Tsarskoe Selo Ivan Petrovich Sautov

of Military Unit 10729

Anatoly Afanasievich Baranenko

of IPR Group Eero Haapalehto

* During the negotiation session, Admiral Baranenko explained that "special verification" signifies a counterintelligence operation involving sweeping a secured area for electronic listening devices. Special verification is required by Russian military procedure in all cases where non-military personnel are employed at a secure military installation. Admiral Baranenko stated that classified operations in the Alexander Palace will need to be transferred outside the work area during the restoration period, with the assumption that they will return following the work. Given that assumption, special verification will need to be performed upon the completion of the roof work.

Since the breakup of the Soviet Union, the military organization concerned with counterintelligence screening has become an independent entity and requires separate payment for its services. The cost of the procedure is calculated by the square meter, and the total cost in this case, according to Admiral Baranenko, could approach \$10,000. At this negotiation session, no party agreed to assume the responsibility for payment.

Attachment 2: Roof Sections

Condition markings:

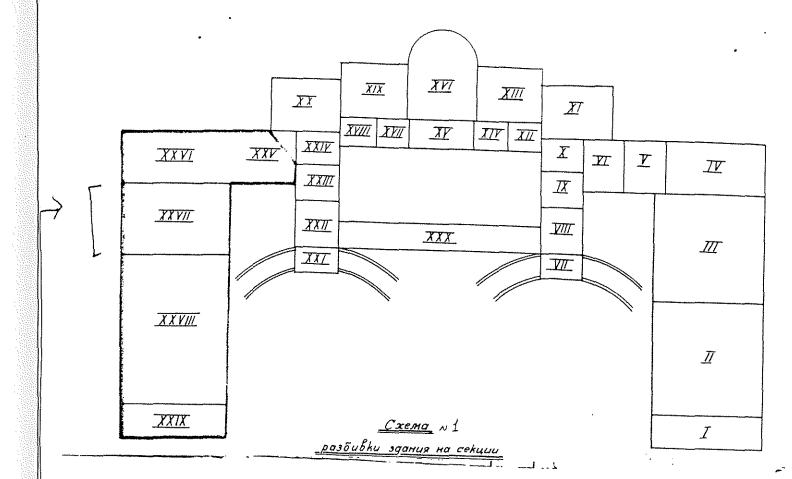
Outlined in blue = Borders of work as defined by agreement

Cross-hatched in yellow = Area of completed work

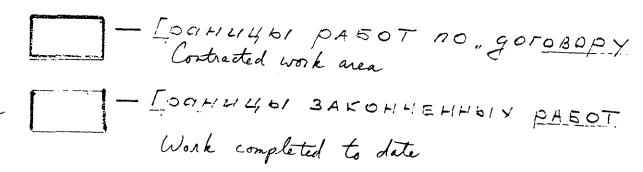
Attachment 3: Photographs

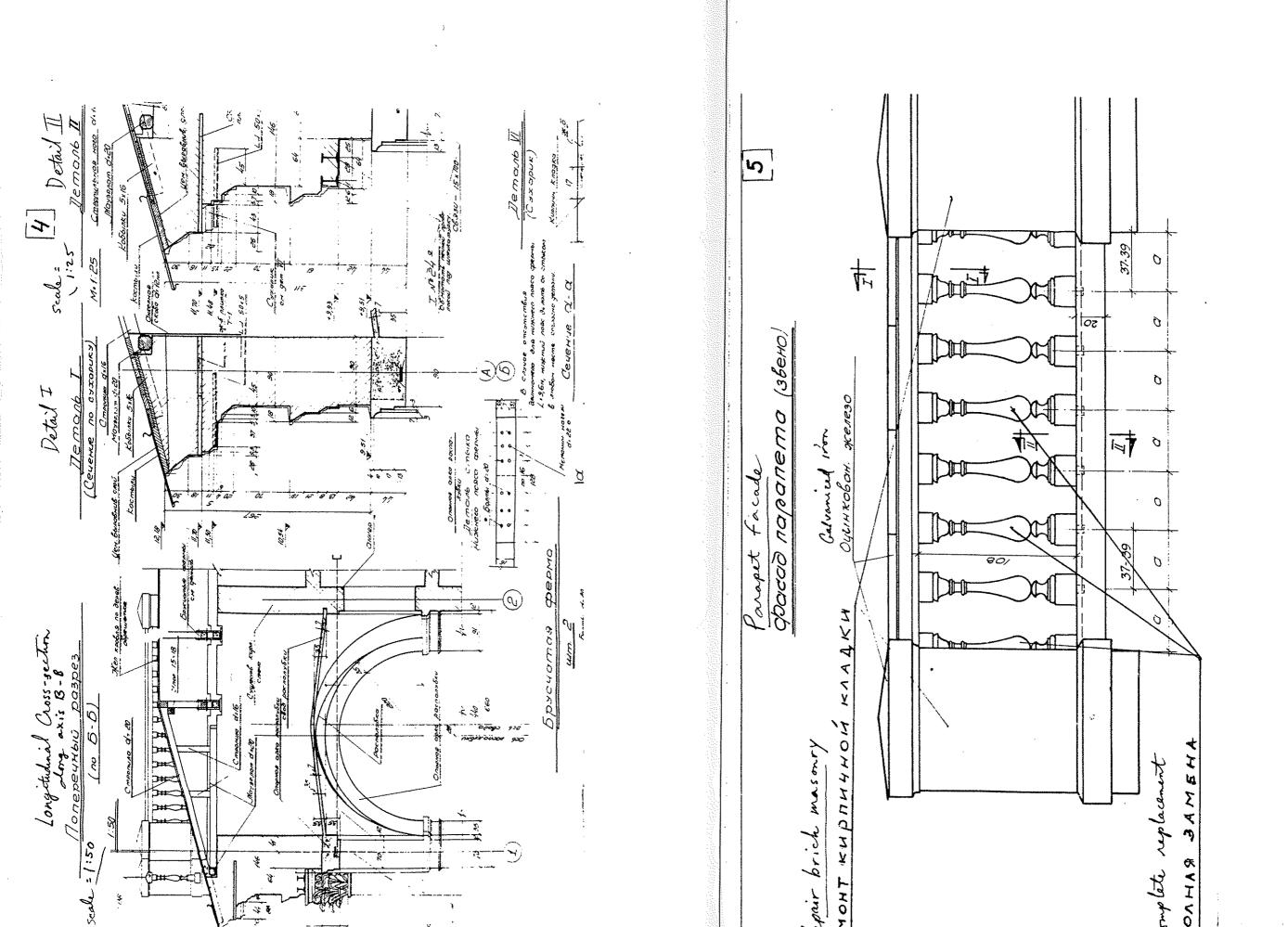
- 1. Fragment of palace roof, February 6, 1997
- 2. Parapets before repair, October 1996
- 3. Parapets, chimneys, February 6, 1997
- 4. Juncture of rafter tail with support beam, one of the characteristic marks of the repaired roof.
- 5. Ends of rafter tails after repair, February 6, 1997
- 6. Rafter tails and lathing as they appear before repair.
- 7. Rafter tails and lathing after repair, February 6, 1997
- 8. Truss after repair, February 6, 1997
- 9. Fragment of roof covering after repair, February 6, 1997
- 10. Fragment of roof covering after repair, February 6, 1997
- 11. Transverse beam and upper part of truss after repair, February 6, 1997
- 12. Beginning of work
- 13. Chimney, October 1996
- 14. Fragment of roof before repair, October 1996

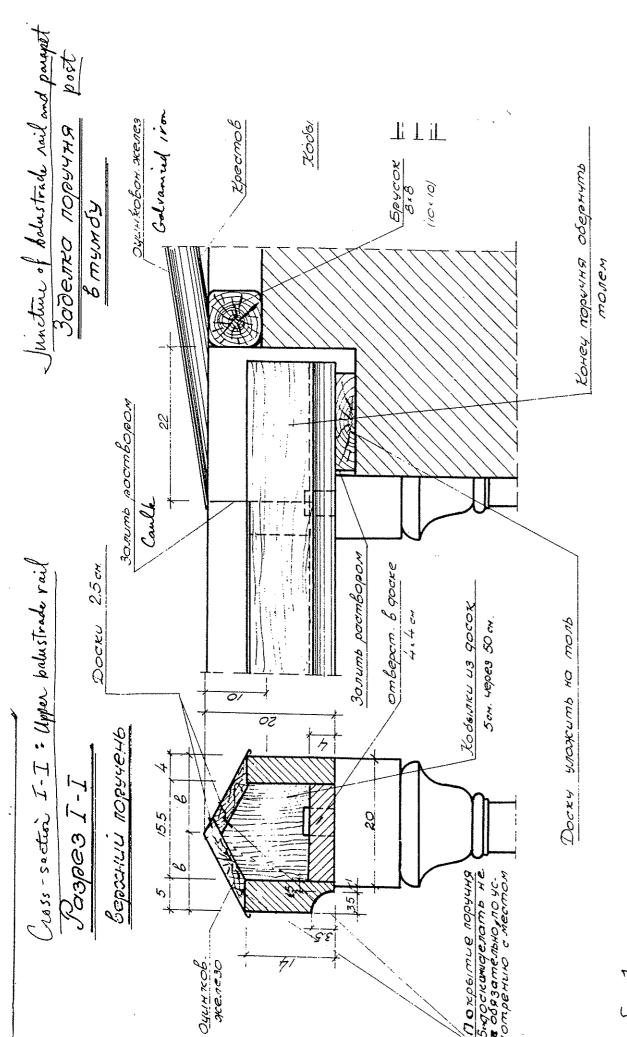
Attachments 4 and 5: Diagrams



UCNOBHELE OFOSHALEHIAS:







Attachment 6: Independent Engineering Report

Institute Lenproektrestavratsiya Construction Engineering Division

Client: State Museum-Preserve Tsarskoe Selo Contract No. 678, November 12, 1996

Technical Conclusions

from the results of roof condition survey of the Alexander Palace in Pushkin

Department Head: V.A. Mizyakov Chief Specialist: V.A. Babkin

> St. Petersburg 1996

I. General Observations

[translation incomplete]

II. Survey Results

[translation incomplete]

III. Conclusions and Recommendations

The conclusions derived from this survey of the technical condition of a section of the Alexander Palace roof reveal the necessity for building repair according to a specially developed plan.

In reviewing the relevant documentation it is anticipated that the following procedures will be required:

- In the zone between axes 1 and 3, repair of rafter tails through addition of prosthetic extensions, and replacement of the rafter support beam beneath them.
- 2. In the zone between axes 3 and 4, replacement of rafter tails, vertical supports, portions of support beams, truss F-4, and longitudinal rafter support beam.

- 3. In the zone between axes 4 and 5, replacement of all rotten trusses and wooden elements. In planning for trusses, consider the load of heating pipes.
- 4. In all zones, replacement of roof plating and bridges (?)
- 5. In the zone between axes 3 and 5, replacement of lathing.
- 6. Waterproofing of all wooden elements of rafter system.

Attachment 7: Letter from Paanurakenne

PAANURAKENNE

IPR GROUP

7 February 1997

Mr. John Stubbs

Dear Mr. Stubbs,

This letter will serve to inform you of the state of affairs as of February 7, 1997.

In the course of roof repairs it became apparent that a significant increase in the scale of work was required which was not foreseen in the beginning stages of the project, specifically:

The replacement of the rafter-tail support beamThe repair of brick masonry beneath it

• Installation of new dormer windows and ventilation openings

Brick masonry on the first missing chimney

Waterproofing of the rafter system, and other types of work

Because of this, the cost of the work has increased, and it will therefore be impossible to complete the full scope of contracted repairs for \$100,000. If supplementary financing becomes available, we are prepaired to reexamine the conditions of the agreement with the client and complete a new agreement and cost estimate.

Respectfully, IPR Group Paanurakenne, Oy

Pavel Pavlinov Director of Marketing tel. 967 58 33

Appendix E: Chronology of the Alexander Palace

1792 - 1796	Design and construction of the Alexander Palace by Giacomo Quarenghi (1744-1817).
1796 - 1800	Stucco facade completed and final color scheme applied.
1801 - 1825	Alexander I occupies the Palace as a permanent residence.
1809	Interiors completed to the design of Luigi Rusca (1758-1822); Wall paintings completed by Giovanni Battista Scotti (1776-1830).
1826 - 1827	Private apartments of Nicholas I and Alexandra Fyodorovna redecorated; work attributed to Ivan Starov (1769-1848).
1837	Crimson Drawing Room of Alexandra Fyodorovna redecorated by Konstantin Ton (1794-1881).
1825 - 1855	Nicholas I occupies the palace as a summer residence.
1846	Iron balconies are added to the garden elevation, designed by Alexander Briullov (1798-1877) and Ippolit Monighetti (1819-1878).
1855 - 1881	Alexander II occupies the palace as a permanent residence.
1881 - 1894	Alexander III occupies the palace as a summer residence.
1892	Exterior semi-circular steps to both the Imperial Suite and the English Suite are re-built. Marble paving within the aula is removed and replaced with plants; marble slabs are re-used as interior paving.
1894 - 1917	Nicholas II occupies the palace as a permanent residence.
1895	Left (southeast) wing of the palace reconfigured and redecorated by Roman Meltser (1860 - 1943) to serve as private apartments of Nicholas II and Alexandra Fyodorovna. Right (northwest) wing redecorated using furnishings supplied by the English design firm Maples & Co. to the design of Shrenburg.
1898	Iron beams inserted into floors and ceilings of the Imperial wing; Field Church incorporated into the Crimson Room
1899	Artificial marble finishes restored; elevator installed in the Imperial Wing corridor.
1902	Interior re-decoration completed in the New Study, Maple Room and children's rooms.
1903	Basement excavated under the aula; cast stone balustrade replaced with wood.

March 20: All-Russia Central Executive Committee designates the Palace historic landmark. 1941 - 1944 German military forces blockade the city of Leningrad and occupy Tsarsh Selo, including the Alexander Palace. 1941 - 1945 The Palace is badly damaged by shelling. In addition to facade damage, Mauve Sitting Room and corner rooms are virtually destroyed 1945 Control of the Alexander Palace is transferred to the USSR Academy of Sciences and the Institute of Russian Literature for proposed museum use comprehensive repair campaign is recommended, including repairs to the colonnade, restoration of the west wing to the Stasov design, and the retu of Nicholas II and Alexandra Fyodorovna's apartments to Meltser's Art Nouveau design. The following initial stages of the project are carried outhe state construction agency Lenakademstroiproyekt under the direction architect L. M. Bezverkhnii: • Repair of the Main Enfilade. • Restoration of Stasov interiors [verify] • Partial repair to Nicholas I and Alexandra Fyodorovna's study • Partial repair of cornices and fireplaces in the east wing • Reconstruction of interior design of Nicholas II's study and reception room • Restoration of ceiling mural by Giovanni Battista Scotti uncovered in course of the work. 1948 Boiler replaced [verify] August 31: Control of the Alexander Palace is reassigned to the Soviet Noruse as a research institute. 1957 Roof repairs are carried out, and heating system is repaired and upgrade minor renovation is carried out to adapt the building for military use.	1912	Floors above the children's rooms are repaired.
1920s Upper floors of the Palace used as a "club house" for the secret police (NKVD). Portions of the Palace are used as a children's home for the You Communist League (Komsomol). 1935 March 20: All-Russia Central Executive Committee designates the Palace historic landmark. 1941 - 1944 German military forces blockade the city of Leningrad and occupy Tsarsh Selo, including the Alexander Palace. 1941 - 1945 The Palace is badly damaged by shelling. In addition to facade damage, Mauve Sitting Room and corner rooms are virtually destroyed 1945 Control of the Alexander Palace is transferred to the USSR Academy of Sciences and the Institute of Russian Literature for proposed museum use comprehensive repair campaign is recommended, including repairs to the colonnade, restoration of the west wing to the Stasov design, and the return of Nicholas II and Alexandra Fyodorovna's apartments to Meltser's Art Nouveau design. The following initial stages of the project are carried out the state construction agency Lenakademstroiproyekt under the direction architect L. M. Bezverkhnii: • Repair of the Main Enfilade. • Restoration of Stasov interiors [verify] • Partial repair to Nicholas I and Alexandra Fyodorovna's study • Partial repair to Tornices and fireplaces in the east wing • Reconstruction of interior design of Nicholas II's study and reception room • Restoration of ceiling mural by Giovanni Battista Scotti uncovered in course of the work. 1948 Boiler replaced [verify] August 31: Control of the Alexander Palace is reassigned to the Soviet Nor use as a research institute. 1957 Roof repairs are carried out, and heating system is repaired and upgrade minor renovation is carried out to adapt the building for military use.	1917	
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minor renovation is carried out to adapt the building for military use. 1957 - 1985 Annual maintenance and minor repairs carried out.	1951	August 31: Control of the Alexander Palace is reassigned to the Soviet Navy or use as a research institute.
	1957	Roof repairs are carried out, and heating system is repaired and upgraded; minor renovation is carried out to adapt the building for military use.
1996 Alexander Palace registered on first World Manuments Watch List of 100	1957 - 1985	Annual maintenance and minor repairs carried out.
Most Endangered Sites. American Express Company awards a grant of	1996	\$100,000 through the program to be directed toward emergency roof repair

Appendix F: WMF Mission Reports

AN INTERNATIONAL PRESERVATION ORGANIZATION 949 Park Avenue New York, New York 10028

Telephone: 212 517 9367
Telefax: 212 517 9494
WORLD MONUMENTS FUND

Alexander Palace Field Notes, Technical Mission III

Location:

Tsarskoe Selo, outside St. Petersburg, Russia

By:

John Stubbs and Baron Lobstein

Date:

22-25 July 1996

Roof Inspection

On 22 July an initial inspection of the roof of the east half of the Alexander Palace was made in the company of Dr. Ivan Petrovich Sautov, General Director of the State Museum Tsarskoe Selo; Boris Danilovich Podolski, chief architect of Tsarskoe Selo restoration projects; Mr. Veli Ala-Viuhkola, Vice President for St. Petersburg operations of the Finnish restoration/construction firm IPR Group Paanurakenne Oy; Mr. Pavel Pavlinov, Marketing Manager of Paanurakenne (serving as interpreter for Veli Ala-Viuhkola, who spoke only Finnish); and four staff members of Russian Naval Division 10729, the current occupants of the Alexander Palace. Our purpose was to determine the extent of repairs necessary in order to prevent water damage to architectural fabric, especially interior rooms and exterior walls below.

Attic Area. On an initial examination of the principal attic spaces in the east half of the building it was noticed that roof framing (trusses, rafters, purlins, and flooring) appeared to be in relatively good condition, there having been several noticeable repairs and structural interventions from earlier this century. For example, a large lattice truss over the Semicircular Hall, tie rods and cables at corners, etc. As noticed from a centrally-placed walkway, most rafters and purlins appear to be in good condition. Of those observed and probed it appears that these materials are approximately 80%-90% intact and reusable. The few rafter "tails" noticed which were fitted into exterior wall caps appeared sound, though access and illumination levels were not adequate here for a close inspection. A number of open joints and very poorly detailed flashing at chimney collars resulted in wood deterioration in almost all such areas. This is due to the almost complete lack of counter-flashing used in construction of the present roof covering.

A semi-cementitious material is laid between the floor joists as insulation. Numerous small semicircular layered roof vents occur at regular intervals in the roof, most having been deformed, probably during snow-shoveling operations. Steam piping is poorly insulated, and a relatively minor amount of debris has accumulated in the attic areas. No household implements were noticed in the attic area, though a stalk of approximately 50 turned wooden balusters was noticed near the roof hatchway.

Roof surface. After passing through a tight dormer-type roof access door it was immediately apparent that the roof area of the Alexander Palace is vast and in poor condition. The wooden balustrade, dating from ca. 1910, is severely deteriorated and missing altogether in certain areas; some repairs with galvanized straps were noticed. The galvanized metal roof surface shows rust over approximately 40% of its exterior surface, there being dents and bent-over seams in abundance. Small (approximately 60 cm. x 1.5 m) semicircular roof vents with wooden louvers are mostly flattened on their top edges though appear to be sound at their junctures with the roof surface. Glass covers are in place on a number of these vents. Almost all roof penetrations which consist of stuccoed masonry chimneys, flues, and firewalls are very poorly flashed, there being almost no effective counter-flashing in place. Crickets and other diverters are only in fair condition, their standing seams having been partially flattened during snow-shoveling operations. A masonry chimney and balustrade supports all suffer from spalling stucco, poor flashing, substandard repairs, and little or no cap flashing.

Key Repair Recommendations

All in the inspection party agreed that roof surface replacement with a new, properly-detailed, standing-seam metal roof was the only solution here. The area of most immediate interest — the roof area over the southeast wing of the palace — was discussed at length in terms of details, new construction joints, and construction worker access. On close examination, every one of several dozen balusters and their supports was badly deteriorated by splitting and rot. It is recommended that all balustrade sections be replaced in kind, using improved detailing and treated wood.

John Stubbs expressed concern that debris within the attic space be inspected and removed. Ivan Sautov recommended that damaged insulation on heating pipes located within the attic be repaired. The contractor, Dr. Sautov and I all agreed on an appropriate location for stopping this phase of roof repair work for the budgeted amount (see Paanurakenne-Tsarskoe Selo contract).

Palace Interiors

On July 23, Baron Lobstein and I were escorted by Lieutenant Colonel Valery Nikolaevich Solovyov of Russian Naval Division 10729 through several spaces within the Alexander Palace. The following rooms which were visited by members of Technical Mission I team members in February 1994 were revisited:

- Tsar Nicholas II's reception room
- Tsar's Working Office
- Tsar's New Study (with balcony in the Art Nouveau style)
- Tsarina Alexandra Fyodorovna's reception room
- The entrance vestibule and corridor of the southeast wing
- The Semicircular Hall

The above-mentioned interior spaces are unchanged from the appearance last observed in February 1994 (see draft Master Plan for descriptions).

Additional rooms observed included:

Central corridor, 2nd floor, East Wing - from stair at Palace's central entrance to stair at southeast entrance. Arranged as both a double- and single-loaded corridor, this passageway was in good condition, having both 10×10 cm. brown tile floor and wood parquet flooring, moderately richly detailed cornices and moldings, and paneled double doors. The numerous offices off both sides of this corridor were not visible due to closed and locked doors. There was no notice of leakage, insensitive intrusions, or damage other than communications wiring and a few door replacements.

Stairways. All four stairways used in the east wing of the building were in good condition, each being framed in ornamental iron with marble treads. Each was enclosed by doorways.

The Pallisander Room. Observed only from the doorway, the Pallisander Room was in good condition, having an intact central plaster ceiling medallion. Cornices, intermediate moldings, and bases appeared to be all intact. As with all other interior spaces of the Imperial apartments thus far observed, this place was painted in a monochrome institutional color, in this instance green.

The Small Library and vestibule. The Small Library, located adjacent to Alexandra's Reception Room, is roughly square in plan, being richly ornamented with intact cornice, ceiling medallion, and lavish door frames finished in scagliola. The original flat wall finishes of this room may also have been scagliola. An undersized chandelier of good quality is suspended from a richly detailed ceiling medallion. The vestibule in the northeast entrance of this room intrudes upon the Tsar's New Study and may not be original.

Basement corridors. Almost the entire length of the basement corridors in both the east and west wings of the palace was viewed. Accessible by stairs at the southeast and southwest ends and a partially closed split stair at the center of the building, the basement corridor system was single-loaded with

transom lighting along the north wall of the building. The various wings of the palace have double-loaded corridors at the basement level. Ceilings are relatively new at a height of about 2.8 meters, several ceilings being formed by groin vaults.

Many offices are located in the basement spaces, located there no doubt due to their more secure position in the building. Offices which were observed, including a dental office, had basement window lighting. Concrete floors had numerous wooden access panels, and walls were finished in painted plaster. Lighting throughout was minimal.

Evidently there are large unused spaces beneath the aula (courtyard) of the palace, complete with ventilations and skylights. Judging from original window openings on the outside of the base of the double colonnade, these large storage spaces seem to date from the original construction of the building.

Miscellaneous. The ground and part of the first floor of the eastern entrance pavilion were observed. These contained offices which appear to be in very good condition. It was observed that these two entrance pavilions have three floors, though at the exterior of these wings it appears that only two floors exist, as elsewhere through the Alexander Palace.

Site. Two drainage (sewage?) outlets were observed at the edge of the lake located to the north of the palace.

Kitchen Building. A brief examination of the exterior of the large detached kitchen building near the entrance gate to the palace was made. The kitchen building is U-shaped in plan, the center of its plan being bisected by an enclosed carriage way which is accessible from Dvortsovaya Ulitsa (Palace Road). We were told that two stairways are located in each half of the two-story kitchen building. Near the center of the open courtyard is a building which contains a stairway, one portion of which leads to the underground service tunnel which connects the kitchen building with the southwest corner of the palace. Evidently no special functions occur within the kitchen building, which according to our guide could probably be seen on our next visit with proper application.

Palace Exterior

On July 22 a walk around the exterior of the Alexander Palace allowed for closer examination of its various deteriorated finishes and details. The situation with spalling stucco and the sources of these problems is largely described in the draft Master Plan. Repairs using hard cements were noticed, and occasional tapping of reachable stucco surfaces yielded hollow sounds about half of the time.

The exterior windows of the Semicircular Hall are in very poor condition, as are storm sash located throughout most of the building. Metal drip edges were evidently extensively replaced in the most recent renovation and appear to be working relatively well.

As has previously been noticed, the chief threat to the exterior finishes of the Alexander Palace is from defective roof water drainage systems. The stone water table (foundation rising to approximately 1.5 meters) is generally in good condition, there being basement window arch failure noticed in three locations along the south elevation.

Miscellaneous

At a viewing of archival watercolors of the Alexander Palace at the Tsarskoe Selo Museum offices at the Catherine Palace, it was noticed in one rendering of the exterior of the palace, dating from 1857, that the roof was green in color. We were told by Tsarskoe Selo's chief curator that green-painted roofs were a St. Petersburg custom. Also, in this watercolor it was evident that fabric awnings were in place on certain palace windows.

MEMORANDUM

Date: August 1, 1996

To: Alexander Palace project team members, sponsors, and friends

From: Baron Lobstein

Re: WMF Visit to St. Petersburg — July 22-26, 1996

Summary

From July 22 to 26, World Monuments Fund staff members John Stubbs and Baron Lobstein visited St. Petersburg for the purpose of completing the conditions survey of the Alexander Palace which was begun by WMF in February 1995, as well as meeting with representatives of the Finnish restoration firm Paanurakenne, which had been selected by Tsarskoe Selo museum director Ivan Sautov as the leading candidate to begin repair work on the roof of the Alexander Palace. Depending on the success achieved in the opening days of the trip, it was planned also to meet with project sponsors and other constituents in the city.

The visit had been planned for a group of four representatives, to include architects Page Cowley and Scott Duenow, who had been responsible for compiling the conditions survey. Immediately before the group's departure for Russia, however, because of unresolved doubts about the possibility of access to the palace, the decision was made to limit the delegation to two representatives. While a great degree of access was, in fact, allowed at the Alexander Palace, many interior spaces remained off limits, and the survey was therefore limited in its scope. However, we believe that the information gathered was sufficient to complete our concept report on the future restoration and adaptive re-use of the palace as a museum of the Romanov family.

During the course of the visit, we were also able to complete negotiations on a contract between Paanurakenne and the Museum of Tsarskoe Selo for the emergency repair of the roof over the southeast wing of the Alexander Palace, for which a grant of \$100,000 has been generously provided by American Express Company through the World Monuments Watch program. This work is slated to begin on August 15, to be completed by the end of November. We also learned of definitive plans at American Express to organize an official grant presentation ceremony at Tsarskoe Selo on October 17, at which time work will be already well underway.

The following is a detailed summary of our daily activities during the trip, compiled from memos written during the course of travel.

Monday, July 22

Today we were met at the Alexander Palace by four Naval officers who escorted us on a thorough exterior walking tour and a complete survey of the attic and roof. Tour participants included Vice President Veli Ala-Viuhkola of the Finnish contractor Paanurakenne and his assistant, Ivan Sautov and his chief restoration engineer Boris Danilovich Podolski, Yuri Moiseenko, interpreter Nina Zonina, our four escorts from the Naval institute, and a building engineer. Close to 200 photographs were taken, and no obstacles were offered by the gentlemen from the Admiralty or their security.

The Finns brought a draft contract to the meeting, which they promised to have revised by tomorrow, based on today's observations.

Based on our observations, the entire roof surface, approximately 15% of the substrate, and all

balustrades will need to be replaced. The various chimneys and parapets need extensive work as well. It seems, in other words, that the most efficient and effective way to repair the roof of the palace is to replace it with a long-term, durable roof. The Paanurakenne representatives still feel that they can replace the southeast third of the roof for the available \$100,000.

Sautov and Paanurakenne's manager are prepared by the end of this week to sign a contract between their respective entities for roof restoration work on the southeast third of the building. Work is projected to start on August 15 and be completed by November 15 of this year.

As a precondition of the contract, a protocol will be signed between the Admiralty and the World Monuments Fund stating the following: WMF will provide sponsorship for the roof work to be completed, and the Admiralty will allow the repairs to take place by removing occupants from the second floor of the southeast wing so as to accommodate the repair crew for the duration of the work.

During the course of negotiations it was decided that the World Monuments Watch grant money would be paid to the Tsarskoe Selo Museum, which would forward it to Paanurakenne at the times stipulated in the contract. The projected agreement will contain a payment schedule that calls for three payments, which would be transferred by WMF to the St. Petersburg bank account of the Tsarskoe Selo Museum and immediately thereafter transferred to the Finnish company as advance payment for work to be completed. The contractor is willing to accept this arrangement. Sautov has made it clear that all transactions will be made transparent and open to us for examination at all times. These terms will form part of the agreement between WMF and Sautov's organization.

There seems to be a general consensus that the Navy will be leaving the Alexander Palace sooner or later. We drove by a large vacant building in Pushkin, which after some renovation will be available for the institute's offices. An executive order is reportedly to be signed by President Yeltsin transferring control of the Alexander Palace to the City of St. Petersburg, and all that will remain, in order for the Navy to leave the Alexander Palace, is the money for renovation and relocation.

In any case, the Alexander Palace project for the next 18 months to 5 years should be concentrated on restoration of the roof, exterior wall restoration, and restoration of exterior doors and windows, as per our master plan.

Tuesday, July 23

This morning began with a guided tour of two St. Petersburg restoration projects under the auspices of Paanurakenne, led by the firm's vice president for Russian operations Veli Ala-Viuhkola. We first visited the Russian Museum – the former Mikhailovsky Palace – a grand building dating from the early 19th century in the center of the city, similar in style and layout to the Alexander Palace. In that building we saw a finely restored gallery with new parquet flooring and a vast skylight, and then the roof area over that gallery, which features a beautifully designed and carefully constructed diffuser and outer enclosure.

The second site visit was to the Gostiny Dvor, the enormous 18th-century shopping arcade on Nevsky Prospekt, where conditions are so bad that pedestrian traffic has been diverted for the past five years because of the danger of falling brick and stucco. Paanurakenne is restoring the stucco finish of the primary elevation. We observed the use of Fescon stucco mixture, which the firm would propose to use at the Alexander Palace in future facade work, and of which we managed to take a small sample in dry form. We also observed an impressive workshop on site where Russian craftspeople are creating new plaster detailing for the finished building.

We later discussed with the Paanurakenne representatives the contract which they propose to sign with the Tsarskoe Selo Museums regarding the Alexander Palace roof repair. They understand that the price is not to exceed \$100,000, and they assured us that the physical scope will be as described in the diagram attached to the contract. Also discussed were the standard details they intend to use on the construction of the new roof.

In the afternoon we were received by Olga Taratynova (Mrs. Sautov) and her colleagues at the St. Petersburg Preservation Commission. She had much new archival material on the Alexander Palace for us to examine — dozens of black-and-white photos of the palace from ca. 1915 showing all sorts of interior details. Of interest as well were approximately 1 dozen architectural watercolors — scale drawings detailing restoration plans for the interiors of the palace dating from roughly 1947. Also of interest was a brief published report compiled by Dr. Boris Kirikov (the Assistant Director of the Preservation Committee specializing in scientific studies and an expert on 20th century interiors), which was released in 1992 as an entry in a multi-volume study on proposed restoration and preservation of several St. Petersburg monuments. Dr. Kirikov has delivered us a copy of this material, which gives a brief concept for a restoration of the Alexander Palace and conversion to use as a museum and center for the study of decorative arts. The line of reasoning is remarkably similar to that discussed by WMF and might serve as a fitting appendix to the forthcoming WMF master plan.

Wednesday, July 24

Sautov received us this morning for a very productive 2-hour meeting in his office, where we finalized all details of the Paanurakenne/Tsarskoe Selo agreement and the WMF/Tsarskoe Selo agreement. We together drafted a letter for the Navy to sign, which allows us to work there in the low-security areas, and for WMF representatives to have access to the palace on reasonable notice.

In the afternoon we were taken on a second tour of the Alexander Palace, this one focusing on the interior spaces. Four rooms were re-visited from our February '95 visit, but some new spaces were also seen, including:

- The upstairs hallways in the east half of the building
- 2 stairways
- A beautiful vestibule room just west of Alexandra's reception room
- The entire basement corridor system, even below the west wing
- The first and basement floors of the east pavilion opening to the entrance colonnade

Cameras were not allowed, but we took pages of notes and sketches. The Commandant who showed us around said the workers on the top floor of the east wing will vacate the area during roof repairs.

Thursday, July 25

Today we went to Smolny Institute to visit Deputy Governor Vladimir Petrovich Yakovlev, who oversees cultural affairs in St. Petersburg (not to be confused with the new governor, Vladimir Anatolyevich Yakovlev). We believe this meeting to have been essential to maintaining constructive dialogue with city authorities here as the real project work commences. In the meeting we received his assurance that he is behind us 100 percent and will even try to help arrange through the office of the new Minister of Defense for all the proper documentation to allow unimpeded access to the roof during the work.

From Smolny we went to the U.S. Consulate to speak with Donna Evans, the wife of Consul General John Evans. Mr. Evans appeared while we were there, and we had an opportunity to speak at length with both of them about our successes and potential problems. Both indicate great interest in supporting the project in some capacity.

We have set a tentative deadline of October 17 for the release of WMF's master plan for the palace restoration - this date to coincide with the American Express plaque presentation at the Alexander Palace.

Friday, July 26

John Stubbs left early this morning for Istanbul, and I remained to be present at the signing of the contract between Paanurakenne and the Museum of Tsarskoe Selo. Also in attendance were Tsarskoe Selo's chief restorator Boris Podolski; Paanurakenne's President Eero Haapalehto, Vice-President for St. Petersburg operations Veli Ala-Viuhkola, Marketing Director Pavel Pavlinov, and secretary/translator Viktoria Trofimova; the commandant of the naval institute in residence at the Alexander Palace, Rear-Admiral Anatoly Afanasievich Baranenko.

Admiral Baranenko had not been involved in earlier contract discussions, and a significant amount of time was devoted to settling questions relating to the role of the navy in the upcoming work. Issues discussed included:

- Restoration of roof ventilation units, chimneys, rafters and heating-pipe insulation
- Fire insurance
- Building access and scheduling
- WMF inspection visits
- Counterintelligence screening (see below)
- Electricity and water supplies for Paanurakenne's workers
- Miscellaneous technical issues

The issue of counterintelligence screening was an obstacle which had not been anticipated by either side in earlier negotiations. Admiral Baranenko informed us that, according to Russian military procedure, areas of secure facilities which are occupied for any length of time by outsiders — in this case restoration workers — must be examined thoroughly for electronic devices (i.e. bugs) that may have been left behind. The counterintelligence laboratory that undertakes this special verification is no longer a part of the Ministry of Defense and must be paid separately, at a rate of approximately \$10 per square meter, for its services. According to Baranenko, the total cost of the screening in this case could be between \$7,500 and \$10,000. The question of payment was left open in this case, so that all possible arrangements could be considered in the course of the coming weeks, and the issue was not allowed to interfere with the overall agreement.

At 12:30, the negotiation session recessed for half an hour while the agreed points were written into a protocol to be attached to the contract. On the strength of the accords reached, signatures were affixed to the document, and champagne was opened in celebration. Boris Podolski signed, on behalf of Ivan Sautov, an agreement with WMF regarding the procedure by which the World Monuments Watch grant will be paid out. Admiral Baranenko, Eero Haapalehto, and Boris Podolski signed a document, to be countersigned by Bonnie Burnham, affirming the Navy's commitment to assist however possible in the fulfillment of the contract through building access and other accommodation as necessary.

Alexander Palace Project

Outstanding Issues and Questions Relating to Mission I Visit and Completion of Report

Existing conditions Survey

- Review of documentation regarding bomb damage, structural repairs carried as both temporary and permanent repairs to the palace. Were roof trusses replaced or strapped with propping? Were new members inserted for damaged ones, if so, were these in steel or wood? Were floor beams and joists replaced and or repaired? if so, where are the locations of these repairs?
- Fire damage reported, if any to the building
- Has any insulation be inserted into the building by any of the following means: Interior wall linings? Batt insulation in the roof space or attic?
- Review of mechanical, electrical and plumbing systems. Draft report assumed that all of these systems will require replacing
- Review of alterations and how they have impact historic interiors, If the alterations were carried out were interior finishes concealed behind new walls and partitions, removed and stored off site or demolished and discarded?
- Has any improvement been carried out the basement walls or the perimeter walls? Has a damp-proof course been installed, Was one removed? When was the exterior repointed to the base of the building carried out?
- Are there deteriorated wood structural components in the basement? Any known infestation of termites or other decay? If so, was this condition ever treated and when would this have been carried out?
- Visual inspection of the entire structure for overall impression of the condition of the structure for more detailed evaluation of the structural, mechanical, electrical and plumbing systems and an evaluation of the remaining life span

New Proposed Adaptive Re-use of the Alexander Palace as a House Museum

- What is the program for the persons who will operate the building? Will staff be relocated from the Catherine palace, If so, how many persons and which departments?
- Security: What type of system is envisioned? Remote sensors, hard-wired, personnel?
- 3 Environmental system: Is there an interest in a "state of the art" system or reliance on manual controls and humidistats to regulate temperature
- 4 Expected visitation: what is the current visitation of the Catherine Palace, and what is the expected visitation for the Alexander Palace?

- Revenue: It is expected that the Alexander Palace is to be self supporting. How much revenue needs to be generated to cover operating, maintenance and staff expenses?
- Are there previous reports or plans for adaptive re-use. If so, have these considered a shared occupancy of the building? Was there a Russian prototype or model for the mixed use?
- Mixed uses: Are there any limitations as to mixed use that would be restricted by code compliance and any other statutory regulations?
- 8 Could the facility be a 24 hour use, say hotel accommodation provided for overnight guests or only day-time use for conferences and accommodation provided elsewhere?
- Display of objects: Will entire collection be on view? What will the storage requirements be? Will there be a need for a receiving area or can this be located off-site? Will there be a need for changing exhibition galleries? If so what is the anticipated space requirements?

Preliminary Cost Estimate

Discussion regarding the dollar/ruble equivalent for restoration work of a similar nature and complexity. Would this project be contracted for solely in Russia or would assistance be provided for specialist crafts or supply of fabrics and wall coverings?

Appendix G: Project Participants

The World Monuments Fund

The **World Monuments Fund** (WMF) is dedicated to the conservation of monuments and works of art whose loss or destruction would impoverish mankind. Based in New York City, WMF is a private, not-for-profit organization that is a leader in worldwide preservation activity.

WMF acts as a catalyst. It identifies a major work of art or architecture in peril, develops a plan to conserve it, and brings in partners and sponsors who commit funds to carry out the project. Depending on the nature of the endeavor, WMF may oversee a project to completion or it may limit its involvement to the planning stage. WMF's goal is to stimulate collaborative activity by public and private agencies to assure the survival of the world's most outstanding artistic and architectural treasures. WMF also sponsors research, training, and exchange programs to share its on-site conservation experience with students and craftspeople working in the field.

Currently, WMF is managing 18 conservation projects in 11 countries. Major projects include the conservation of the temple complex of Preah Khan in the Historic City of Angkor, Cambodia; planning for the re-use of the historic castles of Valtice and Lednice in the Czech Republic; the restoration of the Tempel Synagogue in Cracow; the conservation of the Tower of Belém in Lisbon; and the development of a restoration plan for the Alexander Palace in St. Petersburg, Russia.

The World Monuments Watch, established by WMF in 1995, is a global campaign aimed at identifying and preserving the world's most important and endangered cultural landmarks. The program addresses cultural patrimony worldwide, including national monuments, archaeological sites, traditional communities, and manmade landscapes. The Watch consists of two program components: The List of 100 Most Endangered Sites and the World Monuments Watch Fund. The List consists of sites worldwide, selected by an international panel of leading professionals, that will be lost or significantly compromised if no action is taken. The List is updated each year to document conservation progress and to monitor newly emerging problem areas. Sites are selected from the List to receive financial support from the World Monuments Watch Fund, which is composed of donations and grants from individual, foundation and corporate sponsors. These awards are used to support emergency assistance, strategic planning, technical advice, educational programs, local fundraising, and conservation treatments.

WMF relies on generous funding from its membership and philanthropic sponsors. With their support, WMF contributes technical expertise and financial assistance to help save endangered sites. Founded in 1965, WMF has completed more than 100 major projects in 37 countries around the world.

In addition to its own field offices in Paris and Venice, the World Monuments Fund has created five independently chartered affiliate organizations — in France, Italy, Portugal, Spain, and the United Kingdom — that undertake artistic and architectural conservation programs in their own countries and contribute to the success of World Monuments Fund projects worldwide.

The Alexander Palace Association

The Alexander Palace Association (APA) is an independent non-profit organization committed to the complete and accurate restoration and preservation of the Alexander Palace — home of Russia's last Tsar, Nicholas II — through fundraising, grant support, and worldwide media attention.

In the furtherance of its goals, the organization is working in conjunction with Dr. Ivan Sautov, Director of the State Museum-Preserve of Tsarskoe Selo, and the World Monuments Fund (WMF). Specifically, APA seeks to focus its efforts on the restoration and preservation of the palace's historic interiors as WMF concentrates its involvement on the building's exterior. The parties' shared goal is the adaptation of the Alexander Palace for use as a first-class museum offering extensive research materials and educational resources, while becoming a noteworthy attraction for tourists and scholars around the world. In addition, the APA will establish a Russian office at Tsarskoe Selo, whose role will be to provide active supervision of the restoration project.

APA was founded in 1996 as the successor to the Committee to Restore the Alexander Palace, which was the result of more than twenty years of groundbreaking research by its founder and president, Bob Atchison of Austin, Texas, whose training, expertise, and knowledge of the Alexander Palace have been crucial to the growth of public interest in the Palace and its restoration. APA is currently a volunteer effort organized on a committee structure. Its active, honorary, and advisory boards include members of the Romanov and other prominent Russian noble families, as well as Pulitzer Prize winning author Robert K. Massie, all of whom are dedicated to the project's advocacy and advancement.

Mission Participants

Bob Atchison. *President, Alexander Palace Association*. Austin, Texas

Page Ayres Cowley, AIA, RIBA. Consulting architect. New York, New York

Frank Clark Washington, DC

Scott Duenow, AIA.

David Easton New York, New York

Patricia Falk. *Trustee, World Monuments Fund* Lake Forest, Illinois

Henry Joyce. *Consulting curator*. New York, New York

Michael Larvey. *Photographer*. Austin, Texas

Baron Lobstein. *Staff member, World Monuments Fund.* New York, New York

Ivan Petrovich Sautov. *General Director, Tsarskoe Selo Museum-Preserve*. St. Petersburg, Russia

John Stubbs. *Director of Programs, World Monuments Fund*. New York, New York

Richard Torrence. Special Assistant to the Mayor of St. Petersburg on International Affairs. St. Petersburg, Russia

Kirk Tuck. Photographer. Austin, Texas

Appendix H

Conceptual Framework for the Restoration of the Alexander Palace in Pushkin excerpted from

THE ARCHITECTURE OF PETERSBURG Research Materials Part 2

International Foundation for the Preservation of St. Petersburg St. Petersburg Association of City Researchers St. Petersburg State Institute of Architecture

St. Petersburg: Ingria Publishers, 1992

Conceptual Framework for the Restoration of the Alexander Palace in Pushkin by Y. V. Novikov and G. V. Semyonova

Translated from the Russian by Baron Lobstein Included by permission of the St. Petersburg Preservation Commission

The following is a preliminary conceptual framework for the conversion to museum use of the Alexander Palace in Pushkin, intended to allow the fullest possible presentation of the nature of a future exhibit. The creation at the site of a museum of the Imperial Family is presented as the optimal solution in view of the historic and cultural significance of the palace, the natural inclusion of the preserved interiors into the exhibition, and the resulting development of circumstances favorable to the preservation of this architectural monument.

In the system of palaces and parks at Tsarskoe Selo, the Alexander Palace occupies a very significant place, playing the role of a "second center" in a certain sense to the first, the Catherine Palace ensemble, and in addition complementing and developing the whole ensemble.

The Catherine and Alexander Palaces, by virtue of their architectural prominence, stand out among palace-park ensembles, as well as other urban layouts, in juxtaposing the two most significant architectural styles among the structures of Tsarskoe Selo: baroque and neoclassical. And although the interiors of both palaces include elements of other styles, in their fundamental design the basic generic characteristics of these two great styles predominate. This was obvious during the 1920s and 1930s, when the palaces had not yet suffered the destruction of war, and their interiors were preserved basically in the same state which had existed prior to the revolution of February 1917. It was specifically this brief period of time which allowed contemporary researchers to evaluate the cultural and historic significance of the palace-park complex of Tsarskoe Selo and the role played in it by the Alexander Palace.

Today's town of Pushkin has essentially lost one of these "supports," and all of the other preserved and restored neoclassical structures cannot compensate for the loss of the Alexander Palace. For that reason, the issue of the building's future use assumes a special

significance.

In order to develop an appropriate scientific framework for the promising future use (with accompanying restoration and reconstruction) of this or any other monumental site, it is first necessary to thoroughly research:

- 1. Its architectural and stylistic "biography" the history of its construction, repairs and renovations; the effect of architectural renovations on the original design concept; the correspondence of the interiors to the decisions regarding layouts and exterior design; the historical and cultural value of later renovations; the possibility, where necessary, of reconstituting lost elements by scientifically-based means; etc.
- 2. The significance of historical facts and events associated with the site.
- 3. The possibility or necessity of recreating the historic interiors and furnishings of the site (or other furnishings, approximating the historical furnishings to the greatest possible extent).
- 4. The analysis of the site in the context of the historical and cultural context of the ensemble of which it is a part, its population center, and its region of the country.

We will survey the Alexander Palace according to this proposed framework.

1. The first stages of the palace's construction and early renovations. During the years 1792-96 the Alexander Palace was constructed under a commission from Catherine II for the Empress' grandson, Grand Duke Alexander Pavlovich, according to the design of the architect Giacomo Quarenghi (with construction directed by architect I.V. Neyelov). By the time of Catherine's death the building was essentially completed, along with the interior design of the spaces within the main garden enfilade and the right (west) wing, where the family of Alexander Pavlovich settled. Ceiling and wall paintings were executed by the painter-decorator G.A. de la Giacoma (?). After 1796, work was suspended except for ongoing maintenance. Until the death of Paul I the palace was occupied, primarily in the summer months, by Alexander Pavlovich's household staff.

In 1809 work resumed on the interior decoration of the garden enfilade (under architect L. Rusca (?)), and both wings of the palace. Painting of walls and vaulting was executed by Giovanni Battista Scotti.

In the 1820s partial renovation was carried out in the east (facing the aula) side of the right (west) wing beneath the apartments of Nicholas I, according to the designs of architect V.P. Stasov (assisted by architect A.M. Gornostaev, paintings by F. Braudukov). Partitions and false vaulting were installed. In areas on the underside of the vaulting, paintings dating from the 1790s have been preserved to the present day.

Following this major work, from the 1830s to the 1850s, partial reconstruction and renovation were carried out by D. Cerfolio, Konstantin Ton, D. Yefimov, A. Stackenschneider, and others. The interior design of several rooms was changed to reflect changing artistic tastes, but not in a destructive way: the interior layout of the turn of the 19th century was preserved, as well as basic elements of the interior design. At that time the palace was equipped with Amosov's steam heating system, and also with interior plumbing. In 1843, in Nicholas I's study, Russia's first electric telegraph apparatus was

installed, connecting the residence with St. Petersburg. The designer of this system was Jacobi (?).

The most significant renovation work at the palace occurred from 1895-99 (with partial renovation continuing until 1912), primarily in the left (east) wing. In the course of this work the Concert Hall was eliminated and replaced with Nicholas II's Large Study and Alexandra Fyodorovna's Maple Drawing Room, both designed by Roman Meltser. In several rooms of this wing and the southeast corner, mezzanine spaces were built; in the left wing, within the original walls, spaces were redesigned for Alexandra Fyodorovna (the Lilac Study, the Palisander Drawing Room, the bedroom, and bathroom). Architect S.A. Danini reinforced the division between the first and second floors.

Partial interior renovations in the former Nicholas I wing, carried out by the British firm Maples, addressed primarily interior designs and decorative art objects, while retaining original interior designs under the new decoration. There were some renovations in other spaces, but as mentioned above, the primary changes concerned only the left wing, in most of the rooms of which the neoclassical forms (and in some cases plans) of the neoclassical period from 1790 to 1820 were lost, replaced with a striking and original ensemble in the Art Nouveau style.

For the duration of the 19th century and until the early 20th, the layout of the second floor changed little. It was used most often for the Tsar's household staff, and during the reign of Nicholas II its left half was occupied by the Tsarevich and the Emperor's other children, and the right half by the Imperial servants. Interior decoration changed depending on the reigning tastes; chimney pieces and decorative art objects were moved here from the first floor as they passed out of style.

In the years of World War II the heaviest damage was sustained by the left wing and by isolated parts of other sections of the palace; some structural elements of the building were also harmed (damage in 1944 was estimated at 169,290,000 rubles). Despite the manifold losses, the interior decoration in the overwhelming majority of the rooms was largely preserved.

By a decree of the Council of People's Commissars (?) of the USSR on March 13, 1946, the palace was placed under the authority of the USSR Academy of Sciences in order to serve as a national museum of literature and a museum of Alexander Pushkin. In the hands of the State Commission for the Preservation of Historic Monuments (GIOP), an architectural restoration plan was developed under which the central enfilade (along the palace garden) was to be restored to the Quarenghi period and the right wing to the first half of the nineteenth century (i.e. the Stasov design); in the left wing the Art Nouveau interiors were to be reconstructed. It should be noted that expert opinion in 1944-45 held these interiors in extremely high regard, in spite of the dim view generally taken of the Art Nouveau style during that period.

Nevertheless, two proposed adaptations of the palace were developed by the Lenakademproyekt project team, led by the architect L.M. Bezverkhny. The first plan proposed to reconstruct the Concert Hall, which had been lost in the 1890s renovations, and to reconstitute the rooms of Nicholas II and Alexandra to the "Pushkin-Stasov" period of the early nineteenth century, to provide for a greater stylistic consistency between the museum and its intended subject. It was proposed to renovate several other spaces within the palace for the Literary Museum (with individual rooms to be devoted to Leo Tolstoy, Ivan

Turgenev, Maxim Gorky, Vladimir Mayakovsky, etc.). The second proposed adaptation envisioned the fulfillment of the GIOP plan.

In the course of the long series of discussions and negotiations, despite strong pressure by the Presidium of the USSR Academy of Sciences, the second plan was adopted. During the course of restoration work there were utilitarian repairs made to the rooms in the palace wings, and restoration was completed in some of the halls of the main (south) enfilade. For the 150th anniversary of the birth of Alexander Pushkin a temporary exhibit was opened in the restored spaces. However, by order of the USSR Council of Ministers on August 31, 1951, the Alexander Palace was handed over to the administration of the Navy, under whose direction it remains to the present day.

2. The Alexander Palace is very closely connected not only with the private life of the Romanov family, but also with many important state events in the life of Russia from the end of the eighteenth century until 1917. Catherine II took an active part in the palace's design, construction, and decoration. From 1796 until his accession to the throne, Alexander I lived here with his family during the summer months. Nicholas I, Alexander II, and Alexander III all were brought up here. Official records allow us to establish that the palace is connected with the signing of several state decrees of national significance.

It was here also that many members of the Romanov dynasty died, including Grand Duchess Alexandra Nikolaevna and Empress Alexandra Fyodorovna (the daughter and wife of Nicholas I, respectively) and several others. Nicholas II was born here. The Alexander Palace is most closely associated with Nicholas II, who spent virtually every summer here from 1895 until 1905, at which time he took up permanent residence at the site. The Alexander Palace is connected with the most important events of the last Tsar's reign: the Russo-Japanese War of 1904-05, the revolutions of 1905-07, dealings with the State Duma in its various sessions, the Stolypin reforms, the First World War, and the crisis of the autocratic system on the eve of the February Revolution of 1917. It was here where the Romanov family was held under house arrest after Nicholas' abdication until August 1, 1917, when the family was sent into exile in Tobolsk.

Surveying the great blocks of the palace in the context of the Russian Emperors who lived there, the following can be firmly established: the formal ("Quarenghi") enfilade along the palace garden is most closely associated with the time of Alexander I; the right ("Stasov") wing with the time of Alexander I; and the left ("Meltser") wing with Nicholas II. Additionally, the architectural layout of each of these sections of the palace has preserved to the present day elements of interior decoration evoking each of these eras (or iconography, documentation, or analogues that would be necessary for restoration).

3. It is possible to reconstruct the material furnishings of the palace, from descriptions and draft documents, to the "Alexander" period. Sketches of chimneypieces — and in some cases originals - have survived. It is known from delivery documents that furniture of Jacob, Roentgen, and Meyer (?) were ordered for the Alexander Palace by Catherine II herself — and later (from 1810 to 1848 — the reigns of Alexander I and Nicholas I) pieces by Gambs (?). Also, during the reign of Nicholas I, the palace received furnishings from the maker A. Tours (?); in the reign of Alexander II and until the beginning of the reign of Nicholas II, the purveyors of furniture to the Imperial court included Bucher, Kreidner, Liseret, Andrievsky, Greenberg, Lindner, Platonov, Svirsky, etc.; under Nicholas II pieces came from Friedrich

Meltser, whose furniture was crafted according to the designs of his brother, court architect Roman Meltser.

Existing materials can be located with relative certainty in various museum collections (storage rooms), as well as other items of decorative art: mirrors, candelabra, lamps, rugs, porcelain, musical instruments of domestic and foreign origin, a multitude of ornaments, ship models, souvenirs and gifts received from various delegations and during trips, books, printed music, etc.

Aside from fragmentary descriptions of the 19th century, very detailed descriptions and photos exist from the period between 1917 and 1941 of the furnishings and the placement of each piece of furniture, the building's peculiarities, various types of details (eg. the types of upholstery fabrics) which would facilitate a highly detailed reconstruction of the arrangement of each room as it existed during the reign of the last Tsar. Naturally, many objects changed their position more than once within the palace, and not uncommonly pieces were borrowed from other palaces (or lent to other palaces). Descriptions from 1917-30 establish basically only the period of the Alexander Palace's life before February 1917. Nevertheless, these descriptions — together with other administrative palace documents and iconographic materials — make possible the reliable reconstitution of a substantial portion of the central halls to a number of different time periods.

An analogous situation exists with respect to decorative art works. In the course of more than a century of active history (before 1917), the contents of the Alexander Palace changed substantially. A number of works left for other collections (and here we must note the principal shift in the collection that occurred at the beginning of the reign of Nicholas I); new works entered the collection from other Imperial collections (and also as a result of commissions, purchases, and gifts). Hung on the walls were many works of gifted foreign and Russian artists (Italians of the Renaissance, Briullov, Aivazovsky, etc.). Descriptions from the 19th century (as well as detailed Soviet descriptions from the pre-war period) allow us to establish the locations in Soviet museums of a significant portion of these works (in the Hermitage, the Russian Museum, Pavlovsk, the Catherine Palace, the Tretyakov Gallery, etc.). It follows that, along with original works of great Western European masters, in the court there were a number of good copies of them.

Of particular interest is the collection of icons and photographs (especially many from the period of the last Tsar's reign). The majority of photographs entered the special collections of TsGAOR (?) and the Museum of the Great October Revolution. Part of the objects evidently were irretrievably lost after their sale abroad by the Soviet government and into the hands of the burgeoning "Soviet bourgeoisie" during the 1920s and the beginning of the 1930s, and also after the German occupation of the town of Pushkin.

The sculpture, painting, and graphic art of the Alexander Palace collection are particular in terms of their content and their unifying concepts. Firstly, in the collections there are a number of portraits of members of the Romanov family which are both representational and representative of specific artistic genres. It seems sensible to return them from the various collections where they now reside (and are more often than not kept in storage) to their previous location. A second group of works reflects a varied range of events connected with one or another Romanov (military reviews or campaigns, state acts, companions in military service, personal friends and companions, tutors, etc.). A third, remarkable, group is made up of works reflecting the Romanovs' tastes. Among these are individually excellent works(?) from the exhibit collections of active museums. However, the majority of these

works are by second-rank artists: Russians A. Beggrov, A. Bogolyubov, A. Legaev, V. Khudyakov, K. Trutovsky, A. Beydeman, N. Kravchenko, F. Volkov, K. Kryzhitsky, I. Reymers, etc.; and Western Europeans F. Kaulbach, G. Galter, T. von Neff, V. Eriksen, F. Teichel, and others. In the majority of museums these works are kept in storage and only rarely appear in thematic exhibits. And finally, a significant group of pieces is comprised by works created by the Romanovs themselves, works which also remain in the storage facilities of our museums.

The collections of the Alexander Palace, naturally, were constructed according to neither chronological nor thematic principles, and they reflected the personal tastes, passions, and even caprices of various monarchs and the members of their families. The reconstruction of these collections within a house museum of the Romanov family is potentially both significant and instructive, as the tastes of a significant portion of the Imperial court were oriented around the tastes of the family.

Comparing the data on the planning and architectural design of the interior spaces of the palace with the building's history (relating to the lives of individual members of the Romanov family as well as events of national importance), and also with the nature of the material furnishings of these "blocks," their artistic consistency and unity of style and content is impossible to avoid. In this sense, the formal enfilade — with its particular architectural character, its decorative art furnishings, paintings, and sculptures — is consistent with the period of neoclassicism (from Quarenghi to Stasov).

4. The restoration of the Alexander Palace and its rebirth as a museum of art and domestic life appears to be the only possible solution for the building from the point of view of a scientific, materially conservative methodology (an example of the opposite approach being the harmful pseudo-restorations of the end of the 1940s).

Considering the special significance of the Alexander Palace for Russia during one of the most pivotal periods of its history (and, indeed, of world history), the palace will certainly become one of the most popular sites of its kind, for both domestic and foreign visitors. The return to the palace of the many art objects now in storage could transform this museum into a unique research institute, with a library and a documentary and photographic archive detailing the history of the Russian state from the epoch of enlightened absolutism to the fall of autocracy.

Notes

- 1 Site chronology provided by GIOP
- ² Sofia Alexeevna acted as regent during the period 1682-1689 during the "dual reign" of brothers Ivan V and Peter I. The legendary relic of this reign, currently on display in the Kremlin Armory Palace, is a double throne on which Peter and Ivan sat during state functions, with a hole in the back through which Sofia would whisper instructions to them.
- ³ Catherine's letters to Diderot and Voltaire were ghost-written for her, probably by Andei Shuvalov.
- ⁴ Peter I selected the area because of its landscape consisting of hills, sloping plains and natural springs. The earliest settlement followed Finnish building traditions of modest wood structures and consisted of Peter's Estate. The Finnish name for this site was *Saari muis*, which translates as "farm on an elevated spot." As the structures increased in size and scale, the name *Tsarskoe Selo* (Tsars Village) became the name of his enlarged estate. (See *The Palaces and Parks in Pushkin*, by Liumila Lapina)
- The term "Alexandrine Neoclassicism" refers to the classical revival period from the latter part of Catherine II's reign, when she commissioned the Alexander Palace. The period is generally agreed to end with the death of Alexander I in 1825. (See Brumfield)
- ⁶ Loukomski, p. 29.
- ⁷ Brumfield, p. 291.
- ⁸ Brumfield p. 370.
- ⁹ Ibid., p. 399.
- 10 Ibid., p. 452.
- ¹¹ Ibid., p. 601, note 71.
- ¹² Barbaralee Diamondstein, Landmarks of New York II, 1993, pp. 346 and 348.
- ¹³ United States Department of the Interior, Museum Property Handbook, p. 5.3.
- The concept and a set of guidelines was elucidated by Richard L. Kerschner, Chief Conservator of the Shelburne Museum in Vermont, in a paper entitled "A Practical Approach to Environmental Requirements for Collections in Historic Buildings." Kerschner created a table listing Five Sensitivity Groups, each with a temperature and humidity range corresponding to the materials present in the collection. These guidelines presented a compromise with respect to the previously held notion that the relative humidity should be held perfectly constant. The principal benefits are twofold: by letting the humidity swing seasonally, the amount of condensation that would be created within the walls and on the windows during cold winter periods is minimized; and the operating costs for humidification will be nearly halved. While the environment will not be ideal for the collections, it would be improved approximately 70%.

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