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# **Urban Planning Regulations in Siberia** in the 19<sup>th</sup>—early 20<sup>th</sup> Centuries

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The article summarizes the results of the study of urban planning in the regions of Siberia in the 19th – early 20th centuries. We considered the circular directions of various institutions of the state government, starting with one of the first orders that given in Siberia during the establishment of the Yenisei province. They regulated the procedure for the project process and apparatus of the Siberian cities in the pre-revolutionary period. For example, one of the priority provisions of the methodology for the design of urban plans defined the requirements for designation of space for the city and its layout. When assigning space for the city it was necessary to determine the amount of land required for the settlement, the quality of the land or its convenience for the settlement and means of the city to bring the project plan into execution. When lying out the city they should have paid attention to the location of streets, establishment of squares and placement of public buildings, which in turn should have taken into account the consideration of benefits in respect of public health, police and economics. When approving designed urban plans it was required to provide: a plan of the present location of the city, a plan of the area sections of the projected city; lists: of the number of yard areas of private homes and the number of people of both sexes of each city; a detailed statistical description of the area for the projected city. In the examined circulars the requirements for the design of urban development plans were regulated. The conducted study revealed the evolutionary transition from personal principles in the project business to the tightening of regulations and requirements resulting in increasingly complex urban and architectural activities. Results of the study reveal the importance of the examined period as a bright and distinctive stage in the history of urban development in Russia associated with the development of principles and methods of urban design.

Keywords: urban planning regulations, project documentation, project plan, Siberian city, circular, guide.

#### Introduction

In December 1822, in the Central part of Siberia the Yenisei province with the main city of Krasnoyarsk was established as a part of the East Siberian Governorate General. Five districts united within its boundaries: Achinsk, Yeniseisk, Kansk, Krasnoyarsk, Minusinsk and

Turukhansk region affiliated to the Yeniseisk district. The centers of the three districts became recent villages – Kanskoe, Minusinskoe and an insignificant town Achinsk.

In the first two decades of the 19<sup>th</sup> century, before the establishment of a new province, the territorial development of Yeniseisk, Krasnoyarsk,

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Achinsk and Turukhansk cities was regulated by project plans drawn up in the 1790s. During this period, new stone temples were built in the cities, and in Yeniseisk and Krasnoyarsk appeared first stone public buildings and houses. At this time the first circular orders of the state agencies for the design and arrangement of the cities began to appear in Siberia.

## Materials and methods

The conducted research was to identify and study the documentary materials from the collections of the Russian State Historical Archives (RSHA, St. Petersburg), the State Archives of the Krasnoyarsk Territory (SAKT) associated with the architectural and urban development activities in the Yeniseisk province. The historical and architectural analysis of archival documents, project materials of the studied period and literary sources allowed to consider the evolution of urban planning requirements for the principles and methods of the project plans of cities, that lasted for a hundred-year period in the Siberian provinces.

#### Main part

The central government documents related to the changes in cities issued at the beginning of the 19<sup>th</sup> century in Siberia defined, as a rule, the measures on improvement of settlements and entrusted the police with the control over their execution. One of the first such circular orders obtained by the authorities of the Siberian provinces were as follows: "The general rules for cities written in 1816 by the hand of His Imperial Majesty" and "The rules determined at the Highest level on the 13th day of December 1817, on the arrangement and cleanness and in cities" (Государственный архив..., 1821). (Fig.1)

The circular from the Ministry of Internal Affairs dated June 14, 1826 ordered to submit

the plan of the existing urban building area to "the Emperor together with the newly projected plan" (Российский государственный... 1824–1829). It was the first document received by the provincial government, which regulated the composition of graphic materials required in the approval of the new layout of the city. In the 1820's this requirement was taken into account, for example, when drawing up plans for cities of the established Yeniseisk province: Krasnoyarsk, Yeniseisk, Achinsk, Kansk, Minusinsk, approval of which required the plans of the current urban area.

In the early forties of the 19th century requirements to the project documentation changed significantly. Based on the circular order of the Ministry of Internal Affairs made on May 17, 1841, No. 1339 on the urban project plans submitted to the highest approval, the following documents were required to attach: "a) a plan of the current location of the city or suburb, b) a plan of the sections (profiles) of the location – a plan of leveling of the designed city or suburb, c) lists: of the number of private vard areas of buildings and the number of people of both sexes of each city, d) a detailed statistical description of the area under the projected city or suburb, as well as the lands surrounding it from 250 sazhens up to 1 verst" (Nashchokina, 2001). In the same circular the requirements to the design of the plan of the present location of the city, the project plan and the plan of leveling the area were first given.

In the late 1840s the Siberian cities received a note from the Ministry of Internal Affairs "On the procedure for the preparation of project plans for cities" (Государственный архив.., 1869–1900) that set forth the priority methods of design and planning work. They ordered to take into account two main subjects during the preparation of a project urban plan: the assignment of space for the city and its layout. When assigning space for

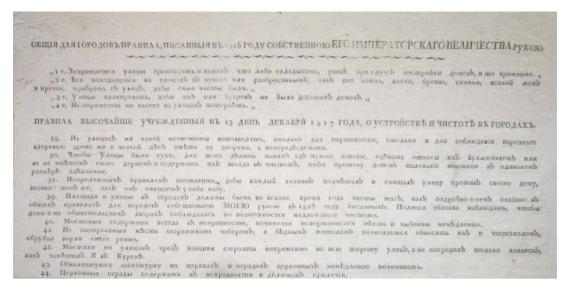


Fig. 1. "The general rules for cities written in 1816 by the hand of His Imperial Majesty" and "The rules determined at the Highest level on the 13th day of December 1817, on the arrangement and cleanness and in cities" (SAKT. F. 47. Op. 1. D. 496)

the city it was necessary to determine the amount of land required for the settlement, the quality of the land or its convenience for the settlement and means of the city to bring the project plan into execution.

When laying out the city one must pay attention to the location of streets, establishment of squares and placement of public buildings, which in turn should take into account a "profit motive" in respect of public health, police and economics. For example, it was pointed out that with regard to the health of the population the streets should provide free flow of fresh air, not exceed 10 sazhens, not lie in the low-lying and marshy places, and give to all parts of the city an easy access to clean and healthy water. The squares were to be considered as reservoirs of clean urban air, and also they were not to be on the ground of the former cemeteries.

With regard to the police, the arrangement of the streets required to take into account the convenience of policing, namely, the lack of solitary alleys, the easiness in the communication between all parts of the city in case of fire.

With regard to economics, the streets were not to be located near the ravines, and the blocks were required to have comfortable and more or less direct connections to all public buildings and institutions, such as: churches, shopping arcades, shops with the first necessities of life. When assigning space it was recommended to pay attention to its convenience for the placement of various public buildings, especially commercial ones. Assignment of space depended on the degree of industrial development and trading activities of the city and on the local features to discover new sources of income "through some trade activity".

To establish the composition and quantity of the commercial buildings necessary for the city (shopping arcades, torzhoks, shops, barns and various stowage places for wholesale trade), the designers were suggested to spend a considerable range of pre-project studies aimed at determining the types of trading activities of the city (internal or transit), the state of people delivering products (goods merchants or producers), the required quantity and

characteristics of products, means and ways of delivering the goods.

For the correct placement of trade establishments in the city they were to be divided on the property and their purpose into such establishments "where trade of goods is carried out, whether it is retail or small, with the aim to sell goods for local consumption only, including: shopping arcades, markets, etc.", into such establishments "where wholesale trade of certain goods is carried out with the aim to sell products not for local consumption, but mainly for usage in other places, including: barns, stowage sites, stores, etc." and into factory, manufacturing and other establishments "that in nature and kind of their production have an impact on the health and safety and secure the residents from fire, such as: forges, mills, sawmills, etc."

Businesses of the first and second kind, as indicated in the guidance document, "must be located in places safe from fire and at the same time, except for the convenience of the location, the needs and desires of traders are taken into consideration, and therefore the assignment of location for commercial establishments can be made by the prior agreement of the trading estate". The appointment of locations for the setting of trading establishments of the third kind: the factory, manufactory, and others "depending on the nature and kind of production", was determined by the requirements of the Charter for the construction, the first edition of which was made in 1832.

In 1861 the Ministry of Internal Affairs issued "The rules adopted as part of the guidance in the design of artificial decoration of project urban plans and tracing of a map submitted to the General Directorate of Communications and Public Buildings of the Ministry of Internal Affairs and the Highest approval" (Nashchokina, 2001). They were supposed to become guidance on the preparation and execution of the three

major plans (the plan of the present location of the city or suburb, the project plan and the plan of leveling of the area) "until the publication of general rules on this subject".

In the late 1860s, the right of making management plans for cities was granted to the Building offices of the provincial government (formed in 1865), and in 1870 the Ministry of Internal Affairs approved and sent to the provinces a guide that was made for specialists of building offices "to help when preparing plans for new buildings of cities and changing the existing municipal regulation approved at the Highest level" (Государственный архив.., 1870–1872).

It determined the composition of the project documentation and requirements for "finishing" design of urban drawings. Thus, in accordance with the guide for finishing of project works, the heads of the provinces were to be submitted the following documents for the Ministry's approval: "a city plan approved earlier at the highest level, a plan of the existing arrangement of the city with the profiles of leveling the area, both under the existing city, and under parts designed for its placement; a plan of the projected location of the city, a statement of the number of yard sites, houses located in there and the number of inhabitants of both sexes in the city, a detailed topographical description of the area under the existing city, as well as the surrounding lands from 250 sazhens to one verst with an explanation of the main reasons why change the current location of the city". For all graphic materials the guide prescribed rules on the choice of scale, the location of the drawings on paper, the "designation" of key elements of an urban setting on plans, the "shading and designation of parts of the plan with colors". They kept the value of "general rules" in the development of project plans of the Russian cities for the next forty-five vears.

At the beginning of the building offices' activity in the Siberian provinces the problem caused by the uncertainty of rules and variety of design of project documentation submitted for the approval to the capital for various facilities in cities and villages worsened. In order to solve it, in December 4, 1874, the Technical and Construction Committee of the Ministry of Internal Affairs issued a circular "On the order of compilation, review and approval of projects and budgets in Building Offices of Provincial Governments" (Государственный 1875). It established a common form of drawings, inscriptions on them and estimates, which should be taken into account by those who made, reviewed and approved the project documentation. For example, the drawings to be submitted for the approval were done on sheets of paper cut into formats with the length of 13-inch, the width of 8 inches and pasted on the calico. The scale for the fronts, plans and sections was 2 sazhens to an inch, and for the general plan -5 sazhens to an inch. The drawings of the construction or reconstruction were to include general plans of the location with an indication of the cardinal points. In addition, there was a regulation for certain colors signifying the different parts of civic buildings, hydraulic structures, earth roads and highways.

In the second half of the 19<sup>th</sup> century, along with the activities of the central government, the role of local boards increased in the apparatus of the Siberian cities helped by the introduction of the City Regulation in 1870, according to which "the approval of plans and facades of private buildings in the city, issuing permits for reconstruction and monitoring the correct performance of buildings" was completely passed to the management of the city departments (Государственный архив.., 1876). In this regard, for example, in March 1875, the Krasnoyarsk City Council issued a resolution with the rules regulating the private construction

in the city (Государственный архив... 1876). Before the start of construction people who wanted to make buildings had to apply to the council with a petition to permit them to build these buildings and provide "the construction plans". The city administration made sure if "there were no obstacles to permit the building... and approved the plan by putting a signature on it". The responsibility of local boards also included the control if "there is no deviation from the plan at the beginning of the building". But in real term the city officials were unable to control private construction that kept to increase, which resulted sometimes in cases of spontaneous building without proper technical inspection of building projects.

In March 1881, the building office of the Main Department of Eastern Siberia sent a circular on strengthening supervision over the production of private buildings in the cities to the jurisdictional heads of provinces and regions (Государственный архив..., 1881). In the document the Governor-General D. Anuchin argued the need for regulatory measures in the current critical situation in the cities.

"The existing rules in the law on private buildings, with very few exceptions, differ with such a fullness and clarity that the city's public authorities could easily make this case quite satisfactory, especially when it is one of the main functions of the city administration in its essence. Meanwhile, when getting a closer look at the cities of Eastern Siberia, one can notice the opposite: the wooden houses are built without legitimate breaks, the stone houses are attached with wooden additions for the stairs, passages, galleries, etc., the stoves in the houses are arranged with no pipes and on wooden bases in other words, violations of the building charter are found everywhere, apparently making it a perfectly normal phenomenon. Even Irkutsk that is the main trading and administrative center of

Eastern Siberia can not be among these exceptions in this case. Despite the fact that it suffered huge losses from a fire in 1872, many of the buildings, still, were made without complying with the rules of the construction charter, resulting in refusal of the insurance companies to insure property in some parts of the city. Bearing in mind the fact that such a non-fulfillment of the law by the owners of immovable property can be explained as a lack of control over the private buildings, and the incorrect establishment of the construction business in the city government in general, I think it is necessary to ask heads of provinces and regions to take the following actions". The municipal public offices were proposed to organize work so that, prior to the issuance of permits for the constraction of the buildings, they presented plans submitted for the approval to the urban planners or people who perform these jobs, as well as the city police authorities were instructed to strictly follow the strict observance of rules of construction charter and regulations issued by the municipal dumas, bringing people guilty of violating the law to justice in due course.

The circular included the rules drawn up by the experts of the Irkutsk construction office that were to be followed by the city government in private building. They represented a sample of the basic requirements of the construction charter, a set of laws and guides regulating the project documentation and the process of building.

However, the measures undertaken by the authorities did not save the Siberian cities of mostly wooden houses from the main disaster – fires. Thus, a month after receiving the circular of the Irkutsk Governor-General on the night of 17 to 18 April 1881, more than half of Krasnoyarsk, the best part of it, burned away in a large-scale fire (Сибирская газета. 1881).

After the fire, the city council issued a binding ruling on the construction of buildings in Krasnoyarsk (Государственный архив.., 1888–

1890). It prescribed the rules for the assignment of places for the buildings, the procedure for obtaining building permits and requirements for building of banyas, roofs, sidewalks, based on the provisions of the construction charter. The ruling preserved the old principles of regulation of urban development, but with an increased control of fire safety. (Fig. 2)

At the turn of the centuries with the increased volume of construction the responsibilities of a city architect significantly expands. If in the first years after the the establishment of this position at the Krasnoyarsk City Council in 1876, the main function of the architect was to review the plans and facades of private houses submitted for approval to the council, then in 1899, according to the guide (Российский государственный... 1899-1900) drawn up by the administration, he had the following responsibilities: "a preliminary review of plans and facades of private buildings specifying the requirements to be followed in the construction: certification of copies of plans issued to private individuals; if necessary, on-site verification of plans and other information on the construction part; examinations of private buildings on special occasions and condition survey of urban buildings; making assumptions and estimates about the reconstruction and renovation in urban buildings; control over the implementation of public construction works performed by both economic and contracting methods; reporting on performed urban construction works under the supervision of the architect; renewal and preparation of plans of the existing buildings for the needs of the City Council; participation in the prosecutions for violations of the rules and requirements of the City Council". Along with these responsibilities an architect and a surveyor were assigned to "make the project plan for the city of Krasnoyarsk; report to the Council the results of work on designing a plan every three

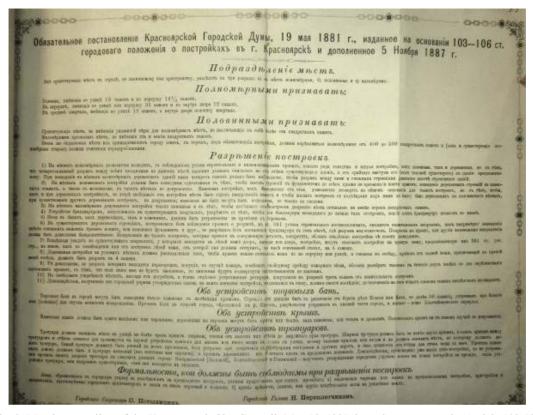


Fig. 2. Mandatory ruling of the Krasnoyarsk City Council, May 19, 1881, issued pursuant to the Article 103-106 of the city regulation on the buildings in the city of Krasnoyarsk and updated in November 5, 1887 (SAKT. F. 161. Op. 2. D. 1480)

months in advance to the finishing of the project; and after the approval of the plan by the proper authority to take control so that there were no deviations from the approved plan, both for the private change of the plan and redesign".

The complexity of the architectural and planning issues arising in the rapidly developing cities in Siberia that was constantly growing in the early twentieth century was not consistent with the previously accepted approaches to the practice of drawing up urban plans. People needed new methods of prospects development for the city.

In this regard, in June 1915 the Ministry of Internal Affairs prepared and approved a new guide "on the rules for planning urban settlements" (Государственный архив.., 1916) replacing the old one that was in force since

1870. It regulated the composition of "technical documents" submitted for approval to the Ministry of Internal Affairs: when constructing new urban settlements; when developing the existing urban settlements that did not have the approved plans; when changing the approved plan of the city for the entire area or significant partial changing the approved plan; when expanding the existing urban settlements. The guide required to submit the resolution of the city authorities about the changes of previously approved plan as a part of the materials for approval. Thus, much of the responsibility for determining the prospects of the architectural and planning development of cities was assigned to the local authorities. The rules of finishing plans were illustrated by two exemplary drawings in the guide: "The plan of the existing location of



Fig. 3. A sample drawing to the guide for drawing up plans of urban settlements submitted for approval to the Ministry of Internal Affairs approved by the Minister of Internal Affairs, June 1, 1915. Plan of the existing location of the city. (SAKT. F. 595. Op. 60. D. 324)

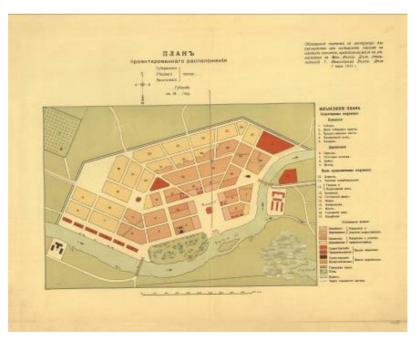


Fig. 4. A sample drawing to the guide of drawing up plans for urban settlements submitted for approval to the Ministry of Internal Affairs approved by the Minister of Internal Affairs, June 1, 1915. Plan of the designed layout of the city. (SAKT. F. 595. Op. 60. D. 324)

the city" and "The plan of the designed layout of the city". (Fig. 3), (Fig. 4)

#### Resume

The above documentation reveals the evolution of the requirements for the establishment process of the Siberian cities in the pre-revolutionary period, which was associated with the transition from a personal principles in the project business to the strict regulation of increasingly complex urban planning and architectural work. The study of principles, rules and requirements applied at various stages of project work in the Siberian regions allows us to understand some aspects of urban planning thinking that are very important at this time.

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# Градостроительные регламенты в Сибири XIX – начала XX века

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В статье обобщены результаты проведенного автором исследования градостроительной деятельности в регионах Сибири XIX – начала XX века. Рассмотрены циркулярные предписания различных учреждений государственной власти, начиная с одного из первых указов, поступившего в Сибирь в период учреждения Енисейской губернии. Они регламентировали порядок проектного процесса и устройства сибирских городов в дореволюционный период. Например, одно из приоритетных положений методики составления проектных городских планов определяло требования к назначению пространства для города и его распланировки. При назначении пространства для города требовалось определить количество земли, необходимой под заселение, качество этой земли или удобство ее к заселению и средства города к приведению проектного плана в исполнение. При распланировке города следовало обратить внимание на расположение улиц, образование площадей и на размещение общественных зданий, что в свою очередь должно было учитывать соображение выгоды в отношении народного здравия, полицейском и хозяйственном. При утверждении проектных городских планов требовалось представлять: план настоящего расположения города, план разрезов местности проектируемого города; ведомости: о числе дворовых участков личных домов и о числе жителей обоего пола каждого города; подробное статистическое описание местности, находящейся под проектируемым городом. В рассмотренных циркулярах регламентировались требования к оформлению градостроительных чертежей. Проведенное исследование позволило выявить эволюционный переход от личностных начал в проектном деле к ужесточению нормативных правил и требований, что обусловливалось всё более усложнявшейся градостроительной и архитектурной деятельностью. Результаты исследования раскрывают значение рассматриваемого периода как яркого и своеобразного этапа в истории градостроительства России, связанного с разработкой принципов и методов проектирования городов.

Ключевые слова: градостроительные регламенты, проектная документация, проектный план, сибирский город, циркуляр, инструкция.