

ANALYSIS MARKET OF INDIVIDUAL HOUSE CONSTRUCTION IN ALTAI KRAI

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Statistical data of the market of housing construction of Altai Region are reviewed: commissioning of living spaces, state support of the region: program and target approach, cost indexes of individual housing construction, also developments of the market of housing construction of edge are summed up.

Keywords: housing market, individual housing construction, total area of houses.

RATIONAL DISTRIBUTION OF ALTERNATIVE VARIANTS OF INDIVIDUAL HOUSING CONSTRUCTION TAKING INTO ACCOUNTING THE RESOURCE CAPACITY OF ALTAI KRAI

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The material source of raw materials of construction branch of the Altai Region is considered, the most economic technologies of individual housing construction are revealed for each region of edge taking into account distribution of resources are revealed. Offers on optimization of use of resource base for obtaining economic efficiency at development of low-storeyed building of the Altai territory are put forward.

Keywords: individual housing construction, technology of construction, material source of raw materials.

RECOMMENDATIONS ON THE PRACTICAL USAGE OF THE BASE SHAPE COEFFICIENTS OF THE RECTANGULAR FOUNDATION DEPENDING ON THE INNER FRICTION ANGLE OF THE EARTH

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Recommendations on usage calculation methods of the rectangular foundation base of the I-II groups of utmost state are given in the article. The recommendations have been worked out basing on both the earth utmost equilibrium theory and experimental data.

Keywords: earth, rectangular foundation, square function, state coefficient, carrying capacity (durability) of the earth foundations, theory of the utmost earth equilibrium, settlement, sandy earth, loam earth.

DURABILITY AND DEFORMABILITY OF THE TWO-LAYER BASIS - THE COMPOSITE FROM THE SANDY PILLOW AND LOESSIAL SOIL

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In article the technique and results of tests of collaboration of the two-layer basis from a sandy pillow and the loessial basis are given in soil conditions of Barnaul. The experimental data testifying to prospects of application of sandy pillows as a method of construction of foundations on loessial soil of the region are given.

Keywords: soil, tension, deformations, composite, sandy pillow, two-layer bases, field tests.

MODERN TECHNOLOGIES OF STRENGTHENING OF THE FOUNDATION IN SOIL CONDITIONS OF THE ALTAI REGION

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Modern technologies are given in article used by the advanced countries at reconstruction of emergency buildings and constructions. Effective ways of strengthening of the foundations of reconstructed and emergency buildings in soil conditions of the Altai region are established.

Keywords: soil, basis, foundation, strengthening, technologies of strengthening.

STRUCTURAL DURABILITY AS CRITERION OF THE ASSESSMENT DEFORMABILITIES OF LOESSIAL SOIL

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The technique and results of determination of structural durability of loessial soil are given in article. Dependences between the structural durability and physic mechanical characteristics of loessial soil are received. Advantage of the offered technique by definition of the lower bound of squeezed thickness of the soil basis is proved.

Keywords: soil, structural durability, physic mechanical characteristics, calculation deposit.

MODERN METHODS OF «OLD» BUILDING OF THE CITY OF BARNAIL FROM FLOODING WITH SUBSOIL WATER

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The main ways of protection to prevent and fight against flooding in the condition of dense building of the city is presented and analyzed as well as construction and reconstruction of horizontal and vertical hydro isolation.

Keywords: subsoil water, capillary moisture/humidity, hydro isolation, flooding.

CHANGE RESEARCH PUCHINISTYKH OF PROPERTIES OF THE CONDENSED SOIL DEPENDING ON DENSITY OF THE SKELETON OF SOIL ON BUILDING SITES OF BARNAUL

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In work results of research of the condensed loessial soil with the review of results of earlier executed experiments are presented. The purpose and research problems are stated. The direction for further experiments is chosen.

Keywords: loessial soil, frosty puchenije, physicommechanical properties of loessial soil.

RESEARCH OF HEAVE PROPERTIES OF SOIL DEPENDING ON HUMIDITY

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The technique and results of tests of soil are given in article on a frosty heave depending on humidity. The short analysis of dependences of degree of a distending of soil from natural and optimum humidity is given.

Keywords: humidity, frost heave, vertical deformations.

COMPOSITE SOIL FOUNDATION OF BUILDINGS USING LOCAL MATERIALS AND INDUSTRIAL WASTES

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The research is devoted to the use of local soils, with low-strength of stone materials and mineral waste production at the device of grounds and buildings, as well as structural pavement layers. This work is highly technical and economic feasibility, particularly in regions with structurally-unstable soils and non-durable stone materials. The main objective of the research is to find and support of the design basis of buildings new ground composites with high stability, durability, as well as more fuel-efficient than existing materials.

Keywords: clay, stone, local materials, the strengthening of the bases.

APPLICATION OF LUMP LIME IN CONSTRUCTION OF BORED PILES IN SATURATED SOILS

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Gain ground on weak saturated soils-is quite a common problem of modern construction. One of the most effective methods to enhance soil in areas with structurally-unstable soils, especially in high moisture content, is the device of lime piles.

Keywords: soil, moisture, lime, piles, stronger reason.

CHOICE OF THE RATIONAL STRUCTURAL FORM OF METAL STRUCTURES BY SOFTWARE SYSTEM (PCMS)

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In this report we describe the use of software system PCMS on the example of a choice of the rational structural form of metal structures carcass warehouse in the city of Barnaul.

Keywords: metal structures, software system, structural form.

THEORETICAL BASES OF PROCESSES OF CRUSHING OF SUBSTANCE IN THE PRODUCTION TECHNOLOGY OF BUILDING MATERIALS

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In work the analysis of existing laws of crushing of substance to fine conditions is carried out. It is noticed, that in their maintenance there is no interrelation of working parameters of the machine with properties of the crushed environment. On the basis of joint consideration of molekularno-kinetic aspects of destruction of substance and power characteristics of the device making crushing by methods of nonequilibrium thermodynamics offer mathematical model of process of a grinding of substance in the mechanical grinders, allowing to optimise process of a grinding of materials at any stage of crushing.

Keywords: Crushing, Grinding of materials, Deficiency of structure, Energy of process and its parameter, Optimisation.

PROBLEMS THE HEALTH PROFESSIONALS, OF CONSTRUCTION COMPLEX AS SOCIO-ECONOMIC TASKS THE INDUSTRY

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Summary. The article is devoted to the topical for the modern health aspects of the problem of health professionals of construction complex. Change of the organizational-economic relations in healthcare is happening around the world and is associated with an increased socio-economic importance of health as a personal and social categories. Priority areas selected disease prevention experts of the construction industry and the fight against risk factors. Special attention is paid to the improvement and strengthening of health, in reducing the incidence of specialists. The expediency of mass prophylactic examinations, as an effective tool for medical examination, conducted in the framework of the priority national project «Health».

Keywords: health, the principle of the priority of preventive measures, specialists from the risk group (construction complex), a healthy and safe working environment, medical examination, social and economic efficiency.

ANALYSIS OF TRENDS IN ARCHITECTURE AND URBAN PLANNING IN THE LATE XX - EARLY XXI CENTURIES

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This article analyzes the changes in architecture and urban planning in recent years. We investigate the influence of postmodern worldview on the formation of new approaches to urban planning. The examples of new trends, «critical reconstruction» and «Architectural emulation» that have fallen into the «Concept of the image», the terms of the four strategies: «multi functional strategy», «strategy of stability», «strategy of entertainment» and «strategy of architectural stars».

Keywords: the postmodern world, the development trend of architecture, modern urban development, globalization in architecture and urban planning, architecture and urban planning strategy.

FEATURES OF MODERNISM, OF JAPANESE TRADITIONALISM AND OF JAPANESE CONTEMPORARY ARCHITECTURE (50-70S) AND THEIR MANIFESTATION IN ARCHITECTURE MODERNISM

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In this scientific article, on the base on the architecture of modernism, of Japanese traditionalism and of contemporary Japanese architecture (up to 80-ies of the XX century), are distinguished features that were designed in minimalism.

Keywords: Minimalism, architecture of Minimalism, Minimalism in architecture, the origins of minimalist architectural, features of Minimalism.

PLANNING ASPECT OF THE URAL-KUZNETSK INDUSTRIAL COMPLEX ARE: THE TRANSFORMATION OF IDEAS INTO LOCAL CONDITIONS

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The article analyses peculiarities placing cities Siberian part Ural-Kuznetsk plant. Departmental approach first five-year plan assumed uniform distribution industrial enterprises and cities throughout country, their approach to the sources of raw materials. However, in Siberia choice «points» construction led regional authorities. For them main thing was regional town planning conditions. As a result, instead of uniform dispersion, on contrary, there is a concentration industrial enterprises and settlements in areas most suitable for construction.

Keywords: urban planning policy in the USSR, industrialization, socialist settlement, town-planning of the Western Siberia.

RESEARCH OF OSCILLATORY PROCESSES IN TERRITORIAL AND SPATIAL DEVELOPMENT OF NOVOSIBIRSK

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In this article the general concept of construction and primary approbation of open dynamic model of Novosibirsk is shown. The purposes, tasks, algorithm of creation of dynamic model of town-planning system are formulated, its characteristics are provided.

During primary approbation of model the statement about cyclic nature of process of territorial and spatial development of the largest cities is checked: the largest cities in the course of the development endure cycles replacing each other during which, town-planning activity is displaced from the center on the periphery and back. As an indicator of change of town-planning activity within the chosen fragment the gain of housing stock is accepted. The received results speak about existence several pronounced surges in town-planning activity in the studied territory.

Keywords: cyclic development of the city, dynamic modeling of town-planning systems, oscillatory processes in town planning, territorial development of Novosibirsk.

PHILOSOPHICAL ROOTS OF THE MODERN CONCEPT OF ORGANIC ARCHITECTURE

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The article discusses the theoretical origins of formation of organic architecture, close interaction of the architectural object and its natural environment. Indirect relationship at the end of XVIII - first half of XIX century between philosophical views of the representatives of German idealism and architectural theory and practice of this period in the context of Russian-German cultural dialogue is revealed. The realization of the theory of organic architecture in the practice of the leading masters of the twentieth century is mentioned.

Keywords: german idealism, the organic architecture, naturphilosophie, the natural environment, landscape and park architecture

REGIONAL FEATURES OF «TYPICAL» AND «REPEATING» MASS HOUSING IN SIBERIA: HISTORICAL EXPERIENCE

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The article considers regional characteristics of Siberia: harsh natural conditions, short construction season, traditional lack of qualified architectural and construction personnel and, as a consequence, expansion of typical architectural solutions in mass housing. Two trends are indicated in the spreading of standard solutions - folk architecture, based on the traditions of the immigrants, and of the local population and the «official», including «model» projects of residential buildings of the Classical period, which expanded in Siberian towns. The particular conflict between the official stylistics in mass architecture and regional specificity of Siberia and the attempt to overcome it by taking into account local realities are considered.

Keywords: Siberian architecture, typical building, stylistics, classicism, housing construction.

RECONSTRUCTION OF BUILT-UP URBAN AREAS

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Issues on the development of built-up areas have been considered in terms of outdated 5-storey panel house reconstruction using the mass application of low rise building within the framework of solving town planning objectives on providing the population with available dwelling based on the solution of the following goals:

- *implementation of innovative town planning designs in the reconstruction of built-up areas using mainly low rise typologies for urban residential housing;*
- *preparation of a new offer for the house building market – a sector of public rental housing*

Key words: urban planning, innovative planning system, public rental housing, state-private partnership, state order, state regulation.

PERIODIZATION OF DEVELOPMENT OF ARCHITECTURAL AND TOWN-PLANNING AND SOCIOCULTURAL STRUCTURES OF NOVOSIBIRSK 1893-2010

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One of the main problems connected with increase of efficiency of functioning and formation of Novosibirsk as a social and spatial organism, the continuity problem in development of architectural and town-planning and sociocultural structures of the city. Determination of interdependence of dynamics of architectural and town-planning and sociocultural structures in the course of historical development of Novosibirsk will allow, in our opinion, to reveal and use the steadiest architectural and town-planning and sociocultural traditions at further formation of planning structure of the city.

Keywords: architecture, culture, periodization, Novosibirsk.

LANDSCAPE ARCHITECTURE, PROBLEMS OF TERMINOLOGY

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Landscape architecture is considered as an art of creation anthropogenetic landscapes which are aesthetically essential, in light of their stable existence. This existence is assured with a balance of autoregulation and regulation by a man by means of harmonious combination of environmental compatibility and economical efficiency. These conditions can be fulfilled if only genetic factors of a landscape will be taken into account. In that case, made anthropogenetic landscape can accomplish social and economic functions and the environmental ones, which are connected with reproduction of a human environment.

Keywords: landscape, landscape architecture, natural functions of a landscape, social and economic functions of a landscape.

FROM DISMEMBERED TO THE COMPACT CITY

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It is shown that city building domination from a blank sheet leads to a situation in which interrelations between parts of the structure, urged to provide activity of a city organism are broken. Dynamics of transition from «dismembered» to «compact» structure through system of theoretical concepts is shown. Density as new quality is urged to force out the friability which has remained in heritage from the Soviet era. The old city culture of the industrial period of development is allocated as basic concept.

Keywords: cultural institutions, types of the spatial environment, interrelation «object-environment».

CHALLENGES AND PROSPECTS OF SEMIOTIC MODELING ARCHITECTURAL AND SPATIAL ENVIRONMENT

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The article focuses on the semiotic approach to the study of architectural and spatial environment, considered as a system of signs. Justified search for «signs» and «codes», symbolically expressed in the unified system of the city. Represented by the methodology and algorithm «genesis-semiotic model» to address urgent task of identifying prospects for architectural and spatial environment and preservation of historical and cultural continuity.

Keywords: semiotics, genesis-semiotic model, city, architectural and spatial environment, structure, succession.

ANTI-CRISIS GENERAL PLAN-CHALLENGES AND PERSPECTIVES (ON THE EXAMPLE OF KRASNOYARSK CITY)

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Pressing problem of domestic town planning – crisis of the cities. Development of the cities during the period of the crisis caused by uneven development of its parts, not complexity, transport problems, the unemployment, the degrading industrial sites, accruing quantity of slums, ecology deterioration, etc., is connected with urban economics deterioration, with the low income of the population. Conclusion from this for the large cities of Siberia – transition of the industry to modern technologies, state programs on reconstruction of slums, on subway construction, etc. These offers are necessary for the concept of a development of the city, as it is offered for development of the general plan.

Keywords: urban planning, methods of planning, crisis, Krasnoyarsk.

TOWN-PLANNING PROBLEMS OF THE PERIPHERAL TERRITORIES OF THE KRASNOYARSK

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The article deals with studying the peripheral territories of the Krasnoyarsk. The article presents the author's methodology for identifying factors of peripheral territories. The article determines problems of the peripheral territories. The article presents the territory microzoning scheme of the Krasnoyarsk. Finally the main directions of modernization of peripheral territories are determined.

Keywords: peripheral territories, zoning, urban problems.

PANORAMA AND THE SILHOUETTE OF HISTORICAL CITIES SIBERIA AS A HARMONICALLY-HOLISTIC EDUCATION IN ARCHITECTURE AND URBAN PLANNING CULTURE OF SIBERIA THE XVII-XIX CENTURIES

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The article considers the formation of a harmonically integrated environment and the first panorama of the historical cities of Siberia, created by artists and schedules XVIII-XIX centuries. For each historical period has its characteristic architectural and artistic image, which consists of architectural ensembles, planning and landscape elements.

Keywords: panorama, silhouette, harmonically-holistic environment, architectural dominant, architectural and artistic image.

DEVELOPMENT OF TYPOLOGY OF PEASANT FARM ENTERPRISES IN WESTERN SIBERIA

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The development of different types of peasant farm enterprises and their influence on natural environment is investigated in this article. The classification of peasant farm enterprises was carried out and types of their architecture and planning structures were defined.

Keywords: farm enterprises, environment, organization of territory, agrarian area of Western Siberia, architecture and planning structure, ecology, power saving.

EVOLUTION OF ARCHITECTURAL AND BUILDING SOLUTIONS OF INDUSTRIAL BUILDINGS IN NOVOSIBIRSK

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The stages of origin and the following development of some types of industrial buildings and enterprises in the largest Siberian city of Novosibirsk are studied in this article. The interrelation between architectural and building solutions of industrial buildings and the evolution of building technologies is shown here.

Keywords: architecture, history, industrial buildings, building technologies, building constructions, building materials, technologies of winter concrete casting.

DEVELOPMENT OF MODELS TO ASSESS THE VALUE OF RESIDENTIAL REAL ESTATE

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The article is devoted to the review and analysis information about the current state of the property market in the Russian Federation, also the concept of hierarchical structure and pricing models of residential real estate are described

Keywords: residential real estate, estimation model of residential real estate, hybrid expert system.

RESOURCE CAPABILITIES OF GEOINFORMATION SYSTEMS (GIS) IN THE CONSTRUCTION AND OPERATION OF THE GAS PIPELINE

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The article is devoted to the theoretical information about resource capabilities, components and applications of GIS, also are given description and structure of the organizational and managerial capabilities of GIS in relation to the conditions of the construction and operation of gas pipelines.

Keywords: geoinformation system, information modeling, gas pipelines, organizational and managerial capabilities, building and operation of gas pipelines.

RESEARCH AND OPTIMAL CHOICE OF MECHANIZED METHODS OF STRENGTHENING THE FOUNDATIONS OF THE BUILDINGS AND CONSTRUCTIONS SITUATED ON THE LOESS SOILS IN CONDITIONS OF THE WESTERN SIBERIA

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The article is devoted to the validation of the necessity of the search, choice and upgrade of the technical and technological solutions using domestic serial mechanized production facilities and equipment to strengthen and stabilize the buildings and constructions situated on the loess soils in conditions of the Western Siberia and Altai region.

An overview and analysis of mechanized way of strengthening the loess soils in conditions of the Western Siberia also are given in the article

Keywords: the loess soils, mechanized methods of strengthening the foundations, the choice of optimal technical and technological solutions.

THE SUCCESSION OF CULTURAL TRADITIONS OF INDIGENOUS SIBERIAN POPULATION AND NORTH AMERICAN INDIANS ON THE EXAMPLE OF DWELLINGS CONSTRUCTION

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The theory of coastal migrations of the early man and the Asian origin of American peoples have initiated an extensive discussion on the continuity of cultural traditions of the peoples separated by the Bering Strait in the 10-8 millennium BC. The established constructing traditions were largely preserved despite the long-lasting noninteraction of the American Indians with the indigenous peoples of Asia. The article provides a classification that unites the construction experience of dwellings. It is divided into three groups according to the type of dwellings: a frame building (examples: tipi, chum, wigwam, yaranga, etc.), self-supporting (examples: hogan, bothy, quinzhee, igloo, etc.), dugouts (examples barabara, lymgiyan, etc.) The author draws parallels between the main types of dwelling construction of the Native Americans and peoples of Siberia. A detailed study of closely related types of dwellings on the territory of Siberia and Alaska has revealed similarities in the dimensions, structure and properties of the following pairs: a cone-shaped American tipi and a Siberian chum; a frame dome-shaped wigwam and yaranga, a log hogan and a bothy; quinzhee and igloo both made of snow; coastal dugouts barabara and lymgiyan. Finally, the continuity of the constructing traditions of the indigenous population was not limited by the native peoples and migrating descendants, but was also extended to the civilized pioneers engaged in the development of new lands in Siberia and on the North American continent. Best construction practices of the local population were reflected in the first buildings of the English Pilgrims in America and Russian industrialists in Siberia and Alaska. The author cites some examples of the interaction between the traditional construction of dwellings in distant homeland and the long-term experience of the indigenous peoples.

Keywords: dwellings architecture, the indigenous peoples of Siberia, the Indians of North America, constructing traditions, Beringia, tipi, chum, wigwam, yaranga, hogan, bothy, quinzhee, igloo, barabara, lymgiyan, English wigwam.

CONTROLLED TEMPERATURE REGIMES OF CONCRETE CURING – A WAY TO IMPROVE EFFICIENCY OF CONCRETING

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The article notes that the efficiency of concreting in winter conditions depends on the efficiency of control over concrete thermal treatment processes. The existing control methods do not provide the required quality of thermal treatment. Quality control over winter concreting can be provided by synthesis of such fields of knowledge as building technology, building thermal physics and mathematical modeling of complex physical, organizational and technological processes combined with modern tools of computational mathematics and modern information technologies. Algorithmic dispatchers developed for that purpose allow controlling the process at the stage of designing by both conventional and non-conventional temperature regimes. Comparative calculations and actual data of energy consumption in construction of a residential building in the city of Novosibirsk in winter of 2011-2012 have shown that controlled regimes are the most preferred in terms of timing for developing strength and power consumption for that purpose.

Keywords: winter concreting, management of temperature modes of heat treatment of concrete, field of temperatures in a concreted structure, method of mathematical modeling.

THE COMPARATIVE ANALYSIS OF ARCHITECTURAL FORMATION OF DOMESTIC AND FOREIGN COASTAL RECREATIONAL COMPLEXES IN MOUNTAIN LANDSCAPES

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In article on the basis of synthesis of experience of architectural formation of domestic, regional, foreign coastal recreational complexes in mountain landscapes the comparative analysis on the following parameters is carried out them: the planning organization, capacity, season of operation, function, functional zoning, is made classification of coastal recreational complexes in mountain landscapes.

Keywords: architecture, comparative analysis, domestic and foreign recreational complexes, mountain landscapes, coastal territories, planning organization, capacity, season of operation, function, functional zoning, classification.

PROBLEMS OF PRESERVATION AND USE OF MONUMENTS OF PETROGLYPHIC ART OF ALTAI IN THE CULTURAL-EDUCATION ASPECT

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Its researched in the article an opportunity of applying of the monuments of petroglyphic art of Altai in the cultural-education aspect. The author analyzed axiological status of the monuments of petroglyphic art Altai in education and society.

Keywords: society, monuments of petroglyphic art, cultural potential of the Altai, the educational aspect.

RELATIONSHIP OF STRENGTH AND PHASE COMPOSITION OF THE AUTOCLAVE-LIME FLY-ASH STONE

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The strength of lime-ash stone after autoclaving for 8, 50, and 100 hours of isotherms at 0.8 MPa always directly proportional to the gel phase C-A-S-H. Its content is proportional to the Al-tobermorite in mixtures without additives or does not correspond to the content of tobermorite in mixtures with additive 2% Na₂SO₄.

Keywords: strength of the stone, lime-ash composition, autoclaving, the relationship with the phase composition.

FORMATION OF TOURISM CLUSTER «BARNaul - GORNOZAVODSK CITY»

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This article discusses the main provisions of the concept of a tourism and recreation cluster «Barnaul - the mining town». Outlines the analytical basis of the concept and design proposals for the cluster as a whole and for individual subclusters.

Keywords: concept, tourism and recreation cluster (TRC), architectural and urban planning, tourism, recreational facilities and systems.

THE EVOLUTION OF LOW-RISE BUILDING AREAS IN SIBERIAN CITY (THE EXAMPLE OF NOVOSIBIRSK)

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The article is devoted to the different periods of formation of low-rise building areas in Novosibirsk. The main goal of the article is identification the causes of social, infrastructural and architectural problems associated with the peculiarities of the formation of low-rise building. A description of each period is adduced in this article. The role of low-rise buildings in various stages of development of the city is revealed. The author marks the peculiarities of the development of Novosibirsk low-rise building areas under the influence of social, economic and political factors that have laid the foundation for the emergence of problems escalated in the described urban areas in the last decades.

Keywords: low-rise building areas, Novosibirsk.

SPECIAL ARCHITECTURAL AND PLANNING ORGANIZATION ZHIVOTNOVODCHESKIH COMPLEXES IN ENERGY INTENSIVE WESTERN SIBERIA

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The article describes the classification of technological and functional processes of livestock farms also provide an analysis of the architectural organization of livestock facilities. Address the issue of energy efficiency and enegorgosberezheniya livestock facilities.

Keywords: livestock complexes, architectural and planning organization, processes, energy efficiency.

METHOD OF DETERMINING THE RATIONAL OPTION DREDGING TECHNOLOGIES OF SHALLOW-WATER AREA

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The article deals with the existing methods of dredging the shallow areas. A new method of dredging was suggested through the use of digging machines namely track-type excavators with the different types of rigging. Dredging technology is described by the means of track-type excavators. Finally, main cost characteristics of using engineering for different methods of dredging were compared.

Keywords: hidden investment potential, effective dredging, suction dredging method, dredge hopper method, pitch of temporary dams, depth of excavation, cost of excavation works.

THE EVOLUTION OF THE OBJECTIVE-SPACIAL ENVIRONMENT OF THE NOVOSIBIRSK CITY

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This article is devoted to the objective-spacial environment of the Novonikilaevsk – Novosibirsk city from date of its foundation till the present day. The main periods and stages are picked out. There are three main component parts of the objective-spacial environment: «the skeleton of the city», «the material» - the building, the building and the constructions and «the plasma» that is the thing covering, the objects of the city's environment. Also the intercommunication of these parts at the process of the evolution of the objective-spacial environment was discovered.

Keywords: the objective-spacial environment, the objects of city's environment.

SPACE-TIME ASPECTS IN JAPANESE ARCHITECTURE

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Japanese architecture, traditional and modern is tunable nature. Changes to occur rapidly in many areas: improving the layout, with transformations over time, improve the environmental lighting and insulation glass windows, ventilation, environmental improvement for the season, improving equipment and components for security, technological improvements and design details to the earthquakes, improving materials, finishes, texture and color. The study of spatial and temporal aspects of the Japanese architecture opens up new facets of activity of experts on environmental realistic design.

Keywords: architecture, housing, space, environment, transformations.

TO THE CHARACTERISTIC OF ARCHITECTURE OF ORTHODOX CATHEDRALS IN CHITA AND VLADIVOSTOK (END OF XIX – BEGINNING OF XX CENTURY)

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The architecture of the main Russian Orthodox Cathedrals of the Far East region, created in the late 19th and early 20th centuries and completely destroyed on the orders of Soviet authorities in the second half of the 1930 's, remains virtually unexplored portion of the historic Russian architectural and artistic culture, emerging from the late 16th to the early 20th century on the territory of Asiatic Russia. The task of this concise work is a primary documentary reconstruction of major episodes of the processes of design, construction, operation and demolition of the Cathedral in the name of Holy Grand Prince Alexander Nevsky (St. Alexander Nevsky) in Chita and the Cathedral in the name of the Assumption of the Blessed Virgin Mary (Holy Assumption) in Vladivostok.

Keywords: russian architectural culture, architectural and artistic style, eclectic, Orthodox cathedrals, design and construction, architectural ensemble.

PROBLEMS OF ARCHITECTURAL AND SPATIAL FORMATION OF ENSEMBLES OF THE CENTER OF NOVOSIBIRSK

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Formation of architectural ensembles, which form the basis of creation and the evolution of architecture and spatial design, modern Russia is not ensured the necessary legal protection. The imperfection of modern Russian city planning laws threatens the destruction of valuable, historical urban environment, including architectural ensembles of the squares, streets and other public spaces.

Keywords: architecture, urban continuity, reconstruction, urban regulation, urban culture.

FORMATION OF THE ARCHITECTURAL AND ARTISTIC IMAGE OF THE CITY IN THE NATURAL CONDITIONS SIBERIA (ON THE EXAMPLE OF THE CITY OF KRASNOYARSK)

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The article describes the most encountered climatic conditions okayvayut influence on the architectural and artistic image. The importance of analysis and consideration of climatic conditions in the development of architectural objects and hail architectural details. The same username scheme is the most significant factors influencing the formation of the image of the city as a whole.

Keywords: climatic conditions, architectural and artistic image of the city.

ARCHITECTURE OF APARTMENT BUILDINGS OF WEST SIBERIA OF THE NEP PERIOD

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On the basis of the study of the project development and text documents from the state archive, as well as natural materials surveys and photographic images revealed the characteristic space-planning, design, styling and features of urban residential development in Western Siberia NEP period. We show the influence of local socio-economic and policy factors on the design and construction of apartment buildings. Analyzes the major types of residential buildings which became widespread in the cities of the region.

Keywords: residential buildings of the 1920s., the architecture of Western Siberia, construction of apartment houses of the USSR.

COMPUTER TECHNOLOGY IN THE DISCIPLINE «DRAWING» AND «PAINTING»

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This article describes the modern aspects of innovation in the field of teaching subjects «Drawing» and «Painting» at the highest architectural and design school, objectives and ways of its further development, the proposed changes to the organization of the system and its development in terms of increasing the percentage of independent work of students in the learning process with the active implementation of computer technology, building on existing experience of the introduction of new forms of organization of work of the students.

Keyword: Drawing and architectural graphics, painting, innovative activity, new educational programs.

THE ADJUSTMENT EFFORT IN THE ARCHITECTURAL DESIGNS OF COVER BY TERMOPOLZUČESTI

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In the work considered the behavior of continuous steel truss beams, dvuhprolětnoj operated in the frame on the ground exposed to chemical pučeniū. Suggested for relieving stress in the beam caused by uneven compression supports, temporarily turn it into a shareware razreznuū. Conditional nerazreznost' is carried out by heating pads in the kon'kovom node of the beams over the Middle pillar. Theoretically calculated and experimentally confirmed by the values of the allowed relative displacements of supports in the beams.

Keywords: continuous beams, termopolzučest', uneven rainfall supports tensely-deformed state.

PROBLEM OF INTERACTION OF ARCHITECTURE AND SOCIOLOGY AS SIMULARS OF TOWN-PLANNING SYSTEMS AND THEIR ELEMENTS

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In article the problem of interaction of architecture and sociology as similars of town-planning systems and their elements is considered, possibilities of sociology in the solution of modern problems of rapprochement of the theory and practice of architecture are considered.

Keywords: architectural and sociological researches, methodology of sociological researches, interdisciplinary approach, architecture and town planning.

YURTA – THE BASIS OF NATIONAL ARCHITECTURE OF MONGOLIA

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In article it is told about a national Mongolian yurt-a-ger which is a traditional view of the dwelling of Mongolia. In research the following aspects of architecture of a yurt-a are considered: design, microclimate, acoustics, lighting.

Keywords: architecture, Mongolian yurt-a, designs, microclimate, lighting, acoustics.

RESEARCH METHODOLOGY APPLICATION THE GOLDEN SECTION FOR ANALYSIS OF SIGNIFICANT OBJECTS IN BARNaul

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The appearance of new buildings does not always cause the approval of both residents and professionals in the field of architecture. What rules guide the architect to create a harmonious work, pertinent in this city? This article is part of the scientific work dedicated to the identification of constitutional features of the village, allowing you to create tools for the constructive description of the architectural design statement, as well as to analyze and identify architectural mistakes and their solutions on the example of the city of Barnaul.

The research problem - find out just how versatile a tool such as the golden section , whether it is a necessary feature of significant architectural sites, and whether it is allocated in this parameter of significant architectural objects object, which is a symbol of the city.

Keywords: methodology, analysis, architectural object, the proportions, the perception of the golden section, the symbol of the city.

SIMULATION OF ROADSIDE SERVICE CENTER FOR COMPLEX OF SOUTH WEST SIBERIA

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On the basis of the historical development of roadside service, analysis of factors results architectural and sociological research, developed the principles and methods of formation of complexes of roadside service stations, the final model proposed planning organization complexes of roadside service stations.

Keywords: Car roadside complex, the results of sociological research architectural model planning organization.

ERGONOMICALLY RATIONALE ARCHITECTURAL AND DESIGN SOLUTIONS AS A FACTOR OF THE PRESENT

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The article focuses on the importance of ergonomic studies in the preparation of architectural and design solutions interiors and exteriors of buildings and complexes.

Keywords: Architectural Design, pre-design, higher education, equipment and ergonomics.

DESIGN INTERNATIONAL TOURIST ROUTE AND ITS ARCHITECTURAL ENVIRONMENT IN CROSS-BORDER REGION ALTAI NIRS REVIEW AND DIPLOMA STUDENTS PROJECTS

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The article provides an overview of NIRS and graduation projects of students dedicated to the design of the international tourist route and its architectural environment in transboundary area in the Altai.

Keywords: Altai, Architectural Design, concept, tourism, recreational facilities, cross-border area.

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