

Baracks. Basis of housing fund of sotsgorod's. First five-year plan buildings

MEEROVICH MARK GRIGORYEVICH

Abstract

Sotsgorod-buildings in the period of soviet industrialization (1920-1940-ies.) often erect from scratch - in the plains, taiga or the desert. Their acquisition of workforce - was impossible without large-scale construction of the home. Barracks was the first truly mass housing being built in new buildings Sotsgorod's in industrialization period. They provide a roof over your head about 80-90% of the population of industrial buildings. There are five identified types of barracks (the material of construction).

Keywords

Barracks, sotsgorod, industrialization, soviet policy of urbanization

Meerovich Mark Grigoryevich. Professor at the National Research Irkutsk State Technical University (Russia), Doctor of Historical Sciences, Candidate of Architecture, corresponding member of Russian Academy of Architecture and Construction Sciences. Professor of Irkutsk National Research Technical University (Russia). Active member of International Academy of Natural and Social Sciences in the section of Artistic and Industrial Design. Correspondent-member of Russian Academy of Architecture and Building Sciences. Correspondent-member of International Academy of Architecture, Honorary architect of Russia. Honorary worker of Higher School of Russia, Member of Russian Union of Architects. Member of Russian Union of Designers. Foreign Expert Certificate of the People's Republic of China

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Publications: monographies – 17 (including 5 collective monographies); articles – 422.

Translated by **Valeria Nazimova.**

[Fig. 1] Magnitogorsk sotsgorod. Tented camp of builders from Magnitogorsk Iron and Steel works. Photo, early 1930s. Source : // USSR im bau. 1932. № 1.



Forced urbanization in the USSR in the period of industrialization was based on artificially accelerated growth of pseudourban population due to pushing former peasant countryside inhabitants to sotsgorod new developments. It was also based on forced displacement of massive contingent workforce from existing cities to industrially developing territories. As a consequence, population of sotsgorod new developments consisted of: a) peasants recalled from their traditional lifestyle; b) disenfranchised people, expelled from their places of residence; c) socially devoid people expelled from existing cities by the set of some legislative measures; d) punishment endured political prisoners who stayed for good near former labor camp zones, also former special settlers and labor settlers who did not have place to go; e) nomadic nations forced to sedentary life; f) wage workers who signed labor contracts; g) delegated specialists, Soviet and party leaders of different positions directed to construction sites, etc.

It was impossible to complete first five-year plan of sotsgorods new developments with workforce without mass housing construction, often they were built on blank space, for example, on plain, taiga or desert. As a consequence, each Soviet industrial new development started with construction of plain dwellings for workers. There were: a) tents lain out by planks and banked with soil to keep it warm; b) dugouts; c) semi-dugouts; d) yurts; e) booths, pavilions, etc.

Temporary dwellings for workers in the initial period of sotsgorods construction

Tents. In September, 1930 (almost in a year after the beginning of sotsgorod construction) about 2,000 workers lived in tents in Magnitogorsk¹. In 1931 about 1,350 workers of coking plant continued living in them². Researchers I.V. Antipova and M.I. Shkolnik affirm that, in general, about 10,000 people lived in tents in summer 1931 in Magnitogorsk³ [Fig. 1].

Dugouts represented a small house with walls made of two rows of planks with soil between them. There was a boardwalk over it, then slag and a clay layer. Wind drifted soil dust on it; that is why the grass grew on it in summer [Fig. 2-3].

Semi-dugouts had two parts, a bottom one (it was banked with land, as it turned to be under the ground, it kept warmth) and upper one. In places with a lack of forest both parts were made of shield twined from willow tree branches from the river nearby. The shield were installed on wooden frameworks, the space between them was filled with clay (it was mined in winter from 1.5, 2 or 2.5 m. layer of frozen ground). Roofing felt, then slag were put on it; the top layer was packed soil and greensward⁴ [Fig. 4-5].

1 Cit. ex Макарова Н.Н. Повседневная жизнь Магнитогорска в 1929-1935 гг.: дис. ... канд. ист. наук / Н.Н. Макарова. – Магнитогорск. 2010. – 280 с., С. 64-65.

2 ГАРФ. Ф. Р-7592. Оп. 5. Д. 304. Л. 11; Магнитогорский комсомолец, 1931. 16 октября (Cit. ex Макарова Н.Н. С. 64-65).

3 Cit. ex Макарова Н.Н. Повседневная жизнь Магнитогорска в 1929-1935 гг.: дис. ... канд. ист. наук / Н.Н. Макарова. – Магнитогорск. 2010. – 280 с., С. 87.

4 Галигузов И.Ф., Чурилин М.Е. Флагман отечественной индустрии. История Магнитогорского металлургического комбината им. В.И.Ленина. - М.: Мысль, 1978.- 280 с., С. 25.



[Fig. 2] Magnitogorsk sotsgorod. The dugout. Source: Хан-Магомедов С.О. Архитектура советского авангарда: В 2 кн.: Кн. 2: Социальные проблемы. М.: Стройиздат, 2001. С. 253.

[Fig. 3] Magnitogorsk sotsgorod. The dugout. Source: provided by V.A. Tokarev.

[Fig. 4] Magnitogorsk sotsgorod. The semi dugout. Source: MI "Magnitogorsk Local History Museum" archives.

[Fig. 5] Uralmash sotsgorod. First builders' semi-dugout. Source: Ударная стройка [Electronic resource]. Access mode: <http://biblio28.ru/kraevedenie/pamyatnyie-mesta/iz-istorii-rajona.html>.

Yurts. Nomadic nations lived in them, they were forced to move to five-year plan construction plants and have sedentary life. For example, the Kirghiz lived in yurts in Magnitogorsk, they were taken as unskilled labor to perform excavations, loading operations, etc. J. Niegeman⁵, Dutch architect, who was a member of E. May's group in 1931-1936⁶, he was stunned and wrote about "new residents" of sotsgorod, who set up their felt yurts-pavilions just between stone houses, because there were not given any other kind of dwelling. J. Niegeman was shocked, because his expectations about those, for whom he projected the dwelling, were wrong [Fig. 6].

Booths and pavilions were installed almost on all construction plants of first five-year plan; they were made of alternative materials as temporary summer dwellings [Fig. 7, 8].

Long-term dwelling for workers in the initial period of sotsgorods construction

Barracks, were the main type of mass housing construction at industrial housing developments of Soviet industrialization in 1920-1940s. They became dwellings for hundreds of thousands of people. From 85 to 93% of industrial new developments population lived in them. Step by step, throughout several years workers were removed from draft proof tents, dugouts and semi-dugouts to barracks. 52 barracks (37 winter and 15 summer ones) were built to accommodate 6,700 residents in Magnitogorsk during 1929⁷ [Fig. 9-10]. 140 joint and 55 mixed barracks were built to the 1st of January, 1931. It had been planned to build 221 joint barracks in 1931. Such construction took place in Kuznetsk and Chelyabinsk [Fig. 11, 12] and in some other sotsgorods and townships. For example, barracks took 44,294 sq. m. from 51,268 sq. m. of housing area (86%) in Nizhniy Tagil on the 1st of May, 1933.

The history of the first decades of Russian urban planning is connected with this type of construction. Its planning and mass building was caused by extreme cheapness and authorities' aspirations to build a lot of housing area paying as

5 Wit, Cor de. Johan Niegeman, 1902-1977: Bauhaus, Sowjet Unie, Amsterdam. Amsterdam, 1979. С. 81.

6 Эрнст Май и проектирование соцгородов в годы первых пятилеток (на примере Магнитогорска). / Е. В. Конишева, М. Г. Меерович – М.: URS, ЛЕНАНД, 2012 – 224 с. (монография); Evgenija Konyševa, Mark Meerovič: Linkes Ufer, rechtes Ufer. Ernst May und die Planungsgeschichte von Magnitogorsk (1930–1933). Herausgegeben von Thomas Flierl. Edition Gegenstand und Raum. Berlin: Verlag Theater der Zeit. 2014 – 254 с. (in German) (*monograph*).

7 Федосихин В.С., Хорошанский В.В. Магнитогорск – классика Советской Социалистической архитектуры. 1918-1991 гг. – Магнитогорск: МГТУ им. Г.И.Носова. 1999. – 168 с., С. 41.



[Fig. 6] Magnitogorsk sotsgorod. The yurt. Source: MI "Magnitogorsk Local History Museum" archives.

[Fig. 7] Ground man's family at Kuznetskstroy. Summer dwellings – booths and pavilions are in the background. Source: Кузнецкий металлургический комбинат им. И.В. Сталина (1929-1945). [Electronic resource] - Access mode: http://community.livejournal.com/su_industria/58586.html.

[Fig. 8] Pavilions. Residential camp of Orsk Lokomotivstroy Kazak workers. 1934. Source: provided by O.V. Kotlyarov.

[Fig. 9] Magnitogorsk sotsgorod. Barracks. Source: provided by V.A. Tokarev.

[Fig. 10] Magnitogorsk sotsgorod. Barracks construction to the winter, 1929. (photo is dated by August 30th, 1929). Source: provided by V.A. Tokarev.

little money as possible. According to wall material, barracks were divided into the following groups: 1) reed-fiber (straw); 2) plank (wooden); 3) panelized; 4) plywood; 5) stone; 6) dukovy, etc.

Reed-fiber (straw) barracks represented framework wooden structure with wooden shields boxed off with reed-fiber layer (6 cm thick). Walls were plastered up from both sides [Fig. 13-14].

Plank barracks represented a wooden framework made of sawn and whole section timber nailed up with planks. Plank barracks were often shingled by wooden lath and were plastered up to protect it from precipitations and to prolong its life [Fig. 15-20].

Panelized barracks were widely used in new development settlements because they were standardized, and, as a consequence, they were fast to produce accessors for its installing [Fig. 21]. Barrack walls were assembled from wooden panels which could be: a) hollow – heat-insulating qualities of air gap were used; b) filled with various insulants. Panelized barracks, as well as wooden ones were either plastered up or stayed unplastered [Fig. 22, 23].

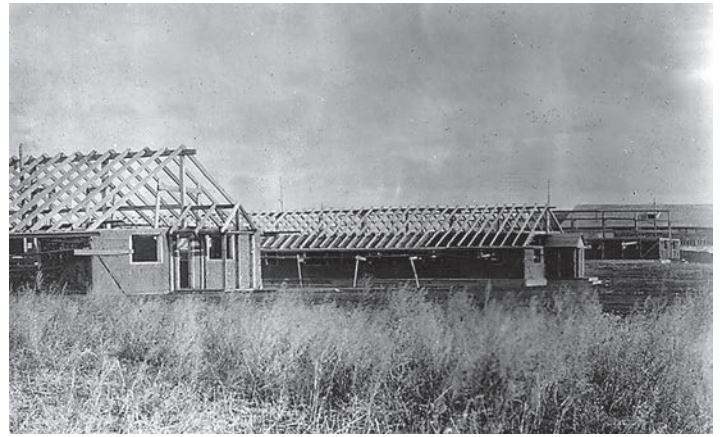
Plywood barracks were of two kinds: a) installed on site (indecomposable); b) demountable ones made of ready plywood panels with insulant. For example, plywood-peat demountable barrack by V.A. Andreevskiy construction (was developed by the order of Military Department in 1929), it was made of plywood sheets (5 mm.) with sphagnum (5 cm.) between them [Fig. 24].

Stone barracks were by-product from foundation excavations for integrated industrial plant production departments, during that process natural or "wild" stone was mined and it was used for barracks construction. For example, several barracks were made only in 1929-1930 during foundation excavation works in Magnitogorsk.

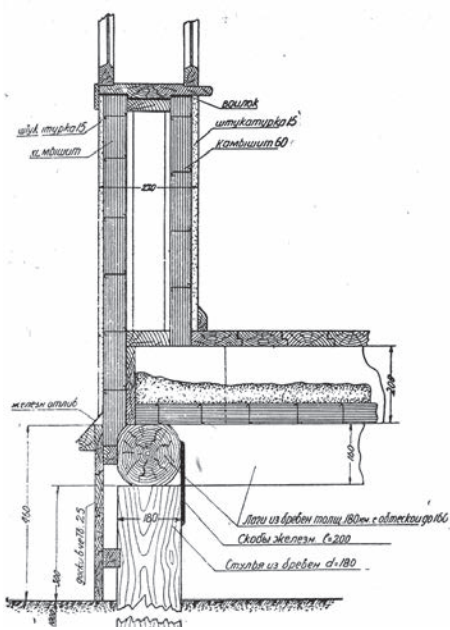
Dukovye. What are "dukovye" barracks is not ascertained. There is no any information in the archives (State Archive of the Russian Federation, Russian State Archive of Economics). Revelation and description of this type of barracks is the topic of the further research. Different design, research and other organizations, such as Standartdom (Soyuzlesprom), Norms and Standards Institute, RSFSR Supreme



[Fig. 11] Township of first builders from Sergo Ordzhonikidze machine-tool plant of the Order of the Red Banner of Labour. Construction of barracks. 1931. Source: Поселок первостроителей ЗСО [electronic resource] – access mode: <http://eh-la-bas.livejournal.com/2398.html>.



[Fig. 12] Township of first builders from Sergo Ordzhonikidze machine-tool plant of the Order of the Red Banner of Labour. Construction of barracks 1932. Source: Поселок первостроителей ЗСО [electronic resource] – access mode: <http://eh-la-bas.livejournal.com/2398.html>.



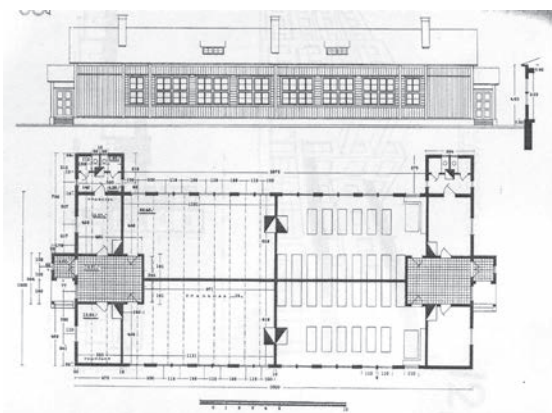
[Fig. 13] Structure of reed-fiber barrack of “Leningrad - NORD” cooperative association. Source: Васильев Б.Ф. Сборные и разборные конструкции деревянных зданий. (Обзор и критическая оценка). М.-Л. 1931. – 112 с., С. 83.



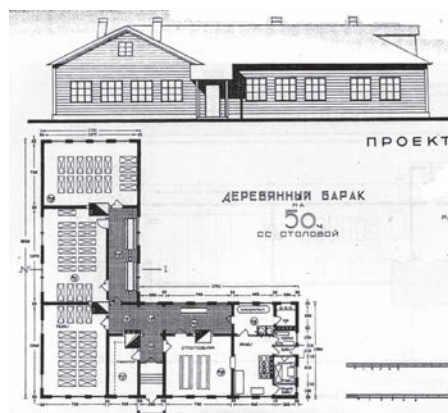
[Fig. 14] A barrack (made by “Leningrad - NORD” cooperative association). 1930. Source: Васильев Б.Ф. Сборные и разборные конструкции деревянных зданий. (Обзор и критическая оценка). М.-Л. 1931. – 112 с., С. 82.



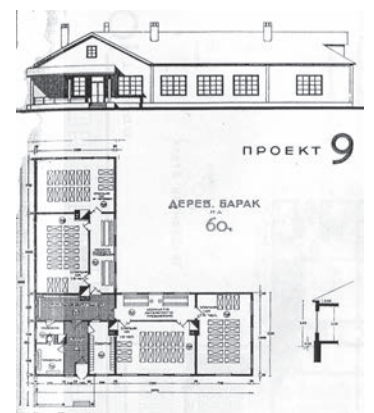
[Fig. 15] Kuznetsk sotsgorod. Plank barracks. Source: provided by I.V. Zakharova.



[Fig. 16] A barrack (one-storey, wooden) for 50 people with a canteen. Layout design. 1929. Source: Проекты рабочих жилищ. Центральный банк коммунального хозяйства и жилищного строительства. М. 1929. – 270 с., С.203.



[Fig. 17] A barrack (one-storey, wooden) for 50 people with a canteen. Layout design. 1929. Source: Проекты рабочих жилищ. Центральный банк коммунального хозяйства и жилищного строительства. М. 1929. – 270 с., С.203.



[Fig. 18] A barrack (one-storey, wooden) for 60 people with a canteen. Layout design. 1929. Source: Проекты рабочих жилищ. Центральный банк коммунального хозяйства и жилищного строительства. М. 1929. – 270 с., С.203.



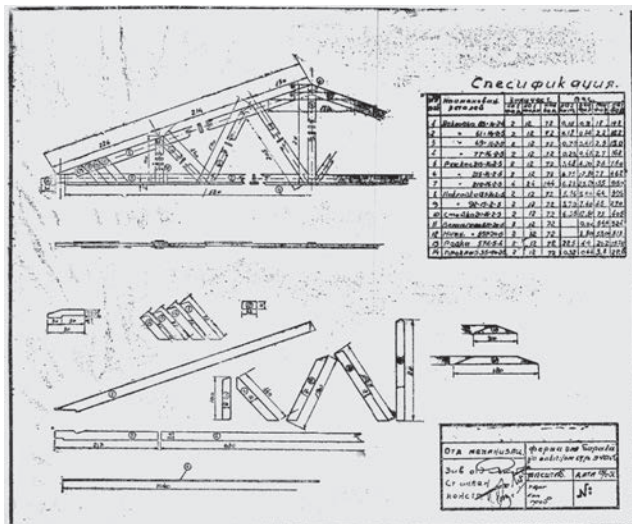
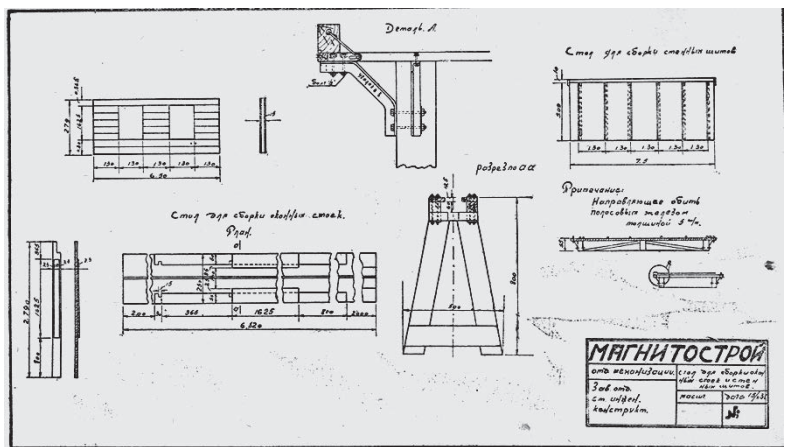
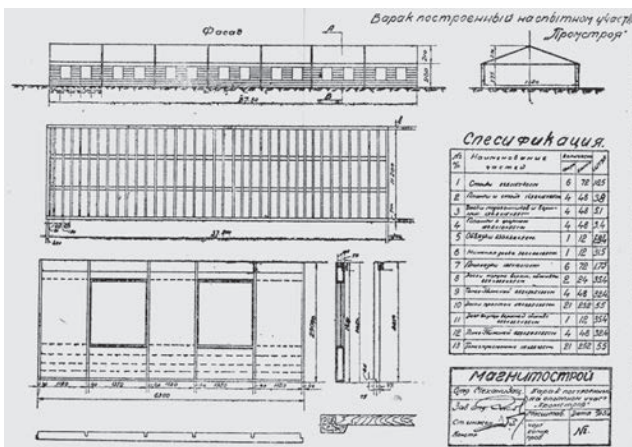
[Fig. 19] Township of first builders from Sergo Ordzhonikidze machine-tool plant of the Order of the Red Banner of Labour. Plastered up lathing plank barracks. Source: Поселок первостроителей ЗСО [Electronic resource] – access mode: <http://eh-la-bas.livejournal.com/2398.html>.



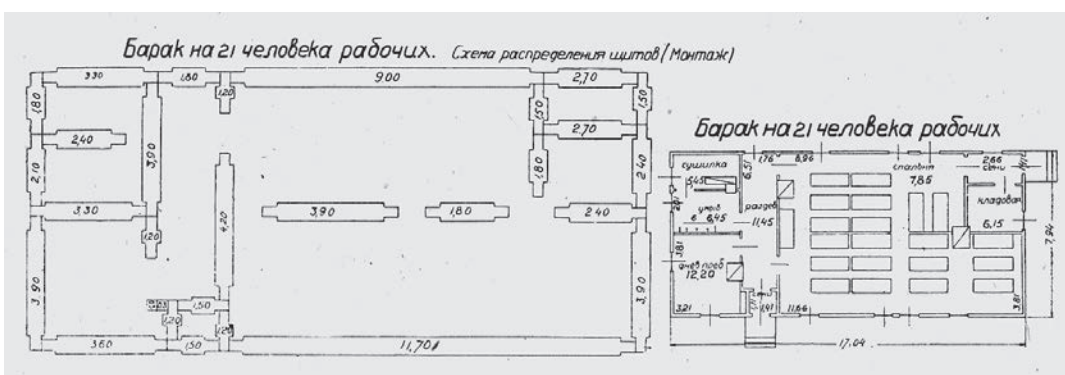
[Fig. 20] Township of first builders from Sergo Ordzhonikidze machine-tool plant of the Order of the Red Banner of Labour. Plastered up lathing plank barracks. Source: Поселок первостроителей ЗСО [electronic resource] – access mode: <http://eh-la-bas.livejournal.com/2398.html>.



[Fig. 21] Panelized barrack (type Ш-11) – a dormitory for the single. Source: [Electronic resource] – Access mode: http://s16.photobucket.com/user/chmelnizki/media/Архитектура/Stalingrad_Doma_ASSR_N10-45-600_zps8a9525fe.jpg.html.



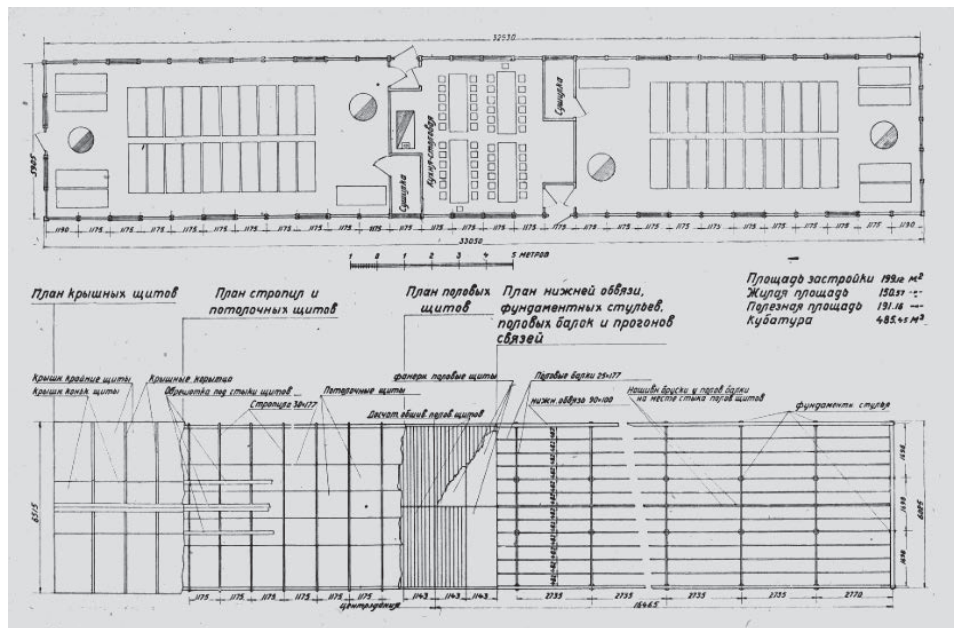
[Fig. 22] Magnitostroy panelized barracks. 1930. Source: Тищенко Ф.В. Новые методы производства строительных работ. Одноэтажные каркасные строения (Опыт Магнитостроя). Свердловск-Москва, Урал. обл. гос. изд. 1932.- 46 с.



[Fig. 23] Panelized barrack for 21 people. INNORS. Not later than 1931 Source: Сборные деревянные дома (конструкции). Альбом. М.-Л., Гос. научно-техн. изд-во. 1931. - 208 с., С. 21.

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[Fig. 24] Plywood (dismountable) barrack by engineer Andreevskiy construction. Late 1920s. Source: Васильев Б.Ф. Сборные и разборные конструкции деревянных зданий. (Обзор и критическая оценка). М.-Л. 1931. – 112 с., С. 78-80.

[Fig. 25] Plywood (indecomposable) barrack for 50 people. Soyuzlesprom. Standartprom. Ot later than 1931. Source: Сборные деревянные дома (конструкции). Альбом. М.-Л., Гос. научно-техн. изд-во. 1931. - 208 с., С.91.

Council of National Economy Rosstroy, RSFSR Gosplan Stroysector [Fig. 25]⁸. For example, “Prefabricated wooden houses (structures)” album, published in 1931, contained several prefabricated barrack layouts recommended to construction in workers’ township new developments. Also, Tsekbank “Layouts of workers’ dwellings” album contained barrack layouts for construction in workers’ township new developments of the first five-year plan⁹.

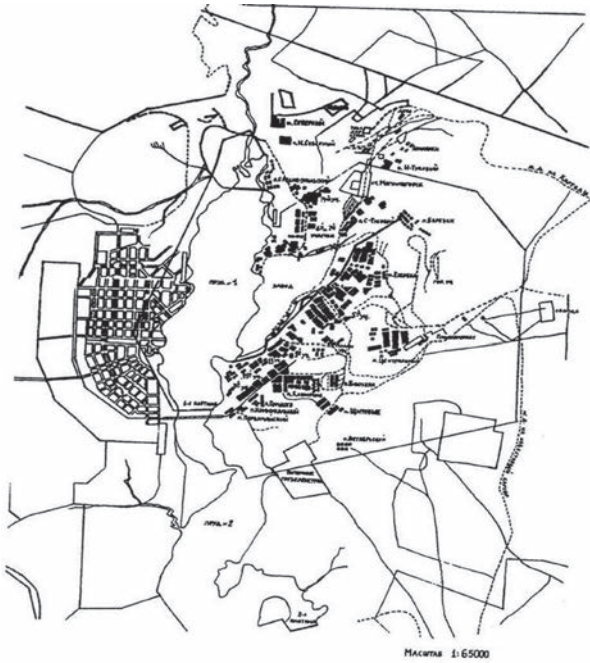
Onsite location of the barracks

Residential area of large sotsgorods new developments represented chaotically scattered barrack townships [Fig. 26-27], which were divided into several sites, so-called blocks with their own numbers. Each of them consisted of barracks disposed in parallel 20-30-50 meters apart.

Barrack blocks were built on the place of projected permanent (stone, wooden) housing blocks. Thus, the resident of Magnitogorsk remembered that barrack townships were divided into large sites which had numbers from 1 to 14. The first site was upscale. It was located southwestward from Metallurg City Park, stadium and Puskin Boulevard and bore to Railway transport club. It was considered to be upscale, because there were some urban facilities: shops, people’s court, “Magnit” cinema (opened in August, 1932). The fifth site was the largest; it was located northward from future Puskin Boulevard.

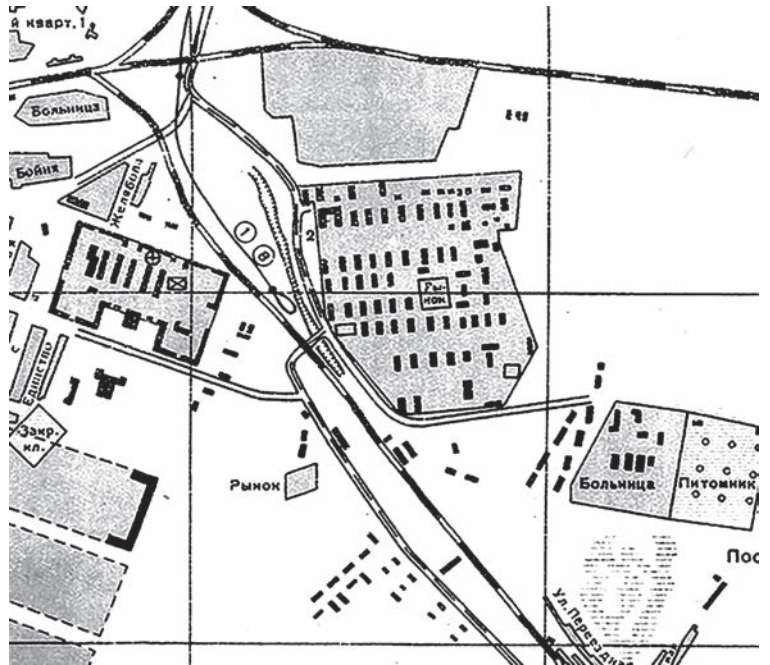
8 Сборные деревянные дома (конструкции). Альбом. М.-Л., Гос. научно-техн. изд-во. 1931. - 208 с.

9 Проекты рабочих жилищ. Центральный банк коммунального хозяйства и жилищного строительства. М. 1929. – 270 с., С. 104.



[Fig. 26] Magnitogorsk sotsgorod. Barrack townships (colored in black). 1933 -1934.

Source: Макарова Н.Н. «Повседневная жизнь Магнитогорска в 1929 – 1935 гг.». Дисс. на соискание ученой степени кандидата исторических наук по специальности 07.00.02 – Отечественная история. Магнитогорск. 2010. – 249 с., appendix 2.



[Fig. 27] Barrack township of first builders from Sergo Ordzhonikidze machine-tool plant of the Order of the Red Banner of Labour. Layout. 1931-1932. Source: Поселок первостроителей ЗСО [Electronic resource] – access mode: <http://eh-la-bas.livejournal.com/2398.html>.



[Fig. 28] Magnitogorsk sotsgorod. Brigade barrack. Interior. Source: Меерович М.Г. Рождение соцгорода: градостроительная политика в СССР. 1926-1932 гг. (концепция социалистического расселения – формирование населенных мест нового типа). Иркутск: Изд-во ИргТУ, 2008. С. 145-146.



[Fig. 29] Magnitogorsk sotsgorod. Barrack for shock-workers. Interior. 1931. Source: Ларин Ю. Показательная роль Магнитогорска в коммунальном и жилищном хозяйстве // За социалистическую реконструкцию городов. 1932. №1., с. 33-34., С. 33-а.

There weren't any indoor toilets. That is why outdoor toilets were built; they represented plank constructions with two compartments (for men and women) with 4-6 places each. Garbage and household rubbish cans were situated nearby. Wooden annexes – sheds, which were called "budka", were built within the space between barracks. Residents stored coal and firewood there.

Barrack enclosure pattern

Barrack represented one-storey corridor-type building with an entrance from an abutting end via built-on window porches. Barracks were occupied according to the gender – either single men, or single women. As mostly men came to the construction plants, they were accommodated by brigades in big rooms, 15-20 people in each [Fig. 28-29].

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[Fig. 30] Panelized barrack (LJ-10 type) with separate rooms for families. Source: [Electronic resource] – Access mode: http://s16.photobucket.com/user/chmelnizki/media/Arhitektura/Stalingrad_Doma_ASSR_N10-45-600_zps8a9525fe.jpg.html.



[Fig. 31] Magnitogorsk sotsgorod. Canteen for builders of dam №1. Source: provided by V.A. Tokarev.



[Fig. 32] Magnitogorsk sotsgorod. Barrack township in 1931. Big building opposite to barracks is canteen. Source: // USSR im bau. 1932. № 1.



[Fig. 33] Barrack township of first builders from Chelyabinsk Sergo Ordzhonikidze machine-tool plant. Post office. Source: Поселок первостроителей ЗСО [Electronic resource] – access mode: <http://eh-la-bas.livejournal.com/2398.html>).



[Fig. 34] Barrack township of first builders from Chelyabinsk Sergo Ordzhonikidze machine-tool plant. Foreman's office. Source: Поселок первостроителей ЗСО [Electronic resource] – access mode: <http://eh-la-bas.livejournal.com/2398.html>).

Each barrack had propaganda room with the area of 30 sq. m., there were several desks and chairs, Stalin's and other proletarian leaders' portraits and also barrack staff honours from the competitions for better life. There was a small barrack library beside it. Children had free access to the books. Pupils did their homework in those rooms. Babies also played there. Illiterate people studied reading and writing in the

evenings. The family of barrack militiaman lived in one of the rooms; in general that room was located next to the entrance except those barracks where there was elected barrack supervisor.

Those workers, who created the family, had positive labour results and were active in Soviet party social activities, had a chance to get separate residential space in family barracks. Those barracks were similar to the single ones, but inner space was separated to isolated rooms with separate entrance and area of 12-15 sq. m. [Fig. 30].

There were 30-36 rooms in each barrack. If there were children in the family, parents installed mezzanine (sleeping bench) for games and sleep with the area of 5 sq. m. On the left and on the right from the door there was stone or brick stove to warm the room and to cook meals; it was made by residents on their own. Stove was fired from corridor side. Residents often made root cellar to store food. There was a small glass window opposite to the entrance on the outer wall; its sashes were glued up with newspapers stripes to decrease room blowing off through cracks in window sash and doors. There was an iron bed along one of the walls which had plank cover instead of the net. Doors could not be locked, that is why rooms stayed unlocked and non-working women (unemployed or pregnant) always looked after the children. Barracks – dormitories for single and family people were built without kitchens.

Population service objects (household, medical, cultural, etc.) in sotsgorods

All population service objects in sotsgorods (household, medical, cultural, educational, etc.) were located in the residential barracks specially adapted for those purposes. Workers ate in canteens which were located in the same barracks. They checked special cards at the entrance and gave wooden spoons. As a rule, workers sat at the long wooden tables. Their fellows stood behind them waiting for their turn [Fig. 31-32]. Other service facilities (club, post office, temporary garage, horse barn, fire station, foreman's office, shop, bakery, kids nursery school) were located in the same but shortened barracks [Fig. 33-34].

Conclusion

Artificial forced urbanization in the USSR was strongly connected with the general line of the Party for fast construction of military-industrial firms. Settlement, urban planning and housing policies were just industrialization by-product where the human considered being just one more "natural resource" which should be used for the government convenience. Both in the period of the first five-year plan, and then, barracks expressed and embodied that doctrine.

Soviet urban planning materialized governmental postulates of labor and military mobilization of the population in a certain structure of inhabited territory. So, sotsgorod new developments had planning settlement decomposition in barrack townships, divided into blocks which provided territorial arrangement of population, which was guided and controlled by territorial party bodies and plant Party Committees, eased the management of working processes and control over household ones, allowed keeping accurate counts of quantity and "quality" of residents, eased to invite people to serve employment and military duties.

Planning and construction of barracks, as any mass housing construction in the USSR, was carried out only by the government and it was the main tool to provide 80-90% of industrial new developments population with dwelling.