

**METHODS OF DRAWING UP A MODERN PLAN “BANDIHON CITY «  
IN THE CONDITIONS OF NEW UZBEKISTAN**DOI: <https://doi.org/10.53885/edinres.2021.45.91.028>*Turakulov Anvar Ergashovich**Dean of the Faculty of Art History of TerSU, Acting Associate Professor, Ph.D.*

*Abstract: In this article, the basic information on the creation and implementation of the modern Bandihon city plan in the conditions of new Uzbekistan is given. It is written on the basis of the results of research conducted by pedagogical scientists on the creation of a plan of modern architectural buildings and their introduction into practice and the literature created.*

*Keywords: plan, project, construction, graphics, drawing, graphics program, foundation, land structure, territorial location.*

**YANGI O'ZBEKISTON SHAROITIDA ZAMONAVIY “BANDIHON CITY”  
PLANINI TUZISH METODIKASI***Turakulov Anvar Ergashovich**TerDU, San 'atshunoslik fakulteti dekani, dotsent v.b., p.f.n. (PhD)*

*Annotatsiya: Ushbu maqolada yangi O'zbekiston sharoitida zamonaviy “Bandihon city” planini tuzish va uni amaliyotga joriy etish haqida asosli ma'lumotlar berilgan. U pedagog-olimlar tomonidan zamonaviy arxitektura binolarining planini yaratish va ularni amaliyotga joriy etish bo'yicha olib borilgan tadqiqot natijalari va yaratilgan adabiyotlar asosida yozilgan.*

*Kalit so'zlar: plan, loyiha, konstruksiya, grafika, chizma, grafik dastur, asos, yer tuzilishi, hududiy joylashuv.*

**МЕТОДИКА СОСТАВЛЕНИЯ СОВРЕМЕННОГО ПЛАНА  
«BANDIHON CITY» В УСЛОВИЯХ НОВОГО УЗБЕКИСТАНА***Туракулов Анвар Эргашевич**Декан факультета искусствоведения ТерГУ, и.о. доцента, к.п.н. (PhD)*

*Аннотация: В данной статье представлена обоснованная информация о разработке и внедрении в практику современного плана “Bandihon city” в условиях нового Узбекистана. Он написан на основе результатов исследований, проведенных учеными-педагогами по созданию планов зданий современной архитектуры и внедрению их в практику, а также на основе созданной литературы.*

*Ключевые слова: план, проект, конструкция, графика, чертеж, графическая программа, основание, землеустройство, территориальное расположение.*

Bandikhan district is a district in Surkhandarya region. Established on May 18, 1992. The district is bordered by Kumkurgan, Qiziriq, Jarkurgan, Sherabad and Baysun districts. Area of 0.20 thousand km<sup>2</sup>. With a population of over 30,000 (2000). There are 5 village gatherings in Bandikhan district (Bandikhon, Kirshak, Almazar, Charvador, Qiziriq). The center - the village of Bandikhon [1].

History. There are several historical monuments in the district, the largest of which is the Bandikhan burial ground. The Bandixon castle dates back to the 2nd and 1st centuries BC and was discovered by archaeologists in 1973. Excavations were made in 1975-76. The ancient channel - the Urgulsay river is divided into two parts. The total area is 1.5 hectares. 250 m from east to west and 170 m from north to south. The Kurgan Fortress is located to the east of the monument - in the place of today's cemetery. Square shape 90-70 meters; The height is 5-6 meters. The dwellings are made of cotton and raw brick. Earthenware vessels and stone tools were found at different

times. The hills around Mendatepa, Gozimullo, Bektepa, Kindiktepa, Kurgan around Bandixon have also been proved to be ancient settlements. In the past, the Badi Khan's valley was covered with a brick by brick and supplied water to the Bandixon - Red Sea. In particular, the examination of Gazimullo hill found that fountains brought potable water from distant pipes. The name Bandihon derives from the word «band» and means «bridge» [2].

The nature. Bandixon district is mainly located in the north of the Surkhan-Sherabad steppe, which declines in the west to the east and south. There are Sherabad-Sarikamish Mountains and Bandihon-Kyzyrik hills, mainly south-north-east of the district. Dry subtropical climate. The average January temperature is 2.5 ° C - 3 ° C, July 30 ° C - 31 ° C. In a year 160 to 200 mm of precipitation falls. In the north of the district there is the Bandykhon River. The farms of the district are irrigated with the Akkopchigay and Sherabad canals. The soil is typical gray, sandy and partly black soils. The plants are ephemeral and ephemeroïd. There are wolves, foxes, reptiles, birds and insects (scorpions and scabies) in mountainous parts and ravines.



1-picture. (The Bandikhan current view)

Population. The majority of the population (96%) are Uzbeks, 3% are Tajiks, and Tatars, Russians and others live there. There are 145 people per 1 km<sup>2</sup>. All the population lives in rural areas.

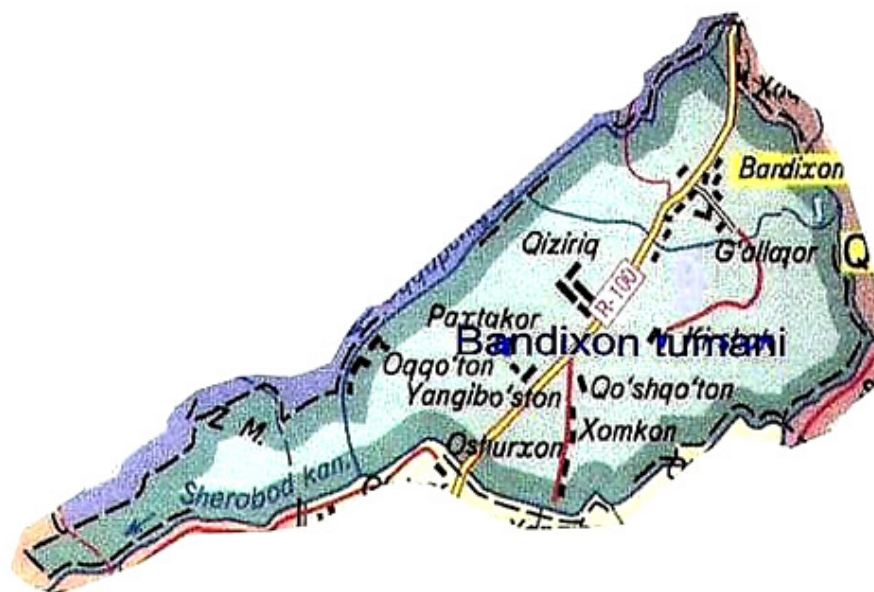
The farm. The farm is mainly agrarian. The irrigated arable land makes up about 70% of the district's land fund. Pastures make up 27.5%, arable land is 2.5%. There are 6 collective farms in Bandixon district. Cotton plays a major role in agriculture. Grain crops are cultivated, viticulture and gardening are developed [3].

Economics. There are 4 small enterprises, 46 dekhkan farms and 5 joint stock companies specializing in animal husbandry. There are 22 private small businesses, 11 mills, 40 private shops and canteens, and 6 lounges. The Sherabad-Denov highway crosses Bandixon district. There is a branch of the Schroeder National Gardening, Viticulture and Wine Corporation in Bandikhan district. [1] There are 6 collective farms in Bandixon district. Cotton plays a major role in agriculture. Grain crops are cultivated, viticulture and gardening are developed. Bandihon wheat is close by - it has recently been priced 1.5-2 times in the markets. The tombstone weighs 180–200 kg.

The social sphere. There are 27 schools, 2 children's and sports schools and 5 kindergartens in the district. 15 types of medical services are provided at the Central Hospital in Bihikhan. The district pays great attention to mass sports. Schools and organizations have stadiums, gyms, and volleyball fields. There is a modern Sayyid Muhammad Jomie Mosque in the center of the district.

Bandikhon Village. Bandikhon is a village. The center of Bandixon district of Surkhandaryo region. To the southwest of the district. The nearest railway station is 30 km from Kumkurgan and 100 km to Termez. The Akkopchigay Ari has passed by the village. Drinking water for the population is supplied by the main pipeline from the Khojaipok River. The population is mostly engaged in agriculture [4].

There are historical and archaeological monuments in the region - Bandihontepa I, II, Kindiktepa, Ghazimullatepa, Yalangtoshtepa and another unnamed hill and Khanbandi dam. These are not perfectly studied. Bandihontepa I is a city ruin with an area of 1.5 hectares; The remains of the stone house, earthenware fragments found at the end of 2,000 BC and at the beginning of the 1st millennium. Area of the ruins of Bandihontepa II is 10-12 hectares; the remains of the fossil fossils, cups, cans and cups found in it date from 650 to 450 BC. The material cultural monuments found in the Kindiktepa (area 140 x 30 m) and Fazimullatepa (area 50 x 25 m) coincide with the period of the Ahomians (558-330 BC). The terracotta figurines and utensils found in Yalangtoshtepa ruins (10 hectares) are of antique and early medieval times. It is thought that there was a defensive structure in place of the unnamed top. The Khandbandi dam is made of strong bricks at the age of 16-17 and is about 30 to 35 meters wide. B. monuments are important in studying the history of architecture, crafts and farming in Uzbekistan.



2-picture. (Map of Bandikhan)

Update: Bandikhon (Uzbek: Bandikhon, Russian: Bandikhon) is an urban-type settlement in Kizirik District, Surxondaryo Region, Uzbekistan. It was the administrative center of Bandikhon District until the district was abolished in 2010.

Modern Principles of City and Town Planning. Cities are known to be the most innovative and complex creations of human beings. They have existed in the past and will continue to exist in the future, showcasing human growth and development. Cities are economic and social systems, that are dominating the global canvas in terms of concentration of population. They are also the principle centers of economy, consumer markets and also have a highly trained workforce. As engines of economic growth, cities are known to be creators of wealth, generators of employment and promoters of the economy. "Urban planning or city planning is a technical or political process which deals with the development and use of land, planning permission, protection, and use of the environment, public welfare and the design of the urban environment. These are



also responsible for the planning and development of water use and resources, rural and agricultural land, parks and conserving areas of natural environment significance” [5].

As per World Urbanization Prospects –the 2014 Revision Report of Department of Economic and Social Affairs, United Nations: India by 2030 will have 7 Mega cities with population exceeding 10 million and 2 cities of a population above 5 million. It is also estimated that by 2050 there will be over a 100 Metro cities around India. This calls for critically and objectively looking at the urban centers in terms of their pattern of growth, development and evolving strategies which make them more productive, smart, efficient, healthy and sustainable.



3-picture. (The modern look of the Bandikhan)

Some of the basic principles of building a city, considered from technical, economical and the administration point of view are as follows:

The city planning principally consists of fixing the baselines of all traffic movements and transit facilities, including streets, railroads, and canals. These transit facilities should be treated liberally and systematically.

The street network should be planned in such a way that the main streets with the existing streets should be given greater consideration. The secondary streets should be fixed based on local conditions.

The building departments should adhere by some rights and privileges related to fire protection, aesthetic condition, health and safety of the buildings.

The town or city municipal authorities should facilitate for legal measures in cases of expropriation and impropration and should also create a law providing for the regulation of the contour of new or reconstructed blocks to be built upon.

Efficient use of land and infrastructure: land is essential for making improvements and should only be built upon under reservations for its subsequent use by the city. High-density development, infill development, and the adaptive re-use of the existing buildings result in efficient utilization of land resources and compact urban areas.

Cities are homes to complex webs of systems, and sectors, with their primary aim that ties into how a city functions. With this mind, collaboration is critical to identify innovative solutions.

Good urban planning addresses immediate needs while striving to achieve a city’s unique vision of the future. Long-term visions are rarely achieved through an uncoordinated application of projects.

The municipality should constantly supervise the activities of interested property owners associations, regarding the improvement of certain section.

Structural model of a Town or city.

What is town planning?

Town planning is an art of shaping and guiding the physical growth of the town creating buildings and environments to meet the various needs of the public such as social, cultural, economic and recreational etc. and to provide healthy conditions for both rich and poor to live, to work and to play or relax, thus bringing:

Physical and social planning of an urban environment.

Encompassing many different disciplines and bringing them all under a single roof.



4-picture. (The modern look of the Bandikhan)

The objective of town planning:

To create and promote healthy conditions and environments for the public.

To make right use of the land for the right purpose of zoning.

To ensure orderly development.

To avoid encroachment of one zone over the other.

To build social, economic and recreational amenities such as open spaces, parks, gardens, and playgrounds, town hall stadiums, community centers, cinema houses.

To preserve the individuality of the town

To preserve the aesthetics in the design of all the elements of a town or a city plan.

Principles of Town Planning:

The basic intention of town planning is to satisfy the needs of our future generations and to prevent the disorganized growth of the town or a city. Some of the principles of the town planning are as follows:

**Zoning:** the towns are divided into suitable zones such as commercial zone, industrial zone, residential zone, and certain rules and regulations should be implemented for each zone.

**Green-belt:** is a non-developmental zone which is located on the periphery of the town. It usually prevents the chaotic spread of the town, confining its size. A green belt is an invisible line designating a border around a certain area, preventing development of the area and allowing wildlife to return and be established [6].

**Housing:** should be carefully designed to suit the local population and care should be taken to make sure that all the facilities are there inside the housing complex.

**Public buildings:** should be well organized and distributed throughout the town. Unnecessary concentration of public buildings should be avoided. Factors such as



parking facilities, road widths should be taken into consideration while allocating the space for public buildings.

Recreation centers: are essential while designing a town. They are necessary for the recreational activities of the public. They include parks, for walking, cycling, amusement parks etc.

Road systems: road network hierarchy is very important while building a town or a city. The efficiency of any town is measured by the layout of its roads. The provision of a faulty road system in the initial stages of town formation proves to be too difficult and costly to repair to rearrange in future.

Transport facilities: the town should be provided with suitable transport facilities so that there is minimum loss of time for commuting between the work place and the residence. Efficiency in transport facilities includes both public and private networks. Public transportation network includes access to buses, trains, trams and trolleybuses.

Town planning has gained a lot of importance today. New towns and cities are being developed on a regular basis and it has become very essential for the town planners to concentrate on old development as well as the new development. Energy efficiency in planning should be the goal of every town planner and urban designer for a sustainable living and development.

Source and literature used:

Ctlachu Follow. (2012, March 18). Introduction to town planning. Retrieved June 23, 2017, from <https://www.slideshare.net/ctlachu/introduction-to-town-planning>

Basic Principles of City Planning (445 Words). (2013, December 11). Retrieved June 23, 2017, from <https://www.yourarticlelibrary.com/planning/8-basic-principles-of-city-planning-445-words/4694/>

Ten urban planning principles every humanitarian should know. (2015, December 03). Retrieved June 23, 2017, from <https://www.iiied.org/ten-urban-planning-principles-every-humanitarian-should-know>

Fainstein, S. S. (2016, May 12). Urban planning. Retrieved June 23, 2017, from <https://www.britannica.com/topic/urban-planning>

<https://en.wikipedia.org/wiki/Bandixon>

<https://www.slideshare.net/ShrikantKatedeshmukh/architecture-and-town-planning-unit-3spputown-planning-and-various-levels-of-planning-by-s-r-kate>.