INTERNATIONAL THERAPEUTIC AND DIAGNOSTIC COMPLEX BULGARIA



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International medical and diagnostic complex>

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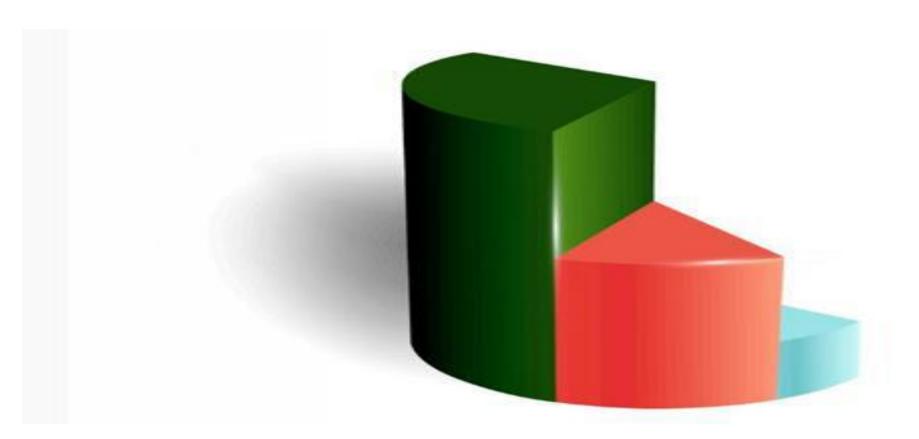
Residential building > PERSPECTIVE

Center for Medical Rehabilitation, Restorative and Sports Medicine in the Bulgaria part of the project "International Medical and Diagnostic Center"

38.4% of the total residential area

12% of the total medical area

7% of the area of engineering networks and structures



Preliminary data

According to the project of creating an International Medical Diagnostic Complex in the territory of the Bulgaria, a center for medical rehabilitation, restorative and sports medicine, with the support of the Administration of the Bulgaria and the Bulgaria Ministry of Health.

1. Object status.

It is assumed that the International Medical and Diagnostic Complex will have the status of a separate legal entity.

person and be located on a dedicated plot of land owned by the Center for Medical Rehabilitation, Restorative and Sports Medicine (hereinafter referred to as the Center).

2. The area of construction.

The Bulgaria, the territory of participation is 51 hectares, on which hospital buildings with 600 beds will be located, in which treatment and rehabilitation of patients is carried out.

The necessary infrastructure must exist on the territory: electricity, gas, water, sewerage, heating network.

3. Characteristics of the object.

Number of beds - 600

Total area - 45000 m2 Floors - 3 - 7

Floor height - 3.0 - 3.5 m

The Customer-Builder is a newly formed company of a center for medical rehabilitation, restorative and sports medicine.

4. General economic indicators. Expenditure part.

The cost of creating the **International Diagnostic and Treatment Complex** on a turnkey basis is 140.0 million Euros, of which:

Design 5.0 million EUR

Construction 50.0 million EUR

Equipment 40.0 million EUR

Construction of the Church and school 15.0 million Euro

Temple on the territory of Serbia 15.0 million Euro

Church in Estonia 15.0 million EUR

Pre-project preparation for the construction of the Bulgaria medical complex

The customer provides for a specialized department for the design of a medical institution initial permit documentation and medical and technological task.

To prepare for the construction of a hospital, an urban planning justification for the placement of a new construction facility is required.

It is also necessary to initially determine the future possibility of reconstructing an object on a given site, taking into account environmental, sanitary, socio-economic requirements, as well as historical and architectural requirements.

A medical-technological task is a necessary and mandatory documentation for a hospital project.

The medical and technological task should include the entire main list of the Customer's requirements for medical technology and architectural solutions.

For those who cannot formulate an exact medical and technological task, it is enough to indicate their general requirements, starting from the number of visits, the number of places, the necessary units and offices, and the general functional orientation.

Based on the medical and technological task, a state examination of the hospital project is carried out.

Specialized department for the design of medical institutions of an engineering company draws up the necessary medical and technological task, which takes into account the requirements of the regulatory document.

Development of medical and technological section of project documentation

With the help of medical and technological tasks, all the necessary nuances are taken into account and prescribed:

*The number of storeys of the hospital, the location of stairwells, the number of elevators, the planning of evacuation routes for staff and customers are set.

Zoning of all divisions and territories should be carried out taking into account fire safety requirements.

* Rationally and justifiably arrange diagnostic and treatment units, administrative, economic and support services.

The necessary zoning of the hospital territory is also indicated.

Be sure to take into account the requirements of the regulatory document, the distance between the buildings.

*Regulatory documents also necessarily indicate the routes for the movement of staff and visitors, the removal of garbage and waste.

*A complete list of the necessary equipment and furniture for the hospital for each office in accordance with the specialization is also indicated. The equipment for the hospital is selected taking into account the financial possibilities and the characteristics of the hospital specification. It is also necessary to take into account the possible future modernization of equipment for the hospital. In addition, you must opt for equipment with a common interface. For equipment and furniture, an appropriate layout in the room is proposed.

After drawing up the layout of furniture and equipment, a technical task is drawn up for our designers.

Designers calculate the amount of engineering resource: power supply, water supply, ventilation, sewerage and air conditioning.

After compiling the medical and technological task, a full-fledged hospital project is developed and drawn up. Then the installation of machinery and equipment, commissioning begins. After installation, the installation and commissioning phase begins.

Existing situation.

Town-planning use of land placement of the object.

Basic information about the construction object.

The international diagnostic and treatment complex will be located on the territory of Bulgaria.

The area of the enclosed development of the Center is determined based on the recommendation of the Bulgaria Ministry of Health.

The land plot planned for the construction of the Center, with an area of 51 hectares, should be located near technological communications and be provided with good transport accessibility.

Favourable environmental conditions are largely due to the requirements of the Center for Diagnostic and Treatment Complex.

The Center for Restorative Technologies of the International Diagnostic and Treatment Complex in Estonia will located at the address: Narva, Estonia.

The Center for Restorative Technologies of the International Medical and Diagnostic Complex in Bulgaria will be located at the address: Velingrad, Bulgaria.

The creation of the International Medical and Diagnostic Complex will allow the introduction of new methods and technologies of medical rehabilitation, restorative and sports medicine, aftercare, prevention and rehabilitation, through the complex use of drug and non-drug therapy (physiotherapy, physiotherapy, massage, therapeutic and preventive nutrition, manual therapy, osteopathy and kinesitherapy, psychotherapy, reflexology, other technologies, as well as methods of traditional medicine).

The total amount of investment for the implementation of the International Diagnostic and Treatment Complex project is approximately 140 million euros.

Land plot: ~51 ha Bulgaria

Building area: ~7.25 ha

Number of objects: 7 buildings No. 1 - No. 7

Construction volume: ~45,000 sq.m.

Usable area: ~41,000 sq.m.

Floors: ~3-7 floors

Floor height: 3.0 - 3.5 m.

Objects of infrastructural environment: ~27 objects Foreign complexes: - two complexes (Estonia, Serbia)

Project development time: ~24-36 months.

Client-developer: a newly formed company of a center for medical rehabilitation, restorative and sports medicine.

Investor - determined with the assistance of the World Sovereign Bank of Order of Hospitallers.

The project implementation period is 2023-2026.

The concept of rehabilitation of patients with CCC pathology (cardiopathology)

The Center provides rehabilitation for coronary heart disease.

The cardio-rehabilitation program is provided for patients who have had a myocardial infarction, patients suffering from angina pectoris, heart failure, after interventions on the coronary arteries - coronary angioplasty, coronary artery bypass grafting (CABG) and some others.

Cardio-rehabilitation is also possible with less severe diseases: arterial hypertension, obesity and hyperlipidemia.

Structure of the Center for 250 beds

- 1. Reception department
- 2. Therapeutic department No. 1 for 30 beds (in addition, the department includes 10 intensive care beds)
- 3. Department No. 2 for 30 beds
- 4. Department No. 3 for 30 beds
- 5. Department No. 4 for 30 beds
- 6. Department No. 5 for 30 beds
- 7. Department No. 6 for 30 beds
- 8. Department No. 7 for 30 beds
- 9. Department No. 8 for 30 beds
- 10. Clinical diagnostic laboratory
- 11. Department of functional diagnostics

The composition of the bed fund:

- wards for 1 bed 20%
- rooms for 2 beds 20%
- wards for 3 beds 60%

Reference Information:

The area (calculated) for placement of beds in one department for 30 beds will be about 500 sq.m.

250 beds will require a total area of 8000 sq.m.

Center for Modern Surgical Technologies

Leading specialists of the clinic: a surgeon, a neurologist, a cardiac surgeon, a dermatologist, conduct a consultative receiving and providing medical care for diseases:

intervertebral (intervertebral) disc herniation arthrosis and arthritis (including psoriatic) lymphostasis (primary and secondary) of the lower extremities damage to the main arteries of the lower extremities chronic venous insufficiency varicose veins, trophic ulcers, post-thrombophlebitis syndrome, obliterating atherosclerosis of the arteries of the lower extremities, burns (stage I-III), coronary artery disease, including angina pectoris and acute myocardial infarction; stroke, cardiac arrhythmia, vertebrobasilar insufficiency, trigeminal and facial neuralgia, consequences of traumatic brain injury, headaches of various origins tension headache, headache after traumatic brain injury, headache in vascular disorders, headache due to myofascial syndromes, cluster pain, post-stroke conditions, spinal cord infarction, plexopathy, dermatological diseases

Center for Prosthetics

Center for ocular prosthetics

For a huge number of people, a high-quality prosthetic eye is a return ticket to a normal, active life.

After all, professionally performed eye prosthetics allows a person to feel like a full-fledged member of society and not catch the sympathetic looks of others.

<u>Limb Prosthetics Center</u>

Prosthetics and orthotics are a real opportunity to return to an active life, to feel like a needed, strong and independent person.

To restore a mobile lifestyle of a patient with disabilities, it is necessary:

- optimal preparation for prosthetics;
- manufacturing of an individual exoprosthesis (comfortable and safe);
- training in the use of the prosthesis.

Center for aesthetic treatment and dental prosthetics

The main objectives of the dental department is to provide all types of therapeutic, orthopedic, aesthetic and surgical dental care to the population with diseases of the oral cavity.

The list of services to the population will include:

hygiene and prevention, teeth whitening, endodontics, periodontology, implantology, orthodontics, gnatology, digital X-ray diagnostics and dental prosthetics.

The department will be equipped with its own dental laboratory.

Ophthalmology Center

General description of services

Pediatric ophthalmology Laser vision correction Cataract surgery Laser eye surgery

Treatment of retinal dystrophy (Lucentis) Blepharoplasty + Aesthetic ophthalmology Vision diagnostics + eye tomography Vitreoretinal surgery

Equipment for high-precision diagnostics and safe surgery eyes:

- Latest generation excimer laser for vision correction
- Advanced surgical system for cataract treatment
- Diagnostic equipment for the most complete eye examination

Center for Physiotherapy and Treatments

Massage

- Medical massage
 - Salt cave
 - Mud baths
 - Hydrotherapy
 - Therma
- Departments of apparatus physiotherapy and massage.

Department of Physiotherapy and Physiotherapy:

Magnetotherapy, laser therapy, cryotherapy, lymphatic drainage,

inductothermy, electrotherapy, oscillatory therapy of edema, pain, blood vessels.

Halls of kinesitherapy

Halls of physical activity and ergometry.

Controlled halocomplex as part of the physiotherapy department.

- List of special technological equipment:
 - 1. Hardware and software complexes for treatment and diagnostics
 - 2. Neurorehabilitation rooms
 - 3. Halls of kinesitherapy
 - 4. Special wards with daily monitoring of rehabilitation patients
 - 5. Water clinics

- 6. Physical cardiorespiratory training on strength and cyclic simulators with continuous automatic monitoring of the state of the body.
- 7. Interval hypoxic training (mountain air) to improve blood circulation and ventilation of the lungs, vascular training.
- 8. Salt "caves" with a wide range of local and general therapeutic effects: anti-inflammatory, antiallergic, immunomodulatory, psychorelaxation.
- 9. Halotherapy (salt therapy) a salt room with a dosed supply of dry fine aerosol of sodium chloride and maintained microclimate parameters (temperature, humidity, pressure, air aerosol composition)
- 10. Speleotherapy (cave therapy) a room made of the natural mineral sylvinite, mined from a depth of 200-300 meters in the salt deposits of the ancient Permian Sea, creating a unique microclimate close to the conditions of natural caves of the Upper Kama potash deposits.

The air in such a room is called "living".

- 11. Various methods of oxygen therapy and inhalation therapy with reactive oxygen species (singlet, ozone).
- 12. A complex of intravenous anti-inflammatory, immunomodulatory, antioxidant effects is carried out in the treatment room.
- 13. Enhanced external counter pulsation (EECP) is a method of vascular and heart rehabilitation, treatment of coronary heart disease (CHD).

Center for Disease Prevention and Psychological Relief

Health is a state when the body works as efficiently as possible with the least expenditure of energy. When exchange processes openly and freely occur between the cell and the surrounding space, vital processes take place in the cell. This state in biology is called a stable non-equilibrium state. In other words, an open and free system, in which exchange processes freely proceed, is stable.

That is, the state of health is a stable state.

The body receives energy in three ways: the main one is the energy of thoughts, the second most important is the energy of breathing, the third is the energy of nutrition. When a person thinks negatively, he loses energy and puts stress on the body - he goes out of a stable state of health. When a person breathes incorrectly, then the movement of nutrients is disrupted and all body systems are stressed.

When a person does not eat properly, digestion and the supply of nutrients are disturbed, self-poisoning occurs with undigested foods.

Thus, only you yourself can come to recovery, relying on internal resources - Love, Joy, Harmony ... resources that are limitless, and hence your possibilities.

Suggested technologies:

Osteopathy is an amazing science.

A simple level of work is aimed at eliminating clamps, blocks and tensions to restore the patency of blood vessels and nerves - this will ensure normal metabolic processes and restoration of health.

A more complex level of work is associated with the harmonization of body systems up to harmonization with the outside world - this work is associated with the personality of a doctor who is able to accompany you on this difficult path.

- Traditional Chinese Medicine An ancient science that considers a person inseparably from the outside world in terms of energy exchange. Efficiency of work is connected with knowledge of the philosophy of Chinese medicine and the doctor's ability to feel the movement of energy in the body.
- Biological decoding of diseases a science that studies the effect of stress on the physiology of the body, methods for finding starting stresses and the moment of loss of connection with internal resources, establishing this connection again. The disease begins at a specific moment of stress, it is important to find it and reconnect with internal resources.
- FORMTOTIKS (FORMTHOTICS) is a technology for manufacturing individual insoles from special blanks. There are many receptors on our feet that regulate the stable position of the body and the functioning of internal organs through the nervous system.
- Only individual insoles can give correct information. The systems of the body react so powerfully to the restoration of body balance that when placed on insoles, braces on the teeth can be detached.
- Therapeutic exercises the doctor teaches what you can do on your own to recover faster. If necessary, all types of massage are added.
- Yoga a combination of physical exercises, breathing practices and meditation to understand your inner essence.

Center for Recovery Technologies

- Gynecology,
- Urology, pediatric urology,
- Proctology,
- Cardiology,
- Immunology,
- Oncology, mammology, surgery
- Endocrinology,
- Medical laboratory,
- Pediatrics,
- Vascular surgery,
- Neurology, pediatric neurology,
- Plastic surgery,
- Cosmetology,
- Dermatovenereology,
- Anesthesiology,
- Hematology

The architectural concept of the Bulgarian center of the complex

The construction project of the Bulgarian part of the project "International Medical and Diagnostic Center" is being developed in accordance with the rules and regulations of the Bulgarian using innovative technological solutions based on world experience in the design and construction of similar facilities.

The historical, landscape and urban features of the land plot and its built-up part will be identified and taken into account in order to create its own architectural image, at the same time strictly meeting the requirements for buildings and structures of this type, in accordance with the approved medical and technical program.

All divisions of the medical center will have functional technological connections.

The concept of this center involves the construction of 3-7 storey buildings, which will house the main rooms connected by passages:

- -Day hospital and the Main building, consisting of 7 buildings, combined into a single ensemble rehabilitation and health, administrative, scientific and educational, infrastructure facilities with an estimated total area of 45,000 square meters;
 - Consultative and polyclinic building for 3,000 sq. m;
 - Hospital for 120 beds with an area of about 4,000 sq. m.

In addition, it is planned to build and equip underground and surface parking lots, as well as additional improvement of the entire territory.

The infrastructure of the center includes the construction of a Church for 500 parishioners with a farmstead, a hotel and a training center for the training of sisters of mercy, pharmacists, packers, trade managers, cooks and hotel workers.

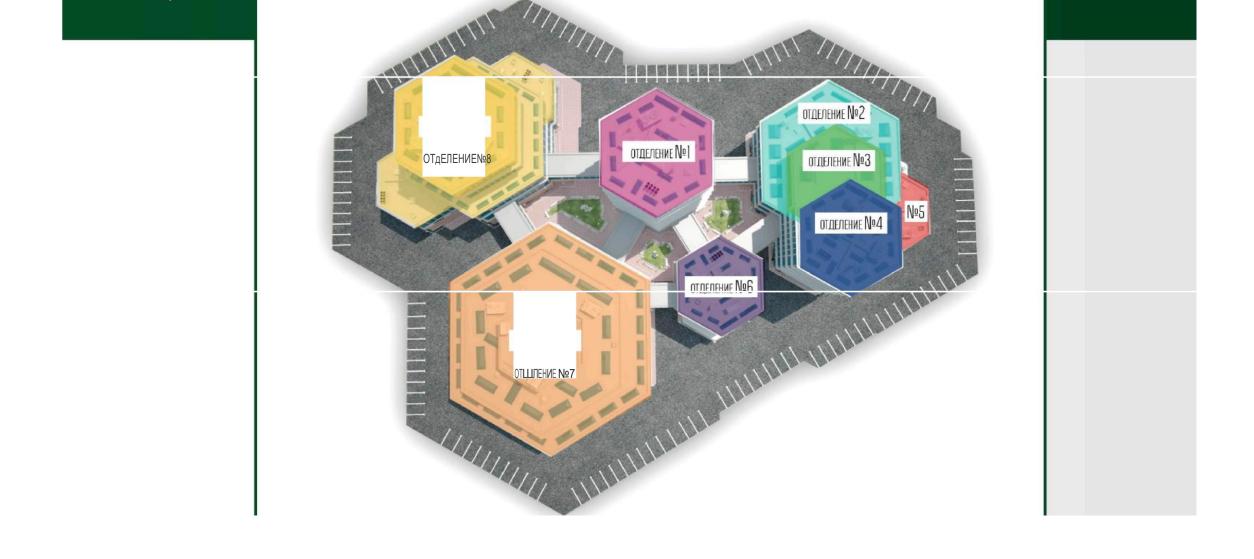
The construction of a gas generating power plant and the construction of an integrated greenhouse facility are envisaged.

On the territories adjacent to the complex, it is planned to build a SPA center and a shopping and entertainment center.

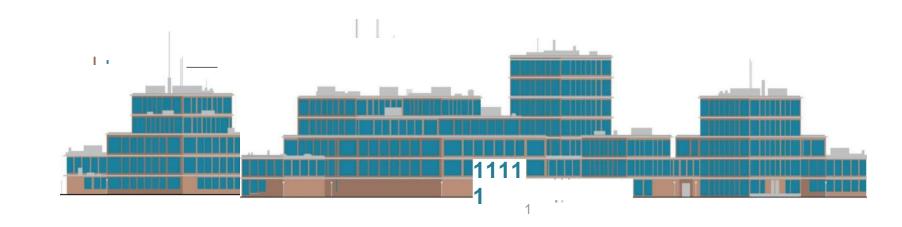
The construction plan includes the construction of two multi-storey buildings and the construction of family cottages.

It is also planned to improve the park area and the arrangement of an underground source.

The number of storeys of constructed buildings (3-7 floors) will not be negative for the overall architectural landscape and visual perception.



The layout of departments in the complex of the medical center

















Projected power unit for uninterrupted power supply of the medical center



Thank you for attention!

The initiator of the project is KLM Agency BG Est Ltd. Bulgaria

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