# 

# VOLUME 3

# TECHNICAL SPECIFICATIONS

**“SMALL SCALE CONSTRUCTIONS FOR THE NEEDS OF MUNICIPALITY OF BOTEVGRAD UNDER PROJECT CB007.2.11.224”,**

**LOT 2: EXTERIOR PROMOTING CENTER IN BOTEVGRAD UNDER PROJECT CB007.2.11.224**

Botevgrad Promotion Center has an information and communication function. It unites and focuses the activities of experts in the fields of culture, tourism and municipal media on the creation and development of a concept and real presentation to the world of the identity and attractiveness of the municipality of Botevgrad. The purpose of the promotional center is to provide an environment for communication between the various cultural and information cores on the territory of the municipality.

1. **Aim of the project**

The overall goal proposed by the Heterotopias project is to provide both a mechanism and an environment for communication between the various cultural and information cores in the municipality of Botevgrad, included in cross-border networks for interaction and promotion of the Botevgrad brand in the common European cultural and information space.

1. **Means of the project**

**2.1. Architectural part**

The purpose of the construction and technical project is to provide the material basis for joint work of the Promotion Center and the Heterotopias Project by forming the exterior and technological equipment of the atrium space and the premises of the Promotion Center, thus creating conditions for long-term and sustainable work, increasing the tourist attractiveness of Botevgrad municipality.

To achieve the goal of the project it is necessary to perform the following works:

**A. On the premises of the promotion center**

1. For the premises of the telepresence center - to deliver, install, install, wiring, network, test and put into operation the package of technological equipment - display, amplifiers, audio mixers, etc., including processors, screen configuration software, connectors, cables to full rigging;

2. For the space for contemporary art - to be delivered, installed, installed, wired, networked, tested and put into operation LED video screens for indoor conditions with 2.5 interpixel distance with their respective processors, hardware and configuration software of screens, connectors, cables to full rigging;

3. For the space of the tourist guide-center - to be delivered, installed, installed, wired, connected in a network, tested and put into operation LED video screens for internal conditions with 2.5 interpixel distance with their respective processors, hardware and software for configuration of screens, connectors, cables to full rigging of the set=

***NOTICE: THE ACTIVITIES UNDER POINT A ARE SUBJECT OF ANOTHER CONTRACT AND SHALL NOT BE EXECUTED BY THE CHOSEN CONTRACTOR.***

**B. In the atrium /courtyard/ of the promotion center**

4. To free the interior of the atrium from existing non-functioning elements accumulated over the years - visor, metal security grille, outdoor air conditioners, non-functioning lighting fixtures in the passage, defective gutters and cisterns, defective cladding and flooring, etc.

5. To repair the roof of the garage, representing the floor of the Atrium by performing all necessary construction and installation works for waterproofing, drainage of rainwater and installation of new pavement of Siberian larch decking by making long-term protection /minimum 10 years/ from fires, insects and atmospheric conditions in accordance with the provisions of the design and estimate documentation;

6. To carry out the cleaning, construction-assembly and finishing works on the walls of the atrium indicated in the project documentation and the quantity-value accounts for bringing them in a usable form for the needs of the project;

7. To make delivery, installation, samples and commissioning of the module with lighting networks and of all lighting fixtures for the atrium provided in the project;

8. To be delivered, installed and strengthened to the fencing elements of the building, to be connected to the building electrical and plumbing installations, wired, connected in a network, tested and put into operation the installation wall with built-in panels vertical landscaping with the irrigation system to them , as well as a vertical LED video screen for outdoor conditions with 6 mm interpixel distance with its respective processors, hardware and software for screen configuration, software for multimedia broadcasting, interactivity system, connectors, cables, etc .;

9. To install the side desktop with laptop and GSM chargers;

10. To install plumbing and electrical installations leading out of the building to connect the installation wall with built-in elements, power supply to the countertop with chargers for laptops and mobile devices, atrium lighting, passage, reception area in front of the atrium and library entrance , as well as the reception space from the square in the area of the interactive CIOSC.

***NOTICE: THE ACTIVITIES UNDER POINT B, SUB-POINT 8 “VERTICAL LED VIDEO SCREEN WITH ITS RESPECTIVE PROCESSORS, HARDWARE AND SOFTWARE FOR SCREEN CONFIGURATION, SOFTWARE FOR MULTIMEDIA BROADCASTING, INTERACTIVITY SYSTEM, CONNECTORS, CABLES” AND SUB-POINT 9 ARE SUBJECT OF ANOTHER CONTRACT AND SHALL NOT BE EXECUTED BY THE CHOSEN CONTRACTOR.***

**C. Outside the atrium / courtyard / of the promotion center**

11. To carry out all construction and installation works for repair of pavements and curbs, construction of ramps for people with disabilities in the area from the Atrium to the space between the buildings of the municipal administration and the community center;

12. To present the project on a metal frame structure with information in front of the entrances of the atrium and the city library by making delivery and installation;

13. To create a sign system of modules with lighting networks in front of the entrances of the atrium and the city library, as well as in the space of the existing reinforced concrete pergola between the buildings of the municipal administration and the community center by delivery, installation, testing and commissioning;

14. To activate an interactive CIOSC /computer information operating system for communication/ for outdoor installation with specification characteristics by performing the necessary work on delivery, assembly, foundation, installation, binding, testing and commissioning of hardware and software;

15. To make delivery, foundation and installation of park and garden equipment - stone benches and stone bicycle stands in front of the entrances of the Atrium and the library, as well as under the pergola between the buildings of the municipal administration and the community center.

**2.2. Constructive part**

The project under part Constructive is developed on the grounds of architectural project and treats the foundation of CISOC

The foundation is developed with dimensions of 75/40 cm with depth of 60 cm. It’s reinforced with longitudinal and transverse reinforcement of N8. In the foundation a CISOC will be anchored under the specification of the manufacturer.

The earthly foundation and the fulfillment of the foundations to be accepted. Also the formwork and reinforcement to be accepted before concreting.

**2.3. Electrical part**

The design envisages exterior lighting of the inner courtyard, around the library and next to the municipality, as well as power supply of special facilities for the activities of the center.

The switchboard for the center is powered by the main switchboard /there are free terminals/. This switchboard is mounted on a column in the tourist center and is powered by cable CBT 5x6mm2 from the main switchboard. The power cable and part of the output cables to the CISOC pass through the basement.

The required power for the promotional center is 9kW.

All electrical equipment is for outdoor installation - lighting fixtures, cables, contacts, sockets.

Most of the cables are laid on existing cornices, walls and columns.

The excavation for the cables to the CISOC should be done by hand, due to the existing underground communications. The cables are to be pulled into a pipe with the necessary shafts.

For exterior lighting, several types of lighting fixtures with LED luminaires will be installed - luminaires mounted in the flooring, on profiles on the cornices and on the wall.

The luminaires are asymmetrical, symmetrical and LED lighting networks.

In the inner courtyard it is planned to install power contacts and sockets RJ 45 for use by visitors. Power supply is envisaged for the installation wall in the yard.

The sizing of the power cables is made according to the load, taking into account the probability of simultaneous operation and the existing street lighting, and according to the existing Design Standards. The cable cross-sections are checked for permissible voltage loss.

All power cables have three and five cores.

**2.4. Other instalments**

**A. Pergola**

L 1500s m, B 35 cm, H 4 35 cm, RK aluminum truss 6082-T6; Certified finished product - with certificate and CE, TUV, ISO9001; Assembly of ready-made elements of bolted connection base of the element square 35/35 cm; 50 mm outer diameter main pipe; 30 mm diagonal fixation; 3 mm wall thickness

Mandatory! Measure out of place

**B. Decking**

Courtyard area 227.50 m2; L 64 m edging = 16 x 4 m; L 676 m grill = 169 pcs. x 4 m; L 1632 m decking = 408 pcs. x 4 m; mounting elements for installation of wood on steel and wood on wood - stainless steel, powder coated, fitting with hidden heads of screws - of mounting system decking; timber first category; according to Bulgarian Strandards S427, FSC/PEFC certified, maximum humidity 12%; solid corrugated wood - Siberian larch, specific weight 850-870 kg/m3, including double underlayment prefabricated wooden grille of impregnated smooth profile 60/60 mm and fasteners /1 m2 decking is installed with 3.5 l.m grill of underlay profile and 22 screws/, protective double-sided impregnation for exterior installation of the decking for preventive long-term protection from weathering, insects , fire and polyurethane coating for the base grill

**C. System vertical landscaping**

Vertical landscaping system; The weight of the system is 70-80 kg/m2; Area of the system S 47 m2, of which system installation on an existing wall - S 27 m2 on an installation wall S 20 m2 area on a solid wall; Plastic modules, dense installation; metal profile for installation, drip irrigation hose for 47 m2; Automated irrigation system - programmer, valve, filter, etc. with water supply provided existing water supply network: - supply with water - From an existing outlet of a building water supply system in the courtyard - drainage system - in building sewerage in ext . yard; Plants 80 pcs/m2 Lonicera nitida, Heuchera (two or three flowers) and succulent vegetation.

The plants should be grown in the modules of the system from cuttings or seedlings, minimal care of the plants in the modules before installation 2-3 weeks.

Technological peat substrate 4 m3

**D. Concrete Bicycle Stand**

L 100 cm, B 55 cm, H 26 cm, high-strength reinforced fiber concrete and natural mosaic; Surface treatment - customs mosaic, white, UV and waterproofing varnish built-in metal rings made of stainless steel

A working design project is an integral part of the technical specification and should be fully considered. Wherever the technical specification and the working design include brands and types the tenderers should consider that they can offer any equivalent material/item.