### **REPUBLIC OF CROATIA**

### **Ministry of Justice**

## JUSTICE SECTOR SUPPORT PROJECT (JSSP) IBRD Loan no.: 7888-HR

### **Terms of Reference**

### **Consulting Assignment No. CS16**

Title:

# Services of Expert and Financial Supervision during the "Renovation and adaptation of the ex military base "Istarskih Brigada" for the need of the County State Attorney's Office, Municipal State Attorney's Office and Land Register Department of the Municipal Court in Pula" (contract ref. no. JSSP – CW4)

#### I Background

The Republic of Croatia has received a Loan from the International Bank for Reconstruction and Development (IBRD) towards the Justice Sector Support Project (JSSP). The JSSP is intended to be a key vehicle for a multi-year program to modernize the judiciary and prosecutors' offices in the Republic of Croatia. The over-arching goal of the JSSP is to strengthen the efficiency of the justice sector and support the efforts of the Croatian authorities towards EU integration on the justice and home affairs issues. The JSSP will be implemented by the Ministry of Justice (MOJ) of the Republic of Croatia.

Within the JSSP Project the Ministry of Justice intends to improve housing conditions of several judicial bodies through financing the reconstruction and/or extension of several judicial buildings. According to the Physical Planning and Building Act (Official Gazette 76/07; 38/09) and Act on Architectural and Engineering Activities in Physical Planning and Building (Official Gazette 152/08) such works must be supervised by certified expert supervisors.

The Ministry of Justice intends to use a portion of the Loan proceeds to finance the services of Expert Supervision of the "Renovation and Adaptation of the ex military base "Istarske Brigade" building for the needs of the County State Attorney's Office, Municipal State Attorney's Office and Land Register Department of the Municipal Court in Pula.

#### II Objectives

The objectives of the assignment are to:

a) conduct an expert and financial supervision of civil works on renovation and adaptation of the ex military base "Istarske Brigade" building for the needs of the County State Attorney's Office, Municipal State Attorney's Office and Land Register Department of the Municipal Court in Pula.

The objective includes, but is not limited to the supervision of the following works:

- construction and skilled works;
- statics;
- water/sewage/plumbing installations
- electrical installations
- engineering installations (gas, heating, cooling, fire protection, elevator)
- other tasks envisaged by the design.

b) monitoring and control of the works performed, in accordance with the Contract, project documentation, technical descriptions and general conditions, all in accordance with applicable legislation, regulation, norms and professional standards;

c) conduct the overall time, quality and cost controll with the purpose of achieving optimal quality and cost of the works.

d) implementation of the Environmental Management Plan.

Specific responsibilities also include, but are not limited to those listed below.

#### **III** Tasks and Responsibilities

The Supervising Engineer (hereinafter "the Consultant") will:

- (i) Supervise construction so that it is in accordance with the construction permits and approvals, designs, applicable legislation, special regulations, standards and norms;
- (ii) Organize and lead the site possession, determine if all legal preconditions for commencement of works have been fulfilled and verify that fact in the construction log;
- (iii) Determine if the Contractor has met all legal and contractual preconditions for commencement of works;
- (iv) Monitor and control the works in accordance with the dynamic plan (the Program). Determine Contractor's delays in case of exceeding agreed deadlines;
- (v) Controll all site documentation in accordance with applicable legislation and in consultations with the Employer.
- (vi) Amend the plans, after advising with Project Manager, in the construction design in case of minor aberrations, in consultations with Employer;
- (vii) Perform daily technical and personal supervision at the construction site;
- (viii) Inform the Project Manager and other relevant Employer's personnel of all problems, deficiencies and irregularities during the works, as well as warn them of any deficiencies in technical documentation;
- (ix) Coordinate works in accordance with adopted Program of works and issue all necessary instructions to Contractor;

- (x) Monitor and control all costs, revise costs in accordance with relevant Contract provisions, determine and approve quantities and quality of executed works, as well as of material and equipment used/installed;
- (xi) Determine all necessary testings;
- (xii) Maintain and update efficient tracking system and filing system of all relevant information needed for cost, time and quality control, and overall contract management;
- (xiii) Assist the Employer's Project Manager in all aspects of his/her work including, but not limited to: reporting; cost, time, and quality control; analysis and approving of variations; analysis and approving of unforeseen/additional works; certifying payments; dispute resolution; other contract management issues; and perform other activities that Project Manager might reasonably request;
- (xiv) The Consultant shall pay special attention to any and all unforeseen and/or additional works that deviate from Contract or Bills of Quantity prior consent of the Employer's Project Manager shall be requested.
- (xv) Identify defects and supervise correction of defects;
- (xvi) Participate in Management Meetings;
- (xvii) Prepare all periodic reports to Employer on all construction issues and developments (including photo and video documentation);
- (xviii) Prepare the Supervising Engineer's Final Report for the technical inspection of the building, including, but not limited to: the summary of the course of works, explanation of excess/deficiency of unforeseen works, description of applied methods and technologies if different than contracted ones, proofs of quality of executed works.
- (xix) Conduct all technical and professional preparation for and participate in the final calculation and Completion of works.
- (xx) Conduct all technical and professional preparation for and participate in the final takeover of the building;
- (xxi) Perform all activities necessary during the Defect Liabilty Period.
- (xxii) Supervise implementation of the Environmental Management Plan and report results in the periodic reports on implementation of the same.

## **IV** Technical Description of the works to be supervised

### 1) Technical Description

The subject of this assignment is the Reconstruction of the Former Military Base "Istarske Brigade" building for the needs of the County State Attorney's Office, Municipal State Attorney's Office and Land Registry Department of the Municipal Court in Pula.

The site is located in Rovinjska street 2a, particle no. 978/2, Pula.

According to the land registry survey of the Department of Pula, particle no. is 978/2. According to the new survey, the particle no. is 5957/2, but is not formal yet.

Concept design is in accordance with terms in General Urbanistic Plan of the City of Pula.

The location of the construction site, according to the provisions from General Urbanistic Plan of the City of Pula, is specified by:

- Purpose of the building, mark D1 (paragraph 1.7);
- Conditions and Building methods zone G, stand-alone building and complexes of large dimensions (paragraph 6.2.);
- Terms of Use Protection proposal (paragraph 9.2)

In the planned protection measures the General Urbanistic Plan does not require development of the DPU (Detailed Arrangement Plan) for the area of intervention (paragraph 12.0.5)

## 2) Shape and Size of Construction Site

Construction site is located in the centre of Pula, district Monte Zaro. It is above Arsenal (the shipyard "Uljanik"), across the Arsenal street (south-east).

The public traffic surface from the north is through Rovinjska street (connected to Arsenal street). On the south the particle borders with Gajeva street (also a public traffic surface).

From north-east and south-west the particle neighbors with the constructed parts of the town:

- NE side residential (mark S)
- SW side public (mark D)

The construction site is rectangular in shape, extended to NW-SE. Width of the site is 65 meters. Length of the particle is 149 meters. Part of the site planned for County State Attorney's Office, Municipal State Attorney's Office and Land Registry Department of the Municipal Court is on the NW side and 58 meter length. The wall departs it from the other part of the particle.

The surface of the whole particle is 10115 square meters, and the part of the former military base planned for adaptation and renovation is 3787 square meters.

## 3) Manner of Construction

General Urbanistic Plan of the City of Pula determines the conditions and the manner of construction in particular zones of the city. The building of the former military base, according to the town-planning morphology, is in zone G – stand-alone buildings and building complexes of large dimensions.

The graphic illustration "Manner of Construction" determines the marks of the zone (numeric marks from 1 to 122). In the regulations for pursuing is the table of the site terms and manner of construction according to the site location in the proposed zones. The building planed for reconstruction is in zone no. 100 determined by:

- minimum construction surface: 400 square meters,
- maximum construction surface: 5000 square meters,
- maximum construction coefficient: 0.70,
- height: 15 meters.

### 4) The Purpose of the Building

The building in Rovinjska street 2a used to be military base "Istarskih Brigada", now abandoned. After reconstruction the building will retain its administrative purpose, office

space for the County State Attorney's Office, Municipal State Attorney's Office and Land Registry Department of the Municipal Court.

According to the General Urbanistic Planing of the City of Pula, the building is located in D1 zone, within the area for implementation of administrative purposes (Enforcement Provisions, paragraph 1.7).

### 5) Current State

The building has two floors, ground floor and first floor, rectangular in shape (dimensions approximately  $38 \times 90$  m) with an internal courtyard. The roof is double sided. The height of the building elevation to the ground:

a) limit of the roof is at 7.8 m

b) top of the ridge is at 11.76 m.

Construction line (towards Rovinjska street) is located 7 m from the public traffic surface. From the neighboring particles of the urban area the building is 20 m away (SW particle) and 7 m (NE particle). The building is separated with a wall from the SE part of the particle that is not predicted for the needs of the County State Attorney's Office, the Municipal State Attorney's Office and the Land Registry Department of the Municipal Court.

#### Surface size

Constructed buildin Gross area Yard size	ng area (vertical projection of the building)	1315 square meters 2554 square meters 465 square meters
Coefficient of construction (part of the particle for adaptation and renovation)		1315 /3787=0.34
Coefficient of utilization (part of the particle for adaptation and renovation)		2554/3787=0.67

#### 6) New State

Due to the specific purpose of the building, and legal obligation to keep court cases in archive over a period of 30 years and the land registry documents collection permanently, it was necessary to reorganize the back yard – the storage of the existing building and eaves are joined with the ground floor space for the archive. Also, next to the stairs (in the south yard) an elevator is added to ensure accessibility to the building for disabled persons and persons with reduced mobility.

#### Surface size

Constructed Building Are Gross area Yard size	a (vertical projection of the building)		<ul><li>1491 square meters</li><li>2775 square meters</li><li>438 square meters</li></ul>
Coefficient of construction	on (part of the particle for adaptation and	d renovation)	1491 /3787=0.39
	part of the particle for adaptation and re	enovation)	2//5/3/8/=0./3

	2093,90
Total Nett Area (ground floor + 1. floor)	square
	meters

## 7) Arrangement of the Construction Site

From the north the parcel is surrounded by stone walls (entrance from Rovinjska street). The building is separated with the plastered wall from the SE particles.

Parking area (which also serves as a fire access road) and the fire access road located on the opposite side of the building will be asphalted.

Walking paths within the parcel will be paved with stone or concrete environmental texture elements in accordance with the façade of the building.

Green areas around the facility are to be arranged as parks. The central area of the inner courtyard will be grafted with trees.

## 8) Requirements for Unrestricted Access of Persons with Reduced Mobility

Ramp is planned to overcome the height difference of the pedestrian entrance in the building. The ramp slope is 5%, width 130 cm, with a fence with handrails 4 cm in diameter at altitudes of 60 and 90 cm and 30 cm of lengthening in relation to the ramp's deck.

Inside the building the elevator is planned with dimensions  $110 \times 140$  cm, with a gate 100 cm width and handles in the elevator at a height of 90 cm.

Halls width within the building are larger than 150 cm. Doors on halls are widther than 140 cm.

The ground floor is planed for toilets for disabled persons and persons with reduced mobility. There are two parking spaces provided (5% of total parking spaces) to the nearest accessible entrance to the building, size  $370 \times 500$  cm.

## 9) Vehicle Access on the Public Area and Infrastructure

The building has direct access to the road on the north (Rovinjska street). From the south the particle borders Gajeva street from which the driveway is also possible.

## **10)** Stationary Traffic

In accordance with the purpose, number of parking places are determined according to the Decision on the Stationary Traffic ("Official Gazette" City of Pula, 9 / 93), providing one parking lot on 60 square meters of the area for construction. For planed reconstruction the number of parking spaces are required (min. number 35 parking spaces, achieved 44 parking spaces).

Current stationary traffic is not resolved, so there is no parking places on the particle. With reconstruction it is possible to provide 44 parking spaces, located in the SW. Dimensions of parking spaces are 250 x 500 cm.

The solutions for stationary traffic are shown in the graphic illustration 2b "The situation on the geodetic ground (new state)", M 1:200.

## 11) Construction and Building Materials (final work)

The building construction consists of brick walls, approximately 60 cm thick. Constructive wall load is transferred into the soil with concrete foundations.

Partition walls are made of NF-format blocks (d = 15 cm). The walls are plastered and painted.

Walls in sanitary facilities are fitted with ceramic tiles. Also, the construction structure of the ceiling is partly reinforced with "I" profile iron cross girders.

Ceilings are wooden. Rectangular wooden beams bridge the constructive range of 6 m. On the supporting beams a formwork is attached, with the floor final coverings (parquet, tiles). Downside of the ceiling is plastered (final work is painted). The ceiling is approximately 50 cm thick.

The roof is double (slope 37 °). Wooden structures of the attic system is made in the "podrožnica" system with double anchors which transfer the vertical pressure to outside walls, 9,5 m wide.

The roof is covered with salonit plates.

The roof drainage water is drained in tin grooves and discharged on the ground through gutters.

All joinery is wooden, painted with oil paints. Windows are double wing. Individual wings have single-glazed glass. External sills are brass.

Both staircases are three-way, made of reinforced concrete. Staircase railings are made of iron, vertical profiles with wooden handles. Surface of the stairs and podest are laid with sanded "teraco".

Part of the construction on the ground floor was damaged in the fire.

The present construction system of the building will be repaired after a static estimate of wear of constructive elements. Renovation of the roof will be made by putting the reinforced concrete plate (ca 6 cm) over the wooden beams, connected with metal hinges, thus vreating one reinforced, stiff construction.

In this way the bearing wooden structures would not be devastated, and necessary stiffness to transfer loads to the walls will be added.

## 12) Utility Infrastructure and Installations

The building is connected to the city water and sewage system, but it will be necessary to replace the installation of water supply and sanitation. Internal and external hydrant network is planned. The flow of 1 l /sec is envisaged for the purposes of sanitary water. 1.66 l / sec is envisaged for the purposes of internal hydrant system.

High and low power installations, antenna and telephone connections exist in the building. Their replacement is also planned.

Uninterupted power supply, installation of fire detection and video surveillance of the main entrance are also planned.

The power needed to supply the building with electricity is 210 kW.

Installation of heating, cooling, hot water, ventilation and gas installation are planned.

1. Boiler room

a) 1 hot water boiler 300 kW capacity, gas fired

b) vertical boiler for the preparation of hot water 300 l volume, 1000 l / h capacity 45  $^\circ$  C hot water

2. Radiator heating

Hot-water radiator heating with temperature control according to the external temperature, programmable mode

3. Ventilation

Extract ventilation is planned for all sanitary facilities without the possibility of natural ventilation

4. Heating and cooling

For all working areas of the building heating and cooling systems is to be installed – installation of ventilation convectors - 4 pipe systems

5. Installation of natural gas

New connection to the gas network, as well as distribution of measured and nonmeasured part of the gas installation is planned.

## **13)** Fire Protection

Fire protection requirements are provided under the following measures:

• The length of the most distant parts of the building to the staircase does not exceed 50 meters on the ground floor and 30 on the first floor (staircase width is 140 cm);

• Fire approaches and areas for fire truck approach are provided on two longest building sides 5.5 m width;

• Distance for fire trucks from the outer walls of the building is less than 12 m;

• Bearing capacity of the fire approach surfaces for the operation of fire trucks is 100kN/shaft length;

• Operating surfaces are all on the same level, with maximum slope of 10%;

• The building is 11.54 meters high. Last floor height is 3.78 m from the lowest elevation of the ground;

• External and internal hydrant systems are planned.

## 14) Protection of the Cultural Heritage

The former military base building is not included in the Register of Protected Cultural Assets of the Ministry of Culture. However, under the conditions of use of the General Urbanistic Plan, the building has been proposed for protection (Section 9.2). Therefore, the reconstruction shall be carried out in accordance with the Authority of Ministry of Culture.

## **15) Measures for Environmental Protection**

On the plot, by the north roadway area, space for waste/garbage disposal is planned with the adequate number of containers.

Precipitation waters from the parking areas will drain to the sewage system through oil and grease separators (sumps).

Since the plot is not planned for technological processes – it has administrative purpose - there will be no adverse impact on soil, water and air. Also, for the intended purpose, the level of noise in the environment will not increase during building usage.

Environmental Management Plan for this site has been developed and accepted by the Ministry of Justice on December 23, 2009. The Contractor is expected to strictly observe its findings and recommendations.

## V Qualifications and Experience

1. The Consultant shall demonstrate experience in implementing similar assignments, e.g. expert and financial supervision on comparable civil works.

2. The assignment requires interdisciplinary skills and expertise. The Consultant's team shall include professionals covering all skills and relevant experience required to carry out the described tasks. The Consultant's team should possess the following minimum qualifications, experience and skills:

- a. Advanced degree in architecture, civil engineering, mechanical engineering, electrical engineering, or similar relevant discipline;
- b. Consultant' staff must meet the legal requirement of being a certified architect/engineer in accordance with the Physical Planning and Building Act (Official Gazette 76/07; 38/09) and Act on Architectural and Engineering Activities in Physical Planning and Building (Official Gazette 152/08)
- c. Knowledge of the current Croatian legislation and standards in the area of construction, civil engineering, physical planning and environment protection.
- d. Proven relevant experience of at least 5 years and of supervising at least 2 comparable large projects;
- e. Experience in supervising projects financed by international and/or foreign investors (based on FIDIC contract conditions) would be considered as advantage;
- f. The team shall, as a minimum, include the following experts: (i) project leader head supervising engineer (certified architect, civil engineer or similar with experience in supervision of comparable projects); (ii) certified electrical engineer with experience in comparable projects; (iii) certified mechanical engineer with experience in comparable projects;
- g. Ability to work as part of a high-performing and multi-disciplinary team, often operating under tight deadlines and timetables;
- h. Excellent oral and written communication skills in both Croatian and English, including the ability to prepare necessary reports, drawings, calculations, and similar.
- i. Knowledge of the World Bank's Procurement Guidelines, bidding documents and contracts for civil works would be considered an advantage;
- j. Full computer (MS Office and architectural/engineering/design programs) and office automation literacy;

### VI Contract Arrangements

The Consultant will work under a time-based contract.

The assignment shall commence on the day of commencement of subject Works and shall continue till the end of Defects Liability Period and settlement of the Final Account. Estimated total duration is 3 years (1 year for construction, plus 2 years Defect Liability Period).

The assignment will involve daily presence of the Consultant's staff at the construction site until the Completion. During the Defect Liability Period occasional visits to the site may be required to verify the nature of the defects discovered. Working hours for supervision and passing instructions regarding construction and time spent at the construction site should be determined and distributed so that all tasks can be fulfilled diligently and conscientiously. The supervising engineer should inform the Employer and the Contractor about vacation and possible illness on time and without delay, and propose a substitute if the need arises.

### VII Consultant's Reporting Obligations

The Consultant will report to the MoJ Project Manager and JSSP Project/Loan Manager. S/he will closely cooperate with the MoJ PIU, the MoJ Investment Department and the Design studio that created the project designs.

The Consultant shall have the following reporting obligations:

- organization and keeping of the Construction log;
- weekly report on the execution of the Program of works, and, if necessary, special reports in the meantime;
- monthly reports on the works performed, control and approval of Contractor's monthly statements to be certified by the Project Manager, with the list of costs incurred from the commencement of works and the projection of future works for the next three months with estimate of total costs of these works;

- monthly reports on implementation of the Environmental Management Plan.

The reports will be submitted in Croatian in 2 copies.

Two weeks before the end of the assignment, the Consultant will prepare a Final Report, which summarizes the work of the Consultant and sets out details of the future work schedules, if applicable. The report will be prepared in 2 copies in hard copy and CD in Croatian and English languages.