

## FORMULAR INFORMATIV DESPRE OFERTANT

1. Denumirea/numele **Sigma Engineering, S.R.L.**
2. Codul fiscal **1017600028690**
3. Adresa sediului central **mun. Chișinău, str. Alba Iulia 101, ap.55**
4. Telefon **+373 69 665 664**

Fax **N/A**

E-mail **contact@sigma.md**

5. Certificatul de înregistrare **Extras nr. 9498, din 11.06.2019**

(numărul, data înregistrării)  
**I.P. "Agentia servicii publice"**  
(instituția emitentă)

6. Obiectul de activitate, pe domenii **1 Alte activități de tipărire n.c.a. ; 2 Reproducerea înregistrărilor; 3 Fabricarea de construcții metalice și părți componente ale structurilor metalice; 4 Fabricarea de uși și ferestre din metal; 5 Tratarea și acoperirea metalelor; 6 Dezvoltarea (promovarea) imobiliară; 7 Lucrări de construcție a clădirilor rezidențiale și nerezidențiale; 8 Lucrări de construcție a drumurilor și autostrăzilor; 9 Construcția de poduri și tunelori; 10 Lucrări de construcții a proiectelor utilitare pentru fluide; 11 Lucrări de construcție a proiectelor utilitare pentru electricitate și telecomunicații; 12 Construcții hidrotehnice; 13 Lucrări de construcții a altor lucrări ingineresti n.c.a.; 14 Lucrări de demolare a construcțiilor; 15 Lucrări de pregătire a terenului de construcții; 16 Lucrări de instalări electrice; 17 Alte lucrări de instalări pentru construcții; 18 Lucrări de tencuire; 19 Lucrări de tâmplărie și dulgherie; 20 Lucrări de pardoserie și placare a peretilor; 21 Lucrări de vopsitorie, zugrăveli și montări de geamuri; 22 Alte lucrări de finisare; 23 Lucrări de învelitori, sarpante și terase de construcții; 24 Alte lucrări speciale de construcții n.c.a.; 25 Comerț cu ridicata al materialului lemnos și al materialelor de construcție și echipamentelor sanitare; 26 Închirierea și exploatarea bunurilor imobiliare proprii sau închiriate; 27 Administrarea imobililor pe bază de tarife sau contract; 28 Activități de consultanță pentru afaceri și management; 29 Activități de arhitectură; 30 Activități de inginerie și consultanță tehnică legate de acestea; 31 Activități de design specializat; 32 Activități de traducere scrisă și orală (interpreti); 33 Alte activități profesionale, științifice și tehnice n.c.a.; 36 Lucrări de foraj și sondaj pentru construcții; 37 Construcțiile de clădiri și (sau) construcții ingineresti, instalatii și retele tehnico-edilitare, reconstrucțiile, consolidările, restaurările; 38 Activitatea de proiectare pentru toate categoriile de construcții, urbanism, instalatii și retele tehnico-edilitare, reconstrucții, restaurări.**

(în conformitate cu prevederile din statutul propriu)

7. Licență (certificat) seria **A MMII 055985, din 08.09.2017, Agentia Servicii Publice, activitatea de proiectare pentru construcții, urbanism, instalatii si retele tehnico-edilitare, reconstrucții \*(se permit lucrările conform listei indicate în anexă)**

(numărul, data, instituția emitentă, genurile de activitate)

8. Birourile filialelor/succursalelor locale, dacă este cazul: \_\_\_\_\_



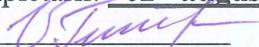
(adresa completă, telefon/telex/fax, certificate de înregistrare)

9. Principala piață de afaceri: **Republica Moldova**

10. Cifra de afaceri pe ultimii 3 ani:

<b>Nr. d/o</b>	<b>Anul</b>	<b>Cifra de afaceri anuală la 31 decembrie, mii lei</b>
1.	2017	100 586.0 lei
2	2018	1 055 771.0 lei
3	2019	3 996 989.0
Media anuală: 1 717 782.0 lei		

Data completării: **"02" august 2019**

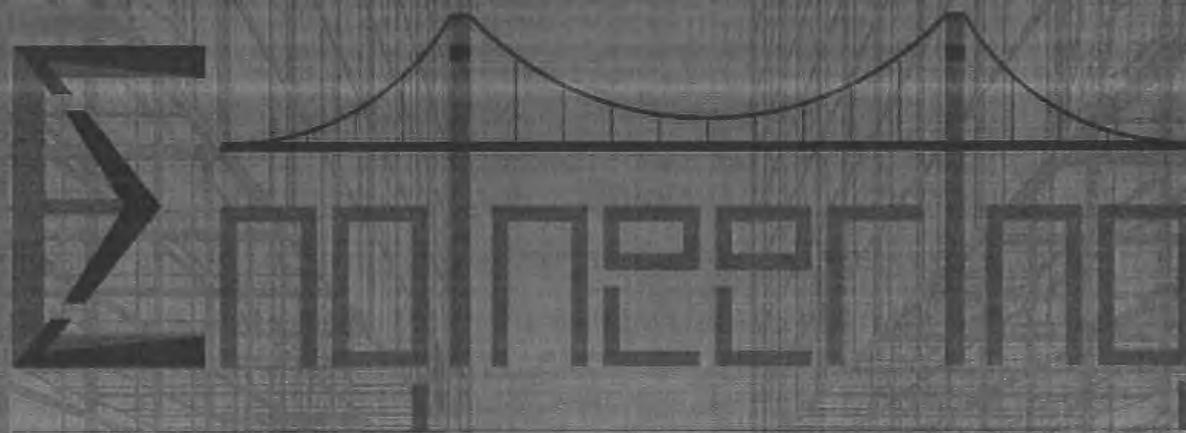
Semnat: 

Nume/prenume: **Vitalie Titei**

Funcția în cadrul firmei: **Director**

Denumirea firmei **"Sigma Engineering" S.R.L.**





CHISINAU 2020





## WHO WE ARE?



We are an Engineering Company that provides a full range of Consulting and Engineering Services for International and Local Employers. Our core team, which includes experts from Italy, Austria, Moldova and Romania has a great experience in Consulting and Managing International Contracts, such as FIDIC Contracts and World Bank Contracts. We have expertise in such Project as: Urban Planning, Residential and Industrial Buildings & Structures, Hydro-technical and Water Management Project and Roads Infrastructure Projects. We are employing the latest technology and the most advances software solutions to optimize the work procedures and to facilitate the sharing of information between the involved parties.

### Few Highlights

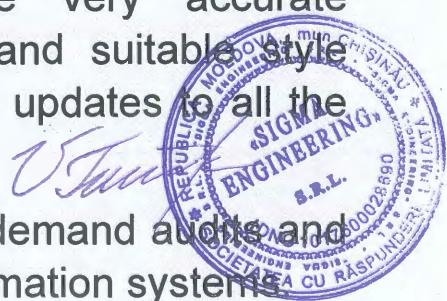
We provide all of our services in three languages: English, Romanian and Russian. Communication is also available in: Italian and French.

We are constantly updating the work methodologies to integrate state of the art techniques and software solutions.

We use building information modeling and database oriented project management solution to enhance productivity, improve collaboration and limit the number of potential requests for information.

We make professional reports that include very accurate information, clean design, meaningful content and suitable style enhancements to deliver regular, comprehensive updates to all the stakeholders.

We guarantee full transparency, comply with on-demand audits and have established an advanced management information systems





## OUR SERVICES

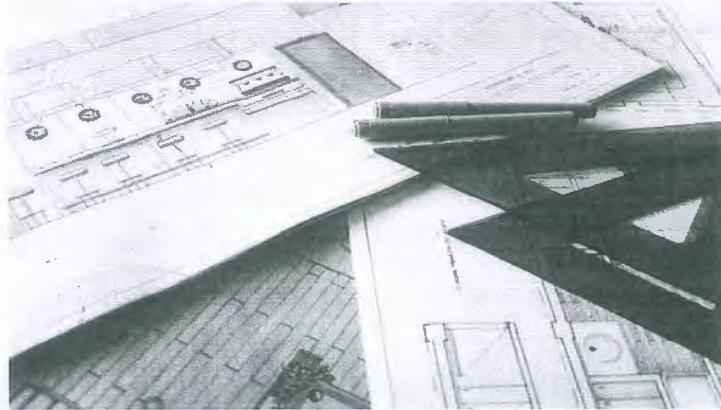
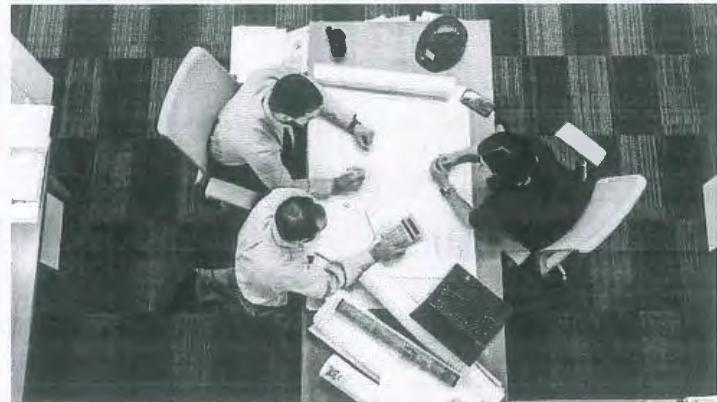


### Engineering

Our Engineering Services range from Works Supervision and Independent Engineering Expertise to SCADA System Implementation and Training on Capacity Building, to ensure your project success!

### Consulting

We offer Consulting Services for a large range of construction projects. From Feasibility Studies to Building Information Modeling and Technical Audits, we will help you to get successful with your project!



### Design

We offer Full Design Solution for the projects of any complexity, fully complaint to the local law and standards. We also offer services for adapting existing projects to be compliant with European Codes.





## OUR SERVICES

### BREAKDOWN

Sigma Engineering provides a full range of engineering services covering the entire projects cycles from Feasibility Studies and Detailed Design to Work Supervision and Contract Management.

Below is presented the list of several key dominions and activities that we have expertise with:

### Engineering

- ❖ Independent Engineering Expertise covering all construction and infrastructure projects;
- ❖ Building Information Modeling;
- ❖ Introduction of new technologies, equipment and materials into work procedures and methodologies;
- ❖ Support services for obtaining/providing technical agreements, quality and conformity certificates for materials and equipment.

### Consulting

- ❖ International and Local Projects Consulting, Engineering, Management;
- ❖ Elaboration of pre-feasibility and feasibility studies;
- ❖ Action plans for public services modernization;
- ❖ Works supervision;
- ❖ Technical Audit, Energetic Audit, Management and Financial Audit;
- ❖ Environmental and Social Impact Assessment;
- ❖ Risk analysis and mitigation plans.

### Design

- ❖ Urban Planning;
- ❖ Residential, Industrial and Agricultural Buildings & Structures;
- ❖ Hydro-technical and Water Management Systems;
- ❖ Roads Infrastructure.





## OUR COMPANY



is a national and international engineering company, which specializes in providing services for the Public Infrastructure Projects, as well as for Private Sector Projects.

At Sigma Engineering we believe that any successful project has to have two focal points: smart engineering and excellent management. Therefore, our approach is to establish a project implementation model that allows tracking of the quality assurance procedures, project modifications, as well as flexibility to easily inspect and adapt the project to any changing conditions. Communication and information access, specifically regarding the works progress and financial status is of primary importance for a successful project, and integration of building information modeling, from the project's inception, is the most effective way to overcome any potential issues.

The expertise of our core team with Public Infrastructure Projects is covering more than 10 countries. Given that such Projects have Contracts with specific requirements towards the Construction and the Consulting Companies, our main goal is to provide professional engineering and consulting services in accordance with the Contracts provisions, as well as to direct and educate the local partner firms in following the Contracts requirements for the job implementation procedures and the elaboration of documentation.

The Private Sector Projects are more elastic, and in this regards, our job is to offer flexible solutions while ensuring an efficient outcome. We always make sure that the Customer is well informed about the optimal technical processes; and that the advantages and downsides of the provided solution, design or technique are properly understood, in both short and long terms perspective.

We guarantee that our works are in compliance with industry standards and accounts for latest engineering and design practices.



*Stam*



## OUR TEAM

The Sigma Engineering Company's structure is composed of the core team engineers who are involved on the permanent base and the support team which consists of individuals and partner firms that help with specific task.



The core team includes experts and specialists in key engineering fields, such as: civil, structural and buildings engineering, hydrological and hydro-mechanical engineering, as well as infrastructure and geotechnical engineering. Having such a diverse team

allows us to easily handle the most complex projects.

The support team includes local and international specialists, technicians and engineers from a variety of business areas, as well as partner firms that specialize in specific fields of activity, such as: automation & programming, electrical engineering, environmental & resettlement expertise, as well as IT services.



Our team members have the certification and licenses for all the listed activities. The good knowledge of the local, as well as international standards, which is embedded in our work, reassures inspectors' contentment during

implementation phase and greatly facilitates the handing over procedures at completion.

At Sigma Engineering we always approach the works as a **Team and** we ensure that the most optimal solutions are being **timely** implemented.





## KEY PERSONNEL

### Vitalie Titei

#### **Civil, Water and Sanitation Engineer @ Sigma Engineering**

10 years of experience with FIDIC and World Bank Contracts as Professional Engineer and Management Consultant. Fields of activity includes: Infrastructure Investment Projects (buildings, structures, water management, irrigation, roads), as well as Design and Research Projects (residential and industrial constructions).

### Luca Lollobrigida

#### **Contract Manager, Engineer @ Sigma Engineering**

30+ years of experience with FIDIC, World Bank and other IFIs Contracts as Professional Engineer and Project Manager. Fields of activity includes: Construction and Supervision of Infrastructure Investment Projects (buildings, structures, water management, irrigation, roads), as well as Design and Research Projects.

### Cristian Murariu

#### **Infrastructure Expert @ Sigma Engineering**

15+ years of experience in working with USAID and MCC development projects of improving infrastructure and municipal services in Moldova, Pakistan and Tajikistan. International expertise includes provision of technical assistance to local governments in rendering community strategic planning, municipal service improvement action planning. Master Degree in Energy and Environment.

### Andrei Sargarovschii

#### **Civil Design Engineer and BIM Expert @ Sigma Engineering**

7+ years of experience in working with MCC development projects and FIDIC Contracts as Design Engineer, Quantity Surveyor, Site Engineer and Management Consultant. Expertise in Building Implementation Modeling, Project Documentation Management, Project Software Solutions and Computer Aid Design. Advanced skills in computer modelling, design and management software.

### Predrag Lukac

#### **Hydro-Mechanical and Electrical Expert @ Sigma Engineering**

Master degree in Mechanical Engineering and 35+ years of experience as Engineer and Electro-Mechanical Expert. Member of Economic Council in Republic of Austria, International Economic Department. Since 2005, working as Key International Expert in huge International projects financed by World Bank, EU (EIB), EBRD, and MCC in over 7 counties.





## Alexandru Ceban

### **Chief Architect, Design Engineer and BIM Expert @ Sigma Engineering**

10+ years of experience in architectural and structural design for industrial and residential buildings and structures. Chief Architect and Design Engineer attestation for civil and industrial constructions. Solid experience with local construction standards, including: Eurocodes, ISO, SNIP, GOST, NCM.

## Nicolai Barcari

### **Chief Structural Engineer @ Sigma Engineering**

Master Degree in Structural Engineering and over 9 year of experience in designing residential, public and industrial building and structures. Excellent skill in structures design calculation and structural verification procedures. Expertise with preparation of project documentation for Project Verification Agency (State Agency) and project coordination with State Construction Inspectorate.

## Irina Maico

### **Water Supply and Sewerage Design Engineer @ Sigma Engineering**

30+ years of experience in design projects for water supply, water resources protection, drainage and solid waste systems as well as design and management of sanitary systems and environmental protection. State Certification (Moldova) for Water supply networks & sanitation systems installation and design. Advanced skills in computer aid design and project standardization.

## Tatiana Cojuhari

### **Heating, Ventilation and AC Design Engineer @ Sigma Engineering**

30+ years of experience in design of heating, ventilation and AC systems, proving extensive knowledge of design norms and regulations. Certified in the field of design and verification of heating, ventilation and AC systems and networks. Advanced skills and extensive knowledge of legislation, regulation, norms and project standardization.

## Ala Licov

### **Gas Networks and Systems Engineer @ Sigma Engineering**

30+ years of experience in design projects for gas supply networks and systems, as well as member of the technical board for supervision of dangerous industrial installations and buildings. Advanced skills in computer modelling software and implementation of innovative practices.





# OUR RECENT AND CURRENT PROJECTS

## Feasibility Study for renovation of the building for premature babies, part of the Mother and Child Institute, as well as the provision of medical equipment

- ❖ Survey of Current Situation and Justification of Investment
- ❖ Analysis of scenarios and determination of optimum
- ❖ Elaboration of investment description
- ❖ Cost benefit analysis and Risk evaluation

## Adaptation of the Detailed Design of Chisinau Waste Water Treatment Plant (water supply, sewer, heating and gas installations and networks) – in progress

- ❖ Review and adaptation of the Detailed Design Drawings to local regulations and norms.
- ❖ Review and adaptation of Hydraulic Calculation
- ❖ Elaborate design explanatory notes
- ❖ Elaborate construction organization plan and work program
- ❖ Provide support in obtaining approval and verification of the design drawings
- ❖ Author supervision of the construction works

## Technical Expertise of the Main Waste Water Pumping Station building in Hancesti town

- ❖ Review the available archive documents and detailed design
- ❖ Perform building survey and nondestructive tests
- ❖ Perform calculations considering additional load from new mechanical equipment proposed to be installed (overhead hoist, automatic screens for primary treatment, water gates on admission channels, gate valves and piping)
- ❖ Elaboration of the technical expertise report with findings, solutions and conclusion

## Adaptation of the Detailed Design of Chisinau Waste Water Treatment Plant (Process compartment) – I and II Phase

- ❖ Review and adaptation of the Detailed Design Drawings to local regulations and norms.
- ❖ Review and adaptation of Process Calculation
- ❖ Review and adaptation of the Process Description Report
- ❖ Author supervision of the construction works
- ❖ Total number of designed new and rehabilitated structures I phase – 38 pcs.
- ❖ Total number of designed new and rehabilitated structures II phase – 10 pcs.





## **Detailed Design of Chisinau Water Supply Networks**

- ❖ Topographic survey
- ❖ Geological study
- ❖ Detailed Design of 64km of water supply networks.
- ❖ Consulting services for design coordination with local authorities
- ❖ Author supervision of the construction works
- ❖ Total pipelines to be designed and reconstructed: 64 Km.  
Manholes – 700pcs.

## **Detailed Design of 2 Sludge Centrifugal Decanters and 2 Sludge Reservoirs for Chisinau Waste Water Treatment Plant**

- ❖ Geological study
- ❖ Detailed Design of 2 sludge centrifugal decanters and 2 sludge reservoirs for waste water including General layout, Architectural, Structural, Process, Water and Wastewater networks compartments
- ❖ Author supervision of the construction works

## **Supervision of Reconstruction of Existing Production Hall into a Warehouse for Food Products**

- ❖ Detailed Design, Works Supervision and Contract Management for reconstruction of the existing building with 2 and 3 floors changing its destination and erecting an additional floor for offices
- ❖ Author supervision of the construction works





# OUR CORE TEAM PROJECTS

(Several Projects from our Key Personnel Portfolio)

## Supervision of Rehabilitation of Centralized Irrigation Systems in Moldova

- ❖ Detailed Design, Work Supervision and Contract Management for 9 Centralized Irrigation Systems, serving more than 12 villages along Nistru and Prut Rivers.
- ❖ Works Contracts based on FIDIC – Red Book Contract Conditions.
- ❖ Total pipelines reconstructed: 530 Km.
- ❖ Total pumping stations rehabilitated: 33 pumping stations with 104 pumps.

## National Water Supply and Sanitation Project in Moldova

- ❖ Supervision of construction works in 23 rural localities and in 3 towns.
- ❖ Works Contracts based on World Bank Contract Conditions.
- ❖ Total water supply and sewerage pipelines reconstructed: 200 Km.
- ❖ Water treatment plants: rehabilitated – 2; built – 2.
- ❖ Water pumping stations build and rehabilitated – 11.
- ❖ Waste water pumping stations – 1.

## Balchik Water Supply and Sewerage and Sewerage Network Extension and Rehabilitation in Bulgaria

- ❖ Works Contracts based on FIDIC – Red Book Contract Conditions.
- ❖ Rehabilitation of existing Reservoir, Construction of Chlorination Station, Construction of Booster Station.
- ❖ Construction of approx. 38 km of water supply network.
- ❖ Construction of approx. 4.5 km of main gravity sewage collectors, 21 km. of secondary gravity sewage system plus branches for house connections.
- ❖ Rehabilitation of the existing Sewerage Pumping Station.

## Sewerage Project in the City of Korça, in Albania

- ❖ Sewage Construction, Construction of Storm-Water Tanks.
- ❖ Construction of: 90 concrete shafts; 2 storm water tanks; 1 siphon; 1 culvert (tot. 2.400 c.m. of concrete).
- ❖ Total of gravity sewage pipeline (concrete and HD polyethylene): 5.7 km
- ❖ Mechanical installations.
- ❖ Financed by KfW - value 3,2 million euro.





## **Design of 1 store and 2 warehouses for storing phytosanitary products and fertilizers, Moldova**

- ❖ Developed general layout of the industrial area with details for access roads and rain water drainage.
- ❖ Architectural and structural solutions for 1 store and 2 warehouses (steel structure) with a total surface of cca. 1700m2.
- ❖ Internal and external utility networks (Electrical, water supply, sewerage, gas, heating and ventilation, signalization, communication).

## **Design of production hall and wheat mill with storage silos in Hincesti rayon, Carpineni village, Moldova**

- ❖ Architectural and structural solutions of the wheat mill complex.
- ❖ Solutions for incorporation of the technological equipment.
- ❖ Solutions for storage silos built of precast concrete elements.
- ❖ Author supervision of the construction works.

## **Design of the building with commercial purpose and warehouse for construction materials, Moldova**

- ❖ Architectural and structural solutions.
- ❖ Solutions for the support wall with a height of 6m.
- ❖ Internal and external utility networks (Electrical, water supply, sewerage, gas, heating and ventilation, signalization, communication).
- ❖ Author supervision of the construction works.

## **Technical Assistance for Municipal Infrastructure Projects in Macedonia**

- ❖ The Works Contracts based on PRAG Contract Conditions.
- ❖ 14 Contracts for rehabilitation of schools, sports' halls, theatres for a total amount of 6,5 million euro.
- ❖ 11 Projects financed by European Union and 3 projects financed by the Ministry of Local Self Government of Republic of Macedonia.

## **Struga and Ohrid Water Supply Project in Macedonia**

- ❖ Improvement of the existing Water Supply System through civil and electro-mechanical works; construction of Water intakes and Reservoirs, including automation.
- ❖ Rehabilitation of 11 existing pumping stations.
- ❖ Rehabilitation of 6 new and rehabilitation of 2 Reinforced Concrete.
- ❖ Laying of approx. 50k m. of water network.

