**Technical Systems and Environmental Protection** 

# Our Competence meets Your Needs.

Research • Development • Engineering • Field & Lab Testing • Designing

Institute Kirilo Savic a.d. · Serbia · A: Vojvode Stepe 51 11010 Belgrade · T: +381 11 2469 147 · +381 11 2463 729 F: +381 11 2469 514 · www.iks.rs · office@iks.rs







### **R&D INSTITUTE "KIRILO SAVIĆ":**

Technical Systems and Environmental Protection

### Engineering, Research, Conformity Assessment and Consultancy

The Institute's origins trace back to 1954 when a separate entity, named Railway institute, was established within the General Directorate of Yugoslav Railways. By the end of 1960, it turns into an independent legal entity.

Today, the "Kirilo Savić" Institute a.d. • (•jsc) is Research and Development institute whose primary activities are based on design and development of various technical systems to ensure their reliability, safety and effectiveness.

Basic activities of the Institute are mostly related to the fields of traffic and transport engineering (road and railway engineering), civil and mechanical engineering, environmental protection, esp. water supply, wastewater treatment, regional landfills, energy efficiency; occupational health and safety, chemistry, metallurgy, welding technologies etc.

#### **Quality and Environmental protection**

Institute is certified against SRPS ISO 9001:2008 – Quality Management System by IQNet for the entire scope of its activities. Institute has been awarded with QMS/EMS – 14001:2005 Integrated Quality Management system and Environmental Management System.

Moreover, it is accredited against SRPS ISO/IEC 17020:2002, type A and competent to perform inspection as an Inspection body and **accredited by the Ministry of Science and Technological Development** for performing scientific and research activities of general interest.

There are three laboratories within the Institute, accredited by the Accreditation Board of Serbia (as per ISO 17025:2006 standard): the Rolling stock testing laboratory, the Laboratory for materials testing and the **Laboratory for testing of Structures** (Building constructions) which is competent to perform physical and mechanical testing of building materials (building constructions).

Institute employs over 150 full-time employees, approximately half of which are Graduate engineers or with Masters Degree in Engineering.

Institute "Kirilo Savić" has **38 licences** issued for designing / execution of works.

Considerable number of designs have been awarded prizes in different competitions organized by professional associations of constructors and urban planning salons.

Institute provides its services to a number of institutions; most contracts being established between IKS and local public/private organizations/public enterprises (including the City of Belgrade, state authorities - institutions and ministries - Ministry of Environment, Mining and Spatial Planning, Ministry of infrastructure and Energy, PE Serbian Railways, cities and municipalities as the basic units of local self-government in Serbia).

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### Onyx Group Development Itd General partner of the Institute "Kirilo Savić"

Onyx group is one of the leading energy trader and service provider in the Global energy market serving the world with the energy requirement in the field of oil and gas, power generation, minerals. We find, extract, refine and deliver to the corners of the globe, the energy needs of the market.

Our network across the globe, associate offices and partners makes the consumers and producers comfortable to work with to make the very efficient and cost effective. Onyx Group's global reach means we have expertise where ever in the world energy is sourced, stored, transported, traded or needed.

Onyx Group is associated with world's leading exploration, drilling and contracting companies in the development of the energy market. Our expertise in the filed of shipping, aviation and logistics are our added advantage.

With our world wide network Onyx Group is equally committed in the business of Metals and Minerals, Heavy plants, machineries, automobiles, food commodities and we are leading supplier in the middle east market.









#### SERVICES



Air cargo management



Airport management



### **SERVICES**



Airlines management



Leasing of aircrafts



### **SERVICES**



Sales of aircrafts and parts



Maintenance of aviation equipments









Oil pipe line projects

Power plants





Mini rafinery



Bridges





Dams



Hospitals



Sea ports





## Short Company profile with selected references: Design and execution of works of SCHOOLS and educational institutions

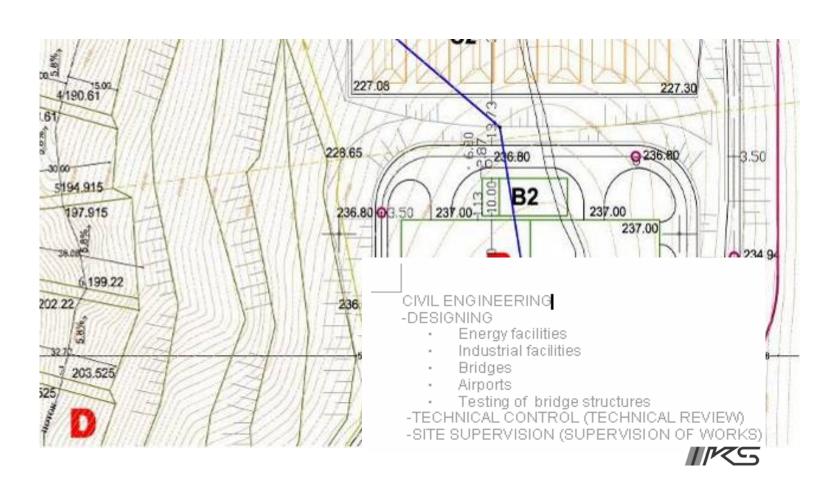
### With selected references of IKS partners included





### Selected references: Schools and educational institutions

With References of IKS Partners included





#### **DESIGNING**

### MAIN REHABILITATION DESIGNS

Main rehabilitation design:

Primary school "IX Srpske brigade", Boljevac

Main rehabilitation design:

Preschool "Diznilend", Belgrade

· Main rehabilitation design:

Primary school "Braće Jerković", Železnik, Belgrade

 Report on Static and seismic stability of the building – Institute of pathology Belgrade

### MAIN MECHANICAL DESIGN

Main mechanical design –

Reconstruction of central heating system installation

Primary school "Petar Petrović Njegoš", Belgrade



### **TESTING**

• Testing of building structures - Petnica Science Center Serbia

Petnica Science Center is the biggest and, probably, the oldest independent nonprofit organization for extracurricular, informal science education in South Eastern Europe.





Petnica Science centre, photo http://pi.petnica.rs



#### SITE SUPERVISION

 Supervision and coordination of Construction works and Building adaptation and rehabilitation works:

Childrens` recreational centre - children's holiday camp "Suplja Stena", Avala



Children's holiday camp "Suplja Stena", Avala, photo ekapija.com

- Supervision of building adaptation and rehabilitation works
  - · Primary school "Jelena Cetkovic", Belgrade
  - · Primary school "Dositej Obradovic", Belgrade
  - · General High school "VI Beogradska gimnazija" Belgrade

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### **Execution of works**

- **Primary school** "Jefimija" 10.000 m<sup>2</sup>, Obrenovac
- Primary school Arnajevo 1.800 m<sup>2</sup>

















"Udarnik gradnja" Itd Serbia Construction of residential and non-residential buildings

Selected references: SCHOOLS

Primary school "Svetozar Marković" Kraljevo, Serbia 5000 m²





### "Udarnik gradnja" Itd Serbia

Selected references: SCHOOLS Primary school "Svetozar Marković" Kraljevo, Serbia





### "Udarnik gradnja" Itd Serbia

Selected references: SCHOOLS Primary school "Svetozar Marković" Kraljevo, Serbia





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Short Company profile with selected references:

### Designing and execution of works: AIRPORTS and AIRPORT buildings

With selected references of IKS partners included:

- Elgra Vision member of Minel Koncern a.d, Belgrade, Serbia
- GP Planum AD, Belgrade, Serbia
- "Kolubara Invest Gradnja" d.o.o, Belgrade, Serbia



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Its references include projects dealing with energy efficiency and environmental protection (with special emphasis on the projects of water supply, wastewater treatment and regional waste landfills).







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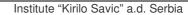
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R&D Institute "Kirilo Savić" has **38 licences** issued for designing / execution of works, including those for

- Architectural design for building constructions, structures and other facilities at the airport etc.
- •Architectural design for building constructions, structures and other facilities at the airport (passenger terminals, cargo terminals, air base hangars, infrastructure, radio-navigation equipment) Traffic projects for airport complex facilities (take off/land runways, rolling runways, access platforms, hangar platforms)
- Building structures designs for the facilities at public railway infrastructures with connections (bridges),
- Building structures designs for facilities having the structural span of 50 or more meters etc.

Considerable number of designes have been awarded prizes in different competitions organized by professional associations of constructors and urban planning salons. Institute provides its services to a number of institutions; most contracts being established between IKS and local public/ private organizations / public enterprises (including the City of Belgrade, state authorities - institutions and ministries - Ministry of Environment, Mining and Spatial Planning, Ministry of infrastructure and Energy, PE Serbian Railways, cities and municipalities as the basic units of local self-government in Serbia).





Selected references: AIRPORTS and airport buildings

With Selected References of IKS partners included





### Selected references: Airports and airport facilities (airport buildings)

1. Main project of rehabilitation-repair of the facility "JAT-Hangar II" at the airport "Nikola Tesla "Belgrade Serbia (2006)

The main elements of the roof structure are three major box girders of double-layer structural system, the range of 135.8 m, radius 9.7 m at the distance of 22.4 m. Box girders with cables for prestressing make composite construction. Subject of the Main project was inspection and testing of steel bearing suports, anchors, control of HV bolts and in the end, according to results of testing, measures of rehabilitation.



Designing & execution of works: AIRPORTS

Page 6 of 2





Selected references: Airports and airport facilities (airport buildings)

2. Inspection and testing of the facility "JAT-Hangar 2" in Belgrade (2011)

Inspection and testing of construction JAT-2 hangar includes

Testing and measure of:

- Force in all the cables supporting composite construction,
- Control of the forces in HV bolts,
- Geodetic measurements.

### Visual examination:

- Examination of the structural elements and connections.







### Selected references: Airports and airport facilities (airport buildings)

- 3. Main project of reinforcing floor structure on the first floor, "Terminal 2" (2011)
  - -Visual examination of the existing structure-"Terminal 2" with a review of existing technical documentation.
  - -Static calculation influence of new X-ray machines to the existing support structure.
- 4. Technical documentation for garage extension in "TPO" sector for airport "Nikola Tesla" Belgrade project in progress, initial phase.
- 5. Technical documentation for the construction of canopy on cargo terminal for airport "Nikola Tesla " Belgrade project in progress, final stage (pending approval by the technical control).







### Selected references: Airports and airport facilities (airport buildings)

6. Project design – Reconstruction of Airport Control tower building at Vršac International Airport (tower turret with extension of the terrace, steel structure with glass facade).









### ELGRA VISION D.O.O., member of MINEL KONCERN

MINEL - MINELINŽENJERING EVING d.o.o. reference list regarding the engineering projects at airports, is as follows:

No.	Description	Employer	Year
1	Reconstruction of airport lighting system	Airport "Belgrade"	1986
2	Construction of 35/10kV power supply substation	Airport "Belgrade"/JAT	1986
3	Designing of test facility for airplane engine	SNECMA	1987
4	Reconstruction of 10 kV power supply system	Airport "Belgrade"	1987
5	Installation of airport remote control system	Airport "Belgrade"	1987
6	Construction of 10/0,4 kV power supply substation "Računski centar"	JAT	1987
7	Designing and construction of test facility for airplane engine	JAT	1988
8	Construction of 10/0,4 kV power supply substation "Tehnička baza"	Airport "Belgrade"	1988
9	PAPI unit installation	Airport "Belgrade"	1988
10	PAPI unit installation	Airport "Dubrovnik"	1988



### MINEL - MINELINŽENJERING EVING d.o.o. reference list

11	Designing and construction of lighting system at one part of apron		1989
12	Dislocation of control panel at airport control tower	Airport "Belgrade"	1989
13	Equipment supply for runway at Cuban airport		1989
14	Construction of 10/0,4 kV power supply substation "Motorska radionica"	JAT	1989
15	Designing and reconstruction of low voltage power supply system	Airport "Belgrade"	1989
16	Separation of power measuring units	Airport "Belgrade"	1992
17	Parking facilities	Airport "Belgrade"	1992
18	Works on the relay pole	JAT	1995
19	Designing of PAPI units	Airport "Tivat"	1995
20	Investment works on airport lighting system maintance	Airport "Belgrade"	1996
21	Construction of RVR system from direction 30	Airport "Belgrade"	1996
22	Construction of CAT II lighting system	Airport "Belgrade"	1997/98
23	Construction of GP 12/30, LLZ 12/30, MS, OM, MM 12, VOR	FFCA	1997/98
24	Reconstruction of 10 kV power supply system	JAT	1999
25	Construction of a power supply system for "DEGOSSO" furnace	JAT	2000
26	Installation works on power supply substation and CCR's room	Airport "Belgrade"	2000
27	Construction works on approach and treshold 30	Airport "Belgrade"	2000



### MINEL - MINELINŽENJERING EVING d.o.o. reference list

28	Construction of TWY "E" center line (SB 90)	Airport "Belgrade"	2000
29	Construction of a power supply system for compressor	JAT	2001
30	Automatisation of "LOOS" boiler	Airport "Belgrade"	2001
31	Construction works on approach	Airport "Belgrade"	2001
32	Construction of CAT III b - phase 1 lighting system	Airport "Belgrade"	2002
33	Evaluation of airport lighting system condition with possible revitalisation solutions	Airport "Niš"	2002
34	Revitalisation works, runway widening and apron floodlights	Airport "Niš"	2003
35	Construction and electrical works on lighting platform	Airport "Nis"	2005
36	Construction and electrical works CAT IIIb 2005	Airport "Belgrade"	2005
37	Airfield lighting - CAT IIIb 2006	Airport "Nikola Tesla" Belgrade	2006
38	Airfield lighting - CAT IIIb phase 1	Airport "Nikola Tesla" Belgrade	2008
39	Expansion of taxiway and apron F	Airport "Nikola Tesla" Belgrade	2009
40	Construction and electrical works on infrastructure on Airport "konstantin the Great" in Niš	The City of Niš, Investment department	2012
41	Expansion of Platform C	Airport "Nikola Tesla" Belgrade	2013



### ELGRA VISION D.O.O., member of **MINEL KONCERN**

MINEL - MINELINŽENJERING EVING d.o.o. reference list

### Photo documentation:







(Source: ELGRA VISION d.o.o.)



### ELGRA VISION D.O.O., member of $\boldsymbol{\mathsf{MINEL}}$ KONCERN

MINEL - MINELINŽENJERING EVING d.o.o. reference list

### Photo documentation:





(Source: ELGRA VISION d.o.o.)



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### Photo documentation:







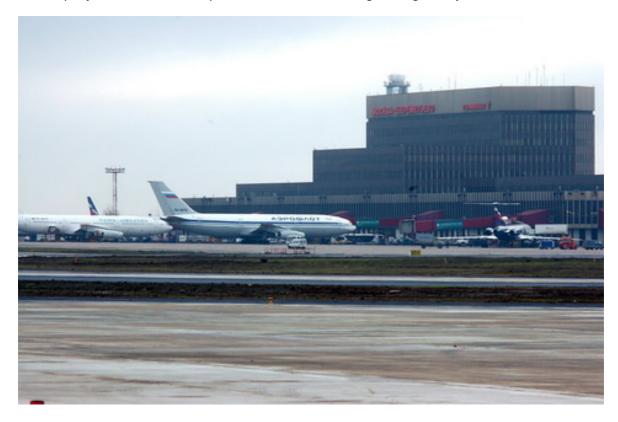


(Source: ELGRA VISION d.o.o.)





Founded in 1948, as a company primarily specialized in the construction of military airports; subsequently the company has widened its scope of activities to all civil engineering and hydro-technical structures.



Chita Airport Bratsk Airport Magnitogorsk Airport

Chelyabinsk Airport Kemerovo Airport Anadyr Airport

Sheremetyevo Airport Batajnica Airport





## **Selected references: Airports and airport facilities (airport buildings) Chita Airport**

Basic project information:

Runway length	2,810	m
Runway width	60	m
Taxiway length	2,269	m
Taxiway width	44	m
Platform	175 by 114	m
Drainage system	1,000	
Earthworks	300,000	
Sub-base	46,000	
Cement stabilization	14,000	
Concrete pavement	82,500	$m^3$

### **Bratsk Airport**

Basic project information:

•	Runway length	3,310 m
•	Runway width	45 m
•	4 taxiways - joints	5,000 m <sup>2</sup>
•	Cement stabilization	4,150 m <sup>3</sup>
•	Concrete pavement	45,000 m <sup>3</sup>



Photo and data: www.planum.rs; some photos are used for illustrative purposes





### Selected references: Airports and airport facilities (airport buildings)

### **Magnitogorsk Airport**

Basic project information:

Runway length	3,250 m
Runway width	63.40 m
Culverts and drainage system	18,000 m
Earthworks	270,000 m <sup>3</sup>
Sub-base	120,000 m <sup>3</sup>
Cement stabilization	14,000 m <sup>3</sup>
Concrete pavement	65,000 m <sup>3</sup>

### **Chelyabinsk Airport**

Basic project information:

Runway length	3,350	m
Runway width	60	m
Drainage system	8,720	m
Cable rout and lighting cables	1,000	
Embankment	385,000	
Sub-base	125,000	
Cement stabilization	55,000	
Concrete pavement	65,000	$m^3$



Photo and data: www.planum.rs; some photos are used for illustrative purposes





### Selected references: Airports and airport facilities (airport buildings)

### **Kemerovo Airport**

Basic project information:

Runway iength	3,200 m
Runway width	60 m
Three joints of the new runway with the existing taxiway	27,940 m <sup>2</sup>
Reconstruction of the existing taxiway	95,675 m <sup>2</sup>
Reconstruction of the existing platform	86,000 m <sup>2</sup>
New platform	41,904 m <sup>2</sup>
Rainwater service, f 276 - 600 mm	8,375 m
Gross drains	14,850 m
Earthworks	4,072,000 m <sup>3</sup>
Blanket course	296,500 m <sup>3</sup>
Cement stabilization	91,100 m <sup>3</sup>
Concrete pavement	112,860 m <sup>3</sup>





Photo and data: www.planum.rs; some photos are used for illustrative purposes





### Selected references: Airports and airport facilities (airport buildings)

**Anadyr Airport** 

Location:

Anadyr, Russia

Project value: **167 million USD** 

Construction Period:

2002 - 2008

### Description of Works:

**Reconstruction of Anadyr Airport**; rehabilitation and extension of existing runway, taxiway and platform, construction of new platforms, reconstruction of hotels and construction of new airport building, reconstruction of garages and aviation technical centre (ATC), construction of new garages and access roads; around 107,000m<sup>3</sup> of concrete has been placed



Photo and data: www.planum.rs; some photos are used for illustrative purposes





### Selected references: Airports and airport facilities (airport buildings)

**Sheremetyevo Airport, Moscow** 

Location:

Moscow, Russia

Project Value: 16 million USD

Construction period: **2006 - 2007** 

Description of Works:

Reconstruction of Sector 2 of Sheremetyevo airport; construction of concrete pavement, approx. 75,000 m<sup>3</sup> of concrete has been placed



Photo and data: www.planum.rs; some photos are used for illustrative purposes





### Selected references: Airports and airport facilities (airport buildings)

**Batajnica Airport** 

Location:

Belgrade, Serbia

Project Value: **2.5 million Euro** 

Construction period:

September 2003 - November 2004

### Description of Works:

Remedy of craters on runway and access areas, remedial works on sewerage and drainage systems, remedy of pavement cracks, remedial works and improvement of pavement structure; 2,306 m<sup>3</sup> of concrete and 21,008 t of asphalt has been placed.



Photo and data: www.planum.rs; some photos are used for illustrative purposes





### Selected references: Airports and airport facilities (airport buildings)







Photo and data: www.planum.rs; some photos are used for illustrative purposes



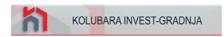


Company "KOLUBARA INVEST GRADNJA" from Belgrade is specialized in project Management, design, constructing and consulting in the area of construction.



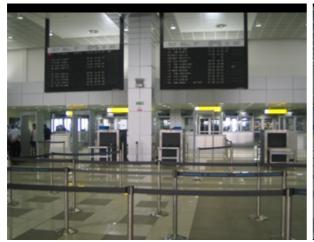
(Photo and data:www.kolubara-ig.com)





### Selected references: Airports and airport facilities (airport buildings)

- Reconstruction of connection between Terminal 1 and Terminal 2, area 8000m2 and remodeling of Terminal 1, Airport "Nikola Tesla" Belgrade.



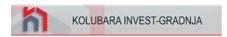






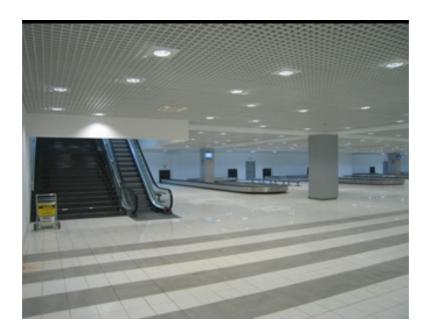
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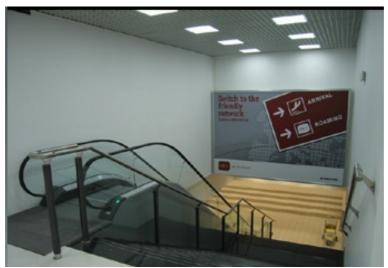




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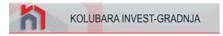
- Construction of Annex to Terminal 1, area 700m2, Airport "Nikola Tesla" Belgrade.





(Source:www.kolubara-ig.com)





### Selected references: Airports and airport facilities (airport buildings)

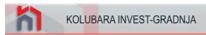
- Reconstruction of Terminal 2, area 25000m2, Airport "Nikola Tesla" Belgrade.





(Source:www.kolubara-ig.com)





### Selected references: Airports and airport facilities (airport buildings)

- Reconstruction and interior decoration of VIP lounge, Airport "Nikola Tesla" Belgrade.





(Source:www.kolubara-ig.com)









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Short Company profile with selected references:

Design and execution of works of Hospitals

With selected references of IKS partners included

- Ratko Mitrović Itd Dedinje Belgrade SERBIA
- Termomont Itd Belgrade Serbia
- DOK DOO Obrenovac Serbia



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- Architectural design for building constructions, structures and other facilities at the airport etc.

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### Selected references: Hospitals

With Selected References of IKS partners included





Institute "Kirilo Savić" a.d.

Project title: Study of revitalization and modernization

of facilities and installations of

Military Medical Academy Belgrade (VMA)

Investor: Ministry of Military

Military Medical Academy Belgrade 17 Crnotravska St, Belgrade Serbia

Study completed by: Institute "Kirilo Savić"

Belgrade, Vojvode Stepe 51

Year: 1999

### Study contents:

- A. GLOBAL ANALASYS OF THE MILITARY MEDICAL ACADEMY RESOURCES
- B. FINANCIAL ANALYSIS Analysis of maintenance costs of facilities and installations of the Military Medical Academy in the preceding period
- C. ANALYSIS and assessment with proposed measures for revitalization and modernization per systems
- D. ANALYSIS of facilities and installations
  - 1. Architectural system VMA PRA
  - 2. Structure systems VMA PRG
  - 3. Shelter systems VMA SKL
  - 4. Hydro-technical systems VMA HID
  - 5. Heating, Cooling and Air-Conditioning (HVAC) Systems VMA KGH
  - Regulation systems KGR
  - 7. Pipeline transportation systems- CTR
  - 8. Systems of medical and technical gases MTG
  - 9. Systems of electroenergetics VMA ELE
  - 10. Remote control systems VMA SIG
  - 11. Systems of vertical and inclined transport TRA
  - 12. Fire protection systems VMA PPZ
  - 13. Information system of both technical and construction services-IIS
  - 14. Construction service organizational systems VMA ORG
  - 15. Ecological systems VMA EKO
- E. SUMMARY OF PROPOSED MEASURES
- F. ECONOMIC ASPECT OF STUDY EVALUATION







Institute "Kirilo Savić" a.d.

Study of revitalization and modernization of facilities and installations of Military Medical Academy Belgrade (VMA)

Military Medical Academy is a medical, educational and scientific-research institution with an internationally acknowledged reputation



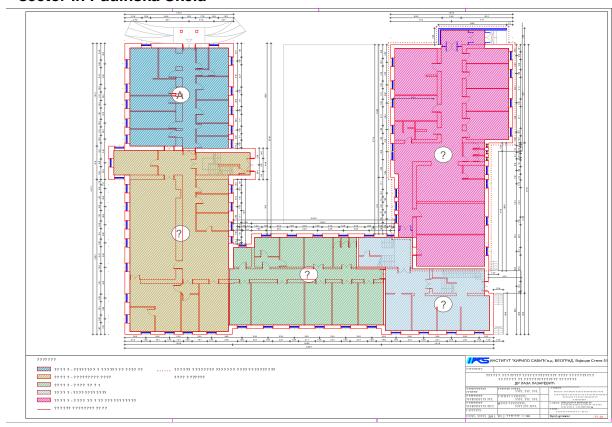




Institute "Kirilo Savić" a.d.
R&D Center of Chemistry, Technology and Metalurgy

Selected IMPLEMENTED PROJECTS - FACILITIES - Hospitals

- 1. Works on the reconstruction of the Department of adolescents in a special hospital, "Dr. Laza Lazarevic" Belgrade-hydro technical works on all internal installations and all works on the reconstruction
- 2. Works on water mains in the Special Hospital "Dr Laza Lazarevic" sector in Padinska Skela

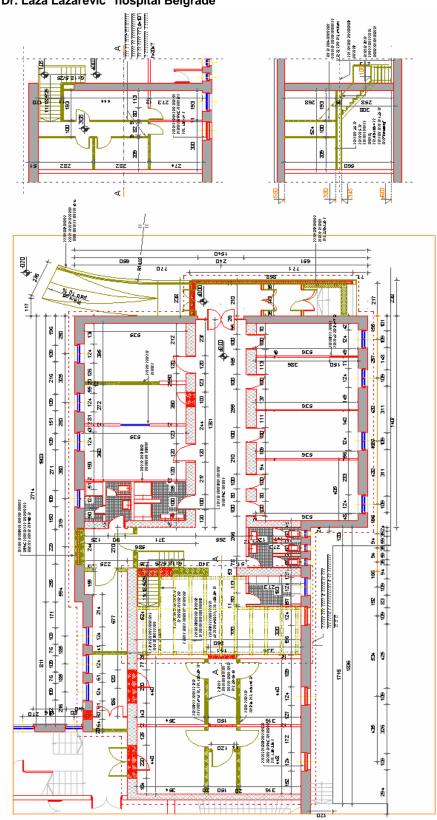


Situation of Special hospital "Dr Laza Lazarevic" Belgrade





## Institute "Kirilo Savić" a.d. IMPLEMENTED PROJECTS – FACILITIES - Hospitals "Dr. Laza Lazarevic" hospital Belgrade



Layout of Special hospital "Dr. Laza Lazarevic" Belgrade



**11**75

### Institute "Kirilo Savić" a.d. Thermal engineering: Hospitals

- Detailed mechanical design (main mechanical engineering project) of climatization system reconstruction of the Military Medical Academy ER Centre, 2002
- Detailed mechanical design (main mechanical engineering project) of the hot water heating system and technological steam production system adapting, Surgery Building of the Clinical Hospital Center "Doctor Dragiša Mišović Dedinje", 2005



Photo: http://www.dragisamisovic.bg.ac.rs/



Institute "Kirilo Savić" a.d.
Thermal engineering: Hospitals

- Detailed mechanical design (main mechanical engineering project) of installing new system for waste heat recovery in the central air preparation CPV-1 for acclimatization system, part of the Military medical academy, 2008
- Detailed mechanical design (main mechanical engineering project) of installing new system for waste heat recovery in the central air preparation CPV-2 for acclimatization system, part of the Military medical academy, 2010
- Detailed (main) design of repair and adapting of a part of premises of KCS- Clinical Medical centre of Serbia, Belgrade, Eye Dept, Children's' sector - Detailed design of thermal-technical installations and medical gases, 2011



KCS - Klinicki centar Srbije Clinical Centre of Serbia
Photo: http://www.kcs.ac.rs/



Institute "Kirilo Savić" a.d.
Thermal engineering: Hospitals

- Detailed (main) design of repair and adapting of the Building 'Surgery', Clinical Hospital Center "Doctor Dragiša Mišović" – Detailed Design of thermal-technical installations and medical gases, 2011
- 7. Detailed (main) design of repair and adapting of a part of the premises of KBC- Clinical centre of Serbia, Clinic of Dermatovenerology, Belgrade detailed design of thermal-technical installations and medical gases, 2012
- Detailed (main) design adapting (preparing) the premises for the needs of installation of X-ray and other scanning equipment, KBC-Clinical centre of Serbia, Urology Dept, - detailed design (main) of thermal-technical installations and medical gases, 2012
- Detailed (main) design adapting (repairing) the premises for the needs of installation of MR scanning equipment, KBC-Clinical centre of Belgrade, detailed design (main) of thermal-technical installations and medical gases, 2012
- Investment programme of energy losses elimination, KBC-Clinical centre of Serbia, Belgrade, premises of Department of Neurosurgery,2012,2013
- 11. Detailed mechanical design (main mechanical engineering project) of replacement of Cooling unit of conditioning systems, KBC-Clinical centre of Serbia, Belgrade, 2012
- 12. Detailed (main) design adapting the premises of the second floor, Clinical centre of Serbia, Critical care, Dept. of cardiovascular diseases, 2013
- 13. Detailed (main) design of repair and adapting of the first floor premises, KBC-Clinical centre of Serbia, Belgrade, Surgery room detailed design of thermal installations and medical gases, 2013





Ratko Mitrović Dedinje Beograd was established in 1948. This Company is specialized in building construction, construction craftwork and engineering. It has a tradition long approximately sixty years in which a large number of important construction objects in the region of the former Yugoslavia and partly abroad have been built.

### Selected references: Hospitals





During the last 30 years, references of Ratko Mitrović Itd Dedinje as well include works on other hospitals, medical institutions, clinics, separate buildings situated within hospital centres (Belgrade-hospital `Doctor Dragiša Mišović`, hospital 'Rifat Burdžević', Kragujevac- operational block of Clinical medical centre, Čačak- Surgery building of General hospital etc.), separate specialized facilities such as dispensaries (Priboj – Helath care centre, Čačak, Skopje) Medical institutions in Belgrade, Kragujevac, Trstenik, Čačak, Lučani etc.





(photos and data: www.rmdedinje.co.rs)



### VMA, Belgrade

Name and Location: Military Medical Academy (VMA), Belgrade

Investor: undefined

In 1981, our Company finished the building of the Military Medical Academy, one of the largest medical facilities in this part of Europe, with 170,000 square meters. "Ratko Mitrović" built this center with the planning to the mounting of state of-the-art facilities and modern medical equipment for the time being. For the construction of such a building, one needed state-of-the-art technology, a team of skilled experts and contractors and a perfect organization. This hospital was built in 1978 days and from all its angles, it impresses with monumentality, harmony and a perfect shape.

In total: 170.000 m<sup>2</sup>





Ratko Mitrović Itd Dedinje Belgrade SERBIA Selected references: Military medical academy Belgrade (VMA)











**KBC ZEMUN (Clinical hospital)** Works performed: 2006,2007



### KBC Zemun, Zemun

Name and Location: KBC Zemun, Zemun

Investor: Department of Health

KBC Zemun was reconstructed during 2006/2007.





### KBC Zvezdara BELGRADE (Clinical centre -hospiatal)

Reconstruction works performed: 2006,2007



### KBC Zvezdara, Belgrade

Name and Location: KBC Zvezdara, Belgrade

Investor: Department of Health

KBC "Zvezdara" was reconstructed during 2006/2007.









GAK NARODNI FRONT BELGRADE (Clinic of obstetrics and gynecology) Reconstruction works performed: 2006,2007

### GAK Narodni front, Belgrade

Name and Location: GAK "Narodni front", Belgrade

Investor: Department of Health

GAK Narodni front was reconstructed during 2006/2007.













Reconstruction works









### Ratko Mitrović Itd Dedinje Belgrade SERBIA

Shown below: 1. Kragujevac, Medical center, Operational block 2. FYR of Macedonia, Skopje, Military hospital









### Ratko Mitrović Itd Dedinje Belgrade SERBIA

KBC ZVEZDARA (Clinical centre-hospital) reconstruction works







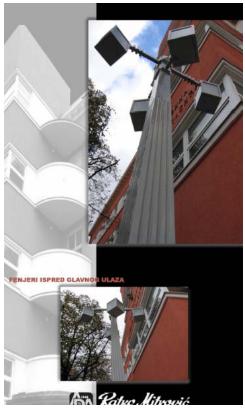




## Ratko Mitrović Itd Dedinje Belgrade SERBIA KBC ZVEZDARA (Clinical centre-hospital) reconstruction works







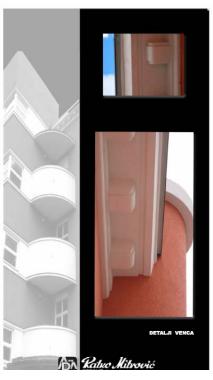






### Ratko Mitrović Itd Dedinje Belgrade SERBIA

### KBC ZVEZDARA (Clinical centre-hospital) reconstruction works











### **TERMOMONT**

Termomont Itd Belgrade Serbia

TERMOMONT" ltd. was founded in Belgrade, Serbia, in 1991. Company is competent to successfully perform the following activities: designing, consulting, engineering, execution of works (civil construction, finishing construction works, thermal and electrical installations, gas installations, installations of sewage and water supply system) in residential and/or business buildings, public and industrial facilities.

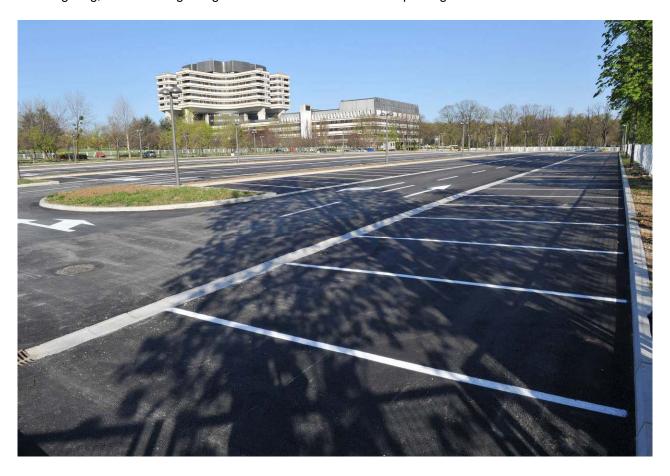
### Termomont Itd Belgrade Serbia Selected references: Hospitals

### VMA - Military medical Academy Belgrade

Construction works

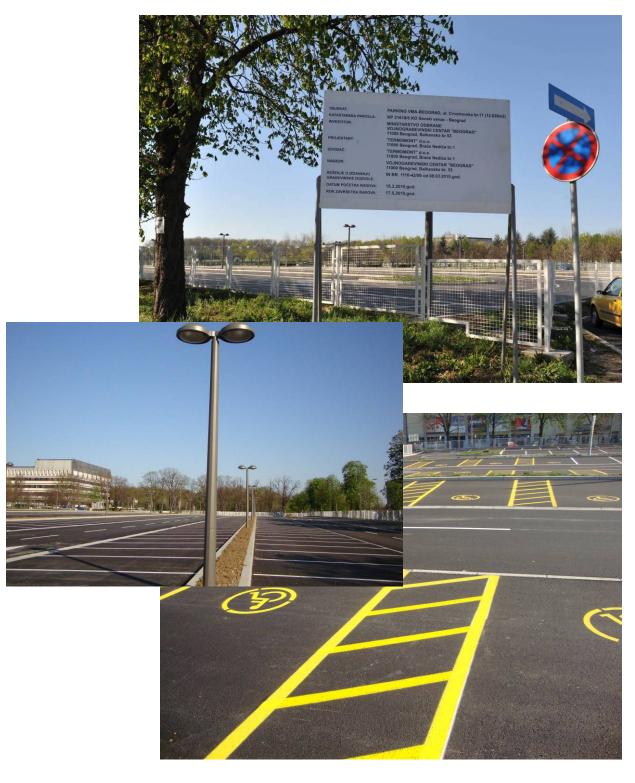
### Parking area within VMA building complex with parking spaces for vehicles

- Reconstruction of access roads
- Parking spaces for 550 vehicles including hydrant system, water drainage, outdoor lighting, automatic signaling and controlled entrance to the parking area





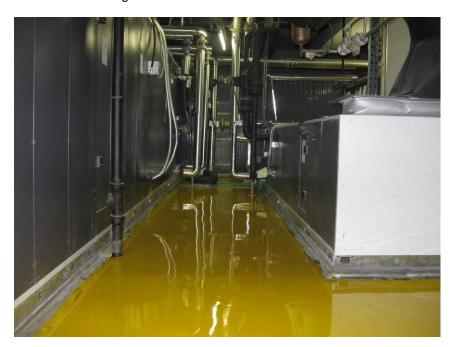
**TERMOMONT**Termomont Itd Belgrade Serbia
VMA – Military medical Academy Belgrade
Parking area





**TERMOMONT**Termomont Itd Belgrade Serbia
Selected references:

VMA – Military medical Academy Belgrade
Installation of 21 air handling units within climate system of VMA
Hydro-insulation of surrounding floor







**TERMOMONT**Termomont Itd Belgrade Serbia
Selected references: VMA – Military medical Academy Belgrade
Installation of 21 air handling units within climate system of VMA
Hydro-insulation of surrounding floor







**TERMOMONT** Termomont ltd Belgrade Serbia

Selected references:

## VMA - Military medical Academy Belgrade, Institute of Radiology of Military medical Academy Belgrade, Angiography premises -Finishing works in construction of Angiography room - Electrical Installation works -Air-conditioning of premises







**TERMOMONT**Termomont Itd Belgrade Serbia
Selected references:

VMA – Military medical Academy Belgrade, Clinic for Anesthesiology and Critical Care, Department of Critical Care
- Air-conditioning and adapting of premises









### IDAMPTINIFIE IDOM

### "PARTNER DOK" Ltd. Obrenovac Serbia

"PARTNER DOK" Ltd. is a company which succeeded DOK Ltd firm founded in 1990. Its basic activities are construction and engineering.

### Selected references: hospitals

## Special Hospital for Psychiatric Diseases 'Doctor Laza Lazarevic' Belgrade Reconstruction works, 2011

- Reconstruction of ground floor and first floor
- Reconstruction of sewage and water supply system
- Replacement of parquet, laminate flooring
- Replacement of floor and wall tiles
- Replacement of wood windows and doors to PVC
- Installation of partition walls
- Wall painting
- Construction of a new Admissions department











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Institute Kirilo Savic a.d. Company profile

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## Onyx Group Development Itd General partner of the Institute "Kirilo Savić"

Institute Kirilo Savic a.d.
Short Company profile with selected references: **Hydrotechnics** 

With selected references of IKS partner included
- DOK DOO Serbia



### **R&D INSTITUTE "KIRILO SAVIC":**

Technical Systems and Environmental Protection

# Engineering, Research, Conformity Assessment and Consultancy

The Institute's origins trace back to 1954 when a separate entity, named Railway institute, was established within the General Directorate of Yugoslav Railways. By the end of 1960, it turns into an independent legal entity.

Today, the "Kirilo Savic" Institute a.d. • (•joint stock company) is Research and Development institute whose primary activities are based on design and development of various technical systems to ensure their reliability, safety and effectiveness.

Basic activities of the Institute are mostly related to the fields of traffic and transport engineering (road and railway engineering), civil and mechanical engineering, environmental protection, esp. water supply, wastewater treatment, regional landfills, energy efficiency; occupational health and safety, chemistry, metallurgy, welding technologies etc.

Its references include projects dealing with energy efficiency and environmental protection (with special emphasis on the projects of water supply, wastewater treatment and regional waste landfills).

### **Quality and Environmental protection**

Institute is certified against SRPS ISO 9001:2008 – Quality Management System by IQNet for the entire scope of its activities. Institute has recently been awarded with QMS/EMS – 14001:2005 Integrated Quality Management system and Environmental Management System.

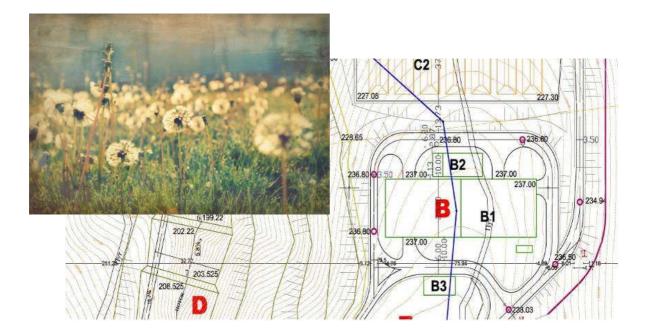
Moreover, it is accredited against SRPS ISO/IEC 17020:2002, type A and competent to perform inspection as an Inspection body and accredited by the Ministry of Science and Technological Development for performing scientific and research activities of general interest.

There are three laboratories within the Institute, accredited by the Accreditation Board of Serbia (as per ISO 17025:2006 standard): the Rolling stock testing laboratory, the Laboratory for materials testing and the Laboratory for testing of Structures (Building constructions) which is competent to perform physical and mechanical testing of building materials (building constructions).



Institute employs over 150 full time employees, approximately half of which are Graduate engineers or with Masters Degree in Engineering.

Institute provides its services to a number of institutions in the Republic of Serbia, but also to clients in the South East Europe. Most contracts are established between IKS and local public and private organizations and Public enterprises (including the City of Belgrade, state authorities - institutions and ministries - Ministry of Environment, Mining and Spatial Planning, Ministry of infrastructure and Energy, PE Serbian Railways, cities and municipalities as the basic units of local self-government in Serbia).





# Institute's licences in the area of Environmental protection

Institute Kirilo Savic has 38 licences issued for designing and execution of works, including the following:

- P071M2 —mechanical installations designs for water-supply and industrial waters facilities, water engineering, and hydroenergetics for interregional and regional water-supply and sewage system facilities
- **P072M2** mechanical installations designs for water-supply and industrial waters facilities, water engineering, and hydroenergetics for potable water preparation plants having the capacity of over 40l/s
- **P073G3** water engineering designs for wastewaters purification plants in urban settlements with more than 15 000 residents, or over 40 l/s in capacity
- P073M2 mechanical installations designs for water-supply and industrial waters facilities, water engineering, and hydroenergetics for wastewaters purification plants in urban settlements with more than 15 000 residents, or over 40 l/s in capacity
- P073T1 technological processes designs for wastewaters purification plants in urban settlements with more than 15 000 residents, or over 40 l/s in capacity
- P100T1 technological processes designs for the plants for hazardous waste treatment by incineration, heat and/or physical, physicochemical, chemical procedures, as well as central warehouses and/or landfills for hazardous waste disposal.
- **P180G1** building structures designs for regional landfills, i.e. landfills for non-hazardous waste disposal for the area with more than 200 000 residents
- P180G3 water engineering designs for regional landfills, i.e. landfills for non-hazardous waste disposal for the area with more than 200 000 residents
- P180T1 technological processes designs for regional landfills, i.e. landfills for non-hazardous waste disposal for the area with more than 200 000 residents
- **I071M2** mechanical installations for water-supply and industrial waters facilities, water engineering and hydroenergetics for interregional and regional water-supply and sewage system facilities
- **1072G3** works at water engineering facilities for potable water preparation plants with the capacity of over 40 l/s
- **I072M2** mechanical installations for water-supply and industrial waters facilities, water engineering and hydroenergetics for potable water preparation plants with the capacity of over 40 l/s
- 1073G3 works at hydro-engineering facilities for the wastewaters purification plants in urban settlements with more than 15 000 residents or over 40 l/s in capacity



# Institute Kirilo Savic a.d. Serbia: Hydrotechnics

Main references of the Institute Kirilo Savic in this area including water supply&sewerage network systems, waste water treatment plants

References of DOK d.o.o as IKS partner included



### Institute's references include the following:

- Programs and studies
- Municipal waste;
- Wastewater Treatment
- Industrial waste treatment
- Waste selection and recycling
- Geotechnical and hydro-geological investigative proceeding;
- Consulting and supervision
- Architecture and civil engineering



Institute "Kirilo Savić"

# Excerpt from the Reference list: **Hydrotechnics**:

# Water supply and sewerage network system, waste water treatment plant

### PRELIMINARY DESIGN DOCUMENTATION

- Preliminary design of facilities for collection, removal and waste-water village Kusadak – Ratari of Smederevska Palanka municipality (7000 ES)
- Preliminary design of facilities for collection, removal and waste-water village Azanja of Smederevska Palanka municipality (5000 ES)
- Preliminary design of facilities for collection, removal and waste-water village Glibovac of Smederevska Palanka municipality (4000 ES)
- Preliminary design of facilities for collection, removal and waste-water village Selevac of Smederevska Palanka municipality (4000 ES)
- Preliminary design of facilities for collection, removal and waste-water village Golobok of Smederevska Palanka municipality (3000 ES)
- Preliminary design of facilities for collection, removal and waste-water village Vlaški Do of Smederevska Palanka municipality (1000 ES)
- Preliminary design of the plant for waste water from settlements Markovac with study of environmental impacts (3300 ES)
- Preliminary design of the plant for waste water from settlements Staro Selo with study of environmental impacts (3200 ES)
- Preliminary design of the plant for waste water from settlements Novo Selo i Rakinac with study of environmental impacts (2000 ES)
- Preliminary design of the plant for waste water from settlements Donje Livadice sa studijom uticaja na okolinu (1300 ES)
- Preliminary design of the plant for waste water from settlements
   Radovanje with study of environmental impacts (500 ES)
- Preliminary design of the plant for waste water from settlements Resavica with study of environmental impacts (4000 ES)
- Preliminary design of water supply "MZ Kličevac"near Kostolac
- Preliminary design of a central plant for wastewater treatment in Smederevska Palanka (50 000 ES).2012.



### DETAILED DESIGN OF DOCUMENTATION

- Detailed design of documentation of existing discharges of wastewater into the main sewer for the town Resavica
- Detailed design documentation of sewerage network for the village Markovac ,Velika Plana municipality
- Detailed design documentation of sewerage network for the villages
   Markovac and Lozovik , Velika Plana municipality
- Detailed design, documentation of sewerage network for the villages Novo Selo and Rakinac, Velika Plana municipality
- Detailed design of documentation of sewerage network for the village Veliko Orašje, Velika Plana municipality
- Detailed design of documentation of sewerage network for the village Radovanje, Velika Plana municipality
- Detailed design of documentation of sewerage network for the village Staro Selo ,Velika Plana municipality
- Detailed design of documentation of waste water treatment plant for settlement Resavica (4000 ES)
- Detailed design of documentation of water supply MZ "Kličevac" near Kostolac - primary network
- Detailed design of documentation of water supply MZ "Kličevac" near Kostolac - secondary network
- Detailed design of documentation of water supply MZ "Kličevac" near Kostolac – reservoir of sanitary water 2x200 m3 network
- Detailed design of documentation of reconstruction of "bypass" the central plant for waste water treatment plant of Velika Plana
- Detailed design of documentation of recirculation of the central plant for waste water treatment of Velika Plana
- Detailed design of documentation sewerage network for village Maskare, investor Municipality Varvarin, 2012
- Detailed design of documentation sewerage network for village Bosnjane, investor Municipality Varvarin, 2012
- Detailed design of documentation sewerage network for village Obrz, investor Municipality Varvarin, 2012
- Detailed design of documentation sewerage network for village Bacina, investor Municipality Varvarin, 2013



# TECHNICAL DOCUMENTATION OF THE AS-BUILT- DESIGN

- Rehabilitation and extension of waste water treatment plant of Subotica - water line, Process design, ebrd/ear/ms/200s/26807-1a2
- Rehabilitation and extension of waste water treatment plant of Subotica - sludge line, Process design, ebrd/ear/ms/200s/26807-1a2

## **STUDIES**

Plan and program of works on reconstruction of the existing central plant for wastewater treatment plant in the municipality of Velika Plana:

**Volume 1:** Central defects inspection systems for wastewater treatment plant in the municipality of Velika Plana

**Volume 2:** The reconstruction project "Bypass" for central wastewater treatment plant in the municipality of Velika Plana

**Volume 3:** The main project of the recirculation for central wastewater treatment plant in the municipality of Velika Plana



Bio lagune as wastewater treatment plant in the municipality of Velika Plana



## **IMPLEMENTED PROJECTS**

- Works on the reconstruction of the Department of adolescents in a special hospital, "Dr Laza Lazarevic" Belgrade-hydro technical works on all internal installations and all work on the reconstruction
- Reconstruction of Water supply pipeline in Special Hospital For Mental Disorderes "Dr. Laza Lazarevic", facilities in Padinska Skela, 2012.



Water supply pipeline in Special Hospital For Mental Disorderes "Dr. Laza Lazarevic", facilities in Padinska Skela



## REFERENCES OF THE COMPANY DOK d.o.o. SERBIA as a Consortium partner of the Institute "Kirilo Savic"

### **REFERENCES - EXECUTED WORKS**

Νo	Type of work	Year	Client
1.	Works performed on the construction of NIS gas stations	2010,	Deneza M Engineering
	(Plandište, Kragujevac, Valjevo, Inđija, Sopot Železnik) with	2011,	
	the entire water supply and sewage network	2012	
2.	Construction building (building works performed)) up to	2010	Tehno beton 2009
	level "O" in a mall "Mercator" in Mladenovac with entire		
	water supply and sewage network P=30.000m2		
3.	Construction building (construction works performed) at	2010	Institute "Kirilo Savić"
	TE "Kolubara", drainage and sewage system		Belgrade
4.	Construction building (building works) at TE "Nikola Tesla"	2008,	"Energoinvest" Sarajevo
	B deashing system and sewage network.	2009,	
		2010	
5.	Construction building ( construction works performed ) on	2008	TE "Nikola Tesla"
	technical recultivation of passive cassettes at the ash		
	landfill TE Kolubara Crljeni with water system and		
	drainage system.		
6.	Building of Tamnavska street in Obrenovac with entire	2007	PZP Beograd
	water supply and sewage network		
7.	Construction building (construction works performed) on	2009	"Energoinvest",Sarajevo
	infrastructure at TENT Bwith water supply and sewage netw	ork	
8.	Construction building (construction works performed) -	2005	Public corporation for
	City park with water supply and sewage network		building Obrenovac
9.	Construction of market in Obrenovac with water supply	2003,	Public Building
	and sewage network	2004	Corporation Obrenovac
10.	Construction of Petar Bojović street in u Obrenovac with	2002,	Public Building
	water supply and sewage network.	2003	Corporation Obrenovac
11.	Construction of Save Kovačević street in Obrenovac with	2002	Public Building
	water supply and sewage network		Corporation Obrenovac
12.	Building of drainage system and watering system(special	2000,	TE"Nikola Tesla" power plan
	ash handling system ) at a TENT B landfill	2001	l
3.	Construction of the industrial sewerage collector,Lajkovac		RB"Kolubara"
		2000	



## **PHOTO DOCUMENTATION**





Water supply pipeline in Padinska Skela



Water supply pipeline in the village of Klicevac





Sewerage network manhole



Concrete Sewerage network pipeline





PE corrugates Sewerage network pipeline







Deep excavation for PVC Sewerage network pipeline





Wide excavation for waste water treatment plant with needle filters



Waste water treatment plant Reinforcement for bottom slab of aeration tank





Panel for concrete walls

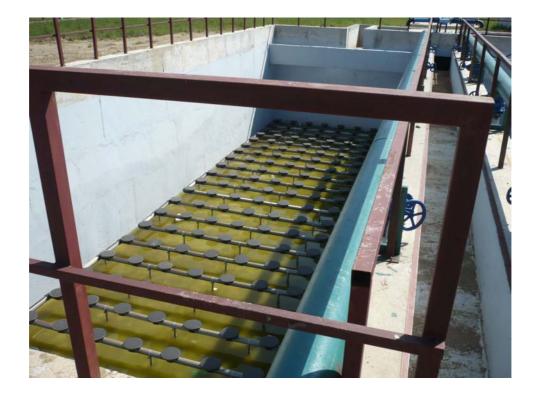


Waste water treatment plant Secondary sedimentation tank in a final phaze





Waste water treatment plant Aeration tank in final phaze



Aeration tank final phaze





Waste water treatment plant Object of Flow meter





Crossing PVC sewerage with passing barrier ,Nikola Tesla Power plant



Industrial Sewerage network in Lajkovac, PVC pipes



DOK d.o.o. SERBIA



Industrial Sewerage network in Lajkovac, PVC pipes



Industrial Sewerage network in Lajkovac





Industrial Sewerage network in Lajkovac, montage manholes



Sewerage network for Trade center `Merkator` - Belgrade







Sewerage network for trade centar, Merkator - Belgrade



Escalation sewerage network pipeline in the street with wood suburb ,P.Bojovic Str.





DOK d.o.o. Save Kovacevic street





DOK d.o.o. Tamnavska street







# CONFIRMATIONS FROM EMPLOYERS/CLIENTS





Name of Employer: Special Hospital For Mental Disorderes "Dr. Laza Lazarevic" Address: Visegradska 26, Belgrade,

#### CONFIRMATION

For the Bidder:

#### Institute "Kirilo Savić" a.d. Vojvode Stepe 51, 11000 Belgrade

In last 4 year (2009,2010, 2011 and 2012) provide service of

Designing Detail Design Documentations (DDD) and Accomplished same works on the object:

 Special Hospital For Mental Disorderes "Dr. Laza Lazarevic", department of adolescents in object Visegradska 26. Belgrade.

Total amount

8 000 000,00 RSD~ (76190 Euros) without Vat.

This Confirmation is issues by request of the bidder Institute "Kirilo Savić" a.d. Serbia by reason of participation on the tender

Date: 11 e 1 Sent3

Place: Belgrade



Sign of authorized person





Name of Employer: Special Hospital For Mental Disorderes "Dr. Laza Lazarevic" Address: Visegradska 26, Belgrade.

#### CONFIRMATION

For the Bidder:

#### Institute "Kirilo Savić" a.d. Vojvode Stepe 51, 11000 Belgrade

In last 4 year (2009,2010, 2011 and 2012) provide service of

Accomplished water supply works on the object:

 Water supply network for Special Hospital For Mental Disorderes "Dr. Laza Lazarevic", department in Padinska Skola

Total amount

820 000,00 RSD~(7 800 Euros) without VAT.

This Confirmation is issues by request of the bidder Institute "Kirilo Savić" a.d. Serbia by reason of participation on the tender

Date: 11 04 Cenz.

Place: Belgrade



Sign of authorized person



Name of Employer: JKP "TOPLIK" Address: Moravska 18, Despotovac

#### CONFIRMATION

For the Bidder:

#### Institute "Kirilo Savić" a.d. Vojvode Stepe 51 , 11000 Belgrade

In last 4 year (2009,2010, 2011 and 2012) provide service of

#### Detail Design Documentations (DDD):

- Detail Design Documentation of sewerage network for main colector in coal mine Resavica,
- Detail Design Documentation for Waste water treatment plant for Coal mine Resavica

Total amount

2 000 000,00 RSD~ (19050 Euros) without Vat.

This Confirmation is issues by request of the bidder Institute "Kirilo Savić" a.d. Serbia by reason of participation on the tender

Date: 11.04.2013.

Place: Despotovac

Sign of authorized person

30



#### POTVRDA ZA REFERENCE

Name of Employer: Municipality Varvarin

Address: 37260 Varvarin

#### CONFIRMATION

For the Bidder:

#### Institute "Kirilo Savić" a.d. Vojvode Stepe 51, 11000 Belgrade

In last 4 year (2010, 2011,2012 and 2013) provide service of

Designing Detail Design Documentations (DDD)

- DDD sewerage network for wilage Maskare, investor Municipality Varvarin, 2012
- DDD sewerage network for wilage Bosnjane, investor Municipality Varvarin, 2012
- DDD sewerage network for wilage Obraz Investor Municipality Varvarin, 2012
- DDD sewerage network for wilage Bacina, investor Municipality Varvarin, 2013

Total amount

7.000.000,00 RSD ~ 66,666.00 Euros) without Vat.

This Confirmation is issues by request of the bidder institute "Kirilo Savić" a.d. Serbia by reason of participation on the tender

Date: 11.04-2013

Place: Varvarin



Sigh of authorized person



Name of Employer: Municipality Velika Plana Address: Milosa Velikog 30, Velika Plana

#### CONFIRMATION

For the Bidder:

#### Institute "Kirilo Savić" a.d. Vojvode Stepe 51, 11000 Belgrade

In last 4 year (2009,2010, 2011 and 2012) provide service of

#### Designing Detail Design Documentations (DDD)

- DDD sewerage network system in villages in municipality Velika Plana, 2011
  - DDD sewerage network for wilage Radovanje, investor Municipality Velika Plana, 2011
  - DDD sewerage network for wilage Markovac, investor Municipality Velika Plana, 2011
  - DDD sewerage network for wilage Novo Selo, investor Municipality Velika Plana, 2011
  - DDD sewerage network for wilage Staro Selo, investor Municipality Velika Plana, 2011
  - DDD sewerage network for wilage Lozovik and Milosevac, investor Municipality Velika Plana, 2011
  - DDD sewerage network for wilage Veliko Orasje, investor Municipality Velika Plana, 2011

#### Preliminary Design Documentations

- Preliminary design of WWTP in wilage Radovanje, investor Municipality Velika Plana, 2011
- Preliminary design of WWTP in wilage Markovac, investor Municipality Velika Plana, 2011
- Preliminary design of WWTP in wilage Novo Selo, investor Municipality Velika Plana, 2011
- Preliminary design of WWTP in wilage Staro Selo, investor Municipality Velika Plana, 2011
- Preliminary design of WWTP in wilage Lozovik and Milosevac, investor Municipality Velika Plana, 2011

Total amount

13.930.000,00 (RSD~ 132,666.00 Euros) without Vat.

This Confirmation is issues by request of the bidder Institute "Kirilo Savić" a.d. Serbia by reason of participation on the tender

Date: //

Date . \_\_

Place: Velika Plana

Sign of authorized person









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#### Onyx Group Development Itd General partner of the Institute "Kirilo Savić"

Short Company profile with selected references: **Structural engineering** 

With selected references of IKS partner included - MOLOS Serbia



#### **R&D INSTITUTE "KIRILO SAVIC":**

Technical Systems and Environmental Protection

# Engineering, Research, Conformity Assessment and Consultancy

The Institute's origins trace back to 1954 when a separate entity, named Railway institute, was established within the General Directorate of Yugoslav Railways. By the end of 1960, it turns into an independent legal entity.

Today, the "Kirilo Savic" Institute a.d. • (•jsc) is Research and Development institute whose primary activities are based on design and development of various technical systems to ensure their reliability, safety and effectiveness.

Basic activities of the Institute are mostly related to the fields of traffic and transport engineering (road and railway engineering), civil and mechanical engineering, environmental protection, esp. water supply, wastewater treatment, regional landfills, energy efficiency; occupational health and safety, chemistry, metallurgy, welding technologies etc.

Its references include projects dealing with energy efficiency and environmental protection (with special emphasis on the projects of water supply, wastewater treatment and regional waste landfills).

#### **Quality and Environmental protection**

Institute is certified against SRPS ISO 9001:2008 – Quality Management System by IQNet for the entire scope of its activities. Institute has recently been awarded with QMS/EMS – 14001:2005 Integrated Quality Management system and Environmental Management System.

Moreover, it is accredited against SRPS ISO/IEC 17020:2002, type A and competent to perform inspection as an Inspection body and accredited by the Ministry of Science and Technological Development for performing scientific and research activities of general interest.

There are three laboratories within the Institute, accredited by the Accreditation Board of Serbia (as per ISO 17025:2006 standard): the Rolling stock testing laboratory, the Laboratory for materials testing and the **Laboratory for testing of Structures** (Building constructions) which is competent to perform physical and mechanical testing of building materials (building constructions).

Institute employs over 150 full time employees, approximately half of which are Graduate engineers or with Masters Degree in Engineering.

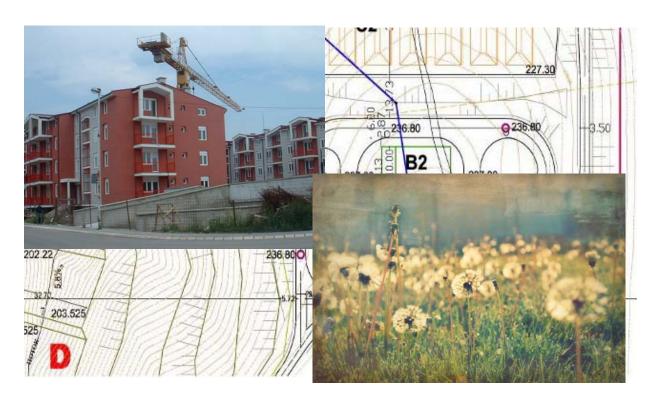


Institute Kirilo Savic has **38 licences** issued for designing and execution of works, including those for

- Building structures designs for the facilities at public railway infrastructures with connections (bridges),
- Building structures designs for facilities having the structural span of 50 or more meters,
- Architectural design for building constructions, structures and other facilities at the airport etc.

Considerable number of designed projects have been awarded prizes in different competitions organized by professional associations of constructors and urban planning salons.

Institute provides its services to a number of institutions in the Republic of Serbia, but also to clients in the South East Europe. Most contracts are established between IKS and local public and private organizations and Public enterprises (including the City of Belgrade, state authorities - institutions and ministries - Ministry of Environment, Mining and Spatial Planning, Ministry of infrastructure and Energy, PE Serbian Railways, cities and municipalities as the basic units of local self-government in Serbia).



NB Some of the photos for illustrative purposes only



#### **CIVIL ENGINEERING**

#### Selected references of the Institute Kirilo Savic

#### 1. DESIGNING

#### 1.1. ENERGY FACILITIES

- Detail design documentation of sanitation (recovering) for aerial (auto crane) P&H-8115-TC-Kolubara Metal-Vreoci 2005
- Detail design documentation adaptation system of manipulation of ash from power plant Lafarge BFC a.d. Beočin-2010
- Detail design documentation concrete plateau in thermo power plant Kostolac-2011.
- Detail design documentation for sanitation bridge for gas pipeline cross the river Danube-Ade near city Smederevo - 2006

#### 1.2. INDUSTRIAL FACILITIES

 Detail design documentation of warehouse packaging milk factory in Vrsac-2005

#### 1.3. BRIDGES

- Detail design documentation of bridge construction and stone pillow on Mladenovac overpass
- Detail design documentation of bridge construction in Koste Racina street, municipality Lazarevac
- Detail design documentation of bridge construction in MZ Dudovica -Barzilovica, municipality Lazarevac.
- Detail design documentation of bridge construction on river Turija, municipality Lazarevac.

#### 1.4. **AIRPORTS**

 Detail design documentation of sanitation (recovering) construction facility of airport JAT -Hangar-2006

#### 1.5. TESTING OF BRIDGE STRUCTURES

**Testing of more than 90 bridges of different types**; the list could be provided at the request



#### 2. Technical control

- Detail design documentation of sanitation railroad bridge cross the river
   Sava on km 5+260 railroad: Beograd-Ranžirna-Ostružnica-Batajnica
- Detail design documentation of residential complex "Stepa Stepanović" ,Voždovac, Belgrade,2010-2011
- Technical control of the main project (DDD) of the residential buildings in the settlement of "Dr Ivan Ribar" street, Belgrade

#### 3. Site supervision (supervision of works)

- Site supervision of sanitation works of the bridge Gazela, Belgrade-2007,2008
- Site supervision, Residential buildings N11, N12, N13, N14 in settlement Borča Greda II - 2006
- Bridge Works Supervision Consultant: Sava River Brigde Project 'Most na Adi', construction of the bridge on the Sava at tip position of Ada Ciganlija, the largest single pylon cable-stayed bridge in Europe, Belgrade, Serbia
- Site supervision of bridge cross the river Sava on the Ade Ciganlija,
   Belgrade with all infrastructure, 2009 -2011
- Site supervision of reconstruction of elementary school "Dositej Obradović" - 2011.
- Site supervision of reconstruction of elementary school "Jelena Ćetković" –2011.
- Site supervision of reconstruction of High school "VI Beogradska gimnazija" –2011.



#### Photo documentation

# TECHNICAL CONTROL OF THE MAIN PROJECT (DDD) OF THE RESIDENTIAL BUILDINGS IN THE SETTLEMENT OF "DR IVAN RIBAR" STREET, BELGRADE

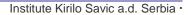
Total area:	52.550,00 m2
Name of client:	BUILDING DIRECTORATE OF SERBIA, Ltd. Bulevar Arsenija Čarnojevića 110, Belgrade
Dates (start/end):	2011/2012

Residential buildings Dr. Ivan Ribar Belgrade, NOVI BEOGRAD  $^1$  -visualization



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<sup>&</sup>lt;sup>1</sup> Photographs taken from http://ekapija.com





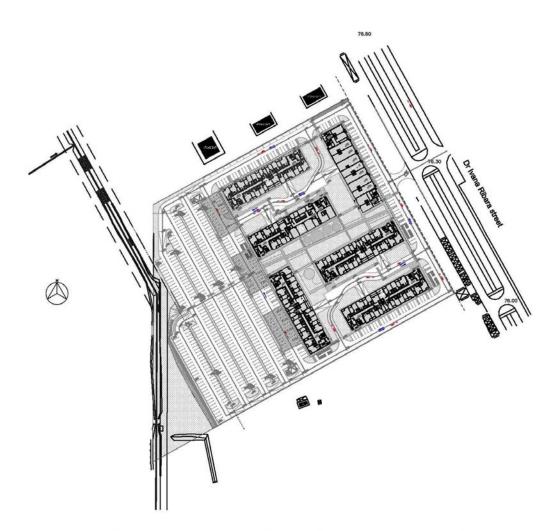




IKS
Technical control of the main project (DDD) of the residential buildings in the settlement of "Dr Ivan Ribar" street, Belgrade



# Elevation A



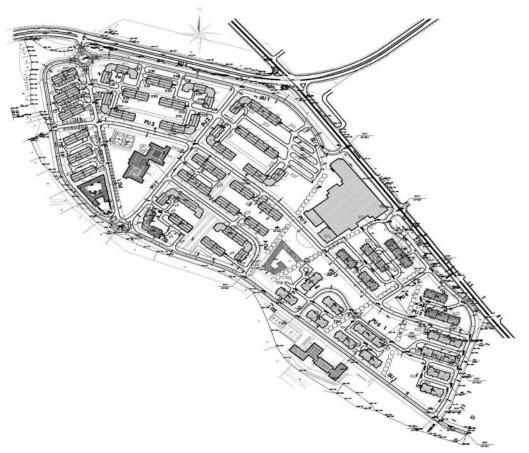
Site plan of the settlement Dr Ivan Ribar, Belgrade

Technical control of the main project of the residential buildings in the settlement of "Dr Ivan Ribar" street, Belgrade



# TECHNICAL CONTROL OF THE MAIN PROJECT (DDD) OF THE RESIDENTIAL BUILDINGS ON THE LOCATION OF THE MILITARY COMPLEX "STEPA STEPANOVIĆ" IN VOŽDOVAC, BELGRADE

Total area:	350.200,00 m2
Name of client:	BUILDING DIRECTORATE OF SERBIA, Ltd. Bulevar Kralja Aleksandra 84, Belgrade
Dates (start/end):	2010/2011



Site plan of the settlement Stepa Stepanovic, Belgrade



# Residential buildings on the location of the Military complex "Stepa Stepanović" Voždovac Beograd\*







References: Civil engineering

<sup>\*</sup> Photographs taken from http://www.gds-stanovi.rs











Residential buildings on the location of the Military complex "Stepa Stepanović" Voždovac Beograd\*

<sup>\*</sup> Photographs taken from http://www.gds-stanovi.rs



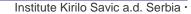


## SUPERVISION OF CONSTRUCTION WORKS OF THE RESIDENTIAL BUILDINGS IN THE SETTLEMENT OF "BORČA GREDA II", BELGRADE

Total area:	10.958,30m2
Name of client:	SOCIAL HOUSING FUND, Kosovska 17, Belgrade
Dates (start/end):	2006/2008















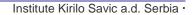
IKS:

Supervision of construction works of the residential buildings in the settlement of "BORČA GREDA II", Belgrade

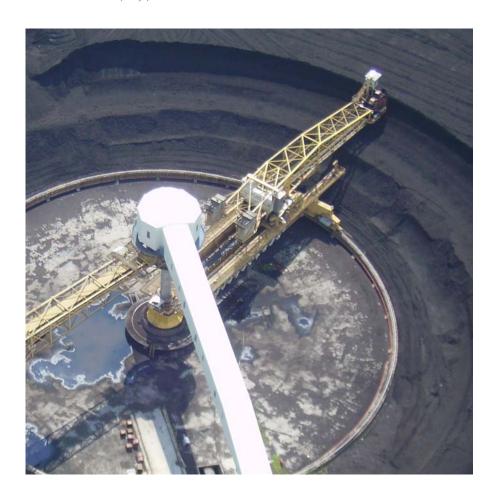


#### **Construction works supervision**





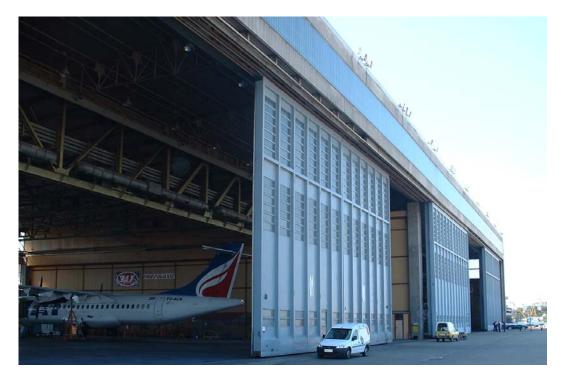


















MOLOS LTD.

### REFERENCES OF THE COMPANY "MOLOS" Itd Consortium partner of the Institute "Kirilo Savic"

#### REFERENCES-EXECUTED WORKS

No	Type of work	Year	Client
1.	Construction building (building works performed)) up to	2010	Tehno beton 2009
	level "O" in a mall "Mercator" in Mladenovac with entire		
	water supply and sewage network P=30.000m2		
2.	Construction works, 10000m2 ,Stepa Stepanovic	2011	
	residential complex		



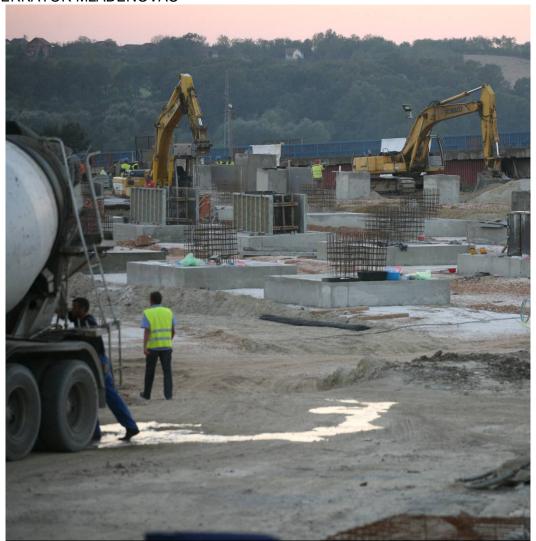
MOLOS LTD.

Molos Itd: Consortium partner of the Institute "Kirilo Savic"

#### **Photo documentation**

#### Structural engineering

MERKATOR MLADENOVAC

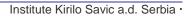




MOLOS - Photo documentation Shopping mall MERKATOR MLADENOVAC



#### **MOLOS - Photo documentation**













#### MOLOS - Photo documentation Residential complex Stepa Stepanovic











