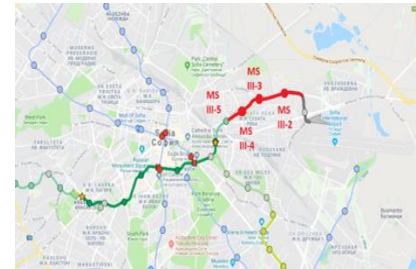


PRELIMINARY DESIGN FOR AN EXTENSION OF THIRD METRO LINE IN SOFIA – MS III-5 – MS III-2



Third Metro Line connects Northeast and Southwest parts of Sofia. The total length of this Metro Line is 16 km with 19 Metro Stations. Estimated load of the line is 170 000 passengers daily, and maximum train speed 80 km/h.

The optimization of the concept design is necessary in relation with investment intentions of Sofia Municipality in order to update the detailed development plan, where the metro stations will be underground.

The project covers a metro route from km 4+307.53 to km 1+262.10 with a total length of 3045.43 m with three underground metro stations MS III-2, MS III-3 and MS III-4, as well as a section for turnover and warm reserve after MS III-2 to the east.

Metro stations consist of two platforms with a length of 105 meters. Two of the metro stations will have two vestibules, the third one has one vestibule.

The project includes 14 project parts:

- Architecture
- Structures and Tunnel structures
- Track road
- Electricity
- Catenary System
- Rail Roads
- Water and Sewerage
- Health and Safety Plan
- Heating, Ventilation and Air Conditioning
- Energy Efficiency
- Access Control and Charging Systems
- Communication and Audio -Visual systems
- Automatic and Telemechanic
- Reconstruction of existing infrastructure

EKJ Bulgaria’s services:

During design:

EKJ Bulgaria provided consultant services for preparation of project development of the phase “Preliminary design” of section of third metro line in Sofia with length of 3045.43 m and three underground metro stations.

- Project and team management
- Time management and coordination
- Reports and calculations of structures
- 3D modelling and 2D drawings

Special challenges:

- Increasing the capacity of the third subway drivers in Sofia
- Design in weak and water-saturated soils
- Reconstruction of the existing infrastructure

Location:	Sofia, Bulgaria
Client:	Metropolitan JSC
Contact person:	Alexander Jiponov, akj@ekj.bg
EKJ BG’s role:	Contractor
Contract type:	Design
Period:	2018 - 2019
Scope:	Metro Line from the end of MS III-5 to MS III – 2 with three Metro stations and section for turnover and warm reserve
Design phase:	Preliminary design

