

# Project Dossier



PROJECT DOSSIER

## ICD BROOKFIELD

### PROJECT OVERVIEW

The mixed-use development ICD Brookfield Place designed by Foster + Partners consists of a 53 storey, 282 m high tower, located in Dubai International Financial Centre (DIFC) district. The tower comprises of Grade A office space adjacent to a 5 storey retail centre with shopping, dining, fitness and private club facilities. The office tower and retail building will be connected by several pedestrian pathways and a 31 m high landscaped public realm that will showcase a range of arts and cultural events.

A comprehensive monitoring program was planned for before, during and after the Enabling Works for ICD Brookfield Palace, Dubai Project. Installation and monitoring of surface geotechnical and geodetic instruments was executed to monitor surface and sub-surface movements.

<b>Project</b>	<b>ICD Brookfield Place</b>
<b>Location</b>	Dubai, UAE
<b>Client</b>	Investment Corporation of Dubai & Brookfield Property partners
<b>Contractor</b>	Brookfield Multiplex-Ssangyong Engineering & Construction (BMSS) JV
<b>Consultants</b>	AECOM
<b>Duration</b>	July 2016 till date



## Monitoring solution

Geotechnical and geodetic instruments were used to monitor effects of proposed shoring wall, excavation, dewatering and raft foundation works.

### Turnkey services

Encardio-rite was awarded the sub-contract for complete monitoring works of the project. Scope of works included:

- Supply and Installation of geotechnical/ geodetic instruments
- Online monitoring, Surveying
- Daily & weekly reporting with evaluation & interpretations



## INSTRUMENT USED

### Shoring works monitoring

- **Ground Settlement Point:** Installed at kerbstone and above service tunnel to monitor soil settlement and deformation of ground surface
- **Prism target:** Installed at shoring wall to monitor 3-D movements

### Raft monitoring

- **Strain Gage:** To monitor strain/stress in the piles
- **Pressure Cell:** To monitor stress on the raft
- **Settlement Point:** To monitor settlement of raft

**Online monitoring** was required for sensors that were critical and was carried out with advanced automatic dataloggers.

Automatic as well as manual monitoring data was provided in monthly reports to the Contractor, Client as well as the Consultant with interpretation for the variations observed.



TUNNELS



HYDROELECTRIC



CONSTRUCTION



STRUCTURAL



METRO & RAIL



BRIDGES



MINING