

CASE STUDY



THE PROJECT

Phase IA6 of One Central is part of a major development within the prestigious Dubai World Trade Centre District. Al-Futtaim Carillion is the main contractor on the project which forms part of one of the most significant business districts in the world, home to the Dubai International Convention and Exhibition Centre, Jumeriah Emirates Towers and the Dubai World Trade Centre complex. The development is strategically located adjacent to Sheikh Zayed Road and will offer seamless connectivity for business and international commerce.

This first phase of the DWTCD development is a mixed-use development with a built-up area of 182,500 square metres and comprises two grade A office buildings of 12 and 8 storeys and includes a business hotel. The contract began in January 2017 and is scheduled for full completion at the end of 2018.

THE CLIENT – AL-FUTTAIM CARILLION

Al-Futtaim Carillion has a long history of successfully working in the U.A.E. and the Middle East. The company's roots date back to the early days of the region's growth and development. Al Futtaim Carillion is a Dubai based and registered organisation jointly owned by Al Futtaim (Private) Limited of Dubai and Carillion Construction Overseas Limited, the international contracting and services group from the United Kingdom.

Al-Futtaim Carillion provides a broad range of services in construction, civil engineering works, sewerage works and concrete repairs, transport and construction services to commercial and public-sector clients in the U.A.E. They have been involved in numerous landmark projects in the development of the U.A.E. and continue to work on major projects in the area contributing to shaping the future of the region.

CADS AND USING BIM (BUILDING INFORMATION MODELLING) ON THIS PROJECT

Al-Futtaim Carillion commissioned CADS for their BIM services on this project. Using Autodesk Revit 2016, Autodesk Naviswork, AutoCAD, Lumion 7 and A360 Collaboration on this particular project the experienced team of architectural, structural and MEPF engineers at CADS provided 3D detailed modelling to the required standard for each stage of the development. This included updating LOD 200 to LOD 500 Revit model for architectural, structural, MEPF.civil and FFE services. The development of the model included 4D (simulation & schedule), quantity take off, 5D (cost management), 6D (facility management) and COBie information set.

CADS BIM CUSTOMER:

Al-Futtaim Carillion

LOCATION:

Dubai, U.A.E.

SIZE

Two grade A office buildings of 12 & 8 storeys

DURATION OF PROJECT:

18 months

PROJECT COMPLETION DATE:

The end of 2018

AWARDS

LEED® Gold precertification from the US Green Building Council





This approach provided detailed 3D visualisation which could be used collaboratively by the different parties involved in the project making communication and co-ordination on the project easier. The level of accuracy enabled decisions to be taken quickly and the project to be tightly controlled in terms of budget, materials and schedule.

BIM provided clash detection and was used in the design meetings with consultants as well as in the final coordination and updating of all the services as a clash free model. CADS also prepared the architectural construction drawings from the coordinated BIM models and validated other subcontractors models in QC.

CADS has worked with for AI-Futtaim Carillion for over a decade and in that period, has detailed and produced bar bending schedules for more than 1 million tonnes of rebar using our own, AutoCAD based software, CADS RC. For the One Central Dubai project alone CADS produced 1,600 AO sized drawings for approximately 25,600 tonnes of steel reinforcement.

CADS

Established in 1974, CADS is a leading software developer with 6,000+ civil and structural engineering customers in 90+ countries.

CADS has established an enviable reputation for providing expert RC detailing services to Consulting Engineers, Contractors and Rebar Fabricators in the UK, UAE and North America. CADS uses its own market leading CADS RC and RebarCAD software to detail more than 2000 drawings per month.

CADS has now built up a talented team of engineers specifically to provide BIM services. The experienced team at CADS can deliver your BIM projects faster and at a lower cost than traditional design methods allow. Our unique ability to connect SCIA Engineer 3D FE design software to Revit and back means we can take full advantage of existing design information, collaborating fully with our clients or the in-house structural engineering design team at CADS.

"AFC have used CADS RC detailing and rebar scheduling services for many years, which gave us confidence that we could expect the same high level of service and accuracy from their BIM modelling too. The CADS BIM Services Team produced Revit models and other BIM related deliverables with the expected high level of presentation in a responsive and timely manner and all at a competitive price. AFC has a longstanding and valuable business relationship with CADS and I wouldn't hesitate to work with the CADS BIM team again on a future project."



Microsoft Partner Gold Application Development



GLOBAL CONSTRUCTION SOFTWARE AND SERVICES

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