

Media Release



Inauguration of Bangabandhu Sheikh Mujibur Rahman Tunnel

23 October 2023, Chattogram: Official inauguration of Bangabandhu Sheikh Mujibur Rahman Tunnel is set to occur in the port city of Chattogram on 28th October 2023. Owned and managed by the Bangladesh Bridge Authority, the 3.4 km-long, 11 m diameter twin tunnels will play a vital role in connecting the different parts of the country and promoting economic growth.

SMEC was appointed in 2017 to undertake design review, contract management and construction supervision for the project. The tunnel was built by the China Communications Construction Company under an EPC contract and SMEC led a joint venture supervision team which included ACE, COWI and DevConsultants.

The presence of soft soil in the riverbed, and an elevated water table made this a highly complex tunnelling operation. Passing 20 meters under the Karnaphuli river, reaching 31 meters deep, it is the first slurry shield under-river road tunnel in South Asia.

The ARiGATAYA® System was used for data collection and management of the TBM works. It provided the SMEC team with vital information needed to make important decisions related to the operation of the TBM.

It was critical to achieve watertightness throughout construction as well as during operation. Approximately 1,225 precast concrete rings have been installed to line the tunnel, each with a width of 2,000 mm and a thickness of 500 mm. The entrances of the tunnel are built to withstand cyclonic tidal surges that are common in the Bay of Bengal.

Nestled 20 m below the riverbed, the tunnel is fitted with world class safety and control systems to enable smooth traffic flow. A central control centre will monitor the tunnel in real time, with the ability to activate controls remotely to respond to changing

conditions or any incidents that occur. The tunnel is capable of servicing approximately 28,000 vehicles a day.

In addition to the tunnel, the project features several interfacing infrastructure nodes including 5.4 km of approach roads, a 730 m viaduct, a toll plaza, overload control system, a 65-hectare mixed-use service area, and a Slurry Treatment Plant.

With the construction team peaking at over 2,000 people on site, SMEC was tasked with implementing a comprehensive management framework which extended to document control, quality assurance, safety, environmental management, and risk assurance. The team also had to navigate severe disruptions caused by the global pandemic.

Dr Janardhan Sundaram, Executive Director Bangladesh said, "The tunnel is a game-changer for economic development in the region. It will ease traffic congestion and significantly reduce travel times between Dhaka, Chattogram Port and the developing growth area in southeast Bangladesh."

Gavin Strid, Chief Technical Principal and Project Manager added, "The Bangabandhu Sheikh Mujibur Rahman Tunnel enabled the training of over 50 local Bangladeshi engineers. The project's success has given the government confidence in the slurry shield methodology which is currently being deployed on other mega projects in the country including the Dhaka Metro"

Learn more: <https://www.smec.com/au/project/the-karnaphuli-river-tunnel/>

Download images: [SMEC Media Release_Bangabandhu Sheikh Mujibur Rahman Tunnel](#)

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About SMEC: *SMEC is a global engineering, management and development consultancy delivering innovative solutions for our clients and partners. Across Bangladesh SMEC is currently involved in numerous regionally significant infrastructure projects including Padma Multipurpose Bridge, Dhaka Metro Mass Rapid Transit System, Matarbari Sea Port, Marine Drive Expressway and the Dohazari to Cox's Bazar Railway Line.*

Leveraging our 70-year history of delivering nation-building infrastructure, we provide technical expertise and advanced engineering services to resolve complex challenges across the project lifecycle. www.smec.com

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