



Kolkata Metro including the East West Metro

SHARMA, Hemant K.

Managing Director
Kolkata Metro Rail Corporation
Ltd, Kolkata, Inda.
Hemantkumar9@gmail.com

Sharma H K, Born in 1955, an IRSE Officer of 1981 batch presently working as Managing Director, Kolkata Metro Rail Corporation. A civil engineer of more than 34 years of experience in railway infrastructure sector. Previously engaged as CPM in DMRC and completed construction of a substantial part of 2nd phase as well as in charge of planning for entire 3rd phase of Delhi Metro. Also served in different important capacities in India and abroad with Indian Railways as well as IRCON.

ROY, Bidhan C.

Sr. Executive Director
Consulting Engineering
Services (India) Ltd. New
Delhi, India
bcr.iabse@gmail.com

Roy B C, born in 1944, holds a Ph. D in engineering. In a career of over 40 years, Dr. Roy has dealt with many multi-disciplinary projects; experience and is known for his innovative designs. He has worked in MRTS, LRTS and BRTS projects. He is the Vice President and the Chairman of the Scientific Committee for the Kolkata Symposium 2013 of IABSE.

DEWANJEE, Biswanath

Chief Engineer
Kolkata Metro Rail
Corporation Ltd, Kolkata,
India
biswanath_dewanjee@hotmail.com

Biswanath Dewanjee, has comprehensive experience in the planning, design, construction and co-ordination of metro, road, building and other projects

Summary

Kolkata - developed in the North-South direction along Hooghly River - a major metropolis of India and was once made its capital. After Independence the transport facilities did not develop fast enough to meet the rising demands, although two major rail terminals, Howrah on the west of River Hooghly and Sealdah in the east were developed, serving millions of passengers daily.

Dr. B C Roy, the then Chief Minister of the state of West Bengal realized the transport problem as early as 1949 and Metropolitan Transport Project (Railways) (MTP) set up in 1969 started the ball rolling. A Master Plan developed in 1971 proposed a Rapid Transit System with three corridors with appropriate interchange points to facilitate overall mobility. The East-West line, the second of the three lines that were originally approved for enhanced mobility of the city in the Master Plan started with a detailed project report and the construction work began in 2009.

Keywords: Technological innovation, Elevated viaduct, Underground Tunnel, Green Depot

1. Introduction

We are urbanizing fast. This automatically means moving people and goods across an expanding landscape. And, as you expand, the things to be crossed loom ever larger. And, metro lines are no exception. In a congested city like Kolkata, the crossings may not be long, but they definitely are complex. Bridge engineers' skills are tested not necessarily only by the length of the crossing, but where the crossings are, like a severely curved alignment across a multi-pronged busy intersection. Kolkata East-West Metro, currently under implementation is a prime example where bridge engineers' skills are in great demand.

Historically Kolkata has developed in the North-South direction. But now it is spreading further east. Consequently, the East-West travel patterns will become more intense. At the same time there are many developmental initiatives on the western banks of River Hooghly and the cross-river traffic is bound to increase. Further, the East-West transport network within the metropolitan area is extremely sparse as compared to the North-South. This is the context in which the Kolkata East-West Metro finds strong justification.

The added feature of this project is that it crosses River Hooghly underneath it. Yes, there is no "span" visible, like the Vidyasagar Setu, Rabindra Setu, or Nivedita Setu, but it still is a crossing!

The under construction East-West Metro, crossing River Hooghly beneath it, had been ideated as long ago as 1971. Over the past forty years many things had changed in Kolkata, except the commuting conditions, notwithstanding the North-South metro corridor between Dum Dum and Garia.