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S.C. Railway has handed over one acre of railway land at Chilkalguda on temporary lease for a few months to HMRL for assembling and launching the massive steel Metro Rail bridge over the existing Oliphanta railway bridge near Secunderabad station. With this, L&TMRHL will soon bring the pre-fabricated steel bridge structure from Ghaziabad (near Delhi) to Secunderabad for commencing Oliphanta Metro RoB works, stated MD, HMRL Mr.NVS Reddy.

Of all the 8 Metro Rail over bridges being constructed in the twin cities, Oliphanta bridge construction is the toughest and an engineering challenge. Stiff conditions were imposed by the railways that no Metro pillar is permitted in between the railway tracks of Secunderabad yard or in the railway land for future railway tracks; and that a minimum of 28 ft height above the Oliphanta bridge tracks shall be maintained by Metro Rail for accommodating future double-decker trains. The Metro Rail main obligatory span had to be accordingly designed for a length of 275 ft without any support and with a height of 60 ft (6th floor level) from road level. Complicating further is the presence of a very sharp 128 mtr radius road curvature. To take care of these technical needs, a specially pre-fabricated high strength steel truss structure with special steel plates and steel bolts and high quality welds is being used for this bridge construction.

The entire steel bridge weighing about 1,100 tons was fabricated and assembled at an engineering factory in Ghaziabad with high precision. To withstand the high stresses of different types that will be induced by such a large span and height, the high strength steel plates are joined by HSFG (High Strength Friction Grip) bolts which will provide necessary strength for the bridge. The so assembled bridge will be dismantled piece by piece at Ghaziabad and brought to Secunderabad by July. Meanwhile, a temporary multi-pillar support structure called "trestle structure" for a length of about 500 ft would be assembled on the leased railway land to support the launching of the bridge.

Originally L&T planned to launch the steel bridge girders from Lekha Bhavan / Gopalapuram Police station side. This would have been possible only after the completion of "Secunderabad East" Metro station (of Corridor-III) in front of Lekha Bhavan and it would have delayed the bridge construction and the Metro project by one year. To avoid this delay, Mr.NVS Reddy suggested launching of the bridge girders from Chilkalguda side with parallel construction of the Metro station and persuaded L&T to rework their launching scheme. Now with the railway authorities handing over the land to HMRL, preparatory activities for the bridge construction have commenced. Mr.Reddy has thanked GM, SC Railway Mr.Ravinder Gupta for sparing the railway land and for giving approval for the Metro RoB construction. The bridge construction will be completed by January next year, he added.