SALIENT FEATURES

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SYSTEM

Metro Neo

ROUTE LENGTH

CORRIDOR	AT-GRADE (KM)	ELEVATED (KM)	TOTAL LENGTH (KM)
Kazipet-Hanamkonda-Warangal via DPO Junction	7.1	8.4	15.5

NUMBER OF STATONS

CORRIDOR	ELEVATED STATIONS	AT-GRADE STATIONS	TOTAL
Kazipet-Hanamkonda-Warangal via DPO Junction	12	9	21

TRAFFIC FORECAST

CORRIDOR	MAXIMUM PHPDT			
	2024	2031	2041	2051
Kazipet-Hanamkonda-Warangal via DPO Junction	3916	5733	6670	8194
	RIDERSHIP IN LAKHS			
	0.97	1.45	2.27	3.12

STATION PLANNING

Two typical station types have been developed.

TYPE	STATION SIZE	PLATFORM TYPE
TYPE 1	60.0M X 12M	2 side elevated
TYPE 2	30.0M X 7M	1 side at-grade
TYPE 3	30.0M X 12M	2 side elevated
TYPE 4	30.0M X 12M	Island platform for at-grade

SPEED

a) Design Speed : 70 kmph
b) Scheduled Speed : 25 kmph

FARE COLLECTION

The tickets shall be purchased outside the vehicle (before boarding) which will then be validated inside the vehicle.

ROLLING STOCK

PARAMETERS		SYSTEM SPECIFICATION
Traffic Handling capacity (PHPDT)		Upto 15000
Traction System		750 V DC Overhead Catenary
Signaling System		Automatic Train Protection (ATP)
Rolling	Length	18 m single articulated electric bus coaches

ROLLING STOCK	Width	2.55 m
	Height	3.5 m
	Coach construction	Light weight stainless steel/Aluminum body
	Carrying Capacity	140 Passengers
	Axle Load	12 T
	Braking System	Regenerative Braking
	Propulsion system	3 phase drive system with VVVF control
	Performance Characteristics	Max. Design speed: 70 kmph Max. Acceleration :1.3 m/s2

Rolling Stock Requirement:

YEAR	2024	2031	2041	2051
Rolling Stock Requirement	48	69	81	99

MAINTENANCE DEPOT

The maintenance facilities are proposed near Warangal Railway Station (on about 25 Acre allotted as depot land) on Narisampet Highway.

SIGNALING AND TELECOMMUNICATION

a) **Type of Signaling:** Metro neo system shall be equipped with suitable Automatic Train Protection (ATP) System with anti-collision device. Traffic lights will be provided at major locations. The coaches will be operated by drivers with at a pre-defined speed limit. The operation will be monitored by a Central Control.

b) **Telecommunication** will include Automatic Vehicle monitoring, Mobile Radio Communication System, On-Board Passenger Information System, Public Address System, Passenger Information Display System at Stations, Centralized Clock System, Close Circuit Television, Central Voice Recording System (CVRS) and Central Fault Locating System etc.

TOTAL ESTIMATED COST WITHOUT TAXES AND DUTIES

WITHOUT LAND AND R&R COSTS	Rs. 816 Crore
WITH LAND AND R&R COSTS	Rs. 824 Crore

TOTAL ESTIMATED COST WITH TAXES AND DUTIES

WITHOUT LAND AND R&R COSTS	Rs. 879 Crore
WITH LAND AND R&R COSTS	Rs. 941 Crore

COMPLETION COST WITH TAXES AND DUTIES

Total : Rs. 997.74 Crore (@5% escalation)

FINANCIAL INDICES

Construction Period: 2.5 years (starting from 2021-22)

Commencement of Commercial Operation: 2024-25

a) FIRR

The FIRR for a project operation period of 30 years for the recommended SPV Model is given below:

PRICES	FIRR
Without VCF	10.6%
With VCF	11.9%

FUNDING PATTERN

Funding of Completion Cost	Amt INR Crs	Percentage
Equity by GOI	151	16.4%
Equity by GoTS	151	16.4%
Interest Free Sub Ordinate debt for CT by GOI (50%)	33	3.6%
Interest Free Sub Ordinate debt for CT by GoTS (50%)	33	3.6%
Contribution/ Grant by GWMC and KUDA (10%)	92	10.0%
Soft Loan from bilateral/multilateral funding agencies	461	50.0%
	923	**100%**
Interest Free Sub Ordinate debt for Land, Depot land development & R& R by GoTS	8	100%
Interest Free Sub ordinate Debt for State Taxes by GoTS for State Taxes and IDC	67	100%
Total	**998**	

ALIGNMENT PLAN