

### Rapid MetroRail Gurgaon

**Project Status** 

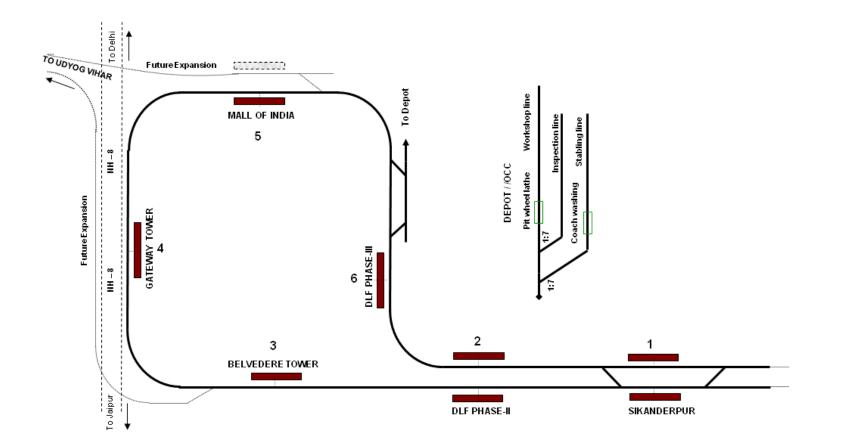


# **Route Alignment Map**



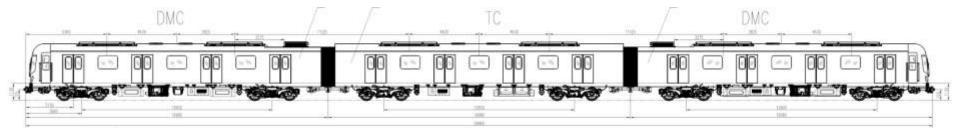


#### **Track Layout**

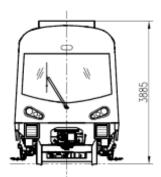




## **Train Layout**



1	Length of Car (mm)	DMC	TC	UNITS		
	<ul> <li>a) Length of vehicle over body end walls/fairing</li> <li>b) Length of carbody over couplers</li> <li>c) Distance of vehicle bogie centres</li> </ul>	19314 19980 12600	19276 19980 12600	59312 59940 N/A		
2	Width of vehicle (mm):		2			
	<ul> <li>a) Max. outside width of carbody</li> <li>b) Outside width of roof (Rain gutter)</li> <li>c) Outside width of under frame (sole bars)</li> </ul>	2800 2554 2800	2800 2554 2800	2800 2554 2800		
3	Height of Vehicle from TOR (mm)					
	<ul> <li>a) Height of roof</li> <li>b) Height A/C Unit</li> <li>c) Height Brake Resistor</li> <li>d) Height of floor surface</li> <li>e) Inside height (floor to ceiling) in centre</li> <li>f) Coupler height (New wheels and AWO)</li> </ul>	3722.6 3885 3871.5 1130 2100 720	3722.6 3885  1130 2100 720	3722.6 3885 3871.5 1130 2100 720		
4	Speed (a) Max. operating speed (kmph) (b) Design speed (kmph)	80 90	80 90	80 90		
5	Structure Type	Aluminium alloy structure by welding	Aluminium alloy structure by welding	Aluminium alloy structure by welding		
6	Load Requirement (Compressing force)	less than 1200kN	less than 1200kN	less than 1200kN		
7	Service life	30 years	30 years	30 years		





### **Salient Features**

- All elevated: 1.2 km double track + 3.7 km single track
- Ballastless track
  - Standard Gauge
  - 60kg rail section
  - 336 rail fastening system
- Trains, Signalling and Traction Power Supply from one supplier
  - 3-car trains
    - DMC+TC+DMC
    - Aluminum body
    - Air-conditioned coaches
    - built by Siemens AG, Germany through ZELC China
  - 750V DC 3rd rail Traction
  - Automatic Train Protection and Automatic Train Operation
- Track structure, Signalling, Fare Collection identical to Delhi Metro project
- Check rail on curves sharper than 190m radius
- Sharpest horizontal curve 140m, max grade 3.2%
- Pre-cast box girders (except a few steel spans)
- DMRC is Owner's Engineer



# **Assistance Required**

- Approval of SOD MOR
- Approval of DBR MOR
- Approval of Signaling System MOR
- Notification of General Rules & Rules for Opening of Metro Railway – MoUD
- RMGL will submit an application for approval of Traction Power System & Issue of Provisional Speed Certificate for Oscillation Trials to RDSO



### PROJECT STATUS (As on 27 June 2012)

**Target Date for Opening: March 2013** 



#### Viaduct

Girders Placed 193/273 Piles completed





#### **Stations**

Activities	Sikenderpur	Phase-2	Belvedere Towers	Gateway	Mall of India	Phase-3
Foundation	90%	90%	90%	80%	90%	100%
Slab up-to Platform level	100%	100%	100%	Yet To Start	80%	100%
Entry-Exit Structure	Yet To Start	25%	Yet To Start	Yet To Start	Yet To Start	100%
Station Finishing including Roofing	Yet To Start	15%	Yet To Start	Yet To Start	Yet To Start	25%







### **Track Installation**

Track Laid 1000m / 7200m Two turnouts laid



#### Trains



All 15 cars manufactured
One train assembled and undergoing train level testing in China











# **THANK YOU**