

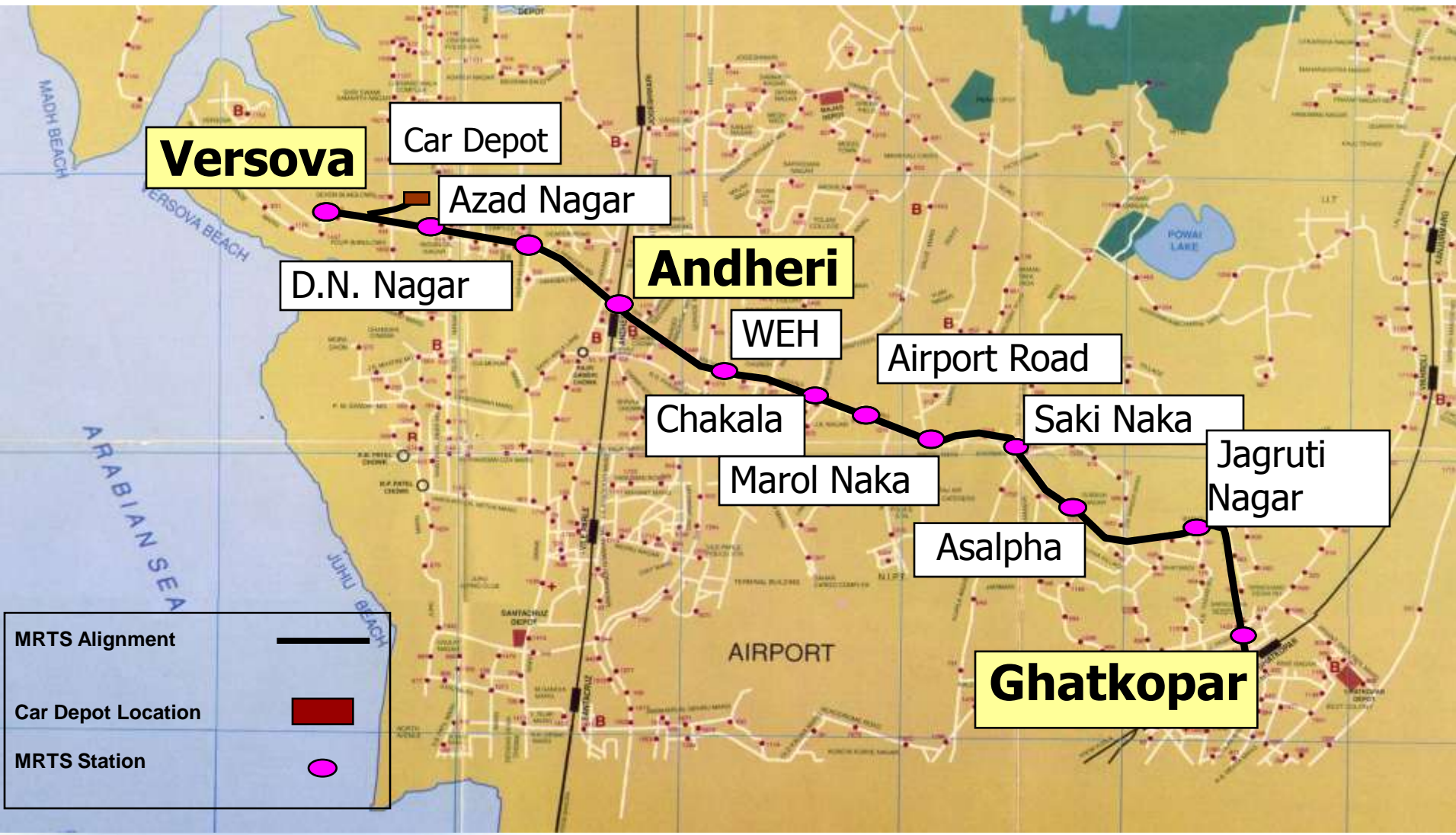
Challenges in Metro and Monorail in Mumbai

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Mumbai Metropolitan Region Development Authority

Versova-Andheri-Ghatkopar Corridor



VAG ~ Salient features

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- ➔ **Length of the route** : **11.40 km (Elevated)**
 - ➔ **Gauge (standard)** : **1.435m**
 - ➔ **Car Depot location / Area** : **D. N. Nagar**
 - ➔ **No. of stations** : **12 (Elevated)**
 - ➔ **Minimum ground clearance** : **5.5 m**
 - ➔ **Maximum Gradient** : **4.0 %**
 - ➔ **Minimum Curvature** : **100 m**
 - ➔ **Width of Coach** : **3.20 m**

Viaduct of Mumbai Metro One



Mumbai Monorail – Gadge Maharaj Chowk – Wadala - Chembur



SCOPE OF WORK

LINE-1 (Ch. No. 205.000 TO 10370.092)			LINE-2 (Ch. No. 10370.092 TO 18442.029)		
SR.	ITEM	SCOPE	SR.	ITEM	SCOPE
1.	PILE	1147	1.	PILE	848
2.	PILE GAP	401	2.	PILE GAP	335
3.	PIER	491	3.	PIER	336
4.	PIER CAP	340	4.	PIER CAP	299

DEPOT BUILDING			LEGEND:-	
SR.	ITEM	SCOPE	LINE-1	DEPOT AREA
1.	PILE	638	—	—
2.	PILE CAP	107	—	—

Salient Features

- **Total Alignment Length – 19.29 Km.**
- **Depot at Wadala**
- **Phase 1 (Wadala to Chembur) Length – 8.922Km**
- **Phase 2 (Wadala to SGM Chowk) Length – 10.368 Km**
- **Stations**

Phase-I (7 stations)	Phase-II (10 stations)
Wadala Depot	GTB Nagar
Bhakti Park	Antop Hill
Mysore Colony	Acharaya Atre Nagar
Bharat Petroleum	Wadala Bridge
Fertilizer Township	Dadar East
VNP & RC Marg	Naigaon
Chembur	Ambedkar Nagar
	Mint Colony
	Lower Parel
	Sant Gadge Maharaj Chowk

Monorail Guideway Beam

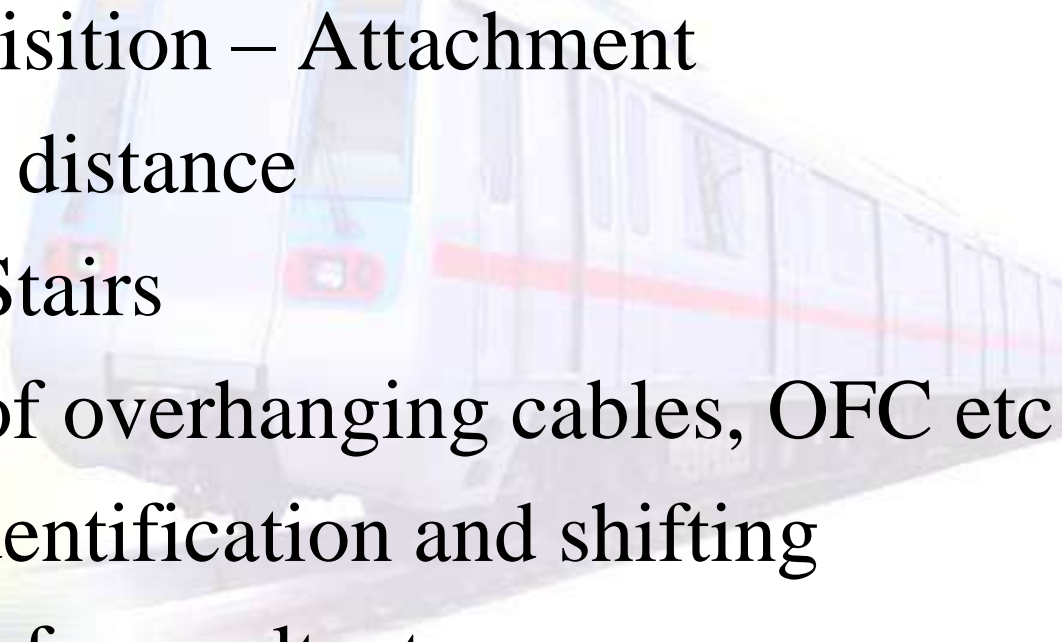


High Cost

- Cost cutting exercise is needed
- Higher land cost – Centralized repair shops
- Design optimization
- Sharing of design



Execution

- Land acquisition – Attachment
 - 10 to 20M distance
 - Landing /Stairs
 - Removal of overhanging cables, OFC etc
 - Utilities identification and shifting
 - Selection of consultant
- 

Challenges



Heavy utility

Land acquisition



Existing vegetation



Creek crossing



Narrow alignment stretches



Traffic diversion



Heavy rainfall

Operation

A blue and white train with a red stripe is shown in motion, moving from left to right across the frame. The train is slightly blurred, suggesting speed. The background is a light, hazy landscape.

- No loop lines
- OPC
- Seamless operation – myth
- Social Problems like festivals such as Dahi Handi
- Meetings like MSG will be helpful
- RPUP Act required

Monorail

- Bird Nesting
- Underground Cable Maintenance
- Rescue at Height is challenge
- Fire
- Tramway Act - CRS



Trail Run: 1st May 2013



Trail Run: 1st May 2013



Trail Run: 1st May 2013



Monorail



Monorail



A blue and white train is shown moving along tracks that curve into the distance. The train has a red stripe running along its side. The background is a bright, hazy sky. The text "Thank You" is overlaid in the center in a large, blue, serif font with a slight shadow effect.

Thank You