



# दिल्ली मेट्रो रेल कॉर्पोरेशन लिमिटेड DELHI METRO RAIL CORPORATION LTD.

(भारत सरकार एवं दिल्ली सरकार का संयुक्त उपक्रम)  
(A JOINT VENTURE OF GOVT. OF INDIA AND GOVT. OF NCT DELHI)

## Justification of Locating the Project in Ridge Area:

The Aerocity-Tughlakabad Corridor is to serve the densely populated areas of Mahipalpur, Vasant Kunj, Chhattarpur, IGNOU, Maidangarhi, Nebsarai, Saket, Khanpur, Sangam Vihar and Tughlakabad. The alignment is based on the proximity to the populated areas to be served and areas are mostly along the Mahipalpur-Mehrauli Road and Mehrauli-Badarpur Road. There have been many constraints while finalizing the alignment such as minimum distance from the Protected Monuments, avoiding built up areas and at the same time also minimizing the Ridge/Forest area as there are large extent of Forest areas along the corridor.

Since, it has also informed that the physical boundary of the ridge area has not been demarcated on the ground. The area and length of alignment falling in the ridge has been worked out incorporating the DCF(S) letter F. No. 03/RO/DCF(S)/Misc./2020-21/1692-94 27.05.2021 & mail dated 01.06.2021.

In accordance with Hon'ble Supreme Court order in case no. 202/1995 DMRC approached the Ridge Management Board and Hon'ble Supreme Court for utilization of ridge area for construction of the MRTS Project. RMB has also cleared proposal in the meeting dated 14.07.2021. CEC also submitted the report no. 10 of 2021 dated 11.08.2021 and corrigendum dated 09.09.2021 clearing the proposal of DMRC. As per the CEC recommendation para XIV & corrigendum dated 09.09.2021 forest clearance is being sought for notified ridge area measuring 7.42 Ha and deemed forest area measuring 3.75 Ha. Further, revised area of 2.64 Ha area in DCF/West's section (2.32 Ha new and 0.32 Ha earlier applied) for Mahipalpur station and new area of 0.67 Ha. for Receiving sub station at Vasant Kunj is also updated as per DCF/West's email dated 12.01.2022 and DCF/West's letter no. F. No. 73/WFD/COT/21-22/Camp office dated 08.09.2021 respectively.

The details are spelt out below:-

1. **Ridge at Mahipalpur:** Alignment originates from Aerocity towards Southeast direction along the Mahipalpur- Mehrauli road and a small tunnel portion of 166 m length falls under southern ridge at Mahipalpur. At Mahipalpur, southern ridge area spread across both sides of road such that there is no possibility to align corridor outside this ridge area. This tunnel connects Mahipalpur station which is an underground station proposed on the vacant land of DDA which serves the commuters of Mahipalpur, Mahipalpur Extension and Rangpuri. The tunnel is in notified southern ridge 166 m long measuring 1345 sqm being constructed by Tunnel Boring Machine without cutting the ground & hence it will not affect Ridge area. Further, vide DCF/West's email dated 12.01.2022, it was conveyed by the Forest department to apply for revised area of 26,398 Sqm (1345 sqm for ridge area & 25053 sqm for Deemed Forest/Notified Reserve Forest). Accordingly, the additional area of 25,053

(मेट्रो भवन, फायर ब्रिगेड लेन, बाराखम्बा रोड, नई दिल्ली-110001)

Sqm (Out of which, 6757 Sqm for Station portion and 18,296 Sqm for tunnel portion) falling in Deemed Forest area/Notified Reserve Forest area is also included in this proposal.

2. **Ridge at Kishangarh:** The final alignment is along Vasant Kunj marg and passes through the South-Central Ridge Area of length approx. 1.182 km. Kishangarh station and a crossover have been proposed on a vacant land at T junction of Aruna Asaf Ali marg. There is no possibility of aligning the station & crossover outside the ridge area due to built up area on either side. However, Underground Kishangarh station and crossover portion falling in this area is to be constructed by cut & cover method requiring 6319 Sqm area on permanent basis for Entry/Exit, Ancillary Building, Shaft, etc. and 25232 Sqm area on temporary basis which will be restored back to original condition. The Tunnel area in the notified south central Ridge is 7415 Sqm. The tunneling work will be done by Tunnel Boring Machine without cutting the ground, hence, it will not affect the ridge area
3. **Deemed Forest near Chhattarpur station:-** Near Chhattarpur Metro Station partly tunnel and part of station falls in deemed forest. Chhattarpur station is proposed as an interchange station with the existing Chhattarpur station of Samaypur Badli-HUDA City Centre metro corridor. To provide interconnectivity between the proposed and existing station at Chhattarpur, there was no other alternative for the location of proposed Chhattarpur station except this land. Area of tunnel portion deemed forest is 800 Sqm whereas area of station in deemed forest is 10,003 Sqm. The tunneling work will be done by Tunnel Boring Machine without breaking the ground and no damage to the forest. The station will be constructed by cut and cover method and 9,777 Sqm of temporary land will be restored back after completion of work.
4. **Ridge at IGNOU:** To connect Mahipalpur-Mehrauli Road and Mehrauli-Badarpur Road, the proposed alignment passes through 710 m of Notified southern Ridge. Since, the spread of the ridge is such that there is no possibility to avoid ridge area. The IGNOU station location has been proposed in front of IGNOU University. The proposed location is ideal location to serve commuters from Maidan Garhi, IGNOU and partly of Neb Sarai. The tunneling work being constructed by Tunnel Boring Machine without cutting the ground, hence it will not affect the ridge area. The underground IGNOU station to be constructed by cut & cover will require permanent land of 2835 Sqm and temporary land of 15667 Sqm during construction stage which will be restored back after completion of project. The Tunnel area in the notified southern ridge is 4748 Sqm.
5. **Deemed forest area at Hauz Rani City Forest:** The Aerocity - Tughlakabad corridor was passing through Mehrauli and from Mehrauli to connect Mehrauli - Badarpur Road. But this alignment has unavoidable proximity to Qutub Minar and various after monuments protected under ancient monuments and Archaeological sites and Remains Act, 1958. The subject area was also falling in notified ridge area. National Monument Authority has not granted the permission for this alignment. Accordingly, the alignment has been modified to pass through Chhattarpur, IGNOU, Neb Sarai to meet original alignment at Saket G-Block. The portion on MB Road is elevated from Saket G-Block which is to be constructed as double Decker as per requirement of Govt. of NCT of Delhi with Metro in second layer at top. The alignment from Aerocity Station up to Neb Sarai is underground. After Neb Sarai, the alignment changes from underground to Elevated at Saket G-Block. In case of change of alignment from underground to elevated, construction of a Ramp (Underground at Grade and Elevated) is technically required as transition to connect underground and elevated portion. The location of the Ramp falls party in Hauzrani City Forest area at Neb Sarai

which would be required for construction of Ramp because of above technical requirements. The alignment near to this location is passing through densely populated area and there is no vacant land available in the nearby area, accordingly, construction of Ramp was planned in the vacant land at Hauzrani City Forest area with a bare minimum requirement of land measuring 16871 Sqm. It is also clarified that the area utilized on temporary basis will be used during construction only and will be restored and made green as original.

6. **Ridge at Anandmayee Marg T Junction:** Alignment from Saket G Block to Tughlakabad is along the Mehrauli-Badarpur Road and its tunnel is falling under Southern ridge of length approx. 789 m (9942 Sqm area) behind Adilabad/Ghiyasuddin Fort to avoid Protected Monuments of ASI on Mehrauli-Badarpur Road. The spread of the ridge is such that there is no possibility to align the corridor outside ridge area due to the extent of Ridge. The tunnelling work in the length of 789 m will be done by Tunnel Boring Machine without cutting the ground; hence it will not affect the ridge area. The tunnel connects Maa Anandmayee Marg station which has been proposed on Mehrauli-Badarpur Road at T-junction of Maa Anandmayee Marg. It is ideal location to serve commuters from Naradana, Lal Kuan, Okhla Phase-2 and Prem Nagar.

The above alignment meets the above constraints and also simultaneously meets the technical requirements of metro alignments/stations and proximity to the target population to be served. There is a vast extent of ridge on either side of the alignment because of which it has not been possible to shift the alignment out of ridge area but efforts have been made to minimize the Ridge area involved. Alignment of this corridor is having the requisite traffic and it will minimize the travel time of the commuters.

7. **Deemed Forest area at Vasant Kunj for RSS:** Receiving Sub Station is required for feeding power supply of Aerocity to Tughlakabad corridor, stepping down the high incoming power supply of 220 kV to 33 kV, 3 phase supply voltage for the Auxiliaries power supply (AMS) to cater load of metro stations services including illumination of buildings, air conditioning of underground stations, ventilation of tunnels, lifts, escalators, signaling, telecommunication, fire-fighting etc., workshops, depots & other maintenance infrastructure within the premises of metro system, and 25 kV, 1 phase supply voltage for the running of trains of Aerocity to Tughlakabad corridor.

As per DCF/West's letter no. F. No. 73/WFD/COT/21-22/Camp office dated 08.09.2021, an area of 6685 Sqm required for the Receiving Sub Station is also falling under Deemed Forest Area which is also included in this proposal. To provide RSS provision for this corridor, there was no other alternative for the location of proposed Receiving Sub Station except this land.



The area details as per the CEC report of RMB clearance is as under:

Station wise details of Ridge area falling in Aerocity to Tughlakabad Metro Corridor							
S. No	Location	Purpose	Classification	Tunnel Area (Sqm) (A)	Permanent Area (Sqm)	Temporary Area (Sqm)	Total Area (Sqm) (B)
1.	Mahipalpur Tunnel on both sides	Tunnel	Notified Southern Ridge	1345			
2.	Kishangarh station tunnel on both sides	Station/ Tunnel	Notified Central Ridge	7415	6319	25232	31551
3.	Tunnel portion near Chhattarpur Mandir	Station/ Tunnel	Notified Southern Ridge	703			
4.	IGNOU Station tunnel on both sides	Station/ Tunnel	Notified Southern Ridge	4748	2835	15667	18502
5.	Maa Anandmayee Marg Station and tunnel on both sides	Station/ Tunnel	Notified Southern Ridge	9942			
<b>Total</b>				<b>24153</b>	<b>9154</b>	<b>40899</b>	<b>50053</b>
<b>Total Area in notified Ridge (A &amp; B) = 74206 Sqm (7.42 Ha)</b>							

Details of Notified Reserve Forest/Deemed Forest area falling in Aerocity to Tughlakabad Metro Corridor			
S. No	Location	Purpose	Area
1	Mahipalpur	Station Area	6757
		Falling on Tunnel	11198
2.	Vasant Kunj	RSS	6685
		Falling on Tunnel	7098
			2729
3.	Chhattarpur	Falling on Tunnel	800
		Station Area	10003
4.	Hauz Rani City Forest	Cut & Cover Ramp	16871
5.	Tughlakabad	Falling on Tunnel	3819
			494
			845
Total Area under Deemed Forest			67299 Sqm (6.73 Ha)

  
 (M.K. Shukla)  
 General Manager/Land