

**Minutes of the Public Consultation Meeting
Environmental and Social Aspects of the Mumbai Metro Line-4A
(Kasarwadavali-Gaimukh)**

The Mumbai Metro Line-4A (Kasarwadavali-Gaimukh) is extension of Metro Line-4 (Wadala-Ghatkopar-Mulund-Thane-Kasarwadavali). The work of Metro Line – 4A has been undertaken by MMRDA with the approval of Govt. of Maharashtra.

Public Announcement in Newspapers:

A preliminary public consultation meeting focusing on the environmental and social aspects of the Mumbai Metro Line-4A (Kasarwadavali-Gaimukh) was organized on 5th February, 2020. A notice regarding the schedule of the meeting was advertised in prominent daily newspapers in three languages i.e. English, Hindi and Marathi on the 23rd January, 2020 to inform the general public. Copies of the notices published in the newspapers are attached as *Annexure-I*. The details of the date, time and place of the Public consultation meeting were as follows:

Date	Time	Place
05/02/2020	11.00 a.m. to 1.00 p.m.	Niyojan Bhavan, Collector Office, Thane

The following officers from MMRDA Present during the meeting:

Sr. No.	Metro Representatives	Designation
1.	Shri. Basavraj Bhadragond	Chief Engineer
2.	Shri. Sanjiv Tatu	Superintendent Engineer
3.	Shri. Vishram Patil	Chief,SDC
4.	Shri. D. Sampathkumar	OSD,Planning
5.	Smt. Anita Wankhede	Additional Collector
6.	Shri. Vijay C. Kamble	OSD to Chief Engineer
7.	Shri. Surendra Shewale	Executive Engineer
8.	Ms. Poonam Khopade	OSD, Environment, MMRDA

The meeting started with introduction of officials and power-point presentations on the project comprising of the Metro Master Plan, details including alignment, station locations and facilities, method of construction, costs and financial obligations, the environmental and social impacts and safeguards etc. were made. The technical aspects of the project were presented by Shri. Sanjiv Tatu, social aspects were presented by Shri. V.G. Patil and environmental aspects were presented by Ms. Poonam Khopade. Copies of presentations made during consultation are attached as *Annexure-II*. The photographs of the meeting are attached as *Annexure-III*

Environment related issues were not raised by the participants during the consultation. The details of the points raised by the participants related to civil/technical and social aspects and the responses provided to their queries are as follows:

Sr. No.	Name of Participant and Points raised	Responses provided
1.	<p>Shri. Hemant Khandekar (Token No. 51) from Thane asked Why is alignment of Metro kept as zigzag on the Ghodbunder Road and why barricades are provided all along the alignment rather than to provide at the places wherever actual works are being done?.He asked about traffic issues due to metro work, measures taken with respect to traffic congestion at Ghodbunder road due to closure of service road and is there any Metro stations proposed near existing bus stops? If yes, what measures will be taken to cope up with the mess due to Metro Stations, existing bus stops and Auto stops being proposed at the same locations? He further asked, is the Metro alignment getting affected by the Forest at Ghodbunder near Patlipada?</p>	<p>It was informed that the Metro alignment is generally planned along the median of Highway/Road. Alignment is planned as per ROW available along proposed route. On Ghodbunder Road, at some locations, the alignment is planned on LHS footpath along the slip road of flyover instead of median as it cannot be continued straight along existing flyover. Metro alignment is preferably planned on median to avoid any additional land acquisition or R&R requirement along adjacent residential areas on either side of road. Also on Ghodbunder road, all existing utilities are normally along the footpath side which will be required to be diverted, if Metro is planned on the sides. After installation of barricade, preliminary preparation works like soil investigation and utility identification below ground must be done before start of design and construction. Sometimes this may lead to change of alignment where underground utilities cannot be shifted. Also at some location the utilities are required to be shifted before piling work begins. All these activities need to be carried out in restricted area i.e. within barricades. In order to complete the Metro construction in scheduled target, the various activities are carried out at various locations simultaneously and hence barricades are installed all along the alignment.</p> <p>It was also informed that the commissioning of Metro will result in shift of commuters from Road to Metro and so will reduce traffic congestion and following are the measures taken to avoid traffic congestion: 1. Reflective diversion markers, blinkers and rope lights are provided along barricades to</p>

		<p>direct the vehicle. Different types of signages are installed over barricade to provide advance warning to traffic.</p> <p>2. Adjacent damaged roads are repaired before installation of barricade and the same is maintained in good condition.</p> <p>3. Traffic diversions are done with prior approval of Traffic Police. Also all barricades are installed with prior approval of traffic police.</p> <p>4. Wardens are deployed at high intensity traffic areas along barricades to ensure safety.</p> <p>It was explained that the Metro stations are planned at locations such as junctions of crossing Main roads where the passengers can get easy access to board the Metro Trains. Also stations have to be located along straight portion of Alignment from train operation point of view. The existing Auto and Bus stops shall be suitably modified to integrate with Metro Stations such that it will provide maximum convenience to the public.</p> <p>It was clarified that to avoid forest permissions near Patlipada and Dongripada, the Metro alignment is suitably shifted towards the Road median.</p>
2.	Shri. Surendra Mohite (Token No. 18) from Thane asked is any provisions have been made for road crossings at proposed Metro stations?	It was informed that all metro stations will have unpaid areas which can be utilized by pedestrians to cross the road.
3.	Shri. Dipesh (Token No. 19) from Thane asked are the Fares of Metro affordable to the common man while compared to the fares of local trains and buses?	It was informed that the fares of Metro are fixed such that a part of the operation and maintenance of Metro can be done from the Revenue generated from the fares collected. The suggestion about affordability of fares is noted and shall be considered at appropriate time while fixing the Metro fares.
4.	Shri. B. Halawane (Token No. 24) wanted to know about the difference in compensation and R&R benefits to be given to Title Holders and encroachers	It was informed that while the Title Holder was eligible to receive compensation for acquisition of land under RECTLARR Act, Encroacher was eligible for only R&R benefits. The resettlement benefits for Title Holders and encroachers were same under the MUTP R&R Policy, under which, the

		alternate shop area equivalent to area of affected structure upto 225 sq.ft. carpet area was provided free of cost, and for those having areas of affected structure more than 225 sq.ft., additional areas upto 525 (total maximum 750 sq.ft.) can be provided on payment to MMRDA as per the rate fixed in this regard.
5.	Shri. M. Patil (Token No. 23) suggested that due care should be taken to provide all necessary amenities at the new relocation site and such resettlement sites should be planned at locations suitable for the business of affected PAPs in order to protect their livelihoods.	It was informed that since survey is carried out and PAPs are identified only after the project is taken up for implementation, and that procurement of suitable land and construction of R&R tenements at desired locations should be feasible, which also generally takes a few years, it is necessary to have a stock of R&R tenements and use such stock for R&R to avoid inordinate delay in execution of projects. Further, it is ensured that basic amenities are available in or near relocation sites and post-R&R assessment of impact on livelihood is carried out and, if found necessary, livelihood support activities are taken up.

List of Annexure

- Annexure IA,IB,IC : Copies of the notices published in the newspapers
Annexure IIA,IIB,IIC : Presentation of MMRDA officials given during the consultation
Annexure III : Photographs of the Public Consultation meeting
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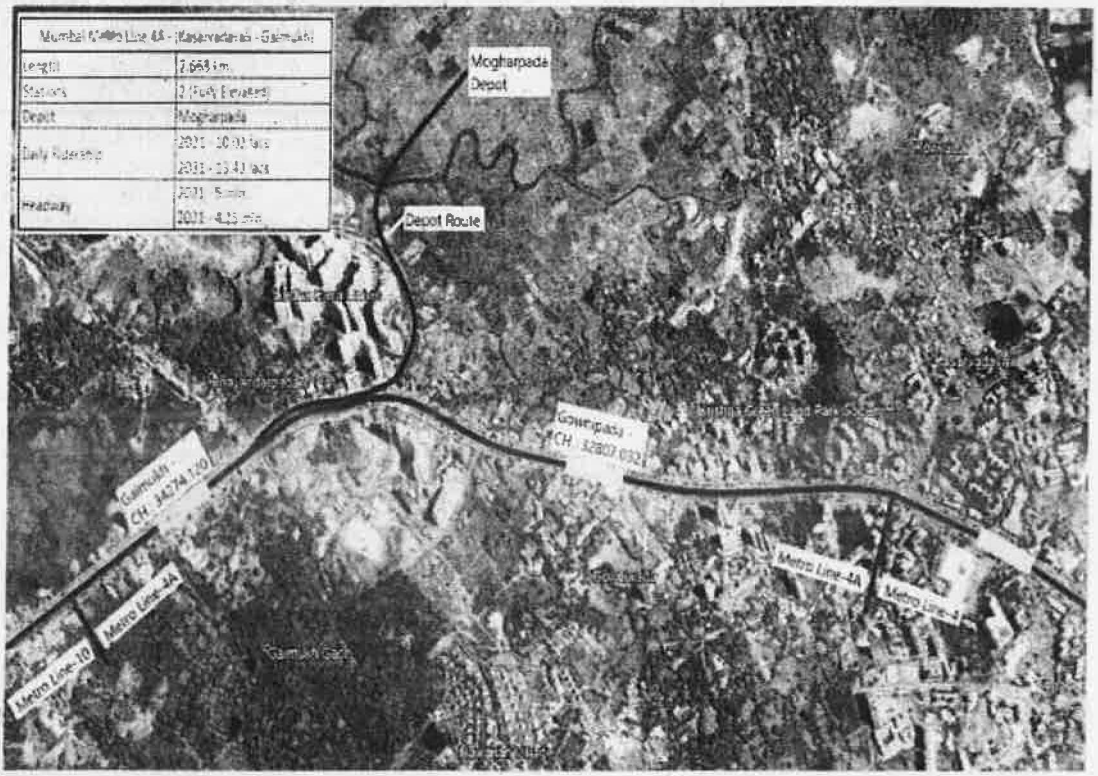
MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY

(A Govt. of Maharashtra Undertaking)
Plot Nos. R-5, R-6 & R-12, Bandra-Kurta Complex, Bandra (E), Mumbai- 400 051.
Tel.No. 26594000 Fax : 26591264 Website: <https://mmrda.maharashtra.gov.in>

PUBLIC CONSULTATION ENVIRONMENTAL AND SOCIAL ASPECTS OF MUMBAI METRO CORRIDOR - 4 A (KASARVAVALI - GAIMUKH)

The Mumbai Metropolitan Region Development Authority (MMRDA) has undertaken implementation of the Metro Line - 4A (Kasarvadavali - Gaimukh) with the approval of the Government of Maharashtra.

Approved Alignment of the Metro Line - 4A (Kasarvadavali - Gaimukh)



The MMRDA has prepared Environmental Impact Assessment (EIA) report & is carrying out preparation of Social Impact Assessment (SIA) report. The MMRDA desires to hold Public Consultation with various stakeholders and public at large to share the details about the project and obtain their views and suggestions. A Public Consultation meeting on Environmental and Social aspects of the project is scheduled on **Wednesday, 05/02/2020** in the hall at Niyojan Bhavan, Collector Office, Thane from **11: 00 a.m. - 1:00 p.m.**

All persons including NGOs, academicians etc. having interest in this project are invited to attend and participate in the meeting.

Date : 22.01.2020
Place : Mumbai

Addl. Metropolitan Commissioner & Project Director
MMRDA

Furani

FPI 23/1/20

मुंबई महानगर प्रदेश विकास प्राधिकरण

महाराष्ट्र शासन अंगीकृत

प्लट नं. आर-५, आर-६ और आर-१२, बांद्रा-कुला संकुल, बांद्रा (पूर्व), मुंबई - ४०० ०५१.

दूरध्वनी क्र. २६५९४००० फॅक्स : २६५९१२६४ वेबसाईट : <https://mnrda.maharashtra.gov.in>

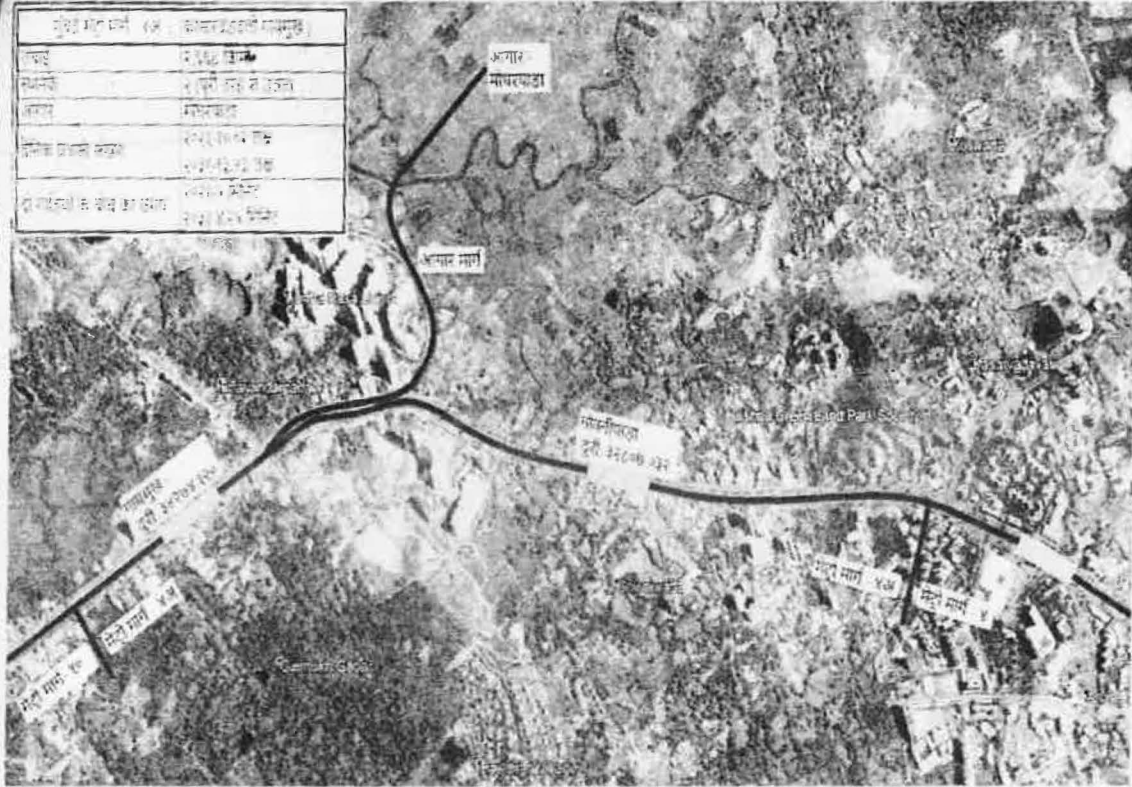
लोक परामर्श

मेट्रो मार्ग - ४अ (कासारवडवली से गायमुख)

के पर्यावरणीय तथा सामाजिक पहलू

सरकार की स्वीकृति से मुंबई महानगर क्षेत्र विकास प्राधिकरण (मुं.म.प्र.वि.प्रा.) ने मेट्रो मार्ग - ४अ (कासारवडवली - गायमुख) परियोजना के कार्यान्वयन का कार्यभार लिया है।

मेट्रो मार्ग - ४अ (कासारवडवली से गायमुख) का अनुमोदित संरेखण



मुंबई महानगर क्षेत्र विकास प्राधिकरण ने इस परियोजना के हेतु पर्यावरण परिणाम मूल्यापन (EIA) अहवाल तैयार किया है तथा सामाजिक प्रभाव निर्याण (SIA) अहवाल तैयार करने कि शुरुआत की है। मुंबई महानगर क्षेत्र विकास प्राधिकरण विभिन्न हितधारकों तथा सर्व सामान्य जनता से इस परियोजना से संबंधित सूचना वांटने तथा उनके विचार और सुझाव प्राप्त करने हेतु परामर्श करने की इच्छुक है। इस परियोजना के पर्यावरणीय एवं सामाजिक मुद्दों के साथ विभिन्न पहलुओं पर विचार हेतु बुधवार दि. ०५/०२/२०२० को नियोजन भवन, जिल्हाधिकारी कार्यालय, टाणे के सभागृह में सुबह ११.०० से १.०० बजे तक लोक परामर्श बैठक का आयोजन किया गया है।

इस परियोजना में रुचि रखनेवाले सभी लोग और गैर सरकारी संस्थान, विद्वान व्यक्ति इ. बैठक में उपस्थित रहने तथा भाग लेने के लिये आमंत्रित है।

दिनांक- २२.०१.२०२०

स्थल : मुंबई

अतिरिक्त महानगर आयुक्त व प्रकल्प संचालक

मुं.म.प्र.वि.प्रा.

Fulrani

Yashobhomi - 23/1/20

Vijayamasa - 23/1/20

महाराष्ट्र
महानगर विकास प्राधिकरण
MMRDA

मुंबई महानगर प्रदेश विकास प्राधिकरण

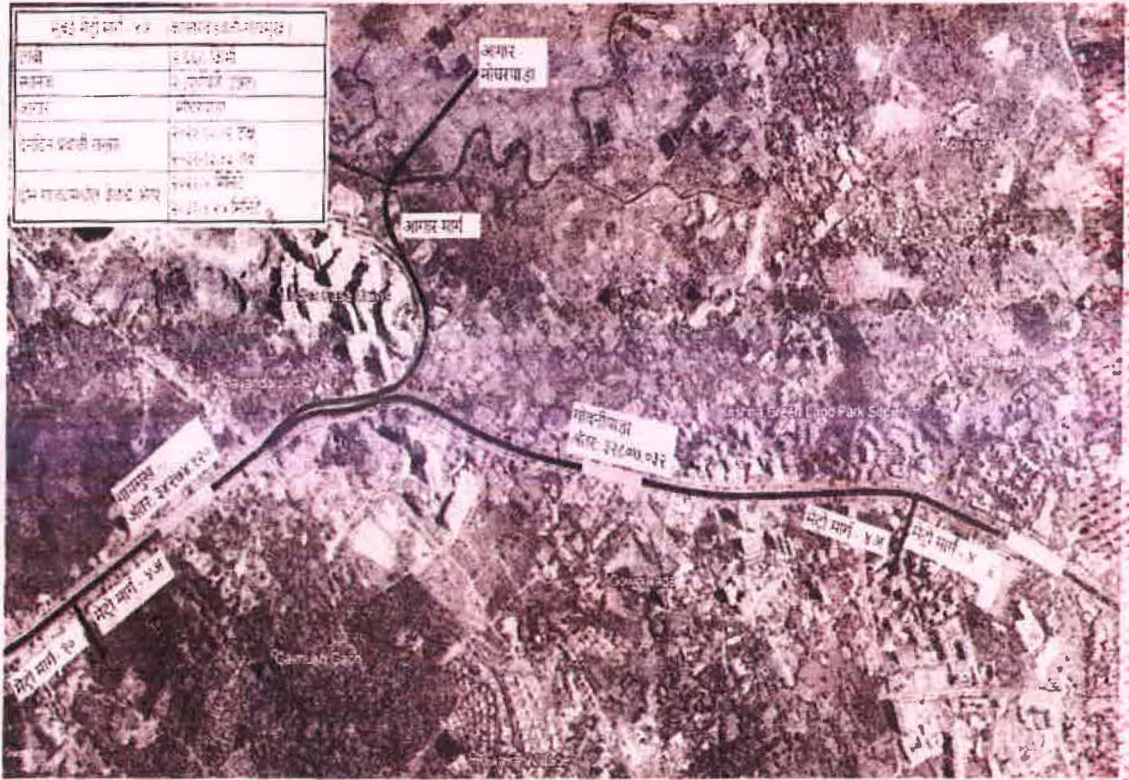
महाराष्ट्र शासन अंगीकृत

प्लॉट नं. आर-५, आर-६ आणि आर-१२, बांद्रा-कुर्ला संकुल, बांद्रा (पूर्व), मुंबई - ४०० ०५१.
दूरध्वनी क्र. २६५९४००० फॅक्स : २६५९१२६४ वेबसाईट : <https://mmrda.maharashtra.gov.in>

जनतेसाठी खुले चर्चासत्र मेट्रो मार्ग - ४अ (कासारवडवली ते गायमुख) संबंधी पर्यावरणीय व सामाजिक बाबी

महाराष्ट्र शासनाच्या मान्यतेने मुंबई महानगर प्रदेश विकास प्राधिकरणाने (मुं.म.प्र.वि.प्रा.) मेट्रो मार्ग - ४अ (कासारवडवली ते गायमुख) ची अंमलबजावणी हाती घेतली आहे.

मेट्रो मार्ग - ४ अ (कासारवडवली ते गायमुख) चा मान्यताप्राप्त आखणीमार्ग



मुं.म.प्र.वि. प्राधिकरणाने या प्रकल्पाचा पर्यावरण परिणाम मूल्यमापन (EIA) अहवाल तयार केला असून सामाजिक परिणाम निर्धारण (SIA) अहवाल तयार करण्यात येत आहे. या प्रकल्पाचे तपशील सादर करण्यासाठी आणि त्याशील विचार आणि सूचना प्राप्त करण्यासाठी मुं.म.प्र.वि. प्राधिकरण या प्रकल्पाशी संबंधित विविध हितसंबंधितांशी आणि सर्वसाधारण जनतेशी सल्लामसलत करण्यास इच्छुक आहे. याकरिता प्रकल्पाच्या पर्यावरणीय तसेच सामाजिक मुद्यांसह विविध पैलूंचा विचार विनिमय करण्यासाठी बुधवार दि.०५/०२/२०२० रोजी नियोजन प्रकल्प जिम्हाधिकारी कार्यालय, ठाणे येथील सभागृहात सकाळी ११.०० ते १.०० या वेळी जनतेसाठी खुले चर्चासत्र आयोजित करण्यात आले आहे.

या प्रकल्पात स्वास्थ असणाऱ्या सर्व व्यक्ती तसेच मंत्र सरकारी संस्था, विद्यानिष्ठ व्यक्ती इत्यादींना बैठकीस उपस्थित राहून सहभागी होण्याचे निमंत्रण देण्यात येत आहे.

दिनांक : २२.०१.२०२०

स्थळ : मुंबई

अतिरिक्त महानगर आयुक्त व प्रकल्प संचालक

मुं.म.प्र.वि.प्रा.

Furani

V/sutamamas - 23/1/20

Date: 20-Jan-2020

PUBLIC CONSULTATION FOR LINE-4A



MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY (MMRDA)
 at Govt. of Maharashtra (Maharashtra)
 Plot No. 115, 116 & 117, Borewell Park Compound, Borivali (E), Mumbai - 400 084
 Tel No. 26666677 Fax: 26611251 Website: www.mmrda.gov.in

PUBLIC CONSULTATION
ENVIRONMENTAL AND SOCIAL ASPECTS OF
MUMBAI METRO CORRIDOR - 4A (KASARVADAVALLI - GAIMUKH)

The Mumbai Metropolitan Region Development Authority (MMRDA) has undertaken implementation of the Metro Line - 4A (Kasarvadavalli - Gaimukh) with the approval of the Government of Maharashtra.

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The MMRDA has prepared Environmental Impact Assessment (EIA) report & is carrying out preparation of Social Impact Assessment (SIA) report. The MMRDA desires to hold Public Consultation with various stakeholders and public at large to share the details about the project and obtain their views and suggestions. A Public Consultation meeting on Environmental and Social aspects of the project is scheduled on Wednesday, 06/02/2020 in the hall at Nityojan Bhuvan, Collector Office, Thane from 11:00 a.m. - 1:00 p.m.

All persons including NGOs, academicians etc. having interest in the project are invited to attend and participate in the meeting.

Date: 22.01.2020
 Place: Mumbai
Additional Commissioner & Project Director
MMRDA


FFS 23/1/20

एम एम आर डी ए MMRDA मुंबई महानगर प्रदेशा विकास प्राधिकरण
 महाराष्ट्र शासन अखिल
 प्लॉट नं. ११५, ११६ & ११७, बोरवेल पार्क कॉम्प्लेक्स, बोरीवली (पूर्व), मुंबई - ४०० ०८४
 फोन नं. २६६६६६७७ फॅक्स नं. २६६११२५१ वेबसाईट: www.mmrda.gov.in

पब्लिक कन्सल्टेशन
मेट्रो मार्ग - ४अ (कासारवाडवली ते गैमूख)
कासारवाडवली ते गैमूख या मार्गाचा पर्यावरण व सामाजिक प्रभाव

महाराष्ट्र शासनाने मुंबई महानगर प्रदेशा विकास प्राधिकरण (एम.एम.आर.डी.ए.) वर मेट्रो मार्ग - ४अ (कासारवाडवली - गैमूख) बांधण्याची परवानगी देण्यात आली आहे.

मेट्रो मार्ग - ४अ (कासारवाडवली ते गैमूख) चा अनुमोदित संरेखण



मुंबई महानगर क्षेत्राच्या विकासासाठी वृद्धी होण्यास वरिष्ठ नियोजन (एम्.आय.पी.ए.) अन्वयेत मेट्रो मार्ग ही एक आवश्यकता असून सोशल इम्पॅक्ट (SIA) अन्वयेत तसेच इतर काही गोष्टी आहेत. एम्.आय.पी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे गरजेचे आहे. यासाठी एम्.आय.पी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे ही गरज आहे. यासाठी एम्.आय.पी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे ही गरज आहे.

एम.एम.आर.डी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे ही गरज आहे. यासाठी एम्.आय.पी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे ही गरज आहे.

सर्व व्यक्तींना, विशेषतः एम्.एम.आर.डी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे ही गरज आहे. यासाठी एम्.आय.पी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे ही गरज आहे.

दिनांक: २२.०१.२०२०
 स्थान: मुंबई
अतिरिक्त महासंचालक (अनुमोदन व प्रकल्प निदेशक)
एम.एम.आर.डी.ए.


Yashobhema - 27/1/20

एम एम आर डी ए MMRDA मुंबई महानगर प्रदेशा विकास प्राधिकरण
 महाराष्ट्र शासन अखिल
 प्लॉट नं. ११५, ११६ & ११७, बोरवेल पार्क कॉम्प्लेक्स, बोरीवली (पूर्व), मुंबई - ४०० ०८४
 फोन नं. २६६६६६७७ फॅक्स नं. २६६११२५१ वेबसाईट: www.mmrda.gov.in

पब्लिक कन्सल्टेशन
मेट्रो मार्ग - ४अ (कासारवाडवली ते गैमूख)
कासारवाडवली ते गैमूख या मार्गाचा पर्यावरण व सामाजिक प्रभाव

महाराष्ट्र शासनाने मुंबई महानगर प्रदेशा विकास प्राधिकरण (एम.एम.आर.डी.ए.) वर मेट्रो मार्ग - ४अ (कासारवाडवली - गैमूख) बांधण्याची परवानगी देण्यात आली आहे.

मेट्रो मार्ग - ४अ (कासारवाडवली ते गैमूख) चा मान्यताप्राप्त संरेखण



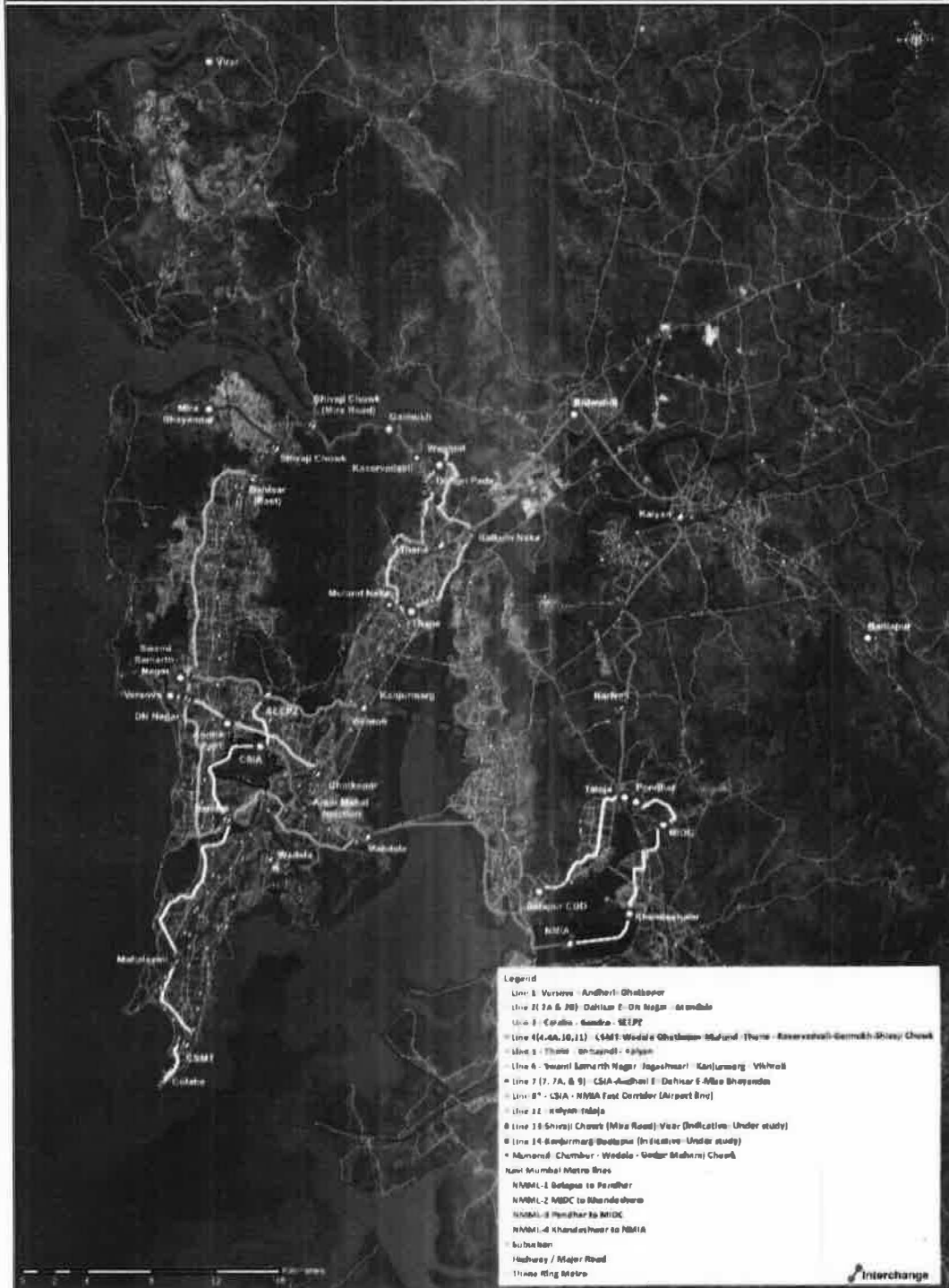
मुंबई महानगर क्षेत्राच्या विकासासाठी वृद्धी होण्यास वरिष्ठ नियोजन (एम्.आय.पी.ए.) अन्वयेत मेट्रो मार्ग ही एक आवश्यकता असून सोशल इम्पॅक्ट (SIA) अन्वयेत तसेच इतर काही गोष्टी आहेत. एम्.आय.पी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे गरजेचे आहे. यासाठी एम्.आय.पी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे ही गरज आहे. यासाठी एम्.आय.पी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे ही गरज आहे.

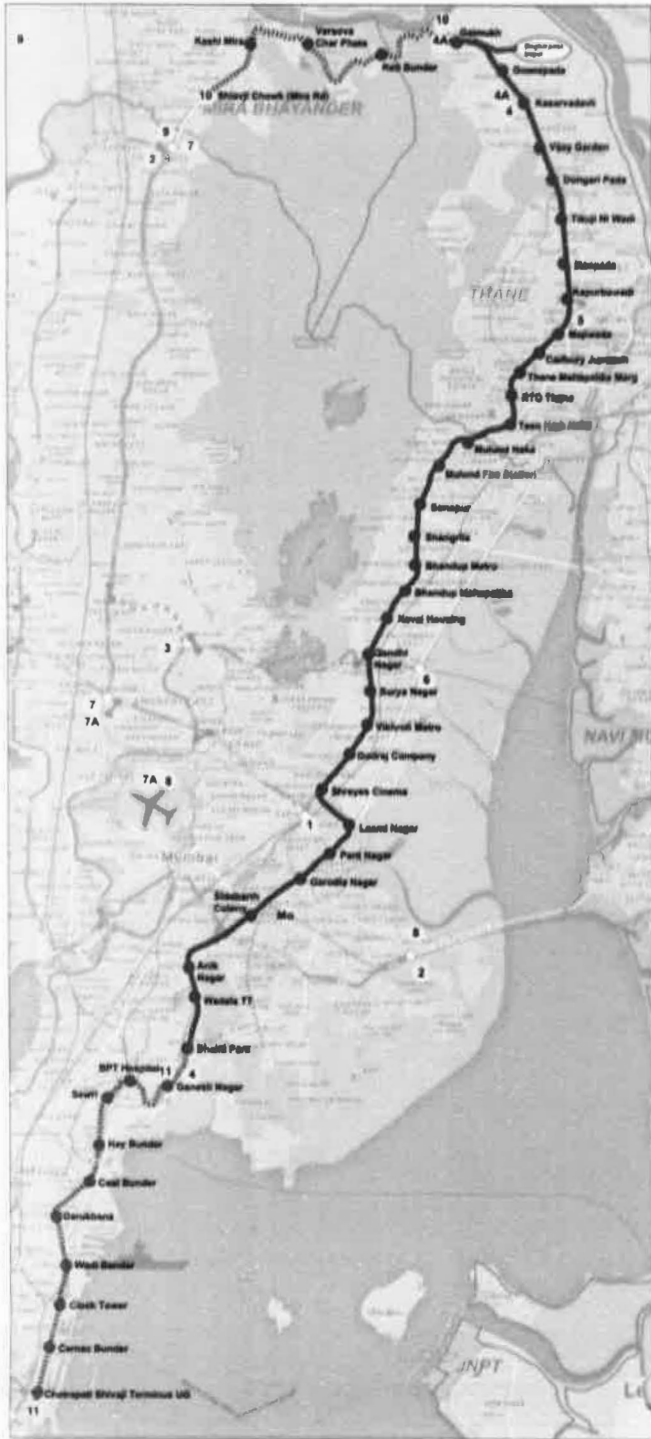
एम.एम.आर.डी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे ही गरज आहे. यासाठी एम्.आय.पी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे ही गरज आहे.

सर्व व्यक्तींना, विशेषतः एम्.एम.आर.डी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे ही गरज आहे. यासाठी एम्.आय.पी.ए. वरिष्ठ नियोजन अन्वयेत मेट्रो मार्गाचा पर्यावरण व सामाजिक प्रभाव यांचे मूल्यमापन करणे ही गरज आहे.

दिनांक: २२.०१.२०२०
 स्थान: मुंबई
अतिरिक्त महासंचालक (अनुमोदन व प्रकल्प निदेशक)
एम.एम.आर.डी.ए.

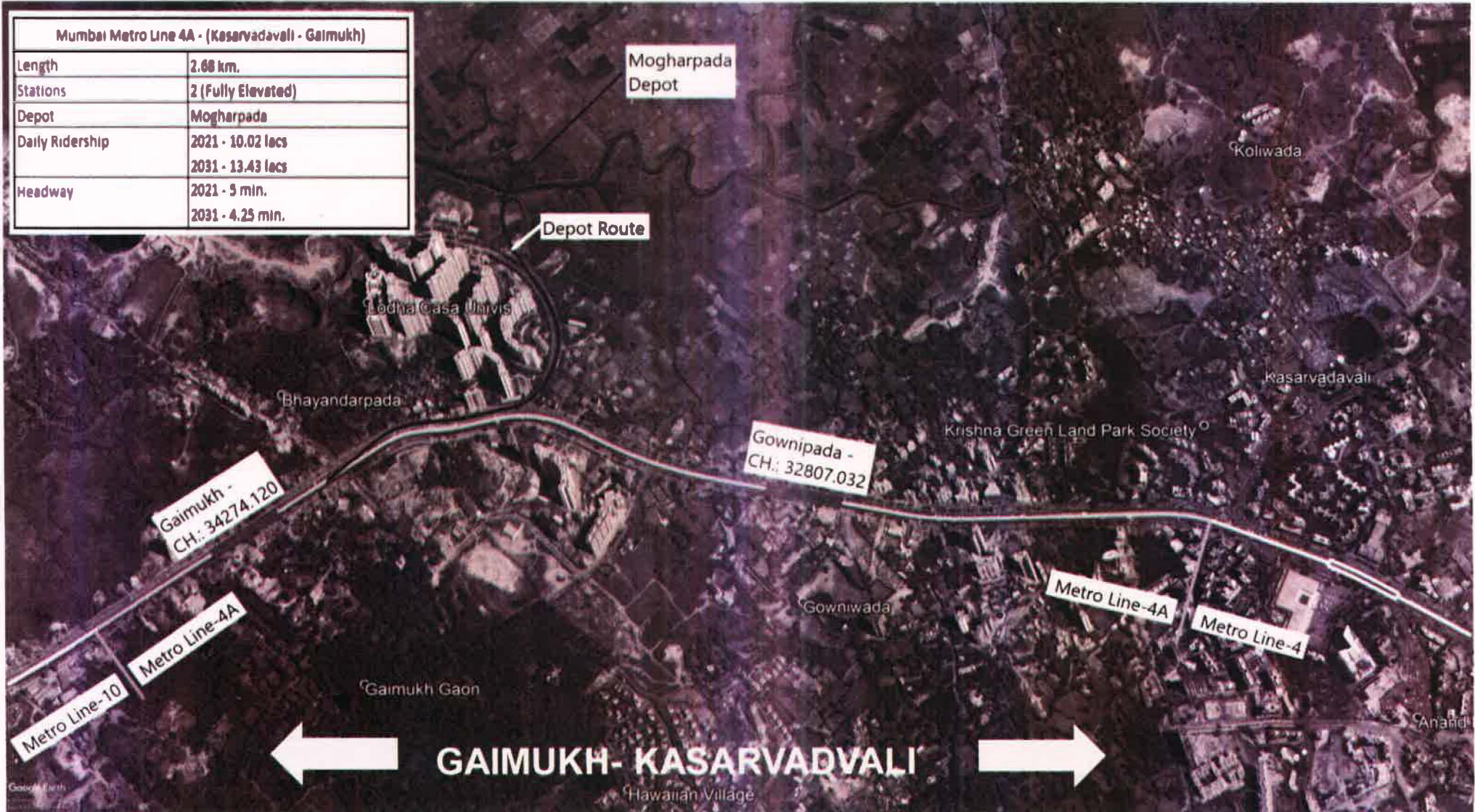
Nishumangal - 23/1/20



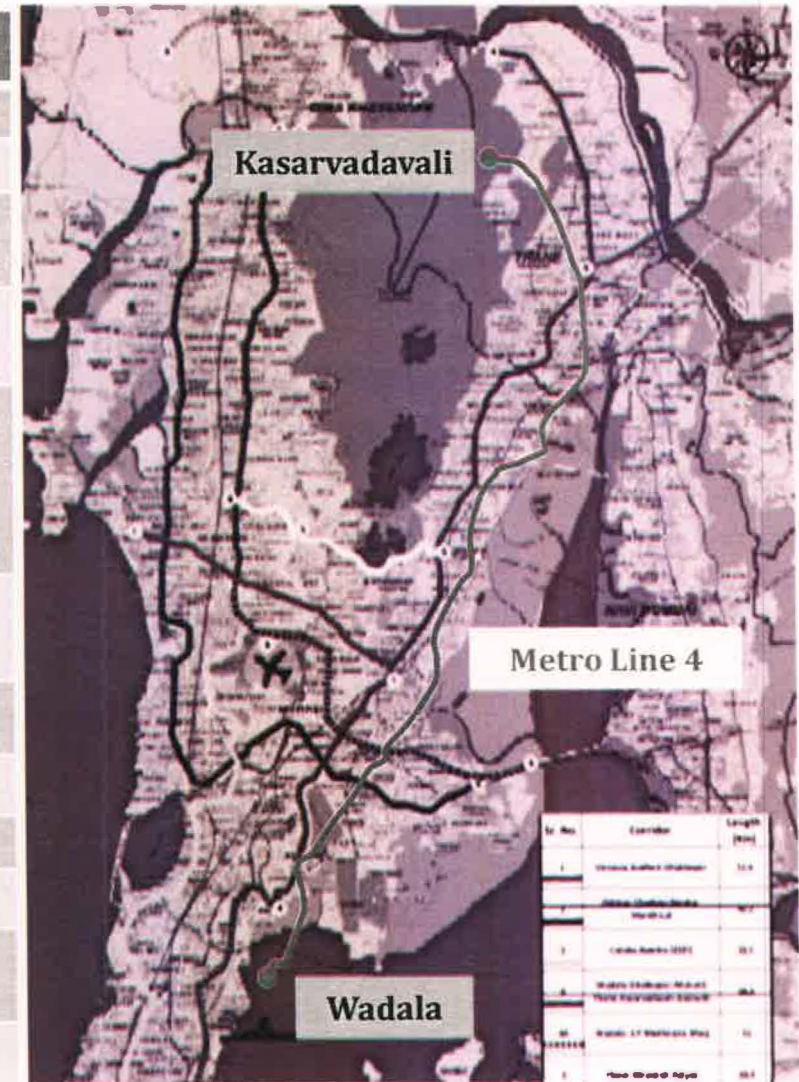


Line	Route	Length (km)
Line 4	Wadala – Kasarvadavali	32.3
Line 4A	Kasarvadavali – Gaimukh	2.7
Line 10	Gaimukh – Shivaji Chowk (Mira Road)	9.2
Line 11	Wadala – CSMT	12.7
Total Length of corridor		56.9

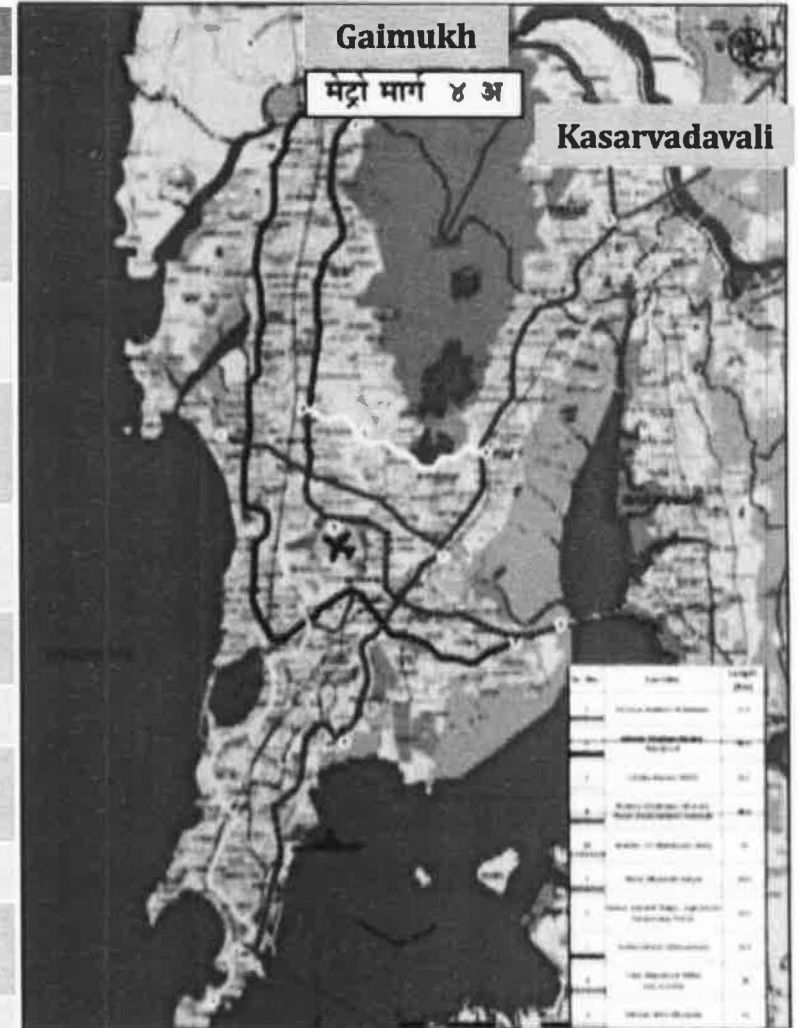
ALIGNMENT FOR LINE – 4A



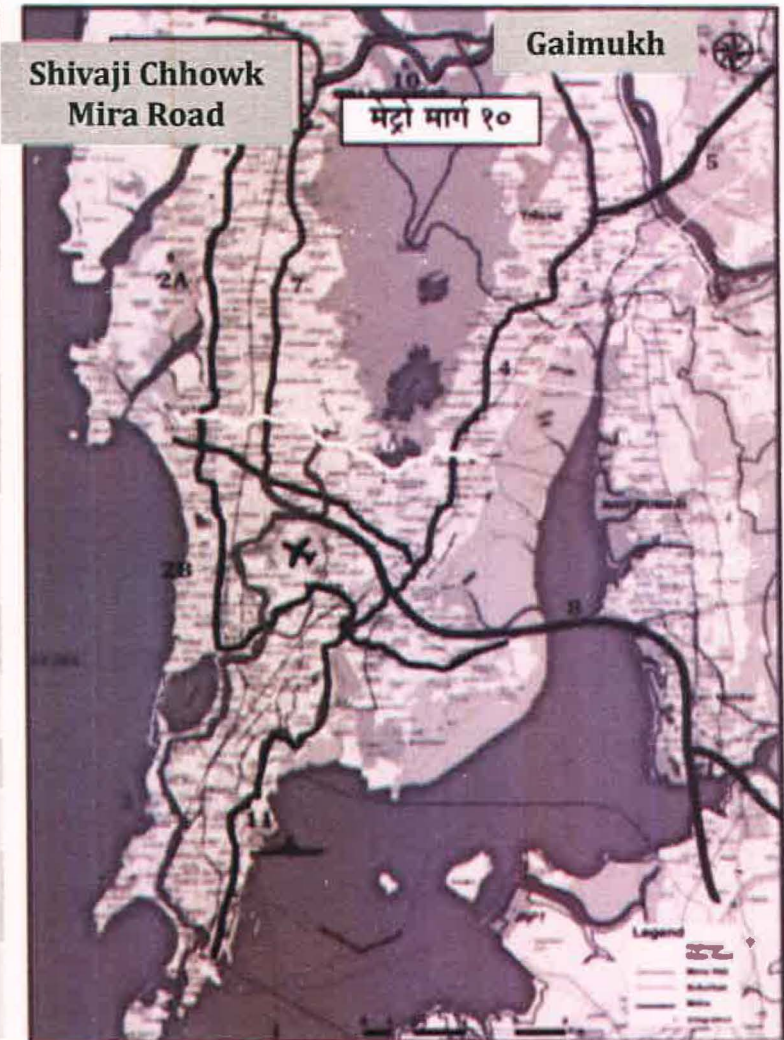
FEATURES	
Length	32.32 km
Stations	30 Nos.
Elevated / Underground	Fully Elevated
Depot	Mogharpada Depot 41.5 Ha combine for Line-4, 4A , 10 & 11
Interchange stations for Metro	<ol style="list-style-type: none"> 1. Wadala (Monorail) 2. Kurla EEH (Metro Line 2B) 3. Kapurbawdi (Metro Line 5) 4. Gandhi Nagar (Metro Line 6)
Project Completion Cost	Rs.14,549 Cr. (Incl. Taxes and Duties)
EIRR	22.79 %
FIRR	8.22 %
Ridership	
2021	Daily Ridership: 8.70 Lakhs, (PHPDT- 28107)
2031	Daily Ridership: 12.13 Lakhs, (PHPDT- 33417)
Current Progress	11.4 % Civil
Completion Time	Oct 2022



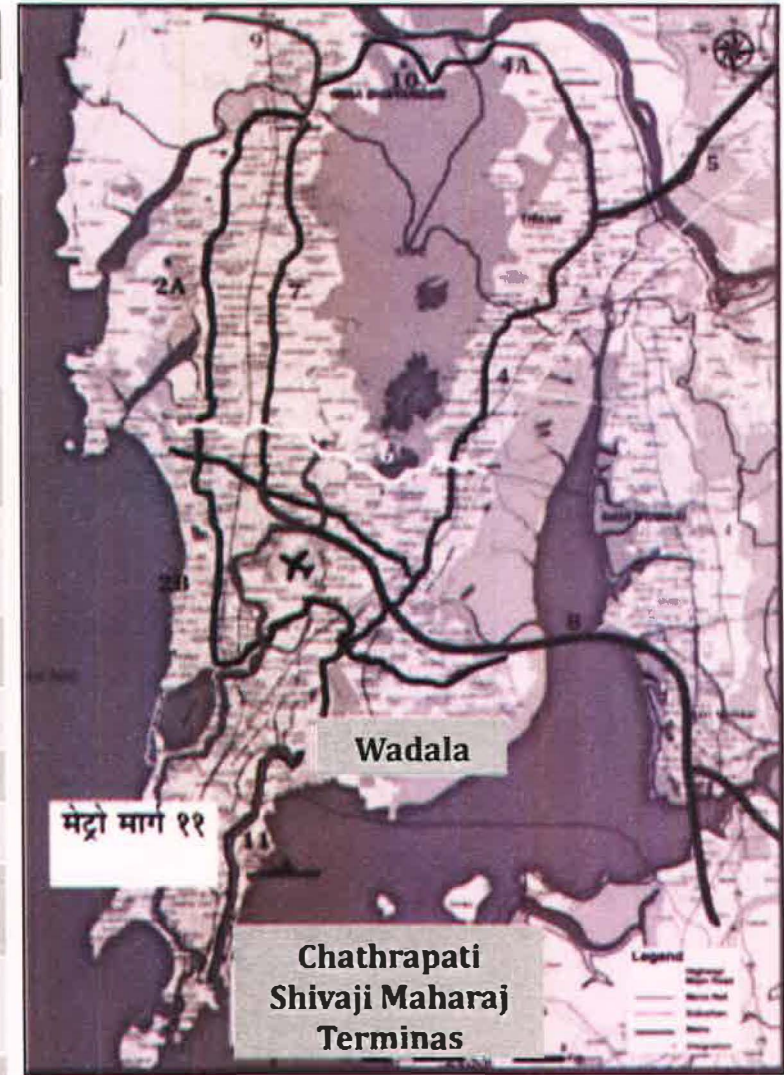
FEATURES	
Length	2.668 km
Stations	2 Nos.
Elevated / Underground	Fully Elevated
Depot	Mogharpada Depot 41.5 Ha combine for Line-4, 4A , 10 & 11
Interchange stations for Metro	<ol style="list-style-type: none"> 1. Kasarvadavli (Metro Line-4) 2. Gaimukh(Metro Line 10)
Project Completion Cost	Rs.949 Cr. (Incl. Taxes and Duties)
EIRR	18.35 %
FIRR	12.68 %
Ridership for Line-4 & 4A	
2021	Daily Ridership: 10.02 Lakhs, (PHPDT- 27570)
2031	Daily Ridership: 13.43 Lakhs, (PHPDT- 30708)
Current Progress	Work started
Completion Time	Oct 2022

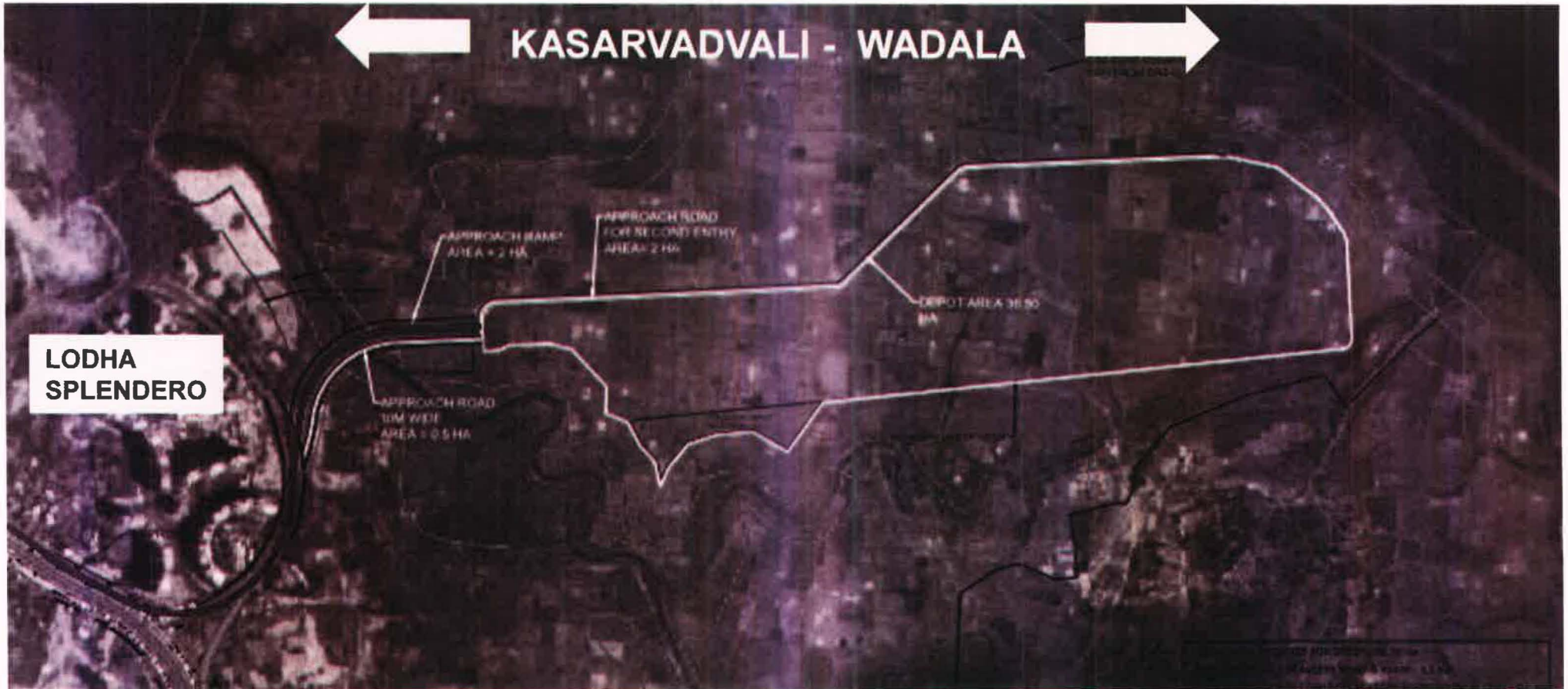


FEATURES	
Length	9.209 km
Stations	4 Nos All elevated.
Elevated / Underground	8.529 km Elevated & 0.680km underground
Depot	Mogharpada Depot 41.5 Ha combine for Line-4, 4A , 10 & 11
Interchange stations for Metro	1. Gaimukh(Metro Line 4A) 2. Dahisar (Metro Line-9)
Project Completion Cost	Rs.4476 Cr. (Incl. Taxes and Duties)
EIRR	22.86 %
FIRR	10.91 %
Ridership	
2021	Daily Ridership: 14.32 Lakhs, (PHPDT- 47102)
2031	Daily Ridership: 21.62 Lakhs, (PHPDT- 48122)
Current Progress	Approval received from State Government on July 23, 2019
Completion Time	Oct 2024



FEATURES	
Length	12.774 km
Stations	2 Nos Elevated & 8 Nos Underground.
Elevated / Underground	8.765 km Elevated & 4.009 km underground
Depot	Mogharpada Depot 41.5 Ha combine for Line-4, 4A , 10 & 11
Interchange stations for Metro	<ol style="list-style-type: none"> 1. Wadala (Metro Line 4) 2. CST station (Metro Line-3)
Project Completion Cost	Rs.8739 Cr. (Incl. Taxes and Duties)
EIRR	17.41 %
FIRR	7.63 %
Ridership	
2021	Daily Ridership: 11.68 Lakhs, (PHPDT- 32460)
2031	Daily Ridership: 16.95 Lakhs, (PHPDT- 36635)
Current Progress	Approval received from State Government on July 23, 2019
Completion Time	Oct 2026





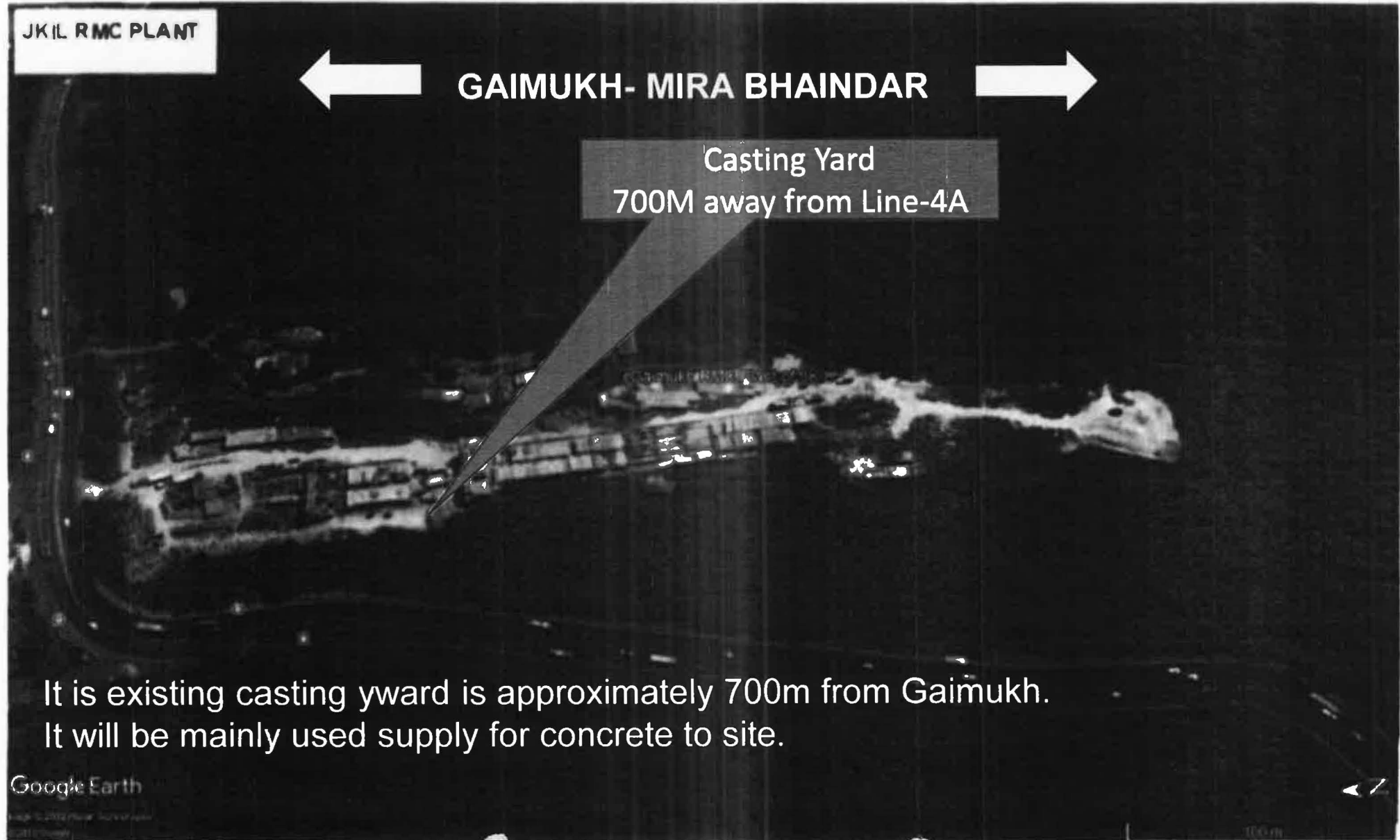
Single depot has been considered for accommodating the required facilities for line 4,4A,10 and 11, at Mogharpada which is at north end of the line 4.

Salient feature

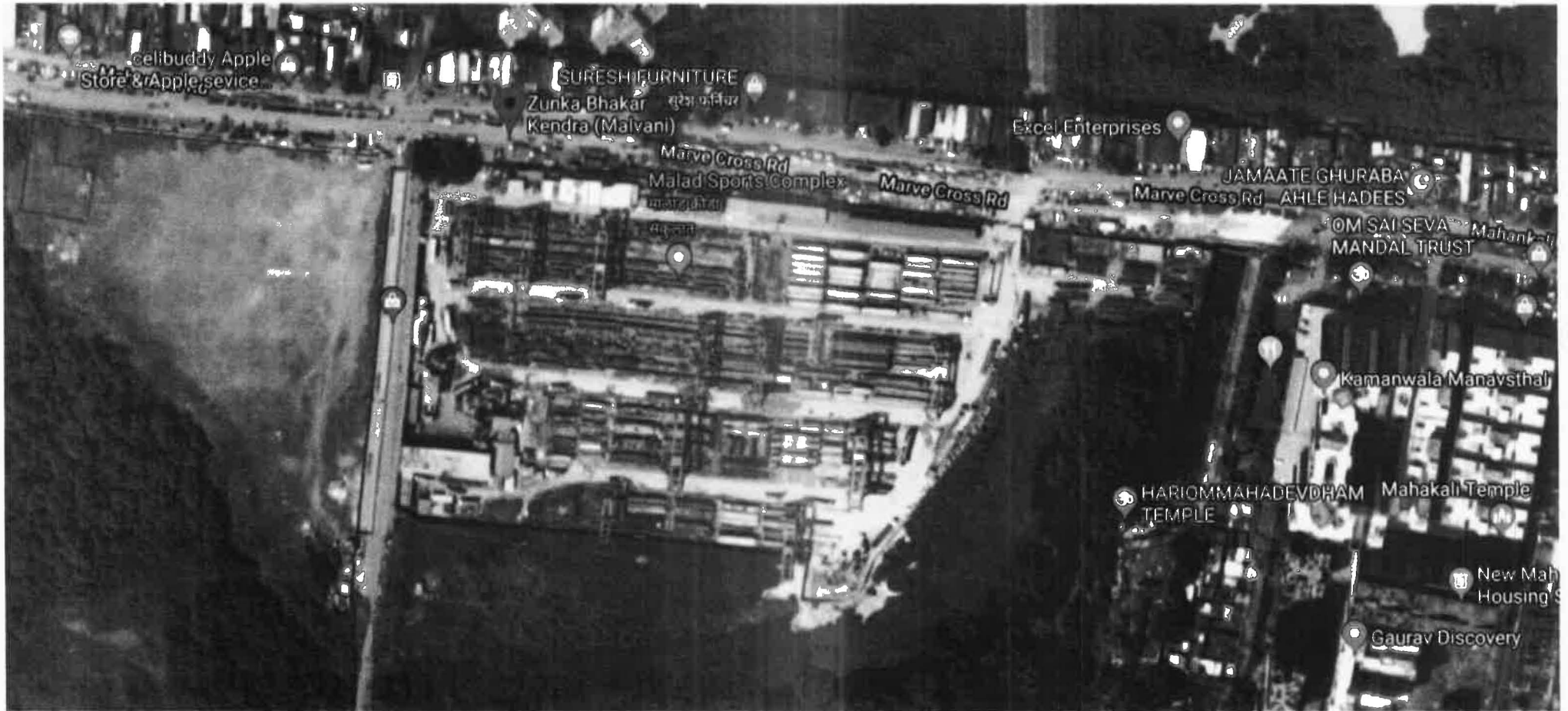
The major components of the depots are below :

1. Stabling lines to accommodate 64 rakes of 8-cars each 2-tier arrangement of stabling lines considering 16 Nos at ground floor and 16 Nos at first floor. Future provisions are considered for additional 32 lines, 16nos at ground and first floor each.
2. Workshop consists of 6 lines for the present and future provision for 4 lines is considered
3. 9 lines for inspection works
4. 2 Nos of Auto coach wash plant
5. 2 Nos of Pit wheel lathes
6. Enough space for rolling stock spares.
7. Test track
8. Other associated buildings like DDC, BOCC and administrative building including other needed facilities are also included in the depot.

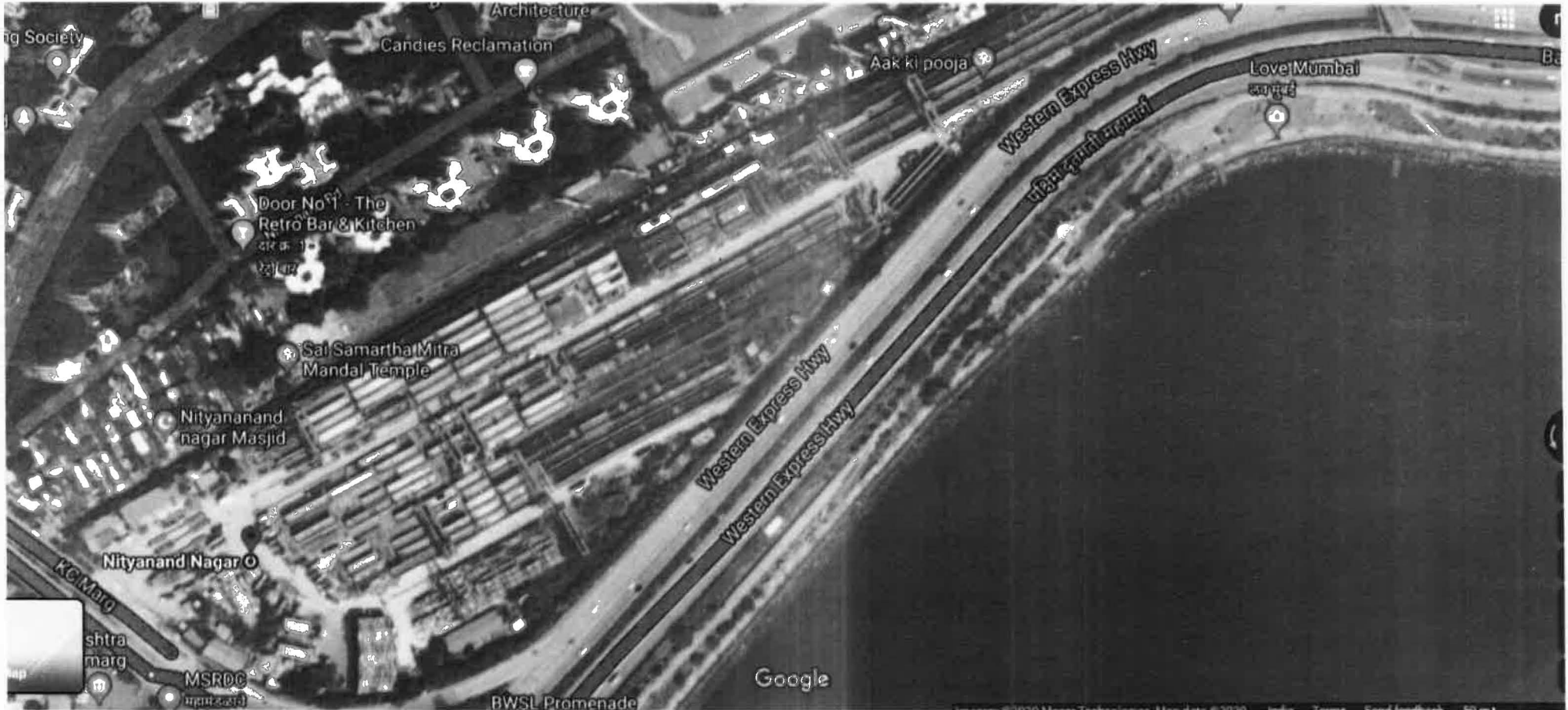
Gaimukh casting Yard



MALWANI CASTING YARD

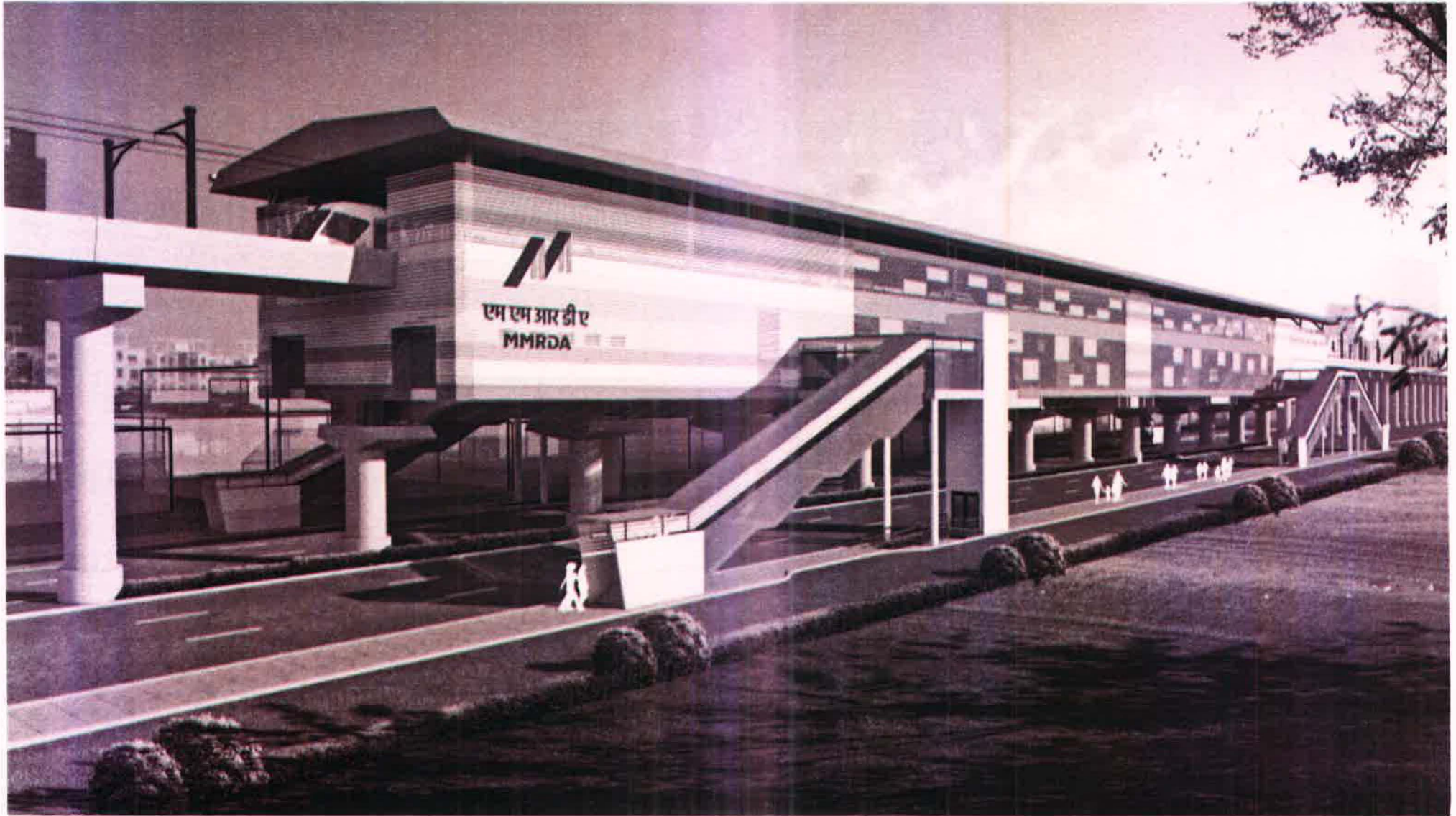


It is existing casting yard is approximately 25 km from Gaimukh.
It will be mainly used for all station precast element.



It is existing casting yard is approximately 40 km from Gaimukh.
It will be mainly used for all Viaduct precast element.

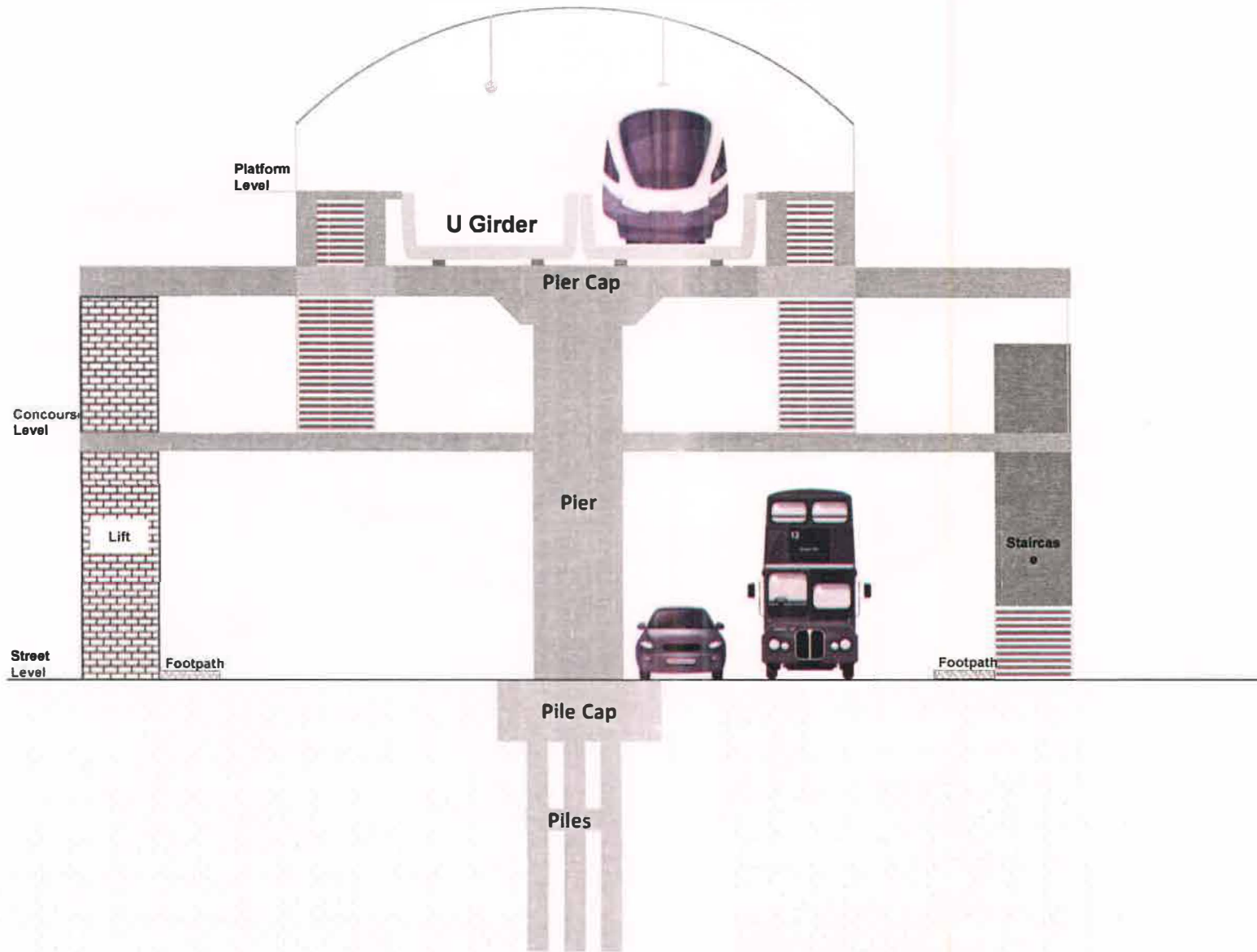
Station View



Station Facilities

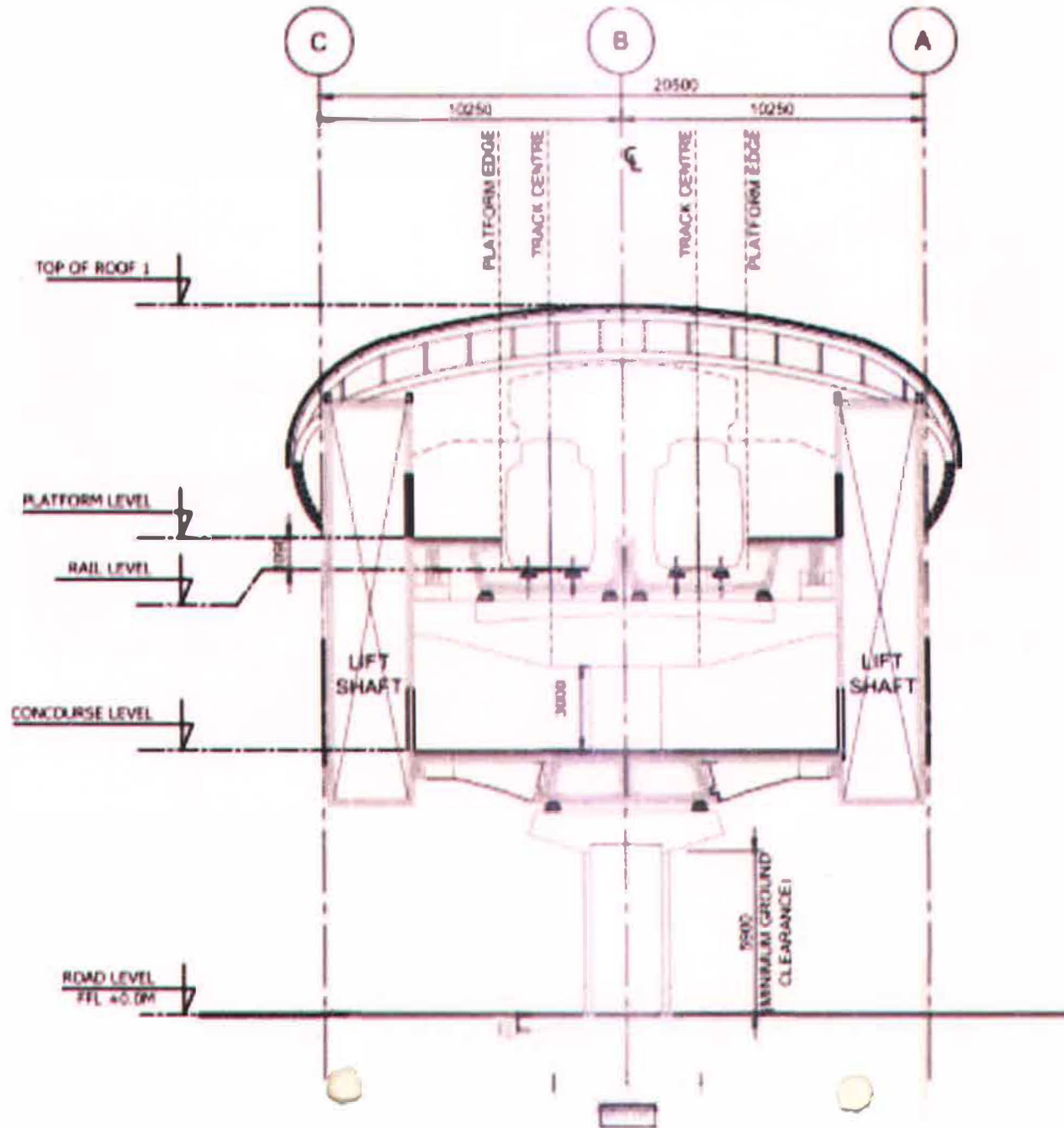
- Lifts, Escalators and Stair cases.
- Improved footpaths with ramps for differently
- abled and senior citizens
- Integrated Ticketing System
- Bus, Auto/Taxi Pick up and Drop off point.
- Integration with Other Transport Modes
- Application of Intelligent Transportation Systems
- for Arrival and Departure.
- Parking facilities

Typical Station Section

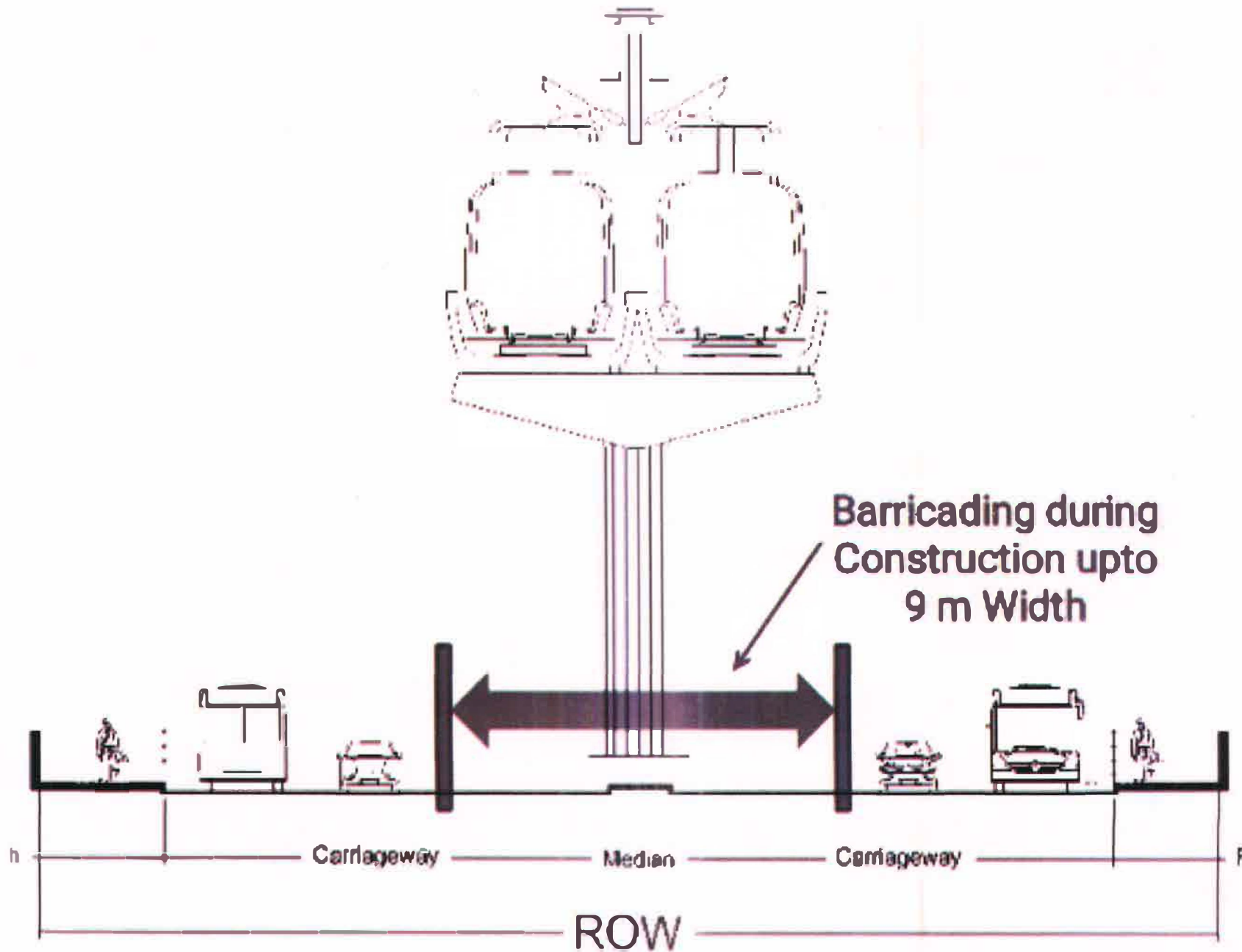


25/CS

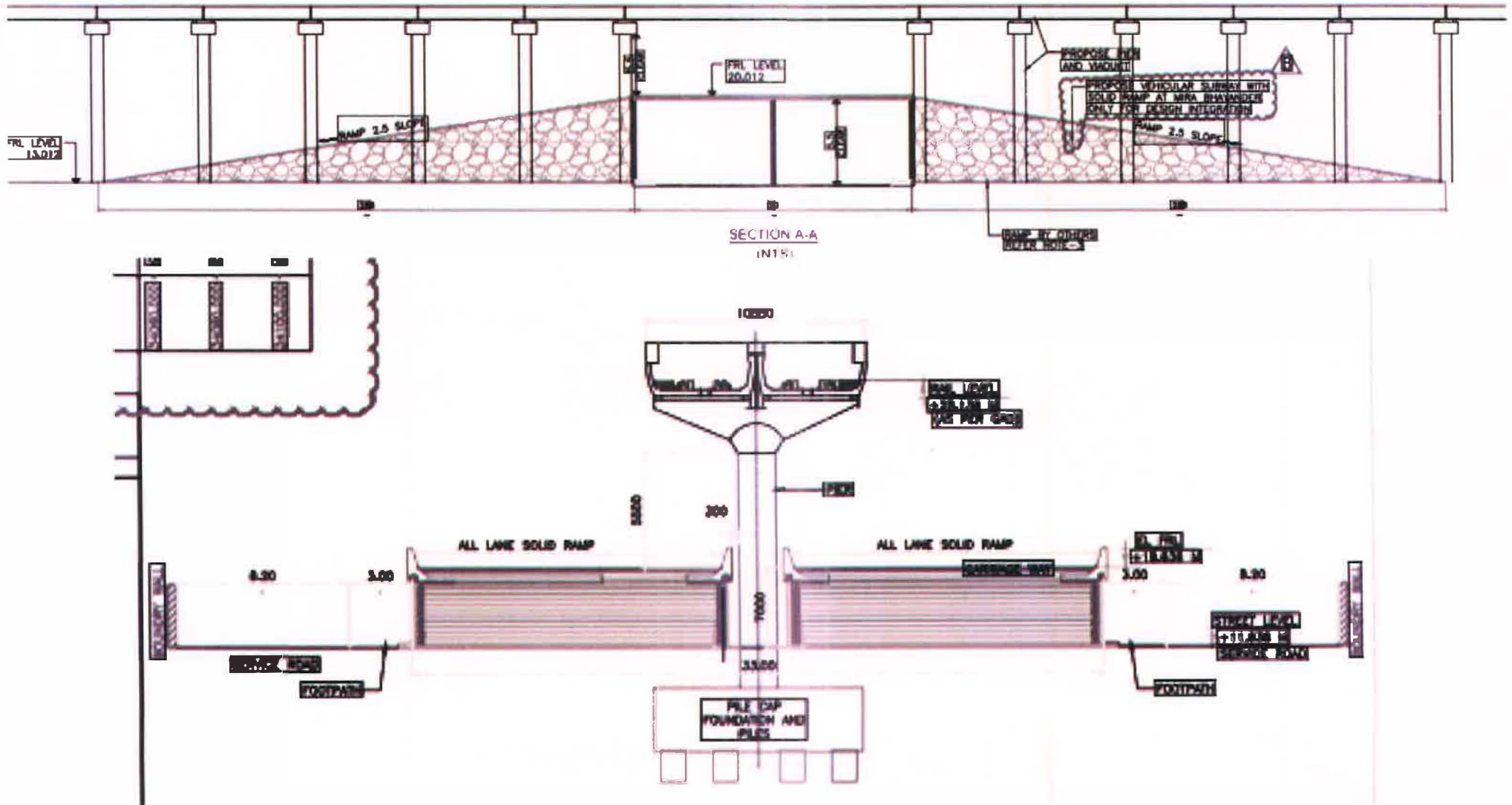
Typical Station Section



Typical Barricade details



Integration of Metro with proposed solid Ramp at Bhaindar Pada



PROJECT STATUS

- DPRs prepared by DMRC and approved on – 12 December 2018
- GR Published – 25 January 2019.
- Field work started on dated 16 September 2019 by JKUMAR

PROJECT BENEFIT

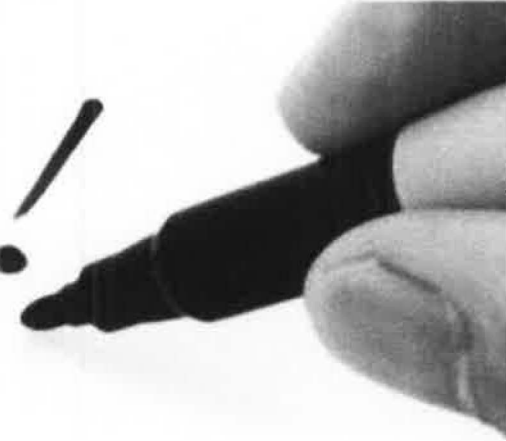
As Line-4A is extension of line-4 and future extension planned as Line-10 & 11 both side which will give following wide connectivity,

1. Wadala (Monorail)
2. Kurla EEH (Metro Line 2B)
3. Kapurbawdi (Metro Line 5)
4. Gandhi Nagar (Metro Line 6)
5. Gaimukh (Metro Line 10)
6. Dahisar (Metro Line-9)
7. CST station (Metro Line-3)

Travel Time Saving – 30 45 Mins

- Expected Shift from Road vehicular traffic is 30 to 35%.
- Reduction in road congestion.

Thank you!



Metro – 4A
(Kasarvadavali to Gaimukh)

Public Consultation
on Social Aspects

February 5, 2020

Social Impacts and Safeguards

- MMRDA has experience in rehabilitating about 44,500 families & business enterprises in past 15 years and has a dedicated Cell (SDC) established for R&R
- Metro 4A is a 2.67 km extension of Metro-4, includes a depot at Mogharpada and the alignment is chosen with a view to minimize displacement
- Requires acquisition of very less private land (1,926 sq.m. as per DPR) & no impacts are observed along the alignment.
- Some of the 41.5 ha. Mogharpada land required for depot is provided by the State Govt. to cultivators under Owale Kharland Scheme.

Social Impacts and Safeguards

- Efforts are being made to carry out survey and joint measurement of land required for the project
- A separate Unit under an Addl. Collector is set up in Metro PIU for acquisition of land and R&R of PAPs
- R&R process will involve disclosure of information, specific consultation with PAPs & Grievance Redressal Mechanism
- The social impact assessment and compensation requirements for Metro – 4A will be incorporated in a combined SIA / RAP report for Metro-4 & 4A

Social Impacts and Safeguards

- Land Owners and Titleholders will be compensated on par with RFCTLARR Act, 2013
- Non-titleholders will be provided entitlements as per MUTP R&R Policy
- Occupants of affected structures, if any, are proposed to be resettled in tenements constructed under Rental Housing Scheme
- Residential PAPs will be provided free tenement of 320 sq.ft. c.a. and non-residential PAPs will be provided galas of equivalent area with a maximum of 225 sq.ft. c.a.

THANK YOU



एमएमआरडीए
MMRDA

PUBLIC CONSULTATION ON ENVIRONMENTAL ASPECTS

For
MUMBAI METRO LINE- 4A : {Kasarwadavali-
Gaimukh}

Date: 05/02/2020

Time : 11:00 am – 1:00 pm

Venue: Niyojan Bhavan, Thane



MMRDA

**WELCOMES
PUBLIC & STAKEHOLDERS PRESENT**

Project Background

- ❖ The Government of Maharashtra, in order to alienate the severe traffic congestion in the City of Mumbai, has undertaken construction of Metro Railway network in Mumbai and surrounding areas like Thane, Bhiwandi, Kalyan, Mira Bhayandar covering 337.10 kms of Metro corridors within next 5 years.
- ❖ The Metro line-1 (Versova-Andheri-Ghatkopar) fully elevated is already in operational.
- ❖ Metro line -3 (Colaba-Bandra-SEEPZ) fully underground, construction works are started by Mumbai Metro Rail Corporation Limited (MMRCL).
- ❖ The construction works of Mumbai Metro line- 2A from Dahisar (East)- D. N. Nagar and Metro line - 7 from Andheri (East) –Dahisar (East) are in progress while construction works of Metro Line-2B (D.N.Nagar-Mandale), Metro Line-4 (Wadala-Ghatkopar-Mulund-Thane-Kasarwadavali) and Metro Line-6 (Swami Samarth Nagar-JVLR-SEEPZ-Kanjurmarg-Vikhroli) has also started and remaining lines will be commenced in next 8-9 months.
- ❖ MMRDA has been appointed as a Special Planning Authority vide GR dated 25th January, 2019 for Metro Line-4A and declared as “Vital Urban Transport Project” vide GR dated 26th June,2019.
- ❖ Detailed Project Reports for Mumbai Metro Project prepared by Delhi Metro Rail Corporation (DMRC).

Alignment of Metro Line-4A



Status of Statutory permissions

- ❖ Construction of Metro Rail is not covered under EIA Notification,2006. Hence Environmental Clearance is not applicable for Metro Projects.
- ❖ Metro car depot proposed at Mogharpada (38 Ha.) is falls in non-CRZ area. However, approach road with spur line to Mogharpada depot (3.50 Ha.) is partly falls in CRZ area.
- ❖ MCZMA recommended the proposal to SEIAA in its 138th meeting held on 10th October,2019
- ❖ SEIAA issued CRZ Clearance in November ,2019.
- ❖ Piers of approach road with spur line falls within 50 m. mangrove buffer zone. Hence, need to obtain High Court permission which is in process.
- ❖ Total No. of affected trees are 358. Out of which, it is proposed to transplant 355 trees and cutting of 03 trees. Proposal submitted to “Tree Authority” of Thane Municipal Corporation (TMC).

Benefits of Metro

- ❖ Gaseous, liquid or solid pollution prevention as the Metro railway is run on clean energy viz. electricity which does not emit any pollutant during the operation.
- ❖ Lower noise pollution compared to equivalent capacity of road transport.
- ❖ Metro Lines are also environment friendly and will result in substantial reduction of fuel consumption, air pollution, traffic noise.
- ❖ It will Reduce emissions of CO₂ and particulate matter.
- ❖ Energy efficient



Benefits of Metro

- ❖ Operation of this Metro corridor would result in reduction of travel time.
- ❖ Metro will reduce fatal accidents happening on suburban rail system due to severe overcrowding.
- ❖ Also safer as compared to road transport in cities like Mumbai, Thane, Bhiwandi etc. where road accident rate is very high.
- ❖ Higher speed, in line to peak hours, compared to bus and other road transport.
- ❖ Smooth ride as it is not affected by other vehicles, pedestrians etc.
- ❖ It has capacity to carry 72,000 people/hr/direction which is equivalent to 24 dedicated bus lanes and 78 private vehicular lanes.

Impacts during construction phase

- Loss of trees
- Air Pollution
- Noise Pollution
- Solid and Hazardous waste generation
- Construction & Demolition waste generation

Environmental Management Plan (EMP): Construction Phase

- Transplantation and compensatory plantation
- Regular water Sprinkling, Mandatory Euro II certification for construction vehicles.
- Use of barricading of adequate height around the digging/piling area, proper traffic diversion to avoid congestion.
- Segregation of Solid Waste, reuse and recycle the waste
- Management of Hazardous waste

Impacts during Operation Phase

- Noise Pollution: Due to friction of rolling stocks on tracks, announcement at metro stations etc.
- Solid waste generation at stations

Impacts due to Depot:

- Generation of Sewage and effluent
- Oil Spillage
- Generation of solid and Hazardous Waste

Environmental Management Plan (EMP): Operation Phase

- Installation of Noise barriers
- Segregation of solid waste, use of colour code bins
- Installation of STP & ETP
- Use of Oil & Grease Traps
- Generated sludge disposed off as per MPCB norms.
- Green Belt Development in depot area
- Rain water harvesting

Environmental Monitoring Plan

- ❖ Air Monitoring
- ❖ Noise Monitoring
- ❖ Soil Monitoring
- ❖ Water Monitoring



THANK YOU...

Annexure-III: Photographs of PC







