Presentation For Environmental Clearance

before

State Level Expert Appraisal Committee – II, Maharashtra

For

Proposed Redevelopment Project (MHADA)

at

Existing Building 25, 26, 27 Trilochan CHS Ltd on plot bearing S N 6(pt), C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 400022.

Proposed by

M/s. Shikara Constructions Pvt. Ltd.

Presented by

EIA Co-Ordinator: Mr. Sourabh Jaiswar

FOR, POLLUTION AND ECOLOGICAL CONTROL SERVICES

AUTHORITY LETTER

SHIKARA CONSTRUCTIONS PVT. LTD.

Date: 10th October 2023

To
The Member Secretary (SEIAA)
15th Floor, New Administrative building,
Madam Cama Road, Mumbai-400032

Subject : Authority Letter for **M/s. Shikara Constructions Pvt. Ltd.**

This is to Certify that Mr. Dharmesh Kumar Sharama, Project Head of **M/s. Shikara Constructions Pvt. Ltd.** is assigned competent person for all clearance matters of Company and is Authorize to sign all documents pertaining to Environment Clearance and attend SEAC/SEIAA Meetings.

Yours Faithfully,

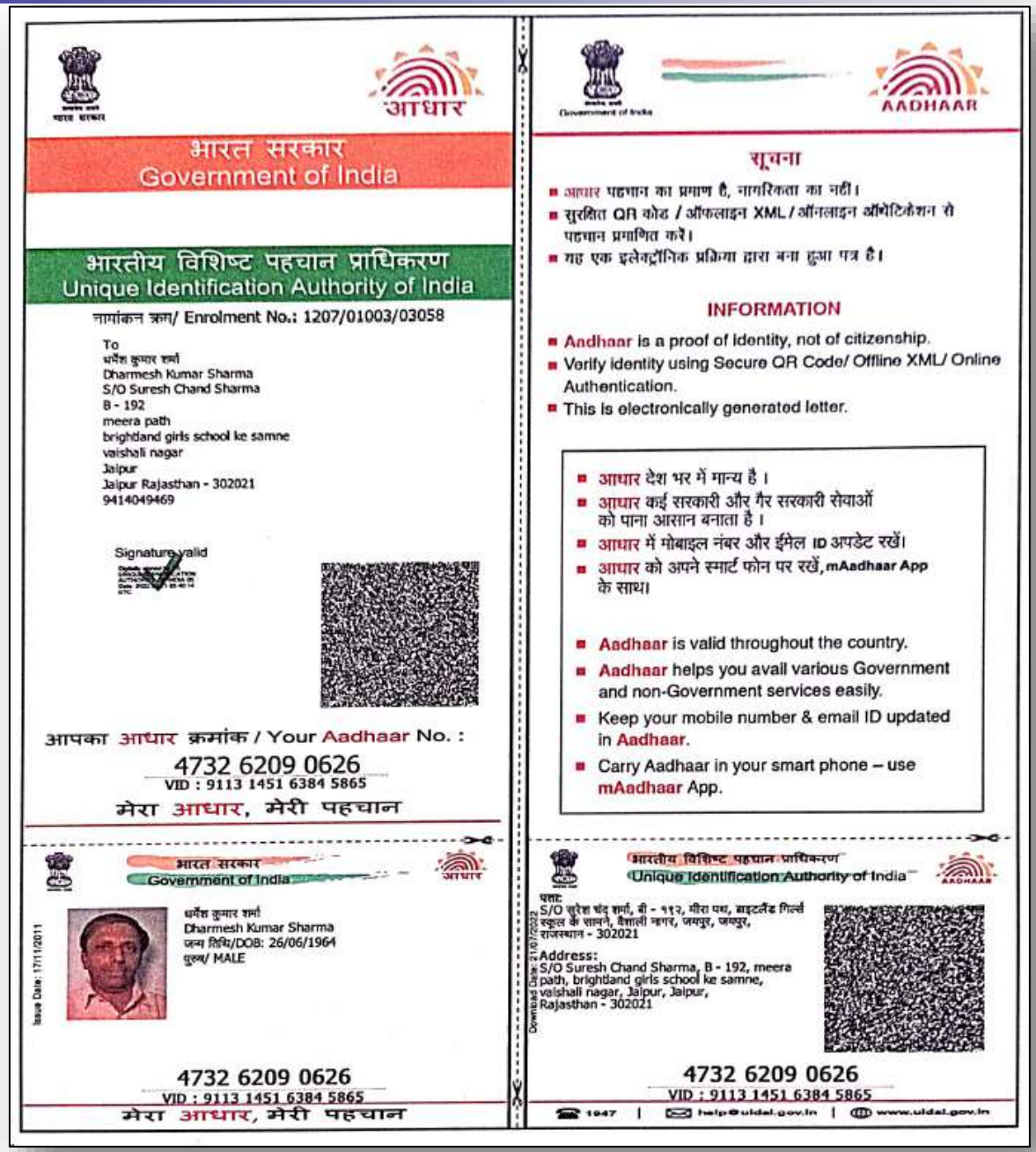
M/s. Shikara Constructions Pvt. Ltd.

Mr. _____
(Director)
Authorized Signatory

SHIKARA CONSTRUCTIONS PVT. LTD. MUMBAI

Regd. Office :
204, Bezzola Complex, Opp. Suman Nagar, Sion Trombay Road, Chembur, Mumbai - 400 071.
Tel. : (+91 22) 4225 0018/9 E-mail : info@shikaraconstructions.com Website : www.shikaraconstructions.com

ISO 9001:2008 CERTIFIED



NABET ACCREDITATION

QUALITY COUNCIL® OF INDIA
Creating an Ecosystem for Quality

NABET

National Accreditation Board for Education and Training

NABET

Certificate of Accreditation

Pollution & Ecology Control Service, Nagpur

Near Dhantoli Police Station, Dhantoli, Nagpur- 440012 (M.S.)

*The organization is accredited as **Category-A** under the QCI-NABET Scheme for Accreditation of EIA Consultant Organization, Version 3: for preparing EIA-EMP reports in the following Sectors –*

S.No	Sector Description	Sector (as per)		Cat.
		NABET	MoEFCC	
1	Mining of minerals opencast only	1	1 (a) (i)	A
2	River Valley projects	3	1 (c)	B
3	Thermal power plants	4	1 (d)	A
4	Coal washeries	6	2 (a)	A
5	Mineral beneficiation	7	2 (b)	A
6	Metallurgical industries	8	3 (a)	A
7	Coke oven plants	11	4(b)	A
8	Building and construction projects	38	8 (a)	B
9	Townships and Area development projects	39	8 (b)	B

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in RAAC minutes dated June 09, 2023 posted on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in QCI-NABET's letter of accreditation bearing no. QCI/NABET/ENV/ACO/23/2874 dated September 06, 2023. The accreditation needs to be renewed before the expiry date by Pollution & Ecology Control Service, Nagpur following due process of assessment.

NABET

Sr. Director, NABET
Dated: September 6, 2023

Certificate No.
NABET/EIA/2225/RA 0291

Valid up to
October 16, 2025

For the updated List of Accredited EIA Consultant Organizations with approved Sectors please refer to the QCI-NABET website.

PECS
NABET Accredited Consultant

POLLUTION AND ECOLOGY CONTROL SERVICES

Date: 01/08/2021

TO WHOM IT MAY CONCERN

This is to inform you that we **M/s Pollution & Ecology Control Services** are Accredited by NABET to carry out project for environmental clearance of various sectors including 8(a) and 8 (b). We authorized to Mr. Sourabh Singh Jaiswar (EIA Co-coordinator) to present case before SEAC/SEIAA for sector 8(a) building and construction project and 8 (b) Area development and Township project.

Thank you

Your's faithfully

M/s Pollution & Ecology Control Services

01/08/2021

(Authorized Signatory)

Enclosure: NABET Accreditation Letter

Rgd. Office : Near Dhantoli Police Station, Dhantoli, Nagpur - 440012 (M.S.) India.
Ph. & Fax : 91-712-2442363, 2442393 (M) 09373128182, 07720076428
Work Office : Rekha Residency, Plot No. 28, Shree Badrinarayan Society in Gharkul Co-Operative Housing Society, Swalambi Nagar, Nagpur - 25 Ph. Fax : 91-712-2293223, 2293225, 07720076427
E-mail : vijenenvironment@gmail.com, pecs_nagpur@rediffmail.com
Branch Office : House No. 2208/A, Jagarnath Nagar, Near Anand Gas Godown, Argora, P.O. Ashok Nagar, Ranchi - 834012
Mobile : 08407804251, E-mail : iem2012@rediffmail.com, pecs_ranchi@rediffmail.com

भारत सरकार
GOVERNMENT OF INDIA

सौरभ सिंह जैस्वार
Sourabh Singh Jaiswar
जन्म वर्ष/YoB:1979
पुरुष Male

6811 8567 7235

आधार - सामान्य माणसाचा अधिकार

SCRUTINY FEES

SHIKARA CONSTRUCTIONS PVT. LTD.

To
The Member Secretary (SEAC II).
15th Floor, New Administrative building,
Madam Cama Road, Mumbai- 400032

Subject : Submission of Scrutiny fee for Proposed Expansion in Redevelopment of Existing Building 25, 26, 27 Trilochan CHS Ltd at S. No. 6(pt), C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 400022, by M/s. Shikara Constructions Pvt. Ltd.

Reference : Scrutiny Fee order by Environment Dept Govt of Maharashtra dated. 12th June 2014 & revised Circular dated. 06th June 2018.

Respected Sir/Madam

Please note that we had submitted online Prior EC application for Proposed Expansion in Redevelopment of Existing Building 25, 26, 27 Trilochan CHS Ltd at S. No. 6(pt), C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 400022, by M/s. Shikara Constructions Pvt. Ltd.

Following are the details of scrutiny fee for your reference.

1	**Name of the project**	Proposed Expansion in Redevelopment of Existing Building 25, 26, 27 Trilochan CHS Ltd at S. No. 6(pt), C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 400022, by M/s. Shikara Constructions Pvt. Ltd.
2	**Name of the project proponent**	M/s. Shikara Constructions Pvt. Ltd.
3	**Proposal Number**	SIA/MH/INFRA2/449560/2023
4	**Scrutiny fee details**	
	Project Cost	Proposed Project Cost: Rs. 135 Cr. Previous Project Cost: Rs. 125 Cr. Difference: Rs. 10 Cr.
	Scrutiny fee amount	Rs. 1,50,000/-
	Reference ID	1371329421
	Fee Transaction date:	09.11.2023

Kindly consider the same.
Thanking you
Yours faithfully
Authorized Signatory

Regd. Office :
204, Bezzola Complex, Opp. Suman Nagar, Sion Trombay Road, Chembur, Mumbai - 400 071.
Tel. : (+91 22) 4225 0018/9 E-mail : info@shikaraconstructions.com Website : www.shikaraconstructions.com

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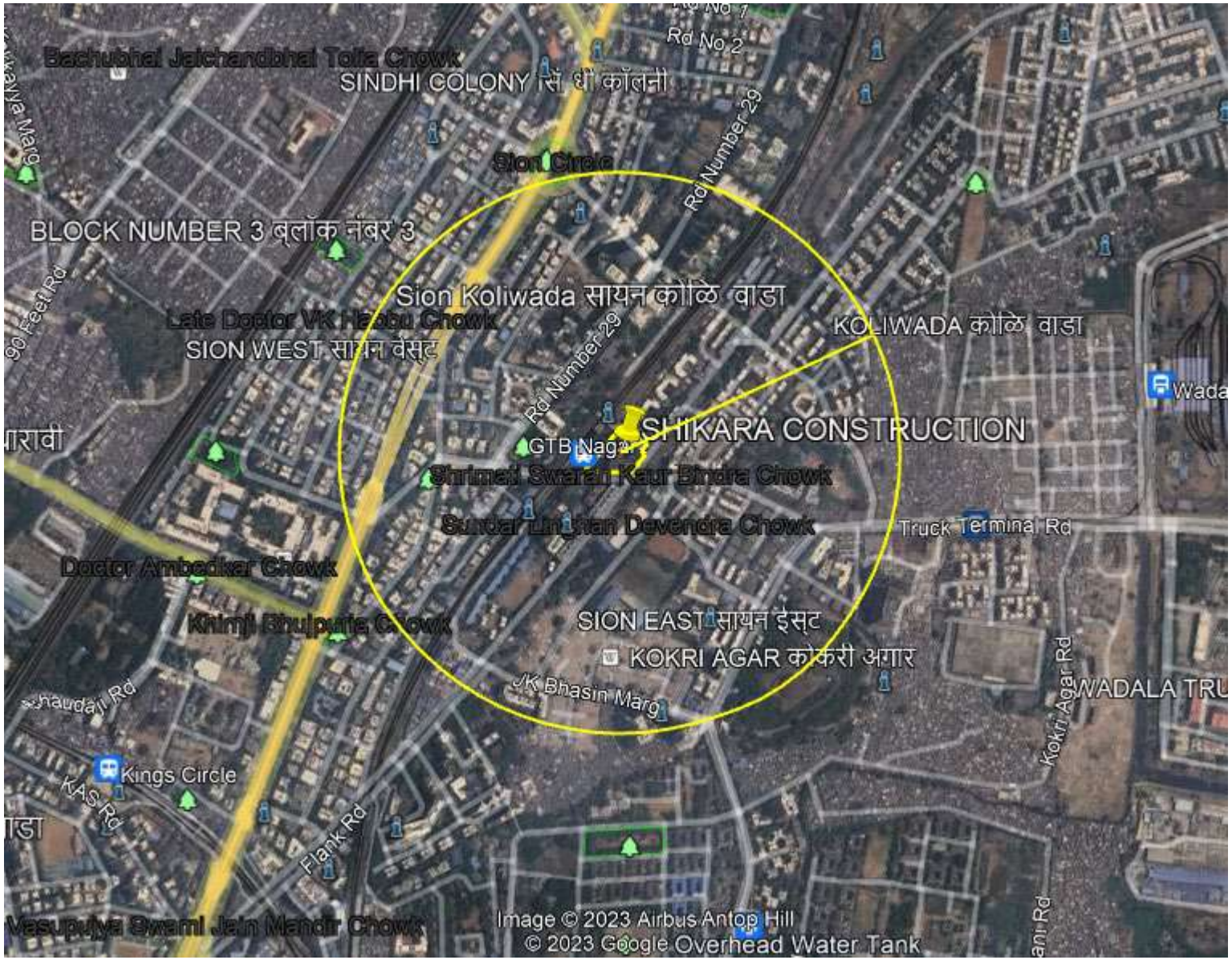
Sr. No.	Description	Details
1.	Approvals	Applied
2.	Fire NOC	Obtained
3.	Tree NOC	Obtained
4.	Sewer line Connection NOC	Obtained
5.	Water NOC/Remark	Obtained
6.	SWD Remark	Obtained
7.	Civil Aviation NOC	Obtained
8.	Fees	Date Of Payment : 09.11.2023 Amount : 1.50 Lac UTR No : 1371329421

INTRODUCTION

- The Project under reference is Proposed Expansion in Redevelopment of Existing Building 25, 26, 27 Trilochan CHS Ltd at S. No. 6(pt). C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada, Mumbai 400022.
- This Project comes under DCPR 2034 under Jurisdiction of **MHADA** with scheme 33 (5).
- The project has plot area of **3,359.31 Sq.mt.**, Net Plot area of **3,359.31 Sq.mt.**, having Total proposed Built-up area of **32,863.79 sq.mt.**
- Required RG according to DCPR 2034 is **1,584.41 sq.mt** & entire mandatory RG area provided on Mother Earth is **1,588.24 sq.mt.** as per NGT order.
- PP has proposed Buildings as follows:
  - Wing A: B (pt) + Gr. + 1st to 9th Podium + 10th to 16th floor
  - Wing B: B (pt) + Gr. + 1st to 9th Podium+ 10th E level +11th to 23rd floor.
  - Wing C: B (pt) + Gr. + 1st to 9th Podium+ 10th E level + 11th to 23 floors.
  - Wing D: B (pt) + Stilts +15th floor & Stilt +22nd floor.
- PP has obtained EC Environment Clearance vide No. SEIAA-EC-0000002105 dated 18.02.2020 for plot area **3,359.31 Sq.mt** and he built-up area of 30,839.53 sq.mt.
- PP has constructed about **29,107.05 sq.mt** out of 30,839.53 Sq.m. as per EC granted.
- There is no change in Wing A, B & D Only vertical expansion proposed in Wing C i.e addition of 6 Floor.
- Part basement is only proposed for services.
- Now PP has applied for expansion in Environment Clearance as built-up area increasing from 30839.53 sq.mt. to **32,863.79 sq.mt.** as per DCPR 2034.
- The Project is accessible by 18.30 mt. wide Dr. Ambedkar Marg in South Direction & 12.00 mt. wide Flank Road at East boundary of the plot.
- PP shall provide all the Infrastructures including wastewater management, solid waste management, storm water management, energy saving measures, tree plantation.

SATELITE IMAGE WITH PLOT BOUNDARY



Eco - Sensitive zones	Distance from Site
Powai Lake	10.04 km
Dharavi Creek	2.37 km

LATITUDE: 19° 2'16.16"N

LONGITUDE: 72°51'53.93"E

PREVIOUS EC

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

सत्यमेव जयते

Environment department,
Room No. 217, 2nd floor,
Mantralaya, Annexe,
Mumbai- 400 032.
Date:February 18, 2020

To,
Shikara Constrcutions Pvt Ltd.
at plot bearing S N 6(pt), C S No 11 (pt) of village Sion Koliwada of MHADA layout

Subject: Environment Clearance for proposed redevelopment of Existing Building 25, 26, 27 Trilochan CHS Ltd on plot bearing S N 6(pt), C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 400022

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-II, Maharashtra in its 124th meeting and recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 186th meetings.

2. It is noted that the proposal is considered by SEAC-II under screening category 8(a) as per EIA Notification 2006.

Brief Information of the project submitted by you is as below :-

1.Name of Project	proposed redevelopment of Existing Building 25, 26, 27 Trilochan CHS Ltd on plot bearing S N 6(pt), C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 400022
2.Type of institution	Private
3.Name of Project Proponent	Shikara Constrcutions Pvt Ltd.
4.Name of Consultant	Enviro Analysis and Engineers Pvt Ltd
5.Type of project	Residential and Commercial
6.New project/expansion in existing project/modernization/diversification in existing project	MHADA Redevelopment
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Not applicable
8.Location of the project	plot bearing S N 6(pt), C S No 11 (pt) of village Sion Koliwada of MHADA layout
9.Taluka	-
10.Village	Sion Koliwada
Correspondence Name:	Ms Sarala Shetty
Room Number:	204
Floor:	Second
Building Name:	Benzzola Complex , Opp Suman Nagar
Road/Street Name:	Sion Trombay Road
Locality:	Chembur
City:	Mumbai
11.Whether in Corporation / Municipal / other area	MCGM, MHADA

12.IOD/IOA/Concession/Plan Approval Number	yes
	IOD/IOA/Concession/Plan Approval Number: Application to MHADA
	Approved Built-up Area:
13.Note on the initiated work (If applicable)	NA
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	Application to MHADA
15.Total Plot Area (sq. m.)	3359.31 Sq. Mts
16.Deductions	NA
17.Net Plot area	3359.31 Sq. Mts
18 (a).Proposed Built-up Area (FSI & Non-FSI)	**FSI area (sq. m.):** 15848.93
	Non FSI area (sq. m.): 14990.60
	Total BUA area (sq. m.): 30839.53
18 (b).Approved Built up area as per DCR	**Approved FSI area (sq. m.):** -
	Approved Non FSI area (sq. m.): -
	Date of Approval: 01-01-1900
19.Total ground coverage (m2)	1881
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	56
21.Estimated cost of the project	1250000000

CORRESPONDENCE FOR CCR

SHIKARA CONSTRUCTIONS PVT. LTD.

Date: 09th October 2023

To
Regional Officer.
Ministry of Environment, Forests and Climate Change
Regional Office (WCZ), Ground Floor
East Wing, New Secretariat Building,
Civil Line, Nagpur-440001.

Subject : Request for conducting RO site visit for Proposed Redevelopment of Existing Building 25, 26, 27 Trilochan CHS Ltd on plot bearing SN 6(pt). C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 400022 by **M/s. Shikara Constructions Pvt. Ltd.**

Reference : 1. Office Memorandum vide F.NO. (E 177258) dated 8th June 2022 from MOEF & CC.

Dear Sir

We would like to convey to you that we have applied for Environmental Clearance for the proposed expansion of Residential Project located at above mentioned address. Now with reference to OM dated 8th June 2022 from MOEF&CC, we must submit a certified compliance report from regional office of MOEF & CC. To fulfill the same, we request you to schedule the site visit for our project.

We are here with attached copy of Environment Clearance dated 18.02.2020.

Thanking you
M/s. Shikara Constructions Pvt. Ltd.

Authorized Signatory

Enc.: 1. EC dated 18.02.2020.

Regd. Office :
204, Bezzola Complex, Opp. Suman Nagar, Sion Trombay Road, Chembur, Mumbai - 400 071.
Tel. : (+91 22) 4225 0018/9 E-mail : info@shikaraconstructions.com Website : www.shikaraconstructions.com

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From: info@kautilyaenv.in
To: "Shri. V N Ambade" <apccfcentral-ngp-mef@gov.in>, "EC Compliance Maharashtra" <eccompliance-mh@gov.in>
Cc: rttlceo@gmail.com, ddmpsion@gmail.com
Sent: Monday, October 9, 2023 7:00:19 PM
Subject: RO VISIT APPLICATION FOR CCR - M/S. SHIKARA CONSTRUCTION PVT LTD.

To
Regional Officer.
Ministry of Environment, Forests and Climate Change
Regional Office (WCZ), Ground Floor
East Wing, New Secretariat Building,
Civil Line, Nagpur-440001.

Subject : Request for conducting RO site visit for Proposed Redevelopment of Existing Building 25, 26, 27 Trilochan CHS Ltd on plot bearing SN 6(pt). C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 400022 by **M/s. Shikara Constructions Pvt. Ltd.**

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We are here with attached copy of Environment Clearance dated 18.02.2020.

Thanking you
M/s. Shikara Constructions Pvt. Ltd.

ARCHITECT LETTER

Certificate for Construction as per EC

Date: 09.11.2023

To,
Chairman,
State Environment Impact Assessment Authority

Subject: Construction status as per earlier EC for Proposed Expansion in Redevelopment of Existing Building 25, 26, 27 Trilochan CHS Ltd at S. No. 6(pt), C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 400022, by M/s. Shikara Constructions Pvt. Ltd.

Sir,

We have obtained Environment Clearance vide No. SEIAA-EC-0000002105 dated 18.02.2020 for FSI area of (15,848.93 sq mt.) m2, Non FSI of (14,990.60 sq mt.) and Total BUA of (30,839.53 sq.mt.).

We, hereby declare that the construction done on site till date is BUA of (29,107.05 Sq.mt.) as against the approved BUA of (30,839.53 sq.mt.) as per Environment Clearance vide No. SEIAA-EC-0000002105 dated 18.02.2020.

We certify that, the construction carried out on ground by PP till the date of SEIAA hearing is within the BUA and in accordance with configuration of earlier Environment Clearance vide No. SEIAA-EC-0000002105 dated 18.02.2020.

Yours,

Authorized Signatory (Project Proponent)	Authorized Signatory Ar.Prathamesh Khot CA/2015/69001 ARCHITECT PRATHAMESH KHOT CA/2015/69001	Authorized Signatory (Environmental Consultant)

SITE PHOTOGRAPHS

Wing A & B

Wing C

Wing D

SOCIO-ECONOMIC INFRASTRUCTURE AROUND PROJECT SITE

Sr. No.	Nearest Social Infrastructure	Name/Type	Aerial Distance from project (in kms)
1	Railway Station	GTB Nagar Station	0.09
2	Metro Station	Sion Metro Station	0.90
3	Bus Stop/Depot	MSRTC Sion Bus Stand	1.00
4	Fire station	Rawali camp fire station	0.40
5	Airport	Chhatrapati Shivaji Maharaj International Airport	9.00
6	Hospital	New Sunita Hospital	0.50
		Atharva hospital	0.43
		Sion Hospital	0.55
		Antop Hill hospital	0.51
		Sai Multispecialty Hospital & Research Centre	1.08
7	Schools/Colleges	Guru Nanak Higher Secondary School	0.23
		K. D. Gaikwad Municipal upper Primary Marathi School	0.25
		Sion Koliwada Municipal Hindi School	0.28
		Guru Nanak College of arts, science and Commerce	0.34
		Shri Gauridutta Mittal Vidyalaya & Junior college	0.26
		LTMG college	0.71
8	Bank /ATM	Panjab & Sindh Bank	0.16
		Bank of Baroda	0.15
		Yes Bank	0.41
9	Police station	Sion police station	0.31
10	Post office	Raoli camp post office	0.18

COMPARATIVE STATEMENT

Sr. No.	Project Details	Details as per Earlier EC		Propose Expansion	
1	Survey No.	S. No. 6(pt). C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 400022.		S. No. 6(pt). C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 400022.	
2	Plot area	3,359.31 sq.mt.		3,359.31 sq.mt.	
3	Proposed FSI area	15,848.93 sq.mt.		17,535.18 sq.mt.	
4	Non FSI area	14,990.60 sq.mt.		15,328.61 sq.mt.	
5	Total Built up area	30,839.53 sq.mt.		32,863.79 sq.mt.	
6	Building Configuration	**Building**	**Configuration**	**Building**	**Configuration**
		Wing A	B (pt) + Gr. + 1st to 9th Podium + 10th to 16th floor	Wing A	B (pt) + Gr. + 1st to 9th Podium + 10th to 16th floor
		Wing B	B (pt) + Gr. + 1st to 9th Podium+ 10th E level +11th to 23rd floor	Wing B	B (pt) + Gr. + 1st to 9th Podium+ 10th E level +11th to 23rd floor
		Wing C	B (pt) + Gr. + 1st to 9th Podium+ 10th E level + 11th to 17th floor	Wing C	B (pt) + Gr. + 1st to 9th Podium+ 10th E level + 11th to 23 floors
		Wing D	B (pt) + +Stilts +15th floor & Stilt +22nd floor	Wing D	B (pt) + Stilts +15th floor & Stilt +22nd floor
7	No. of Tenements	Flats: 292 Nos.		Flats: 318 Nos, Shops: 07 Nos.	
8	Total Water Requirement	224 KLD		218 KLD	
9	Wastewater generated	188 KLD		183 KLD	
10	STP capacity	130 KLD + 60 KLD		130 KLD + 70 KLD	
11	Solid waste generation	737 Kg/Day		691 KLD	
12	RG Area	1565.31 sq.mt.		1588.24 sq.mt.	

PROPOSED LAYOUT

GROUND FLOOR PLAN

SCALE 1:100

GURU TEGH BAHADUR NAGAR RAILWAY STATION

BRIEF INFORMATION

Sr. No.	Particulars	Details
1	**Proposal No**	SIA/MH/INFRA2/449560/2023
2	**Name of Project**	Proposed Expansion in Redevelopment of Existing Building 25, 26, 27 Trilochan CHS Ltd by M/s. Shikara Constructions Pvt. Ltd.
3	**Project Category**	B2
4	**Type of Institute**	Private Limited.
5	**Details of Project Proponent**	Mr. Dharmesh Kumar Sharma
6	**Details of Environmental consultant**	EIA Coordinator: Mr. Sourabh Jaiswar Pollution and Ecology Control Services, NABET/EIA/2023/SA 0165 valid upto 16.10.2025
7	**Applied for**	Expansion
8	**Site Address**	S. No. 6(pt). C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 400022.
9	**Latitude and Longitude**	Latitude: 19° 2'15.95"N, Longitude: 72°51'54.96"E
10	**Plot Area**	3359.31 sq.mt.
11	**Deductions**	Nil
12	**Net plot area**	3359.31 sq.mt.
13	**Ground coverage in (sq.mt. & %)**	1881 sq.mt. & 56 % of Net Plot Area.
14	**FSI area**	17,535.18 sq.mt.
15	**Non FSI area**	15,328.61 sq.mt.
16	**Total built up area**	32,863.79 sq.mt.
17	**BUA Sanctioned by Planning authority**	32,863.79 sq.mt.
18	**Details of Previous EC with BUA**	Environment Clearance vide No. SEIAA-EC-0000002105 dated 18.02.2020 for BUA of 30893.53 sq.mt.
19	**Construction as per previous EC**	29,107.05 sq.mt.

BRIEF INFORMATION

Sr. No.	Particulars	Details			
20	Configuration	Sr. No.	Building	Configuration	Height
		1	Wing A	B (pt) + Gr. + 1st to 9th Podium + 10th to 16th floors	49.45 m
		2	Wing B	B (pt) + Gr. + 1st to 9th Podium+ 10th E level +11th to 23rd floors	69.75 m
		3	Wing C	B (pt) + Gr. + 1st to 9th Podium+ 10th E level + 11th to 23 floors	69.75 m
		4	Wing D	B(pt) + Stilts +15th floor & Stilt +22nd floor	68.45 m
21	No. of tenants	Flats: 318 Nos, Shops: 07 Nos			
22	Population	1545 No's			
23	Total water requirement (KLD)	218 KLD			
24	Source of water	MCGM and Recycled Water.			
25	Under ground tank Location	Basement			
26	Sewage generation (KLD)	183 KLD			
27	STP capacity (KLD)	130 KLD + 70 KLD (MBBR Technology)			
28	STP location	Basement			
29	Rain water Harvesting Details	2 nos. RWH Tanks of Capacity 72 CMD & 23 CMD			
30	Solid waste during construction phase	Type		Quantity (kg/day)	Treatment
		Dry		10	Send authorized recyclers
		Wet		15	Send authorized recyclers
31	Total Solid Waste Quantities with Type during Operation Phase & Capacity of OWC to be installed	Type		Quantity (kg/day)	Treatment
		Dry waste		414	Send authorized recyclers
		Wet waste		277	Treated in OWC
		E-Waste		-	Send authorized recyclers
		STP Sludge (dry)		20	Used as Manure.

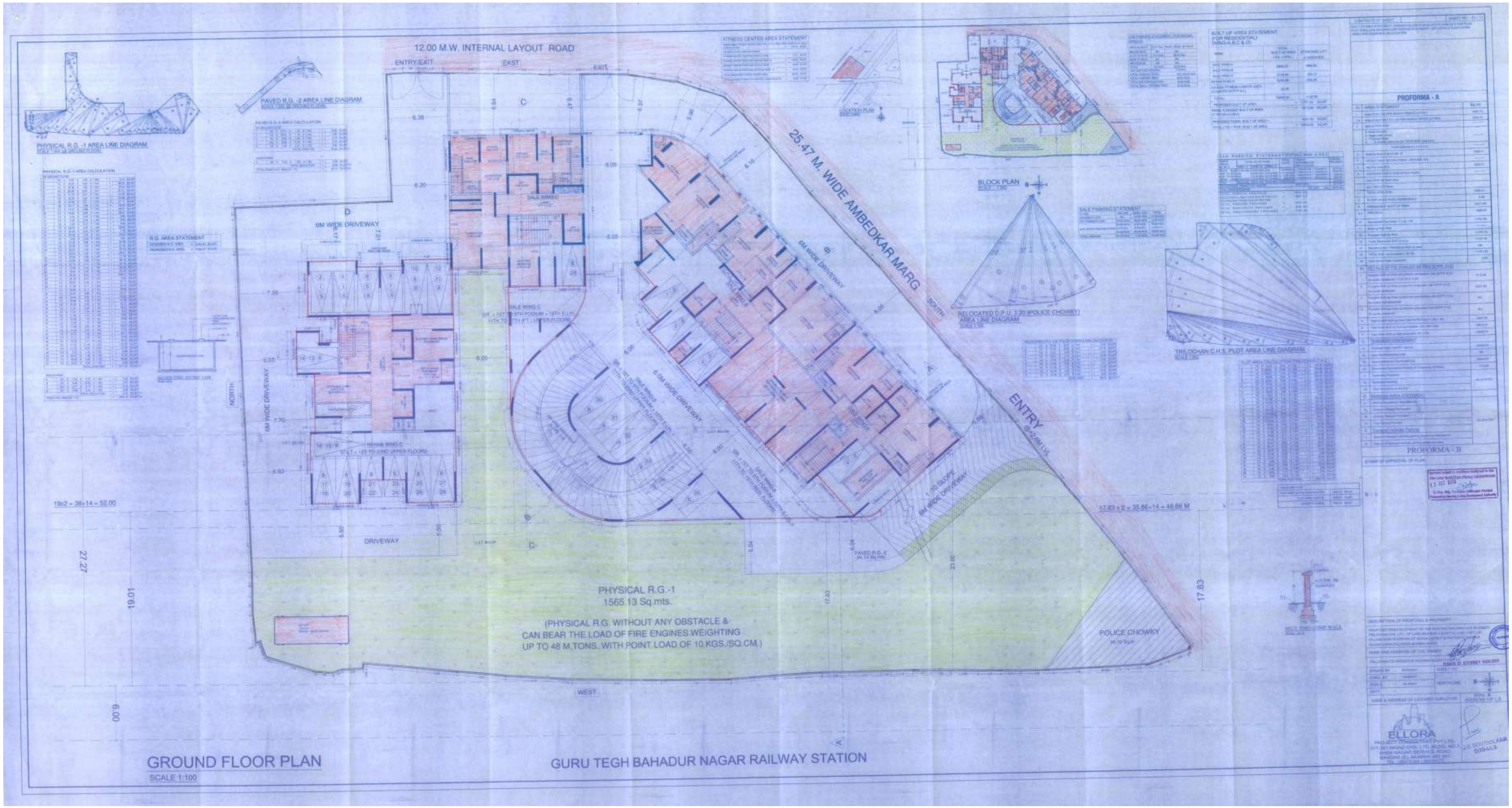
BRIEF INFORMATION

Sr. No.	Particulars	Details	
32	**R.G Area Details**	Net Plot area in sq.mt	3,359.31 sq.mt.
		Required R.G area in sq.mt	nil
		Proposed Layout R.G area on mother earth in sq.m	1,588.24 sq.mt.
		Proposed R.G area On podium in sq.m	nil
		Total Proposed R.G area in sq.mt	1,588.24 Sq.mt.
		Existing No of Trees	69 Nos.
		Trees to be Retained	36 Nos.
		Trees to be transplant	11 Nos.
		Trees to be cut	22 Nos.
		No of Trees to be planted in R.G area/periphery	44 Nos.

BRIEF INFORMATION

Sr. No.	Particulars	Details		
33	Power requirement during operation	Connected Load (KW)	1846 kW	
		Demand Load (KW)	1237 kW	
34	Energy Efficiency Details	Total Energy Savings (%)	22 %	
		Energy saving by Solar (%)	5.465 %	
35	D.G set Capacity in KVA	500 KVA		
36	Parking Details	**Particular**	**Total**	**Electric Charging Point**
		No. of 4 Wheeler	167	42
		No. of 2 Wheeler	50	13
37	Project cost in Cr	135.00 Cr.		
38	EMP Costing	**Particular**	**Capital Cost in Cr.**	**O & M Cost in Cr.**
		Construction Phase	12.55	7.83
		Operation Phase	177.27	22.70
39	CER Details with justification if any….as per MoEF & CC circular dated 01/05/2018	Not applicable		
40	Details of Court Cases/litigations w.r.t the project and project location, if any.	-		

OLD APPROVED PLAN



AREA STATEMENT OF OLD APPROVAL

PROFORMA - A

A)	AREA STATEMENT	Sq.mt.
1	Area of plot (AS PER MHADA DEMARCATION)	4943.72
1 A	Area of plot FOR F.S.I (AS PER MHADA OFFER LETTER)	3359.31
2	DEDUCTION FOR	----------
	a Road set-back b Reservation of any c Proposed Road d .....% amenity space as per DCPR 56/57 (sub plot)	----------
	Total Deductions (a + b + c)	----------
3	Balance Area of plot (1AB -2)	3359.31
4	DEDUCTABLE RECREATIONAL GROUND 15%	----------
5	Net Plot Area (3-4)	3359.31
6	ADDITIONS FOR FLOOR SPACE INDEX	----------
	2(a) 100% Set Back Area	
	2(b) 100% D.P.Road	
7	TOTAL AREA (5+6)	3359.31
8	FLOOR SPACE INDEX PERMISSIBLE	3.00
9	PERMISSIBLE BUILT UP AREA	10077.93
9 a	PRO-RATA	1680.00
10	Permissible Floor Area (7 x 8) + 9a	11757.93
11	Existing Floor Area	----------
12	Proposed Built up Area	11757.93
13	Purely Residential Built up area	11757.93
14	Remaining Non - Residential Built up area	NIL
15	TOTAL Built - up proposed (13+14)	11757.93
16	Floor Space Index consumed	3.50

B)	DETAILS OF FSI AVAILED AS PER DCPR 31(3)	
1	Fungible Built up Area component permissible vide DCPR 31(3) for purely residential 11757.93 X 0.35)	4115.28
2	Fungible Built up Area component proposed vide DCPR 31(3) for purely residential	4091.00
3	Fungible Built up Area component permissible vide DCPR 31(3) for purely non-residential	NIL
4	Fungible Built up Area component proposed vide DCPR 31(3) for purely residential	NIL
5	Total fungible Built up Area Vide DCPR 31(3) = (B2 + B4)	4091.00
6	Total Gross Built up Area permissible (15 + B1 + B3)	15873.21
7	Total Gross Built up Area proposed (15 + B5)	15848.93

BRIHANMUMBAI MUNICIPAL CORPORATION
MUMBAI FIRE BRIGADE
Office of the Dy. Chief Fire Officer (R-II), Wadala Fire Station, Shaikh Mistry Dargah road, C.G.S. Colony, Opp. MHADA Colony, Antop Hill, Wadala, Mumbai-400 037.

Sub: Fire-Protection & Fire-fighting requirements for amendments in Wing-B & Wing-C in the construction of proposed High rise building under section 33(5) of DCPR-2034, on plot bearing C.S. No -11 (part) of village, Sion Koliwada of MHADA layout, situated at Sardar Nagar II, Sion, Mumbai – 400022 for Sardar Nagar Trilochan CHSL.

Ref.: i) Online submission from Mr. Jitendra Govind Dewoolkar, Licensed Surveyor for M/s Ellora Consultants.
ii) Online File no.: **P-18722/2023/(11)/F/North/SION/MHADA/CFO/1/Amend.**

Earlier NOC/FSRL: 1) FB/HR/R-11/10 dated 23/07/2019
2) FB/HR/R-11/46 dated 24/03/2021.

Mr. Jitendra Govind Dewoolkar, Licensed Surveyor.
For M/s. Ellora Consultants.

In this case, please refer to the NOC/FSRL stipulating fire-protection & fire-fighting requirements issued by this department vide No.- FB/HR/R-II/10 dated 23/07/2019 for the proposed construction of High-rise residential building comprising of 04 Wings i.e. Sale Wings "A","B" and "C" and Rehab Wing "D"; Wing 'A having Ground floor part on stilt for car parking & part for shops +1st floor part for car parking within the building line by using 06.00 mtrs wide two way ramp & part for upper duplex shops + 2nd to 9th floors part for car parking with in the building line by using 06.00 mtrs. wide two-way ramp & part for residential + 10th E-Deck Level for Society office, fitness centre & residential flats + 11th to 16th Upper residential floors with a total height of 49.45 mtrs. from general ground level to terrace level. Wing 'B' having Ground floor Part on stilt for car parking & part for shops + 1st floor part for car parking with in the building line by using 06.00 mtrs wide two-way ramp & part for upper duplex shops + 2nd to 9th floors part for car parking with in the building line by using 06.00 mtrs. wide two-way ramp & part for residential + 10th E-Deck Level for Entrance lobby, fitness centre & residential flats+ 11th to 23rd Upper residential floors with a total height of 69.75 mtrs. from general ground level to terrace level, Wing 'C' having Ground floor Part on stilt for three tier stack car parking & part for Shops + 1st floor part for car parking with in the building line by using 06.00 mtrs wide two-way ramp & part for upper duplex shops + 2nd to 9th floors part for car parking with in the building line by using 06.00 mtrs. wide two-way ramp & part for residential + 10th E-Deck Level for Society office, fitness centre & residential flats + 11th to 17th (17th Part) Upper residential floors with a total height of 52.35 mtrs. from general ground level to terrace level, Wing' D' having Basement for services + Ground floor on stilt for two tier stack car parking + 1st to 15th (part) + 16th to 22nd upper residential floors with a total height of 68.45 mtrs from general ground level to terrace level as shown on enclosed plans.

Further in this case please refer to the NOC/FSRL stipulating fire-protection &fire-fighting requirements issued by this department vide No.- FB/HR/R-II/46 dated 24/03/2021 for the proposed construction of a High rise Residential building comprising of 04 Wings i.e. Sale Wings 'A', 'B' & 'C' and Rehab Wing 'D', where Sale Wings 'A','B' and 'C' having common basement (-3.50 mtrs) for services and thereafter **Wing 'A'** having ground floor part on stilt for car parking & part for lower duplex shops + 1st floor part for car-parking within the building line by using 06 00 mtrs. wide two-way ramp & part for upper duplex shops + 2nd to 9th floor part for car-parking within the building line by using 06 00 mtrs wide two-way ramp & part for residential + 10th E-Deck level for Entrance Lobby, fitness center & residential flats + 11th to 16" upper residential floors with total height of 49.45 mtrs. from general ground level up to terrace level; **Wing-B** having ground floor part on stilt for car-parking & part for lower duplex shops + 1st floor part for Car-parking within building line by using 6.00 mtrs. wide two-way

ramp & part for upper duplex shops + 2nd to 9th upper floor part for Car-parking within building line by using 6.00 mtrs. wide two-way ramp & part for residential use + 10th E-Deck level for Entrance lobby fitness centre & residential flats + 11th to 20th upper residential floors with total height of 61.05 mtrs, from general ground level up to terrace level; **Wing 'C'** having ground floor part on stilt for car parking & part for lower duplex shops + 1st floor part for car parking with-in the building line by using 06 00 mtrs. wide two-way ramp & part for upper duplex shops + 2nd to 9th upper floor, part for Car-parking by way of 6.00 mtrs. wide two-way ramp & part for residential + 10th E-Deck level for Entrance lobby, fitness centre & residential flats + 11th to 20th upper residential floors with total height 61.05 mtrs. from general ground level up to terrace level; **Wing 'D'** havlng basement (-4 50 mtrs,) for services + Ground floor on Stilt for two-tier stack car-parking + 1st to 15th(part) + 16th to 22nd upper residential floors with total height of 68 45 mtrs from general ground level up to terrace level as shown on the plan by you.

NOW YOU HAVE SUBMITTED AMENDED PLANS OF THE BUILDING & PROPOSED FOLLOWING AMENDMENTS IN WING-B & WING-C:

i) You have now proposed 23 floors instead of 20 floors, i.e. proposed additional 03 nos. of floors in Wing B & C (Sale Building), thereby earlier approved height of the building i.e. Wing-B & Wing-C is changed from 61.05 mtrs. to now proposed 69.75 mtrs., as shown on the building plans.
ii) Proposed few changes in internal layout & floor-wise users in Wing-B & Wing-C as shown on the building plans.
iii) Proposed additional 3rd refuge area in Wing-B at 22nd floor, as shown on the plans.

No any major changes other than mentioned above are proposed in open spaces, staircase, common passage, lift & lift lobby, electric duct and location of earlier approved refuge areas etc. in any of the Wings, as shown on the plans. Further, no any changes are proposed in Wing-A & Wing-D which remains the same as approved earlier u/no. FB/HR/R-II/46 dated 24/03/2021.

THE FLOOR WISE USERS OF THE BUILDING AS SHOWN ON THE PLAN ARE AS UNDER:

Wing-A

No any changes are proposed by you in Floor-wise users in Wing A, thereby remains the same as approved in FSRL u/no. FB/HR/R-II/46 dated 24/03/2021.

Wing-B & C :-

Floors	Proposed floor wise user	
	Wing-B	Wing-C
Common Part Basement (below common Podium portion only) (-3.00 mts.)	Underground water tanks + Pump room+ OWC room +STP. (below extended common Podium portion only)	
Ground floor	Double Height Common Entrance lobby, Electric meter room, 03 nos. of Lower duplex N.R., common toilets/WC & part stilt for surface car-parking	Entrance lobby + 02 Nos. of lower duplex shops + Substation + Meter room + Horizontal car parking
1st floor (Part Podium)	Horizontal car parking + 03 Nos. of Upper duplex shops.	Horizontal car parking + 02 Nos. of Upper duplex shops
2nd floor (Part Podium)	Horizontal car parking + 03 Nos. of residential flats + Pocket terrace + Toilets.	Horizontal car parking + 02 Nos. of residential flats + Pocket terrace
3rd to 7th & 9th floor (Part Podium)	Horizontal car parking + 03 Nos. of residential flats + Toilets on each floor	Nos. of residential flats on each floor
8th floor (Part Podium)	Horizontal car parking + 02 Nos. of residential flats + **Refuge area** + Toilets	Horizontal car parking + 02 Nos. of residential flats + **Refuge area**
10th E-Deck level floor (Part Podium)	03 Nos. of residential flats + 02 nos. Fitness centers	03 Nos. of residential flats + 02 nos. of Fitness centers
	Common Garden area on part Podium	
11th to 14th & 16th to 21st & 23rd floor	05 Nos. of residential flats on each floor	04 Nos. of residential flats on each floor
15th floor	04 Nos. of residential flats + **Refuge area**	03 Nos. of residential flats + **Refuge area**
22nd floor	04 Nos. of residential flats + **Refuge area**.	04 Nos. of residential flats on each floor
Terrace floor	O.H.T. + Terrace open to sky to be treated as refuge area.	O.H.T. + Terrace open to sky to be treated as refuge area

Wing-D:-

No any changes are proposed by you in Floor-wise users in Wing D, thereby remains the same as approved in FSRL u/no. FB/HR/R-II/46 dated 24/03/2021.

DETAILS OF REFUGE AREAS IN WING-B & WING-C AS SHOWN ON THE PLAN ARE AS UNDER:

There are no any changes proposed by you in the Refuge area of Wing-A & Wing-D, thereby remains the same as approved earlier u/no. FB/HR/R-II/46 dated 24/03/2021

Refuge floor	Refuge area in sq. mtrs.		Height of refuge floor from ground level in mtrs.
	Required (4%)	Proposed	
Wing-B:-			
8th floor	58.13	60.68	23.35
15th floor	70.96	71.39	43.65
22nd floor	19.52	36.23	66.85
Wing-C:-			
8th floor	52.75	59.14	23.35
15th floor	79.38	80.14	43.65
Excess refuge area beyond 4.25% shall be counted towards FSI. In this case, 3rd Refuge area should have been provided on 22nd floor as per rule, but 23rd floor is the topmost floor i.e. only one floor is above 22nd floor, due to planning constraint, the Architect/L.S. has submitted hardship that there is only one floor above 22nd floor, i.e. 23rd floor, above which is terrace floor, thereby requested not to insist Refuge area on 22nd floor & the area of top two floors is considered in the calculation of refuge area on 15th floor, hence to treat terrace floor above 23rd floor as Refuge area which is accepted herewith for Wing C only & terrace floor above 23rd floor is treated as Refuge area.			

DETAILS OF THE OPEN SPACES AS SHOWN ON THE PLAN:

The site abuts on 18.30 mtrs. wide Ambedkar Road on south side and 12.00 mtrs. wide layout road on east side connected to 18.30 mtrs. wide Ambedkar Road as shown on plan.

No changes has been proposed by you in the open spaces of the Buildings all around at ground level as per your letters uploaded & as shown on the plans, thereby open spaces remains the same as approved earlier u/no. FB/HR/R-II/46 dated 24/03/2021.

CIVIL AVIATION NOC

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

Mr.Ashok Mehra Managing Director of M/s.Shikara Constructions Pvt Ltd
204,Bezzola,Commercial Complex,Sion Trombay Road,Chembur,Mumbai-400071.

Date: 09-01-2018
Valid Upto: 08-01-2026

No Objection Certificate for Height Clearance

1. This NOC is issued by Airports Authority of India (AAI) in pursuance of responsibility conferred by and as per the provisions of Govt. of India (Ministry of Civil Aviation) order GSR751 (E) dated 30th Sep. 2015 for Safe and Regular Aircraft Operations.

2. This office has no objection to the construction of the proposed structure as per the following details:

NOC ID :	**SNCR/WEST/B/121417/267827**
Applicant Name*	**Mr.Vilas Sawant**
Site Address*	**C.T.S.No.11(pt),Bldg No.25,26 and 27 at Sardar Nagar No.2,Sion,Mumbai.,Sion,Mumbai,Maharashtra**
Site Coordinates*	**72 51 51.685-19 02 15.145, 72 51 53.89-19 02 17.60, 72 51 54.363-19 02 15.082, 72 51 55.599-19 02 16.368,**
Site Elevation in mtrs AMSL as submitted by Applicant*	**7.14 M**
Permissible Top Elevation in mtrs Above Mean Sea Level(AMSL)	**98.94 M (Restricted)**

*As provided by applicant

3. This NOC is subject to the terms and conditions as given below:

a. Permissible Top elevation has been issued on the basis of Site coordinates and Site Elevation submitted by Applicant. AAI neither owns the responsibility nor authenticates the correctness of the site coordinates & site elevation provided by the applicant. If at any stage it is established that the actual data is different, this NOC will stand null and void and action will be taken as per law. The office in-charge of the concerned aerodrome may initiate action under the Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules, 1994"

b. The Structure height (including any superstructure) shall be calculated by subtracting the Site elevation in AMSL from the Permissible Top Elevation in AMSL i.e. Maximum Structure Height = Permissible Top Elevation minus (-) Site Elevation.

c. The issue of the 'NOC' is further subject to the provisions of Section 9-A of the Indian Aircraft Act, 1934 and any notifications issued there under from time to time including the Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules,1994.

क्षेत्रीय मुख्यालय पश्चिमी क्षेत्र पोर्टा केबिंस, नई एयरपोर्ट कॉलोनी, हनुमान रोड के सामने, विलेपारले ईस्ट
मुंबई- 400099 दूरभाष संख्या : 91-22-28300606
Regional headquarter Western Region,Porta Cabins, New Airport Colony, Opposite Hanuman Road, Vile Parle East
Mumbai-400099 Tel. no. 91-22-28300606

98.94 mt. – 7.14 mt. = 91.80 mt.

Central Railway

Divisional Railway Manager (Wks)
Office, Mumbai CSMT-400 001.

No. BB/W/6561/NOC/**GTBN/1279**/DB

Date:26.12.2019

To,
M/S Shikara Construction Pvt. Ltd.,
204, Bezzola complex,
opp. Suman Nagar,
Sion Trombay Road, Chembur,
Mumbai-400 071

Sub: GTBN-NOC for the redevelopment of proposed B.No. 25,26 & 27 Known as Sardar Nagar Trilochan CHSL bearing CTS No. 11(Part) of Village: Sion Koliwada of MHADA layout, situated at Sardar Nagar II, Sion, Mumbai-400 022.

Ref.: Your Application for NOC dated 12.06.2019.

****

The Railway administration has **No Objection** for the above, subject to fulfill the following conditions :-

1 The height of the proposed building/structures varying in different stages with minimum different clear horizontal distances between **RailwayLand/ Track Boundary**to nearest edge of the proposed building structures are as under as shown in the drawing bearing No. **DRM (W) BB/ R -26871&GM (W) BB/P-17519.**

Stages	Maximum height of the proposed bldg / Structure from **Ground level / Rail Level.** To top of roof slab (in meter)		The Minimum clear open horizontaldistance between nearest face of the proposed building/Structure to **RailwayLand** (in Meter)
	Ground Level	**Rail Level**	**Railway Land Boundary**
SECTION D-D			
I	44.80 M	28.86 M	19.01 M
II	46.15 M	30.21 M	19.61 M
III	69.55 M	53.61 M	27.27 M
IV	73.25 M	57.31 M	33.71 M
Base I	-03.00 M	-18.94 M	18.94 M
Base II	-04.15 M	-20.09 M	20.10 M
SECTION A-A			
I	30.75 M	14.81 M	17.15 M
II	49.00 M	33.06 M	18.72 M
III	50.60 M	34.66 M	19.32 M
IV	51.75 M	35.81 M	25.82 M
V	54.25 M	38.31 M	27.22 M
Lift Pit	-01.85 M	-17.79 M	27.22 M

2 The parameter/dimensions mentioned vide Sr. No. 01 above should be strictly followed/adhered at site.

3 No construction material is allowed to store/stack on the RailwayLand by the builder during construction of buildings/structure.

4 In no case encroachment on RailwayLand should be allowed during the construction of these proposed building/structure.

5 No access will be provided to the proposed building/structures from RailwayLand or proposed building/structures to RailwayLand.

6 Sewer and drain should be connected to the Municipal sewer line and drain should not be directed towards Railway Track.

7 Drainage and storm water from RailwayLand should not be obstructed. Proper drainage arrangement along with arrangement of discharge to be shown in the drawing.

8 Responsibility for the safety of the proposed building/ structure will rest with the owner/developer.

9 The design and construction work of the proposed buildings/structure should be followed as per relevant I.S. codes.

10 No foundation of any structure, whatsoever, should come under the RailwayLand and not obstruct track stability.

11 Signal visibility to the train drivers is not obstructed due to construction of these proposed building/ structure.

12 Adequate precaution/safety should be taken for excavation work, so that it may not cause any damage to railway boundary wall and railway track.

13 The excavation work should not be carried out in Rainy/Monsoon season.

14 If building/structure is not constructed as per approved drawing by Railway or detection of any deviations to drawing will lead to cancellation of NOC granted by railway and necessary action will be taken immediately.

15 The applicant/party will inform to concern ADEN of Railways about commencement of work within 60 days, giving reference of NOC issued by Railways.

16 Complete safety should strictly be ensured in respect of any crane working towards railway land involved during the construction work. The builder/owner will be fully responsible for any loss caused to the railway or any one during the course of construction as well as after construction.

17 Railways have right to inspect the worksite during construction stage as well as during lifetime of building/structure to ensure safety of railway assets & Train operations.

18 All the data/documents related with ownership of land rests with the applicant to prove. Railway NOC does not mean the ownership of land.

19 NOC should be given to get necessary clearance from State Govt./ Municipality etc. It is in no way authorize the applicant thze ownership of said land. The RailwayLand boundary shown is for indicative purpose.

20 Party will construct the common boundary wall at its own cost as per the drawing and directions of railway. Where Railway boundary is adjacent to private party plot, the demarcation would be done by railways.

21 It is certified based on the sanctioned plans/works for new line and surveys that the land is not required for railways own development in the foreseeable future.

22 The protection system-phased implementation of excavation should be ensured while excavation is being carried out for basement and Deep foundation & proper protection for nalla should be ensured.

23 No Plantation of trees should be done in the vicinity of Railway Track. i.e. 10 meter from Railway Track, which could eventually grow up to height detrimental to safe operation of Rail Traffic.

24 It will be the responsibility of society / Agency (to whom NOC is issued) to cut or trim tree / tree branches to protect loss of life due to electrocution, likely to fall on the live conductors and disruption of rail traffic due to earthed conducting items touching / coming in the vicinity of induction zone of 110KV/25KV/1500V high voltage traction supply. Lapses causing disturbance to the train operation are to be dealt as per the provisions of the Railway Act-1989/ Indian code and all other relevant Acts/ Rules etc.

25 In case of delay in cutting/trimming of tree branches by the land owner to the safe distance from Railway track within 07 days from the date of notification by Railway authorities, Railway will take action to remove such obstructions with a rightful entry in the premises of land / plot / property. The land owner has to bear the entire cost of such activities. Railway has the right to recover the cost from the owner as penal action.

26 This NOC in no way grant the applicant the ownership of said land. If any dispute for ownership for the mentioned plot arises in the future, this NOC will be deemed to be cancelled and the developer shall fully discharge the liability duly indemnifying the Railway.

27 In any case, at least 3 m clear horizontal space has to be maintained between the closest edge of the structure and the Railway land boundary.

28 The proposed structure must not lead to accrual of easement rights such as Right of Way, Right to discharge sullage and storm water, easement of support, easement of "light and air" etc. on Railway land over a period of time.

29 As regards compliance of provisions of Development Control Regulations or other rules issued by State Government/Local Authorities in this regard, it is for the StateGovernment/Local Authority to examine and ensure compliance of the same.

The above conditions should be apprised to the concerned ADEN/IOW/PWI/Municipal Corporation/Grampanchayat etc. The construction progress of this building structure may be monitored during the construction by ADEN to check the above condition are as compiled in drawing No.DRM (W) BB/R-**26871** orPucca Drg. No.GM (W) BB/**P-17519.**

This has been issued, subject to the condition, stipulated in the drawing cited above.

This has got the approval of competent authority.

One B.P. copies of this approved drawing No. DRM (W) BB/R-**26871** orPucca Drg. No.GM (W) BB/**P-17519** is enclosed herewith for your information and record please.

Encl : Drg. No. DRM (W) BB/R-**26871** &Pucca No. GM (W) BB/**P-17519.**

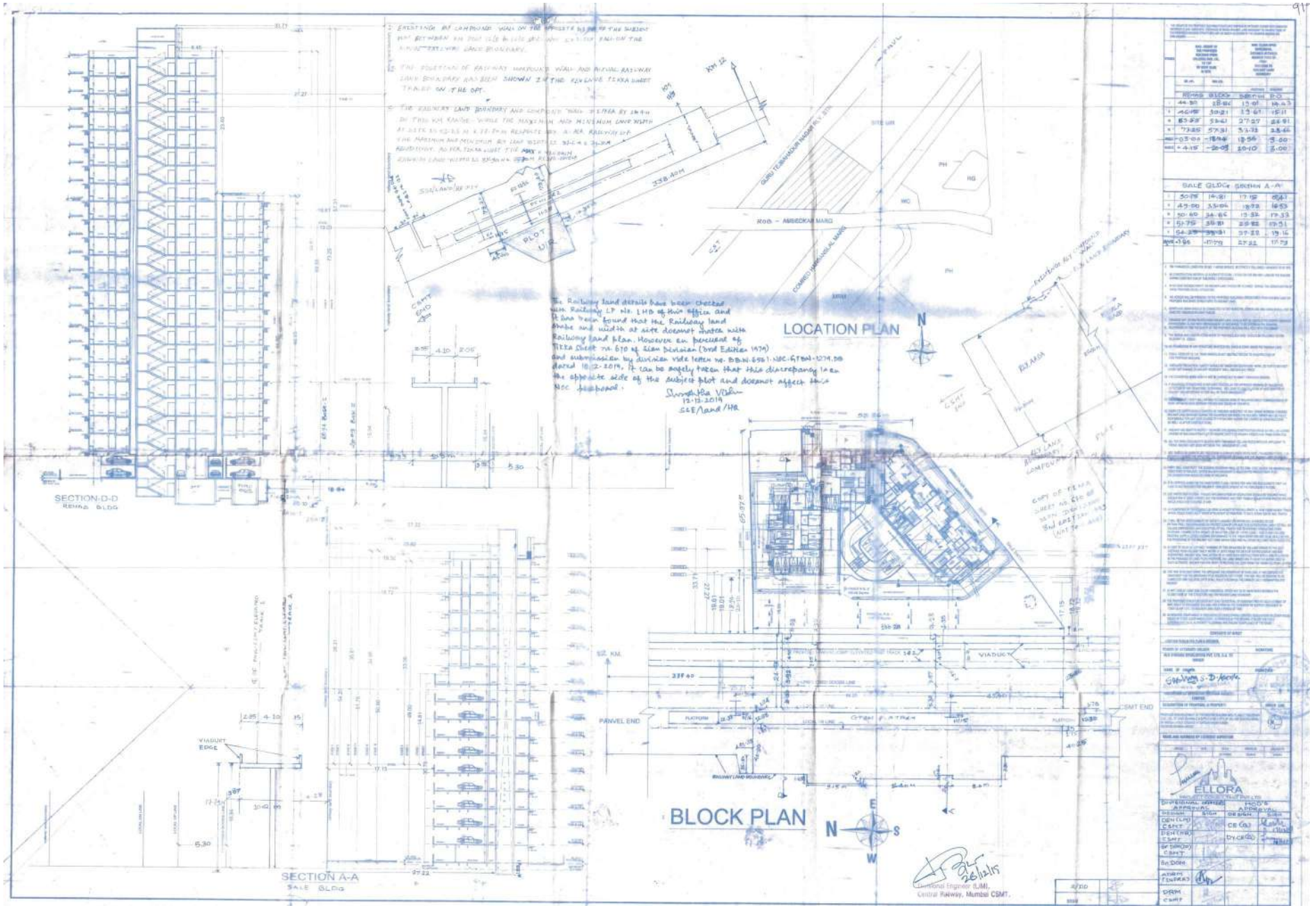
Divisional Engineer (LM)
Central Railway, Mumbai C. S. M.T.

C/- : Executive Engineer, Building proposal /GM/MAHADA, Griha Nirman, kalanagar, Bandra (East), Mumbai, Maharashtra 400051: For informationplease, as regards compliance of provisions of deveSSlopment control regulations or other Rules issued by State Government / Local Authorities in this regard, it is for the State Govt./Local Authority to examine and ensure compliance of the same.

Encl : Drg. No. DRM (W) BB/R-**26871** orPucca Drg. No. GM (W) BB/**P-17519.**

Divisional Engineer (L/M),
Central Railway, Mumbai CSMT.

RAILWAY NOC


LOCATION PLAN
BLOCK PLAN
SECTION-D-D
REHAB BLDG
SECTION A-A
SALE BLDG
ELLORA

MUNICIPAL CORPORATION OF GREATER MUMBAI

SOLID WASTE MANAGEMENT

4th floor, Worli Garage Bldg, Dr.E.Moses Road, Worli, Mumbai-400018.24935687/8893, Fax-24922166

DEMOLITION DEBRIS ONLY
VALID UPTO 13.10.2022

To,
M/s. Shikara Constructions Pvt. Ltd.
204, Bezzola Complex,
Opp. Suman Nagar,
Sion Trombay Road,
Chembur, Mumbai - 400 071.

Ex. Engr. (SWM) 2189 Zone-2
23/12/2021

Sub:- Approval to Construction & Demolition Waste Management Plan for 'Proposed redevelopment of existing bldg No. 25, 26,27 on plot bearing C. S. No.11(pt), Plot No. 06(pt) of Sion Divn , at Sardar Nagar No.2, Sion Koliwada MHADA Layout in 'G/North' ward, Mumbai-22 for 'Trilochan Co-op Hsg. Soci. Ltd.'

Ref:- 1) Your application dtd 17.12.2021& received in this office on 21.12.2021
2) MH/EE/(BP)/GM/MHADA-38/390/2021 Dt 23.08.2021.
3) Proforma 'A' & 'B' duly filled in by Contractor & LS
4) Letter of Ex. Engr (SWM)/Z-VII u/no. Ex.Engr/SWM/846/Z-VII dt 14.10.2021 issued to M/s. S. M. Transport
5) Consent letter of M/s. S. M. Transport to M/s. Shikara Constructions Pvt. Ltd.
6) Undertaking duly sign stamp & notarized on Rs.200/- stamp paper
7) This office earlier NOC u/no. EE/SWM3143//Z-II dt.18.12.19
8) Scrutiny fee paid under receipt No.1004222880 dt.22.12.2021

With reference to your application, the Construction & Demolition Waste Management Plan submitted by you has been approved as per "Construction and Demolition Waste Management Rules-2016" and you allowed to transport Construction & Demolition waste from construction site to the unloading site subject to following terms & conditions

1. This approval is subject to the orders by Hon. Supreme Court u/no. in SLP(Civil) No.D23708/2017 dated 15.03.2018
2. You shall handle & transport Construction & Demolition Waste Material to the extent of 300 Brass x 2.83 = 849.00 Cu. M. only to the unloading site at plot bearing Survey No.95/A, 95/K, & 96/1 of Village-Sasunavghar, Taluka-Vasai, Dist. –Palghar
3. You shall ensure that proper barricading and enclosure are provided at construction site to avoid escape of fugitive dust into the atmosphere, as well as its deposits to spread on street / footpaths / drains etc as per the conditions of IOD / LOA, etc issued by the planning authorities. The generated Construction & Demolition Waste shall be stored properly till its utilization and it should not be deposited on roads or footpath.
4. In the event for any reason whatsoever, the consent given by the disposal site Owner / Authority is revoked or the time limit for the disposal site has expired, in such case, the developer shall stop the transportation activities. The developer shall submit revised debris management plan along with required valid documents for revalidation of existing debris management plan.
5. The Construction & Demolition Waste / Excavation Material shall be transported through your Transport Contractor M/s. A to Z Scrappers, as per the attached vehicle list. Transportation of C & D waste shall be done in day time only.
6. The deployed vehicles shall abide by all the R.T.O. rules and regulations. You shall ensure that the vehicles should be properly covered with tarpaulin or any other suitable material firmly to avoid any escape / fall of waste on road from moving vehicle. The body and wheels shall be cleaned & washed thoroughly to avoid spreading of waste on road.
7. The copy of approved Construction & demolition Waste Management Plan shall be accompanied with each and every vehicle under this approval. The developer shall issue the proper challan for each and every trip of vehicles and that shall be acknowledged by the authority of unloading site. The developer shall maintain record of C & D material transported and shall make it available to MCGM for Monitoring Committee.
8. The approval granted presuming that the papers submitted by the applicant / Owner / are genuine & for any dispute arising out of document submitted by applicant / POA / Occupant / owner will be held responsible for fraudulent practices. Owner / applicant shall be liable for action as per rule.
9. This approval is not valid for the areas covered with Mangroves & CRZ contravention of this clause will attract prosecution under the Environment Protection Act & other relevant Act.
10. This approval is not valid for the areas covered with Mangroves & CRZ contravention of this clause will attract prosecution under the Environment Protection Act & other relevant Act.
11. The approval granted hereto does not absolve the other approvals required from the other deptt of MCGM or Govt. authorities.
12. In case of disputes, court matters etc. related to the subject site / land / property, this approval cannot be treated as a valid proof.
13. Violation of any condition stated above will attract the action as per the prevailing Construction and Demolition Waste Rule 2016 & MCGM may revoke this approval without assigning any reason thereto.
14. This approval is not permission for excavation or permission for dumping but this is the only approval under Construction & Demolition Waste Management Plan for transportation of Construction and Demolition Waste for filling & leveling at designated unloading site.
15. This Approval is valid up to **13.10.2022.**

Yours Faithfully

Executive Engineer
(Solid Waste Management) Zone-II

As per approval of A.E.W.W. F/North dated 31.01.2022

म.म.पु. - 5163-2009-10-500,000
EW-7

बृहन्मुंबई महानगरपालिका
जल अभियंता विभाग

माटुंगा (पू), मुंबई - 400 019.
दूरध्वनी क्र. 24024353, विस्तारीत क्र. 142
ई-मेल- ee.ww.fn@mcgm.gov.in
जल जोडणी व जोडकामे यासाठी परवानगी पत्र

परवानगी प्रपत्र क्रमांक : C/8043/FN दिनांक : 25/03/2022

प्रेषक : साहाय्यक अभियंता (जलकामे) एफ/उत्तर प्रति : Shri. Ashok B Mehra
Director of M/s. Shikara Construction Pvt. Ltd.
C.A. to Trilochan CHSL, Sardar Nagar – 2
Sion Koliwada MHADA Layout, Mumbai.-22

विषय : इमारत मार्ग क्रमांक : Shop No. 1&2, Sham Dham Co-op Housing Society मार्ग / रस्ता : Station Road No. 3 नावाने ओळखला जातो.

प्रिय महोदय / महोदया,

आपल्या दिनांक **11.03.2022** च्या अर्ज क्रमांक **122011000077** च्या संदर्भात मला असे कळवा वयाचे आहे की, खाली दिलेल्या सर्व अटी अनुज्ञा धारक नळकारागिरां मार्फत पूर्ण केल्यास आणि सोबत जोडलेले प्रपत्र भरुन या कार्यालयात परत दिल्यास खाली नमूद केलेल्या जोडण्या व जोडकामे घेण्यास आपणास परवानगी देण्यात येईल.

वरील इमारतीला होणाऱ्या अपुऱ्या पाणी पुरवठ्यामुळे, आपणास असे कळवायचे आहे की, तातडीची उपाय योजना म्हणून खाली दिलेली कामे आपल्याला लवकरात लवकर करुन घ्यावी लागतील अन्यथा ह्या बाबतीत कोणताही संदर्भ न देता मुंबई महानगरपालिका अधिनियमांतील तरतुदींनुसार आपल्या विरुद्ध कारवाई करण्यात येईल. अनुज्ञा धारक नळकारागिरां कडून खाली नमूद केलेली कामे करुन घेतल्यानंतर सोबतचे प्रपत्र योग्य रित्या भरु ह्या कार्यालयाकडे परत करावे.

बाब क्रमांक 1 ते 6 पर्यंत नमूद केलेल्या सर्व अटी पूर्ण कराव्यात.

1. खालील संबंधात विभागीय दुय्यम / सहाय्यक अभियंता यांचे कडून प्रमाणपत्र सादर करावे.
   (1) कर निर्धारक आणि संकलक यांज कडील महानगरपालिका थकबाकीच्या रकमेचा भरणा.
   (2) मलेरिया खात्याच्या आवश्यकतेनुसार साठवण टाक्यांची तरतूद करणे.
   (3) जल उपविधी नुसार पाईप आणि जोडकामे यांची तरतूद करणे.
2. नगर अभियंता खात्याच्या सहाय्यक अभियंता (इमारत प्रस्ताव प.उ.) विभाग यांजकडून गटार व्यवस्थे संबंधातील प्रमाणपत्र सादर करावे.

आपण खालील प्रमाणे रकमेचा भरणा केल्यानंतर :- रुपये

(अ) जल जोडण्या करण्याचा खर्च :- 25 मि.मी. x 25 मि.मी.व्यासाची जल जोडणी Rs.1440
(ब) बांधकामासाठी वापरण्यात आलेल्या जल आकाराचा आगाऊ खर्च
(क) जलमापकाद्वारे पुरवठा केलेल्या पाण्याचा आकार भरुन काढण्यासाठी सुरक्षा अनामत रक्कम :- Rs. 2,75,400/-
(ड) कक्षासह / कक्षाविना जल मापक बसविण्याचा खर्च
(इ) जोडणी तोडण्याचा / जलमापक काढून टाकण्याचा खर्च
(फ) महानगरपालिकेचा जलमापक पुरविला असल्यास 200 रोजी संपलेल्या वर्षी दरमहा रुपये ---------- ह्या दराने जल मापकाच्या भाड्याचा आगाऊ भरणा
(ग) विना कर निर्धारण शुल्क (रु.१०० x ..... सभासद)
(घ) कायदे विषयक शुल्क

एकूण :- **Rs. 2,76,840/-**

3. रुपये १०० किंमतीच्या मुद्रांक कागदावर अनामत रकमेवर ज्यादा रक्कम देण्याचे करार पत्र सादर करावे.
4. सर्व अटी मान्य असल्यास करार पत्र मागे छापलेल्या मसुद्याच्या धर्तीवर रुपये २०० किंमतीच्या मुद्रांक कागदावर सादर करावे.
5. संबंधित जागेचा मालकाकडून संमती पत्र सादर करावे.
6. रुपये १०० किंमतीच्या मुद्रांक कागदावर पाईप्स जोडकामे, आदेश दिला जाईल तेव्हा काढून टाकण्यास, आदेश दिला जाईल तेव्हा ह्या जोडणीवरुन इतर भाडेकरुंना नळ घेऊ देण्यास / आदेश दिला जाईल तेव्हा शाखा जोडणीवर खाजगी जलमापक बसविण्याची व्यवस्था करण्यास / तेव्हा नवीन जल जोडणी घेण्यासाठी घर मालक / इमारतीत भाडेकरु यांजकडून तेवढी हमी पत्र सादर करावे.

]टिप : (1) (सोबतचे प्रपत्र पूर्ण भरुन जल अभियंता यांच्या कार्यालयात सादर केल्यानंतरच वर दिलेली मंजूरी वैध होईल त्यापूर्वी कोणतेही केल्याचे आढळल्यास कलम 287(ब) आणि उपविधी क्रमांक 5 आणि 33 अन्वये कारवाई करण्यात येईल.)

(2) (प्रचलित जल आकार नियमावलीनुसार, पूर्वी न पाहीलेला खाजगी जल मापक, पूर्वी न वापरल्याचे आढळून आल्यास, तो जल मापक जल जोडणीवर बडवण्यापूर्वी महानगरपालिकेची मालमत्ता म्हणून महापालिका जप्त करिल आणि तो मान्यता प्राप्त समजून तपासणी करुन मोहरबंद करुन आणि उचित कक्ष पाहण्याची इ. ची तरतूद करुन परिरक्षक केला जाईल. नळ जोडणीवर जल मापक बसविण्यापासुन पाच वर्षाच्या कालावधीनंतर घर मालकाला जल मापकाचे भाडे आकारले जाईल याकडे ग्राहकाचे लक्ष वेधण्यात येत आहे.)

** जोडण्या कोणत्या जागी बसवा वयाच्या आहेत हे ठरविल्यानंतर विभागीय दुय्यम अभियंता ही रक्कम निश्चित करुन सादर करतील.

1. To take 25 mm dia. x 25 mm dia. unmetered water connection for Labour Drinking purpose under section 92 of M.M.C act at party's cost as per W.C. Rule No. 2.7.
2. To pay Rs. 2,75,400/- towards security deposit.
3. To use other than municipal water for construction purpose.
4. To submit N.O.C. from A. A. & C. 'F/N' Ward and from A.E.(M) F/N for proper drainage arrangement.
5. To cut off all existing connection after Demolition of the property and to pay outstanding dues of all water connection to plot.
6. To inform the date of demolition of the existing property.
7. To submit valid road opening permission before water connection.
8. To comply with Usual terms and conditions.

आपलाविश्वासू,

25/3/2022

सहाय्यक अभियंता (जलकामे)
एफ/उत्तर विभाग

दुय्यमअभियंता/स.अ.अभियंता

रुपये100 किमतीच्या मुद्रांक कागदावर मसुदा करारपत्र टंकलेखित करावयाचे.

बृहन्मुंबई महानगरपालिका
महापालिका आयुक्त, मुंबई,

विषय:- इमारत क्रमांक----------रस्ता/मार्ग नावाने ओळखला जातो.

परवानगी प्रपत्र----------दिनांक----------चा क्रमांक

रस्ता क्रमांक मार्ग/ रस्त्यावर

महोदय,

माझ्या /आमच्या इमारतीच्या आवारामध्ये माझ्या, आमच्याजल जोडणीवरमहापालिकाजल मापक बसविण्याची, आमची विनंती आपण मान्य केल्यामुळे. मी/ आम्ही खाली सही करणारे भाडेकरु महापालिका माझ्या/आमच्या जल जोडणीवर जलमापकाचे भाडे / आणि किंवा जल मापकाचे कक्ष हरविल्यास / चोरी लागेल्यास / किंवा नुकसान (शुल्लक झिजेतून अपेक्षित) झाल्यास महापालिकेच्या मागणीनुसार रक्कम भरण्यास तयार आहोत.

SWD NOC & SEWER NOC

MUNICIPAL CORPORATION OF GREATER MUMBAI

No. Dy. Ch. Eng./SWD/ 3106 / P.C. dtd. 19 APR 2022

Office of the :
Dy.Ch.Eng.(Storm Water Drains) P.C.
Engineering Hub Bldg.,
Dr. E. Moses Road,
Acharya Atre Chowk, Worli Naka,
Worli, Mumbai- 400 018

Sh. Kadam/DE
plz note for n.a
27/4

का. अ. / इपक (बृ के)
परिमंडल उपनगर व शहर/ भा.
आवक क्र. ET-990 दिनांक 26 APR 2022

To,
Shri. Ashok B Mehra Director of
M/s. Shikara Construction Pvt.Ltd.
C./A to Trilochan CHSL, Sardar Nagar-2

Sub : Storm Water Drain Remarks for Proposed redevelopment of existing building no. 25,26,27 known as Sardar Nagar Trilochan CHSL on Plot bearing CTS no.11 (part) of village Sion Koliwada of MHADA layout, situated at Sardar Nagar II, Sion, Mumbai-400022.

Ref : 1) Your letter under no.- nil dtd. 14/03/2022.
2) This office remarks u/no. Dy.Ch.Eng./SWD/2078/P.C. dtd 17/12/2019
3) EE/EB/Cell/GM/MHADA/-38/390/2019 dated 17/10/2019.

Shri. Vincent Jayn.a 28/4/

Gentlemen,

With reference to the above cited letter at sr. no 1, it is to inform you that, since the Developers have paid the internal SWD remarks Revalidation Charges amounting to Rs. 74,160/- (Rs. Seventy four Thousand One Hundred & Sixty only) vide receipt No. 1735833, 17535834 SAP Doc. No. 1004306278 dtd.31/03/2022, the Storm Water Drain remarks offered by this office vide No. Dy.Ch.Eng./SWD/2078/P.C. dtd 17/12/2019, are revalidated for period upto 16/12/2022, provided there is no change in approved plan.

Yours faithfully,

sd/-
Executive Engineer
(Storm Water Drains) PlanningCell.(City)

No. Dy.Ch.E. / SWD / 3106 / Pl. Cell dtd. 19 APR 2022

Copy to: Ex.Eng.B.P. Cell (MHADA)

Ref: EE/EB/Cell/GM/MHADA/-38/390/2019 dated 17/10/2019.

For information, please.

18/04/2022
E.E.(S.W.D.) Planning Cell(City)

MUNICIPAL CORPORATION OF GREATER MUMBAI
Sewerage Project Department

Office of the
Dy.Ch.Engineer Sewerage Project.
Planning & Design,
Engineering Hub Bldg., 2nd floor,
Dr. E.Moses Road, Worli,
Mumbai-400 018

Sh. Kadam/DE
plz note for n.a
27/4

का. अ. / इपक (बृ के)
परिमंडल उपनगर व शहर/ भा.
आवक क्र. ET-989 दिनांक 26 APR 2022

To,
Mr. Sanjay Rane (L.P. No. 5274),
M/s. Sanjay Rane & Associates,
183/10, Milap CHSL, Sector 1,
Charkop, Kandivali (West),
Mumbai-400 067.

Sub: Revalidation of sewerage NOC for proposed redevelopment of existing building No. 25, 26, 27 known as Sardar Nagar Trilochan CHSl on plot bearing C.S No. 11 (Pt) of village Sion Koliwada of MHADA Layout, situated at Sardar Nagar II, Sion, Mumbai – 400022, in F/N Ward.

Ref: 1) Your Letter received on 14.03.2022.
2) IOA u/No. EE/BP/Cell/GM/MHADA-38/390/2019 dtd. 17.10.2019
IOA Holder: Shri Ashok B. Mehra, Director of M/s Shikara Construction Pvt. Ltd.
3) NOC u/no. Dy.Ch.E/SP/136/F/N/P&D dtd. 19.12.2019.
4) Dy. Ch.E.(S.P.) P. & D.'s approval dtd. 08.04.2022.

Shri. Vincent Jayn.a 28/4/

Gentleman,

With reference to above, this is to inform you that, the NOC issued for the Proposed Redevelopment u/no. Dy.Ch.E/SP/136/F/N/P&D dtd. 19.12.2019 is hereby revalidated for further 2 years period (i.e. from 19.12.2020 up to 18.12.2022) as per usual terms and conditions mentioned in the earlier NOC dated 19.12.2019.

No.Dy.Ch/E/S.P./136/F/N/P&D 13 APR 2022

sd/-
Executive Engineer (Sewerage Project)
Planning & Design, City

C.C. to:-
1) E.E.B.P. Cell Greater Mumbai/MHADA
2) Asstt. Commissioner 'F/N' Ward
3) Dy.C.E. (S.O.) PMS City

Copy forwarded for information & necessary action please.

P.M.Mhatre 12/4/2022
E.E.(S.P.)P.&D.,City
(A.R.Chorge)

TREE NOC

MUNICIPAL CORPORATION OF GREATER MUMBAI
TREE AUTHORITY

TBl 19
10/6

Office of the Supdt .of Gardens
Veermata Jijabai Bhosale Udyan,
Penguin Building , 2nd Floor
Dr.Ambedkar Road, Byculla (East),
Mumbai-400 027.

pro/II
128
6/05/2021.

To,
M/s. Shikara Constructions Pvt Ltd ,
204 , Bezzola Complex ,
Opp. Suman Nagar, Sion- Trombay Road,
Chembur , Mumbai – 400 071

Sub : Permission for Shifting / transplanting & Cutting of trees in the proposed redevelopment of building no. 25-26 , 27 , CTS no. 11 (pt) , of village Sion Koliwada of MHADA layout situated at Sardar Nagar -II, known as ' Sardar Nagar Trilochan CHSL' , Sion , Mumbai- 400 022 in 'F/North' ward.

Sir/ Madam,

Please refer to Consultants M/s. Ellora Project Consultants Pvt Ltd letter No. Nil dt.22.11.2018 for permission for removal of tree affected in proposed redevelopment of building no. 25-26 , 27 , CTS no. 11 (pt) , of village Sion Koliwada of MHADA layout situated at Sardar Nagar -II, known as ' Sardar Nagar Trilochan CHSL', Sion , Mumbai- 400 022 in 'F/North' ward has been considered by the Tree Authority under Section 8(3) of The Maharashtra (Urban Areas) Protection & Preservation of Trees Act 1975,as modified up to January 2018.

Hence , You are hereby directed to plant 44 nos trees in lieu of **Cutting 22** (Twenty two) trees (Tree no.- 02, 03, 04, 25, 26, 27, 28, 32, 33, 36, 36 A , 40, 41, 42, 44, 46, 52, 55, 57, 58, 59, 62A) within 15 days from the execution of tree cutting, **Transplant 11** (Eleven) trees (Tree no.- 29, 30, 31, 34, 35, 37, 45,48, 49, 50, 56) is sanctioned by the **Tree Authority meeting** vide its **Resolution no. 60 dt 23.03.2021.**

As per the provision under Section 8 (3) (a) of the said Act, you are hereby directed that no tree shall be cut/ transplant until fifteen days (15) after the permission is given by the Tree Authority. And also you are requested to inform the Jr.Tree officer of concern ward about the date and time of cutting & transplanting of trees as per permission , so that the representative of this office will remain present to ensure the work carried out properly. Jr. Tree officer 'F/N' ward whose contact no is 8097913378 ,& Hort.Asstt.'F/N' ward 9699733828

The remaining 36 (Thirty Six) trees (Tree no.- 01, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 38, 39, 43, 47, 51, 53, 54, 60, 61, 61A, 62, 63, 63A, 64, 65) shall be **Retained** as it is , as per plan attached.

Whoever fells any tree or causes any tree to be felled in contraventions of the provisions of the Act or without reasonable excuse fails to comply with any order issued or condition imposed by the Tree Officer or the Tree Authority or voluntarily obstructs any member of the Tree Authority or the Tree Officer or any Officers and Servants subordinate to him in the discharge of their functions under this Act, shall, on convection, be punished with the fine of not less than one thousand rupees which may extend upto five thousand rupees for every offense and also with imprisonment for a term of not less than one week. Which may extent upto one year . The felling or causing of felling of each tree without the permission of the Tree Authority shall constitute a separate offense.

As per provision under section 19 (b) you are directed to plant trees in open spaces as well as R.G. Area as per the norms of Tree Authority before getting occupation /completion certificate of the constructed propose work.

As per direction of the Tree Authority, you are hereby directed to submit the photographs taken while transplanting of trees and the C.D. of the transplantation of the trees,you are also requested to plant indigenous variety of trees having circumference of 6" above and height of 10'-12' above. The list of indigenous variety of trees is enclosed herewith for your ready reference and compliance.

Thanking you.

Yours faithfully,

Sd/-
Supdt.of Gardens
& Tree Officer

Copy to :

Asstt. Comm.'F/North' Ward

For Information please.

Sd/-
Supdt.of Gardens
& Tree Officer

Asstt. Supdt.of Gardens 'F/North' ward.

To Monitor the work of transplantation & plantation in lieu of cutting of trees for technical aspects.

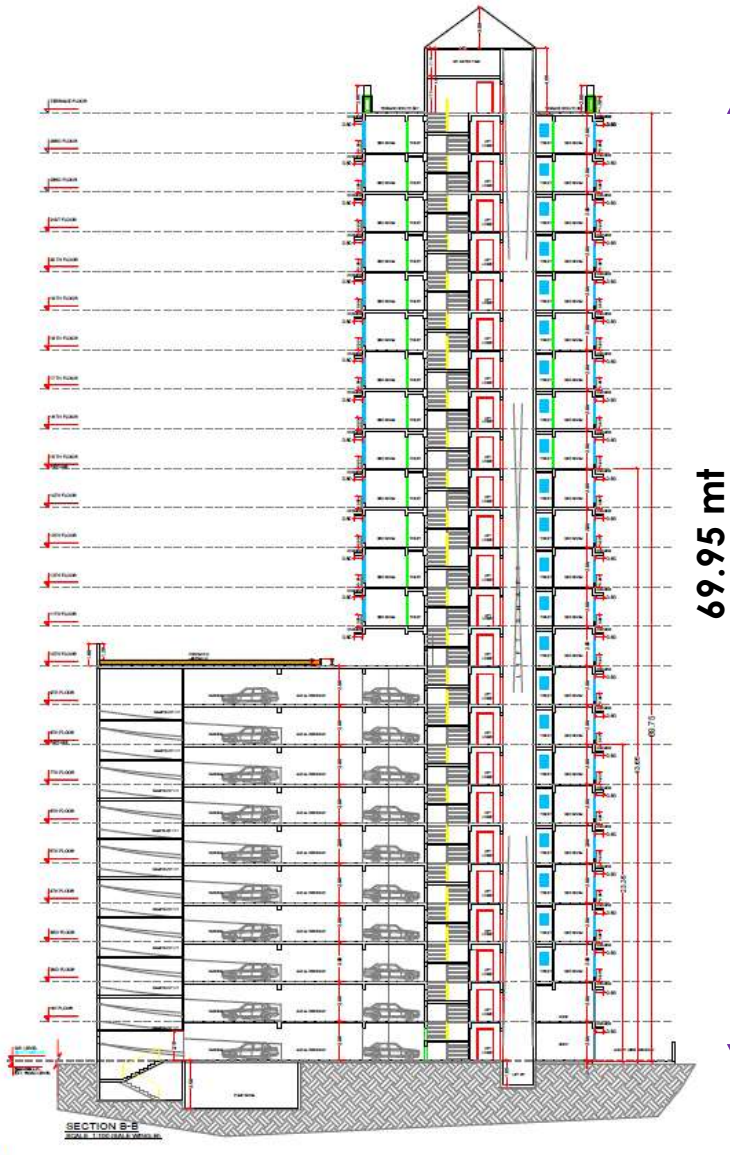
Supdt.of Gardens
& Tree Officer

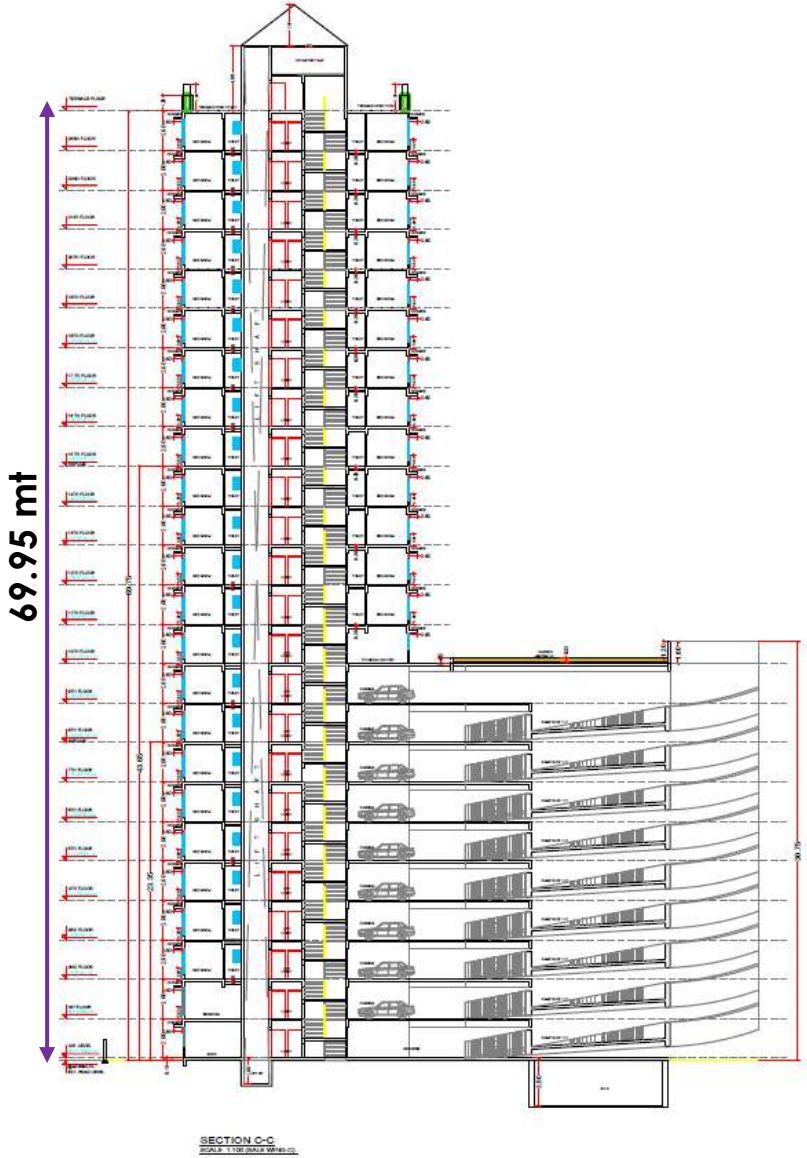
बृहन्मुंबई महानगरपालिका
सहा. म.न.पा. आयुक्त
एफ उत्तर, माटुंगा - १९.
08 JUN 2021
क्र. 7996
वेळ:- ११,१२,१३,१४
१५,१६,१७,१८
A. S-G

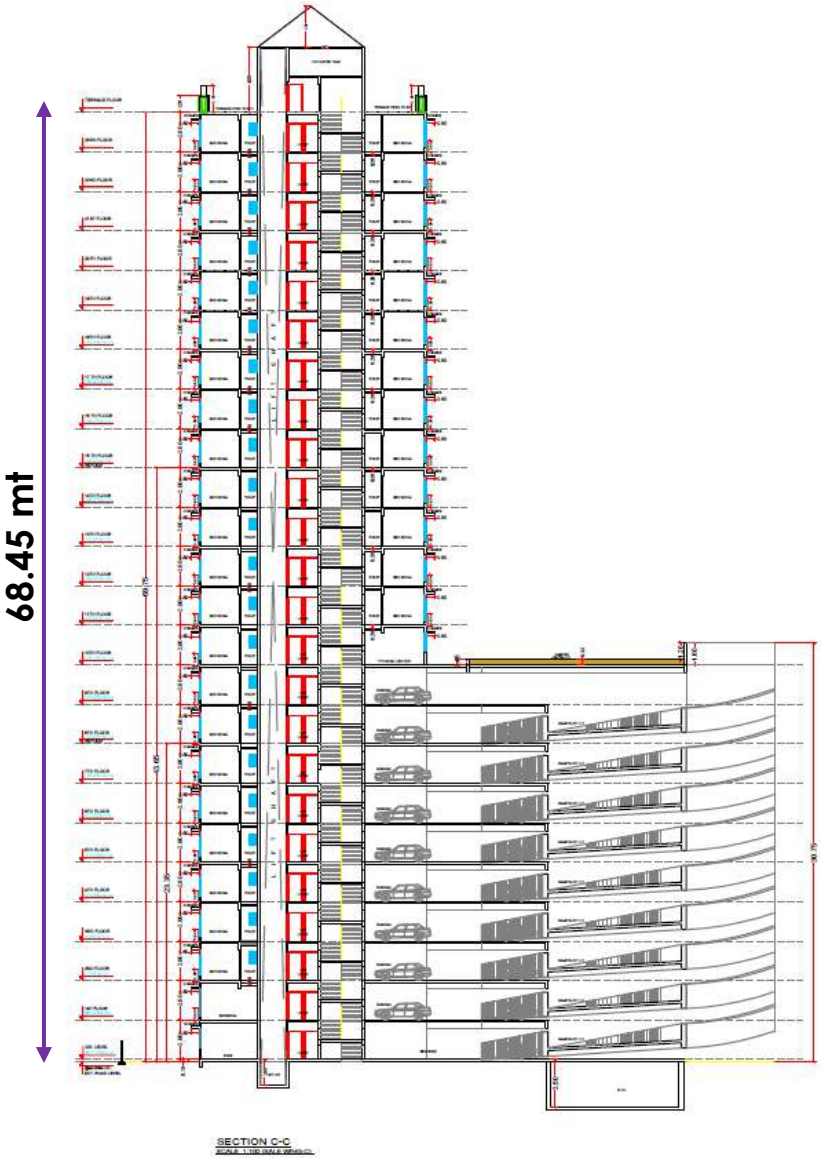
HA-I/HA-II/HA-III
1) Pl. Inspect report with action & D/R
2) Pl. Process further/report further.
3) Pl. take n.a.
4) ....

Asstt. Supdt.of Gardens

BUILDING SECTION







PARKING AREA STATEMENT

CAR PARKING STATEMENT (FOR SALE WING - A, B & C)

CARPET AREA IN SQ. MT.S	TOTAL NO. OF FLATS			TOTAL FLATS	PARKING PERMISSIBLE AS PER D.C. RULES	PARKING REQUIRED
	WING - A	WING - B	WING - C			
BELOW 45.00	41.00 NOS.	21.00 NOS.	08.00 NOS.	70.00 NOS.	1 PARKING FOR / 4 TENEMENTS	17.50 NO.
45.00 TO 60.00	NIL	68.00 NOS.	68.00 NOS.	136.00 NOS.	1 PARKING FOR / 2 TENEMENTS	68.00 NO.
60.00 TO 90.00	NIL	NIL	NIL	NIL	1 PARKING FOR / 1 TENEMENTS	NIL
ABOVE 90.00	NIL	NIL	NIL	NIL	2 PARKING FOR / 1 TENEMENTS	NIL
TOTAL	41.00 NOS.	89.00 NOS.	76.00 NOS.	206.00 NOS.		85.50 NO.
BUILT UP AREA OF SHOPS = 714.46 sq.mt. FOR GROUND & 1ST FLOOR					1 PARKING FOR 40.00 SQ.MT. UP TO 800 SQ.MT.	17.86 NO.
					1 PARKING FOR 80.00 SQ.MT. ABOVE 800 SQ.MT.	NIL
TOTAL						103.36 NO.
10 % ADDITIONAL PARKING FOR VISITORS(FOR RESIDENTIAL) (85.50 x 0.10)						08.55 NO.
10 % ADDITIONAL PARKING FOR VISITORS (FOR SHOP) (17.86 x 0.10)						01.78 NO.
TOTAL PARKING REQUIRED 113.69 NO. Say-						114.00 NO.
ADDITIONAL 50% PARKING WITHOUT CHARGING PREMIUM (114.00 X 0.50)						57.00 NO.
TOTAL PARKING PERMISSIBLE						171.00 NO.
TOTAL PARKING PROPOSED						136.00 NO.
TOTAL BIG PARKING PROPOSED						59.00 NO.
TOTAL SMALL PARKING PROPOSED						77.00 NO.

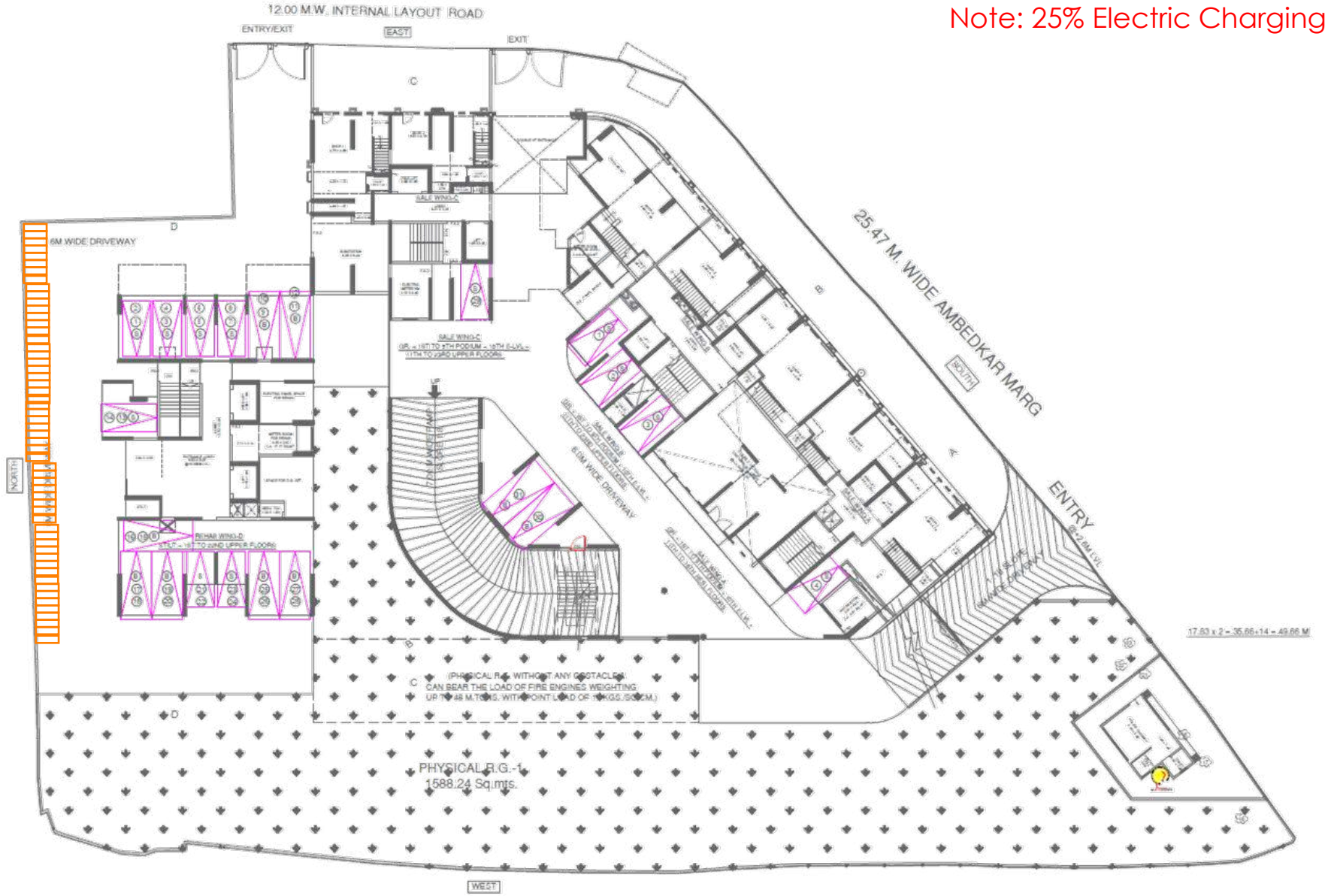
CAR PARKING STATEMENT (FOR REHAB) (WING-D)

AREA IN SQ.MT.	FLAT Nos.	PARK. REQD. BY RULE
BELOW 45.00	NIL	NIL
45.00 TO 60.00	112 NOS.	28.00 Nos.
60.00 TO 90.00	NIL	NIL
ABOVE 90.00	NIL	NIL
TOTAL	112 NOS.	28.00 Nos.
10% VISITORS PARKING		2.80 Nos.
TOTAL PARKING REQD. 30.80 NOS.		SAY-31.00 NOS.
TOTAL PARKING PROV.		31.00 NOS.
TOTAL BIG PARKING PROV.		16.00 NOS.
TOTAL SMALL PARKING PROV.		15.00 NOS.

In addition 50 N0 of 2 W parking's are proposed.

PARKING PLAN GROUND FLOOR

Note: 25% Electric Charging is Proposed



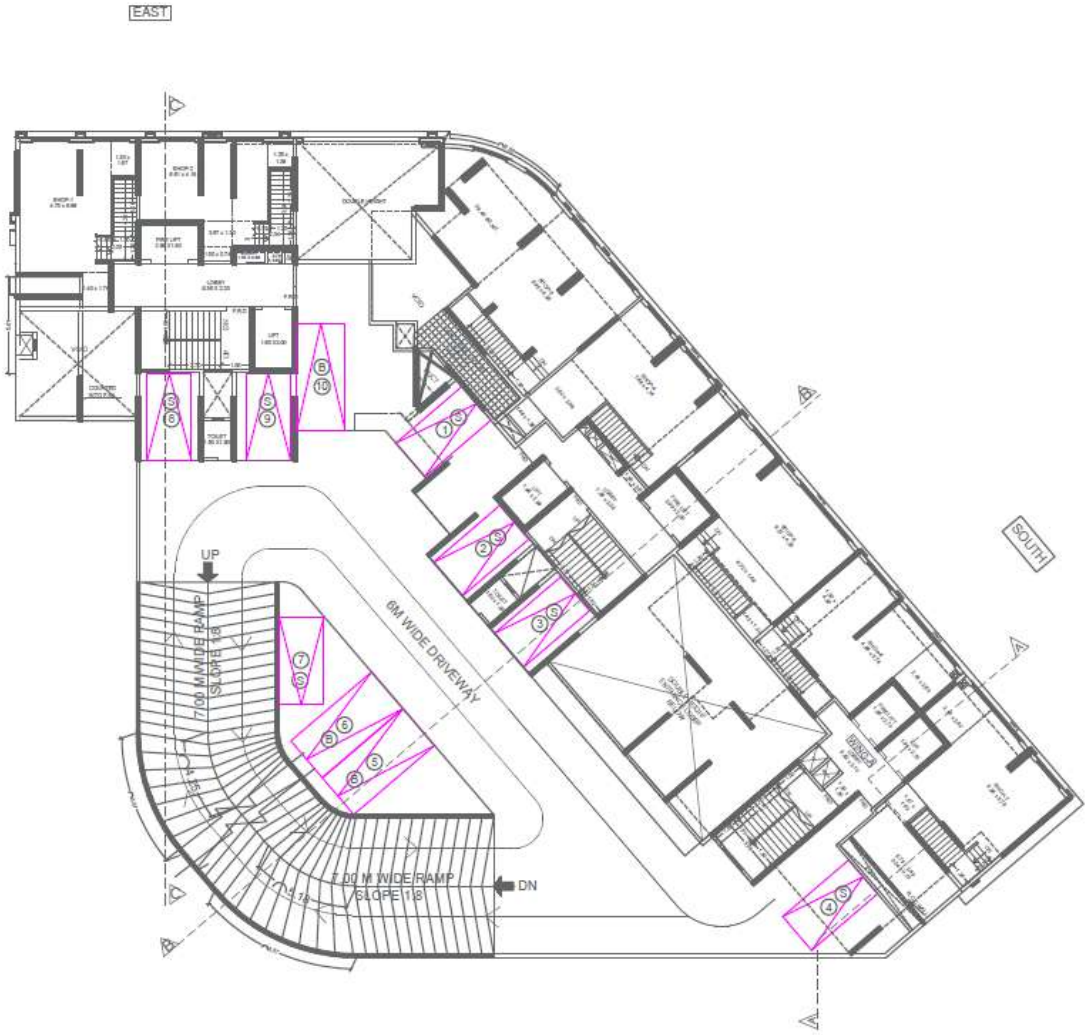
GROUND FLOOR PLAN

SCALE 1:100

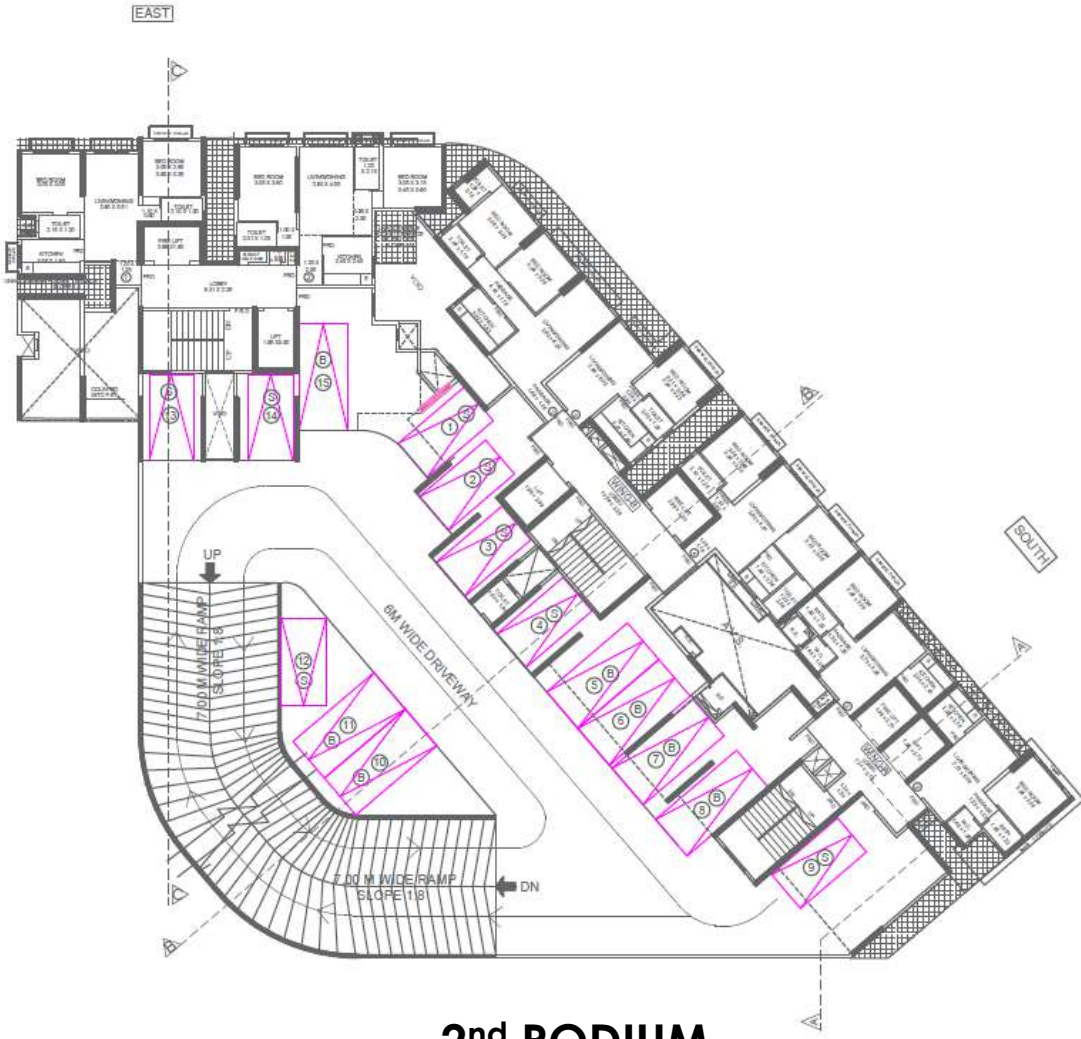
GURU TEGH BAHADUR NAGAR RAILWAY STATION

PARKING PLAN 1 & 2 PODIUM

Note: 25% Electric Charging is Proposed



1st PODIUM

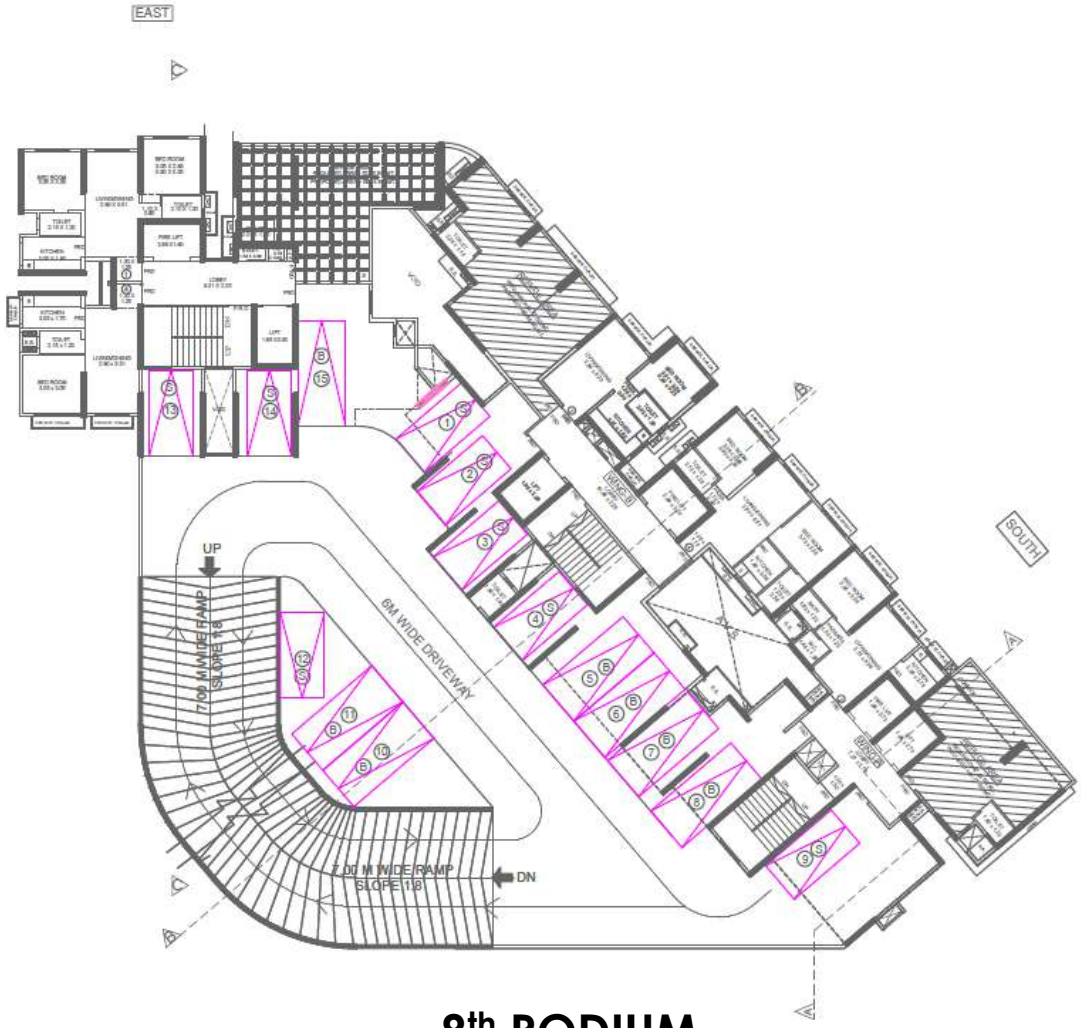


2nd PODIUM

PARKING PLAN 3 to 7 & 8 PODIUM

Note: 25% Electric Charging is Proposed

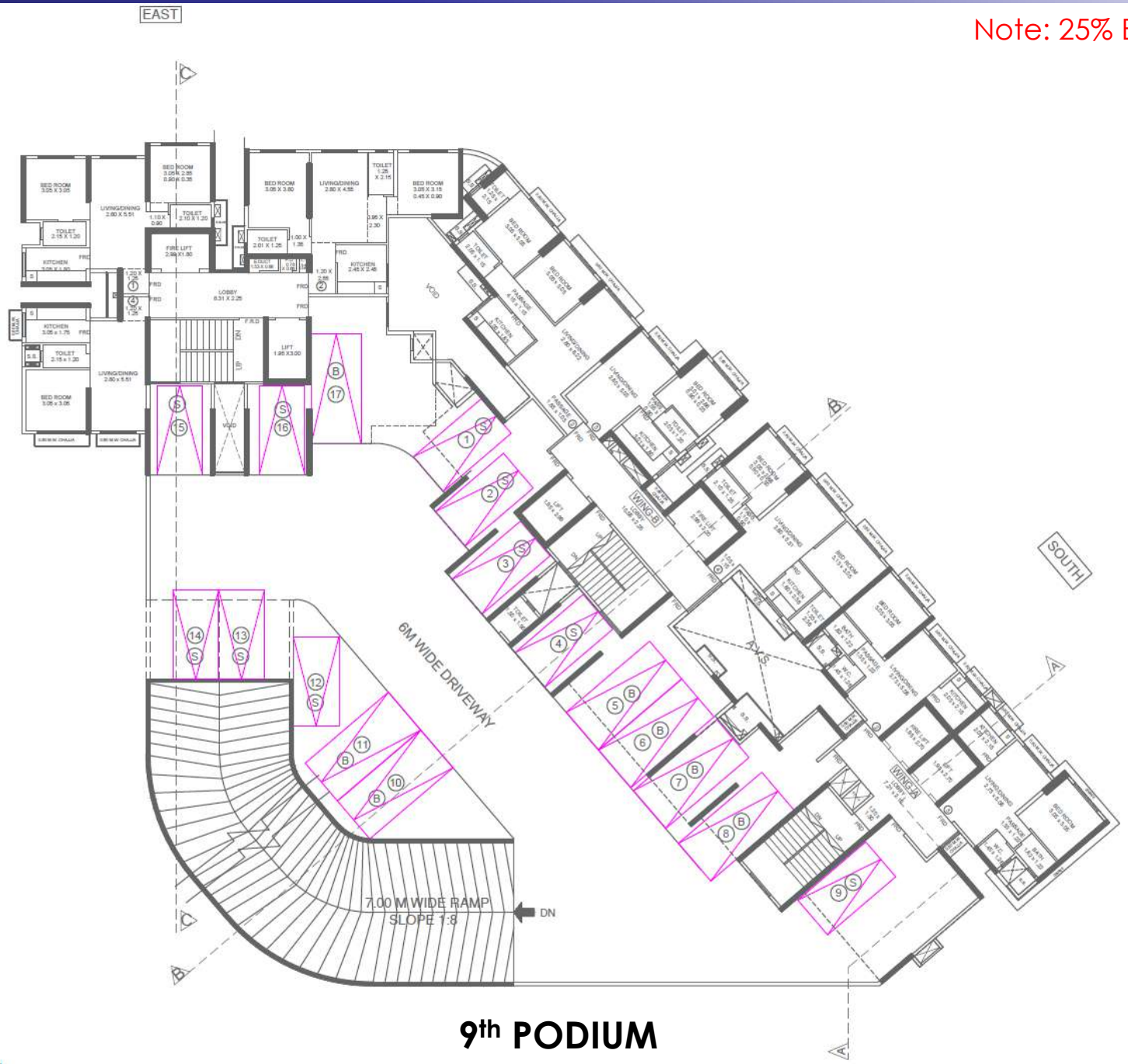
3rd to 7th PODIUM



8th PODIUM

PARKING PLAN 9 PODIUM

Note: 25% Electric Charging is Proposed



9th PODIUM

LANDSCAPE PLAN – GROUND FLOOR

Description of Area	Details
Balance Plot Area	3,359.31 sq.mt.
Required RG	Nil
Provided RG On ground	1,588.24 sq.mt.
Additional R.G on Podium	nil
Total RG Provided	1,588.24 Sq.mt.
Existing No of Trees	69 Nos.
Trees to be Retained	36 Nos.
Trees to be transplant	11 Nos.
Trees to be cut	22 Nos.
No of Trees to be planted in R.G area/periphery	42 Nos.
Total No of Trees	89 Nos.

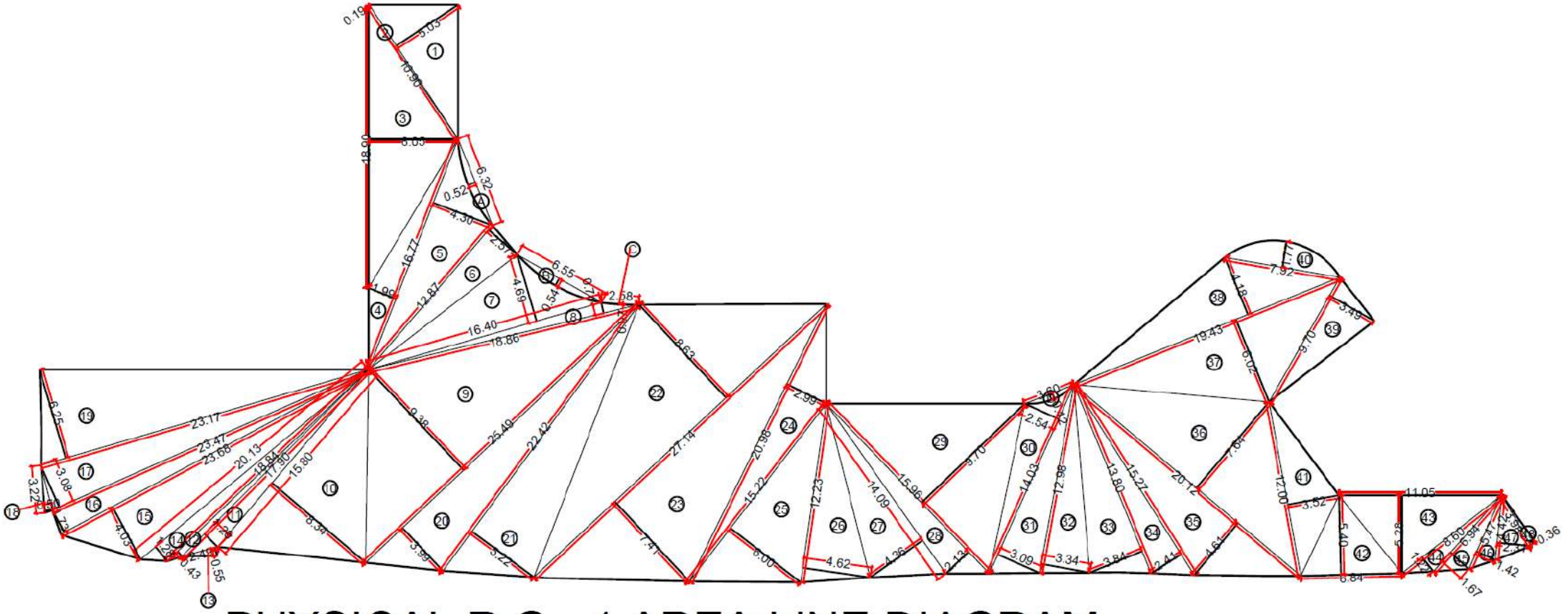
PERIPHERY/RG TREE PLANTATION

S. No	Scientific Name	Common Name	No.
1	*Adina cordifolia*	Kadam	10
2	*Delonix regia*	Gulmohar	8
3	*Syzygium cumini*	Jamun	2
4	*Azadirachta Indica*	Neem	7
5	*Terminalia Arjuna*	Arjun tree	3
6	*Acacia nilotica*	Babul tree	5
7	*Albizzia saman*	Rain tree	2
8	*Plumeria alba*	Champa	3
9	*Cassia fistula*	Indian Labarnum	1
10	*Areca catechu*	The Betel Nut Palm	1
Total			**42**

GROUND FLOOR PLAN
SCALE 1:100

GURU TEGH BAHADUR NAGAR RAILWAY STATION

Note: There is no Separate RG required as Plot is part of MHADA Layout. However we kept 1588.24 sq.mt. MHADA Layout RG on Mother Earth.



PHYSICAL R.G. -1 AREA LINE DIAGRAM

SCALE 1:500 (@ GROUND FLOOR)

R.G. AREA STATEMENT		
REQUIRED R.G. AREA	=	1584.41 SQ.MT.
PROPOSED R.G. AREA	=	1588.24 SQ.MT.

PHYSICAL R.G.-1 AREA CALCULATION

1	1/2	X	10.90	X	5.03	X 1 NO	=	27.41	SQ.MT.	
2	1/2	X	10.90	X	0.19	X 1 NO	=	1.04	SQ.MT.	
3	1/2	X	18.90	X	6.05	X 1 NO	=	57.17	SQ.MT.	
4	1/2	X	16.77	X	1.99	X 1 NO	=	16.69	SQ.MT.	
5	1/2	X	16.77	X	4.30	X 1 NO	=	36.06	SQ.MT.	
6	1/2	X	12.87	X	2.57	X 1 NO	=	16.54	SQ.MT.	
7	1/2	X	16.40	X	4.69	X 1 NO	=	38.46	SQ.MT.	
8	1/2	X	18.86	X	0.74	X 1 NO	=	6.98	SQ.MT.	
9	1/2	X	25.49	X	9.38	X 1 NO	=	119.55	SQ.MT.	
10	1/2	X	15.80	X	8.34	X 1 NO	=	65.89	SQ.MT.	
11	1/2	X	17.90	X	1.26	X 1 NO	=	11.28	SQ.MT.	
12	1/2	X	18.84	X	0.43	X 1 NO	=	4.05	SQ.MT.	
13	1/2	X	2.49	X	0.55	X 1 NO	=	0.68	SQ.MT.	
14	1/2	X	20.13	X	1.28	X 1 NO	=	12.88	SQ.MT.	
15	1/2	X	23.68	X	4.03	X 1 NO	=	47.72	SQ.MT.	
16	1/2	X	23.68	X	1.73	X 1 NO	=	20.48	SQ.MT.	
17	1/2	X	23.47	X	3.08	X 1 NO	=	36.14	SQ.MT.	
18	1/2	X	3.22	X	0.50	X 1 NO	=	0.81	SQ.MT.	
19	1/2	X	23.17	X	6.25	X 1 NO	=	72.41	SQ.MT.	
20	1/2	X	25.49	X	3.99	X 1 NO	=	50.85	SQ.MT.	
21	1/2	X	22.42	X	5.22	X 1 NO	=	58.52	SQ.MT.	
22	1/2	X	27.14	X	8.63	X 1 NO	=	117.11	SQ.MT.	
23	1/2	X	27.14	X	7.41	X 1 NO	=	100.55	SQ.MT.	
24	1/2	X	20.98	X	2.99	X 1 NO	=	31.37	SQ.MT.	
25	1/2	X	15.22	X	6.00	X 1 NO	=	45.66	SQ.MT.	
26	1/2	X	12.23	X	4.62	X 1 NO	=	28.25	SQ.MT.	
27	1/2	X	14.09	X	4.36	X 1 NO	=	30.72	SQ.MT.	
28	1/2	X	15.96	X	2.13	X 1 NO	=	17.00	SQ.MT.	
29	1/2	X	15.96	X	9.70	X 1 NO	=	77.41	SQ.MT.	
30	1/2	X	14.03	X	2.54	X 1 NO	=	17.82	SQ.MT.	
31	1/2	X	14.03	X	3.09	X 1 NO	=	21.68	SQ.MT.	
32	1/2	X	12.98	X	3.34	X 1 NO	=	21.68	SQ.MT.	
33	1/2	X	13.80	X	3.84	X 1 NO	=	26.50	SQ.MT.	
34	1/2	X	15.27	X	2.41	X 1 NO	=	18.40	SQ.MT.	
35	1/2	X	20.12	X	4.61	X 1 NO	=	46.38	SQ.MT.	
36	1/2	X	20.12	X	7.64	X 1 NO	=	76.86	SQ.MT.	
37	1/2	X	19.43	X	6.02	X 1 NO	=	58.48	SQ.MT.	
38	1/2	X	19.43	X	4.18	X 1 NO	=	40.61	SQ.MT.	
39	1/2	X	9.70	X	3.49	X 1 NO	=	16.93	SQ.MT.	
40	2/3	X	7.92	X	1.77	X 1 NO	=	9.35	SQ.MT.	
41	1/2	X	12.00	X	3.52	X 1 NO	=	21.12	SQ.MT.	
42	1/2	X	6.84	X	5.40	X 1 NO	=	18.47	SQ.MT.	
43	1/2	X	11.05	X	5.28	X 1 NO	=	29.17	SQ.MT.	
44	1/2	X	8.60	X	1.23	X 1 NO	=	5.29	SQ.MT.	
45	1/2	X	6.94	X	1.67	X 1 NO	=	5.79	SQ.MT.	
46	1/2	X	5.47	X	1.42	X 1 NO	=	3.88	SQ.MT.	
47	1/2	X	4.42	X	2.31	X 1 NO	=	5.11	SQ.MT.	
48	1/2	X	3.98	X	0.36	X 1 NO	=	0.72	SQ.MT.	
						TOTAL ADDITION	=	1593.92	SQ.MT.	X

DEDUCTIONS

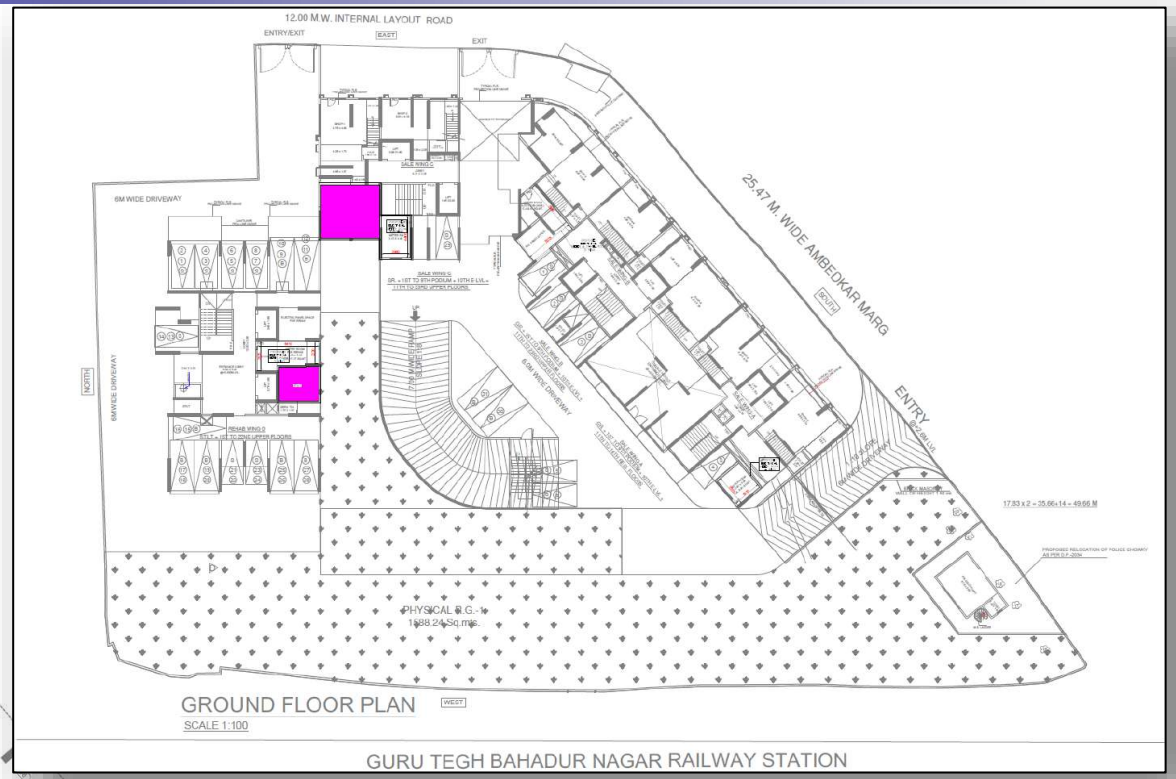
A	2/3	X	6.32	X	0.52	X 1 NO	=	2.19	SQ.MT.	
B	2/3	X	6.55	X	0.54	X 1 NO	=	2.36	SQ.MT.	
C	2/3	X	2.58	X	0.07	X 1 NO	=	0.12	SQ.MT.	
D	2/3	X	3.60	X	0.42	X 1 NO	=	1.01	SQ.MT.	
						TOTAL DEDUCTION	=	5.68	SQ.MT.	Y1
TOTAL R.G. UP AREA [X - Y1]							=	1588.24	SQ.MT.	X1

ENVIRONMENTAL INFRASTRUCTURE

CO-ORDINATED LAYOUT

LEGENDS	
STP	
Fire Tank	
Domestic Tank	
Flushing Tank	
Rain Water Harvesting Tank	
OWC	

UTILITY FLOOR (BASEMENT)



SOLID WASTE MANAGEMENT - CONSTRUCTION PHASE

- Total No. of Workers: 150 approx.
- Total Solid waste generation: 15 kg/day (considering 0.1 kg/day/person)
- Segregation of dry and wet waste at site
- Wet waste: Disposed off through authorized recyclers
- Dry Waste: Handed over to authorized recyclers

Sr. No.	Item	Management
MANAGEMENT DONE FOR EXCAVATION		
1A	Excavated top soil	Used in landscaping
1B	Quantity of Excavated lower soil used for basement filling	Used in backfilling, site leveling & road construction
2	Construction debris/concrete	Reused on site to construct safety walls & backfilling below roads
3	Cement bags	returned back to vendor or sold to recycler
4	CLC Blocks, Bricks & Broken tiles	CLC Blocks, Bricks used for water proofing at site Waste tiles used in mosaic pattern on top terraces and driveways, walkways

SOLID WASTE MANAGEMENT- OPERATION PHASE

BUILDCON MEP SERVICES CONSULTANTS.			
PROJECT -SHIKHARA HEIGHT (WING A B & C)			DATE :-18.10.23
CALCULATION FOR OWC			REV :- 00
Project Name	Population	Solid Waste Rate (Kg /per person per day)	Total Waste (Kg /per day)
WING A	164	0.45	73.8
WING B	424	0.45	190.8
WING C	376	0.45	169.2
SHOP	21	0.25	5.25
Total	985		439.05
Non-biodegradable Waste (60% of Total)			263.43
Bio degradable waste (40% of Total)			175.62

Biodegradable waste would be transferred to Organic Waste Converter units within the premises for disposal and non-biodegradable waste will be disposed to existing municipal solid waste collection system.

Non-biodegradable waste will be segregated into inert and recyclable/ reusable waste.

Recyclable waste will be sold to scrap dealers and remaining inert waste will be disposed off to authorized municipal solid waste disposal site.

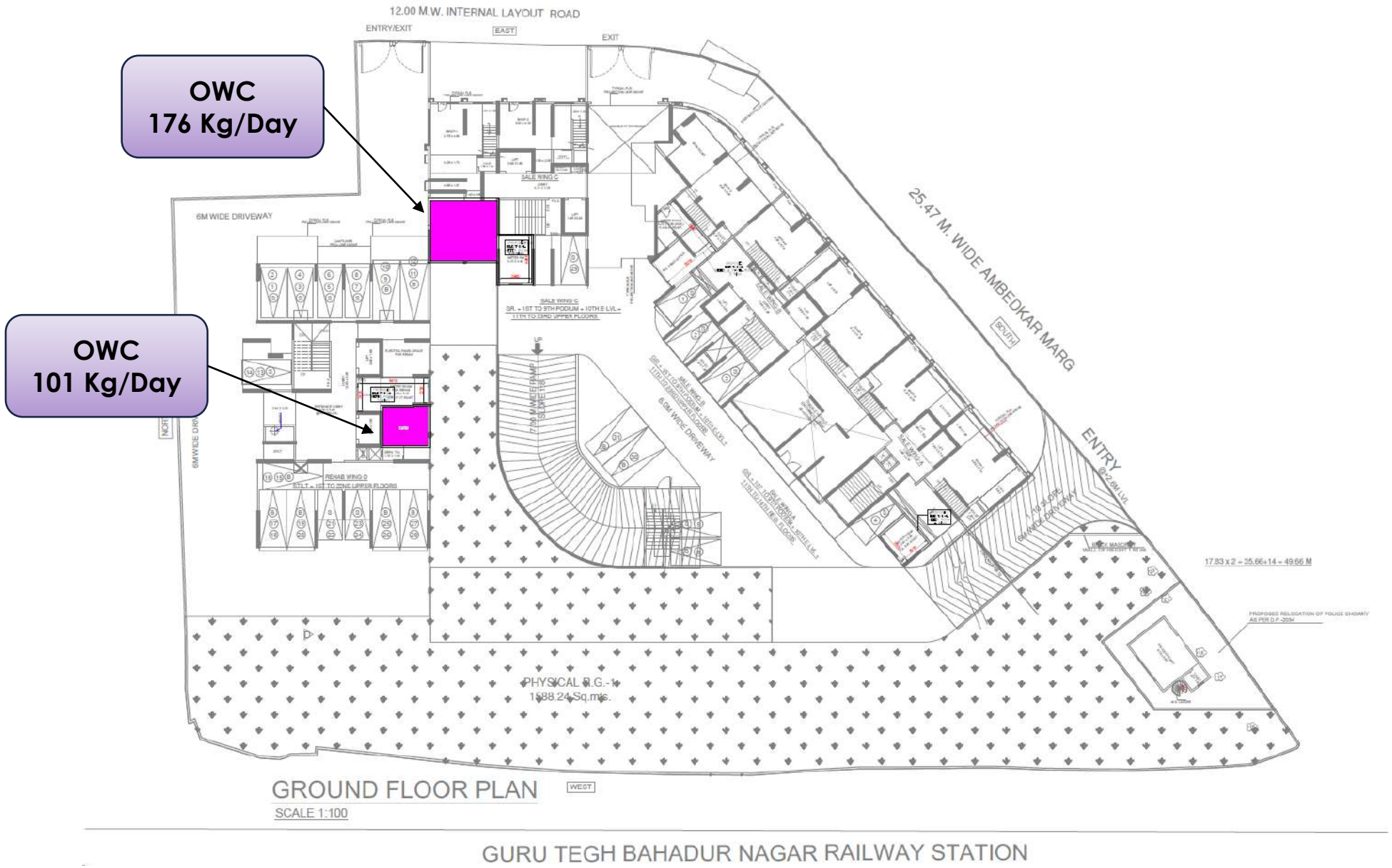
BUILDCON MEP SERVICES CONSULTANTS.			
PROJECT -SHIKHARA HEIGHT (WING D)			DATE :-18.10.23
CALCULATION FOR OWC			REV :- 00
Project Name	Population	Solid Waste Rate (Kg /per person per day)	Total Waste (Kg /per day)
WING D	560	0.45	252
Total	560		252
Non-biodegradable Waste (60% of Total)			151.2
Bio degradable waste (40% of Total)			100.8

Biodegradable waste would be transferred to Organic Waste Converter units within the premises for disposal and non-biodegradable waste will be disposed to existing municipal solid waste collection system.

Non-biodegradable waste will be segregated into inert and recyclable/ reusable waste.

Recyclable waste will be sold to scrap dealers and remaining inert waste will be disposed off to authorized municipal solid waste disposal site.

OWC LOCATION



OWC CALCULATION (Wing A, B & C)

OWC Machine Calculation

Total Biodegradable waste	176	kg/day

OWC Machine Selection

Sr.No	Select OWC Model	Per batch capacity (kg)	No. of Batches	Per Day Capacity (kg)	Unit Consumed by Machine	HP of Machine	kW of Machine	Area of Machine (Sq. Feet)	Area of Machine (Sq. Mtr.)
OWC 1	OWC 60	25	8	200	8	4	2.98	22	2

System Details (Quantity, Area & Power)

Total biodegradable waste treated	200	kg	Total HP Required for Machine(s)	4	HP
Total area required for selected machine(s)	2	Sq.Mtr.	Electrical Power of Machine(s)	2.98	kW
Total area required for small truck & accessing	0	Sq.Mtr.	Total Area Required for System	24	Sq.Mtr.
Total area required for big truck & accessing	0	Sq.Mtr.	Note: Select total area for system considering area for machines, area for curing & area for truck with accessing area as per project reuirements & quantity of waste to be treated.		
Extra accessing space	6	Sq.Mtr.			

Curing Area Details

Two Container System		
Particulars		Units
Total Bio-Degradable Waste Treated	176	kg
Density of Biomass	800	kg/m3
Container size assumed	0.11	m3
Holding capacity per container	86.40	kg
Holding capacity of two way container	172.80	kg
No. of Vertical Stacks	5	Nos
Capacity of biomaas	864	kg
Select retention days	12	
Total holding capacity required	2116.8	kg
Number of horizontal stacks	2	
Series of stacks	6	
Number of stack series	0	

Area required for stack series	3.14	Sq.Mtr.
Total area required for clearance between stack series & wall (Approx. 22.4 Sq.Mtr. Required for two series)	13	Sq.Mtr.
Total Area Required	16	Sq.Mtr.

OWC CALCULATION (Wing D)

OWC Machine Calculation

Total Biodegradable waste	101	kg/day	

OWC Machine Selection

Sr.No	Select OWC Model	Per batch capacity (kg)	No. of Batches	Per Day Capacity (kg)	Unit Consumed by Machine	HP of Machine	kW of Machine	Area of Machine (Sq. Feet)	Area of Machine (Sq. Mtr.)
OWC 1	OWC 30	10	10	100	2	2.5	1.87	18	2

System Details (Quantity, Area & Power)

Total biodegradable waste treated	100	kg	Total HP Required for Machine(s)	3	HP
Total area required for selected machine(s)	2	Sq.Mtr.	Electrical Power of Machine(s)	1.87	kW
Total area required for small truck & accessing	0	Sq.Mtr.	Total Area Required for System	22	Sq.Mtr.
Total area required for big truck & accessing	0	Sq.Mtr.	Note: Select total area for system considering area for machines, area for curing & area for truck with accessing area as per project reuirements & quantity of waste to be treated.		
Extra accessing space	6	Sq.Mtr.			

Curing Area Details

Two Container System

Particulars		Units
Total Bio-Degradable Waste Treated	101	kg
Density of Biomass	800	kg/m3
Container size assumed	0.11	m3
Holding capacity per container	86.40	kg
Holding capacity of two way container	172.80	kg
No. of Vertical Stacks	5	Nos
Capacity of biomaas	864	kg
Select retention days	12	
Total holding capacity required	1209.6	kg
Number of horizontal stacks	1	
Series of stacks	6	
Number of stack series	0	

Area required for stack series	1.79	Sq.Mtr.
Total area required for clearance between stack series & wall (Approx. 22.4 Sq.Mtr. Required for two series)	11	Sq.Mtr.
Total Area Required	14	Sq.Mtr.

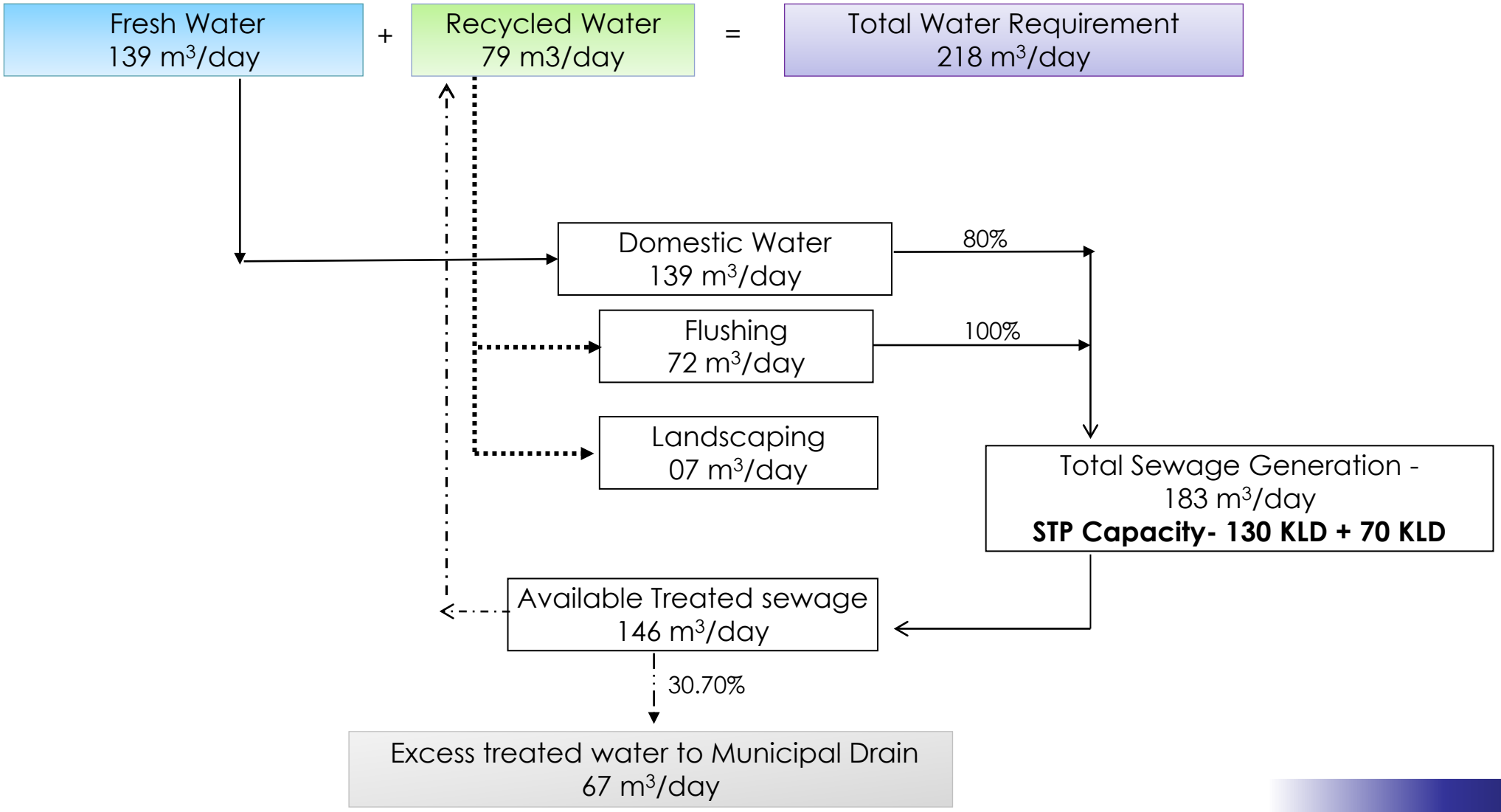
Sr. No.	Particulars	TOTAL
1.	Total population (Nos.)	**1545**
2.	Domestic water (KLD)	**139**
3.	Flushing water (KLD)	**72**
4.	Landscape water (KLD)	**7**
5.	**Total water demand (KLD)**	**218**
6.	Total sewage generation (KLD)	**183**
7.	Total capacity of STP (KLD)	**130 + 70**
8.	Total Water available after Treatment (KLD)	**146**
9.	Total Excess treated Water to Drain during Non Monsoon (KLD)	**67**
10.	Total Excess treated Water to Drain during Monsoon (KLD)	**74**

Note: There is no increase in population and water demand as we have considered 4 person /1BHK as per NBC 2016 in compare to earlier 5 person/ 1 BHK.

WATER BALANCE CHART – DRY SEASON

Total Population : 1545 nos.

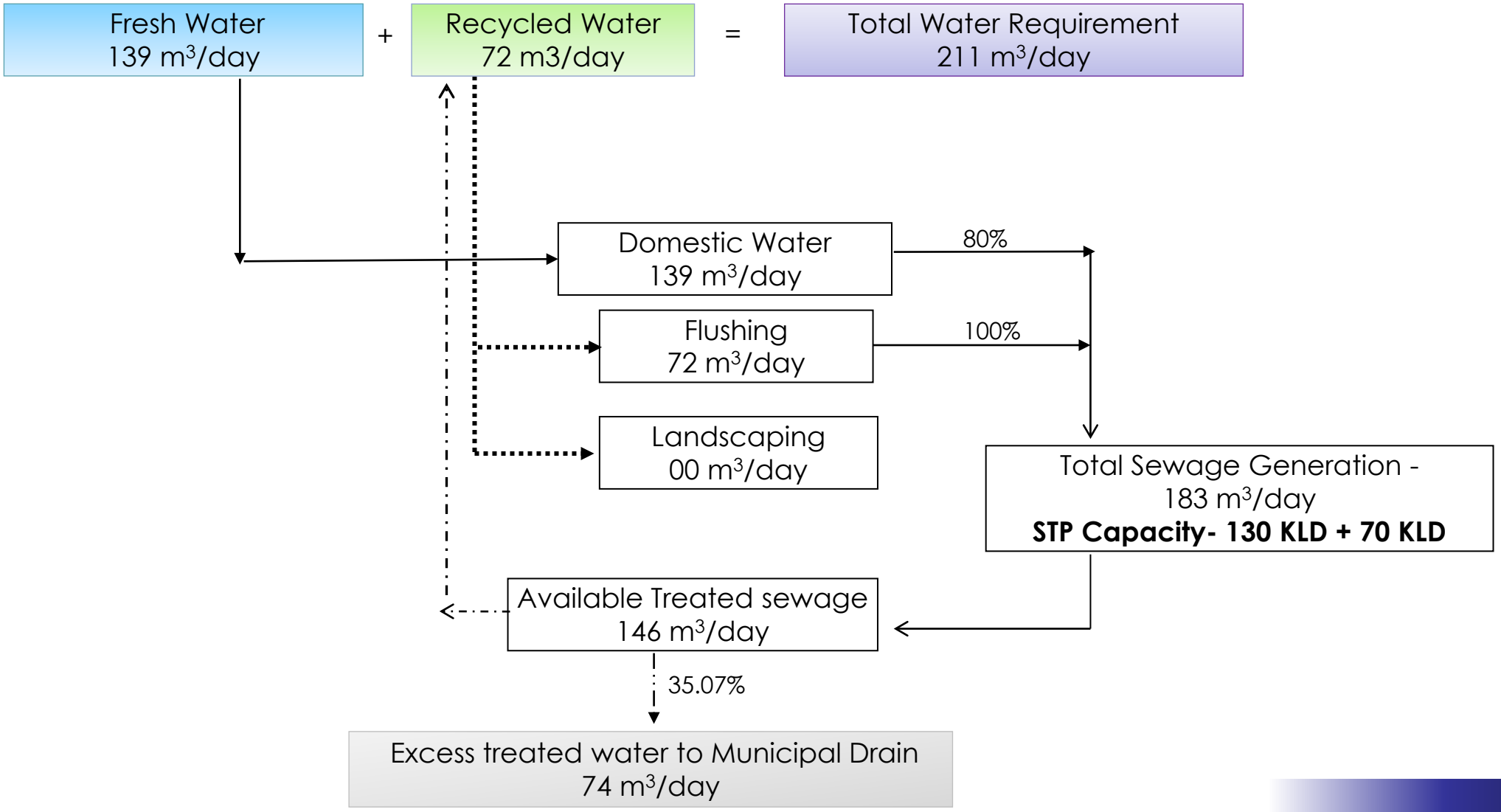
Source – MCGM & STP Recycled Water.



WATER BALANCE CHART – WET SEASON

Total Population : 1545 nos.

Source – MCGM & STP Recycled Water.



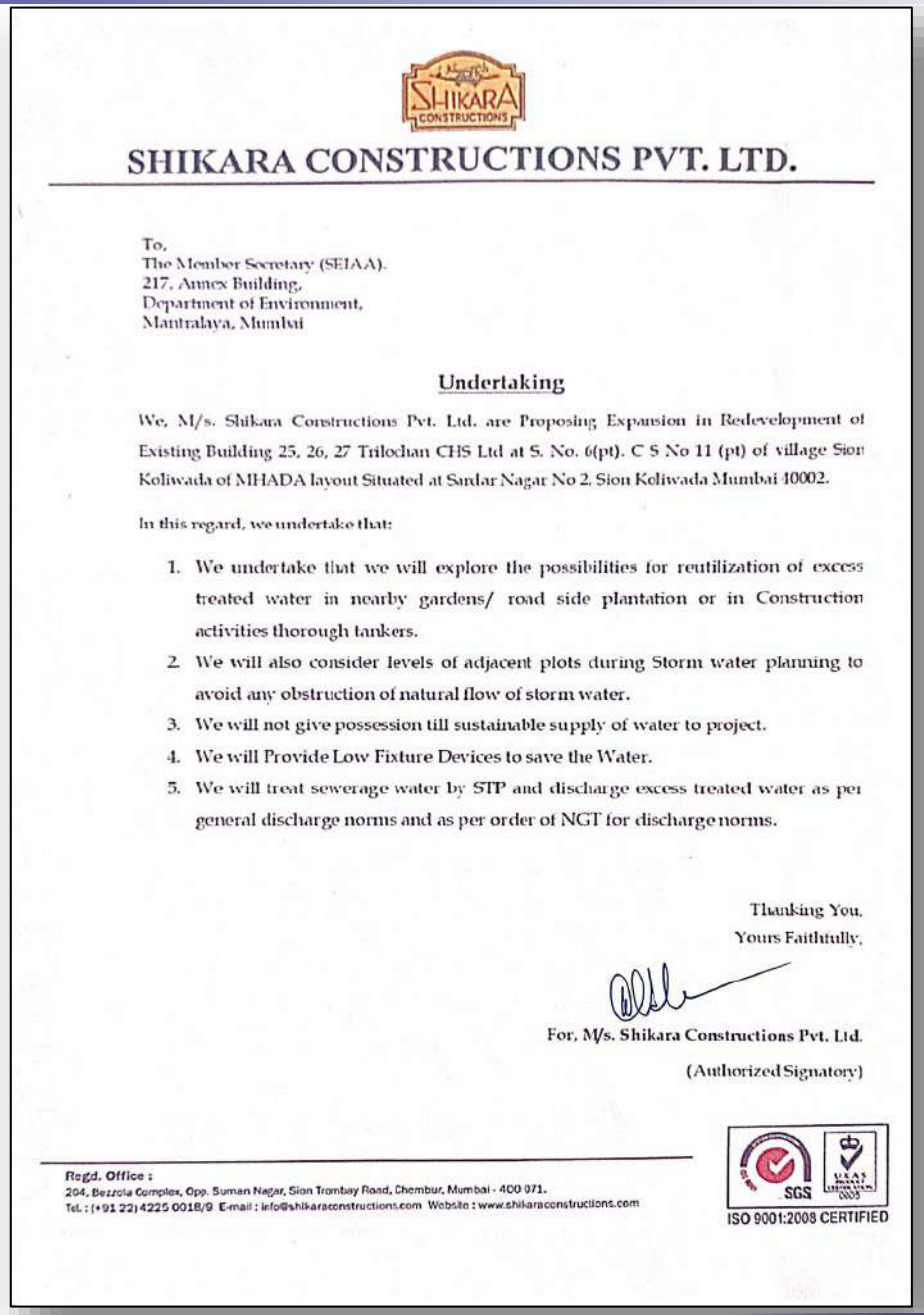
UNDERTAKING – EXCESS WATER UTILIZATION & LOW FIXTURE DEVICE

Low flow water conservation fixtures shall be used for the project as per IGBC guidelines.

Details are as given below

Faucets	:	2.5 GPM / 9.5 LPM
Shower Heads	:	2.5 GPM / 9.5 LPM
Water Closets	:	1.6 GPF / 6.1 LPF
Urinals:	1.0 GPF / 3.8 LPF	

(GPF : Gallon Per Flush : LPF : Litres Per Flush)
(GPM: Gallons per Min)



SHIKARA CONSTRUCTIONS PVT. LTD.

To,
The Member Secretary (SEIAA),
217, Annex Building,
Department of Environment,
Mantralaya, Mumbai

Undertaking

We, M/s. Shikara Constructions Pvt. Ltd. are Proposing Expansion in Redevelopment of Existing Building 25, 26, 27 Trilochan CHS Ltd at S. No. 6(pt). C S No 11 (pt) of village Sion Koliwada of MHADA layout Situated at Sardar Nagar No 2, Sion Koliwada Mumbai 40002.

In this regard, we undertake that:

1. We undertake that we will explore the possibilities for reutilization of excess treated water in nearby gardens/ road side plantation or in Construction activities thorough tankers.
2. We will also consider levels of adjacent plots during Storm water planning to avoid any obstruction of natural flow of storm water.
3. We will not give possession till sustainable supply of water to project.
4. We will Provide Low Fixture Devices to save the Water.
5. We will treat sewerage water by STP and discharge excess treated water as per general discharge norms and as per order of NGT for discharge norms.

Thanking You,
Yours Faithfully,

For, M/s. Shikara Constructions Pvt. Ltd.

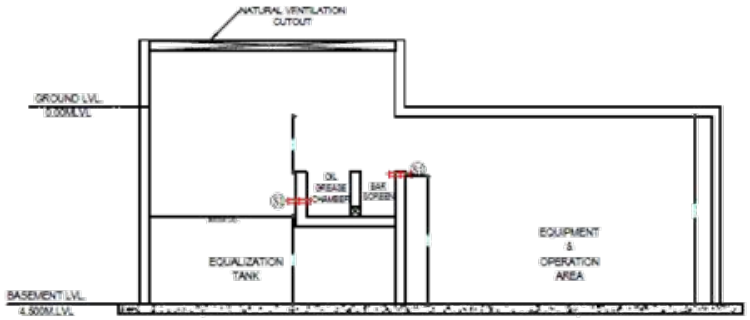
(Authorized Signatory)

Regd. Office :
204, Bezzola Complex, Opp. Suman Nagar, Sion Trombay Road, Chembur, Mumbai - 400 071.
Tel. : (+91 22) 4225 0018/9 E-mail : info@shikaraconstructions.com Website : www.shikaraconstructions.com

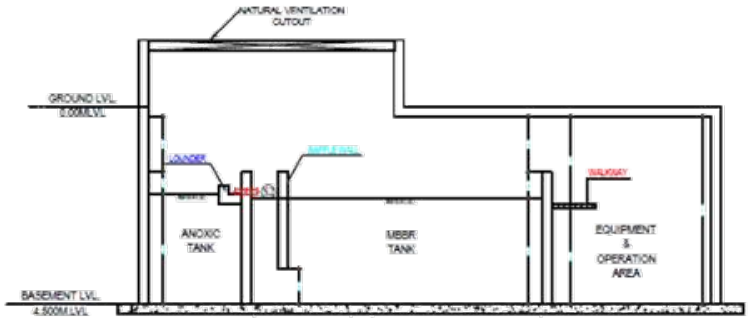
ISO 9001:2008 CERTIFIED

STP LOCATION

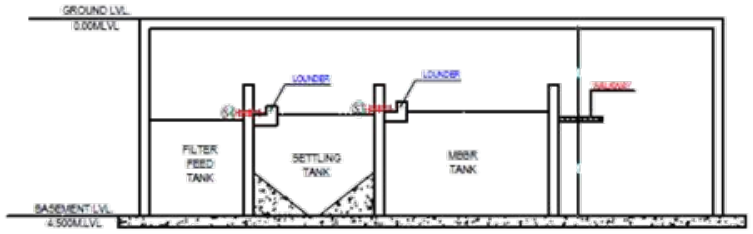
UTILITY FLOOR (BASEMENT)



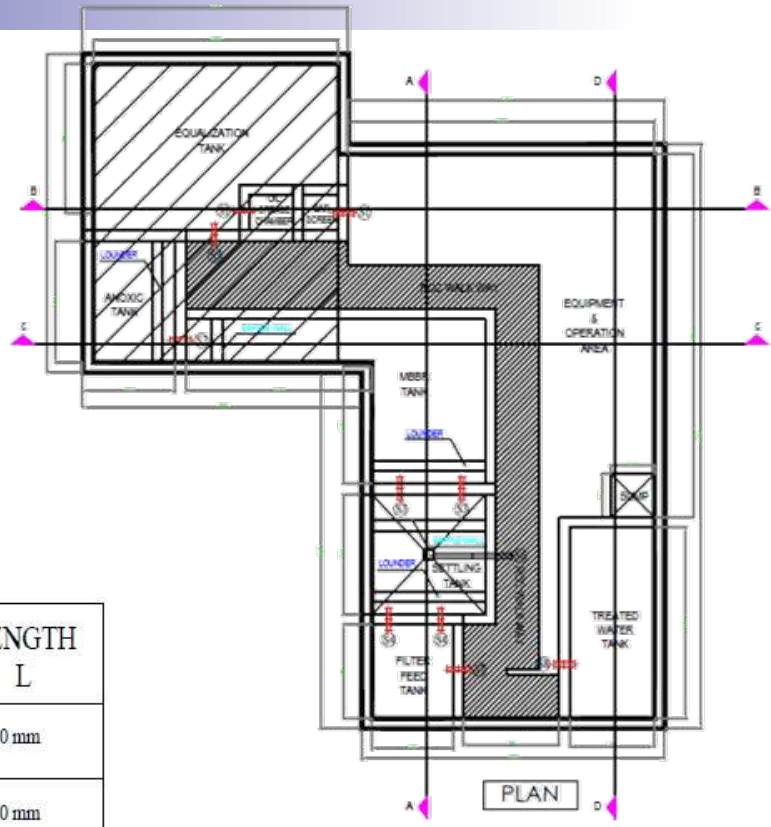
SECTION B'B'



SECTION C'C'



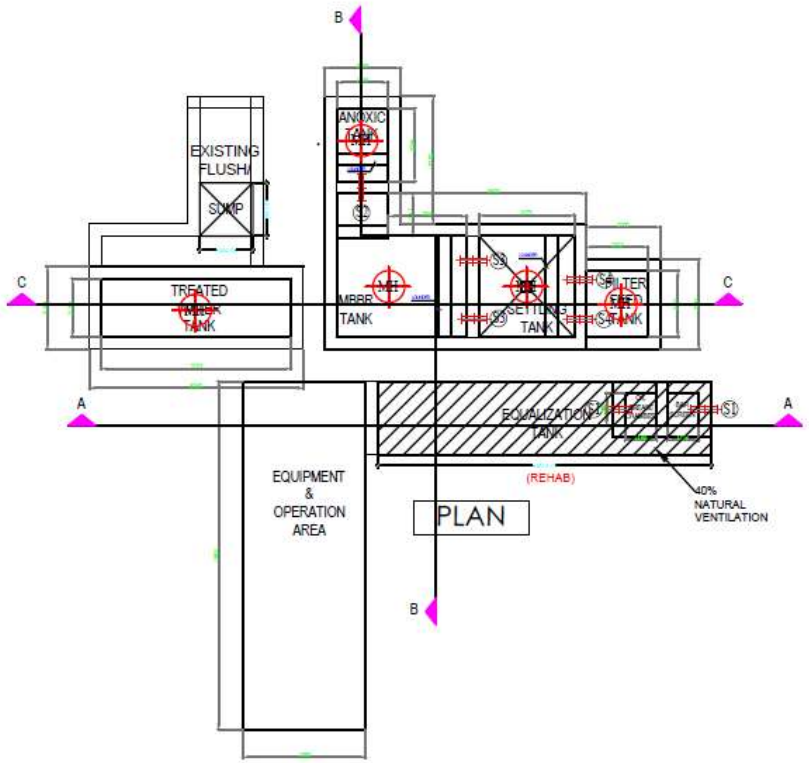
SECTION A'A'

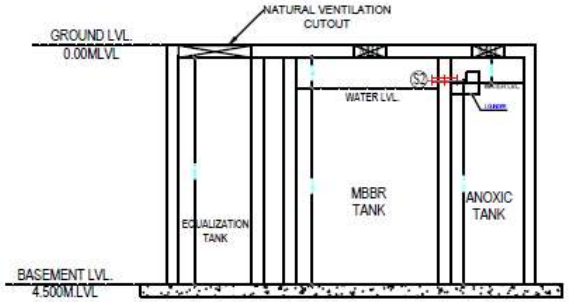


SLEEVE DETAILS

Sr NO	SLEEVE NO	SLEEVE LOCATION	SIZE D	MOC	LENGTH L
1	S1	INLET TO EQUALIZATION TANK WILL BE GIVEN BY MEP CONSULTANT	100mm	GI C CLASS	800 mm
2	S2	ANOXIC TANK TO MBBR TANK OVER FLOW SLEEVE	100mm	GI C CLASS	800 mm
3	S3	MBBR to SET TANK OVER FLOW SLEEVE	100mm	GI C CLASS	800 mm
4	S4	SET TANK TO FILTER FEED TANK OVER FLOW SLEEVE	100mm	GI C CLASS	800 mm
5	S5	EQUALIZATION TANK BOTTOM SLEEVE	100mm	GI C CLASS	800 mm
6	S6	SET TANK BOTTOM Fr SLUDGE REMOVAL	100mm	GI C CLASS	1800 mm
7	S7	FILTER FEED TANK BOTTOM SLEEVE	100mm	GI C CLASS	800 mm
8	S8	TREATED WATER TANK BOTTOM SLEEVE	100mm	GI C CLASS	800 mm

STP SECTION – 70 KLD (MBBR)





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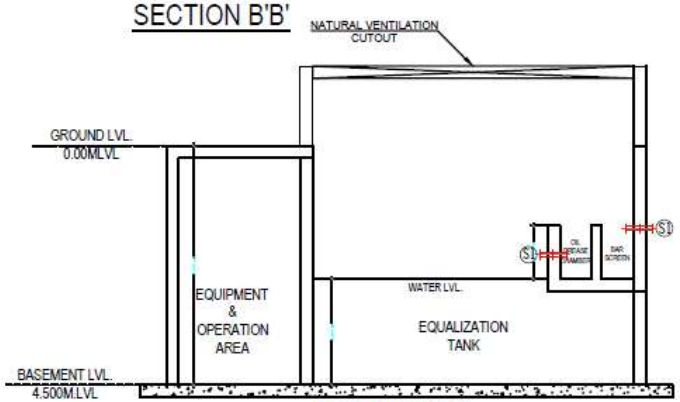

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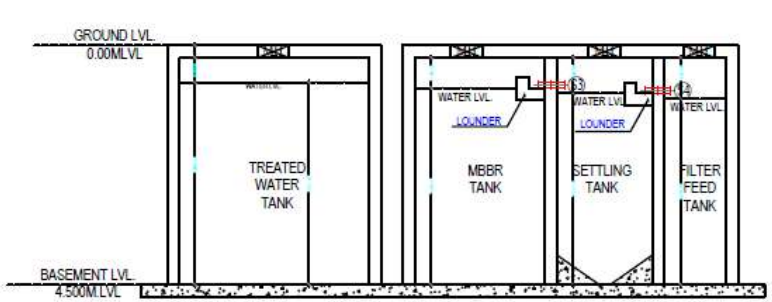
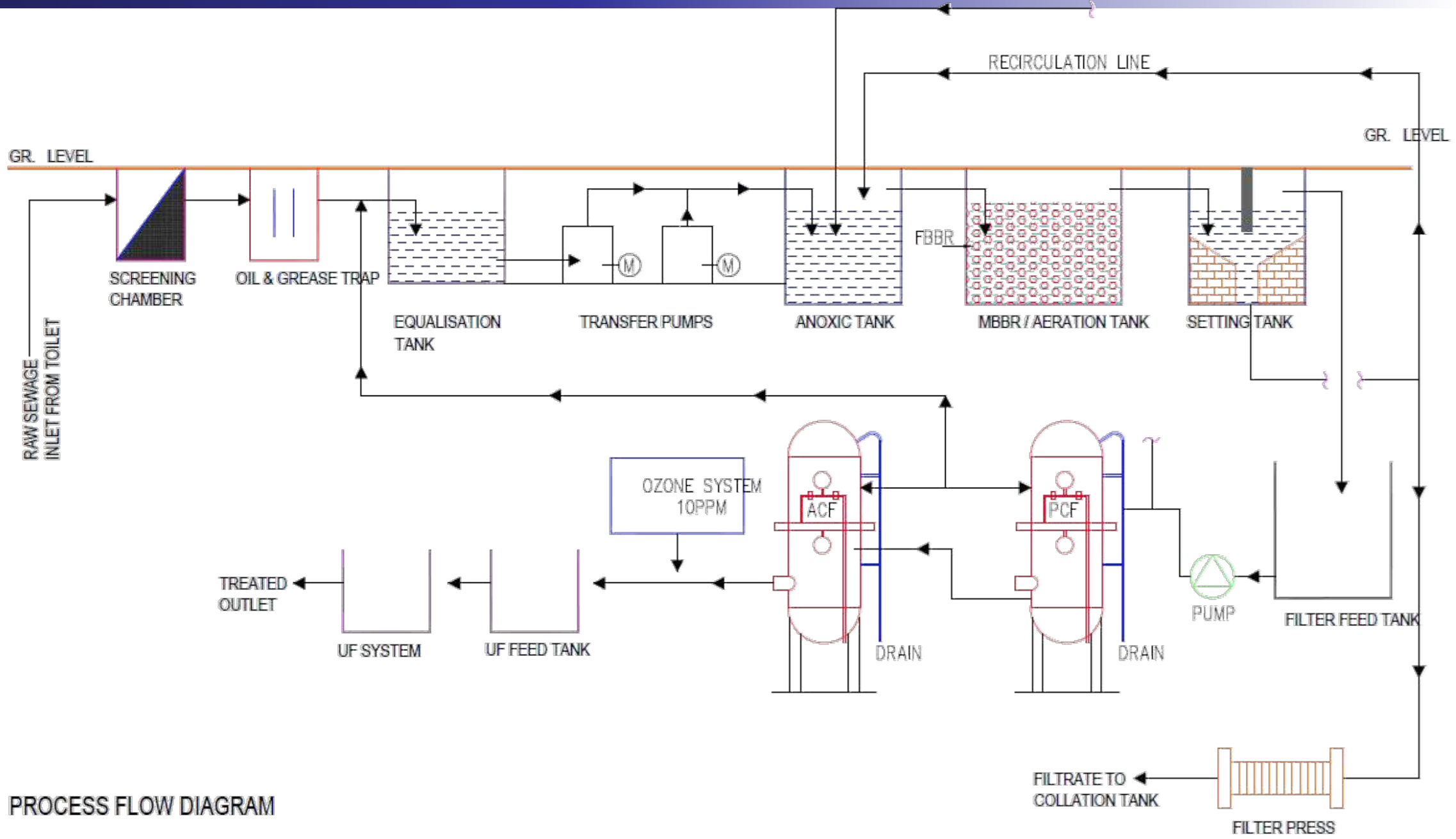


SECTION C'C'

SLEEVE DETAILS

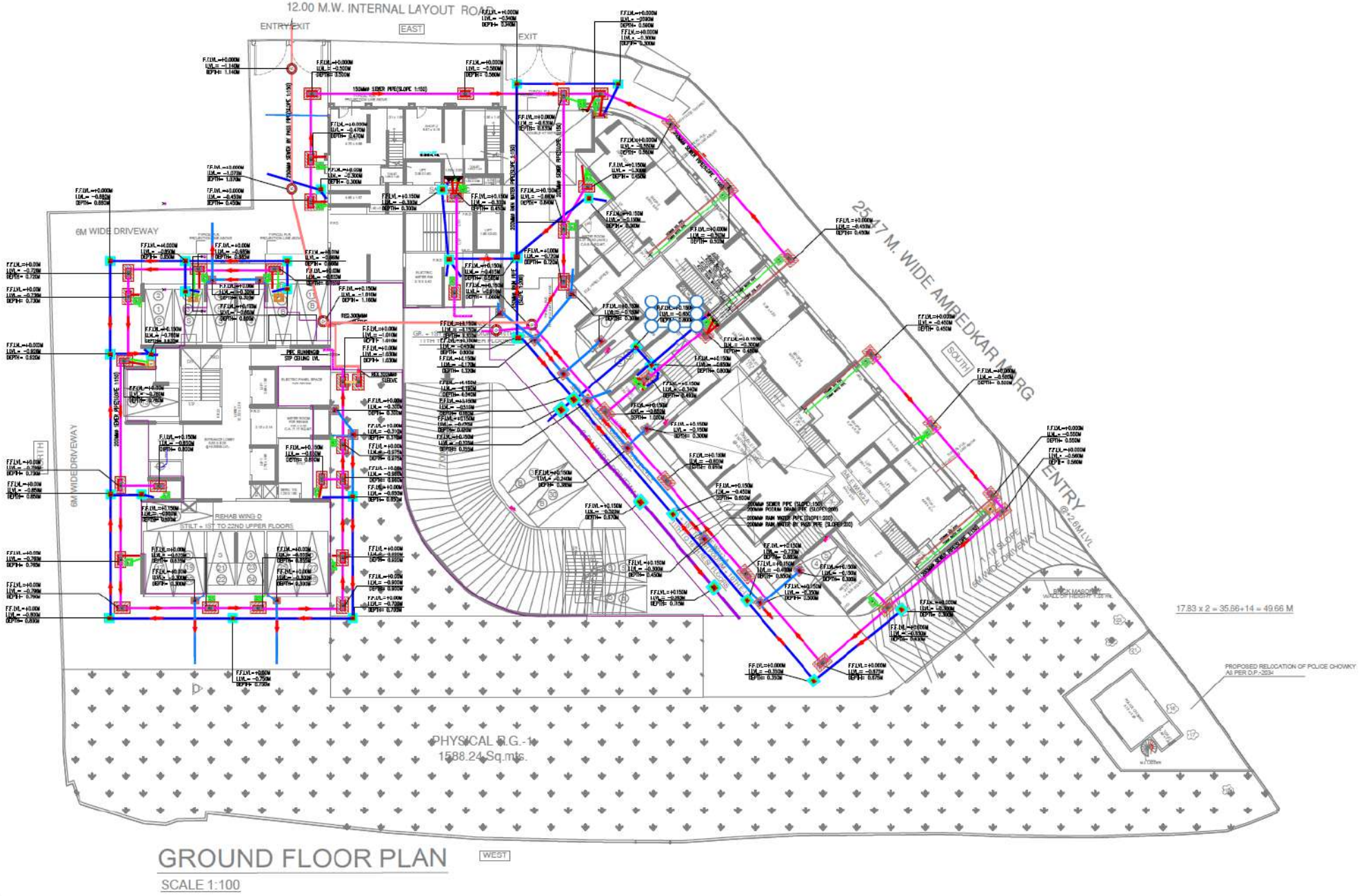
Sr NO	SLEEVE NO	SLEEVE LOCATION	SIZE D	MOC	LENGTH L
1	S1	INLET TO EQUALIZATION TANK WILL BE GIVEN BY MEP CONSULTANT	100mm	GI C CLASS	800 mm
2	S2	ANOXIC TANK TO MBBR TANK OVER FLOW SLEEVE	100mm	GI C CLASS	800 mm
3	S3	MBBR to SET TANK OVER FLOW SLEEVE	100mm	GI C CLASS	800 mm
4	S4	SET TANK TO FILTER FEED TANK OVER FLOW SLEEVE	100mm	GI C CLASS	800 mm

STP SCHEMATIC DRAWING

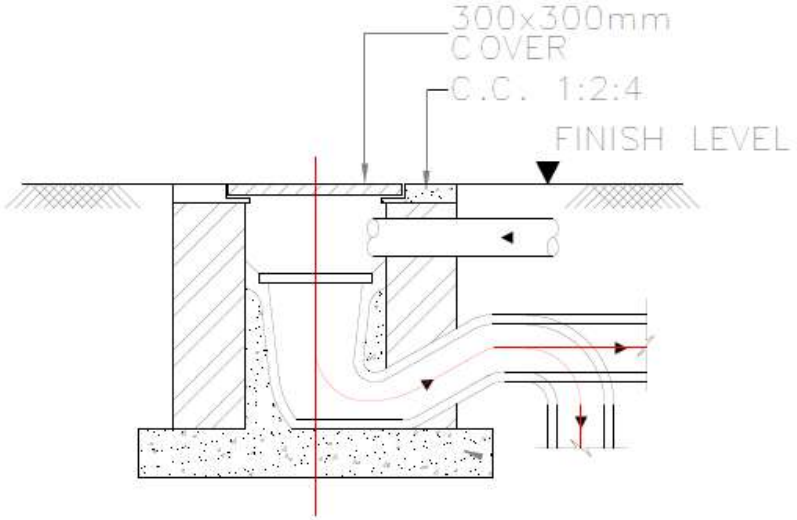


PROCESS FLOW DIAGRAM

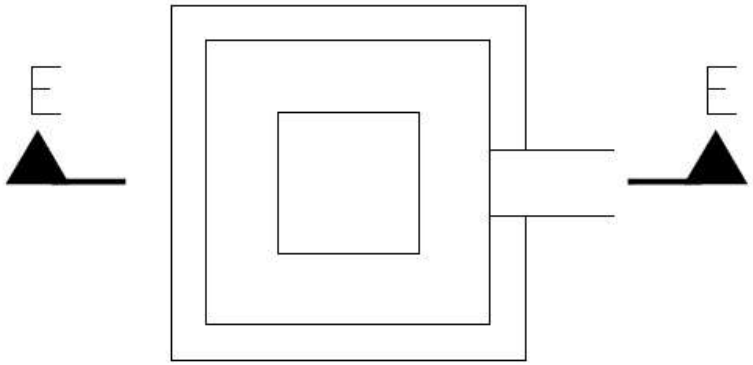
SEWER LAYOUT



SEWER SECTIONS

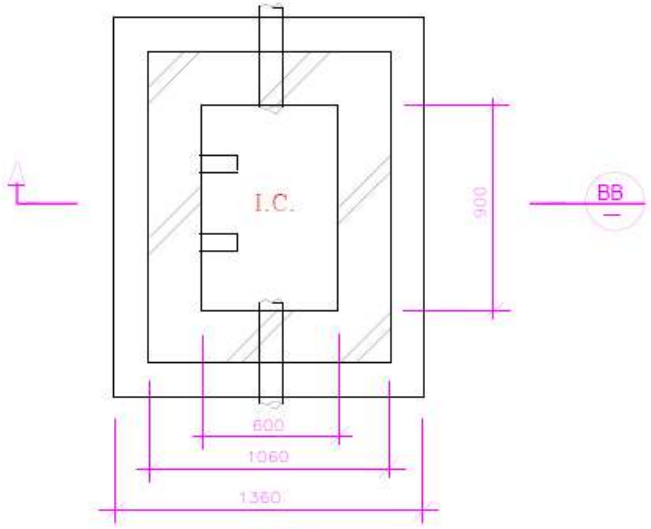


SECTION 'E–E'

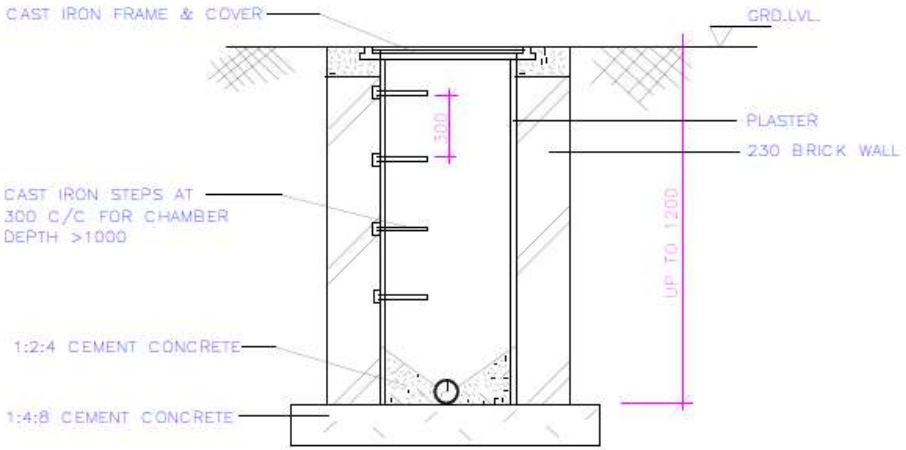


PLAN

DETAIL OF GULLY TRAP

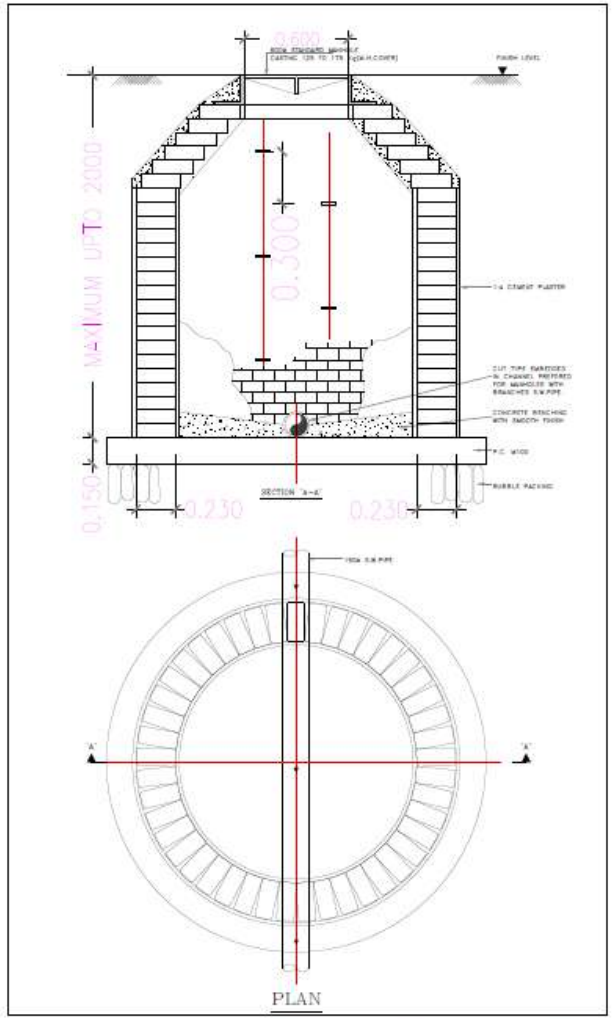


PLAN



SECTION BB

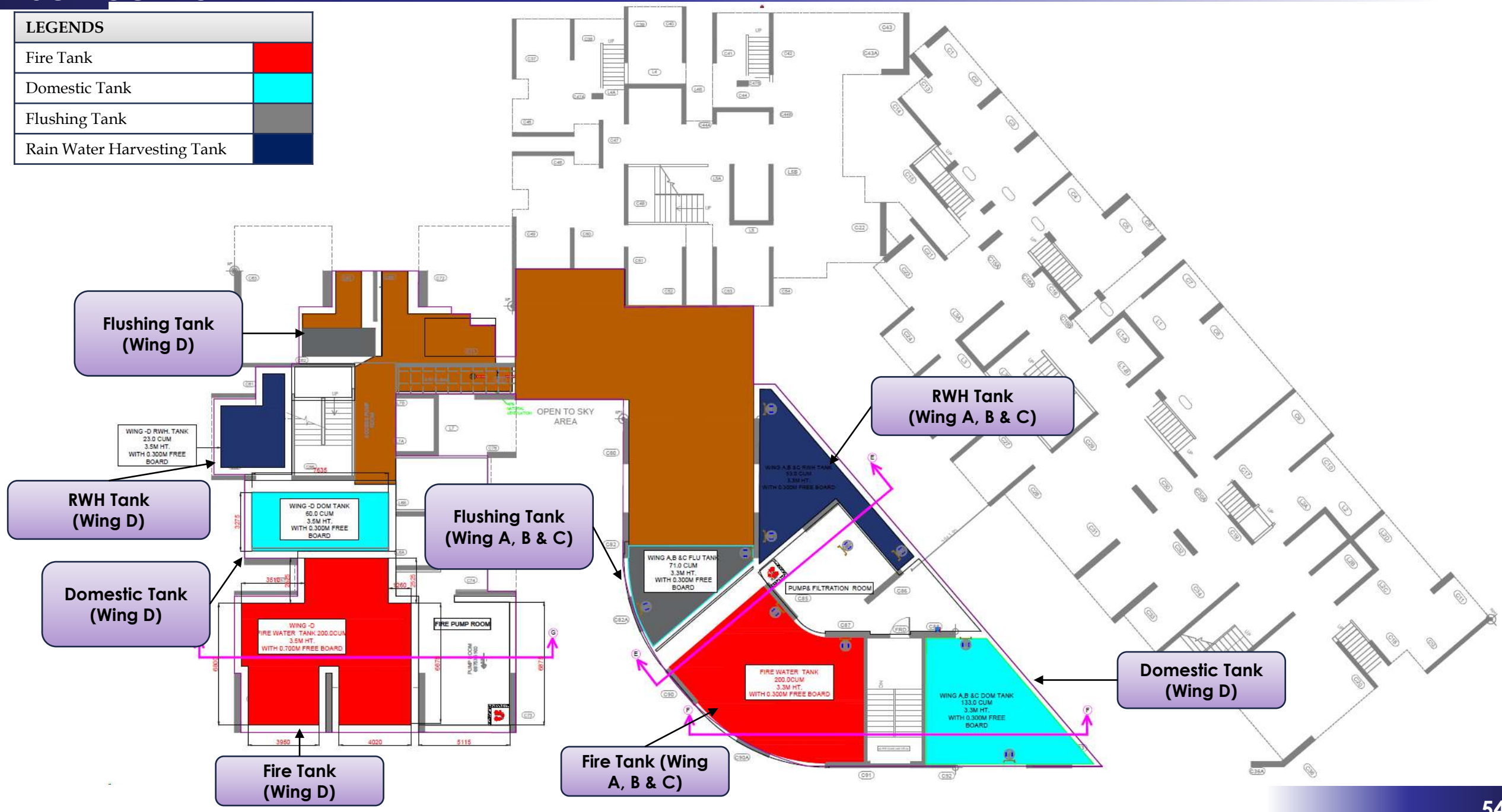
INSPECTION CHAMBER DETAIL
FOR SEWER DRAIN



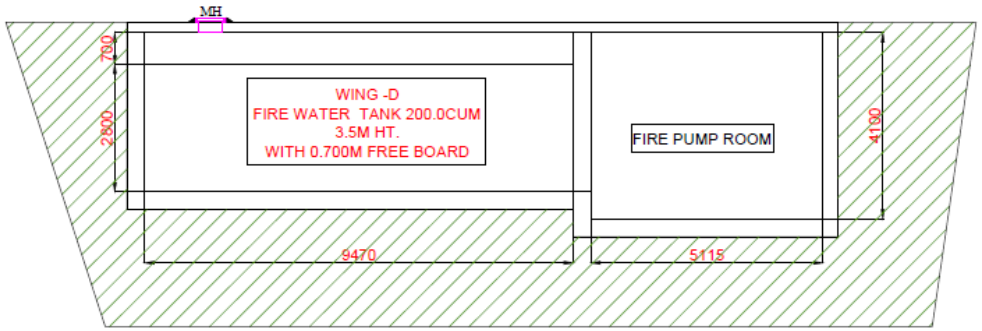
TYPICAL DETAILS FOR CIRCULAR BRICK MANHOLE

UGT LOCATION

LEGENDS	
Fire Tank	
Domestic Tank	
Flushing Tank	
Rain Water Harvesting Tank	

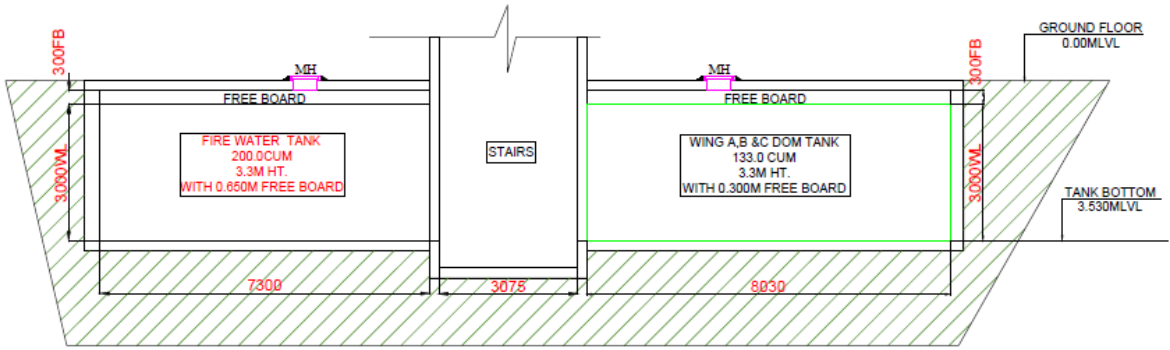


Wing D



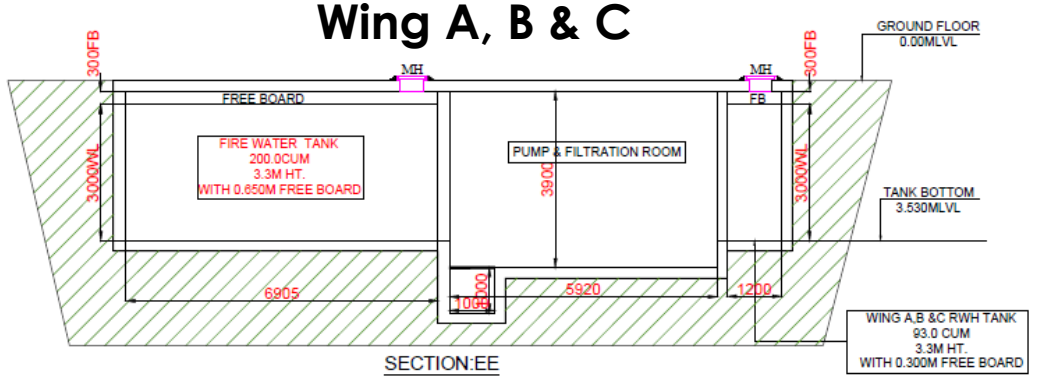
SECTION:GG

Wing A, B & C



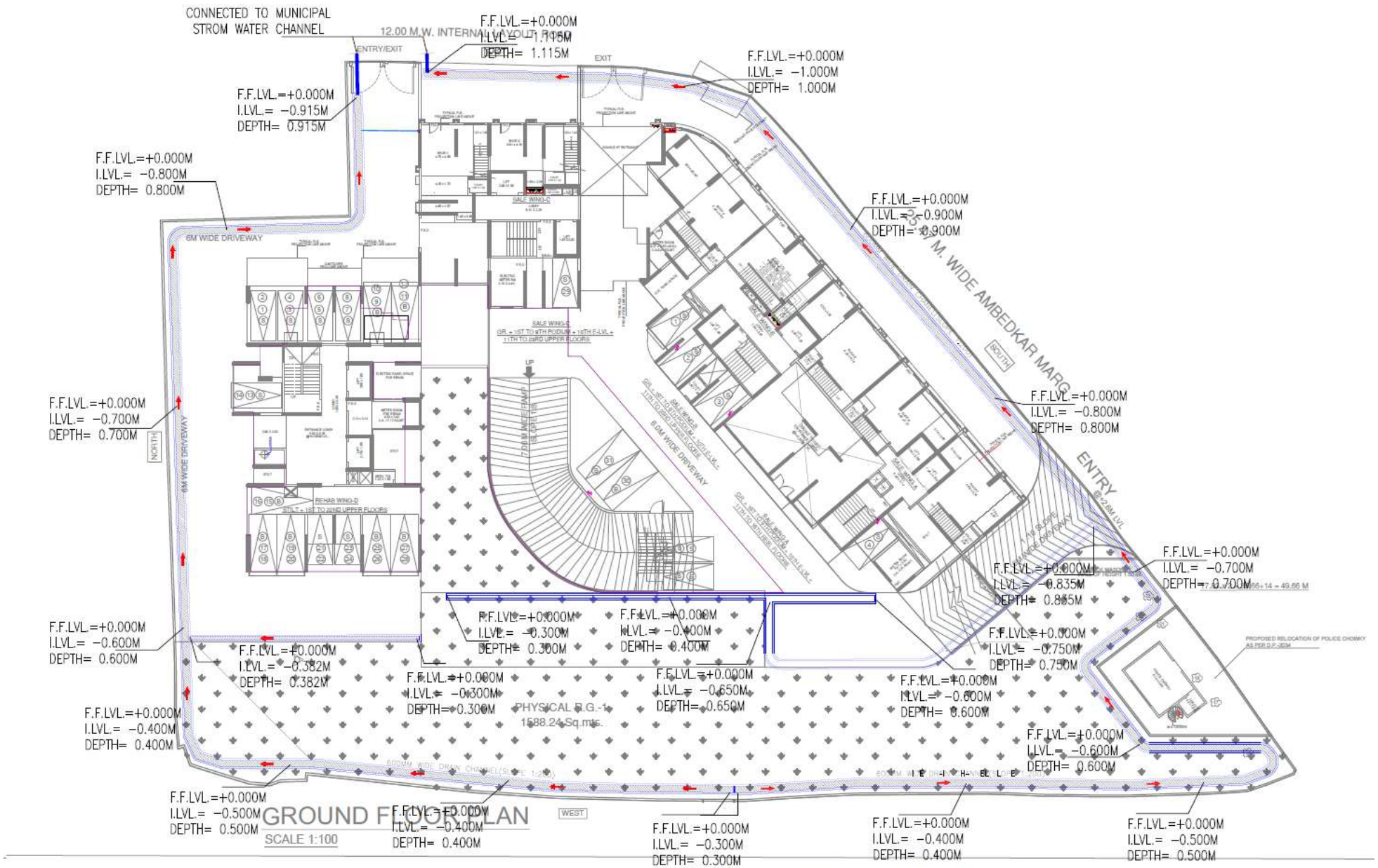
SECTION:FF

Wing A, B & C



SECTION:EE

SWD LAYOUT



GURU TEGH BAHADUR NAGAR RAILWAY STATION

STORM WATER CACULATION

ITEMS	AREA SQ.M (A)	RUN-OFF COEFIECIENT ©	RAIN WATER INTENCITY M/HR (I)	DISCHARGE (Q)M3/HR
GROUND FLOOR LEVEL				
AREA OF LAND SCAPE(AT PODIUM)	1588	0.8	0.125	158.8
AREA OF LAND SCAPE (AT GROUNDFLOOR)		0.3	0.125	0
AREA OF ROAD AND PAVING		0.7	0.125	0
AREA OF HARDSCAPE	2118	0.9	0.125	238.275
AREA OF ROOF	1061	0.9	0.125	119.3625
TOTAL	**4767**			**516.44**
GRAND TOTAL IN CUM./HR.				516.44
GRAND TOTAL IN CUM/S				0.143
WIDTH OF TRENCH IN MTRS.				0.6
ASSUME DEPTH OF THE TRENCH IN MTRS.				0.3

STORM WATER CHANNEL DESIGN			
Q=DISCHARGE =	10 X CX I X A		
C=(COEFFICIENT OF ROUGHNESS)=		0.8	.6 TO.8
I=INTENSITY OF RAINFALL=		125	MM/HR
A=AREA=		0.4767	HECTORS
TOTAL DISCHARGE FROM PLOT	Q =	476.7	M3/HR
TOTAL DISCHARGE FROM PLOT	Q =	0.132416667	M3/SEC
CONSIDER 2 NO.OF TRENCH DISCHARGE =	Q1 =	238.35	M3/HR
CONSIDER 2 NO.OF TRENCH DISCHARGE =	Q1 =	0.066208333	M3/SEC
MANINGS FORMULE			
VELOCITY = V=	1/N X R^2/3 X S ^1/2		1.015610253
WHERE			
N=COEFFICIENT OF ROUGHNESS		0.015	.01 TO .03
R=MEAN DEPTH=	A/P	0.1	MET
assumed	A=	0.18	SQM
	P=	1.8	MET
WIDTH OF TRENCH ASSUMED =		600	MM
STARTING DEPTH OF TRENCH ASSUMED =		300	MM
SLOPE	S	0.005	(i.e 1:200)
RECOMMENDED VELOCITY		.75 TO 2.4 M/S	
check := velocity should in between the recommended velocity.			
DISCHARGE CAPACITY OF ONE TRENCH=	AXV	0.182809845	M3/SEC
		658.12	M3/HR
WHERE			
A=ASSUMED AREA OF TRENCH	A=	0.18	M2
V=VELOCITY OF FLOW IN TRENCH	V=	1.015610253	M/SEC
HENCE TOTAL DISCHAGE CAPACITY FROM 2 NO. OF TRENCH Q =		329.06	M3/HR
WHICH EXCEEDS THE TOTAL DISCHARGE FROM PLOT i.e =		476.7	M3/HR
DISCHAGE CAPACITY TRENCH EXCEEDS THE DISCHAGE FROM PLOT. HENCE TRENCH DESIGN IS SAFE.			

RWH TANK CALCULATION

CALCULATION OF RAIN WATER TANK		18.10.23
AVRAGE ANNUAL INTENSITY OF RAINFALL :	MTRS./HR	0.05
AREA NAME	BLDG.01	
AREA LAND SCAPE (AS PER DRAWING AT GROUND FLOOR)	SQM.	0
AREA LAND SCAPE (AS PER DRAWING AT PODIUM)	SQM.	1588
AREA ROAD AND PAVING (AS PER DRAWING)	SQM.	
AREA OF ROOF (AS PER DRAWING)	SQM.	260
AREA HARD SCAPE	SQM.	2118
RUN-OFF COEFFICIENTS :		
LAND SCAPE (AT GROUND FLOOR)		0.3
LAND SCAPE (AT PODIUM)		0.9
ROAD & PAVING		0.7
ROOF		0.9
HARD SCAPE - ON 2ND FLOOR		0.9
DISCHRARGE (Q)		
LAND SCAPE (AT GROUND FLOOR)	CUM./ HR	0.0
LAND SCAPE (AT PODIUM FLOOR)	CUM./ HR	71.5
GROUND	CUM./ HR	0.0
ROOF	CUM./ HR	11.7
HARD SCAPE	CUM./ HR	95.3
TOTAL		**11.7**
ASSUMING RETENTION TIME	HRS	2
INDIVIDUAL RAIN WATER HARVESTING TANK CAPACITY	CUM	23.40
	SAY	**23 CUM**

POWER REQUIREMENT

S. No.	Power Requirement	
1	**Source of power supply : BEST**	
2	**During Construction Phase**	Connected load: 100 kW D.G. Set : 125 KVA
3	**During Operation Phase**	a) Demand Load: 1846 kW b) Demand Load: 1237 kW
4	**DG set as a Power Back – up during operation**	500 KVA.

ENERGY SAVING MEASURES

REDUCTION IN CONSUMPTION BY USING ENERGY SAVING MEASURE					
1	Energy saving using LED light for Lift Lobby & Staircase				
	Diff Between 12W LED and 20W CFL Lighting Fixture	8 W which comes to 40 %			
	Diff Between 18W LED and 30W CFL Lighting Fixture	12 W which comes to 40 %			
	40 % of saving by using LED light as compare to CFL light	40%			
2	Energy saving using VFD for pumps, Basement ventilation and Lift with High Efficiency Motors	20%			
3	Energy saving using Automatic Timer operation Against Manual operation for External,Facade & Landscape & Common Area Lighting				
	25% lights will be off for 8 hours	25%			
	25% lights will be off for 4 hours	25%			
4	Energy saving using Low Loss Transformer as per ECBC Against Conventional Transformer				
	Low Loss 630kVA Transformer losses are 5.8kW as per ECBC norms compare to Conventional Transformer whose losses are 6.1kW	5%			
5	Use of Solar Water Heater for -----Flats	100%			
A	**Energy Saving Due to LED Lamp**				
		AVG.KWH/ DAY	**PERCE NTAGE**	**DIFFERENCE**	**AVG.KWH/DAY SAVING**
1	Typical floor Passage Area Lighting & Power Load	37	40	21.9	15
2	Staircase Lighting Load	14	40	8.4	6
3	Terrace Lighting Load	35	40	21.0	14
4	Refuge Floor	3	40	2.1	1
5	Common area Lighting & Power Load (80% Lighting Load)	150	20	120.0	30
6	External,Facade & Landscape lighting	53	20	42.7	11
B	**Energy Saving Due to VFD & High Efficiency Motors**				
1	Saving in lift by using V3F drives	280	40	168	112
2	Saving in Plumbing pump by using VFD	320	20	256.0	64
3	Saving in Fire jocky pump by using DOL	330	20	264.0	66
4	Saving in STP by using VFD	640	20	512.0	128
C	**Energy Saving Due to Automatic Timer operation Against Manual operation for External,Facade &**				
1	Saving in External,Facade & Landscape & Common Area from 10pm to 2 am by switching off 25% total lights & from 2am to 6am by switching off 50% total lights	53	25	40.0	13
D	**Energy saving due to Low Loss Transformer as per ECBC Against Conventional Transformer**				
1	2no.630 Kva transformer	3	5	2.9	0.2
Average KWH/Day saving					**460**
Average KWH/Annual saving					**167800**
TOTAL ANNUAL SAVING OF BUILDING COMMON AREAS & UTILITIES					**167800**
SAVING IN PERCENTAGE % OF BUILDING COMMON AREAS & UTILITIES					**23%**

Wing D

REDUCTION IN CONSUMPTION BY USING ENERGY SAVING MEASURE					
1	Energy saving using LED light for Lift Lobby & Staircase				
	Diff Between 12W LED and 20W CFL Lighting Fixture	8 W which comes to 40 %			
	Diff Between 18W LED and 30W CFL Lighting Fixture	12 W which comes to 40 %			
	40 % of saving by using LED light as compare to CFL light	40%			
2	Energy saving using VFD for pumps, Basement ventilation and Lift with High Efficiency Motors	20%			
3	Energy saving using Automatic Timer operation Against Manual operation for External,Facade & Landscape & Common Area Lighting				
	25% lights will be off for 8 hours	25%			
	25% lights will be off for 4 hours	25%			
4	Energy saving using Low Loss Transformer as per ECBC Against Conventional Transformer				
	Low Loss 630kVA Transformer losses are 5.8kW as per ECBC norms compare to Conventional Transformer whose losses are 6.1kW	5%			
5	Use of Solar Water Heater for -----Flats	100%			
A	**Energy Saving Due to LED Lamp**				
		AVG.KWH/ DAY	**PERCE NTAGE**	**DIFFERENCE**	**AVG.KWH/DAY SAVING**
1	Typical floor Passage Area Lighting & Power Load	70	40	41.7	28
2	Staircase Lighting Load	48	40	28.8	19
3	Terrace Lighting Load	11	40	6.6	4
4	Refuge Floor	6	40	3.3	2
5	Common area Lighting & Power Load (80% Lighting Load)	120	20	96.0	24
6	External,Facade & Landscape lighting	120	20	96.0	24
B	**Energy Saving Due to VFD & High Efficiency Motors**				
1	Saving in lift by using V3F drives	512	40	307	205
2	Saving in Plumbing pump by using VFD	160	20	128.0	32
3	Saving in Fire jocky pump by using DOL	255	20	204.0	51
4	Saving in STP by using VFD	640	20	512.0	128
C	**Energy Saving Due to Automatic Timer operation Against Manual operation for External,Facade &**				
1	Saving in External,Facade & Landscape & Common Area from 10pm to 2 am by switching off 25% total lights & from 2am to 6am by switching off 50% total lights	120	25	90.0	30
D	**Energy saving due to Low Loss Transformer as per ECBC Against Conventional Transformer**				
1	2no.630 Kva transformer	3	5	2.9	0.2
Average KWH/Day saving					**548**
Average KWH/Annual saving					**199877**
TOTAL ANNUAL SAVING OF BUILDING COMMON AREAS & UTILITIES					**199877**
SAVING IN PERCENTAGE % OF BUILDING COMMON AREAS & UTILITIES					**21%**

Wing A,B & C

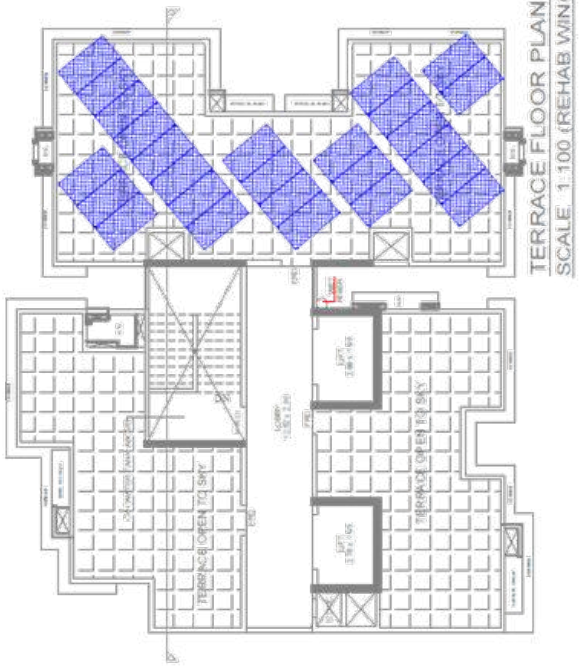
SOLAR PV PANELS

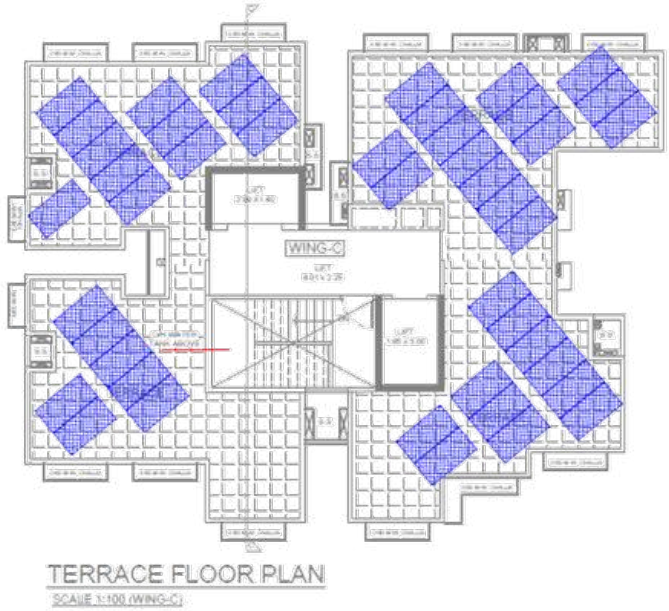
Wing A, B & C

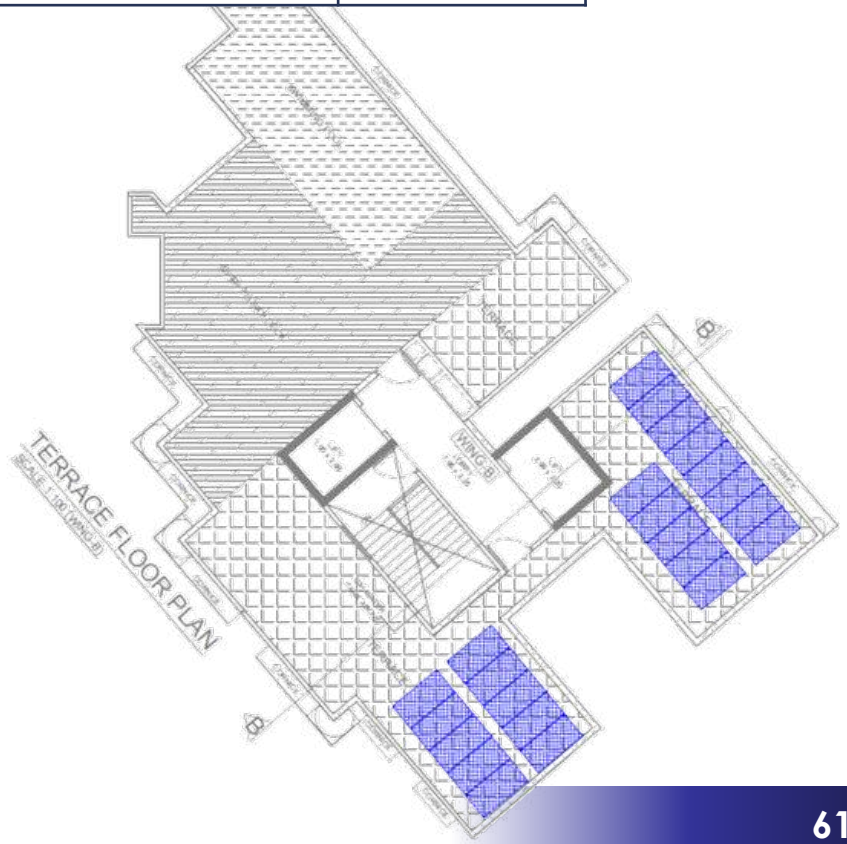
Maximum Demand *(Excluding Amenity & STP)*	760 kW
Total Terrace Area	478 sq.mt
Area available for for PV system	525.10 sq.mt
Area for SPV panel sq.meter	2.0
No. of solar PV panels provided (0.45 kW/Panel)	68
Total Electricity generated BY SPV PANEL	30.60 kW
Terrace Area Required For SPV panel	390.00 sq.mt
Energy Saving by SPV Panels in %	5.61 %

Wing D

Maximum Demand *(Excluding Amenity & STP)*	460 kW
Total Terrace Area	369 sq.mt
Area available for for PV system	525.10 sq.mt
Area for SPV panel sq.meter	2.0
No. of solar PV panels provided (0.45 kW/Panel)	54
Total Electricity generated BY SPV PANEL	24.30 kW
Terrace Area Required For SPV panel	245.00 sq.mt
Energy Saving by SPV Panels in %	5.32 %

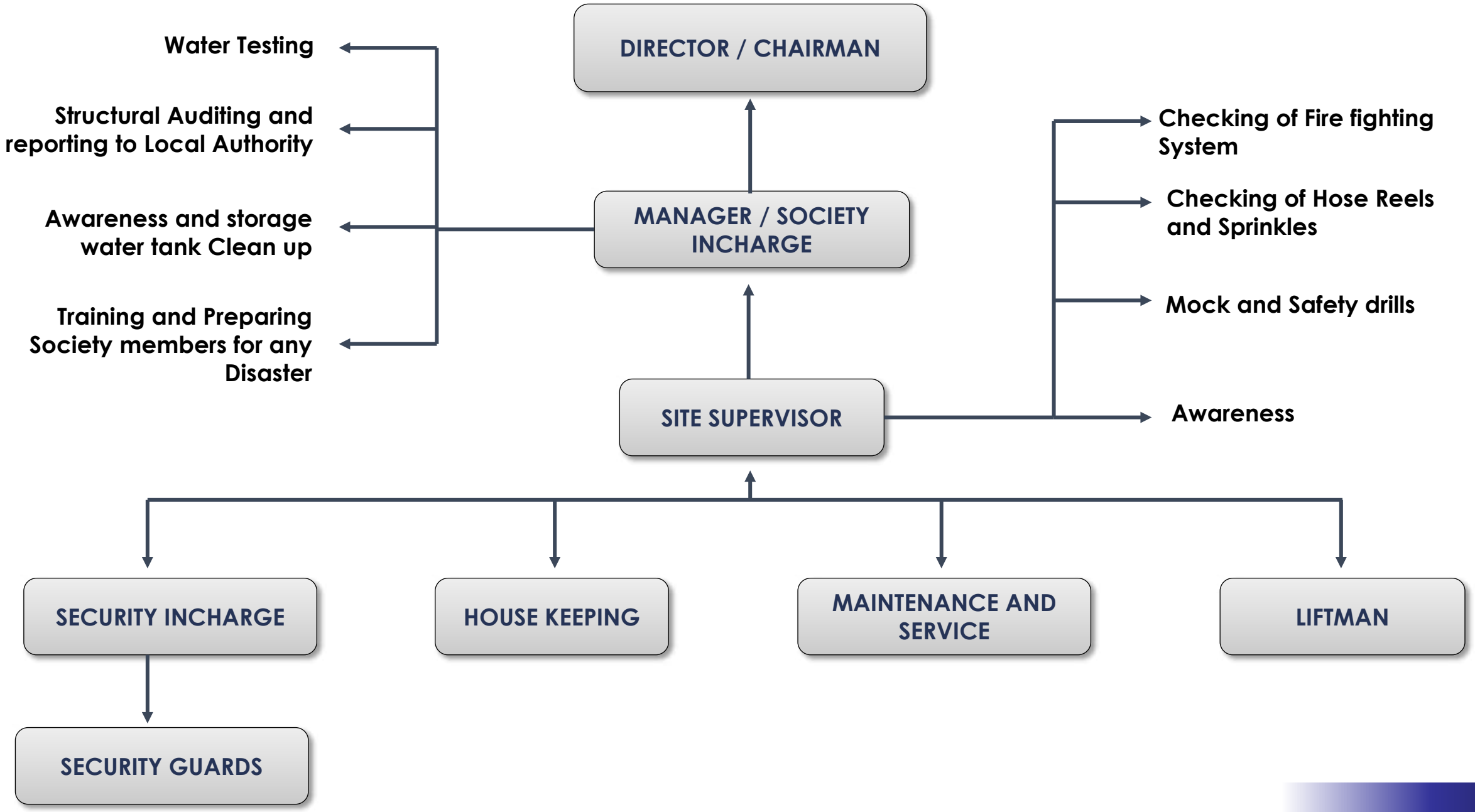






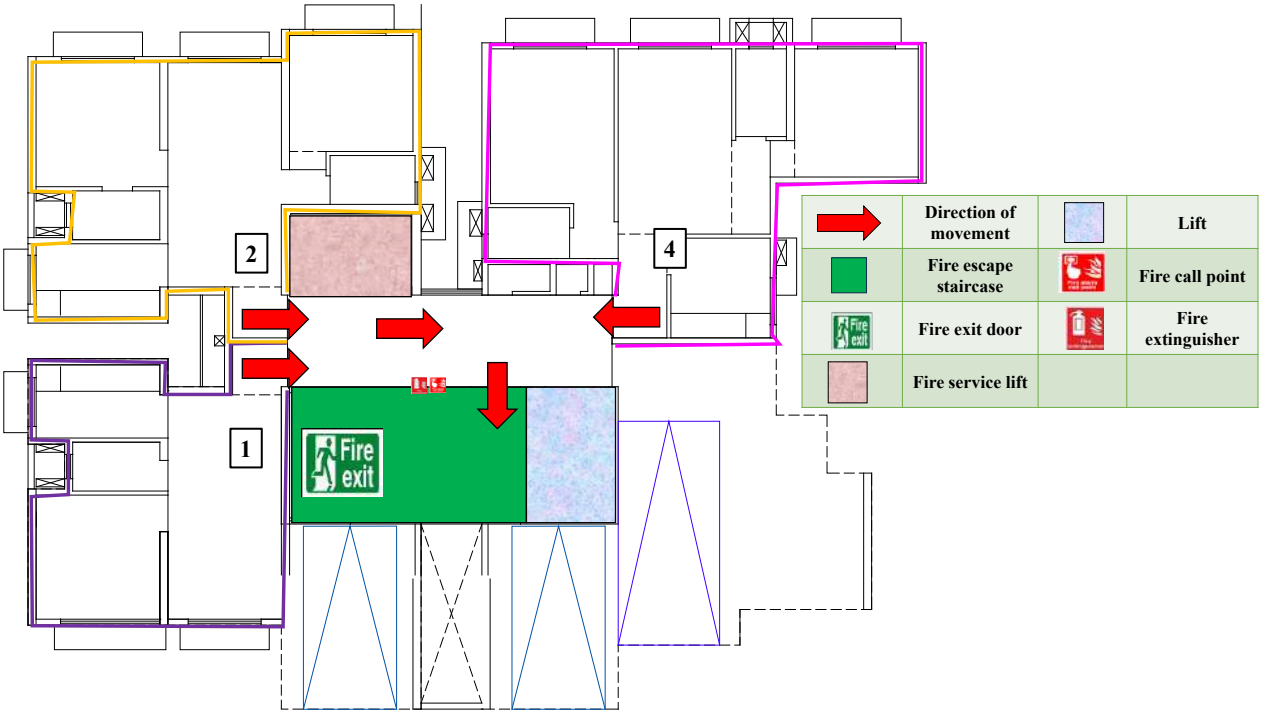
DISASTER MANAGEMENT PLAN

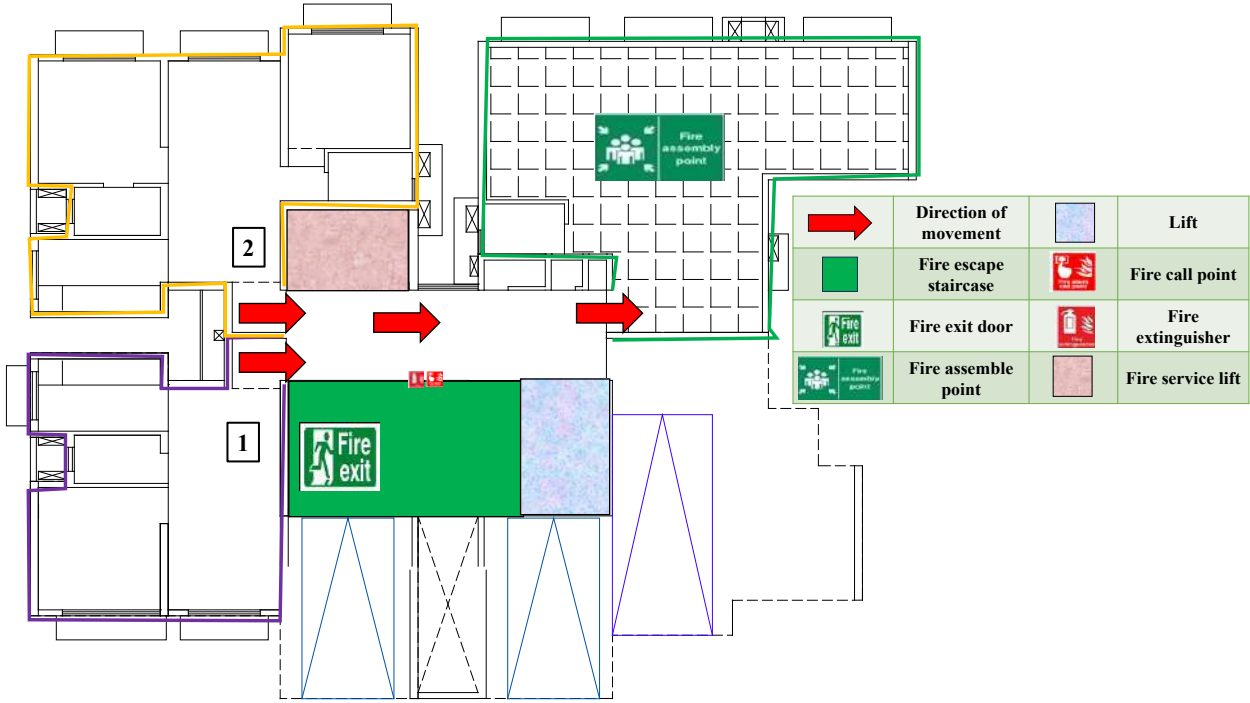
DISASTER MANAGEMENT CELL (DMC)



EVACUATION PLAN

Sale Wing C



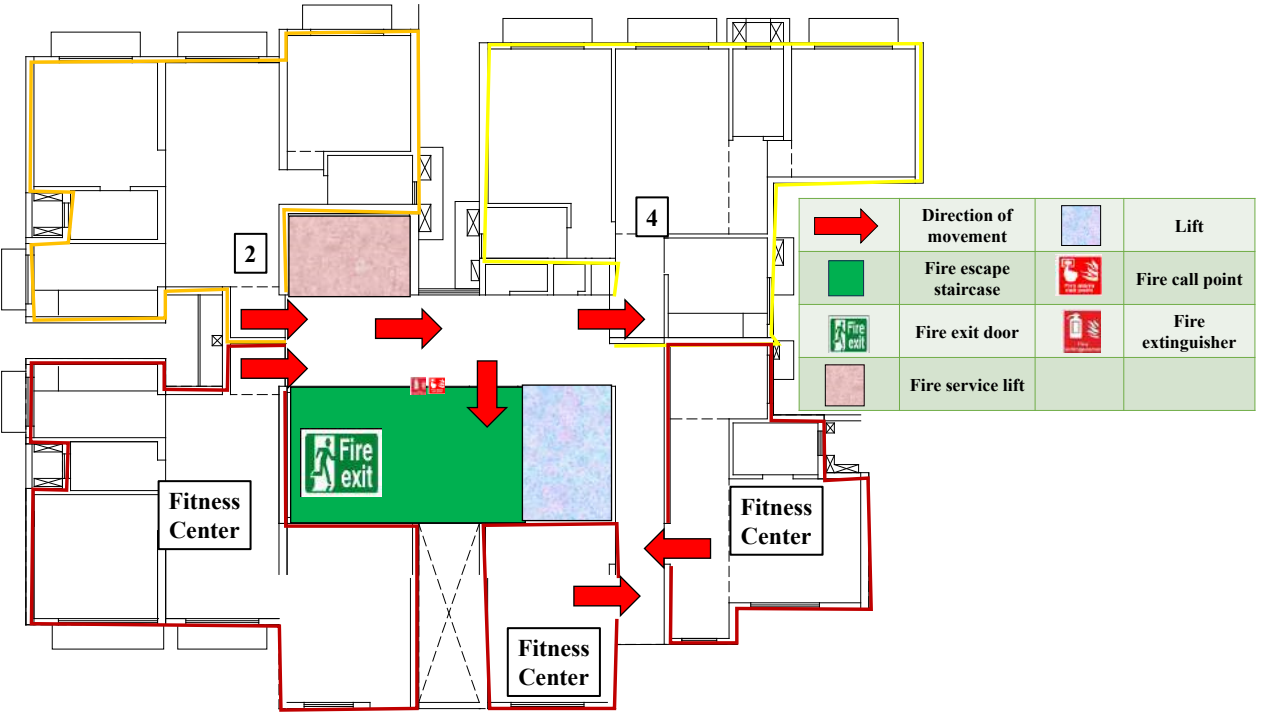


2nd to 7th & 9th typical floor

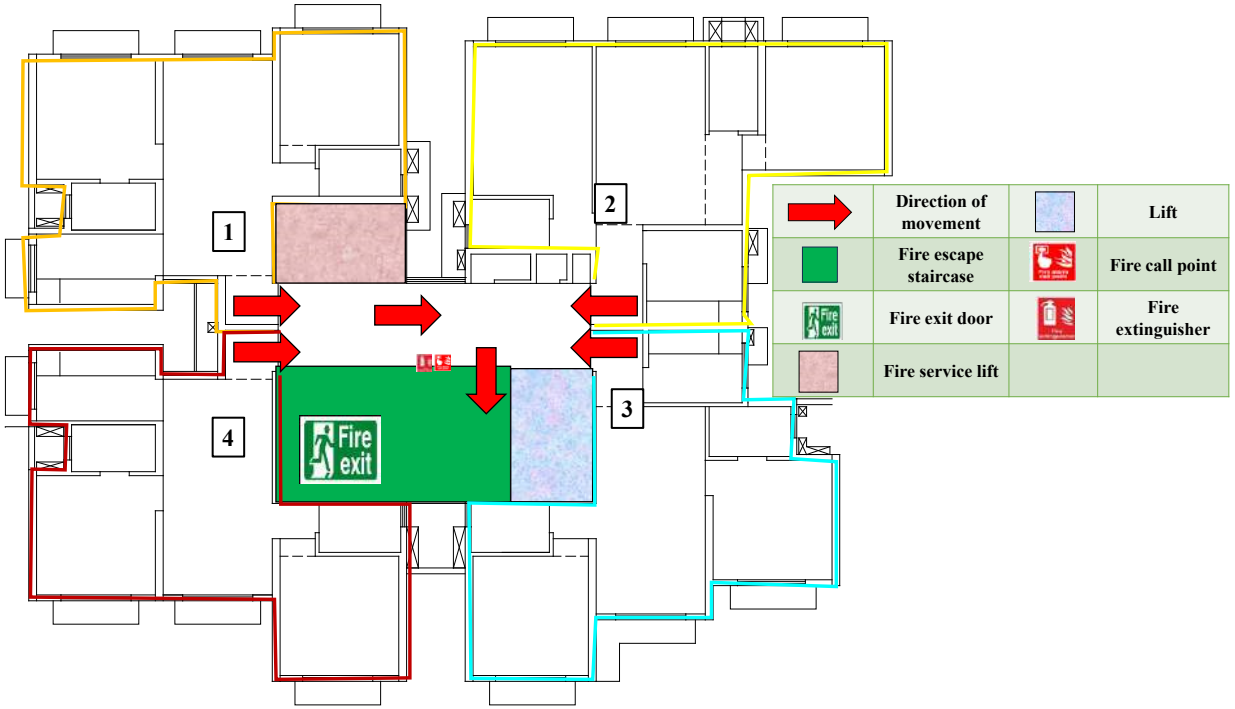
8th refuge floor

EVACUATION PLAN

Sale Wing C



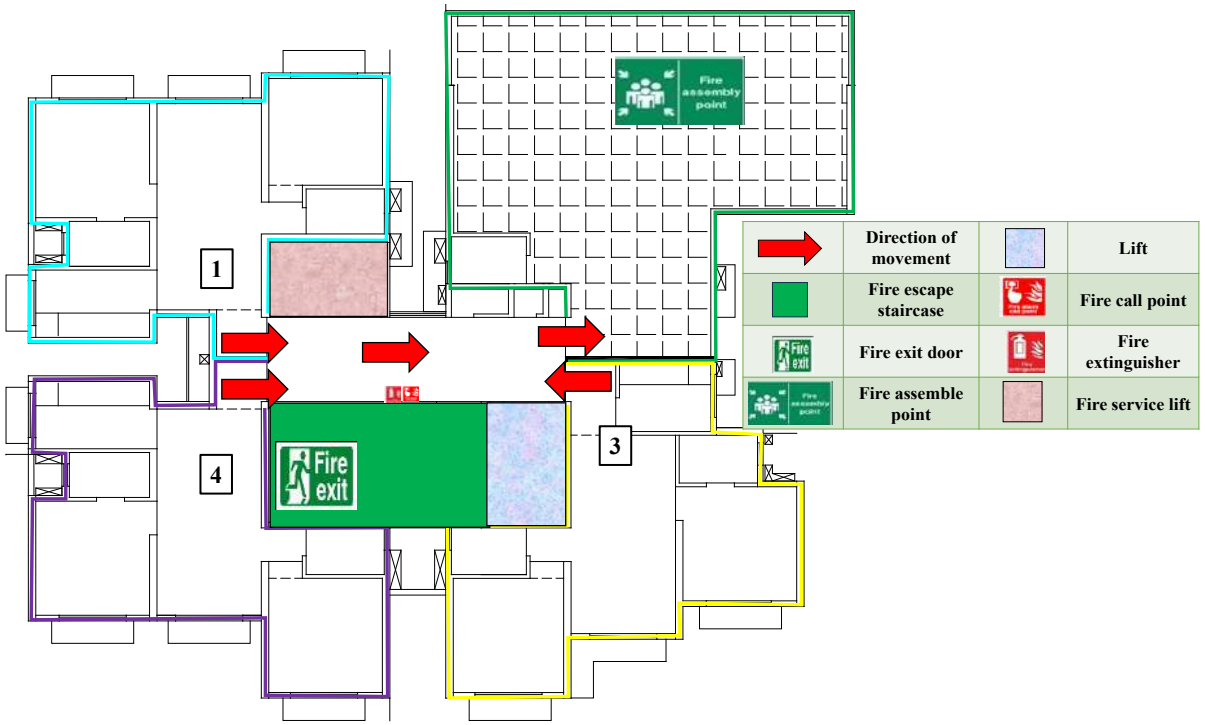
10th E Deck floor



11th to 14th , 16th to 23rd typical floor

EVACUATION PLAN

Sale Wing C



15th refuge floor

LIST OF HOSPITALS NEAR PROPOSED PROJECT

Sr. No.	Name	Address	DISTANCE FROM PROPOSED SITE (In Km)	Contact No.
1	Sion Hospital	RB2 Central Railway Quarters, Jain Society, Sion, Mumbai, Maharashtra 400022	0.95	-----
2	Lion Tarachand Bapa Hospital	Jain Society, Sion West, Mumbai, Maharashtra 400022	1.4	09702360126
3	Sai Multispeciality Hospital & Research Centre	2VQ4+X2F, 90 Feet Rd, Masiha Islampura Co-op Hsg. Soc. Ltd, Dharavi, 90 Feet Rd, behind Sion Hospital, Muslim Nagar, Kumbhar Wada, Dharavi, Mumbai, Maharashtra 400017	1.7	09076073367
4	Sobti Hospital	Manu Mahal, 471C, Ground Floor, Kings Cir, Matunga East, Mumbai, Maharashtra 400019	1.8	-----

DETAILS OF FIRE STATIONS NEAR PROPOSED PROJECT

Name Of Fire Station	Address	Phone No.	Nearest Distance By Road (In Km)	Time
Rawali Camp Fire Station	2VP8+6Q2, Leelabai Kasbe Marg, Sardar Nagar, 4, Sion Koliwada, Mumbai, Maharashtra 400037	02224077841	0.40	2min
Wadala Fire Station	14, Shaikh Mistry, Dargah Rd, Wadala East, Sangam Nagar, Mumbai, Maharashtra 400037	-----	2.0	8min

Locations of Nearby Hospitals

Locations of Nearby fire station

Rawali Fire station

Proposed project

Fire station

To reach Rawali Fire station from the proposed site It takes 2 min & 0.40 km with usual traffic.

Wadala Fire station

Proposed project

Fire station

To reach Wadala Fire Station from the proposed site It takes 8 min & 2.5 km with usual traffic.

DMP costing (construction phase)

Sr. No.	Description	Cost per yr.
1	Water Reservoir/Tank	70000
2	Hydrant line & Valve	15200
3	Temporary hydrant Pumps	27000
4	Portable fire extinguishers	17500
5	Fire Buckets	2500
6	Fire Blankets	2500
7	Fire Marshals	35000
8	Train first aiders	80000
9	Stretchers	30000
10	Public address system Mega phone	50000
11	Walky talkie	85000
12	Wheel chair	25000
13	Submersible pumps	180000
14	Diesel pumps	300000
15	Life buoys	3000
16	Temporary pipe arrangement. / Hose pipe	3000
17	CCTV	72000
18	First Aid Kit	5000
19	Lighting Arrestor	30736
20	Signage	9000
21	PPE	61680
22	DMP Personnel	720000
	Total	**18,24,116 18.24 lakhs**

DMP costing (operation phase)

Disaster	Component	Cost
Flood	Sump Pump for basement	45000
	oil & Grease traps	10000
	SWD pipe	1050000
Earthquake	Cost of structural safety	250000
Lightening	Lightening Arrester	15368
Fire	Hydrant riser	7560000
	Hose Reel	319200
	Fire Hydrant System	9000
	Fire Extinguishers	147000
	Signages	50400
	Fire Alarm System	79800
	Fire Pump	16000
	Fire tank	17500
	Automatic Sprinklers	27216
Medical Equipments for emergencies	First aid box	2500
CCTV		2160000
PA system		25000
Intercom Facility		84000
D.G.Set		5000000
Man power		100000
Total		**16967984**
Operation & Maintenance Cost/Year		**8,48,399 8.48 lakhs**

Human Evacuation Time

Particulars	Details			
	Wing A	Wing B	Wing C	Wing D
Population	164	424	376	420
Evacuation Time	10 min	10 -15 min	10 -15 min	10 -15 min

***NOTE: 2.5 m/sec Lift speed was considered for the calculation of Evacuation Time**

$$\boldsymbol{Formula:}\ \boldsymbol{T} = [(-)_{s}^{D} * P * n]\ N$$

Where,

D = Distance till ground

floor s = Speed of lift

P = Capacity of

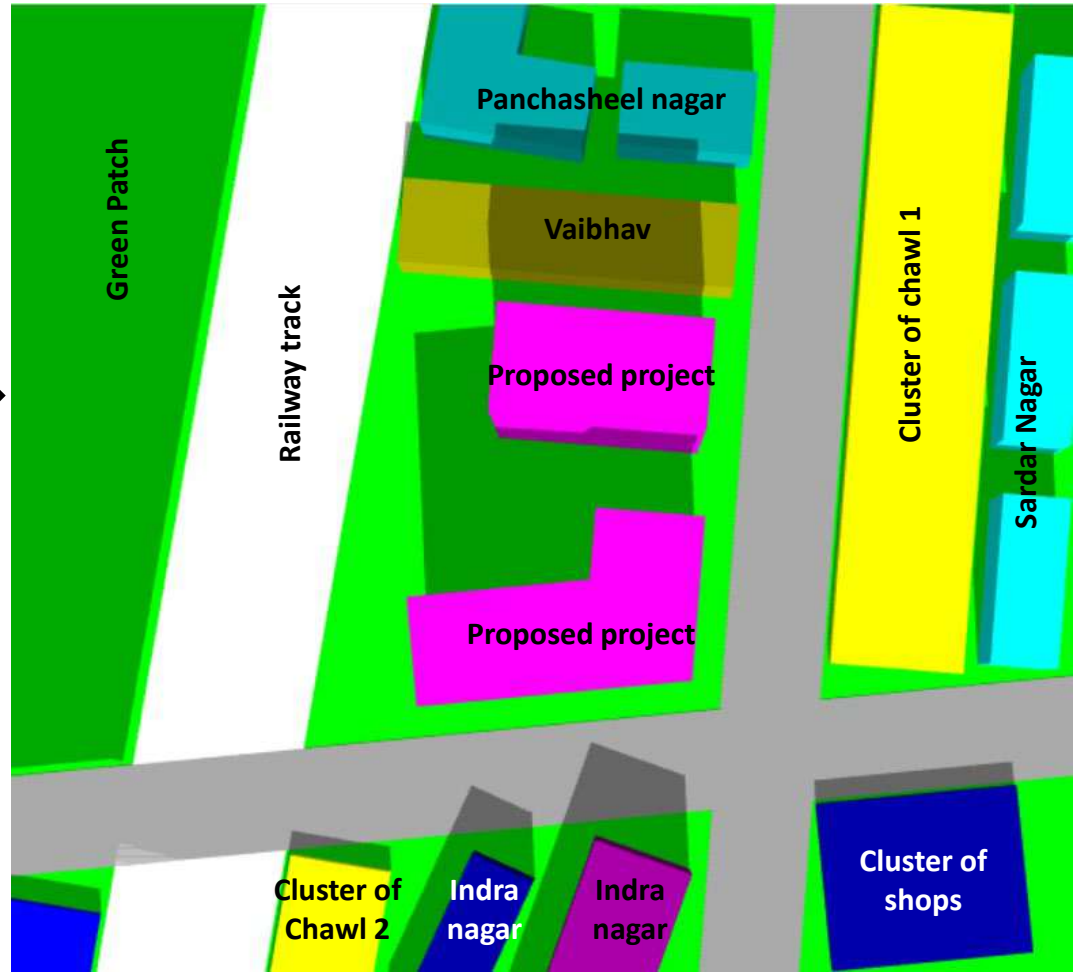
lift n= No .of trips

N = No. of lifts

SHADOW ANALYSIS

SHADOW ANALYSIS

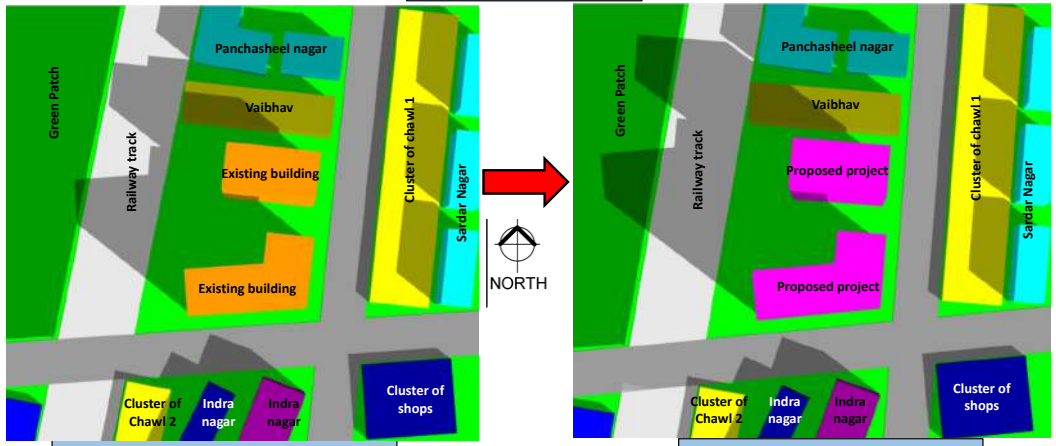
NORTH



Structures	Distance from the proposed project in (m)	Direction
Indra Nagar	63.23	South
Cluster Of Chawl 2	94.54	South
Vaibhav	47.83	North
Panchasheel Nagar	68.94	North
Cluster Of Chawl 1	56.73	East
Sardar Nagar	88.74	East
Cluster Of Shops	67.73	Southeast

SHADOW ANALYSIS

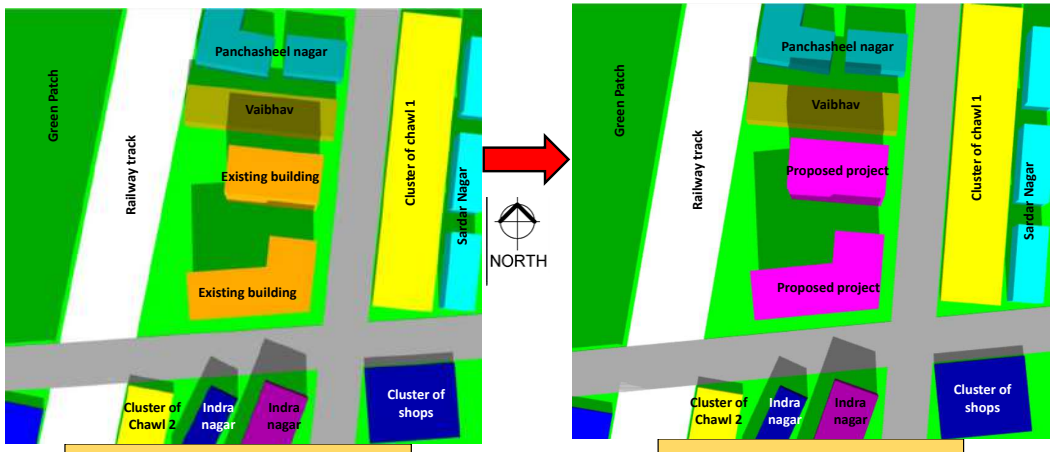
Morning shadow



Without proposed project

With proposed project

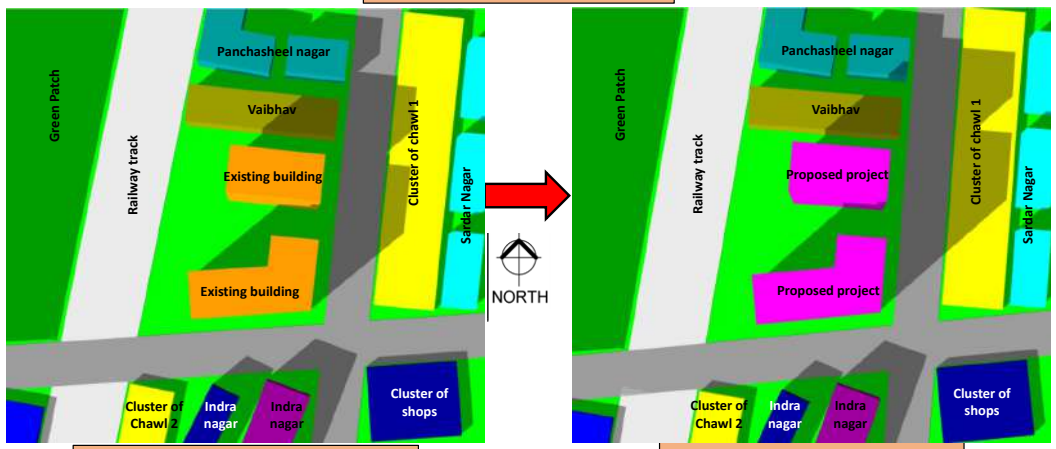
Midday shadow



Without proposed project

With proposed project

Late afternoon shadow



Without proposed project

With proposed project

PROBABLE SUNLIGHT PERIOD WITH PROPOSED PROJECT

Structures	Without the proposed project			With the proposed project		
	Partial shadow	Full shadow	Full sunlight	Partial shadow	Full shadow	Full sunlight
Indra Nagar	2hrs30min	-----	8hrs30min	2hrs30min	-----	8hrs30min
Cluster Of Chawl 2	4hrs	30min	6hrs30min	4hrs	30min	6hrs30min
Vaibhav	10hrs	-----	30min	10hrs	-----	30min
Panchasheel Nagar	11hrs	-----	-----	11hrs	-----	-----
Cluster Of Chawl 1	8hrs30min	-----	2hrs30min	9hrs	-----	2hrs
Sardar Nagar	4hrs	-----	7hrs	4hrs	-----	7hrs
Cluster Of Shops	-----	2hrs30min	8hrs30min	-----	2hrs30min	8hrs30min

Note: All these predictions and findings were made with respect to proposed site for all seasons.

PERCENTAGE ASSESSMENT OF SUNLIGHT PERIOD

Percent shadow (%)			
Structures	**Without the proposed project**	**With the proposed project**	**Remark**
Indra Nagar	100%	100%	The proposed project will not affect the surrounding structures.
Cluster Of Chawl 2	95%	95%	
Vaibhav	100%	100%	
Panchasheel Nagar	100%	100%	
Cluster Of Chawl 1	100%	100%	
Sardar Nagar	100%	100%	
Cluster Of Shops	86%	86%	

Note:

100 % sunlight period consists of total 11 hrs of sunlight period (which includes partial sunlight + full sunlight)
Partial Sunlight : sunlight is falling partially on the structure
Full sunlight : All the structures are completely exposed to Sunlight

TRAFFIC IMPACT ASSESSMENT

TRAFFIC COUNTING LOCATIONS

Name of the Road	Type of the Road	Capacity			Remark
		Arterial*	Sub – Arterial**	Collector***	
Dr. Ambedkar Road	2-Lane undivided (Two-way)	1500	1200	900	Currently operating as Sub-Arterial road as per IRC 106:1990

NEARBY RAILWAY STATION, METRO STATION & BUS DEPOT

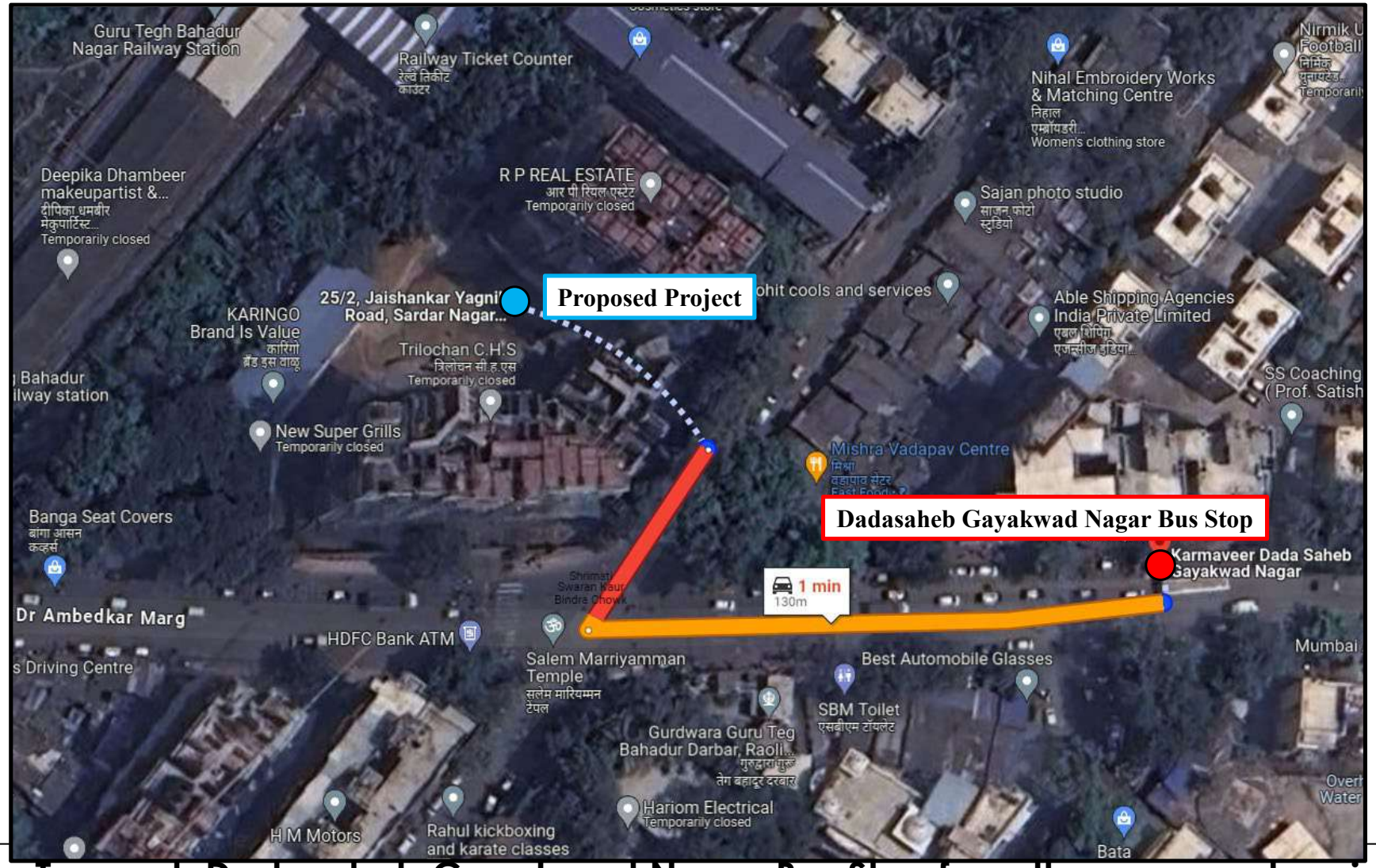
Railway Station	Distance (In Km)	Bus Stop	Distance (In Km)	Monorail Station	Distance (In Km)
GTB Nagar	1	DadaSaheb Gayakwad Nagar	0.130	GTB Nagar	0.90

NEARBY RAILWAY STATION

GTB Nagar Railway Station

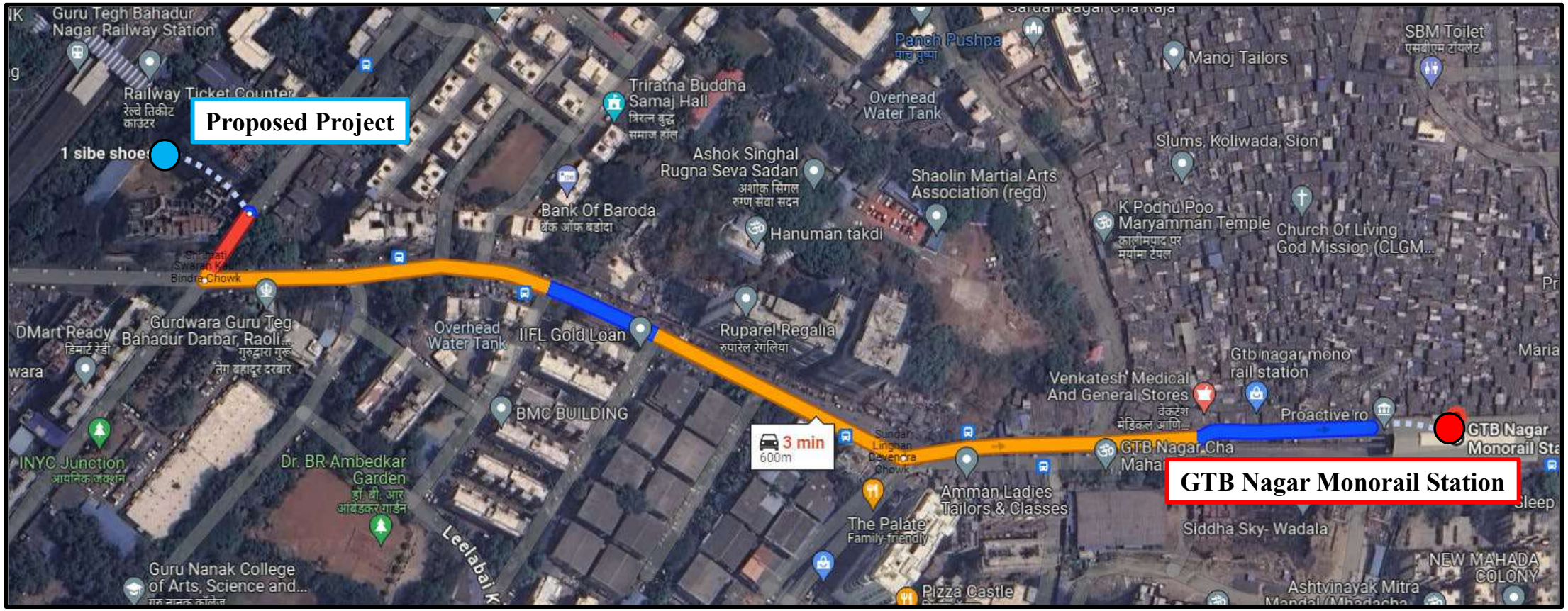
To reach GTB Nagar Railway Station from the proposed project requires 4 min and a distance of 1 km via Dr. Ambedkar Road.

Dadasaheb Gayakwad Nagar Bus Stop



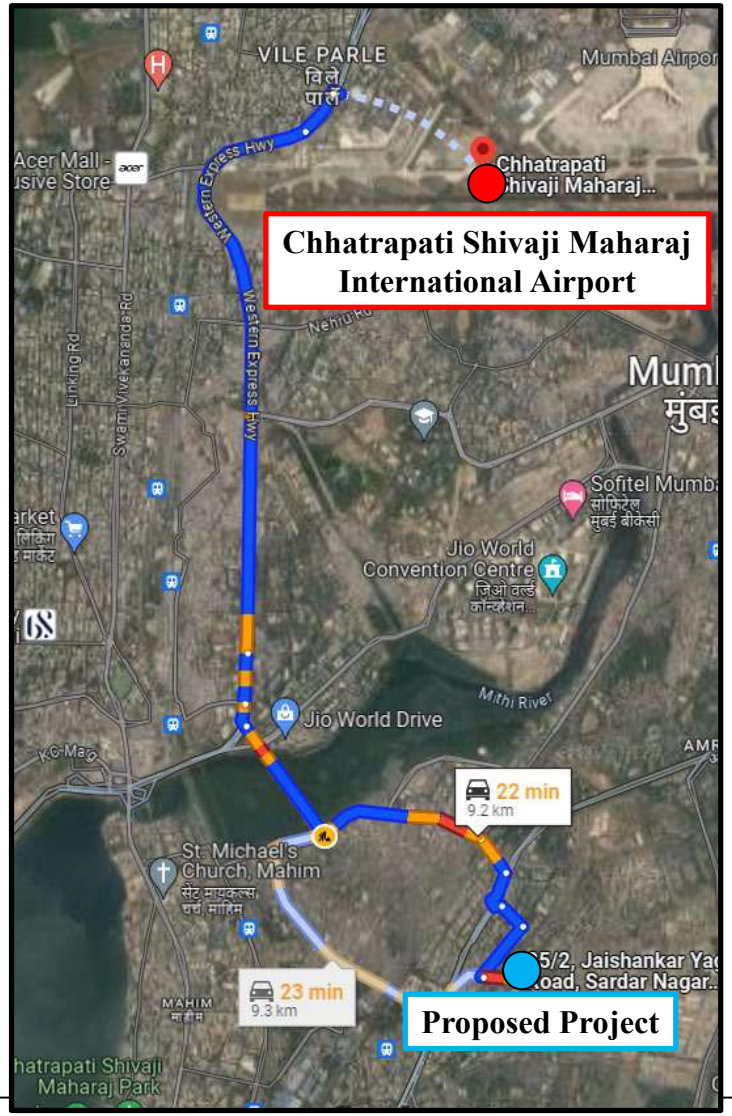
To reach Dadasaheb Gayakwad Nagar Bus Stop from the proposed project requires 1 min
and a distance of 0.130 km via Dr. Ambedkar Road.

GTB Nagar Mono Station



To reach GTB Nagar Mono Station from the proposed project requires 3 min and a distance of 0.60 km via Dr. Ambedkar Road.

Chhatrapati Shivaji Maharaj International Airport

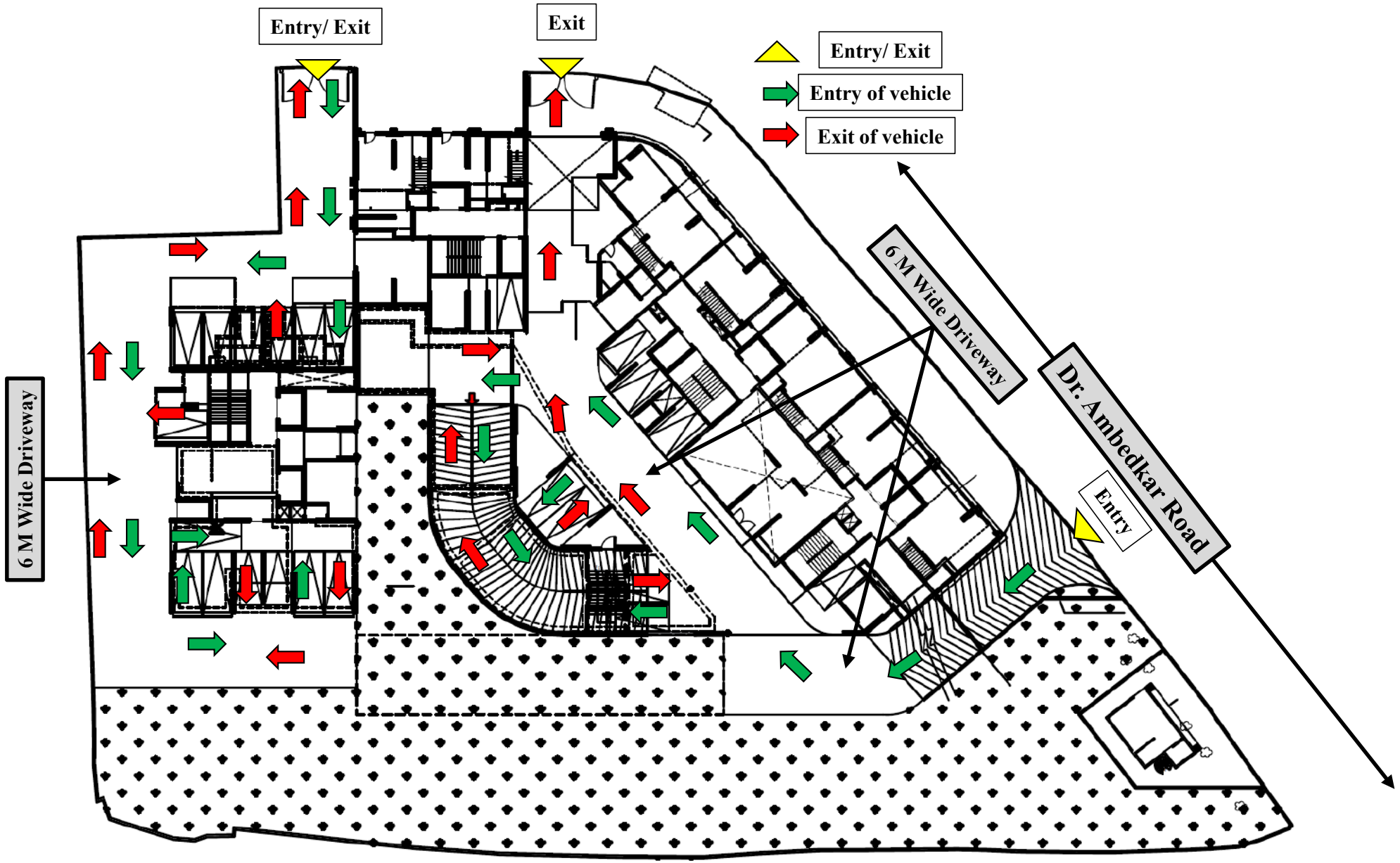


To reach Chhatrapati Shivaji Maharaj International Airport from the proposed project requires 22 min and a distance of 9.2 km via Western Express Highway.

VC DETAILS FOR CURRENT AND FUTURE SCENARIO FOR ROADS NEAR PROPOSED SITE

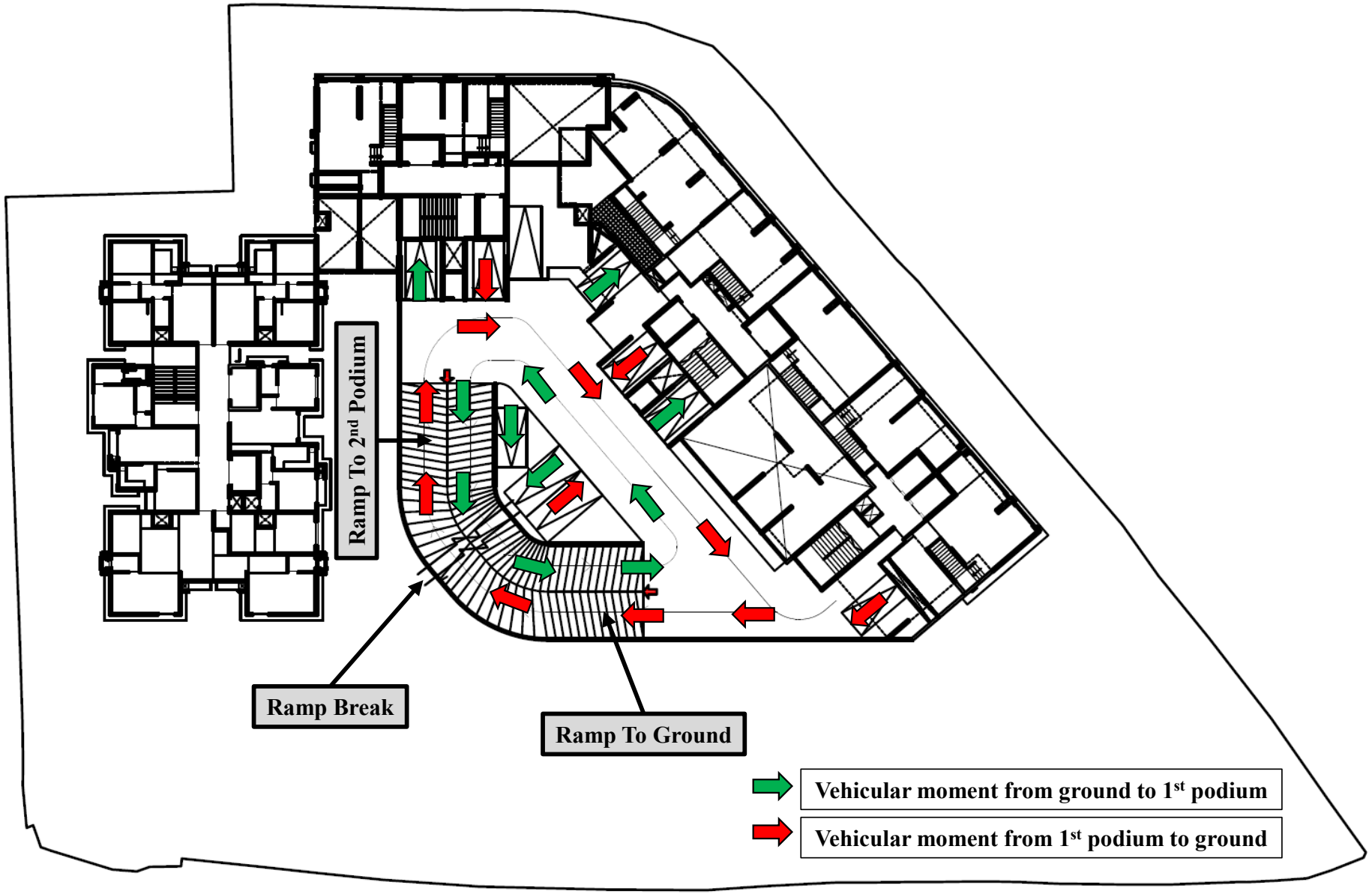
Name of Road	Current Year (2023)			2028						2033					
	PCU	VC without parking on side of road	VC with parking on side of road	Without Project		With Project		With Project & Road Widening		Without Project		With Project		With Project & Road Widening	
				PCU	VC and LOS	PCU	VC and LOS	PCU	VC and LOS	PCU	VC and LOS	PCU	VC and LOS	PCU	VC and LOS
Dr. Ambedkar Road	446	0.30 LOS: B	0.37 LOS: B	416	0.28 LOS: B	567	0.38 LOS: B	594	0.40 LOS: B	504	0.34 LOS: B	694	0.46 LOS: C	721	0.48 LOS: C

INTERNAL VEHICULAR MOVEMENT (SWEPT PATH)

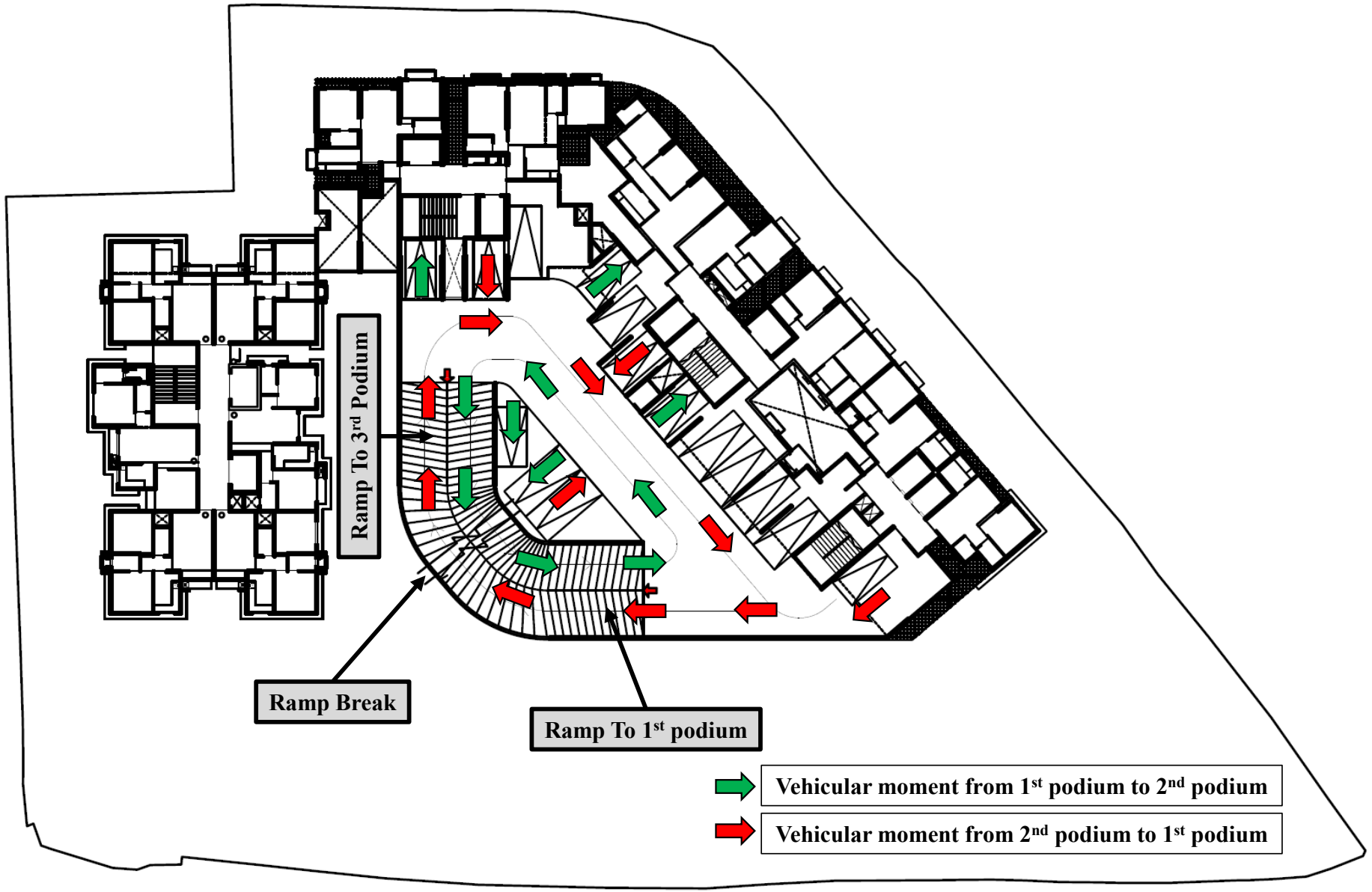


Ground floor

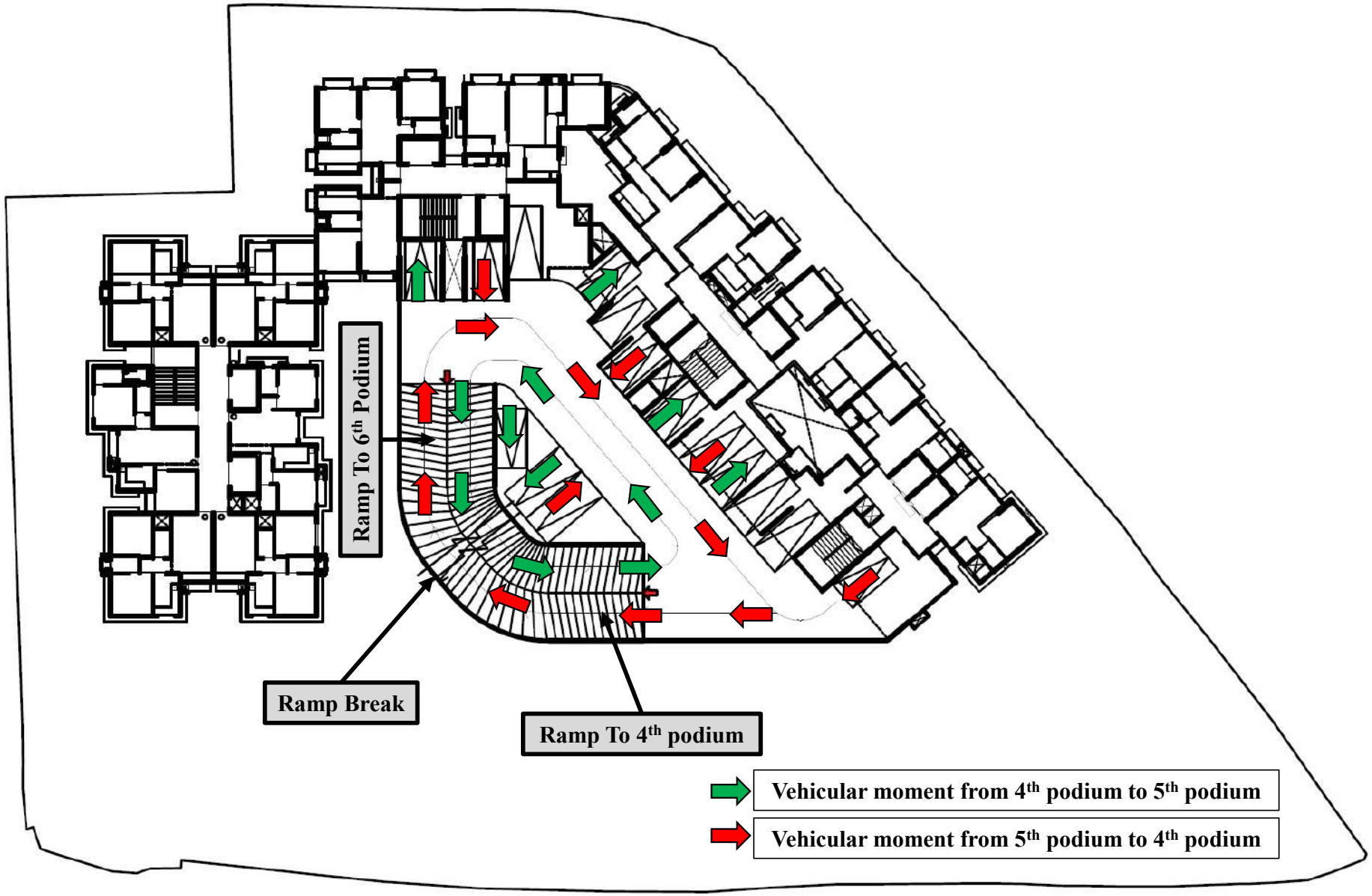
INTERNAL VEHICULAR MOVEMENT (SWEPT PATH)



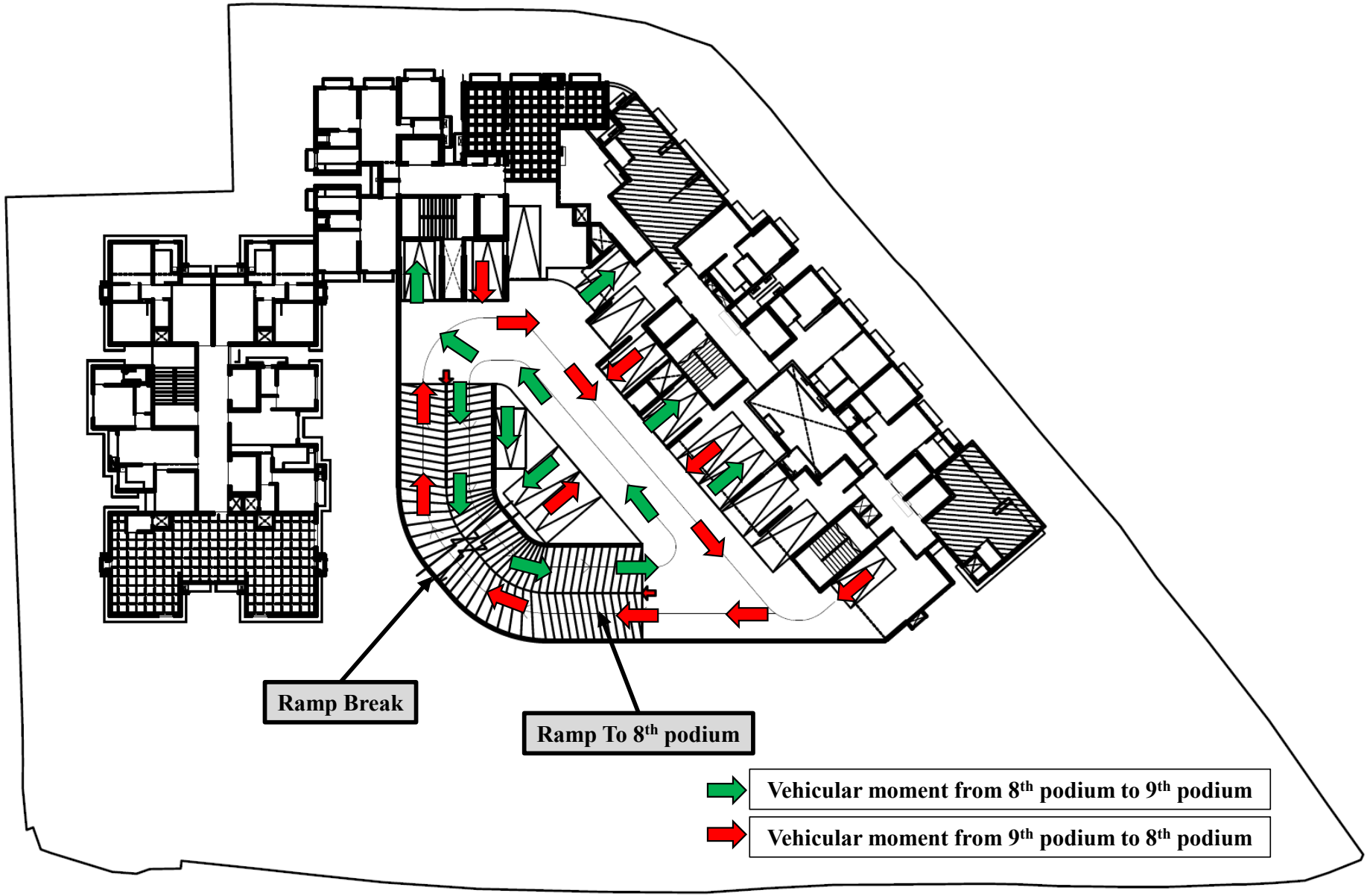
INTERNAL VEHICULAR MOVEMENT (SWEPT PATH)



INTERNAL VEHICULAR MOVEMENT (SWEPT PATH)



INTERNAL VEHICULAR MOVEMENT (SWEPT PATH)



Vehicular Evacuation Time	
Parameters	**Details**
Total Vehicles	167
Width of Driveway	6 m
No. of Exit at Ground	2
Farthest Distance Covered By Last Car	35
Peak Hour Evacuation (75% Vehicle)	16mins
Emergency Evacuation (100% Vehicles)	18-20 mins

***Note: Speed of the vehicle was considered to be 10 Km/hr**

$$\boldsymbol{Formula}: \boldsymbol{T = (t * N * L)/D}$$

Where,

T = Evacuation Time for all vehicles

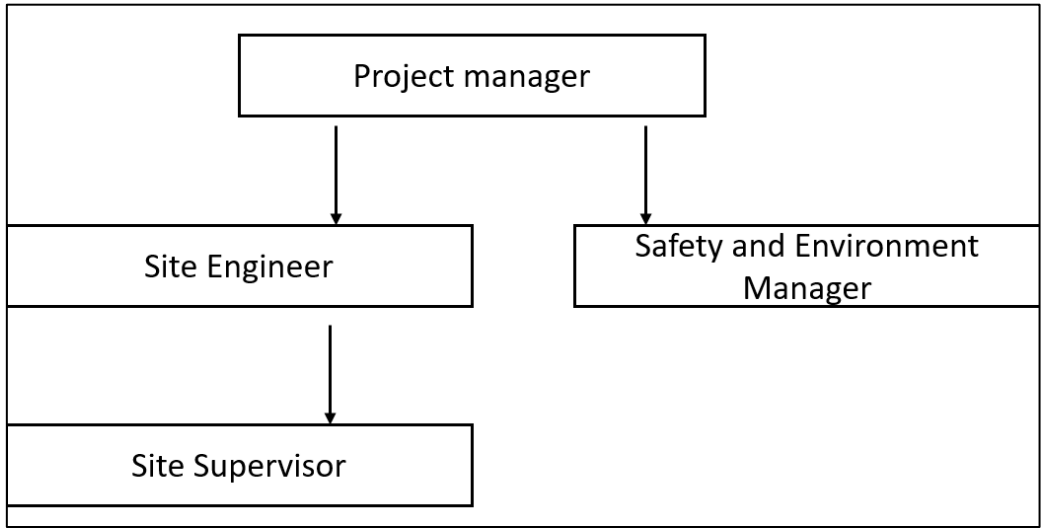
t = Standard time for vehicle to cover a particular distance at particular speed N = No of vehicles

L= Length of Vehicle

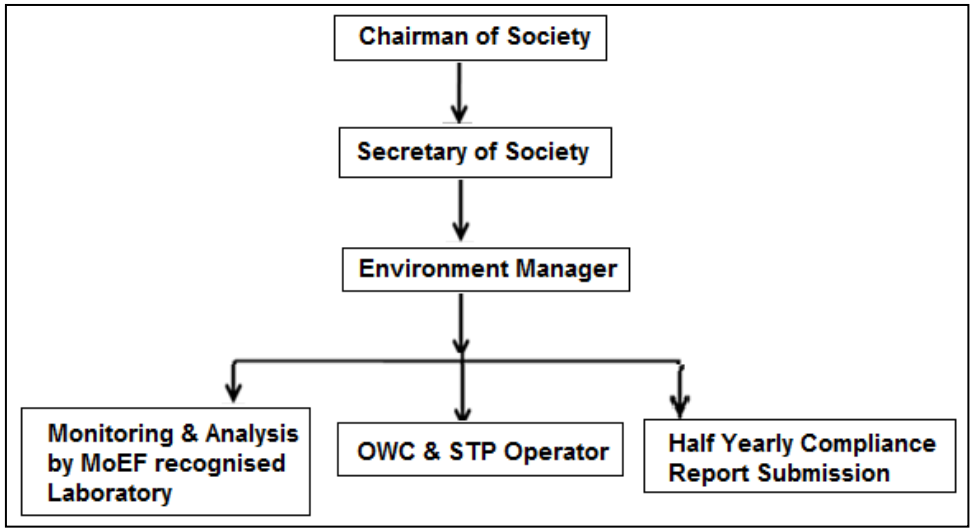
D = Distance of vehicle from exit point

ENVIRONMENT MANAGEMENT PLAN

EMC Organization Chart: Construction Phase



EMC Organization Chart: Operation Phase



Sr.	EMC Personnel	cost in Rs./Month
1	Project Manager	25,000/-
2	Site Engineer	15,000/-
3	Safety & Environment Officer	15,000/-
4	Site Supervisor	10,000/-
5	**TOTAL**	**65,000/-**

Sr.	Officials	Cost in Rs./Month
1	Environment Manager	40,000/-
2	Operators for STP & OWC – 1 Nos.	20,000/-
3	Fire Marshal (training on quarterly basis)	20,000/-
4	**Total**	**80,000/-**

MITIGATION MEASURES FOR DUST SUPPRESSION DURING CONSTRUCTION PHASE

1. Provide misting water sprays sufficient with pressurized nozzles to reduce airborne dusting from demolition work;
2. Apply additional water dust suppression applied during dry weather;
3. Avoid dust-generating work must be avoided on high wind days.
4. Spray water (amended with a small amount of detergent) during demolition, as required, to reduce airborne particle
5. Remove construction debris through approved route, covered, netted, or otherwise contained to prevent dust generation, or remove during off-hours times
6. Use of Anti-Smog Gun to reduce the dust particle during demolition work.
7. Logbook shall be maintained for the cleaning of vehicles going out from the project site,
8. Construction material shall be stored at designated covered space,
9. Topsoil shall be stacked with covering and moisture level shall be maintained to reduce the dust level in ambient air quality.
10. Mega Cities - All construction layouts having area more than 1 (one) acre shall have tin / metal sheet erected of height 25 feet at least around periphery of the construction project sites and for construction sites, less than 1 (one) acre, the tin I metal sheet height shall be 25 feet at least
11. All the buildings under construction shall be compulsorily enclosed by wet green cloth /wet jute sheet / tarpaulin from all sides.
12. All the structures under demolition shall be covered with tarpaulin /wet green cloth / wet jute sheet from top to bottom. There shall be continuous sprinkling/spraying of water during the process of demolishing the structure.
13. It shall be ensured that water fogging shall be carried out during loading and unloading of materials at the construction sites (use of stationary/ mobile anti- smog guns).

MITIGATION MEASURES FOR DUST SUPPRESSION DURING CONSTRUCTION PHASE

14. The water sprinkling shall be done on debris / earth material etc. which are prone to generate airborne particulate matters at all construction sites without fail.
15. All vehicles carrying construction materials shall be fully covered (i.e. from top and all sides) so that construction material or debris does not become airborne during transportation and the vehicle shall not be overloaded to avoid any spillage from the vehicle.
16. All the work sites shall ensure that the grinding, cutting, drilling, sawing and trimming work is carried out in enclosed area and water sprinkler I water fogging is continuously done while working to avoid escape of fugitive air.
17. All the construction sites shall ensure that Construction and Demolition (C & D) waste generated within the premises / site of work is transported to designated unloading site strictly as per C & D Waste Management Plan. After unloading the debris, the vehicle shall be washed and cleaned thoroughly.
18. The vehicles carrying construction material or C & D material, possess vehicle tracking system installed on them, if found not adhering to above stated provisions, shall be seized and impounded by the RTO / Police Department.
19. All vehicles carrying materials shall have valid PUC certificates and the same shall be produced as and when asked for by competent authorities.
20. The loose soil, sand, construction materials and debris of any kind and quantity shall be stored in demarcated / dedicated area and properly barricaded, fully covered / enclosed/protected with tarpaulins. It shall be ensured that there is no dumping of construction material and debris on public roads, footpaths, pavements and open area.
21. Vehicle type washing facility shall be provided at all exit points of construction sites. It shall be ensured that daily cleaning is carried out of major roads for removal of dust by using vacuum sweeping or water sprinkling, brushing. brooming and sweeping. This work may be outsourced to ensure wide and fast coverage of all major roads in one month's time.

COST OF EMP – CONSTRUCTION PHASE

#	Particular	Parameters	Cost/sample	Locations	Samples per year	Capital Cost	O & M Year (Rs.)
1	Sprinkling of water / fine spray from nozzles to suppress dust re-suspension at site.	Site	2 lit/sq.m	02	-	-	245450
2	Cost of Anti-smog Gun	Site	-	01	-	180000	
3	Site Barricading	Site	3.0 m	-	-	275000	-
4	Health Check up	Site	-	-	-	100000	75000
5	Occupational Health & safety	Site	-	-	-	225000	250000
6	Site sanitation and disinfection	Site	-	-	-	75000	36000
7	Ambient Air Quality Monitoring	PM-10, PM-2.5, SO2, NOX etc	4800	4	24	-	115200
8	Noise Monitoring	Equivalent noise	1200	4	8	-	9600
9	Soil Monitoring	PH, Porosity, Water Holding Capacity Iron, Zinc, OC, Cl, Mg, N etc	4000	4	8	-	32000
10	Basement Dewatering		-	1	-	400000	20000
	Total					1255000	783250

Note: Dust Suppression Cost: 2 Litres water / Sq.m x Cost of water x Area
Cost of water Consider :100 per 1000Ltrs
Area : Open storage yard, Internal Path, Approach Road

ENVIRONMENT MANAGEMENT PLAN – CONSTRUCTION PHASE

Regime	Construction Phase	Responsibility	Ground work Assigned to
Air	Water sprinkling for dust suppression (10 m^3/day of water & 2Tankers)	Site In-charge in consultation with Environment Manager	Contractor and water tanker vendor
	Provide misting water sprays sufficient to reduce airborne dusting	Site In-charge in consultation with Environment Manager	Contractor
	Avoid dust-generating work must be avoided on high wind days	Site In-charge	Contractor
	Use of Covering sheets while transporting the material and type washing facility to check dust propagation	Contractor	Transportation agency (Driver & accompanying person)
	heaps of loose soil covered with tarpaulin at site	Contractor	Contractor
	Dry sweeping of work areas to be prohibited	Contractor	Contractor
	Routes of transport vehicles within construction site be damped by water (preferably treated waste water) sprinklers	Site In-charge in consultation with Environment Manager	Contractor
	Dropping materials to ground level by Enclose chutes, and skips will help in reducing dust emissions. Sufficient water supply needs to be carried out to increase the moisture content.	Site In-charge in consultation with Environment Manager	Contractor
	Use of ready mix concrete (RMC), barricading by trees, Maintenance of Logbooks for RMC trucks haulage.	Site In-charge in consultation with Environment Manager & RMC contractor	Contractor and RMC vendor. Sprinkling to be arranged in coordination with water tanker vendor
	Use of DG sets with acoustic enclosures	Site In-charge in consultation with Environment Manager	Contractor
	Proper traffic arrangement for the construction vehicles. Entry to vehicles with valid PUC certificate	Site In-charge to plan traffic arrangements in consultation with Environment Manager & transport vehicle contractor	Site security to maintain a record and prevent entry of vehicles not having valid PUC
	Use of the standard personal protective equipment like –helmets, masks, goggles etc.	Labour Contractor and Environment Manager	Labour Contractor

ENVIRONMENT MANAGEMENT PLAN – CONSTRUCTION

Regime	Construction Phase	Responsibility	Ground work Assigned to
Water	Provision of toilets (6 nos.)	Contractor in consultation with Site Engineer	Connected to STP
	Periodical assessment of environmental samples as per IS 10500	Environment Manager	MoEF approved Laboratory
	Provision of potable water for workers and staff as per IS 10500	Contractor	Site In-charge
	Construction of storm water drain	Contractor	Site In-charge
	Proper management and channelization of water to avoid water logging at site. Use of screens and silt traps to avoid sedimentation in drains	Contractor + Site Engineer + Environment Manager	Site In-charge
Solid waste	Training to sub contractor & workers for waste collection, segregation and sanitation	Environment Manager and Labour Contractor	Team members of Environment management Cell
	Separate bins for collection of waste	Labour contractor along with Site Supervisor	Team members of Environment management Cell
	Isolated storage of construction raw material such as paint, varnishes etc.	Site Engineer along with labour contractor. Environment manager to ensure proper disposal	Site Supervisor
	Segregation of waste & its proper disposal	Environment manager and Labour Contractor	Site Supervisor & Team members of Environment management Cell
	covering with tarpaulin sheet during Transportation of debris and construction waste	Site supervisor	Labours at site
	Disposal of construction and demolition waste at recognised site	Site supervisor	Contractor
Soil	Preservation of Topsoil for re-usage in landscaping	Site Engineer and landscape consultant	Labours at site
	Covering of excavated materials with polyethylene sheets	Site Engineer	Labours at site
	Plan for excavated materials management for re-usage of the same within the premises or off site and disposal	Environment Manager and Site In-charge	Contractor
	To explore the possibility of tree transplantation instead of cutting wherever is possible.	Contractor	Site In-charge
	Maintenance of Storm water drains to avoid water logging & soil erosion	Site Engineer & Labour contractor	Labours at site
Noise	Barricading the construction site to avoid noise nuisance to the surrounding areas	Contractor and Site engineer	Contractor
	Regular noise monitoring to maintain the noise level within the standard levels	Environment manager in consultation with Environment Monitoring laboratory	Monitoring team
	Provision of ear plugs for construction labour and staff & insist its use.	Labour contractor	Contractor
	Provision of DG with CPCB approved acoustic enclosures	Environment manager in consultation with	DG Vendor

ENVIRONMENT MANAGEMENT PLAN – OPERATION PHASE

Regime	Operation Phase	Responsibility	Ground work Assigned to
Air	Installation & Maintenance of DG set with acoustic enclosures	Developer and contractor	DG set Operator or Site Security
	Periodic monitoring of air pollutants	Laboratory in-charge / Monitoring team in coordination with Environment Manager	Laboratory monitoring team
	Tree plantation to supress dust	Landscape designer	Gardener
	Basement Ventilation	Developer and Secretary	Staff
Water	Installing water meters, taking regular readings, maintaining the register	Environment Manager	Plumber/ security staff
	Provision of STP	Developer and contractor	STP operator
	Dual Plumbing system , Low Flow Fixtures Devices	Developer and contractor	Environment Manager
	Use of treated sewage for flushing & gardening within the premises	Project proponent or society	STP operator
	Regular analysis of treated waste water to ensure good treatment of waste water and its reuse.	Environment Manager	Lab (Outsourced)/ STP operators
	Regular inspection, maintenance and repair of the storm water drainage system	Storm water vendor in consultation with Environment Manager	Labours on site
	Diversion of surface runoff water from SWD to rainwater harvesting unit. Regular inspection, maintenance and repair RWH system	Storm water vendor in consultation with Environment Manager	Secretary /Manager
	Explore the possibilities of reuse of excess treated water at nearby garden and construction activities	Environment Manager	Environment Manager
Solid waste	Informing and educating occupants to ensure segregation of waste in colour coded barrels	Environment manager	Team members of Environment management Cell
	Disposal of E-Waste and non-biodegradable waste (excluding bio-degradable) through authorized vendor	Environment manager	Team members (Operator) of Environment management Cell
	Segregated non biodegradable waste handed over to authorized vendor	Environment manager	Vendor
	Treatment of biodegradable waste through OWC	Environment manager in consultation with Vendor	OWC Operator

ENVIRONMENT MANAGEMENT PLAN – OPERATION PHASE

Regime	Operation Phase	Responsibility	Ground work Assigned to
Landscaping	Plantation of fruit and flower bearing trees of native species nos.	Landscape designer and Environment Manager	Gardner
	Trimming to be conducted routinely & especially at the advent of monsoon	Environment manager	Gardner
	Explore the possibilities for Miyawaki planation at site to promote concepts of Urban forest	Developer and contractor	Gardner
	Funds to be earmarked for the maintenance of lawn & plantation with provision of work force, tools & watering arrangement.	Environment Manager and Management representative	Environment manager
Noise	Acoustic enclosure for DG set	Developer and contractor	Environment manager
	Preparation & implementation of Traffic management plan to avoid traffic congestion and thereby reducing noise	Environment Manager in consultation with Traffic expert	Site Security
	Precaution measures during Interior works	Environment manager	Environment manager
Energy Saving	Use of solar energy to promote use of clean energy	Developer and contractor	Environment manager
	Use of energy efficient lifts, equipment's and lighting	Developer and contractor	Environment manager
	Installation of automatic timers for common area lighting	Developer and contractor	Environment manager
	Promote the use of BEE star category equipment's	Developer & Promoter	Tenants
Traffic Management	Allotment of parking spaces to tenants as per NBC	Developer & Promoter	Tenants
	Earmarked space for 2 Wheeler parking in project	Developer & Promoter	Tenants
	Provision of Two way ramps for 4 W parking in, podium	Developer & Promoter	Environment manager
	Earmarked space for Visitor parking	Developer & Promoter	Secretary
	Provision of electric charging points for vehicles	Developer & Promoter	Secretary /Manager
	Min 6.0 m driveway for smooth movement of vehicles	Developer & Promoter	Secretary /Manager
Safety measures	Installation of fire fighting equipment's as per local norms	Developer & Promoter	Secretary /Manager
	Installation of CCTV camera, Intercom, Fire alarms	Developer & Promoter	Secretary /Manager
	Regular maintenance, Training and mock drill	Developer & Promoter	Secretary /Manager
	Appointment of security at main gate and Building gates	Secretary /Manager	Secretary /Manager

Sr. No	Condition	Mode of Compliance	Action by
1	Validity of consent	Apply in time	Secretary / AMC
2	Sewage Quantity & Quality	Measure, Minimize	Operator/ MOEF approved lab
3	Water Input	Repair Meters, Pumps	Operator, Secretary
4	Solid waste	Segregation/ Disposal	Operator / AMC
5	Nuisance	Odor & Noise Control	Operator / AMC
6	Monitoring	Ground water, Drinking water, Treated water, AAQM, Noise, Soil	MOEF approved lab Quarterly
7	Envt. Audit	Regular Data	Secretary
8	Compliance report	Half yearly	Secretary

BUDGETARY PROVISION FOR EMP

Sr. No.	Pollution Control & Other Environment Infrastructure	Capital Cost In Rs. Lakhs	Annual O & M Cost In Rs. Lakhs/annum
	During Operation Phase:		
1	Rain Water Harvesting	16.00	1.40
2	Sewage Treatment Plant	68.00	8.00
3	Organic Waste Composting	18.50	4.50
4	Landscaping	16.00	2.00
5	Energy saving	38.00	3.50
6	Low Flow Devices Fixtures	8.50	1.00
7	Lighting for Passage and Lift	3.50	0.75
8	Basement Ventilation	8.50	1.50
9	**Total EMP COST**	**177**	**22.65**
10	**DMP**	**169.67**	**8.48**
11	TOTAL COST	346.67	31.13

THANK YOU!