

EXECUTIVE SUMMARY

FOR

**PROPOSED REDEVELOPMENT ON PLOT
BEARING C. S. NO. 73 OF COLABA
DIVISION, SITUATED AT NATHALAL
PAREKH ROAD, “A” WARD, MUMBAI**

BY

**M/S AMRUTSAGAR CONSTRUCTIONS PVT.
LTD..**

1. INTRODUCTION TO PROJECT

After recognizing the need for the redevelopment of the (21 Residential & 14 Non Residential) CEsSED and (4 Non Residential) NON CEsSED category building structures having total 39 nos. of tenants/occupants on the plot bearing C. S. No. 73 of Colaba Division, situated at Nathalal Parekh Road, "A" Ward, Mumbai, the same is now being proposed to be redeveloped by M/s Amrutsagar Constructions Pvt. Ltd. The proposed development on plot is a composite development i.e. tenements for rehabilitation and sale are proposed in the same building. The proposal is for construction of a new building consisting of a Basement for parking and other services + Ground floor for Entrance Lobby + 1st to 4th Floor for Car Parking + 5th Floor for Car Parking & Swimming Pool + 6th Floor as Service Floor + 7th to 13th (part) Non-residential and 13th (part) to 21st (part) upper floors for Residential use, which will be rehabilitation cum sale building. The surrounding of the subject plot also consists of mixed use i.e. residential and commercial but predominantly residential. The site is surrounded by many more existing structures

The plot under reference falls within 500 mtr. from H.T.L. of Arabian Sea. As such, it attracts MoEF guidelines & CRZ regulation. The plot falls in Residential zone as per old DP of 1967 as well as revised sanctioned DP (1991 & 1992) and is not affected by any reservation as per old DP. The user of "Residence" was permissible as per land use and zoning as on 19/02/1991.

1.1 PROPOSAL DETAILS

There are two existing CEsSED category structures on the plot. The existing first CEsSED category structure is of Ground Floor + Mezzanine floor + 1st to 3rd Upper floor having 14 nos. of residential and non residential tenants/occupants and second CEsSED category structure is of Ground Floor + 1st to 8th Upper floor having 21 nos. of residential and non residential tenants/occupants, consuming 2679.10 sq mtrs of built up area as certified by the Dy. Engineer, M. B. R. & R. Board, Mumbai, as enclosed with the NOC issued by the Chief Officer M.B.R.R.Board dated 18.08.2004. The existing building is a Category "A" and the with residential and non residential land use as per the Category certificate and the Inspection Extract issued by Asstt. Assessor & Collector 'A' Ward.

There also exists a NON CEsSED category structure of ground floor structure having 04 nos. of shops, which will be rehabilitated in the proposed building.

The re-development is proposed in view of provisions contained in CRZ 2011 notification, wherein benefits of DCRs as on the date of approval of plans is extended for re-development of CESS and NON

CESS category building.

The proposal has received MHADA NOC dated 27.09.2012 for FSI 2.50 or FSI required for rehabilitation of the existing occupiers plus 50% incentive whichever is higher, in accordance with modified DC Regulations 33(7) and Appendix III to this Regulations 33(7).

The site under reference is affected by CRZ-II zone. It is within 500 mtrs. from the HTL of Arabian sea. It is on the landward side of the existing Wodehouse Road and Colaba Road, as can be seen from the approved CZMP. Hence the work is permitted subject to the approval of CRZ clearance. Thus property attracts the CRZ legislation, which is reflected in CZMP plan.

The development site does not fall or contain the environmentally sensitive areas as specified in the Coastal Regulation Zone notification.

The total cost of the project is Rs. 43,52,56,524/- (Rupees Forty Three Crore Fifty Two Lakh Fifty Six Thousand Five Hundred and Twenty four Only) as per the valuation report.

2. DESCRIPTION OF THE PROJECT

2.1 NATURE OF THE PROJECT

This is a proposal for redevelopment on plot bearing C. S. No. 73 of Colaba Division, situated at Nathalal Parekh Road, "A" Ward, Mumbai, in CRZ-II belt, as the same is situated within 500 mtr. from Arabian sea. The proposal is for redevelopment of CESSSED and NON CESSSED category building structures, which are situated on the landward side of the existing Wodehouse Road and Colaba Road, as can be seen from the approved CZMP. The Plot is situated in Residential zone and not under any reservation as per 1967 DP as well as Revised 1991/1992 DP.

2.2 SIZE OF THE PROJECT

The gross area of the Plot is 1275.92 sq.m and the balance plot excluding the area affected by road widening is 1048.90 sq. mtrs.

2.3 LOCATION

The C. S. No. 73 of Colaba Division, situated at Nathalal Parekh Road, "A" Ward, Mumbai, is in the heart of the city. The nearest railway station is CSMT Railway Station, 3.90 kilometers on the Central line.

Google Earth Image of the site

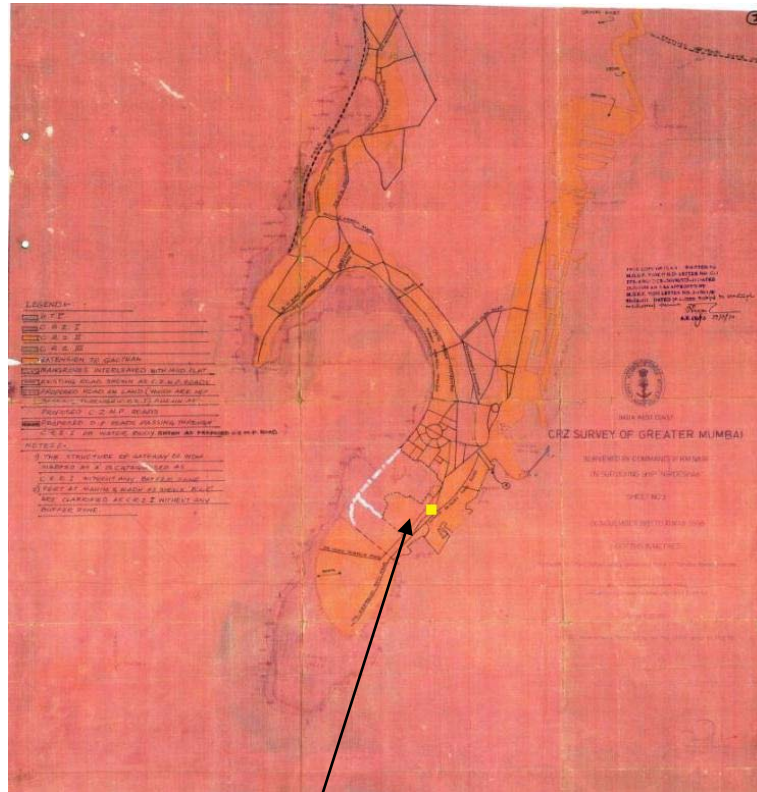


SITE UNDERREFERENCE

Location map of the site



SITE UNDER REFERENCE

CZMP Plan showing location of reference Plot

SITE UNDER REFERENCE

2.4 SITE DESCRIPTION

The site under reference is affected by CRZ-II zone and the property falls on landward side of the existing Wodehouse Road and Colaba Road, which is reflected in CZMP of Mumbai. Thus property attracts the CRZ legislation as per CRZ - 2011. The development site does not fall or contain the environmentally sensitive areas as specified in the Coastal Regulation Zone notification.

Town / Tehsil	: Mumbai
District	: Greater Mumbai
State	: Maharashtra
Latitude	: 18°54'51.81"N
Longitude	: 72°49'25.53"E

2.5 PROPOSED DEVELOPMENT**2.5.1 AREA**

A)	AREA STATEMENT	SQ.MTS.
1)	Area of plot	1275.92 m ²
2)	Deductions for	
	(a) Road Set-back Area	227.02
	(b) Proposed area	0.0 m ²
	(c) Any Reservations (sub plot -----)	0.0 m ²
	Total (a +b +c)	0.0 m ²
3)	Balance Area Of Plot (1 minus 2)	1048.90 m ²
4)	Deduction for Recreational Ground	0.0 m ²
5)	Net Area of plot (3 minus 4)	1048.90 m ²
6)	Additions for Floor Space index	
	2 (a) 40 %	227.02 m ²
	2 (b) 100 %	0.0 m ²
7)	Total Area (5 plus 6)	1275.92 m ²
8)	Floor Space Index Permissible	Rehab + 50%
9)	(a) Floor Space Index credit available by development rights	0.00 m ²
10)	Permissible Floor Area	4150.98 m ²
11)	Existing Floor Area	0.00 m ²
12)	Total Proposed Built Up Area	4150.98 m ²
	Permissible	Proposed
	CESSED NR REHAB = 1623.51 Sq. Mtr.	1623.51 m ²
	NON CESSED NR REHAB = 161.89 Sq. Mtr.	161.89 m ²
	CESSED + NON CESSED EXCESS REHAB NR = 170.71 Sq. Mtr.	170.71 m ²
	Rehab + Sale R = 2194.87 Sq. Mtr.	2194.87 m ²
	Total = 4150.98 Sq. Mtrs.	4150.98 m ²
13)	Non Residential Built Up Area	1956.11 m ²
14)	Purely Residential Built Up Area	2194.87 m ²
15)	F.S.I. consumed	3.25
C)	Details of FSI Availed as per DCR 35(4) Only Rehab Sale	
		Permissible
		Proposed

1)	Fungible Built Up Area component proposed vide DCR 35 (4) for purely residential	768.20 m ²	730.39 m ²
2)	Fungible Built Up Area component permissible vide DCR 35 (4) for non residential	391.22 m ²	377.79 m ²
	Total Fungible Built Up Area	1159.42 m ²	1108.18 m ²
	Total Gross Built Up Area Proposed		5259.16 m ²

PROJECT DEVELOPMENT DETAILS

Proposed development		
1	Structure of Building	Basement for parking and other services + Ground floor for Entrance Lobby + 1st to 4th Floor for Car Parking + 5th Floor for Car Parking & Swimming Pool + 6th Floor as Service Floor + 7th to 13th (part) Non-residential 13th (part) to 21st (part) upper floors for Residential use
2	Tenements existing	39 Nos. (R + NR)
3	Tenements proposed	41 Nos.
4	Height of Building from Ground level	69.70 Meters
5	Emergency Power supply (D.G. Nos. x KVa	1 no. 500 KVa
6	Salient features of the project	
		<ul style="list-style-type: none"> • Earthquake Resistance Building structure • Rain water Harvesting System in the complex • Energy conservation, through energy efficient devices. • Use of low water fixtures to promote water conservation

2.5.2 UTILITIES

The Utilities required during the construction phase are water, power, fuel and Labour.

i) **WATER:** (Expected Consumption – total 17 cum/day)

For worker - 7 KLD

For construction - 10 KLD

Note: The actual quantity of water may depend upon the actual construction requirement

Water Balance (Operation Phase)

Sr. No		Criteria	Total (KLD)
A.	Residential Population (in Nos)		133 Nos.
	Domestic	@ 90 lpcd	11.97 CMD
	Flushing	@45 lpcd	5.98 CMD
B.	Commercial Population (in Nos)	370	370 Nos.
	Domestic	@ 20 lpcd	7.40 CMD
	Flushing	@25 lpcd	9.25 CMD
C.	Non-Residential population (Visitors, Drivers, etc.)		157 Nos.
	Domestic	@ 5 lpcd	0.785
	Flushing	@10 lpcd	1.57 CMD
D.	Total Water Requirement	-	36.955 CMD
E.	Discharge to STP	-	34.94 CMD
F.	STP capacity STP Technology: Attached Growth process	-	37.00 CMD
G.	Treated Water Availability	-	29.70 CMD
H.	Irrigation Water Requirement	-	0.60 CMD
I.	Flushing Requirement	-	16.80 CMD
J.	Evaporation Losses	-	0.30 CMD
K.	To Municipal Drain	-	12.00 CMD

Source: - Water will be available from Mumbai (MCGM) for domestic use and from Tanker for construction purpose.

ii) **POWER**

During Constructional Phase–

Connected Load: 150KW (Estimated)

During Operational Phase–

Component	Values
Total demand kW	673.86 kW

iii) FUEL**DURING CONSTRUCTION PHASE**

Estimated energy shall be used.

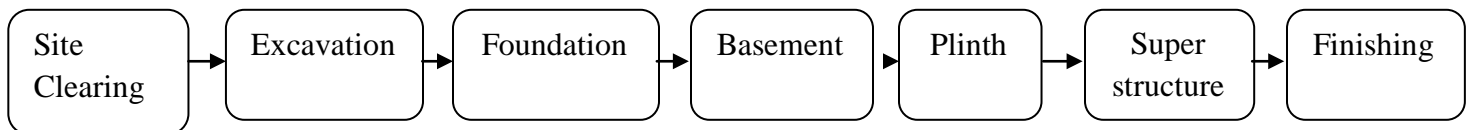
DURING OPERATION PHASE

Diesel will be required to run the D. G. Set in case of power failure, in emergency case only.

1. Storage: Diesel and oil will be stored as per guidelines from concerned authorities.
2. Fire and safety measures will be taken as per the guidelines from concerned authority.
3. All Safety and fire precautions will be followed.

2.6 CONSTRUCTION PROCEDURES

The outline of the construction procedure is described below schematically.

**Note:**

- a) Parameters and Quality will be strictly adhered to as per the drawing approved by MCGM. Applicable regulations of government authorities will be followed.
- b) Necessary safety precaution will be observed as per the guidelines during the construction phase. Personal Protective Equipment (PPE) will be provided to the personnel involved in the construction activities.
- c) Site barricading will be done to protect the surrounding area of the project site from nuisance /dusting.
- d) All electrical connections & cables will be checked by authorized persons to ensure the safety of workers on field.
- e) Water sprinkling will be done, wherever required to reduce the emission of fugitive in atmosphere. Jute barricading along plot boundary shall be provided to minimize noise level from construction activities.
- f) The safety and security officers shall supervise the site.

3. ENVIRONMENTAL CONCERNS

3.1 AIR POLLUTION

Fugitive Emissions i.e. Emissions from construction activities will mainly consist of dust. Movement of Heavy & light vehicles, for loading and unloading of Construction Materials, transporting people, will also add on to source of emissions.

3.2 AIR POLLUTION MITIGATION

Sr. No.	Source	Mitigation	
1.	Vehicle	i]	Vehicles coming to the site will be ensured to be in good condition having PUC.
		ii]	Public awareness to use Green Fuel will be done.
2.	Solid Waste	i]	Proper segregation and collection of waste will be ensured.
		ii]	Location of loading and unloading will be fixed.
		iii]	Good Housekeeping practices will be ensured at the premises.
3.	Construction Activities	i]	Noise / Dust nuisance preventions by barricading site up to 5.0 meter height.
		ii]	Water sprinkling on dry site, sand.
		iii]	Construction equipment with regular maintained

3.3 WATER POLLUTION

1] **Use:** - Water for domestic purpose will be procured from MCGM i.e. drinking water for staff and laborers working on the field whereas bore well water/Tanker water will be used for various constructions activities like, Concreting, Plastering, Flooring & Finishing etc.

2] **Effluent:** - There will be no generation of effluent from construction activities as the water used for concreting; Plastering, Flooring and Finishing etc. will get evaporated during drying or curing time. All the construction activities are physical in nature. The Domestic Effluent will be generated due to the persons working on the site who will require water for drinking, cleaning, etc.

Sewage generated during operation phase is estimated to 29.70 CMD which will be treated in the Sewage Treatment Plant. The treated water will be used for non domestic purposes such as gardening, flushing etc and excess treated water shall be discharged to Municipal drain.

3] **Treatment & Disposal:** - The Domestic Effluent generated in construction phase will be disposed off in existing MCGM Sewer.

4] **Rain Water Harvesting:** - The Plot is occupied by CESSSED and NON CESSSED category structures. A new sale cum rehab building is now proposed to be redeveloped. Roof rain water harvesting is proposed in the project. 1 Rainwater Harvesting Tanks will be provided for the using the rain water.

5] **Storm Water Discharge:** Storm water drains will be constructed for proposed facility as per the norms. A recharge pit and Rain water recharge tank will help to reduce the runoff and reduce the load on external storm water drain.

3.5 NOISE LEVEL MITIGATION

Sr. No.	Source	Mitigation
1.	Near Residential Areas	i] Site Barricading will be done to protect the surrounding area. ii) Construction Activity will be carefully planned and carried out accordingly.
2.	Nearby Traffic	i] All the vehicles coming to the site will be ensured in good condition, having Pollution Under Check (PUC).
3.	Construction Equipments	i] Regular maintenance to all the equipment at proper interval for efficient working ii] Appropriate PPE to be provided to workers

1] It is evident from the nature of operation (i.e. Construction) that the Concentration of suspended particulate matter would be higher than the other two parameters.

2] Control of Emission: - Proper precaution will be taken to reduce the particulate matter by water sprinkling on the dry site area, barricading the periphery by corrugated tin Sheets of 5.0 mtrs height to protect the surrounding area from dusting. Also it will be ensured that the vehicles will carry PUC

certificate. To minimize air pollution efforts shall be made by use of equipments, which area electric power driven.

3.6 SOLID WASTE MANANGMENT DURING OPERATIONAL PHASE

1] The solid waste generated during operation phase is proposed to be segregated as biodegradable & non-biodegradable waste within the premises.

2] Solid waste transfer station shall be proposed for collection, sorting, segregation, storage & transportation of biodegradable and non-biodegradable waste.

Calculation for quantum of solid waste to be generated in the building:

- Total no of residential population = 133 persons
- Generation of Total waste per person of residential population = 0.6 kg/ capita per day (as per provisions of NBC 2016, Part 9 section 3 under the heading As per assessment of per capita Waste Quantity – a) Residential Refuse : 0.3 to 0.6 kg/ capita per day)
- Thus total solid waste generation, for residential population will be 133×600 gms/person/day = 79.80 Kg
- Total no of commercial population/ non- residential population = 527 persons
- Generation of Total waste per person of Commercial population = 0.2 kg/ capita per day (as per As per assessment of per capita Waste Quantity – b) Commercial Refuse : 0.1 to 0.2 kg/ capita per day, of NBC 2016)
- Thus total solid waste generation, for Commercial/ Non Residential population will be 527×200 gms/person/day = 105.40 Kg
- Thus solid waste generated in the project will be 185.20 kg/day.
- Generation of organic waste = 60% of total waste (as per guidelines in As per assessment of per capita Waste Quantity, of NBC 2016)
- So total organic/Wet/ Bio degradable waste generated by the occupants = $185.20 \times 60\% = 111.12$ Kg by all occupants of the building.
- Total inorganic/Dry/ Non biodegradable waste generated will be 74.80 kg/ day.

3.6.1 Measures for treatment of Solid Waste Generated on the site during operation phase

- Segregation of non biodegradable and biodegradable garbage on site.
- Bio degradable garbage: Treatment by means of Organic Waste Convertors.
- Non- biodegradable garbage: Segregated into recyclable and non-recyclable waste.
- Recyclable waste: Handed over to vendors for recycling.

- Non-recyclable waste: Handed over to M.C.G.M.
- STP Sludge : Used as manure.
- The debris generated due to demolition and excavated material shall be partly reused on site and partly shall be disposed off to authorized Landfill sites with permission from M.C.G.M.

3.7 DEMOLITION WASTE AND CONSTRUCTION WASTE MANAGEMENT

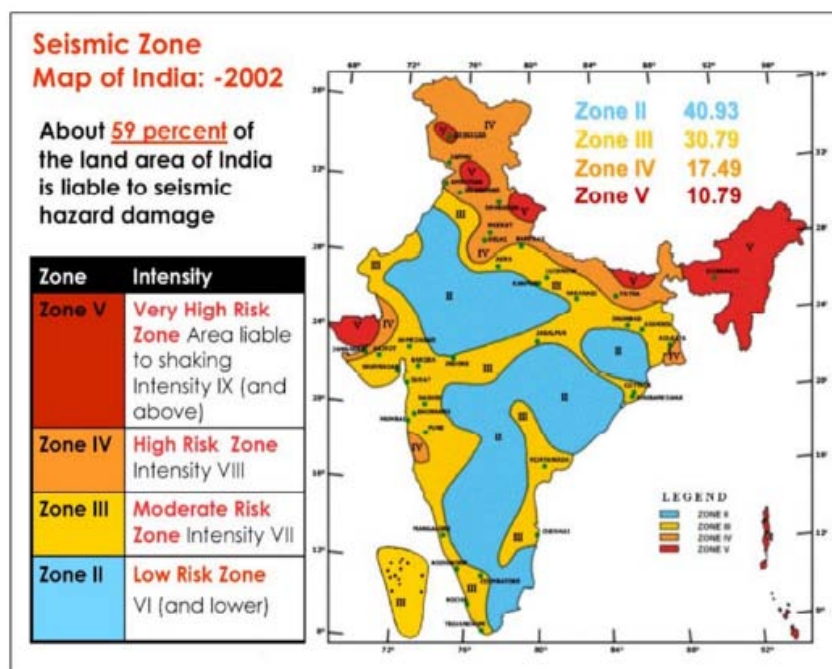
Local Municipal norms shall be followed to ensure responsible disposal of C & D waste.

3.8 SEISMICITY:

Seismic zone map was initially based on the amount of damage suffered by the different regions of India because of earthquakes. Following are the varied seismic zones of the nation,

- Zone - II: This is said to be the least active seismic zone.
- Zone - III: It is included in the moderate seismic zone.
- Zone - IV: This is considered to be the high seismic zone.
- Zone - V: It is the highest seismic zone.

Proposed project and Study Area comes under Seismic Zone III.



4. PROJECT SCHEDULE AND COST ESTIMATES

The Proposed Project is Redevelopment project and will be started as soon as required government NOC's and CRZ Clearance is received to start the work.

5. TRAFFIC MANAGEMENT

5.1 CONSTRUCTION PHASE

- Storage and Godown area will be properly identified, as per requirement.
- The area for loading and unloading will be located at proper demarcated location in the premises.
- Thus the traffic management on the project site will be easily and smoothly monitored without any hindrance to the regular flow of traffic on the main road.

5.2 OPERATIONAL PHASE

- About 78 cars are expected to be accommodated in the premises. The parking space will be provided in basement, 1st to 5th Upper parking levels. There is ample space in the building on all sides for smooth movements of cars.
- There will be 6.0 mtrs wide approach road to the building from municipal road for movements of vehicles and parking.
- Thus the traffic management will be easily and smoothly monitored without any hindrance to the regular flow of traffic on the main road having width of 18.29 m (Nathalal Parekh marg) and 27.44m (Shahid Bhagat Singh Road).

6. ENVIRONMENTAL, HEALTH AND SAFETY

6.1 SAFETY MEASURES ON SITE

1. Parameters and Quality will be strictly adhered to as per the drawings approved by MCGM. Necessary regulations of government authorities will be followed.
2. Necessary safety precaution will be observed as per the guidelines during the construction phase. Appropriate Personal Protective Equipments (PPE) will be provided to all the personnel involved in the construction activities.
3. Site barricading up to height of 5.0mtr will be done to protect the surrounding area of the project site from nuisance/ dusting.
4. All electrical connections & cables will be checked by authorized persons to ensure the safety of workers on field.
5. Water sprinkling will be done, wherever required to reduce the dusting in atmosphere.

7. BENEFITS OF THE PROJECT

- It will provide employment opportunities to the local people in terms of labour during construction and services personnel during operational phase.
- Modern sanitation and infrastructure facilities will have minimal impact on living condition of local people.
- The project will improve living standard and welfare of the area and local people.
