

EXECUTIVE SUMMARY

REDEVELOPMENT OF RESIDENTIAL PROJECT

AT

**C.T.S. NO. 864A, 864B, 865, 866A/1 AND 866A/2
OF VILLAGE BANDRA, AT BYRAMJI
JEEJIBHOY ROAD, BANDRA (WEST),
MUMBAI**

BY

**M/S SAGAR RESHAM CO-OPERATIVE
HOUSING SOCIETY LIMITED**

1. INTRODUCTION TO PROJECT

After recognizing the need for proposed redevelopment of dilapidated structure to new residential building on the plot bearing C.T.S. No. 864A, 864B, 865, 866A/1 and 866A/2 of Village Bandra, at Byramji Jeejibhoy Road, Bandra (West), Mumbai, the same is now being proposed to be redeveloped by the M/s Sagar Resham Co-Op. Housing Society Limited. The proposal involves demolition of the existing Ground Floor + 6th Upper Floor old dilapidated building structure, declared as dilapidated vide Notice under Section 354 of the Mumbai Municipal Corporation Act, dated 08.10.2009, i.e. as declared unsafe prior to 6th Jan 2011. The proposal is submitted consuming plot potential + additional TDR + fungible compensatory FSI as per modified D.C. Reg. in force as on TODAY.

The developer has proposed redevelopment of dilapidated structure to new residential building of One Basement for Parking + Stilt floor for parking and entrance lobby + Intermediate Floor + 1st to 19th upper floors for residential use. 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 as well as revised sanctioned DP (1993) and is not under any reservation as per old DP. The user of “Residence” was permissible as per land use and zoning as on 19/02/1991.

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 authorized Byramji Jeejibhoy Road, **in existence prior to 19/2/1991, as may be seen from CZMP of Mumbai as well as old 1967 DP of Mumbai**. 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.96,21,00,000 /- (Rupees Ninety Six Crore and Twenty One Lakh Only) as per the valuation report.

1. PURPOSE OF THE REPORT

Proposed redevelopment of dilapidated structure to new residential building on plots bearing C.T.S. No. 864A, 864B, 865, 866A/1 and 866A/2 of Village Bandra, at Byramji Jeejibhoy Road, Bandra (West), Mumbai and thereby obtain CRZ Clearance as per clause 33(7) of DCR – 1991 in force as on 6th January 2011. The Plot is occupied by dilapidated structure. The said dilapidated category structure is now

proposed to be redeveloped on the plot. The present proposal envisage the redevelopment by availing plot potential + additional TDR + fungible compensatory FSI as per modified D.C. Reg. No. 35(4), in force as on TODAY.

As the site under reference is affected by CRZ-II zone, it attracts the CRZ legislation as per 6th January 2011 notification for Coastal Regulation Zone (CRZ and the regulating activities in the CRZ).

2. DESCRIPTION OF THE PROJECT

3.1 NATURE OF THE PROJECT

This is a proposed redevelopment of dilapidated structure to new residential building on plots bearing C.T.S. No. 864A, 864B, 865, 866A/1 and 866A/2 of Village Bandra, at Byramji Jeejibhoy Road, Bandra (West), Mumbai, in CRZ-II belt, as the same is situated within 500 mtr. from Arabian Sea. The proposal is situated on the landward side of existing authorized Byramji Jeejibhoy Road, in existence prior to 19/2/1991, as may be seen from CZMP of Mumbai as well as old 1967 DP of Mumbai. The Plot is situated in Residential zone and not under any reservation as per 1967 DP as well as Revised 1993 DP.

3.2 SIZE OF THE PROJECT

Total Area of the said plot is 1141.60 sq. mtrs. Cost of the Project is Rs.96,21,00,000 /- (Rupees Ninety Six Crore and Twenty One Lakh Only) as per the valuation report.

3.3 LOCATION

The C.T.S. No. 864A, 864B, 865, 866A/1 and 866A/2 of Village Bandra, at Byramji Jeejibhoy Road, Bandra (West), Mumbai, is in the suburban part of the city. The nearest railway station is Bandra Railway Station, 2.60 kilometers on the Western line.

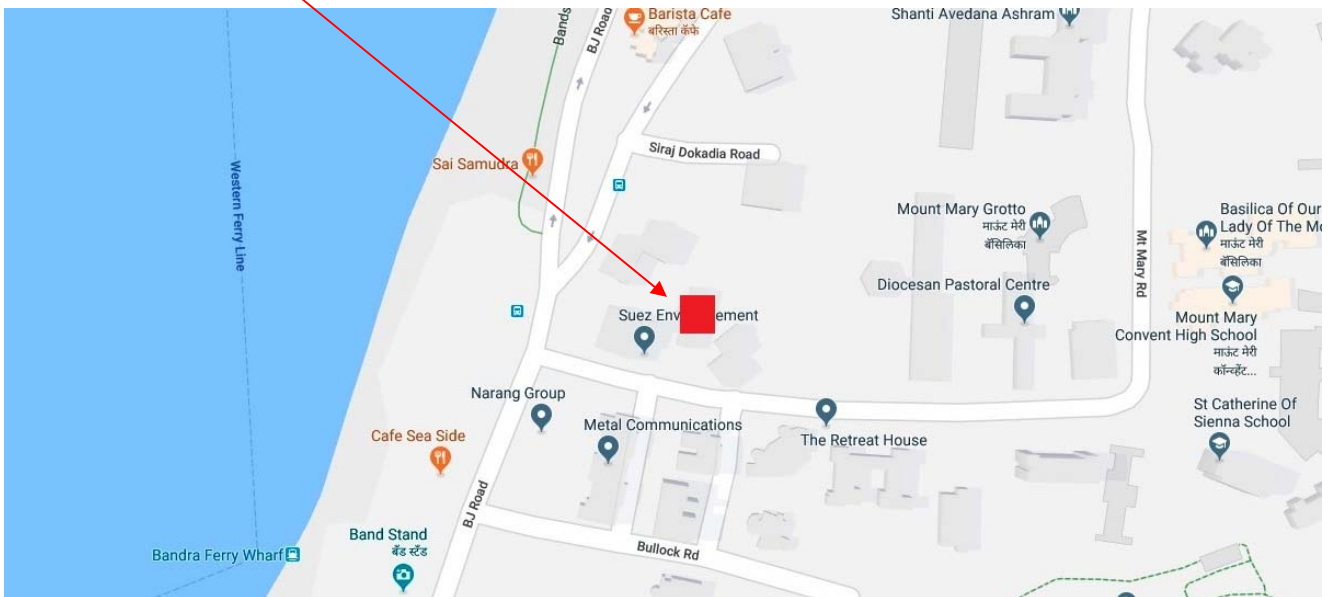
Google Earth Image of the site

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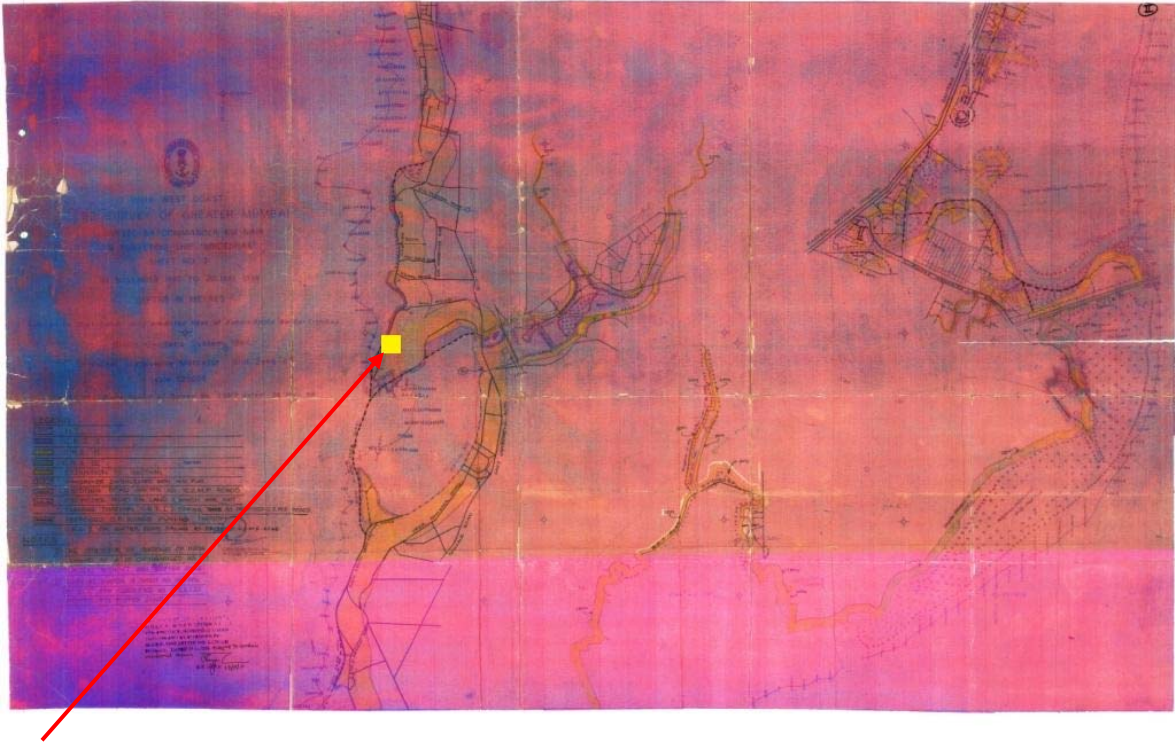


SITE UNDERREFERENCE

Location map of the site



CZMP Plan showing location of reference Plot



SITE UNDERREFERENCE

3.4 SITE DESCRIPTION

The site under reference is affected by CRZ-II zone and the property falls on landward side of the authorized existing authorized Byramji Jeejibhoy Road, in existence prior to 19/2/1991, as may be seen from CZMP of Mumbai as well as old 1967 DP 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	: Suburban Mumbai
State	: Maharashtra
Latitude	: 19° 02'46.79"N
Longitude	: 72°49'13.07"E

3.5 PROPOSED DEVELOPMENTS

3.5.1 AREA STATEMENT

A)	AREA STATEMENT	SQ.MTS.
1)	Area of plot	1141.60 m ²
2)	Deductions for	
	(a) Road Set-back Area	0.00 m ²
	(b) Proposed area	0.00 m ²
	(c) Any Reservations (sub plot -----)	0.00 m ²
	(d) _____% amenity space as per DCR 56/57 (sub plot)	0.00 m ²
	Total (a+b+c+d)	0.00 m ²
	Other	
3)	Balance Area Of Plot (1 minus 2)	1141.60 m ²
4)	Deduction for 15 % Recreational Ground / 10 % Amenity space (if deductible for ind.)	0.00 m ²
5)	Net Area of plot (3 minus 4)	1141.60 m ²
6)	Additions for Floor Space index	
	2 (a) 100 % of D.P. Road (Restricted to 40 % or 80% of net plot area)	0.00 m ²
	2 (b) 100 % for setback (Restricted to 40 % or 80% of net plot area)	0.00 m ²
7)	Total Area (5 plus 6)	1141.60 m ²
8)	Floor Space Index Permissible	1.00
9)	(a) Floor Space Index credit available by development rights addition in lieu of T.D.R.	
	(b) 0.50 F.S.I. as per DCR 32	570.80 m ²
	(c) 90 % TDR	1027.44 m ²
	Other	0.00 m ²
10)	Permissible Floor area (7 x 8) plus 9 above	2739.84 m ²
11)	Existing Built up Area	0.00 m ²
12)	Proposed Built Up Area (11 -12)	2739.58 m ²
13)	Excess Balcony Area taken in floor space index	N.A.
14)	Total Built Up Area Proposed (11+12+13)	2739.56 m ²
15)	F.S.I. consumed on net holding = 14 / 3	2.39
B)	Details of Residential / Non Residential area	
	Purely Residential built up area	2739.58 m ²
	Remaining Non- Residential built up area	0.00 m ²

C)	Details of FSI Aailed as per DCR 35(4)	
1)	Fungible Built Up Area component proposed vide DCR 35 (4) for purely residential = or < (B1 x 0.35)	958.84 m ²
2)	Fungible Built Up Area component permissible vide DCR 35 (4) for non	0.00 m ²
	Total Fungible Built Up Area vide DCR 35 (4) =(C1+C2)	958.84 m ²
	Total Gross Built Up Area Proposed (14 + C3)	3698.42 m ²

PROJECT DEVELOPMENT DETAILS

Proposed development		
1	Structure of Building	(Proposed Building): One Basement for Parking + Stilt floor for parking and entrance lobby + Intermediate Floor + 1 st to 19 th upper floors for residential use
2	Tenements existing	12 Nos.
3	Tenements proposed	16 Nos.
4	Height of Building from Ground level	69.95 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; Provision of Solar water heating system. • Eco-Friendly Measures • Optimum use of Timber 	

2.5.2 UTILITIES

The Utilities required during the construction phase area 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 depends upon the actual construction requirement

Water Balance (Operation Phase)

Sr. No		Criteria	Total (KLD)
A	Residential Population (in Nos)		112 Nos.
B	Domestic	@ 90 lpcd	10.08 CMD
C	Flushing	@45 lpcd	5.04CMD
D	Non Residential Population (in Nos)		28 Nos.
E	Domestic	@ 20 lpcd	0.56 CMD
F	Flushing	@25 lpcd	0.70 CMD
G	Total Water Requirement	(B + C + E + F)	16.38 CMD
H	Total Waste Water generated	(90% x (B+E) + 100% x (C+F))	15.316 CMD
I	STP capacity STP Technology: Attached Growth process	-	19.00 CMD
J	Treated Water Availability	(90% x H)	13.78 CMD
K	Recycled Water	(C + F)	5.74 CMD
L	To Municipal Drain	(J - I)	8.04 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
Maximum demand kW	427.54
D.G. sets (for emergency back up during power failure)	1 DG of 500 kVA

iii) FUEL**DURING CONSTRUCTION PHASE**

Estimated energy shall be used.

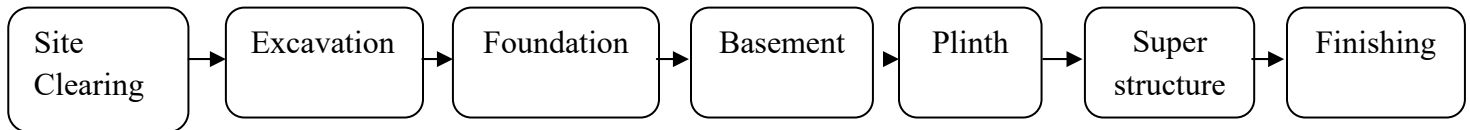
DURING OPERATION PHASE

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:**

1. Parameters and Quality will be strictly adhered to as per the drawing approved by MCGM.

Applicable regulations of government authorities will be followed.

2. 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.
3. Site barricading 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 emission of fugitive in atmosphere. Jute barricading along plot boundary shall be provided to minimize noise level from construction activities.
6. 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.

Parameter	Permissible Range	CPCB Limits	AVG Range Before Activity
SPM ($\mu\text{g}/\text{m}^3$)	100 ~ 200	200	80-100
RSPM ($\mu\text{g}/\text{m}^3$)	50 ~ 100	100	20-30
SO ₂ ($\mu\text{g}/\text{m}^3$)	50 ~ 80	80	10-15
NO _x ($\mu\text{g}/\text{m}^3$)	40 ~ 80	80	5-10

Ref: 24 Hourly values as per Central Pollution Control Board, National Ambient Air Quality Monitoring, Notification 11th April, 1994, Schedule 1.

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 15.316 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 a declared dilapidated building. A building is now proposed to be redeveloped. Roof rain water harvesting is proposed in the project. 1 Recharge pits to be provided for the percolation of rain water into the soil rather than flowing to the drain.

5] **Storm Water Discharge:**

Storm water drains will be constructed for proposed facility as per the norms. A recharge pit and Rain water recharge pit 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 are 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 = 112 persons
- Generation of Total waste per person of residential population = 0.5 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 112×600 gms/person/day = 67.20 Kg
- 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 28×200 gms/person/day = 5.60 Kg
- Thus solid waste generated in the project will be 72.80 kg/day.
- Generation of organic waste = 40% 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 = $191.00 \times 40 \% = 29.12$ Kg by all occupants of the building.
- Total inorganic/Dry/ Non biodegradable waste generated will be 43.68 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 composting.
- 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

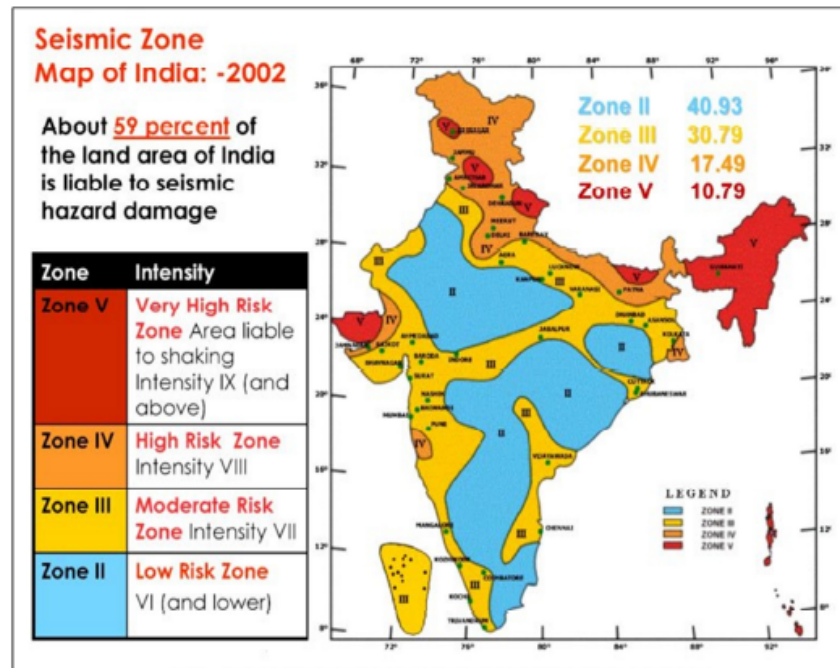
Local Municipal norms shall be followed to ensure responsible disposal of C & D waste.

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 81 cars are expected to be accommodated in the premises. The parking space will be provided in basement, stilt floor, Intermediate Floor and 6 parking levels. There is ample space in the building on all sides for smooth movements of cars.

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 5.0 mtr 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.