



## Municipal Corporation of Greater Mumbai

**CONSULTANCY SERVICES FOR PREPARATION OF FEASIBILITY REPORT, DPR PREPARATION, REPORT ON ENVIRONMENTAL STUDIES AND OBTAINING MOEF CLEARANCE AND BID PROCESS MANAGEMENT FOR MUMBAI COASTAL ROAD PROJECT**



## **SOCIAL IMPACT ASSESSMENT AND RAP REPORT**

August 2016



### **STUP Consultants Pvt. Ltd.**

Plot 22-A, Sector 19C,  
Palm Beach Marg, Vashi,  
Navi Mumbai 400 705



### **Ernst & Young Pvt. Ltd**

8th floor, Golf View Corporate Tower  
B, Sector 42, Sector Road  
Gurgaon - 122002, Haryana

**STUP Consultants P. Ltd**



Plot No.22A, Sector 19C, Palm Beach Road  
Vashi, Navi Mumbai 400 705  
Phone: 2789 62 41 - 45. Fax: [91-22] 2789 62 40  
e-mail : [navimumbai@stupmail.com](mailto:navimumbai@stupmail.com)

OFFICE OF ORIGIN

**STUP, VASHI**

OWNER CLIENT

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## **1. Introduction**

### **1.1 Project Context**

Mumbai often reckoned as the financial capital of India, houses a population of 12.4 million besides a large floating population, in a small area of 437 sq km and is surrounded by sea and has nowhere to expand. After the British arrival, the demand for land steadily increased, and by 1730; it was becoming impossible to accommodate the entire population of Mumbai inside the Fort. The sea was making inroads at Worli, Mahim and Mahalaxmi, which turned the ground between the islands into a swamp, making travel between Mumbai islands hazardous. These seven islands were lush green, thickly wooded, and dotted with 22 hills, with the Arabian Sea washing through them at high tide. The original island of Mumbai was only 24 km long and 4 km wide from Dongri to Malabar Hill (at its broadest point) and the other six were Colaba, Old Woman's island, Mahim, Parel, Worli, Mazagaon. It took over 150 years to join the original seven islands of Mumbai. However, the constraints of the geography and the inability of the city to expand have already made it the densest metropolis of the world. High growth in the number of vehicles in the last 20 years has resulted in extreme traffic congestion. This has increased commuting times significantly leading to serious impact on the productivity in the city and also affected the quality of life of its citizens. The extreme traffic congestion has also resulted in Mumbai witnessing the worst kind of transport related pollution.

In view of the ever increasing traffic problems, a Comprehensive Traffic Studies (CTS) were conducted for the island city along with its suburbs to identify transportation requirements to eliminate existing problems and plan for future growth. The studies identified requirement of a new arterial road along the Western Coast as part of the transportation networks, as shown in Figure 1.1.

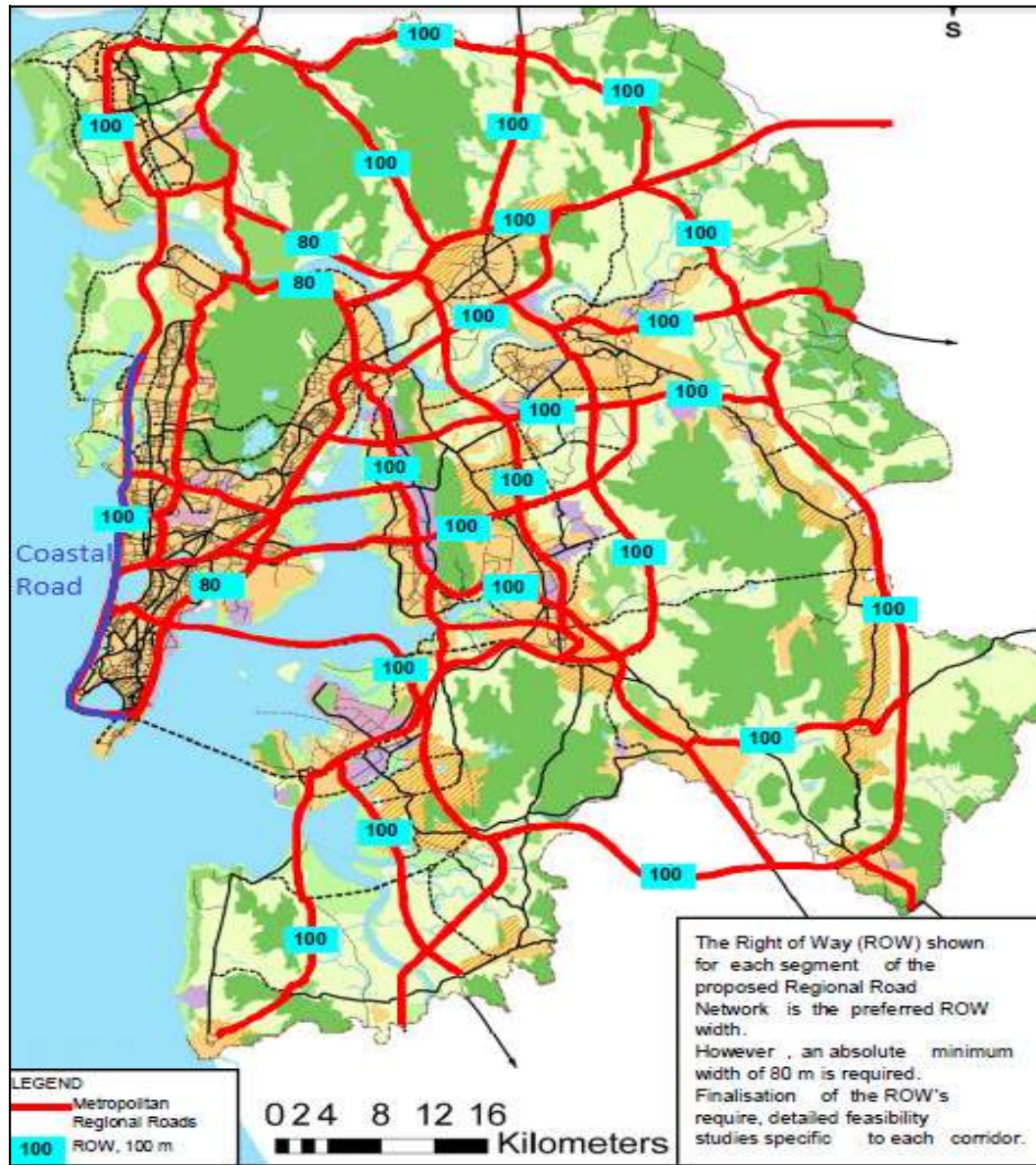


Figure 1.1

With this background, The Municipal Corporation of Greater Mumbai (MCGM) has proposed to construct a Coastal Road on the Western side of the city and appointed a consortium of M/S STUP Consultants Pvt. Ltd consultants and M/S Ernst & Young Pvt. Ltd for Preparation of Feasibility Report, DPR Preparation and Bid process management for the proposed Mumbai Coastal Road Project. This report deals with likely adverse social impacts based on the Detailed Project Report of the proposed Coastal road.



## 1.2 Project Description

Mumbai being an island city, surrounded on three sides by Arabian Sea, sea links were planned on the western flank and the trans-harbour link on the east to connect the island city to the main land. One of the prime reason sea links were planned as bridges was the restriction placed by the earlier Coastal Regulatory Zones (CRZ) regulations preventing reclamation or stilt roads in the CRZ areas. The CRZ notification dated 6 January 2011 issued by the Ministry of Environment and Forests, Govt. of India (MOEF, GOI) now makes it possible to envisage coastal roads on stilts. Government of Maharashtra constituted a Joint Technical Committee under the Chairmanship of Municipal Commissioner, MCGM on 30 June 2011 to study and make recommendations on the subject of reclamation based coastal road encircling Mumbai. The Committee recommended about 35.6 km. coastal road comprising a combination of road based on reclamation, bridges, elevated roads and tunnels on western side of Mumbai. Further, it recommended this coastal road with two options of alignments, both with a view to resolve the traffic congestion in Mumbai and to enable creation of the much needed recreational open spaces.

The proposed project starts at Princes Flyover (CH: 2.448 km) and ends at Kandivali (CH: 19.220 km) which covers a length of 29.20 kms. The project may be divided into two distinct sides namely, South side and North side. Brief description of the proposed project is as under:

Proposed project sections		Main features of proposed road (in km)			
Name	No	Highway on Reclaimed Land	Tunnel	Elevated (Flyovers / Bridges / Road on Stilts)	Total
Princes Flyover to Priyadarshini Park (I)	1	0	3.45	0	3.45
Priyadarshini Park to Mahalaxmi Temple	2	1.62	0	0	1.62
Mahalaxmi Temple to Markandeshwar Temple	3	0.12	0	2.08	2.20
Markandershwar Temple to Bridge Connecting Worli End	4	1.81	0	0.90	2.71

<i>South Side (sub-total)</i>		3.55	3.45	2.98	9.98
BWSL(End) to Start of Tunnel (Carter Road Mandir)	5	2.239	0	2.086	4.33
Start of Tunnel (Carter Road Mandir) to Bharat Nagar (End of Tunnel)	6	0	5.78	0	5.78
Bharat Nagar (End of Tunnel) to Kandivali Interchange	7	0	0	9.12	9.12
<i>North side (sub-total)</i>		2.23	5.78	11.21	19.22
<b>Total</b>		<b>5.79</b>	<b>9.23</b>	<b>14.19</b>	<b>29.20</b>



Figure 1.2

### 1.3 Study Objectives

The broad objective of the study is to assess the adverse impacts of the implementation proposed project on land, structures, other assets, common property resources, livelihood etc of the people, make efforts to minimize the impacts of the project wherever feasible and prepare a resettlement action plan covering commensurate mitigation measures.

#### 1.4 Methodology of RAP preparation

Methodology adopted for the study was as follows:

- i. The secondary data required for the development of study was collected from various sources primarily from MCGM. The data collected was reviewed to understand the project and the project influenced areas.
- ii. Reconnaissance Survey: The detailed ground reconnaissance was undertaken by STUP's team and MCGM's officers. Identified alignments were visited to carry out ground reconnaissance survey. All field studies are being undertaken on the basis of information derived from the reconnaissance surveys.
- iii. Social assessment by review of available secondary data, literature from different sources including websites. These include website of government of Maharashtra, data from Census of India, besides other sources such as review of legal instruments, governmental orders.
- iv. Consultations with stakeholders: Interactions with primary stakeholders i.e. affected persons. In addition; institutional stakeholders such as MCGM, SRA were consulted.
- v. Social Survey & Land Acquisition: The final stage of field work involved detailed data collection on affected assets. Cadastral maps were prepared wherein the lands and properties which were getting affected on account of implementation of the project corridor. Relevant information such as survey number, name of owners, and area etc were collected for preparation of Land acquisition proposals. Available city survey maps were obtained and the Cadastral survey was super imposed on the city survey maps. The RoW proposed to be acquired was set out on ground and joint measurements were made for the lands /structures affected along with revenue officials. Details collected for land acquisition proposal contained the following details
  - Government owned; land unencumbered;
  - Privately owned land unencumbered;
  - Land in open setback owned by the Government or private falling within RoW;
  - Built up setback to be acquired for till ROW; and
  - Land occupied by the slum /land occupied by declared slum.
- vi. Data compilation and report preparation: All the collected data was compiled, analyzed and used in preparation of the report and submitted to MCGM for review and comments



vii. Following receipt of comments and its incorporation, the report was finalized.

### **1.5 Limitations**

Constraints experienced were mainly during the survey as households likely to be affected refused to provide information and resisted efforts by the consultants to conduct socio-economic survey and consultations.

## 2. Socio-Economic Profile

The chapter presents socio-economic profile of Maharashtra State, as it largely affects growth of Mumbai, followed by profile of the project influence area, proposed intervention and associated social impacts.

### 2.1 Profile of the State

Profile of the state in terms of its demographical features, density, GSDP, per capita etc is presented in sections below:

*Administration:* Maharashtra consists of six administrative divisions: Amravati, Aurangabad, Konkan, Nagpur, Nashik and Pune. The state's seven divisions are further divided into 36 districts, 109 sub-divisions and 357 talukas. Each district is governed by a district collector or district magistrate, appointed either by the Indian Administrative Service or the Maharashtra Civil Service. Districts are subdivided into sub-divisions, governed by sub-divisional magistrates, and again into blocks. A block consists of panchayats (village councils) and town municipalities. Talukas are intermediate level panchayat between the zilla panchayat (district councils) at the district level and gram panchayat (village councils) at the lower level

*Population:* As per Census 2011, Maharashtra's population was 11.23 crore persons, which is 9.28 % of India's population. It is the second largest State in India in respect of population after Uttar Pradesh. During the decade 1991-2001, the population of the State increased by 15.99%. The corresponding growth during the earlier decade was 22.57 %. The decadal growth rate in 2001-2011 was more by 6.6%. Urban Population. According to 2011 Population Census, 45.23 % (42.4% in 2001) of the State's population was in urban areas as against 27.8% at All-India level. Thus, the proportion in the state is substantially higher than that for India.

*Population Density:* As per Census 2011, the density of population of the State is 365 per sq.km as compared to that of India (382). During the last decade (2001-2011) there was an addition of 42.5 people per 1 sq.km. Mumbai In 2011, Mumbai average density was 30,000 persons per sq.km, became the most populated city of the India and world's fifth.

*State of the Economy:* Maharashtra state has highest Gross State Domestic product (GSDP) in India. Gross State Domestic Product (GSDP). Gross State Domestic Product (GSDP), as per the advance estimates, is expected to grow at 10.5 per cent during the year 2010-11 as against 8.7 per cent during the previous year. Increased agricultural production will help 'Agriculture & Allied activities' sector to grow by 12.5 per cent as against growth of 3.1 per cent in the earlier year. Industry sector is expected to grow by 9.1 per cent. Services sector is expected to grow by 10.9 percent during the year. GSDP at constant (2004-05) prices is Rs.7, 01,550 crore during 2009-10,

as against Rs.6,45,492 crore in 2008-09, showing an increase of 8.7 per cent as per the preliminary estimates. GSDP during 2009-10 at current prices is Rs 9, 01,330 crore, showing an increase of 16.6 per cent over the previous year.

*Religion:* Hinduism is majority religion in state of Maharashtra with 79.83 % followers. Islam is second most popular religion in state of Maharashtra with approximately 11.54 % following it. In Maharashtra state, Christianity is followed by 0.96 %, Jainism by 1.25 %, Sikhism by 0.20 % and Buddhism by 0.20 %. Around 0.16 % stated 'Other Religion', approximately 0.25 % stated 'No Particular Religion'.

*Sex Ratio:* In 2011, it was 929 i.e. for each 1000 male, which is below national average of 940 as per census 2011. In 2001, the sex ratio of female was 922 per 1000 males in Maharashtra

*Literacy rate:* Literacy rate in Maharashtra has seen upward trend and is 82.34 percent as per 2011 population census. Of that, male literacy stands at 88.38 percent while female literacy is at 75.87 percent. In 2001, literacy rate in Maharashtra stood at 76.88 percent of which male and female were 85.97 percent and 67.03 percent literate respectively. In actual numbers, total literates in Maharashtra stands at 81,554,290 of which males were 45,257,584 and females were 36,296,706.

*Agriculture:* About 61% of the total population in the State depends on agriculture and Allied activities. Net irrigated area is about 33.50lakh hectare. Principle crops grown in the State are rice, jawar, bajra, wheat, tur, mung, udid, gram and other pulses. The State is a major producer of oilseeds, groundnut, sunflower, soyabean, the major oil seed crops. Important cash crops are cotton, sugarcane, turmeric and vegetables. Sorgham, millet, and pulses dominate the cropped area. Rice grows where rainfall exceeds 40 inches, and wheat is a winter crop in fields that retain moisture. Cotton, tobacco and peanuts are major crops in areas having 24-39 inches of rainfall. Irrigation dams in rain-shadow areas have resulted in a rich sugarcane yield. The State has also a large area under horticulture and has an area of 10.91 lakh hectares under various fruit crops like mango, banana, orange, grape, cashewnut, etc.

*Tourist Centres:* The important Tourist Centres in the state includes Ajanta, Ellora, Elephanta, Kanheri and Karla caves, Mahabaleshwar, Matheran and Panchgani, Jawhar, Maishejghat, Amboli, chikaldara, Panhala Hill Stations and religious places at Pandharpur, Nasik, Nanded, Audhanagnath. Trimbakeshwar, Tuljapur, Ganpatipule, Bhimashankar, Harihareshwar and Shegaon.

*Social and Community Services:* Social development in Maharashtra has attained satisfactory level of success. Successive government of the state has followed a development strategy by consciously investing in social development sector like education, medical and public health. The social



security measures introduced by the state government were directed towards reducing income disparities and uplifting weaker segments.

*Transport Infrastructure:* The transport system promotes the development of backward regions and integrating them with the main stream economy by opening their opportunities to trade and investment; acquire new knowledge, awareness and contributing their share of intellectual and financial wealth to the national development.

## 2.2 Profile of the project influence area - Mumbai Metro City

Sections below present profile of the project's influence area i.e. of Mumbai metro city.

*Population:* As of 2013, Mumbai's population is estimated at 19 million, but its total metropolitan area is home to more than 20.5 million. As with other metropolitan areas in India, Mumbai's population has grown very rapidly over the past two decades, and much of its population are migrants from other regions in the country who came seeking better employment opportunities. The number of people living in slums is estimated at 9 million, which is up from 6 million just a decade ago. That means about 62% of all Mumbaiker's live in slums. Dharavi, the second largest slum in Asia, is located in central Mumbai and is home to 800,000 to 1 million people in just 2.39 square kilometers (or 0.92 square miles). This makes it one of the most densely populated areas on the planet with a density of a minimum of 334,728 people per square kilometer. It's also the most literate slum in India with a literacy rate of 69%. **Table 2.1** presents key parameters.

Table 3.1 - MMR - Key features			
Parameter	Total	Male	Female
Population	18,414,288	9,894,088	8,520,200
Literates	15,132,568	8,423,992	6,708,576
Children (0-6)	1,743,997	917,855	826,142
Average Literacy	90.78	93.85	87.19
Sex Ratio	861		
Child Sex Ratio	900		
Source: Census of India, 2011			

MMR is highly urbanized area with more than 90% of the total population of 11.9 million as per 2001 census and 12.4 million as per 2011 census is concentrated in cities and towns. The urban population is however confined to 8 Municipal Corporations, 11 Municipal Councils and 10 Non Municipal Towns. Total area under these urban units is about 1,500 sq. km. In the rest of the region, about 1 million population is spread over 950 village settlements. The demographic

census gives population and worker details according to 88 census sections in Greater Mumbai, for suitably defined wards in other urban centres and for village as a whole in MMR.

The sanctioned Regional Plan for MMR 1996-2011, specifies the land-use for different parts of the region. In this plan, urban development is categorized under two classes namely, U1 and U2 zone. U1 zone, constituting 19% of the total land denotes intensive and high density urban development, whereas, U2 zone, constituting 5% of the total envisages relatively low density urban development. U1 zone largely covers the existing Municipal Corporations, Municipal Councils and a few Non Municipal Towns. U2 zone is generally showing the possible outgrowth of the cities and towns. Further, 3% of the land is placed under Industrial Zone, 1% under Port and Airport and 6% under Recreation & Tourism Development Zone and National Park. The rest of the 66% of land-use is distributed among Forest Zone (23%), Green Zone (39%), Coastal Wetland (3%) and Water body (1%). The Regional Plan also provides estimates of population and its distribution in different parts of MMR for the year 2011.

The Region has a fairly well developed rail and road network. The rail network consists of suburban and main line sections. The rail network connects most of the important urban areas. The road network comprises Expressways, National Highways, State Highways, Major District Roads, other District Roads and Village Roads. The village settlements are largely served by the road network and state road bus transport services.



### 3. Proposed Interventions

#### 3.1 Salient Features of the Project

The proposed Coastal Road project involves two parts comprising seven sections as described below:

Part 1: South Side (Princess Street flyover to Worli end of Sea Link)

Section 1: Princess Street flyover to Priya Darshini Park

Section 2: Priya Darshini Park to Mahalaxmi

Section 3: Mahalaxmi to Baroda Palace

Section 4: Baroda Palace to Worli End of Sea Link

Part 2: North Side (Bandra end of Sea Link to Kandivali Junction)

Section 5: Bandra End of Sea Link to Juhu Sea Side Garden

Section 6: Juhu Sea Side Garden to Ritumbhara College

Section 7: Ritumbhara College to Kandivali Junction and Central Institute of Fisheries,  
Versova to Madh Island

In order to finalise alignment options it is necessary to identify various site constraints that may affect the outcome of the alignment options studies. Site constraints in terms of engineering/technical, environmental, social and financial components were duly considered for various options and after due deliberations the proposed alignment was selected for detailed study.

Based on estimated capacity, the coastal road is proposed as an eight (4+4) lane road except tunnel portion in section 1. Section wise description and likely social impacts of the proposed project are discussed in subsequent paragraphs.

#### Social Impact Assessment

- **South Side:**

**Section 1 (Princess Street flyover to Priyadarshini Park):** Section-1 starts from Princess Street flyover and ends at Priyadarshini garden sea front. The section is characterised by the requirement of provision of a tunnel for the entire length i.e., 3.45 kms along the Marin Drive. The tunnel would be located about 20-30m Below Ground Level (BGL). However, a few multi storied buildings exist in the proposed tunnel alignment. These buildings will not be affected due to construction of tunnel as suitable measures for stability, safety, and risks involved will be

ensured during construction of tunnel. Sensors for vibration monitoring will be installed on each structure. Thus provision of tunnel avoids requirements of private land area, impact on structures and other properties and consequently issues related to resettlement and rehabilitation. Approximately, 9.3 hectares of land would be reclaimed. Besides, there are six (6) heritage structures located in this section. Name of heritage structures, their category and minimum distance from the right of way is presented below.

Sl. No.	Name of Heritage	Category	Minimum distance from the alignment (Mtrs)	Section
1	Islam Gymkhana	II-A	123	1
2	Hindu Gymkhana	II-A	39	1
3	Wilson College Gymkhana	II-A	50	1
4	Police Gymkhana Ground	II-A	55	1
5	Zaveri Mansion	II-A	171	1
6	Wilson College	II-A	186	1



Figure 3.1

Hindu Gymkhana is situated nearest to the proposed alignment. Provision of tunnel will neither affect the views of heritage structures nor the aesthetics in the surrounding areas. It is broadly straight alignment with one smooth curve thus improving safety and minimising operational requirements. The alignment is away from structures of archaeological importance, roads and buildings and minimal traffic management during construction. It provides the best option in terms of minimising adverse social impacts.

**Section 2: Priya Darshini Park to Mahalaxmi:** The section runs from Priyadarshini Park to Mahalaxmi Temple area and is characterised by land-fill road in inter-tidal zone. Other options in this section were similar with variation to area of reclamation and geometry of the alignment. Approximately, 30.4 hectares of land would be required to be reclaimed covering a length of 1.62 km.

Heritage structures namely, Lincoln House (Heritage category-IIB) and Mahalaxmi Temple (Heritage category-IIB) are located at an approximate distance of 150 & 95 metres respectively on land side from the proposed alignment. No adverse impact in terms of obstruction of views and safety of structure is envisaged as the project road is planned on reclaimed land.



Figure 3.2

The proposed alignment in this section is broadly straight and away from the existing settlements except for a length of 300 metres near Amarsons Park and Harish Mahindra Children Park where the proposed Right of Way (RoW) of the project road is touching the seaward boundaries of these parks. Provision of Retaining Wall (RE) has been made to avoid requirement of land towards these parks. The entire section of the road is planned on reclaimed land which would be filled with muck generated from tunnelling in Section 1. The adverse social impacts in terms of private land, structures, and other properties are not there and hence resettlement and rehabilitation is not required.

**Section 3 Mahalaxmi to Baroda Palace:** This section of the proposed project is 2.20 km. It is characterised by presence of structures of religious importance i.e. Mahalaxmi temple and Haji Ali along with Baroda Palace. Construction of this section of road requires reclamation of

approximately 27.7 hectares of land, almost for the entire section of the road except for locations where navigation bridges are required. Haji Ali Dargah (Heritage category –IIA) is located about 300 metres away towards the sea from the proposed road alignment. These religious places attract huge number of devotees on a daily basis. Suitable Construction of the proposed project with provision of Pedestrian Under Pass (PUP) will facilitate smooth access to devotees to Dargah.



Figure 3.3

The livelihood of fishermen near Rajni Patel Chowk (CH 8+800 to CH 9+100) would not be affected as provision of navigational bridge with sufficient clearance has been made to facilitate unrestricted movement of fishing boats at this location. During construction period suitable mechanism will be adopted so as to provide unhindered movement of fishermen. In case, impacting livelihood of fishermen can't be avoided in such case suitable policy decision will be framed by the project authority to provide rehabilitation assistance to all affected fishermen.



Further, people staying in slums near Dairy Colony (approximate CH 9+900 to CH 10+200) will not be affected as the proposed road would be constructed on reclaimed land all along from CH 9+900 to CH 11+600.

Once again in this section there would be no impacts on private land, structures and common property resources, impacts on livelihood and thereby no resettlement and rehabilitation.

**Section 4 Baroda Palace to Worli End of Sea Link:** The length of Section 4 is 2.71 km. This section 4 is characterised by reclamation of land all along except for bridge portions (approx CH 9+700 to CH 9+900 & CH 11+700 to CH 12+400). The proposed alignment will get connected to the existing Bandra Worli Sea Link. Approximately, 22.90 hectares of land will be reclaimed in this section. There is no heritage structure in this section of the proposed alignment.



Figure 3.4

In this section also there would be no impacts on private land, structures and common property resources, impacts on livelihood and hence no resettlement and rehabilitation.

- **North Side:**

**Section 5 Bandra End of Sea Link to Juhu Sea Side Garden:** The length of this section of the proposed alignment is 4.32 kms. The alignment hugs existing coastal line and runs from Bandra end of Sea Link till Khardanda Village. The construction of the proposed road is characterised by the reclamation of land (21 ha) along the sea.

The livelihood of fishermen near Chimbai Village (CH 2+500 to CH 3+400) would not be affected as provision of navigational bridge with sufficient clearance has been made to facilitate unrestricted movement of fishing boats at this location. During construction period suitable mechanism will be adopted so as to provide unhindered movement of fishermen. In case, impacting livelihood of fishermen can't be avoided in such case suitable policy decision will be framed by the project authority to provide rehabilitation assistance to all affected fishermen.

Three heritage structures Bandra Fort (Heritage category-I), Kekee Manzil (Heritage category-IIB), and 19/19-A Cartar Road (Heritage category-III) are situated at a distance of 60 metres, 220 metres and 450 metres respectively. Construction of proposed road will not obstruct views and aesthetics in the surrounding areas.



**Figure 3.5**

Impacts on private land, structure and other structures in this section of the project are not likely and thus issue of involuntary resettlement is not involved.

**Section 6: Juhu Sea Side Garden to Ritumbhara College:** The length of this section of the proposed project is 5.78 km. The section is characterised by the provision of a tunnel for the entire length i.e., from CH 4+325 to CH 10+100 away from the JUHU Beach. The tunnel would be located about 20-30m Below Ground Level (BGL).

Approximately, 13.7 hectares of land would be reclaimed of which 11.41 hectares (83.3%) is temporary reclamation which will be restored as beach after completing construction of ramp (from CH 4+325 to CH 4+700) and Cut & Cover portion of tunnel (from CH 4+700 to CH 5+100). The proposed tunnel shaft near Khar Danda area (CH 5+000) will not affect the livelihood of fishermen. The fish draying yard near Carter Road would be temporarily shifted to reclaimed area (between CH 4+500 to CH 4+700) for the construction of Carter Road Interchange it will be restored back. Similarly, the fish draying yard near Mora Gaon area would be temporarily shifted to reclaimed area (CH 9+600 to 9+800) for the construction of Guide Bund at Irla Nalah.



**Figure 3.6**

Movement of fishermen of Khar Danda area will not face any obstruction and also no disruption to their livelihood activities. Thus provision of tunnel avoids requirements of private land, impact on structures and other properties and issue of resettlement and rehabilitation.

**Section 7 Ritumbhara College to Kandivali Junction:** This section covers a length of 9.12 kms. The section of project road alignment traverses through Nana Nani Park and slum area of Sundar Wadi. The project road alignment envisages construction of a double deck elevated corridor up to Institute of Fisheries on existing DP Road in K/West Ward. The Nana Nani Park

will be partially covered due to proposed elevated structure. This will impact the beauty of the park and create inconvenience to public visiting parks at large. The Project Authority has agreed to allocate equivalent area of land for development of park in nearby area.

The widening of DP Road is under progress. Approximately 146 families are being covered for the project under Redevelopment and Rehabilitation Scheme by the Slum Rehabilitation Authority. Besides, there are a few structures which also covered under the Scheme of DP Road.



**Figure 3.7**

Approximately, 70 to 80 families have been identified which require relocation. Besides, one of the structures of Institute of Fisheries (near CH 11+200 to CH 11+300) which would be partly affected. The exact number of families and associated number of PAPs in Sundarwadi area could not be ascertained due to resistance by the occupants of the structures. However, these families are already covered under DP Road Resettlement Scheme and hence are not considered as affected persons under the Coastal Road Project. Other than Sundarwadi area there will be no impacts on private land, structures, etc. There is no heritage structure in this section and also reclamation of land is nil.

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**Conclusion:**

- The proposed alignment has been planned keeping in view avoiding as far as possible and if unavoidable, minimising involuntary resettlements. The entire alignment on south side has been planned on reclaimed land barring tunnel and elevated portions without compromising the major technical specifications/ standards.
- Approximately, 55.12 hectares (19.64 hectares in south and 35.48 hectares in north) of land area belonging to various government departments/agencies will be required which would be transferred to MCGM through inter departmental transfer mechanism.
- Overall the adverse social impacts of the proposed project on private land, structure (used for residential, commercial or any other purposes), common property resources, etc on South side is not observed and is free from involuntary resettlement and rehabilitation aspects i.e. people residing or earning livelihood in nearby areas along the proposed project will not be affected or displaced and thus preparation of Resettlement Action is not needed.
- Provision of Pedestrian crossings near religious places (Mahalaxmi Temple and Haji Ali Dargah) will be highly socially beneficial to devotees in terms of easy access to these religious places.
- The provision of a number of interchanges will facilitate easy access to various major roads. People in the nearby localities of interchanges will be benefitting the most in particular and people from other parts of the city in general.
- Overall the construction of the Coastal Road will immensely benefit to its citizens, people in surrounding areas, visitors, tourist etc in terms of substantial reduction in travel time and cost, improved level of comfort, reduced mental agony and irritation, faster accessibility to surrounding areas, faster movement of goods and services, high appreciation of land and property prices in direct influence area, etc.