Action Plan Conservation of Heritage Precincts in MMR

Chembur Sub-Precincts Chembur Gaothan / St Anthony's / Old Chembur



1.0: Introduction to Project

1.1 Project

To Prepare an Action Plan for Management of the Three Heritage Sub-Precincts of Chembur, namely Chembur Gaothan, Old Chembur, and St. Anthony's Society, located in the M ward of Municipal Corporarion of Greater Mumbai.

1.2 Project Brief:

- A. To evaluate the current status and conditions of the precincts through detailed documentation and analysis of key issues.
- B. To identify schematic projects, programmes for conservation of precincts through participation of local communities and stakeholders
- C. To formulate financial, institutional and regulatory strategies for project implementation, phasing, operations and maintenance.
- D. To prepare draft Guidelines for conservation of the heritage precinct. Such guidelines could form a significant component of the proposed Development Plan of Greater Mumbai.
- E. To interact with the resident communities in order to explore various aspects of the precincts which characterise the precinct and further involve them in creating a brief for the formulation of the Action Plan.

1.3 Characteristics of a heritage precinct:

The first list of Heritage structures was prepared in 1995. It was nearly after a decade that a revised list was prepared with a conscious effort to recognize the significance of the heritage in the broader context of the political, economic and cultural history of the city. The new list included settlements or precincts in addition to the 'stand alone' structures. It is in this revised list that many more existing settlements like Wadis and Gaothans spread over the city and the suburbs belonging to the different ethnic communities were added. Most of these settlements are located in the sprawling Salsette Island of the fishing communities belonging to the native Portugese or the East Indians fisherfolks or Hindu Kolis along the coastline. The agriculture based communities like the Panchkalsis (SKPs) owned agricultural fields and resided in the villages near the fields. Present Greater Mumbai is dotted with such precincts. While the coastline is still by and large protected as of now, the agricultural land is brought into the folds of urban development and the dependent communities have undergone transition in the economic activities. From farming to the manufacturing sector to the service sector- most of the communities have a middle class dimension to their caste and religious identities. As per one of the proud residents of the Chembur Gaothan "every day we return to our village home after work, unlike most of the other Mumbaikars. This aspect of returning to their 'native' village at the end of every day is extremely cherished by the communities living in the precincts.

The Heritage Precincts are not necessarily an ensemble of structures of architectural heritage value but also represent multifold attributes like social networks and practices, festivals, and cultural expressions of the residing communities. The architectural significance of a precinct has to be seen more as common characteristics shared by the group of structures in a precinct. These common attributes go beyond architectural attributes. They consist of many layers of Built Form which make the precinct worth its conservation. The relationship of precinct components -like public/ private built and semi built spaces, streets, vegetation, and community nodes -with each other, all enriched by active engagement of the resident over many decades or centuries, need to be identified in the precincts. The study of such heritage precincts in this context raises important issues like the perception of the role of history in the imagination of the communities and its connection with the vision of the future development.



1.4 Brief Overview of the Sub Precincts:

Chembur is part of M ward located on the north east of the Island city. It is a rapidly growing suburb because of its significant location. It is the most important link between the city and the mainland. Once known for its green surroundings, with large open spaces, peaceful environment and a slow pace of life, Chembur is undergoing massive transformation and is catching up with the growth impetus like the rest of the suburbs of Mumbai. There are many reasons for this change. The Floor Space Index (FSI) which was restricted to 0.5, doubled subsequently. Specifically after the introduction of the Policy of Transfer of Development Rights (TDR), Chembur started witnessing a major change in its skyline. At present, bungalows and modest houses on small land holdings are being taken over by the real estate developers and replaced by high rise buildings after loading the TDR.

However, in spite of the urban pressures there are some historically significant localities of Chembur that still retain their heritage significance, in the form of both, tangible and non tangible charactristics. This heritage significance goes beyond the presence of architectural characters of individual buildings. The precincts display a historical fabric, woven by built as well as socio- cultural attributes. Although weakened at places, it is important to preserve the historical characteristics of the past to the extent that it helps us plan the future of our cities in a more humane way. It is not intended to 'museumise' the precincts by freezing their future. Through this project there is effort to negotiate ways and means to preserve what the communities wish to preserve.

The three sub precincts under the scope of this project are adjoining each other and share a low scale development with abundant green cover. Yet they are very different in their built and socio cultural characters, because of the overriding caste and religious linkages which have imparted a distinct identity and a sense of belonging to the community residing within. Especially the distinct difference between the Chembur Gaothan and the St Anthony Precinct, divided only by the east west 'Central Avenue', (Dayanand Saraswati Marg), makes a very significant and an interesting study. It shows how the multiple layers of housing settlements belonging to ethnically different migrant communities evolved their own specific social and cultural institutions; at the same time sharing a peaceful co existence, a quality cherished unanimously by all the communities. This could be seen as one of the unique characteristics of this project.

Chembur Gaothan : The Chembur Gaothan portrays a social and built fabric associated with a village like organic settlement. Most of the residents belong to a single community- Somavanshiya Khatriya Pathare(Panchkalashi) caste, which is one of the oldest communities of Mumbai. They reside in many other Gaothans of Chembur. The Chembur Gaothan boasts of their history of more than 150 yrs. The community is greatly influenced by the Temple Trust of Bhulingeshwar located in the vicinity. The narrow

streets in the core of Chembur Gaothan are lined with modest country tiled houses with verandahs and open stairs amidst a thick green cover. The community nodes which emerge informally by the intersections of the pedestrian streets are used for several festivals and community events.

St. Anthony's Precinct : While the Gaothan represents an informal/asymmetrical built fabric embedded in the pre-modern era, the symmetrical 'grid iron' layout of the St Antony's precinct is the outcome of modern city planning norms executed a century ago. This aspect of St Anthony's and of the Old Chembur precincts needs to be recognized as an important phase in the history of planning in the city. This layout therefore acquires a heritage status. TP Scheme no. III executed in the first decades of the 20th century in Chembur can be said to be one of the early Town Planning schemes executed after the TP schemes executed by the BIT at the turn of the 19th century.

The St Anthony's neighbourhood portrays a cohesive character because of its religious homogeneity with the Catholic Church at the apex. The early migrants from Goa who came in search of white collar jobs, built bungalows on the bounded plots of 500 sq mt. These plots abut 9mt wide roads laid out in the 'Grid Iron' pattern at right angles to each other. These bungalows represent different architectural styles prevalent during the respective decades. The formal TP layout however does not create informal community nodes like the Gaothan. Therefore the Church with its surrounding open spaces and the OLPS/St Anthony's schools become the prime gathering areas for the community. The precinct also exhibits another era in the development; of the Co-operative societies built on the same sized plots with ground and 2 storeyed walkup apartments, owned by residents belonging to different communities.

Old Chembur : Although known as the Hindu precinct to distinguish it from the Catholic identity of St Anthony's precinct, the physical character is similar to the latter. There are also large open grounds, gardens, temples and schools. However in the absence of the religious and cultural control/guidelines in operation, unlike the Gaothan and the St Anthony's Society, this neighbourhood is fast changing under the TDR policy.

1.5 Challenges in the Project:

The heritage precincts have a unique character and significance on account of their distinctive architectural character, social characteristics, cultural practice, tradition, historical context, functionality and natural setting. However these very aspects of the precincts are threatened and facing danger of being extinct due to several kinds of pressures. For the protection of Heritage structures, there is a provision of dedicated Development Control Regulations (DCR) which Grade the Listed Heritage structures (as Grade I, Grade II and Grade III). While these regulations also include Heritage Precincts, there has been more emphasis on the individual structures. Further, predominantly the architectural merits of such structures define its heritage grading. However protecting the Precincts become much more complex. It is a challenge to develop strategies that will preserve the non tangible cultural characteristics which define a precinct. Such 'non tangible' layers valued by the resident communities need to be identified in the Precincts. What are the ways to preserve these layers? The implementation of the existing policy, has created negative response in the imagination of the people. Instead of a feeling of pride, owning a heritage listed building is seen as a burden for maintenance and as a loss of development potential in the real estate market. A new set of guidelines which fulfill both, the current expectations of the communities and need to conserve the history of the city- which now aspires to become a global city-, is a difficult and challenging task. We strongly feel the need to evolve special guidelines for such special precincts even though it might give an impression that it is too late. Our documentation shows not 'all is not lost' and a lot still exists.

BASE MAP



LANDUSE PLAN



HERITAGE



TYPOLOGIES



8

FIGURE GROUND



2.3 Precinct wise Detail Documentation:

This section includes:

- 1. Detailed plans of the three precincts showing existing condition (neighborhood landmarks, nodes, street hierarchy, public spaces, open spaces, cultural practices, existing infrastructure, demographic characteristics, transformations, major activities)
- 2. Drawings showing the heritage characteristics (special architectural features, special buildings, plans and streetscapes)
- 3. Establishing the common characteristics, features and elements.

2.4 Establishing Precinct wise Significance of Heritage

In this stage the Heritage Significance of each of the three Precincts has been documented in detail under following headings:

- 1. Architectural Significance
- 2. Historical Significance
- 3. Social Significance
- 4. Cultural Significance
- 5. Technological Significance
- 6. Environmental Significance
- 7. Economic Significance

2.4.1 : Chembur Gaothan :



The Festival Node of Gaothan





The Bawdi/Well Node of Chembur

Chembur Gaothan











The Chembur Gaothan is very conveniently located near the railway station, on the west side of Dayanand Saraswati Marg, known as the Central Avenue. The precinct boundaries were determined in the earlier study of MMR HCS by Ramakrishna Chemburkar Marg on the west, 15th road to the north, D. K. Sandu Marg on the east and 10th Road on the south. This area has nine entries two from the west, one from the north, four on the east and two on the south all culminating to the core of the Gaothan. In this project this Core is identified as the Heritage Precinct'.

Architectural Heritage: The Chembur Gaothan constitutes the inner core of the area broadly known as the Chembur Gaothan. While the outer area reflects the urban development in the last 50 years as a result of the Town Planning Schemes, the inner core of the Gaothan distinctly retains both, the social and the built fabric associated with a village like early organic settlements of Mumbai. The narrow lanes in the core of Chembur Gaothan are lined with modest country tiled houses amidst a thick green cover. The street pattern reflects the hierarchy that responds to the scale of the houses that abut them. The winding lanes unexpectedly intersect to create the community nodes that are often highlighted by open water wells. All this invariably creates a feeling of a time warp.

85% of the structures within the Gaothan exhibit pre industrial vernacular character of ground and ground plus one storied houses. The houses share many common architectural characteristics although they vary in scale, size and in the current structural status. All the vernacular houses have sloping roofs covered with mangalore/country tiles. Invariably the covered varandahs and/or open otlas/plinths create an interface with the streets and act as transition spaces between private and public spaces, especially for the women folk of the households.

The most significant characteristic feature which constitutes the precinct's built fabric is the location of the staircases. They are located outside the house, accessible from the otlas and vary in their structural patterns. The other elements of the architectural vocabulary that accentuate the visual quality of the fabric of the precinct are the timber posts supporting the varandahs, the geometrical wooden railings on the projecting balconies and the decorative wooden eaves. The community nodes are formed by the intersection of the organic streets. They are paved and defined by a well or a platform, both used as immediately accessible meeting and festival spaces.

The inner core of Gaothan has so far retained most of its character in spite of the repairs and renovations. FSI still remains un-consumed, it is a very crucial time as market pressures are very strong and real estate prices are sky rocketing in Chembur as discussed earlier. Hence, it is high time some interventions are made and special development rules are formulated to save the historically important built environment of the Gaothan. Nearly 40% to 50% of the houses display one or more elements of architectural significance.

Summary: Significant architectural vocabulary is woven by architectural characters consisting of low rise structures, sloping roofs, external staircases, verandahs, balconies, grills, railings, organic winding pattern of the streets and community nodes.

Historical Heritage: The Chembur Gaothan is one of the 8 Gaothans of Chembur that date back from one and half to nearly three centuries. The other Gaothans of Chembur are Ghatla, Charai, Borla, Wadhavli, Mahul. The land was owned by the original inhabitants who were farmers, predominantly from the Somavanshia Kshatriya Pathares (also known as Panch Kalshis caste of Marathi Hindus), along with Kolis, Agris and Sutars.

The history of the SKPs dates back to 12th century AD since a general Ambud, a Somavanshi Kshatriya Pathare from Anhilvaad, Gujarat, tried to attack a Shilahaar king. The Somavanshi sena from Dahanu then helped Yadavs to conquer North Konkan and defeat the Shilahaaras. The Yadav kings accommodated the Somavanshi Kshatriyas in Dahanu in return for their help to defeat the Shilahars. Later the king Bimbadev Rana got support from the old Gujarati Somavanshi Kshatriya who had settled

in Sopara about a century ago. Bimbadev donated 66 villages to his 66 Sardars(Somvanshi Kshatriya) of the "Sasti" island. These Somavanshi were known as "Sashtikars". Bimbadev honoured and released orders in 1204 A.D. that the Somavanshi Kshatriyas are eligible to use "Chattra Sinhasana and 5 Kalashas". Thus since 1204 A.D. these Somavanshi Kshatriya clans (both from Orissa Somavanshi clan who had settled in Shurparak in 280 A.D. and Gujarati Somavanshi clan) came to be known as "Panchkalshis".

The Naiks from this caste are documented in the history of the Marathas in relation to the annexation of the Vasai Fort. The mapping of the Fort of Vasai by the Naiks helped the Marathas to create a base in the important Vasai and Sopara area, which was a major trading port in the times.

As per the older residents of Chembur, 500 mtrs on all sides of the Gaothan was reserved for agricultural use for the Gaothan farmers. Later when the Suburban Town Planning scheme III was introduced in the 1920s, the land around the Gaothan was acquired by the Government. Thus about 150 plots have A1 tenure which is ancestral private freehold. About 40 peripheral plots of the Suburban Town Planning scheme III have B1 tenure which are Collector leased. These 40 plots are outside the core Gaothan.

As per the precinct boundary given in the report prepared by M/s Designers, the area of Gaothan was 11.5 Ha. As per the tenure status the original Gaothan core is only about 4.5Ha and the total number of structures is 160. Hence the boundary of this precinct has been changed for this project, concentrating only on the core area which holds tenure A, A1, C, F and G. Tenure B1 type development is very similar to the Old Chembur precinct and can be included in that precinct.

S.No.	Tenure type	No. of plots	Description of Tenure			
1.	A and A1	150	Original inhabitants, ancestral property, lifetime no revenue to be collected by any authority			
2.	B1	40	Acquired by Government and sold to Co-op housing societies, property tax is levied			
3.	С	7	Acquired and allotted for housing to individuals			
4.	F	1	Government land (wells)			
5.	G	2	Government land			

Social Heritage: Somvanshi Kshatriya Pathare (SKP) community is one of the few original residents of Mumbai. SKPs share an important status in the history of this city as land owners and as a community which gave the city of Mumbai many architects, engineers, building contractors and visual artists. Their last names reflect the locations of the land they owned in the different parts of the city - Chemburkar, Dadarkars, Mahimkar, Goregaonkars, Paralkars, Chaulkar, Urankar, Jukar(Juhukar) etc. The Chogles were credited to be the navy builders of the Maratha Navy. They were rewarded by the ruling Marathas with land near Mumbai, which now constitutes Borivali and the surrounding suburbs. The SKPs are also based in the nearby places of Mumbai like Alibag, Uran, Chaul, Revdanda, Murud, Maap gaon, Kihim and others.

The community in the Chembur Gaothan is homogeneous with close ties although there is distinct physical demarcation of the sub-sect within the SKPs i.e. the Mhatres, Raotes and Puravs. The percentage is as follows: Mhatres are 45%, Raotes 35% and Puravs 20%. However, they marry within the sub-sects. The plan shows bands of these sects. With newer inhabitants coming in, this distinction is getting diluted. The Gaothan has a peaceful, harmonious environment and everyone is known there amongst the residents and they can identify houses in the plan by naming people. Most of them within the community are inter-related which provides a sense of security in the precinct. The community of the Gaothan also has strong links with the other caste members in the other Gaothans of Chembur.

There is no formal Caste Panchayat, but the disputes, both family and property related, are generally resolved by the elders of the community. The Bhulingeshwar Trust is an important social/religious body, registered with the Charity Commissioner which has 20 to 25 elected representatives from Gaothan. It manages and maintains the temple complex as also engages in some charity work.

Cultural Heritage: The Gaothan has a very strong socio-cultural identity and the residents are strongly affiliated to the Bhulingeshwar temple situated on the northern edge of the Gaothan. There are two main cultural/religious festivals associated with the Gaothan. The 'Palkhi festivals'- the Akkalkot Swami Palkhi and the Chaitra Palkhi of Saibaba. All the residents get together during these palkhis to have the 'bhandara'-celebrate, cook and listen to discourses by various prominent persons of their community. The common festivals like Gokulashtami, Navratri, Diwali, Holi, etc are also celebrated with great fervor and enthusiasm by the locals. All these festivals are celebrated in the main node of the Gaothan which is identified by the meeting of 4 streets and by a stage like platform which acts as a transition space between the node and a redeveloped ground plus 3 storied structure. A public address system is installed in this node to facilitate the communal activities. Many religious talks are organized at the Bhulingeshwar temple by various scholars and Gurus. There are many Mitra Mandals which involve the local youth for social work. The important aspect is that all the festivals are celebrated in open spaces within Gaothan although these aren't designated open spaces but are incidental in nature.

Technological Heritage: Majority of the structures within the Gaothan i.e. 150 nos. (85%) exhibit pre industrial vernacular character of ground and ground and one storied with composite construction of load bearing walls and inbuilt timber frame work with timber sloping tiled roofs. Distinct characteristics of thick masonry white washed walls with timber posts along otlas, external staircases, projecting balconies and roof eaves with major and minor transformation. Distinct characteristics of window openings with timber shutters and ventilators are accentuated with a variety of timber railing usually in a state of disrepair. Further, the building fabric is characterized by projecting open staircases constructed in different materials – timber, steel, and masonry.

The old houses of Gaothan display a number of interesting technological details: some houses have used timber floors in combination with 'I' sections of steel. Most of the older houses are load bearing and have composite masonry, with stone and brick combination. Sloping roofs have timber understructure with clay roofing tiles. There are many houses with IPS flooring. There are high ventilators with timber frames.

Environmental Heritage: Chembur's prevailing huge green cover is the main savior for the neighbourhoods, from ammonia and other toxic gases which are released from the chemical and fertilizer factories situated in this area. The Gaothan precinct has a considerable amount of green cover in form of plants, trees, creepers and household potted plants, etc.

Rich flora of the place in terms of vegetables, fruits and flowers and trees like the guava, jamun, sitaphal, chickoo, ramphal mango, gulmohar, neem, peepal, banyan; similarly, many types of birds, domestic and farm animals all co-exist here and contribute in a big way towards a quiet and rural character to the place in the midst of urban location. As one of the inhabitants, Architect Ramakant Patil said, "others wait for a break to go to their village but we are lucky as we come back to our village daily..." Environmental heritage is one of the most significant attributes of the Gaothan and the inhabitants are very proud of it.

As the roads are narrow, there is less vehicular traffic, resulting in better air quality and less noise pollution. There are totally 11 wells in the whole of Gaothan, out of which 3 are public and 8 are private. The water from these wells is used for washing and gardening, presently, but with some interventions it can be made potable in the future. In addition, there are 50 bore wells. The daily municipal water supply is for 3 hours which the residents find quite adequate. Some of the open wells

have become polluted due to leakages in the sewer lines but are under repairs through the local corporatoe, Suresh Phatarphekar.

Large green zones like the Beggars' Home plot, Sandhu garden, Gandhi Maidan, Babasaheb Ambedkar Udyan, at the periphery add up to the precinct's advantage.

Economic Heritage: Traditionally, the inhabitants of Gaothan were cultivators till their land on the peripheries got acquired in early 1920s for the TP Suburban Scheme. Later the people found employment in the textile mills and the docks. Earlier, there were a few 'Kumbhar' families who were pursuing traditional pottery, but today some SKP families make and sell clay Ganesh idols. Some of the women of the community engage in home based production of food items like chakalis, masalas, til polis, chapattis etc. Apart from these there isn't any other special economic activity which is pursued here. The owners also restrict the tenants from undertaking any commercial activity or small scale production activity in the residential premise, hence there are no livelihood generating activities seen in the houses. There are some owners who pursue entrepreneurial activities such as fabrication of steel products like grills, gates etc. but it cannot be classified as a heritage economic activity.

2.4.2 : St. Anthony's Precinct







St. Anthony's Precinct

Architectural Heritage: St. Anthony's precinct is significant because of its neighbourhood and architectural scale as well as the variety seen in the architectural styles and vocabulary in the bungalows and low rise developments. The development essentially consists of: 1. Plots under St. Anthony's Housing Society allotted to the Christians, 2a. Plots bought directly by both Christians and non-Christians when TP scheme came into being in 1920s, some of these have been made into cooperative societies/ownership of G+2 and 2b. Some owned by individuals and they have sold floors of their houses, hence making it the condominium typology. As the real estate prices are rising the market forces are compelling residents to redevelop, which is increasing the height and density of this area, leading to loss of identity and character of the area.

The plots of 500 sq mts are symmetrically laid out along the grid iron pattern of roads of 9 mt width. The bungalows are located mostly in the centre of these plots. The surrounding areas of the plot are developed as gardens. The St. Anthony's precinct has many typologies of bungalows which have evolved in different eras, from 1920s onwards. The precinct enjoys houses which contribute to its claim as a heritage precinct. Though scattered in the entire precinct, these isolated bungalows can be classified into three categories:

'Vernacular Goan style': Initially from 1920 till 1940s there were a lot of Christian habitants who had migrated from Goa; hence bungalows which initially came up in St. Anthony's precinct displayed similar vocabulary and style of construction. They are mainly ground storied structures with covered verandahs, load bearing walls with inbuilt timber posts as frames, multilevel sloping roofs clad with red tiles and the louvered windows and doors in wood with ventilators. Examples: The Grotto, Belvedere.

'The Art Deco style': This typology of bungalows built during the 1940s and 50s, some up until 1960s; are identified by the construction material: RCC framed structure and or Brick masonry with curved corners and curved balconies, and with appreciable features like geometrical mild steel railings accentuated by curves set in the masonry parapet, or protecting the large windows. The window panes are made of rectangular divisions in timber mullions painted white. The accentuated curved staircase blocks, patterns with plaster mouldings, grooves and the use of pastel colours are also part of the Art Deco vocabulary seen elsewhere in the city especially in the island city.

'The Modernist Style': This typology of Bungalows portrays the 1960s influence of the Modernist style comprising a ground and one storied RCC framed structure with stone clad vertical walls as distinct characteristic features and supporting horizontal RCC running chajjas as bands highlighted using colours in contrast to the entire body of the structure which is distinctively in lighter colours and white. Flat roofed terrace, deep set verandahs/otlas, and partial stone masonry and external staircases with prominent handrails is distinctive of this genre.

The settlement is planned along a grid iron with roads such as the 11th, 12th, 13th, 14th and 16th as internal roads running in the east west direction. The covenant development led to the isolated two storied bungalows along large plots. Lush green trees line either side of the roads giving a distinct identity to the precinct of serenity.

The early migrants from Goa in search of white collar jobs built bungalows in the centre of the bounded plots of 500 sq mt each. These plots symmetrically abut the roads laid out at perfect right angles to each other. These bungalows represent different architectural styles prevalent during the respective decades. So we see the early houses built in the Vernacular Goan style, Art Deco houses of 1940s to 1950s and the modernist RCC houses built in the 1960s and 1970s. There are still 81 bungalows mostly owned by single families which have retained heritage characteristics.

Historical heritage: The Suburban Town Planning Scheme no. III, introduced in 1925 and executed in the 1920s in Chembur, can be said to be one of the early Town Planning schemes executed after the TP schemes executed by the BIT at the turn of the 19th century. This is a significant historical marker in the development of the city. During this time a number of Catholics jointly formed the St. Anthony's Homes. This body bought the plots and leased them to its members for 998 years. One of the pioneers was Mr Allyious Soares who built the bungalow Belvedere, now part of the government heritage list. Later, as the number of Catholic residents increased, Redemptorist Congregation of Bangalore established the church in 1956. All development which happened before 1964 followed the principle of either making stand alone bungalows or/and apartments with 1/3rd ground coverage. The precinct exhibits different eras in the development of the housing sectors of the city. There are many Cooperative societies built on the same sized plots with ground and 2 storeyed walkup apartments, owned by residents belonging to different communities. In 1964 the first D.P came into existence and it defined a FSI of 0.5 for Chembur. The architectural vocabulary later displayed all the DC rules which were applicable in that period.

Social Heritage: The St. Anthony's precinct is dominated by Christian community. It was earlier known as the 'Christian Colony' as different from the adjoining 'Hindu Colony' now known as Old Chembur. The Catholic Christians who migrated to Mumbai in search of employment were the predominant members of the apex body: St Anthony Homes. Later Mangalorian Christians and the East Indian (Christians) joined the society. The precinct subsequently received a significant number of members from of Keralite Christian community. The area has very old residents and therefore there is a lot of community/social awareness amongst the residents and they all are linked via the church. All of them belong to the same parish, are known well to each other and meet often at social occasions. There are many non-Christian residents at present, mostly occupying the apartments. The residents have a great sense of belonging to this area and are proud of its multi cultural and middle class fabric. However the residents occupying the newly built towers are seen as those from the rich class, bringing in a consumerist culture.

Cultural Heritage: The Our Lady of Perpetual Succor (OLPS) church established by the Redemptorist Congregation of Bangalore in 1956 is the only important religious and cultural centre. It has an added significance because it conducts the Novena prayer service otherwise conducted only in the Mahim church.

Earlier there was no church but the parish had a Chapel which was located in the pavilion now part of the Our Lady of Perpetual Succor church, (OLPS). A primary school was operating in the same place. In the 1950s OLPS School and St. Anthony's School were established. There are 22 community groups which are part of the OLPS parish out of which 7 groups comprise residents of the St. Anthony's Housing Society. These social communities engage in various social, cultural and charitable activities like running free food programmes, funding needy students in the payment of fees, vocational activities for the disabled etc. Each group is overviewed by a member from the Parish.

The formal TP layout however has not designated formal/ informal community nodes like those in the Gaothan. Therefore the areas around the places of worship and small shops and hawking zones become spill out spaces for people to hang around. In St Anthony's precinct, the OLPS Church along with its surrounding open space and the OLPS and St Anthony's schools become the prime gathering areas for the religious festivals and cultural gatherings of the community. Other social and cultural nodes on the periphery of the precinct are the Saibaba temple, Hanuman temple, Sharda Math, AFAC School, Subhash Nagar Municipal School and the Chembur Gymkhana.

Technological Heritage: The old bungalows are load bearing with composite masonry, in random/dressed rubble and brick. There some stone clad walls and pilasters. Many houses have sloping roofs with timber understructures. RCC structures are seen in the Art Deco and Modernist style bungalows.

The infrastructure has been upgraded as earlier there were no drains for storm water, which were later made about 30 years ago. Similarly, earlier houses had either a septic tank or cess pools for sewage disposal, but about 40 years ago the BMC laid down the sewer and connected all the plots to it.

Environmental Heritage: As late as the 1960s, as one of the residents Mrs. Valerie has nostalgic memories of, a nalla flowed from the BARC hill and culminated in the marshy area between Chembur and Ghatkopar. It had crystal clear water as a result of the sparse occupation and large open areas. She remembers playing as a child on the small wooden bridges which were made indigenously to cross the nalla. There was a variety of flora and fauna and among them there were many frogs and snakes found here.

As a result of the tree plantations in the earlier decades there are a variety of indigenous trees which the entire area was dotted with like, tamarind, mango, peepul, jamun, gulmohar, laburnum, etc. There are many birds species also seen in this area out of which, parrots, kingfishers, woodpeckers, egrets, koels are still seen among sparrows, pigeons and crows. The total area of the open spaces is about 2.1 Ha which is nearly 10% of the total area (21.7Ha) of the precinct. This is much higher than average residential neighbourhoods of Mumbai.

Dr. S.S. Bakhle, an avid nature lover has made a documentary covering 60 species of birds, 25 species of butterflies and many reptiles. According to him nearly 20,000 flamingoes visit Chembur every year, other exotic species found here are: Egrets, Owls, Indian pittas, Parrots and Paraquets, Red Whiskered Bulbul, Vented Bulbul, Magpie Robin, Golden Oriole, Barbet, Wood Pecker, Kingfisher etc.

At the same time the 'Green Suburb' of Chembur is threatened by several environmental hazards due to the presence of the refineries, Atomic Energy complex and the armament depot all located in the same Municipal wards.

Economic Heritage: The precinct is dominated by middle class population mainly employed in service sector. Some Christian families operate home based bakeries which sell cakes and other home -made food items. There many skilled residents who conduct piano and guitar classes for children and adults. As there is a lot of greenery there are some plant nurseries here. Barring these few special entrepreneurial activities most of the other residents are employed in the tertiary sector.

2.4.3 Old Chembur Precinct:



Old Chembur Precinct:

Although known as the Hindu precinct to distinguish itself from the Catholic identity of St Anthony's precinct, the physical character is similar to the latter. There are also large open spaces, gardens, temples, schools. However in the absence of the religious and cultural control/guidelines in operation, unlike the Gaothan and St Anthony, this neighbourhood is fast changing under the new norms of urban development linked to the Real Estate market. There are however 18 houses which have retained heritage characteristics.

This precinct is located between the three nodes mainly the Sandu garden, Ambedkar chowk and the renowned Diamond garden.

Old Chembur Precinct: Special Characters: Old Chembur precinct essentially comprises area which was the Suburban TP Scheme No. 3, which came into being in 1920s. Initially there were very few fully developed plots as most of the people had built only about $1/3^{rd}$ of the plot and left open spaces all around. As recalled by old resident, Mrs. Rupali Balan that this area had a sleepy town laid back

attitude with wadis around of different trees. There were essentially G or G+1 structures and a very cohesive settlement. In 1964 the DP was implemented and FSI 0.5 was given for development in old Chembur.

Old Chembur has actually seen the maximum transformation in the last two decades and had to bear the brunt of rising real estate prices and pressures of TDR. Most of the old bungalows and co-op housing societies are being eyed by builders and developers, who can see the un-used potential of these plots and are paying big money to the owners for development rights. As discussed earlier with the number of infrastructural projects coming in and around Chembur the property prices are rising astronomically.

In spite of the pressures, there are certain special characters of old Chembur which should be retained as they are cherished by the residents. There are some old bungalows which the owners are willing to retain and maintain. There is a lot of greenery and species of flora and fauna which are dominant in this area. There are a number of gardens and socio-cultural nodes which need to be preserved.

Architectural Heritage: Although under the pressures of transformation, driven by the real estate market in the last two decades during which many of the beautiful old structures have been replaced by high rise, there are some interesting features in Old Chembur which should be retained as they are cherished by the residents. There are some old bungalows which the owners are willing to retain and maintain. There is a lot of greenery and species of flora and fauna which are dominant in this area. There are no. of gardens and socio-cultural nodes which need to be preserved. Some of the structures/locations are: Ling Mahal, an Art Deco bungalow, with lovely balcony and banded RCC structure, timber painted window frames and mullions. Sandu Wadi where originally there was an ayurvedic pharmacy, still has some old structures with sloping roofs having timber understructures covered with clay tiles. The walls are composite of rubble and brick masonry. There are stand alone structures with open space between them leading from one part to another of the factory.

The post office building is about 50 years old and is a simple curved structure of RCC. It is well maintained building which adds to the cultural identity of the place.

There are some very old G+1 structures in load bearing brick masonry, and sloping roofs which require repairs and maintenance. These have long verandahs with otlas in the front leading to the rooms. There was also a typology of chawl like structures, very few of which exist today, which had long verandahs and small rooms with common toilets.

Historical Heritage: The term Old is a misnomer to the Old Chembur Precinct -which was earlier known as the Hindu Chembur to distinguish it from the St Anthony precinct's Christian character. Old Chembur precinct essentially comprises the area which was the Suburban TP Scheme III, which came into being in 1920s. Most of the plots are privately owned-under B1 tenure and are developed as Residential Co-operative Housing societies except for a few bungalows and Institutions such as the schools which would be under private Trusts. Initially there were very few fully developed plots as most of the people had built only about $1/3^{rd}$ of the plot and left open spaces all around. As recalled by an old resident, Ms. Rupali Balan, this area had a sleepy town, laid back attitude with wadis around of different trees. There were essentially G or G+1 structures and a very cohesive settlement. In 1964 the DP was implemented and FSI 0.5 was given for development in old Chembur.

Social heritage: It is a very cosmopolitan neighbourhood unlike St. Anthony's Precinct and Gaothan. Initially there were Maharashtrians and Guajaratis who settled here followed by North Indians who came after partition. In the 1950s and 60s a lot members of South Indian middle class community made old Chembur their home, which led to the setting up of Ahobila Math in the 1960s. There are many Jains and Marwaris who came after the Jain temple was built on the 10th road. This multi ethnic community is largely middle class. However the new population has changed its class character

drastically as can be seen in the new commercial outlets such as Banks, Restaurants, Health Clubs, Spas and high-end retail shops developed along the North- South Central Avenue.

Chembur has one of the most successful ALMs (Advanced Locality Management) which are operational in the old Chembur area, around diamond garden. There is a chapter of Bombay First initiative of AGNI called Chembur First which came into being about 3 years ago. The citizens are very active and take pride in partnering with Government agencies for the up-keep and development of their neighbourhood.

Cultural Heritage: There are cultural nodes in and around the precinct for every community, which adds to the overall richness of social fabric. Some of the religious nodes are: Bhulingeshwar temple which is about 150 years old and a part of the Gaothan, is a very important hub for the Hindu's of this precinct as well. Ahobila Math: is a very important religious and cultural centre for the South Indian community Jain temple: for Gujratis, Jains and Marwaris. Gandhi Maidan is a very important social node where a number of sports competitions are organized. Many festivals are celebrated here and the residents organize Ramleela performance during Navratri festivals.

Some socio –cultural nodes are:

The Vinayak Bhawan where Ganesh Utsav, Navratri and Ramleela are celebrated with great fervor.

Durga Pooja is organized at the Chembur High by the Bengali community during Navratri.

There is a Mahila Mandal on the periphery of the precinct boundary, which undertakes many social, economic and cultural activities. Balvikas is another very important socio-cultural node as it is a primary school but its premises are used for conducting many types of classes and for organizing public meetings, music festivals etc.

There are many informal meeting and hanging out places which also add to the socio- cultural richness of the locality. These are in and around Sandu Garden, Diamond Garden and its periphery, in and around Ambedkar Garden. The main North South Road between Diamond Garden and Ambedkar Chowk is abundantly shaded, with ever-green trees that create an ambience truly characteristic of Chembur. This road enjoys many activities, thereby making it a public spine.

Environmental Heritage: There many gardens and maidans in this area and the green cover is very dense. There are many indigenous trees, shrubs and fauna of this area similar to the St. Anthony's precinct. Important open spaces/gardens are: 1. Ambedekar Garden, 2. Sandu Garden, 3. Gandhi Maidan 4. A small garden maintained by Balvikas.

The total area of open spaces is 1.72 Ha which is about 8% of the total area (21.5Ha) and relatively higher than average neighbourhoods of Mumbai. Other environmental attributes are similar to the St. Anthony's precinct.

Economic Heritage: There is no major economic heritage activity except the Sandu Pharmaceuticals which has shut down its unit now. The Mahila Mandal is engaged in various home based cottage industries such as catering, making chapattis, pickles, papad etc. which empowers women. There are many play schools and nurseries in Old Chembur area, run by private organizations or individuals. Many types of coaching classes and hobby classes are active in old Chembur and add to the socio-cultural richness of the area.

3.0 Community Participation:

The communities in all the precincts, although different in their social and cultural patterns of living, share the pride towards their respective individual cohesive social and built fabric which represents the respective histories. At the same time they recognize the vulnerability in retaining these cherished features in the current urban scenario dominated externally by the Real Estate market and internally by their own familial and economic compulsions.

In the past, the physical fabric reflected the provisions of the byelaws and Development Control Rules which resulted in low densities and high green cover. In the last two decades drastic changes in the FSI/TDR have initiated rapid transformation. Communities are not happy with the impact of the new development on certain cherished characteristics of the existing fabric such as green cover, traffic, parking problems, overcrowding, security, harmony, disaster management and the like.

Summary of the Qualitative Responses to Questions asked during the Community meetings:

(the answers were descriptive and not objective in the form of yes/no)



Question 1:- What characteristics of your neighbourhood do you cherish?

Question 2:- What characteristics of your neighbourhood would you like to preserve?





Question 3 :- What characteristics of your neighbourhood do you dislike?







Question 5 :- How to preserve the existing context ?

Community Meetings:



Architect Anil Nagrath addressing the community



Architect Neera Adarkar presenting the documentation



One of the community members expressing her views



One of the community members expressing his views



Community members responding to queries

One of the community members expressing her views

3.4 Personal interviews with owners of important heritage bungalows

There are 75 bungalows in St. Anthony's precinct, pre-1950. Interviews were conducted with the owners of 12 bungalows having heritage significance owners to identify issues related to their properties:

Very good Architectural value	17.33 %
Significant Architectural value	16 %
Pride in their property	80 %
Properties that are well maintained. Spend 1 lakh rs per year	60 %
Compulsion to go in for Redevelopment. Issues of maintenance and of safety and security for senior citizen	30 %
Dilapidated conditions. Need structural interventions. Lack of resources	20 %
Do not want Heritage Tag. Will lose out on the future flexibility.	80 %
Opposition to Builder / Developer driven redevelopment. Experience of others in the locality not good, a raw deal from the builders But no other choice because of complications in the existing legal and technical procedures	



3.5 Analysis of Community Responses for Action Plan

Grading of What needs to preserved, Why and To what extent

No.	What needs to be conserved	Precinct	Why	To wha	at extent	
				Full	Partial	Minimum /Symbolic
1	Houses which are identified as	All	Important Historical and Urban			
1	Houses which are identified as	All	Important Historical and Urban significance			
	having heritage value		Rated high by community			
			Rated high by community			
2	Community nodes - cultural and religion	Gaothan	Significant for a precinct			
		St. Anthony	Community spirit is important			
			to community.			
			Graded high	-		
3	Low scale character of built	All	Heritage and Architectural			
	form		value			
			Appreciated by community	-		
4	Green Cover : trees, permeable	All	Most significant characteristic	_		
	surfaces		of all the three precincts			
			Graded highest by community			
5	Environmental Balance	All	Disaster threats from			
			hazardous industries and			
			Armament store			
			Graded high by community			
				_		
6	Cultural Co-existence	St. Anthony	Pride of the Precincts	_		
		Old Chembur	Graded high by community			
_						
7	Gardens around houses /	All	Will lead to enhanced			
	building		guidelines for marginal open			
			space around building			
			Graded high by community			
8	Open spaces	All	Important for quality of life in	-		
			the current development trend			
			Graded high by community	-		
9	Social / religious infrastructure	All	Act as important places of			
-	temples, mitra mandals,		community interaction			
	churches, schools		,			

10	Cleanliness	All	Concern of the community		
			with respect to garbage		
			dumping		
11	Existing ratio of marginal open	St. Anthony	The community dislikes the		
	space between the building and	Old Chembur	new towers built close to the		
	the road		road line.		
			Significant Urban quality		
12					
12	Accountability of the governing	All	Major demand from the		
	authorities both, local and state		community		
			Community dislikes builder -		
			politician nexus		
13	Peaceful atmosphere	Gaothan	The community resents high		
10		Cuotinan	and thorough traffic		
		St. Anthony			
14	Existing 'A' tenure in Gaothan	Gaothan	Community is highly possessive		
15	Low scale of streets and lanes	Gaothan	Important for the identification		
			of the precinct for		
		St. Anthony	community fabric.		
16	Architectural vocabulary like	Gaothan	Defines the precinct fabric		
10	external staircases, verandahs,	Gaothan			
	otlas as interfaces between				
	private and public				
17	Winding pattern of the streets	Gaothan	Defines the essence of any		
	in Gaothan		village type Gaothan's identity		
18	Caste character	Gaothan	Significant essence of		
			Gaothan's social identity		
19	Wells in Gaothan	Gaothan	Prominent element of a		
15		Subtrian	Gaothan		
			Defines community nodes		
			,		
20	Examples of all styles of	St. Anthony	Significant Architectural		
	bungalows, vernacular, art deco	Old Chembur	heritage		
	and modernish bungalows				
			1		

3.6 Identification and Categorisation of Issues

	IDENTIFICATION OF ISSUES FOR ALL PRECINCTS	Urgent Attention	Significant Attention	Minimum Attention
	Community Perception with respect to the Project			
1	Apprehensions with respect to MMRDA's intentions			
2	Apprehensions about Consultants' capacity to influence the Authorities			
3	Apprehensions about implementation of the suggested Action Plan			
4	Consultants' role seen as that of the agents of the Developers/Builders			
5	Consultants' role seen as 'Heritage Conservationists'-Anti-development			
	Conflict between Heritage Conservation and Future Development			
6	Integration of Heritage guidelines in the overall development vision			
7	Market pressure especially due to TDR			
8	Economic pressure for maintenance of old property and increase in taxes			
9	Familial pressure with respect to property disputes			
10	Threat to the existing cultural / caste / religion and social fabric			
	Increasing density due to the current trends of development			
11	Pressure on the carrying capacity of physical infrastructure			
12	Existing road network planned for low density			
13	Increase in vehicular traffic and on street and off street parking			
14	Pressure on the carrying capacity of social infrastructure			
15	Changes in the class structure			
16	Changes in the social / religion / cultural fabric			
17	Safety and security of the vulnerable sections of the community (senior citizens, children, physically challenged etc.)			

	Identifying and formulation of appropriate representatives organization / group / body		
18	To participate in the project to address current issues		
19	To participate in the project to formulate future guidelines		
20	To create awareness in the community at large		
21	To carry forward the Action Plan		
	Regulatory Complexities		
22	Tenure A system in Gaothan exempting from taxes		
23	Controlled access to St. Anthony based on religion		
24	Lack of financial incentives for conserving the built heritage		
25	Lack of incentives for Self Redevelopment (could better the quality of life)		
	Environment Vulnerability :		
26	Loss of green cover		
27	Loss of flora fauna		
28	Reduction in permeable cover due to future development		
29	Possibility of appropriation of open spaces		
30	Air pollution due to industries (fertilizers and refineries) and through traffic of heavy vehicles.		
31	Disaster threat due to BARC, Armament store and refineries and fertilizer plants.		

4.0 Strategy and Action Plan

4.1 Vision:

The precincts are important links to city's economic, political and cultural history. In that sense they become significant components of a city's larger legacy. Precinct's heritage significance emerges from its cultural cohesiveness, created by a composite fabric, woven by architectural as well as social attributes. The basis for the conservation of the past though such Cultural precincts, is to derive alternatives for future by juxtaposing the precinct's strengths with the current model of development. Such a process will lead to planning the future in a more holistic way; as a continuation of the living culture till it hold its relevance in time and space. The development policies would respect the existence of such precincts, and of the communities residing within them, in order to incorporate strategies to strengthen both, the built fabric and the social fabric which characterise the precincts.

Strategy:

For achieving the above vision, the planners and the policy makers need to adopt both, a sensitive and a sensible approach which transcends the limited scope of conservation by Listing the pecincts and then imposing Grades for controlling the development.

For preservation of a Precinct there should be a multilevel strategy:

- 1. The precinct to be recognised as a 'Cultural Precinct' than as a 'Heritage Precinct'
- 2. Identification of the cultural attributes (social, cultural, physical, historic, economic and environmental) which create links between the communities and the precincts.
- 3. Formulation of Projects which will strengthen the attributes of heritage significance and those which are cherished by the communities with an objective to engage the communities in conservation of these attributes. This process would create a ground for considering and accepting guidelines for future development for their precincts, proposed by the Consultants.
- 4. Formulation of the modified DCR in order to redirect the course of existing development policies within and around the precincts.
- 5. Bring the above process in the public domain to inform the city at large.

Basis of the Action Plan: Projects and Development Control Guidelines

The Action Plan through the suggested Guidelines and the Projects, their Phasing and their Implementation are strategized to equip the community to make an informed choice and further to take necessary actions to conserve what they cherish against the perceived threats, whether opting for a redevelopment or opting to maintain the existing Precinct.

The two components of the Action Plan are:

A. Project Proposals B. Development Control Guidelines

Both the components are based on the two different sets of responses received during the community meetings. (The detail documentation of the meeting in which the community replied to specific questions in writing is given in Section 5). There are 4 projects proposed below after which there is a section on Development Control Guidelines.

1. One set of responses elaborates upon the positive attributes of their respective precincts, both tangible and intangible; which create a sense of belonging and those which they would like to conserve in the future. The strategy to address these expectations leads to four different Projects.

2. Another set of responses from the communities refer to the negative aspects of current redevelopment process and the threats they perceive to their existing social fabric in the near future. A set of objectives are formulated based on this critic of the redevelopment as seen in the precincts of St Anthony's and Old Chembur. The Strategy envisaged here is to address these issues through alternative Guidelines for the redevelopment of the precincts.

4.2 The Projects:

Four projects are proposed to address the opinion of the communities with respect to what they value in their precincts. The following list as has emerged from their written responses encompassing the tangible as well intangible attributes in their precincts. These include:

- Environmental aspects
- Social and Cultural spaces /Nodes
- Social and Religious institutions
- Scale of the built environments
- Culturally Cohesive neighbourhooods and cultural co existence

List of attributes which the communities expect from the future (Re) development

- 1. Community nodes- cultural and religious within the precincts
- 2. Social/ religious infrastructure temples, mitra mandals, churches, schools
- 3. Cultural Co-existence
- 4. Peaceful atmosphere
- 5. Houses which have ancestral value
- 6. Low scale character of built form
- 7. Low scale of streets and lanes
- 8. Green Cover: trees
- 9. Environmental Balance
- 10. Cleanliness/Garbage management
- 11. Gardens, Playgrounds and other Open Spaces
- 12. Existing ratio of marginal open space between the building and the road
- 13. Accountability of the governing authorities both, local and state
- 14. "I return to my native village every day" Home in the village in the urban setting

4.3 Formulation Development Control Guidelines

Background:

It is observed that the current perception of 'heritage' in the public consciousness is limited to the built form in general and specifically to a) the architectural merits and b) the legal framework for its preservation. This perception has gained a strong negative bias against the concept of Heritage, over the last decade. As a result, owning a heritage building which is listed or proposed to be listed under 'Heritage Regulations for Greater Bombay', is seen as a burden for maintenance and as a loss of development potential in the real estate market, instead of a feeling of pride of residing/owning a structure of historical value. While there is some debate about the Heritage -stand alone –Buildings, a 'Heritage Precinct' is largely unknown to people and is likely to face more resistance. As architects and planners, we face the challenge to negotiate with such prejudice in an utmost sensible manner. Our entry to the conservation of a precinct is based on the strategy of : A. looking at the built

Our entry to the conservation of a precinct is based on the strategy of : A. looking at the built landscape of the precincts from a cultural lens and B. Encouraging the community to work out a critic of the existing development in their own precincts.

Formulation of Development Control Guidelines is the second component of the Action Plan. (First component being the formulation of Projects, elaborated in the earlier section). Both the components are based on two different sets of responses received during the community meetings.

1. One set of responses elaborates upon the positive attributes they would like to conserve in the future. The strategy to address these expectations leads to four different Projects.

2. Another set of responses from the communities refer to the negative aspects of current redevelopment process and the threats they perceive to their existing social fabric in the near future. A set of objectives are formulated based on this critic of the redevelopment as seen in the precincts of St Anthony's and Old Chembur. The Strategy envisaged here is to address these issues through alternative Guidelines for the Redevelopment of the precincts.

We have understood from the community that apart from the real estate value of the land there is not much lure for them in the new models of development that they see around and within their precincts. They raised questions about the current alternatives of development. Yet, the power of Real Estate market has made the community vulnerable to opt for selling their bungalows and the land to the Developers.

Objectives:

1. To preserve the characters of the precinct significant to Communities :

Low Rise, Low Density, Green Cover, Safety of Pedestrians, Management of Parking, Noise pollution, Air Pollution, Manage growth to match existing road networks within precincts

2. To Preserve buildings of Heritage value:

Manage maintenance, address loss of development potential

A set of objectives are formulated based on the critique and on the suggestions from the communities for the redevelopment as seen in the precincts of St Anthony's and Old Chembur. The Strategy envisaged here is to address these issues through alternative Guidelines for the redevelopment of the precincts, mainly in these two precincts.

The policies and the strategies will have to be multi level to address several contesting concerns in the conservation strategies. No single policy will address all the concerns and no immediate solution can be expected. How can the perceived loss be measured? How do we define the development potential? Can the tools of FSI, TDR be regulated in the heritage precincts? Can the owners of the

Existing & Projected Mass Index

Existing Volumes



Projected Volumes if the current trend continues



Development Guidelines for St. Anthony's and Old Chembur

Objective	Strategy	Proposal
1. To prevent further Densification	Curb accelerating growth of residential buildings	 On main avenues, which are 18.28m wide, the maximum Built up area in plots shall be restricted to a total FSI of 2.00 (including TDR) On inner roads which are 9.14m wide, the maximum Built up area in plots with apartment buildings shall be restricted to a Total F.S.I. of 1.33 (Available F.S.I. of 1. + .33 given by MCGB at a premium.) The maximum Built up Area in plots with bungalows shall be restricted to F.S.I. of 0.66.
2.To preserve significant heritage structures	 List buildings with character. Offer incentives to residents to retain, repair, maintain 	 Heritage structures should be identified and categorized into 3 grades recognized by the Heritage Committee. Grade 3 structures should not be demolished. A technical Consultancy committee should be set up to advise on repair, additions and alterations. No addition or alteration of heritage houses should increase the F.S.I to more than 0.66. The unused F.S.I (1.33-0.66) i.e.0.67 should be allowed to be sold by way of T.D.R. Developers constructing in Chembur shall first purchase TDR generated from heritage building plots in these precincts. A fund shall be created for the conservation of heritage houses with the trust contributing 90% of the cost and the house-owners 10% of the cost This public fund could be generated through a heritage cess payable by developers
 3. To conserve the Architectural Character 4. To maintain the Scale of the 	Restrict building height to ground + 7 upper floors Have stepped sections of Buildings on either side of	 The maximum height of buildings shall be 24 m on the main avenue, 16 m for the plots with apartment buildings and 10 m for the bungalow plots on the inner roads. Minimum one balcony per apartment shall not be enclosed. The front open Space shall be 4.5M clear and no built up area shall be allowed outside a line drawn inward into the plot, at an
built environment	the road to reduce the narrow corridor effect. To encourage amalgamation of small plots	 angle of 63.5 deg from the boundary line in section. Plots above 750 sq.M may be granted additional F.S.I of 0.1



APARTMENT BUILDINGS



 5. To preserve the Green Cover 6. To promote Harmony among the various sections/groups- 	Prohibit cutting of trees Increase vegetation Generate awareness of Flora and Fauna species Enhance Public Spaces for festivals, Sports, Competitions, Community	 Minimum of 5 trees per 100 sqM of plot area should be planted. Flower Beds upto 450mm wide, well drained, will be permitted around open balconies only. A tree Census should be conducted and important trees labelled. Roof Gardens will be encouraged. Recreation Grounds shall have unrestricted access for all groups. Public Recreation Grounds shall be reclaimed from private users.
religious, social,	celebrations.	 Some roads may be pedestrianised on certain days.
economic		
7.To revive the feeling of Security	Promote community interaction	 Social Networks shall be strengthened. Effective lighting on roads and public spaces. Staircases are recommended to be open to view from outside.
8.To regulate vehicular traffic	Traffic patterns and densities to be studied	 Cross roads 9.15 M wide , should be made one way. Eliminate the grade difference between pavements and roads however there will be different material with different texture.(Red interlocking paver blocks) to ease walking without shifting levels.
9.To provide for car parking	Identify plots/Street lines where parking is feasible	 On the inner roads 9.15 m wide, there shall be no grade division/variation between the road and the pavement. The surface drains will be between the pavement and the road and both the pavement and road will be sloped towards it. Variation in paving shall define the three lines. Temporary day parking will only be allowed on one side of the road. Owners must park within the plot at all times.
10.To address issues of Garbage Disposal	Separation and decentralised treatment	 Residential units that compost their wet garbage and recycle their non bio-degradable shall get reduction in their property tax.
11.To reduce pollution –Air / Noise	Increase greenery	As in Pt 2

12. To clean and revive water bodies- Wells and Nallahs.	Provide alternate function/ activity	 Well water shall be used for Gardening and other secondary purposes Develop a recreational walk along the Nallah
13. To increase citizens' awareness of their heritage and natural environment	Seminars, Exhibitions, Installations, visits, performances	A Cultural walk route is proposed, that focuses on a variety of building types and interaction nodes. The Culture nodes shall be developed for greater participation A participatory Website shall be created.

Development Guidelines for Gaothan

1. To prevent excessive through Traffic, but allow emergency	Make it unattractive for outside vehicular movement. No house should be	 The Width of the main arteries should be restricted to 4.5M. The smaller pedestrian paths may be 2.0 M wide.
vehicles.	more than a 3 min walk	 The maximum distance between any unit and
	from a motorable path.	a motorable path shall be 100 M .
2. To maintain a	Maximum height should	 Maximum ground coverage shall be 75%.
low rise building	be Ground Plus 2 upper	 Maximum height 10 M and Maximum F.S.I.
Profile.	floors	1.5
3. To conserve	List out typical,	 Minimum of 50% of the building footprint
the Architectural	characteristic	should have sloping roofs, in Mangalore Tiles
Character.	architectural	or Coloured profiled sheets.
	Features.	 Balconies provided should not be enclosed.
		 Staircases shall have two sides open.

Note : Points 2,6,10,12,13 of St Anthony's Precinct will also apply to Gaothan.

FSI & Density Statement of Precincts

CHEMBUR GAOTHAN	FSI	Gross Density P/Ha	Population	Built Up Area Sq.mt.
EXISTING	0.58	511	2453	24000
PROJECTED	1.5	1068	5125	61500

ST. ANTHONY'S PRECINCT	FSI	Gross Density P / Ha	Population	Built Up Area Sq.mt.
EXISTING	0.55	291	7008	87000
PROJECTED	2.0	711	17160	343200

OLD CHEMBUR PRECINCT	FSI	Gross Density P / Ha	Population	Built Up Area Sq.mt.
EXISTING	0.49	223	5472	80000
PROJECTED	2.0	713	17450	349000

The above statement shows the projected demographic transformation in the 3 precincts, if the precincts are developed on the basis of the FSI available at present. The FSI in all the three precincts was proposed as 0.5 after the DP (1964). Excluding the Gaothans, it was increased to 0.75 in March 1991 and later to 1.0 in Sept 1998. Subsequently it was increased to 1.5 in the Gaothan areas. At present the TDR facility is available in Chembur upto 1.0 (excluding the Gaothan areas). This has increased the total potential FSI to 2.0.

While the Gaothan residents are not yet willing for the transformation (both, physical and cultural) that this increase in the FSI will bring in, the other two precincts are in the process of exploiting the real estate value offered by the additional FSI and TDR. If the potential FSI of 2.0 is fully exploited the population and the density will increase to more than 3 times. On the other hand, the infrastructural network of 10 mt wide roads as well as the open spaces and social amenities designed to cater to the lower population due to the 0.5 FSI, will have a devastating effect on the environmental and cultural features of these sub precincts of Chembur. In the imagination of the resident communities today, these very features define the heritage identity of these precincts.